

Transport and Energy Community Joint Workshop on Sustainable and Green Mobility

Decarbonisation efforts in the energy sector and Trans-European Networks for Energy

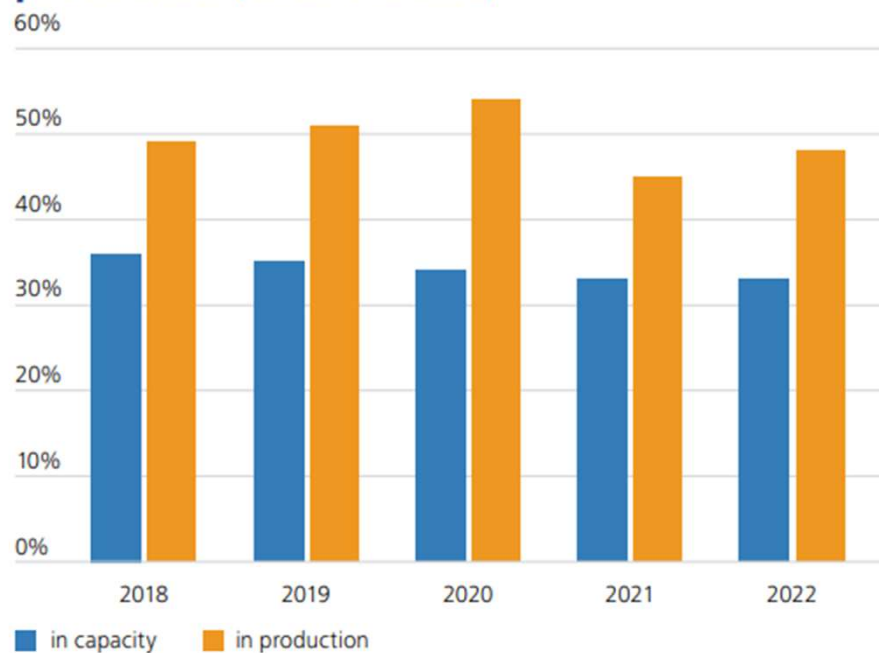
Vienna, 20 December 2023

Davor Bajcs
Energy Community Secretariat

Decarbonisation of the energy sector in the Energy Community

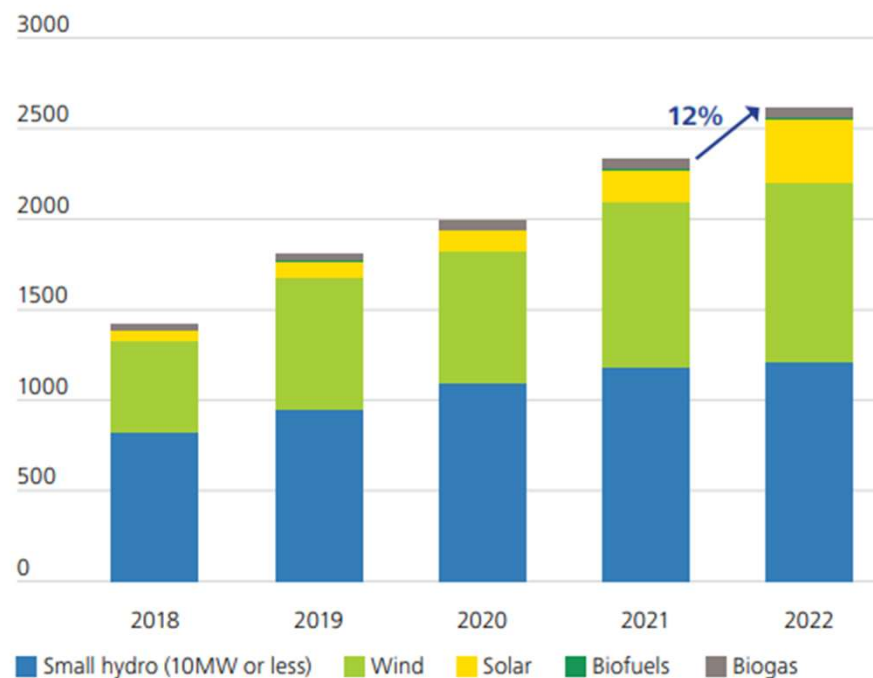
ELECTRICITY GENERATION MIX IN THE EnC

Share of coal-based capacity / production in total Energy Community capacity / production (excl. Ukraine)

