



Department
for Transport

Waste, Residues and Advanced Biofuels Policy in the UK





UK 15 year strategy on low carbon fuels



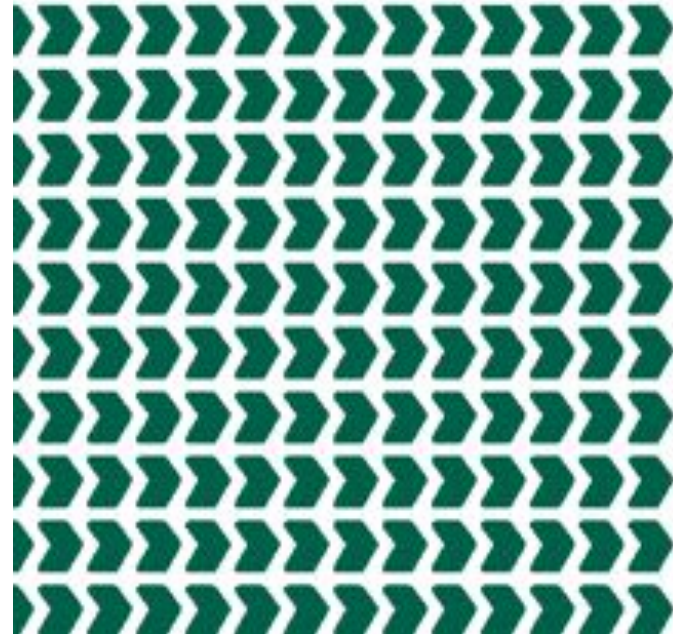
The Renewable Transport Fuel Obligations Order Proposed amendments

Moving Britain Ahead



The Renewable Transport Fuel Obligations Order Government response to the consultation on amendments

