

The EU Plan for Green Transition: RED II Implementation, Fit for 55 and an Outlook on the RED III

Rob Vierhout, Independent advisor on EU affairs

(Virtual) Regional Stakeholder Committee North America, on-line, November 16, 2021

Agenda

Renewable Energy in Transport (SoP)

RED II implementation (SoP)

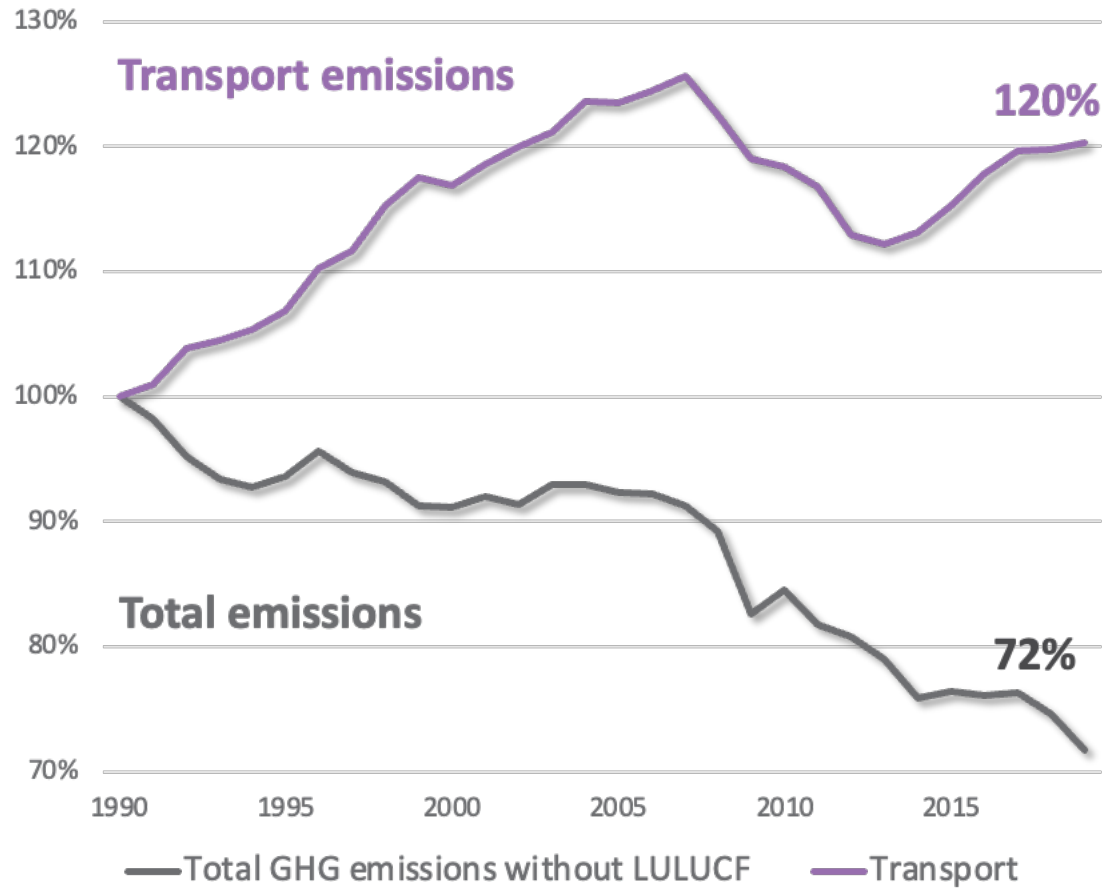
The Fit for 55 Package

RED III (or better 2.1)

