

**Date and Time:** Monday 9 September 2024 18:00:00 CEST

**Job Number:** 233037894

**Documents (100)**

1. [*Arctic powers gather for Alaska talks as pace of global warming threatens ice cap US to host summit of polar nations as fears grow that the Earth's frozen wastes are losing their ability to deflect harmful rays*](https://advance.lexis.com/api/document?id=urn:contentItem:5H5K-NJ91-JCJY-G16V-00000-00&idtype=PID&context=1516831)

**Client/Matter:** -None-

**Search Terms:** emission and energy or emission and reduction or emission and targets or emission and greenhouse gas or energy and reductions or energy and targets or energy and greenhouse gas or reductions and targets or reductions and greenhouse gas or targets and greenhouse gas

**Search Type:** Terms and Connectors

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| News | Timeline: 20 jul 2015 tot 20 jul 2016; Locatie: International; Plaats van publicatie: Europe; Taal: English |

2. [*Canadian egg sector going ‘greener’*](https://advance.lexis.com/api/document?id=urn:contentItem:5K56-4T61-JB14-7300-00000-00&idtype=PID&context=1516831)

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3. [*Arctic powers in Alaska for talks as pace of global warming threatens ice cap US to host summit of polar nations as fears grow that the Earth's frozen wastes are losing their ability to deflect harmful rays*](https://advance.lexis.com/api/document?id=urn:contentItem:5H5K-GWY1-JCJY-G0V8-00000-00&idtype=PID&context=1516831)

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4. [*Kerry optimistic over $3bn climate change vow to developing nations US secretary of state says Obama will find a way to convince lawmakers*](https://advance.lexis.com/api/document?id=urn:contentItem:5HC1-KKH1-DXXV-451V-00000-00&idtype=PID&context=1516831)

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5. [*We should take a French approach to food waste*](https://advance.lexis.com/api/document?id=urn:contentItem:5K8B-NM01-JBVM-Y3HK-00000-00&idtype=PID&context=1516831)

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6. [*-Evonik adds L-valine to its amino acid portfolio for animal nutrition*](https://advance.lexis.com/api/document?id=urn:contentItem:5K0Y-J8M1-JD3Y-Y221-00000-00&idtype=PID&context=1516831)

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7. [*AB purchases 115 of GE's Jenbacher Type 3 and Type 4 biogas engines*](https://advance.lexis.com/api/document?id=urn:contentItem:5K3N-NDP1-DYG0-7409-00000-00&idtype=PID&context=1516831)

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8. [*'Ambitious and binding agreement' necessary*](https://advance.lexis.com/api/document?id=urn:contentItem:5HH3-6N41-DYS1-032J-00000-00&idtype=PID&context=1516831)

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9. [*Milking it: critics take aim at new environmental guidelines for dairy industry The US dairy industry is outlining ways ranchers and producers can reduce their environmental impact. But do the new guidelines go far enough?*](https://advance.lexis.com/api/document?id=urn:contentItem:5J0X-PM61-F021-6510-00000-00&idtype=PID&context=1516831)

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10. [*BBC Radio 4 - 04:47 AM GMT*](https://advance.lexis.com/api/document?id=urn:contentItem:5H64-KSK1-DY08-32B0-00000-00&idtype=PID&context=1516831)

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11. [*UN agency and French Government urge inclusion of food security in global climate change debate*](https://advance.lexis.com/api/document?id=urn:contentItem:5H4X-NF71-JD3Y-Y2XM-00000-00&idtype=PID&context=1516831)

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12. [*Milking it: will new dairy sustainability guidelines slow progress in the industry? The US dairy industry is outlining ways ranchers and producers can reduce their environmental impact. But critics say the new guidelines don't go far enough*](https://advance.lexis.com/api/document?id=urn:contentItem:5J0V-H1S1-F021-63TH-00000-00&idtype=PID&context=1516831)

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13. [*UN agency and French Government urge inclusion of food security and agriculture in global climate change debate*](https://advance.lexis.com/api/document?id=urn:contentItem:5H4X-NF71-JD3Y-Y2SF-00000-00&idtype=PID&context=1516831)

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14. [*UN agency and French Government urge inclusion of food security and agriculture in global climate change debate*](https://advance.lexis.com/api/document?id=urn:contentItem:5H4X-NF71-JD3Y-Y29T-00000-00&idtype=PID&context=1516831)

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15. [*UN agency and French Government urge inclusion of food security in global climate change debate*](https://advance.lexis.com/api/document?id=urn:contentItem:5H52-B441-F0K1-N054-00000-00&idtype=PID&context=1516831)

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16. [*UN agency and French Government urge inclusion of food security in global climate change debate*](https://advance.lexis.com/api/document?id=urn:contentItem:5H4X-NF71-JD3Y-Y2DR-00000-00&idtype=PID&context=1516831)

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17. [*UN agency and French Government urge inclusion of food security in global climate change debate*](https://advance.lexis.com/api/document?id=urn:contentItem:5H52-B441-F0K1-N02J-00000-00&idtype=PID&context=1516831)

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18. [*Sustainable exports*](https://advance.lexis.com/api/document?id=urn:contentItem:5MYF-GVJ1-DYF4-G15Y-00000-00&idtype=PID&context=1516831)

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19. [*Sustainable exports*](https://advance.lexis.com/api/document?id=urn:contentItem:5MP3-2VS1-DYF4-G362-00000-00&idtype=PID&context=1516831)

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20. [*Short answers to hard climate questions Tough challenges, daunting scenarios, and things we can do to help*](https://advance.lexis.com/api/document?id=urn:contentItem:5HH5-NH81-DYR7-C186-00000-00&idtype=PID&context=1516831)

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21. [*India 's climate tech revolution is starting in its villages From solar powered irrigation to handheld crop sensors, climate-smart villages are springing up across Gujarat , Haryana , Punjab and other states*](https://advance.lexis.com/api/document?id=urn:contentItem:5H4G-5FJ1-F021-607F-00000-00&idtype=PID&context=1516831)

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22. [*India 's climate tech revolution is starting in its villages From solar powered irrigation to handheld crop sensors, climate-smart villages are springing up across Gujarat , Haryana , Punjab and other states*](https://advance.lexis.com/api/document?id=urn:contentItem:5H4G-5FJ1-F021-607D-00000-00&idtype=PID&context=1516831)

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23. [*Italy set to pass new law to fight food waste The Italian parliament is due to pass new laws cutting red tape for shops or supermarkets who wish to donate food - making it Europe's second country after France to introduce new legislation*](https://advance.lexis.com/api/document?id=urn:contentItem:5J9H-TGD1-F021-627K-00000-00&idtype=PID&context=1516831)

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24. [*-[CDP press release] Climate action reaches tipping point as corporate 'A Listers' revealed*](https://advance.lexis.com/api/document?id=urn:contentItem:5HBP-28G1-JD3Y-Y1S3-00000-00&idtype=PID&context=1516831)

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25. [*Nuclear’s environmental impact – is it trivial?*](https://advance.lexis.com/api/document?id=urn:contentItem:5HK9-7XK1-DYXB-S2NB-00000-00&idtype=PID&context=1516831)

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26. [*Renewable fuel benefits*](https://advance.lexis.com/api/document?id=urn:contentItem:5J46-2F41-JDHR-854T-00000-00&idtype=PID&context=1516831)

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27. [*Programme summary of Iranian TV news 0930 gmt 30 May 16*](https://advance.lexis.com/api/document?id=urn:contentItem:5JWR-HMY1-JC8S-C233-00000-00&idtype=PID&context=1516831)

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28. [*Scottish research finds soil crucial to climate change fight*](https://advance.lexis.com/api/document?id=urn:contentItem:5JGG-4RP1-F15H-C48M-00000-00&idtype=PID&context=1516831)

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29. [*Comment - Nuclear's environmental impact - is it trivial?*](https://advance.lexis.com/api/document?id=urn:contentItem:5HK8-2WN1-JD7R-X00F-00000-00&idtype=PID&context=1516831)

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30. [*Don't dodge the green issues, Mr Kenny - they're actually a golden opportunity*](https://advance.lexis.com/api/document?id=urn:contentItem:5JT4-N4T1-JBVM-Y0Y5-00000-00&idtype=PID&context=1516831)

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31. [*Climate deal: Carbon dated?*](https://advance.lexis.com/api/document?id=urn:contentItem:5HM8-VWH1-F039-60DM-00000-00&idtype=PID&context=1516831)

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32. [*Brazilian columnist assesses climate change summit outcome*](https://advance.lexis.com/api/document?id=urn:contentItem:5HMK-57X1-JC8S-C4MV-00000-00&idtype=PID&context=1516831)

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33. [*Biofuel needs $70 oil to compete, says DuPont*](https://advance.lexis.com/api/document?id=urn:contentItem:5H9D-CCW1-JCM7-G493-00000-00&idtype=PID&context=1516831)

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34. [*Impax Environmental Markets PLC Half Yearly Report*](https://advance.lexis.com/api/document?id=urn:contentItem:5GJV-4N21-F0CC-S1N5-00000-00&idtype=PID&context=1516831)

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35. [*Norway : Environmental hero or hypocrite?*](https://advance.lexis.com/api/document?id=urn:contentItem:5JRY-CCG1-F039-623H-00000-00&idtype=PID&context=1516831)

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36. [*Sustainability Watch - Smithfield Foods on new targets*](https://advance.lexis.com/api/document?id=urn:contentItem:5GNR-HR31-JDNW-42KW-00000-00&idtype=PID&context=1516831)

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37. [*Xylem Inc. Research Identifies Significant Energy Efficiency Opportunity in Wastewater Management Globally*](https://advance.lexis.com/api/document?id=urn:contentItem:5H69-RRR1-JB72-1009-00000-00&idtype=PID&context=1516831)

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38. [*OECD upgrades Ireland 's growth forecast*](https://advance.lexis.com/api/document?id=urn:contentItem:5HBM-0K91-F021-62YM-00000-00&idtype=PID&context=1516831)

**Client/Matter:** -None-

**Search Terms:** emission and energy or emission and reduction or emission and targets or emission and greenhouse gas or energy and reductions or energy and targets or energy and greenhouse gas or reductions and targets or reductions and greenhouse gas or targets and greenhouse gas

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| News | Timeline: 20 jul 2015 tot 20 jul 2016; Locatie: International; Plaats van publicatie: Europe; Taal: English |

39. [*Time to change the way we farm?*](https://advance.lexis.com/api/document?id=urn:contentItem:5HBX-7XK1-JD39-X2S8-00000-00&idtype=PID&context=1516831)

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40. [*US REG, ExxonMobil team up on biodiesel*](https://advance.lexis.com/api/document?id=urn:contentItem:5HY7-XDS1-JCN4-H453-00000-00&idtype=PID&context=1516831)

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41. [*Climate change: we are still searching for that paddle*](https://advance.lexis.com/api/document?id=urn:contentItem:5K20-PFG1-JBVM-Y1KV-00000-00&idtype=PID&context=1516831)

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42. [*-Hydro- Quebec - The municipality of L'Ange-Gardien offers a new charging option for electric vehicle drivers*](https://advance.lexis.com/api/document?id=urn:contentItem:5J9B-D031-F0K1-N0GC-00000-00&idtype=PID&context=1516831)

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43. [*Yes, the Paris climate change conference can save the planet Earth's temperature is heading towards its highest for three million years. We must move to zero emissions - and it can be done without closing down our economy*](https://advance.lexis.com/api/document?id=urn:contentItem:5JH9-PX31-JCJY-G1NF-00000-00&idtype=PID&context=1516831)

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44. [*- EBRD boosts food security across regions*](https://advance.lexis.com/api/document?id=urn:contentItem:5JN3-X491-F0K1-N327-00000-00&idtype=PID&context=1516831)

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45. [*Evonik's new lysine plant goes on stream in Brazil*](https://advance.lexis.com/api/document?id=urn:contentItem:5KYT-R251-JC6M-X40W-00000-00&idtype=PID&context=1516831)

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46. [*Yes, the Paris climate change conference can save the planet Earth's temperature is heading towards its highest for three million years. We must move to zero emissions - and it can be done without closing down our economy*](https://advance.lexis.com/api/document?id=urn:contentItem:5HFF-3M31-JCJY-G3WR-00000-00&idtype=PID&context=1516831)

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47. [*Conquering climate change requires global cooperation*](https://advance.lexis.com/api/document?id=urn:contentItem:5N6H-PYR1-F105-V4TN-00000-00&idtype=PID&context=1516831)

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48. [*"Historic" Paris Agreement Paves Way for World Bank to Help Countries Deliver on Climate Commitments*](https://advance.lexis.com/api/document?id=urn:contentItem:5HKY-23P1-F12G-X3NT-00000-00&idtype=PID&context=1516831)

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49. [*End of sanctions may help Iran face an accelerating environmental crisis The lifting of sanctions will support positive change quickly if government funds are freed to tackle environmental challenges and if international investment is encouraged in green technology*](https://advance.lexis.com/api/document?id=urn:contentItem:5HXW-S9C1-JCJY-G2FC-00000-00&idtype=PID&context=1516831)

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50. [*Environmental hero? FT BIG READ: NORWAY*](https://advance.lexis.com/api/document?id=urn:contentItem:5JPJ-97S1-JBFS-D0T9-00000-00&idtype=PID&context=1516831)

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51. [*Electric Vehicle Charging Stations Market: 29.8% CAGR to 2022*](https://advance.lexis.com/api/document?id=urn:contentItem:5JFX-WD41-JB72-14KB-00000-00&idtype=PID&context=1516831)

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52. [*- IMF -Leaders Unite in Calling for a Price on Carbon Ahead of Paris Climate Talks*](https://advance.lexis.com/api/document?id=urn:contentItem:5H6T-BX91-F0K1-N218-00000-00&idtype=PID&context=1516831)

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53. [*-ADB-Leaders Unite in Calling for a Price on Carbon Ahead of Paris Climate Talks*](https://advance.lexis.com/api/document?id=urn:contentItem:5H6T-BX91-F0K1-N219-00000-00&idtype=PID&context=1516831)

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54. [*- CWA , dairy industry and AGL CEO sign landmark agreement on CSG land access*](https://advance.lexis.com/api/document?id=urn:contentItem:5GWW-MGV1-F0K1-N41B-00000-00&idtype=PID&context=1516831)

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| News | Timeline: 20 jul 2015 tot 20 jul 2016; Locatie: International; Plaats van publicatie: Europe; Taal: English |

55. [*-IFC Helps Turkish Glass Maker Trakya Cam Save Energy in Turkey and Bulgaria*](https://advance.lexis.com/api/document?id=urn:contentItem:5GJX-VT81-F0K1-N1JD-00000-00&idtype=PID&context=1516831)

**Client/Matter:** -None-

**Search Terms:** emission and energy or emission and reduction or emission and targets or emission and greenhouse gas or energy and reductions or energy and targets or energy and greenhouse gas or reductions and targets or reductions and greenhouse gas or targets and greenhouse gas

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| News | Timeline: 20 jul 2015 tot 20 jul 2016; Locatie: International; Plaats van publicatie: Europe; Taal: English |

56. [*Ukip AM returning from holiday early amid storm over his appointment as head of climate change committee Around 7,000 signatures on a petition calling on the Assembly to rescind the appointment of Mark Reckless as chair of a committee investigating climate change*](https://advance.lexis.com/api/document?id=urn:contentItem:5K4P-G9R1-JCJY-G1J8-00000-00&idtype=PID&context=1516831)

**Client/Matter:** -None-

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| News | Timeline: 20 jul 2015 tot 20 jul 2016; Locatie: International; Plaats van publicatie: Europe; Taal: English |

57. [*BBC Radio 4 - 01:22 AM GMT*](https://advance.lexis.com/api/document?id=urn:contentItem:5J0H-28T1-JBH6-C0JK-00000-00&idtype=PID&context=1516831)

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58. [*-FIRST SOLAR, AL WATANIA AGRICULTURAL CO. PILOT SOLAR-POWERED IRRIGATION PROJECT IN SAUDI ARABIA*](https://advance.lexis.com/api/document?id=urn:contentItem:5HY9-SG21-F0K1-N4BF-00000-00&idtype=PID&context=1516831)

**Client/Matter:** -None-

**Search Terms:** emission and energy or emission and reduction or emission and targets or emission and greenhouse gas or energy and reductions or energy and targets or energy and greenhouse gas or reductions and targets or reductions and greenhouse gas or targets and greenhouse gas

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59. [*-FIRST SOLAR, AL WATANIA AGRICULTURAL CO. PILOT SOLAR-POWERED IRRIGATION PROJECT IN SAUDI ARABIA*](https://advance.lexis.com/api/document?id=urn:contentItem:5J15-83X1-JD3Y-Y53G-00000-00&idtype=PID&context=1516831)

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**Search Terms:** emission and energy or emission and reduction or emission and targets or emission and greenhouse gas or energy and reductions or energy and targets or energy and greenhouse gas or reductions and targets or reductions and greenhouse gas or targets and greenhouse gas

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60. [*Leaked figures show spike in palm oil use for biodiesel in Europe Steep rise between 2010 and 2014 shows link between EU's renewable energy mandate and deforestation in south-east Asia, say campaigners*](https://advance.lexis.com/api/document?id=urn:contentItem:5JX5-22R1-F021-61D1-00000-00&idtype=PID&context=1516831)

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61. [*Leaked figures show spike in palm oil use for biodiesel in Europe Steep rise between 2010 and 2014 shows link between EU's renewable energy mandate and deforestation in south-east Asia, say campainers*](https://advance.lexis.com/api/document?id=urn:contentItem:5JX5-22R1-F021-61D0-00000-00&idtype=PID&context=1516831)

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62. [*Ilona Amos: It's time to reduce our red meat consumption*](https://advance.lexis.com/api/document?id=urn:contentItem:5H4V-KYK1-JDPF-N3D0-00000-00&idtype=PID&context=1516831)

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63. [*IRELAND 'S CHANGING CLIMATE*](https://advance.lexis.com/api/document?id=urn:contentItem:5HF0-21R1-JBVM-Y4T9-00000-00&idtype=PID&context=1516831)

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64. [*Halma PLC Final Results -10-*](https://advance.lexis.com/api/document?id=urn:contentItem:5K12-TDP1-JCXB-250D-00000-00&idtype=PID&context=1516831)

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65. [*-Evonik adds L-valine to its amino acid portfolio for animal nutrition*](https://advance.lexis.com/api/document?id=urn:contentItem:5K15-HFV1-JD3Y-Y12N-00000-00&idtype=PID&context=1516831)

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66. [*Politicians are not bothered about climate change because we are not*](https://advance.lexis.com/api/document?id=urn:contentItem:5HG3-4H01-JCW9-20R8-00000-00&idtype=PID&context=1516831)

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67. [*World Bank Launches Action Plan To Help Nations Meet Urgent Climate Impacts*](https://advance.lexis.com/api/document?id=urn:contentItem:5JGP-D5B1-DXCW-C1VY-00000-00&idtype=PID&context=1516831)

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68. [*Food security atforefront of climate treaty*](https://advance.lexis.com/api/document?id=urn:contentItem:5JP5-XG61-JB14-73JJ-00000-00&idtype=PID&context=1516831)

**Client/Matter:** -None-

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69. [*Food security at forefront of climate treaty*](https://advance.lexis.com/api/document?id=urn:contentItem:5JF4-WGD1-DXG5-Y1R6-00000-00&idtype=PID&context=1516831)

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70. [*Analysis UN climate deal*](https://advance.lexis.com/api/document?id=urn:contentItem:5JRF-60P1-JBPJ-71CG-00000-00&idtype=PID&context=1516831)

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71. [*Analysis UN climate deal*](https://advance.lexis.com/api/document?id=urn:contentItem:5JRF-5YF1-DY5K-Y076-00000-00&idtype=PID&context=1516831)

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72. [*Analysis UN climate deal*](https://advance.lexis.com/api/document?id=urn:contentItem:5JMX-P3M1-DY5K-Y13X-00000-00&idtype=PID&context=1516831)

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73. [*Analysis UN climate deal*](https://advance.lexis.com/api/document?id=urn:contentItem:5JMX-P2P1-JBPJ-73HX-00000-00&idtype=PID&context=1516831)

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74. [*World Bank to spend 28% of investments on climate change projects The world's biggest provider of public finance to developing countries will refocus its financing efforts towards tackling climate change, group said*](https://advance.lexis.com/api/document?id=urn:contentItem:5JGK-FJ31-JCJY-G53B-00000-00&idtype=PID&context=1516831)

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| News | Timeline: 20 jul 2015 tot 20 jul 2016; Locatie: International; Plaats van publicatie: Europe; Taal: English |

75. [*Q&A ON THE NEW CLIMATE CHANGE AGREEMENT*](https://advance.lexis.com/api/document?id=urn:contentItem:5HKN-1DX1-JCBD-Y278-00000-00&idtype=PID&context=1516831)

**Client/Matter:** -None-

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76. [*Evonik sees profitability gains in sustainable animal nutrition game*](https://advance.lexis.com/api/document?id=urn:contentItem:5KYT-R231-DYNP-M23H-00000-00&idtype=PID&context=1516831)

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77. [*Ricardo PLC Interim Results -2-*](https://advance.lexis.com/api/document?id=urn:contentItem:5J5V-5101-F0CC-S4SK-00000-00&idtype=PID&context=1516831)

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78. [*Carbon dioxide and the link to crop levels Letters to the Editor*](https://advance.lexis.com/api/document?id=urn:contentItem:5H6B-KMJ1-JBVM-Y542-00000-00&idtype=PID&context=1516831)

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79. [*Carbon dioxide and the link to crop levels Matt Ridley says that evidence is growing that high CO2 levels boost crops and nourish the oceans. Is he right?*](https://advance.lexis.com/api/document?id=urn:contentItem:5H66-YXM1-JCJY-G2WR-00000-00&idtype=PID&context=1516831)

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80. [*Making the Most of Manure: SRUC Experts Say it is Time to Break Old Habits*](https://advance.lexis.com/api/document?id=urn:contentItem:5GSG-B5G1-F0JC-M30T-00000-00&idtype=PID&context=1516831)

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81. [*World Bank calls for $16bn to help Africa weather the effects of climate change Africa climate business plan, emphasising clean energy, efficient farming and urban protection, will be launched by World Bank chief at Paris climate talks*](https://advance.lexis.com/api/document?id=urn:contentItem:5HFW-XJG1-F021-63JN-00000-00&idtype=PID&context=1516831)

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82. [*Release of CO2 fastest in 66 million years: study*](https://advance.lexis.com/api/document?id=urn:contentItem:5JBY-Y6H1-DY93-M52K-00000-00&idtype=PID&context=1516831)

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83. [*Report by Capgemini Consulting and i24c: Europe Failing to Realize the Full Environmental and Commercial Benefits of its Low-Carbon Technology R&D Leadership*](https://advance.lexis.com/api/document?id=urn:contentItem:5JW4-2XK1-F0K1-N4K5-00000-00&idtype=PID&context=1516831)

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84. [*Big cheese puts environment first through innovation A background in microbiology and a drive to innovate helped Julie Cameron transform a sinking wool business into a multi-million dollar dairy operation, all while helping to save her local environment*](https://advance.lexis.com/api/document?id=urn:contentItem:5JXJ-9MD1-JCJY-G48T-00000-00&idtype=PID&context=1516831)

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85. [*Report by Capgemini Consulting and i24c: Europe Failing to Realize the Full Environmental and Commercial Benefits of its Low-Carbon Technology R&D Leadership*](https://advance.lexis.com/api/document?id=urn:contentItem:5JW4-2XK1-F0K1-N4BP-00000-00&idtype=PID&context=1516831)

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86. [*-FPL breaks ground on three new solar power plants that will triple the amount of solar it provides its customers*](https://advance.lexis.com/api/document?id=urn:contentItem:5J2R-9971-F0K1-N2J9-00000-00&idtype=PID&context=1516831)

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87. [*Choking air, melting glaciers: how global warming is changing India*](https://advance.lexis.com/api/document?id=urn:contentItem:5HD3-SN51-DY93-M17V-00000-00&idtype=PID&context=1516831)

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88. [*Fossil fuel use must fall twice as fast as thought to contain global warming - study Available carbon budget is half as big as thought if global warming is to be kept within 2C limit agreed internationally as being the point of no return, researchers say. Climate News Network reports*](https://advance.lexis.com/api/document?id=urn:contentItem:5J5G-HPK1-F021-63P4-00000-00&idtype=PID&context=1516831)

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89. [*Blowing it on the wind*](https://advance.lexis.com/api/document?id=urn:contentItem:5H6T-GGS1-F0FB-T2FW-00000-00&idtype=PID&context=1516831)

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90. [*Africa - The Africa Climate Business Plan.*](https://advance.lexis.com/api/document?id=urn:contentItem:5JKM-3731-F0PT-M3TT-00000-00&idtype=PID&context=1516831)

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91. [*Biofuel needs oil at $70 to compete, says DuPont Chemicals*](https://advance.lexis.com/api/document?id=urn:contentItem:5H9H-T9S1-DXXV-41WM-00000-00&idtype=PID&context=1516831)

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92. [*Evonik's new lysine plant goes on stream in Brazil*](https://advance.lexis.com/api/document?id=urn:contentItem:5KYT-R251-DYNP-M05J-00000-00&idtype=PID&context=1516831)

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93. [*Cop21 - Africa - Agriculture neglected in Cop21 negotiation text, AU expert*](https://advance.lexis.com/api/document?id=urn:contentItem:5HJF-C1T1-F11P-X0SX-00000-00&idtype=PID&context=1516831)

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94. [*- General Mills to double organic acreage sourcing to meet growing demand for natural and organic foods*](https://advance.lexis.com/api/document?id=urn:contentItem:5J8P-GD91-JD3Y-Y2GV-00000-00&idtype=PID&context=1516831)

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95. [*- METLIFE RELEASES UPDATE ON ENVIRONMENTAL, SOCIAL AND GOVERNANCE ISSUES*](https://advance.lexis.com/api/document?id=urn:contentItem:5H0F-8S61-JD3Y-Y0FK-00000-00&idtype=PID&context=1516831)

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96. [*- KYOCERA TCL Solar Begins Construction on 13.7MW Floating Solar Power Plant Company's fourth floating solar project, world's largest, will be built on Japan 's Yamakura Dam reservoir*](https://advance.lexis.com/api/document?id=urn:contentItem:5J15-83X1-JD3Y-Y2T9-00000-00&idtype=PID&context=1516831)

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97. [*- KYOCERA TCL Solar Begins Construction on 13.7MW Floating Solar Power Plant Company's fourth floating solar project, world's largest, will be built on Japan 's Yamakura Dam reservoir*](https://advance.lexis.com/api/document?id=urn:contentItem:5HX7-XJ71-F0K1-N05M-00000-00&idtype=PID&context=1516831)

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98. [*-AfDB-Multilateral Development Banks pledge increased funding to tackle climate change*](https://advance.lexis.com/api/document?id=urn:contentItem:5HHB-DDV1-F0K1-N45M-00000-00&idtype=PID&context=1516831)

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99. [*Climate change must be halted, now Heating the planet is an ecocrime*](https://advance.lexis.com/api/document?id=urn:contentItem:5H88-7DG1-JCM4-64F5-00000-00&idtype=PID&context=1516831)

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100. [*Could diesel vehicles really be banned in Wales following VW emissions scandal? Government document says areas will breach EU pollution limits for years if diesels are not kept out*](https://advance.lexis.com/api/document?id=urn:contentItem:5H42-1TV1-JCJY-G4V9-00000-00&idtype=PID&context=1516831)

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# [***Arctic powers gather for Alaska talks as pace of global warming threatens ice cap; US to host summit of polar nations as fears grow that the Earth's frozen wastes are losing their ability to deflect harmful rays***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H5K-NJ91-JCJY-G16V-00000-00&context=1516831)

The Observer (London)

October 17, 2015 Saturday 11:09 PM GMT

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**Section:** WORLD NEWS

**Length:** 742 words

**Byline:** Robin McKie Science editor

**Body**

Scientists in Alaska will raise the vexed issue of methane and "black carbon" pollution as they discuss tipping-point dangers posed by global warming in the Arctic.

A crucial meeting of the Arctic Council, in Anchorage, comes amid evidence that the polar region is warming faster than any other place on Earth and that sea ice coverage there has shrunk by nearly a third since 1979. Researchers now fear that new threats to climate stability are about to be unleashed in the Arctic. Warming in high latitudes is causing permafrost in Siberia and northern Canada to thaw and release plumes of methane stored there, they say. Methane is a powerful ***greenhouse gas*** and these releases threaten to trigger secondary rises in global temperatures.

In addition, researchers warn that black carbon - ultra-fine particles produced by factories and farms and deposited thousands of miles from ***emission*** points - could be significantly ***reducing*** the brightness of snow and icefields. With less solar radiation reflected back into space, the region will warm up even faster, leading to a longer melt season and even greater ***reductions*** in ice.

"The sources of black carbon and methane ***emissions*** affecting the Arctic are the oil and gas sector, waste, domestic burning, shipping and other modes of transportation, ***agricultural*** burning, other industry and ***agricultural*** sources, and natural sources including wildfires and wetlands," said Jon Kahn, director of the ministry of environment and ***energy*** in Sweden and an Arctic Council delegate, in a recent blog.

Kahn has played a key role in setting up past Arctic Council investigations of the dangers posed by methane and black carbon to the region. Crucially, Kahn noted that the US, which has just assumed presidency of the council, has agreed to maintain this interest and, in particular, to look more closely at flaring, the burning of natural gas that cannot be processed or sold, and which has been linked to the release of secondary climate pollutants such as black carbon.

The Arctic Council is made up of representatives of the main north polar nations - Canada, Denmark (through its dependencies of Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States. In recent years, its work has come into sharp focus as the Arctic has warmed up and its sea ice cover has shrunk, exposing once inaccessible oilfields and sea routes.

Russia has been particularly aggressive in claiming rights over newly exposed territories, while US president Barack Obama recently triggered controversy by giving the go-ahead to Shell to drill for oil in the Chukchi Sea.

However, the US administration has since made significant retreats over its oil drilling policy in the Arctic and last week announced new curbs on oil and gas exploration in Arctic waters off Alaska's northern coast. This has raised hopes that it will use its presidency of the Arctic Council to try to strengthen measures that will protect the fragile polar environment. The Arctic suffers by comparison with its southerly counterpart, the Antarctic, which is controlled by an international treaty that bans all mining, oil drilling or the presence of the military, and which strictly controls all environmental hazards. By contrast, the Arctic is owned by nations who have very different ideas about how to run the place. It is the task of the Arctic Council to reconcile these differing aspirations.

For its part, the United Kingdom, which has strong interests in both Arctic and Antarctic research and exploration, has permanent observer status at the council and uses its scientific expertise and knowledge of the region to optimise its political leverage at debates.

The UK has been criticised for its lack of ambition in Arctic debates. A House of Lords report, Responding to a Changing Arctic, recently warned that the UK does not always take a full role in Arctic discussions. In the report, peers recommended that the post of UK Arctic ambassador be created. However, the government has since dismissed the idea, arguing that such a post is unnecessary. "We already have a strong influence and certainly do not need honorific posts with grand titles to make our presence felt," said one UK Arctic expert.

This year, the UK natural environment research council said it would spend an extra £16m on Arctic research in order to better understand how climate change there is likely to affect wildlife, fish stocks and the environment.

**Load-Date:** October 17, 2015

**End of Document**



[***Canadian egg sector going ‘greener’***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K56-4T61-JB14-7300-00000-00&context=1516831)

World Poultry (English)

July 4, 2016

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**Section:** EGGS

**Length:** 361 words

**Byline:** Rosie Burgin

**Highlight:** Despite a 50% increase in egg production, the environmental footprint of the Canadian egg sector has decreased by almost 50% according to a recent report by Egg Farmers of Canada.

**Body**

EFC, a national non-profit organisation that manages the supply of eggs, promotes eggs and develops standards for egg farming in Canada, took a hard look at the entire supply chain to see how the whole industry has changed - and where more improvements could be made.

**Changes in egg production over 50 years**

The comprehensive study, Environmental Footprint of Canadian Eggs: 1962 vs 2012, provides insight into the history of ***agricultural*** production in Canada. The aim of the study was to evaluate the cradle-to-farm gate environmental footprint of egg production, and how it has changed over 50 years.

Canadian egg production volumes increased from 434 million dozen to 657 million dozen eggs per year between 1962 and 2012 - an increase of over 50%. Even with this increase, the egg industry's overall environmental footprint decreased for all resource use and ***emissions*** indicators considered. Supply chain ***emissions*** for egg production were 72% lower for ***greenhouse gas*** ***emissions***. Supply chain ***energy***, land and water use were 41%, 81% and 69% lower, the study showed.

**Also read:**

**Improved efficiencies in egg supply chain**

The change in the environmental footprint of Canadian eggs is attributed to a number of factors. These include improved efficiencies in the supply chain activities that support egg production; changes in the composition of feeds sourced for both pullet and egg production; and significant improvements in resource efficiencies, animal health, and productivity at the level of pullet and egg production. These effective, on-going management upgrades have placed the Canadian egg industry at substantially higher levels of efficiency and productivity than several decades ago.

This commitment to effective sustainability practices comes just as Canada has signed on to the in December 2015. Meeting the ***targets*** set out in the agreement requires cooperation across sectors, situating Canada as a leader in addressing climate change.

As a next step in its commitment to effective sustainability practices for egg production, EFC has funded a new Research Chair in Sustainability, Dr Nathan Pelletier, at the University of British Columbia's Okanagan Campus.

**Load-Date:** July 4, 2016

**End of Document**



[***Arctic powers in Alaska for talks as pace of global warming threatens ice cap; US to host summit of polar nations as fears grow that the Earth's frozen wastes are losing their ability to deflect harmful rays***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H5K-GWY1-JCJY-G0V8-00000-00&context=1516831)

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In addition, researchers warn that black carbon - ultra-fine particles produced by factories and farms and deposited thousands of miles from ***emission*** points - could be significantly ***reducing*** the brightness of snow and icefields. With less solar radiation reflected back into space, the region will warm up even faster, leading to a longer melt season and even greater ***reductions*** in ice.

"The sources of black carbon and methane ***emissions*** affecting the Arctic are the oil and gas sector, waste, domestic burning, shipping and other modes of transportation, ***agricultural*** burning, other industry and ***agricultural*** sources, and natural sources including wildfires and wetlands," said Jon Kahn, director of the ministry of environment and ***energy*** in Sweden and an Arctic Council delegate, in a recent blog.

Kahn has played a key role in setting up past Arctic Council investigations of the dangers posed by methane and black carbon to the region. Crucially, Kahn noted that the US, which has just assumed presidency of the council, has agreed to maintain this interest and, in particular, to look more closely at flaring, the burning of natural gas that cannot be processed or sold, and which has been linked to the release of secondary climate pollutants such as black carbon.

The Arctic Council is made up of representatives of the main north polar nations - Canada, Denmark (through its dependencies of Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States. In recent years, its work has come into sharp focus as the Arctic has warmed up and its sea ice cover has shrunk, exposing once inaccessible oilfields and sea routes.

Russia has been particularly aggressive in claiming rights over newly exposed territories, while US president Barack Obama recently triggered controversy by giving the go-ahead to Shell to drill for oil in the Chukchi Sea.

However, the US administration has since made significant retreats over its oil drilling policy in the Arctic and last week announced new curbs on oil and gas exploration in Arctic waters off Alaska's northern coast. This has raised hopes that it will use its presidency of the Arctic Council to try to strengthen measures that will protect the fragile polar environment. The Arctic suffers by comparison with its southerly counterpart, the Antarctic, which is controlled by an international treaty that bans all mining, oil drilling or the presence of the military, and which strictly controls all environmental hazards. By contrast, the Arctic is owned by nations who have very different ideas about how to run the place. It is the task of the Arctic Council to reconcile these differing aspirations.

For its part, the United Kingdom, which has strong interests in both Arctic and Antarctic research and exploration, has permanent observer status at the council and uses its scientific expertise and knowledge of the region to optimise its political leverage at debates.

The UK has been criticised for its lack of ambition in Arctic debates. A House of Lords report, Responding to a Changing Arctic, recently warned that the UK does not always take a full role in Arctic discussions. In the report, peers recommended that the post of UK Arctic ambassador be created. However, the government has since dismissed the idea, arguing that such a post is unnecessary. "We already have a strong influence and certainly do not need honorific posts with grand titles to make our presence felt," said one UK Arctic expert.

This year, the UK natural environment research council said it would spend an extra £16m on Arctic research in order to better understand how climate change there is likely to affect wildlife, fish stocks and the environment.

**Load-Date:** October 17, 2015

**End of Document**



[***Kerry optimistic over $3bn climate change vow to developing nations; US secretary of state says Obama will find a way to convince lawmakers***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HC1-KKH1-DXXV-451V-00000-00&context=1516831)

Financial Times (London, England)

November 12, 2015 Thursday

USA Edition 1

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**Section:** WORLD NEWS; Pg. 2

**Length:** 785 words

**Byline:** Demetri Sevastopulo in Norfolk, Virginia

**Body**

John Kerry, US secretary of state, had just finished touring the USS San Antonio, a big transport ship docked at Norfolk naval base on America's east coast.

The Vietnam war veteran and former navy officer was not visiting the world's biggest naval base for nostalgia - he was trying to reinforce the case for why the US must take climate change even more seriously. The base is threatened by the prospect of rising sea levels.

As he prepared to fly to Paris this month to push for a climate deal, Mr Kerry said the threat from rising temperatures was not just the "harm that is caused to the habitat for butterflies or polar bears as some people try to mock it" but the threat to everything from ***agriculture*** to national security.

"Long story short, climate change is not just about Bambi. It's about all of us in very personal and important ways," Mr Kerry told students, military officers and climate scientists at Old Dominion University before talking to the FT.

President Barack Obama has given Mr Kerry the formidable task of trying to reach a climate deal aimed at curbing rising world temperatures. While many countries want a treaty containing legally binding ***emissions*** ***reduction*** ***targets***, Mr Kerry said there was "definitively not going to be" one.

Critics worry that unless there are legally binding ***targets***, countries can evade responsibility for their ***greenhouse gas*** ***emissions***. Some of that concern is aimed at the US because of the fear that the next president could be one of the Republicans who are either sceptical about climate change, such as Donald Trump, or unwilling to take action that could damage the US economy in the short term.

Mr Kerry argued that other countries should not worry about US politics. In any case, he claimed Republicans had no chance of taking the White House.

"There's just a very different electorate in the general election and I think that people will want somebody who understands climate change . . . and wants to do something about it," the former presidential candidate said.

Mr Kerry played down concerns that Congress would play a big role but said the administration was "fine" about some review of any agreement struck in Paris as long as the scrutiny was sincere. "It depends on whether it is a poison-pill effort or a genuine effort just to review it," he said.

He acknowledged that lawmakers were already making it difficult for the US to come up with the $3bn that it has pledged ahead of the Paris deal to help developing countries combat global warming. He said this was because of "attitudes about climate change itself" and an "ideological barrier to any kind of federal expenditure that's dealing with a kind of global issue".

Mr Kerry said finding the money was a wider challenge as "the politics of moving on climate change in many countries are trumped by paying the pensions and filling up the potholes and doing some other things". But the man who fought with Congress over the Iran deal earlier this year said Mr Obama would find a way to press lawmakers to approve the funding.

"We'll get there, because the trade-offs of the budget are such that when something is a high enough priority for a president, you have a way of getting it done, even though it's opposed by people," he said.

"If the president is prepared to veto the budget because it hasn't included it, you can usually find some money."

Mr Kerry said one hurdle was resistance from nations that insist they should be compensated more because of their developing nation status.

"We have to break the old mentality . . . This is not 1992, this is not 1997, this is not the same Kyoto kind of breakdown," he said.

"China is an example. It's now the world's largest emitter and it's the second-largest economy in the world . . . Now they're not sitting there being the same. They're putting up some money, they're doing other things. It's a great example."

While he praised Beijing, he raised concern about other countries, including India, that he suggested were more resistant even as he applauded Narendra Modi, the Indian prime minister.

"India has been more cautious, a little more restrained in its embrace of this new paradigm, and it's a challenge.

"We've got a lot of focus on India right now to try to bring them along. India regrettably is . . . not only continuing to do coal, but they're talking about using their own domestically produced coal, not importing it. And that's not the direction that we ought to be moving in."

Conscious of putting too much pressure on nations that believe the US and developed countries should take more responsibility for the current level of ***greenhouse gases***, he said "we have to be careful not to be holier-than-thou or accusatory".

A last hurrah page 9

**Load-Date:** November 11, 2015

**End of Document**



[***We should take a French approach to food waste***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K8B-NM01-JBVM-Y3HK-00000-00&context=1516831)

The Western Mail

July 19, 2016 Tuesday

Edition 1, National Edition

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**Section:** COUNTRY AND FARMING;FEATURES; Pg. 4

**Length:** 397 words

**Byline:** Jill Evans

**Body**

IN A week when we celebrate the excellence of Welsh produce, it's incredible to think that a third of the world's food is lost between farm and fork, and that food waste consumes a quarter of all water used by ***agriculture***.

Around 8% of the world's ***greenhouse gas*** ***emissions*** comes from food waste, which is more than Europe's share of global ***emissions***. Clearly, it not only makes sense to tackle this issue from a social and economic perspective but the environmental costs of food waste are also significant.

Readers may well remember the flurry of news a few months back at France's decision to become the first country to ban supermarkets from throwing away unsold food, punishing them with fines of up to (EURO)75,000 if they refused to donate it to food banks or charities instead.

There has been a marked increase in the number of food banks operating in Wales, going up from 16 between 1998 and 2010 to the 157 that we have now.

There's no doubt that this increase also correlates with the UK Government's introduction of austerity measures.

With the end of austerity nowhere in sight and with economic pressures set to squeeze households even more in the coming few years, it's clear that people are set to become even more reliant on food banks.

Given this, there's no doubt that the French approach of making supermarkets donate unused food is something to consider. Last month MEPs voted 600 to 48 to bring forward laws to end unfair trading practices by supermarkets. These practices lead to overproduction and significantly increase the likelihood of food being wasted.

This autumn the European Parliament will also consider a report that calls on the European Commission to propose laws to halve food waste across the continent by 2030. These laws are now more crucial than ever, after the Commission shelved food waste ***targets*** contained in a draft law last year.

What the statistics and the evidence shows us is that food waste is a global problem that needs both global and local solutions.

As food producers and communities, we can work together to combat food waste by helping the most vulnerable in our society.

However, we cannot do this on our own - the problem is too big. By changing the legal framework, by demanding that the big commercial supermarkets change their ways, we can make considerable steps to ***reduce*** food waste, help those in need and tackle climate change.

**Load-Date:** July 19, 2016

**End of Document**



[***-Evonik adds L-valine to its amino acid portfolio for animal nutrition***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K0Y-J8M1-JD3Y-Y221-00000-00&context=1516831)

ENP Newswire

June 14, 2016 Tuesday

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**Length:** 485 words

**Body**

Essen - Evonik has launched L-valine, the fifth essential amino acid for animal nutrition in the company's portfolio.

It will make swine and poultry feed more efficient and sustainable.

L-valine is needed for protein biosynthesis in the organism of animals and forms part of all important proteins. The low valine content of plant-based raw feed materials frequently limits the utilization of other protein building blocks. Valine is the fifth limiting amino acid in pigs, and the fourth limiting in poultry.

The addition of ValAMINO, along with MetAMINO (DL-methionine), Biolys (L-lysine), ThrAMINO (L-threonine) and TrypAMINO (L-tryptophan), allows to further ***reduce*** crude protein content of feed without any loss of animal growth performance. This results in lower feed costs and conserves natural resources in ***agricultural*** feed production, which in turn ***reduces*** land use, ***greenhouse gas*** ***emissions***, and potential eutrophication and acidification. In this manner, ***targeted*** amino acid supplementation contributes to the sustainable supply of animal protein for a growing world population.

ValAMINO is produced by fermentation. The product has been registered Europe-wide and the market launch has started. 'We are now able to offer customers the five key essential amino acids for animal nutrition from a single source-along with our wide range of services,' noted Dr. Emmanuel Auer, head of the Animal Nutrition Business Line at Evonik. 'This is further proof of our leadership in this field.'

Evonik has over sixty years of experience in the manufacture of essential amino acids and provides solutions for efficient and sustainable animal nutrition to customers in over one hundred countries. Evonik strives to make an even greater contribution to the efficiency of animal feed by including innovative feed additives beyond amino acids in its portfolio in order to create additional value for its customers. Evonik's products and services in the area of animal nutrition play a key role in the worldwide production of healthy and affordable food, while preserving natural resources and ***reducing*** the ecological footprint.

About Evonik

Evonik, the creative industrial group from Germany, is one of the world leaders in specialty chemicals, operating in the Nutrition & Care, Resource Efficiency and Performance Materials segments. The company benefits from its innovative prowess and integrated technology platforms. In 2015 more than 33,000 employees were employed at Evonik.

About Nutrition & Care

The Nutrition & Care segment is led by Evonik Nutrition & Care GmbH and contributes to fulfilling basic human needs. That includes applications for everyday consumer goods as well as animal nutrition and health care. This segment employed about 7,000 employees in 2015.

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[Editorial queries for this story should be sent to [*newswire@enpublishing.co.uk*](mailto:newswire@enpublishing.co.uk) ]

**Load-Date:** June 14, 2016

**End of Document**



[***AB purchases 115 of GE's Jenbacher Type 3 and Type 4 biogas engines***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K3N-NDP1-DYG0-7409-00000-00&context=1516831)

MarketLine NewsWire (Formerly Datamonitor)

June 30, 2016 Thursday 1:28 PM GMT

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**Section:** GENERAL INDUSTRY MACHINERY

**Length:** 630 words

**Highlight:** GE's Distributed Power business has announced that AB Holding SpA, a combined heat and power and biogas project developer, has purchased 115 of GE's Jenbacher Type 3 and Type 4 biogas engines.

**Body**

AB will offer the units to ***agricultural*** sector customers as a cost-effective alternative to upgrading existing engines at their sites. Following a 2012 boom in ***agricultural*** biogas projects driven by government incentives, industry demand for new biogas development began to slow down. In response to this industry development, the new engine order illustrates AB's new service strategy to give ***agricultural*** customers a cost-effective new option to repower their existing biogas ***energy*** facilities. "We purchased the 115 Jenbacher biogas engines from GE to provide an attractive and reliable service option to our customers in Italy during the minor overhauls for their installed gas engines," said Angelo Baronchelli, AB's president.

"Instead of overhauling a customer's installed engine on-site, potentially causing several costly days of downtime, we now have the ability to immediately provide an alternative solution to replace the existing engine with a new 'premium long block' powered by one our latest Jenbacher units." Time-saving engine replacement procedures are an attractive solution, helping customers ***reduce*** their downtimes and costs. High levels of plant reliability after such major service activities also provide additional economic benefits. AB is offering the attractive replacement program for Jenbacher gas engines when they reach their recommended operating hours schedule for a minor overhaul. To save the customer time and money, AB offers on-site replacements with overhauled engines, including upfront delivery for engines that needs to be changed out. The customer receives an original Jenbacher engine that meets the latest technology standards and is aligned with the end user's business needs. Meanwhile, the operator's first engine will be overhauled at Orzinuovi and later will be returned to service during the next scheduled engine overhaul. The long block option provides an extended scope of supply that is precisely adjusted to the customer's requirements and contains a comprehensive engine test run at the Jenbacher test bench facilities. Benefits of this approach include technical upgrades and short delivery times. Installing a Jenbacher J320 long block engine under the replacement program will allow AB to offer an ***agricultural*** biogas plant operator 2,000 additional operating hours of power production in downtime savings, an estimated 2,700 tons of biomass savings and approximately E600,000 in additional income over 15 years. Meanwhile, the new long block engine offering continues to improve local air quality by helping the operator ***reduce*** the need to flare off biogas during the overhaul. AB ordered 115 of GE's Jenbacher J312, J316, J320 and J416 gas engines. The engines will supply a combined 115-megawatts (MW) of renewable ***energy*** to AB's customers. "We are excited to deepen our relationship with AB by supporting their innovative way to continue developing cost-effective biogas projects throughout Italy in support of Europe's efforts to expand renewable ***energy*** production," said Margherita Adragna, general manager-services for GE's Distributed Power business. "Increasing the long-term reliability of existing biogas facilities throughout the region will play an important role in supporting the region's efforts to ***reduce*** its ***greenhouse gas*** ***emissions***." All of the 115 units will be delivered by GE's Overhaul Technology Center for Jenbacher gas engines in Austria, where GE's Distributed Power business also is headquartered. The new order follows a multiyear agreement announced in 2011 between GE and AB for the Italian company to deploy Jenbacher engines for ***agricultural*** biogas projects throughout Europe. In all, AB now owns an estimated 1,100 Jenbacher engines that are being used for various on-site power projects.

**Load-Date:** July 5, 2016

**End of Document**



[***'Ambitious and binding agreement' necessary***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HH3-6N41-DYS1-032J-00000-00&context=1516831)

The Irish Times

December 1, 2015 Tuesday

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**Section:** IRELAND; Pg. 2

**Length:** 605 words

**Body**

"COP21 provides a unique opportunity for the political leaders of this generation to provide lasting foundations for the preservation and sustainability of generations of the future.

"Many of us in this room came together in New York in September to agree the Sustainable Development Goals, the most ambitious programme of action ever agreed by the nations of the world.

"Today, we meet in Paris, a city whose people have demonstrated remarkable bravery, courage and resilience in the face of the most horrendous crimes.

"I hope that we are serious about putting in place a legally binding agreement on climate change that will underpin our actions on the goals already agreed and enhance our ability to reach them. This requires action by everybody, big and small.

"Ireland is determined to play its part. We have committed, with our EU partners, to a collective ***target*** to ***reduce*** ***greenhouse-gas*** ***emissions*** by at least 40 per cent by 2030. Ireland's national long-term vision is presented in climate legislation, which sets out our intention to substantially cut CO2 ***emissions*** by 2050, while developing an approach towards carbon neutrality in the land sector that does not compromise our capacity for food production. We are developing a National Mitigation Plan to achieve that vision.

"One really significant area for Ireland is our valuable and already efficient ***agriculture*** sector. Through a series of programmes, like carbon foot-printing 43,500 beef farms and 18,000 dairy farms, we are driving economic and environmental efficiency in ***agriculture*** and achieving results that we believe are both transferable and scalable.

"Our research will contribute to global progress and help all countries realise the potential of their land sectors in addressing climate change. This is not just about opportunities, but about the co-operation that will allow us to address our common challenges. Real transparency and accountability will benefit us all, but we need to trust each other and the systems that we operate in.

"Building on our strong track record of supporting developing countries, including in areas like climate justice, human rights, gender and education, Ireland recognises that vulnerable communities need very considerable assistance in adapting to climate change.

"Despite recent difficult economic circumstances, Ireland provided public climate finance of EUR 34 million in 2014, including support for the Least Developed Countries Fund. These funds support adaptation in ***agriculture***, food and ***energy*** systems, and help to strengthen the resilience of vulnerable households, primarily in sub-Saharan Africa.

"Ireland is committed to scaling up climate finance. One: in addition to continuing our current level of support, which from 2016 to 2020 will ensure EUR 175 million in public funding, mainly for adaptation, Ireland will commence contributions to the Green Climate Fund in 2016 with a view to building up support over the coming years.

"Two: we will increase our contribution to the Least Developed Countries Fund.

"Three: we are also examining ways to mobilise private finance from Ireland, to further contribute to the 2020 goal.

"The negotiations this week will be very difficult, but if we are serious then we should leave Paris with an ambitious and binding agreement that will ultimately limit global temperature increase to less than 2 degrees above pre-industrial levels . . .

"I encourage our negotiators to bring this process to a successful conclusion next week. Let's send the signal the world is waiting for and let us not deprive our successors and their children of a real future before they are born."

**Load-Date:** November 30, 2015

**End of Document**



[***Milking it: critics take aim at new environmental guidelines for dairy industry; The US dairy industry is outlining ways ranchers and producers can reduce their environmental impact. But do the new guidelines go far enough?***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J0X-PM61-F021-6510-00000-00&context=1516831)

The Guardian

February 3, 2016 Wednesday 11:23 PM GMT

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**Section:** GUARDIAN SUSTAINABLE BUSINESS

**Length:** 1279 words

**Byline:** Sarah Shemkus

**Body**

Brian Medeiros generally keeps the operation at Medeiros & Son simple and traditional. The Central California farm's 2,500 cows get milked three times a day and the resulting milk is shipped to area processors and turned into cheese and butter.

"We're not the newest, most fandangled-type facility," said Medeiros, a second-generation dairy farmer.

In recent years, some new farming technology has crept in, with the goal of making farms more sustainable. Medeiros installed GPS devices on tractors to make sure they're not covering unnecessary ground. The milking pumps have new, more efficient drives. And this year, the farm erected a 1-megawatt solar power system that will provide about 85% of the farm's ***energy*** needs.

Related: Think dairy farming is benign? Our rivers tell a different story | George Monbiot

Medeiros is just one farmer in a $36bn industry that is attempting to move in a more sustainable direction. To that end, Innovation Center for US Dairy, an industry group representing about 80% of the dairy production in the US, has released proposed updates to its Stewardship and Sustainability Guide for US Dairy, a set of voluntary sustainability metrics for dairy farm operations and producers that aim to help the industry respond to the environmental need and consumer demand for more sustainable practices.

The Innovation Center was founded in 2008 with the goal of creating a shared sustainability vision for the dairy industry. It released the first version of its sustainability standards in 2013. This version, still in effect today, includes guidelines for measuring and communicating ***energy*** use, ***greenhouse gas*** impact and animal care on the farm level. At the producer level, the guidelines suggest best practices for water use and efficiency, employee benefits and health and community engagement, as well as ***energy*** use and ***greenhouse gas*** ***emissions***.

The new version, which is open to comment until 10 March, adds metrics for water use and quality, soil quality, biodiversity, waste management and feed management to the on-farm practices section. For producers, new metrics on waste management and air quality have been added.

"There's the potential here for a very large percentage of the dairy industry to be using these to communicate their sustainability and environmental stewardship goals," said Chad Frahm, senior vice president of sustainability at the Innovation Center.

However, while many in the dairy industry are excited about the new guidelines, voices in the sustainability field question whether voluntary measures have the power to effect needed change.

"It really all depends on what those standards are and the situation surrounding those standards," said Chris Hunt, special advisor on food and ***agriculture*** for the Grace Communications Foundation, a New York-based nonprofit focused on food and environmental issues. "I don't think voluntary industry guidelines should take the place of regulations."

According to Frahm, the goal of updating the sustainability standards is twofold. Firstly, the guidelines should give dairy farms and producers a way to quantify their sustainability efforts, helping them better tell the story of their eco-friendly practices to a market that is increasingly concerned with sourcing its food responsibly. Secondly, the standards should help inspire farmers to improve their operations.

"They'll run through some of the metrics and say, 'Where do I compare? How do I get better?'" Frahm said.

The project is still in the early stages, he said. Some farmers are just starting to learn about the standards, while others are already implementing them, using the guidelines to assess and report on their sustainability. He hopes, however, that the document will be a catalyst in the industry, creating one set of standards that can be widely agreed upon and adopted.