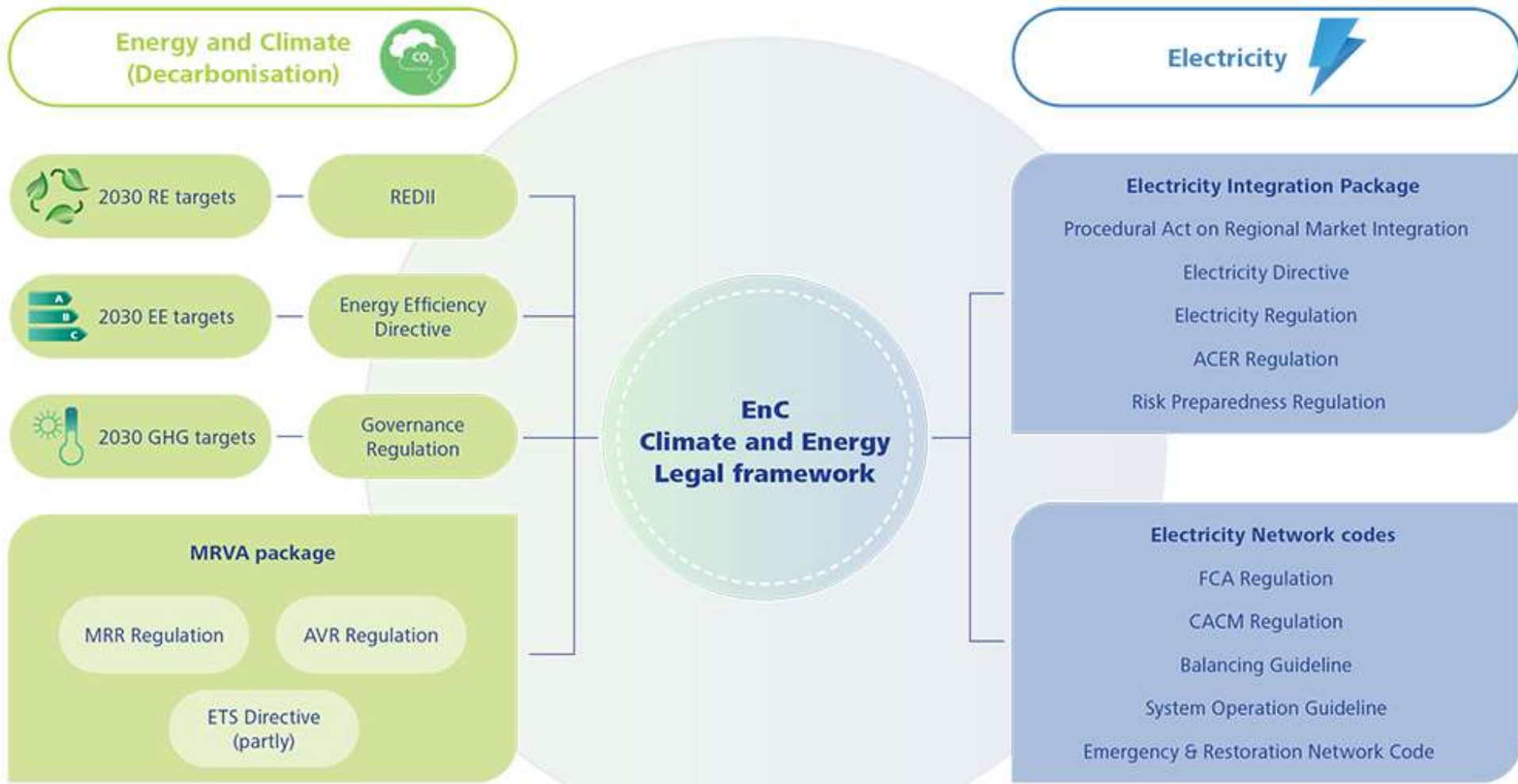


Source: ECS report "CBAM-Readiness Tracker", June 2023

Installed electricity generation capacities from RES (excl. large hydro) [MW]



ROLE OF THE ENERGY COMMUNITY



Why decarbonization in the EnC?

