

Commissione UNICHIM
“Prodotti Petroliferi e Lubrificanti”

**Sustainable biomass availability in the EU, to
2050**

Roma, 9 Novembre 2021

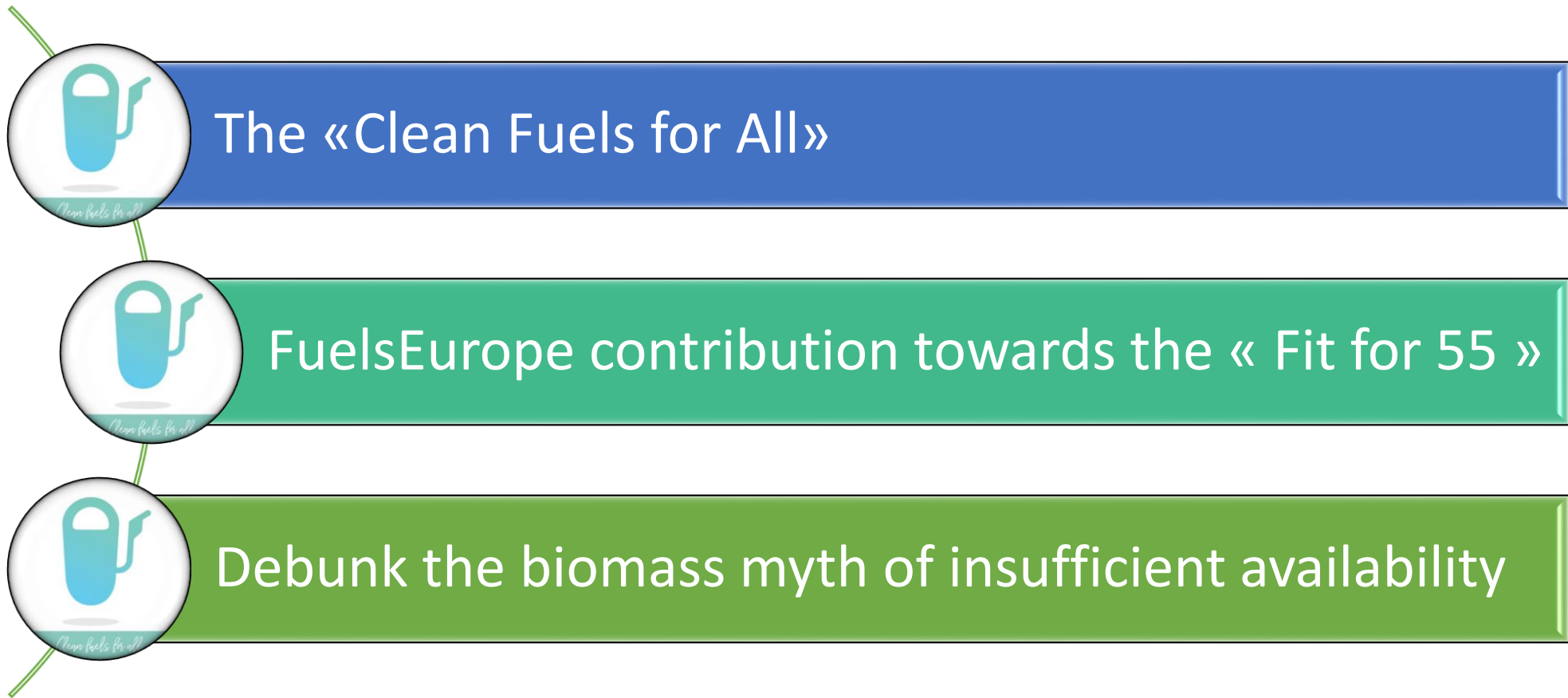
Emanuela Sardellitti, Advocacy Strategy Manager



FuelsEurope represents 41 Member Companies ≈ 100% of EU Refining



Presentation Overview



a.

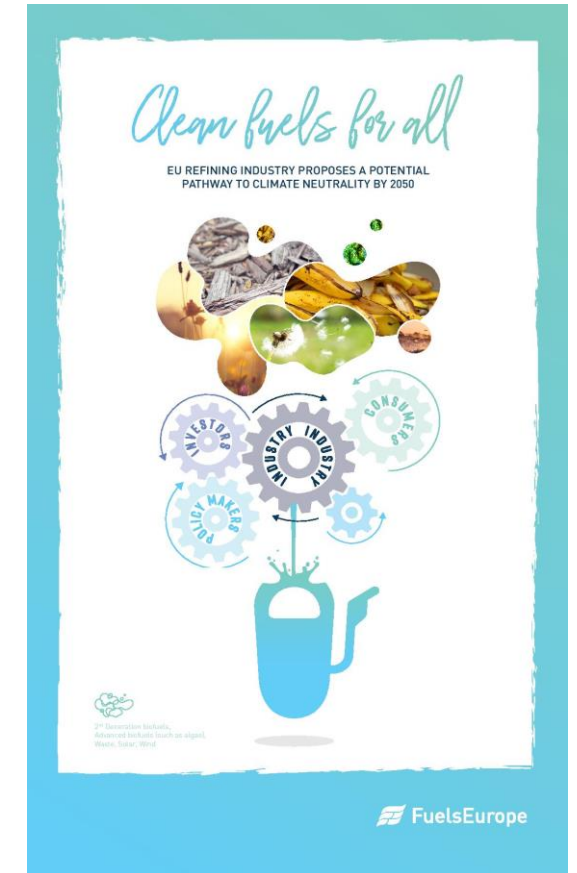
**The « Clean Fuels for
All »**

What is *Clean Fuels for All* about?

- 🛢️ The EU refining industry's potential pathway to achieve climate neutrality by 2050 in all transport modes.
- 🛢️ By 2050, at the latest, every litre of liquid fuel for transport could be net climate neutral, enabling so the decarbonisation of aviation, maritime and road transport.
- 🛢️ Up to 650 bln€ investment over 30 years.