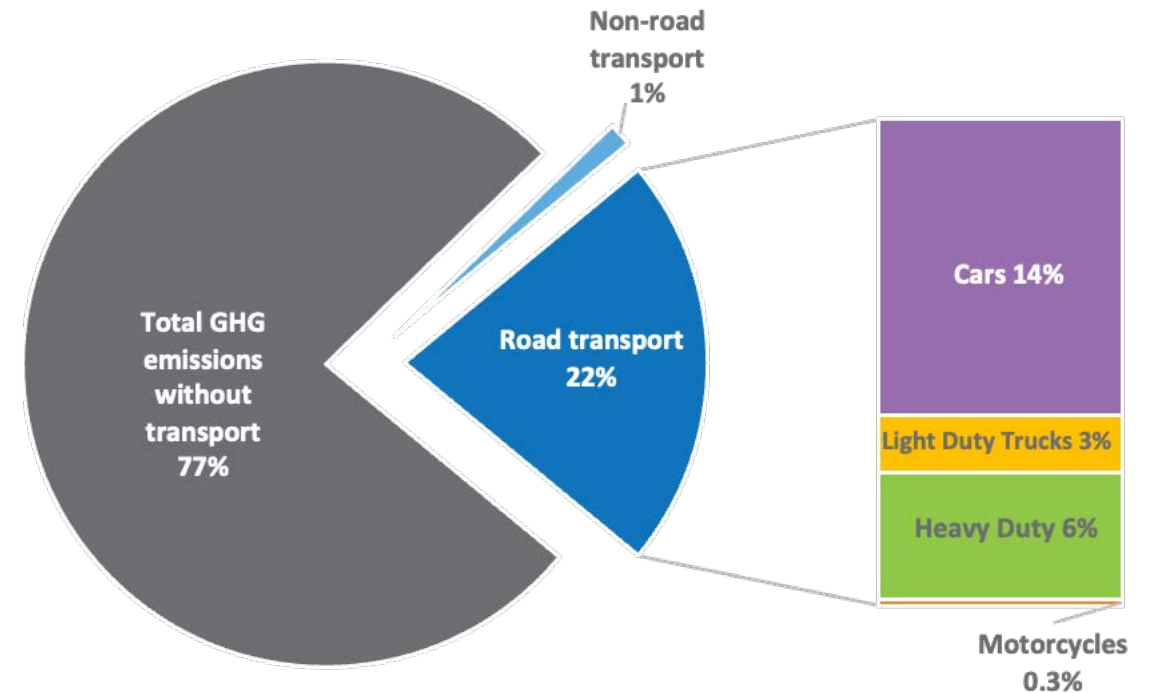
Wrap-up and & Questions

As a reminder: transport emissions in the EU are still high

EU transport emissions on the rise again



Road transport emissions are substantial



Source: UNFCCC, 2021

Renewable Energy in Transport (RES-T) per Member State (with multipliers)