Ministerial Council Conclusions 2020

Green Deal for the Energy Community

6. The Ministerial Council discussed the challenges and opportunities of an Energy Community at the crossroads in times when decarbonisation and climate neutrality objective have substantially changed the agenda of energy policy in Europe and globally. The Ministerial Council welcomed the signature of the Sofia Declaration on the Green Agenda for the Western Balkans, and highlighted that it will serve as the cornerstone for a long-term vision in establishing a modern, climate neutral, resource-efficient and competitive economy.
7. The European Commission in cooperation with the Secretariat will launch preparatory work on developing a decarbonisation roadmap for the Energy Community until 2030 and beyond in the framework of the Energy and Climate Committee and its technical working group.

EnC Decarbonization Roadmap 2021

The aim of this roadmap is to:

- support a path towards 2030 energy and climate targets and mid-century climate neutrality for the Energy Community;
- establishing a consistent dialogue between the European Union and the Contracting Parties on the decarbonisation priorities, the process, timeline and main elements of the roadmap;
- take stock of the state of play of existing and planned decarbonisation efforts in an Energy Community and its Contracting Parties-wide roadmap, setting out a clear and predictable path for all stakeholders on the introduction of decarbonisation-related EU legal acts;
- making progress on agreeing to a carbon pricing system for the Contracting Parties of the Energy Community;
- and establishing shared political messages on subjects such as a coal phase-out and fossil-fuel subsidies.

EnC Decarbonisation Roadmap

- Reasons:
 - ✓ Significant **transboundary pollution** from coal plants in the Western Balkans region;
 - ✓ **Slow progress** on implementing the polluters pay principle and introducing carbon pricing;
 - ✓ **Carbon leakage**;
- **Outcome → roadmap containing a timetable for the adoption of measures in CPs in the area of energy and climate action**

The revised TEN-E Regulation in the Energy Community

“Old” TEN-E REGULATION (347/2013)

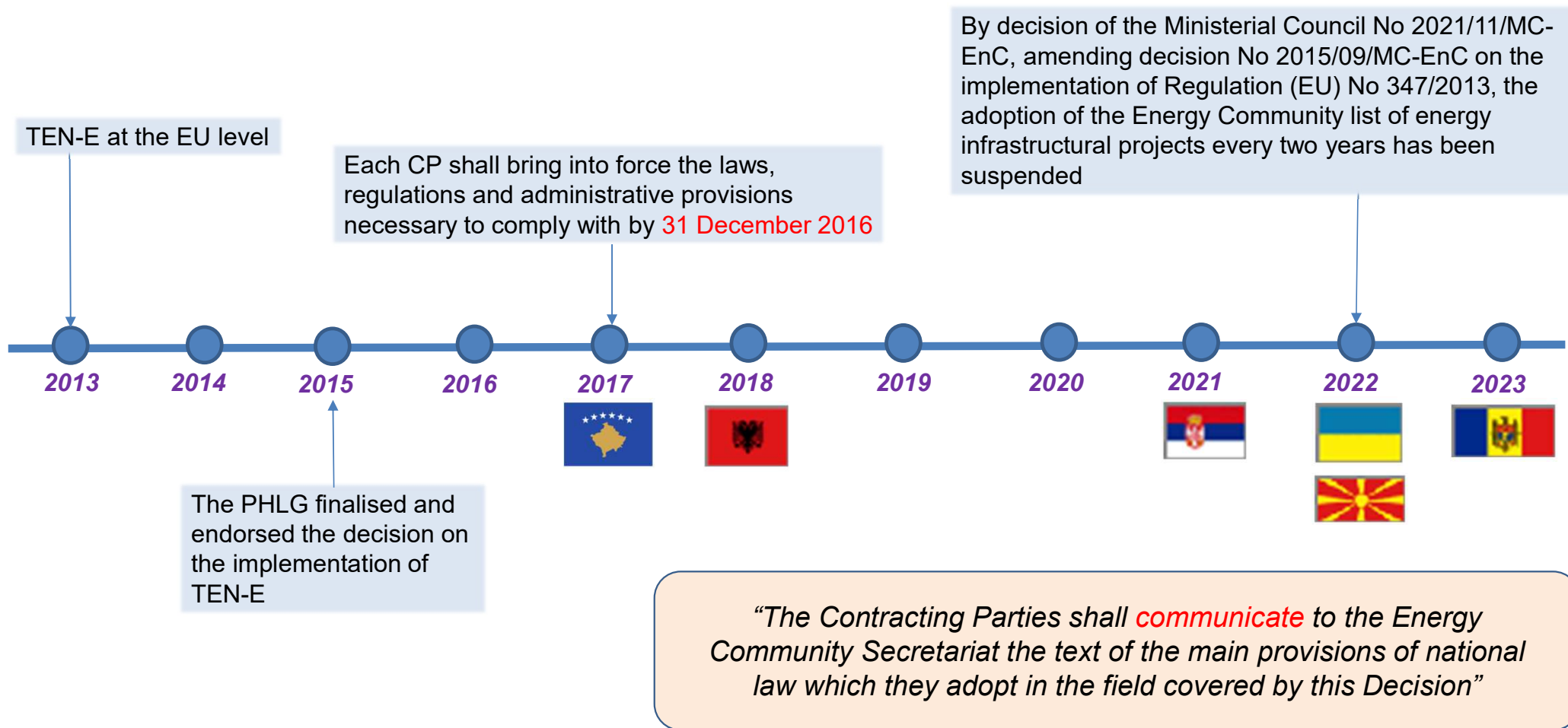
REGULATION (EU) No 347/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 **April 2013** on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009



