National & International Contexts Low Carbon Fuel Programmes

International Low Carbon Fuel Standard Symposium Berkeley, San Francisco, USA 18th May 2007

Jessica Chalmers Low Carbon Vehicle Partnership, UK



Both the UK & NL are introducing quota schemes to boost supply of sustainable fuels

- UK RTFO requires suppliers of transport fuels to:
 - Sell a given amount of renewable transport fuel each year (for which they will receive certificates); or
 - Purchase certificates from another company;
 or
 - Pay a "buy-out" price of \$0.3/I duty differential of \$0.4/I retained
- NL scheme commenced January 2007;UK, April 2008
- UK targets:
 - 2008/92.5% (by volume)
 - **2009/10 3.7%**
 - 2010/11 5% [aim to save 1Mt Ceq]
- Requirements to encourage companies source sustainable fuels with good GHG-savings







UK Renewable Transport Fuel Certificates issued on receipt of a carbon and sustainability report

- Reports must be supplied on all fuels produced or imported to UK
- Monthly reports confidential annual aggregate reports published
- □ Comparative reports of company performance issued driving sustainable sourcing of biofuel
- ☐ Clear targets for company performance no penalty for failing to achieve
- No exclusions of feedstock/fuel & "Not known" reports permissible

Annual supplier targets	2008-2009	2009-2010	2010-2011
Percentage of feedstock meeting the 'Qualifying' Standard	-	50%	80%
GHG saving	40%	50%	60%
Data provision	35%	65%	80%

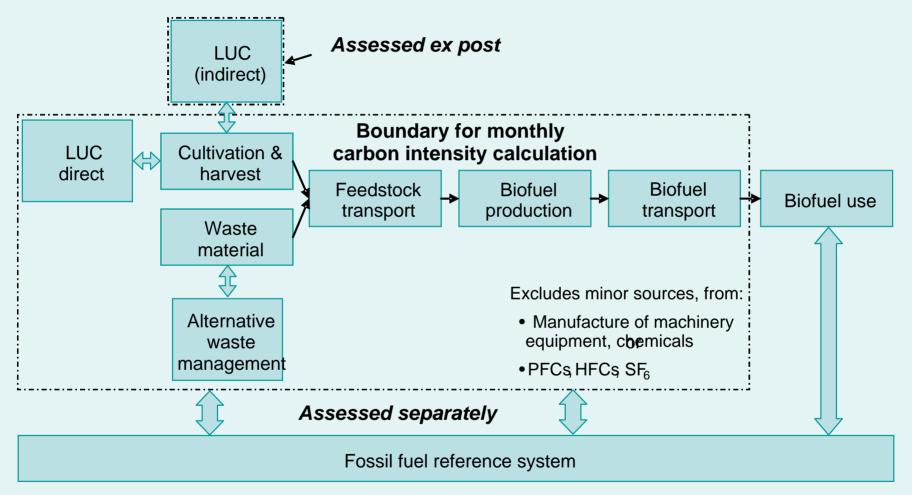


Illustrative Monthly Sustainability Data Sheet

Ref	Fuel type	Quantity of fuel (litres or kg)	Biofuel Feed- stock	Origin	Sustainability Information			Carbon Information		
					Env. Stnd	Social Stnd	Land use in Nov 2005	Carbon intensity	Impact of LUC	Accur- acy level
								g CO ₂ e / MJ		ICVCI
3303	Bioethanol	250,000	Sugar beet	UK	ACCS	Mech	Crop	45	0	4
3304	Bioethanol	1,000,000	Sugar cane	Brazil	-	-	Crop	19	0	2
3305	Bioethanol	500,000	N/K	N/K	-	-	N/K	72	N/K	0
3306	Biodiesel	1,000,000	Oilseed rape	UK	ACCS	Mech + RTFO	Crop	79	0	2
3308	Biodiesel	500,000	Palm oil	Malay- sia	RSPO	RSPO	Crop	49	N/K	2
3309	BioCH4	150,000	Dry manure	UK	By- product	By- product	By- product	36	0	2
3310	Bio-ETBE	500,000	Wheat	UK	LEAF	Mech + LEAF	Crop	12	0	2



