

Biomethane and the Renewable Transport Fuel Obligation

Biomethane for Transport

3rd March 2008

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Low Carbon Vehicle Partnership

Accelerating a sustainable shift to low carbon vehicles and fuels in the UK

Stimulating opportunities for UK businesses



LowCVP 'Low Carbon Road Transport Challenge'

Proposals to reduce road transport CO₂ emissions in the UK to help mitigate climate change
June 2006



Fuel Economy

CO ₂ emissions (g/km)	Low Carbon Car
<100 A	B 117 g/km
101-120 B	
121-150 C	
151-180 D	
181-225 E	
226+ F	
226+ G	

Fuel cost (estimated) for 12,000 miles: £662
VED for 12 months: £50

Environmental Information

Make/Model: Low Carbon Car Engine Capacity (cc): 1399
Fuel Type: Diesel Transmission: 5 speed manual

Drive cycle	Litres/100km	Mpg
Urban	5.4	52.3
Extra-urban	3.8	74.2
Combined	4.4	64.2

Carbon dioxide emissions (g/km): 117 g/km
Important note: Some specifications of this make/model may have lower CO₂ emissions than this. Check with your dealer.

LowCVP marketing challenge

CARS NOT CARBON
A competition to promote greener motoring marketing

Event outline

Winners to be announced at the LowCVP Annual Conference
28th June 2007
DTI Conference Centre, Westminster

Accelerating the shift to low carbon vehicles and fuels



LowCVP Accelerating the shift to low carbon vehicles and fuels

News

Week notes

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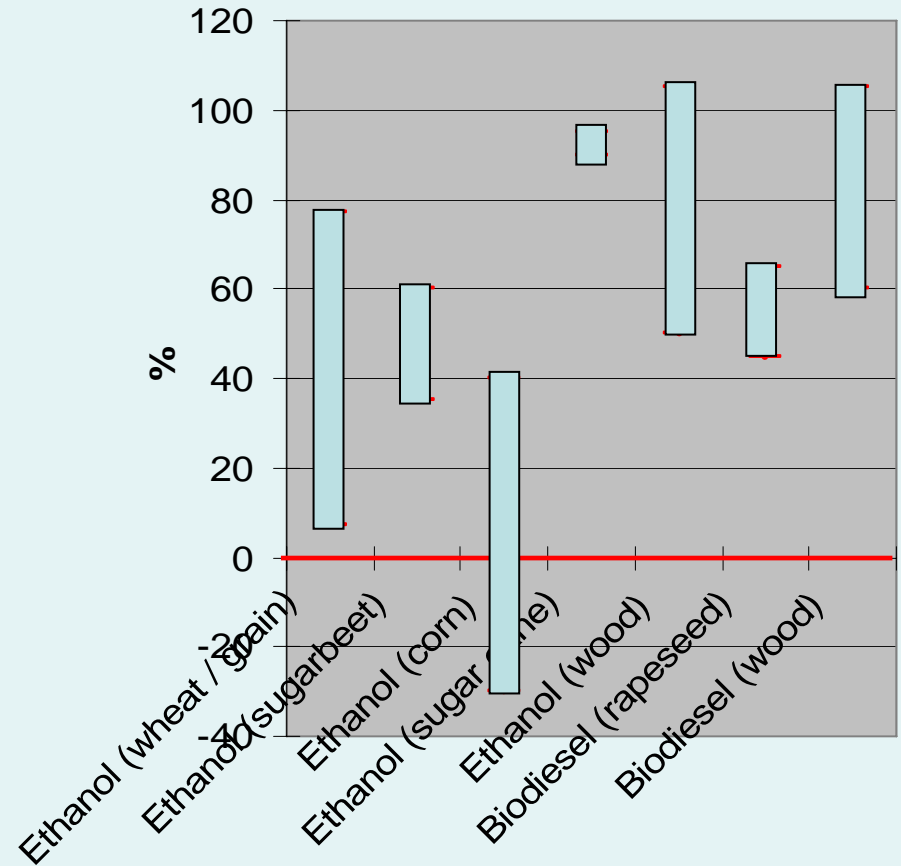
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There are good and bad biofuels – assurance schemes can distinguish