Moving Britain Ahead





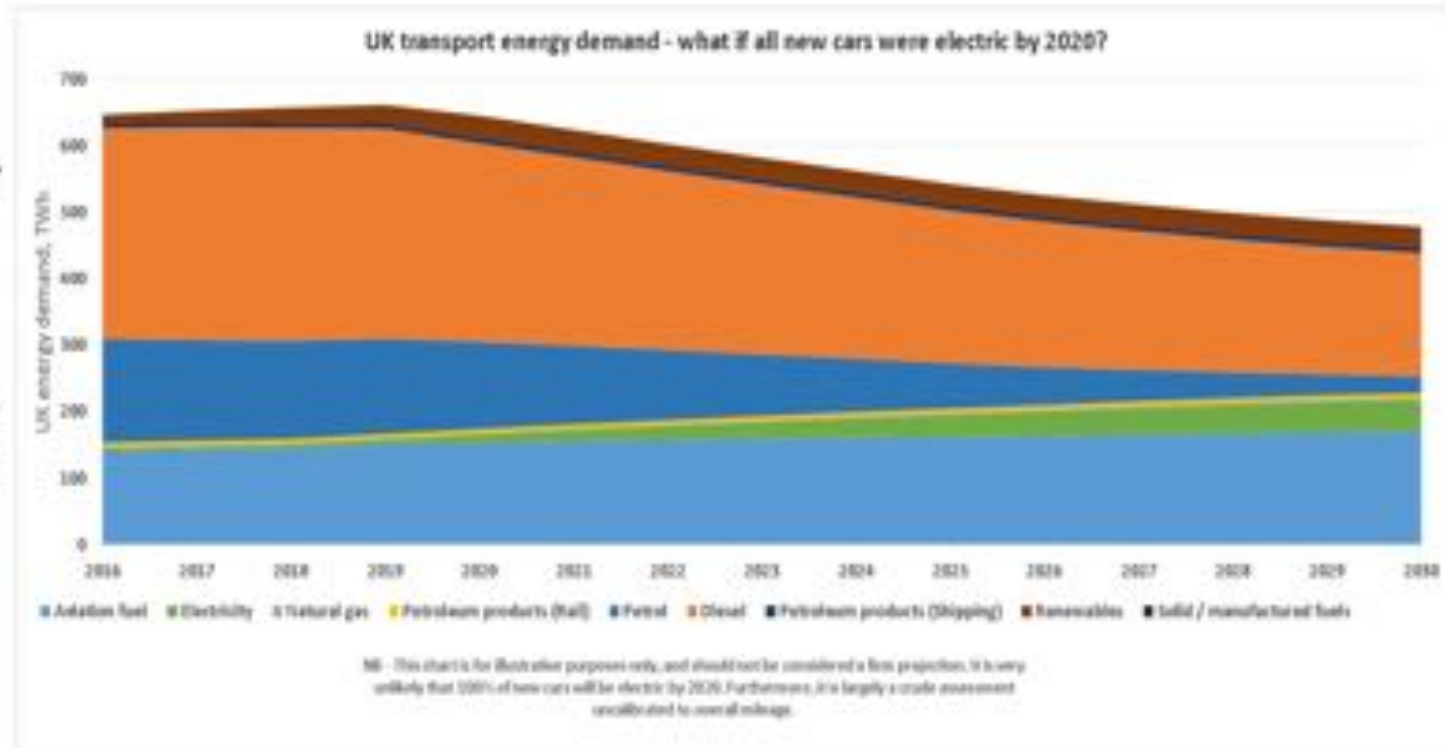
Subject to Parliamentary debate





Rationale: Liquid biofuels are essential to decarbonising transport

- ▶ Electric vehicles currently <2% of new car sales.
- ▶ The government's pledge is that all new cars and vans will be electric by 2040.

