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NUTS2 expert steering group.
Meeting to review updates to the UK report on regional emissions from biofuel cultivation (NUTS2 report)

2-4pm, 05 October 2012
GMH, London

Dr Keeley Bignal
Sustainability Guidance Specialist

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NUTS2 expert steering group meeting

1st meeting regarding updates to the UK report on 'Regional emissions from biofuels cultivation' (NUTS2 report)

2-4 pm, 5 October 2012 - GMH, London

Agenda

(coffee will be available)

- Welcome and introduction of the members
- Background to the 'NUTS2 report' – Keeley Bignal, DfT
- Proposed changes to the NUTS2 report (including time for discussion) – Harley Stoddart, HGCA
- Next steps – Keeley Bignal, DfT

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Aims of the meeting

- To review the proposed updates to the original NUTS2 report:
  - Input data
  - Methodology
- To reach consensus on the NUTS2 report revisions
- To agree next steps to take this forward
- Agree steering group input

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Aims of the NUTS2 report

- Note that the aims of any revisions to the NUTS2 report are NOT to achieve NUTS2 compliance in all regions but to accurately reflect the GHG emissions from cultivation of biofuel feedstocks by region, in the UK
- The NUTS2 report must meet the requirements of the Renewable Energy Directive and the European Commission
- The report must be independent and based on scientifically robust data and methodology
- The revised report should have stakeholder buy-in

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Background to the first NUTS2 report

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Summary

- NUTS – a brief explanation
- How the current report was produced
- What the current report means for supply
- Rationale for review

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What are NUTS2 regions?

- Nomenclature of Territorial Units for Statistics (NUTS) is a method of defining regions within European countries employed by the European Commission.
- **NUTS2** refers to the second level on the scale
- 35 NUTS2 regions in the UK
- 271 NUTS2 regions in EU

CODE	NUTS 1	NUTS 2	NUTS 3
UKC	**NORTH EAST**		
UKC1		**Tees Valley and Durham**	
UKC11			Hartlepool and Stockton-on-Tees
UKC12			South Teesside
UKC13			Darlington
UKC14			Durham CC
UKC2		**Northumberland and Tyne and Wear**	
UKC21			Northumberland
UKC22			Tyneside
UKC23			Sunderland

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Some definitions

- **carbon intensity** - lifecycle emissions of greenhouse gases from a biofuel supply chain, in CO_{2e}/MJ
- **Carbon defaults** or **defaults -** carbon intensity values provided by the European Commission for a number of biofuel feedstocks
- The carbon defaults are the sum of **disaggregated defaults** for cultivation, processing and transport.
- A **compliant NUTS2 region** – is where emissions from cultivation for a particular biofuel feedstock are equal to or less than the disaggregated default for cultivation
- **A non-compliant NUTS2 region** – is where emissions from cultivation for a particular biofuel feedstock are greater than the disaggregated default for cultivation

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Why do we have a NUTS2 report?

- Article 19(2) of the RED requires the UK Govt to:
  - report on emissions from cultivation of biofuel feedstocks by NUTS2 (or smaller) region
  - to identify which regions have emissions equal to or lower than those in the RED
  - To describe the data & methodology

- Article 19(3) of the RED states that for EU crop-based feedstocks parties are only allowed to use the RED GHG default values if the feedstock is from a compliant NUTS2 region

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Methodological requirements for the NUTS2 report

Article 19(2) of the RED

- "…That method shall take into account soil characteristics, climate and expected raw material yields."

Annex V Part C Methodology

GHG emissions from extraction/cultivation of raw materials includes emissions :

- from the extraction or cultivation process itself;
- from the collection of raw materials;
- from waste and leakages;
- from the production of chemicals or products used in extraction or cultivation.

Process for production of original NUTS2 report

- Specification consulted on with DECC, Defra, NFU, NFU Scotland, NFU Cymru, Ulster Farmer Union, AIC, SCOPA, GAFTA, HGCA, UKPIA, REA, AUKOI, RSPB, FoE, Scottish Excecutive, DARDNI, Welsh Govt
- Sought views on who should be invited to tender from same group
- Single tender action – through DfT Research Framework Agreement
- Project team: AEA, ADAS, E4Tech, NSRI
- Steering group: DfT, DECC, Defra, Scottish Executive, NFU, HGCA, GAFTA, REA, Ensus, British Sugar
- Regular steering group meetings & consultations on key aspects of the project including:
  - AEA's project proposal (Jan 10)
  - Draft of final report (Feb 10)
  - Proposals/methodology for revised report following European Commission's comments (Nov 10)