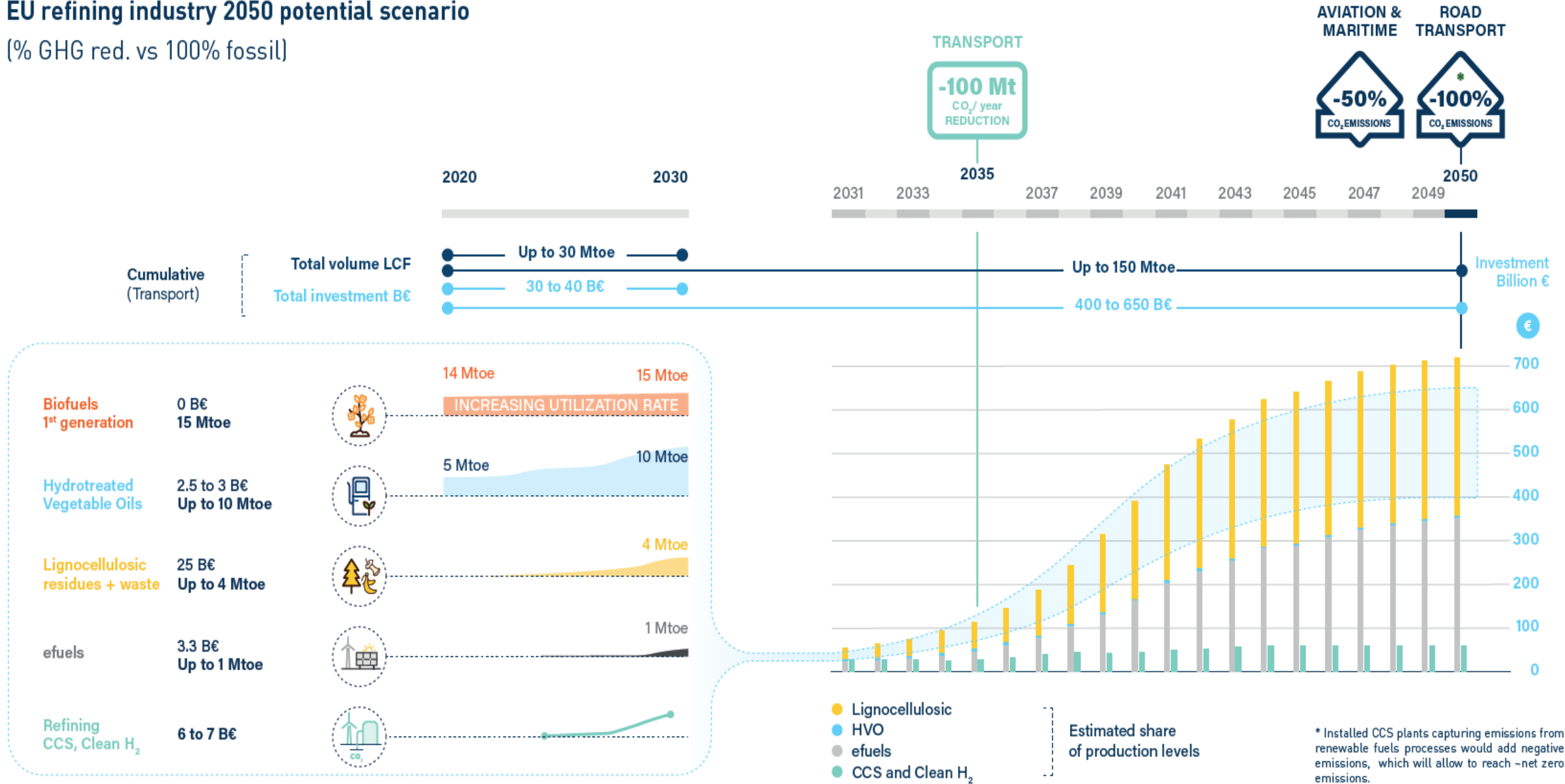
What are "Low-Carbon Liquid Fuels" ?

Renewable and sustainable liquid fuels from non-petroleum origin.
Produced from new feedstock such as biomass, renewable energy, waste and recycled CO₂.



EU refining industry 2050 potential scenario

(% GHG red. vs 100% fossil)