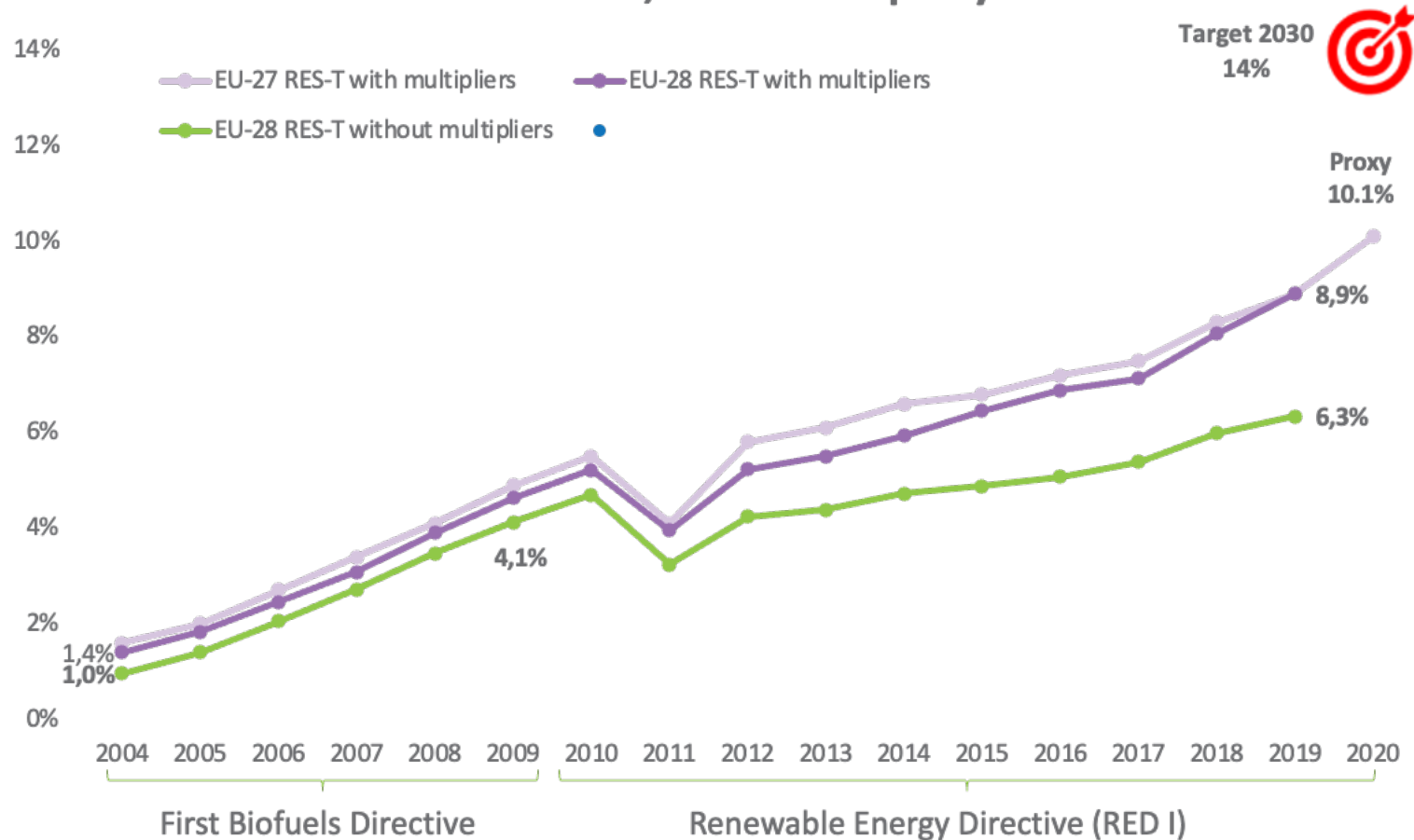


- **12 MS have achieved the 2020 targets:** Austria, Belgium, Finland, Hungary, Ireland, Italy, Luxembourg, Malta, the Netherlands, Portugal, Sweden, Slovenia
- **2 MS were close to achieving the target:** France and Germany
- **4 MS were under 6%:** Estonia, Greece, Croatia and Lithuania
- **Overall, 10.1% at EU-27 level**

Source: EEA, 2021, courtesy of ePURE

RES-T: Progress and multipliers impact

**EU-28 RES-T with and without multipliers
2004-2019, 2020 EU-27 proxy**



RES-T progress:

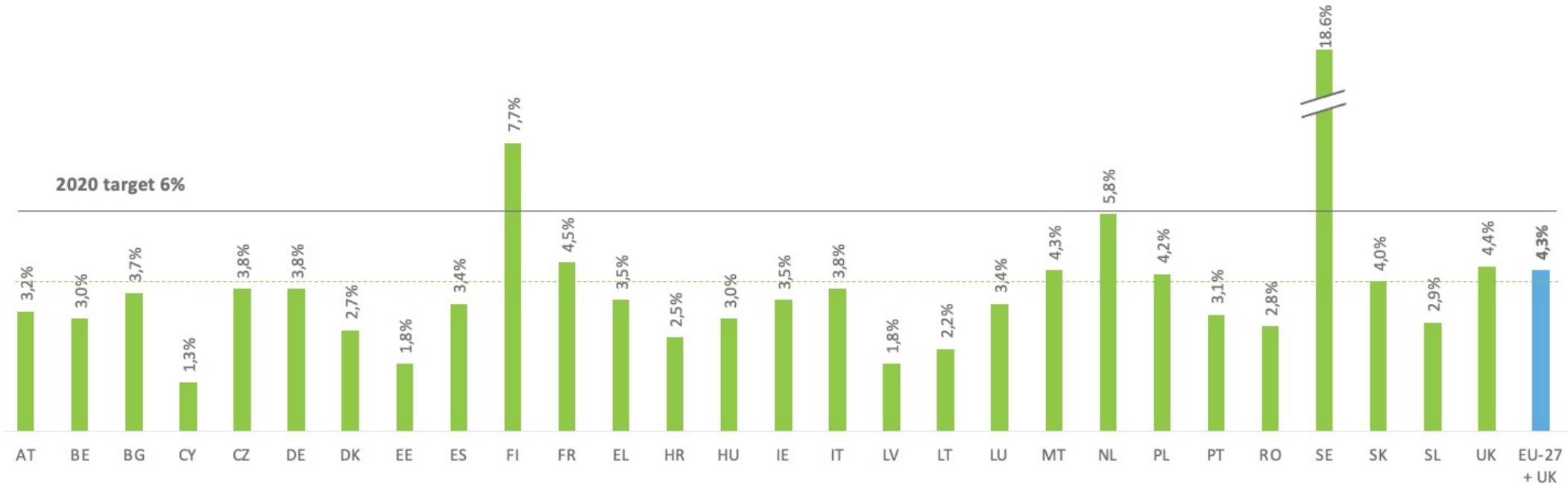
- EU27 2020 proxy: 10.1%
- EU28 2019: 8.9%, but 6.3% in reality