Already, dairy operations of all types have made moves toward more sustainable operations, some even going beyond what the standards currently outline. The Oregon Dairy in Pennsylvania has installed an anaerobic digester that captures methane from manure and turns it into electricity and heat. The Hilmar Cheese Company's locations in California and Texas recover almost all of the water removed from milk in the cheese-making process, treat it, and use the resulting water for crop and landscape irrigation.

Related: Tech entrepreneurs set their sights on urban farming

Some sustainability experts agree that voluntary standards can be effective at improving businesses' practices, perhaps even more so than regulations. As long as voluntary guidelines include provisions for transparency and accountability, they can be more flexible and encourage greater innovation than enforced regulations can, said Suzy Friedman, director of sustainable ***agriculture*** for the Environmental Defense Fund. According to Friedman, laws should always exist to ensure a base level of responsible behavior. However, the structured and often time-consuming process of debating and developing regulations can make the resulting rules restrictive and difficult to change. Voluntary standards, however, can respond more nimbly to changes in market conditions or available technology.

At the same time, Friedman said companies will want to comply with guidelines in order to satisfy a market clamoring for sustainable food options. "I hear routinely from food companies that their consumers are asking them relentlessly, 'Where is my food coming from, how is it grown, what's in it?'" she said. "Food companies realize that their economic wellbeing and support from their customers in part depends on their ability to answer those questions."

Furthermore, those making the rules may not fully understand the industry they are trying to regulate. Medeiros points to the California Air Resources Board's stated goal of ***reducing*** methane ***emissions*** by 40% by 2030. Some promising systems exist to recapture the methane given off by manure, he said, but it would not be possible to meet the state goals without also finding a way to ***reduce*** enteric methane ***emissions*** - essentially, cow belches. And there is not yet any commercially available technology that can achieve that goal, he said.

"The only way to ***reduce*** [enteric] methane from a cow is to get rid of the cow," Medeiros said.

Some sustainability advocates however are not optimistic about the role of voluntary standards, particularly those generated within the industry itself. If one standard comes to dominate an industry, it is far too easy for consumers to assume a product marketed as sustainable is indeed sustainable, without really understanding what practices back up the claim, according to Grace's Chris Hunt. "There's definitely a risk of greenwashing happening," Hunt said.

The livestock industry is already under-regulated, Hunt added. Most operations pack too many animals into too little space, which is bad for both human health and animal welfare, he said. A single cow, he noted, produces 23 times as much waste as one human; an operation with a few thousand cows can generate as much waste as a small city, without the benefit of a sewer system to keep pollution in check. The overuse of antibiotics is also a problem in the industry. Regulations, not voluntary measures, are the best way to handle these issues.

According to Hunt, once an industry produces its own voluntary rules, creating the sense that the problems are being tackled, it can be even harder to convince lawmakers to take action.

"It's great that the industry is trying to become more responsible," Hunt said. "But I just think small improvements shouldn't be presented as the achievement of sustainability."

**Load-Date:** February 3, 2016

**End of Document**



[***BBC Radio 4 - 04:47 AM GMT***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H64-KSK1-DY08-32B0-00000-00&context=1516831)

TVEyes - BBC Radio 4

October 20, 2015 Tuesday

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**Section:** U.K. NATIONAL RADIO

**Length:** 799 words

**Body**

**Speech to text transcript:**[[1]](#footnote-2)1

Career and the new only started last Monday say you're near Bassett of 5.7 days into its fiery finding s you trim was this something that you have considered doing it for a while always is suddenly came up me so you'll give our guys yeah it was a man came to an end a career in the forum for changing career would be your perfect actors the skills you've already more review would' ve been doing so far the moment rips more more vast area Theresa may get in you know I found this hacking hacking the me you need off the bowing to the there's almost no me left on the blind appeaser for Tory donor liver heart of Toronto who who who who who are everyday if you our mind her the are doing the same job as Dean apprenticeship in the during is a good laugh of all the staff members and everyone now works there hammer main's that Charlie is mainly drive far off Moss whose sole going to move one is the kind if they were in a bar only hope for real for everyone some people might be a bit squeamish and my thing is an offer then did that ever cross your mind yeah as a live your life now and some people might say they're ready go with me a lot of now known told a maximum storage or 8c you notice that does not want the understand much sir doing the same seen her since you've been here for a from a can wait for the steak on for to appreciate the the lawn I EC will day's work isn't you wish that the produce a lot more than you very much work goes into BBC Somerset's James Hanson there we abattoir apprentices will in the near future the demand for meat is expected to increase by more than two-thirds according to the food and ***agriculture*** organisation of the united nations producing more me from livestock Hatton feel the or put significant pressure on resources but could growling not meet in the lap be the onset it's been two years since the 1st beef was produced from cultured cells and today the 1st international symposium on courtship meat is being held in the Netherlands I stop to marry Anne Ellis senior lecturer in by chemical engineering at bath university is chairing one of the sessions to explain how cold to beef is made culture beef is a food product that is made by taking a population of cells from a cow we're baking beads themselves all muscle cells and they use cells are culture that an expanded in allowed and have a certain length of time we have a lot more cells and started with and then that can be made into a burger or sausage roll to the right that's and concede really what we're looking at now is how we do it in a cost effective way will you really think you might be viable financially you make the would be viable to create meat in a factory rather than easing animals think it will be and certainly with the engineering aspects the signs is really very close the cost and the viability having this honour supermarket shelf really comes down to how we can end the decision and manufacture its is all wet your of easing like engineering and manufacturing doesn't seem to chime with eating a burger and d' you think the scientists and people investing in this could ever complaints the public to get rid of that so-called yuck factor and actually accepts eating meat which is actually been manufactured think so and I say that because I've person you become that that yuck factor certainly something that is looking very favourable this the and trucks of the environmental impacts kiss um me growing a very small parts of the animal effectively say this ***energy*** ***reduction*** this of ***greenhouse gas*** ***emission*** ***reduction*** to land these ***reduction*** and bautista ***reduction*** So I think we can make it affordable and certainly the environmental impact of making culture meets he is favoured ball Dr Mary Ann Ellis from Bath University about opinion cast your mind back to how British farming was in the 1960s if he can then it's clear ***agriculture*** has come a long way thanks to increased mechanisation computer technology and better animal husbandry and a chronic knee all those changes were in evidence at a 50th anniversary reunion a former students from the female only Studley aquaculture College in Warwickshire as part of their celebrations the class of 65 went on a visit to a modern dairy farm to see what's changed and to reminisce about the swinging 60s Fernand hard would join them good afternoon ladies not I'm you are drawn to watch live Whoa what a season milk you Yes you could stand it no galloway and just watch a couple of batteries whatever

**Load-Date:** October 20, 2015

**End of Document**



[***UN agency and French Government urge inclusion of food security in global climate change debate***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H4X-NF71-JD3Y-Y2XM-00000-00&context=1516831)

M2 PressWIRE

October 14, 2015 Wednesday

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**Length:** 537 words

**Body**

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[***Milking it: will new dairy sustainability guidelines slow progress in the industry?; The US dairy industry is outlining ways ranchers and producers can reduce their environmental impact. But critics say the new guidelines don't go far enough***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J0V-H1S1-F021-63TH-00000-00&context=1516831)

The Guardian

February 3, 2016 Wednesday 10:07 PM GMT

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**Section:** GUARDIAN SUSTAINABLE BUSINESS

**Length:** 1279 words

**Body**

Brian Medeiros generally keeps the operation at Medeiros & Son simple and traditional. The Central California farm's 2,500 cows get milked three times a day and the resulting milk is shipped to area processors and turned into cheese and butter.

"We're not the newest, most fandangled-type facility," said Medeiros, a second-generation dairy farmer.

In recent years, some new farming technology has crept in, with the goal of making farms more sustainable. Medeiros installed GPS devices on tractors to make sure they're not covering unnecessary ground. The milking pumps have new, more efficient drives. And this year, the farm erected a 1-megawatt solar power system that will provide about 85% of the farm's ***energy*** needs.

Related: Think dairy farming is benign? Our rivers tell a different story | George Monbiot

Medeiros is just one farmer in a $36bn industry that is attempting to move in a more sustainable direction. To that end, Innovation Center for US Dairy, an industry group representing about 80% of the dairy production in the US, has released proposed updates to its Stewardship and Sustainability Guide for US Dairy, a set of voluntary sustainability metrics for dairy farm operations and producers that aim to help the industry respond to the environmental need and consumer demand for more sustainable practices.

The Innovation Center was founded in 2008 with the goal of creating a shared sustainability vision for the dairy industry. It released the first version of its sustainability standards in 2013. This version, still in effect today, includes guidelines for measuring and communicating ***energy*** use, ***greenhouse gas*** impact and animal care on the farm level. At the producer level, the guidelines suggest best practices for water use and efficiency, employee benefits and health and community engagement, as well as ***energy*** use and ***greenhouse gas*** ***emissions***.

The new version, which is open to comment until 10 March, adds metrics for water use and quality, soil quality, biodiversity, waste management and feed management to the on-farm practices section. For producers, new metrics on waste management and air quality have been added.

"There's the potential here for a very large percentage of the dairy industry to be using these to communicate their sustainability and environmental stewardship goals," said Chad Frahm, senior vice president of sustainability at the Innovation Center.

However, while many in the dairy industry are excited about the new guidelines, voices in the sustainability field question whether voluntary measures have the power to effect needed change.

"It really all depends on what those standards are and the situation surrounding those standards," said Chris Hunt, special advisor on food and ***agriculture*** for the Grace Communications Foundation, a New York-based nonprofit focused on food and environmental issues. "I don't think voluntary industry guidelines should take the place of regulations."

According to Frahm, the goal of updating the sustainability standards is twofold. Firstly, the guidelines should give dairy farms and producers a way to quantify their sustainability efforts, helping them better tell the story of their eco-friendly practices to a market that is increasingly concerned with sourcing its food responsibly. Secondly, the standards should help inspire farmers to improve their operations.

"They'll run through some of the metrics and say, 'Where do I compare? How do I get better?'" Frahm said.

The project is still in the early stages, he said. Some farmers are just starting to learn about the standards, while others are already implementing them, using the guidelines to assess and report on their sustainability. He hopes, however, that the document will be a catalyst in the industry, creating one set of standards that can be widely agreed upon and adopted.

Already, dairy operations of all types have made moves toward more sustainable operations, some even going beyond what the standards currently outline. The Oregon Dairy in Pennsylvania has installed an anaerobic digester that captures methane from manure and turns it into electricity and heat. The Hilmar Cheese Company's locations in California and Texas recover almost all of the water removed from milk in the cheese-making process, treat it, and use the resulting water for crop and landscape irrigation.

Related: Tech entrepreneurs set their sights on urban farming

Some sustainability experts agree that voluntary standards can be effective at improving businesses' practices, perhaps even more so than regulations. As long as voluntary guidelines include provisions for transparency and accountability, they can be more flexible and encourage greater innovation than enforced regulations can, said Suzy Friedman, director of sustainable ***agriculture*** for the Environmental Defense Fund. According to Friedman, laws should always exist to ensure a base level of responsible behavior. However, the structured and often time-consuming process of debating and developing regulations can make the resulting rules restrictive and difficult to change. Voluntary standards, however, can respond more nimbly to changes in market conditions or available technology.

At the same time, Friedman said companies will want to comply with guidelines in order to satisfy a market clamoring for sustainable food options. "I hear routinely from food companies that their consumers are asking them relentlessly, 'Where is my food coming from, how is it grown, what's in it?'" she said. "Food companies realize that their economic wellbeing and support from their customers in part depends on their ability to answer those questions."

Furthermore, those making the rules may not fully understand the industry they are trying to regulate. Medeiros points to the California Air Resources Board's stated goal of ***reducing*** methane ***emissions*** by 40% by 2030. Some promising systems exist to recapture the methane given off by manure, he said, but it would not be possible to meet the state goals without also finding a way to ***reduce*** enteric methane ***emissions*** - essentially, cow belches. And there is not yet any commercially available technology that can achieve that goal, he said.

"The only way to ***reduce*** [enteric] methane from a cow is to get rid of the cow," Medeiros said.

Some sustainability advocates however are not optimistic about the role of voluntary standards, particularly those generated within the industry itself. If one standard comes to dominate an industry, it is far too easy for consumers to assume a product marketed as sustainable is indeed sustainable, without really understanding what practices back up the claim, according to Grace's Chris Hunt. "There's definitely a risk of greenwashing happening," Hunt said.

The livestock industry is already under-regulated, Hunt added. Most operations pack too many animals into too little space, which is bad for both human health and animal welfare, he said. A single cow, he noted, produces 23 times as much waste as one human; an operation with a few thousand cows can generate as much waste as a small city, without the benefit of a sewer system to keep pollution in check. The overuse of antibiotics is also a problem in the industry. Regulations, not voluntary measures, are the best way to handle these issues.

According to Hunt, once an industry produces its own voluntary rules, creating the sense that the problems are being tackled, it can be even harder to convince lawmakers to take action.

"It's great that the industry is trying to become more responsible," Hunt said. "But I just think small improvements shouldn't be presented as the achievement of sustainability."

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[***Sustainable exports***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5MYF-GVJ1-DYF4-G15Y-00000-00&context=1516831)

Eolas Magazine

September 18, 2015

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**Section:** ***agriculture***

**Length:** 1001 words

**Byline:** EolasAdmin

**Body**

Bord Bia Chief Executive Aidan Cotter speaks to Owen McQuade about Ireland's agri-food export performance and progress on the Origin Green sustainability programme, which is the first of its kind in the world. The sustainability challenge facing the food production sector is huge, with global food production forecast to grow by 70 per cent over the next four decades, and ***greenhouse gas*** ***emissions*** set to ***reduce*** by a similar amount. Bord Bia Chief Executive Aidan Cotter points out that Ireland has clear advantages as a country of choice for producing food and drink sustainably. A temperate climate combined with its annual rainfall means Ireland's grass production exceeds the European average by more than one third. EU Commission research ranked Ireland among the top five performing member states in terms of its carbon footprint for the livestock sector.

**World first** A key part of the Harvest 2020 strategy was the Origin Green programme developed by Bord Bia and was launched in 2012. The sustainability programme underpins the strategy's ambitious growth and sets out clear ***targets*** in key areas such as raw material sourcing, ***emissions***, ***energy***, waste, biodiversity and CSR activities. There are now over 469 Irish food and drink companies registered with Origin Green and 109 of these companies account for over 80 per cent of exports. No other country has undertaken such a comprehensive programme to improve the sustainability of its food and drink sector. "It's a world first. We are hugely encouraged by the feedback we are getting internationally, from organisations such as the World Bank and the World Wildlife Fund, who would like to see it replicated in other countries around the world including Eastern Europe, Africa and South America and from the large global food industry players. We have Origin Green ambassadors in organisations such as Danone, Nestle, Unilever, Walmart and Coca-Cola - the feedback from all these organisations has been hugely encouraging," states Cotter. "The global food sector has been impressed by the commitments by Irish farmers and food industry towards sustainability. It is indeed a world first. We have undertaken 90,000 carbon assessments on farms and that is many times a multiple of what is happening in any other country in the world," says Cotter. Origin Green is the theme of the Irish pavilion at this year's Milan Expo which runs from 1 May to 31 October. 140 countries have pavilions all addressing the overall theme of 'Feeding the Planet, ***Energy*** for Life'. This global showcase is expected to attract over 20 million visitors. "When you walk around the Expo Milano, the Origin Green story is very unique and Ireland is telling a very compelling story on what it is doing on the ground - measuring, managing and improving." **Exports** How will 2015 turn out? We have had the support of a very weak Euro. 70 per cent of our food and drink exports go to non-euro destinations, 40 per cent is to the UK in sterling and 30 per cent is international which is predominantly in US dollars. "So there a very significant benefit from the weak euro." "If you look at our main, and expanding sector, dairy, we have seen the end of quotas and a significant increase in volume, with double digit growth. The volume is going up as had been the ambition of the sector. On the other hand it has come at a time when global production has also increased which has resulted in dairy prices coming under huge pressure with significant falls in global dairy prices this year." There has been "huge" investment in the sector and companies have been investing for the long-term. The underlying global demand for dairy products has been growing at 2.5 per cent per year and it is driven by population and middleclass growth particularly in Asia, with a shift towards a more protein-based diet. "But the previous two good years for the diary sector has driven global production capacity which impacted on prices. It is very much a case of rising production and falling prices globally which will mean 2015 will be challenging for Irish dairy exports," observes Cotter. Similar to the situation in dairy this year, 2014 saw rising beef production and downward pressure on prices. However, this year it has been the opposite. There has been a ***reduction*** in cattle processed but there has been a significant increase in price. "The question this year will be, will the average increase in prices offset the fall in output?" The overall picture for Irish food and drink exports has been particularly bright with five years of export growth. In 2014 exports grew by 4 per cent to a record high of (EURO)10.2 billion. In addition to the dairy and meat and livestock sectors prepared foods, beverages and seafood all showed good growth as shown in the table below. **2015 exports** Looking forward to the remainder of this year and beyond, Aidan Cotter stresses that there are some challenges ahead. "Any growth coming this year will be hard won because of the challenges, particularly in the dairy sector," observes Cotter. Recent forecasts by Rabobank suggest that diary prices will remain weak. Although the number of cattle supplies has increased this year this is expected to be offset by rising prices. The prepared foods and beverages sectors both face competitive market environments, although both have shown a strong ability to diversify. Overall, the food and drink sector show good optimism. The Bord Bia industry survey in December 2014 reflected this with almost 95 per cent of the 350 respondents reporting similar of higher export sales over the previous 12 months. The industry is also optimistic about 2015 with more than half (52 per cent) expecting export sales to increase and a further 43 per cent expect them to be maintained. Bord Bia Clanwilliam Court Lower Mount Street, Dublin 2 Tel: + 353 1 668 5155 Email: [*info@bordbia.ie*](mailto:info@bordbia.ie) Web: [*www.bordbia.ie*](http://www.bordbia.ie) Join the conversation on twitter: @bordbia and follow Bord Bia on LinkedIn

**Load-Date:** February 24, 2017

**End of Document**



[***Sustainable exports***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5MP3-2VS1-DYF4-G362-00000-00&context=1516831)

AgendaNi

September 18, 2015

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**Section:** ***agriculture***

**Length:** 1001 words

**Byline:** EolasAdmin

**Body**

Bord Bia Chief Executive Aidan Cotter speaks to Owen McQuade about Ireland's agri-food export performance and progress on the Origin Green sustainability programme, which is the first of its kind in the world. The sustainability challenge facing the food production sector is huge, with global food production forecast to grow by 70 per cent over the next four decades, and ***greenhouse gas*** ***emissions*** set to ***reduce*** by a similar amount. Bord Bia Chief Executive Aidan Cotter points out that Ireland has clear advantages as a country of choice for producing food and drink sustainably. A temperate climate combined with its annual rainfall means Ireland's grass production exceeds the European average by more than one third. EU Commission research ranked Ireland among the top five performing member states in terms of its carbon footprint for the livestock sector.

**World first** A key part of the Harvest 2020 strategy was the Origin Green programme developed by Bord Bia and was launched in 2012. The sustainability programme underpins the strategy's ambitious growth and sets out clear ***targets*** in key areas such as raw material sourcing, ***emissions***, ***energy***, waste, biodiversity and CSR activities. There are now over 469 Irish food and drink companies registered with Origin Green and 109 of these companies account for over 80 per cent of exports. No other country has undertaken such a comprehensive programme to improve the sustainability of its food and drink sector. "It's a world first. We are hugely encouraged by the feedback we are getting internationally, from organisations such as the World Bank and the World Wildlife Fund, who would like to see it replicated in other countries around the world including Eastern Europe, Africa and South America and from the large global food industry players. We have Origin Green ambassadors in organisations such as Danone, Nestle, Unilever, Walmart and Coca-Cola - the feedback from all these organisations has been hugely encouraging," states Cotter. "The global food sector has been impressed by the commitments by Irish farmers and food industry towards sustainability. It is indeed a world first. We have undertaken 90,000 carbon assessments on farms and that is many times a multiple of what is happening in any other country in the world," says Cotter. Origin Green is the theme of the Irish pavilion at this year's Milan Expo which runs from 1 May to 31 October. 140 countries have pavilions all addressing the overall theme of 'Feeding the Planet, ***Energy*** for Life'. This global showcase is expected to attract over 20 million visitors. "When you walk around the Expo Milano, the Origin Green story is very unique and Ireland is telling a very compelling story on what it is doing on the ground - measuring, managing and improving." **Exports** How will 2015 turn out? We have had the support of a very weak Euro. 70 per cent of our food and drink exports go to non-euro destinations, 40 per cent is to the UK in sterling and 30 per cent is international which is predominantly in US dollars. "So there a very significant benefit from the weak euro." "If you look at our main, and expanding sector, dairy, we have seen the end of quotas and a significant increase in volume, with double digit growth. The volume is going up as had been the ambition of the sector. On the other hand it has come at a time when global production has also increased which has resulted in dairy prices coming under huge pressure with significant falls in global dairy prices this year." There has been "huge" investment in the sector and companies have been investing for the long-term. The underlying global demand for dairy products has been growing at 2.5 per cent per year and it is driven by population and middleclass growth particularly in Asia, with a shift towards a more protein-based diet. "But the previous two good years for the diary sector has driven global production capacity which impacted on prices. It is very much a case of rising production and falling prices globally which will mean 2015 will be challenging for Irish dairy exports," observes Cotter. Similar to the situation in dairy this year, 2014 saw rising beef production and downward pressure on prices. However, this year it has been the opposite. There has been a ***reduction*** in cattle processed but there has been a significant increase in price. "The question this year will be, will the average increase in prices offset the fall in output?" 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[***Short answers to hard climate questions; Tough challenges, daunting scenarios, and things we can do to help***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HH5-NH81-DYR7-C186-00000-00&context=1516831)

International New York Times

December 2, 2015 Wednesday

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**Section:** LEISURE; Pg. 12

**Length:** 1155 words

**Byline:** JUSTIN GILLIS

**Body**

**ABSTRACT**

The issue can be overwhelming. The science is complicated. Here's a cheat sheet.

**FULL TEXT**

The issue can be overwhelming. The science is complicated. Predictions about the fate of the planet carry endless caveats and asterisks.

We get it.

And so, with the global climate talks now underway in Paris, we've provided quick answers to often-asked questions about climate change.

**How much is the planet heating up?**  As of October, the Earth had warmed by 0.95 degrees Celsius, or about 1.7 degrees Fahrenheit, since 1880, when tracking began at a global scale. That figure includes the surface of the ocean. The warming is greater over land, and greater still in the Arctic and parts of Antarctica.

The number may sound low, but as an average over the surface of an entire planet, it is actually high, which explains why much of the land ice on the planet is starting to melt and the oceans are rising at an accelerating pace. The heat accumulating in the Earth because of human ***emissions*** is roughly equal to the heat that would be released by 400,000 Hiroshima atomic bombs exploding across the planet every day.

Scientists believe most and probably all of the warming was caused by the human release of ***greenhouse gases***. If ***emissions*** continue unchecked, they say the global warming could ultimately exceed 8 degrees Fahrenheit, which would transform the planet and undermine its capacity to support a large human population.

**How much trouble are we in?**  The risks are much greater over the long run than over the next few decades, but the ***emissions*** that create those risks are happening now. Over the coming 25 or 30 years, scientists say, the climate is likely to resemble that of today, although gradually warming. Rainfall will be heavier in many parts of the world, but the periods between rains will probably grow hotter and therefore drier.

The number of hurricanes and typhoons may actually fall, but the ones that do occur will draw ***energy*** from a hotter ocean surface, and therefore may be more intense on average than those of the past. Coastal flooding will grow more frequent and damaging.

Longer term, if ***emissions*** continue to rise unchecked, the risks are profound. Scientists fear climate effects so severe that they might destabilize governments, produce waves of refugees, precipitate the sixth mass extinction of plants and animals in Earth's history, and melt the polar ice caps, causing the seas to rise high enough to flood most of the world's coastal cities.

All of this could take hundreds or even thousands of years to play out, conceivably providing a cushion of time for civilization to adjust, but experts cannot rule out abrupt changes, such as a collapse of ***agriculture***, that would throw society into chaos much sooner. Bolder efforts to limit ***emissions*** would ***reduce*** these risks, or at least slow the effects, but it is already too late to eliminate the risks.

**Is there anything I can do?**  There are lots of simple ways to ***reduce*** your carbon footprint, and most of them will save you money. You can plug leaks in your home insulation to save power, install a smart thermostat, switch to more efficient light bulbs, turn off the lights in any room where you are not using them, drive fewer miles by consolidating trips or taking public transit, waste less food and eat less meat.

Perhaps the biggest single thing individuals can do on their own is to take fewer airplane trips; just one or two fewer plane rides a year can save as much in ***emissions*** as all the other actions combined. If you want to be at the cutting edge, you can look at buying an electric or hybrid car, putting solar panels on your roof, or both.

If you want to offset your ***emissions***, you can buy certificates, with the money going to projects that protect forests, capture ***greenhouse gases*** and so forth.

In the end, though, experts do not believe the needed transformation in the ***energy*** system can happen without strong state and national policies. So speaking up and exercising your rights as a citizen matters as much as anything else you can do.

**What's the optimistic scenario?**  In the best case that scientists can imagine, several things happen: Earth turns out to be less sensitive to ***greenhouse gases*** than currently believed; plants and animals manage to adapt to the changes that have become inevitable; human society develops much greater political will to bring ***emissions*** under control; and major technological breakthroughs occur that help society to limit ***emissions*** and to adjust to climate change.

The two human-influenced variables are not entirely independent, of course: Technological breakthroughs that make clean ***energy*** cheaper than fossil fuels would also make it easier to develop the political will for rapid action.

Scientists say the odds of all these things breaking our way are not very high. The Earth could just as easily turn out to be more sensitive to ***greenhouse gases*** than less. Global warming seems to be causing chaos in parts of the natural world already, and that seems likely to grow worse, not better. So in the view of the experts, simply banking on a rosy scenario without any real plan would be dangerous. They believe the only way to limit the risks is to limit ***emissions***.

**What's the worst-case scenario?**  That is actually hard to say, which is one reason scientists are urging that ***emissions*** be cut; they want to limit the possibility of any worst-case scenario coming to pass. Perhaps the greatest fear is a collapse of food production, accompanied by escalating prices and mass starvation. Even with runaway ***emissions*** growth, it is unclear how likely this would be, as farmers are able to adjust their crops and farming techniques, to a degree, to adapt to climatic changes.

Another possibility would be a disintegration of the polar ice sheets, leading to fast-rising seas that would force people to abandon many of the world's great cities and would lead to the loss of trillions of dollars worth of property and other assets. Scientists also worry about other wild-card scenarios like the predictable cycles of Asian monsoons' becoming less reliable. Billions of people depend on monsoons to provide water for crops, so any disruptions would be catastrophic.

**Will a tech breakthrough help?**  As more companies, governments and researchers devote themselves to the problem, the chances of big technological advances are improving. But even many experts who are optimistic about technological solutions warn that today's efforts are not enough. For instance, spending on basic ***energy*** research is only a quarter to a third of the level that several in-depth reports have recommended. And public spending on ***agricultural*** research has stagnated even though climate change poses growing risks to the food supply.

People like Bill Gates have argued that crossing our fingers and hoping for technological miracles is not a strategy - we have to spend the money that would make these things more likely to happen.

**Load-Date:** December 1, 2015

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[***India's climate tech revolution is starting in its villages; From solar powered irrigation to handheld crop sensors, climate-smart villages are springing up across Gujarat, Haryana, Punjab and other states***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H4G-5FJ1-F021-607F-00000-00&context=1516831)

The Guardian

October 12, 2015 Monday 11:27 AM GMT

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**Section:** GUARDIAN SUSTAINABLE BUSINESS

**Length:** 851 words

**Byline:** Lisa Palmer

**Body**

Camels pulling wooden carts loaded with coconuts plod down the main road amid speeding motorcycles, buses, rickshaws and cars. Farmers sit atop slow-moving oxcarts loaded with grasses and other cattle feed. In this region of central Gujarat, India, it appears that rural life has not changed for decades.

But drive down a dirt road outside the village of Thamna, about an hour north of Anand, and the 21st century comes into view. Solar panels drive a water pump that irrigates the fields of farmer Raman Bhai Parmar, 65, who grows bananas, rice and wheat on seven acres of land.

Parmar's solar ***energy*** pump is one of the technologies being promoted by a new project designed to help rural Indians adapt to climate change. The project, run by the international NGO, the Consultative Group for International ***Agriculture*** Research programme on climate change, ***agriculture*** and food security (CCAFS), aims to create 1,000 so-called climate smart villages across six Indian states including Haryana, Punjab and Gujarat.

Haryana and Punjab are known as the grain basket states of India, producing the majority of the country's staple wheat and basmati rice for export to the Middle East and European markets. The pumping of groundwater for irrigation over the past thirty years has led to a spike in productivity and increased food security.

However, the region faces increases in temperature up to 5C by 2080 and wheat is particularly vulnerable to heat stress. A recent study by the Indian ***Agricultural*** Research Institute indicates that climate change may ***reduce*** wheat yields in India between 6% and 23% by 2050. Environmental problems such as depleting groundwater and variable rains - delayed monsoons and intense rainfall - limit yields. Indian farmers also typically use almost twice the amount of fertiliser needed, damaging soil, contaminating groundwater and adding to ***greenhouse gas*** ***emissions***.

For rural communities in Haryana and Punjab the issue now is how to meet these new challenges, introduce more sustainable practices of farming and still increase yields and profits.

The pilot solar ***energy*** pump being used by Parmar is just one of the solutions promoted by the climate-smart villages project. In addition to ***energy***, it provides a financial incentive for farmers to conserve water because they can sell ***energy*** back to the grid, thus helping to relieve stress on depleted aquifers. Last quarter Parmar, whose annual income from crops is roughly 65,000 rupees (£652), received a cheque for 7,500 rupees (£75) for producing solar ***energy***.

"When you connect the solar pump to the grid and let the farmer use the ***energy*** they need for the pumping, and you give them the chance to sell the surplus solar power to the grid at an attractive price, then they will opt to do it," says Tushaar Shah, senior fellow at the International Water Management Institute (IWMI) in Anand, which is working with CCAFS on the project.

Shah says government subsidises had given farmers' little incentive to limit their use of diesel-powered irrigation pumps. "The solar ***energy*** will give the farmers a crop that is worth up to 90,000 rupees (£900) a year. We think this will reverse the current incentive structure that has led to over-pumping. There are very few crops farmers grow that will give you that income," he adds.

Crucially, the climate-smart technologies, like the solar pump, are now beginning to gain acceptance among village communities.

When Vikas Chaudhary, 34, of Taraori, Haryana, learned farming from his father, rains came predictably during the monsoon and ***agriculture*** was a safe bet. Groundwater was plentiful. Soils were rich. Now that's all a gamble for Chaudhary, who farms 35 acres and grows rice and a small plot of maize in summer and wheat in winter to support his extended family of seven.

Chaudhary has adopted climate-smart interventions including laser-guided land leveling of his fields, which he says has conserved 20% of water resources in his fields and has increased his yields by 15% through greater precision in seeding, tillage and measuring the moisture of soils.

Chaudhary uses a handheld crop sensor called a Green Seeker to assess crop health, a mobile phone app helps him calculate how much fertiliser to apply throughout the growing season. He also avoids tilling his fields, which helps the soil retain moisture and leads to fewer costs and fewer ***greenhouse gas*** ***emissions***. However, the cost of the machinery needed to plant the rotational crop amid stubble from the previous season is a barrier for small farmers, he says. Most prefer to plant on bare soil.

While climate unpredictability has made farming more difficult in the past decade, Chaudhary's greatest challenge was to change the thinking of his father, who lives on the farm and remains involved in the decisions.

"He is now fully impressed by climate-smart practices, and my vision is to change thinking of every farmer, especially young farmers, and how we can make ***agriculture*** more profitable," said Chaudhary.

Travel for this story was funded by the Pulitzer Center on Crisis Reporting.

**Load-Date:** October 12, 2015

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[***India's climate tech revolution is starting in its villages; From solar powered irrigation to handheld crop sensors, climate-smart villages are springing up across Gujarat, Haryana, Punjab and other states***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H4G-5FJ1-F021-607D-00000-00&context=1516831)

The Guardian

October 12, 2015 Monday 11:27 AM GMT

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**Section:** GUARDIAN SUSTAINABLE BUSINESS

**Length:** 851 words

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**Load-Date:** October 12, 2015

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[***Italy set to pass new law to fight food waste; The Italian parliament is due to pass new laws cutting red tape for shops or supermarkets who wish to donate food - making it Europe's second country after France to introduce new legislation***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J9H-TGD1-F021-627K-00000-00&context=1516831)

telegraph.co.uk

March 15, 2016 Tuesday 12:43 PM GMT

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**Section:** NEWS

**Length:** 513 words

**Byline:** By Henry Samuel

**Body**

Italy is poised to pass a new law to ensure it is "easier to donate than to waste" food, making it the second country in Europe after France to tackle the issue in parliament.

The new legislation comes as Britain's leading supermarkets have pledged to drive down food and drink waste by a fifth within the next decade.

Italy's bill on food waste, which costs its economy (EURO)12 billion (£9.4 billion) each year, has received cross-party support and is set to pass in the country's lower house next Monday, before heading for final approval in the Senate.

It is hoped the new law will double the amount of food saved from the dustbin.

"We currently recover 550 million tonnes of excess food each year but we want to arrive at one billion in 2016," said Maurizio Martina, Italy's ***agriculture*** minister.

Whereas the French bill can slap a (EURO)75,000 fine on supermarkets who throw food away unnecessarily, the Italians are banking on streamlining donations rather than punishing those who fail to cut waste.

"Punishing wasters is not so helpful: this is all about encouraging donations," Democratic Party MP, Maria Chiara Gadda, who presented the bill, told La Repubblica.

The current Italian system is considered a bureaucratic nightmare as all food outlets wishing to hand their excess food to charity must declare their donations in advance.

The new laws will limit red tape to one monthly form detailing all donations made.

As an extra carrot, donors will receive generous cuts in rubbish taxes proportionate with the amount of food they give away.

The bill will also change the rules on a number of products making it possible to give them away even if they have passed their "best before" date.

"We are making it more convenient for companies to donate than to waste," said Mr Martina.

In another front in the fight against food waste, some (EURO)1 million a year will be allocated to the development of food packaging over the next three years.

Meanwhile, a separate (EURO)1 million campaign to promote the use of doggy bags in restaurants will be rolled out after trials in the Venice area last year - a movement that has also taken root in France.

The new law comes as leading supermarkets in the UK on Tuesday pledged to drive down food and drink waste by a fifth within the next decade.

Asda, Sainsbury's, Tesco and Morrisons are backing a voluntary agreement, which also ***targets*** a 20 per cent ***reduction*** in ***greenhouse gas*** ***emissions*** created by the food and drink industry.

Some 24 local authorities and manufacturers also committed to the agreement produced by the Waste and Resources Action Programme (Wrap).

The charity hailed the deal as the first of its kind and said it would usher in a "new era" for the industry.

It comes days after Tesco, Britain's biggest grocery chain, pledged not to waste any surplus food from its stores by the end of next year by redistributing it to charities.

Food waste in the UK is valued at more than £19 billion a year, 75 per cent of which could be avoided, according to studies by Wrap.

**Load-Date:** March 15, 2016

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[***-[CDP press release] Climate action reaches tipping point as corporate 'A Listers' revealed***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HBP-28G1-JD3Y-Y1S3-00000-00&context=1516831)

ENP Newswire

November 10, 2015 Tuesday

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**Length:** 768 words

**Body**

Three weeks ahead of COP21, the UN climate change conference, when national leaders meet to agree a global deal to ***reduce*** carbon ***emissions*** and limit global temperature warming, disclosures from the world's largest listed companies reveal the extent to which corporations have shifted their strategies over the past five years to become part of the solution to the climate challenge.

The international not-for-profit CDP - which holds the most comprehensive set of global corporate environmental data - has today issued its annual Climate Change Report on behalf of 822 investors representing US$ 95 trillion.

The new publication includes the 2015 Climate A List, which comprises those companies identified as A grade for their actions to mitigate climate change. Nearly 2,000 companies submitted information to be independently assessed against CDP's scoring methodology; 113 have made the list, which features brands from around the world such as, Apple, Microsoft and Google, the three largest by market capitalization.

CDP's executive chairman and co-founder Paul Dickinson says: 'The influence of the corporation is mighty. The momentum of business action on climate change suggests we have reached a tipping point, where companies are poised to achieve their full potential. They need ambitious policy at both a national and international level that will support them in this regard and will catalyze participation from industry at scale.'

CDP charts the changed corporate landscape over five years, comparing data from 1,997 companies this year, with 1,799 in 2010. Companies globally are taking action and making investments to prepare for the transition to a low carbon economy. For example, at 94%, nearly all companies assign board or senior management responsibility to climate change and three quarters offer incentives for improving climate performance.

Nine of every ten companies now have activities in place that are lowering their carbon output, compared with less than half in 2010. The percentage of businesses with ***targets*** to ***reduce*** the intensity of their ***greenhouse gas*** ***emissions*** has also more than doubled.

Meg Whitman, President and CEO at Hewlett Packard Enterprise, formerly Hewlett-Packard, which has achieved A List status this year, says: 'We must take swift and bold action to address the root causes of climate change. This means disrupting the status quo - changing the way we do business, holding ourselves and others accountable, and creating innovative solutions that drive a low-carbon economy.'

The growing momentum among the corporate world is coinciding with increasing engagement on climate change from the investor community. If the recently introduced landmark pension fund voting guidelines known as the Red Lines are applied, failure to disclose to CDP may put chairpersons' jobs at risk. And more investors are betting on a sustainable future: US$ 21.4 trillion was invested in 2014 in funds with environmental, social and governance mandates, up 61% in two years1.

Companies are responding to investor needs by improving the quality of the data they report through CDP. However, notable by their absence in CDP's analysis are ***Agricultural*** Bank of China Ltd, Berkshire Hathaway, and Facebook the three largest by market capitalization companies that have failed to disclose to investors via CDP.

1According to the Global Sustainable Investment Alliance: [*http://www.gsi-alliance.org/wpcontent/uploads/2015/02/GSIA\_Review\_download.pdf*](http://www.gsi-alliance.org/wpcontent/uploads/2015/02/GSIA_Review_download.pdf)

About CDP

CDP, formerly Carbon Disclosure Project, is an international, not-for-profit organization providing the only global system for companies and cities to measure, disclose, manage and share vital environmental information. CDP works with market forces, including 822 institutional investors with assets of US$ 95 trillion, to motivate companies to disclose their impacts on the environment and natural resources and take action to ***reduce*** them. CDP now holds the largest collection globally of primary climate change, water and forest risk commodities information and puts these insights at the heart of strategic business, investment and policy decisions. Follow us @CDP to find out more.

About The Climate A List

The Climate A List denotes the companies that publicly disclose through our climate change program and are leading the way globally in their actions to ***reduce*** ***emissions*** and mitigate climate change in the past CDP reporting year.

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**Load-Date:** November 10, 2015

**End of Document**



[***Nuclear’s environmental impact – is it trivial?***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HK9-7XK1-DYXB-S2NB-00000-00&context=1516831)

Progressive Media - Company News

December 9, 2015 Wednesday

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**Section:** NUCLEAR ENGINEERING INTERNATIONAL; Opinion

**Length:** 1931 words

**Highlight:** A strong element of the argument for nuclear power playing an increasing role in world ***energy*** is that the environmental impact of using it is very low.

**Body**

Although economics and security of supply are very important aspects, a small environmental footprint is becoming more important to the public and policymakers. This is not just because of today's concentration on the environmental consequences of ***energy*** use. There is an incorrect belief that nuclear has substantial impacts on health, safety and environment and this links with economics and security of supply.

[Cartoon by Alexey Kovynev - "Only a dozen relate to nuclear ***energy*** but we don't know which ones"]

The costs of building large numbers of nuclear power plants are now under question, particularly as fossil fuels have become cheaper and renewable ***energy*** solutions are achieving cost ***reductions***. At least some of the deteriorating economics of nuclear can be put down to regulatory impositions because we have failed to communicate that the technology is essentially safe and free of other so-called external costs. Nuclear cannot offer perfect security of supply if plants are subject to either temporary or permanent closures because of these fears.

If the strong credentials of nuclear on health, safety and environment can be established, the complaint that it faces discriminatory treatment by governments and indeed by society as a whole becomes more powerful. As discussed in last month's article (November 2015, '[*The level playing field - what about the auto industry*](http://www.neimagazine.com/opinion/opinionthe-level-playing-field-what-about-the-auto-industry-4716303/)') other industrial sectors have had a comparatively easy ride. Their products are now under a much higher degree of scrutiny. Nuclear was arguably one of the first industries to experience this heightened evaluation. Now it must convince people that it has passed with flying colours.

It is climate change which has risen to become the prime challenge. Nuclear power's credentials here are very good, but it has achieved very little recognition. Claims that the nuclear fuel cycle and power stations contribute substantial amounts of ***greenhouse gases*** have been largely dismissed.

But nuclear advocates have unwisely concentrated too much on climate change (see January 2015, '[*Is climate change the worst argument for nuclear?*](http://www.neimagazine.com/opinion/opinionis-climate-change-the-worst-argument-for-nuclear-4493537/)'). Other environmental concerns such as air and water pollution and the wider impact of industrial activities (such as in the oil and gas, chemical and steel industries) are arguably more important in today's world and are having substantial impact on people's lives. Even the ***agricultural***, fishery and forestry sectors have a huge and potentially negative impact, as seen by the current concern over the mass burning of forests in Indonesia.

The health, safety and environment impacts of urbanization around the world have to be carefully considered. This is gradually happening as measures of human wellbeing, other than the usual gross domestic product (GDP), are being seriously considered. This includes trying to put a value on the world's "natural capital", in other words the natural assets, whether renewable (like fish and forests) or non-renewable (like oil and minerals).

In relation to these huge issues, the nuclear sector looks inconsequential. Building and then operating 400 or so large nuclear reactors, fuelling them with a fuel cycle starting with only 60,000 tonnes of natural uranium a year and then managing a relatively small amount of radioactive waste does not appear very significant in scale. To the extent that there is any additional exposure to radiation, it is localised and, even in most accident situations, arguably inconsequential. Waste management and decommissioning activities are also highly localised and have little impact on the lives of even the people living close to the relevant facilities.

Serious studies back up this conclusion. ExternE, a major European study of the external costs of various fuel cycles for generating electricity, was released in 2001. The European Commission launched the project in 1991 and it "put plausible financial figures against damage resulting from different forms of electricity production for the entire EU". The external costs are defined as those incurred in relation to health and the environment, and quantifiable but not built into the cost of the electricity to the consumer and therefore are borne by society at large.

They include the effects of air pollution on human health, crop yields and buildings, as well as occupational disease and accidents. The methodology measured ***emissions***, dispersion pathways and their ultimate impact. Exposure-response models led to evaluating the physical impacts in monetary terms. For nuclear ***energy*** the risk of accidents is factored in, along with estimates of radiological impacts from mine tailings and carbon-14 ***emissions*** from reprocessing (waste management and decommissioning being already within the cost to the consumer).

The report showed that in clear cash terms nuclear ***energy*** incurs about one tenth of the costs of coal. Nuclear ***energy*** averages under 0.4 euro cents per kWh (0.2-0.7), less than hydro. Coal is over 4 cents (2-10 cent averages in different countries), gas ranges from 1-4 cents and only wind shows up better than nuclear, at 0.05-0.25 cents per kWh.

The EU cost of electricity generation without these external costs averaged about 4 cents per kWh. If these external costs were included, the EU price of electricity from coal would double and that from gas would increase by around 30%.

Economists would argue that these external costs should be incorporated in the electricity price paid by consumers or else there is a misallocation of resources. This could be achieved by imposing appropriate taxes to reflect the external costs, with the revenues sufficient to compensate society. This would considerably alter the mix of electricity generating capacity in favour of those with low external costs - nuclear, large hydro and the renewables. However, there are substantial political barriers to this being achieved, as society has always subsidised fossil fuel use, by ignoring its pollution costs.

The report proposed two ways of incorporating external costs: taxing the costs or subsidising alternatives. Taxes are difficult, so subsidies have been favoured and renewable ***energy*** has certainly received plenty of these. Yet these have not extended to nuclear power, despite the comparable external costs avoided.

External costing suggests that the public health benefits associated with ***reducing*** ***emissions*** from fossil fuel burning could still be the strongest reason for pursuing closure, in addition to climate change concerns. Thousands of deaths could be avoided in urban areas each year by ***reducing*** fossil fuel combustion in line with ***greenhouse gas*** abatement ***targets***. The World Health Organisation (WHO) in 1997 presented estimates, of 2.7 or 3 million deaths occurring each year as a result of air pollution. In the latter estimate, 2.8 million deaths were due to indoor exposures and 200,000 to outdoor exposure. The lower estimate comprised 1.85 million deaths from rural indoor pollution, 363,000 from urban indoor pollution and 511,000 from urban ambient pollution. The WHO report points out that these totals are about 6% of all deaths. Moving to cleaner ***energy*** has huge benefits to the world.

One interesting area is that of accidents related to ***energy*** production. A November 1998 study from the Paul Scherrer Institute in Switzerland drew on data from 4290 ***energy***-related accidents, 1943 of them classified as severe, and compared different ***energy*** sources. It considered over 15,000 fatalities related to oil, over 8000 related to coal and 5000 from hydro.

Considering only deaths and comparing them per terawatt-year, coal has 342, hydro 883, gas 85 and nuclear power only eight. Given that nuclear power annually delivers some 2500TWh per year to the world, these eight deaths would be at an average 2.3 deaths a year. Coal produces more than double nuclear's share of world electricity and works out at 216 deaths per year. In terms of number of immediate deaths per event from 1969 to 1996, perhaps surprisingly hydro stands out with about 550 compared with coal at around 40.

The studies show that nuclear power is certainly not a bad citizen. It is very safe to work in and has very limited impacts on the environment. The battle to achieve acceptance of these important facts is a very slow and hard one, and it is one that the industry is only slowly winning.

The key area is clearly to convince people that even if there are small incremental releases of radiation, the impacts will be highly localised and of no severe consequences. If this can be achieved, the issues on other key areas can much more easily be addressed. The "big three" here are the consequences of major nuclear accidents, nuclear waste management and the fear of nuclear proliferation and terrorist thefts of nuclear materials.

It is widely agreed that the nuclear industry can no longer maintain that accidents will never happen and it must argue that if they do happen, the consequences will be controllable and relatively minor. This is difficult after the Fukushima accident, which was very badly handled by all concerned. Until the radiation dragon is slain, one cannot have much confidence that future accidents will be handled any better. The fear that has affected the entire history of nuclear power must be overcome and radiation is the key (see September and October 2015, 'Overcoming the paradigm of fear, [*Parts 1*](http://www.neimagazine.com/opinion/opinionovercoming-the-paradigm-of-fear-part-1-4680622/) and   [*Part 2*](http://www.neimagazine.com/opinion/opinionovercoming-the-paradigm-of-fear-part-2-4680640/)').

The waste issue is often cited as nuclear's "achilles heel" but in reality, it should be a strength. Unlike the generation of electricity from fossil fuels) all the nuclear wastes are identified and contained. Even in a worst case scenario where there is a release of radiation from a waste facility, any impact is likely to be highly localised and of little consequence to humans. Of greater difficulty is the issue of how long the waste will remain dangerous, and the multigenerational aspects of geological repositories need careful handling. Under natural capital principles, it is impossible to impose a huge burden on future generations by activities today, so the industry must be able to convince critics that what is passed on is easily manageable. Multinational repositories are one answer here, lessening the potential burden on countries with only a small number of operating reactors.

The proliferation and nuclear security issues are also closely related to the understanding of radiation, but need careful handling nevertheless. The fear of nuclear war has undoubtedly diminished as the world has learned to live with nuclear weapons, but is still too easily linked with the civil nuclear sector. If more countries in the Middle East employ nuclear power (after Iran and the UAE), these concerns are likely to remain active rather than simply fade away, but they must be kept in proportion.

To conclude, the environmental impact of nuclear is trivial by comparison with other means of generating electricity and by comparison with other industrial sectors, but there is still a long way to go in getting it generally accepted. The key remains the slow removal of underlying fear. Facts and figures can only go some way to helping.

This article was first published in the December issue of Nuclear Engineering International. Download [*a PDF*](http://commondms.digitalinsightresearch.in/Uploads/NewsArticle/4749239/33978ee0-7e89-4bf6-ae2e-8db1744314eb.pdf) of the article now.

Steve Kidd is an independent nuclear consultant and economist with East Cliff Consulting. The first half of his career was spent as an industrial economist within British industry, followed by nearly 18 years in senior positions at the World Nuclear Association and its predecessor organisation, the Uranium Institute.

**Load-Date:** December 11, 2015

**End of Document**



[***Renewable fuel benefits***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J46-2F41-JDHR-854T-00000-00&context=1516831)

Horticulture Week

February 19, 2016

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**Section:** Pg. 32

**Length:** 1384 words

**Body**

Biomass has enabled many to save on heating bills with help from the Renewable Heat Incentive. With the scheme under review, we ask experts what those thinking of following suit should consider and Jez Abbott reports on growers' experience. Comment Jon Swain.

The Renewable Heat Incentive (RHI) for non-domestic use was introduced four years ago to ***reduce*** the nation's dependence on fossil fuels by providing financial incentives for users to switch to renewable heating technologies such as biomass, heat pumps and solar thermal.

Administered by Ofgem, RHI payments are index-linked and guaranteed for 20 years. Little wonder then that there has been a rush to renewable heating technologies since the introduction of the RHI - and none more so than biomass.

This technology now produces more than 2,200MW of renewable heat, accounting for a staggering 94.5 per cent of the overall non-domestic renewable heat output. Horticultural and ***agricultural*** sectors stand at the forefront, accounting for nearly 33 per cent of the total uptake so far.

In fact, the scheme has been a victim of its own success, forcing Ofgem to use its quarterly reviews to ***reduce*** rates for new installations when uptake for a technology has far exceeded expectation. This has been particularly noticeable for small commercial biomass (<200kW).

This has seen so-called 'tier 1' payments (the first 1,314 operating hours) ***reduced*** from 8.94p/kWh initially to 4.18p/kWh at present. There is little doubt the tariff ***reduction*** of approximately 50 per cent has affected the recent uptake of small commercial biomass.

But heavy users of heat can still benefit, though they will need to trim their project budget and choose their biomass fuel carefully. Meanwhile, the early adopters benefiting from the higher initial rates must be very glad that they acted early on.

Uptake of medium (200-1,000kW) and large (>1,000kW) biomass has been more in line with Ofgem's expectations, so these have largely escaped tariff ***reduction*** so far and will continue to be attractive in appropriate cases, at least for the time being, subject to the detail still to emerge following the chancellor's autumn statement announcing a reform of the RHI.

Reform being considered

Last month the Department of ***Energy*** & Climate Change (DECC) stated that Ofgem will continue to run the RHI under the current rules during the budget year 2016-17 while reform of the scheme is considered. This gives certainty for projects that are planning to complete after April 2016, although be mindful that tarrifs will continue to be reviewed by DECC each quarter and Governments can also change their mind.

But Ofgem has already shown it will ***reduce*** rates when the financial allocation for a particular technology is exceeded, so for anyone considering a switch to biomass it would be wise to act sooner rather than later because the tariff is fixed at the rate in force at the time when the installation is approved and it is index-linked for the following 20 years.

What then are the issues for those thinking about biomass? Choosing the right fuel is by far the most important factor because this affects every other practical and economic aspect of the switch to biomass There are many fuel choices:

- Straw bales.

- Wood pellets.

- Virgin wood - round wood or woodchips.

- Waste wood.

- Miscanthus and other ***energy*** crops.

- Poultry litter.

- Oversize compost.

Factors such as moisture content, ***energy*** content and availability vary significantly between these fuels and have a bearing not only on the economics of the project but also affect the choice of boiler because biomass boilers are generally designed for a particular biomass fuel or fuels.

Renewable heating technologies are closely scrutinised, with a number of regulations affecting biomass fuel. Since October last year, commercial biomass users must meet stringent new regulations covering fuel sustainability. Using wood fuel sourced from a supplier on the Biomass Suppliers List (BSL) is the easiest route to compliance.

For other biomass fuels, the user must demonstrate that the fuel they are using meets the sustainability criteria for total ***greenhouse gas*** ***emissions***. RHI payments can be withheld where compliance with the new sustainability code cannot be demonstrated. Burning waste wood requires additional permissions, either from the local authority or the Environment Agency, depending on the size of the installation. Once the necessary permission has been obtained, using grade A waste from a BSL supplier will be the most straightforward route to compliance.

Securing the best returns

RHI payments are guaranteed for 20 years so even though payback of the initial investment can often be attained within the first few years, the best return will be earned by those who utilise the asset for the full term.

So, security of fuel supply is very important and while choosing the lowest equipment prices at the outset might be appealing, the cost of replacing inferior-quality equipment mid term, or high routine maintenance costs, could well result in a lower return overall.

All biomass fuels require storage on site. Where the fuel is already available on site or from a local supplier's stock, it may be possible to keep storage space to a minimum, but it is much more usual to provide weather-protected storage sufficient for at least one week at maximum demand. Biomass fuels are bulky so adequate space is required to facilitate large delivery vehicles and the storage of the delivered fuel. Some form of mechanical handling, such as telehandlers, walking floors or auger systems, will be required for unloading and transferring from the fuel store to the boiler.

Biomass users should also be prepared to spend more time maintaining their system than they would with oil or gas. Regular duties such as de-ashing, tube cleaning and adjusting controls can often require an hour a day of someone's time. Occasional clinker removal and the odd breakdown will take time too. In addition, should a user opt for manual rather than automatic fuel loading, it will be necessary to have someone available for stoking every few hours.

Biomass boilers are not ideally suited to modulating or switching on and off, so every biomass heating system must include adequate heat storage. One of the most common mistakes in the greenhouse heating sector is to provide insufficient heat storage - a commonly accepted heat store size is to allow for at least 100 litres of storage for each kilowatt of boiler capacity (100cu m for a 1MW boiler) and it is essential to install proper insulation, ideally 75mm on transport pipes and 150mm on storage tanks.

Finally, the biomass heating system must be integrated into the existing system. In many cases, the biomass boiler will be one of several heat sources such as a backup boiler, a boiler for CO2 production or a combined heat and power system. In such cases it is vital to seek expert advice at an early stage, not least because RHI applications will be rejected where the applicant cannot show exactly how much heat is being generated by each heat source.

There is no doubt that the RHI has already encouraged many growers to install biomass systems and, despite ***reductions*** in some tariffs, biomass can still result in substantially lower heating costs in the right circumstances. But there are many practical and regulatory pitfalls, so it is always advisable to seek expert advice at a very early stage.

About GrowSave

GrowSave is AHDB Horticulture's knowledge transfer programme for ***energy*** related issues in the protected edibles and protected ornamentals sectors. Largely delivered by consultants from Farm ***Energy*** Centre, who are ***energy*** experts in ***agriculture*** and horticulture, a programme of events and literature is provided annually. Support is available through attendance at industry events and via the GrowSave website at [*http://www.growsave.co.uk*](http://www.growsave.co.uk) where growers can find out all about the latest techniques and new ways of thinking about ***energy*** savings.

Jon Swain is a senior engineer at Farm ***Energy*** Centre.

- Case studies follow overleaf (p35).

