



EU bioethanol market & trade – key trends

Crops Market Observatory, 13 March 2024, Brussels

ePURE at a glance

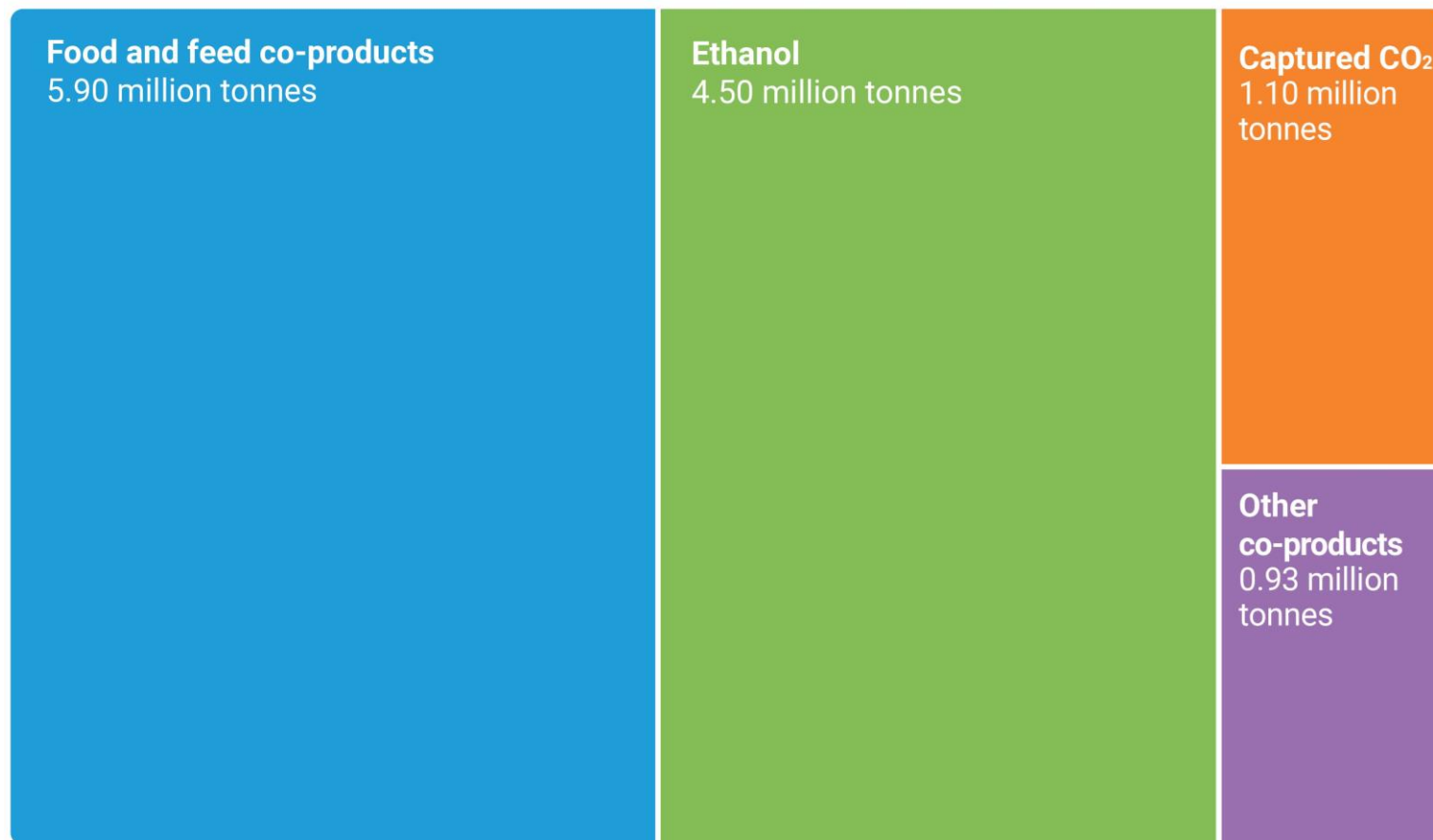
ePURE: Voice of the EU ethanol industry



- 43 members, including 20 producing companies
- 50 plants across the EU and UK
- 85% of EU renewable ethanol production

ePURE production circularity: More than just ethanol

Main output of European renewable ethanol plants



Source: Aggregated and audited data of ePURE members for 2022

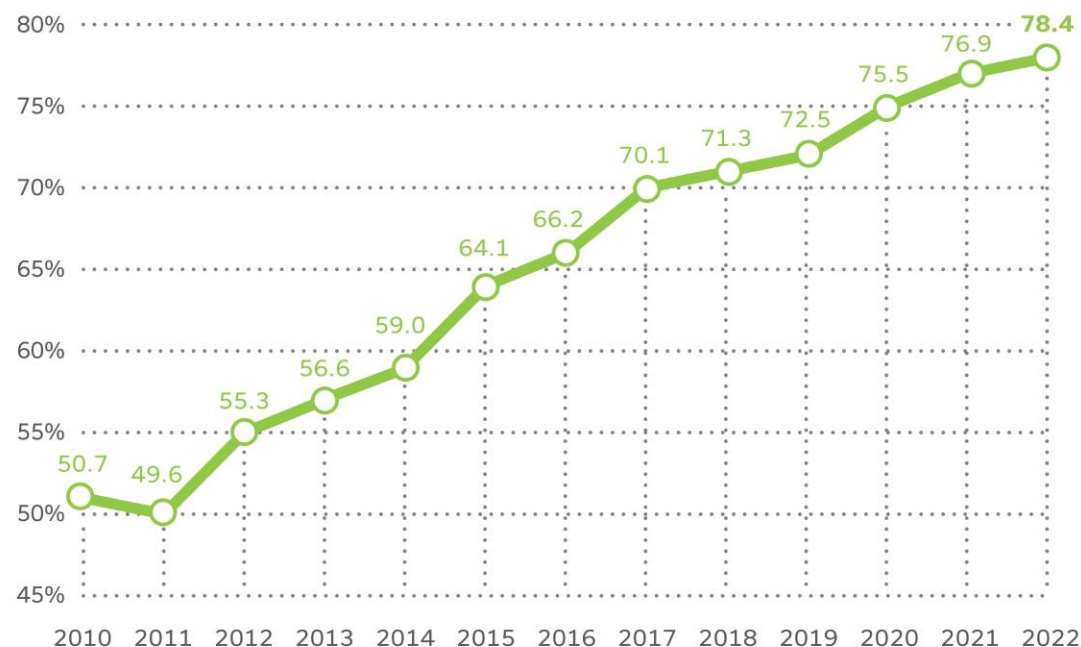
Ethanol – pure alcohol; Food and feed co-products – commercial product equivalent; other co-products – commercial equivalent