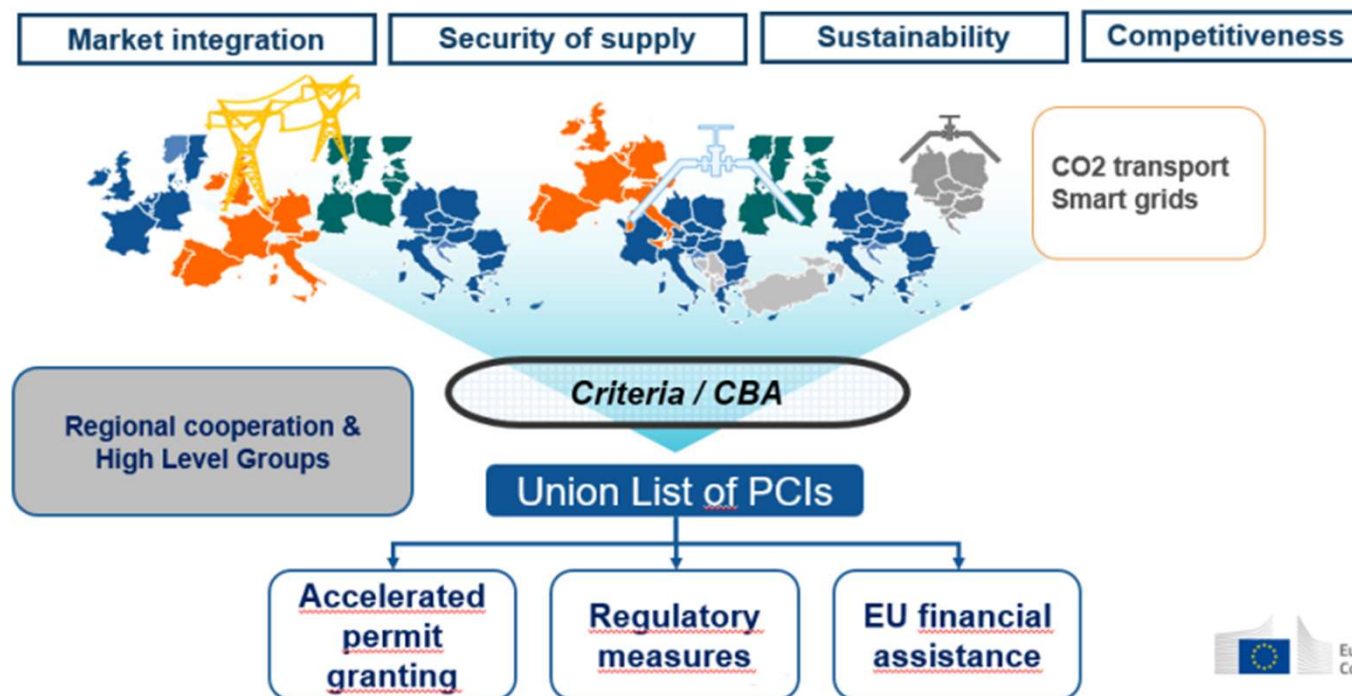
DECISION OF THE MINISTERIAL COUNCIL OF THE ENERGY COMMUNITY D/**2015**/09/MC-EnC: on the implementation of Regulation (EU) No 347/2013 of the European Parliament and of the Council on guidelines for trans-European energy infrastructure