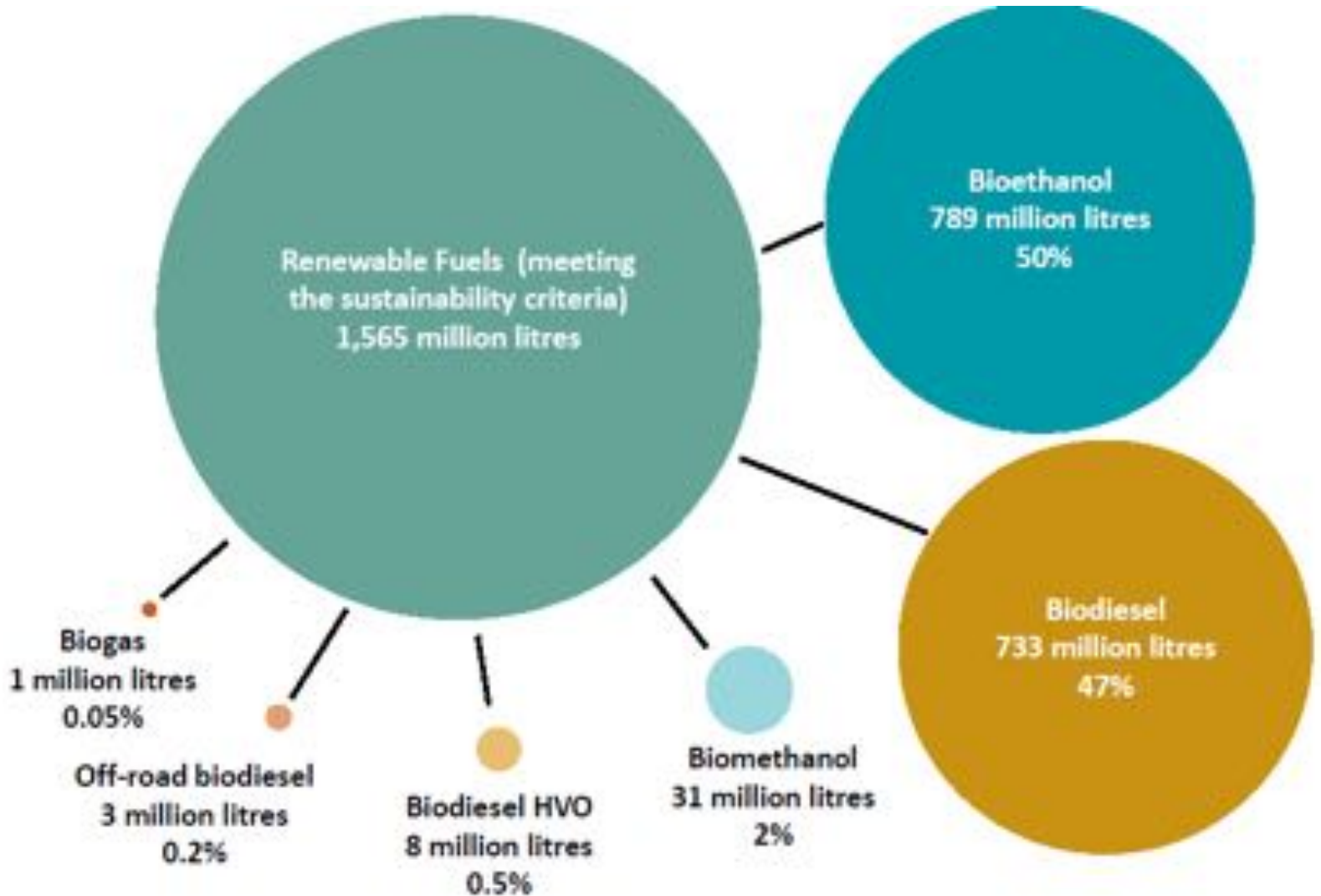


- ▶ Even if all new cars were electric from 2020 embedded demand for liquid fuels remains for decades.