Increase

- **Since 2004 from 1.4% to 8.9%, BUT**
- In 10 years, since RED I was approved, until 2019
- **Most of the increase has come from virtual quantities created by (artificial) multipliers**
- **Without multipliers, it has increased by 2.2% only**

Source: EC SHARES, 2021; EEA, 2021, courtesy ePURE

Progress towards FQD Art. 7a target: 2010-2019



- Fuel quality Directive (FQD) targets for fuels:
 - By 2020: to reduce GHG intensity of the fuels by at least 6% vs. 2010 baseline of 94.1 gCO_{2eq}/MJ;
 - 2017 indicative target: 4% vs. 2010.
- Only 2 MS met the 6% reduction target, 4 MS (France, Malta, Poland, Slovakia) and the UK were above the 4% indicative target.
- 21 MS were still below the 4%.

Source: EEA, 2021, courtesy of ePURE

Agenda

Renewable Energy in Transport (SoP)

RED II implementation (SoP)

The Fit for 55 Package

RED III (or better 2.1)

Wrap-up and & Questions

Summary: what the RED II prescribes on RES-T

RED II (Directive 2018/2001)	
Energy from Renewable Sources	At least 32 % (at EU level)
Renewables in the Transport Sector	At least 14% obligation for fuel suppliers until 2030
Blending Obligation for Low-Emission and Renewable Fuel	To translate the 14%, obligation can be in energy, volume or by GHG reduction
Cap on Food/ Feed Crop Based Biofuels	<ul style="list-style-type: none"> • 2020 consumption level for each MS within a 7% limit, with 1% flexibility • MS may reduce the 7% to zero
Target for Annex IX Part A (advanced)	<ul style="list-style-type: none"> • 0.2 % (2022), 1 % (2025), 3.5 % (2030) • may be counted twice to achieve this target
Limit for Annex IX Part B (UCO, animal fat)	<ul style="list-style-type: none"> • Limit of 1.7%, which can be modified by MS if approved by Commission • may be counted twice to achieve the 14%
GHG emission saving thresholds	<ul style="list-style-type: none"> • 50% for old installations • 60% for new installations after 5 October 2015 • 65% for installations starting operation after 1 January 2021 • 70% for renewable fuels from non-biolog. origin after 1 January 2021
Fossil fuel comparator	94 gCO _{2eq} /MJ instead of 83.8 gCO _{2eq} /MJ

RED II Implementation

Member State level

- Transposition at national level was required by **30 June 2021**.
- To date no MS has fully transposed the REDII.
- For several MS still unclear what the state of play is. Some have draft law ready for adoption in national Parliament.

Implication for industry

- Law requires that every batch of biofuel is REDII compliant and certified accordingly as per 1 July 2021.
- However, no Voluntary Scheme has yet received an official license to operate according to REDII even though technically all VS are considered compliant.
- Until the end of this year no strict enforcement (by national authorities) expected.

RED II Implementation (2)

Commission is late too

- Several important implementation rules (Delegated Acts) still to be proposed and adopted. To date only the DA on high ILUC risk biofuels adopted.
- Still in the pipeline crucially important implementation rules:
 - DA on GHG methodology on RFNBOs and RCF - **draft version sent to MS for appraisal**
 - DA on co-processing (in refineries) with biofuels - **no progress**
 - Research on low ILUC risk biofuels - **still ongoing**
 - Implementation rules on Voluntary Schemes + EU database - **Revised draft has leaked, next step discussion by MS; on EU database hardly any progress.**
 - (Possibly) Proposal to change feedstock list of Annex IX - research ongoing but almost concluded. **Draft report has leaked.** Unclear if Commission will propose changes to the Annex.