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**Load-Date:** February 19, 2016

**End of Document**



[***Programme summary of Iranian TV news 0930 gmt 30 May 16***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JWR-HMY1-JC8S-C233-00000-00&context=1516831)

BBC Monitoring Middle East - Political

Supplied by BBC Worldwide Monitoring

May 30, 2016 Monday

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**Length:** 416 words

**Body**

A. News headlines

B. Main news:

1. 0930 President Hassan Rouhani paid a visit to West Azerbaijan Province. He delivered a speech and said that the government's main concern is economic problems and unemployment issues. (See processed reports)

2. 0935 Judiciary Chief Ayatollah Amoli-Larijani started a provincial tour in Tehran Province.

3. 0938 Report on the 23rd International Exhibition of ***Agricultural*** Industry and Food items held in Tehran.

4. 0938 Telephone conversation with a government official, Mohsen Haj-Mirza'i, on the cabinet meeting, which dealt with retirement issues.

5. 0941 Iran and Poland have signed a memorandum of understanding (MoU) aimed at boosting political-economic cooperation. (See processed report)

6. 0943 Report on remarks made by Secretary of Iran's Supreme National Security Council (SNSC) Ali Shamkhani about Iran's security strategy.

7. 0943 Report about the late founder of the Islamic Republic of Iran, Imam Khomeyni, on the occasion of his demise anniversary.

8. 0948 Iraqi forces entered the Iraqi City of Fallujah for several hours and destroyed a number of "terrorist strongholds". Iranian Deputy Foreign Minister for Arab and African Affairs Hossein (Hoseyn) Amir-Abdollahian said that Tehran will continue providing advisory help to regional countries. (See processed report)

9. 0950 Report on tensions between Iran and Saudi Arabia over the cancellation of the Hajj for Iranian pilgrims this year. Saudi Foreign Minister Adel al-Jubeir said that Iran "exploited the Hajj for political purposes". Head of Iran's Hajj and Pilgrimage Organization Saeed Ohadi (Sa'id Owhadi) in an interview on state-run TV Channel Two's (IRTV2's) daily discussion programme said Riyadh "sabotaged" this year's Hajj.

10. 0953 Live telephone link-up with correspondent from an area near the Iraqi city of Fallujah on the operation to "liberate the city from terrorists".

11. 0955 Speaking at the 11th International ***Energy*** Conference, Iranian ***Energy*** Minister Hamid Chitchian said that Iran is trying to ***reduce*** ***greenhouse gas*** ***emissions*** by four per cent.

12. 0956 Report on the sale of smuggled fruits in Iranian markets.

13. 0957 Educational report

14. 0958 Initial results for PhD admissions at Azad University have been announced.

C. 0958 News in brief

D. 1003 Weather report

E. 1004 Sports news

F. 1005 Calendar; prayer times

1005 Recap of news headlines

1006 End of news bulletin

Source: Vision of the Islamic Republic of Iran Network 1, Tehran, in Persian 0930 gmt 30 May 16

**Load-Date:** May 30, 2016

**End of Document**



[***Scottish research finds soil crucial to climate change fight***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JGG-4RP1-F15H-C48M-00000-00&context=1516831)

Scotsman

April 7, 2016 Thursday

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**Length:** 529 words

**Byline:** Sam Shedden

**Body**

THE earth's soils are set to play a key role in locking away ***greenhouse gases***, new research by experts in the Abeerdeen and Edinburgh has shown.

A team at Edinburgh University and Aberdeen University the have produced a study which suggests natural surfaces could store an extra eight billion tonnes of ***emissions***, helping to limit the impact of climate change.

The analysis indicates that adopting the latest technologies and sustainable land use practices on a global scale could also allow gases to be stored in farmland and natural wild spaces.

Growing crops with deeper root systems, using charcoal-based composts, applying sustainable ***agriculture*** practices and restoring drained peatlands could help soils retain an amount of carbon, equivalent to a significant proportion of annual ***emissions*** released by the burning of fossils fuels.

READ MORE: {[*http://www.scotsman.com/news/renewables-become-scotland-s-biggest-source-of-****energy****-1-3982617*](http://www.scotsman.com/news/renewables-become-scotland-s-biggest-source-of-energy-1-3982617) | Renewables become Scotland's biggest source of ***energy***}

The role that soils could play in efforts to combat climate change has until now been largely overlooked, owing to a lack of effective monitoring tools however advances in technology have enabled researchers to work out their full potential.

The study states that coordinated efforts involving scientists, policymakers and land users are key to achieving any meaningful increase in soil storage of ***greenhouse gases*** and resources should be provided to help ***reduce*** the environmental impact of farms.

Community-based initiatives could be used to help to overcome cultural barriers, funding issues and monitoring challenges to achieve a global increase in soil uptake.

Previous research shows that soils currently store around 2.4 trillion tonnes of ***greenhouse gases***, which are stored underground as stable organic matter.

Professor Pete Smith, of the Institute of Biological and Environmental Sciences at the University of Aberdeen, said: "Soils have probably been overlooked as you cannot see the large carbon stocks they contain, whereas you can see trees growing and getting bigger. It is also difficult to easily measure changes in soil carbon, as changes are slow and we are trying to measure a small change against a large background. But after International Year of Soils in 2015, and the French Government's initiative to increase soil carbon stocks to tackle climate change agreed at the Paris climate summit last December, soils are now firmly on the climate change agenda."

Professor Dave Reay, of the University of Edinburgh's School of GeoSciences, added: "In the fight to avoid dangerous climate change in the 21st Century we need heavyweight allies. One of the most powerful is right beneath our feet. Soils are already huge stores of carbon and improved management can make them even bigger. Too long have they been overlooked as a means to tackle climate change. Too often have problems of accurate measurement and reporting stymied progress towards climate-smart soil management. With the surge in availability of big data' on soils around the world, alongside rapid improvements in understanding and modelling, the time has come for this big-hitter to enter the ring."

**Load-Date:** April 7, 2016

**End of Document**



[***Comment - Nuclear's environmental impact - is it trivial?***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HK8-2WN1-JD7R-X00F-00000-00&context=1516831)

Nuclear Engineering International

December 1, 2015

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**Section:** Pg. 10

**Length:** 1906 words

**Byline:** Steve Kidd

**Highlight:** A strong element of the argument for nuclear power playing an increasing role in world ***energy*** is that the environmental impact of using it is very low.

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External costing suggests that the public health benefits associated with ***reducing*** ***emissions*** from fossil fuel burning could still be the strongest reason for pursuing closure, in addition to climate change concerns. Thousands of deaths could be avoided in urban areas each year by ***reducing*** fossil fuel combustion in line with ***greenhouse gas*** abatement ***targets***. The World Health Organisation (WHO) in 1997 presented estimates, of 2.7 or 3 million deaths occurring each year as a result of air pollution. In the latter estimate, 2.8 million deaths were due to indoor exposures and 200,000 to outdoor exposure. The lower estimate comprised 1.85 million deaths from rural indoor pollution, 363,000 from urban indoor pollution and 511,000 from urban ambient pollution. The WHO report points out that these totals are about 6% of all deaths. Moving to cleaner ***energy*** has huge benefits to the world.

One interesting area is that of accidents related to ***energy*** production. A November 1998 study from the Paul Scherrer Institute in Switzerland drew on data from 4290 ***energy***-related accidents, 1943 of them classified as severe, and compared different ***energy*** sources. It considered over 15,000 fatalities related to oil, over 8000 related to coal and 5000 from hydro.

Considering only deaths and comparing them per terawatt-year, coal has 342, hydro 883, gas 85 and nuclear power only eight. Given that nuclear power annually delivers some 2500TWh per year to the world, these eight deaths would be at an average 2.3 deaths a year. Coal produces more than double nuclear's share of world electricity and works out at 216 deaths per year. In terms of number of immediate deaths per event from 1969 to 1996, perhaps surprisingly hydro stands out with about 550 compared with coal at around 40.

The studies show that nuclear power is certainly not a bad citizen. It is very safe to work in and has very limited impacts on the environment. The battle to achieve acceptance of these important facts is a very slow and hard one, and it is one that the industry is only slowly winning.

The key area is clearly to convince people that even if there are small incremental releases of radiation, the impacts will be highly localised and of no severe consequences (see November 2014, 'Radiation - how can the industry begin to deal with its biggest challenge'). If this can be achieved, the issues on other key areas can much more easily be addressed. The "big three" here are the consequences of major nuclear accidents, nuclear waste management and the fear of nuclear proliferation and terrorist thefts of nuclear materials.

It is widely agreed that the nuclear industry can no longer maintain that accidents will never happen and it must argue that if they do happen, the consequences will be controllable and relatively minor. This is difficult after the Fukushima accident, which was very badly handled by all concerned. Until the radiation dragon is slain, one cannot have much confidence that future accidents will be handled any better. The fear that has affected the entire history of nuclear power must be overcome and radiation is the key (see September and October 2015, 'Overcoming the paradigm of fear, Parts 1 and 2').

The waste issue is often cited as nuclear's "achilles heel" but in reality, it should be a strength. Unlike the generation of electricity from fossil fuels) all the nuclear wastes are identified and contained. Even in a worst case scenario where there is a release of radiation from a waste facility, any impact is likely to be highly localised and of little consequence to humans. Of greater difficulty is the issue of how long the waste will remain dangerous, and the multigenerational aspects of geological repositories need careful handling. Under natural capital principles, it is impossible to impose a huge burden on future generations by activities today, so the industry must be able to convince critics that what is passed on is easily manageable. Multinational repositories are one answer here, lessening the potential burden on countries with only a small number of operating reactors.

The proliferation and nuclear security issues are also closely related to the understanding of radiation, but need careful handling nevertheless. The fear of nuclear war has undoubtedly diminished as the world has learned to live with nuclear weapons, but is still too easily linked with the civil nuclear sector. If more countries in the Middle East employ nuclear power (after Iran and the UAE), these concerns are likely to remain active rather than simply fade away, but they must be kept in proportion.

To conclude, the environmental impact of nuclear is trivial by comparison with other means of generating electricity and by comparison with other industrial sectors, but there is still a long way to go in getting it generally accepted. The key remains the slow removal of underlying fear. Facts and figures can only go some way to helping.

Steve Kidd is an independent nuclear consultant and economist with East Cliff Consulting. The first half of his career was spent as an industrial economist within British industry, followed by nearly 18 years in senior positions at the World Nuclear Association and its predecessor organisation, the Uranium Institute.

**Load-Date:** December 11, 2015

**End of Document**



[***Don't dodge the green issues, Mr Kenny - they're actually a golden opportunity***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JT4-N4T1-JBVM-Y0Y5-00000-00&context=1516831)

Irish Independent

May 18, 2016 Wednesday

Edition 1, National Edition

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**Section:** NEWS; Pg. 28

**Length:** 891 words

**Byline:** Norman Crowley

**Body**

THIS week, Nasa announced that April 2016 was the hottest April on record globally, and that the latest figures smashed the previous record for April by the largest margin ever recorded.

In fact, the last three months of temperature increases have broken records by the highest margins ever. When we couple this data with the fact that the new Programme for Government barely mentions climate change, this might be a good opportunity to write to our newly re-elected Taoiseach on the largest challenge that currently faces mankind.

The job of being green while trying to win votes is a tricky one, with lots conflicting issues.

We need to lower our agriculturerelated ***emissions***, and yet we need to expand our dairy herd to compete globally.

We need to create more green ***energy***, but wind turbines can be a blight on the landscape and, to compound this, we already have 30pc over-capacity in electricity generation.

We need to use our cars less, but we need to support the motor industry, which delivers jobs and tax income.

Gas fracking could generate valuable revenue and jobs, but could also wreck our water supply.

Is it any wonder that none of our politicians ever want to mention the elephant in the room, or, in Ireland's case, the methanebelching cow? Like most problems in life, however, this challenge can also be an opportunity.

To highlight the opportunity, let's start with one where everybody wins. In 2014, we in Crowley Carbon went to the trouble of calculating how much money the Government could generate by implementing ***energy*** efficiency solutions in its own buildings, while also encouraging businesses to do the same.

We used the State's own figures to ensure accuracy. The punchline is that the Government could upgrade all its hospitals, prisons and offices to a more efficient and comfortable standard - and release an extra (EURO)500m in ***energy*** savings to the Exchequer.

Despite being confronted with these figures, the Government has claimed that a lack of money is the reason for the slow progress on efficiency. Despite this, large European funds that were set aside for ***energy*** efficiency remain unspent.

Next, let's tackle the cow in the room, ***agriculture***. Our ***agricultural*** ***emissions*** are responsible for around 30pc of our total ***greenhouse gases*** and at the same time, we need to expand - not contract - our agribusiness.

When it was introduced in Germany, anaerobic digestion (AD) delivered valuable additional income to small farms, and also got rid of farm waste. But we have almost no farm-scale AD plants in Ireland.

Supplements in cattle feed have been proven to ***reduce*** methane ***emissions*** by 30pc, and at minimal cost. We are never going to beat the largest farms in the world in terms of prices for our farm produce. By trying to compete on scale, we are losing more and more people from the land.

The solution must be in lowcarbon quality, and not quantity. Maybe the solutions can be found by using our 'green' brand, our imagination and our technology to get a win for everyone.

The increase in car sales in the last couple of years and our love of one-off houses far away from public transport both highlight the challenge we face on low-carbon transport.

However, the increased range and sophistication of electric cars, coupled with their dramatically ***reduced*** running costs, may mean that external market forces will push us to a greener future.

Of course, electric cars are only green if we have a green grid, and while we have no shortage of power generation in Ireland, 80pc of the ***energy*** we consume still comes from coal, oil and gas.

With the cost ***reduction*** and efficiency improvements that are coming on stream with solar ***energy***, we cannot ignore this opportunity any longer.

When I talk to people in Ireland about the solar opportunity, many laugh because of our obsession with the weather - and rain in We need to lower ***agricultural*** ***emissions***, yet expand our dairy herd, to use cars less, yet support the motor industry.

Is it any wonder none of our politicans ever want to mention the elephant in the room, or, in Ireland's case, the methanebelching cow? particular. You may be shocked to know that, for generating hot water, the latest solar systems rely on daylight rather than sunshine. As bad as the weather gets here, we still have daylight.

When you combine this with the fact that solar panel efficiency (the rate by which a panel converts sunlight to electricity) is increasing dramatically every year, then maybe Ireland has a solar future.

Resolving the low-carbon ***energy*** question is a complex problem. We need to keep the cost of ***energy*** low in order to be competitive, and the current lower oil prices do not improve the case for low-carbon solutions.

However, the lower costs of solar and ageing fossil fuel plants that need to be replaced anyway may hold the solution.

I don't have all the answers, but clogging our cities with more cars, losing more farmers from the land while we try to compete on price with global food companies, buying coal and oil when the largest ***energy*** generator we know of beams from the sky and wasting 40pc of the ***energy*** we buy seem to be the kind of silly things that a new government should tackle.

So my message to the Taoiseach is: Stop sweeping the low-carbon opportunity under the rug… it's not as scary as you think.

Norman Crowley is founder and chief executive of Crowley Carbon

**Load-Date:** May 18, 2016

**End of Document**



[***Climate deal: Carbon dated?***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HM8-VWH1-F039-60DM-00000-00&context=1516831)

FT.com

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**Length:** 1878 words

**Byline:** ​Pilita Clark in Paris

**Body**

If there was one sound that captured the frantic nature of the talks that led to theParis climate change deallast weekend, it was the ping of an incoming WhatsApp message.

The instant messaging smartphone app was used by dozens of delegations from the 195 countries involved in the  [*two-week negotiations*](http://www.ft.com/paris-climate-talks). Among them were the representatives from Saudi Arabia, the world’s largest oil exporter and one of the countries with most to lose from a robust accord. As haggling over the agreement spilled into a series of private meetings, delegates from more than 20 Arab nations received a stream of WhatsApp messages advising them on what to say in each session.

“A lot of it was intended to marshall the troops to make sure the Saudi position was backed up by at least one other country in the room at all times,” says one delegate who saw the messages. “Otherwise their arguments could have been viewed as those of an isolated country.”

The Saudis were deeply opposed to something that many other countries insisted should be in the pact: a goal to stop global temperatures rising more than 1.5C above pre-industrial revolution levels.

Riyadh’s unease was understandable. Temperatures have already risen by nearly 1C and meeting the 1.5C ***target*** would require heat-trapping carbon dioxide ***emissions*** from burning fossil fuels, a lifeblood of the Saudi economy, to come down much faster than if governments stuck to a 2C warming ***target*** agreed at UN climate talks in 2010.

Reaching the 2C goal means ***energy***-related ***emissions*** would need to be cut to zero by around 2060 or 2070, according to Niklas Höhne, an author of the latest report from the UN’s Intergovernmental Panel on Climate Change. “For 1.5C, you have to be at zero at around 2050,” he says.

In the end, the Paris agreement said countries should aim to keep temperatures “well below 2C” and “pursue efforts” to limit warming to 1.5C. It was one of a series of compromises made in the final fevered hours of the COP21 talks that eventually produced a grand bargain among nations with vastly different economies on the fairest way to tackle global climate change.

The question now is, can this pact — born out of such compromises and riddled with non-binding conditions — actually deliver a big enough cut in ***emissions*** to curb temperatures that are on track to warm the world by around 3C or more by the end of this century. An increase of that size, say scientists, would intensify the risk of fierce storms, intolerable heatwaves, higher sea levels and melting ice caps.

The UN has been trying to orchestrate a global agreement to limit ***emissions*** for more than 20 years, starting with a 1992 accord struck in Rio de Janeiro. This was followed by the 1997 Kyoto protocol, a treaty that required only rich countries to cut their carbon pollution, and a failed attempt to produce a new pact at Copenhagen in 2009.

**Fuel for activists**

The Paris agreement differs from earlier efforts in several ways. Its new 1.5C ***target*** is only aspirational and meeting it would require substantial cuts in ***emissions*** and unprecedented growth in existing  [*renewable* ***energy*** *technologies*](http://www.ft.com/topics/themes/Renewable_Energy). But its implications will be seized on by advocates who have already translated the 2C goal into a string of campaigns highlighting the amount of coal, gas and oil that needs to stay unburned if such a ***target*** is to be met.

The same goes for another goal in the agreement to achieve a balance in the second half of the century between man-made ***greenhouse gases*** and carbon-absorbing “sinks”, such as forests. Another big difference between the Paris pact and its predecessors is that it requires virtually every country in the world, not just wealthy ones, to publish a climate plan every five years, probably from 2020.

Any ***targets*** in those climate plans, such as the US goal to cut ***emissions*** by at least a quarter from what they were in 2005 by 2025, or China’s aim to get its ***emissions*** to peak by 2030, are not legally binding for signatories to the agreement. But the plans themselves are mandatory, as is a stronger UN system for monitoring countries’ ***emissions*** and assessing how they are being curbed.

We have already seen what happens when countries are merely invited to publish voluntary plans, as they were in the run-up to the Paris meeting. More than 180 nations did this, including Saudi Arabia. But it only plans to ***reduce*** ***emissions*** if its economy continues to grow and there is a “robust contribution from oil export revenues”.

Still, Riyadh did submit a plan and under the new accord, it will have to table a new one every five years that cannot be any weaker, using a more stringent set of reporting rules. The same applies to the largest emitter, China, which accounts for 27 per cent of global carbon pollution.

Like Saudi Arabia, it was reluctant to support the 1.5C ***target*** and other measures backed by a group of countries led by small island states — those most at risk as sea levels rise — that labelled itself the “high ambition coalition” at COP21.

Only a day before the agreement was adopted, Liu Zhenmin, deputy head of China’s delegation, dismissed this coalition as “a kind of performance” or stunt.

But the group included the US, the second-largest emitter. Its diplomacy under John Kerry, secretary of state and a life-long climate action advocate, led to Washington and Beijing jointly announcing climate plans late last year — a move that at the time raised hopes that a Paris agreement could be sealed.

**Breakthrough of the Big Two**

In the end the US-China relationship proved crucial to Saturday’s accord. In the tense moments before the deal was signed it almost came unstuck, but China showed that, despite its officials’ public rhetoric, it wanted the agreement to go ahead.

As France’s foreign minister, Laurent Fabius, was preparing to bang the gavel on the agreement’s adoption on Saturday, panic set in after the US delegation saw the final text, drawn up in the early hours of the morning by exhausted officials.

Unlike previous versions, which said developed countries “should” take the lead in fighting climate change, it said they “shall” undertake ***emission*** ***reduction*** ***targets***. This was a legally problematic change for the Obama administration, which wants to sign up to the new deal by executive agreement rather than submitting it to a hostile Senate for consent.

Mr Kerry took one look and said: “We cannot do this and we will not do this, and either it changes or President [Barack] Obama and the United States will not be able to support this agreement.”

A group of developing country delegates, still nervous about the accord, seized the chance to declare they would not accept any changes.

But as envoys huddled on the conference floor to try to iron out the problem, Xie Zhenhua, China’s top climate negotiator, stepped in.

“He said, ‘Stop it now, we want this agreement, don’t play games with this, it isn’t fair’,” says Laurence Tubiana, France’s COP21 ambassador. The text was duly changed — “should” replaced “shall”. “Without Xie, we would not have had an agreement,” Ms Tubiana told the Financial Times.

The relief in the convention hall was profound. The most important immediate outcome of the Paris agreement is that it was not another flop like Copenhagen. In the aftermath of that failure governments continued to launch climate policies, but opponents were bolstered by the absence of a global agreement committing all countries to take similar action.

The paradox of UN climate negotiations, where all countries have an equal vote, is that they are destined to produce deeply compromised agreements with a limited chance of having a positive impact on lowering ***emissions***. But they can easily have a negative effect on such efforts if they fail in the way the Copenhagen conference did in 2009.

Paul Marty, a senior credit officer at Moody’s, the rating agency, says that if Paris had been another Copenhagen, it might have affected even climate policy pioneers such as the EU, home of the world’s largest carbon market and some of the earliest solar power subsidies.

“It’s likely it would have undermined the EU’s long-term decarbonisation policies and ***targets*** on the grounds that if the rest of the world isn’t doing much, why would EU economies need to make the effort,” he says.

**Declarations of intent**

The immediate impact of the agreement was mixed. France’s President François Hollande was the first leader to say his government would revise its existing climate ***targets*** before 2020 in the wake of the Paris agreement, but few other nations have shown any sign of being willing to join him.

Shares in a number of European and North American solar and wind companies ticked up on Monday; Elon Musk’s SolarCity, the biggest residential installer in the US, jumped 12 per cent.

Many market specialists said the rise was likely to be temporary. But Barclays analysts predict that the deal would “speed up the deployment of renewable and other zero and low-carbon ***energy*** sources”.

The initial response from oil and gas companies was a broad shrug, but some coal industry groups were more perturbed about its implications, and especially its 1.5C goal.

Brian Ricketts, secretary-general of Euracoal, a trade body representing the EU coal industry, says: “That 1.5C might be a ***target***, but it means NGOs will be striving for the complete phase-out of fossil fuels very quickly, which means we will be hated and vilified in the same way slave traders were.”

It was “bizarre” to think coal companies could change their business models to adapt to such goals, he says, adding that he feared climate activists’ “mob rule” was already replacing the rule of law in some countries and the Paris agreement would exacerbate the trend.

Other coal industry executives say the accord ought to bolster their argument that tougher climate ***targets*** should translate into more support for technologies such as  [*carbon capture and storage*](http://www.ft.com/topics/themes/Carbon_Capture_and_Storage) systems that allow fossil fuels to be burnt without harming the climate.

But it may not be long before such systems are competing against newer technologies that eliminate the need for coal, oil and gas altogether.

That is the hope of Bill Gates, Microsoft’s co-founder, who announced at COP21 that he had teamed up with other billionaires to get nascent clean ***energy*** innovations out of the lab and into the market. This group will work with 20 countries, including the US and China, pledging to double their $10bn combined spending on clean ***energy*** research and development over the next five years. It is initiatives like this that could end up doing more to meet the Paris agreement’s goals than the accord itself.

Ultimately, it is impossible to know if the pact will make this century the last to be powered by fossil fuels. Even Mr Obama, one of the agreement’s strongest proponents, conceded on Saturday that global warming “is not solved because of this accord”. But it does create “the architecture for us to continually tackle this problem in an effective way”, he argued.

Perhaps that is all that can be expected from UN talks that have taken more than 20 years to get to this stage, and may take another 20 to start fixing a problem that has so far proved insoluble.

**Letter in response to this article:**

Carbon sinks will tip the market balance in favour of sustainable ***agriculture*** / From Craig Sams

**Load-Date:** December 18, 2015

**End of Document**



[***Brazilian columnist assesses climate change summit outcome***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HMK-57X1-JC8S-C4MV-00000-00&context=1516831)

BBC Monitoring Latin America - Political

Supplied by BBC Worldwide Monitoring

December 17, 2015 Thursday

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**Length:** 948 words

**Body**

Text of report by leading, centre-left Brazilian newspaper Folha de Sao Paulo website on 14 December

[Column by Fernando Meirelles: "New Environmental Consciousness Might Be On Its Way"]

The cards are on the table. The good news is that this time all countries are on board.

The agreement is better than what was expected as it mentions for the first time a 1.5 degrees centigrade [C] as the desired heating ceiling and a commitment of 100 billion dollars a year, at least, for the adaptation and mitigation of the climate effects in the poorest countries.

The bad news is that if all the countries fulfil what they have proposed in their INDCs [Intended Nationally Determined Contributions] (pollutant ***emission*** ***reduction*** ***targets*** for each one), the planet might heat up between 2.7EsC and 3.3EsC, which means a catastrophe.

In two words: congratulations for the agreement, but it sucks. There is, however, a glimpse of hope: the revisions of the ***emission*** ***targets*** for each country planned for every five years.

If these ***targets*** become more ambitious in their new versions, it will still be possible to limit warming to 1.5EsC. This is very bad, but it is the best possible.

It is very bad because, in this scenario, many corals will die, and there will be huge losses of biodiversity and ocean life.

Glaciers will disappear, increasing by hundreds of millions the number of climate refugees and the number of conflicts resulting as a consequence. The sea level could rise by up to one meter. Can Copacabana resist? Drought, floods. But I will stop here.

I will spare you the repetition of the list of what awaits us and try to somewhat summarize what closely observing this COP21 and parallel activities was like.

When news began to become unbearable, the solution was to flee to the tents of the "observers," where hundreds of NGOs, research institutes, universities, banks, and civil society representatives exposed their projects and ongoing actions.

The number of people involved in some aspect of the climate issue has multiplied every meeting. This and the certain euphoria in the air, did not go unnoticed to anyone.

There were projects ranging from floating artificial islands to host the homeless living on the coast lines, new building systems, up to campaign to save the mangroves.

At a project financing panel, a lecturer at Harvard said we are living an intellectual revolution.

He identified and showed that in the past three years there has been a change of appetite in the business world, which is understandable.

There is talk of investments amounting to trillions of dollars in the world to adapt to the new situation.

The figures change depending on who mentions them, but it is true that the world's money will change hands in the next decade. Candidates for this race are on the go and many of them were in Paris.

The market is monolingual and is already talking their language. For us, mortals, it is great news to know that many of them will become billionaires overnight selling photovoltaic panels or batteries, without the consent of the Arabs.

BRAZIL

Cities, transportation, the recovery of degraded lands, the planting of forests and ***agriculture*** were the main themes present.

What a pity Brazil's ***Agriculture*** Minister, Katia Abreu, did not come to join her colleagues here. Her area accounts for 20 per cent of ***greenhouse gas*** ***emissions*** in the world. It is true that she is not negletful: in October she launched the so-called "Sustainable Rural Area" project which refers to healthy practices for small and medium size producers.

A total of $26 million are for healthy practices, compared to 94.5 billion reais for the ***agricultural*** industry, which spends much of that in fertilizers and pesticides.

Nitrogen fertilizers release nitrous oxide (N2O), one of the gases that contribute the most to aggravate the greenhouse effect.

As it turns out, Brazil did very well in the meetings but, in practice, we are still going in the opposite direction.

The Great Green Wall, which is a replanted forest area 27 km wide by 6,500 kilometres long which will cross Africa from the Atlantic to the Red Sea, through 12 countries, is one of the most impressive projects I saw worth mentioning.

In addition to containing the Sahara, it creates a green axis of food production and opportunities for the inhabitants.

The $100 billion per year to aid the poor countries can be used to implement this and other good projects.

At least in that this crisis could have a positive side: turn crisis into opportunity.

AWARENESS

In the 1970s, we talked about the end of the world and the coming of age of Aquarius, when a new awareness would arise. There was in fact the possibility of a nuclear war destroying the planet, but after that I never thought about the subject again. At least until now. I realized that there are already many who are experiencing catastrophes.

We know, in the cases of disaster, that something triggers in the heart or human soul and we start to act as flocks, and not as individuals.

At these times, no one hesitates to donate, to stack up bags or get a foot in the mud to help those who are buried.

I witnessed this feeling at this COP21. Seeing thousands of people hanging around the corridors trying to find solutions, proposing other economic systems, or trying to recover what was already considered lost, struck me that, after all, this might be that new awareness surfacing. That was not all work.

It comes from below, but also seems to have finally touched the top. The prognosis continues to suck, but there is something very new and promising in the air. There is a will. Realizing this was my redemption.

Source: Folha de Sao Paulo website ([*www.folha.com.br*](http://www.folha.com.br)) in Portuguese 14 Dec 15

**Load-Date:** December 17, 2015

**End of Document**



[***Biofuel needs $70 oil to compete, says DuPont***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H9D-CCW1-JCM7-G493-00000-00&context=1516831)

FT.com

November 4, 2015 Wednesday 1:22 PM GMT

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**Length:** 774 words

**Byline:** Ed Crooks

**Body**

Advanced biofuel made from ***agricultural*** waste — the so called Holy Grail of the alternative ***energy*** industry — will not be competitive with conventional fuel until the oil is back to $70-$80 per barrel, DuPont has said.

This prediction from the US chemicals group, which last week formally opened the world’s largest cellulosic ethanol plant, underscores the challenge facing makers of “second-generation” biofuels. After a decade pursuing an elusive production process, companies are finding their business models threatened by the changing economics of the industry — as well as the politics of the US.

DuPont’s new $225m Iowa plant will, after some delay, begin making cellulosic ethanol next year, and the fuel is expected to result in 90 per cent fewer ***greenhouse gas*** ***emissions*** than conventional petrol.

Ethanol from the plant will be sold in California, which has mandated a 10 per cent ***reduction*** in the carbon intensity of transport fuels by 2020, through the addition of biofuels.

Jan Koninckx, DuPont’s global head of biofuels, described the opening of the plant as a “historic day in technology”. He said: “We’re really reforming the transport ***energy*** sector . . . This is a phenomenal environmental benefit.”

Using ***agricultural*** waste rather than fresh crops to  [*make biofuel*](http://www.ft.com/topics/themes/Biofuels) is difficult, though. At the plant DuPont will take corn waste left over from the harvest — leaves, husks, cobs and stalks, collectively known as “stover” — and turn its cellulose into ethanol. Other sources for cellulosic ethanol include bagasse, the waste cane left from sugar production, and specialist ***energy*** crops such as switchgrass.

Using waste as a feedstock in this way avoids many of the concerns raised by first-generation biofuels, particularly the worry that food production was being sacrificed to create fuel additives.

But the new cellulosic ethanol process needs advanced enzymes to release sugars held in the cellulose, and production levels in the US have been very low.

Only two plants are using this technology: one owned by Abengoa of Spain, and another that is a joint venture between Poet, the privately held ethanol producer, and Royal DSM, a Dutch technology company.

Both formally opened their plants a little over a year ago but, from January to September, only 1.65m gallons of cellulosic ethanol were produced in the US, according to the government’s Environmental Protection Agency. That is 4 per cent of the volumes that the Poet and Abengoa plants were notionally capable of producing in that time.

DuPont claims to have a better understanding of the cellulosic ethanol production process. Nevertheless, Mr Koninckx acknowledged that the economics of cellulosic ethanol suggested it would not be competitive with oil-based fuels until the oil price had risen back above $70 a barrel.

With oil priced at around $50 now, it could easily rebound. But in the futures market Brent crude for delivery in December 2021 is trading at only $65 per barrel — suggesting cellulosic ethanol will need some sort of official supportfor several years.

In the US, demand for ethanol is mandated under the Renewable Fuel Standard, a regulation requiring a specified volume of biofuels to be blended into transport and jet fuels and heating oil.

However, this regulation has come under attack from the oil industry, food producers and environmentalists — and the EPA has launched a new inquiry into ethanol’s ***emissions***.

Ethanol production has also been hitting what is known as the blend wall — the 10 per cent legal maximum for ethanol content in US car fuel.

Peder Holk Nielsen, chief executive of Novozymes, the Danish enzyme technology company that supplies DuPont rivals such as Beta Renewables in Italy, says the important issue is funding the industry’s growth.

“The second wave of plants could be 20 or 30 or 200 or 2,000,” he says. “But that will not happen unless investors understand that the plants will have access to the market . . . not just today, but in 2025.”

To instil confidence, he says, the US administration needs to retain and extend the Renewable Fuel Standard. But many Republicans and some Democratic politicians have been arguing that it should be cut back or scrapped.

Robert Rapier, an ***energy*** analyst, says the problem with cellulosic ethanol is the difficulty in processing and logistically managing high volumes of the plant waste. “Technically it works,” he says. “Economically it’s a very difficult proposition.”

But Mr Holk Neilsen of Novozymes argues that the environmental benefits deserve continued support. “Solutions do exist for many of the problems we face,” he adds. ”It’s about the political courage to implement them.”

**Load-Date:** November 5, 2015

**End of Document**



[***Impax Environmental Markets PLC Half Yearly Report***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5GJV-4N21-F0CC-S1N5-00000-00&context=1516831)

London Stock Exchange Aggregated Regulatory News Service (ARNS)

July 30, 2015 Thursday 4:07 PM GMT

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**Body**

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Impax Environmental Markets PLC

30 July 2015

IMPAX ENVIRONMENTAL MARKETS PLC

HALF-YEARLY FINANCIAL REPORT

FOR THE SIX MONTHS ENDED 30 JUNE 2015

INVESTMENT OBJECTIVE, FINANCIAL INFORMATION AND PERFORMANCE SUMMARY

INVESTMENT OBJECTIVE

The Company's objective is to enable investors to benefit from growth in the markets for cleaner or more efficient delivery of basic services of ***energy***, water and waste. Investments are made predominantly in quoted companies which provide, utilise, implement or advise upon technology-based systems, products or services in environmental markets, particularly those of alternative ***energy*** and ***energy*** efficiency, water treatment and pollution control, and waste technology and resource management (which includes sustainable food, ***agriculture*** and forestry).

FINANCIAL INFORMATION

At 30 June

2015

Net assets GBP377.2m

Net asset value ("NAV") per

Ordinary Share 174.3p

Ordinary Share price 158.5p

Ordinary Share price discount

to NAV 9.1%

PERFORMANCE SUMMARY

% change(1)

Share price total return per

Ordinary Share +4.8%

NAV total return per Ordinary

Share(2) +3.6%

FTSE ET100 Index(2) +8.4%

MSCI AC World Index(2) +1.8%

(1) Total returns in sterling for the six months to 30 June 2015.

(2) Source: Morningstar

[*www.impaxenvironmentalmarkets.co.uk*](http://www.impaxenvironmentalmarkets.co.uk)

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CHAIRMAN'S REVIEW

Against a more positive backdrop for environmental and resource efficiency markets, Impax Environmental Markets plc ("IEM" or "the Company") has had a strong start to 2015.

In previous reports I have highlighted changing investor awareness and concern about climate risk and this trend has continued apace. In June, the publication of Pope Francis's Encyclical on Climate Change featured prominently in the media around the world. In the same month Mercer, a leading global investment consultant, published an important report: "Investing in a time of Climate Change". Its findings reflect our view that climate change will affect investment returns, while the way in which policy makers respond to rising ***emissions*** will dictate how specific markets and individual companies are affected.

In response to higher levels of perceived risk, some 800 major investors (including, notably, the Rockefeller family) have now committed to divest approximately $50 billion of fossil fuel assets; of particular interest was the Norwegian Sovereign Wealth Fund's recent announcement to sell all its coal holdings. Meanwhile, the build up to the United Nations Climate Change Conference ("COP21") in Paris in December generates additional news. Countries accounting for more than 70% of global ***greenhouse gas*** ***emissions*** have now set out their plans for ***emissions*** ***reduction*** in advance of the meeting, which is due to produce a deal taking effect from 2020. Your Company's Directors believe that growing investor familiarity with these issues should lead to heightened interest in IEM, as investors seek to manage climate risk and benefit from potential solutions to the challenge.

While the climate change debate builds, we have seen further evidence of the impact of more extreme weather patterns. The California drought, now in its fourth year, is causing severe disruption to the local economy. At the same time, interesting investment opportunities are emerging in companies with new technologies, making desalination viable and improving water treatment and re-use in drought afflicted areas.

Performance

During the Period, the total returns on the Company's net asset value per Ordinary Share ("NAV") and share price were 3.6% and 4.8% respectively. Over the same period, the total return on the MSCI All Country World Index ("ACWI", priced in Pounds Sterling) was 1.8%, while the total return on the comparator FTSE ET100 Index was 8.4%. The underperformance versus the environmental benchmark can be partly attributed to companies such as Hanergy and SunEdison that the Manager has decided not to own because their fundamentals, governance or valuations do not fit with IEM's long term investment process.

In the second half of the Period, investor fears of Greece leaving the Euro, and concerns about China's economy, resulted in broad market declines. However IEM outperformed the ACWI during these months and was in line with the FTSE ET100 Index.

Impact measurement

The Company's investment philosophy is to ***target*** companies which generate the majority of revenues from resource efficiency and environmental markets since we believe these will deliver superior total returns over the long term. Revenue exposure of the portfolio to those markets is approximately 80%, making the Company one of the highest "pure play" environmental investment opportunities amongst its peers. In addition to this metric, the Board has recognised strong interest from investors in quantifying the positive environmental impact of the portfolio and is looking to estimate certain important environmental metrics. These include carbon dioxide saved, renewable ***energy*** generated, water treated and total materials recycled.

These impact metrics will be covered in more detail in the Company's Annual Report.

Gearing

The Company's GBP30 million, two year, multi-currency, revolving credit facility with The Royal Bank of Scotland plc was fully drawn down throughout the Period. As at 30 June 2015 the Company's net gearing was 5%. The loan facility will expire on 8 January 2016 and, in the coming months, the Board will be considering the possible financing options following that date.

Discount and Share Buybacks

During the year, the discount to NAV at which the Company's Ordinary Shares traded ranged from 6% to 14% and ended the period at 9.1%. The Company bought back 3,610,000 Ordinary Shares for cancellation in the Period at an average discount to NAV of 12%. The buybacks enhanced the NAV per Ordinary Share by approximately 0.3p, equivalent to 0.2% of the NAV per Ordinary Share at the Period end.

Shareholder communications

Following changing market practice away from paper-based communications, and in order to ***reduce*** our paper consumption, we announced in the Annual Report that we are no longer automatically mailing a hard copy of our financial reports. Hard copies are available on request from the Company's registered office. With the increasing focus on digital reporting we have introduced some additional functions to our website (   [*www.impaxenvironmentalmarkets.co.uk*](http://www.impaxenvironmentalmarkets.co.uk)). There is an alert service on the home page where you can sign up to receive information, including press releases, regulatory news, financial calendar details and Reports & Accounts as soon as they are published. You can also follow us on Twitter @IEMplc, where we post updates on the Company, views on our sectors and interesting third party commentary on environmental and related markets.

Outlook

The investment hypothesis for IEM continues to strengthen. The Directors expect positive future returns across global equity markets for the remainder of 2015, albeit with higher volatility. Meanwhile, investor awareness of climate change and other environmental issues is growing, the Company has a proven record of delivery of premium growth versus global equities and a valuation that we believe understates the Company's prospects. Your Board believes that IEM remains a compelling investment opportunity for long term investors.

John Scott

30 July 2015

MANAGER'S REPORT

The resurgence of interest in resource efficiency has finally reached or surpassed pre-financial crisis levels and IEM's diverse investment universe continues to grow. Furthermore, during the Period solid earnings reports and outlook statements continued to point to superior growth delivery from companies across IEM's environmental and resource efficiency markets.

IEM's portfolio has a small cap bias and is geographically diversified. These characteristics both proved positive during the Period as small cap stocks returned to favour with investors and the Company was cushioned against major currency fluctuations.

Key Developments and Drivers of Environmental Markets

During the Period there were numerous significant catalysts and new policy announcements providing further support for the Company's long term growth drivers.

Solar update

Solar stocks were weak in the second half of last year. We believe this was a reflection of negative sentiment surrounding the dramatic fall in oil prices. This weakness was followed by significant positive developments during the Period that strengthen the sector outlook. Government announcements around the world continue to open up and enlarge new and diverse end markets, with India announcing ambitious cumulative installation ***targets*** of 100 GW by 2022 (versus 3 GW today) and China raising its 2015 ***target*** from 15 to 17.8 GW.

Technology costs also continue to fall, ***reducing*** reliance on subsidies and creating an environment for leaders to emerge with the technology, scale and cost base to thrive. These favourable supply/demand dynamics drove strong performance in our solar holdings including Chinese companies Trina Solar and Xinyi Solar. We remain focussed on companies with strong business models, robust financials and solid governance. For this reason we have never held Hanergy Thin Film Solar (Hong Kong), which was suspended amidst a storm of media attention in June.

Strong environmental policy news flow from China

**Load-Date:** July 30, 2015

**End of Document**



[***Norway: Environmental hero or hypocrite?***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JRY-CCG1-F039-623H-00000-00&context=1516831)

FT.com

May 5, 2016 Thursday 6:04 PM GMT

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**Length:** 1820 words

**Byline:** Richard Milne in Oslo

**Body**

With killer whales swimming in the pristine fjord and sea eagles soaring above it, the scene offers a postcard-perfect image of Norway. “It is a paradise where nature can develop undisturbed,” says Anne-Line Thingnes Forsund, who was born and raised in Vevring, beside the Forde fjord.

But last year the Norwegian authorities approved a plan that would allow millions of tonnes of industrial waste to be dumped into the fjord, drawing criticism that the pristine area will be disturbed. The project developer, Nordic Mining, says that in return 170 jobs would be created to excavate titanium oxide, a mineral used in teeth whitening and other products.

The move has sparked the ire of locals and environmentalists. It has also unleashed criticismof Norway, long seen as one of the leading lights of the climate change movement for its largesse in sponsoring green projects abroad: it gave $1bn to stop deforestation in Brazil and has a  [*similar scheme in Indonesia*](https://ig.ft.com/sites/land-rush-investment/indonesia/).

“We are telling everybody else what they should be doing but we are not doing it ourselves,” says Nina Jensen, head of the WWF in Norway.

In areas as diverse as coal mining, oil and gas exploration, forestry, peat bogs, fossil fuel subsidies and ***emissions*** ***reduction***, Norway stands accused of not practising what it preaches. Critics argue that the type of behaviour it rails against abroad — putting jobs and growth above protecting the environment — is exactly what it is doing at home, leading to charges of hypocrisy.

“We are frustrated most of the time because jobs go before the environment. To some extent it is hypocrisy. Sometimes it seems easier to achieve something abroad than in Norway itself,” says Arild Hermstad, head of the Future In Our Hands, Norway’s leading environmental lobby group.

**‘Far from perfect at home’**

It is not just environmentalists angered by this. “Norway always comes across as a moraliser on environmental matters but I think there’s a lot to criticise it about at home where it’s far from perfect,” says the chief executive of a Swedish industrial company, who asked to remain anonymous.

James Hansen, the US climate researcher and former Nasa scientist, argued last year that Norway should leave its remaining fossil fuels in the ground, arguing that saying they were in the middle of a “green shift” while drilling for oil was a “nonsense”. “To leave Norway’s share of resources untouched would be an act of leadership that would go down in the history books worldwide,” he wrote in a letter to Norway’s prime minister.

The stakes are high in the wake of the climate accord agreed in Paris in December — which was formally signed in New York on April 23 — to limit warming of the planet to less than 2C from pre-industrial times. Norway has been well regarded for doing more than almost any other nation to fight deforestation as well as putting climate change action at the heart of its $855bn sovereign wealth fund.

In Vevring, a town of just 300 residents, Ms Forsund, head of the  [*local action group*](http://fjordaksjonen.org/english-information.html) against the mine, calls the plan “madness”. The fjord is a popular spawning ground for fish, the location of several salmon farms as well as a destination for cruise ships. Various groups involved in tourism and seafood — two of Norway’s biggest industries behind petroleum — have spoken out over the plans, while a British marine biologist called the development “mad” and “like returning to the 18th century”.

“It is unbelievable that we are paying so much to protect the rainforest when they are going to let mining waste into our fjord — an underwater rainforest — in Norway. This is gross hypocrisy,” says Ms Forsund.

Nordic Mining promotes the project as an example of how Norway can survive as oil and gas slowly but inevitably disappears from the ***energy*** mix. It argues that the waste will be pumped to the bottom of the fjord, a depth of 300m, well below where the typical habitat of wild salmon. Norway is one of the few countries that allows mining waste to be dumped at sea. The company says studies show that marine life tends to return to the bottom of such fjords within a few years.

“This is positive,” Roald Kvammen, a Vevring resident, told local media. “We need these jobs.”

The Forde fjord is far from an isolated incident. Environmentalists point to a string of projects where jobs in isolated communities have trumped other considerations. These projects are partly explained by Norway’s slowing economy, which has seen growth stall and unemployment rise by a third in the past two years as the country has felt the sharp effect of lower oil prices.

One proposal is to open up vast swaths of sea inside the Arctic Circlefor oil exploration. Oil and gas are already being pumped from the southern Barents Sea but this year auctions for the first new acreage in 20 years will be awarded, particularly along the country’s Arctic border with Russia.

**Assisting exploration**

The ***energy*** companies are helped by a tax break of 78 per cent to set off against exploration costs, something Ms Jensen calls a “hidden subsidy” which by her calculation amounts to NKr140bn ($17bn) in this year’s licensing round. “You really shouldn’t be investing your money in something you should be ending,” she adds.

Government officials dispute that the tax measures are subsidies, arguing that they help ensure exploration. They point to the UK, on the other side of the  [*North Sea*](http://video.ft.com/4870221563001/North-Sea-hit-by-fall-in-oil-price/Companies), where the industry is struggling, as an example of what can happen without the right incentives.

 Even more controversial is a push to open up the Lofoten islands and Vesteralen archipelago in northern Norway for oil exploration.

With the largest cold water coral reef in the world, Lofoten is widely regarded as the most spectacular place in Norway. The current centre-right government has ruled out any drilling there while it is in power.

However, both the chief executive of government-controlled Statoil and Oslo’s oil minister have recently called for the area to be opened up after next year’s elections.  [*Eldar Saetre*](http://www.bloomberg.com/news/articles/2016-04-13/norway-oil-executives-warn-on-long-term-supply-as-elections-loom) of Statoil has warned that unless the drilling ban is lifted, the precipitous decline in Norway’s oil production would continue — it has halved since 2000.

“It is these kinds of calls that make you think: why the hell are we doing this? [Opening up Lofoten] would be very short-term thinking trumping long-term thinking,” says Ms Jensen.

Cries of hypocrisy were also heard when a state-owned company opened a coal mine on the Svalbard archipelago on the very day in 2014 that Norway’s parliament began discussing whether its sovereign wealth fund should pull out of coal investments.

“It is true there is a certain amount of double standards here,” says one senior government official. “But we think it is better to take a stance on climate change with the oil fund than do nothing, and the coal mine itself is pretty small.”

Vidar Helgesen, the environment minister, argues that Norway is a “paradox nation” because of its status as western Europe’s largest producer of oil and gas.

 “We have significant wealth derived from fossil fuels but at the same time we are a policy lab for ideas that seek to undermine the market for oil,” he says. As an example, he cites heavy subsidies for electric cars, which have helped Norway set sales records for many models. Early last year, more than two-thirds of the European sales of Volkswagen’s eGolf were in Norway.

On the broader criticism, Mr Helgesen says the government wants to ensure a gradual shift away from fossil fuels as well as create jobs. “In individual cases, there will be trade-offs between industries. That is not a matter of hypocrisy. It is the kind of dilemma you will have in any country,” he adds.

The minister calls the claim that Norway does not do at home what it preaches abroad “a fundamentally flawed assumption — we are not telling Indonesia that they should not make money from their forests”.

**Poor record**

Perhaps the most pointed criticism of Norway’s record is in the very areas where it is seeking to have an effect overseas: forestry and peat bogs.

Norway paid its final instalment of a $1bn donation to Brazil late last year for ***reducing*** its rate of deforestation by three-quarters. It has offered large sums to Liberia to protect 30 per cent of its forests by 2020, as well as other countries, such as the Democratic Republic of Congo.

Environmentalists, though, are worried about the protection of Norway’s own woodland. Most of its forests are relatively young, with just 2.4 per cent that are more than 160 years old and classified as old growth, the type that supports the most biodiversity. Mr Helgesen says there has been a recent improvement but admits it is from “a poor base”.

Similarly, Norway is encouraging Indonesia to protect its peat bogs, a source of ***greenhouse gases*** when burnt, as in last year’s big fires in the Southeast Asian country. But Norway itself has drained a third of its peat bogs in the past 100 years, while less than 5 per cent are protected. That contrasts with a goal of 17 per cent set as part of UN biodiversity ***targets*** for 2020.

“If you look at the last century, we have a lot to make up,” Mr Helgesen concedes. He says measures that would hurt the ***agriculture*** or forestry sectors are politically difficult to implement. “It’s perfectly clear that when you have government interventions to protect the environment that go against traditional livelihoods, that is bound to be met with resistance.”

Instead, he claims that one krone goes further in fighting climate change abroad than in Norway. “Cost effectiveness is a consideration. If Norwegian money can result in more carbon dioxide ***reductions*** abroad than through similar actions in Norway, that is better for the global climate. But that is not to say we are not going through a transition in Norway too,” he says.

Norway is one of the  [*few European countries*](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Total_greenhouse_gas_emissions_by_countries_(including_international_aviation_and_excluding_LULUCF),_1990_-_2013_(million_tonnes_of_CO2_equivalents)_updated.png) where   [***greenhouse gas******emissions***](https://www.ssb.no/en/natur-og-miljo/statistikker/klimagassn/aar-endelige) are higher than they were in 1990. CO2 ***emissions*** are 23 per cent higher than they were in 1990, while total GHG ***emissions*** are up 2.4 per cent largely due to the growth of the oil and gas industry but also partly due to increased road traffic.

By contrast, both Germany and the UK have ***reduced*** their ***emissions*** by about a quarter over the same period.

“We are winning the championship on what we do environmentally abroad but in our own country it is like we are not even in the competition,” says Mr Hermstad. “When it comes to the difficult decisions and the people might be a bit angry, then we can’t do it.”

In Vevring, Ms Forsund is keeping up the fight against the mine. The permit to allow the discharge was finally approved in February after an appeal was dismissed. She says: “If Norway is willing to do this [open the mine], it can put pressure on poor countries to abandon their environmental standards. If Norway can’t do this, then who can?”

**Letter in response to this article:**

*Nothing paradoxical about Norway’s policies / From Johannes Mauritzen*

**Load-Date:** January 13, 2017

**End of Document**



[***Sustainability Watch - Smithfield Foods on new targets***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5GNR-HR31-JDNW-42KW-00000-00&context=1516831)

just-food global news

August 13, 2015 Thursday 8:59 PM GMT

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**Length:** 1472 words

**Byline:** Ben Cooper

**Body**

Smithfield Foods, the US meat group, has set out a new tranche of goals on sustainability, building on ***targets*** it laid out in 2010. Ben Cooper spoke with Stewart Leeth, vice president of regulatory affairs and sustainability, about the company's progress over the past five years and the launch of the new ***targets***.

Last month, US meat processor Smithfield Foods outlined a new set of ***targets*** on sustainability, reporting it had "surpassed or achieved" many of the previous goals set in 2010.

The last five years have been eventful for the business, notably including its 2013 sale to Chinese giant Shuanghui International, now renamed WH Group.

Over that time, Smithfield's sustainability journey has also developed, underlined by recently reported progress in areas such as animal care, environmental stewardship, employee and food safety and community investment.

While Smithfield reports on familiar sustainability metrics like carbon ***emissions*** and water efficiency, its previous and new ***targets*** reflect particular sustainability "hotspots" for a mass producer of meat which raises its own animals, such as animal welfare and employee safety.

"Animal care issues and how we treat animals are at the top for us," Smithfield's vice president of regulatory affairs and sustainability, Stewart Leeth, tells just-food.

This is seen in the pursuit of a goal to end use of gestation crates for pregnant sows. In 2014, 71.4% of Smithfield's company-owned farms housed pregnant sows in group systems, against 6.6% in 2010. Now, the company has committed to convert to group housing systems at all its US company-owned farms by the end of 2017, and on US contract farms and joint ventures worldwide by 2022.

Animal welfare carries both reputational and supply risks. The general unease about industrialised meat and poultry production, which even those who may not consciously avoid mass-produced meat will often feel, coupled with vocal campaigning from activists, place companies like Smithfield in delicate territory.

In spite of progress on issues such group housing of sows, Leeth says it remains a "challenging" area. "I don't think it's got any easier," Leeth says. "I think we still have the challenges particularly because of the interest and many divided views on how food is produced. We slaughter animals for food so if you don't like raising animals for food like that then you're going to take issue with the industry as a whole and with Smithfield because we're the biggest at what we do."

Other new commitments on animal welfare include certification of all its live animal transporters to Transport Quality Port (TQA) standards and annual reporting of antibiotic use.

The use of antibiotics speaks both to reputational and supply risks inherent in the business model of a company like Smithfield. The supply risks associated with unchecked disease speak for themselves. Meanwhile, the widespread use of antibiotics in industrialised farming has become an extremely controversial issue and is a particularly live debate at the moment, with growing concern over antimicrobial resistance (AMR) prompting recent moves from companies and regulators alike.

Meat processors therefore have to consider antibiotic use both from the point of view of animal stewardship and from a consumer health standpoint. Interestingly, with the dietary health debate now so squarely on carbohydrates and particularly sugar, meat producers are arguably less in the firing-line than might have been the case a few years ago. However, the debate over AMR has led to increased scrutiny.

Leeth agrees there is "a big focus" in terms of public attention on antibiotics, though he sees that as part of the broader trend towards greater concern about ingredients and "what goes into the food people are eating". He says concern over antibiotics has led to "a lot of finger-pointing" at the animal ***agriculture*** sector, but adds Smithfield took a "pretty aggressive" approach on following voluntary guidance on antibiotic use that was issued by the US Food and Drug Administration two years ago, reaching compliance "well ahead of time".

With staff handling dangerous machinery and large animals, employee safety is another key issue for Smithfield, reflected both in the recent five-year ***targets*** and in the new ones set last month. Leeth says the company is "proud of where we are after the first set of ***targets***"- it reported a 5% ***reduction*** in 2014 in all incident rates over 2013 - but "there are challenges and that's why we're trying go one step further". For example, it has committed to ***reducing*** its "total incident frequency rate" and maintain levels below the general industry average.

Being a vertically-integrated industrialised meat producer carries specific and stern sustainability challenges but by definition integration gives Smithfield one significant advantage in terms of measuring and mitigating impacts and risks in their supply chain.

While food companies face a daunting task in measuring and mitigating environmental impacts across a wide range of ***agricultural*** raw materials, Smithfield has both visibility and control over its primary ***agricultural*** supply chain.