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Timeline

Nov 09	Specification consulted on, Expert Group put together
Dec 10	Tender awarded
Jan 11	Work commenced
Feb 10	Draft report consulted on
Mar 10	Deadline for final report – report submitted to European Commission
Aug 10	Appeared on Transparency Platform as ‘under consideration’ Feedback received from Commission. Some revisions needed
Dec 10	Revised report completed and submitted
Mar 11	Report accepted by the Commission and published on Transparency Platform
Apr 11	UK NUTS2 data available in Carbon Calculator for calculation of biofuel GHG emissions
Dec 11	RED implemented in UK

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NUTS2 report results

Number of compliant NUTS2 regions by feedstock

	Feed wheat	Oilseed rape	Sugar beet
No. of compliant regions	27	3	0
No. of non-compliant regions	8	32	11
No. that meet the 35% GHG saving threshold	All if process is nat. gas/CHP or straw/CHP None if process is lignite/CHP or nat gas/conventional boiler or unknown	14	11 (all)

Note: The report also calculated emissions from barley (spring/winter), oats & triticale. These feedstocks do not currently have defaults in the RED

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What this means for suppliers of biofuel

- Biofuel suppliers from feedstocks grown in UK/EU must determine from which NUTS2 region their feedstock was cultivated

GHG reporting options:	Compliant NUTS2 region	Non-compliant NUTS2 region	
		meets 35% GHG threshold using NUTS2 data	**does NOT meet 35% GHG threshold using NUTS2 data**
Default?	Yes	No	No
Actual data for cultivation?	Optional	Required	Required
Actual data elsewhere in fuel chain?	Optional	Optional	Required (unless grandfathered)
Grandfathering?	Optional until 1 April 2013	Optional until 1 April 2013	Required if no other actual data

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How the Carbon Calculator can help

- Free software tool available on our website http://www.dft.gov.uk/publications/carbon-calculator/
- For calculation of GHG emissions from biofuels
- Includes all the default fuel chains in the RED
- We have included all the NUTS2 data from all MS reports accepted by the European Commission
- You can therefore use it both to:
  a) Look up if your biofuel is from a NUTS2 compliant region
  b) Use the NUTS2 emissions as actual data for cultivation

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Rationale for revising the report

- From the outset it was understood that the report would need regular updates to reflect the current situation e.g. latest yields
- Improvements in methodology?
- Balance between frequency of update & resource
- Does the data make a substantive difference?

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Conclusions from HGCA review & stakeholder workshop

- Anticipated benefits from updating report with latest data
- Basic methodology of report ok; a few tweaks to the methodology would improve it

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Timeline for revising the NUTS2 report

Autumn 11	In response to stakeholder concerns, DfT committed to review the need to update the NUTS2 report by the end of 2012
Spring 12	HGCA commissioned 3 independent reviews of the NUTS2 report to identify areas for update
June 12	Stakeholder workshop to review the NUTS2 report – should we update, what? When?
Summer /autumn 12	HGCA have been working with E4Tech & AEA (original project team) to identify/confirm data sources, detailed calculation methodology etc
Oct - ?	Update the NUTS2 report, reviewed by steering group and DfT
?	Submit to Commission
?	Accepted by Commission and revised data used for reporting under RTFO/RED across EU.