In 2022, ePURE members' bioethanol

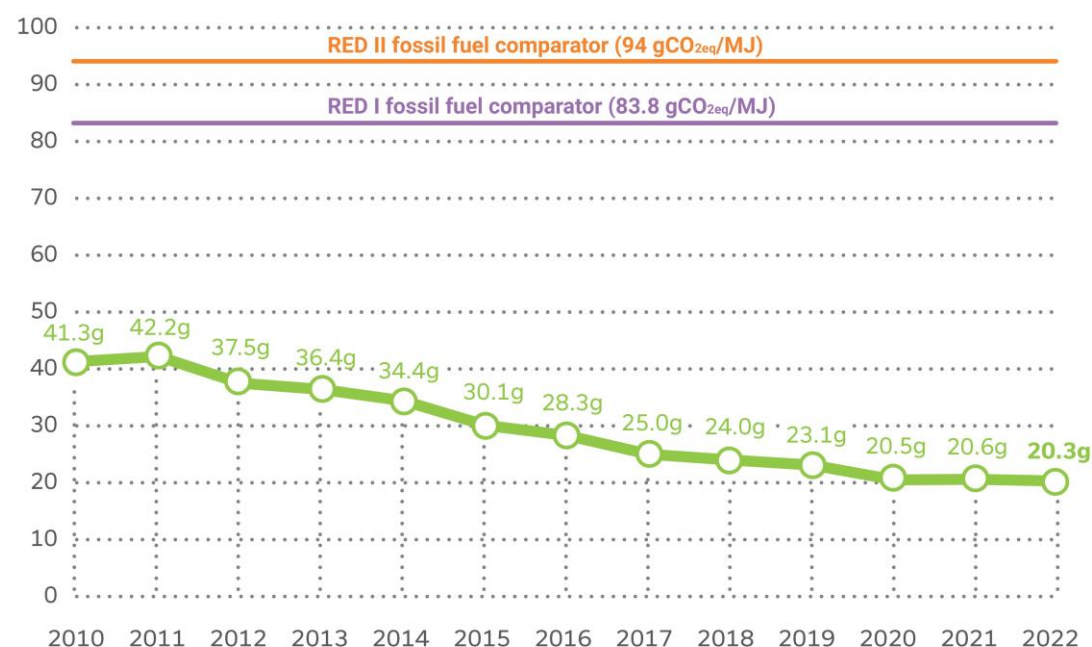
- **more food & animal feed than ethanol**
 - 5.9 million tonnes of food and high-protein animal feed
 - 4.5 million tonnes of ethanol
 - Fuel quality (85%)
 - Non-fuel applications (15%)
- **1.10 million tonnes of biogenic CO₂** (great potential to increase current capacity)
- **reduced GHG emissions by 78.4 %** compared to fossil fuel

European renewable ethanol: GHG emission savings

Average certified emissions savings
in %

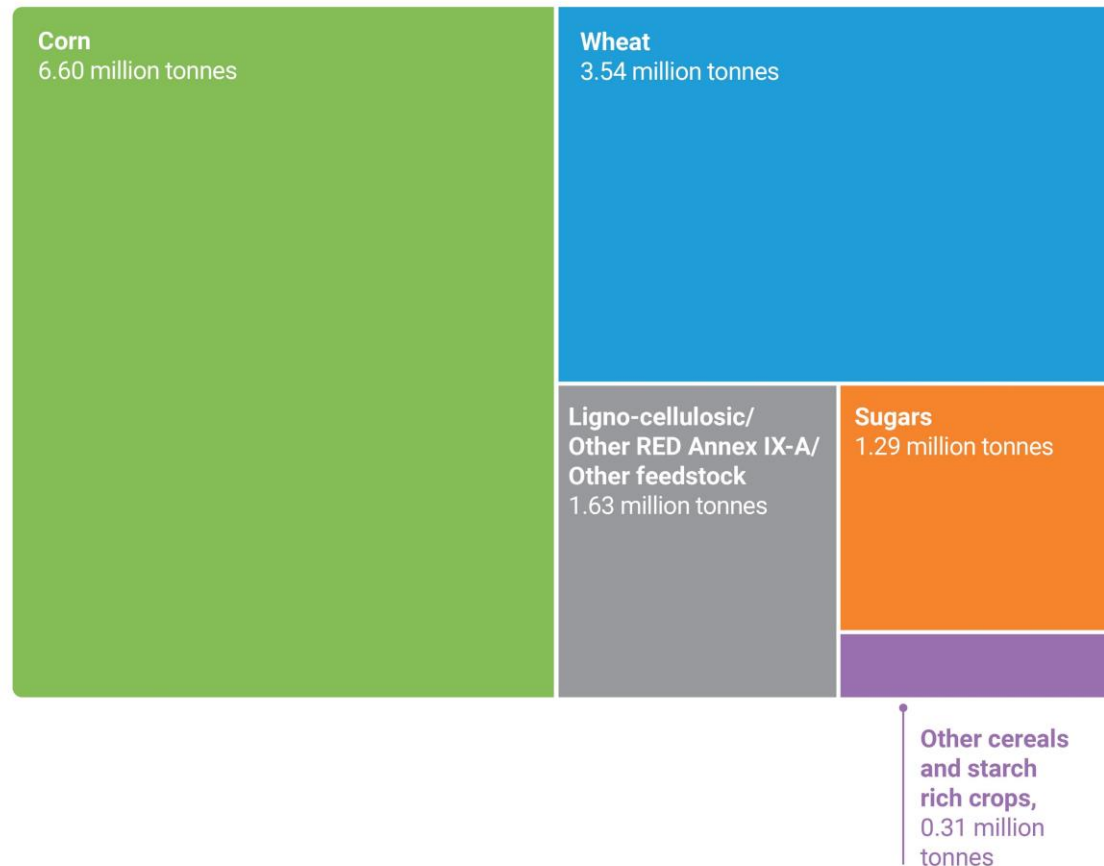


Average certified emissions from the production
and use of fuel ethanol in gCO_{2eq}/MJ



