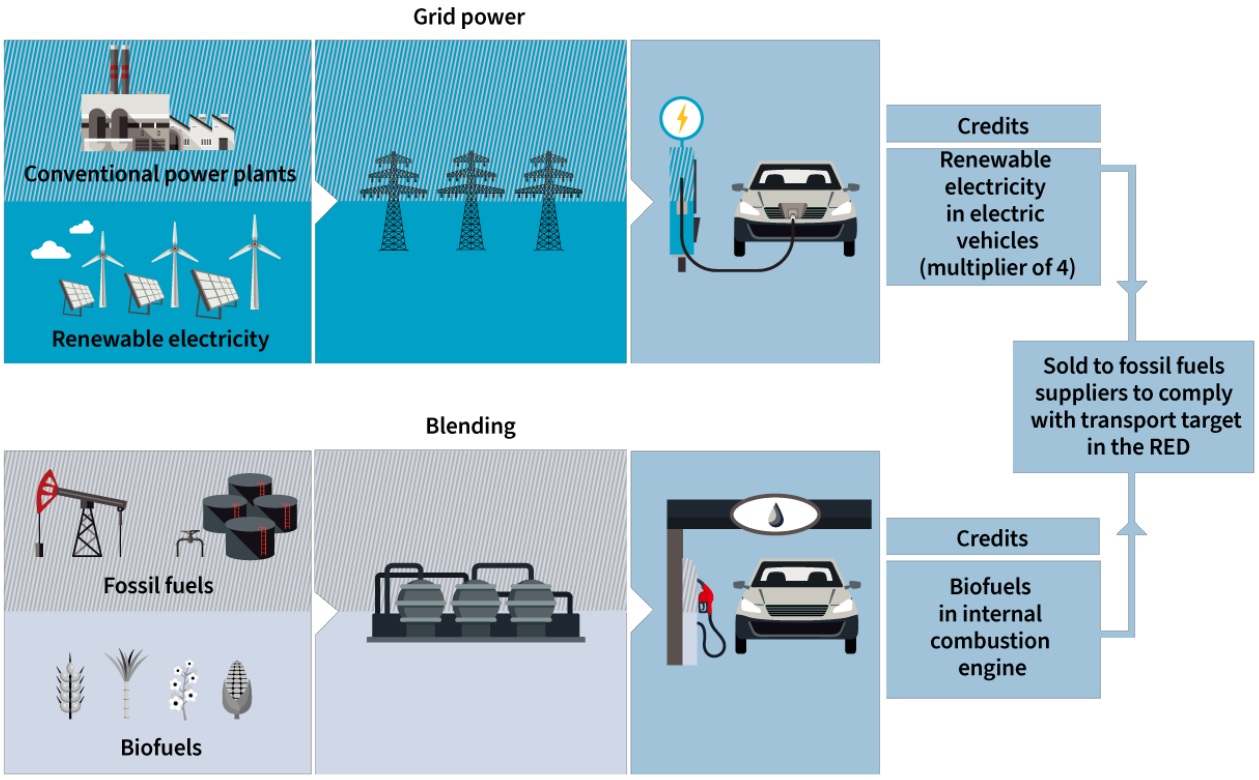
TRANSPORT & ENVIRONMENT

2023 Renewable Energy Directive fact sheet

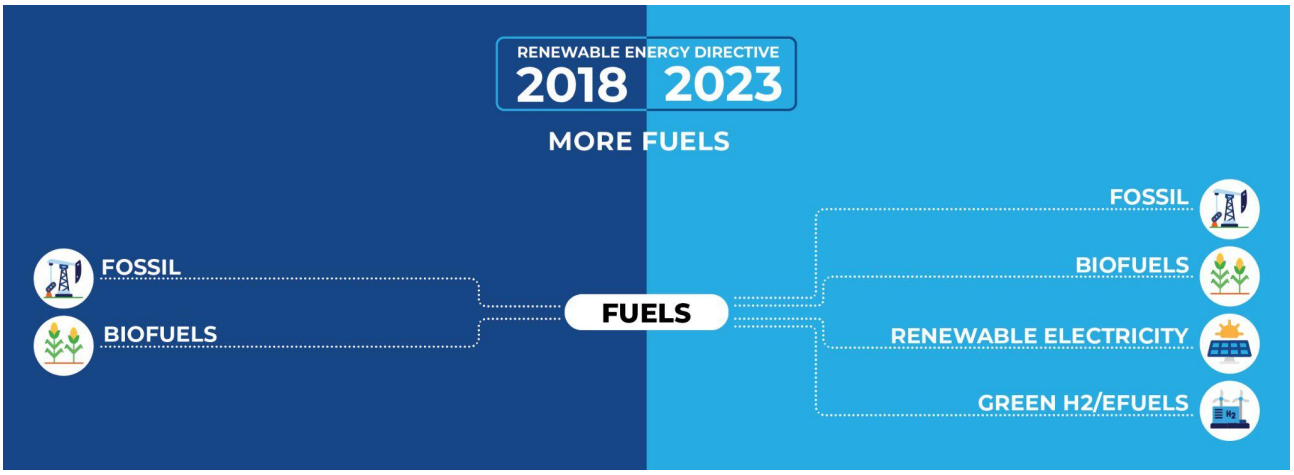
From the ICE to the electric age, future-proofing the RED

