

SAF Mandates in the EU

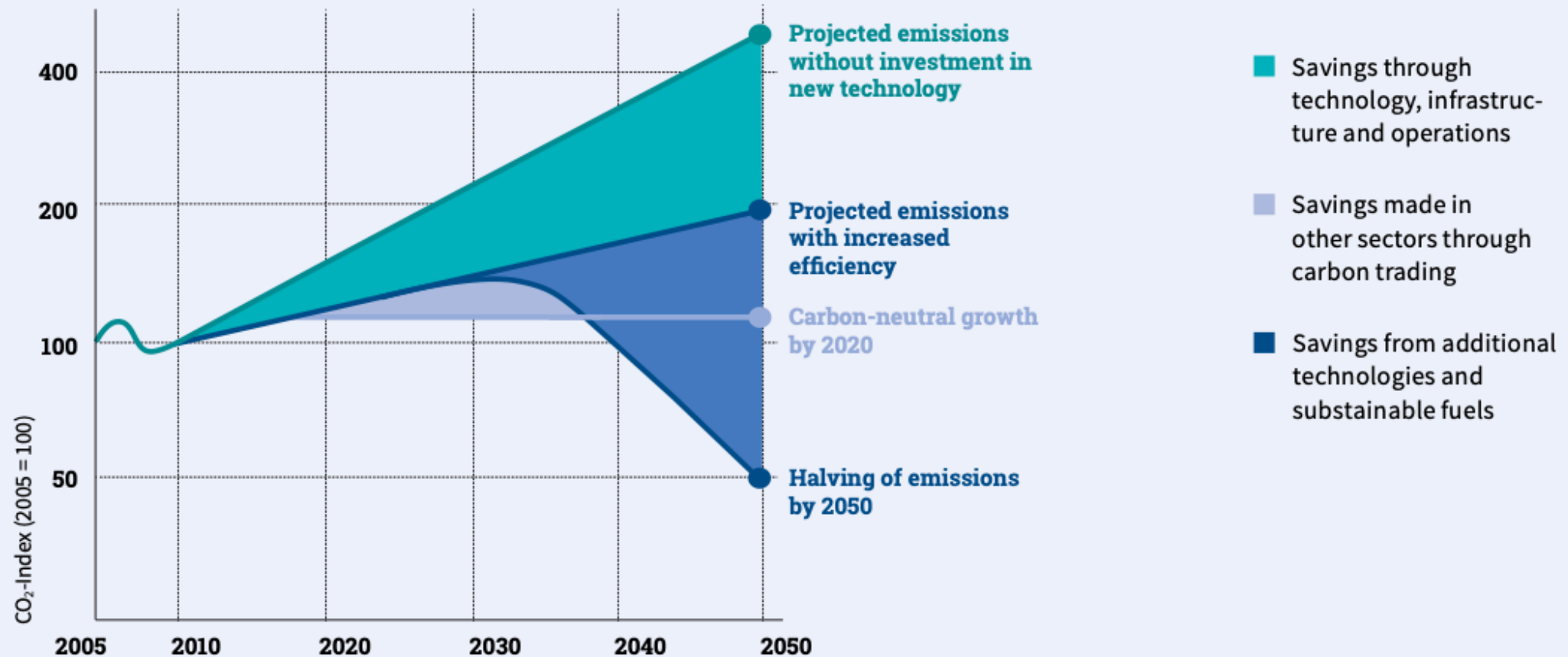
Can they help the broader bioenergy scale-up challenge?

studio
gear
up

Eric van den Heuvel
EUBCE2021 – 29 April 2021

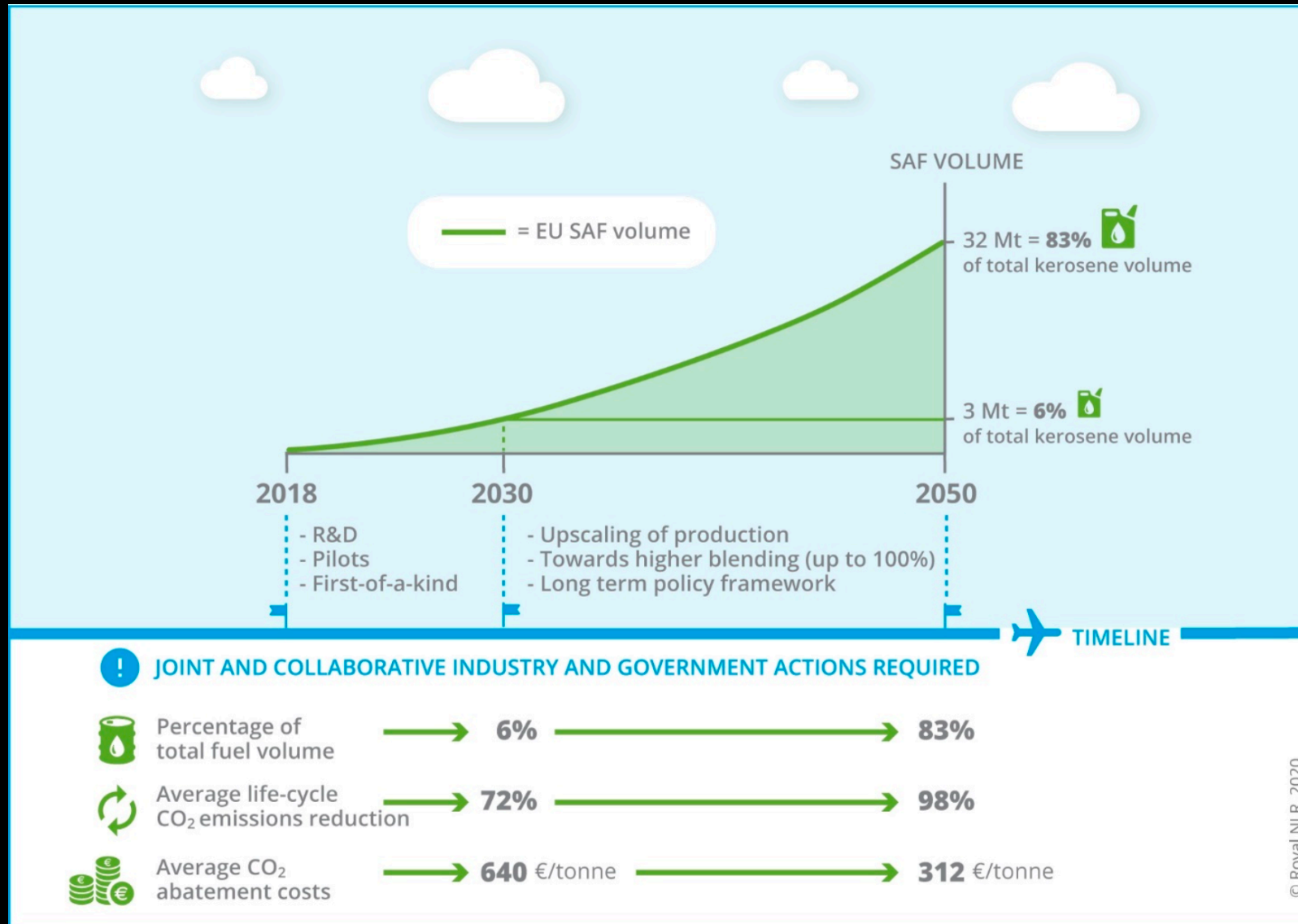
Workshop and Panel Discussion: Expert Opinions on
the ReFuel EU Aviation Initiative

Strong policy focus for Sustainable Aviation Fuels for more than a decade now...



