



Aurora Summer Renewables Summit

28 June 2018, Institute of Mechanical Engineers, London

#AuroraSummit

2018 Partners:



Aurora Summer Renewables Summit 2018

It was my great pleasure to welcome you to Aurora's Summer Renewables Summit 2018. This was our inaugural event dedicated to renewables, and the highly topical issue of a subsidy-free future.

Joined by distinguished speakers and panellists, in particular Lord Deben, Chair of the Committee on Climate Change, and informed by Aurora's unique analysis, the Summit brought to the fore the perspectives of the organisations and people who will shape this zero-subsidy future. We trust you found the Summer Renewables Summit engaging, challenging, and enjoyable.

From a personal perspective, one of the main highlights for me was to host Lord Deben at our Summit. At such a critical time of the Climate Change debate, we were privileged that he chose to share with us his perspectives on current and future policy and requirements.

Aurora's latest analysis on decarbonisation helped frame the debate on the day and we then heard business leaders, government, and experts discuss and debate the issues. Deepening our understanding of the policy frameworks and investment needs of a low- and post-subsidy environment is critical to the on-going energy transition.

We are very grateful for the support of all our speakers and of course our sponsors:
Augusta & Co, Ashurst,
and Green Giraffe.

John Feddersen
Co-Founder and CEO
Aurora Energy Research



Aurora Summer Renewables Summit 2018 Overview

Aurora's inaugural Summer Renewables Summit brought together leading industry figures, in particular Lord Deben, Chair of the Committee on Climate Change to debate and discuss the policy and investment issues surrounding a subsidy-free future.

Aurora presented original analysis and insights to stimulate and frame the discussion. Aurora's latest research shows that unsubsidised renewables could deliver about half the zero-carbon generation needed to reach a decarbonisation target of $100\text{gCO}_2/\text{kWh}$ by 2030. This generation capacity could be supported through a continuation of CfD subsidies: This would provide more certain progress, but also leave more risk on the government's balance sheet.



Government faces a clear choice about the future of subsidies and the implications for projects are significant with the risk of being put on hold and investments delayed. These key themes and related issues formed the basis of discussion at the Summit.

Click [here](#) to view the highlights video on the Aurora YouTube page.

Links to all presentations are included in the following booklet.

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Aurora Summer Renewables Summit 2018



Aurora Insight:
Role for the state in facilitating low-carbon investment



Speaker:
Hugo Batten
Head of GB Renewables, Aurora

Click [here](#) to view presentation

One-on-One Interview:
Climate Change Act 10 years on



Speakers:
Lord Deben
Chairman, Committee on Climate Change
John Feddersen
Co-Founder & CEO, Aurora

Panel Discussion:
The time of subsidy-free renewables has come



Panellists:
Juan Rivier Abbad, Iberdrola Renovables
Lily Coles, Anesco
Fiona Mettam, BEIS
Richard Howard, Aurora

Part 2: Investment

Aurora Insight:
The new investment
landscape for renewables



Speaker:
Mateusz Wronski
Head of Product Development,
Aurora

Click [here](#) to view presentation

Augusta & Co Insight:
Understanding merchant
exposures for investors



Speaker:
Justin FitzHugh
Partner, Augusta & Co

Case Study:
Cleve Hill 350MW PV Park



Speaker:
Hugh Brennan
Managing Director, Hive Energy

Click [here](#) to view presentation

Panel Discussion:
Thriving in a post-subsidy
environment



Panellists:
Justin FitzHugh, Augusta & Co
Minal Patel, Foresight Group
Joris Rademaker, Forsa
Antony Skinner, Ashurst
Clément Weber, Green Giraffe
Benjamin Merle, Aurora

Speaker and delegate feedback

Siobhan McAdam, ESB

"I thought the day was excellent and the GB market is really moving ahead with its thinking in terms of how to manage both investors and lenders views in relation to Merchant risk."



Gavin Taylor, Mitsui

"I found the summit very interesting and I am already looking forward to the next summit in October. I thought the Summit was very well organised and created a good opportunity to discuss issues with other people with an interest in renewable energy."



Agnes Zakrisson, Vattenfall

"Thank you for a good summit last week. I appreciated the variety of discussions and analysis, all related to a very interesting topic."