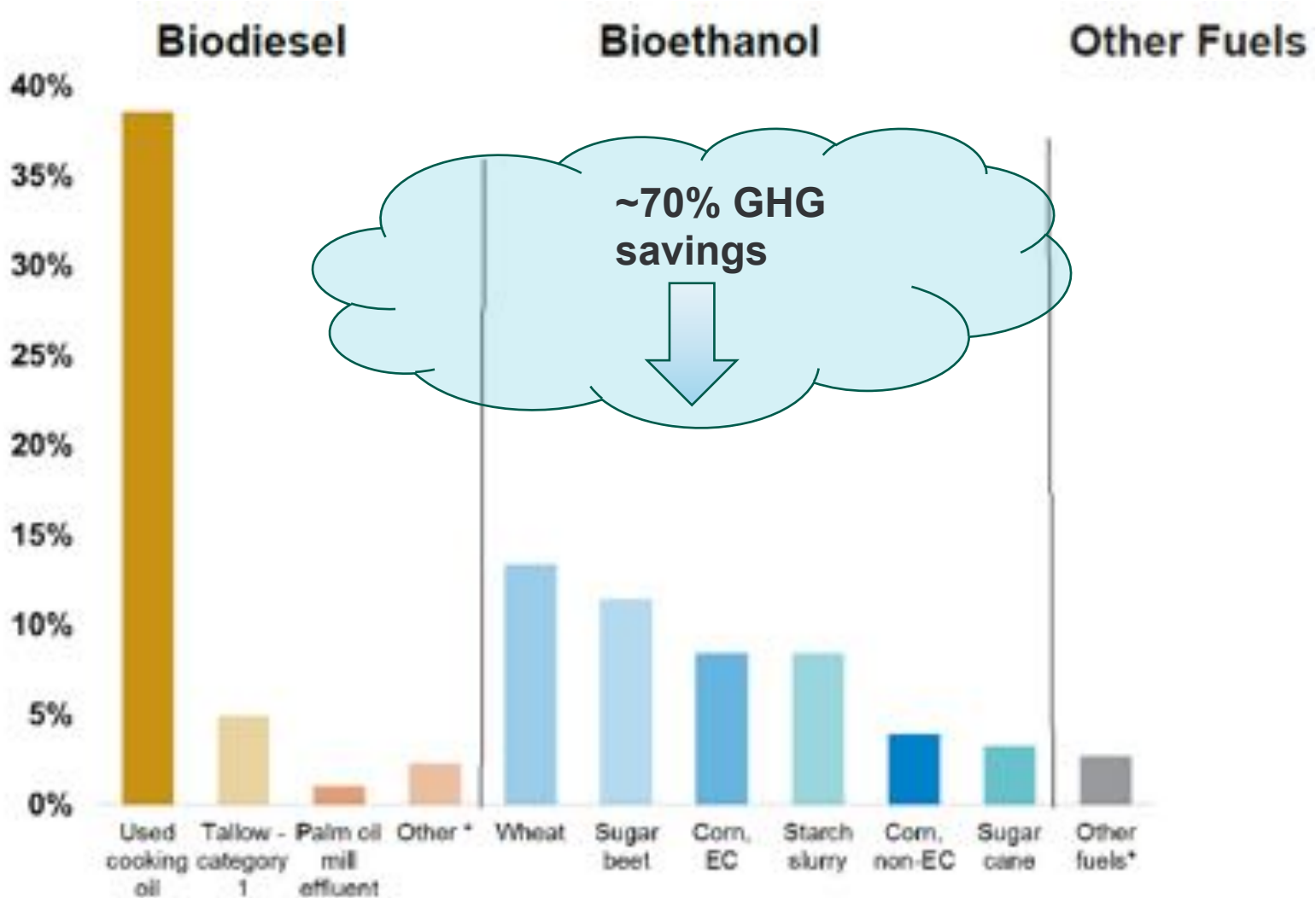


Today about 3% of UK transport fuel is renewable



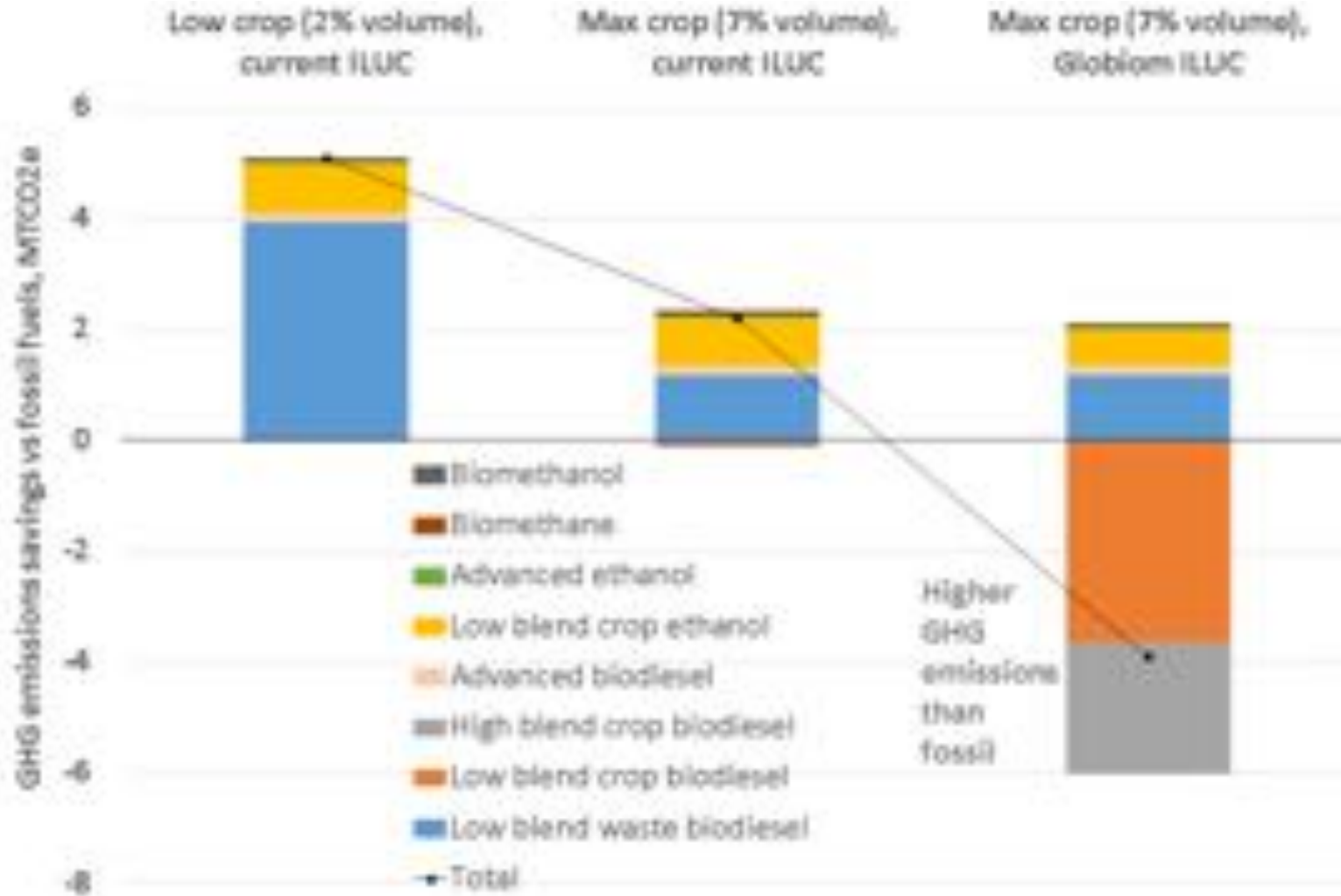


And well over half is derived from waste



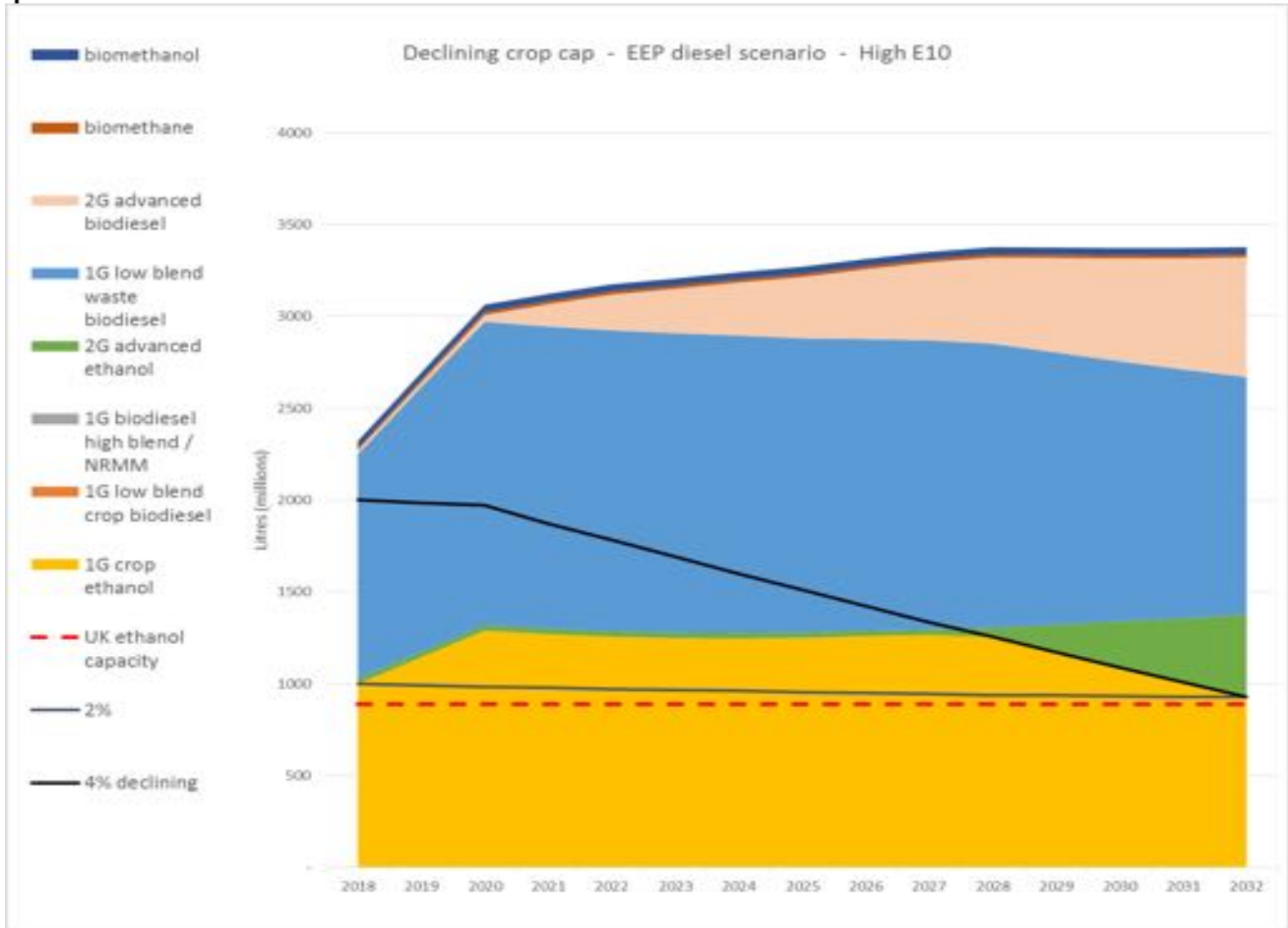


Focus on waste to ensure the policy delivers genuine GHG savings





Targets set to 2032 – increases from waste and advanced fuels





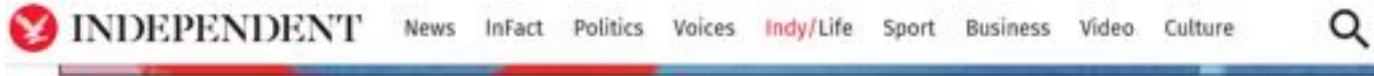
The targets set a long term direction for industry