% WTW GHG savings compared to petrol or diesel

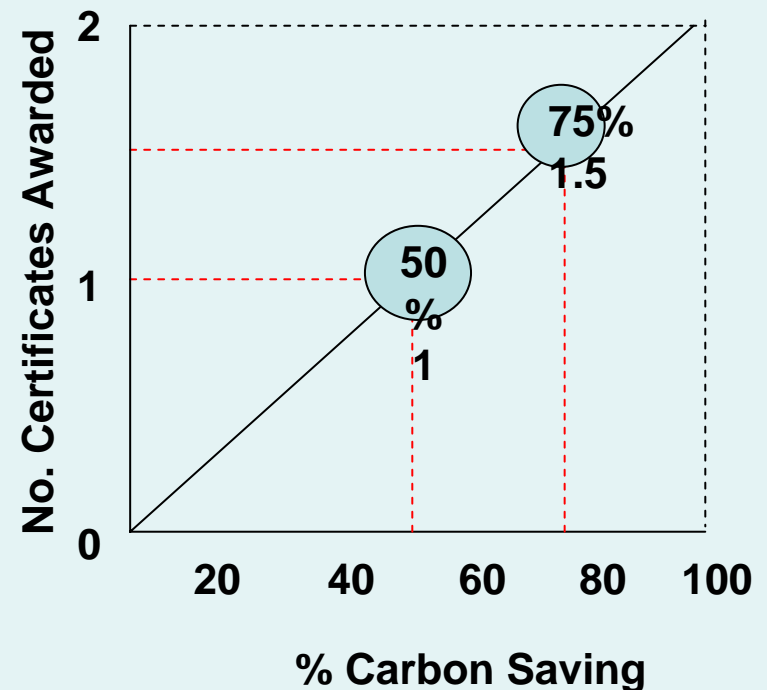


Derived from Concawe 2006

UK biofuel policy is designed to deliver GHG savings sustainably

- ❑ RTFO commences April 2008, 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 22c/l – duty differential of 45c/l retained
- ❑ From start - reporting of the carbon and sustainability (C&S) of biofuels
- ❑ From 2010 – proposed to link issuing of Renewable Transport Fuel Certificates to the carbon intensity of the biofuel
- ❑ From 2011 – proposed to issue certificates only to sustainable biofuels

Illustrative option for incentivising GHG-savings



Renewable Fuels Agency will regulate the RTFO

- ❑ Became a legal entity on the 26 October 2007
- ❑ Board appointed
- ❑ Location established – Hastings
- ❑ User testing of software underway
- ❑ Guidance issued
 - For fossil fuel suppliers
 - For biofuel suppliers and traders
 - On Carbon and Sustainability reporting
- ❑ Training underway
 - With Obligated companies
 - On C&S reporting
- ❑ RFA will formally take over responsibility for the operational management of the RTFO from DfT in early April



“The independent sustainable fuels regulator”

The RFA is focused on creating a sustainable market for renewable transport fuels

The RFA will:

- ❑ Report to parliament on the RTFO
 - Carbon emissions
 - Sustainability
 - Volume returns
- ❑ Advise Government on the effectiveness and impacts of relevant policies
- ❑ Inform and influence international policy developments
- ❑ Deliver its responsibilities by:
 - Operating C&S reporting as part of the RTFO
 - Undertaking research to evaluate indirect effects of renewable transport fuel
 - Indirect land use change
 - Influence on food prices and availability
 - Influence on other commodities