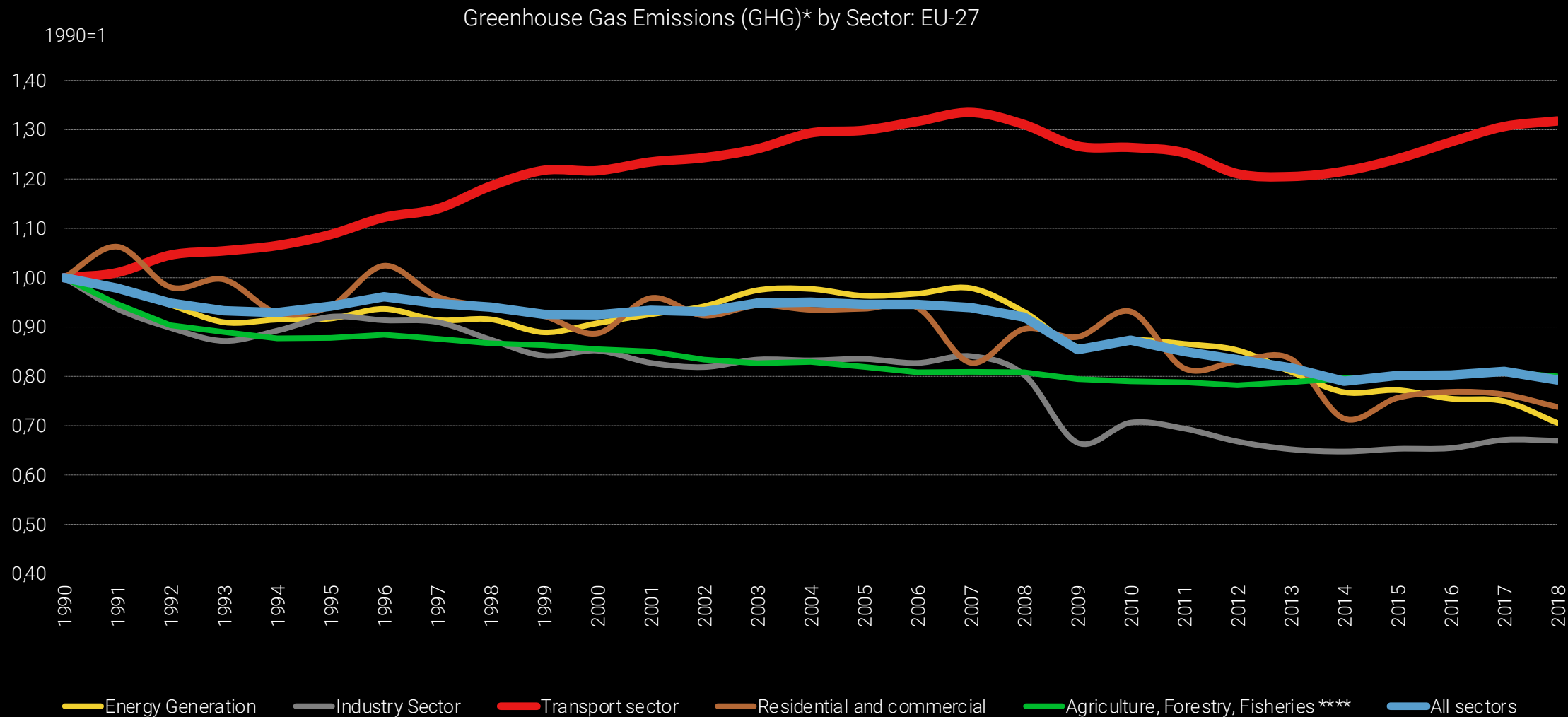
Source: based on IATA [44]

... and strong growth perspectives for the coming decade are predicted



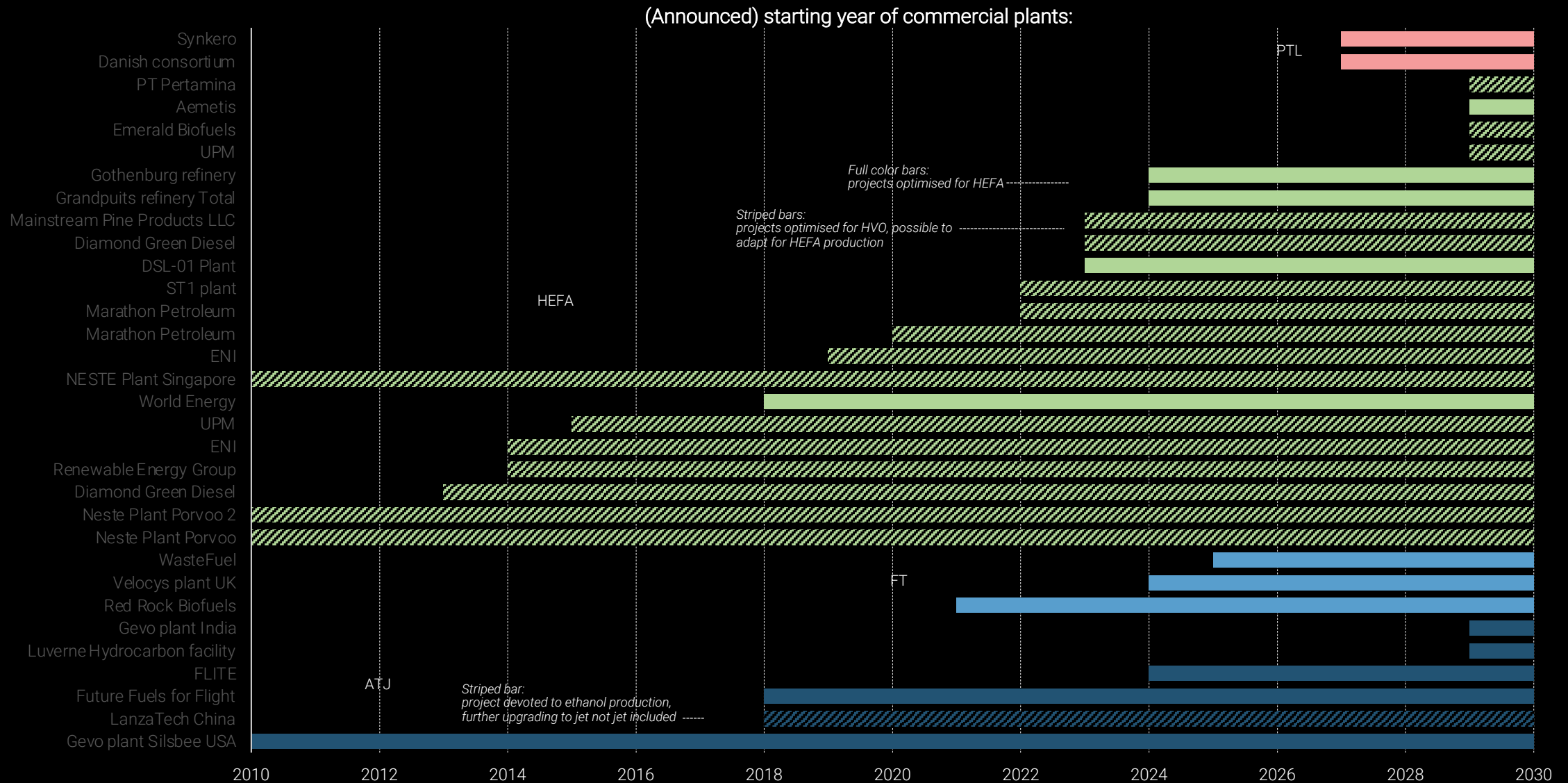
Source: NLR/SEO, 2021, Destination 2050 - A route to net zero European aviation