Crediting renewable electricity as transport fuel.

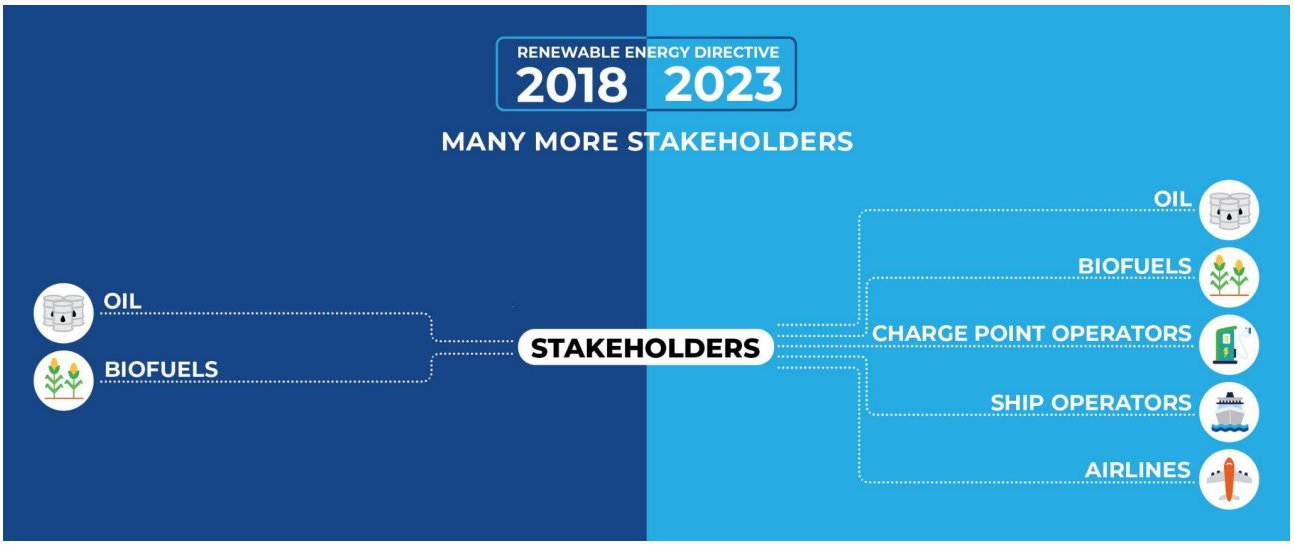
This fact sheet presents the key changes that were introduced in the RED to recognize the growing fleet of electric vehicles and - as a result - the growing role of electricity as a transport fuel. Given that the RED aims to promote renewable energy, the focus is on renewable electricity.