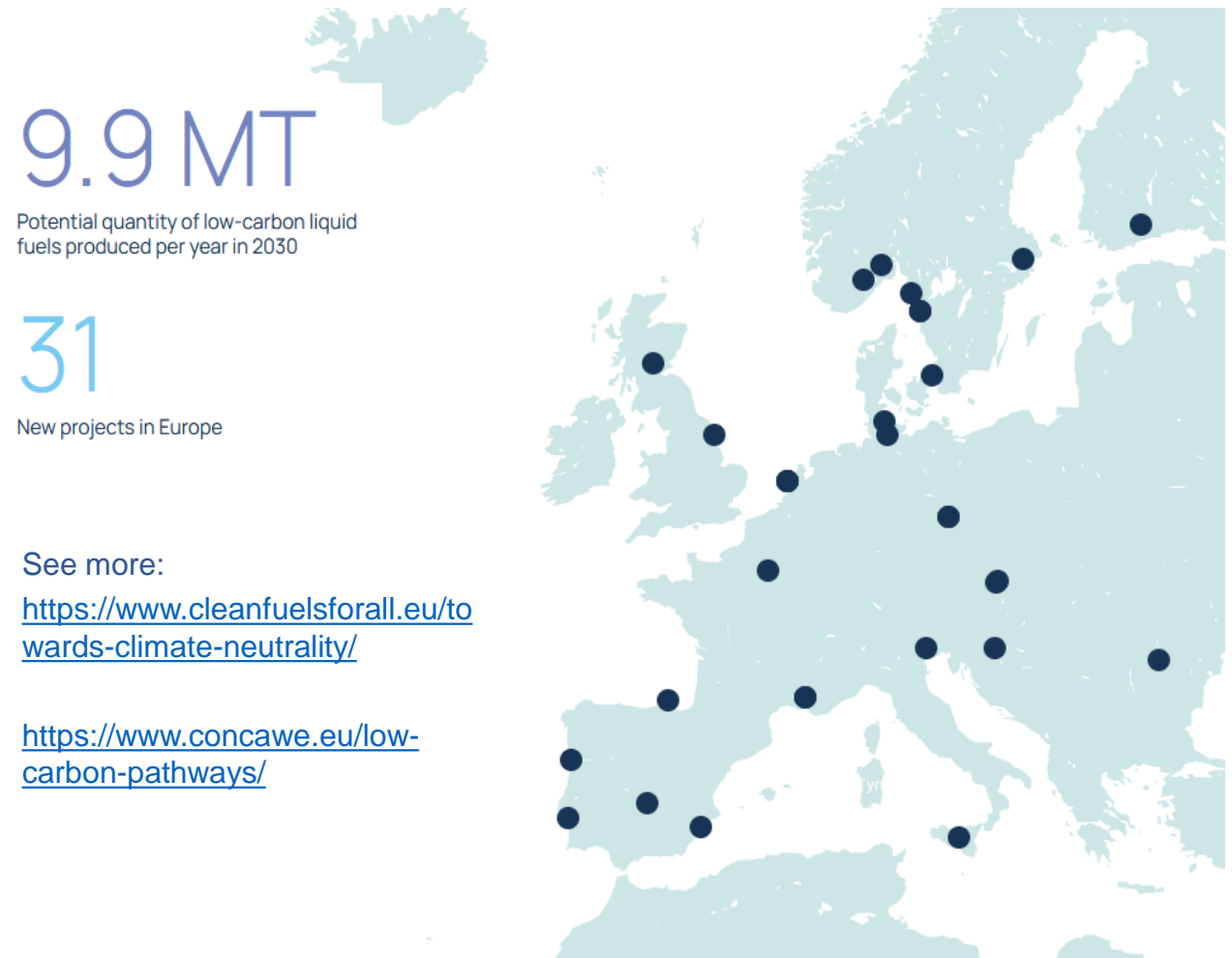


Transition to low-carbon liquid fuels initiatives

- FuelsEurope's members pursue a wide range of low-carbon initiatives across at least 12 member states in different phases of the project cycle, including **CCUS**, **E-Fuels**, **Green H2**, **Advanced biofuels**, **bio-refinery conversions**, **waste to fuel**, etc.
 - Well over **20 projects for low-carbon liquids** have already been started or are planned until 2030 (in the public domain)
 - Projects **facilitate industrial clustering** though links with Chemicals, Recycling, Steel and Cement Industries, ...
 - **Scaling up and increasing the overall number of projects will be possible with the right enabling framework** in place

Provisional examples*:

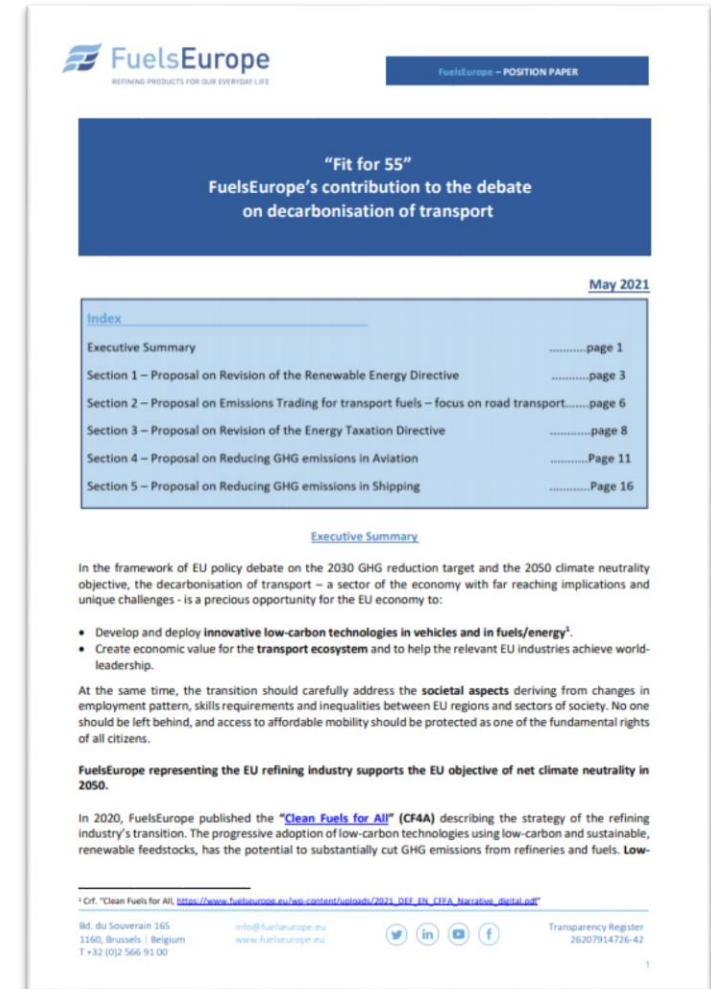
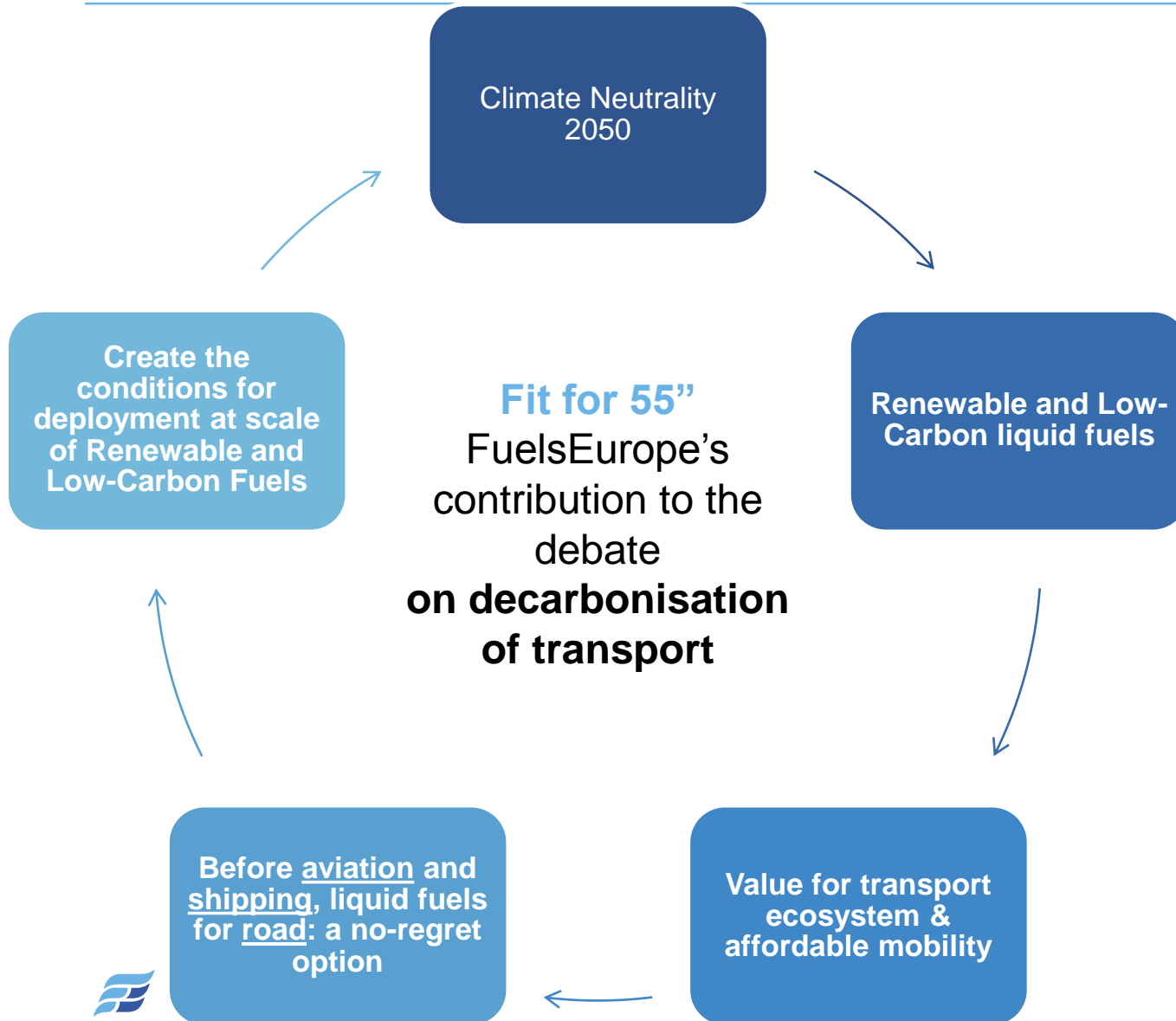
- **9 Advanced biofuel projects**, with capacities between 100.000 and 750.000 tonnes of output.
- **7 CCUS projects**, up to 6 mt. of capacity for CO2 sequestration.
- **12 Green Hydrogen Projects**, some of which lower the GHG intensity of manufacturing processes, others combine the green H2 with captured carbon to produce synthetic fuels with a capacity of up to 3.4 million tonnes of output per year.
- **3 Waste-to-fuel projects**, with a capacity of up to 100.000 tonnes per year in output (derived from urban waste).