Background: to lower overall climate impact, efforts in transport key to reach EU climate targets



Source, EC, 2021, Transport in figures, Pocket book, 2020

(Announced) start year of projects – many current HVO plants can co-produce HEFA



Various European Member States announced SAF mandates:

Norway:
0.5%* (2020)

United Kingdom:
(Eligible under RTFO,
no obligation)

Netherlands:
14% (2030)

Germany:
0,5% (2025), **2%** (2030)
(PtX-fuels only)

France:
1% (2022), **2%** (2025)
5% (2030), **50%** (2050)

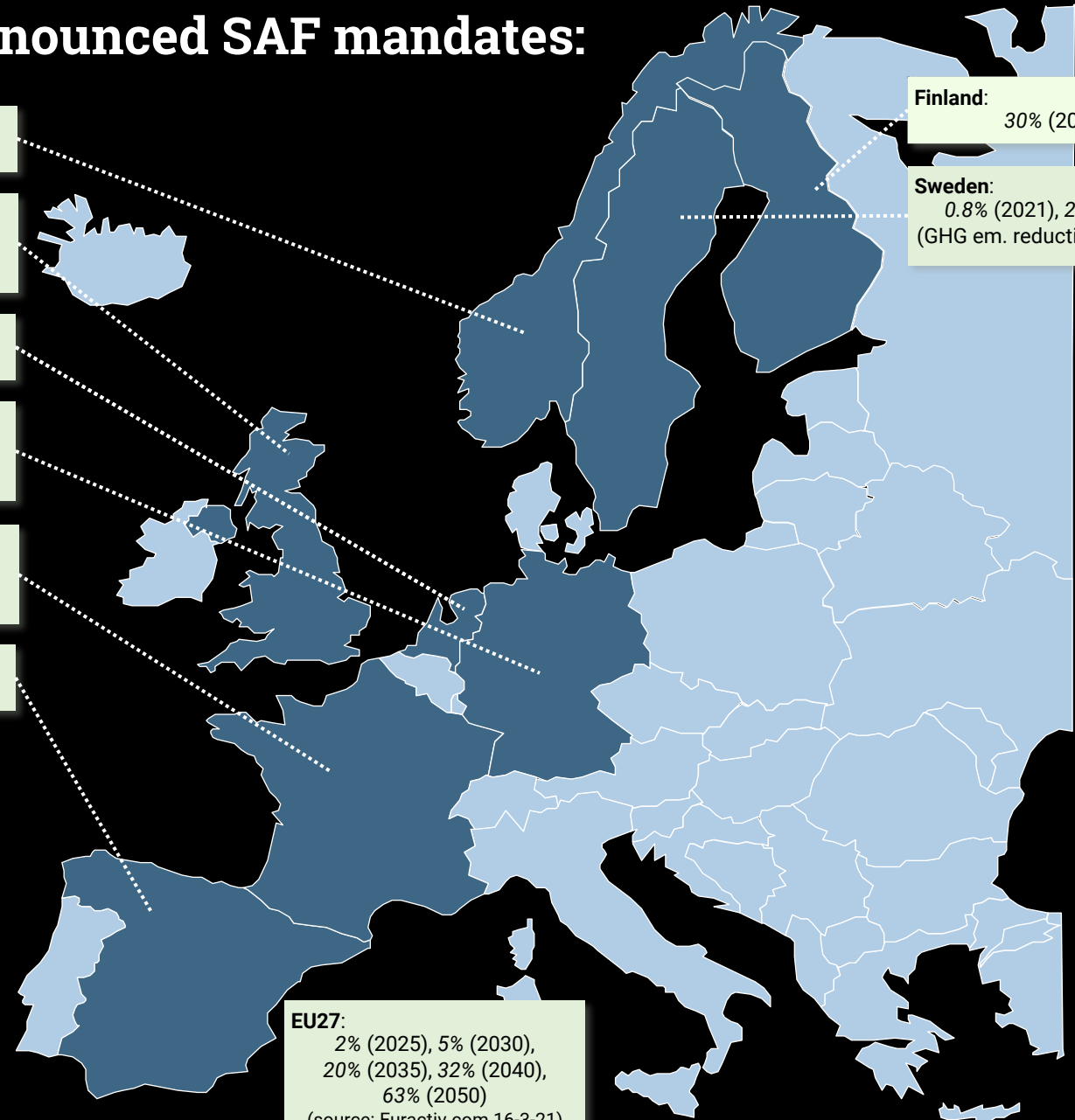
Spain:
2% (2025)

**) Bold figures:* established
mandates
Italic numbers: announced and
planned mandates

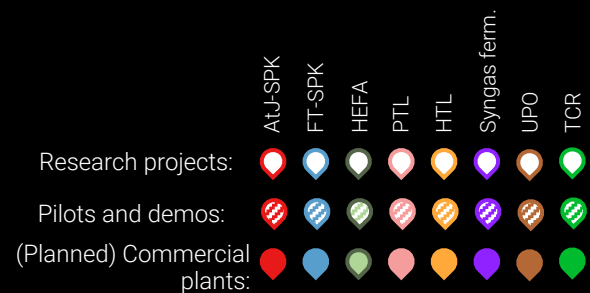
Finland:
30% (2030)

Sweden:
0.8% (2021), **27%** (2030)
(GHG em. reduction mandate)

EU27:
2% (2025), **5%** (2030),
20% (2035), **32%** (2040),
63% (2050)
(source: Euractiv.com 16-3-21)



And SAF R&D and commercial projects link to these MSs...