ePURE ethanol: Made in/from Europe

Feedstock used to produce renewable ethanol by ePURE members was grown in Europe

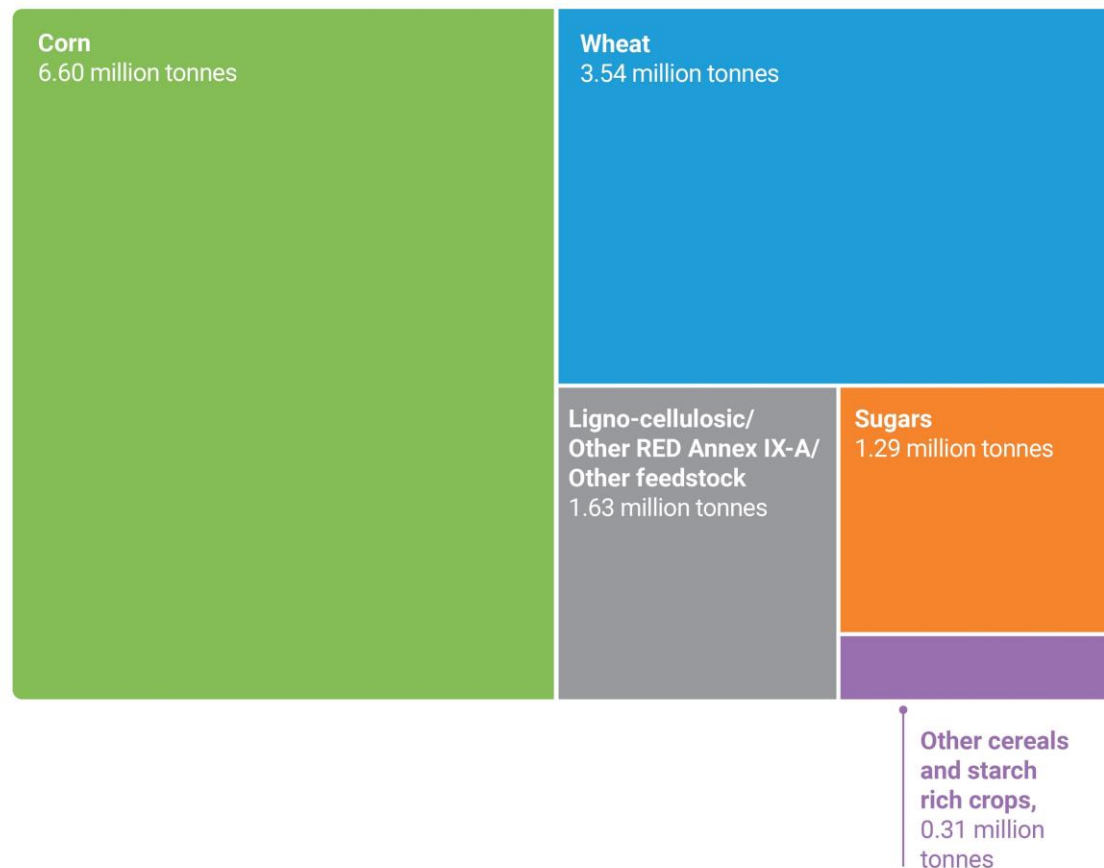


- Of the 5.71 billion litres of ethanol produced in 2022
 - 47.8% was from corn,
 - 22.3% was from wheat,
 - 13.9% was from sugars,
 - 1.9% from other cereals and starch-rich crops, and
 - 14.1% from ligno-cellulosic, other RED Annex IX-A, and other feedstocks.

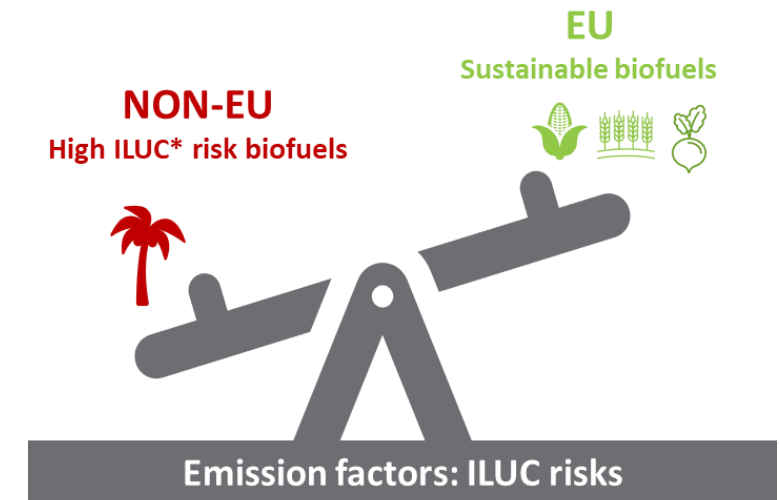
Source: Aggregated and audited data of ePURE members for 2022. Sugars – sugar equivalent; Ligno-cellulosic/Other RED Annex IX-A/Others – dry matter equivalent

ePURE ethanol: Made in/from Europe

Feedstock used to produce renewable ethanol by ePURE members was grown in Europe



- RED-compliant
- ILUC is no problem for domestic feedstock used for biofuels production



Source: Aggregated and audited data of ePURE members for 2022. Sugars – sugar equivalent; Ligno-cellulosic/Other RED Annex IX-A/Others – dry matter equivalent