RTF Certificates issued on receipt of an appropriate C&S report

- ❑ Reports must be supplied on all fuels for which RTFCs are claimed
- ❑ Monthly reports confidential – annual aggregate reports published
- ❑ Comparative reports of company performance produced by the RFA
- ❑ No exclusions of feedstock/fuel & “Not known” reports permissible
- ❑ Independent verification of reports & claims
- ❑ Annual targets for company performance (initially no penalty for failing to achieve)

Company targets	2008-2009	2009-2010	2010-2011
Percentage of feedstock meeting the ‘Qualifying’ Environmental Standard	30%	50%	80%
GHG saving	40%	45%	50%
Data provision	50%	70%	90%

C&S reporting will operate through a 2 stage scheme

Stage 1 Monthly Report

Step 1

Data sheet submitted *monthly* accounting for every litre of fuel for which a certificate is claimed.

Step 2

RFA issues certificate (if appropriate report has been received).

Stage 2 Annual Report

Step 3

Data is independently verified and an annual report is prepared.

Step 4

Supplier submits the annual report with verifier's opinion by 28th Sept.

Step 5

RFA reviews, approves and publishes the report.

Step 6

RFA prepares annual report

Key aspects of the RTFO for biomethane

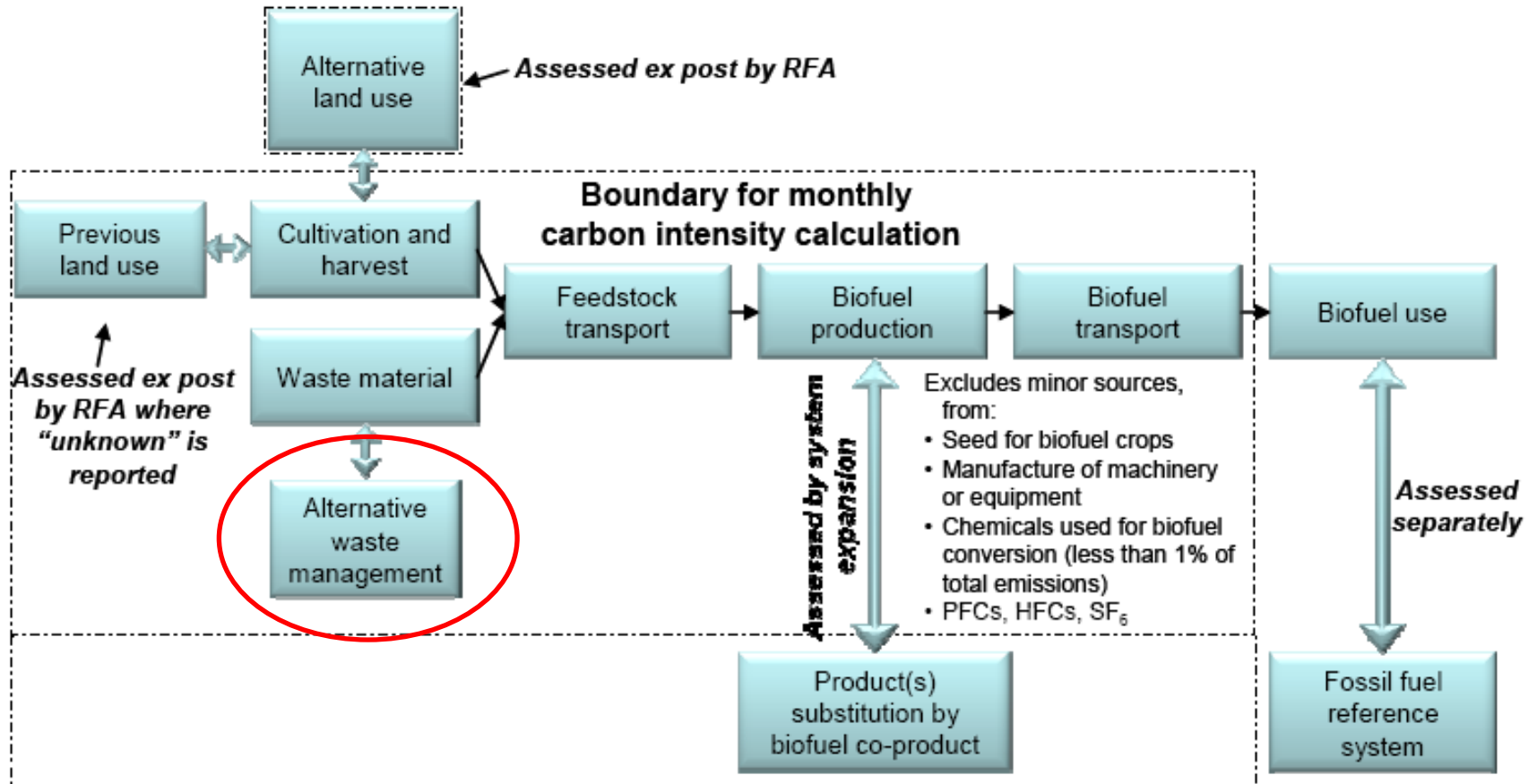
- ❑ Obligated suppliers are those that supply liquid fossil fuels
 - No obligation is not placed on suppliers of natural gas for road transport use
- ❑ Biomethane as a road transport fuel is eligible for Renewable Transport Fuel Certificates
 - 1 RTF Certificate = 1 litre (for liquid fuels)
 - 1 RTF Certificate = 1kg (for gaseous fuels)
- ❑ Suppliers can meet their obligation through certificates generated by biomethane