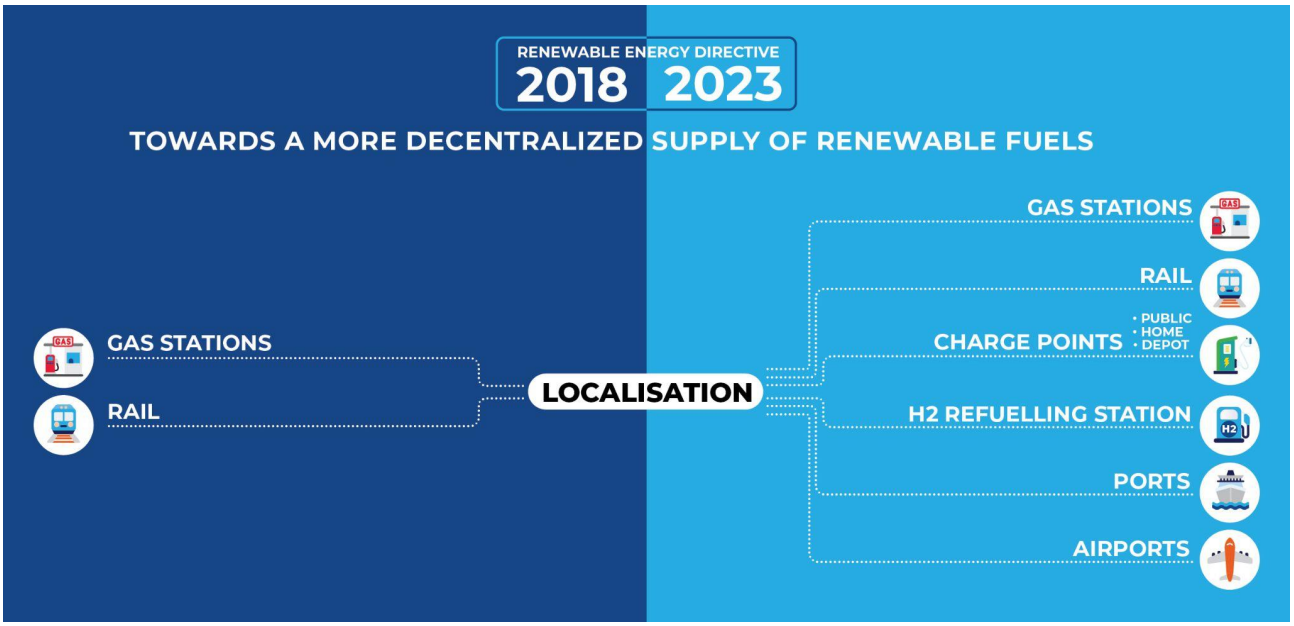
The previous 2030 target in the RED of 14% renewables in transport was more than doubled to 29% (or a -14.5% carbon intensity reduction of transport fuels) to match the increased overall level of ambition. Given the rapid electrification of road transport, reaching a higher transport target by 2030 with a declining role for biofuels was deemed impossible. A greater role for renewable electricity was widely recognized as essential.



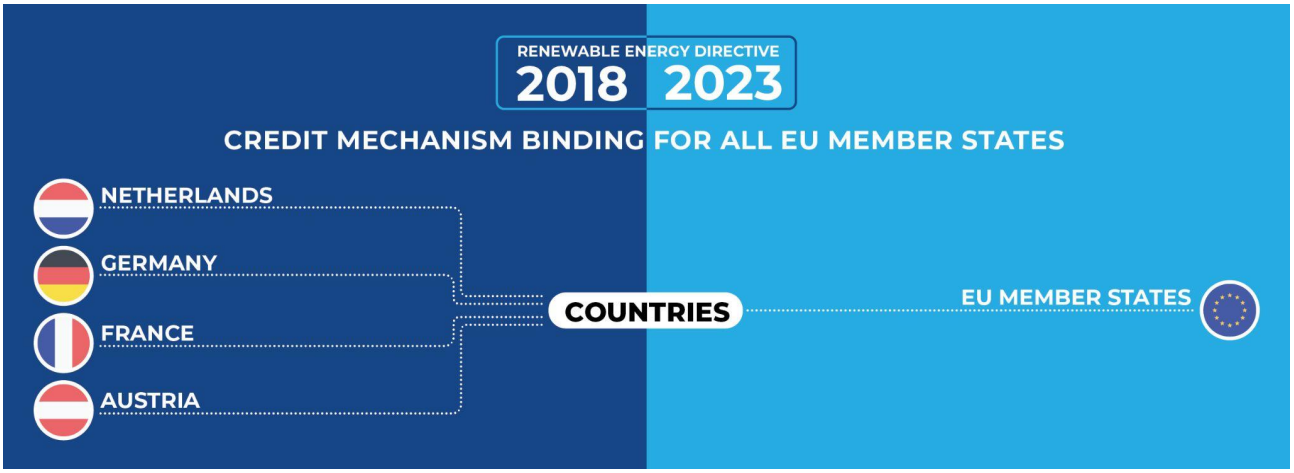
However, to count renewable electricity towards the RED targets, **a credit mechanism for different types of fuels must be introduced**. This means a significant change for how most instruments to promote renewables in transport have been conceived until now. Most member states impose on oil companies ('fuel suppliers') an obligation to blend a certain percentage of biofuels with the fossil gasoline or diesel that they sell to drivers. Member states now need to introduce a mechanism, whereby kWhs instead of litres of liquid fuels are also available to meet a certain target. Including renewable hydrogen (crediting e.g kg of H2) will also require the adaptation of existing biofuel blending mandates.