Focus increasingly on sectors difficult to electrify





And should encourage UK investment



News > Business > Business News

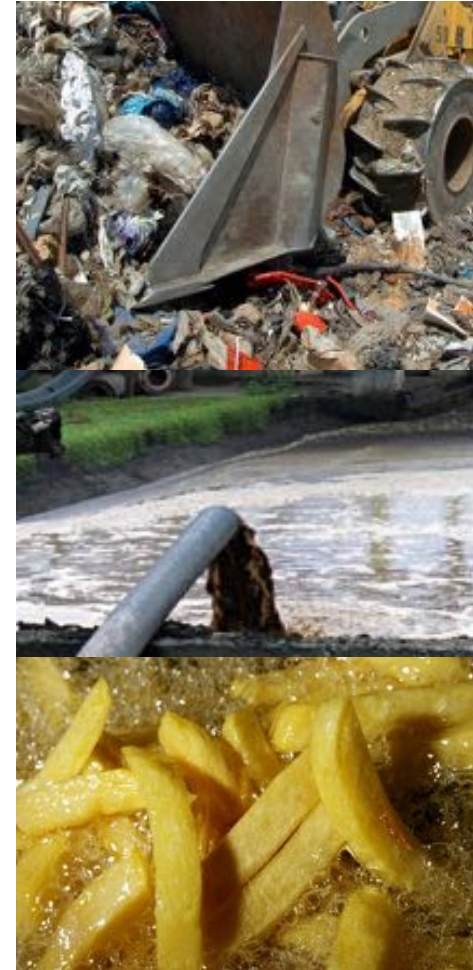
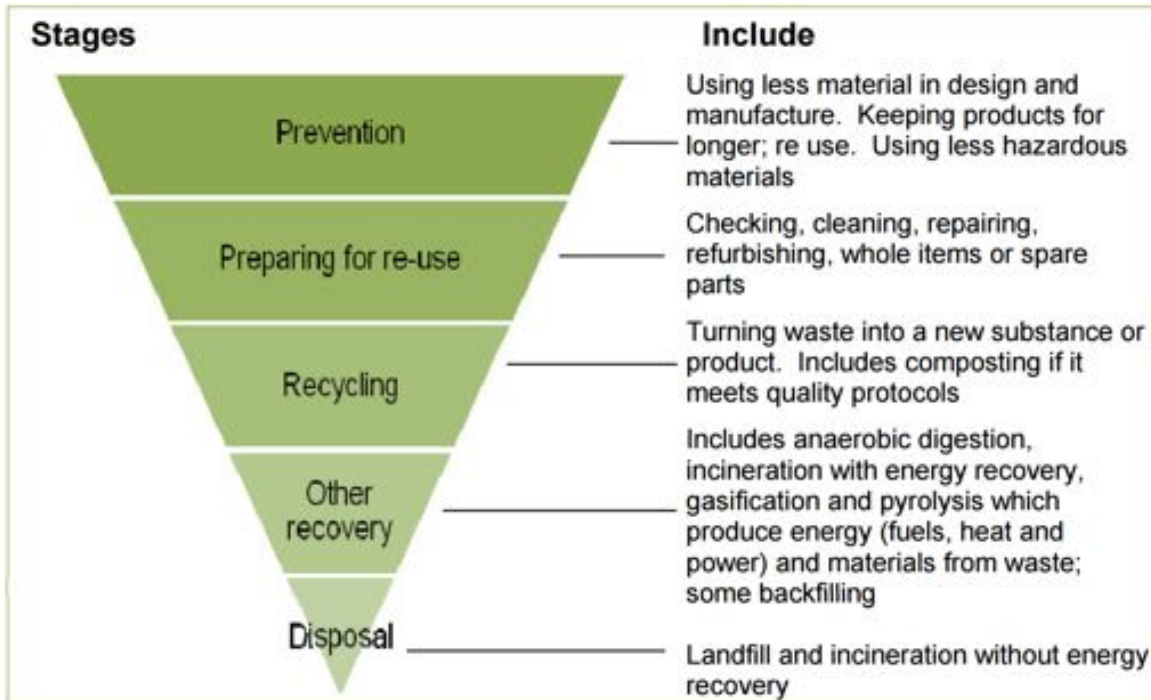
Renewable jet fuel company Velocys sees shares jump 40% after British Airways deal

Velocys plans to take hundreds of thousands of tonnes of post-recycled waste, destined for landfill, and convert it into clean-burning, sustainable fuels





Wastes receive double credits under the RTFO





There is detailed guidance on which wastes qualify



RTFO Guidance Part Two
Carbon & Sustainability
RTFO Year 10
15 April 2017 to 14 April 2018

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Wastes and processing residues

Table 3 contains a list of wastes and processing residues that are eligible to receive double the number of RTFCs for every litre/kg of biofuel.