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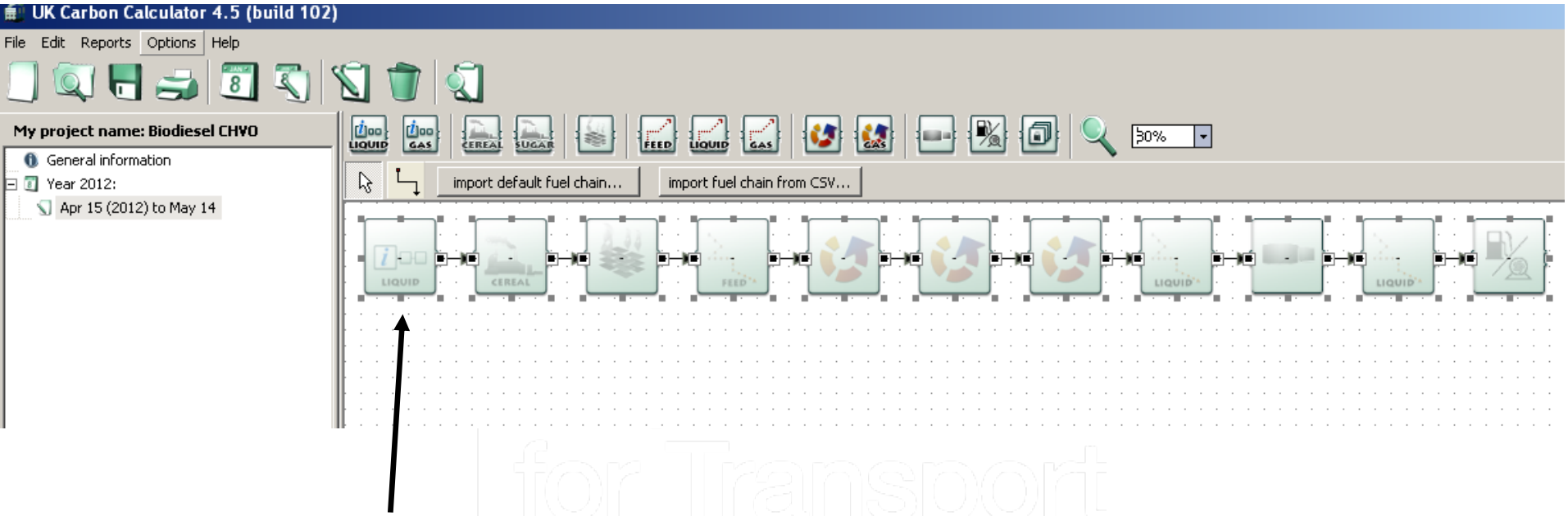
Examples using Carbon Calculator



- Import a default chain e.g. OSR from UK
- Edit the first module with your NUTS2 region
- The Carbon Calculator will tell you if it is a compliant NUTS2 region

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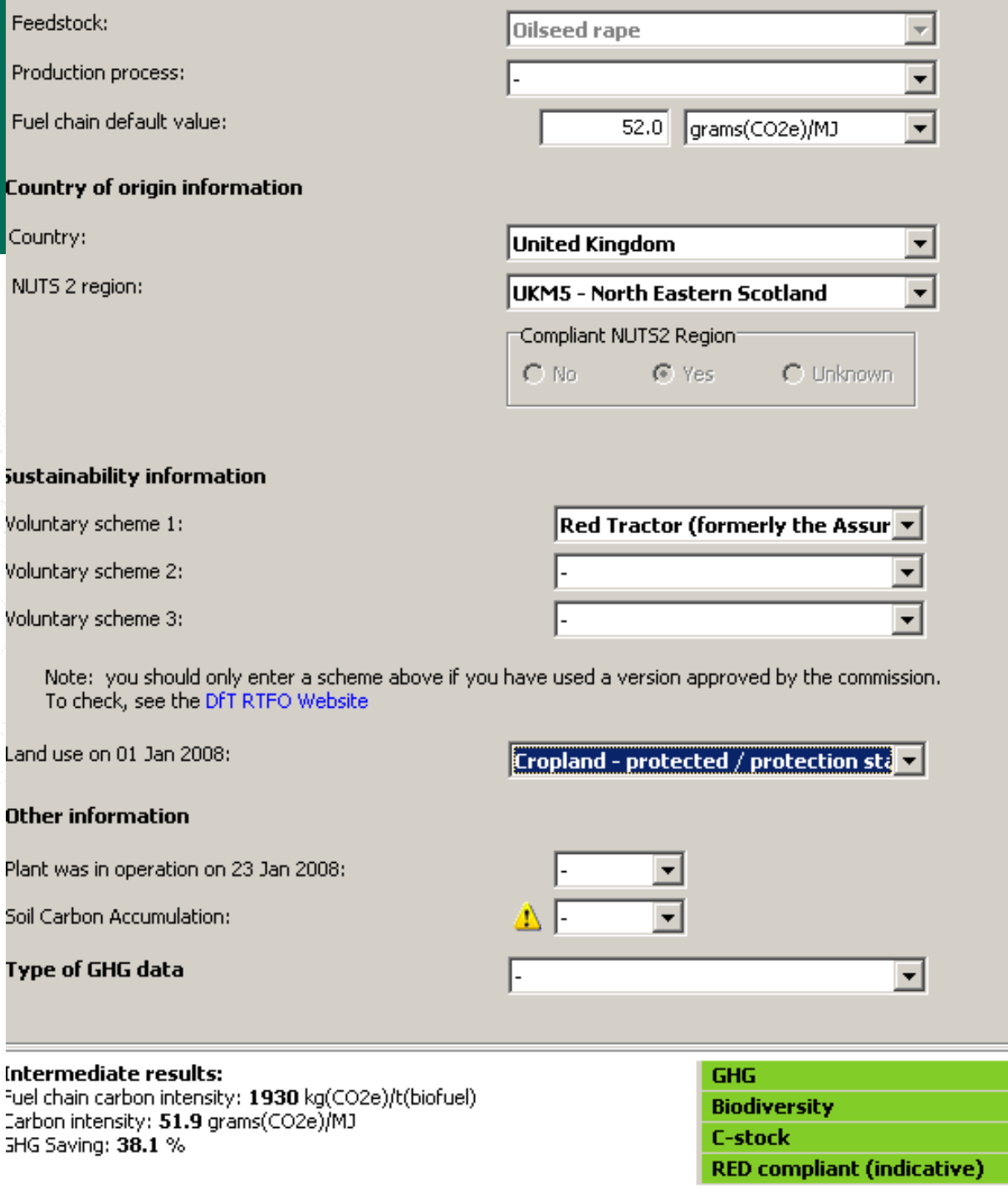
Carbon Calculator

