



Demonstration of the ENROAD results Legislative & Regulatory Framework

CEDR 2019 Renewable Energy in Road Infrastructure
FINAL CONFERENCE – 24 October 2023

Purpose of work

- Which are the relevant regulations concerning renewable energy production?
 - EU level
 - National level
- What are the long-term strategies for each country?
- What are the figures/business models available and relevant for the NRAs?
- What are the potential risks, pitfalls and barriers in implementing the business models?

An assessment has been carried out examining the governance, regulatory and legislative framework.

EU regulatory framework

Renewable Energy Directive, Directive (EU) 2018/2001

- At least 55% reduction on greenhouse gas emission.
- At least 42.5% renewable energy generation.
- At least 14% renewable energy in the transport sector.
- Legally binding.

National Energy and Climate Plans (NECPs)

- No important barriers concerning EU and national ambitions.
- Long term strategies aligned with EU decarbonization strategy.
- UK and Norway aligned, but no pressure to comply.

Ambitions, Goals and Commitments Matrix

	Germany	Austria	Ireland	Netherlands	Belgium	Denmark	Sweden	Norway	U.K.
National Long Term Strategies									
National Energy Climate Plans									
2030 Framework for the Union - Targets									
Binding Overall Union Target 2030									

Source: ENROAD.

EU regulatory framework

Take into account:

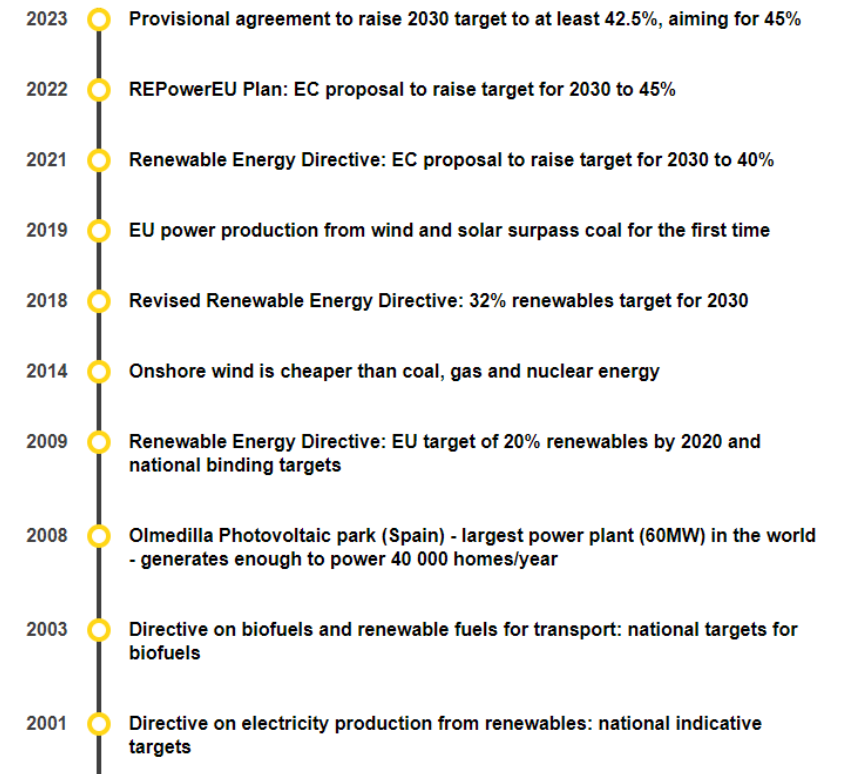
By 30 June 2023, Member States will submit to the Commission draft updated NECPs.

A 2023 provisional proposal could allow to choose:

- A. target of 13% greenhouse gas intensity reduction in transport by 2030.
- B. target of at least 29 % renewable energy within the final consumption of energy in the transport by 2030.

The regulatory framework is constantly evolving.

Timeline for renewable energy EU



Source: European Commission.

National regulatory framework

Regulatory Framework

- National Energy and Climate Plans.
- Energy sector regulation.

Key Industry players

Relevant figures and structures to be defined

- Self-consumption.
- Demand aggregators.
- Renewable energy communities.
- Closed distribution networks.
- Charging infrastructure.
- Power Purchase Agreements (PPAs).

Germany Example



Relevant figures and structures










- **Demand aggregators:** demand response management (EnWG), operating reserve markets (EnWG), renewable suppliers (EEG), electricity grid access (StromNZV).
- **Closed distribution networks and renewable energy communities:** lack clear legal definitions. Citizen energy communities are defined in the EEG.
- **Charging infrastructure:** Building E-Mobility Infrastructure Act.
- **PPAs:** governed by the EnWG, the EEG and the StromNEV.

Source: E-Learning module. ENROAD.

Regulatory Red Flag Report

- **Governance** of the energy union and climate action.
- Promotion of the use of **energy from renewable** sources.
- Common rules for internal **electricity market**.

Regulatory Red Flag Report Matrix

									
GOVERNANCE OF THE ENERGY UNION AND CLIMATE ACTION									
• National long-term strategies	●	●	●	●	●	●	●	●	●
• National energy and climate plans	●	●	●	●	●	●	●	●	●
• 2030 framework for Union targets	●	●	●	●	●	●	●	●	●
PROMOTION OF THE USE OF ENERGY FROM RENEWABLE SOURCES									
• Binding overall Union target 2030	●	●	●	●	●	●	●	●	●
• Support schemes Renewable Energy	●	●	●	●	●	●	●	●	●
• Administrative procedures, regulations & codes	●	●	●	●	●	●	●	●	●
• Simple procedures for grid connections	●	●	●	●	●	●	●	●	●
• Guarantees of Origin for renewable energy	●	●	●	●	●	●	●	●	●
• Renewable Self-consumers	●	●	●	●	●	●	●	●	●
• Renewable Energy Communities	●	●	●	●	●	●	●	●	●
• Mainstreaming Renewable Energy in the transport sector	●	●	●	●	●	●	●	●	●
• Minimum Shares of Renewable Energy in the transport sector	●	●	●	●	●	●	●	●	●
COMMON RULES FOR INTERNAL ELECTRICITY MARKET									
• Aggregation Contract	●	●	●	●	●	●	●	●	●
• Active Customers	●	●	●	●	●	●	●	●	●
• Citizen Energy Communities	●	●	●	●	●	●	●	●	●
• Demand Response Through Aggregation	●	●	●	●	●	●	●	●	●
• Integration of Electromobility into the Electricity Network	●	●	●	●	●	●	●	●	●
• Closed Distribution Systems	●	●	●	●	●	●	●	●	●
• Connection of new Generating Installations and Storage	●	●	●	●	●	●	●	●	●

Source: E-learning ENROAD.

Regulatory Red Flag Report

- **Austria** include the lack of legislation.
- **Sweden**, double counting of biofuels. Sweden only reports only renewable energy in rail.

Minimum shares of renewable energy in the transport sector



Source: E-learning ENROAD.

Member States shall take measures to ensure the availability of fuels from renewable sources for transport, including in relation accessible power charging points.

Regulation (EU) 2023/1804 of **13 September 2023** on the deployment of alternative fuels infrastructure

The regulatory framework is constantly evolving.



ENROAD

THANK YOU!

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**Conférence Européenne
des Directeurs des Routes
Conference of European
Directors of Roads**