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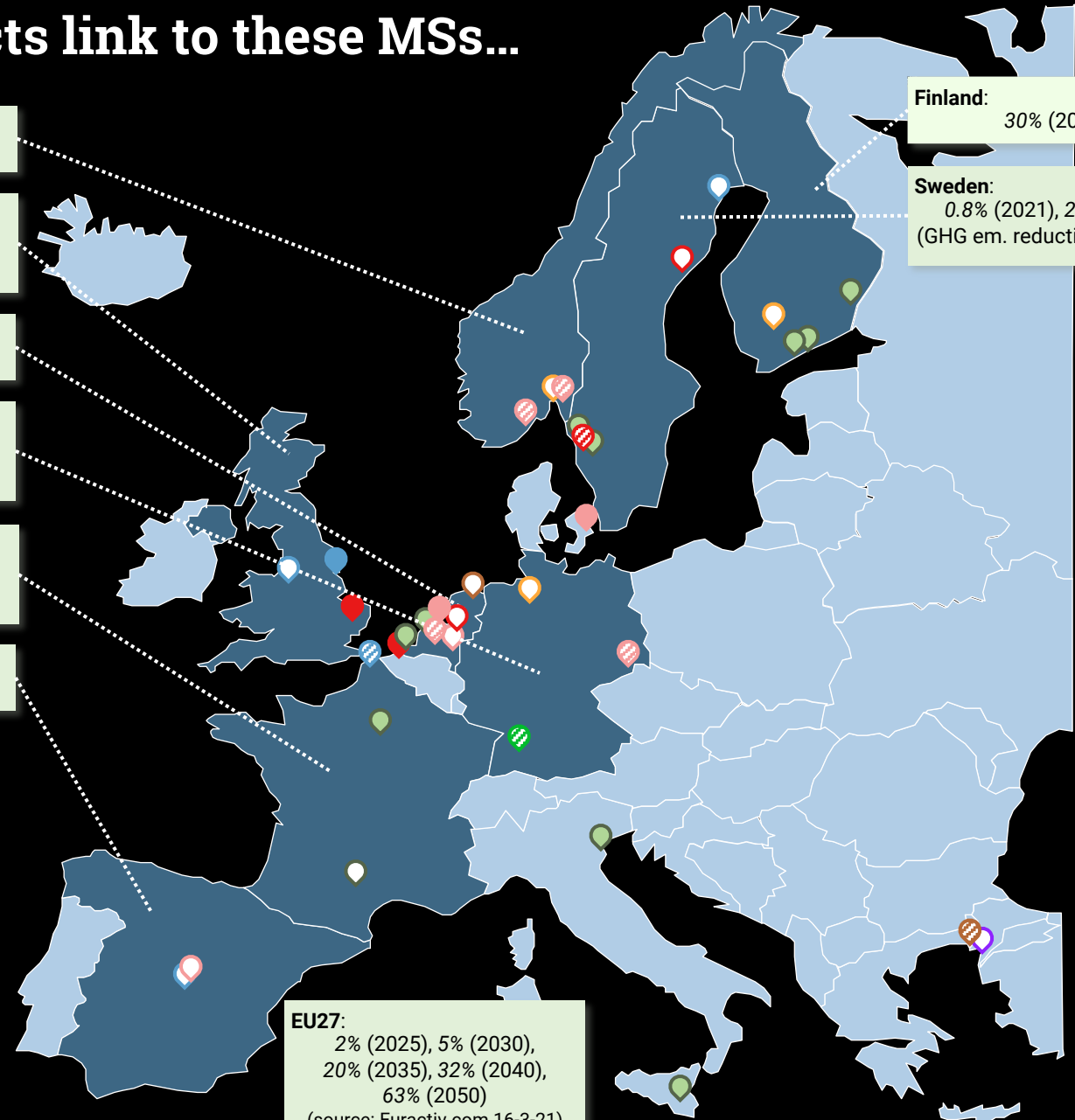
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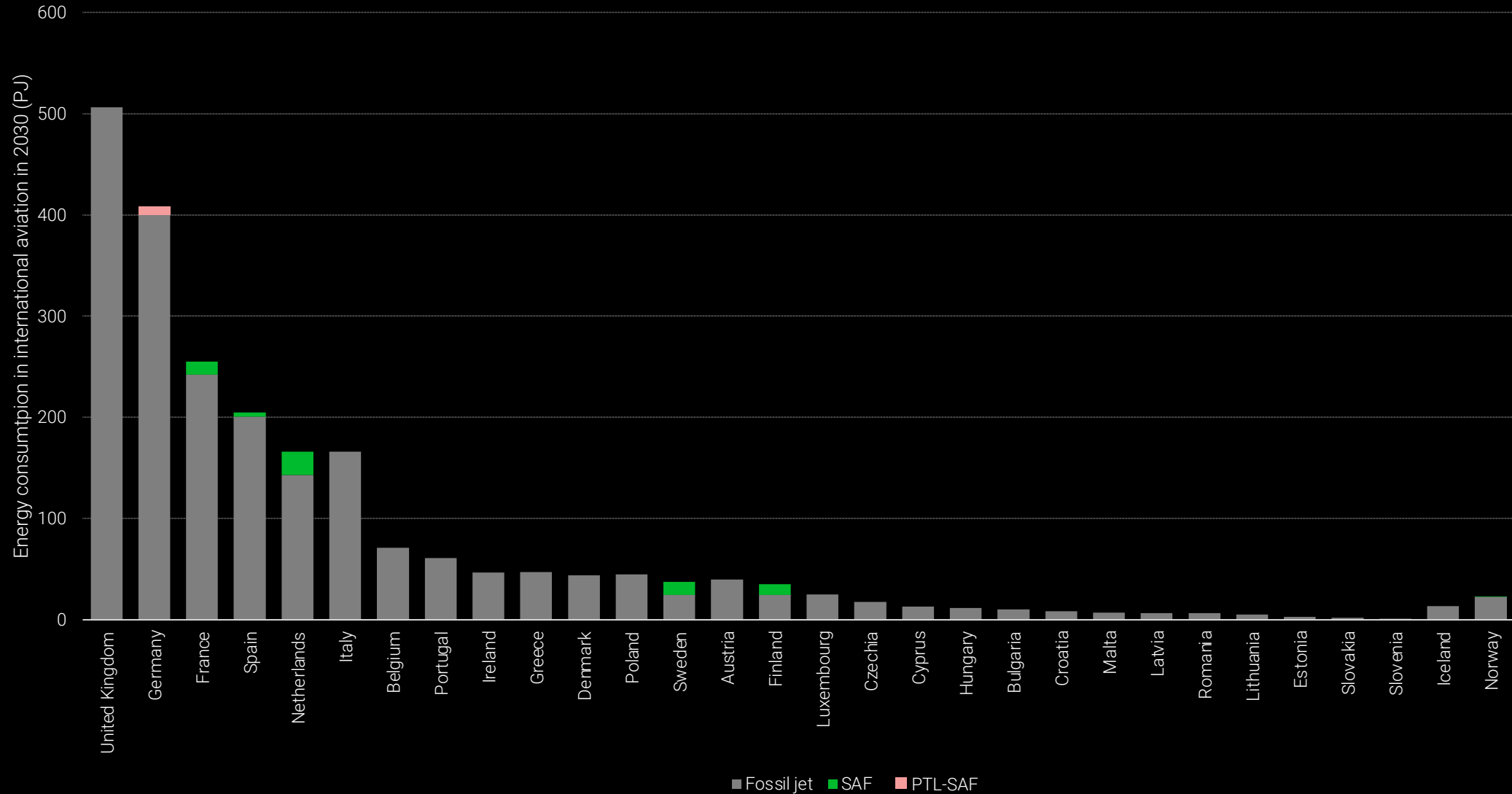