MC Decision on the “old” TEN-E

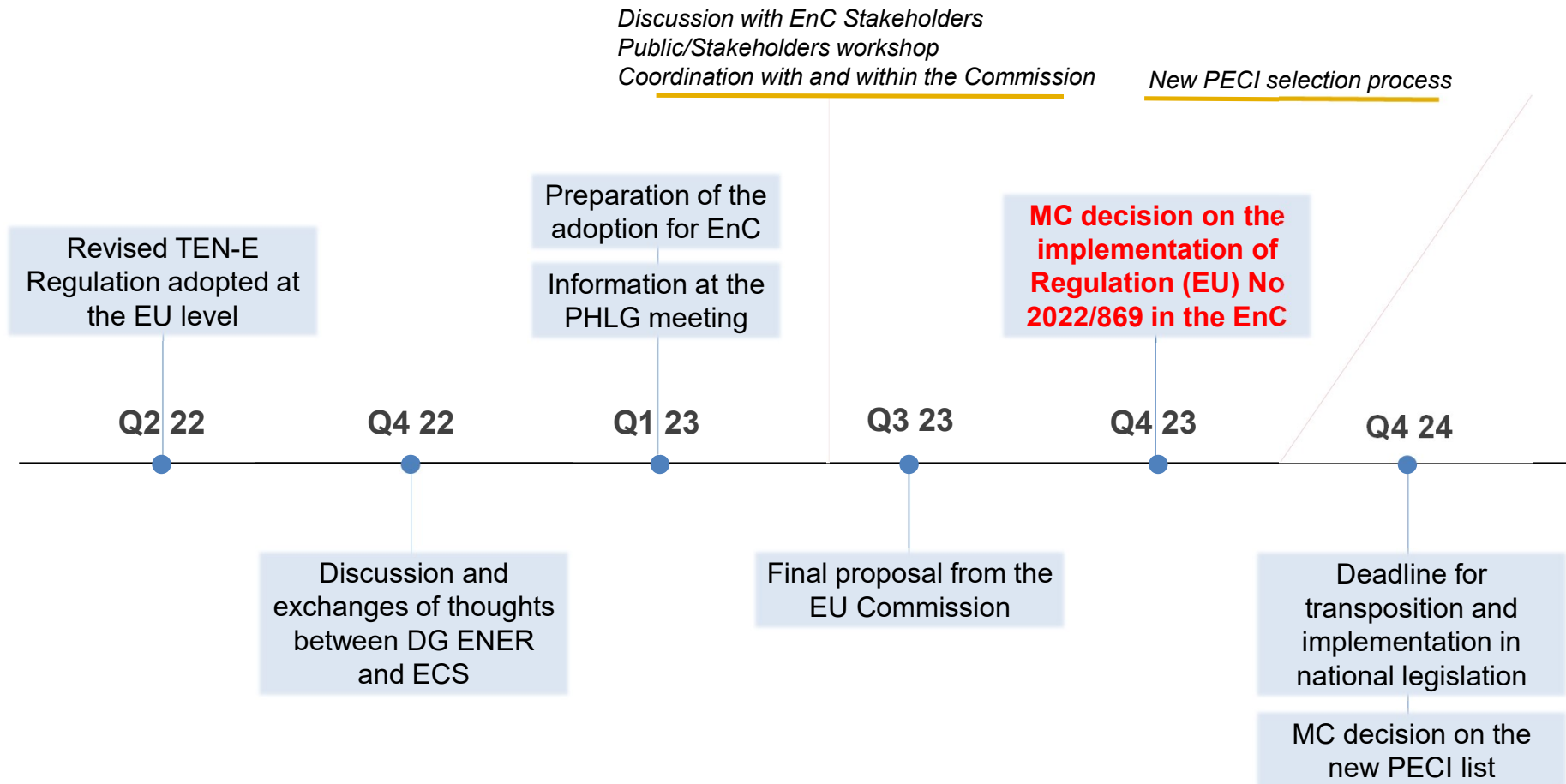


The trans-European energy networks policy

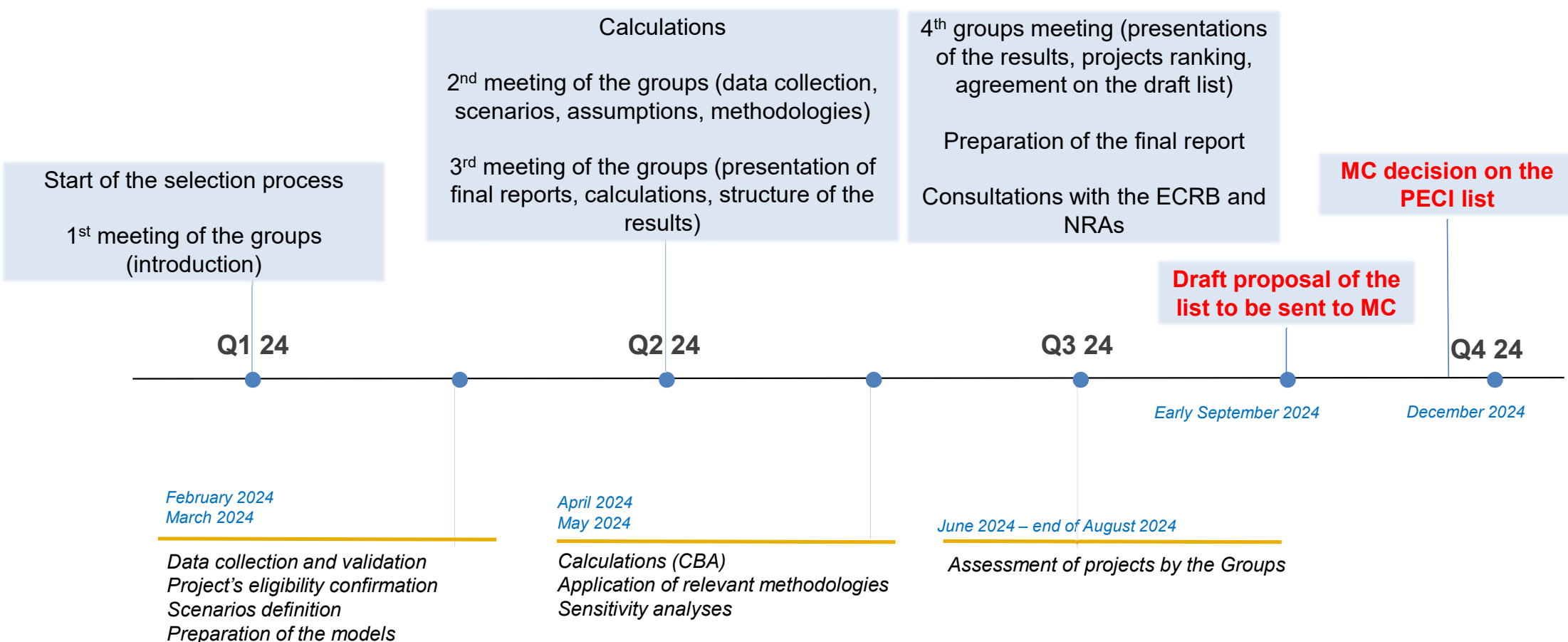


Source: European Commission - Webinar: The revised TEN-E Regulation, 10 May 2022

Predicted timeline for TEN-E adoption in the EnC



Expected timeline for the PECEI 2024 process



Main topics/differences: **PMI projects**

Old TEN-E*

*REGULATION (EU) No 347/2013 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009

Union list of projects of common interest

PCI: A project necessary to implement the energy infrastructure priority corridors and areas set out in the Regulation.