*While the final list of projects may differ from the map or the list shown here, these projects are being considered by FuelsEurope's members to be put forth for support under the EU Recovery Fund.

b. | **FuelsEurope
contribution towards the
« Fit for 55 »**

Recommendations on the “Fit for 55”



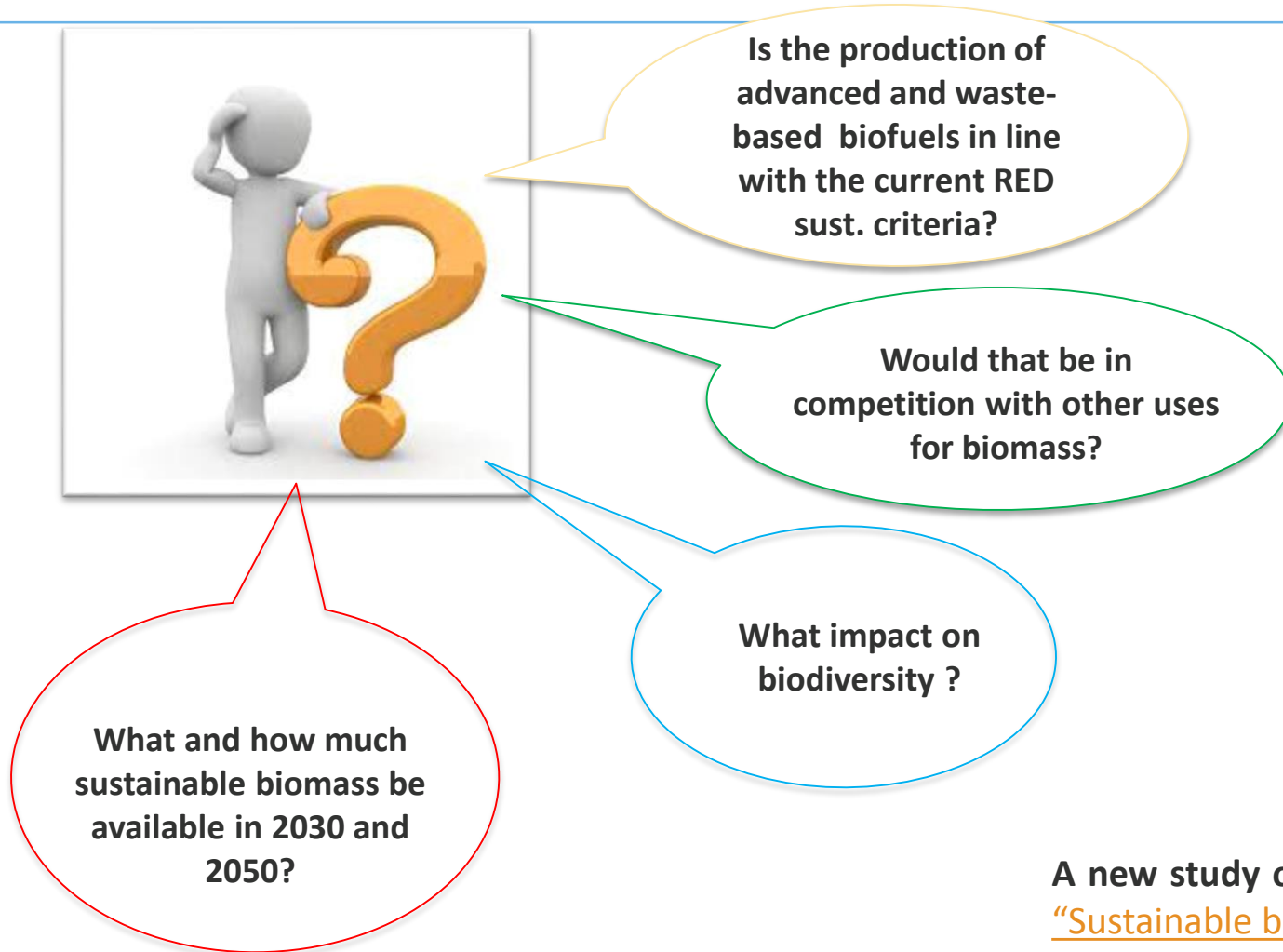
Preliminary assessment on the Fit for 55 proposals relevant to transport