Aside from its own animals, the company's principal ***agricultural*** raw material is animal feed. As an example of work to ***reduce*** impacts from its feed supply chains, Leeth points to Smithfield's support of research into increasing sorghum cultivation in the south-eastern US. Expanding production of sorghum, a crop well suited to the region, would boost farmer incomes and ***reduce*** costs and environmental impacts of transporting feed from the Midwest.

In today's environment, anything a mass producer of meat can do to improve its carbon footprint is likely to be eagerly grasped, and once again reputational issues are partly at play. Concerns over the sustainability of rearing meat for protein are appreciated by a far larger proportion of consumers than would have been true 20 years ago. Mainstream consumers may not yet be dramatically altering their behaviour, as more environmentally conscious consumers have done, but they are undoubtedly more aware, leaving Smithfield and its peers with a battle to win hearts and minds.

Leeth says "in certain respects" it is winning the battle but he adds: "You certainly can't do it overnight and it takes a lot of time and building relationships."

One relationship Smithfield is building stands out. The company is working with the environmental group Environmental Defense Fund (EDF), focusing on fertiliser application in corn and soy destined for animal feed.

Leeth concedes EDF might be expected to take an "adverse" position, while Maggie Monast, a project manager for the not-for-profit, says the two organisations are "not exactly seen as two peas in a pod".

The collaboration, launched last year, stemmed from Walmart's call to suppliers using large quantities of commodity grain to find ways to ***reduce*** fertiliser loss on farms and thereby cut ***greenhouse gas*** ***emissions*** and water pollution, while also boosting yields and improving soil health.

Smithfield and EDF now conduct weekly meetings to assess progress towards the goal of having 75% of the processor's grain-sourcing acreage in the south-east US within the programme by 2018. EDF estimates the collaboration will ultimately ***reduce*** excess nitrogen fertiliser use on 450,000 acres of farmland.

Establishing such an unlikely partnership may well represent as notable an achievement as any ***target*** and underlines the development and maturing of Smithfield's sustainability mission over the past five years. In the face of the particular challenges posed by the mass production of meat, it is clear the Smithfield sustainability strategy launched a decade ago and the ***targets*** set in 2010 have been of great value, something arguably recognised by its new owner, WH Group.

Leeth says one of the factors that attracted WH Group to Smithfield was the "strong programmes we have in these areas, in environment and animal care and other things", adding the new owner has been "nothing but supportive" of the company's sustainability work.

It may be still too early to tell how the companies may influence on sustainability. The relationship is "very new", Leeth says, with Smithfield and WH Group "exchanging information and learning from each other". However, as WH Group is reviewing how it approaches CSR reporting as a company listed on the Hong Kong Stock Exchange, it would not be surprising to find the company looking to its new subsidiary for inspiration.

Moreover, that WH Group was attracted partly by Smithfield's sustainability strategy could speak to the increasing importance being attached to sustainability performance and credentials in the M&A field when selecting and evaluating acquisition ***targets***.

**Load-Date:** August 13, 2015

**End of Document**



[***Xylem Inc. Research Identifies Significant Energy Efficiency Opportunity in Wastewater Management Globally***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H69-RRR1-JB72-1009-00000-00&context=1516831)

PR Newswire Europe

October 20, 2015 Tuesday 10:03 AM EST

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**Length:** 741 words

**Dateline:** RYE BROOK, New York, Oct. 20, 2015

**Body**

Study Shows Half of Electricity-related ***Emissions*** Abatement can be Achieved at Negative or Neutral Cost

Increasing ***energy*** efficiency through the adoption of readily available wastewater management technologies can slash related ***emissions*** by nearly half, according to a new study released today by Xylem Inc. (NYSE: XYL), a leading global water technology company. The analysis further concludes that 95 percent of the electricity-related ***emissions*** abatement can be achieved at negative or neutral cost.

Powering the Wastewater Renaissanceprovides an analysis of ***energy*** efficiency in the wastewater management industry and assesses how the global water sector can ***reduce*** harmful ***greenhouse gas*** ***emissions*** with existing, proven technologies. The report, which studied the wastewater sector in the U.S., Europe and China, assessed 18 distinct abatement opportunities - from pumps used to transport the water to the blowers used to aerate it to the various filtration systems used to treat it.

Additional information and a link to Xylem'sPowering the Wastewater Renaissancereport can be foundhere. ThePowering the Wastewater Renaissanceinfographic can be foundhere.

"Infrastructure investments today can have positive environmental and economic consequences for decades," said Patrick Decker, Xylem President and CEO. "Importantly, the pragmatic solutions identified in this report pay for themselves and, in many cases, unlock new capital that can be invested in additional infrastructure improvements. As we address the effects of a growing global population and its accompanying strain on natural resources, the public and private sectors must come together to identify and implement new ways to realize the full potential of a low-carbon economy."

The greatest investment return and ***emissions*** abatement opportunities were found in China, where 100 percent of the ***emissions*** abatement opportunities analyzed could be realized at zero or negative cost. In this region, where the government is actively investing in water infrastructure, more than $25 billion in net savings can be generated with the adoption of high efficiency wastewater technologies. With the addition of the United States and Europe, the savings top $40 billion.

The report notes two levers that would accelerate adoption of highly efficient wastewater technologies. First, new financing models that incentivize investments in low-carbon technologies would assist with the initial higher capital costs that often come with these advanced technologies. Second, increasing the ***energy*** efficiency standards of wastewater equipment would ensure broader adoption.

The report concludes, "Now is the time for the industry and all stakeholders in the climate change agenda to work together to overcome these barriers to adopting high efficiency wastewater treatment technologies, which will result in greater productivity of wastewater operations, and a meaningful step forward in tackling climate change."

This report was initiated as part of Xylem's commitment to advancing sustainable solutions in the water sector.

About XylemXylem (XYL) is a leading global water technology provider, enabling customers to transport, treat, test and efficiently use water in public utility, residential and commercial building services, industrial and ***agricultural*** settings. The company does business in more than 150 countries through a number of market-leading product brands, and its people bring broad applications expertise with a strong focus on finding local solutions to the world's most challenging water and wastewater problems. Xylem is headquartered in Rye Brook, New York with 2014 revenues of $3.9 billion and approximately 12,500 employees worldwide. Xylem was named to the Dow Jones Sustainability Index for the last four years for advancing sustainable business practices and solutions worldwide, and the Company has satisfied the requirements to be a constituent of the FTSE4Good Index Series each year since 2013.

The name Xylem is derived from classical Greek and is the tissue that transports water in plants, highlighting the engineering efficiency of our water-centric business by linking it with the best water transportation of all -- that which occurs in nature. For more information, please visit us at[*http://www.xylem.com*](http://www.xylem.com).

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**Load-Date:** October 20, 2015

**End of Document**



[***OECD upgrades Ireland's growth forecast***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HBM-0K91-F021-62YM-00000-00&context=1516831)

thetimes.co.uk

November 10, 2015 Tuesday 12:01 AM GMT

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**Section:** IRISH BUSINESS

**Length:** 617 words

**Byline:** Philip Connolly

**Body**

Ireland's economy is bucking the trend, as the OECD upgraded the country's growth forecast, but predicted a slowdown in global trade.

The Paris-based forum said that the Irish economy would continue its strong expansion over the next two years. It also revised Ireland's GDP growth forecast for this year, up to 5.6 per cent from the 5 per cent it predicted in September.

"Exports will rise in line with increasing demand in [Ireland's] trading partners," the OECD said. "Business investment should remain robust thanks to rising profitability and favourable financing conditions. Growth will provide momentum to job creation and ***reduce*** the still-high rate of unemployment, thereby spreading the fruits of the recovery more widely. Household consumption will be supported by labour earnings growth."

In its biannual economic outlook, released yesterday, the OECD said that the Irish fiscal policy was expected to exert a "smaller drag" on activity than in past years, while the government remained on track towards its medium-term goal of balancing the budget.

The think tank urged the government to use any windfalls from strong growth and low interest costs to pay back public debt.

"A fiscal package of (EURO)1.5 billion in 2016 should prioritise getting more people back into work by revamping the tax and benefit system and enhancing activation policy," the organisation said.

The OECD added that the ***agricultural*** sector would need help if it was to achieve Ireland's ***target*** of a 40 per cent ***reduction*** in ***greenhouse gas*** ***emissions*** by 2030.

Yesterday's report followed a positive assessment by the European Commission, which said last week that Ireland's economy was set to grow by 6 per cent this year, the fastest rate in the EU.

The OECD warned, however, that a slowdown in international trade might foreshadow another recession in the world's leading economies.

Catherine Mann, the OECD's chief economist, said that trade figures were deeply concerning because the stagnating or declining rates of trade this year "have, in the past, been associated with global recession".

The organisation said that it expected global output to grow to 3.3 per cent next year, helped by stimulus measures in China. Previously it had predicted growth of 3.6 per cent.

The OECD said that, in contrast to two years ago, when sluggish trade was blamed on advanced economies, the fault now lay with emerging markets such as China.

· Irish retailers are expecting their best Christmas season for seven years as the prospect of tax cuts in January has boosted consumer confidence.

According to Retail Ireland's third-quarter monitor, released yesterday, households will spend about (EURO)2,450 on core retail goods next month, (EURO)600 more than in other months. It expects core retail sales to exceed (EURO)4 billion next month, up 3.5 per cent on last year.

Nearly half of Ireland's small and medium-sized businesses reported an increase in turnover in the past six months.

Credit approval for small to medium enterprises (SMEs) has risen to 85 per cent, according to the SME Credit Demand Survey, commissioned by the Department of Finance and carried out by Red C Research and Marketing.

The data showed a significant improvement in the profitability of the sector, as 61 per cent of companies reported a profit between April and September.

Although conditions were improving, the study said that firms were focusing on stabilising their businesses rather than pursuing growth strategies, as credit demand had fallen slightly.

**Load-Date:** November 10, 2015

**End of Document**



[***Time to change the way we farm?***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HBX-7XK1-JD39-X2S8-00000-00&context=1516831)

The Northern Echo (Newsquest Regional Press)

November 10, 2015 Tuesday

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**Section:** FEATURES

**Length:** 860 words

**Body**

Rather than prop up an ailing farming industry, Vegan Society writer Jimmy Pierce argues that the time has come for a complete reappraisal of the UK's ***agricultural*** policy

LATER this month experts will gather in Paris for the annual UN Climate Change Conference to discuss how to cut carbon ***emissions*** and halt temperature rises, but the principal contributor is likely to be left off the agenda. Environmental non-governmental organisations dare not discuss it, nor do policy makers.

The identity of this climate culprit shielded from scrutiny? Animal ***agriculture*** - the leading cause of deforestation, water consumption, species extinction, habitat loss, ocean dead zones and pollution, responsible for more ***greenhouse gas*** ***emissions*** than all transport in the world combined.

Cows on Chuggaton Farm come in for milking

Its impact is persistently ignored, wilfully neglected in favour of comparatively trivial initiatives like the 5p carrier bag charge which pay little more than lip service to notions of environmental preservation. Unlike the transport, waste and ***energy*** sectors in which ***emissions*** ***reductions*** have repeatedly been attempted, the livestock industry continues to enjoy unprecedented freedom to carry on with business as usual. It remains, as ever, unchallenged.

The reasons are numerous. Pressure from an extremely powerful industry is omnipresent, while historical links between consuming meat and social status have unhelpfully stuck around along with inaccurate ideas of good nutrition courtesy of clever marketing. Environmental charities fear alienating their meat-eating donors so leave the topic well alone, as do much of the mainstream press. But are the public that welded to meat, dairy and routine, and that averse to change?

The rise of veganism would suggest not. The number of vegans in the UK has roughly doubled in the last nine years. We have also seen similar rates of growth in the United States, Germany and Israel as people make more compassionate choices, better for their health, the planet and animals. There has been a seismic shift in global dietary tendencies, and this should be reflected in food policy.

Farmers are struggling. So much so that half of all UK dairy farmers are reported to be intending to quit their sector, resorting to publicity stunts to protest milk prices earlier in the year. Take this as a marker for the need for change.

English dairy farmers receive around a third of their income in EU subsidies. This amounts, on average, to around £25,000 per dairy farmer per year, dwarfing the sums given to crop growers. Rather than continue propping up a failing industry, the Government ought to alter the ***agricultural*** system; make it better, greener.

One solution: subsidise farmers interested in diversifying away from livestock systems to growing sustainable plant protein crops. The EU's Common ***Agricultural*** Policy (CAP), which makes these payments to farmers, must place far greater emphasis on truly sustainable practices like crop farming and stop primarily promoting meat and cheese businesses, which should not be exempt from market forces.

The UK has some of the world's best conditions for growing plant protein crops, fava beans and hemp in particular. Both are nutritious and highly sustainable, and both replenish the soil and require less fertiliser than their animal-based counterparts. These inherent capabilities of rural Britain are being woefully under-utilised.

A new report by The Vegan Society - Grow Green - outlines the process and the need for urgent change. Transitions of this type will admittedly take time, require research and greater cooperation between governmental departments, but the potential benefits stare us plainly in the face.

Fewer animals than the billions killed every year will be forced to live a life of pain and suffering. We would become healthier, young farmers would see a brighter future than the gloomy predicament they face at present, and global food security issues would start to be properly addressed.

At the very least, let the Grow Green report be the catalyst for wider discussion about the role of animals in future ***agricultural*** policy. The current CAP budget runs until 2020, but new budget negotiations will most likely start next year. Now is the time to influence the debate on the longer-term role and responsibilities of the CAP. Write to your MP and urge them to raise these issues with the relevant minister.

We are asked to turn off lights, recycle, use ***energy***-saving lightbulbs, and cycle instead of drive. These are of course positive steps to take, but their impact pales into insignificance when compared to eating less meat and fish and drinking less milk.

Animal farming in the ***agriculture*** sector is akin to fossil fuels in the ***energy*** sector, only much more damaging. That it enjoys such clandestine protection in a society that projects itself as forward thinking is nothing short of backward.

Jimmy Pierce is a writer and spokesperson for The Vegan Society (vegansociety.com), the oldest vegan organisation in the world. A former sports journalist for The Daily Telegraph, Jimmy has also written for The Independent on vegan-related issues.

**Load-Date:** November 11, 2015

**End of Document**



[***US REG, ExxonMobil team up on biodiesel***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HY7-XDS1-JCN4-H453-00000-00&context=1516831)

Global News + ICIS Chemical Business (ICB)

January 26, 2016 Tuesday

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**Length:** 554 words

**Body**

Image 4690625a Photographer Jim West / imageBROKER/REX Shutterstock VARIOUS Worker at fermentation tanks for making cellulosic ethanol from non-edible plants at the National Renewable ***Energy*** Laboratory, operated by the US Department of ***Energy***, Golden, Colorado, USA 2007 Renewable ***Energy*** Group has developed a technology that uses microbes to convert sugars to biodiesel in a one-step fermentation process similar to ethanol manufacturing. (Jim West/imageBROKER/REX Shutterstock)

MEDELLIN, Colombia (ICIS)--[1]Renewable ***Energy*** Group (REG) and ExxonMobil have launched a project to study the production of biodiesel by fermenting renewable cellulosic sugars from sources such as ***agricultural*** waste.

REG has developed a patented technology that uses microbes to convert sugars to biodiesel in a one-step fermentation process similar to ethanol manufacturing, REG said in a statement.

The ExxonMobil and REG Life Sciences research will focus on using sugars from non-food sources.

"This research is just one way ExxonMobil is working to identify potential breakthrough technologies to ***reduce*** ***greenhouse gas*** ***emissions***, increase ***energy*** supplies and realise other environmental benefits," said Vijay Swarup, vice president of research and development at ExxonMobil Research and Engineering Company. "The science is extremely complex, but we hope to identify new affordable and reliable supplies of ***energy*** for the world that do not have a major impact on food supplies."

Through the research, the two companies will be addressing the challenge of how to ferment real-world renewable cellulosic sugars, which contain multiple types of sugars, including glucose and xylose, but also impurities that can inhibit fermentation.

"REG has a long history of innovation in the production of advanced biofuels from lower carbon, waste feedstocks," said Eric Bowen, REG vice president and head of REG Life Sciences. "We look forward to this collaboration with ExxonMobil to advance our proprietary cellulosic sugar fermentation technology and capitalise on the combined power of cellulosic sugars and microbial fermentation to revolutionise the production of ultra-low carbon, cleaner burning advanced biofuels."

"Our first challenge is to determine technical feasibility and potential environmental benefits during the initial research," Swarup said. "If the results are positive, we can then take the next step and explore the potential to expand our efforts and explore scalability."

Based in Ames, Iowa, REG is a large North American producer and marketer of biomass-based diesel, with 11 active biorefineries across the US and a nationwide production, distribution and logistics system.

REG also produces renewable hydrocarbon diesel at its 75m gal/year (284m litres/year) plant in Geismar, Louisiana.

The plant, which launched operations in November, is REG's first that produces renewable diesel using the company's Bio-Synfining technology, which uses vegetable oils and animal fats as a feedstock.

The plant also produces naphtha and liquefied petroleum gas (LPG).

Renewable diesel is different from biodiesel, which is made through atransesterification process.

Bio-Synfining is a hydrotreating process that relies on heat, hydrogen and catalysts to produce renewable diesel.

(INSET IMAGE: Sipa Press/REX Shutterstock)

References

1. [*http://www.regi.com*](http://www.regi.com)/

**Load-Date:** January 27, 2016

**End of Document**



[***Climate change: we are still searching for that paddle***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K20-PFG1-JBVM-Y1KV-00000-00&context=1516831)

Sunday Independent

June 19, 2016

Edition 1, National Edition

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**Section:** BUSINESS;NEWS; Pg. 4

**Length:** 1203 words

**Byline:** DANO'BRIEN

**Body**

THE relationship between ***energy*** and the environment will be one of the defining issues of the 21st Century. Climate change has led to growing calls for action to be taken to halt it. The most recent major effort was last year's global Climate Change Conference in Paris. There, world leaders agreed to ***reduce*** ***emissions*** to stop global temperatures rising by 2 degrees centigrade, an ambitious ***target*** given current trends. Ireland pledged to do its bit by slashing ***greenhouse gases*** by at least 40pc by 2030, a tall order too.

Renewable ***energy*** is not only central to ***reducing*** the risk of runaway climate change, it is also a matter of ***energy*** security. Ireland is one of the most dependent countries in Europe on imported ***energy***. While importing anything is not bad per se, security of supply is an issue given the depletion of the North Sea reserves which account for most of our imports.

Geopolitical tension tends to stalk the sources of global ***energy***, whether in the Middle-East, Africa or Russia, making its availability [*www.uncertain.No*](http://www.uncertain.No) one ever believed there would be a credit crunch of the kind experienced after 2008. It would be wrong to dismiss the risk of an ***energy*** supply crunch in the future. That gives further reason to develop clean, competitive domestic ***energy*** sources.

To do this - in Ireland and globally - big money will be required. This was a topic in the OECD's recent Business and Finance Outlook 2016\*.

It's not all doom and gloom. The study points out that there is no shortage of good news on the renewable ***energy*** front and that the many positive trends of recent decades are set to continue.

Consider a technology as old as the humble windmill. A single wind turbine can now generate 100 times more power than the best of breed 30 years ago.

And then there's the ultimate source of all our ***energy*** - the sun. Prices of solar components are just 1pc of their level 35 years ago, and are still plummeting as innovation continues apace.

With the cost of a unit of renewably generated ***energy*** declining, prices of renewables relative to those of fossil fuels have been trending downwards - and it cannot be stressed enough that relative prices are what matter more than anything else when it comes weaning the planet off oil, coal and gas.

The hope is that research and development will conjure up new technologies we have not even thought of yet. But there is plenty of scope to squeeze more from existing technologies.

Carbon capture, storage and demand management through smart grids could all make renewables more viable. They could also make them more reliable - wind and solar cannot be depended upon for an uninterrupted supply, thanks to the ever-unpredictable nature of the weather.

Switching from finite and dirty ***energy*** sources to renewable and clean ones will of course require investment. How to raise the needed funds is a huge and complex question. Where to deploy them is no less challenging.

Consider the world's biggest and most innovative economy. Funding for basic research on (non-defence) ***energy*** by the US federal government sources was budgeted at $7bn in 2015, and only a slice of it goes on renewables. That compares with $30bn on medical research and $70bn on defence research.

On the private side ***energy*** firms are attached to existing fuels and technologies and have been reticent to spend big on new technologies with unclear gains.

An example of failure has been wave and tidal power. Lots of money has been ploughed into harnessing the awesome power of the sea - yet everyone who has done so has lost money. Tidal and wave technologies are... well, dead in the water.

During 2015 a total of $286bn was invested globally on renewable ***energies*** - an all-time high, according to the OECD report. Driven by growth in Asia and Europe, wind power was the largest sector. Solar power was not too far behind in second, while other sectors, such as biomass and waste-to-power, remain much smaller.

Initially clean ***energy*** projects were funded by the big utility companies. However, in the past five years more banks, private funds and state-backed 'green' banks have piled in. This is in spite of still considerable barriers that disincentivise investment, the OECD notes.

The main barrier the Paris-based think tank identifies is the lack of coherent and stable positions by governments. Countries can and have changed their policies at a whim: retrospective changes in solar subsidies in several countries, for instance, have damaged investor confidence in the sector.

For advocates of green industrial policies there are ready solutions. Setting a longterm price for carbon would send signals to investors and producers. This can be done through a carbon tax or ***emission***-trading schemes. But easier said than done, as Europe's quite disastrous ***emissions*** trading scheme has shown.

There has also been criticism of clean ***energy*** policies. Solar and wind ***energy*** are cheap once up and running, but subsidies to reach that point may have distorted markets in a way that goes against long-term sustainable solutions.

In Germany, for example, low prices for heavily subsidised renewables have been blamed in undercutting cleaner, but more expensive natural gas in favour of cheaper, but dirty coal.

Other forces working against the shift to renewables include vested interests and concerns about competitiveness.

Companies heavily invested in traditional ***energy*** sources still provide the vast majority of the world's electricity and fuel. They include many big employers that have lots of clout, so there is a substantial lobby that doesn't benefit from change.

Another barrier is countries' fears that they will become uncompetitive in the short run if they impose carbon taxes and tariffs, which push up ***energy*** costs for businesses 'Initially clean ***energy*** projects were funded by utility companies.

However, more banks, private funds and state-backed "green" banks have piled in...' operating in their jurisdictions relative to their competitors.

Ireland faces much the same forces of resistance as most other countries, even if there is not a sizeable cohort of climate change deniers (apart from an occasional backwoodsman in the Dail).

The ***agriculture*** sector accounts for one-third of Ireland's greenhouse ***emissions***. It remains to be seen whether European and international bodies will give Ireland leeway on food security grounds not to force the sector into cutting ***emissions***.

Opposition to the erection of wind turbines was an election issue. Local problems with ***energy*** infrastructure is not only to do with renewables. It has been evident in Corrib gas field, fracking and pylons. While Nimby-ism may be a factor, not keeping locals in the loop has been at fault too. The Programme for Government recognises that there is a need for much better engagement with citizens and communities about ***energy*** policy.

The government is due to publish a National Mitigation Plan on climate change in the coming months. The challenges ahead will no doubt leave the new Minister for Communications, Climate Change and Natural Resources Denis Naughton with plenty of work to do.

\*[*http://www.keepeek.com/Digital-Asset-Management/oecd/finance-and-investment/*](http://www.keepeek.com/Digital-Asset-Management/oecd/finance-and-investment/) oecd-business-and-finance-outlook-2016\_9789264257573-en#page1

**Load-Date:** June 19, 2016

**End of Document**



[***-Hydro-Quebec - The municipality of L'Ange-Gardien offers a new charging option for electric vehicle drivers***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J9B-D031-F0K1-N0GC-00000-00&context=1516831)

ENP Newswire

March 14, 2016 Monday

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**Length:** 652 words

**Body**

The municipiality of L'Ange-Gardien and the Electric Circuit are pleased to announce that a 30thfast-charge station is now available to drivers of electric vehicles.

Easily accessible from Highway 50, it is located in the parking lot of L'Ange-Gardien city hall at 1177, Route 315.

'I am delighted that the municipality of L'Ange-Gardien and a car manufacturer like Nissan are committed to offering the necessary charging infrastructure; this proves that transportation electrification is well on its way in Quebec,' said the MNA for Papineau and Vice-chair of the Committee on ***Agriculture***, Fisheries, ***Energy*** and Natural Resources, Alexandre Iraca.

'Today's announcement falls perfectly in line with our government's Transportation Electrification Action Plan 2015-2020. It shows that Quebec is positioning itself as a world leader in this field and is tackling the challenge of ***reducing*** ***greenhouse gas*** ***emissions***, the transportation sector being its largest emitter.'

We are very proud to be the second municipality in the Outaouais region to offer a fast-charge station and I would like to congratulate the members of our environment committee who recommended and supported this initiative,' added the mayor of L'Ange-Gardien, Robert Goulet. 'I would also like to announce that the municipality of L'Ange-Gardien has created an incentive program to encourage its citizens to purchase electric vehicles. We now offer $ 250 to residents of the municipality who own this type of vehicle.'

'Nissan Canada is proud to be a major partner of the Electric Circuit's expansion. This expansion will allow electric vehicle drivers easy access to numerous fast-charge stations throughout the province, including this new one in L'Ange-Gardien.

We are delighted that zero-***emission*** vehicles like the Nissan LEAF are now even more accessible to Quebec consumers who wish to make a difference in how they drive. Together, we are united in showing that zero-***emission*** mobility is a smart choice,' said Joni Piva, President of Nissan Canada Inc.

'We salute the municipality of L'Ange-Gardien for its leadership in this project, as well as Nissan for its financial support. By offering fast-charging, the mayor and his team are positioning L'Ange-Gardien as a choice destination for electric vehicle drivers in the region. This fast-charge station contributes to developing the corridor along highway 50 between Montreal and Gatineau,' mentioned France Lampron, Director - Transportation Electrification at Hydro-Quebec and representative of the Electric Circuit.

A rapidly expanding network

The Electric Circuit is continuing its development in the Outaouais, where there are now 31 public charging stations, including two fast-charge ones. In addition to the stations already in service in L'Ange-Gardien and Montebello, other fast-charge stations are planned along highway 50 and in Gatineau.

About the Electric Circuit

The Electric Circuit is the largest public charging network in Quebec. It is a major initiative in the implementation of the infrastructure required to support the adoption of plug-in electric vehicles in Quebec. The network comprises over 600 public charging stations, including 30 fast-charge stations, in operation across 16 Quebec regions. Since its launch in March 2012, 136 private and institutional partners have joined the Electric Circuit, and the network now has over 7,000 members.

Electric Circuit users have access to a 24/7 telephone help line run by CAA-Quebec, as well as a charging-station locator service. The Electric Circuit Web site theelectriccircuit.com and the mobile app for iOS and Android are updated as new stations are commissioned. The Electric Circuit card also allows users to access VERnetwork's 150 Quebec charging stations.

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[***Yes, the Paris climate change conference can save the planet; Earth's temperature is heading towards its highest for three million years. We must move to zero emissions - and it can be done without closing down our economy***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JH9-PX31-JCJY-G1NF-00000-00&context=1516831)

The Guardian

April 11, 2016 Monday 5:34 PM GMT

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**Section:** OPINION

**Length:** 1139 words

**Byline:** Ed Miliband

**Body**

"The deal's dead." These were the words of my chief negotiator, approximately six years ago, in the middle of the night in the final hours of the sleep-deprived Copenhagen summit. I was standing in my bedroom as I took his call, about to go to bed for the first time in 36 hours. Thanks to the efforts of a number of countries into the night and the next day, it turned out the deal wasn't quite dead, and something did survive.

Related: Ed Miliband urges UK to enshrine zero carbon ***emissions*** ***target*** in law

But in truth, it is what has happened in the years after Copenhagen that made it not quite the disaster it appeared at the time. Slowly, steadily, the unwieldy, spatchcock UN process has rumbled on. Lessons have been learned from that chaotic episode. The idea that we should build an agreement bottom-up with countries making individual pledges, first conceived at Copenhagen, has become more serious, and every big emitter has put one forward.

And now we approach next week's Paris climate talks, the most important summit since Copenhagen, in a significantly better place than we feared back in 2009. However, we are not where we need to be.

The science is even more unequivocal than it was six years ago. Just to take one example, 2015 looks like being the hottest year on record by some distance. We sometimes talk about the need to avoid dangerous warming of the planet as if it is a theoretical idea, but its effects are already here, with approaching 1 degree of warming so far.

On the other side of the ledger, technology has thrown us a lifeline. The costs of wind and solar ***energy*** have come down far quicker than anyone dreamed of. The constructive side of human ingenuity is holding its own in the fight against its destructive side. And it is now demonstrably the case that the fight against climate change can be job-creating, not destroying, according to the Confederation of British Industry and many others.

Related: Everything you need to know about the Paris climate summit and UN talks

And what about political will? Climate change seems less politically fashionable as an issue. But China and the United States have moved forward a long way from where they were at Copenhagen.

We have moved from a world where everyone said it was someone else's problem, to one where everyone knows this can be only be solved collectively. We are not in a world of business as usual.

That's the good news. And in many senses the Paris summit looks set to represent success: every major country taking real action to ***reduce*** ***emissions***, a substantially different path from where we would be without that action. Paris will also repeat the international commitment made at Copenhagen to limit warming to 2 degrees.

But the bad news is that the pledges will still be short of what is needed. In reality, the commitments for 2030 would take us towards something like a 3-degree world. That would mean higher temperatures than at any time in the last three million years, with potentially dramatic effects of intense heatwaves, flooding and climate refugees across the world.

So what can be done? Just like at Copenhagen, what matters as much as Paris is what happens afterwards. That is why countries are rightly seeking to build an upwards ratchet mechanism into the agreement. If these pledges are the start, not the final word - a prelude to greater ambition - then we can still avoid the most dangerous effects of global warming.

What does this mean for Britain? The last Labour government introduced the Climate Change Act, with all-party support for an 80% ***reduction*** in ***emissions*** by 2050 - the first country in the world to legislate for such deep, long-term cuts. It is essential we remain on track for this goal, including making the right decisions about the period to 2030 which will face the government in the coming months.

But what the science now tells us is that we will need to go further and see a complete end to the accumulation of additional ***greenhouse gases*** in our atmosphere. The world will need to move to zero ***emissions*** at some time in the second half of the century, as President Obama and the other G7 leaders, including David Cameron, have rightly acknowledged. A point will come when the total carbon budget for the world will simply be used up.

Paris must be the start of a journey of the whole world towards this goal

And here is the relevance as far as Paris is concerned: every excess tonne of carbon we emit between now and 2030 brings the date when we need to get to "net zero" ***emissions*** forward - the point at which any remaining ***emissions*** are balanced out by the capturing of carbon.

Is zero ***emissions*** even practical, and can it be done without closing down our economy? The answer to both questions is a strong yes. Indeed, top business leaders such as Ratan Tata as well as Paul Polman of Unilever have recently called on world leaders to adopt a zero ***emissions*** goal in Paris.

So how can it be done in the UK? It is about a 100% clean ***energy*** supply. It is about making our ***energy*** system more efficient and productive. It is about the right infrastructure. And, to cancel out residual ***emissions*** from ***agriculture*** and industry, it is about capturing carbon from the atmosphere, for example through reforestation and by the use of carbon capture and storage technology.

Already cities and companies are adopting the zero ***emissions*** goal. The right step now would be for Britain to become the first major country to enshrine net zero ***emissions*** in law, with the date determined by advice from the independent Committee on Climate Change.

Related: Melting glacier? Yawn. Climate change is boring, worthy - and terrifying | Owen Jones

This would be consistent with the government's support for zero ***emissions*** at G7 level and would show our determination to face up to this existential challenge. It will provide an essential framework for business and government so that we make the right decisions now on key ***energy*** and infrastructure issues. And it will inspire the inventors, engineers and businesses that can deliver on this challenge.

From my conversations with people across the House of Commons, including the Liberal Democrats, the SNP, Caroline Lucas of the Greens and Conservatives such as Nick Hurd and Graham Stuart (chair of Globe, the international parliamentarians group on climate change), it is clear there is cross-party support.

Paris must be the start of a journey of the whole world towards this goal. And far from this commitment holding Britain back, we can be a leader again on climate change. Leadership which does not mean harm to our economy, but will put us ahead in the race for the new jobs, businesses and advantages of this new world.

I hope the government will support this initiative. We can build an alliance, put aside our party differences as we have before, and seize this moment.

**Load-Date:** April 11, 2016

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[***-EBRD boosts food security across regions***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JN3-X491-F0K1-N327-00000-00&context=1516831)

ENP Newswire

April 29, 2016 Friday

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**Length:** 531 words

**Body**

EBRD boosts food security across regions.

The European Bank for Reconstruction and Development (EBRD) is continuing to address the global challenge of ensuring food security by promoting the role of the private sector in increased and sustainable food production.

The EBRD's Private Sector for Food Initiative combines the Bank's own investments with technical assistance and support for reforms to help enhance food security across the countries where EBRD invests and to improve food quality standards and animal welfare practices.

According to the Private Sector for Food Security Initiative Annual Report 2015, the EBRD mobilised EUR7 million for technical assistance and policy dialogue in the agribusiness sector, complementing EUR770 million invested through 51 projects in 2015 alone. The biggest contributors were: Japan, the Netherlands, the Southern and Eastern Mediterranean (SEMED) Multi-Donor Account (MDA),\* TaiwanBusiness-EBRD TC Fund and Ukraine Stabilisation and Sustainable Growth MDA.\*\*

The Initiative sets incentives to encourage private sector involvement in support for policy reform to improve the regulatory environment and the overall business climate and to promote efficiency within the industry.

The EBRD also works to ***reduce*** the ***agricultural*** sector's carbon footprint, helping to lower ***greenhouse gas*** ***emissions***, use ***energy*** and water more efficiently, ***reduce*** food loss and waste and make better use of ***agricultural*** by-products.

'We believe that agribusinesses need to be both productive and sustainable for the sector to overcome challenges such as climate change,' said Gilles Mettetal, EBRD Acting Director for Industry, Commerce and Agribusiness.

Together with the Food and ***Agriculture*** Organization (FAO) of the United Nations, the Bank is working to support the development of ***agricultural*** cooperatives in the southern and eastern Mediterranean region to maximise their impact on rural employment and the participation of young people and women in the economy.

'More will be done to create stronger links between producers and modern value chains to introduce innovative practices, increase the addition of value and manage environmental risks,' said Iride Ceccacci, Principal Economist, EBRD.

The 2015 Report stresses that finance alone is not always enough to achieve private sector development in markets across the EBRD region. SMEs often face difficulties accessing the know-how that will help them enhance their productivity and business performance.

'By providing specific advice for agribusinesses we support sustainable investment in food and ***agriculture*** and improve the efficiency of SMEs, enabling them to become catalysts for growth in our countries of operations,' said Victoria Zinchuk, Acting Director of Agribusiness, EBRD.

\*Donors to the SEMED MDA are: Australia, Finland, France, Germany, Italy, the Netherlands, Norway, Sweden, Taipei China and the United Kingdom.

\*\*Donors to the Ukraine Stabilisation and Sustainable Growth MDA are: Denmark, Finland, France, Germany, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States of America.

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**Load-Date:** April 29, 2016

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[***Evonik's new lysine plant goes on stream in Brazil***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5KYT-R251-JC6M-X40W-00000-00&context=1516831)

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July 20, 2016 Wednesday 12:46 PM GMT+1

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**Section:** SUPPLIERS

**Length:** 434 words

**Byline:** Jane Byrne, , [*Jane.Byrne@wrbm.com*](mailto:Jane.Byrne@wrbm.com)

**Body**

**INTRODUCTION**

Evonik’s new L-lysine production site in the Brazilian state of Paraná is now operational, bringing an additional 80,000 metric tons (Mt) of capacity.

**STORY**

*“The new [Biolys] plant in Castro is our first amino acid plant in Latin America. We will* ***target*** *the [pig and poultry] markets in Latin America in general and in Brazil in particular,”* said a spokesperson for the German group.

Evonik said the site was chosen because of its access to raw material supplies such as corn, its logistical connections, and its closeness to local markets.

The Biolys facility has been built at an industrial complex in Castro owned by Cargill.

Evonik is already running a cooperative manufacturing operation with the US agribusiness giant for the production of Biolys in Blair, Nebraska, which has an annual capacity of 280,000 metric tons following on from expansion work there in 2012.

The spokesperson told us a Biolys production facility with 100,000 Mt capacity, planned for construction in Volgodonsk in the Rostov region of Russia through a joint venture with the local Varshavsky group, is*"still in its realization phase."*

**Innovation pipeline**

Last year, Evonik ploughed an additional half a billion euros into its innovation pipeline.

Some of that capital was invested in the monogastric feed additives side, and the group announced the launch of an L-valine product, ValAMINO last month.

That product, it said, represents the fifth essential amino acid in its portfolio for use in pig and poultry feeds, and will help to ***reduce*** the use of crude protein in the diets of those animals, without any loss in terms of growth performance.

Evonik claimed this will result in lower feed costs and conservation of natural resources in ***agricultural*** feed production, which in turn, it said, ***reduces*** land use, ***greenhouse gas*** ***emissions***, and potential eutrophication and acidification.

The amino acid is said to have EU wide registration.

June also saw the German group announce that feed additive innovation has been earmarked as one of six R&D pillars that will contribute over €1bn in additional sales for the group by the year 2025.

Evonik said it is expanding its product portfolio accordingly to encompass healthy and sustainable animal nutrition.

The chemical company, which is active in over 100 countries, generated sales of around €13.5bn and an operating profit (adjusted EBITDA) of about €2.47bn in fiscal year 2015.

But, in March this year, it [***reported***](http://www.feednavigator.com/Suppliers/Evonik-expects-a-subdued-market-environment-and-a-decline-in-2016-earnings) that adjusted core earnings could drop by as much as 19% in 2016, with the company blaming the weak outlook on falling prices for certain feed additives.

**Load-Date:** October 18, 2016

**End of Document**



[***Yes, the Paris climate change conference can save the planet; Earth's temperature is heading towards its highest for three million years. We must move to zero emissions - and it can be done without closing down our economy***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HFF-3M31-JCJY-G3WR-00000-00&context=1516831)

The Guardian

November 23, 2015 Monday 1:20 PM GMT

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**Section:** COMMENT IS FREE

**Length:** 1139 words

**Byline:** Ed Miliband

**Body**

"The deal's dead." These were the words of my chief negotiator, approximately six years ago, in the middle of the night in the final hours of the sleep-deprived Copenhagen summit. I was standing in my bedroom as I took his call, about to go to bed for the first time in 36 hours. Thanks to the efforts of a number of countries into the night and the next day, it turned out the deal wasn't quite dead, and something did survive.

Related: Ed Miliband urges UK to enshrine zero carbon ***emissions*** ***target*** in law

But in truth, it is what has happened in the years after Copenhagen that made it not quite the disaster it appeared at the time. Slowly, steadily, the unwieldy, spatchcock UN process has rumbled on. Lessons have been learned from that chaotic episode. The idea that we should build an agreement bottom-up with countries making individual pledges, first conceived at Copenhagen, has become more serious, and every big emitter has put one forward.

And now we approach next week's Paris climate talks, the most important summit since Copenhagen, in a significantly better place than we feared back in 2009. However, we are not where we need to be.

The science is even more unequivocal than it was six years ago. Just to take one example, 2015 looks like being the hottest year on record by some distance. We sometimes talk about the need to avoid dangerous warming of the planet as if it is a theoretical idea, but its effects are already here, with approaching 1 degree of warming so far.

On the other side of the ledger, technology has thrown us a lifeline. The costs of wind and solar ***energy*** have come down far quicker than anyone dreamed of. The constructive side of human ingenuity is holding its own in the fight against its destructive side. And it is now demonstrably the case that the fight against climate change can be job-creating, not destroying, according to the Confederation of British Industry and many others.

Related: Everything you need to know about the Paris climate summit and UN talks

And what about political will? Climate change seems less politically fashionable as an issue. But China and the United States have moved forward a long way from where they were at Copenhagen.

We have moved from a world where everyone said it was someone else's problem, to one where everyone knows this can be only be solved collectively. We are not in a world of business as usual.

That's the good news. And in many senses the Paris summit looks set to represent success: every major country taking real action to ***reduce*** ***emissions***, a substantially different path from where we would be without that action. Paris will also repeat the international commitment made at Copenhagen to limit warming to 2 degrees.

But the bad news is that the pledges will still be short of what is needed. In reality, the commitments for 2030 would take us towards something like a 3-degree world. That would mean higher temperatures than at any time in the last three million years, with potentially dramatic effects of intense heatwaves, flooding and climate refugees across the world.

So what can be done? Just like at Copenhagen, what matters as much as Paris is what happens afterwards. That is why countries are rightly seeking to build an upwards ratchet mechanism into the agreement. If these pledges are the start, not the final word - a prelude to greater ambition - then we can still avoid the most dangerous effects of global warming.

What does this mean for Britain? The last Labour government introduced the Climate Change Act, with all-party support for an 80% ***reduction*** in ***emissions*** by 2050 - the first country in the world to legislate for such deep, long-term cuts. It is essential we remain on track for this goal, including making the right decisions about the period to 2030 which will face the government in the coming months.

But what the science now tells us is that we will need to go further and see a complete end to the accumulation of additional ***greenhouse gases*** in our atmosphere. The world will need to move to zero ***emissions*** at some time in the second half of the century, as President Obama and the other G7 leaders, including David Cameron, have rightly acknowledged. A point will come when the total carbon budget for the world will simply be used up.

Paris must be the start of a journey of the whole world towards this goal

And here is the relevance as far as Paris is concerned: every excess tonne of carbon we emit between now and 2030 brings the date when we need to get to "net zero" ***emissions*** forward - the point at which any remaining ***emissions*** are balanced out by the capturing of carbon.

Is zero ***emissions*** even practical, and can it be done without closing down our economy? The answer to both questions is a strong yes. Indeed, top business leaders such as Ratan Tata as well as Paul Polman of Unilever have recently called on world leaders to adopt a zero ***emissions*** goal in Paris.

So how can it be done in the UK? It is about a 100% clean ***energy*** supply. It is about making our ***energy*** system more efficient and productive. It is about the right infrastructure. And, to cancel out residual ***emissions*** from ***agriculture*** and industry, it is about capturing carbon from the atmosphere, for example through reforestation and by the use of carbon capture and storage technology.

Already cities and companies are adopting the zero ***emissions*** goal. The right step now would be for Britain to become the first major country to enshrine net zero ***emissions*** in law, with the date determined by advice from the independent Committee on Climate Change.

Related: Melting glacier? Yawn. Climate change is boring, worthy - and terrifying | Owen Jones

This would be consistent with the government's support for zero ***emissions*** at G7 level and would show our determination to face up to this existential challenge. It will provide an essential framework for business and government so that we make the right decisions now on key ***energy*** and infrastructure issues. And it will inspire the inventors, engineers and businesses that can deliver on this challenge.

From my conversations with people across the House of Commons, including the Liberal Democrats, the SNP, Caroline Lucas of the Greens and Conservatives such as Nick Hurd and Graham Stuart (chair of Globe, the international parliamentarians group on climate change), it is clear there is cross-party support.

Paris must be the start of a journey of the whole world towards this goal. And far from this commitment holding Britain back, we can be a leader again on climate change. Leadership which does not mean harm to our economy, but will put us ahead in the race for the new jobs, businesses and advantages of this new world.

I hope the government will support this initiative. We can build an alliance, put aside our party differences as we have before, and seize this moment.

**Load-Date:** November 23, 2015

**End of Document**



[***Conquering climate change requires global cooperation***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5N6H-PYR1-F105-V4TN-00000-00&context=1516831)

La Croix International

October 1, 2015 Thursday

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**Length:** 1090 words

**Highlight:** What solutions should be expected from upcoming Paris summit?

**Body**

The 12-day U.N. Climate Change Conference in Paris is scheduled to begin Nov. 30.

More than 190 nations will gather seeking new global agreements aimed at ***reducing*** ***greenhouse gas*** ***emissions*** and thus avoiding the threat of dangerous climate change.

The meeting will address scientific warnings that if ***greenhouse gas*** ***emissions*** continue to rise beyond the 2 degrees Celsius threshold, global warming will become catastrophic and irreversible.

Current ***emission*** trajectories [*point to a rise of about 5 degrees Celsius.*](http://www.shutterstock.com/gallery-416161p1.html?cr=00&pl=edit-00)That may not sound like much, but seemingly small changes in temperature can mean big differences for the Earth.

Global temperatures have been on a clear upward path. There was a spike in 1998, after which temperatures dropped — but still warmer than previous decades — that led some climate skeptics to claim that the world was cooling.

During the period since 1998, global temperatures have risen at a slower pace than they did in the previous 30 years. Skeptics seized on that too [*as evidence to show that global warming has "paused."*](http://www.shutterstock.com/gallery-416161p1.html?cr=00&pl=edit-00)

But it is important to note that temperatures have not fallen, or stalled — they have continued to rise. Given the variations that characterize our weather systems, a period in which the rate of warming slowed is not unexpected.

*The Guardian* reports, the "World Meteorological Organization's analysis narrowly places 2014 as the hottest recorded since 1850, as global warming continues into 2015."

The great efforts the United Nations made in Kyoto, Copenhagen, Rio and Bali were important though not conclusive. Getting agreement from 196 countries was never going to be easy.

The intervention of Pope Francis through his encyclical *Laudato si'* in many ways has changed the scenario. Pope Francis was the first among the world leaders to come out in definitive terms saying that world economies have no choice but to agree on the fact of climate change and subsequently comply with the negotiations.

What is likely to be agreed in Paris? The European Union will cut its ***emissions*** by 40 percent — compared with 1990 levels — by 2030. The [*United States will cut its* ***emissions*** *by 26 percent to 28 percent*](http://www.shutterstock.com/gallery-416161p1.html?cr=00&pl=edit-00), compared with 2005 levels, by 2025.    [*China will agree that its* ***emissions*** *will peak by 2030*](http://www.shutterstock.com/gallery-416161p1.html?cr=00&pl=edit-00) and level off.

Nations responsible for about two-thirds of global ***emissions*** have now come up with their ***targets*** but some countries, most notably India, have not yet done so, despite being asked to meet a deadline at the end of March.

**Indian Response**

As a response to the Paris Summit, India's head of the Ministry of Environment and Forests, Prakash Javadekar, recently stated that the "lifestyle adopted in developed countries is unsustainable" and it will require five earths to fulfill their lifestyle demands. On the other hand, the Indian lifestyle is sustainable where one Earth is sufficient.

Hitting out at rich nations, he said, "Greed and an unsustainable lifestyle should have no place in a new world regime to fight climate change and its ill effects."

The developing countries "cannot be asked to compromise on that goal in the name of climate change. Every poor person has the right to emerge out of poverty, and poor and developing countries need sufficient carbon space to ensure sustainable development. As climate change impacts the poorer and vulnerable sections severely, we must ensure climate justice," he said.

The minister's words make sense and India must bargain for climate justice as a third-world developing economy. Pope Francis, especially with his much talked-about encyclical, could be looked as a powerful vocal ally to support India's stand.

Does this mean we Indians can afford climate complacency and stay away from the negotiating table in Paris? Can India go on polluting the planet until a time we have reached the development of wealthier countries? Would that be climate justice?

**Indian scene: scant rainfall**

The Indian economy is primarily based on ***agriculture*** and the industrial development conversation makes little sense to us. The meteorologists tell us that 40 percent of Indian districts have been rain-deficient for the last three years, which was bad news for the farmers who keep up our economy. Just look at the rising graph of farmer suicides in India, which looks grave to even a casual observer. We need the rains again, urgently.

Look at a state like Bihar, once called the rice bowl of India. Most of Bihar has not cultivated rice for the last three years. Many farmers have migrated to other states. If they don't harvest rice, the concern spreads to neighboring states.

We need a resilient climate for our crops.

Drinking water prices are skyrocketing in India and its supply is shrinking fast. Nearly all Indian states are facing a drinking water crisis.

Pope Francis' encyclical on ecology, *Laudato si'* refers to the global water crisis: "Fresh drinking water is an issue of primary importance since it is indispensable for human life … Water supplies used to be relatively constant, but now in many places demand exceeds the sustainable supply, with dramatic consequences in the short and long term."

India and other developing countries do not have to take the brunt of greenhouse ***emissions*** alone. The wealthy and powerful countries might squirm and hesitate because of the powerful corporations lobbying with them, but eventually they will chip in.

**Paris and beyond**

India will arrive in Paris as a very vulnerable party. How can it bargain from a sinking ship? In fact the whole planet is sinking. Even America is facing its own water shortage, as the rampant wild fires in California can attest. Nobody is a bully here except the shortsighted corporations.

Paris calls for a paradigm shift in international understanding. As part of a growing common sense, all countries have to listen to the collective wisdom of scientists as they warn us that we are heading to an abyss, and must pull back. We have no other choice. Adjustments will have to be made by everybody.

This is an unprecedented age of human development. Gone are the categories of "our country" and "their country." With our advanced technologies and consciousness we can do this magnificent work, provided we have the give-and-take mentality of mutual assistance and cooperation.

*Jesuit Father Robert Athickal, based in India's Bihar state, is an environmentalist and the founder of Tarumitra (Friends of Trees), a nationwide organization of some 200,000 students promoting ecological sensitivity. The United Nations conferred it special consultative status in 2005.*

[*Link to Image*](https://international.la-croix.com/uploads/news/2015/10/1443679154.jpg)

[*https://international.la-croix.com/news/conquering-climate-change-requires-global-cooperation/1956*](https://international.la-croix.com/news/conquering-climate-change-requires-global-cooperation/1956)

**Graphic**

Photo: [*costas anton dumitrescu*](http://www.shutterstock.com/gallery-416161p1.html?cr=00&pl=edit-00) /   [*Shutterstock.com*](http://www.shutterstock.com/gallery-416161p1.html?cr=00&pl=edit-00)

**Load-Date:** March 30, 2017

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[***"Historic" Paris Agreement Paves Way for World Bank to Help Countries Deliver on Climate Commitments***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HKY-23P1-F12G-X3NT-00000-00&context=1516831)

NEWS Press (English)

December 14, 2015 Monday

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**Section:** International; International organizations

**Length:** 1158 words

**Byline:** World Bank

**Body**

[*http://www.newspress.fr/common/getImageEm.ashx?imid=20626&emid=2935*](http://www.newspress.fr/common/getImageEm.ashx?imid=20626&emid=2935)

With the passing of a global agreement at COP21 in Paris on December 12, countries around the world are stepping up their action on climate change to meet the ambition of the agreement.

More than 180 countries have submitted national pledges for climate action before and during COP21, including more than 130 countries working with the World Bank Group.

The Bank Group is already working with countries to help meet their Paris commitments, and is finalizing a Climate Change Action Plan to further integrate climate change into operations.

With the passing of a global agreement at COP21 in Paris, countries are stepping up their action on climate change to meet the ambition of the agreement. The World Bank Group is working with countries to help meet their Paris commitments and finalizing a Climate Change Action Plan to further integrate climate change into operations.

With the passing of a global climate change agreement on December 12, the World Bank Group is moving quickly to help countries achieve the pledges they have made in Paris.

More than 180 countries have submitted Intended Nationally Determined Contributions - or INDCs - to the UN Framework Convention on Climate Change (UNFCCC) in the run-up to or during its 21st Conference of Parties (COP21) in Paris. The INDCs spell out what the countries plan to do to ***reduce*** ***emissions*** and adapt to climate change.

The World Bank Group works with more than 130 of those countries

"We welcome the historic agreement that has just been reached in Paris," said World Bank Group President Jim Yong Kim. "The world has come together to forge a deal that finally reflects the aspiration, and the seriousness, to preserve our planet for future generations. The World Bank Group is ready to help immediately and will do its utmost to realize this vision."

The World Bank Group is now finalizing a Climate Change Action Plan that will help to integrate climate considerations across the institution's operations, and make it easier to deliver comprehensive packages of financing, technical assistance and knowledge to help countries adapt to climate change and transition to a low carbon economy.

Integrated Climate Action

The recent Shock Waves report demonstrates that ending poverty and addressing climate change cannot be separated - that if left unchecked, climate change impacts could push more than 100 million people into poverty over the next 15 years. To prevent this, the report calls for an immediate implementation of "climate-smart" development and measures to adapt to climate impacts.

A large proportion of the Bank Group's work is already dedicated to such climate-smart development and adaptation, including investments and activities in renewable ***energy*** and ***energy*** efficiency, natural resources management, low-carbon urban development, resilient ***agriculture***, and sustainable water management.

Just prior to the Paris talks, the World Bank announced the Africa Climate Business Plan, which calls for $16 billion in funding to help African people and countries adapt to climate change and build up the continent's resilience to climate shocks. Of that, $5.7 billion is expected to come from the International Development Association (IDA), the arm of the World Bank Group that supports the poorest countries.

Jim Yong Kim President, World Bank Group " The world has come together to forge a deal that finally reflects the aspiration, and the seriousness, to preserve our planet for future generations. The World Bank Group is ready to help immediately and will do its utmost to realize this vision. "

The Bank Group is using the INDCs as a basis of discussion with countries about their national climate action needs, and is already at work on initiatives that will help to achieve those commitments.

In Indonesia, among the key focus areas of the World Bank's new Country Partnership Framework are renewable ***energy***, landscapes and forests, and disaster risk ***reduction***.

In Senegal, the World Bank is helping to improve resilience through flood management, climate-smart ***agriculture***, and coastal adaptation work. Scientists have developed seven new high-yielding, early maturing, and drought-resistant varieties of sorghum and pearl millet adapted to local growing conditions.

In Morocco, the Bank Group is supporting the government's National Irrigation Saving Program, with a new US$150 million commitment to help poor and vulnerable farmers with more efficient irrigation technologies so they can cope with increasing variability in water supplies.

Cities are where the ***emissions*** are, responsible for more than 70 percent of ***energy*** consumption and ***energy***-related ***greenhouse gas*** ***emissions***. In 2015, World Bank provided over $3 billion in finance and technical assistance to help clients build climate-smart cities. In Brazil, the World Bank is supporting sustainable urban transport in Rio de Janeiro through investment loans, development policy loans and technical assistance

"Beyond Paris, countries are looking for reliable partners to turn commitments into financing, and financing into action" said John Roome, Senior Director for Climate Change at the World Bank Group. "The Bank Group is already on the ground and delivering for these countries."

From Billions to Trillions

To meet the growing demand for such work, the World Bank Group has committed to increasing the share of its portfolio devoted to climate finance, from the current 21 percent, to 28 percent, over the next five years. When including financing generated from other partners and associated private sector financing, such financing would amount to a potential $29 billion a year by 2020.

At the same time, the Bank Group recognizes that public funds will be most effective if they catalyze significant private investment. The finance required to transition to a low carbon and resilient economy is counted in the trillions, not billions. Given that, World Bank climate initiatives are designed to create the stable policy environments, strong institutions and project pipelines needed to increase investment by an order of magnitude.

In 2015, the International Finance Corporation (IFC), the World Bank Group's private sector arm, made $2.3 billion in climate-related investments, covering 103 projects in 31 countries, and mobilizing an additional $2.2 billion from private investors.