Renewables in transport policies

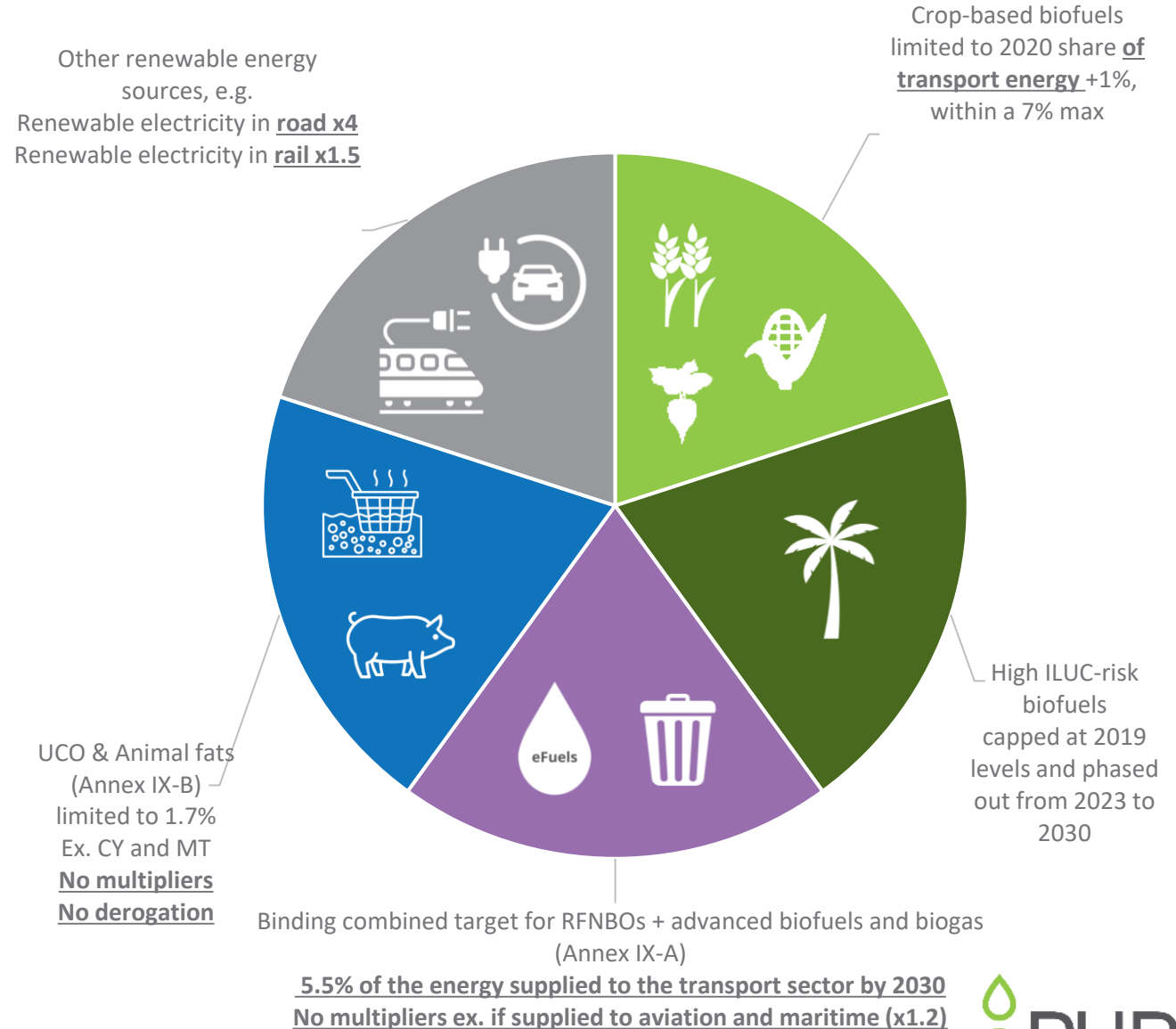
RED II revision

Overall renewable energy target

- At EU level, **min. 42.5 %** share by 2030 complemented by an indicative 2.5% top-up that would increase it to a 45% share.

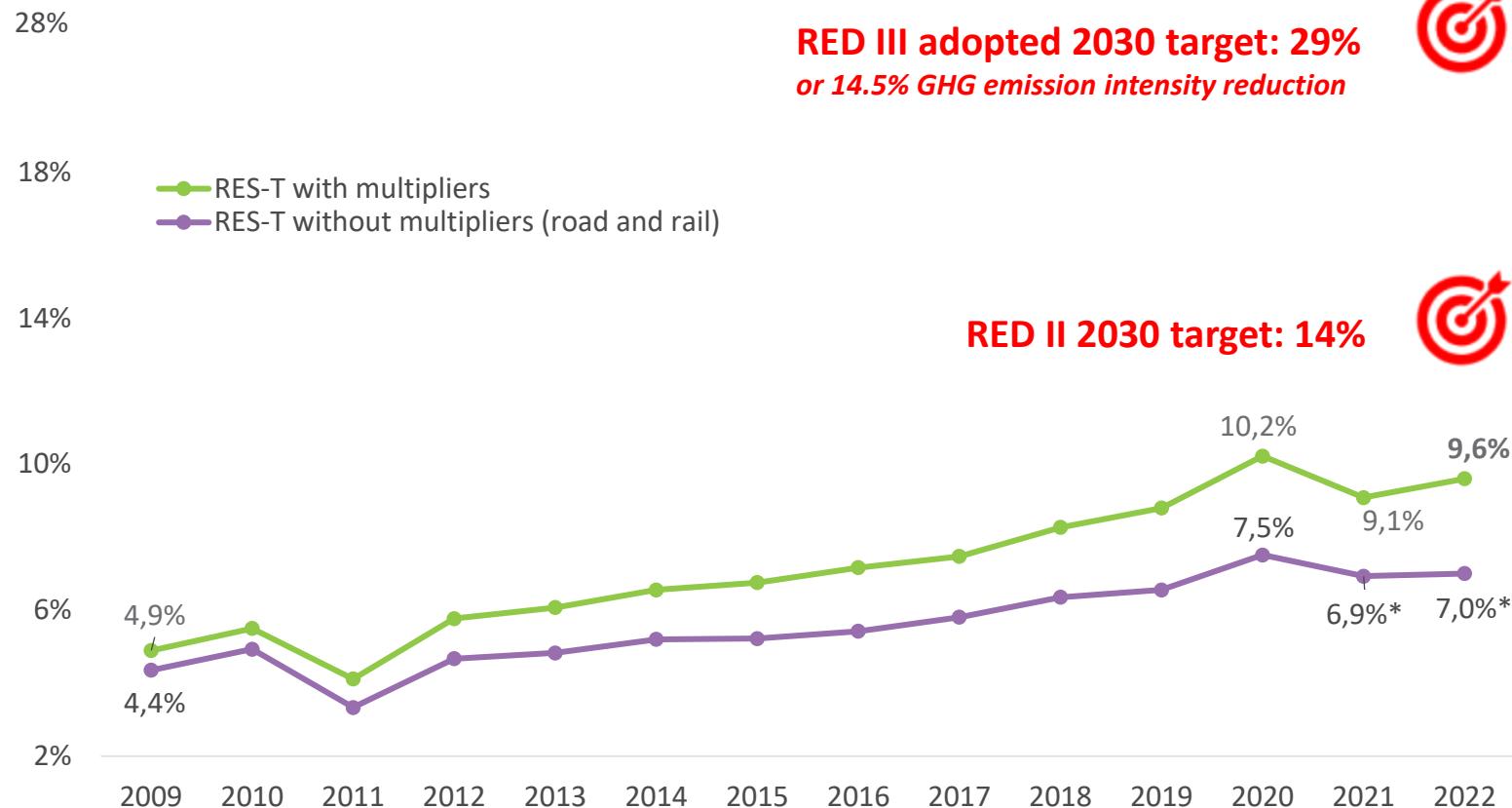
Renewables in transport

- MS can choose between 2 options:
 - a binding **14.5% reduction of GHG intensity** in transport from the use of renewables or,
 - a binding **29% share of RES-T**.
- Can be lowered if crop cap is reduced, in the same proportion (**assuming 50% savings**)
- Repeals FQD art. 7a) to e), introduces B10**



Renewable energy in transport in 2021 (RES-T) in EU27 Achievement and multipliers impact

Renewable energy share in transport in EU27, with multipliers



2022: 9.6% renewables in transport in the EU with multipliers; 7.0% without multipliers* for road and rail (7.2% overall without multipliers)

- Still lower than 2020 (10.2%)
- Since RED I approval in 2009, increased by a mere 4.7%
- Consumption of fossil fuels and renewable electricity is increasing
- Biofuels quantities decreased from 2021