- ✓ In general, the Fit for 55 proposals go in the right direction, towards **creating the conditions** for unlocking **investments** in low-carbon liquid fuels and renewable energy.
- ✓ The refinery liquid products demand (both for conventional and LCLFs) is heavily **impacted** by ETS in transport & buildings, CO2 standards in LDVs, RED, ReFuel EU aviation and FuelEU maritime. International protection is not ensured for our sector.
- ✓ While **LCLFs** recognised for decarbonizing aviation, maritime and possibly HDVs, their **contribution to (new) LDVs decarbonisation is excluded**. Impact on ability to make investment case.
- ✓ The **definition of sustainable biofuels** is unclear and risks imposing unnecessary restrictions.
- ✓ No sufficient assessment of impacts of rapid electrification of cars and vans on **employment**, supply value chain and affordability of personal mobility (especially for low-income households).

C.

**Debunk the biomass
myth of insufficient
availability**

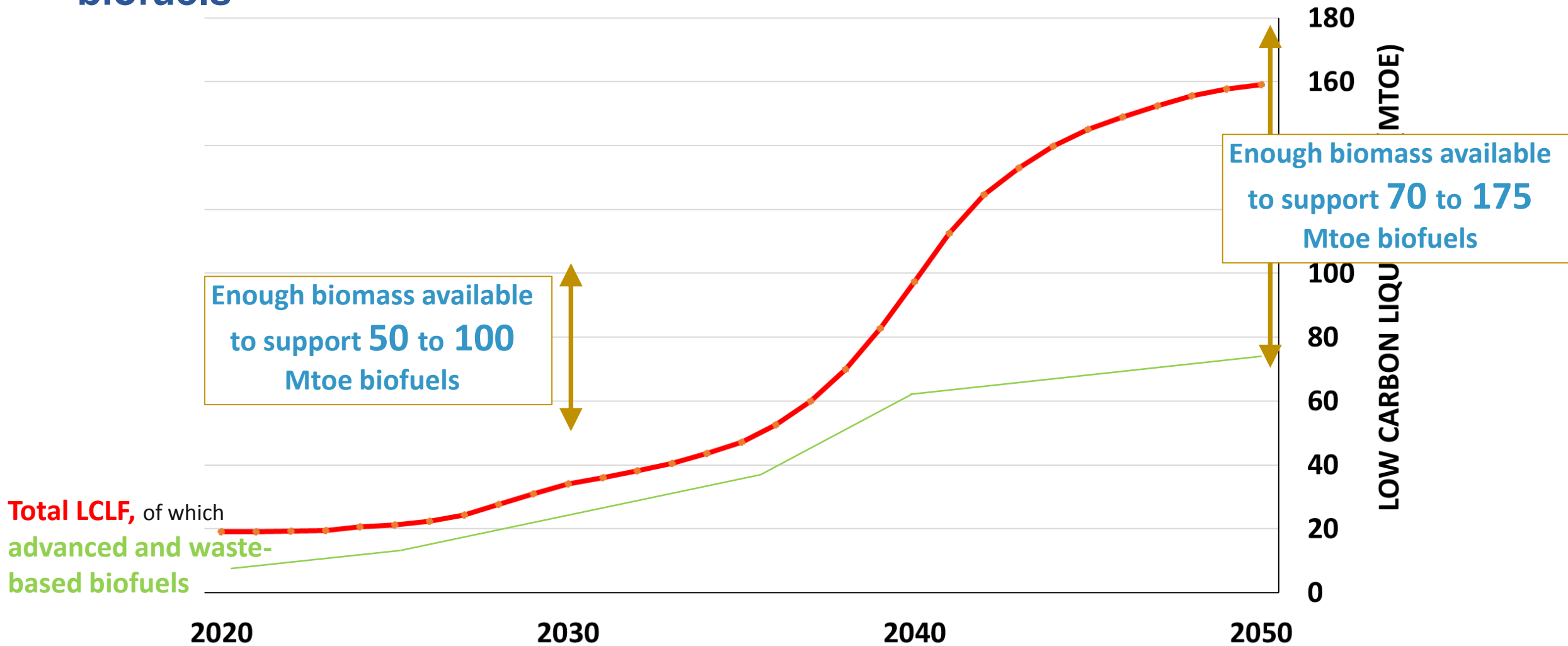
F.A.Q. On advanced biofuels and sustainable feedstocks



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A new study of the Imperial College London Consultants for Concawe, [“Sustainable biomass availability in the EU towards 2050 \(RED II Annex IX Part A/B\)”](#) sheds light on these questions.