Revised TEN-E*

*REGULATION (EU) 2022/869 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 May 2022 on guidelines for trans-European energy infrastructure, amending Regulations (EC) No 715/2009, (EU) 2019/942 and (EU) 2019/943 and Directives 2009/73/EC and (EU) 2019/944, and repealing Regulation (EU) No 347/2013

Union list of projects of common interest and projects of mutual interest

PCI + **PMI***

*A project promoted by the Union in cooperation with third countries

Article 4(2) on PMIs:

- the project is in line with **Policy objectives**;
- overall **benefits** outweigh its costs within the Union;
- the project is located on the **territory** of at least one Member State and on the territory of at least one third country and has a significant cross-border impact;
- high level of **convergence of the policy frameworks** of the third country:
 - a well-functioning internal energy market;
 - security of supply based, inter alia, on diverse sources, cooperation and solidarity;
 - an energy system moving towards the objective of climate neutrality;
- the third country involved **support** the priority status of the project and **commit** to complying with a similar timeline for accelerated implementation;

Main topics/differences: **Categories**

Old TEN-E

Revised TEN-E

Eligible infrastructure categories:

- **High-voltage overhead lines**
(cables ≥ 150 kV; lines ≥ 220 kV, Δ GTC ≥ 500 MW)
- **Electricity storage** (U ≥ 110 kV, 225 MW, 250 GWh/y)
- **Smart electricity grids** (U ≥ 10 kV, TSOs and DSOs from 2 MS, to satisfy all criteria, 50 000 users, consumption 300 GWh/y, 20% covered by RES)
- **Gas pipelines, storage, LNG/CNG, other equipment**
- **Oil pipelines, pumping stations and storage**
- **Carbon-dioxide pipelines, facilities for liquefaction and storage**

- **High-voltage overhead lines**
(cables ≥ 150 kV; lines ≥ 220 kV, Δ GTC ≥ 500 MW, **decreases isolation and Δ GTC ≥ 200 MW**)
- **Electricity storage** (U ≥ 110 kV, 225 MW, 250 GWh/y)
- **Smart electricity grids** (U ≥ 10 kV, TSOs and/or DSOs from 2 MS, to satisfy **at least two** criteria, 50 000 users, consumption 300 GWh/y, 20% covered by RES)
- **Offshore grids** (cables ≥ 150 kV; lines ≥ 220 kV)
- **Smart gas grids, Hydrogen pipelines, storage, other equipment and facilities, Electrolysers** (at least 50 MW of capacity)
- **Carbon-dioxide pipelines, facilities for liquefaction and storage**

Main topics/differences: Smart grids (electricity)

Old TEN-E

Criteria for smart grid candidate PCI (contributes to all)

- integration and involvement of network users with new technical requirements with regard to their electricity supply and demand;
- efficiency and interoperability of electricity transmission and distribution in day-to-day network operation;
- network security, system control and quality of supply;
- optimised planning of future cost-efficient network investments;
- market functioning and customer services;
- involvement of users in the management of their energy usage;

Revised TEN-E

Criteria for smart grid candidate PCI / PMI (contributes to **at least two**)

- security of supply, including through efficiency and interoperability of electricity transmission and distribution in day-to-day network operation, avoidance of congestion, and integration and involvement of network users;
- market integration;
- network security, **flexibility** and quality of supply;
- smart sector integration, through linking various energy carriers and sectors, or in a wider way, favouring synergies and coordination between the energy, transport and telecommunication sectors;

Main topics/differences: **Hydrogen**

Old TEN-E

Criteria for hydrogen projects

- No provisions

One of the eligibility criteria: any equipment or installation allowing for hydrogen or hydrogen-derived fuels use in the transport sector within the TEN-T core network identified in the Contracting Parties in accordance with the rules applicable to the TEN-T infrastructure development in accordance with the Treaty Establishing the Transport Community.