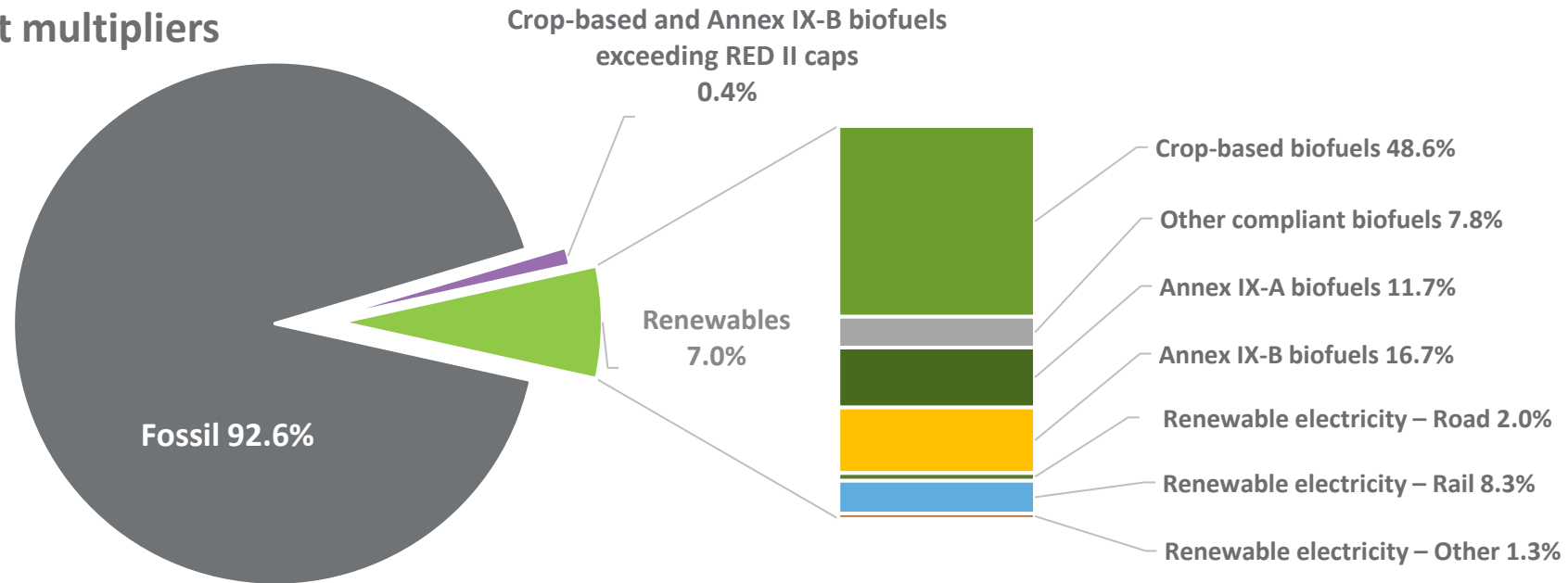
2021: 9.1% RES-T with multipliers; 6.9% (road and rail) without multipliers*

RES-T must be tripled by 2030 to match Fit for 55 plans

Renewables in transport (road and rail) in 2022

Breakdown of biofuels and renewable electricity – EU27

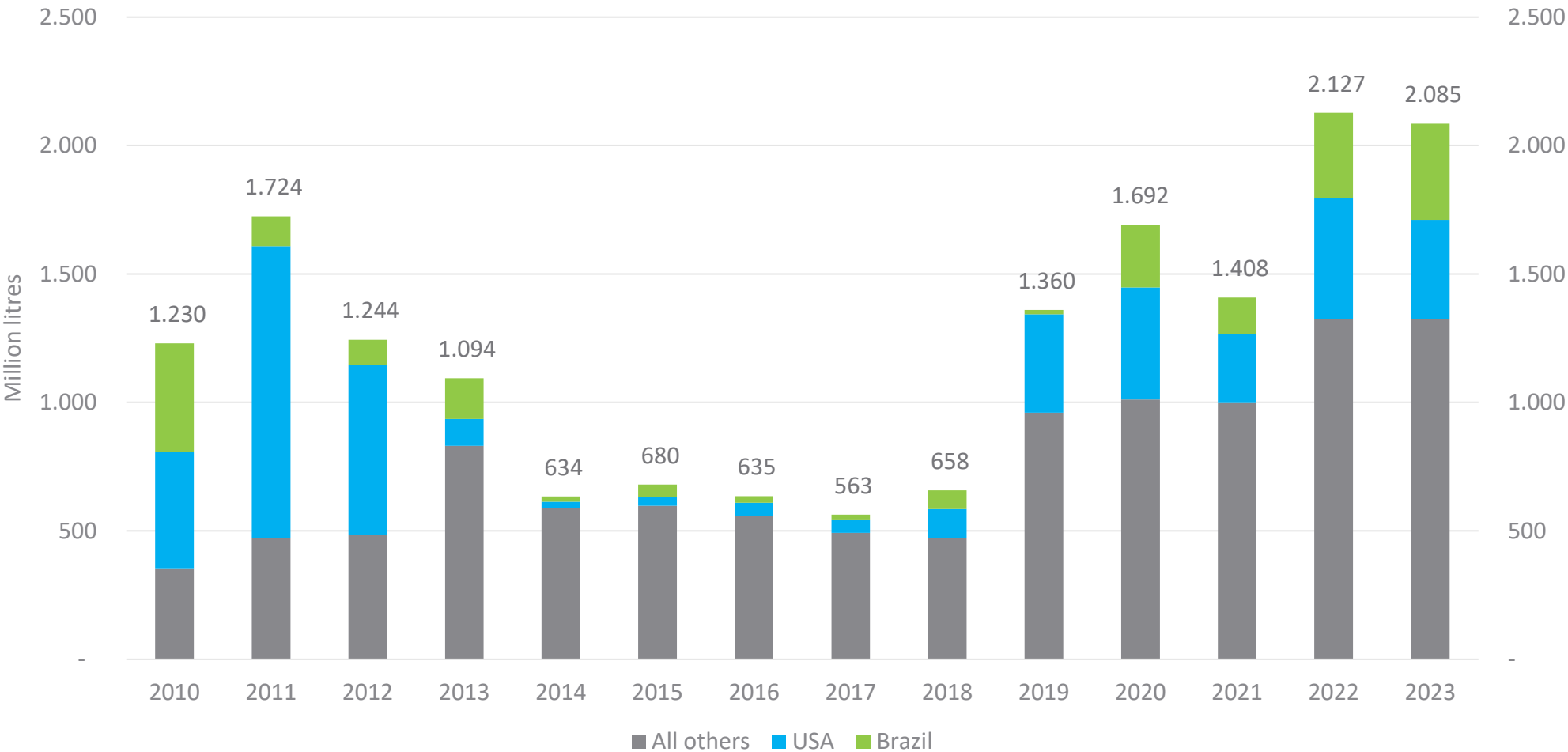
RES-T 2022 without multipliers



- Crop-based biofuels represent the majority of renewables in road and rail transport at 48.6%
- All biofuels together account for 88.4% of renewables in transport
- Renewable electricity contributes to 11.6%, of which 71.6% is used in rail
- No volumes of renewable hydrogen and RFNBOs were consumed in transport in 2022