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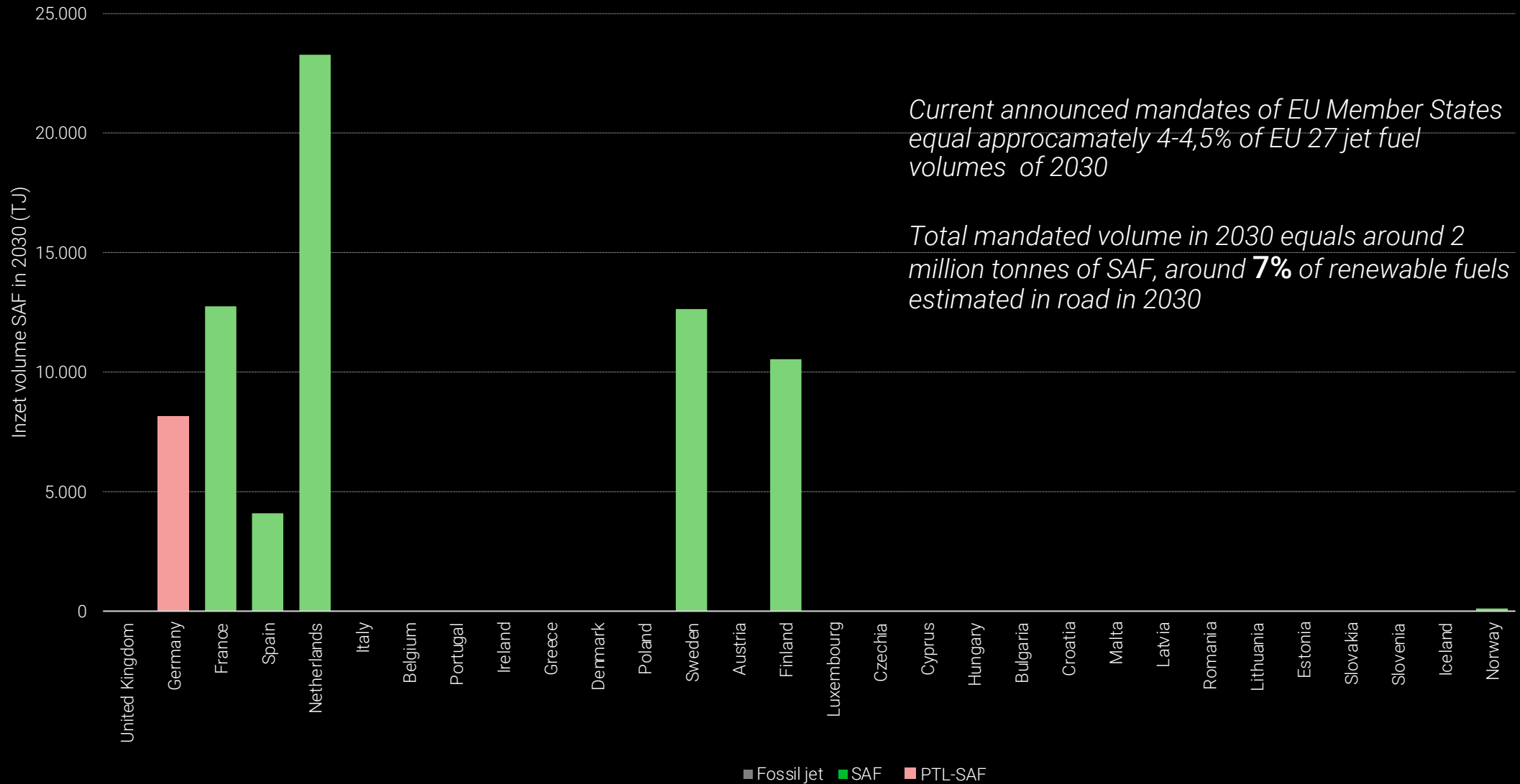
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How do these mandates translate to SAF volumes in 2030?