Revised TEN-E

Criteria for hydrogen projects

Article 4(3)(d)

*The project contributes significantly to **sustainability**, including by reducing greenhouse gas emissions, by enhancing the deployment of renewable or low carbon hydrogen, with an emphasis on hydrogen from renewable sources in particular in end-use applications, such as hard-to-abate sectors, in which more energy efficient solutions are not feasible, and supporting variable renewable power generation by offering flexibility, storage solutions, or both, and the project contributes significantly to at least one of the following specific criteria:*

- **market integration**, including by connecting existing or emerging hydrogen networks of MSs, or otherwise contributing to the emergence of an Union-wide network for the transport and storage of hydrogen, and ensuring interoperability of connected systems;
- **security of supply and flexibility** [...];
- **Competition** [...];

Main topics/differences: **Electrolysers**

Old TEN-E

Criteria for electrolysers

- No provisions

Revised TEN-E

Criteria for electrolysers (contributes to all)

Article 4(3)(e)

- **sustainability**, including by reducing greenhouse gas emissions and enhancing the deployment of renewable or low-carbon hydrogen in particular from renewable sources, as well as synthetic fuels of those origins;
- **security of supply**, including by contributing to secure, efficient and reliable system operation, or by offering storage, flexibility solutions, or both, such as demand side response and balancing services;
- **enabling flexibility services** such as demand response and storage by facilitating smart energy sector integration through the creation of links to other energy carriers and sectors;

Main topics/differences: **Smart Gas Grids**

Old TEN-E

Smart gas grid projects

- No provisions

Revised TEN-E

Smart gas grid projects (contributes to at least one criteria)

Article 4(3)(f)

*the project contributes significantly to sustainability by ensuring the integration of a plurality of **low-carbon and particularly renewable gases**, including where they are locally sourced, such as biomethane or renewable hydrogen, into the gas transmission, distribution or storage systems... and following specific criteria:*

- ***network security and quality of supply [...];***
- ***market functioning and customer services;***
- ***facilitating smart energy sector integration through the creation of links to other energy carriers and sectors and enabling demand response.***

Main topics/differences: **Monitoring**

Old TEN-E

Revised TEN-E

Annual report

Project promoters shall submit an annual report to the national competent authority and the Agency/respective Group by 31 March of each year following the year of inclusion on the list.

3 months after that the Agency submits a consolidated report to the Groups.

Project promoters shall submit an annual report to the national competent authority by **31 December** of each year following the year of inclusion on the list.

By **28 February** of each year the competent authorities shall submit the report to the Agency and to the relevant Group.

By **30 April** of each year in which a new Union list should be adopted, the Agency shall submit to the Groups a consolidated report.

Main topics/differences: **Analysis/calculations**

Old TEN-E

Revised TEN-E

Scenarios for TYNDP, identification of infrastructure gaps

- No provisions

Two chapters added:

- Scenarios for the ten-year network development plans
- Infrastructure Gaps Identification

Offshore grids

- No provisions

Two chapters added:

- Offshore grid planning
- Offshore grids for renewable energy cross-border cost sharing

Main topics/differences: **Financing**

Old TEN-E

Revised TEN-E

Eligibility of projects for Union financial assistance

- Electricity, gas and CO2 projects with PCI label were eligible for Union financial assistance for studies
- Electricity and gas projects (except PSHPP) were eligible for Union financial support for works under specific conditions:
 - CBA positive (evidence of significant positive externalities, such as security of supply, solidarity or innovation)
 - CBCA decision
 - Commercially not viable

Adoption for the EnC:

- Pre-Accession Assistance (IPA);
- Neighbourhood Development and International Cooperation Instrument (NDICI);
- Ukraine facility;

- **All** projects with PCI label are eligible for Union financial assistance for studies
- PCIs (**except electrolysers but with PSHPP**) eligible for Union financial support for works under specific conditions:
 - CBA positive (evidence of significant positive externalities, such as security of supply, **flexibility**, solidarity or innovation)
 - CBCA decision
 - Commercially not viable

Eligibility of PMI projects to approach CEF: **yes** under specific conditions

- To comply with certain provision of the CEF Regulation (2021/1153)
- To have positive CBA, CBCA, commercially not viable
- To contribute significantly to Union's overall energy and climate policy objectives



THANK YOU
FOR YOUR ATTENTION

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