Agenda

Renewable Energy in Transport (SoP)

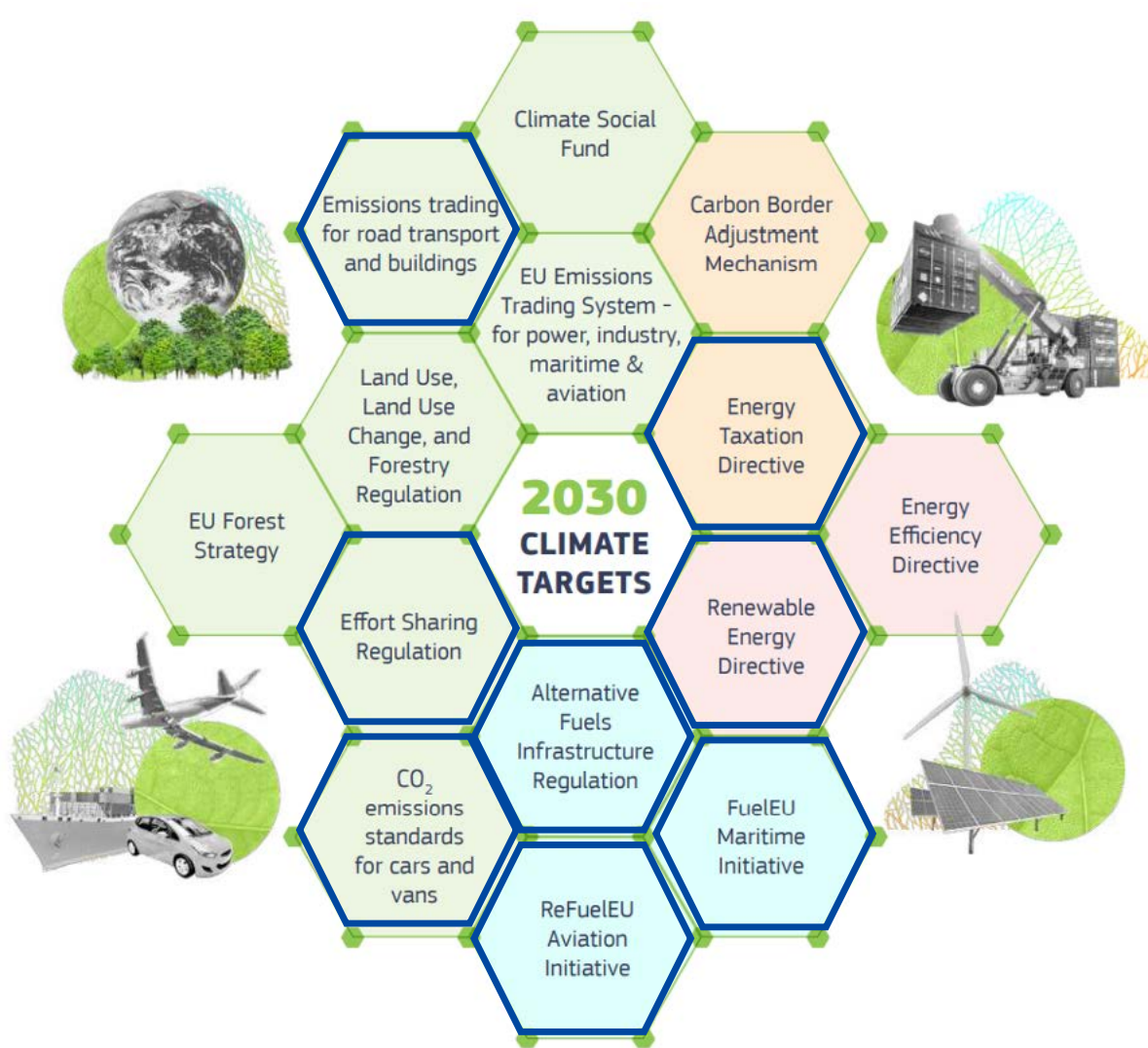
RED II implementation (SoP)

The Fit for 55 Package

RED III (or better 2.1)