Trade and EU ethanol market

Trade: Evolution of imports

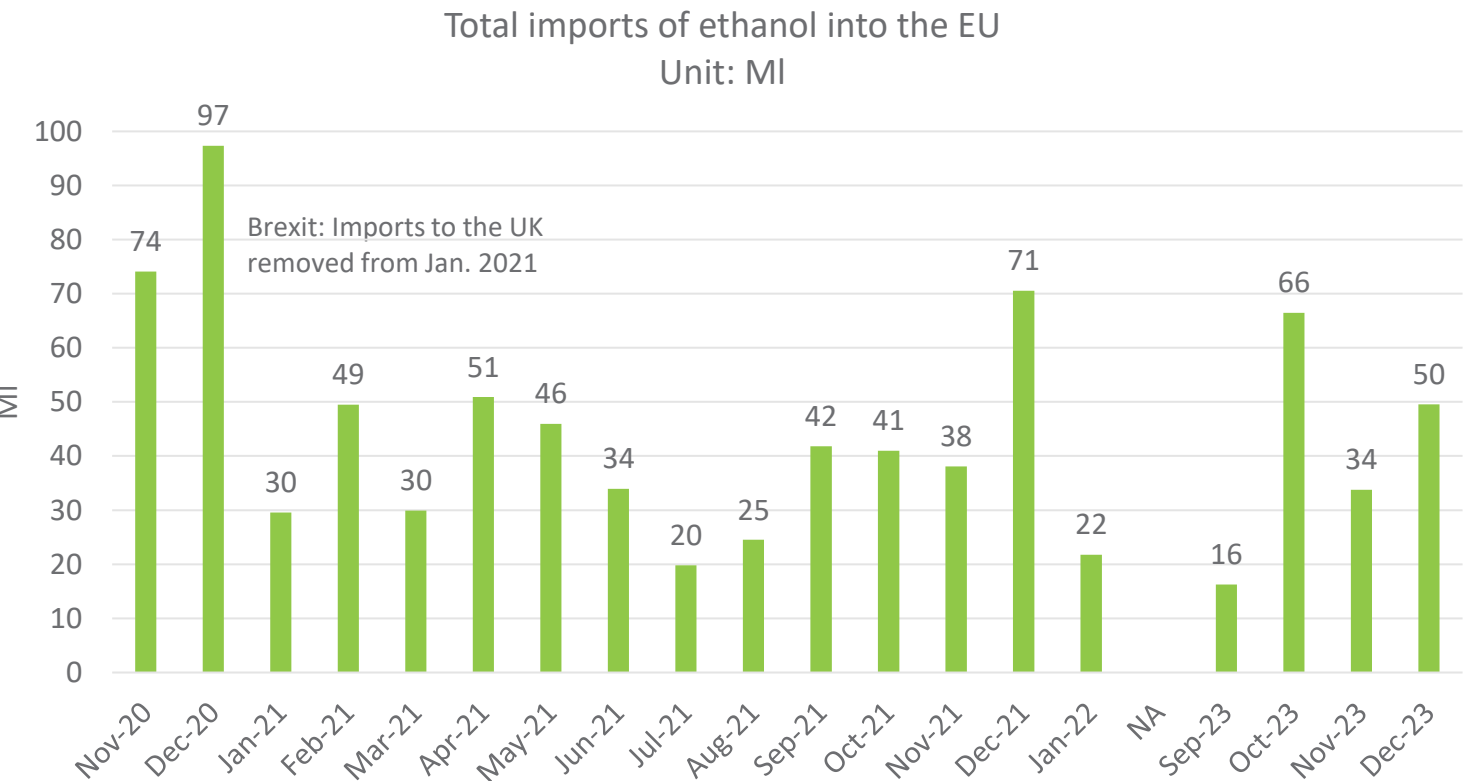


Source: USITC, COMEX, Eurostat 2024

Surveillance on imports of renewable fuel ethanol

Total registered imports of fuel ethanol

- Imports in million litres in Nov. 2020 – Jan. 2022 / Sep. – Dec. 2023



Data collection

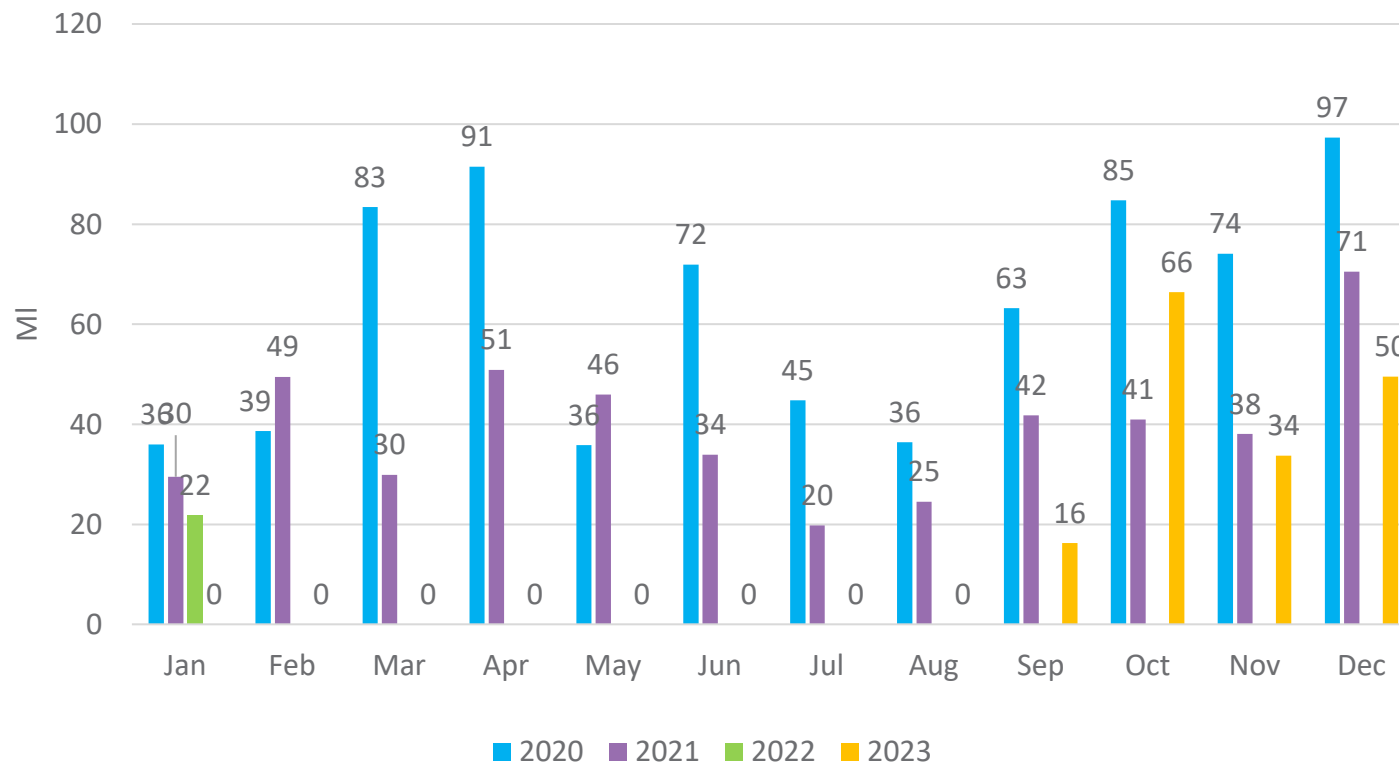
- Including the UK
 - 2020: Nov. – Dec.
- Excluding the UK
 - 2021: Jan. – Dec.
 - 2022: only January
 - 2023: Sep. (50%); full Oct. – Dec.