Table 3 - Wastes & processing residues

Material	Description	Valid from
Brown grease	Brown grease is the grease that is removed from wastewater sent down a restaurant's sink drain. This is a waste. Material removed from sewers known as "FOG" (fats, oils and grease) should also be reported as brown grease. Brown grease may use the waste vegetable or animal oil default GHG value.	15/12/11
Cashew nut shell liquid	Cashew nut shell liquid (CNSL) is a process residue. The material is squeezed from the shells of cashew nuts after the edible portion has been removed. There are other potential uses which may be affected by large scale use of CNSL for biofuel, therefore the Administrator will be keeping this decision under review.	15/05/14
Crude glycerine	Crude glycerine is specifically named as a residue from processing in the RED. (The RED treats refined glycerine from as a product - see above).	15/12/11
Food waste (unsuitable for animal feed)	Whether from manufacturers, retailers or consumers, this will be a waste. This may include food that is; i) Out of date (food that has exceeded its shelf life) ii) Out of specification (food that fails to meet the required end of use specification). As with all wastes, this material must be unsuitable for other non-energy uses. Examples include beer residue, coffee pulp and protamylase ('potato juice').	15/12/11



Development fuels target - trajectory

RTFO obligation and development fuels sub target

▶ Double counting (made from waste)

▶ Sub target

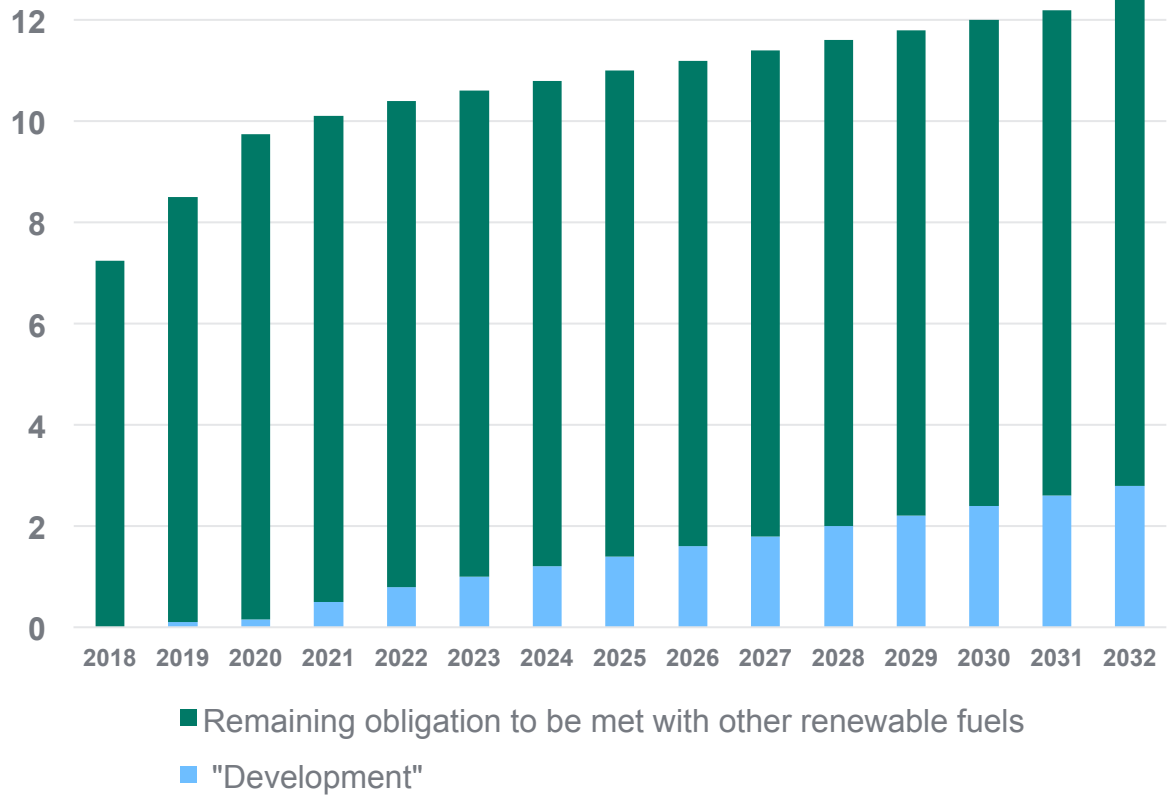
2019 – 0.1% (0.05%)

2020 – 0.15%

2021 – 0.5%

.....