Christopher Granby, Fred. Olsen

"I thought the event was excellent, well informed speakers and a good mix between hard analysis and experience from actual projects."



Lord Deben, Committee on Climate Change

"A thoroughly enjoyable event."



#Aurora Summit on social media



Nick Green
@nickragreen

Follow

Interesting question posed by Juan Rivier Abbas of Iberdrola on risk long term corporate PPAs "who would have signed a PPA with Kodak?"

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Alexander Green
@al_green

Follow

Lord Deben-1) what on earth is Govt. blocking onshore wind for? Should be transparency on total cost of blocking cheapest form of energy"
2) Investment in clean tech now, is money saved for future- climate action today better stated as good business sense
#AuroraSummit @lorddeben



Barnaby Wharton
@BarnabyCBW

Follow

Great kick off to #AuroraSummit -
@hcwbatten expressing concerns about the sub-optimal Nash equilibrium in current energy policy. Quite.



Adam Vaughan
@adamvaughan_uk

Following

"To spend more because the government won't do the low cost alternative seems to me unacceptable," says Lord Deben, chair of @theCCCuk, of ministers blocking onshore wind from competing for clean energy subsidies #AuroraSummit



Felix Chow-Kambitsch
@FelixChowK

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Mateusz Wronski from @AuroraER_Oxford: investment returns of subsidy free solar and wind will continue to rise over the next decade #AuroraSummit



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Utility Weekly (29 June 2018)

Renewables in 'no man's land' due to subsidy indecision

The government must decide whether to pursue a subsidised or subsidy-free route to the decarbonisation of the power sector. In the meantime, projects will be put on hold and investments delayed.



Recharge News (29 June 2018)

Offshore wind focus could cost UK extra £330m a year: Aurora

Focusing purely on offshore wind could cost the UK government an extra £330m (\$435m) in annual subsidies compared to relying on a combination of onshore wind, solar and offshore wind as it aims to meet its clean-energy targets for 2030, according to analyst Aurora Energy Research.



The Guardian (2 July 2018)

Scottish Power owner: ditch 'moonshot' green technologies

New research has found that the UK government's stance of blocking support for onshore windfarms and solar, and only backing offshore windfarms, will be more expensive and result in higher carbon emissions. Analysts at Aurora Energy Research said that subsidising the mix of the three sources would be £210m-£330m cheaper than solely pursuing offshore windfarms.



Business Green (29 June 2018)

Renewables share of UK electricity mix tops 30 per cent

Aurora acknowledged using CfDs would "provide more certain progress, but leave more risk on the government's balance sheet". It added that neither a boom in unsubsidised renewables development nor a new wave of CfD supported projects would be possible "until the government makes a clear choice about the future of subsidies".



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Thank you to our partners!



Augusta & Co is a leading specialist financial advisory and investment firm in the renewable energy sector. It has successfully closed 82 transactions with an aggregate value of €8.6 billion and over 16 years has been at the forefront of pioneering transactions in the sector.

The firm provides a full-service advisory offering including mergers and acquisitions, capital raising, capital structure optimisation, financial restructuring and strategic advice as well as bespoke investment management services in specialised renewable energy sectors and markets.

www.augustaco.com



Ashurst is a leading international law firm with world class capability. With our technical expertise, local knowledge and international network, we deliver a high quality service for our clients with a particular focus on key sectors such as energy, infrastructure and technology. We have an international network of 25 offices in 15 countries, allowing us to provide help and advice to clients across Asia, Australia, Europe, the Middle East and North America. With more than 1,600 partners and lawyers working across 10 different time zones, we are able to respond to our clients wherever and whenever they need us. And we are committed to being a sustainable global law firm, having positive impacts for our clients, employees, profession, the environment and the communities in which we are based.

www.ashurst.com



Green Giraffe is the premier financial advisor for renewable energy projects, providing a number of different services, always with the objective of assisting our clients finance their project or transaction. Green Giraffe helped finance over 25 GW of wind and solar projects and raise over EUR 20 billion of funding and has worked in 18 countries. Green Giraffe has continually advised on landmark transactions, including, among others, the first billion-euro financing for an offshore wind farm (C-Power, 2010), the largest ever financing for an offshore wind farm (Gemini, 2014), the first US offshore wind farm to obtain non-recourse financing (Block Island 2015), and the first ever project to be fully funded with commercial banks through construction (Nordsee One, 2015).