Source: DG Taxation and Customs Union (data without the UK from Jan. 2021); data for Sep. 2023 only 15-30 Sep. 2023; <https://webgate.ec.europa.eu/siglbo/post-surveillance>

Surveillance on imports of renewable fuel ethanol

Total registered imports of fuel ethanol

- Imports in million litres in monthly comparison 2020 – 2023



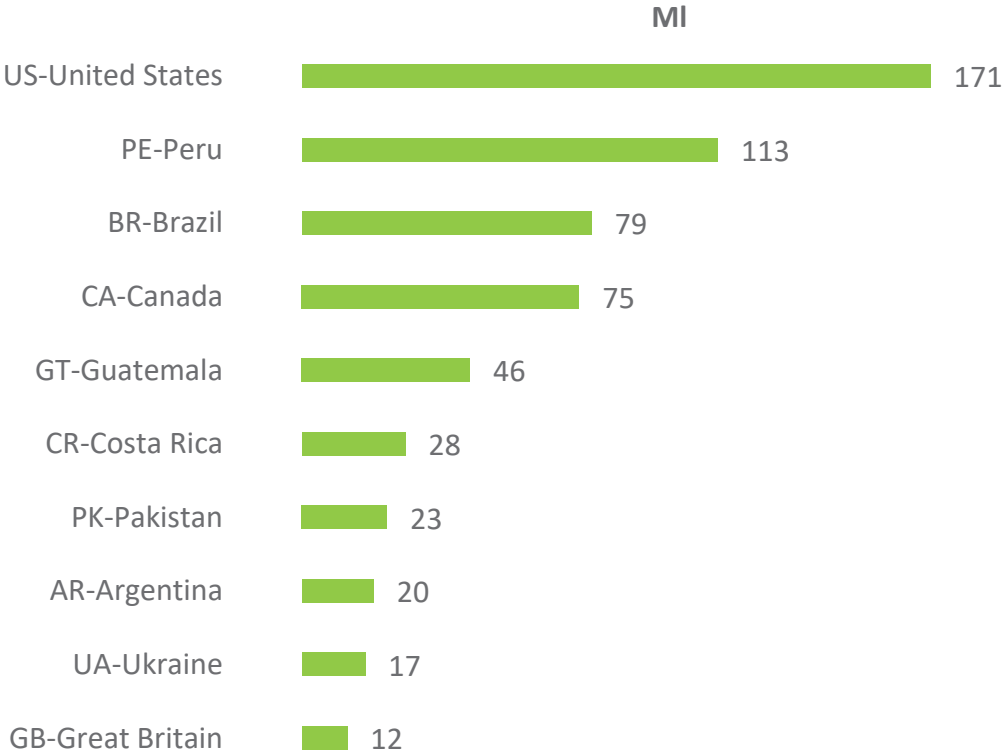
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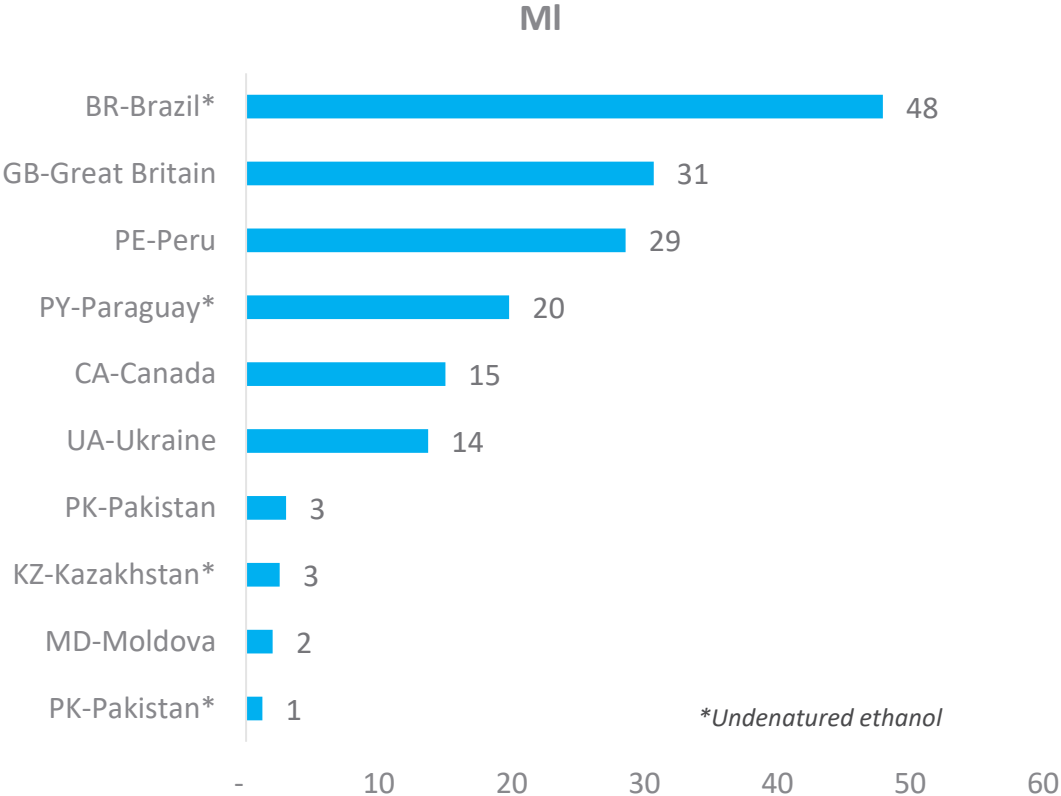
Top 10 origins of fuel ethanol imports