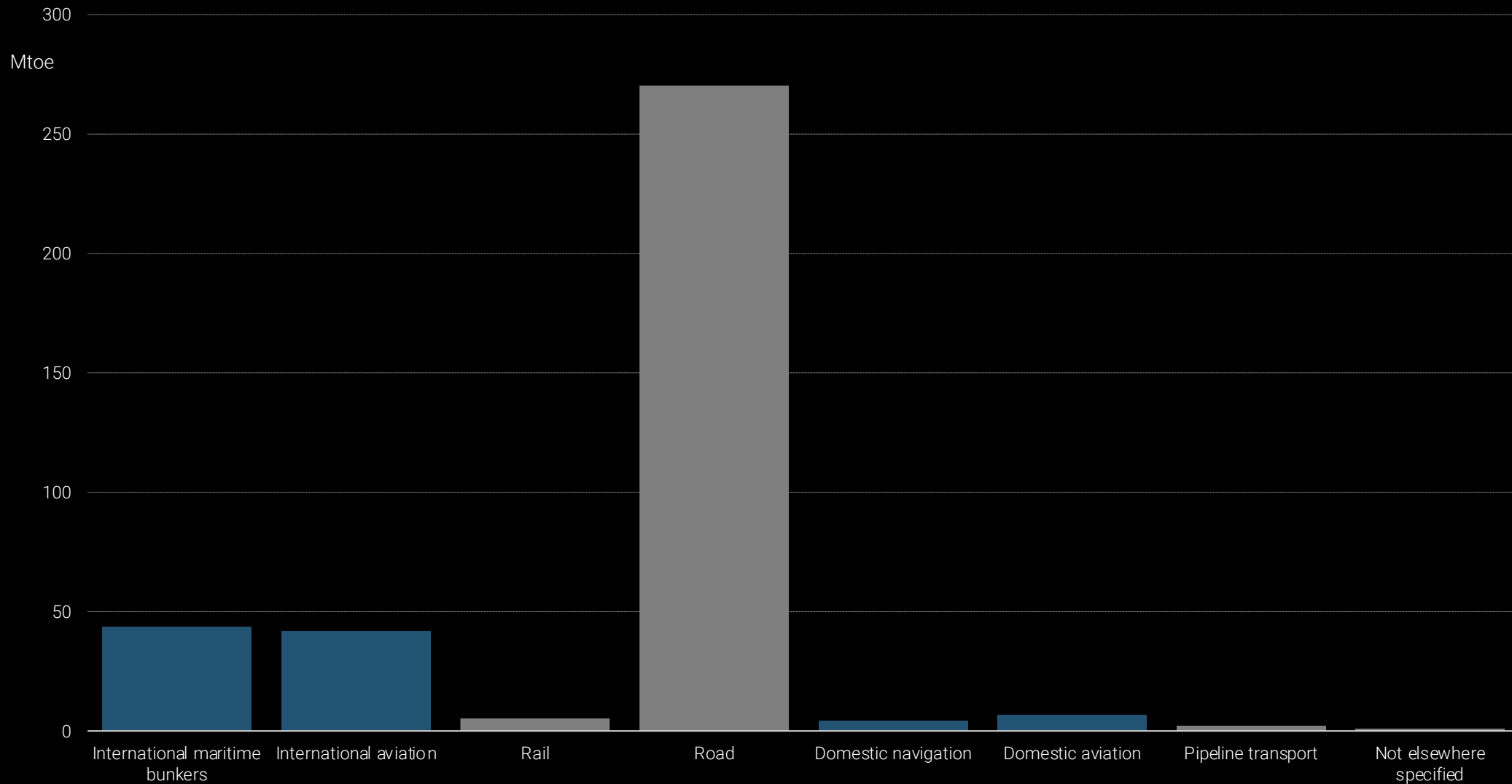


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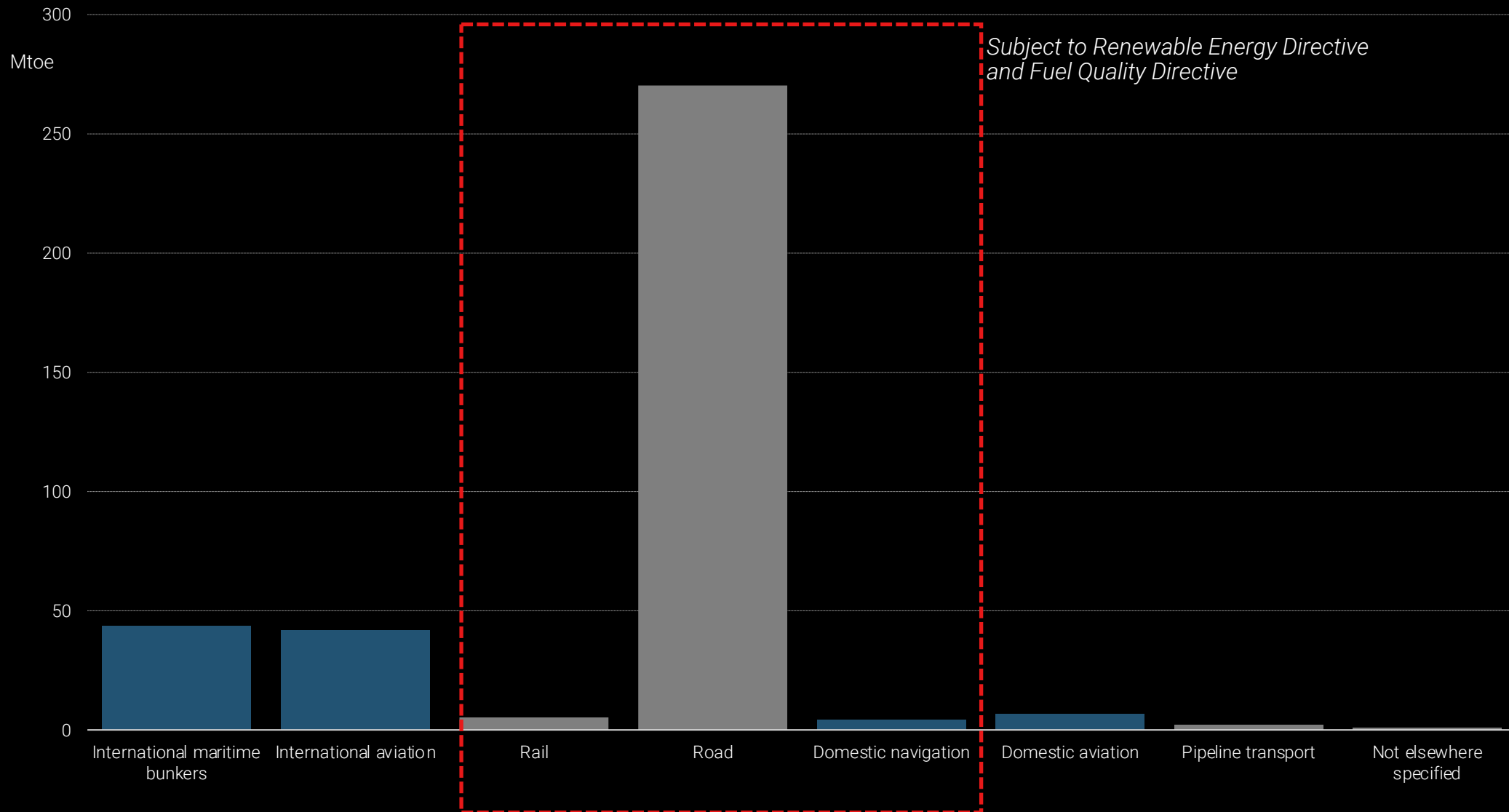
- Announced/leaked SAF mandates:
 - 2% in 2025
 - 5% in 2030
 - 20% in 2035
 - 32% in 2040
 - 63% in 2050
- Mandates for PTL or e-fuels:
 - 0,7% in 2030
 - Increasing to 25% in 2050