www.green-giraffe.eu



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Marketing information

2018 Partners:

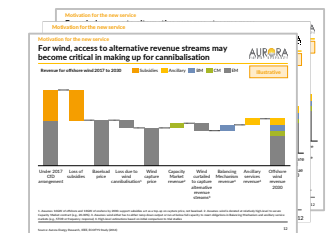
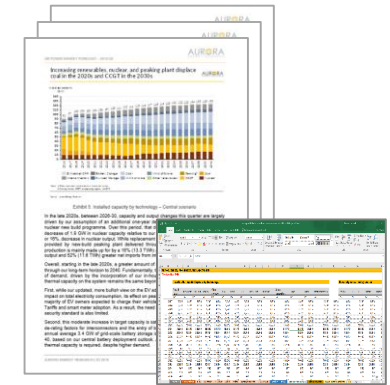


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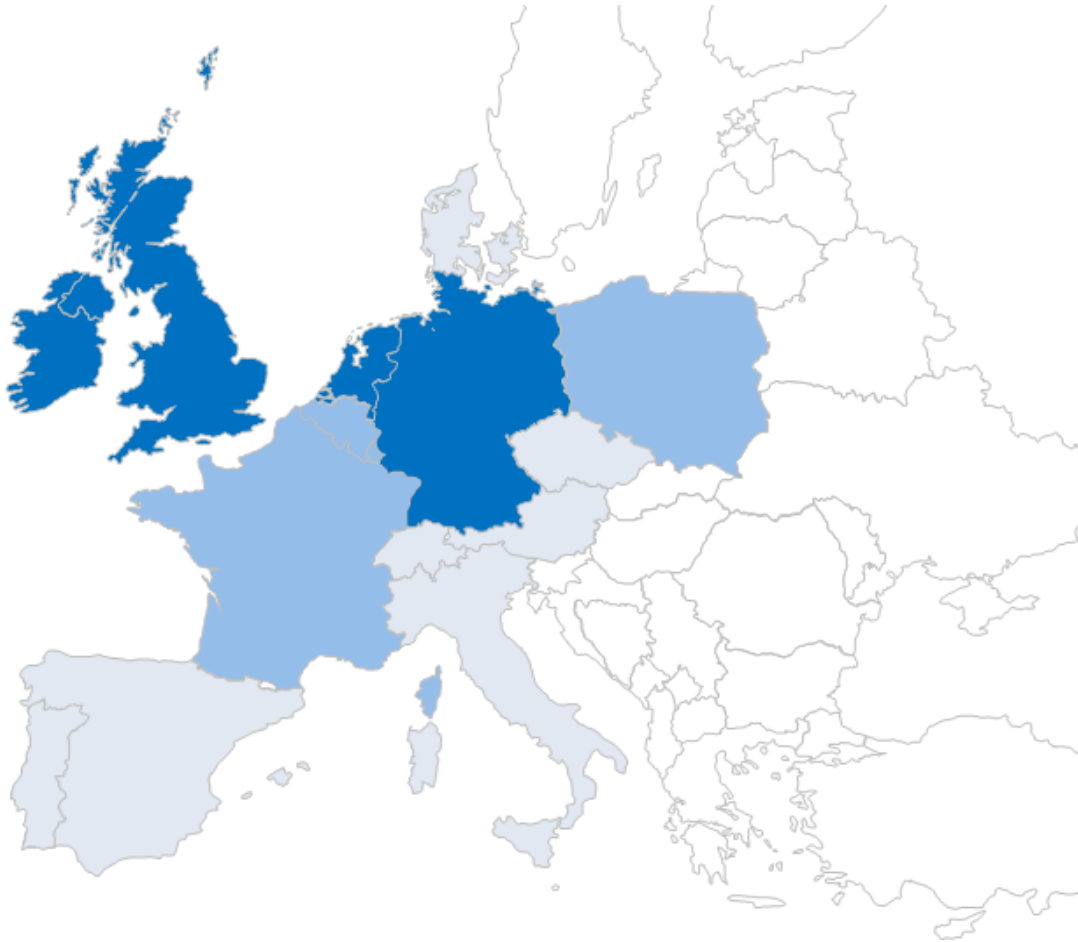
What does the subscription service include?