By-products automatically meet the RTFO Qualifying Standard level

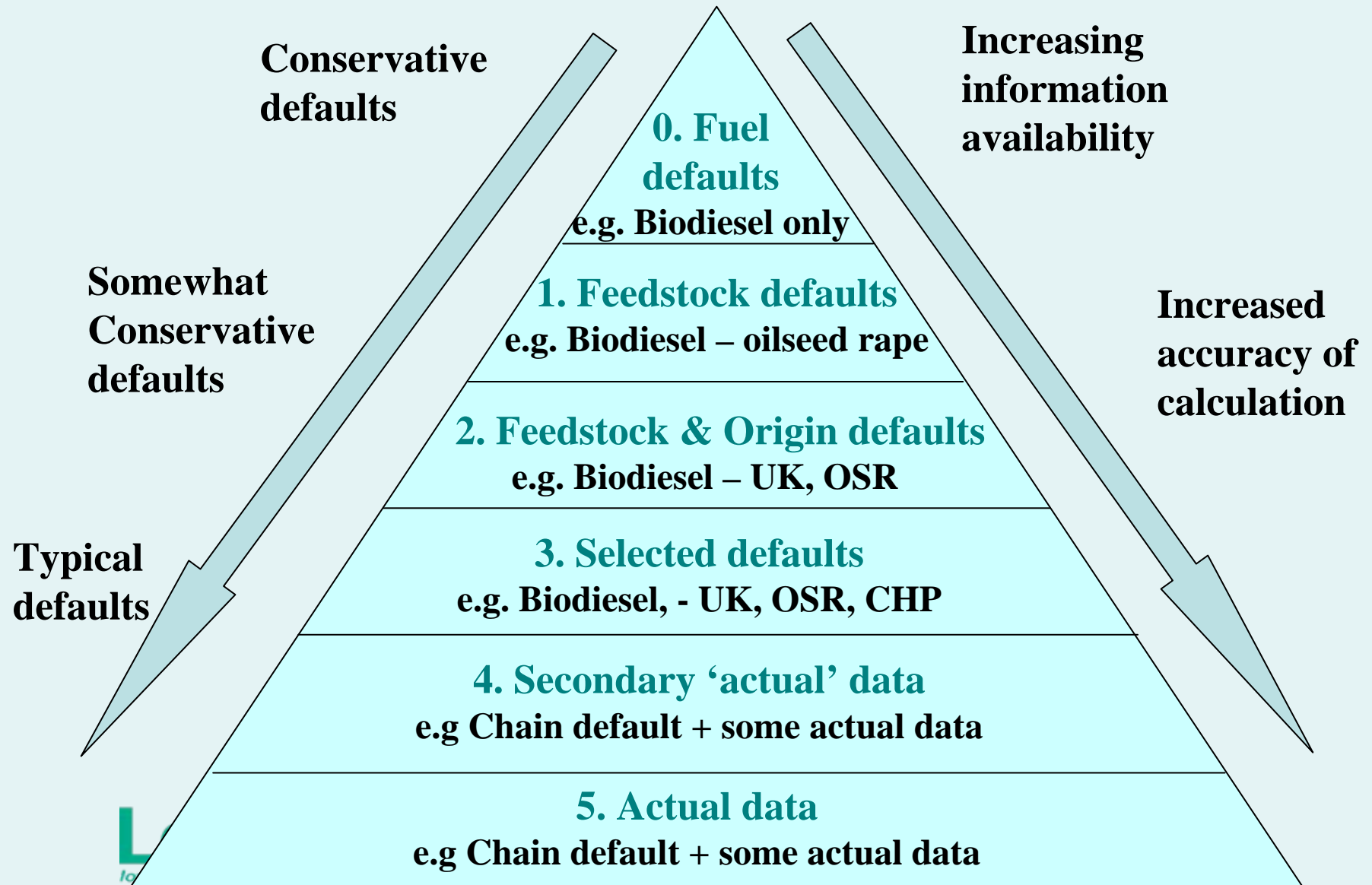
General Information				Sustainability Information				Carbon Information	
Fuel type	Quantity of fuel (kg)	Biofuel Feedstock	Feedstock Origin	Standard	Env Level	Social Level	Land use on 30 Nov 2005	Carbon intensity incl LUC g CO ₂ e / MJ	Accuracy level
Biomethane	250,000	MSW Manure	UK	By-prod	QS	QS	By-prod	36	2