The Bank Group is also exploring ways to create incentives for large scale cuts in ***emissions*** by widening and deepening carbon markets. Since starting the world's first carbon fund to support over a decade ago, the Bank Group has raised $4.36 billion through 18 carbon funds and initiatives, supporting 145 active projects in over 75 client countries.

Photo: Max Edkins / World Bank

It took over 2 months and more than 3,000 workers to build COP 21 conference center at Le Bourget, near Paris. In picture, a replica of the Eiffel tower made out of recycled chairs.

**Load-Date:** December 14, 2015

**End of Document**



[***End of sanctions may help Iran face an accelerating environmental crisis; The lifting of sanctions will support positive change quickly if government funds are freed to tackle environmental challenges and if international investment is encouraged in green technology***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HXW-S9C1-JCJY-G2FC-00000-00&context=1516831)

The Guardian

January 25, 2016 Monday 4:40 PM GMT

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**Section:** WORLD NEWS

**Length:** 1006 words

**Byline:** Tom Lewis and Kaveh Madani for Tehran Bureau

**Body**

A trickle of water has returned this winter to Zayandeh Rud (the Zayandeh River) through Isfahan, but it won't last long. When the winter rainfall ends and the snow in the mountains has melted in spring, high demand for water will see the river bed return to the dusty, cracked state to which Isfahanis have become accustomed.

Simultaneously, desertification downstream of Isfahan threatens to spread as farmers struggle to irrigate their crops. In Kerman province, to the east, 15% of around 150,000 acres of pistachio trees in the main producing area have died in the last decade or so.

In Tehran, a different environmental crisis unfolds. School closures due to air pollution are now part of the winter routine, but there have been more this year than ever before. The smog results from a combination of exhaust fumes and dust blown in from dried-up river basins in the west of the country, with the Alborz Mountains to the north trapping the thick haze over the city's millions of suffocating inhabitants.

Since 2010, Iran's gross domestic product has shrunk by 15-20%, partly due to sanctions, taking unemployment up to 20% and far higher among the young.

These years have also brought environmental decline. Falling oil revenue, due partly to sanctions, and a faltering economy have ***reduced*** government resources available for environmental causes: the 'economy of resistance' has ensured that spending has been directed at stimulating economic growth rather than encouraging environmental sustainability. Sanctions also fed a thirst for accelerated development that has exacerbated Iran's environmental decline.

Related: Every breath you take: the environmental consequences of Iran sanctions

As farmers produce as much as possible with the encouragement of cheap, subsidised ***energy*** and water, groundwater levels continue to fall at alarming rates. A pistachio farmer from the Kerman region spoke in October 2015 of "stealing" the water for as long as he can and then selling up as it runs out. When the economy is struggling and the environmental outlook is bleak, short-term gains become more attractive.

Meanwhile shortages of imported petrol due to sanctions led Iranian refiners to make up the difference with sub-standard fuel. Urban air quality has suffered as a result.

The lifting of sanctions will not automatically reverse environmental decline. Indeed, the removal of sanctions will stimulate economic growth and as much-needed investment replenishes Iran's ailing industries we can expect some environmental indicators to deteriorate further still.

And yet, the easing of sanctions brings opportunities for some positive change. Iran's submission of goals in the run up to December's Paris climate change talks, emphasised the impact sanctions relief would have on Iran's commitments over cutting ***greenhouse gas*** ***emissions***. With sanctions removed, Iran's environment ministry claimed it could mitigate ***greenhouse gas*** ***emissions*** by 2030 by 12%, compared to only 4% if sanctions remained in place.

In a BBC interview during the Paris talks, Masoumeh Ebtekar, Iran's vice president in charge of the environment, said Iran needed a "total U-turn in ***agricultural*** policy". At the highest levels of government, environmental decline, especially water scarcity, is increasingly discussed as a threat to Iran's survival rather than merely as an obstacle to its prosperity. The lifting of sanctions will support positive change quickly if government funds are freed to tackle environmental challenges and if international investment is encouraged in green technology.

Iranian experts and decision-makers dealing with Tehran's air quality have long awaited access to the technical equipment - manufactured outside Iran, and difficult to import under sanctions - to monitor air pollution.

Air quality is not the only environmental challenge in urban areas. Iran requires major investment in developing and improving its urban water and wastewater infrastructure. Access to modern distribution, collection and treatment technologies can be easier without sanctions and some European countries such as Denmark, Germany and Sweden have already shown interest.

***Agriculture***, which uses 92% of Iran's water resources, can also benefit from technology and knowledge transfer. Inefficient irrigation and unsustainable farming practices have led to significant water losses and the depletion of groundwater across the country. If nothing changes, over-cultivation, and the land subsidence and desertification resulting from lack of groundwater, will make more of the country uninhabitable.

Here too, sanctions relief may bring assistance. Iranian environmental organisations can gain from closer relations with their international counterparts, facilitating the application of up-to-date techniques and know-how from areas facing similar challenges.

In addition to direct investment in ***agriculture*** to ***reduce*** environmental degradation, Iran can benefit from sustainable industrial growth that improves the efficiency of water usage. An industrialised Iran free of sanctions would not be concerned about food security and self-sufficiency in food - and so would be willing to ***reduce*** the ***agricultural*** sector. Iran could export more industrial products in return for importing more food grown in parts of the world where water is abundant.

Six months after the nuclear deal was agreed in July 2015, Iran's adherence to the initial requirements of the agreement has been confirmed and Iranians can hope to feel the benefits of rapprochement. With the right mix of international engagement, economic growth and environmental awareness, relief from sanctions can provide the means to tackle the dire situation of Iran's environment.

Tom Lewis is graduate of Iranian Studies, SOAS. Kaveh Madani is a senior lecturer in environmental management at the centre for environmental policy, Imperial College London. The Tehran Bureau is an independent media organisation, hosted by the Guardian. Contact us @tehranbureau

**Load-Date:** January 25, 2016

**End of Document**



[***Environmental hero?; FT BIG READ: NORWAY***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JPJ-97S1-JBFS-D0T9-00000-00&context=1516831)

Financial Times (London, England)

May 6, 2016 Friday

London Edition 1

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**Section:** ANALYSIS; Pg. 9

**Length:** 2109 words

**Byline:** Richard Milne

**Highlight:** Oslo has won praise for pursuing green projects abroad but at home it is planning to allow waste to be dumped in a fjord and open up areas to oil exploration. It is facing calls to resolve its contradictory policies. By Richard Milne

**Body**

With killer whales swimming in the pristine fjord and sea eagles soaring above it, the scene offers a postcard-perfect image of Norway. "It is a paradise where nature can develop undisturbed," says Anne-Line Thingnes Forsund, who was born and raised in Vevring, beside the Forde fjord.

But last year the Norwegian authorities approved a plan that would allow millions of tonnes of industrial waste to be dumped into the fjord, drawing criticism that the pristine area will be disturbed. The project developer, Nordic Mining, says that in return 170 jobs would be created to excavate titanium oxide, a mineral used in teeth whitening and other products.

The move has sparked the ire of locals and environmentalists. It has also unleashed criticismof Norway, long seen as one of the leading lights of the climate change movement for its largesse in sponsoring green projects abroad: it gave $1bn to stop deforestation in Brazil and has a similar scheme in Indonesia .

"We are telling everybody else what they should be doing but we are not doing it ourselves," says Nina Jensen, head of the WWF in Norway.

In areas as diverse as coal mining, oil and gas exploration, forestry, peat bogs, fossil fuel subsidies and ***emissions*** ***reduction***, Norway stands accused of not practising what it preaches. Critics argue that the type of behaviour it rails against abroad - putting jobs and growth above protecting the environment - is exactly what it is doing at home, leading to charges of hypocrisy.

"We are frustrated most of the time because jobs go before the environment. To some extent it is hypocrisy. Sometimes it seems easier to achieve something abroad than in Norway itself," says Arild Hermstad, head of the Future In Our Hands, Norway's leading environmental lobby group.

**'Far from perfect at home'**

It is not just environmentalists angered by this. "Norway always comes across as a moraliser on environmental matters but I think there's a lot to criticise it about at home where it's far from perfect," says the chief executive of a Swedish industrial company, who asked to remain anonymous.

The stakes are high in the wake of the climate accord agreed in Paris in December - which was formally signed in New York on April 23 - to limit warming of the planet to less than 2C from pre-industrial times. Norway has been well regarded for doing more than almost any other nation to fight deforestation as well as putting climate change action at the heart of its $855bn sovereign wealth fund.

In Vevring, a town of just 300 residents, Ms Forsund, head of the local action group against the mine, calls the plan "madness". The fjord is a popular spawning ground for fish, the location of several salmon farms as well as a destination for cruise ships. Various groups involved in tourism and seafood - two of Norway's biggest industries behind petroleum - have spoken out over the plans, while a British marine biologist called the development "mad" and "like returning to the 18th century".

"It is unbelievable that we are paying so much to protect the rainforest when they are going to let mining waste into our fjord - an underwater rainforest - in Norway. This is gross hypocrisy," says Ms Forsund.

Nordic Mining promotes the project as an example of how Norway can survive as oil and gas slowly but inevitably disappears from the ***energy*** mix. It argues that the waste will be pumped to the bottom of the fjord, a depth of 300m, well below where the typical habitat of wild salmon. Norway is one of the few countries that allows mining waste to be dumped at sea. The company says studies show that marine life tends to return to the bottom of such fjords within a few years.

"This is positive," Roald Kvammen, a Vevring resident, told local media. "We need these jobs."

The Forde fjord is far from an isolated incident. Environmentalists point to a string of projects where jobs in isolated communities have trumped other considerations. These projects are partly explained by Norway's slowing economy, which has seen growth stall and unemployment rise by a third in the past two years as the country has felt the sharp effect of lower oil prices.

One proposal is to open up vast swaths of sea inside the Arctic Circle for oil exploration . Oil and gas are already being pumped from the southern Barents Sea but this year auctions for the first new acreage in 20 years will be awarded, particularly along the country's Arctic border with Russia .

**Assisting exploration**

The ***energy*** companies are helped by a tax break of 78 per cent to set off against exploration costs, something Ms Jensen calls a "hidden subsidy" which by her calculation amounts to NKr140bn ($17bn) in this year's licensing round. "You really shouldn't be investing your money in something you should be ending," she adds.

Government officials dispute that the tax measures are subsidies, arguing that they help ensure exploration. They point to the UK, on the other side of the North Sea , where the industry is struggling, as an example of what can happen without the right incentives.

Even more controversial is a push to open up the Lofoten islands and Vesteralen archipelago in northern Norway for oil exploration.

With the largest cold water coral reef in the world, Lofoten is widely regarded as the most spectacular place in Norway. The current centre-right government has ruled out any drilling there while it is in power.

However, both the chief executive of government-controlled Statoil and Oslo's oil minister have recently called for the area to be opened up after next year's elections. Eldar Saetre of Statoil has warned that unless the drilling ban is lifted, the precipitous decline in Norway's oil production would continue - it has halved since 2000.

"It is these kinds of calls that make you think: why the hell are we doing this? [Opening up Lofoten] would be very short-term thinking trumping long-term thinking," says Ms Jensen.

Cries of hypocrisy were also heard when a state-owned company opened a coal mine on the Svalbard archipelago on the very day in 2014 that Norway's parliament began discussing whether its sovereign wealth fund should pull out of coal investments.

"It is true there is a certain amount of double standards here," says one senior government official. "But we think it is better to take a stance on climate change with the oil fund than do nothing, and the coal mine itself is pretty small."

Vidar Helgesen, the environment minister, argues that Norway is a "paradox nation" because of its status as western Europe's largest producer of oil and gas.

"We have significant wealth derived from fossil fuels but at the same time we are a policy lab for ideas that seek to undermine the market for oil," he says. As an example, he cites heavy subsidies for electric cars, which have helped Norway set sales records for many models. Early last year, more than two-thirds of the European sales of Volkswagen's eGolf were in Norway.

On the broader criticism, Mr Helgesen says the government wants to ensure a gradual shift away from fossil fuels as well as create jobs. "In individual cases, there will be trade-offs between industries. That is not a matter of hypocrisy. It is the kind of dilemma you will have in any country," he adds.

The minister calls the claim that Norway does not do at home what it preaches abroad "a fundamentally flawed assumption - we are not telling Indonesia that they should not make money from their forests".

**Poor record**

Perhaps the most pointed criticism of Norway's record is in the very areas where it is seeking to have an effect overseas: forestry and peat bogs.

Norway paid its final instalment of a $1bn donation to Brazil late last year for ***reducing*** its rate of deforestation by three-quarters. It has offered large sums to Liberia to protect 30 per cent of its forests by 2020, as well as other countries, such as the Democratic Republic of Congo.

Environmentalists, though, are worried about the protection of Norway's own woodland. Most of its forests are relatively young, with just 2.4 per cent that are more than 160 years old and classified as old growth, the type that supports the most biodiversity. Mr Helgesen says there has been a recent improvement but admits it is from "a poor base".

Similarly, Norway is encouraging Indonesia to protect its peat bogs, a source of ***greenhouse gases*** when burnt, as in last year's big fires in the Southeast Asian country. But Norway itself has drained a third of its peat bogs in the past 100 years, while less than 5 per cent are protected. That contrasts with a goal of 17 per cent set as part of UN biodiversity ***targets*** for 2020.

"If you look at the last century, we have a lot to make up," Mr Helgesen concedes. He says measures that would hurt the ***agriculture*** or forestry sectors are politically difficult to implement. "It's perfectly clear that when you have government interventions to protect the environment that go against traditional livelihoods, that is bound to be met with resistance."

Instead, he claims that one krone goes further in fighting climate change abroad than in Norway. "Cost effectiveness is a consideration. If Norwegian money can result in more carbon dioxide ***reductions*** abroad than through similar actions in Norway, that is better for the global climate. But that is not to say we are not going through a transition in Norway too," he says.

Norway is one of the few European countries where ***greenhouse gas*** ***emissions*** are higher than they were in 1990. CO2 ***emissions*** are 23 per cent higher than they were in 1990, while total GHG ***emissions*** are up 2.4 per cent largely due to the growth of the oil and gas industry but also partly due to increased road traffic.

By contrast, both Germany and the UK have ***reduced*** their ***emissions*** by about a quarter over the same period.

"We are winning the championship on what we do environmentally abroad but in our own country it is like we are not even in the competition," says Mr Hermstad. "When it comes to the difficult decisions and the people might be a bit angry, then we can't do it."

In Vevring, Ms Forsund is keeping up the fight against the mine. The permit to allow the discharge was finally approved in February after an appeal was dismissed. She says: "If Norway is willing to do this [open the mine], it can put pressure on poor countries to abandon their environmental standards. If Norway can't do this, then who can?"

**Money to burn**

**Wealth fund accused of double standards**

Of all the investors around the world fighting climate change, one of the most intriguing is Norway's $855bn sovereign wealth fund, informally known as the oil fund. Some have accused Norway of double standards in earning vast sums from hydrocarbons and then sometimes refusing to invest it in companies doing the same thing.

But Norwegian officials argue that as the fund is a financial investor designed to safeguard the country's wealth for future generations, climate change is a natural thing to focus on. The fund's biggest action so far was the decision earlier this year not to invest in 52 companies due to their activities involving coal, one of the biggest divestments in history. The fund has also excluded 17 other companies over severe environmental damage including miners Rio Tinto, Barrick Gold, Norilsk Nickel, and Vedanta.

Climate change has also formed part of the fund's recent push to become a more active investor . It decided last year to start publishing some of its voting intentions before annual meetings rather than after them in a bid to influence public debate. It backed shareholder proposals for BP and Royal Dutch Shell to reveal their plans for tackling climate change , and followed that this week by backing similar initiatives at ExxonMobil and Chevron. "We want them to be open about their climate strategy and their dialogue with regulators," says Yngve Slyngstad, head of the oil fund.

Perhaps the biggest climate-related change for the fund would be one proposed by the current centre-right government coalition but yet to be adopted: to allow it to invest in unlisted, renewable ***energy*** infrastructure such as wind and solar farms. The proposal is backed by the government's expert group and the fund itself, as well as environmentalists. But to the bewilderment of many in Oslo it did not form part of this year's plans, drawn up by the finance ministry, for the fund.

**Speed read**

**Spoiled beauty**  A permit to dump the discharge from a titanium oxide plant into Forde fjord has been approved

**Domestic pollutant**  Norway's carbon dioxide ***emissions*** are 23 per cent higher than they were in 1990

**Oil incentive**  Companies that win fresh licences to explore in the Barents Sea will receive a 78 per cent tax break

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[***Electric Vehicle Charging Stations Market: 29.8% CAGR to 2022***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JFX-WD41-JB72-14KB-00000-00&context=1516831)

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**Body**

Growing need to ***reduce*** carbon ***emissions*** is pushing electric vehicle charging stations market along with increasing use of EVs, government subsidies and incentives according to this new research report. It forecasts the market to reach $12.61 Billion by 2022, at a CAGR of 29.8% from 2016 to 2022.

Complete report on global electric vehicle charging stations market spread across 146 pages, profiling 13 companies and supported with 69 tables and 64 figures is now available at[*http://www.reportsnreports.com/reports/518938-electric-vehicle-charging-stations-market-by-charging-station-ac-charging-station-dc-charging-station-inductive-charging-station-connector-type-chademo-ccs-others-location-public-private-and-geography-global-trend-and-forecast-to-2022.html*](http://www.reportsnreports.com/reports/518938-electric-vehicle-charging-stations-market-by-charging-station-ac-charging-station-dc-charging-station-inductive-charging-station-connector-type-chademo-ccs-others-location-public-private-and-geography-global-trend-and-forecast-to-2022.html).

The growth of the electric vehicle charging stations market is attributed to significant incentives offered by the Chinese Government for vehicle buyers and tightening ***emission*** regulations. Further, other countries such as South Korea and India are taking initiatives to ***reduce*** ***greenhouse gas*** ***emissions*** by increasing the use of electric vehicles. The leading players contributing to the growth of the region are JAC Motors (China), BYD Co. Ltd. (China), BAIC Group (China), SAIC Motor Corporation Limited (China), Nissan Motor Company Ltd. (Japan), Mitsubishi Motors Corporation (Japan), and Toyota Motor Corp. (Japan).

Electric vehicle charging stations market for inductive charging stations expected to grow at the highest CAGR between 2016 and 2022. The technology is still in the research and development stage. It is estimated that the market will evolve post 2016 and is expected to exhibit high growth. Participants from various verticals such as telecom, industrial automation, and utilities are transforming the market by establishing their presence. Further, companies such as Evatran Group Inc. (U.S.) and Qualcomm Inc. (U.S.) have launched prototypes and demonstration projects through joint ventures and partnerships, which is expected to drive the growth of this market. For instance, in June 2015, the Evatran Group Inc. (U.S.) partnered with Zhejiang VIE Science and Technology Company (VIE, China) and got an initial investment of USD 1.6 million from VIE to introduce wireless electric vehicle charging products to China.

The key players in the market include ABB Ltd. (Switzerland), Aero Vironment Inc. (U.S.), ChargePoint Inc. (U.S.), Delphi Automotive Plc.(U.K.), Eaton Corp. Plc. (Republic of Ireland),Elektromotive Limited (U.K.),GE Company (U.S.), Pod Point Ltd. (U.K.), Schneider Electric SE (France), SemaConnect Inc. (U.S.), Siemens AG (Germany), and Tesla Motors Inc. (U.S.). Order a copy of Electric Vehicle Charging Stations Market by Charging Station (AC Charging Station, DC Charging Station, Inductive Charging Station), Connector Type (Chademo, CCS, Others), Location (Public, Private), and Geography - Global Trend and Forecast to 2022 research report at[*http://www.reportsnreports.com/purchase.aspx?name=518938*](http://www.reportsnreports.com/purchase.aspx?name=518938).

Americas to be the fastest-growing electric vehicle charging stations market during the forecast period. The growth is attributed to the shift towards low ***emission*** vehicles, tax credits in various cities in the U.S. for the installation of charging stations, and the U.S. Government's subsidies and incentives to boost the deployment of EV charging stations under the American Recovery and Reinvestment Act (ARRA).

On a related note, another research onSuspension System Market by System, Damping, Architecture, Vehicle Type & Region Forecast 2015 to 2020says, the market for suspension system is estimated to grow at a CAGR of 5.32% by value from 2015 to 2020, growing from $52,667 Million in 2015 to $68,253 Million by 2020. North America is estimated to grow at a highest CAGR of 6.03% by volume over the projected period from 2015 to 2020. Companies like ZF Friedrichshafen AG, Tenneco Inc., Kyb Co.Ltd, Continental AG, Magneti Marelli S.P.A., Benteler International AG, Schaeffler AG, Wabco Holdings Inc., Mando Corp. and Thyssenkrupp AG have been profiled in this 176 pages research report with 68 tables and 60 figures available at[*http://www.reportsnreports.com/reports/417263-suspension-system-market-by-system-passive-semi-active-active-damping-hydraulic-pneumatic-electromagnetic-architecture-dependent-semi-independent-independent-macpherson-strut-double-wishbone-vehicle-type-by-region-forecast-to-2020.html*](http://www.reportsnreports.com/reports/417263-suspension-system-market-by-system-passive-semi-active-active-damping-hydraulic-pneumatic-electromagnetic-architecture-dependent-semi-independent-independent-macpherson-strut-double-wishbone-vehicle-type-by-region-forecast-to-2020.html).

Explore more reports on Semiconductor and Electronics market at[*http://www.reportsnreports.com/market-research/semiconductor-and-electronics/*](http://www.reportsnreports.com/market-research/semiconductor-and-electronics/).

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[***-IMF-Leaders Unite in Calling for a Price on Carbon Ahead of Paris Climate Talks***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H6T-BX91-F0K1-N218-00000-00&context=1516831)

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**Body**

For the first time, an unprecedented alliance of Heads of State, city and state leaders, with the support of heads of leading companies, have joined forces to urge countries and companies around the globe to put a price on carbon.

The call to price carbon comes from the Carbon Pricing Panel - a group convened by World Bank Group President Jim Yong Kim and International Monetary Fund (IMF) Managing Director Christine Lagarde - to spur further, faster action ahead of the Paris climate talks. They are joined in this effort by OECD Secretary General Angel Gurria.

The panel includes German Chancellor Angela Merkel, Chilean President Michelle Bachelet, French President Francois Hollande, Ethiopian Prime Minister Hailemariam Desalegn, Philippines President Benigno Aquino III, Mexican President Enrique Pena Nieto, Governor Jerry Brown of California, and Mayor Eduardo Paes of Rio de Janeiro.

These global leaders are calling on their peers to join them in pricing carbon to steer the global economy towards a low carbon, productive, competitive future without the dangerous levels of carbon pollution driving warming. Through strong public policy they are providing certainty and predictability to the private sector so they can make long-term investments in climate smart development.

Private sector support comes from US Institutional Investor CalPERS, ENGIE of France, Mahindra Group of India, and Netherlands-based Royal DSM, who will help link business needs with public policies through the Carbon Pricing Leadership Coalition, an action based platform that will be officially launched in Paris on November 30, 2015.

'There has never been a global movement to put a price on carbon at this level and with this degree of unison. It marks a turning point from the debate on the economic systems needed for low carbon growth to the implementation of policies and pricing mechanisms to deliver jobs, clean growth and prosperity,' World Bank Group President Jim Yong Kim said. 'The science is clear, the economics compelling and we now see political leadership emerging to take green investment to scale at a speed commensurate with the climate challenge.'

'Finance ministers need to think about reforms to fiscal systems in order to raise more revenue from taxes on carbon-intensive fuels and less revenue from other taxes that are detrimental to economic performance, such as taxes on labor and capital. They need to evaluate the carbon tax rates that will help them meet their mitigation pledges for Paris and accompanying measures to help low-income households vulnerable to higher ***energy*** prices,' said Christine Lagarde, Managing Director of the IMF.

Around the world, about 40 nations and 23 cities, states and regions have implemented or are putting a price on carbon with programs and mechanisms covering about 12 percent of global ***greenhouse gas*** ***emissions***. The number of implemented or scheduled carbon pricing instruments has nearly doubled since 2012, reaching an aggregate market value of about $ 50 billion.

This collective experience is providing us with the tools to take the vital step towards pricing carbon and is captured in FASTER principles developed by the World Bank Group and OECD, with input from the IMF. These principles are based on fairness; alignment of policies and objectives; stability and predictability; transparency; efficiency and cost-effectiveness; and reliability and environmental integrity.

For more information, please visit:

[*http://www.carbonpricingleadership.org/carbon-pricing-panel*](http://www.carbonpricingleadership.org/carbon-pricing-panel)

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Quotes by the Carbon Pricing Panel:

'Low carbon technologies are an element in the fight against worldwide climate change. With a price for carbon and a global carbon market, we promote investment in these climate friendly technologies. Many governments are already putting a price on carbon as part of their climate protection strategies. We should advance our effort along this path further so that we can actually reach our goal of maintaining the two degree upper limit,' said German Chancellor Angela Merkel.

'In Chile we believe in the polluter pays principle. We have enacted environmental taxes on our transportation and power sector. Both taxes will be instrumental in cleaner power, and more efficient cars, which will make our air cleaner, and our climate safer. And the revenue goes to fund our educational reform,' said Chilean President Michelle Bachelet.

'If we really want to send market signals to enable enterprises to make their decisions under optimal economic conditions, which may be optimal ecological conditions, then the issue of carbon prices inevitably arises as it is the most tangible signal that can be sent to all economic actors,' said French President Francois Hollande. 'I am aware of the fears created by this notion of carbon pricing, particularly among the most carbon- intensive industries, which have concerns, and rightly so, over their competitiveness. We must therefore act with resolve. Countries, big countries such as China, are already setting carbon prices. Europe already has a carbon market.'

'Like many nations, Ethiopia has much to gain from early action on climate change - and much to lose if we collectively fail to act. We are rapidly developing a diverse portfolio of renewable ***energy*** resources, have been generating results from large scale programs to rehabilitate landscapes for increased ***agricultural*** productivity, resilience and carbon storage, and have shown the world that carbon funds can be put to productive use cutting ***emissions*** by regenerating forest cover, and improving people's lives and livelihoods. A carbon price can be a win-win, not just for nations like Ethiopia, but for the entire planet, provided that it is coordinated and its incidence does not unduly fall on the poor,' said Ethiopian Prime Minister Hailemariam Desalegn.

'Climate change is real. It threatens food and water security, and contributes to the occurrence of more frequent and more destructive storms. In our part of the world, whole South East Asian coastal communities are at a particular risk. They need to be relocated, given the threats of storm surges, rising sea levels, and even landslides. In our own country, we are indeed hard pressed to build back better our vulnerable communities, to support their way of life, and to provide safer, more sustainable livelihood. We are deeply sympathetic about the plight of island nations, particularly Kiribati and Tuvalu, which are likewise in danger due to worsening environmental conditions. Years of international research show that global ***greenhouse gas*** ***emissions*** are intensifying, consequently contributing to the factors that leave so many at risk. In this vein, developing a price on carbon sets in motion the shift towards cleaner investments for our peoples. The Philippines thus believes that this is a step we must all take part in, lest we collectively suffer the consequences of inaction,' said Philippines President Benigno S. AQUINO III

'The challenge of climate change compels us to rethink and transform the way we produce and consume. The international community must advance towards a low-carbon economy, by setting a price on carbon. In keeping with this goal, Mexico has strengthened its national policy towards green growth. Among other measures, we have established a fossil fuel tax which will foster clean technologies. This way we support international efforts in order to ensure that binding agreements -for both developed and developing countries- will be concluded at the upcoming COP 21, scheduled to be held in Paris,' said Mexican President Enrique Pena Nieto.

'We can't stand idly by as billions of tons of carbon pollution spew into the atmosphere,' said California Governor Edmund G. Brown Jr. 'California has put a price on carbon, but these efforts mean little unless the world's government and business leaders join us - and go even further.'

'Rio de Janeiro, like most of Brazil, is already experiencing the impacts of climate change - and we're already taking action,' said Rio de Janeiro, Brasil Mayor Eduardo Paes. 'We're investing heavily in climate-resilient infrastructure, and we're also committed to slashing carbon ***emissions*** across our economy. Putting a price on carbon will serve to accelerate our efforts to build low-carbon urban prosperity - not just in Rio, but in fast-growing cities around the world.'

'Putting a price on carbon is key for ensuring we have credible, cost-effective action on climate mitigation that will get the world on the road to a zero net ***emissions*** future,' said Angel Gurria, Secretary-General of the OECD.' While COP21 will be important to set the overall framework for the path forward, it is domestic policies such as carbon pricing that will guide us collectively to that future. This Panel will help to provide the high level leadership that we need to generate greater momentum on carbon pricing up to and beyond COP21. The OECD is pleased to be engaged in the Panel and to work with the leaders and partner international organisations to expand the reach and uptake of carbon pricing. With so much positive upside to action, why would we not embrace the transition?

'CalPERS supports a price on carbon because we are a financial institution grounded in economics and focused on the long-term. The market needs a transparent and consistent price that discourages carbon ***emissions***, and stimulates low carbon investment opportunities. The goal is that pricing will catalyze a transition to a lower carbon economy,' said Anne Stausboll, CEO of CalPERS.

'***Energy*** use is the main source of ***greenhouse gas*** ***emissions***. ***Energy*** transition, key to keeping to a 2-degreeC rise in temperature on the planet, has started, and ENGIE wants to lead. In addition to the 2 main pillars of its transition strategy - scaling up renewable and ***energy*** efficiency solutions and services Worldwide -, ENGIE has decided to stop developing any new coal generation project (that has not already been legally engaged). ENGIE has put a price on carbon to drive its investment decisions: generalizing carbon pricing is crucial to drive and boost low carbon ***energy*** transition everywhere and preserve the planet,' said Gerard Mestrallet, CEO of ENGIE.

'Growth and Sustainability are complementary and not conflicting goals, both are necessary to achieve a reasonable quality of life for all. Emerging countries will need to leverage technology to follow a low carbon growth path while developed nations will need to ***reduce*** their carbon footprint,' said Anand Mahindra, Chairman and Managing Director of Mahindra Group of India.

'We need to prevent a global temperature rise above 2 degrees Celsius. A meaningful carbon price will provide an economic incentive to shift from fossil to (bio-) renewable ***energy*** and ***reduce*** GHG ***emissions***. DSM enables a low carbon economy by, for example, increasing solar panel yields and converting crop residue into advanced biofuels. To help us take the right decisions from both an economic and environmental perspective, we use an internal carbon price of EUR50. Business has a responsibility to take care of the world for next generations,' said Feike Sijbesma, Chairman and CEO of Royal DSM.

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QUOTES

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'In Chile we believe in the polluter pays principle. We have enacted environmental taxes on our transportation and power sector. Both taxes will be instrumental in cleaner power, and more efficient cars, which will make our air cleaner, and our climate safer. And the revenue goes to fund our educational reform,' said Chilean President Michelle Bachelet.

'If we really want to send market signals to enable enterprises to make their decisions under optimal economic conditions, which may be optimal ecological conditions, then the issue of carbon prices inevitably arises as it is the most tangible signal that can be sent to all economic actors,' said French President Francois Hollande. 'I am aware of the fears created by this notion of carbon pricing, particularly among the most carbon- intensive industries, which have concerns, and rightly so, over their competitiveness. We must therefore act with resolve. Countries, big countries such as China, are already setting carbon prices. Europe already has a carbon market.'

'Like many nations, Ethiopia has much to gain from early action on climate change - and much to lose if we collectively fail to act. We are rapidly developing a diverse portfolio of renewable ***energy*** resources, have been generating results from large scale programs to rehabilitate landscapes for increased ***agricultural*** productivity, resilience and carbon storage, and have shown the world that carbon funds can be put to productive use cutting ***emissions*** by regenerating forest cover, and improving people's lives and livelihoods. A carbon price can be a win-win, not just for nations like Ethiopia, but for the entire planet, provided that it is coordinated and its incidence does not unduly fall on the poor,' said Ethiopian Prime Minister Hailemariam Desalegn.

'Climate change is real. It threatens food and water security, and contributes to the occurrence of more frequent and more destructive storms. In our part of the world, whole South East Asian coastal communities are at a particular risk. They need to be relocated, given the threats of storm surges, rising sea levels, and even landslides. In our own country, we are indeed hard pressed to build back better our vulnerable communities, to support their way of life, and to provide safer, more sustainable livelihood. We are deeply sympathetic about the plight of island nations, particularly Kiribati and Tuvalu, which are likewise in danger due to worsening environmental conditions. Years of international research show that global ***greenhouse gas*** ***emissions*** are intensifying, consequently contributing to the factors that leave so many at risk. In this vein, developing a price on carbon sets in motion the shift towards cleaner investments for our peoples. The Philippines thus believes that this is a step we must all take part in, lest we collectively suffer the consequences of inaction,' said Philippines President Benigno S. AQUINO III

'The challenge of climate change compels us to rethink and transform the way we produce and consume. The international community must advance towards a low-carbon economy, by setting a price on carbon. In keeping with this goal, Mexico has strengthened its national policy towards green growth. Among other measures, we have established a fossil fuel tax which will foster clean technologies. This way we support international efforts in order to ensure that binding agreements -for both developed and developing countries- will be concluded at the upcoming COP 21, scheduled to be held in Paris,' said Mexican President Enrique Pena Nieto.

'We can't stand idly by as billions of tons of carbon pollution spew into the atmosphere,' said California Governor Edmund G. Brown Jr. 'California has put a price on carbon, but these efforts mean little unless the world's government and business leaders join us - and go even further.'

'Rio de Janeiro, like most of Brazil, is already experiencing the impacts of climate change - and we're already taking action,' said Rio de Janeiro, Brasil Mayor Eduardo Paes. 'We're investing heavily in climate-resilient infrastructure, and we're also committed to slashing carbon ***emissions*** across our economy. Putting a price on carbon will serve to accelerate our efforts to build low-carbon urban prosperity - not just in Rio, but in fast-growing cities around the world.'

'Putting a price on carbon is key for ensuring we have credible, cost-effective action on climate mitigation that will get the world on the road to a zero net ***emissions*** future,' said Angel Gurria, Secretary-General of the OECD.' While COP21 will be important to set the overall framework for the path forward, it is domestic policies such as carbon pricing that will guide us collectively to that future. This Panel will help to provide the high level leadership that we need to generate greater momentum on carbon pricing up to and beyond COP21. The OECD is pleased to be engaged in the Panel and to work with the leaders and partner international organisations to expand the reach and uptake of carbon pricing. With so much positive upside to action, why would we not embrace the transition?

'CalPERS supports a price on carbon because we are a financial institution grounded in economics and focused on the long-term. The market needs a transparent and consistent price that discourages carbon ***emissions***, and stimulates low carbon investment opportunities. The goal is that pricing will catalyze a transition to a lower carbon economy,' said Anne Stausboll, CEO of CalPERS.

'***Energy*** use is the main source of ***greenhouse gas*** ***emissions***. ***Energy*** transition, key to keeping to a 2-degreeC rise in temperature on the planet, has started, and ENGIE wants to lead. In addition to the 2 main pillars of its transition strategy - scaling up renewable and ***energy*** efficiency solutions and services Worldwide -, ENGIE has decided to stop developing any new coal generation project (that has not already been legally engaged). ENGIE has put a price on carbon to drive its investment decisions: generalizing carbon pricing is crucial to drive and boost low carbon ***energy*** transition everywhere and preserve the planet,' said Gerard Mestrallet, CEO of ENGIE.

'Growth and Sustainability are complementary and not conflicting goals, both are necessary to achieve a reasonable quality of life for all. Emerging countries will need to leverage technology to follow a low carbon growth path while developed nations will need to ***reduce*** their carbon footprint,' said Anand Mahindra, Chairman and Managing Director of Mahindra Group of India.

'We need to prevent a global temperature rise above 2 degrees Celsius. A meaningful carbon price will provide an economic incentive to shift from fossil to (bio-) renewable ***energy*** and ***reduce*** GHG ***emissions***. DSM enables a low carbon economy by, for example, increasing solar panel yields and converting crop residue into advanced biofuels. To help us take the right decisions from both an economic and environmental perspective, we use an internal carbon price of EUR50. Business has a responsibility to take care of the world for next generations,' said Feike Sijbesma, Chairman and CEO of Royal DSM.

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**Load-Date:** October 23, 2015

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[***-CWA, dairy industry and AGL CEO sign landmark agreement on CSG land access***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5GWW-MGV1-F0K1-N41B-00000-00&context=1516831)

ENP Newswire

September 11, 2015 Friday

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**Length:** 533 words

**Body**

The pre-eminent rural and regional women's association in NSW, the Country Women's Association, along with the dairy industry group Dairy Connect and AGL ***Energy*** Limited Managing Director and CEO, Andy Vesey, today became the latest signatories to landholder access principles that ensure private ***agricultural*** landholders' wishes are respected in the conduct of coal seam gas drilling operations.

The new signatories join Santos Ltd, the NSW Farmers Association, Cotton Australia and the NSW Irrigators Council who, along with AGL, signed the original 'Agreed Principles of Land Access' in March 2014.

'AGL is delighted that the CWA and Dairy Connect, as representatives of ***agricultural*** businesses, landholders and rural and regional families, have become signatories to this important declaration that formalises a collaborative approach between farmers and their industry associations, along with AGL and Santos,' said Mr Vesey.

'These principles reinforce AGL's longstanding approach to working cooperatively with landholders and the communities where we work and live, in relation to our natural gas drilling operations,' he said.

The principles state:

Any landholder must be allowed to freely express their views on the type of operations that should or should not take place on their land without criticism, pressure, harassment or intimidation. A landholder is at liberty to say 'yes' or 'no' to the conduct of coal seam gas drilling operations (Operations) on their land;

Gas companies confirm that they will respect the landholder's wishes and not enter onto a landholder's property to conduct Operations where that landholder has clearly expressed the view that Operations on their property would be unwelcome and

he parties will uphold the landholder's decision to allow access for Operations and do not support attempts by third party groups to interfere with any agreed Operations. The parties condemn bullying, harassment and intimidation by third party groups and individuals in relation to the agreed Operations.

'AGL understands the importance of successfully working side by side farmers and local communities, as we have done for 14 years at our Camden Gas Project, where our wells can be found co-existing safely with dairies, farms and horse studs,' Mr Vesey said.

The Camden and Gloucester Gas Projects currently have more than 50 landholder agreements in place.

About AGL

AGL is one of Australia's leading integrated ***energy*** companies. It is taking action to responsibly ***reduce*** its ***greenhouse gas*** ***emissions*** while providing secure and affordable ***energy*** to its customers. Drawing on over 175 years of experience, AGL serves its customers throughout eastern Australia with meeting their ***energy*** requirements, including gas, electricity, solar PV and related products and services. AGL has a diverse power generation portfolio including base, peaking and intermediate generation plants, spread across traditional thermal generation as well as renewable sources including hydro, wind, solar, landfill gas and biomass.

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[***-IFC Helps Turkish Glass Maker Trakya Cam Save Energy in Turkey and Bulgaria***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5GJX-VT81-F0K1-N1JD-00000-00&context=1516831)

ENP Newswire

July 31, 2015 Friday

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**Length:** 547 words

**Body**

IFC, a member of the World Bank Group, is providing US$ 75 million in long-term financing to Trakya Cam, Turkey's leading flat glass manufacturer, and its subsidiary, Trakya Glass Bulgaria EAD, to boost its ***energy*** efficiency investments and help mitigate climate change.

IFC will lend US$ 55 million to the company and mobilize the remaining US$ 20 million from its new Managed Co-Lending Portfolio Program (MCPP), which offers institutional investors the ability to passively participate in IFC's future senior loan portfolio.

The project will help Trakya Cam revamp furnaces and waste heat recovery in its plants in Mersin and Polatli in Turkey, and in Trakya Bulgaria, which are expected to save up to US$ 11.2 million per year in direct ***energy*** and cut ***greenhouse gas*** ***emissions*** by over 60,000 tons. The Mersin and Bulgaria plants are expected to ***reduce*** their ***energy*** bills by around 15 percent as a result of the project.

'This project is an opportunity to enhance our long-term partnership with a strategic client in Turkey and help boost regional ***energy*** efficiency investments that can have a direct impact on climate change,' said Carsten Mueller, IFC Regional Industry Head of Manufacturing, Agribusiness and Services in the Europe, Middle East and North Africa region.

IFC has a long-standing relationship with Trakya's parent company, the Sisecam Group, spanning over 40 years. At present, IFC holds equity in the group, and has outstanding loans to several Sisecam glass and chemicals companies in Turkey, Russia, Bulgaria, Georgia and Bosnia Herzegovina.

IFC has been supporting private sector development in Turkey for the past 50 years. With a $ 4.3 billion outstanding portfolio, Turkey is the second largest country in IFC's global portfolio. In line with the Turkey 2012-2016 Country Partnership Strategy, IFC has invested a record $ 2.8 billion in private sector projects in the country.

About IFC

IFC, a member of the World Bank Group, is the largest global development institution focused exclusively on the private sector. Working with private enterprises in about 100 countries, we use our capital, expertise, and influence to help eliminate extreme poverty and boost shared prosperity. In FY14, we provided more than $ 22 billion in financing to improve lives in developing countries and tackle the most urgent challenges of development. For more information, visit [*www.ifc.org/Turkey*](http://www.ifc.org/Turkey)

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[*www.ifc.org/SocialMediaIndex*](http://www.ifc.org/SocialMediaIndex)

About Trakya Cam A.S.

Trakya Cam Sanayii A.S. consists of 17 affiliated companies, 3 joint managing companies and 3 joint ventures. The company was founded in 1978 and started production in 1981. Trakya Cam Sanayii A.S., which is an affiliated company of Turkiye SiSe ve Cam Fabrikalari A.S. group, produces basic glass (flat glass, patterned glass, mirror, laminated glass, coated glass), Automotive glass, encapsulated glass and glasses for other transportation vehicles, solar glasses, home appliance glass, and provides input for construction, automotive, ***energy***, furniture, home appliances and ***agriculture*** sectors. For more information, visit   [*www.trakyacam.com.tr*](http://www.trakyacam.com.tr)

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[***Ukip AM returning from holiday early amid storm over his appointment as head of climate change committee; Around 7,000 signatures on a petition calling on the Assembly to rescind the appointment of Mark Reckless as chair of a committee investigating climate change***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K4P-G9R1-JCJY-G1J8-00000-00&context=1516831)

walesonline.co.uk

July 1, 2016 Friday 9:10 PM GMT

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**Section:** NEWS

**Length:** 587 words

**Byline:** By Martin Shipton

**Body**

UKIP AM Mark Reckless, whose appointment as Chair of the National Assembly committee investigating climate change has led to thousands of people signing a hostile petition, is cutting short a family holiday in France to attend its first meeting.

Around 7,000 signatures are on the petition, calling on the Assembly to rescind Mr Reckless' appointment. Organised by the Wales Green Party, it says: "Ukip AMs don't believe that climate change is being caused by humans and have pledged to axe the £73m budget ring-fenced to fight climate change in Wales.

"It is unacceptable that this be allowed to happen and that this vital issue be placed so low on the priorities of Welsh Government that they are allowing a party that denies its existence to preside over it."

The petition goes on to say: "Across Wales, coastal communities are being left to rising seas, and inland flooding is impacting communities all over Wales. Climate change is the single biggest threat to future generations in Wales and we can't afford the prospect of backtracking on climate action. We the undersigned are calling on the Welsh Assembly to revoke this decision and ensure that the future of Wales is safeguarded from the threat of climate change.

"The Intergovernmental Panel on Climate Change - the world's largest and most highly regarded institution working on climate change - states that science shows with 95% certainty that climate change is man made, and 97% of the world's scientists agree."

When, before the recent Assembly election, Ukip was asked by the Climate Change Commission to endorse a carbon ***reduction*** programme, Mr Reckless, who wrote the party's manifesto, responded with a one-word email saying "No".

In May Ukip made a significant breakthrough in the Assembly election, winning seven regional seats. Mr Reckless was elected in South Wales East.

Committee chairs are allocated to parties in accordance with the number of seats they win, and Ukip was allocated one such role. The party decided to nominate Mr Reckless, a former Tory MP who retained his Rochester and Strood seat in a by-election when he defected to Ukip, but lost it at last year's general election.

In a statement, Mr Reckless said: "I am pleased to have been elected Chair of the Climate Change, Environment and Rural Affairs Committee.

"I am looking forward to working constructively with cross-party colleagues and engaging with stakeholders to ensure the Welsh Government is held to account for its performance across these important policy areas.

"This will, for example, include scrutiny of its performance against statutory ***greenhouse gas*** ***emissions*** ***targets***, the implementation of the Environment (Wales) Act, and developing the best possible support regime for farming in Wales as we transition from the EU's Common ***Agricultural*** Policy regime."

Mr Reckless added that under his chairmanship the committee would take an evidence-based approach to climate change policy, as to all matters within its purview.

He said: "I am looking forward to starting the Committee's work and to meeting stakeholders in relevant sectors to discuss their priorities over the summer."

The AM came in for further criticism when he was absent from two plenary sessions. It emerged that he was on a family holiday in France booked before he became an AM.

It is understood Mr Reckless has informed Assembly officials he will be returning early from France to attend the committee's first meeting on July 7.

A Ukip spokesman said: "As far as I am aware, Mark will be chairing the meeting."

**Load-Date:** July 1, 2016

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[***BBC Radio 4 - 01:22 AM GMT***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J0H-28T1-JBH6-C0JK-00000-00&context=1516831)

TVEyes - BBC Radio 4

February 2, 2016 Tuesday

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**Section:** U.K. NATIONAL RADIO

**Length:** 658 words

**Body**

**Speech to text transcript:**[[2]](#footnote-3)1

There was an extremely well airbrush was an extremely well and housing yes tickley of st austell and lucy's who as acidic the model for citizens this area I wish we had more of the truth are necessary in this industry he were in Punjab from the ***agricultural*** seen with strain lowering the authors of the report in her life really one of the things like a ball misses tries contractors from Jade would create about 200 permanent jobs in our bride but the broader coal seam gas industry employs thousands more or 50 billion dollars has been spent developing reserves in eastern Australia and exports to asia have also begun natural guess the overall is one of the biggest growth industries full stroller present Steve Wright is the director of industry body the ***energy*** resource information centre he says the growing gas sector makes sound environmental cents the best way to give the ***reduction*** in ***greenhouse gas*** ***emissions*** is to taking steps and 1st it is often moving to an actual guess obviously the will be the price of food suddenly in for renewable ***energy*** but that's not something which is achieve all right now on the wrong one of developing nations for the that is just not in the foreseeable future so yes represents good bridging technology and a liquid form makes it more readily transport whatever the power of the despite concerns from campaigners the ***energy*** industry says that every credible scientific study in Australia Britain and the United States confirms the coal seam gas is safe when properly regulated the BBC's Phil Mercer reporting now to China police there have arrested 21 workers China's largest online finance business and was thought to be the country's biggest ever financial frauds firm called easy you bow was suspect is suspected of defrauding almost one million investors after more than 7 and a half billion dollars its offer interest rates of up to 15 % spit investigators discovered the vast majority of investments on offer were fake all the rest were announced on state television along with images of angry protesters firms postings the in also appeared on television admitting his guilt warming we had accumulated all my 10 billion by embezzling money from he's cashing which means we built up a relatively big capital port of Genoa you were chummy chummy a ballet that's you you idiot he's a well let's talk now to my guests once again David kuo you firstly in Singapore David the peer to peer lending sector some has really taken off here in the U.K. in the US as well as seemingly easy way for businesses to raise money for new ventures from individual investors but proudly not very well regulated in China why I mean that is just symptomatic of firm what is going on in Channel the mum on a minute e e it is erm a developing economy and they are so the trying all sorts of new things and obviously you know there are some people out there who were trying some things that maybe little bit on the shady side but I think you know this is really sort of highlights one of the big problems in China and that is that ordinary people find it very difficult to put money into the into a normal bank account in China so consequently they are trying to block look for other means by which you know they can generate a return on their money and when you have something I use to bow out there which is offering interest rates of far in excess of 10 % and it is obviously Ghana were tracked a lot of people but unfortunately some some of these people don't quite know what they're going to put putting the money into and when you put it into a company that is actually generating for 10 % or more who you

**Load-Date:** February 1, 2016

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[***-FIRST SOLAR, AL WATANIA AGRICULTURAL CO. PILOT SOLAR-POWERED IRRIGATION PROJECT IN SAUDI ARABIA***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HY9-SG21-F0K1-N4BF-00000-00&context=1516831)

ENP Newswire

January 27, 2016 Wednesday

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**Length:** 702 words

**Body**

DUBAI, United Arab Emirates - First Solar, Inc. (Nasdaq: FSLR) and the Al Watania ***Agriculture*** Company, one of the largest ***agricultural*** enterprises in the Middle East, today announced the completion of a pilot project to evaluate the use of solar electricity to sustainably power irrigation at a large farm in the Kingdom of Saudi Arabia.

The 684 kilowatt (kW) AC photovoltaic (PV) plant powers groundwater extraction and distribution operations at a 25,688-square meter site on the not-for-profit Al Watania Organic farm, which is located in Saudi Arabia's Al Jouf region. The farm, which covers a total of 319.21 square kilometers, is the Kingdom's largest producer of organic products and currently uses conventional fuel to pump water from 150 bore wells.

The pilot project - jointly funded by First Solar Saudi Arabia and the Al Watania ***Agriculture*** Company - is powered by First Solar's advanced thin film PV modules. The facility produces 1,476 MWh of electricity per year, ***reducing*** ***greenhouse gas*** ***emissions*** by 1,100 tons per year based on national averages, which is equivalent to planting 28,000 trees per year. The solar power plant replaces a diesel generator, which would ordinarily consume 628,000 liters of diesel per year, if run continuously.

'We are proud to partner with First Solar on this exciting new project, which will not only help ***reduce*** our carbon footprint, but will also allow us to explore the potential for solar to reliably support our ***energy*** needs,' said Eng. Ibrahim Aboabat, Al-Watania ***Agriculture*** CEO. 'Al Watania Organic was born from, our founder, Sheikh Sulaiman Abdulaziz Al Rajhi's vision of ***agricultural*** products being sustainably farmed right here in Saudi Arabia. Implementing the use of solar electricity will help further that vision and will allow us to move towards our goal of becoming the region's first truly sustainable large-scale ***agricultural*** operation.'

The advanced thin film modules deployed at the site are ideally suited to local environmental conditions, offering a combination of a superior temperature coefficient and spectral performance, allowing for optimum performance in weather like that of Saudi Arabia. The installed PV generator will pump over 3,1 million cubic meters of water per year, unaided by conventional generators.

'This project is an excellent example of the scalability and flexibility that solar PV offers. Easy-to-deploy and able to address very specific needs, innovative solar-powered solutions can address a wide range of ***energy*** challenges, as this pilot facility demonstrates,' said Dr. Raed Bkayrat, Vice President of Business for First Solar in the Middle East. 'Sunlight is the region's most abundant ***energy*** resource and the Al Watania ***Agriculture*** Company should be applauded for having the vision to sustainably harness affordable and reliable solar electricity to address its ***energy*** needs.'

With over 10,000MW installed worldwide, First Solar is a global leader in providing comprehensive PV solar systems powered by its advanced thin film modules. In the Middle East, the company is the leading PV solutions provider, with a projected installed capacity of at least 270MW across the region by 2017. First Solar built the 13MW first phase of the Mohammed bin Rashid Al Maktoum Solar Park in Dubai and is currently constructing the 52.5MW Shams Ma'an solar plant in Jordan. Additionally, First Solar modules have been selected to power the 200MWAC second phase of the Mohammed bin Rashid Al Maktoum Solar Park in Dubai. The company established a commercial presence in Saudi Arabia, First Solar Saudi Arabia, in 2015.

About First Solar, Inc.

First Solar is a leading global provider of comprehensive photovoltaic (PV) solar systems which use its advanced module and system technology. The company's integrated power plant solutions deliver an economically attractive alternative to fossil-fuel electricity generation today. From raw material sourcing through end-of-life module recycling, First Solar's renewable ***energy*** systems protect and enhance the environment.

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[***Leaked figures show spike in palm oil use for biodiesel in Europe; Steep rise between 2010 and 2014 shows link between EU's renewable energy mandate and deforestation in south-east Asia, say campaigners***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JX5-22R1-F021-61D1-00000-00&context=1516831)

The Guardian

June 1, 2016 Wednesday 11:12 AM GMT

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**Section:** ENVIRONMENT

**Length:** 663 words

**Byline:** Arthur Neslen

**Body**

Leaked trade industry figures show a five-fold increase in the use of palm oil for biodiesel in Europe between 2010 and 2014, providing new evidence of links between deforestation in southeast Asia and the EU's renewable ***energy*** mandate.

The leaked figures, which the Guardian has seen, show that 45% of palm oil used in Europe in 2014 went to biodiesel, up from 8% in 2010.

***Greenhouse gas*** ***emissions*** from biodiesel are more than three times higher than those from conventional diesel engines when indirect effects are considered, according to recent research by the European commission.

Campaigners say the leaked figures from the Fediol trade association provide further evidence that an EU ***target*** for sourcing 10% of Europe's transport to renewables by 2020 is fuelling global warming.

Jos Dings, the director of green campaign group Transport & Environment (T&E), which published the leak, said: "We now know why the industry is withholding these numbers. They show the ugly truth of Europe's biofuel policy. It drives tropical deforestation, increases transport ***emissions***, does nothing to help European farmers and does not improve our ***energy*** security."

T&E calculates that 3.5bn litres of palm oil are now arriving in Europe annually because of a 34% spike in imports for biodiesel since 2010. This would be enough to fill Wembley stadium with biodiesel three times over every day.

"As if Dieselgate [ VW cheating at ***emissions*** tests ] was not bad enough, we now have a Biodieselgate on top," Dings said.

The vast majority of the world's palm oil comes from Malaysia and Indonesia. Clearances for palm oil plantations there are thought to be responsible for many of the fires which incinerated an estimated 18.5m hectares of Indonesia's rainforest between 2001 and 2014.

In 2015, the devastation reached record levels, releasing 1.62bn metric tonnes of CO2 and nudging Indonesia above Russia, as the world's fourth largest emitter of ***greenhouse gases***.

If the peatland forests were allowed to regrow, they would resequester much of the released carbon. But conversion of the land for palm oil plantations requires drainage and clearances that release massive amounts of carbon dioxide back into the atmosphere.

Fediol did not immediately respond to requests for comment but the European Biodiesel Board (EBB) said that the leaked numbers differed from their internal count.

Raffaello Garofalo, the board's secretary-general told the Guardian: "The figures we have are substantially lower than that. We would put between 10-15% [of palm oil] globally for biodiesel consumption, based on ***agricultural*** sources."

The EBB declined to share its figures for Europe based on palm oil sources, although Garofalo said that biodiesel manufactured that way "can be a little bit more problematic".

An apparent anomaly in the statistics showing a rise in the palm oil composition of Europe's biodiesel from the lesser figures of 6% to 31% over the same period illustrated that "T&E get their figures from the basket, not from science," Garofalo said.

The use of domestic rapeseed in Europe's biodiesel blends, general expansion of the biodiesel market, and larger relative volume of biodiesel explain the difference between the two figures, T&E says.

Tim Searchinger, a Princeton University scholar, argued that the leaked numbers were likely too conservative, as palm oil is widely used to displace vegetable oil for use in biodiesel production.

"The new data confirms the warnings of those who were critical of the EU's biofuels mandate," he told the Guardian. "Any pretence that the main consequence of the EU biofuels policy had not been the peat drainage and deforestation of south-east Asia is now unmasked."