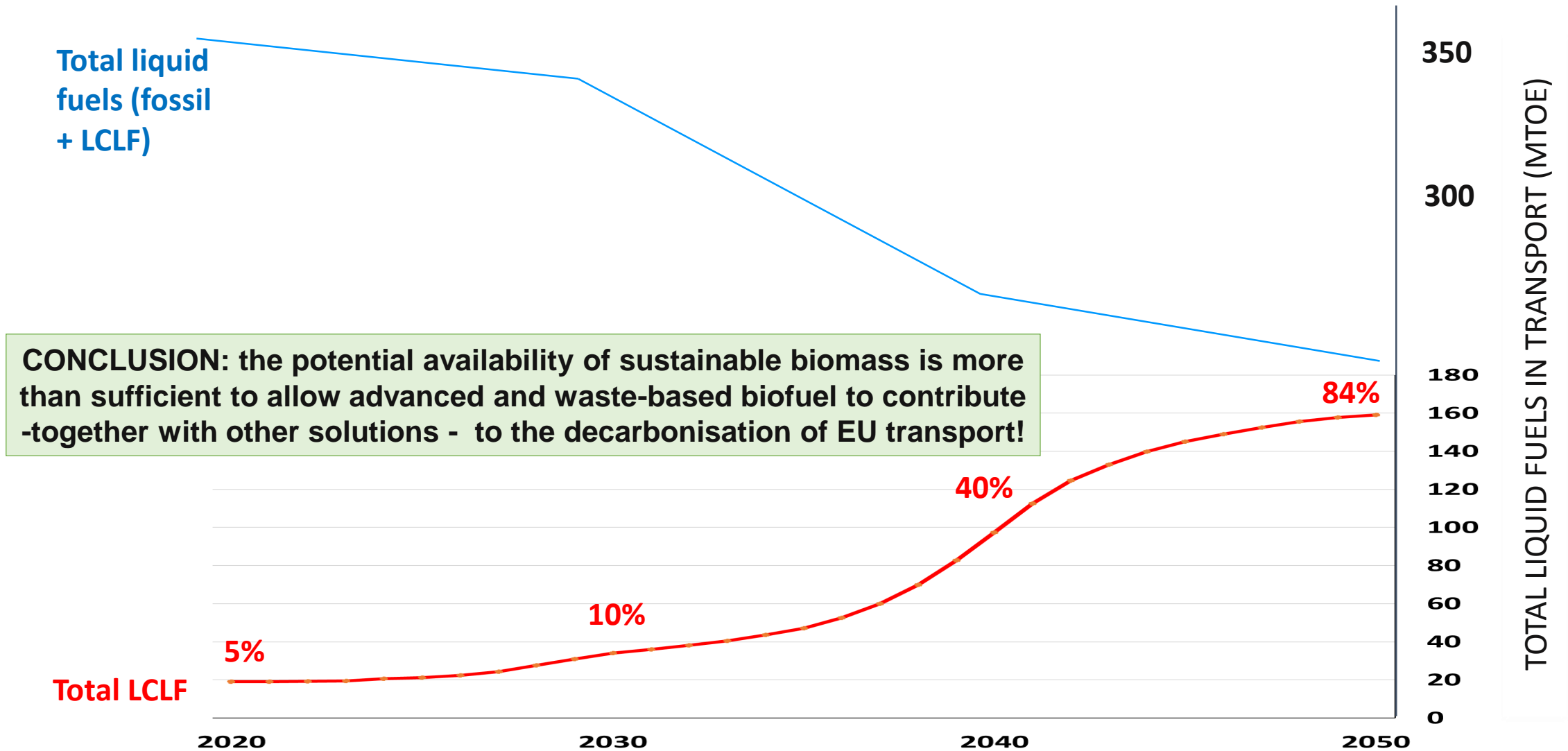
Enough sustainable biomass available for road, aviation and marine fuels biofuels



Total LCLF, of which advanced and waste-based biofuels

FuelsEurope's elaboration, based on the Imperial College London Cons. study and Concawe's scenario assuming LCLF in all transport modes

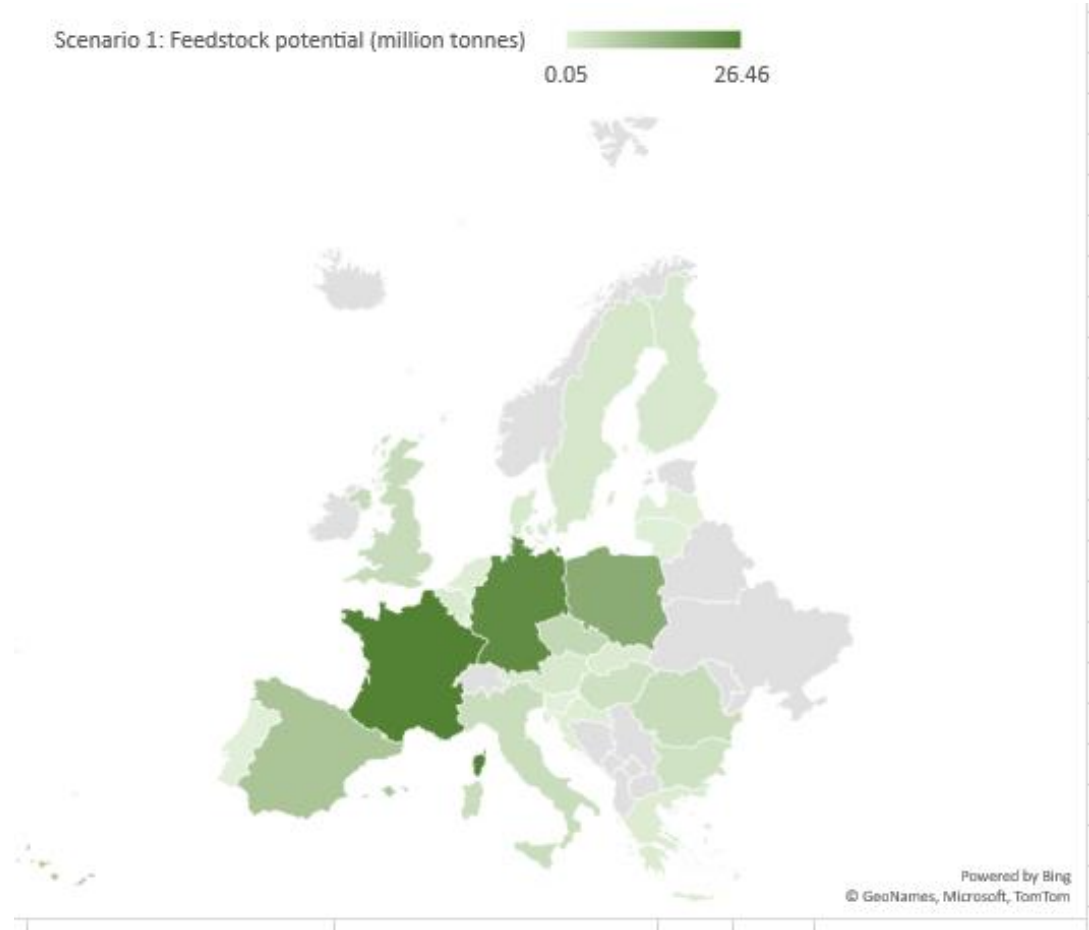
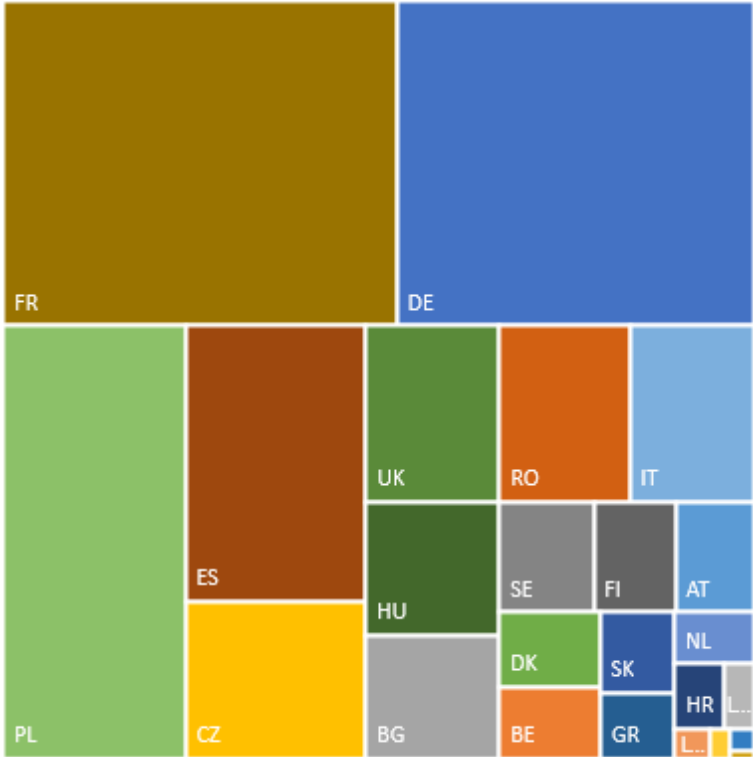
Low-Carbon Liquid Fuels progressively replacing fossil fuels in transport