2032 – 2.8% (1.4%)





Development fuels sub target

A development fuel is:

a) Qualifying Fuel

AND

b) Qualifying feedstock

Aviation fuel (avtur or avgas);

sustainable waste or residue.

Hydrogen

Excludes:

Renewable-SNG

segregated oils and fats (incl
UCO and tallow)

Fuel that can be blended at rates of at least
25% and still meet the relevant fuel standard
i.e. EN228 for petrol, EN590 for diesel.

crops including energy crops

Buy-out price

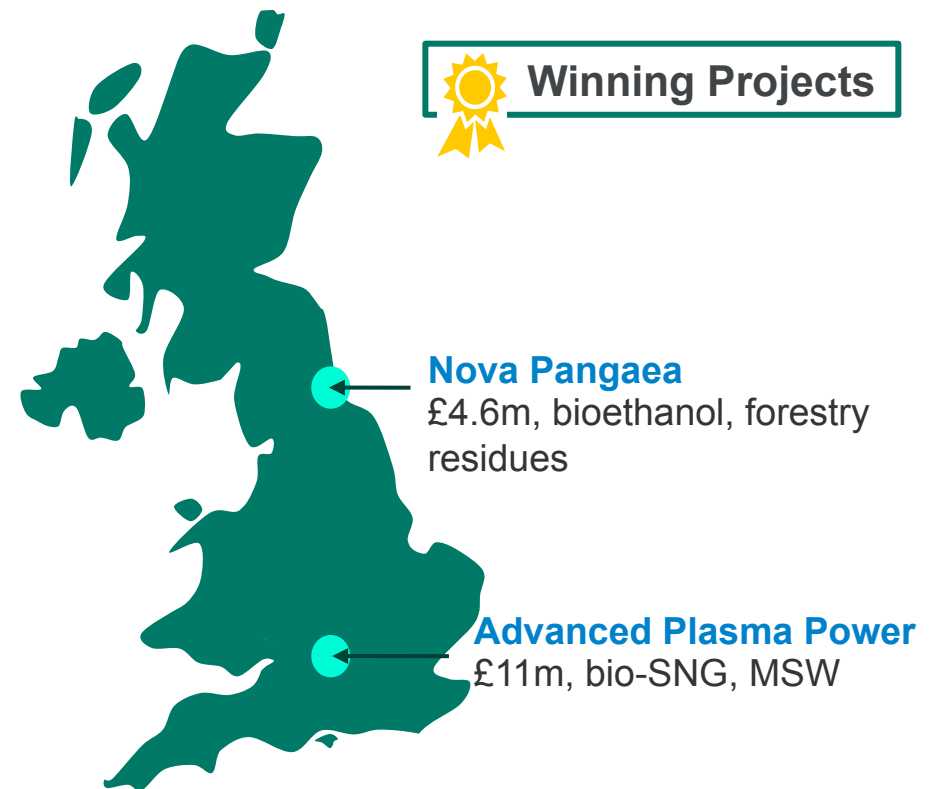
80ppl (up to £1.60 for 1 litre)





Advanced Biofuel Demonstration Competition

- ▶ To leverage private sector investment and kick-start a domestic industry.
- ▶ To demonstrate commercial and technical viability of novel technologies.
- ▶ First production this year.





Future Fuels for Flight and Freight Competition (F4C)

- ▶ £22m matched funding industry competition
- ▶ Launched in August 2017,
- ▶ To support construction of up to five plants by 2021.
- ▶ Designed to broadly align with the RTFO ‘development fuel’ sub-target.



Targeting strategically important
fuels



Statistics and guidance available online

Figure 4: Top 5 countries supplying biofuel to the UK (table [RTFO 05](#))



www.gov.uk/government/organisations/department-for-transport/series/biofuels-statistics

<https://www.gov.uk/government/publications/renewable-transport-fuel-obligation-rtfo-guidance-year-10>