A European commission spokeswoman declined to comment on the leak. She said: "The commission will present proposals to revise the post-2020 bioenergy framework later this year."

The EU currently has a cap of 7% for first generation biofuels in its 10% mandate. Most of this comes from biodiesel.

**Load-Date:** June 1, 2016

**End of Document**



[***Leaked figures show spike in palm oil use for biodiesel in Europe; Steep rise between 2010 and 2014 shows link between EU's renewable energy mandate and deforestation in south-east Asia, say campainers***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JX5-22R1-F021-61D0-00000-00&context=1516831)

The Guardian

June 1, 2016 Wednesday 10:15 AM GMT

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**Section:** ENVIRONMENT

**Length:** 663 words

**Byline:** Arthur Neslen

**Body**

Leaked trade industry figures show a five-fold increase in the use of palm oil for biodiesel in Europe between 2010 and 2014, providing new evidence of links between deforestation in southeast Asia and the EU's renewable ***energy*** mandate.

The leaked figures, which the Guardian has seen, show that 45% of palm oil used in Europe in 2014 went to biodiesel, up from 8% in 2010.

***Greenhouse gas*** ***emissions*** from biodiesel are more than three times higher than those from conventional diesel engines when indirect effects are considered, according to recent research by the European commission.

Campaigners say the leaked figures from the Fediol trade association provide further evidence that an EU ***target*** for sourcing 10% of Europe's transport to renewables by 2020 is fuelling global warming.

Jos Dings, the director of green campaign group Transport & Environment (T&E), which published the leak, said: "We now know why the industry is withholding these numbers. They show the ugly truth of Europe's biofuel policy. It drives tropical deforestation, increases transport ***emissions***, does nothing to help European farmers and does not improve our ***energy*** security."

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**Load-Date:** June 1, 2016

**End of Document**



[***Ilona Amos: It's time to reduce our red meat consumption***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H4V-KYK1-JDPF-N3D0-00000-00&context=1516831)

Scotsman

October 14, 2015 Wednesday

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**Length:** 588 words

**Body**

Cutting down on red meat could help save the planet, writes Ilona Amos

I like a juicy steak or a bacon sarnie as much as the next person. Yes, I know, medical advice recommends not overdoing it on the meat, especially the red kind, and instead heaping your plate with all things green and leafy. I do try, though as a Highlander it would be a good deal easier if tatties could be included in the recommended five-a-day.

But a host of recent studies is making the seemingly insatiable appetite for flesh much harder to swallow. A new Scottish study reveals that meat eaters are devouring ever-increasing swathes of our dear green place at an alarming rate.

Global population growth has meant larger and larger areas being turned over to ***agriculture*** in recent decades. However, research by Dr Peter Alexander, of the University of Edinburgh and the Scottish Rural College, shows rising demand for meat and dairy products is now the key driver of changes in land use, particularly in emerging economies such as China.

Their analysis of land use around the world shows dietary changes have become the most important factor in the expanding acreage given over to ***agriculture***.

The international science community has stated that climate change is "irrefutable", and we are already witnessing the evidence of extreme weather conditions in many countries. At the same time, clear links exist between dining on red and processed meat and a raised risk of heart disease and cancer.

The fact that experts say the livestock industry produces more climate-warming ***greenhouse gas*** ***emissions*** worldwide than all cars, planes, trains and ships combined should be enough to make that burger stick in your throat.

So it's not just our own health we are gambling with when we make our menu choices. The very survival of our world may depend on the food we put on our plates.

An entirely plant-based diet has been shown to have the lowest carbon impact, with vegetarian, including dairy and eggs, coming a close second.

Pescatarianism is the next best thing, though concerns remain about fish stocks and the impacts of intensive aquaculture.

Since it is probably unreasonable to expect all fellow earthlings to turn vegan overnight, perhaps there are other, more palatable steps we could all take to lessen the damage we are inflicting on the environment - and possibly at the same time helping safeguard food supplies into the future.

Maybe we could switch to the new "climatarian" diet, which has been designed to help meat eaters cut their carbon footprint. Its inventors also claim it could help tackle world hunger.

Devised by the social network Climates, the eating plan recommends moving to foods that require less intensive production, while also implementing measures to cut food waste and improving distribution.

Beef and lamb have about five times more environmental impact than pork and poultry because ruminant animals - cows, sheep, goats and deer - need more ***energy***-intensive feed, use more land and produce more manure than pigs or chickens. Food ferments in their four stomach digestive system, so they burp methane, a potent ***greenhouse gas***. Raising animals also uses more water than growing arable crops.

According to Climates, replacing red meat with pork and poultry in everyday meals can cut a tonne of carbon dioxide from your annual carbon footprint - equivalent to driving 3,500 miles a year.

In the meantime we can all do ourselves and the planet a favour by taking a leaf out of our grandparents' books and ration our carnivorous meals.

**Load-Date:** October 14, 2015

**End of Document**



[***IRELAND'S CHANGING CLIMATE***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HF0-21R1-JBVM-Y4T9-00000-00&context=1516831)

Irish Independent

November 21, 2015 Saturday

Edition 1, National Edition

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**Section:** NEWS; Pg. 12,13

**Length:** 300 words

**Body**

More than 150 years after Irish scientist John Tyndall first identified the role that ***greenhouse gases*** play in maintaining the earth's atmosphere, we face a climate crisis of our own making. A solution may lie in a UN summit in Paris later this month, where world leaders will be under pressure to strike a deal for change. But what impact will it have on us? Can we be 'greener' while ***reducing*** household bills, or is life about to get much more expensive? Over the next week, we explore the issues involved, and highlight the opportunities which may be found in a rapidly changing world.

ALTHOUGH the weather station in Rosslare, Co Wexford, was closed in 2007, data recorded over the previous 50 years can be used to produce longterm averages and allow the question to be answered: is it really sunnier in the south east? The data shows that the amount of rain falling has remained unchanged, with 940mm falling every year. There has been no change in the number of rainy days, with rain falling on just 185 days a year, the lowest number of any station across the country.

The average temperature stands at 11.1C, making it the second warmest place on average - but this has risen 1C, the highest increase anywhere.

But crucially, Rosslare has the highest average number of sunshine hours per day at 4.5 hours - 11pc more than second place Dublin, and 24pc more than middle-of-the-road Cork Airport.

All of the data therefore suggests that the south-east is, in fact, the sunniest place in the country.

NEXT WEEK...We examine Government plans to ***reduce*** ***emissions*** from the ***agriculture*** sector, and see how one local authority is saving thousands of euro a year by using renewable ***energy***. We also look at the cost of building a passive home, and outline the risks to infrastructure posed by climate change.

**Load-Date:** November 21, 2015

**End of Document**



[***Halma PLC Final Results -10-***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K12-TDP1-JCXB-250D-00000-00&context=1516831)

London Stock Exchange Aggregated Regulatory News Service (ARNS)

June 14, 2016 Tuesday 7:00 AM GMT

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**Length:** 1563 words

**Body**

Chuck Dubois, Sector Chief Executive, Environmental

& Analysis

The Environmental & Analysis sector achieved record

revenue and profit.

There was strong growth in emerging markets, in

particular China and India. Our water network

monitoring companies benefited from the new five-year

investment cycle in the UK water industry. Renewed

international emphasis on climate change is strengthening

the position of our environmental applications.

The contribution to growth from new products continues

to rise, specifically for our photonics businesses,

and places us in a strong position for sustained

growth in the future.

Market trends and growth drivers

Our products protect and analyse the air we breathe,

the water we drink and the food we eat. They enable

the development and manufacture of new products

that improve our health and well-being. The Environmental

& Analysis sector long-term growth is sustained

by four key drivers:

\* increasing demand for life-critical resources such as

***energy*** and water

\* increasing environmental monitoring and regulations

\* scientific advances transferring into new industries

\* worldwide population ageing and increasing standards

of living

According to the United Nations, by 2030 demand

for water may be 40% higher than supply. By 2050

water shortages are expected to affect over 50%

of the global population due to increasing water

usage by ***agriculture***, manufacturing, domestic

usage and ***energy*** production. ***Energy*** production

is water-intensive and, with the world's population

expected to reach 8 billion by 2025, an ever stronger

emphasis is placed on ***energy*** management and efficiency.

Our diversification in ***energy*** monitoring and building

management systems, and continued efforts in water

conservation technologies capture growth from

these trends.

Today 1.8 billion people drink faecally-contaminated

water and an even greater number drink water that

is unsanitary. Our water testing kits help protect

an increasing number of people in remote areas.

The UN Climate Change Conference in Paris in 2015

reiterated the efforts to limit global warming,

and reach carbon neutrality in the second part

of the 21st century. The EU is ***targeting*** a 40%

***emission*** ***reduction*** by 2030 compared to 1990 levels.

This will multiply the opportunities for our environmental

monitoring and analysis products.

Rapid urbanisation particularly affects air pollution.

An estimated 80% of global ***greenhouse gas*** ***emissions***

are derived from cities, where 50% of the population

being monitored is exposed to air pollution that

is at least 2.5 times higher than the WHO recommended

levels. Our mass flow meters are used to calibrate

pollution monitoring equipment.

In China only 9% of the 190 largest cities meet

the National Ambient Air Quality Standards. Our

new gas conditioning equipment is suitable to

measure the finest particles which are believed

to be the greatest risk to health.

R&D investment continues to generate opportunities

in adjacent and new markets. Increasing demand

for calibration and quality control sensors is

a strong driver for our technologies in food processing,

pharmaceuticals and ***agriculture***. Increasing adoption

of cloud computing and extension of digital communications

into new areas boosts demand for our technologies

that enhance data communication.

Rising concerns about food safety are creating

opportunities in both developed and developing

economies.

By 2030, 150 million more city dwellers will be

65 or older, increasing the share of the population

at higher risk from contamination of food and

water.

Geographic trends

The Environmental & Analysis sector sells into

diverse market niches. The modest growth rates

of the developed economies are being exceeded

by, and at a more accelerated pace in, emerging

economies.

Sales in emerging markets continue to grow strongly,

reaching 30% of sector revenue. Developing world

economic growth is driving profound transformations,

raising expectations for cleaner air, purer water

and safer food. China's environmental concerns

are driving strong sales in environmental monitoring

water testing, building on expanded R&D and manufacturing.

Food contamination scandals throughout the world

are rising. Governments in emerging markets are

tightening food quality regulations and the Food

Safety Modernization Act is beginning to have

an impact in the USA. Opportunities for our spectroscopy

applications in the food safety market are appearing

globally.

India is a key market for our light measurement

equipment, where our technology is used to calibrate

scientific instruments for remote sensing. We

expect this to continue to grow in the coming

year as governmental spending grows.

Our water network monitoring companies are benefiting

from the new five-year investment cycle in the

UK water industry, while diversification into

***energy*** distribution monitoring is a growing niche

for sales of their sensors and data loggers.

Demand for water quality testing by NGOs, particularly

in Africa and South America, continues to grow.

Implementation of water safety regulations in

China is also fuelling growth for our water quality

test kits.

Strategy

Environmental & Analysis growth strategy centres

on market-led new product development, geographic

expansion and collaboration to increase market

reach.

R&D is focused on applications with long-term

drivers and defensible positions. Our businesses

have increased marketing spend to ensure that

new products fulfil specific market needs.

We continue to invest in hiring high calibre people

in developing regions. As the sector expands in

emerging markets, products to meet regional customer

need and local manufacture continues to increase.

Our businesses share knowledge and have a strong

pipeline of joint development projects. Several

businesses re-sell other sector companies' products,

and there are many active joint sales and marketing

projects.

Acquisitions are integral to our sector growth

strategy and we expect this to be a key part of

our growth story in the future.

Performance

The Environmental & Analysis sector grew revenue

by 15% to GBP189m (2015: GBP164m) and profit(1)

by 26% to GBP34m (2015: GBP27m). At constant currency,

organic revenue growth was 11% and organic profit

growth was 21%. Return on Sales improved to 18.3%

(2015: 16.7%) and was back above Group ***target***.

This was a strong year for our photonics businesses.

R&D projects created opportunities in existing

and new markets, geographies and applications.

As increasing numbers of industrial processes

need more sophisticated measurement devices, we

have been able to capture substantial growth.

China provided substantial growth for our water

business, as we developed test kits specific to

new environmental regulations. The return of business

in the Middle East, along with the start of the

new AMP five-year capital investment cycle in

the UK, drove growth at our water monitoring businesses.

Continuing emerging market growth created a favourable

environment for rising sales at our gas conditioning

businesses where new products penetrated growth

markets in China and India and increased developed

region revenue.

Outlook

Externally, global population growth, population

ageing and increasing standards of living are

driving demand for basic ***energy*** resources, cleaner

air, safer water and food and healthcare spending.

Our products and companies are well positioned

to continue to take advantage of these long-term

growth drivers.

We are strengthening our acquisition pipeline,

and we expect to add complementary businesses

in the coming years.

(1) See note 2 to the Results.

Principal Risks and Uncertainties

Halma's principal risks and uncertainties are detailed

below and are supported by the robust risk management

and internal control systems and procedures noted

in the Annual Report and Accounts 2016.

Risk description Potential Mitigation

impact

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Globalisation \* Weakening of financial, tax, audit and legal control \* Control is exercised locally in accordance with the

The global and divergence from overall Group strategy in remote Group's policy of autonomous management. We seek to

interconnectedness operations, leading to businesses taking on more employ local high-quality experts.

of operations risks than intended or unexpected financial outcomes.

poses wide-ranging

challenges \* The increasing geographic diversity of operating

across the \* Failure to comply with local laws and regulations in personnel emphasises the importance the Group places

Group especially unfamiliar territories, leading to reputational on local knowledge and experience.

where businesses issues and legal or regulatory disputes.

manage operational

matters via \* The Group's acquisition model ensures retention of

**Load-Date:** June 14, 2016

**End of Document**



[***-Evonik adds L-valine to its amino acid portfolio for animal nutrition***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5K15-HFV1-JD3Y-Y12N-00000-00&context=1516831)

ENP Newswire

June 15, 2016 Wednesday

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**Length:** 583 words

**Body**

Essen. Evonik has launched L-valine (ValAMINO), the fifth essential amino acid for animal nutrition in the company's portfolio. It will make swine and poultry feed more efficient and sustainable.

L-valine is needed for protein biosynthesis in the organism of animals and forms part of all important proteins. The low valine content of plant-based raw feed materials frequently limits the utilization of other protein building blocks. Valine is the fifth limiting amino acid in pigs, and the fourth limiting in poultry.

The addition of ValAMINO, along with MetAMINO (DL-methionine), Biolys (L-lysine), ThrAMINO (L-threonine) and TrypAMINO (L-tryptophan), allows to further ***reduce*** crude protein content of feed without any loss of animal growth performance. This results in lower feed costs and conserves natural resources in ***agricultural*** feed production, which in turn ***reduces*** land use, ***greenhouse gas*** ***emissions***, and potential eutrophication and acidification. In this manner, ***targeted*** amino acid supplementation contributes to the sustainable supply of animal protein for a growing world population.

ValAMINO is produced by fermentation. The product has been registered Europe-wide and the market launch has started. 'We are now able to offer customers the five key essential amino acids for animal nutrition from a single source-along with our wide range of services,' noted Dr. Emmanuel Auer, head of the Animal Nutrition Business Line at Evonik. 'This is further proof of our leadership in this field.'

Evonik has over sixty years of experience in the manufacture of essential amino acids and provides solutions for efficient and sustainable animal nutrition to customers in over one hundred countries. Evonik strives to make an even greater contribution to the efficiency of animal feed by including innovative feed additives beyond amino acids in its portfolio in order to create additional value for its customers. Evonik's products and services in the area of animal nutrition play a key role in the worldwide production of healthy and affordable food, while preserving natural resources and ***reducing*** the ecological footprint.

About Evonik

Evonik, the creative industrial group from Germany, is one of the world leaders in specialty chemicals, operating in the Nutrition & Care, Resource Efficiency and Performance Materials segments. The company benefits from its innovative prowess and integrated technology platforms. In 2015 more than 33,000 employees were employed at Evonik.

About Nutrition & Care

The Nutrition & Care segment is led by Evonik Nutrition & Care GmbH and contributes to fulfilling basic human needs. That includes applications for everyday consumer goods as well as animal nutrition and health care. This segment employed about 7,000 employees in 2015.

Disclaimer

In so far as forecasts or expectations are expressed in this press release or where our statements concern the future, these forecasts, expectations or statements may involve known or unknown risks and uncertainties. Actual results or developments may vary, depending on changes in the operating environment. Neither Evonik Industries AG nor its group companies assume an obligation to update the forecasts, expectations or statements contained in this release.

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**Load-Date:** June 15, 2016

**End of Document**



[***Politicians are not bothered about climate change because we are not***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HG3-4H01-JCW9-20R8-00000-00&context=1516831)

Irish Examiner

November 26, 2015 Thursday

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**Section:** OPINION

**Length:** 1092 words

**Body**

The publicity for the Peoples Climate March this Sunday, at which hundreds of thousands of people in 150 countries will protest for a positive outcome to the UN Climate Summit in Paris, positions the people against the politicians .

We can t wait for our leaders to solve the problem. Unless they feel serious public pressure, they ll never go far enough or fast enough , wrote Ricken Patel, of lobby group, Avaaz, in The Guardian. Revolutions start with people, not politicians. Except the problem is that politicians are people. In democracies, they are the people elected by the people. Politicians haven t prioritised keeping the increase in temperature, which is driven by ***greenhouse gas*** ***emissions***, to two degrees above 1990 levels because we haven t. We, the people.

Nowhere is that more true than in our little democracy, right here. We won the award of Fossil of the Day at Lima s UN Climate Conference, because we hadn t contributed to the fund to help developing countries adapt to climate change. Now, we have pledged 50 US cents per person, as against an EU norm of 10 US dollars per person.

Our government has received very little flak for having promised a climate law for four years, before enacting one that has no meaningful ***emissions*** ***targets***. A similar performance in any other area of legislative change would have brought a deluge of criticism.

Climate change never comes up on the doors . We leave it to a few hundred earnest types in cycling helmets. We leave it to these people to march on Sunday, in Dublin and Cork and Kildare and Belfast and Galway, to tell the politicians they must act on climate. It is hardly surprising that the politicians ignore them.

The truth is that politicians are, on average, more concerned about climate change than your regular citizen. That s because they get more exposure to news and have more time to think about it. They are less worried about keeping a roof over their heads, and their children in school, than many of us. They can afford to be concerned.

They would show their concern if we did. But we don t. I never tire of quoting Bertie Ahern s 2006 response to Trevor Sargent, in the Dail, when he was questioned about his lack of action on climate change: I m not responsible for the planet, as the deputy is aware. I usually quote it when I m trying to point out the uselessness of politicians as regards this issue.

But I m not being honest, really. Most people think the same way as Bertie. In fact, the word from an FF insider is that Bertie got with the climate programme latterly, following a chat with Bill Clinton. Most people never get that opportunity.

They don t want the world as we know it to end. They don t want 100m more people to be pushed into poverty by 2030, as the World Bank has recently warned. They don t want 100m more people to get malaria. They don t want crop yields to be down 30% in the vastly more populated world of 2080. They sure as hell don t want sub-Saharan Africa and Oceania escaping climate devastation and coming here to sample the Irish weather.

But neither do they want to give up one single car trip, one single plane trip, one single steak dinner. Particularly not if their livelihood depends on selling cars, plane trips or steaks.

Ah, steak! My favourite dinner, with fried onions and a few chips! But we all know that most of the meat would be off the menu if we were eating in a climate-friendly way, don t we?

This week s Irish Examiner reported a new Chatham House study, which argues that if the world ***reduced*** its meat-eating to healthy levels, ***emissions*** could similarly be ***reduced*** by the quarter necessary for a bearable level of temperature rise.

We ve all heard the arguments, again and again, about how it would help feed the world if we didn t feed human food to animals, but ate the grain neat. Chatham House says we do care, but we need governments to promote healthy, sustainable eating habits by taxing meat and encouraging us to eat plants. Can you imagine an Irish politician proposing such a plan? Or proposing a plan to stop over-stocking of the land to make milk powder for Chinese babies, which brings with it, apart from the methane, a deadly trail of ***emissions***, from transport to wrapping to sterilising to medical care? He or she would be shot down and sent to Outer Volta.

Our current government has spent most of the ***energy*** it devotes to this issue wriggling out of EU commitments to ***reduce*** ***emissions*** from ***agriculture***, so we will hardly have to beat the 2020 ***target*** we would miss anyway. And we love them for it. We won t elect anyone who doesn t stand up for what we believe to be our short-term economic interests. We elect governments to keep the turbine out of my back yard, and keep my job in the sausage-stuffing factory, and keep Little Jimmy plugging away at whatever the hell he is doing in the IFSC. It s a process of natural selection that keeps as many environmentalists as possible out of the Dail. The planet can take its chances.

The hard truth is that unless we, the people who live in democracies and who control so much of the world s fire-power, change the questions we ask politicians then there is no hope for the planet. It s not just questions about carbon particles we have to ask, either. It s questions about our useless public transport, our wasteful planning, our continued industrial use of filthy peat and coal, our conservation-free water charge, our wholly undirected property tax, our inability to value work that doesn t look like growth when viewed through the narrow lens of GDP.

I believe there are many politicians, and would-be politicians, who could answer those questions well if we bothered to ask them. But we don t. We are the people who have to change if we are to save human life. There is no better place to start that conversation than in Paris, where our democracy has recently faced such a challenge.

There will be no climate march in Paris on Sunday, due to security concerns, but there are marches all over the world, in cities from New Delhi to Ho Chi Minh City to Hong Kong to Beirut to Sydney to Rome to London to Marseille to Budapest to Helsinki, and all points in between.

Please march on Sunday, but when you ve given the politicians a wake-up call, remember not to vote for the ones who can t hear it.

Peoples Climate Marches, Sunday, November 29: Dublin, Custom House Quay, 2pm; Cork City Library, 2pm; Eyre Square, Galway, 1pm; Writers Square, Belfast, 2pm; Broadlees Road, Ballymore Eustace, 2pm. International information from [*www.350.orgkpollution*](http://www.350.orgkpollution)

**Load-Date:** November 26, 2015

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[***World Bank Launches Action Plan To Help Nations Meet Urgent Climate Impacts***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JGP-D5B1-DXCW-C1VY-00000-00&context=1516831)

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April 8, 2016 Friday 4:32 PM GMT

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**Length:** 398 words

**Body**

WASHINGTON (dpa-AFX) - The World Bank Group has launched a new Climate Change Action Plan, which is designed to help countries meet their Paris COP21 pledges and manage increasing climate impacts. The World Bank lays out concrete actions and set 2020 as the ***target*** for achieving this in high-impact areas, including clean ***energy***, green transport, climate-smart ***agriculture***, urban resilience, as well as in mobilizing the private sector to expand climate investments in developing countries. The plan comes just two weeks ahead of the official signing of the landmark Paris Agreement in New York.

A key focus is boosting the resilience of people and communities to climate shocks, with new efforts to expand early warning systems, climate-smart social protection, and urban and coastal resilience. Launching the Plan Friday, World Bank Group President Jim Yong Kim said 'Developing countries want our help to implement their national climate plans and we'll do all we can to help them.' Under the Plan, the World Bank plans to double its current contributions to global renewable ***energy*** capacity by adding 30 gigawatts of capacity, and to mobilize $25 billion in private financing for clean ***energy*** by 2020. The Bank Group will also quadruple funding for climate-resilient transport, integrate climate into urban planning through the Global Platform for Sustainable Cities, and boost assistance for sustainable forest and fisheries management. To accelerate private sector investment, the World Bank Group will work with regulators, create 'green' banking champions and continue to promote development of the green bond market. The International Finance Corporation (IFC), a member of the World Bank Group and the largest global development institution focused exclusively on the private sector in developing countries, aims to increase its climate investments to a goal of $3.5 billion a year, and will lead on leveraging an additional $13 billion a year in private sector financing by 2020. Climate change poses an enormous challenge to bring down global ***greenhouse gas*** ***emissions*** to a level that make a sustainable future possible. It has been estimated that floods, droughts, sea-level rise, threats to water and food security and the frequency of natural disasters will intensify, threatening to push 100 million more people into poverty in the next 15 years alone.

**Load-Date:** April 8, 2016

**End of Document**



[***Food security atforefront of climate treaty***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JP5-XG61-JB14-73JJ-00000-00&context=1516831)

World Poultry (English)

April 26, 2016

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**Section:** ARTICLES; Vol. 32; No. 3

**Length:** 1050 words

**Byline:** Dick van Doorn

**Highlight:** At the end of last year close to 200 participants at the Climate Conference 2015 in Paris voted for a new binding climate agreement. In this agreement food production and security became an integral part of this new global climate treaty, which traditionally revolved around CO2 ***emissions***.

**Body**

By Dick van Doorn

Farmers and producer organisations across the board hailed the fact that food production and security finally made it into the text of the climate treaty. Koert Verkerk, Policy Advisor International Affairs of the Dutch Federation of ***Agriculture*** and Horticulture based in Brussels and the permanent representative of this organisation to Copa Cogeca, the European farmers and Cooperatives organisation, see it as a victory. Colleagues of Verkerk have co-written part of the new agreement in the various negotiating teams. That food production and security have become part of the climate convention is, according to him, a piece of consciousness to say the least. “One does not exclude the other. ***Agriculture*** and horticulture are polluters of the environment, especially the livestock sector. But, both the United Nations (UN), the FAO as the scientific community will see these also as part of the solution to prevent climate change.” With a focus on sustainable poultry farming, ***emissions*** can be ***reduced***. For example, a poultry house can be fitted with an air scrubber to prevent NH3 entering the atmosphere, in breeding programmes there is a lot to be gained in terms of efficiency and manure can be processed into useful products.

**Food security at centre stage**

Separate from the Climate Treaty the UN has drawn up about 30 so-called ‘Sustainable Development Goals’. Verkerk: “Point two of these 30 goals is ending extreme hunger by 2030. This is now also evident in the climate agreement itself.” Basically this means, according to the lobbyist, that preventing climate change may never be at the expense of food production. Suppose a country or association of countries put heavy demands on ***agriculture*** and this is too much at the expense of food production, then these requirements must be relaxed.

Food production and security has since this last climate treaty clearly been put forward as a priority.” Not only is the European Union aware of this, also other countries have adapted their legislation accordingly. Examples are the Food Safety Modernization Act (FSMA) in the USA and the recently published amended food safety law in China to improve food safety. This can mean that climate measures may not lead to a decrease in food security in for example the developed world, but it also means that climate measures must be taken in order to prevent flooding of ***agricultural*** land in for example Bangladesh.

**Focus on achieving *targets***

On the other hand, both the UN and the climate treaty aims at making ***agriculture*** as sustainable as possible. Verkerk: “According to the latest climate agreement the so-called developed countries worldwide must donate at least €100 billion per year to the climate fund. All resulting projects are accompanied by the UN.” How much the livestock sectors will get exactly, is not yet clear, but it is clear that it will have to be used for sustainable farming methods. Verkerk expects that the climate agreement will be translated in future legislation of the 198 countries that signed the agreement. Also in US legislation and the common ***agricultural*** policy (CAP) of the EU. This is providing an opportunity according to Verkerk: “To ensure more sustainable food production and security one needs not so much tougher, but smarter legislation that points the livestock industry in the right direction.”

Last year during Expo Milano 2015 in Italy the core theme was ‘Feeding the Planet, ***Energy*** for Life’. One of the topics was that poultry meat combines the advantages of being an affordable and accessible source of protein with low fat content and low carbon ***emissions***. Recent FAO figures show that the poultry sector, which accounts for 35% of global livestock production, contributes only 7% to the total livestock ***emissions***. This makes poultry one of the most sustainable meat sectors in the world according to Verkerk.

**Future reflections**

Maja Slingerland, on behalf of the Centre for Sustainable Development and Food Security of Wageningen University, finds it gratifying news that food security is now part of the climate treaty of Paris. If we focus on livestock, she stresses that animal manure makes an important contribution to ***greenhouse gas*** ***emissions***. The manure management of free-range chickens is difficult. For poultry in stables careful manure management is possible, including the capture of ***greenhouse gases***. “Anaerobic digestion of manure may be part of the solution and can also deliver bioenergy, so that double climate advantage can be achieved. Within Europe, and preferably also in the USA, Canada, New Zealand and the like, minimum guidelines could be agreed upon so that climate-friendly poultry farmers experience no competitive disadvantage.”

**Food vs feed discussion**

Another concern about the climate aspect of poultry farming is feed production. At some point there would be competition with the production of crops for human consumption. “From the food security argument, less climate change related requirements could be demanded for food crops as suggested above by Verkerk, for example to avoid food becoming too expensive or lower food production in developing countries.” However when for the same crops climate change related restrictions would not be relaxed when it is used as poultry feed, this would lead to the need for segregated supply chains which is expensive and difficult to control especially when the destination of the harvested produce is only decided after production.

Higher climate-related requirements may lead to more creativity in housing and food rations of poultry, which require less fossil fuels.  Slingerland: “Nevertheless, besides climate change goals, other aspects should be kept in mind. A high feed conversion (a lot of meat or egg per kg feed) is for example the most climate friendly, but rightly inhibited by considerations of animal welfare. Poultry farming in developing countries is often not yet industrialised. Additional climate demands on their current poultry farming can, if they are accompanied by high investment, drive up the prices of poultry products making these unattainable for poor people and thus threaten food security.” On the other hand, requirements from the climate agenda may bring the poultry sector in developing countries on a different development path.

**Graphic**

Production of meat has a large environmental footprint, but food security and preventing extreme hunger in the world has to be achieved at all costs.

Of all animal protein production, poultry meat and eggs have the smallest environmental impact.

At some point there will be competition between crops for food or for feed.

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[***Food security at forefront of climate treaty***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JF4-WGD1-DXG5-Y1R6-00000-00&context=1516831)

World Poultry (English)

March 22, 2016

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**Section:** HOME; No. 3

**Length:** 1107 words

**Byline:** Dick van Doorn

**Highlight:** The carbon footprint of the poultry production industry has taken a back seat to preventing extreme hunger in the most recent climate agreement. But what are the implications for the industry.

**Body**

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{{photo,3}}

**No market disadvantages for climate-friendly poultry farmers**

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[***Analysis UN climate deal***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JRF-60P1-JBPJ-71CG-00000-00&context=1516831)

New Scientist

April 23, 2016

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**Section:** NEWS;; No. 1299

**Length:** 1397 words

**Byline:** Michael Le Page

**Body**

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THIS week, world leaders will go to the UN headquarters in New York to sign the climate change agreement they thrashed out in Paris at the end of last year. The ceremony is largely symbolic: the deal doesn't formally come into effect until 2020. What happens in the meantime is crucial.

In December countries agreed to limit global warming to less than 2 °C above pre-industrial temperatures, the ceiling deemed necessary to avoid the most serious consequences of warming. Yet what countries have proposed to do as part of the Paris deal will at best limit warming to around 3 °C by 2100. If we are serious about limiting it to 2 °C and avoiding the far greater effects on weather extremes and sea level rise predicted to happen with that extra 1 °C, they need to do much more, and do it now.

The good news is that the world's largest emitter of carbon dioxide, China, looks like it has got the message. Thanks to  China, global CO2 ***emissions*** have flatlined after years of rampant growth. So are we reaching a crucial turning point, or are delegates effectively signing up to an agreement that everyone knows is doomed to fail?

On the surface, there are reasons to be optimistic. After a slight fall following the 2007 financial crisis, global CO2 ***emissions*** from fossil fuels and industry grew rapidly over the following decade, at a rate of around 2.4 per cent per year. But over the past two years ***emissions*** have stabilised despite continued economic growth.

In a study released just before the Paris meeting, scientists at the Global Carbon Project predicted a 0.6 per cent fall in ***emissions*** in 2015 based on preliminary data. Now the actual numbers are in, and they suggest that ***emissions*** in 2015 were flat rather than falling, Pep Canadell, director of the Global Carbon Project, told New Scientist. Still, no growth is much better than fast growth.

Global ***emissions*** figures should be treated with caution, however, as they come with big uncertainties and some countries' figures are unreliable - or non-existent.

What we can measure with certainty is the level of CO2 in the atmosphere. Alarmingly, it increased by a record 3 parts per million in 2015 and looks set to rise even more this year, with some readings at Hawaii's Mauna Loa monitoring station approaching 410 ppm last week.

This rise doesn't necessarily mean the ***emissions*** figures are wrong. Even if ***emissions*** really have flatlined, this trend will be obscured by the noise in the system - the natural year-to-year variations in how much CO2 gets soaked up by the land and oceans. The record growth is partly due to the now fading El Niño, for instance, which boosts ***emissions*** by causing more fires, among other things.

Canadell estimates that global ***emissions*** would have to remain flat for a decade or so before the trend becomes apparent in terms of levels of CO2 in the atmosphere. This isn't likely to happen any time soon as we haven't yet reached peak global ***emissions***.

True, China's ***emissions*** - once growing at 8 per cent a year - have slowed to almost zero thanks to declines in manufacturing and efforts to ***reduce*** air pollution, says Glen Peters of the Center for International Climate and Environmental Research in Norway. And with China shifting its economy from exports to services, few expect this rapid growth to return. But that doesn't mean China's ***emissions*** have peaked: its appetite for oil and gas is still growing. Despite that, its ***emissions*** may peak before 2030 - ahead of the schedule China put forward in Paris. The bad news is that to have a good chance of limiting warming to 2 °C, global ***emissions*** need to peak earlier, by around 2020.  With the ***emissions*** of countries like India and Russia still climbing sharply, that seems extremely unlikely.

And it's not just about CO2. Levels of two other potent ***greenhouse gases***, methane and nitrous oxide, are still rising fast. Farming is the main source of both: adding fertiliser makes soils emit nitrous oxide, and livestock belch out methane. In fact, farming ***emissions*** are nearly as large as fossil fuel ***emissions***, Canadell says, if the warming potentials of methane and nitrous oxide ***emissions*** are added to that of CO2 ***emissions*** caused by the switch in land use from forest to ***agriculture***.

Put another way, even if we stopped using fossil fuels tomorrow, we would still have a big ***greenhouse gas*** problem. It's a really tough nut to crack because we can't stop growing food.

That makes it even more urgent to slash fossil fuel ***emissions*** as fast as we can. Just about everyone agrees on what is required to do it: make countries pay for emitting carbon. Getting countries to agree a common carbon price - and penalising those that don't enforce it - is a much better approach than focusing on ***targets*** for limiting ***emissions***.

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The deal comes into force only when 55 countries representing at least 55 per cent of greenhouse ***emissions*** have ratified it. Even when it does come into effect, it will remain essentially voluntary. The deal legally obliges countries to set their own ***targets*** for limiting ***emissions*** between 2020 and 2030, but not to meet them. It was structured this way to allow US president Barack Obama to ratify it using his presidential authority rather than requiring a vote of the Senate - unlike the 1997 Kyoto protocol, which was signed by Bill Clinton but never ratified by the US.

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Since PAris, three reasons to...

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New Scientist

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Since PAris, three reasons to...

**Load-Date:** April 28, 2016

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[***Analysis UN climate deal***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JMX-P2P1-JBPJ-73HX-00000-00&context=1516831)

New Scientist

April 23, 2016

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**Section:** NEWS;; No. 1299

**Length:** 1397 words

**Byline:** Michael Le Page

**Body**

Signed, sealed... undeliverable?

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[***World Bank to spend 28% of investments on climate change projects; The world's biggest provider of public finance to developing countries will refocus its financing efforts towards tackling climate change, group said***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JGK-FJ31-JCJY-G53B-00000-00&context=1516831)

The Guardian

April 8, 2016 Friday 1:58 AM GMT

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**Section:** ENVIRONMENT

**Length:** 551 words

**Byline:** Fiona Harvey, Environment correspondent

**Body**

The World Bank has made a "fundamental shift" in its role of alleviating global poverty, by refocusing its financing efforts towards tackling climate change, the group said on Thursday.

The world's biggest provider of public finance to developing countries said it would spend 28% of its investments directly on climate change projects, and that all of its future spending would take account of global warming.

At last year's landmark conference on climate change in Paris, the World Bank and its fellow development banks were made the linchpins of providing financial assistance to the poor world, to enable countries to cut ***greenhouse gas*** ***emissions*** and adapt to the effects of global warming.

"Following the Paris climate agreement, we must now take bold action to protect our planet for future generations," said Jim Yong Kim, president of the World Bank Group. "We are moving urgently to help countries make major transitions to increase sources of renewable ***energy***, decrease high-carbon ***energy*** sources, develop green transport systems and build sustainable, livable cities for growing urban populations. Developing countries want our help to implement their national climate plans, and we'll do all we can to help them."

John Roome, senior director for climate change at the World Bank, told journalists: "This is a fundamental shift for the World Bank. We are putting climate change into our DNA. Climate change will drive 100 million more people into poverty in the next 15 years [unless action is taken]."

At least $16bn a year, from across the World Bank group, which includes other development and finance institutions, will be directed to climate change projects, including renewable ***energy*** and ***energy*** efficiency. The group will aim to mobilise $13bn in extra funding from the private sector within four years, for instance through joint funding programmes. By 2020, these efforts should amount to about $29bn a year, nearly a third of the $100bn a year in climate finance promised by rich countries to the poor as part of global climate change agreements.

As part of the institution's new strategy, it will help to fund the construction of enough renewable ***energy*** to power 150m homes in developing countries, and build early warning systems of climate-related disasters - such as storms and floods - for 100 million people.

The bank will also ***target*** "smart" ***agriculture*** systems, which use less water and ***energy*** and retain soil fertility, and will help countries develop their transport and urban infrastructure to produce much less carbon. All projects considered for funding - including health, education and other development priorities - will be screened for their vulnerability to the impacts of climate change.

The World Bank has attracted strong criticism in the past for backing the construction of high-***emissions*** infrastructure, chiefly coal-fired power stations, and had already made moves away from such investments. Roome refused to rule out fossil fuel investments in the future, but said they would be subject to strict criteria, to do with their necessity, ensuring the most efficient technology was used, and investigation of alternatives. For instance, he said, gas could provide a "transition" away from high-carbon fuels for countries struggling to build new renewable ***energy*** capacity.

**Load-Date:** April 8, 2016

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[***Q&A ON THE NEW CLIMATE CHANGE AGREEMENT***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HKN-1DX1-JCBD-Y278-00000-00&context=1516831)

Press Association Mediapoint

December 13, 2015 Sunday 1:46 AM BST

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**Section:** HOME NEWS

**Length:** 660 words

**Byline:** Emily Beament, Press Association Environment Correspondent in Paris

**Body**

The world has agreed a new international climate change agreement. Here are the key questions about the deal.

What has been achieved?

The world's first comprehensive climate change agreement which will see action to curb rising temperatures by all countries.

Why do we need this deal?

If we continue to pump ***greenhouse gases*** into the atmosphere on current trajectories, we are facing a world with temperatures of more than 4C above pre-industrial levels by 2100 - hotter globally than at any time in human history.

Rising temperatures will lead to sea level rises, more intense storms and flooding, more extreme droughts, water shortages and heatwaves - as well as massive loss of wildlife and ***reduction*** in crop yields, potentially sparking conflict and mass migration.

The higher temperatures rise, the worse the situation will be - so we need to curb the ***emissions*** that cause global warming.

We've known about climate change for decades, why are we only doing something now?

This deal has effectively been 20 years in the making. A first treaty, the Kyoto Protocol - which was adopted in 1997, only covered the ***emissions*** of developed countries - and the US never ratified it.

It runs out in 2020 and the Paris Agreement will be its successor.

2020 is not very far away - why has it taken until now to negotiate a new deal?

World leaders tried to secure a deal in Copenhagen, Denmark, in 2009, at talks which are generally thought to have been a failure. A weak agreement came out of acrimonious talks which scarred the UN climate process and everybody involved.

But in Durban, South Africa, two years later, the EU teamed up with some of the world's poorest countries to get nations to agree to work towards a new deal to be secured in Paris this year.

Why was this time different?

The world is not just out of recession like in 2009, the costs of technology such as solar panels have fallen while deployment has grown exponentially and countries are keen to tackle the problem for other reasons, such as to cut air pollution in China.

The science is even clearer, with the UN's global climate science body warning last year that global warming was ``unequivocal''.

Countries also started negotiating a lot earlier, with 187 countries covering more than 95% of the world's ***emissions*** putting forward national climate plans for action they will take up to 2030, before or in a few cases during the conference.

If we've already got the climate action plans, why do we need an agreement too?

The climate plans by countries are not enough, as the ***emissions*** curbs in the commitments still put the world on track for a 3C rise in global temperatures by 2100.

So the deal includes a kind of ``review and ratchet'' system for countries to update and increase their levels of climate action every five years, based on a global assessment of how far nations are off meeting the long term goal to tackle climate change.

Countries are being requested to submit updates, by 2020, to their existing plans out to 2030 after an initial stocktaking exercise in 2018.

Have any previous environmental treaties actually worked?

Yes, though not for as wide-ranging an issue as climate change. The Montreal Protocol, for example, agreed in 1987 and ratified by all UN countries, has been successful in phasing out use of the chemicals which cause the ozone layer to be depleted.

So has the planet been saved?

Only time will tell how successful this deal will be.

Tackling climate change will involve a vast, global, transition away from fossil fuels to clean ***energy***, as well as curbing deforestation and ***emissions*** from ***agriculture*** - with experts warning of the need to ***reduce*** ***emissions*** to net zero later in the century to stabilise the climate.

But the hope is Paris will galvanise action in countries and send a strong enough signal to the businesses and investors who will ultimately make the transition happen that the world is serious about stopping climate change and is heading towards a zero-carbon world.

**Load-Date:** December 13, 2015

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[***Evonik sees profitability gains in sustainable animal nutrition game***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5KYT-R231-DYNP-M23H-00000-00&context=1516831)

FeedNavigator.com

June 21, 2016 Tuesday 1:04 PM GMT+1

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**Section:** SUPPLIERS

**Length:** 756 words

**Byline:** Jane Byrne, , [*Jane.Byrne@wrbm.com*](mailto:Jane.Byrne@wrbm.com)

**Body**

**INTRODUCTION**

Feed additive innovation at Evonik has been earmarked as one of six R&D pillars that will contribute over €1 billion (bn) in additional sales by the year 2025 for the group.

**STORY**

The company said it is expanding its product portfolio accordingly to encompass healthy and sustainable animal nutrition.

Evonik’s chief innovation officer, Ulrich Küsthardt, today said the group expects the products and applications developed in the past five years to account for over 16% of sales but he did not put a timeline on that ***target***.

Currently, that NPD constitutes around 10% of the group’s sales.

Evonik, which is active in over 100 countries, generated sales of around €13.5bn and an operating profit (adjusted EBITDA) of about €2.47bn in fiscal year 2015.

But, in March this year, it [***reported***](http://www.feednavigator.com/Suppliers/Evonik-expects-a-subdued-market-environment-and-a-decline-in-2016-earnings) that adjusted core earnings could drop by as much as 19% in 2016, with the company blaming the weak outlook on falling prices for certain feed additives.

Last year, the German chemical giant ploughed an additional half a billion euros into its innovation pipeline.

The amino acid producer said it has also streamlined its approach to R&D, which now includes a more significant portion of larger innovation projects.

New amino acid in portfolio

Some of that innovation capital was invested in the monogastric feed additives side, with last week the group announcing the launch of an L-valine product, ValAMINO.

That product, it continued, represents the fifth essential amino acid in its portfolio for use in pig and poultry feeds, and will help to ***reduce*** the use of crude protein in the diets of those animals, without any loss in terms of growth performance.

Evonik claimed this will result in lower feed costs and conservation of natural resources in ***agricultural*** feed production, which in turn, it said, ***reduces*** land use, ***greenhouse gas*** ***emissions***, and potential eutrophication and acidification.

The amino acid is said to have EU wide registration.

Fish oil replacement

Today saw the company also strongly play up its long term intention to find alternatives to fish oil for farmed fish diets as well as its goal to continue to fine tune its fishmeal replacement strategy.

Some three-quarters of the fishmeal and fish oil produced worldwide are channeled into aquaculture, representing a major strain on marine resources, said Evonik.

Christoph Kobler, who heads up the Sustainable Healthy Nutrition Product Line at the German firm, said that due to modern fish farming concepts and amino-acid products, it is already possible to achieve significant ***reductions*** in the proportion of fishmeal used in feeds.

The underlying principle behind the fishmeal replacement strategy, he said, is to selectively add amino acids such as methionine and lysine to vegetable-based feeds, improving them to the point where salmon and other marine animals can make optimum use of them.

However, the development of sustainable alternatives to fish oil is slightly more challenging.

And, as global supplies of fish oil remain static or decline and demand for aqua feed grows over the next decade, so too does the need to find alternative sources of Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which are an essential factor for human health.

If viable fish oil alternatives can be found it “*would mean that it would be possible to entirely eliminate the use of marine resources like fishmeal and fish oil in the production of fish feed,”* said Kobler.

Last year, we reported on the tie-up between [***Evonik and DSM***](http://www.feednavigator.com/R-D/DSM-and-Evonik-in-algae-derived-omega-3-feed-joint-venture) aimed at using sustainable biotechnological methods to harness marine algae in the production of omega-3 fatty acids.

No further details were forthcoming about that project today.

Recent months have seen other producers releasing algae derived sources of DHA only replacements for use in aqua feed.

A partnership between[***Bunge Limited and TerraVia***](http://www.feednavigator.com/Manufacturers/Bunge-TerraVia-partnership-strikes-fish-oil) has generated such a product and Alltech is working on [***algae based DHA feed technology***](http://www.feednavigator.com/Manufacturers/Alltech-focused-on-algae-derived-DHA-for-fish-feed) as well.

**Shrimp feed additive**

Meanwhile, in March, production at Evonik’s Antwerp facility for its [***new methionine source, Aquavi Met-Met***](http://www.feednavigator.com/Suppliers/Shrimp-targeted-methionine-production-kicks-off-at-Evonik-s-Antwerp-site), got underway.

The product, a dipeptide comprising two methionine molecules, will initially be available for shrimps and crustaceans but its efficiency is currently being tested for other species, said the company.

Evonik said Aquavi Met-Met, which is backed by a series of feeding trials with shrimp producers in Asia and Latin America as well as studies with universities and scientific partners, is aimed at boosting the efficiency and sustainability of shrimp farming.

**Load-Date:** October 18, 2016

**End of Document**



[***Ricardo PLC Interim Results -2-***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J5V-5101-F0CC-S4SK-00000-00&context=1516831)

London Stock Exchange Aggregated Regulatory News Service (ARNS)

February 26, 2016 Friday 7:01 AM GMT

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**Length:** 1672 words

**Body**

Our business growth continues to be underpinned by the following global drivers:

-- The need to ***reduce*** carbon dioxide ***emissions*** as a result of agreements reached at COP21;

-- Market and regulatory requirements for improved ***energy*** efficiency;

-- The need to eliminate the release of noxious pollutants and particulates;

-- A changing and diverse global ***energy*** mix;

-- Increasing levels of urbanisation and resource scarcity; and

-- The rise of global connectivity.

Our expertise in all of these areas enables us to be well-placed to assist major international private and public sector customers across sectors including Automotive, High-Performance Vehicles & Motorsport, Rail, Commercial Vehicle, ***Energy*** & Environment, Defence, Motorcycle and Off-Highway.

Moving forward, our strategy continues to focus on our core areas of growth of Transport & Security, ***Energy*** and Scarce Resources & Waste. In each of these areas we are looking to exploit our Technical Consulting and Performance Products areas of core competence to further grow and expand the business. We are also looking to further strengthen and expand the strategic partnerships that we have established, for example with McLaren, to provide longer-term visibility and a platform for sustained growth. We continue to seek opportunities to grow both organically and through partnerships or acquisitions.

Ricardo continues to invest in its people, technology and facilities to capitalise on the market drivers and conditions that it faces. We believe that our current overall strategy offers a good balance of risk management, avoidance of cyclicality and the promotion of growth.

TECHNICAL CONSULTING

At the centre of our business, the Technical Consulting segment provides engineering, environmental and management consulting services to customers in our chosen market sectors. We deliver projects focused on class-leading innovation. This ranges from detailed collaborations with customers on strategy, advanced engineering work, technology evaluations and market studies to large-scale turnkey commercial programmes, encompassing multiple products and international markets. Our core product offerings are in the following areas:

-- Engines;

-- Driveline & Transmission Systems;

-- Vehicle Systems;

-- Hybrid & Electric Systems;

-- Strategic Consulting;

-- ***Energy*** Consulting;

-- Environmental Consulting;

-- Critical Systems;

-- Independent Assurance; and

-- Test Services.

We have global infrastructure in place to service our customers, including technical and engineering centres in the UK, US, Germany, China, the Netherlands and the Czech Republic. We also have sales offices where local presence is needed to support customers. The technical and engineering centres include specialists in, for example, mechanical and electrical design, control and electronics development, prototype build, project management, cost estimation, supply chain management and manufacturing. Employees can be deployed on projects across the globe using common processes; we often make use of short-term geographical secondments. Our environmental consulting services are delivered from a number of UK locations and are making increasing use of our global network. Our strategic consulting service already has a well-established global team operating out of a number of different locations.

Automotive

We have experienced increasing levels of activity in our major automotive markets. Fuel economy, alternative fuels and CO(2) ***reduction*** remain top global industry priorities and are being driven strongly by consumers. We have secured a range of large multi-year programmes in vehicle systems, hybrid and electric systems and the core powertrain areas of our business, focused on both new and existing product upgrades. Vehicle lightweighting remains an area of growth and we continue to invest in advanced combustion and other key technologies in areas related to improvements in overall vehicle efficiency such as intelligent driveline and electrification. The future of mobility solutions, including connected and autonomous vehicle technology in particular, is attracting significant interest in North America.

Rail

Our rail business has grown significantly following the acquisition of LR Rail on 1 July 2015 and the addition of circa 450 rail specialists to our business. Integration activities are progressing well and we have won significant levels of new business in the UK, the Netherlands and Asia. The largest win was for a multi-year rail project for the independent validation and verification of a transit railway in Asia. The order book remains very strong. Ricardo Rail also saw its 'PanMon' pantograph monitoring systems formally approved by the UK's railway infrastructure manager, Network Rail, for use across the UK national rail network.

Commercial Vehicle

We have secured a number of large engine and transmission projects across the medium and heavy-duty sectors and continue to see strong interest across Asia, in particular. The future pipeline is based around a broad mix of largely engine and transmission opportunities. In the US, ***greenhouse gas*** and low NOx standards are driving interest in powertrain and trailer efficiency, ***emissions*** control and use of alternate fuels.

***Energy*** & Environment

Ricardo provides consultancy services to governments and their agencies and private sector clients based on our in-depth knowledge of legislative challenges and future technology developments in the ***energy*** and environmental consulting sectors. Growth in our environmental consulting business is focused on private sector and international expansion. Key practice areas are ***energy*** and climate change, air quality, resources and waste, sustainable transport, chemical risk and water. The recent additions through the acquisitions of PPA (in November 2014) and Cascade (in August 2015) have provided further opportunities for growth into the electricity networks and water sectors, respectively. We have seen strong recent growth in private sector and international projects and are well-placed to support clients with the implementation of commitments agreed at COP21 in December 2015.

In power generation, our focus remains on growing the large-scale generator sets business. Across the renewables sector, we continue to pursue a range of opportunities in offshore wind, tidal and ***energy*** storage applications.

Defence

In the previous financial year we established Ricardo Defense Systems in the US, which is enabling us to deliver US classified projects and expand the range of opportunities that we can pursue across future land platforms. In the UK, we have broadened our network within the Ministry of Defence ('MoD') and have continued to grow key relationships with defence contractors. In Asia, we have secured a contract to design a new defence vehicle.

Motorcycle

Ricardo Motorcycle is a global business unit and offers complete turnkey motorcycle solutions, covering powertrain and vehicle systems. We continue to develop long-term multi-product relationships with major customers across Asia, Europe and North America and are delivering a large electric bike programme secured in the US.

Off-Highway

Our activities in the off-highway sector are largely driven by ***emissions*** legislation requirements and hence our product offering is largely focused on new powertrain and engine development, complete machine optimisation, cost-effective aftertreatment solutions, hybridisation options and specialised test and test rig development. The off-highway market is currently very challenging as a number of large OEMs are managing business cost ***reduction*** programmes in response to global challenges in the mining, construction and ***agriculture*** markets.

PERFORMANCE PRODUCTS

The Performance Products segment manufactures high-quality prototypes and niche volumes of complex engine, transmission and vehicle products and assemblies. We have advanced manufacturing capabilities, from single components to full vehicle builds. To service our customers we have a global support infrastructure built around our network of technical and engineering centres in the UK, US, Germany, China, the Netherlands and the Czech Republic.

High-Performance Vehicles & Motorsport

The expansion of Ricardo's engine build facility is now complete, which enables a doubling of capacity and the capability to deal with increased engine variants. Production of engines for the 650S, 675LT and the McLaren P1(TM) supercar continue in line with expectations and full production of engines for the new 570S has been added.

Ricardo remains a key supplier to the motorsport sector having commenced deliveries for two new GT3 clients and an R5 Rally works team. Ricardo continues to manufacture for Formula 1 and products such as the Ricardo-designed transmissions for the Japanese Super Formula 14, Indy Lights and the Renault World Series.

Production continues for the Porsche Cup and Bugatti transmissions in line with the long-term supply agreements.

Defence

As part of a teaming agreement with a leading defence Tier 1, Ricardo has developed and provided retrofit kits for the Cougar family of vehicles for the MoD.

RESEARCH AND DEVELOPMENT

Investment in new technologies and services is a key enabler to meet our business objectives. Our R&D activity not only creates new products and services, but also provides our staff with new skills and capabilities. Core teams of dedicated engineers are working on grant-funded and internal R&D projects, enabling Ricardo to be at the forefront of the rapidly changing market landscape. Ricardo maximises its R&D activity through many collaboratively funded programmes with bodies such as EU 'Horizon 2020', Innovate UK (formerly the Technology Strategy Board) and US Government agencies.

In the last six months we have continued to develop innovative technologies and processes in line with our strategy and business funding levels. Highlights from this period are provided below.

**Load-Date:** February 26, 2016

**End of Document**



[***Carbon dioxide and the link to crop levels; Letters to the Editor***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H6B-KMJ1-JBVM-Y542-00000-00&context=1516831)

The Times (London)

October 21, 2015 Wednesday

Edition 1, Scotland

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**Section:** LETTERS; Pg. 34

**Length:** 624 words

**Body**

Sir, Farmers always welcome the idea that the climate of the future might make the challenge of food production easier. Matt Ridley's commentary ("Now here's the good news on global warming", Oct 19) suggests just that, with the promise of extra cropboosting CO2 in the atmosphere. However, as a practical farmer I am acutely aware that this is by no means the end of the story. Weather events such as drought or flood will have far greater impact when it comes to our ability to grow bountiful crops.