But share of aviation and maritime is relative small in total transport energy consumption (EU27, 2019)



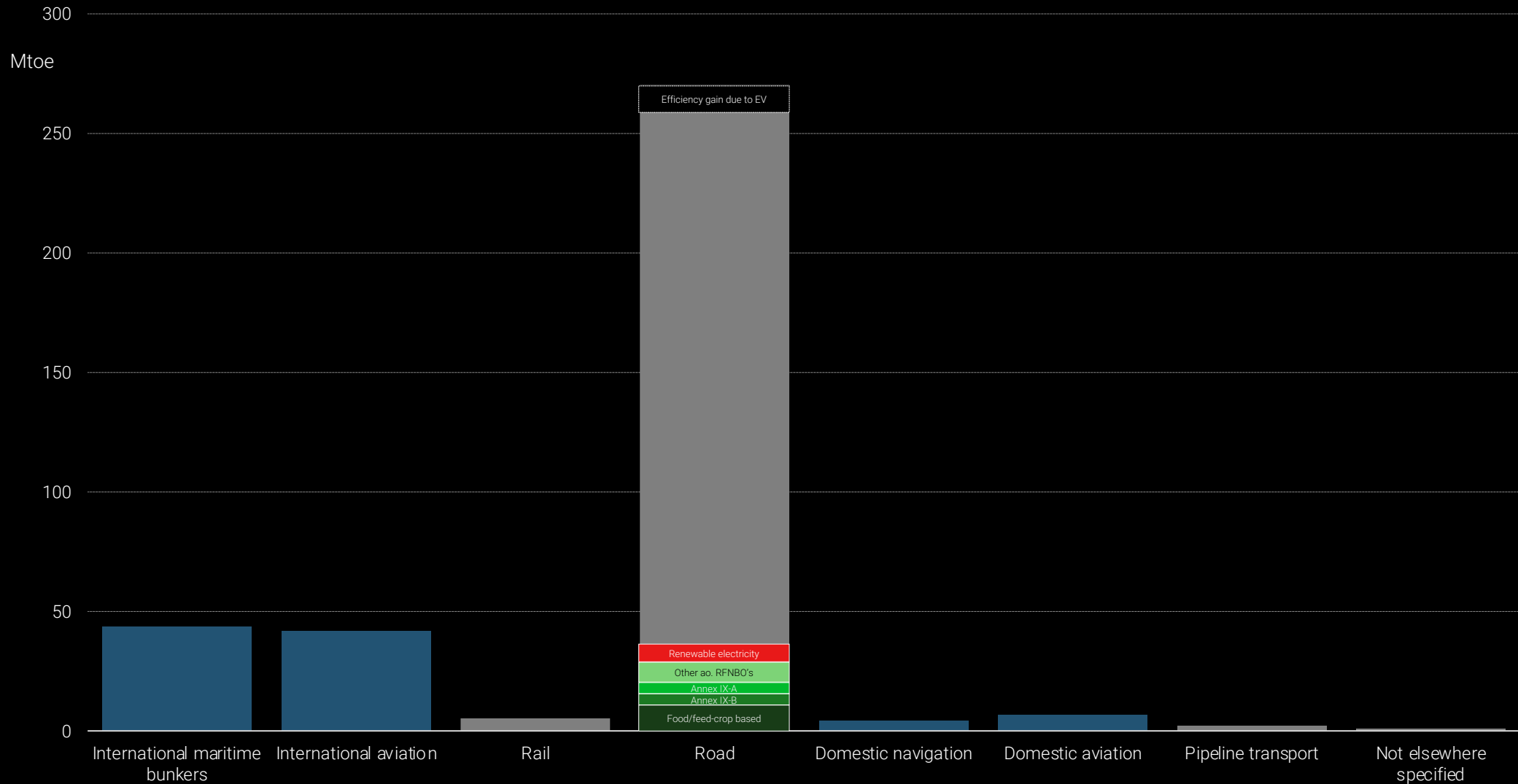
Based on Eurostat data, complete energy balances [NRG_BAL_C]

Only inland consumption is regulated by policy, yet .. (though REFuelEU Aviation is upcoming)



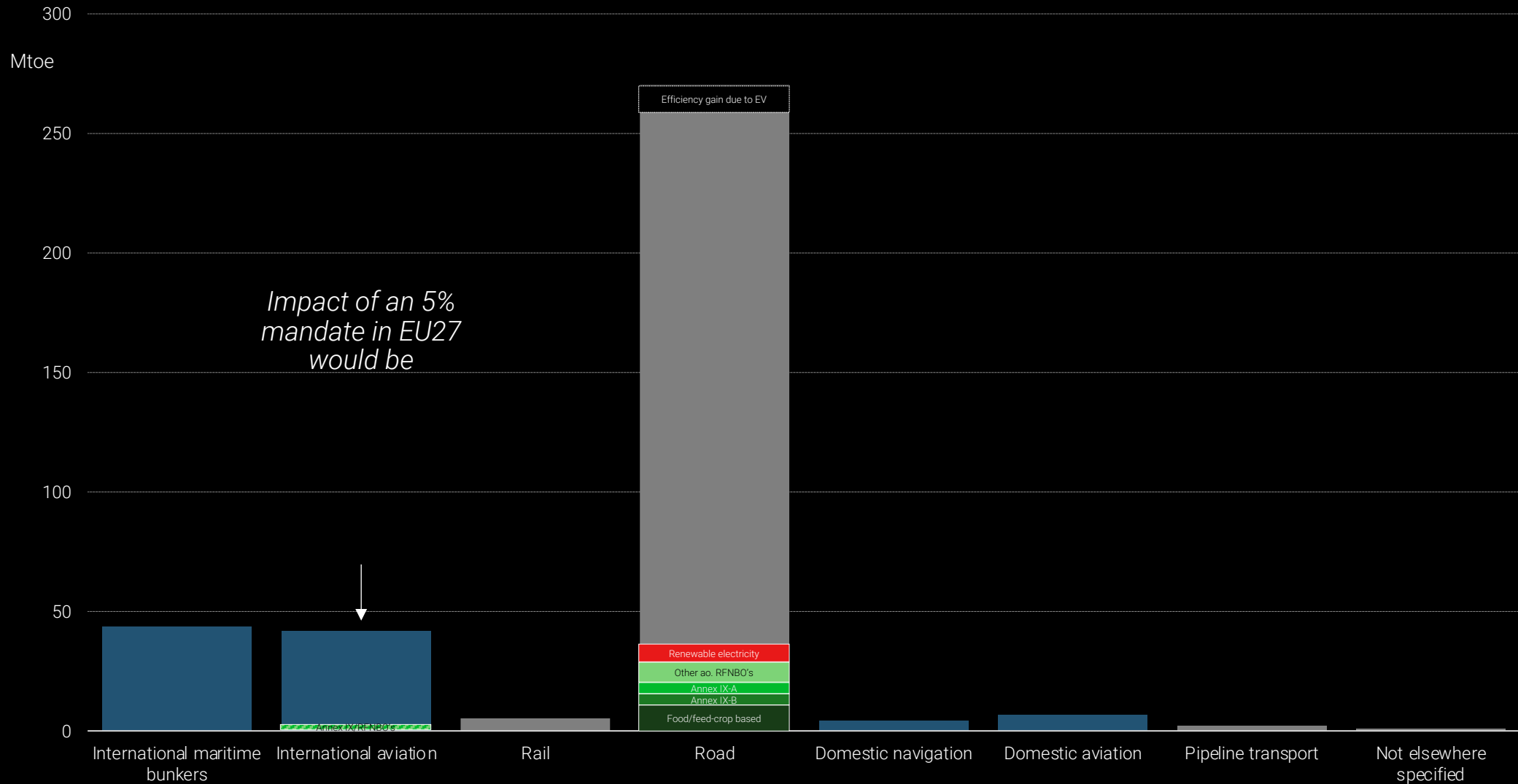
Based on Eurostat data, complete energy balances [NRG_BAL_C],
RED, 2018