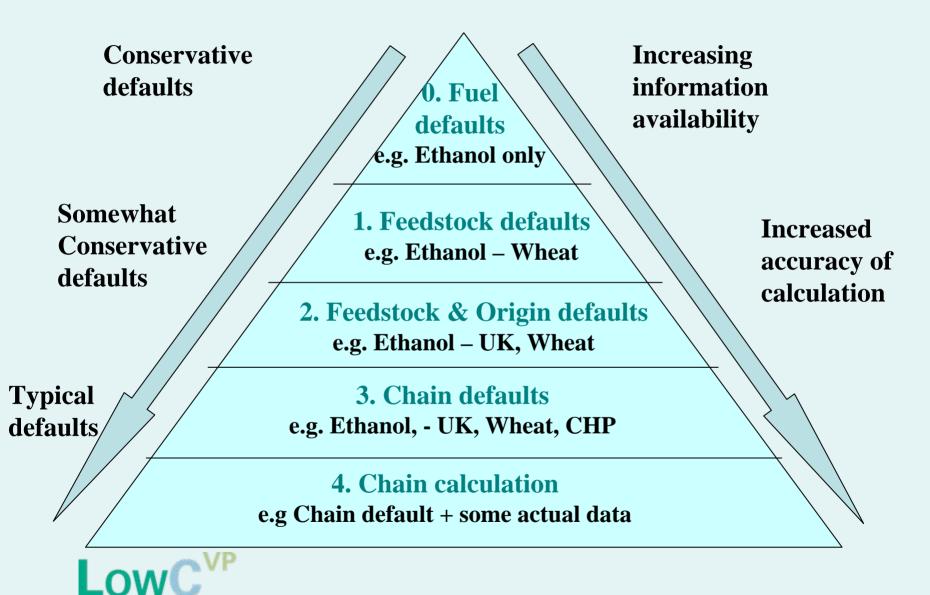
GHG savings measured on a well-to-wheel basis





- System Boundaries
- Reference systems alternative land use, waste
- Previous land use
- Co-product allocation

A flexible methodology based on default values



There are parallels between the UK policy proposals and the proposed LCFS and some differences

California **UK RTFO** LCFS proposals Transportation fuels - including Road transport fuels - primarily electricity biofuels GHG proposals only GHG and wider sustainability Proposed 10% reduction GHG to Volume based - absolute target (1Mt) baseline Fuel suppliers obligated Fuel suppliers obligated GHG Metric: C intensity = CO2eq/ MJ GHG Metric: C intensity = CO2eq/ MJ Trading or banking of credits Trading and banking of certificates

Delivering not just low carbon but sustainable biofuels is becoming ever more significant ...

- ☐ Minimise unintended, negative consequences of biofuels market development
 - Maintain mainstream public and political support
 - To meet corporate CSR commitments and manage reputation risk
- Validate claims & avoid greenwash
- Maximise the GHG-savings delivered by biofuels
- Public and political concerns about the sustainability of biofuels are growing rapidly







There are a number of parties with whom collaboration on a GHG methodology could be co-ordinated

GHG Calc

Sustainability Methodology Assurance UK Government Netherlands Government German Government **European Commission** Roundtable on Sustainable Biofuels Global Bioenergy Partnership/UNEP Californian LCFS ■ IEA Tasks 38, 40

low carbon vehicle partnership

Key messages

- □ There are a number of low carbon fuel programmes under development including proposals for a similar approach at the European level
- Parallels already exist between proposals from California and those under development in the UK
- Significant differences in emphasis on wider sustainability issues for biofuels
 - For some Member States sustainability concerns are key and assurance is an essential element of ensuring a public/political support
- International discussions on well-to-wheel methodologies issues should address the principles of:
 - System boundaries, reference systems, co-product allocation, land use, default values
- An internationally agreed methodology:
 - could enable minimum GHG saving standards to be developed and exclude worst performers from incentives
 - would benefit industry to have a common basis applied internationally
- Consensus will be challenging but significant opportunity for collaboration on a methodology exists - the UK is happy to disseminate its work and findings.

Thank you

The Low Carbon Vehicle Partnership +44 (0)20 7222 8000

jessica.chalmers@lowcvp.org.uk

www.lowcvp.org.uk