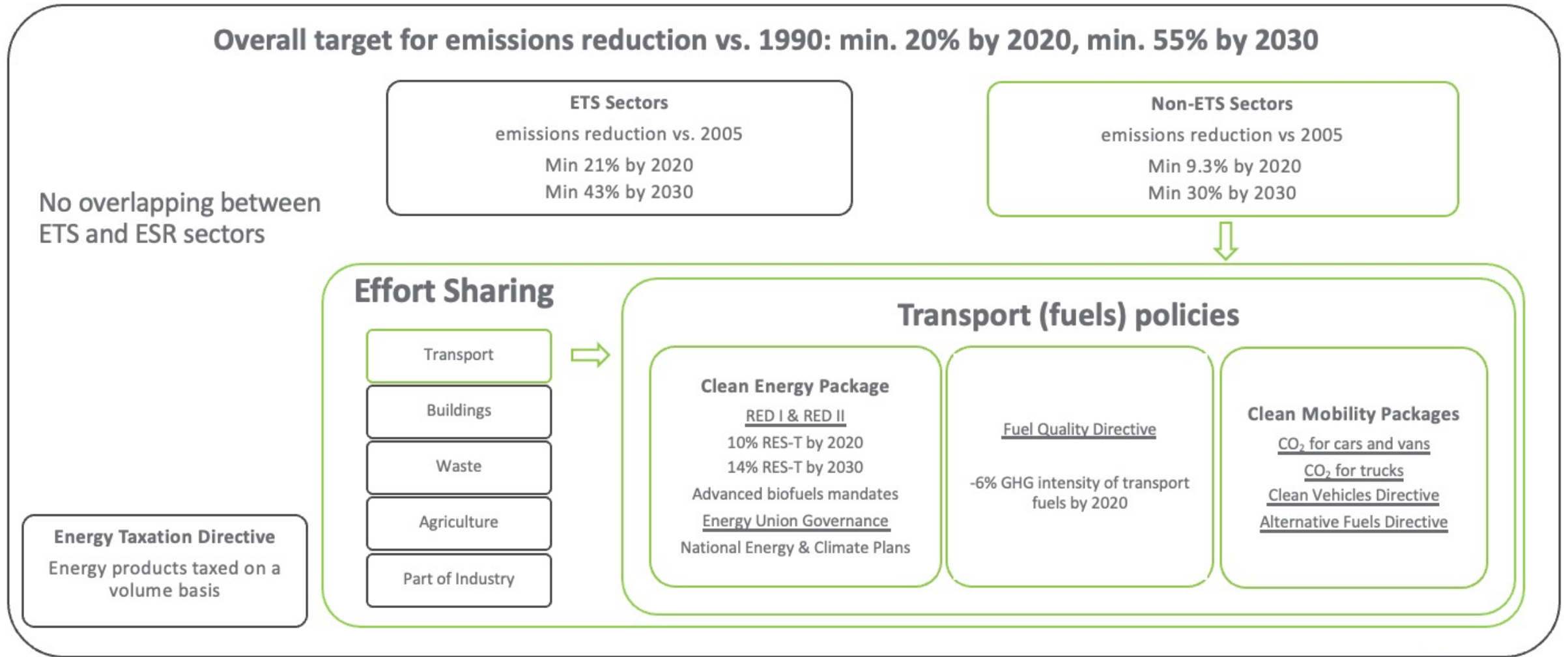
Wrap-up and & Questions

The FF55 package: relevant proposals for biofuels - all interrelated



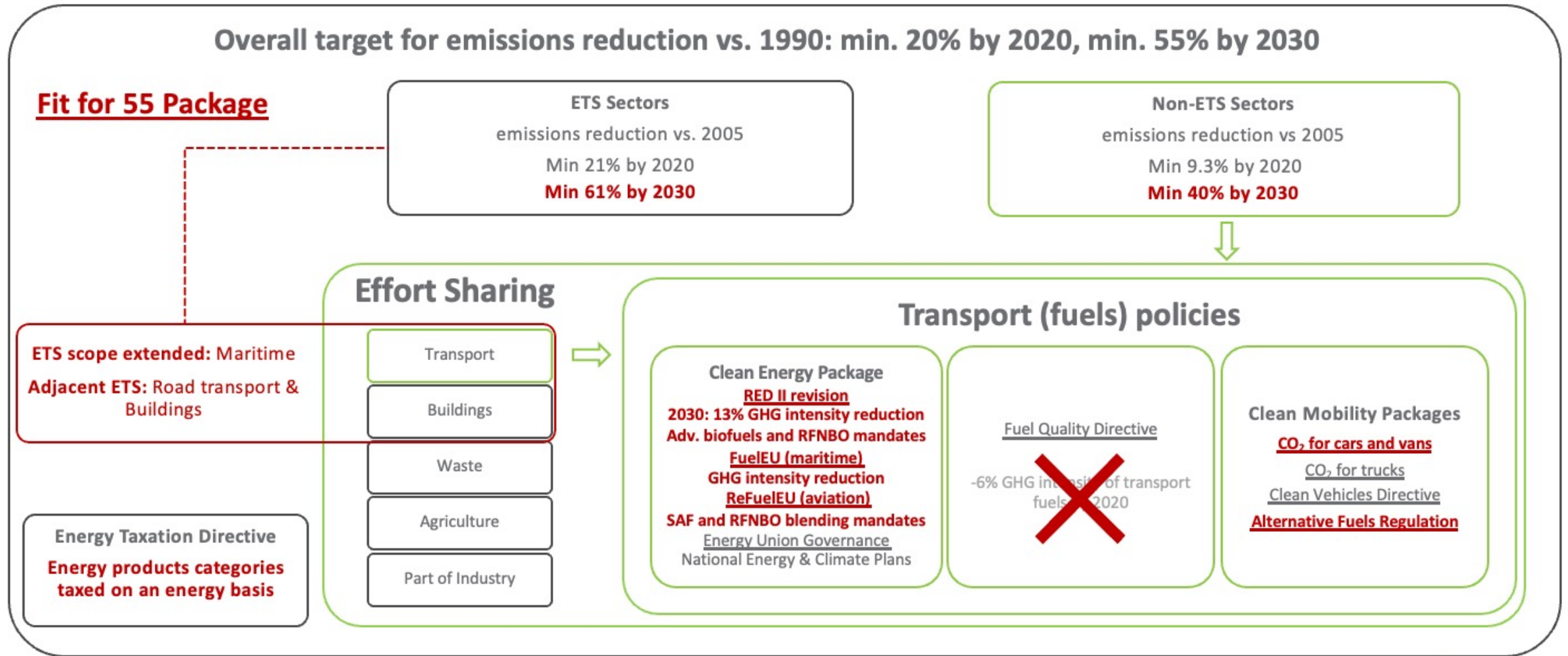
- **Renewable Energy Directive II.1**
- **CO₂ emissions standards for cars and vans**
- **Energy Taxation Directive**
- ETS for road transport & buildings
- Effort Sharing Regulation
- Alternative fuels infrastructure Regulation
- **FuelEU Maritime & ReFuelEU Aviation**