- By-products automatically achieve QS-level: No standard needed
- No reporting on LUC needed
- (Reporting on carbon still required)
- List of by-products in Annex B of the Technical Guidance

The calculation of carbon intensity is a full well-to-tank assessment. The GHG savings are calculated on a well-to-wheel basis.



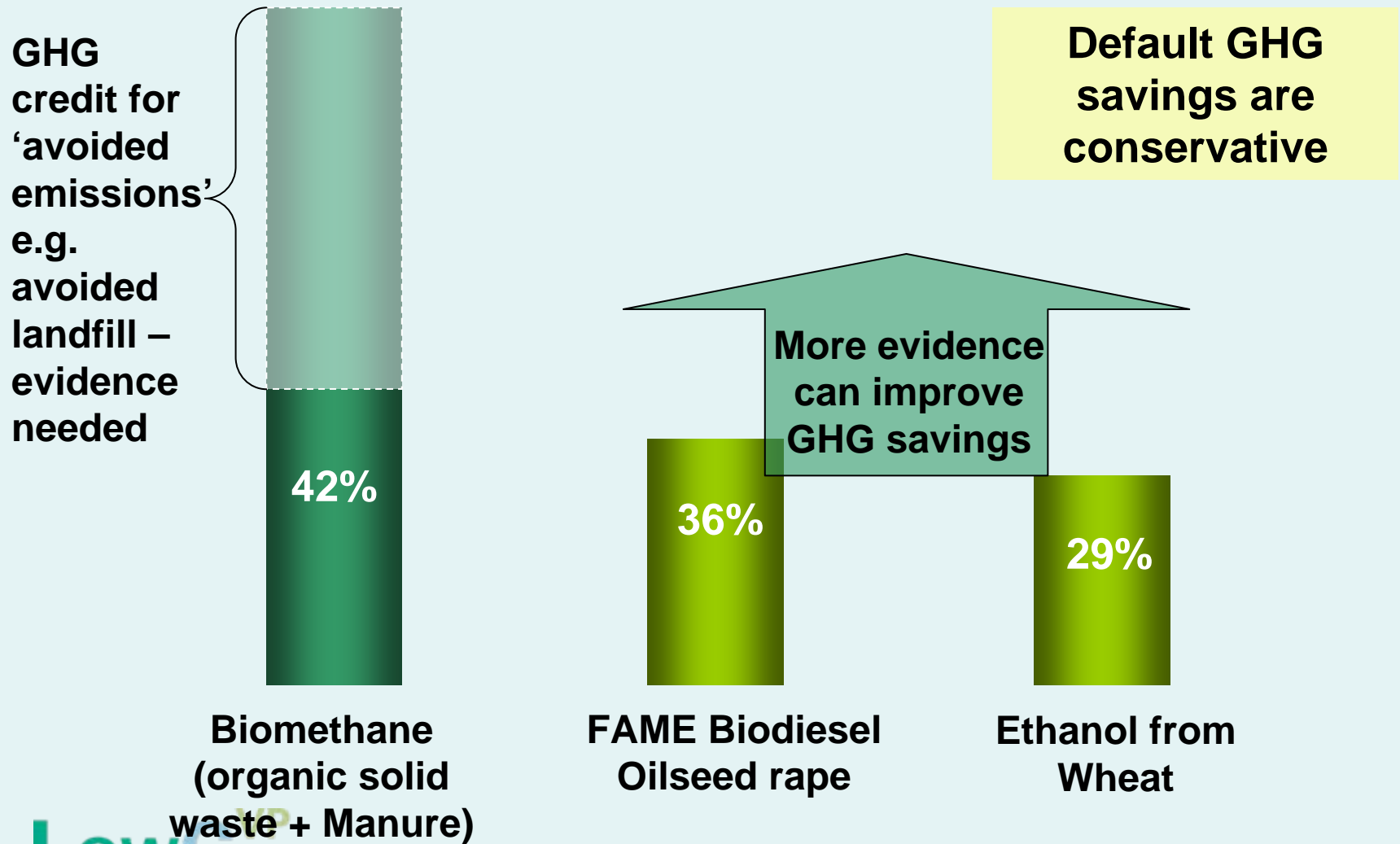
Tiered default values and real data used to report carbon intensity



A default chain is provided for chains including biomethane but 'selected defaults' are available in order to provide more accurate GHG savings

Module	Input	Options
Feedstock transport	Transport mode fuel efficiency	Truck (by geographic region) Rail (by geographic region) Shipping
Conversion	Fuel emissions factor	Coal Natural gas Heavy fuel oil Biomass

The default assumes no credit for avoided emissions for biomethane but providing this evidence will improve GHG savings significantly



RTFO next steps

- ❑ Launch event to mark the start of the RTFO on 15 April
- ❑ Obligated suppliers must register within 28 days – i.e. 12 May
(Or within 28 days of supplying more than 450,000 litres of fossil fuel)
- ❑ First reporting period closes on 14 May – volume & C&S data required by Mon 16 June
- ❑ Expect to publish a report on that quarter by end September
- ❑ Legal obligation for RFA to report – Annual Report 31 Jan 2010

Key messages

- ❑ There are good and bad biofuels
 - Biomethane is one of the best
- ❑ RTFO awards biomethane 1 certificate / kg fuel supplied for road transport applications
- ❑ RTFO commences 14th April
 - Suppliers should register soon
- ❑ RTFO includes a carbon and sustainability reporting requirement. Biomethane is:
 - A by-product
 - “Qualifying standard”
- ❑ GHG calculation includes “alternative waste management”
 - Suppliers must demonstrate previous waste pathway
- ❑ Future policy expected to reward biofuels according to their GHG-saving



Any Questions?

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