If the climate of the future becomes more challenging for farmers in this respect, then the rather limited boost from extra CO2 will not compensate. guy smith Vice-president, NFU Sir, Further to Matt Ridley's comments on global warming, it is worth recalling earlier discussions of the subject. Estimates of the rate of increase in global warming due to carbon dioxide that were made more than a century ago are not all that different from today's. However, Svante Arrhenius, who was then the leading expert on the topic, concluded in 1908 that the results of such warming would be, on balance, beneficial: "By the influence of the increasing percentage of carbonic acid in the atmosphere, we may hope to enjoy ages with more equable and better climates, especially as regards the colder regions of the Earth, ages when the earth will bring forth much more abundant crops than at present, for the benefit of rapidly propagating mankind."No doubt scientists, in the years before the First World War, were more optimistic. Still, Arrhenius may have been right about the benefits that global warming could bring to the "colder regions of the Earth". Consequently, I have for some years pointed out to my grandchildren the potential benefit that they might derive from moving to Canada. professor a J meadows Emeritus professor of information science, Loughborough University Sir, Matt Ridley omits to mention that CO2, together with other ***greenhouse gases***, is also responsible for global warming which, regardless of how rapidly it occurs, will beyond question continue throughout this century and possibly beyond. The substantial negative impact of increasing temperatures on both ***agriculture*** and the environment, especially in the developing world, is equally as well established as the potential gains from the carbon dioxide fertiliser effect. professor peter cooper Motcombe, Dorset Sir, Matt Ridley reminds us that CO2 is good for crop growth, a fact known for decades to people who use greenhouses. They adjust the CO2 concentration in their greenhouses to about five times that in the present atmosphere. Increases in CO2 concentration and atmospheric temperature together produce more rapid and more extensive vegetation growth. But, like all good things, there are dangers in excesses of them. For example, maximum temperatures for vegetation growth lie between 20C and 30C, and global warming is ***reducing*** the area of land that can be used for efficient food production.

The beneficial effects of CO2 increases are limited by the very slow production of the essential trace elements required for plant growth, so the present modest enhancement cannot be expected to continue and will level off in the future.

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Manufacturing jobs are being sacrificed on the altar of the Climate Change Act, which mandates an 80 per cent carbon ***reduction*** (based on 1990 levels) by 2050.

prof emeritus andrew porteous Wellingborough, Northants

**Load-Date:** October 21, 2015

**End of Document**



[***Carbon dioxide and the link to crop levels; Matt Ridley says that evidence is growing that high CO2 levels boost crops and nourish the oceans. Is he right?***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H66-YXM1-JCJY-G2WR-00000-00&context=1516831)

thetimes.co.uk

October 20, 2015 Tuesday 6:51 PM GMT

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**Section:** LETTERS TO THE EDITOR

**Length:** 624 words

**Body**

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Vice-president, NFU

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Emeritus professor of information science, Loughborough University

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Motcombe, Dorset

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Poling, W Sussex

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Professor Emeritus Andrew Porteous

Wellingborough, Northants

**Load-Date:** October 20, 2015

**End of Document**



[***Making the Most of Manure: SRUC Experts Say it is Time to Break Old Habits***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5GSG-B5G1-F0JC-M30T-00000-00&context=1516831)

Smallholder

August 26, 2015 Wednesday

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**Section:** NEWS

**Length:** 599 words

**Body**

SRUC experts are advising farmers to make better use of their slurry and manure to increase profitability and ***reduce*** their environmental impact. While livestock farms create large volumes of their own organic manures which can add much needed nutrients back into the soil, many farmers are still not getting the best out of this resource.

SAC Consultant Donald Dunbar says: "Too often farmers see slurry and manure as a waste product they need to get rid off. We know that used correctly it can ***reduce*** the need for fertiliser which will save money, and of course ***reduce*** the pollution risk. However while many farmers will spread their manure on their fields they still add a normal application of bag fertiliser as well, seeing the manure as little more than a bonus treatment."

The message was given at a recent Farming for a Better Climate Event held in the Scottish Borders. Rumbletonrig, a 341 hectare farm near Greenlaw, run by John Mitchell and his family, is one of the Scottish Government's new Climate Change Focus Farms. Over the next few years meetings will be held at farms across Scotland which aim to introduce farmers to ways they can lessen their environmental impact while maintaining, or even increasing, profitability.

Rumbletonrig is a mixed enterprise and as well as growing barley, wheat and oats, the Mitchells have 250 sheep and 300 beef cows. While they create and use a significant volume of manure Chris McDonald, a Senior ***Agricultural*** Consultant with SAC Consulting, believes they can make far more of it through using it in the right way at the right time.

He says: "The slurry and manures at Rumbletonrig have an equivalent nutrient value worth around £14,000. We will be working with John and son Stephen to work out where best to apply the manure, when to apply to manure and how much to apply to get the valuable phosphate and potash nutrients back where they're needed most. That way he can save on his purchased fertiliser which will help both his bottom line and the natural environment."

Farmers throughout Scotland could benefit similarly if they begin to think about their slurry and manure as a valuable resource and carefully plan how to use it.

Donald explains: "In some fields the nutrient status may already be quite high which means rates of slurry or fertiliser can be ***reduced***, so it's important that farmers take a more ***targeted*** approach. The nutrient level depends on the crop which has just been in the ground, if you have just cut grass for silage for example you'll have removed a high amount of potash from your soil which manure can help replace."

For the Farming for a Better Climate team the key to helping farmers adopt greener practices is to highlight just how positive making these changes can be for the farm.

Donald says: "What we need to do is speak to farmers as much as we can and explain how beneficial this can be if they do it the right way. We need to get them to break old habits, and we know old habits die hard. But it is worth it, for them and for the land they are farming."

The project is funded by Scottish Government and is part of the wider Farming for a Better Climate programme which sets out to raise farmer awareness of climate change and ***greenhouse gas*** ***emissions***. The next meeting of the three year project will be in November. Further details of the programme can be found at [*www.farmingforabetterclimate.org*](http://www.farmingforabetterclimate.org). For more information on slurry management please contact Chris McDonald at [*chris.mcdonald@sac.co.uk*](mailto:chris.mcdonald@sac.co.uk) or on. For more information on Farming for a Better Climate contact Rebecca Audsley at [*Rebecca.audsley@sac.co.uk*](mailto:Rebecca.audsley@sac.co.uk)

**Load-Date:** August 26, 2015

**End of Document**



[***World Bank calls for $16bn to help Africa weather the effects of climate change; Africa climate business plan, emphasising clean energy, efficient farming and urban protection, will be launched by World Bank chief at Paris climate talks***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HFW-XJG1-F021-63JN-00000-00&context=1516831)

The Guardian

November 25, 2015 Wednesday 4:48 PM GMT

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**Section:** GLOBAL DEVELOPMENT

**Length:** 1115 words

**Byline:** John Vidal

**Body**

The World Bank has devised a $16bn (£10.6bn) strategy designed to help Africa adapt to climate change and prevent millions of people from sliding into poverty.

By fast-tracking clean ***energy***, efficient farming and urban protection, the measures promise to greatly increase renewable ***energy*** across the continent, bolster food production and lead to the planting of billions of trees. It is also hoped that the scheme will improve life in cities and ***reduce*** poverty, migration and conflict.

The continent of nearly 1 billion people, which emits just 3% of the world's ***greenhouse gas*** ***emissions***, will be affected more than anywhere else by even the smallest rise in global temperatures, said Jim Yong Kim, the bank's president, who will launch the Africa climate business plan at the UN climate talks in Paris next week.

Related: Somaliland stricken by drought: 'We need what all humans need' | Clár Ní Chonghaile

According to the bank, Africa needs to spend $5-$10bn a year immediately to adapt to a 2C warming, rising to $20-$50bn by 2050, and close to $100bn if temperatures increase by 4C.

"Sub-Saharan Africa is highly vulnerable to climate shocks, and our research shows that could have far-ranging impact on everything from child stunting and malaria to food price increases and droughts," said Kim.

Even if warming does not exceed 2C, sub-Saharan Africa can expect large increases in poverty and malnutrition, the bank said in its report. But if temperatures rise 3-4C, which they are on course to do by the end of the century if no action is taken, heat extremes could affect 70%-80% of Africa's land area in the summer months, and much of southern and central Africa would be at risk of severe drought.

African cities are expected to be disproportionately affected. "The problem will affect a growing number of people, as the urban population of Africa is estimated to rise from its current level of 472 million to 659 million by 2025 and 1 billion by 2040. The poor will be especially hard hit," said the bank.

"Dakar experiences recurrent flooding; the 2009 floods affected almost 360,000 people and caused $100m in damages and losses. Recurrent floods in Bangui, the capital of Central African Republic, cause on average $7m in damages and losses a year. By 2025, about 66 new cities will be added to the 81 cities currently in the medium-city range. This group of cities needs support to enhance their capacity to manage climate-related risks."

The bank proposes that $500m be spent on projects to ***reduce*** deforestation and increase wildlife protection in 14 countries. It also aims to restore up to 100m hectares (247m acres) of degraded and deforested land by 2030. Much of the money needed would come from carbon funds and initiatives expected to be finalised at the Paris talks.

Another $2.5bn should be spent in Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Guinea, Mali, Niger and Nigeria on irrigation, dams, and large-scale flood protection projects, the bank proposes. This, it hopes, could protect and provide electricity to 3 million people.

In the Zambesi basin, countries like Angola, Botswana, Malawi, Mozambique, Namibia, Tanzania, Zambia, and Zimbabwe would share $3.6bn in investments in hydropower, water transfers, irrigation and flood control.

A further $2bn is earmarked for 20 unnamed cities to improve transport and protection against natural disasters.

Nearly $8bn would be spent on solar ***energy*** by 2024, both for cities connected to the grid and off-grid communities, under the terms of the plan. It could include funds to build concentrated solar power stations, as well as money to expand the growth of mini grids and wind power.

At present, 600 million people and 10 million small and medium-size enterprises in sub-Saharan Africa still do not have a connection to the electricity grid.

Once one of the world's largest investors in coal power, the bank now says it plans to develop renewable ***energy*** urgently in Africa, with dams planned in Cameroon and west Africa.

"Hydropower currently provides 24% of sub-Saharan Africa's power needs, and there is potential to increase this share to 40% over the coming years. Some 50GW of hydropower could be developed immediately, at costs of $0.01-$0.08/kWh. These prices make hydropower the lowest cost, largest scale renewable ***energy*** resource currently available to the region - with potential for transformative, growth-inducing developmental impacts," says the report.

The bank will also back and extend existing plans to increase food production. "More efficient livestock systems would increase protein availability while ***reducing*** ***emissions*** per kilogramme of meat or dairy produced. Conservation ***agriculture*** techniques would protect soils from wind and water erosion. Weather information and early warning systems would enable farmers to take better decisions, ***reducing*** risk and protecting yields in uncertain climate and weather conditions."

Because millions of people depend on rain-fed ***agriculture*** or live in drought-prone zones in urban areas in sub-Saharan Africa, climate change is intimately linked to poverty levels, said the report.

"Climate variability is already exacting a heavy toll on development; future change may have catastrophic impacts, as drought, floods, and storm surges could push millions of people into poverty and prevent millions of others from emerging from it," it says.

Related: Laos counts the cost of climate change: record floods, drought and landslides | John Vidal

The new funds will go some way to compensate for the fact that Africa has largely missed out on receiving funds from the UN's Clean Development Mechanism : only about 2% of the 7,000 projects funded by the CDM were on the continent.

Of the $16.1bn that the bank wants to raise, roughly $5.7bn is expected to come from the International Development Association (IDA), the arm of the World Bank Group that supports the poorest countries.

About $2.2bn is expected from climate finance instruments including Climate Investment Funds, the Green Climate Fund and the Global Environment Facility. A further $2bn will be delivered through bilateral and multilateral sources, while $3.5bn is anticipated from the private sector. An estimated $0.7bn will come from domestic sources. An additional $2bn is still to be sourced.

Makhtar Diop, the bank's vice president for Africa, said the plan set out a clear path for investment in the continent's urgent climate needs, and to fast-track the required finance.

"While adapting to climate change and mobilising the necessary resources remain an enormous challenge, the plan represents a critical opportunity to support a priority set of climate-resilient initiatives in Africa."

**Load-Date:** November 25, 2015

**End of Document**



[***Release of CO2 fastest in 66 million years: study***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JBY-Y6H1-DY93-M52K-00000-00&context=1516831)

Agence France Presse -- English

March 21, 2016 Monday 9:00 PM GMT

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**Length:** 749 words

**Dateline:** Paris, March 21 2016

**Body**

Humans are disgorging heat-trapping carbon into the atmosphere 10 times faster than during any period of natural global warming in the last 66 million years, according to a study released Monday.

That rate far exceeds even a cataclysmic climate event 55.8 million years ago, and pushes humanity into unchartered and dangerous territory, researchers said.

During the so-called the Palaeocene-Eocene Thermal Maximum (PETM), Earth's surface temperatures climbed by more than five degrees Celsius (nine degrees Fahrenheit) within a few thousand years.

With only 1C (1.8F) of warming so far, current climate change over the last two centuries -- mostly the last 50 years -- has already begun to unleash super-charged hurricanes, storm surges boosted by rising seas and devastating drought.

On present trajectories, ***greenhouse gas*** ***emissions*** will heat up Earth three to four degrees Celsius by 2100.

The PETM has been much scrutinised as a possible analog, or stand-in, for the potential impacts of carbon pollution.

"Of all the changes we have seen in 66 million years, this event is the one that most looks like anthropogenic, or man-made, warming," said Andy Ridgwell, a paleo-climatologist at the University of Bristol in England and a co-autor of the study.

The parallels are striking: massive carbon ***emissions***, followed by rapid global warming and major loss of species.

Fifty-six million years ago, those extinctions took place mainly in the ocean. Today the so-called "sixth great extinction" is underway both in the sea and on land.

But up to now scientists couldn't figure out how quickly carbon -- whether in the form of CO2 or, more likely, methane from the ocean floor -- had been released.

"The biggest problem has been coming up with a firm timing for the PETM onset event," Ridgwell told AFP.

"How quickly the ***emissions*** occurred is absolutely critical."

Some studies had suggested the massive outpouring of carbon -- 2,000 to 4,500 billion tonnes -- took place in as little as a few hundred years.

This would be marginally reassuring in so far as humanity has added about 400 billion tonnes so far, and may be able to limit the total to two or three times that, depending on how quickly the world economy can kick its carbon habit.

In December, 195 nations set a ***target*** of capping warming "well below 2C," even if many scientists say we are likely to punch through this barrier.

But if the discharge of carbon 56 million years ago took place over a much longer period, that would suggest lower rates of ***emissions*** could still have dramatic consequences.

- In unchartered territory -

In a clever bit of chemical detective work, Ridgwell, James Zachos of the University of California at Santa Cruz, and lead author Richard Zeebe from the University of Hawaii figured out how to nail down the duration of the carbon release without having to determine when exactly when it happened.

Their findings were published in Nature Climate Change.

Knowing there is a lag between ***greenhouse gas*** ***emissions*** and temperature increase, they compared oxygen and carbon tracers, called isotopes, from ocean sediment off the coast of New Jersey.

Oxygen isotopes track temperature, while carbon isotopes provide a record of C02 or methane.

"If the carbon was released rapidly we would find in the sediment core a lag with warming," Zeebe told AFP.

"If carbon is released slowly, the climate adjusts more or less in sync."

There was no lag at all. A quick calculation showed that the carbon could not have been emitted in less then 4,000 years, or about one billion tonnes per year.

By comparison, human activity -- industry, ***energy*** production, deforestation, ***agriculture*** -- is pumping out about 10 billion tonnes of carbon annually, 10 times as much.

"Aside from the huge impact that killed the dinosaurs, what we are seeing now is the fastest rate of climate change in 66 million years," said Ridgwell.

This is bad news for species loss, he continued.

"Ecosystem impacts tend to show up more with the rate, rather than the size, of the change in temperature," he said.

"It's all about the rate."

What is happening on Earth today, he noted, is closer in speed to the end of the Cretaceous -- when a comet cataclysm wiped out the dinosaurs -- than it is to events such as the PETM.

"We are in uncharted territory in the rate carbon is being released into the atmosphere and oceans," commented Candace Major, program director of the Division of Ocean Sciences at the US National Science Foundation, which funded the research.

mh/jm

**Load-Date:** March 22, 2016

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[***Report by Capgemini Consulting and i24c: Europe Failing to Realize the Full Environmental and Commercial Benefits of its Low-Carbon Technology R&D Leadership***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JW4-2XK1-F0K1-N4K5-00000-00&context=1516831)

M2 PressWIRE

May 27, 2016 Friday

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**Length:** 1206 words

**Body**

May 26, 2016

Paris -- A report by the Industrial Innovation for Competitiveness Initiative (i24c) and Capgemini Consulting has found that while there have been notable Research and Development (R&D) successes in low-carbon technologies, Europe is struggling to industrialize promising ***energy*** related innovations and risks losing its position as a world leader. The report analyzed and evaluated Europe's performance on ***energy*** innovation, examining the barriers and the key success factors in the transition to a competitive, low-carbon economy. It makes five key recommendations for both the public and private sector ahead of the close of the European Commission's Consultation1 on its forthcoming integrated Research, Innovation and Competitiveness strategy for the European ***Energy*** Union.

The EU's long-term goal of ***reducing*** ***greenhouse gas*** ***emissions*** by 80-95%, as set out in its ***Energy*** Roadmap 20502, is designed to protect the environment and support Europe's transition to a competitive, low-carbon economy. With its more ambitious temperature stabilization goals and 'net zero' ***emissions*** ***target*** for mid-century, there is now even greater impetus behind this agenda and Europe's role as a leader will be scrutinized and challenged as never before. Renewed action and a focus on innovation and competitiveness will be crucial to its success in this endeavour. The i24c report found that Europe has made significant strides in reaching this goal through considerable investment in R&D, with the region investing over $ 4.3bn, making it the biggest investor in green technology globally. The report also recognized Europe as a world leader in ***energy*** innovation, noting the continent is home to almost a fifth of climate change innovations and over 1.2 million jobs related to renewable ***energy***.

Region wide strategy needed to deploy ***energy*** innovation

The i24c report notes that while these efforts provide Europe with a strong platform, the region has struggled to successfully deploy these innovations due to an insufficiently cohesive industrial, economic and regulatory strategy. A region-wide strategy should focus not only on the ***energy*** sector but on encouraging collaboration across related sectors such as transport, ***agriculture***, infrastructure, digital, and the manufacturing and services industries in general. It should further set in place a framework to enable cross-border collaboration to scale innovation and provide economic growth, prosperity and competitive advantage to all EU member states.

The deployment deficit experienced across Europe is partly the result of outdated or inconsistent regulation and the perception among the investment community that projects are too risky, particularly given the high upfront investments required in ***energy*** initiatives.

With a European Commission Consultation on its forthcoming integrated Research, Innovation and Competitiveness strategy for the European ***Energy*** Union currently under way, the i24c reports notes that a European ***energy*** strategy must not only enable Europe's vibrant start-up community access to much-needed capital, but also drive new regulation to transform a fragmented market and support the uptake of new technologies.

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Region-wide changes are needed following a significant shake-up in the innovation eco-system in recent years caused by the growth of four fast-emerging and inter-related mega-trends: sustainability, digitalization, integrated services and local empowerment. These trends have caused significant disruption in the ***energy*** industry shifting consumer expectation and demands as well as business pressure and priorities. These mega-trends have underpinned the key recommendations made in the i24c report.

The report offers five key principles to help tackle the deployment deficit and spark Europe's transition to clean ***energy***:

1. Provide clarity on long-term direction

Companies and entities at a local and national level need a vision and framework that they can work to. Only by having an overarching Europe-wide industrial innovation strategy is this possible.

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Innovation in the ***energy*** sector requires mass investment and this is only possible if investors can see clear paths from research to deployment. Europe needs to create the right market conditions and regulation to make this a reality

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The power of data is fuelling the growth of IoT and smart cities in particular. Cities such as Singapore are demonstrating how a holistic view can empower an entire region

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To find out more about the i24c report, please visit: [*www.capgemini.com/resources/scaling-up-innovation-in-****energy****-union-capgemini-and-i24c-report*](http://www.capgemini.com/resources/scaling-up-innovation-in-energy-union-capgemini-and-i24c-report)

Infographic:   [*www.capgemini.com/resources/europe-to-bridge-clean-****energy****-deployment-deficit-capgemini-and-i24c-report*](http://www.capgemini.com/resources/europe-to-bridge-clean-energy-deployment-deficit-capgemini-and-i24c-report)

**Load-Date:** May 27, 2016

**End of Document**



[***Big cheese puts environment first through innovation; A background in microbiology and a drive to innovate helped Julie Cameron transform a sinking wool business into a multi-million dollar dairy operation, all while helping to save her local environment***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JXJ-9MD1-JCJY-G48T-00000-00&context=1516831)

The Guardian

June 3, 2016 Friday 7:11 AM GMT

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**Section:** NAB MEET THE CHANGEMAKERS

**Length:** 997 words

**Body**

Australia may have famously ridden to prosperity on the sheep's back, with bush ballads like Click Go the Shears forming part of our national heritage.

But when Julie Cameron and her husband Sandy left their city science careers to come back home to the land as merino farmers they were soon facing disaster.

Their dream of returning to the sort of rural life and natural beauty they had both grown up with in farming families was under serious threat after the reserve wool price was discontinued in the early 1990s, precipitating an industry collapse.

"It literally dissolved our income," Julie Cameron recalls today. "There were record numbers of sheep in Australia at that time, so sheep became absolutely worthless, and prime lamb prices dived because of the supply."

The young couple had a stark choice for their farm at Meredith in rural Victoria: innovate or perish.

"Desperate times called for desperate measures," Cameron says. "We wanted to be farmers and we owned this asset and we needed to produce something off it that would give us a sustainable income."

As they looked around for alternatives to wool, salvation came after discovering that the French blue cheese Roquefort - often cited as the best in the world - was made using sheep's milk.

Against the odds, the Camerons turned to their backgrounds in science to make it happen - milking their sheep instead of shearing them, while experimenting to make a viable local product themselves.

For those first few years of Meredith Dairy, Sandy, a veterinary science researcher, tended to the flock by day, while Julie, a nurse trained in microbiology, made the cheese at night with no time off.

"We were really struggling but we had cash flow," she says. "We found we could reinvent ourselves. We weren't relying on that one wool cheque a year. We were doing things that were really out there and a bit different and that's why the brand became very valued."

Twenty-five years on, the vertically integrated Meredith Dairy has a $15m annual turnover, with around 100 staff making and selling an extensive range of fresh sheep and goat's milk products both here and overseas.

While overseeing such phenomenal growth, core to Cameron's philosophy has been the "triple bottom line" of creating a business that is sustainable environmentally and socially as well as financially.

"It was why we came home from the city in the first place," she says. "We are doing it because we want to be farmers and we want to make the world a better place. We don't want to leave a bad footprint in the environment."

Meredith Dairy includes pristine areas of the original Victorian volcanic grasslands that have been largely degraded elsewhere by European settlement and ***agricultural*** techniques. Cameron says she has been passionate about biodiversity from a young age and is proud to have set aside 20% of their 4000 acres for direct conservation.

She also sees water conservation as a necessity because of climate change, and the farm employs a number of innovative methods to achieve this. As well as recycling rinse water and the runoff from shed roofs, the dairy operations are built on a steep slope to enable a "dry sweep system" that is used while milking their flock of 4000 sheep and 9000 goats.

The animals stand on a platform almost 4m off the ground with a grating for waste products, like manure, to fall or be swept through. Instead of having to hose out a traditional concrete milking platform, the waste can accumulate below until it is hauled away using a bobcat.

To help their sustainability efforts, the farmers have taken out an environmental loan through the National Australia Bank, allowing them to put in solar panels and a solid fuel boiler, which uses waste timber instead of non-renewable LPG.

Meredith Dairy is one of more than 300 agribusinesses to take up this Clean ***Energy*** Finance Corporation (CEFC) equipment finance with NAB - an initiative aimed at letting irrigators, horticulturalists, dairies and other farms with high ***energy*** costs ***reduce*** their ***greenhouse gas*** ***emissions*** and improve ***energy*** efficiencies.

Through the scheme, NAB offers a 0.7% p.a. discount on the equipment finance rate for qualifying assets that ***reduce*** ***energy*** consumption or are renewable. The discount is for the life of the financing and the repayment schedule is aimed at fitting individual cash flow and circumstances. There is usually no deposit needed, with the security being the equipment itself, so capital can stay within the business.

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$70 million of discounted equipment finance has been provided so far, with products funded including solar pumps, PV solar, irrigation systems, and new state of the art vehicles.

The CEFC invests commercially to increase the flow of funds into renewable ***energy***, ***energy*** efficiency and low ***emissions*** technologies. It supports a diverse range of large and small businesses across the Australian economy.

For Cameron, the benefits of loan have been improved efficiencies while helping to ***reduce*** their carbon footprint, including being "off the grid for a while".

"The number one priority is looking after the environment and to look after our social environment - the community - because we need them to support us," Cameron says.

"I think people who live in the country are more attentive to their natural environment. I see native wildlife coming back in the district around us and that's because there are farmers like us who are seeing the benefits of restoring degraded areas."

NAB is to date the only Australian bank to sign the Natural Capital Declaration of December 2011, a global statement which recognises that natural capital poses significant potential risks and opportunities to the finance sector.

The bank is working with agribusinesses like Meredith Dairy as part of an integration of natural capital considerations into its day-to-day decision making processes and risk assessments.

**Load-Date:** June 3, 2016

**End of Document**



[***Report by Capgemini Consulting and i24c: Europe Failing to Realize the Full Environmental and Commercial Benefits of its Low-Carbon Technology R&D Leadership***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JW4-2XK1-F0K1-N4BP-00000-00&context=1516831)

FinancialWire

May 27, 2016 Friday

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**Length:** 1211 words

**Body**

Paris -- A report by the Industrial Innovation for Competitiveness Initiative (i24c) and Capgemini Consulting has found that while there have been notable Research and Development (R&D) successes in low-carbon technologies, Europe is struggling to industrialize promising ***energy*** related innovations and risks losing its position as a world leader. The report analyzed and evaluated Europe's performance on ***energy*** innovation, examining the barriers and the key success factors in the transition to a competitive, low-carbon economy. It makes five key recommendations for both the public and private sector ahead of the close of the European Commission's Consultation1 on its forthcoming integrated Research, Innovation and Competitiveness strategy for the European ***Energy*** Union.

The EU's long-term goal of ***reducing*** ***greenhouse gas*** ***emissions*** by 80-95%, as set out in its ***Energy*** Roadmap 20502, is designed to protect the environment and support Europe's transition to a competitive, low-carbon economy. With its more ambitious temperature stabilization goals and 'net zero' ***emissions*** ***target*** for mid-century, there is now even greater impetus behind this agenda and Europe's role as a leader will be scrutinized and challenged as never before. Renewed action and a focus on innovation and competitiveness will be crucial to its success in this endeavour. The i24c report found that Europe has made significant strides in reaching this goal through considerable investment in R&D, with the region investing over $ 4.3bn, making it the biggest investor in green technology globally. The report also recognized Europe as a world leader in ***energy*** innovation, noting the continent is home to almost a fifth of climate change innovations and over 1.2 million jobs related to renewable ***energy***.

Region wide strategy needed to deploy ***energy*** innovation

The i24c report notes that while these efforts provide Europe with a strong platform, the region has struggled to successfully deploy these innovations due to an insufficiently cohesive industrial, economic and regulatory strategy. A region-wide strategy should focus not only on the ***energy*** sector but on encouraging collaboration across related sectors such as transport, ***agriculture***, infrastructure, digital, and the manufacturing and services industries in general. It should further set in place a framework to enable cross-border collaboration to scale innovation and provide economic growth, prosperity and competitive advantage to all EU member states.

The deployment deficit experienced across Europe is partly the result of outdated or inconsistent regulation and the perception among the investment community that projects are too risky, particularly given the high upfront investments required in ***energy*** initiatives.

With a European Commission Consultation on its forthcoming integrated Research, Innovation and Competitiveness strategy for the European ***Energy*** Union currently under way, the i24c reports notes that a European ***energy*** strategy must not only enable Europe's vibrant start-up community access to much-needed capital, but also drive new regulation to transform a fragmented market and support the uptake of new technologies.

Pascal Lamy, a member of the i24c High Level Group, said: "This study confirms the need for an integrated and systemic approach to ***energy*** research, innovation and competitiveness, so the Commission's initiative is the right one at the right time. It underlines that successes to date cannot be taken for granted in the future, as other economies seek to develop their ***energy***-related industries to exploit the massive opportunities from the transition to a new climate economy. But with the right enabling framework, putting the consumer center-stage and smart strategic choices, Europe can demonstrate leadership through industrial success as well as achieving a clean ***energy*** revolution."

Nicolas Clinckx, Vice President ***Energy*** and Utilities, Capgemini Consulting, said: "Europe's leadership position in low-carbon technology R&D can provide the foundation for meeting the ambitious climate change goals set out both at COP21 and in its ***Energy*** Roadmap 2050, but only if more is done to address our deployment challenges. This isn't just an ***energy*** issue, Europe needs a cohesive strategy for ***energy*** innovation and deployment that encompasses all related sectors and works across borders to pull promising developments across the valley of death and into production. The European Union can play a key role by ensuring that regulation not only encourages investment but also deployment too."

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(Distributed by M2 Communications (   [*www.m2.com*](http://www.m2.com)))

**Load-Date:** May 27, 2016

**End of Document**



[***-FPL breaks ground on three new solar power plants that will triple the amount of solar it provides its customers***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J2R-9971-F0K1-N2J9-00000-00&context=1516831)

ENP Newswire

February 12, 2016 Friday

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**Length:** 2679 words

**Body**

PARRISH, Fla. - Florida Power & Light Company today celebrated the ground breaking of its three new solar power plants with a ceremony on the site of the future FPL Manatee Solar ***Energy*** Center.

The three new large, community-scale plants, which include the FPL Babcock Ranch Solar ***Energy*** Center and the FPL Citrus Solar ***Energy*** Center, are expected to begin producing affordable, clean ***energy*** by the end of 2016 and will triple the company's current solar capacity.

'Six years ago, not far from here, FPL commissioned what was then the largest photovoltaic solar power plant ever built in the United States with 90,000 solar panels,' said Eric Silagy, FPL president and CEO. 'Fast-forward to 2016, and we're extending our leadership role in the renewable ***energy*** space by installing 1 million new solar panels. If you laid these panels end to end, they would nearly wrap around the entire state. But we couldn't have come this far on our own. Working with the communities we serve, we are building solar ***energy*** centers that are not only reliable, but also cost-effective, providing affordable, clean ***energy*** for our customers for generations to come.'

FPL has been working for several years to find ways to ***reduce*** costs in order to make the construction of these three solar plants cost-effective. The company identified three suitable existing sites with unique built-in advantages, such as the existence of sufficient transmission and substation infrastructure, and strong community support. Also, by buying solar panels in such a large quantity, FPL has been able to realize significant savings for customers. Without these unique cost advantages, solar power - even the most economical community-scale installation - is still generally not yet cost-effective in FPL's service area, due in part to its higher costs compared with the company's highly efficient system and low electric rates.

'I commend FPL for embracing solar ***energy*** and leveraging this technology in a cost-effective way to meet our state's current and future clean ***energy*** needs,' said Florida Commissioner of ***Agriculture*** Adam H. Putnam, who addressed guests at the ground breaking ceremony.

The FPL Manatee Solar ***Energy*** Center will consist of more than 338,000 solar panels over 762 acres - enough to cover 577 football fields. The other two solar plants are:

FPL Citrus Solar ***Energy*** Center, which is being built on 841 acres in DeSoto County, Fla., near the site of FPL's first large-scale solar power plant

FPL Babcock Ranch Solar ***Energy*** Center, now under construction on 440 acres in Charlotte County, Fla., as part of the new Babcock Ranch sustainable community

When completed, each of the three new solar plants will have 74.5 megawatts of solar capacity. These plants, along with several community-based, small-scale solar arrays and commercial-scale solar research installations that FPL is building, will combine for a total of more than 225 megawatts of new solar capacity by the end of this year. This will effectively triple FPL's solar capacity, which currently totals approximately 110 megawatts.

The three new solar ***energy*** centers will employ nearly 250 people during construction, helping support the local economies of the three communities.

'Making smart, cost-conscious investments in clean, renewable solar ***energy*** is the right thing to do for our state,' said Vanessa Baugh, Manatee County Commission Chairman. 'We are very pleased to partner with FPL on this project that will also provide a much-needed injection of economic activity to our community, including hundreds of construction jobs.'

'This is a big step forward for our state and for the future of renewable ***energy*** in Florida,' said Eric Draper, executive director of Audubon Florida. 'FPL's three solar plants help ***reduce*** the use of fossil fuels, prevent the ***emission*** of thousands of tons of carbon each year and save millions of gallons of water.'

These projects will join the company's existing solar facilities: the FPL Space Coast Next Generation Solar ***Energy*** Center near Cape Canaveral, Fla.; the FPL DeSoto Next Generation Solar ***Energy*** Center in DeSoto County, Fla. and the FPL Martin Clean ***Energy*** Center, the world's first hybrid solar/natural gas plant. These solar plants were built in 2009 and 2010 and have the combined capacity to generate 110 megawatts of power. In addition, FPL has built more than 100 solar arrays for Florida schools and other educational facilities, and is currently building solar installations at the Palm Beach Zoo & Conservation Society, the Broward Young At Art Museum & Library, Florida International University, Daytona International Speedway and several other locations around the state.

About Florida Power & Light Company

Florida Power & Light Company is the third-largest electric utility in the United States, serving more than 4.8 million customer accounts across nearly half of the state of Florida. FPL's typical 1,000-kWh residential customer bill is approximately 30 percent lower than the latest national average and, in 2015, was the lowest in Florida among reporting utilities for the sixth year in a row. FPL's service reliability is better than 99.98 percent, and its highly fuel-efficient power plant fleet is one of the cleanest among all utilities nationwide. The company was recognized in 2015 as one of the most trusted U.S. electric utilities by Market Strategies International.

A leading Florida employer with approximately 8,800 employees, FPL is a subsidiary of Juno Beach, Fla.-based NextEra ***Energy***, Inc. (NYSE: NEE), a clean ***energy*** company widely recognized for its efforts in sustainability, ethics and diversity, including being ranked in the top 10 worldwide for innovativeness and community responsibility as part of Fortune's 2015 list of 'World's Most Admired Companies.' NextEra ***Energy*** is also the parent company of NextEra ***Energy*** Resources, LLC, which, together with its affiliated entities, is the world's largest generator of renewable ***energy*** from the wind and sun.

Cautionary Statements and Risk Factors That May Affect Future Results

This news release contains 'forward-looking statements' within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not statements of historical facts, but instead represent the current expectations of NextEra ***Energy***, Inc. (NextEra ***Energy***) and Florida Power & Light Company (FPL) regarding future operating results and other future events, many of which, by their nature, are inherently uncertain and outside of NextEra ***Energy***'s and FPL's control. Forward looking statements in this new release include, among others, statements concerning FPL's plans for requesting new base rates.

In some cases, you can identify the forward-looking statements by words or phrases such as 'will,' 'may result,' 'expect,' 'anticipate,' 'believe,' 'intend,' 'plan,' 'seek,' 'aim,' 'potential,' 'projection,' 'forecast,' 'predict,' 'goals,' '***target***,' 'outlook,' 'should,' 'would' or similar words or expressions. You should not place undue reliance on these forward-looking statements, which are not a guarantee of future performance. The future results of NextEra ***Energy*** and FPL and their business and financial condition are subject to risks and uncertainties that could cause their actual results to differ materially from those expressed or implied in the forward-looking statements, or may require them to limit or eliminate certain operations.

These risks and uncertainties include, but are not limited to, the following: effects of extensive regulation of NextEra ***Energy***'s and FPL's business operations; inability of NextEra ***Energy*** and FPL to recover in a timely manner any significant amount of costs, a return on certain assets or a reasonable return on invested capital through base rates, cost recovery clauses, other regulatory mechanisms or otherwise; impact of political, regulatory and economic factors on regulatory decisions important to NextEra ***Energy*** and FPL; dis allowance of cost recovery by FPL based on a finding of imprudent use of derivative instruments; effect of any ***reductions*** to or elimination of governmental incentives that support utility scale renewable ***energy*** projects of NextEra ***Energy*** Resources, LLC and its affiliated entities (NextEra ***Energy*** Resources) or the imposition of additional taxes or assessments on renewable ***energy***; impact of new or revised laws, regulations or interpretations or other regulatory initiatives on NextEra ***Energy*** and FPL; effect on NextEra ***Energy*** and FPL of potential regulatory action to broaden the scope of regulation of over-the-counter (OTC) financial derivatives and to apply such regulation to NextEra ***Energy*** and FPL; capital expenditures, increased operating costs and various liabilities attributable to environmental laws, regulations and other standards applicable to NextEra ***Energy*** and FPL; effects on NextEra ***Energy*** and FPL of federal or state laws or regulations mandating new or additional limits on the production of ***greenhouse gas*** ***emissions***; exposure of NextEra ***Energy*** and FPL to significant and increasing compliance costs and substantial monetary penalties and other sanctions as a result of extensive federal regulation of their operations; effect on NextEra ***Energy*** and FPL of changes in tax laws and in judgments and estimates used to determine tax-related asset and liability amounts; impact on NextEra ***Energy*** and FPL of adverse results of litigation; effect on NextEra ***Energy*** and FPL of failure to proceed with projects under development or inability to complete the construction of (or capital improvements to) electric generation, transmission and distribution facilities, gas infrastructure facilities or other facilities on schedule or within budget; impact on development and operating activities of NextEra ***Energy*** and FPL resulting from risks related to project siting, financing, construction, permitting, governmental approvals and the negotiation of project development agreements; risks involved in the operation and maintenance of electric generation, transmission and distribution facilities, gas infrastructure facilities and other facilities; effect on NextEra ***Energy*** and FPL of a lack of growth or slower growth in the number of customers or in customer usage; impact on NextEra ***Energy*** and FPL of severe weather and other weather conditions; threats of terrorism and catastrophic events that could result from terrorism, cyber attacks or other attempts to disrupt NextEra ***Energy***'s and FPL's business or the businesses of third parties; inability to obtain adequate insurance coverage for protection of NextEra ***Energy*** and FPL against significant losses and risk that insurance coverage does not provide protection against all significant losses; a prolonged period of low gas and oil prices could impact NextEra ***Energy*** Resources' gas infrastructure business and cause NextEra ***Energy*** Resources to delay or cancel certain gas infrastructure projects and for certain existing projects to be impaired; risk to NextEra ***Energy*** Resources of increased operating costs resulting from unfavorable supply costs necessary to provide NextEra ***Energy*** Resources' full ***energy*** and capacity requirement services; inability or failure by NextEra ***Energy*** Resources to manage properly or hedge effectively the commodity risk within its portfolio; potential volatility of NextEra ***Energy***'s results of operations caused by sales of power on the spot market or on a short-term contractual basis; effect of ***reductions*** in the liquidity of ***energy*** markets on NextEra ***Energy***'s ability to manage operational risks; effectiveness of NextEra ***Energy***'s and FPL's risk management tools associated with their hedging and trading procedures to protect against significant losses, including the effect of unforeseen price variances from historical behavior; impact of unavailability or disruption of power transmission or commodity transportation facilities on sale and delivery of power or natural gas by FPL and NextEra ***Energy*** Resources; exposure of NextEra ***Energy*** and FPL to credit and performance risk from customers, hedging counterparties and vendors; failure of NextEra ***Energy*** or FPL counterparties to perform under derivative contracts or of requirement for NextEra ***Energy*** or FPL to post margin cash collateral under derivative contracts; failure or breach of NextEra ***Energy***'s or FPL's information technology systems; risks to NextEra ***Energy*** and FPL's retail businesses from compromise of sensitive customer data; losses from volatility in the market values of derivative instruments and limited liquidity in OTC markets; impact of negative publicity; inability of NextEra ***Energy*** and FPL to maintain, negotiate or renegotiate acceptable franchise agreements with municipalities and counties in Florida; increasing costs of health care plans; lack of a qualified workforce or the loss or retirement of key employees; occurrence of work strikes or stoppages and increasing personnel costs; NextEra ***Energy***'s ability to successfully identify, complete and integrate acquisitions, including the effect of increased competition for acquisitions; NextEra ***Energy*** Partners, LP's (NEP's) acquisitions may not be completed and, even if completed, NextEra ***Energy*** may not realize the anticipated benefits of any acquisitions; environmental, health and financial risks associated with NextEra ***Energy***'s and FPL's ownership and operation of nuclear generation facilities; liability of NextEra ***Energy*** and FPL for significant retrospective assessments and/or retrospective insurance premiums in the event of an incident at certain nuclear generation facilities; increased operating and capital expenditures at nuclear generation facilities of NextEra ***Energy*** or FPL resulting from orders or new regulations of the Nuclear Regulatory Commission; inability to operate any of NextEra ***Energy*** Resources' or FPL's owned nuclear generation units through the end of their respective operating licenses; liability of NextEra ***Energy*** and FPL for increased nuclear licensing or compliance costs resulting from hazards, and increased public attention to hazards, posed to their owned nuclear generation facilities; risks associated with outages of NextEra ***Energy***'s and FPL's owned nuclear units; effect of disruptions, uncertainty or volatility in the credit and capital markets on NextEra ***Energy***'s and FPL's ability to fund their liquidity and capital needs and meet their growth objectives; inability of NextEra ***Energy***, FPL and NextEra ***Energy*** Capital Holdings, Inc. to maintain their current credit ratings; impairment of NextEra ***Energy***'s and FPL's liquidity from inability of creditors to fund their credit commitments or to maintain their current credit ratings; poor market performance and other economic factors that could affect NextEra ***Energy***'s defined benefit pension plan's funded status; poor market performance and other risks to the asset values of NextEra ***Energy***'s and FPL's nuclear decommissioning funds; changes in market value and other risks to certain of NextEra ***Energy***'s investments; effect of inability of NextEra ***Energy*** subsidiaries to pay upstream dividends or repay funds to NextEra ***Energy*** or of NextEra ***Energy***'s performance under guarantees of subsidiary obligations on NextEra ***Energy***'s ability to meet its financial obligations and to pay dividends on its common stock and effect of disruptions, uncertainty or volatility in the credit and capital markets of the market price of NextEra ***Energy***'s common stock.

NextEra ***Energy*** and FPL discuss these and other risks and uncertainties in their annual report on Form 10-K for the year ended December 31, 2014 and other SEC filings, and this news release should be read in conjunction with such SEC filings made through the date of this news release. The forward-looking statements made in this news release are made only as of the date of this news release and NextEra ***Energy*** and FPL undertake no obligation to update any forward-looking statements.

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[Editorial queries for this story should be sent to [*newswire@enpublishing.co.uk*](mailto:newswire@enpublishing.co.uk) ]

**Load-Date:** February 12, 2016

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[***Choking air, melting glaciers: how global warming is changing India***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HD3-SN51-DY93-M17V-00000-00&context=1516831)

Agence France Presse -- English

November 17, 2015 Tuesday 3:11 AM GMT

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**Length:** 891 words

**Dateline:** New Delhi, Nov 17 2015

**Body**

Its Himalayan glaciers are melting fast, its ***agricultural*** heartland is drying up and its capital is choking on the world's filthiest air.

Yet India's government is one of the few major economies refusing to pledge to cut ***greenhouse gas*** ***emissions***, ahead of this month's major climate conference in Paris.

Global warming is already changing the face of rapidly developing India, a nation forecast to become the world's most populous, overtaking China, in less than a decade.

"No one has done less to contribute to global warming than India and Africa. No one can be more conscious of climate change than Indians and Africans," Prime Minister Narendra Modi told a recent Delhi summit.

- Melting glaciers -

In the Himalayas of Kashmir, scientist Shakil Ahmad Romshoo fears for the future of the pristine region which relies heavily on its more than 100 glaciers for water.

At least two major ones have disappeared completely in the last 50 years, while those in a key basin have shrunk by more than 27 percent over the same period, Romshoo's studies show.

"The impact of climate change in Kashmir is loud and clear. We have noticed a significant decline in stream flow from the glaciers," the glaciologist, from the University of Kashmir, told AFP.

In villages nestled in the foothills downstream, less water flowing into rivers and ponds has forced farmers to completely change their way of life.

Instead of rice paddies dotting the landscape, farmers have switched to growing apples which use less water, raising concerns about a drop in India's grain supplies.

As snow melts faster on the peaks from warmer temperatures, farmers, who have stuck with traditional crops, have been thrown into turmoil.

"All the snow melt on the mountains now melts away by April when we actually start needing it for ***agriculture***," said Haji Mohammad Rajab Dar in Chandigam village.

"I used to get 230 to 260 sacks of rice from my fields. It is ***reduced*** to just 90 this year," the 70-year-old said, explaining that his land is not conducive to growing apples.

"So we are ruined and turning into beggars slowly."

- Shrinking coastline -

India's landscapes are changing -- from the melt in the Himalayas, to the increasingly arid farm belts in the middle and the stunning coasts where fishermen talk of rising, warmer seas eroding their shores.

"Changes in sea level and temperature have affected our livelihood. Over the last decade, the amount of fish caught has ***reduced*** by 40 percent," said Ayub Hajji whose family has been fishing off Gujarat's coast for generations.

India says developed countries are mostly to blame for climate change, and heaping demands on developing nations to cut ***emissions*** is both unfair and hypocritical.

Authorities insist they must focus on meeting the growing needs of its 1.25 billion people, 300 million of whom lack access to electricity.

In its action plan for the Paris COP21 meet, India pledges to ***reduce*** its carbon intensity -- a measure of a country's ***emissions*** relative to its economic output -- by 35 percent by 2030, rather than an absolute cut in ***emissions***.

Globally, India is the third largest carbon-emitting country -- though its per capita ***emissions*** are only one third of the international average -- according to the World Resources Institute.

- Gasping for breath -

While the government has an ambitious programme to ramp its use of renewables, including solar ***energy***, it has also vowed to continue expanding its use of coal.

It plans to double coal production to one billion tonnes by 2020 -- saying it was vital to meet the needs of its burgeoning economy, which grew seven percent last quarter.

But the increasing ***emissions*** are taking their toll on health, with Delhi now officially the world's most polluted capital, a problem compounded by the steady rise in car ownership.

At one of Delhi's leading chest hospitals, Dr Manu Madan said the corridors are full of patients suffering asthma and other ailments linked to the dirty air.

"We see more than 600 patients a day in the out-patients department," said Madan, who normally skips lunch to try to keep the queues down.

Madan said his team from the Vallabhbhai Patel Chest Institute are bracing for winter, when heavy cloud cover traps the pollution.

"Children suffer the most because of less immunity. At least two to three months during the winter are the worst. In many cases, we recommend they move out of Delhi."

- Fields dry up -

In the fields of western Maharashtra state, large numbers of farmers are reeling from erratic rains which experts suspect are linked to climate change.

Sudden heavy downpours followed by weeks of no rain at all are accelerating topsoil erosion and leading to less fertile and even barren fields, said Shantaram Sakore, director of a local farmers' NGO.

With no access to irrigation and heavily reliant on the annual monsoon, farmers are increasingly competing to dig deeper borewells to tap groundwater to cope with drought.

"Collectively they have depleted the ground water level substantially," said Sakore, calling for more education on climate change.

Rice farmer Narayan Nipurte, from Thane district north of Mumbai, knows little of the complexities of global warming. But he understands the drier monsoons are making it more difficult to feed his family.

"There will be some seasons when there is no rain, so what do you do?" Nipurte asked.

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**Load-Date:** November 17, 2015

**End of Document**



[***Fossil fuel use must fall twice as fast as thought to contain global warming - study; Available carbon budget is half as big as thought if global warming is to be kept within 2C limit agreed internationally as being the point of no return, researchers say. Climate News Network reports***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J5G-HPK1-F021-63P4-00000-00&context=1516831)

The Guardian

February 25, 2016 Thursday 2:28 PM GMT

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**Section:** ENVIRONMENT

**Length:** 873 words

**Byline:** Tim Radford for Climate News Network, part of the Guardian Environment Network

**Body**

Climate scientists have bad news for governments, ***energy*** companies, motorists, passengers and citizens everywhere in the world: to contain global warming to the limits agreed by 195 nations in Paris last December, they will have to cut fossil fuel combustion at an even faster rate than anybody had predicted.

Joeri Rogelj, research scholar at the International Institute for Applied Systems Analysis in Austria, and European and Canadian colleagues propose in Nature Climate Change that all previous estimates of the quantities of carbon dioxide that can be released into the atmosphere before the thermometer rises to potentially catastrophic levels are too generous.

Instead of a range of permissible ***emissions*** estimates that ranged up to 2,390 bn tons from 2015 onwards, the very most humans could release would be 1,240 bn tons.

Available levels

In effect, that halves the levels of diesel and petrol available for petrol tanks, coal for power stations, and natural gas for central heating and cooking available to humankind before the global average temperature - already 1C higher than it was at the start of the Industrial Revolution - reaches the notional 2C mark long agreed internationally as being the point of no return for the planet.

In fact, the UN Framework Convention on Climate Change summit in Paris agreed a ***target*** "well below" 2C, in recognition of ominous projections - one of which was that, at such planetary temperatures, sea levels would rise high enough to submerge several small island states.

The Nature Climate Change paper is a restatement of a problem that has been clear for decades. Carbon dioxide proportions in the atmosphere are linked to planetary surface temperatures and, as they rise, so does average temperature. For most of human history, these proportions oscillated around 280 parts per million.

The global exploitation, on a massive scale, of fossil fuels drove the expansion of ***agriculture***, the growth of economies, a sevenfold growth in human population, a sea level rise of 14cms, and a temperature rise of, so far, 1C.

To stop temperatures increasing another 3C or more and sea levels rising by more than a metre, humans have to ***reduce*** fossil fuel ***emissions***. By how much these must be ***reduced*** is difficult to calculate.

The global carbon budget is really the balance between what animals emit - in this context, the word animals includes humans with cars and aeroplanes and factories - and what plants and algae can absorb. So the calculations are bedevilled by uncertainties about forests, grasslands and oceans.

To make things simpler, climate scientists translate the ***target*** into the billions of tons of carbon dioxide that, ideally, may be released into the atmosphere from 2015 onwards. Even these, however, are estimates.

There is general agreement that a limit of 590 bn tons would safely keep the world from overheating in ways that would impose ever greater strains on human society. The argument is about the upper limit of such estimates.

Dr Rogelj says: "In order to have a reasonable chance of keeping global warming below 2C, we can only emit a certain amount of carbon dioxide, ever. That's our carbon budget.

"This has been understood for about a decade, and the physics behind this concept are well understood, but many different factors can lead to carbon budgets that are either slightly smaller or slightly larger. We wanted to understand these differences, and to provide clarity on the issue for policymakers and the public.

"This study shows that, in some cases, we have been overestimating the budget by 50 to more than 200%. At the high end, this is a difference of more than 1,000 billion tons of carbon dioxide."

The same study takes a closer look at why estimates of the "safe" level of ***emissions*** have varied so widely.

One complicating factor has been, of course, uncertainty about what humans might do, and another has been about the other more transient ***greenhouse gases***, such as methane and the oxides of nitrogen.

Although short-lived and released in smaller quantities, some of these are potentially far more potent than carbon dioxide as an influence on planetary temperatures.

Complex calculations

But Dr Rogelj and his colleagues found that a significant cause of variation was simply a consequence of the different assumptions and methodologies inherent in such complex calculations.

So the researchers have re-examined both the options and the approaches, and have worked out a global figure that, they suggest, could be relevant to "real-world policy".

It takes into account the consequences of all human activity, and it embraces detailed outlines of possible low-carbon choices. It also offers, they say, a 66% chance of staying within the internationally-agreed limit.

"We now better understand the carbon budget for keeping global warming below 2C," Dr Rogelj says. "This carbon budget is very important to know because it defines how much carbon dioxide we are allowed to release into the atmosphere, ever.

"We have figured out that this budget is at the low end of what studies indicated before, and if we don't start ***reducing*** our ***emissions*** immediately, we will blow it in a few decades."

**Load-Date:** February 25, 2016

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[***Blowing it on the wind***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H6T-GGS1-F0FB-T2FW-00000-00&context=1516831)

Today's Zaman (Turkey)

October 22, 2015 Thursday

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**Length:** 988 words

**Body**

When considering climate change, most people think wind turbines and solar panels are a big part of the solution. But, over the next 25 years, the contribution of solar and wind power to resolving the problem will be trivial - and the cost will be enormous.

The International ***Energy*** Agency estimates that about 0.4 percent of global ***energy*** now comes from solar and wind. Even in 2040, with all governments implementing all of their green promises, solar and wind will make up just 2.2 percent of global ***energy***. This is partly because wind and solar help to ***reduce*** ***greenhouse-gas*** ***emissions*** only from electricity generation, which account for 42 percent of the total, but not from the ***energy*** used in industry, transport, buildings, and ***agriculture***.

But the main reason why wind and solar power cannot be a major solution to climate change stems from an almost insurmountable obstacle: we need power when the sun is not shining and the wind is not blowing.

This has major implications for claims about costs. For example, wind power, we are repeatedly told, is just about to be cheaper than fossil fuels - or even, as a recent global news story claimed, that it is now cheaper than fossil fuels in Germany and the United Kingdom.

This is mostly a mirage - large-scale wind power will not work anytime soon without subsidies. As Warren Buffet says: [W]e get a tax credit if we build a lot of wind farms. That's the only reason to build them. They don't make sense without the tax credit. The IEA estimates that the annual bill for global wind subsidies will increase over the next 25 years, not decrease or fall to zero.

One reason is that cheaper wind in Germany and the UK is true only for new construction. Most existing coal and gas suppliers cost about half or less than wind and could run for decades; instead, we half-close them to accommodate wind. Whereas the new, cheap German wind-***energy*** producers cost $80 per MWh ($0.08 per kWh), the average German spot price in 2014 was just $33 per MWh.

More important, wind is cheaper only when the wind blows. When the wind is not blowing, wind-generated electricity is the most expensive electricity of all, because it cannot be bought at any price.

Installing more wind generators makes the electricity they produce less valuable. The first wind turbine brings a slightly above-average price per kWh. But with 30 percent market share, since all wind producers sell electricity at the same time (when the wind blows), the electricity is worth only 70 percent of the average electricity price. Solar prices drop even faster at similar market shares. So wind and solar generators have to be much cheaper than the average price to be competitive.

Moreover, wind and solar make fossil-fuel-generated electricity more expensive. Some people may think that is a good thing; but, if our societies are to continue functioning in cloudy, windless weather, that means relying on some fossil fuels. The IEA estimates that 56 percent of electricity will come from fossil fuels in 2040, with nuclear and hydro accounting for another 28 percent.

Significant wind and solar usage ***reduces*** the number of hours gas and coal generation operates; with large fixed costs, this makes every kWh more expensive. In a real electricity market, this would result in much higher electricity costs on windless evenings. But this is politically problematic, which is why markets are often constructed to spike much less.

In Spain, gas plants were used 66 percent of the time in 2004, but only 19 percent of the time now, largely because of more wind use. Because the plants must be kept running 57 percent of the time to avoid losses, many are likely to close. Across Europe, possibly 60 percent of all gas-fired generation is at risk.

Keeping the lights on means either accepting much higher prices or emulating what many European governments are beginning to do - namely, subsidize fossil-fuel plants. For example, in 2018 alone, the UK will pay nearly Pound 1 billion ($1.5 billion), mostly to fossil-fuel-based generators, to keep backup capacity available for peak power usage. Building more wind and solar generating capacity with subsidies means societies end up paying three times for power - once for the power, once for subsidies to inefficient renewables, and once more to subsidize our now-inefficient fossil fuels.