- Import a default chain e.g. OSR
- Edit the first module with your NUTS2 region
- The Carbon Calculator will tell you if it is a compliant NUTS2 region
- In this example the region is compliant



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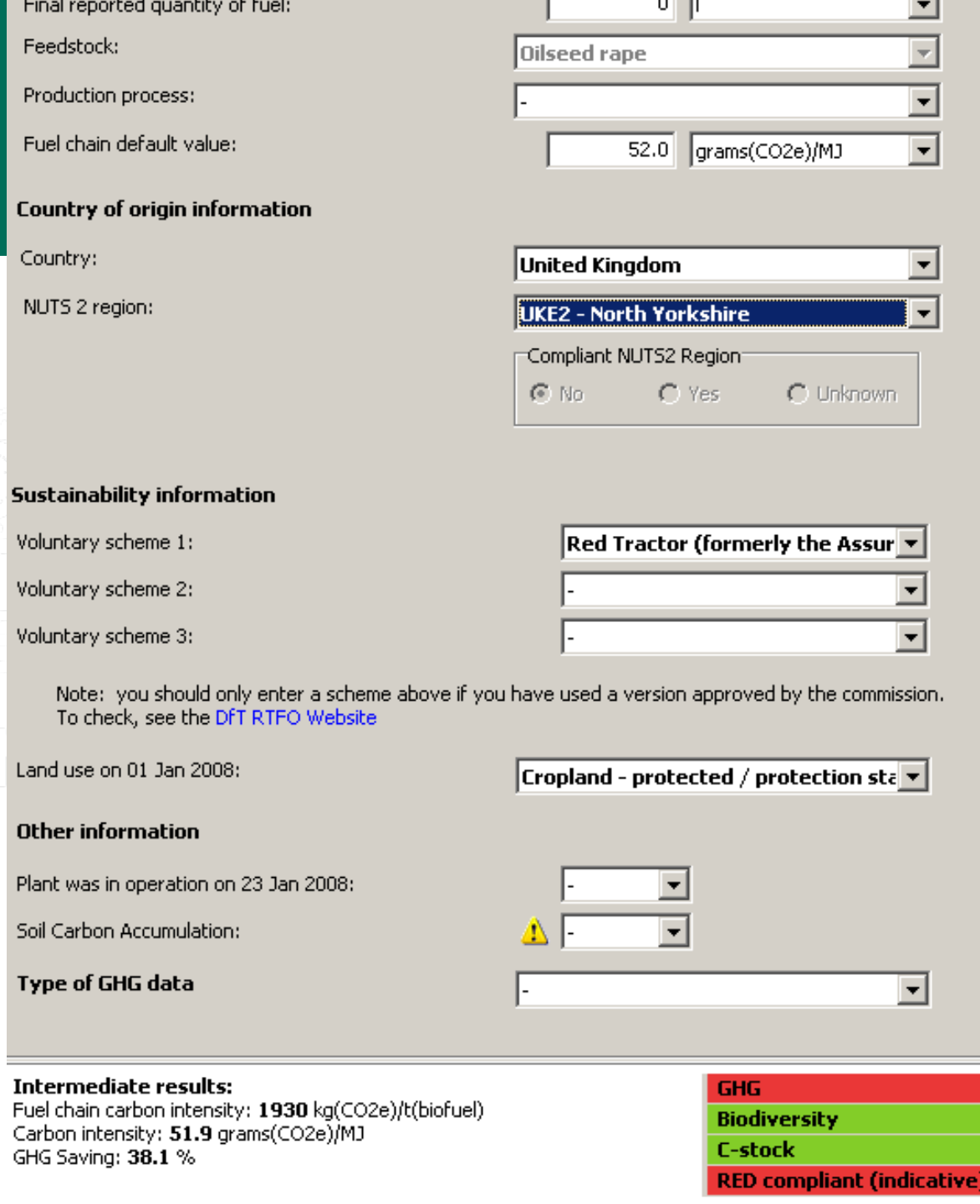
Carbon Calculator