FuelsEurope's elaboration, based on Concawe's scenario assuming LCLF in all transport modes

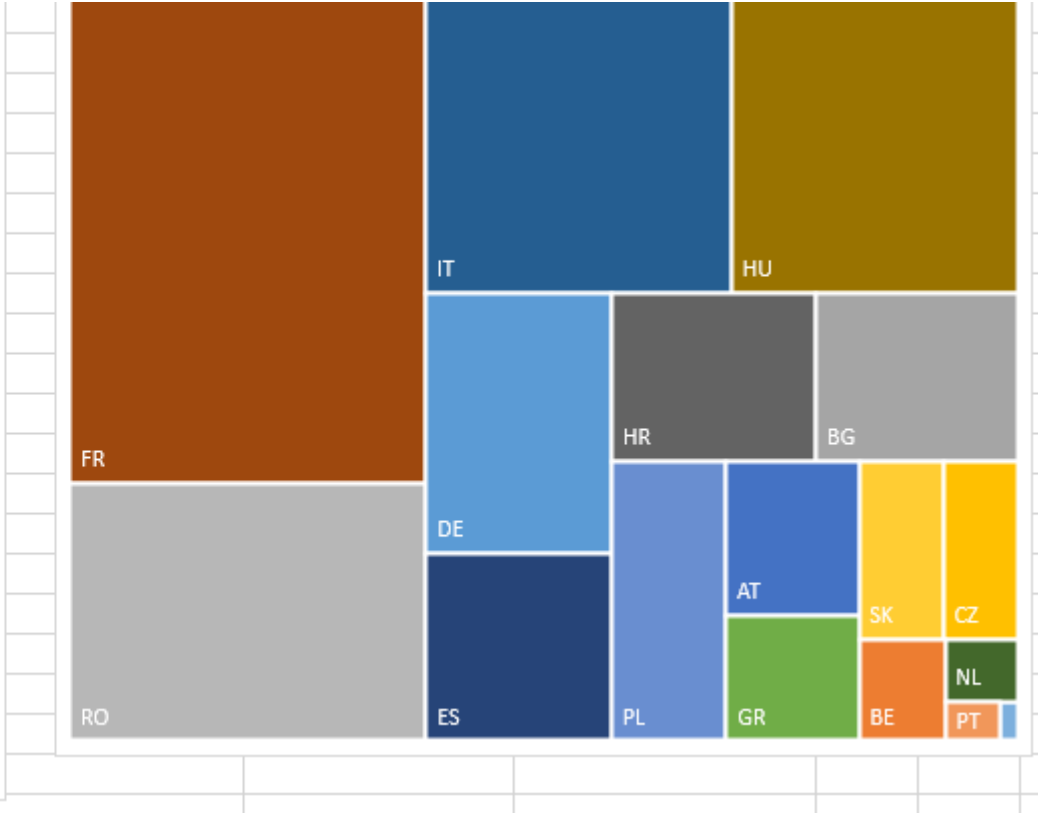
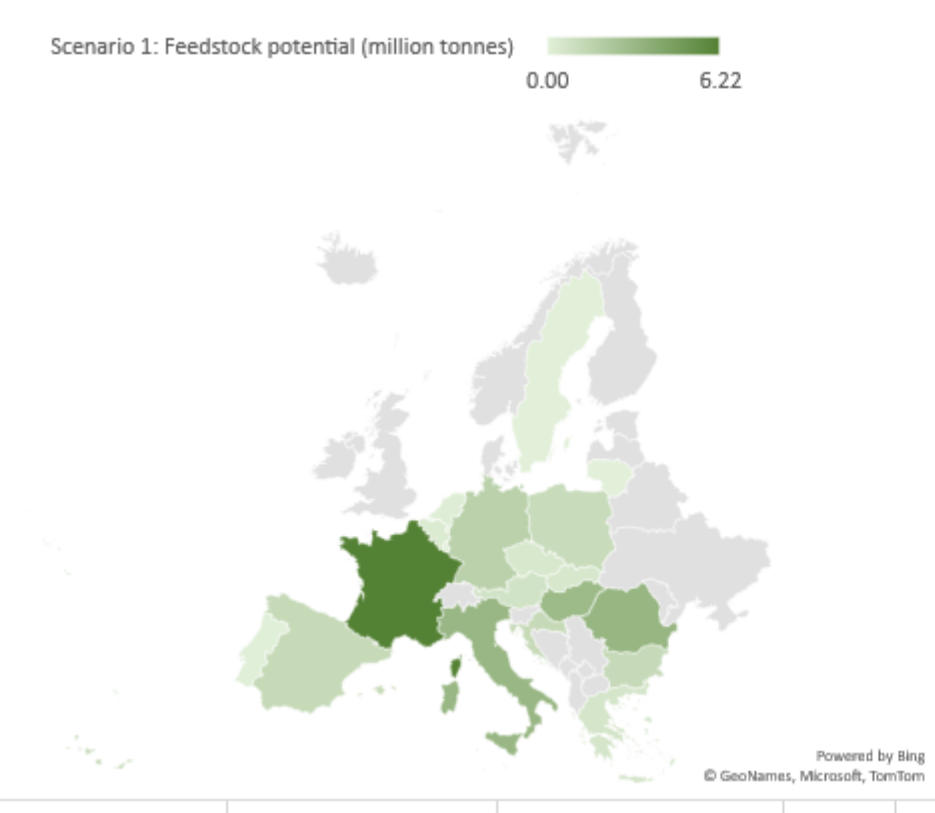
Details on Italy

