

Policy Context for Low Carbon Fuels

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Our mission:

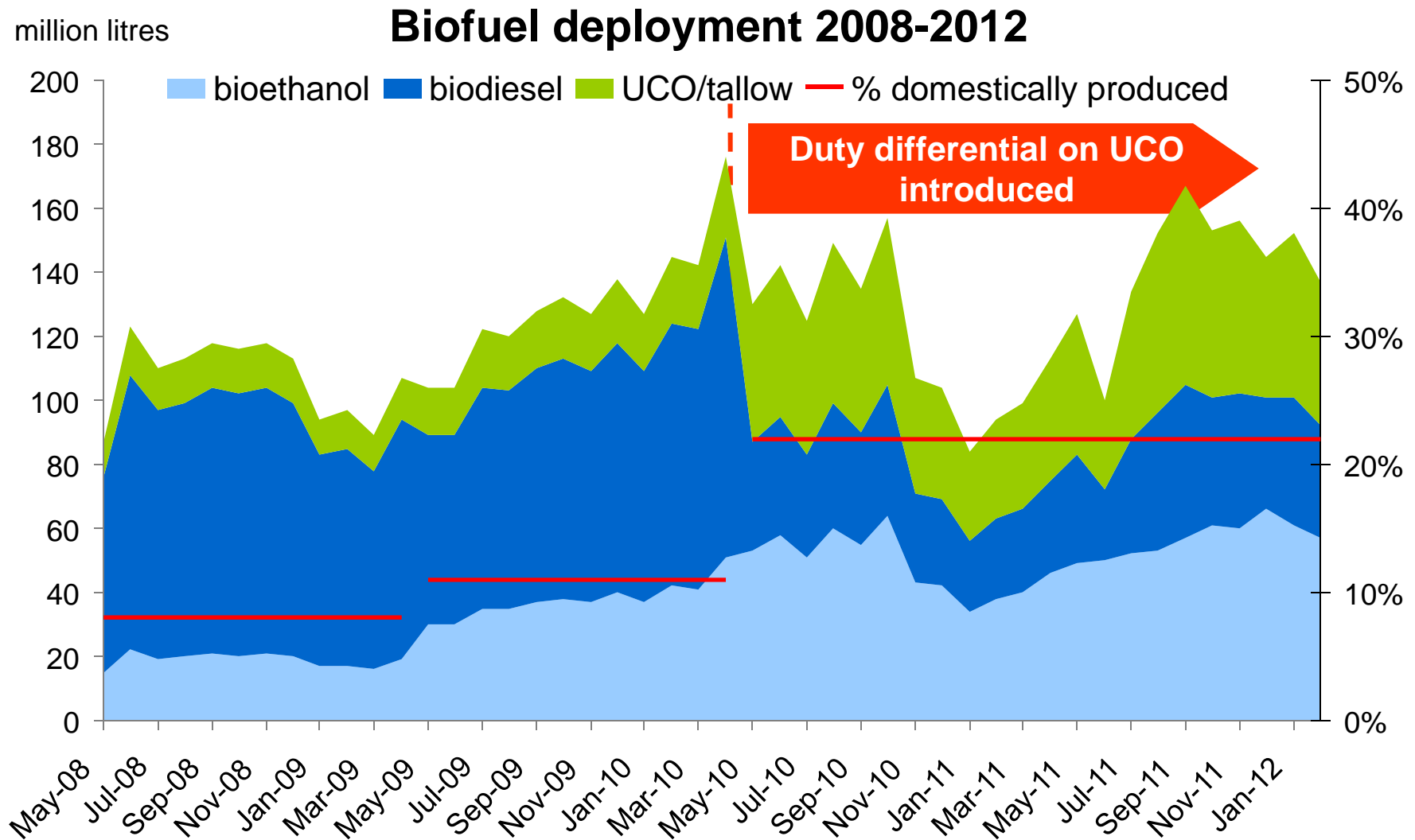
- To have a greener transport system
- Transform road transport and ultimately end reliance on fossil fuels
- Create a low carbon UK



Legislation

- Renewable Energy Directive
 - Fuel Quality Directive
- Renewable Transport Fuel Obligation

What has been supplied under the RTFO?