State of EU energy and transport policies – Before Fit for 55



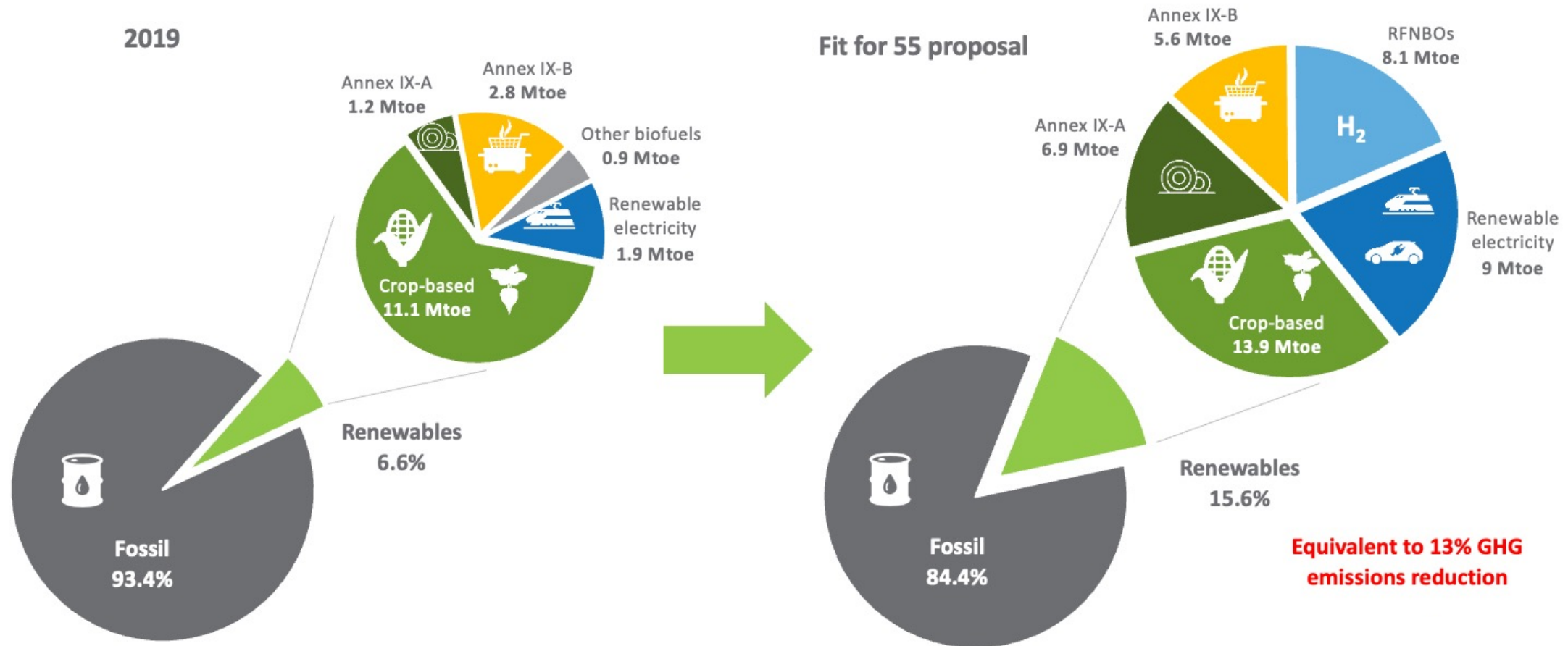
Source: courtesy ePURE

State of EU energy and transport policies – under Fit for 55



Source: courtesy ePURE

RES-T in 2030 – Fit for 55 proposal vs. 2019



Source: SHARES 2021 and ePURE calculations. Energy in transport includes all modes except international maritime according to RED I methodology. Energy in transport in 2030: 280 Mtoe; all sub-targets are met and caps are maximised in 2030; quantity of renewable electricity in 2030 in the Fit for 55 proposal is calculated to reach 13% GHG emission reduction in all transport.

CO2 standards for cars/vans – Energy Taxation Directive



- The fleet of newly registered cars, compared to 2021, has to reduce emissions by 55% by 2030 and by 100% by 2035
- For new vans, the reduction targets are 50% and 100%, respectively
- If maintained, it means that the ICE would no longer be allowed to be sold as of 2035
- Unless zero or low emission fuels (like e-fuels and biofuels) would be accepted

- Taxation based on energy, no longer volume
- Good for ethanol
- Advanced biofuels and e-fuels have a more favourable tax regime than conventional biofuels

Ambitious goals for aviation and maritime



- A volumetric mandate for fuel suppliers and airlines:
 - In 2025 at least:
 - 2% SAF (only Annex IX biofuels; Conventional biofuels not allowed)
 - In 2030 at least:
 - 5% SAF and 0.7% synthetic aviation fuel (e-fuel)
 - Five-yearly ramp-up to at least:
 - 63% SAF and 28% e-fuel in 2050
- A carbon intensity mandate
 - Maximum allowed average GHG intensity of the energy used on-board:
 - -2% in 2025
 - -6% (2030), -13% (2035), -26% (2040), -59% (2045) and -75% (2050)
 - All alternative fuels can be used provided sustainability criteria are met

Both are Regulations to avoid too much creativity by MS

Agenda

Renewable Energy in Transport (SoP)

RED II implementation (SoP)

The Fit for 55 Package

RED III (or better II.1)

Wrap-up and & Questions

Revision of the RED – What is proposed? (Highlights only)



Overall Renewable Energy Share ambition:
40%



An obligation on fuels suppliers that renewables in transport lead to a **GHG intensity reduction** of at least **13%** by 2030, following an indicative trajectory



Crop based biofuels:
2020 share of **transport energy** plus 1%, within a 7% limit



No more multipliers except a multiplier of 1.2 only in aviation and maritime and only for Annex IX A biofuel + Renewable Fuels of non-Biological Origin (RFNBO)



Annex IX A: Binding sub-target for advanced biofuels fixed at 0.2 % in 2022, 0.5% in 2025, 2.2% by 2030
Annex IX B: Limit of 1.7% for Annex IX-B is maintained without derogation



A **mandate** of at least 2.6% of **RFNBOs** by 2030



B7 as standard grade -> moving to B10
Freezes ethanol incorporation at E10

Agenda

Renewable Energy in Transport (SoP)

RED II implementation (SoP)

The Fit for 55 Package

RED III (or better 2.1)

Wrap-up and & Questions

Some observations

- Emissions from transport stay high and commitment from many MS to increase RES in transport stays relatively low
- The REDII transposition (into national law) and implementation rules are severely delayed which creates problems for industry
- The FF55 package is ambitious, interrelated, very complex and not technology neutral (electricity and green hydrogen are the new mantra); CO₂ standard cars/vans means phasing out ICE
- New markets arising for aviation and maritime
- REDII revision is modest in changes, also in ambition, but devil, as per usual in the detail

Questions?