Cereal Straw in 2030



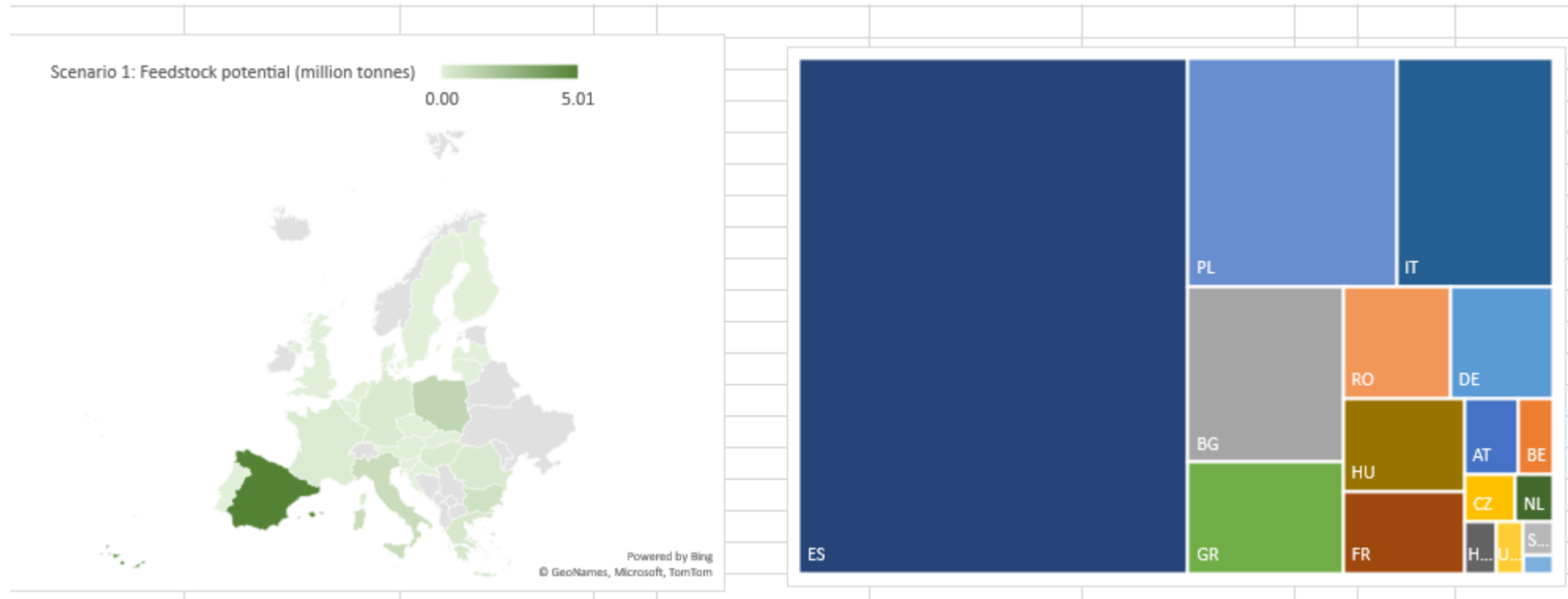
Details on Italy

Maize Stover in 2030

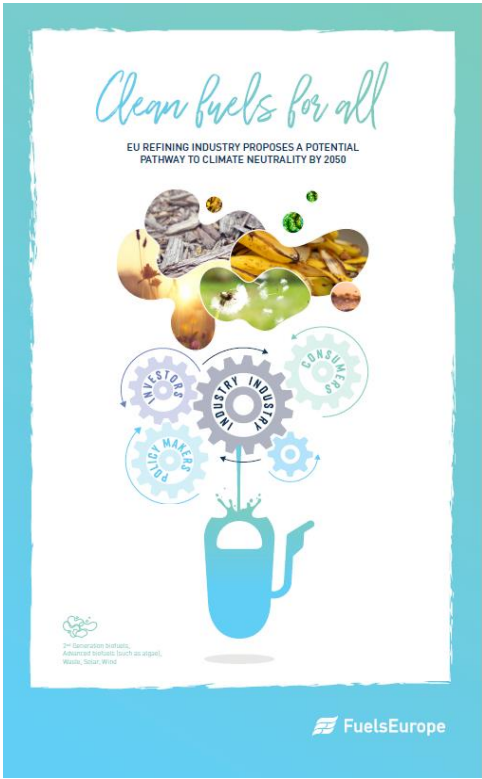


Details on Italy

Agricultural prunnings in 2030







www.cleanfuelsforall.eu

Thank you