Challenges

- Targets
- Sustainability
- High blend biofuels

Targets

	2008/09		2009/10		2010/11		2011/12*	
	Target	<i>Actual</i>	Target	<i>Actual</i>	Target	<i>Actual</i>	Target	<i>Actual</i>
% Biofuel supplied	2.5	2.5	3.25	3.33	3.5	3.1	4	3.2

* biofuel supplied under the RTFO from 15 April 2011 to 14 December 2011

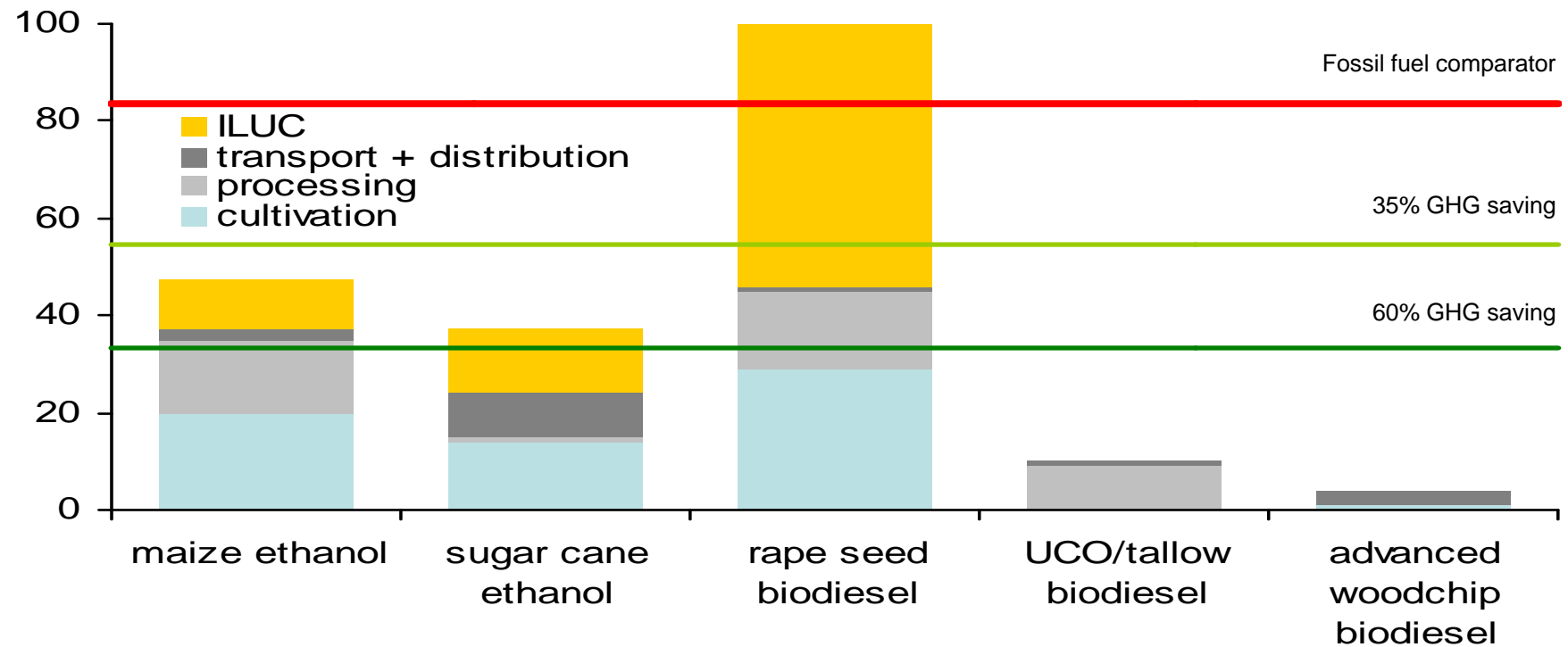
ILUC & Sustainability

What is ILUC (Indirect Land Use Change)?

- ILUC occurs when production of biofuel on existing agricultural land displaces production to previously uncultivated land.
- This can be a problem where the previously uncultivated land has eg high carbon stocks, such as rainforest, or high biodiversity value.
- Research shows that there is great uncertainty as to exactly how big the impact is and how best to measure it.

ILUC and Sustainability

Typical GHG emissions, including ILUC factors, of biofuels from different feedstocks gCO₂/MJ



High Blend Biofuels

Percentage of different road vehicle categories in 2011 that can use various biofuel blend strengths, both for current models and averaged for the current fleet

	Biofuel capability for new vehicles on the market (weighted by sales in 2008)				Biofuel capability for the current fleet			
	Biodiesel Capability							
Type of Vehicle	B7	B20	B30	B100	B7	B20	B30	B100
Passenger Cars	100%	9.1%	9.1%	0%	100%	6.8%	6.8%	0%
Light Commercial Vehicles (Vans)	100%	20.4%	20.4%	0%	100%			0%
HDV which do not use unit injectors - including buses and coaches	100%	45.9%	17.3%	12.1%	100%	31%	11.7%	8.2%
HDV which use unit injectors	100%	91.2%	91.2%	64.3%	100%	61.6%	61.6%	43.3%
	Bioethanol Capability							
	E5	E10	E85		E5	E10	E85	
Light duty vehicles	100%	93.90%	0.008%		100%	84%	0.0025	

Source: AEA Assessment of the existing UK infrastructure and capacity for biofuels (2011)

Looking to the Future

- What is the best way to meet RED targets?
- Are ILUC factors the right way forward?
- What is the right path for introducing higher blend fuels?