This also means that the number of traditional stakeholders involved in achieving the targets will increase, as more types of fuels in more transport modes will contribute to the RED target for renewables in transport.



The challenge is that - unlike with biofuels - electric vehicles do not all recharge at gas stations that are supplied by a few centralised depots. Electric vehicles recharge mostly relatively small volumes in thousands of private locations. And the electricity charged by the electric vehicles is ‘behind the meter’, i.e. not separately metered: This makes it challenging to determine exactly how much electricity/energy is used by electric vehicles. The introduction of a credit mechanism for electricity should overcome these issues.



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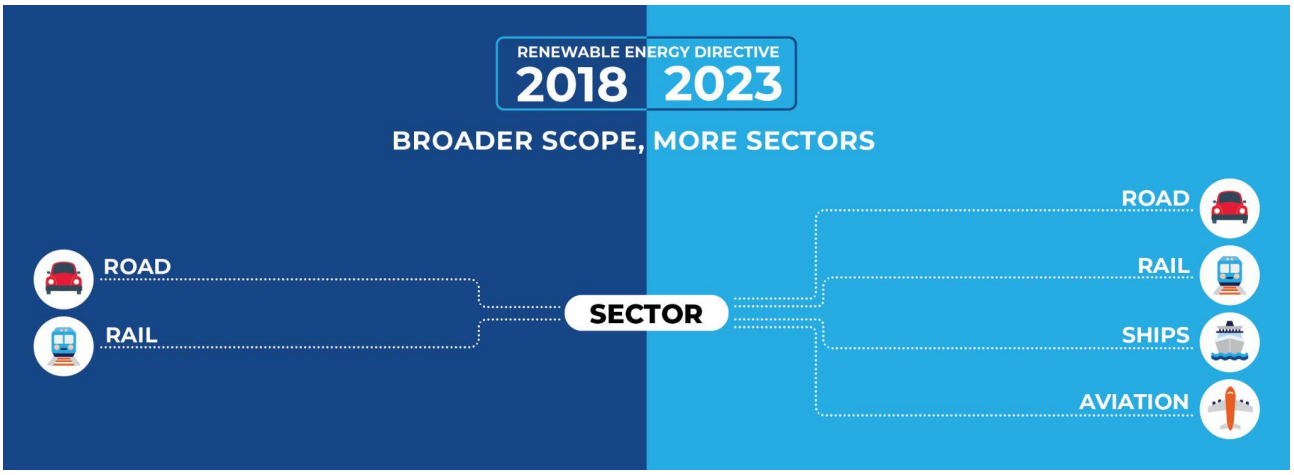

Despite this challenge, a greater role for renewable electricity was not controversial in the RED III, but opinions widely diverged on how much greater the role of renewable electricity needed to be. For the biofuels industry, the focus of the RED needed to remain first and foremost on liquid fuels .On the other side of the debate, pro-electrification voices argued that the RED ambitions on transport could provide a much-needed boost for electromobility. Past experience in the Netherlands and Germany with credit mechanisms has shown that the revenues from the sale of the credits can e.g. boost the deployment of public recharging stations.

The debate on the credit mechanism focused on 2 topics: Scope and efficiency of electricity as transport fuel.

- With regard to the **scope**, the credit mechanism can focus on the 'easy' part: Crediting separately metered electricity at public chargers. Or it could go broader and also try to include private recharging at home or in the workplace. Member states are obliged to at least include public charging, but private recharging points can also be included**.**
- A **multiplier for renewable electricity** is needed to ensure a level playing field with biofuels: To cover the same distance, electric vehicles need less energy, multiple times less than similar vehicles with a combustion engine. The RED introduced a multiplier of 4x to avoid an outcome whereby electric vehicles would need to cover 4x the distance to contribute the same amount of renewable energy towards the RED target.

What is happening at the national level?

The Netherlands first introduced a credit mechanism. Germany, France and Austria followed. By the deadline for transposition for the RED III in the second half of 2025, all EU27 member states are obliged to have implemented such a credit mechanism.

Key recommendations

1. Implement credit mechanism swiftly
2. Include both public and private charging in scope of credit mechanism
3. Recognize the higher efficiency of electric vehicles

Further information:
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Additional materials:
T&E briefing on
"RED III & (renewable) electricity"