'Rumoured' 24% share renewable energy in transport in RED, how would that look like?



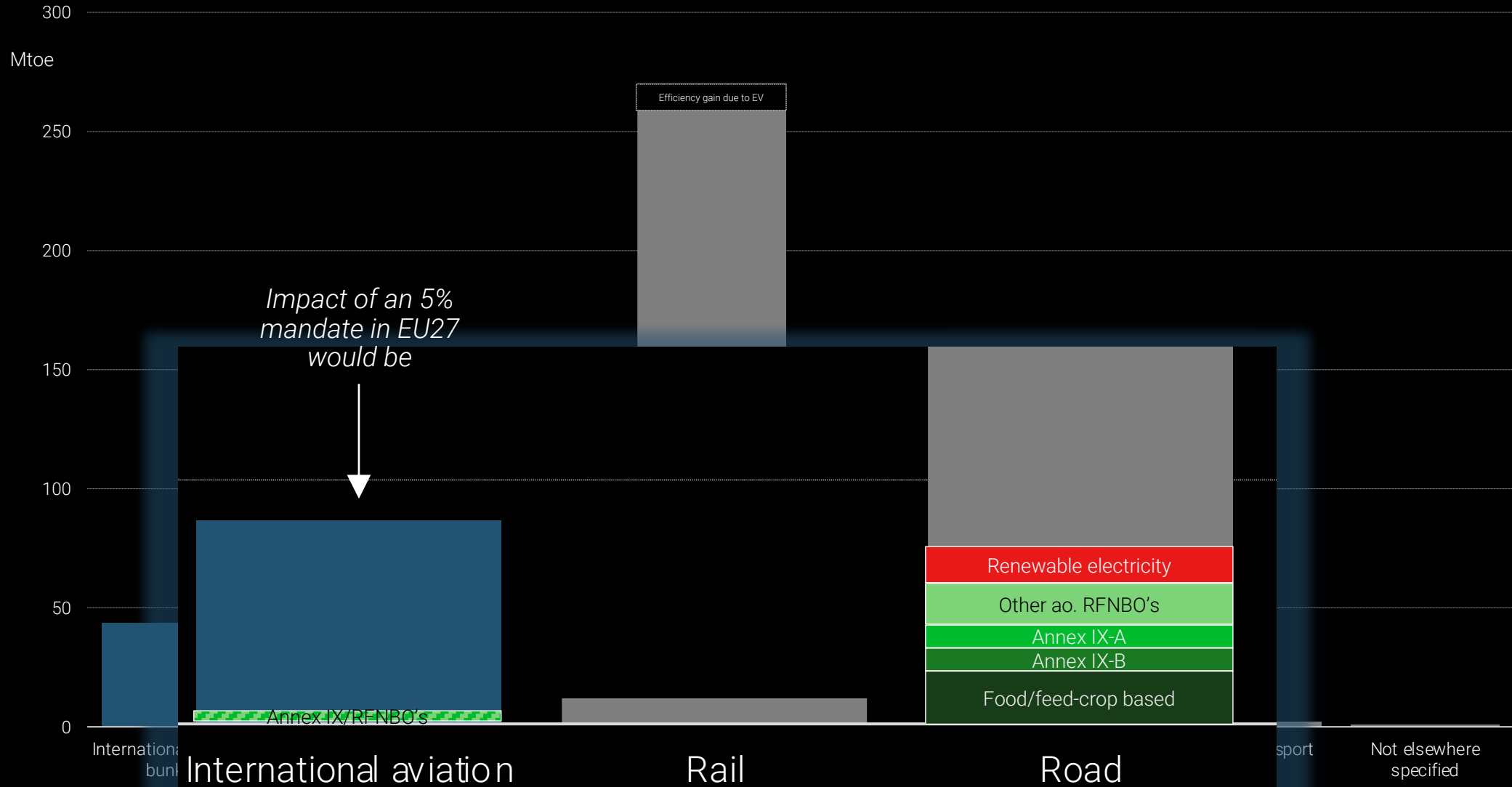
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Mandates for aviation sector will benefit from expansion in road transport



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Final observations and suggestion for strategy:

- 24% share RE in transport, with double counting, results in 13-14% physical share.
- by 2030 and beyond, the majority of fossil fuel is still deployed in road transport.
- Recommended to deploy an Fossil Fuel Exit Strategy:
 - Capping fossil in annual decreasing absolute volumes
 - Multi-option focus in road transport (renewable fuels and electric mobility)
 - Expansion of mandates in Aviation and Maritime
 - Benefit from synergy between sectors
 - Benefit from enhanced production of biofuels and e-fuels, to optimise carbon efficiency

Questions?

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The logo consists of a white triangle pointing to the right, containing the text "studio gear up" in a white, sans-serif font, stacked vertically.

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