- ✓ **GB Renewable Forecast Reports** – published and updated twice a year plus data in xls
 - Full market and regulatory outlook
 - All forecasts you need for investment and financing cases of subsidised and subsidy-free renewables
- ✓ Platform to discuss and receive on-going intelligence and analytics on the most pressing issues facing the renewables industry via our **Strategic Insight Reports and Group Meetings**, e.g.
 - How low can capture prices go? Understanding and managing merchant risks
 - PPA structures, co-location models and other evolving business models
 - EFC Capacity Markets – prospects for additional revenue for renewables and other revenue stacking
- ✓ Regular **interaction with Aurora team** via bilateral workshops and ongoing analyst support to discuss your specific questions and implications for your business



➔ **All intelligence for a successful renewables business, based on bankable price forecasts**

Aurora offers power market forecasts across Europe's key markets



Comprehensive Power Market Services

- ✓ Power market forecast reports
- ✓ Forecast data in Excel
- ✓ Global energy market forecast reports
- ✓ Strategic insight reports
- ✓ Regular subscriber group meetings
- ✓ Bilateral workshops
- ✓ Analyst support

Power Market Forecast Reports

- ✓ Power market forecast reports
- ✓ Forecast data in Excel
- ✓ Analyst support

Bespoke forecasts

- ✓ Aurora can provide power market forecasts upon request

For more information, contact
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Aurora advises on high profile transactions

Flexible generation



Gas peaker and battery storage portfolios, sell side advisory for UK Power Reserve



Green Frog Power, support for £100m debt financing of gas peakers by Lloyds, HSBC and NIBC



Battery storage, sell side advisory of the largest operational battery storage portfolio in Europe



Pumped Hydro, multiple buy side valuations including First Hydro



Battery project, successful equity and debt raise (first battery debt financing in UK)



OCGT sell side advisory for major utility

Thermal generation



870 MW CCGT, sell side advisory for Ørsted



EEW Energy From Waste (>EUR1bn), buy side advisory for Beijing Enterprise Holding



Cory Riverside EfW plant, buy side advisory for successful investor consortium



Stake in Uniper, buy side advisory for a large hedge fund during the IPO process



Stake in RWE, buy side advisory for several private equity funds

Renewable generation



Onshore wind, sell side market advisor for 400MW subsidy-free project



Borssele 3&4 offshore wind farm, buy side advisory for the successful bidder



49% of Enbridge's renewables power assets, buy side advisory for CPPIB (Canadian Pension fund)



Race Bank offshore wind farm, buy side advisor for successful bidder



Several biomass and biogas plant portfolios, successful buy side advisor for Foresight Group



Triton Knoll Offshore wind, buy side advisory for a large infrastructure fund

Gas mid & upstream



UK National Grid distribution network (>£8bn), buy side advisor for successful bidder consortia



TransitGas pipeline, buy side advisor for successful infrastructure fund



Gas Connect Austria, buy side advisor for large infrastructure fund



North-Sea gas upstream asset (>€4bn), commercial buy side advisor for successful bidder

Aurora is leading research for a new multi-client study on CfD design

- A 10 week multi-client study focusing on key issues pertaining to future of CfD design in GB
- Key topics include technical CfD design/mechanism, indicative bids and subsequent renewables capacities, cost to end-consumers, hitting carbon targets
- Participants would have the chance to provide input and help shape scope through-out project through regular check-in meetings
- Almost all major government departments and regulators signed up to take part and now are assessing interest from the private sector
- An independent public report will be published at the end of the project highlighting the main findings



We would be pleased to see you at our next events

3rd Battery storage & flexibility conference



Building on the success of previous Aurora conferences, we will host our third event in Autumn 2018. The event combines original analysis and forecasting with provocative insight and discussion from leading industry figures in a focused conference in London.

11 October 2018, London

5th Aurora Spring Forum



The Aurora Spring Forum is the leading private gathering of the energy industry in Europe. It brings together industry leaders in an exclusive setting at the University of Oxford to engage on key issues impacting GB, European, and global energy markets.

19 March 2019, Oxford

For more information, contact:
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