Many will say, But at least we cut CO2. That is true, although the ***reduction*** is perhaps only half of what is often touted, because the back-up power needed to smooth intermittent wind and solar is often more CO2-heavy. Moreover, we pay dearly for these cuts. In 2013, the world produced 635 TWh of wind electricity and paid at least $28 billion in subsidies, or $76 per avoided ton of CO2, and likely twice or more than that. When the estimated damage costs of CO2 are about $5 per ton, and a ton of CO2 can be cut in the European Union for about $10, we are paying a dollar to do less than 7-13 cents of good for the climate.

And its positive impact on the climate is negligible. Consider two worlds: in the first, all governments implement all their green promises, as indicated by the IEA, and increase solar and wind ***energy*** more than seven-fold by 2040; in the second, not one new solar panel or wind turbine is purchased over the next 25 years.

The difference in subsidy spending between the two worlds is more than $2.5 trillion. Yet the difference in temperature increase by the end of the century, run on the United Nations climate panel's own model, would be a mere 0.0175°C (0.03°F).

One day, when the wind price has fallen much further and solar is almost as cheap as wind, significant investments in wind and solar could be a great idea. But even after decades of capital reallocation, these sources might account for a bit less than a quarter of our electricity.

In short, a world powered by solar and wind - one that has resolved the climate challenge - is very unlikely anytime soon.

**Load-Date:** October 23, 2015

**End of Document**



[***Africa - The Africa Climate Business Plan.***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5JKM-3731-F0PT-M3TT-00000-00&context=1516831)

Water Power & Dam Construction

April 1, 2016

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**Section:** Pg. 24

**Length:** 2315 words

**Highlight:** The World Bank Group has recently unveiled a new plan that calls for US$16B in funding to help African people and countries adapt to climate change. It comes in the wake of analysis which indicates extreme weather patterns could push up to 43M more Africans into poverty by 2030. Increasing the use of hydropower and promoting integrated watershed management form part of the plan to raise awareness and accelerate resource mobilisation for the region. Suzanne Pritchard reports.

**Body**

The outcome of the Conference of Parties to the United Nations Framework Convention (COP21), which took place in Paris in December 2015, was of vital importance for Africa; more than any other region of the world.

The reason behind this is simple, says Makhtar Diop, Vice President of the African Region of the World Bank. "While Africa is the region that contributed the least to ***greenhouse gas*** ***emissions***, African countries suffer the most from the impact of climate change," he explains. "From the Sahel to the Horn of Africa, to the south of the continent and the small island nations, African countries are experiencing first-hand the devastating effects of more extreme weather patterns."

Climate-related factors will make it harder for African countries to tackle extreme poverty in the future for three reasons:

- Warming is unavoidable as a result of past ***emissions*** of ***greenhouse gases***. This will cause the loss of cropland, a decline in crop production, worsening undernourishment, higher drought risks and a decline in fish catches.

- Further warming may materialise which will have disastrous consequences for the region. This will be in the form of heat extremes, increased risk of severe drought, crop failures every two years, a 20% ***reduction*** in major food crop yields, and, by the end of the century, up to 18 million people affected by floods every year.

- Considerable uncertainty on what the warming impact will be on local weather patterns and hydrological cycles. This will pose formidable challenges for development planning and for the design of projects related to water management such as irrigation and hydropower.

"The consequences of climate change for Africa are devastating and threaten to push millions of people into extreme poverty by 2030, largely due to lower crop yields and higher food prices, and negative health impacts" says Benoit Bosquet, World Bank Practice Manager in the Environment & Natural Resources Global Practice.

African leaders have been described as speaking with one voice, and working hard to transform challenges into opportunities on the issue of climate change. "The fact is," Makhtar Diop says, "that the continent is uniquely positioned to build resilience by betting on renewable sources of ***energy*** (plentiful in Africa) to bring power to its people, schools, health centres and businesses."

To help Africa enhance its efforts to strengthen, power and enable resilience, the World Bank has prepared the Africa Climate Business Plan. Presented at COP21, the plan aims to raise US$16B in climate finance by 2020 to meet Africa's financial needs for climate action.

According to current estimates, the region requires US$5-10B per year to adapt to global warming of 2 degsC. The World Bank and the United Nations Environment Programme estimate that the cost of managing climate resilience will continue to rise to US$20-50B by mid-century, and closer to US$100B in the event of a 4 degsC warming.

Of the $16B that the ambitious Africa Climate Business Plan proposes for fast-tracking climate adaptation, some US$5.7B is expected from the International Development Association (IDA), the arm of the World Bank Group that supports the poorest countries. About US$2.2B is expected from various climate finance instruments, US$2B from others in the development community, US$3.5B from the private sector, and US$0.7B from domestic sources, with an additional US$2B needed to deliver on the plan.

"The Africa Climate Business Plan spells out a clear path to invest in the continent's urgent climate needs and to fast-track the required climate finance to ensure millions of people are protected from sliding into extreme poverty," Diop explains. "While adapting to climate change and mobilising the necessary resources remain an enormous challenge, the plan represents a critical opportunity to support a priority set of climate-resilient initiatives in Africa."

The plan will boost the region's ability to adapt to a changing climate while ***reducing*** greenhouse ***emissions***, focusing on a number of concrete actions. These include actions to:

Boost the resilience of the continent's assets, including ***agricultural*** land, inland water bodies and oceans.

- Power resilience, including opportunities for scaling up low-carbon ***energy*** sources.

- Enable resilience by providing essential data, information and decision-making tools for climate-resilient development across sectors, including strengthening hydro-meteorological systems.

"Sub-Saharan Africa is highly vulnerable to climate shocks, and our research shows that could have far-ranging impact. This plan identifies concrete steps that African governments can take to ensure that their countries will not lose hard-won gains in economic growth and poverty ***reduction***," World Bank Group President Jim Yong Kim said, "and they can offer some protection from climate change."

Integrated watershed management

The integrated watershed management component of the business plan intends to scale up support for four selected basins: the Niger, Lake Chad, Zambezi and Victoria. The World Bank says that the goal is to strengthen the ability of riparian countries in these basins to manage their water resources for sustainable development in a climate-resilient way.

Niger River Basin

A Climate Resilience Investment Plan (CRIP) has been prepared for the Niger River Basin. Nine countries in West and Central Africa (Benin, Burkina Faso, Cameroon, Chad, Ivory Coast, Guinea, Mali, Niger and Nigeria) share this basin which has a highly vulnerable population. Seven of the ten basin countries are among the 20 poorest countries in the world. Food security and social well being depend mostly on unpredictable and extreme rainfall patterns. And climate change, the bank says, is exacerbating these challenges.

"There is considerable uncertainty about the implications of climate change for the hydrological cycles in the basin (as in much of West Africa), with some projections suggesting drying conditions and others pointing to wetter ones," the World Bank states. "This uncertainty underscores the importance of strengthening the capacity of institutions in the Niger Basin to plan water resources investments that can deliver the intended development benefits under a wide range of future climates."

It is hoped that the CRIP will achieve the following outcomes:

- Improve information to support water management and development decisions by riparian countries.

- Identify institutional needs for information sharing, increase the sustainability of water-storage infrastructure, mitigate the impacts of climate variability, generate low-carbon ***energy***, and ensure results and impacts at the grassroots level.

- Develop multipurpose infrastructure for ***energy***, irrigation, transport and minimum flows.

- Develop run-of-river dams to provide low-carbon ***energy*** sources.

- Optimise water storage, in order to improve redistribution and maintain low flows.

- Equip the rural poor with small-scale storage options to help withstand water shocks.

Zambezi River Basin

Described as one of the most diverse and valuable natural resources in Africa, the Zambezi River plays a central role in the economies of eight riparian countries:

- Angola.

- Botswana.

- Malawi.

- Mozambique.

- Namibia.

- Tanzania.

- Zambia.

- Zimbabwe.

The river's water helps meet the basic needs of 30M people but its tributaries are subject to strong and seasonal variation. Such a cycle of drought and floods has devastating effects on people and economies in the regions, especially the poorest. And, once again, the basin is "likely to be severely affected by climate change".

The World Bank is part of a multi-donor initiative to support climate-resilient development in the Zambezi River Basin. Part of this involves investment in the 2400MW Batoka Gorge hydroelectric scheme, envisaged as a run-of-river plant upstream of the Kariba Dam. The project is being developed by the Zambezi River Authority which is run jointly by Zambia and Zimbabwe.

Potential outcomes of this programme over the next 10-15 years include that:

- ***Energy*** security will be enhanced through US$10.7B worth of hydropower investments that yield an additional 35,300GWh/yr of firm ***energy*** and an additional 60,000GWh/yr of average ***energy***.

- Poverty will be ***reduced*** throughout the basin, as a result of expanded development and sustainable water resources management.

- Irrigation will be increased to 775,000 hectares a year (85% located in Malawi, Zambia, and Zimbabwe). This will lead to increased ***agricultural*** production and enhanced regional food security.

Lake Victoria Basin

The Lake Victoria Basin is a major population and poverty centre in Africa and is further described by the World Bank as "a transboundary natural asset of global importance". Covering about a ninth of the land area of the East African Community, it is home to about a third of its population below the poverty line. The waters of the lake and catchment area provide 90% of Uganda's hydropower; most of the hydropower for Burundi and Rwanda; and the water supply to major urban centres, including Kampala, Kigali, Mwanza and Kisumu.

The Africa Climate Business Plan will help alleviate problems facing the Lake Victoria Basin caused by environmental degradation such as loss of forest cover, sedimentation and pollution. Expansion and development of more systematic programmes on sustainable land and water management are at the heart of the action plans.

Increasing the use of hydropower

Hydropower currently provides 24% of Sub-Saharan Africa's power needs, with the potential to increase this to 40%. Some 50GW of hydropower could also be developed immediately.

The World Bank has said that it: "will continue to support the development of hydropower resources through technical work, financing, policy dialogue and resource mobilisation. These efforts will be grounded in the development of large hydropower generation capacity as well as water regulation to ensure year round production and create further downstream hydropower development opportunities."

An investment of US$2B in proposed initiatives to address challenges and enhance climate resilience could result in the development of 1GW of hydropower capacity by 2026. Downstream regulation of river flows in two of West Africa's largest river basins will also facilitate further development.

Although Cameroon's total installed generation capacity from all sources is currently only about 1000MW, the country has the third-largest hydropower development potential in Sub-Saharan Africa. This is estimated at more than 12,000MW. The Sanaga River Basin provides nearly half of untapped potential; 4.2GW of which is suitable for large-scale development. Further development of the basin will require additional river regulation to ***reduce*** the seasonality of flows and increase all-season capacity downstream. Commissioning of a regulating dam at the Lom Pangar site in 2017 will also help. The dam will increase guaranteed all-season hydropower capacity on the Sanaga River by about 40%, immediately adding 120MW at existing downstream hydropower plants, which will generate electricity in the dry season.

Over in Guinea, the estimated hydropower potential of the Konkoure River Basin is 2.4GW - about 40% of the country's 6GW hydropower potential. Two main projects have already been implemented: the 75MW Garafiri project was commissioned in 1999, and the 240MW Kaleta project was commissioned in 2015.

The Souapiti Dam on the Konkoure River in northern Guinea is described as being of strategic importance. It regulates the Konkoure Basin and is one of the best hydropower production sites in West Africa, with the potential to generate more than 500MW. The Africa Climate Business plan will focus on supporting development of the Souapiti hydropower project which is estimated to cost US$1-1.5B.

Strengthening hydro-meteorological programmes

Floods and droughts cause heavy loss of life and livelihoods across Africa. In 2013 Madagascar and Nigeria each lost more than 1% of GDP from flooding and cyclones, with losses totalling US$8B. Africa, as the World Bank points out, is only set to experience more frequent adverse weather events such as droughts, floods and heat waves with climate change.

In an effort to improve climate and disaster resilience capacity, the Bank wants to strengthen national meteorological and hydrological services across Africa; where it is estimated only ten services provide adequate forecast and warning. Indeed, according to the World Metrological Organisation in 2014, 54% of surface stations and 71% of upper air weather stations in Africa do not actually report data.

These improvements are important as key sectors, such as ***agriculture***, ***energy*** and water, directly benefit from hydro-met services, with hydropower depending on such data for optimal performance.

Expected outcomes from the initiative include:

- Timely and reliable forecasts at local, regional and national levels.

- Improved delivery of weather, climate and hydrological services.

- Better international collaboration, including on early warnings.

A meaningful contribution

The World Bank admits that although its Africa Climate Business Plan "is arguably only a partial contribution to meet Africa's financial needs for climate action", it is still a meaningful one.

"The plan is a 'win-win' for all especially the people in Africa who have to adapt to climate change and work to mitigate its impacts," says Jamal Saghir, the World Bank's Senior Regional Adviser for Africa. "We look forward to working with African governments and development partners, including the private sector, to move this plan forward and deliver climate smart development."

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This article was compiled from the report: Accelerating Climate-Resilient and Low Carbon Development. The Africa Climate Business Plan by The World Bank Group, Africa Region, Washington, DC. 2015. [*www.worldbank.org*](http://www.worldbank.org).

**Load-Date:** April 22, 2016

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[***Biofuel needs oil at $70 to compete, says DuPont; Chemicals***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H9H-T9S1-DXXV-41WM-00000-00&context=1516831)

Financial Times (London, England)

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**Section:** COMPANIES; Pg. 17

**Length:** 854 words

**Byline:** Ed Crooks in New york

**Highlight:** Next-generation ethanol made from farm waste threatened by economics

**Body**

Advanced biofuel made from ***agricultural*** waste - the Holy Grail of the alternative ***energy*** industry - will not be competitive with conventional fuel until oil is back to $70-$80 per barrel, DuPont has said.

The prediction from the US chemicals group, which last week formally opened the world's largest cellulosic ethanol plant, underscores the challenge facing makers of "second-generation" biofuels. After a decade pursuing an elusive production process, companies are finding their business models threatened by the changing economics of the industry - as well as the politics of the US.

DuPont's new $225m Iowa plant will, after some delay, begin making cellulosic ethanol next year, and the fuel is expected to result in 90 per cent fewer ***greenhouse gas*** ***emissions*** than petrol.

Ethanol from the plant will be sold in California, which has mandated a 10 per cent ***reduction*** in the carbon intensity of transport fuels by 2020, through the addition of biofuels.

Jan Koninckx , DuPont's global head of biofuels, described the opening of the plant as a "historic day in technology". He said: "We're really reforming the transport ***energy*** sector . . . This is a phenomenal environmental benefit."

Using ***agricultural*** waste rather than fresh crops to make biofuel is difficult, though. At the plant DuPont will take corn waste left over from the harvest - leaves, husks, cobs and stalks, collectively known as "stover" - and turn its cellulose into ethanol. Other sources for cellulosic ethanol include bagasse, the waste cane left from sugar production, and specialist crops such as switchgrass.

Using waste as a feedstock in this way avoids many of the concerns raised by first-generation biofuels, particularly the worry that food production was being sacrificed to create fuel additives.

But the new cellulosic ethanol process needs advanced enzymes to release sugars held in the cellulose, and production levels in the US have been very low.

Only two plants are using this technology: one owned by Abengoa of Spain, and another that is a joint venture between Poet, the privately held ethanol producer, and Royal DSM, a Dutch technology company.

Both formally opened their plants a little over a year ago but, from January to September, only 1.65m gallons of cellulosic ethanol were produced in the US, according to the government's Environmental Protection Agency. That is 4 per cent of the volumes that the Poet and Abengoa plants were notionally capable of producing in that time.

DuPont claims to have a better understanding of the cellulosic ethanol production process. Nevertheless, Mr Koninckx acknowledged the economics of cellulosic ethanol suggested it would not be competitive with oil-based fuels until oil had risen back above $70 a barrel.

With oil priced at around $50 now, it could easily rebound. But in the futures market Brent crude for delivery in December 2021 is trading at only $65 per barrel - suggesting cellulosic ethanol will need some sort of official support for several years.

In the US, demand for ethanol is mandated under the Renewable Fuel Standard , a regulation requiring a specified volume of biofuels to be blended into transport and jet fuels and heating oil.

However, this regulation has come under attack from the oil industry, food producers and environmentalists - and the EPA has launched a new inquiry into ethanol's ***emissions***.

Ethanol production has also been hitting what is known as the blend wall - the 10 per cent legal maximum for ethanol content in US car fuel.

Peder Holk Nielsen , chief executive of Novozymes, the Danish enzyme technology company that supplies DuPont rivals such as Beta Renewables in Italy, says the important issue is funding the industry's growth. "The second wave of plants could be 20 or 30 or 200 or 2,000," he says. "But that will not happen unless investors understand that the plants will have access to the market . . . not just today, but in 2025."

To instil confidence, he says, the US administration needs to retain and extend the Renewable Fuel Standard. But many Republicans and some Democratic politicians have been arguing that it should be cut back or scrapped.

Robert Rapier, an ***energy*** analyst, says the problem with cellulosic ethanol is the difficulty in processing and logistically managing high volumes of the plant waste. "Technically it works," he says. "Economically it's a very difficult proposition."

But Mr Holk Nielsen of Novozymes argues that the environmental benefits deserve continued support.

**Cash crop**

**Cellulosic ethanol seen as potential money spinner**

Ellen Kullman , DuPont's chief executive for seven years until her retirement last month, identified cellulosic ethanol as one of the "tough" scientific challenges the group was taking on - and potentially an important source of future earnings growth.

However, Nelson Peltz , the activist investor whose Trian fund has taken a 2.7 per cent stake in DuPont, has attacked the company for its slow progress towards commercialising the technology, as part of his wider critique of its performance.

Its commercial production of cellulosic ethanol had originally been scheduled to start last year.

**Load-Date:** November 4, 2015

**End of Document**



[***Evonik's new lysine plant goes on stream in Brazil***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5KYT-R251-DYNP-M05J-00000-00&context=1516831)

FeedNavigator.com

July 20, 2016 Wednesday 12:46 PM GMT+1

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**Section:** SUPPLIERS

**Length:** 544 words

**Byline:** Jane Byrne, , [*Jane.Byrne@wrbm.com*](mailto:Jane.Byrne@wrbm.com)

**Body**

**INTRODUCTION**

Evonik’s new L-lysine production site in the Brazilian state of Paraná is now on stream, bringing an additional 80,000 metric tons (Mt) of capacity.

**STORY**

*“The new [Biolys] plant in Castro is our first amino acid plant in Latin America. We will* ***target*** *the [pig and poultry] markets in Latin America in general and in Brazil in particular,”* said a spokesperson for the German group.

Evonik said the site was chosen because of its access to raw material supplies such as corn, its logistical connections, and its closeness to local markets.

The Biolys facility has been built at an industrial complex in Castro owned by Cargill.

Evonik is already running a cooperative manufacturing operation with the US agribusiness giant for the production of Biolys in Blair, Nebraska, which has an annual capacity of 280,000 metric tons following on from expansion work there in 2012.

That status of the planned Biolys production facility in Volgodonsk in the Rostov region of Russia is not clear. A 100,000 Mt capacity plant was set to be built under a joint venture - Donbiotech - between Evonik and Russia's Varshavsky group.

Evonik did not respond to our request for clarification on the Rostov project.

However, the CEO of Donbiotech, Vadim Varshavsky, told the All-Russia Food Security Forum at Rostov-on-Don in June 2015 that the partners were completing the construction of all buildings, and were in the process of assembling the plant. He said the plan was to finish the build in mid-2016 and produce the first batch of lysine by the end of the year.

He said amino acids need to be exported to the developing markets of Asia and the Middle East, and that was why the Volgodonsk location was chosen due to its port links with the Black Sea and Turkey and the Caspian Sea and Iran.

**Innovation pipeline**

Last year, Evonik ploughed an additional half a billion euros into its innovation pipeline.

Some of that capital was invested in the monogastric feed additives side, and the group announced the launch of an L-valine product, ValAMINO last month.

That product, it said, represents the fifth essential amino acid in its portfolio for use in pig and poultry feeds, and will help to ***reduce*** the use of crude protein in the diets of those animals, without any loss in terms of growth performance.

Evonik claimed this will result in lower feed costs and conservation of natural resources in ***agricultural*** feed production, which in turn, it said, ***reduces*** land use, ***greenhouse gas*** ***emissions***, and potential eutrophication and acidification.

The amino acid is said to have EU wide registration.

June also saw the German group announce that feed additive innovation has been earmarked as one of six R&D pillars that will contribute over €1bn in additional sales for the group by the year 2025.

Evonik said it is expanding its product portfolio accordingly to encompass healthy and sustainable animal nutrition.

The chemical company, which is active in over 100 countries, generated sales of around €13.5bn and an operating profit (adjusted EBITDA) of about €2.47bn in fiscal year 2015.

But, in March this year, it [***reported***](http://www.feednavigator.com/Suppliers/Evonik-expects-a-subdued-market-environment-and-a-decline-in-2016-earnings) that adjusted core earnings could drop by as much as 19% in 2016, with the company blaming the weak outlook on falling prices for certain feed additives.

**Load-Date:** October 18, 2016

**End of Document**



[***Cop21 - Africa - Agriculture neglected in Cop21 negotiation text, AU expert***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HJF-C1T1-F11P-X0SX-00000-00&context=1516831)

RFI (English)

December 7, 2015 Monday

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**Length:** 1164 words

**Byline:** Laura Angela Bagnetto

**Body**

This week is critical for negotiators at Cop21 in Paris - with a working text on the table, environment ministers from Africa will be discussing how the issues of dealing with climate change can take ...

What is Nepad’s view of the climate negotiations so far?

Africa came with certain expectations-- one, we are hoping that from Paris, we will get a legally binding agreement; two, we’ll get one that is ambitious, accompanied by financing, as well as provide a space for technology transfer to African countries. So, key for Africa is that we’ll have adaptation as a central element in the negotiation outcome. Because for Africa, this is priority number one, two, and three.

Can you talk about specifics on adaptation for someone who might not know exactly what that is for the African countries?

Of course, issues of drought have been there before, but what we are experiencing for the past several years is increased frequency of drought, of floods and coastal erosion, and what this means in practical terms is what impact it will have on the livelihoods of Africans. So when you talk to smallholder farmers, they tell you, ‘We have to change our planting seasons, because we don’t know when the rains are coming. We have to change the seed varieties that we use because the seeds that we used to use before don’t respond well as a result of this change in climate patterns.’ And consequently, it results in ***reduction*** in productivity for those involved in ***agriculture***. So it is critical for us to look at the issue of adaptation in order to address issues of food security as well as national security. Then we would be supporting the capacity of farmers to have new technologies that are well adapted to the changing climate conditions.

Western countries are looking at the continent of Africa as a place that currently has dirty ***energy*** (coal) but has more opportunities to put clean ***energy*** in place, that Africa could be a showcase for new clean technologies. But this could take some time. How do you see it?

That is a really interesting question, because for Africa I think first and foremost the issue is about debt development. That is what is driving leaders’ positions for the continent. Let me say inclusive development, development that is not just about increasing GDP (Gross Domestic Product), but development that trickles down to the local people so you can see an increase in the quality of life of African citizens. So, the question whether you continue with traditional ***energy***, like coal, or whether you embrace renewable ***energy*** or cleaner ***energy*** is an important one, but I don’t think the African countries are in a position to choose. Whatever decision comes from Paris, we are going to move to completely renewable ***energy***. That is the pathway that we’ll have to go, and I think that Africa has abundant assets that they can invest in terms of renewable ***energy***. We have a lot of water, there’s a lot of sunshine. But I think in the short term, there will be still some use of the traditional ***energy*** sources. The question in our view, is what kind of technologies will be made available to African countries? So even when you’re using the traditional ***energy*** sources, like coal, you minimize and mitigate the pollution effect of the use of this traditional ***energy*** source. I think in the short term, you will have a mixture, but the goal is in the medium to long term is to transition to cleaner ***energy*** sources. But for that to happen, Africa has to be accompanied by technology as well as financing, to support this transition to this new economy.

Do you think that there is enough attention placed on ***agriculture*** and technology transfer?

No. We don’t think that the negotiation text, as it is now, sufficiently deals with the issue of ***agriculture***. From the African side, throughout the negotiations, we have been trying to introduce it so that it’s more mainstream in the negotiation text. That being said, I think if we look at the INDCS, (Intended Nationally Determined Contributions) from the member states, most African countries have mentioned ***agriculture*** as one critical area in contributing to ***emission*** cuts. So in an indirect way, one could say it’s been brought into the climate discussion, because the INDCS are an insurance to the decisions that will come from Paris. The negotiations text itself doesn’t sufficiently deal with the issue of ***agriculture*** as we’d like to see. Because of this I think we’ve tried to be creative as a continent. The INDCS do cover them but also we are building partnerships with development partners, with private sector, so that we can have investment flowing to Africa’s ***agriculture***. We have set up initiatives such as the African Climate Smart ***Agriculture*** initiative, which is really to promote best practices in ***agriculture*** interventions in the continent. There is a Nepad Climate Fund that is supporting activities on the ground for communities to adapt to the impacts of climate change. So we are trying to look at this from two fronts, push through the official negotiation channels, which, regrettably I don’t think we are going to be able to get a strong text on this, but pursue this other channel so that we have partnerships that can support investment actions on the ground, support policy reforms on the ground, that will make sure to help us so that Africa’s ***agriculture*** is responsive and adapted to the change in climate patterns.

One of the issues, of course, is financing, and I know that the African group is frustrated because of the issues regarding climactic justice, or climate reparations. Do you think it has been addressed here? The US came out and said, ‘mea culpa, it’s our fault, we’re going to do something about it.’ Have you seen that yet?

Well, it’s one thing to say ‘it’s our fault’ and it’s another about taking action and demonstrating through that action that there is a recognition of that fault and a recognition that Africa suffers the most while it is the least contributor to ***greenhouse gas*** ***emissions***. The 100 billion that was promised in Copenhagen is still not there. So the pace at which developed countries are contributing to the commitment on climate financing that they have pledged to is very slow. They are not responding at the pace in which we are experiencing the effects of climate change at the level of our countries and our communities. The frustrations of negotiators are real, civil society is frustrated. While not wanting to use the word ‘compensation’, in a way you could see some sense in that, if you talk about climate justice, if you talk about environmental justice. Resources that can help these countries to adapt, to transition, to the new realities they are facing, if the responsibilities for the international community to act on those commitments that they have made.

Follow Laura Angela Bagnetto on twitter: @LA\_Bagnetto

More videos available on [*http://www.english.rfi.fr*](http://www.english.rfi.fr)/

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**Load-Date:** December 7, 2015

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[***-General Mills to double organic acreage sourcing to meet growing demand for natural and organic foods***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J8P-GD91-JD3Y-Y2GV-00000-00&context=1516831)

ENP Newswire

March 11, 2016 Friday

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**Length:** 669 words

**Body**

MINNEAPOLIS, MINNESOTA - General Mills today announced it will accelerate its commitment to more than double the organic acreage from which it sources ingredients.

The company now expects to meet its goal of 250,000 acres by 2019.

The increased acreage is directly linked to the company's goals to grow net sales from its natural and organic products. In February at the Consumer Analysts Group of New York conference, Jeff Harmening, General Mills executive vice president and chief operating officer for U.S. Retail, said the company expects to reach $ 1 billion in net sales from natural and organic products by 2019, a full year ahead of its previous ***target***.

Since 2009, General Mills has increased the organic acreage it supports by 120 percent and is now among the top five organic ingredient purchasers - and the second largest buyer of organic fruits and vegetables - in the North American packaged food sector.

'To achieve the growth we anticipate for our natural and organic brands, we will need a more robust pipeline of organic growers,' said John Church, executive vice president, General Mills Supply Chain. 'We're building strategic relationships directly with farmers for our products and are dedicated to working with growers to optimize production and quality, adopt standard practices and accelerate supply.'

General Mills has made sizeable investments to meet growing consumer interest in natural and organic foods, which is expected to drive double-digit industry sales growth over the next five years.

Since 2000, General Mills has acquired a portfolio of natural and organic brands that totaled $ 675 million dollars in pro forma net sales in Fiscal Year 2015, ranking General Mills the third largest natural and organic food maker in the U.S. The portfolio includes Cascadian Farm, Muir Glen, LARABAR, Liberte, Mountain High, Food Should Taste Good, Immaculate Baking, and Annie's. In January, the company acquired meat snacks maker EPIC Provisions.

General Mills has already taken significant steps to help secure a pipeline of organic ingredients. In the U.S., General Mills supports the Organic Farming Research Foundation's efforts to encourage widespread adoption of organic farming practices through research, advocacy and education. In Canada, the company has made a $ 50,000 investment to support the Prairie Organic Grain Initiative (POGI), whose mission is to increase both quantity and quality of organic field crops grown in Canada. POGI is addressing the shortage of organic grain growers by helping conventional growers make the transition to organic farming.

General Mills also participates alongside other organic companies in the Organic Trade Association's Grain, Pulse and Oilseed Council, an industry forum working in a pre-competitive effort to increase the supply of organic grain, oilseeds and pulses.

The commitment to doubling organic acreage will also advance the company's pledge to address climate change. In 2015, General Mills announced a new goal to ***reduce*** absolute ***greenhouse gas*** ***emissions*** across its entire value chain over the next 10 years, with a long-term aspiration to achieve by 2050 sustainable ***emission*** levels in line with scientific consensus. Partnering with suppliers to accelerate adoption of more sustainable ***agriculture*** practices and continuing to grow organic product offerings will help further this commitment.

Media Contact:

Bridget Christenson

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About General Mills

General Mills is a leading global food company that serves the world by making food people love. Its brands include Cheerios, Annie's, Yoplait, Nature Valley, Fiber One, Haagen-Dazs, Betty Crocker, Pillsbury, Old El Paso, Wanchai Ferry, Yoki and more. Headquartered in Minneapolis, Minnesota, USA, General Mills had fiscal 2015 worldwide net sales of US $ 18.7 billion, including the company's US $ 1.1 billion proportionate share of joint-venture net sales.

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**Load-Date:** March 11, 2016

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[***-METLIFE RELEASES UPDATE ON ENVIRONMENTAL, SOCIAL AND GOVERNANCE ISSUES***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H0F-8S61-JD3Y-Y0FK-00000-00&context=1516831)

ENP Newswire

September 23, 2015 Wednesday

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**Length:** 656 words

**Body**

MetLife, Inc. (NYSE: MET) today announced the release of the company's latest corporate responsibility report, highlighting the positive impact it makes on society while achieving its core business goals of managing risk and meeting its long-term financial commitments.

The report, titled Global Impact, provides a progress update on last year's report and includes information on how the company performs on multiple environmental, social and governance issues, including social impact investments, customer service, product access, employee programs, workplace diversity, environmental stewardship and philanthropy.

'We are pleased to share some of the ways MetLife manages the business to create value for our customers, employees and communities around the world,' said Mike Zarcone, executive vice president and head of Corporate Affairs. 'MetLife has a nearly 150-year legacy of operating as a responsible corporate citizen, and this report highlights how we continue to live up to that high standard today.'

Some highlights from the report include:

Protecting the Environment:

Since 2005, MetLife has ***reduced*** ***energy*** consumption by 25 percent and indirect ***greenhouse gas*** ***emissions*** by 100 percent for its U.S. owned and managed office portfolio.

MetLife now holds equity stakes in 46 LEED certified properties, and 100 percent of its owned and operated offices in the U.S. are ***ENERGY*** STAR certified.

More than 5,000 MetLife employees across 25 offices participated in Earth Week 2014 activities.

Since 2003, MetLife has invested $ 2.9 billion in renewable ***energy*** projects and now has ownership stakes in more than 25 wind and solar farms that produce enough clean ***energy*** to power 1 million homes.

Advancing Stability in Communities:

MetLife has more than $ 1.5 billion in community and affordable housing investments (2014 fair value) and provided more than $ 3.5 billion in ***agricultural*** loans originated to farmers and ranchers in 2014.

MetLife Foundation provided more than $ 27 million in financial inclusion grants in year two of its $ 200 million, five-year commitment. In addition, nearly $ 14 million was provided to community development, youth and education, civic and cultural engagement and other community initiatives.

More than 7,300 MetLife employees volunteered over 62,000 hours in communities across 23 countries in 2014.

Serving Customers:

MetLife served approximately 100 million customers from around the world in 2014 and provided financial products and services to 93 of the top 100 of Fortune 500 companies.

MetLife improved its customer service ratings scores (Net Promoter Scores) by 33 percent.

The company invested $ 300 million in technology to improve the customer experience and business operations.

Global Impact has been prepared in accordance with the latest guidelines published by the Global Reporting Initiative (GRI), the nonprofit organization that sets the standard for sustainability reporting. The GRI Guidelines provide a globally recognized framework for companies to measure and communicate their environmental, economic, social and governance performance. By using this framework, MetLife joins thousands of companies around the world in quantifying the benefits and impacts of its business activities.

To view Global Impact, please visit [*www.metlifeglobalimpact.com*](http://www.metlifeglobalimpact.com).

About MetLife

MetLife, Inc. (NYSE: MET), through its subsidiaries and affiliates ('MetLife'), is one of the largest life insurance companies in the world. Founded in 1868, MetLife is a global provider of life insurance, annuities, employee benefits and asset management. Serving approximately 100 million customers, MetLife has operations in nearly 50 countries and holds leading market positions in the United States, Japan, Latin America, Asia, Europe and the Middle East. For more information, visit   [*www.metlife.com*](http://www.metlife.com).

Contact:

Jonathan Richter

(212) 578-5370

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**Load-Date:** September 23, 2015

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[***-KYOCERA TCL Solar Begins Construction on 13.7MW Floating Solar Power Plant; Company's fourth floating solar project, world's largest, will be built on Japan's Yamakura Dam reservoir***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5J15-83X1-JD3Y-Y2T9-00000-00&context=1516831)

ENP Newswire

January 22, 2016 Friday

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**Length:** 607 words

**Body**

In a joint venture, Kyocera Corporation (President: Goro Yamaguchi; herein 'Kyocera,') and Century Tokyo Leasing Corporation (President: Shunichi Asada; herein 'Century Tokyo Leasing') announced today that Kyocera TCL Solar LLC (herein 'Kyocera TCL Solar') has started construction of the world's largest\*1 13.7 megawatt (MW) floating solar power plant on the Yamakura Dam reservoir, managed by the Public Enterprises Agency of Chiba Prefecture in Japan for industrial water services.

Photo: Rendering of the 13.7MW plant on the Yamakura Dam reservoir

Rendering of the 13.7MW plant on the Yamakura Dam reservoir

Scheduled for launch in FY2018 (fiscal year ending March 31, 2018), the plant will be comprised of approximately 51,000 Kyocera modules installed over a fresh water surface area of 180,000m2. The project will generate an estimated 16,170 megawatt hours (MWh) per year - enough electricity to power approximately 4,970 typical households\*2 - while offsetting about 8,170 tons\*3 of CO2 ***emissions*** annually. This is equal to 19,000 barrels of oil consumed\*4.

The project was initiated in October 2014, when the Public Enterprises Agency of Chiba Prefecture publicly sought companies to construct and operate a floating solar power plant to help ***reduce*** environmental impact.

Photo: Floating solar power projects developed by Kyocera TCL Solar in Japan

Floating solar power projects developed by Kyocera TCL Solar in Japan

With the decrease in tracts of land suitable for utility-scale solar power plants in Japan due to the rapid implementation of solar power, Kyocera TCL Solar has been developing floating solar power plants since 2014, which utilize Japan's abundant water surfaces of reservoirs for ***agricultural*** and flood-control purposes. The company began operation of 1.7MW and 1.2MW plants in March 2015 followed by the launch of a 2.3MW plant in June. With Kyocera Communication Systems Co., Ltd. responsible for construction and Kyocera Solar Corporation undertaking O&M (operation and maintenance) of these projects, the Kyocera Group is cultivating the technology and expertise to construct, operate and maintain floating solar power plants.

Project Overview Location Yamakura Dam

(Ichihara City, Chiba Prefecture, Japan)

Operation Kyocera TCL Solar LLC

Output Approx. 13.7MW

Solar modules 270-watt Kyocera modules (50,904 modules in total)

Expected annual power generation Approx. 16,170MWh/year

Electricity generated is planned to be sold to Tokyo Electric Power Company, Incorporated

Construction timeline Start of construction: December 2015

Planned launch: FY2018 (fiscal year ending March 31, 2018)

Design & construction KYOCERA Communication Systems Co., Ltd.

Maintenance KYOCERA Solar Corporation

Company Overview Company name Kyocera TCL Solar LLC Location Chiyoda-ku, Tokyo, Japan Shareholders Century Tokyo Leasing Corporation (81%)

Kyocera Corporation (19%)

Established August 2012

Business outline To sell power produced from solar power generation

\*1 World's largest floating solar power plant in terms of output. Claim is based on research by Kyocera TCL Solar LLC (as of January 15, 2016) of projects currently under construction and in operation.

\*2 Based on average annual use of 3,254.4kWh per household. Source: Federation of Electric Power Companies of Japan (Graphical Flip-chart of Nuclear & ***Energy*** Related Topics 2015)

\*3 Based on calculations derived from JPEA (Japan Photovoltaic ***Energy*** Association) standards

\*4 Based on calculations derived from the United States Environmental Protection Agency's ***Greenhouse Gas*** Equivalencies Calculator

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**Load-Date:** February 4, 2016

**End of Document**



[***-KYOCERA TCL Solar Begins Construction on 13.7MW Floating Solar Power Plant; Company's fourth floating solar project, world's largest, will be built on Japan's Yamakura Dam reservoir***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HX7-XJ71-F0K1-N05M-00000-00&context=1516831)

ENP Newswire

January 22, 2016 Friday

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**Load-Date:** January 22, 2016

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[***-AfDB-Multilateral Development Banks pledge increased funding to tackle climate change***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5HHB-DDV1-F0K1-N45M-00000-00&context=1516831)

ENP Newswire

December 2, 2015 Wednesday

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**Length:** 716 words

**Body**

Multilateral development banks (MDBs) identified climate financing for development action as a crucial step in putting the world on the pathway for sustainable development at the 21st Conference of Parties of the United Nations Framework Convention on Climate Change (COP21) in Paris on Monday.

In a joint statement, the heads of African Development Bank (AfDB), Asian Development Bank (ADB), European Bank for Reconstruction and Development (EBRD), European Investment Bank (EIB), Inter-American Development Bank (IDB), and the World Bank Group (WBG) pledged to further mobilize public and private finance to help countries ***reduce*** ***greenhouse gas*** ***emissions*** and adapt to climate change.

The leaders reiterated their commitment to 'considering climate change across our strategies, programs, and operations to deliver more sustainable results, with a particular focus on the poor and most vulnerable.'

It noted that the six institutions had already delivered US $ 100 billion for climate action in developing and emerging countries in the four years since starting to track climate finance in 2011.

The statement followed on commitments in recent weeks by the MDBs to increased financing for climate change mitigation and adaptation over the next few years.

The MDBs 'pledge to increase our climate finance and to support the outcomes of the Paris conference through 2020,' the statement read. 'Each of our organizations has set goals for increasing its climate finance and for leveraging finance from other sources... These pledges support the US $ 100 billion a year commitment by 2020 for climate action in developing countries.'

According to Akinwumi Adesina, President of the African Development Bank Group, 'Africa has already been short-changed by climate change. 'Now, we must ensure that Africa is not short-changed in terms of climate finance. The African Development Bank stands fully ready to support greater climate financing for Africa,' he added.

Adesina stated that since Africa was seeing double-digit growth, the AfDB will invest a further US $ 50 billion in ***energy*** development, ***agricultural*** and youth empowerment in Africa in the next 10 years.

He further admitted that those who pollute more have a greater moral responsibility to fund more climate-resilient projects in vulnerable countries of the world.

Already the UNFCCC has acknowledged the receipt of climate action plans from 183 countries laying out plans to tackle climate change and to ***reduce*** ***emissions***.

The AfDB President cited new delivery platforms as assets in the execution and implementation of this project.

He urged the industralised countries to fund and support Africa, particularly in the quest for a sustainable development pathway.

President Jim Yong Kim of the World Bank Group declared that 'We have the resources, we have the collective will, and we have a clear roadmap in the national plans that our clients have submitted ahead of Paris.'

Takehiko Nakao, President of the Asian Development Bank, said that 'Climate finance is critical to mitigate and adapt to climate change impacts.' However, finance alone is not enough. 'It is imperative that we combine increased finance with smarter technology, stronger partnerships and deeper knowledge,' he said.

Sir Suma Chakrabarti, President of European Bank for Reconstruction and Development (EBRD), noted that with their long experience as leaders in climate finance, 'the Multilateral Development Banks are making important contributions to combatting climate change, using their strong base of expertise to step up green finance, policy advice and the mobilization of crucial private sector funding.'

For its part, the EBRD is further scaling up its climate finance activity through the implementation of its recently approved Green Economy Transition approach.

The Inter-American Development Bank (IDB), in the run-up to COP21, confirmed that it was working with many countries in designing their national contributions towards tackling climate change. The IDB President Luis Alberto Moreno further stated that following the Paris conference, 'We will help countries to translate these into investment plans that successfully attract the necessary capital for full implementation.'

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[***Climate change must be halted, now; Heating the planet is an ecocrime***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H88-7DG1-JCM4-64F5-00000-00&context=1516831)

Le Monde Diplomatique (English)

November 1, 2015

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**Length:** 1897 words

**Byline:** Agnès Sinaï

**Highlight:** International diplomacy isn’t dealing quickly or well with mitigating, let alone preventing, global warming. Are there other ways to change our lifestyles and ways of thought?

**Body**

Eko Atlantic, a new city being built on reclaimed land just outside the Lagos lagoon, may be underwater by the end of the century. Because of global warming, the sea could cover Nigeria’s costal regions, up to 90km inland, and the city could become one of the ruins that help geologists of the future chart the history of our planet.

Three million years ago, in the Pliocene era, the atmosphere contained as much carbon dioxide as it does today; temperatures were 2-4°C higher, sea level 10-20 metres higher. Scientists today are uncertain how fast the Antarctic ice cap will melt. Some scenarios, notably that suggested by the Potsdam Institute for Climate Impact Research, claim that if all fossil fuel reserves are burned, sea level will rise by three metres a century over the next millennium (1). The chemical composition of our atmosphere is exceptional in the context of natural fluctuations of the greenhouse effect over the last million years. A 3°C rise in temperature over the 21st century (the median scenario) is comparable in scale to a glacial-interglacial transition, but much faster, since the last one involved a rise of 1°C every thousand years. Traces of the industrial age — a brief interlude in human history — will still be visible in a millennium; in 3015 the atmosphere will contain 30% of the carbon dioxide it does today.

Humanity is now the main factor governing how our planet functions. In just over two generations, we have become a geological power, and there are signs that our activities are having a lasting impact, comparable to ice ages, volcanic eruptions and meteorite strikes. The geological strata laid down by urbanisation, the damming of river, industry, mining and ***agriculture*** all contain many fossils from this unprecedented era. A feature of the Anthropocene era is the presence of entirely new substances, created since 1945, including radioisotopes, fluorinated gases and the products of biotechnology and nanotechnology. The globalisation of the petrochemical industry has produced a “palaeontology of plastic”, according to University of Leicester geologist Jan Zalasiewicz. Particles of industrial soot have been detected at the North Pole. Industrial enterprise will leave its mark on the soil, the atmosphere and the oceans for millennia.

Climate change is part of what geographer Will Steffen, geochemist Paul Crutzen and historians Jacques Grinevald and John McNeill call the great acceleration of human history (2). This exuberant period, from 1945 to now, coincides with the golden age of oil, decolonisation, and the democratisation of consumption. Negotiations at the UN have been slow to respond to this dynamic process, failing to challenge obsession with production and growth, or to tackle ***energy***, justice and development issues. Preparatory meetings for the coming Conference of Parties (COP) to the 1992 UN Framework Convention on Climate Change (UNFCCC), in Geneva and Bonn, working on texts made complex by a need for unanimous agreement among 196 countries, have been very slow.

**Nature as a store of commodities**

So the negotiations, cut off from reality, have made little headway. Climate change, with its uncertainty and urgency, presents a challenge for environmental diplomacy; climate policies have been unable to create tools and modes of thought adequate to the task. The extent of the denial can be heard in the language, which uses the accountancy rhetoric of economics, where costs and benefits are estimated on the basis of statistical projections. In the belief that growth will continue indefinitely, modern industry treats nature as a store of commodities, or as a source of funds to pay for services rendered by the world’s ecosystems. The 2°C “safe” threshold for warming, on which the UN negotiations are based, is part of this way of thinking and assumes a degree of stability or predictability; the issue is seen as a matter of controlling the climate through human ingenuity and political mobilisation. In reality, it is hard to determine what level of ***emissions*** would be acceptable, and would allow the climate to stabilise. Nobody knows when the tipping point may come.

Political scientists and sociologists of science Stefan Aykut and Amy Dahan describe the profound disconnect between the processes leading to climate change and the multilateral organisations established over the last 20 years as a “reality rift”. It seems futile to attempt to solve problems caused by burning of fossil fuels by ***targeting*** the waste they generate without addressing their extraction. The negotiations are ***targeting*** CO2 ***emissions*** without addressing economic development, international trade rules or the mechanisms of the world ***energy*** system.

The Kyoto protocol even confirms the hegemony of international market mechanisms as a way to protect the environment, by treating the climate as a measureable and homogeneous economic good. The protocol’s flexibility mechanisms are intended to encourage the ***reduction*** of ***emissions*** where most economically efficient. This logic of compensation has been extended to ***emissions*** caused by deforestation with the UN’s REDD (***reducing*** ***emissions*** from deforestation and forest degradation) programme, and the EU ***Emissions*** Trading Scheme, which has been a humiliating failure.

Moreover, UNFCCC has no control over the free trade system established by the World Trade Organisation, whose rules take precedence over environmental protection. This hierarchy can also be seen in the current transatlantic trade negotiations; the negotiations on the free trade agreement between the EU and Canada, which started in 2013, threaten climate policy — Europe is to allow imports of tar sands oil from Canada (3) and according to a study by the US Natural Resources Defence Council, EU imports could rise from 4,000 barrels a day in 2012 to 700,000 by 2020 (4). The ***Energy*** East pipeline, built by TransCanada, will supply European refineries in an entirely free transatlantic market.

**Collision of histories**

Historian Dipesh Chakrabarty says the climate crisis reveals the collision between the histories of planet Earth, of human evolution and of industrial civilisation (5), which are unfolding on different scales and at different speeds, forcing modern societies to change their way of thinking. Life on Earth no longer rests on stable foundations. The Anthropocene era has opened up a breach in the history of the Earth, forcing a rethink of human destiny to take account of the fundamental uncertainty about threshold effects, tipping points, irreversible changes and the possibility that the climate will go out of control.

Under these circumstances, climatologist James Hansen recommends that politicians plan to abandon the use of coal as fuel, not a precaution but as an essential measure that will allow us to hope for the “least worst case scenario”. According to Christophe McGlade and Paul Ekins of University College London, 33% of the world’s oil reserves, 50% of its gas, and more than 80% of its coal should stay buried to avoid global overheating (6). Reserves of fossil fuels economically viable with current extraction technology are equivalent to 2,900 gigatonnes of CO2, three times as much as the ***emissions*** ceiling if global warming is to be limited to +2°C.

There are new movements around the world campaigning against the extraction of minerals and fossil fuels. The Environmental Justice, Liabilities and Trade network records hundreds, from the Niger delta to Yasuní National Park in Ecuador (7). The pope has called for sobriety in an encyclical (8). Thinktanks have proposed per capita ***emissions*** allocations. In India, the Centre for Science and Environment, founded by environmentalist Anil Agarwal and directed by Sunita Narain, makes a distinction between survival ***emissions*** from the cooking stoves of the poor, and luxury ***emissions*** from the vehicles of the rich, and calls for the sharing of common goods. In Ireland, the Foundation for the Economics of Sustainability (Feasta, which also means “future” in Gaelic) suggests rationing fossil ***energy*** as a global good: an international climate fund would auction permits to produce a fixed annual quantity each year and distribute the financial benefits equitably.

Chakrabarty emphasises that the climate crisis raises major questions of justice: between generations, small island states and major polluters, past and future, developed countries (historically responsible for most ***emissions***) and industrialising countries. (About a dozen countries and a fifth of the world’s population are responsible for most ***greenhouse gas*** ***emissions***; see map).

The other way is by law. The UN’s Rio+20 conference on sustainable development in 2012 produced a popular movement of 500 organisations with a mission to end the impunity of multinationals. The End Ecocide on Earth movement campaigns for an amendment to the Rome Statute (which established the International Criminal Court in the Hague), to cover the crime of ecocide. A group of legal experts proposes conventions on ecocrime and ecocide (9) to strengthen and harmonise prevention and suppression of such crimes: ecocide would be on a level with crimes against humanity. The report recommends appointing an international prosecutor for the environment, the creation of an international criminal court of the environment, an environmental investigation and research group, and a compensation fund. The purpose of this unprecedented collection of measures, as legal expert Mireille Delmas-Marty writes, is as much to make censure widespread, as to “open us up to the hope of a common destiny” (10).

Agnès Sinaï is a journalist specialising in environmental issues and the editor of *Economie de l’après-croissance: Politiques de l’anthropocène II* (Post-growth Economics: Anthropocene Politics II), Presses de Sciences Po, Paris, 2015.

(1) Ricarda Winkelmann, Anders Levermann, Andy Ridgwell and Ken Caldeira, “Combustion of available fossil fuel resources sufficient to eliminate the Antarctic ice sheet”, *Science Advances,* vol 1, no 8, Washington DC and Cambridge (UK), 11 September 2015.

(2) See Will Steffen, Jacques Grinevald, Paul Crutzen and John McNeill, “The Anthropocene: conceptual and historical perspectives”, *Philosophical Transactions of the Royal Society A,* vol 369, no 1938, 2011.

(3) See Emmanuel Raoul, “Canada’s bitter black sands”, *Le Monde diplomatique,* English edition, May 2010.

(4) Danielle Droitsch, Luke Tonachel and Elizabeth Shope, “What’s in your tank? Northeast and Mid-Atlantic states need to reject tar sands and support clean fuels”, National Resources Defence Council, New York, 22 January 2014.

(5) Dipesh Chakrabarty, “The Anthropocene? Some Rifts in Contemporary Thinking on Climate Change”, paper given at the University of Chicago, 2 October 2013.

(6) Christophe McGlade and Paul Ekins, “The geographical distribution of fossil fuels unused when limiting global warming to 2°C”, *Nature,* no 517, London, 8 January 2015.

(7) See Aurélien Bernier, “Ecuador’s plan falters”, *Le Monde diplomatique,* English edition, July 2012.

(8) See Jean-Michel Dumay, “Francis, the whistleblower pope”, *Le Monde diplomatique,* English edition, September 2015.

(9) Laurent Neyret(ed),“Des écocrimes à l’écocide: Le droit pénal au secours de l’environnement” (From Ecocrime to Ecocide: Criminal Law to the Rescue of the Environment), Bruylant, Brussels, 2015.

(10) ibid.

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[***Could diesel vehicles really be banned in Wales following VW emissions scandal?; Government document says areas will breach EU pollution limits for years if diesels are not kept out***](https://advance.lexis.com/api/document?collection=news&id=urn:contentItem:5H42-1TV1-JCJY-G4V9-00000-00&context=1516831)

walesonline.co.uk

October 10, 2015 Saturday 11:00 AM GMT

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**Section:** NEWS

**Length:** 799 words

**Byline:** By James McCarthy

**Body**

Diesel vehicles could be banned in Wales to ensure it meets air pollution ***targets*** following the VW ***emissions*** scandal, it's been warned.

Officials warned that the industry's failure to build vehicles that comply with ***emissions*** rules mean most urban areas will break EU pollution limits for years if diesels are not kept out.

Last month, the UK Government department for environment, food and rural affairs (Defra) warned that Cardiff, and England's big cities, could face restrictions on pre-2015 diesels by 2020.

Read more: Figures show Wales isn't cutting pollution at all

In a background report, Defra officials revealed this was based on a computer model that assumes new models will meet the limits.

If they don't then action will be required in three areas in Wales. Those are Cardiff and two dubbed only "North Wales" and "South Wales."

The background report said: "The road transport ***emissions*** modelled in this document are based on the latest evidence of vehicle NOx (nitrogen dioxide) ***emissions***.

"However, there have been issues with the European test cycles not accurately reflecting real world performance and ***emissions***.

"This has resulted in NOx ***emissions*** of diesel cars in actual driving conditions being significantly higher than the European standards would otherwise suggest."

Read more: Cost of diesel dips below petrol for first time in 14 years

Volkswagen's rigging ***emissions*** tests for 11m cars means they may be responsible for nearly 1m tonnes of air pollution every year. That is the same as the UK's combined ***emissions*** for all power stations, vehicles, industry and ***agriculture***.

Even brand new diesels emit four times more NOx on the road than in the lab.

Poisonous NO2 - the nitrogen dioxide part of ***emissions*** - is higher than in earlier models of cars.

"While emerging data indicates that the European test cycle results are becoming closer to real world performance, there is still disparity," the background report said.

"In order to reflect the current issues in road transport ***emission*** factors for Euro 6 diesel vehicles, an alternative scenario is modelled assuming that the actual ***emissions*** are higher than currently predicted."

Euro 6 is the latest engine ***emission*** standard set by the European Union.

Read more: M4 relief road plans thrown into disarray as plans for £1bn route are 'quietly dropped'

Evidence from measurement systems showed if these standards were not met "it could result in up to 22 additional zones being non-compliant in 2020."

Previously the figure across Britain was eight. This brings the total to 30.

"Given this, it is clear that the performance of ***emissions*** standards going forward will have a significant impact on the efforts to ***reduce*** NO2 concentrations," the document said.

The Welsh Government insisted "improvements" had been made in air quality.

"There are still some areas where more action is needed to meet these EU limits," a spokesman said.

"We have produced new draft air quality plans for these areas to show how we intend to meet these limits and have launched a joint consultation with Defra and the Department of the Environment Northern Ireland to seek views on the proposed approach."

It claimed that by 2020 three of four zones breaking ***emission*** limits would be compliant.

Read more: Fly through video shows the route the £1bn M4 motorway relief road could take through Newport

"Only a section of road, not more than 500 metres in length, will remain the only location within Wales which is predicted to exceed the limit value," the spokesman said.

It is understood that this is part of the A48 that leads onto Cardiff's Western Avenue.

The spokesman said: "The Welsh Government will continue to work towards further improvement and, in particular, with relevant stakeholders to develop additional measures to achieve nationwide compliance before 2020.

Alan Andrews, of campaigning environmental law group ClientEarth, said the government had "admitted that air pollution kills over 50,000 people a year.

"Much of this is down to pollution from road transport and especially diesel vehicles."

He said people in Wales "will be choking on illegal levels of diesel fumes until 2025 without further action."

"Thousands of people will die or be made seriously ill as a result," Mr Andrews said.

Read more: Planned M4 relief road will 'increase traffic and ***greenhouse gases***'

"We want to see a national network of clean air zones to keep the most polluting diesel vehicles out of our polluted town and city centres.

"We all have the right to breathe clean air - Client Earth has been fighting a five year legal battle to uphold that right and we are quite prepared to go back to court again.

"Westminster needs to work with the devolved administrations to come up with a plan to deliver clean air for everyone in the UK."

Cardiff Council declined to comment.

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1. 1This copy is computer generated. Text will vary in accuracy due to speaker dialect and audio quality issues. [↑](#footnote-ref-2)
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