- In this example the biofuel is from a non-compliant NUTS2 region



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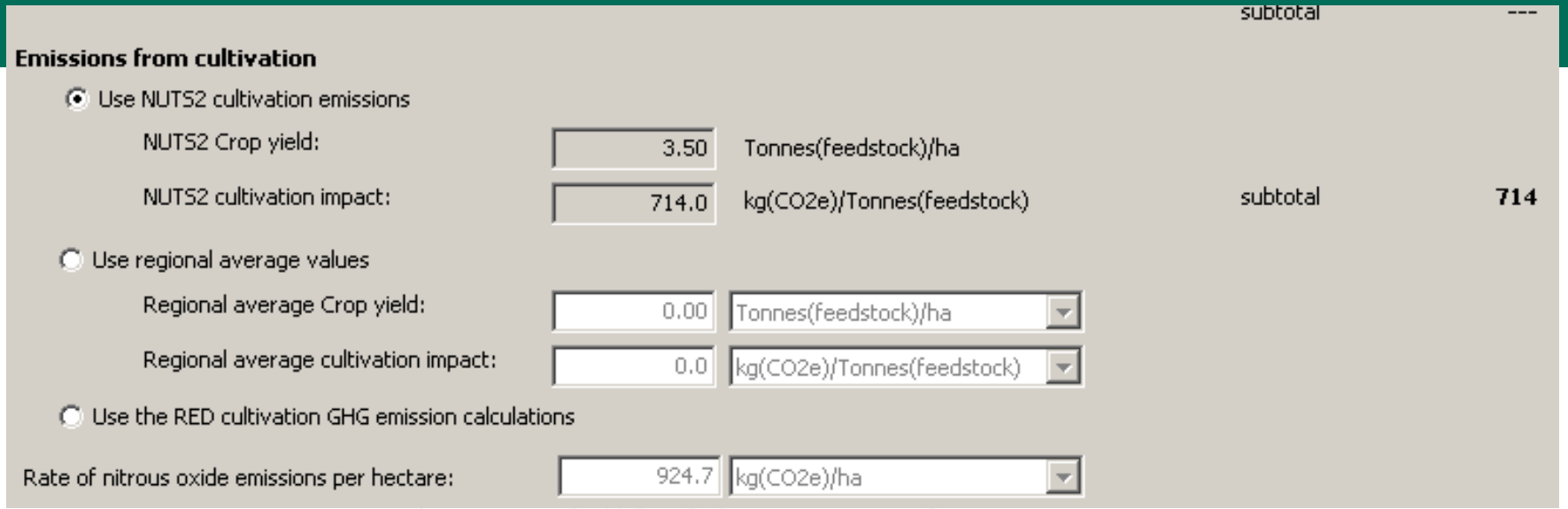
Carbon Calculator



- In this example the biofuel is from a non-compliant NUTS2 region
- BUT if you use the NUTS2 data as actual cultivation data then the biofuel still meets the 35% GHG saving threshold

Intermediate results:
Fuel chain carbon intensity: **2000** kg(CO2e)/t(biofuel)
Carbon intensity: **53.8** grams(CO2e)/MJ
GHG Saving: **35.7** %

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NUTS 2 Research: Next Steps

5 October 2012

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Project tasks – anticipated roles

- **Project management - DfT**
  - Set up steering group
  - Agree any changes to the report with steering group
  - Submit report to Commission; address any questions/work with EC to get report accepted
  - Arrange for communication of outputs
- **Update the NUTS2 report – HGCA with E4Tech and AEA**
  - Perform the calculations
  - Source the data
  - Update the report etc
- **Steering group**
  - Agree the most appropriate data sources for GHG calculations and help source data
  - Agree changes to methodology
  - provide critical review of research outputs including drafts of report

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Timetable to revise the report

Oct - ?	Update the NUTS2 report, reviewed by steering group and DfT
?	Submit to Commission
?	Accepted by Commission and revised data used for reporting under RTFO/RED across EU.