- Imports in million litres in Nov. 2020 – Jan. 2022



Top 10 origins of fuel ethanol imports

- Imports in million litres in Sep.-Dec. 2023

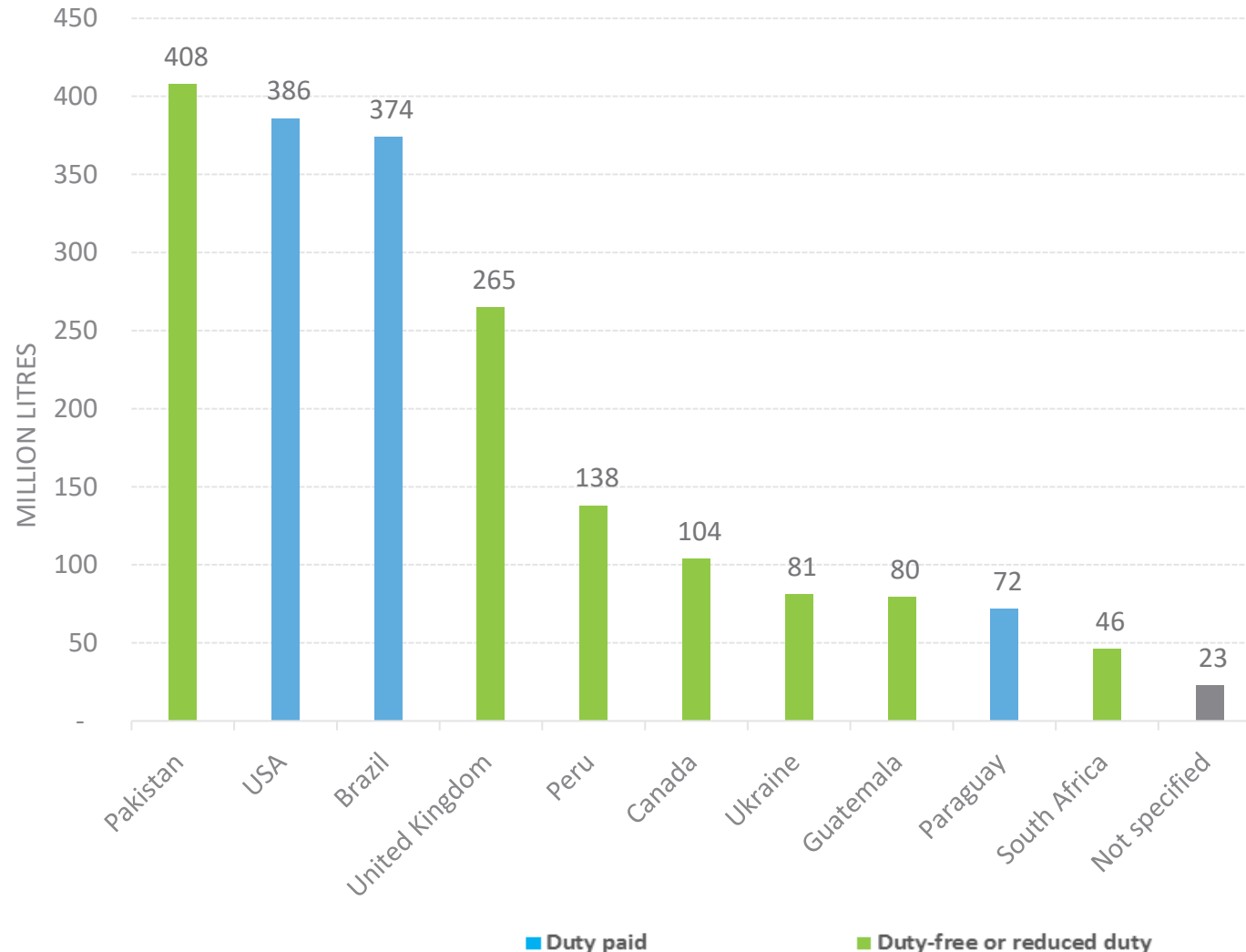


*Undenatured ethanol

Source: DG Taxation and Customs Union (data without the UK from Jan. 2021); data for Sep. 2023 only 15-30 Sep. 2023

EU ethanol imports

Top 10 origins in 2023 (million litres)



Source: Eurostat 2024

USA and Brazil

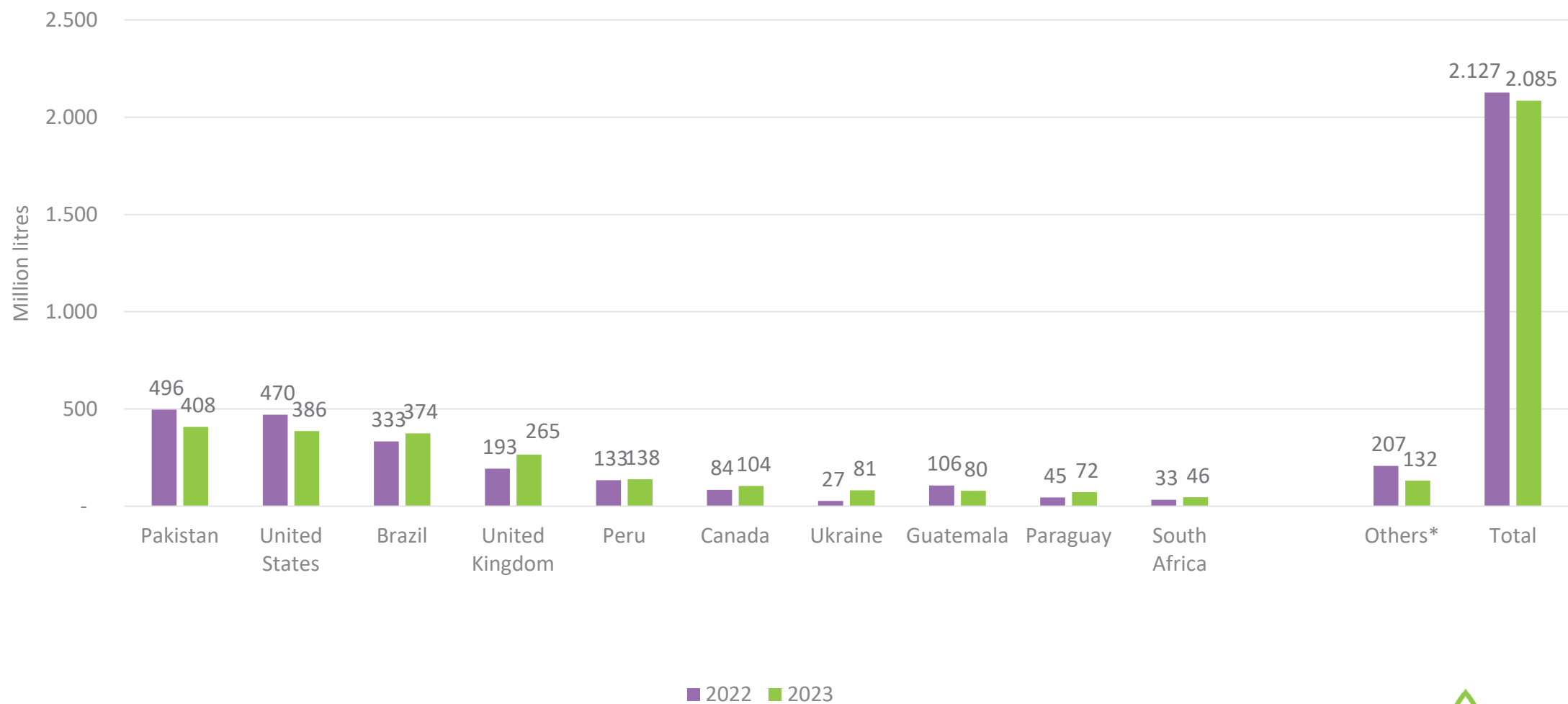
- almost exclusively export renewable ethanol for fuel use
- subject to customs duties 19.2 EUR/hl and 10.2 EUR/hl
- Ongoing surveillance of fuel ethanol imports by the Commission

Pakistan

- exports exclusively renewable ethanol for non-fuel use at 0% duty benefitting from GSP+ regime
- Bolivia, Guatemala and South Africa export only limited quantities of non-fuel ethanol to the EU

EU ethanol imports

Top 10 origins in 2023 vs 2022 (million litres)



Source: Eurostat 2024



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