



How does the European Commission promote grid expansion?

#TENERegulation

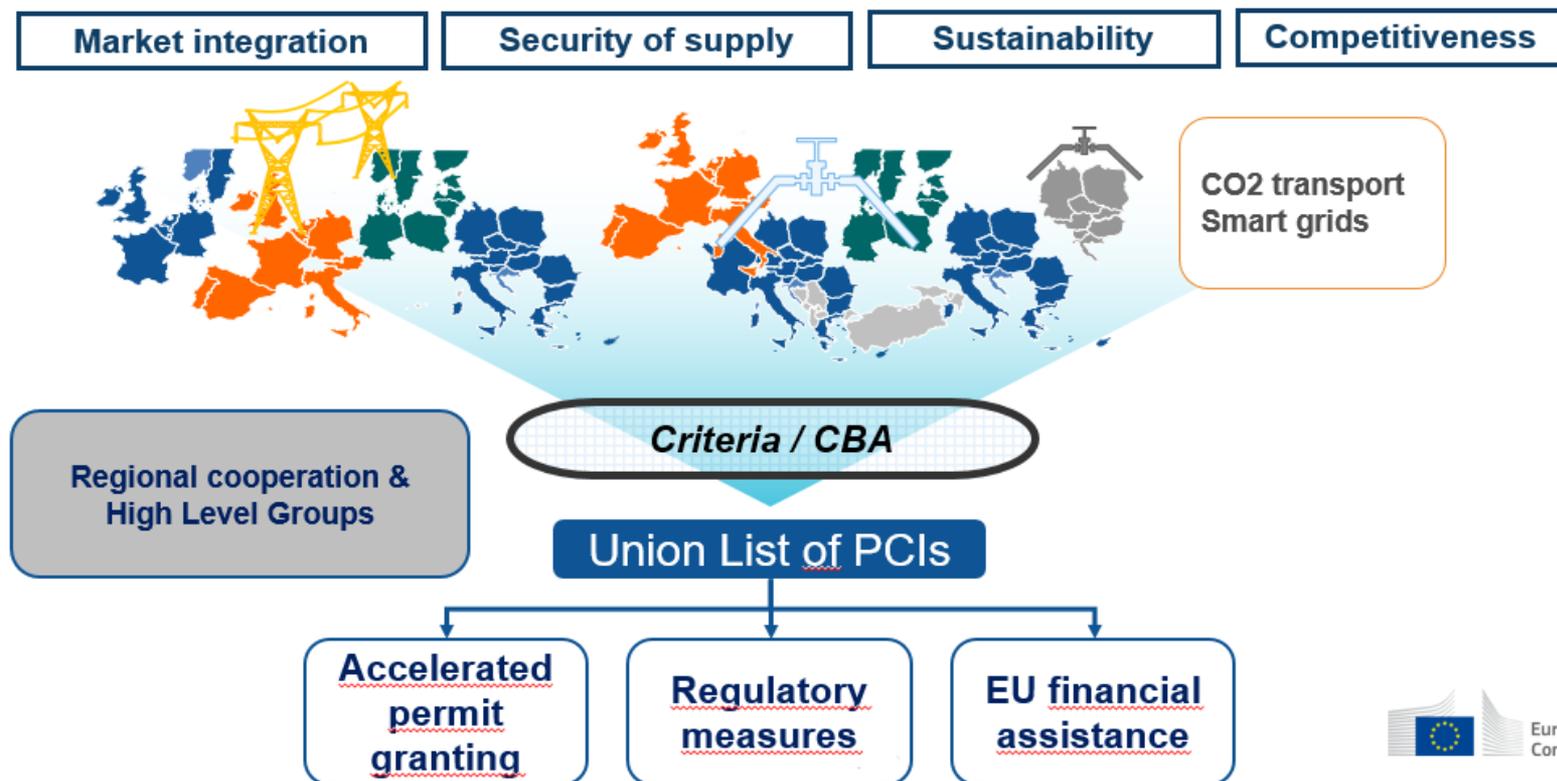
#EUGreenDeal

Oana Langa, Infrastructure and regional cooperation,
Directorate-General for Energy

Connecting Energies: Training Series for European Civil Society,
12 October



The trans-European energy networks policy



The TEN-E Regulation

... Increased interconnections and effectively improved the integration of Member States' networks, which in turn made the EU energy market more integrated and competitive than it was before the application of the TEN-E Regulation;

... is essential for EU's energy security by

- boosting further electrification
- transitioning to renewable gases

and thus accelerating the European Green Deal.

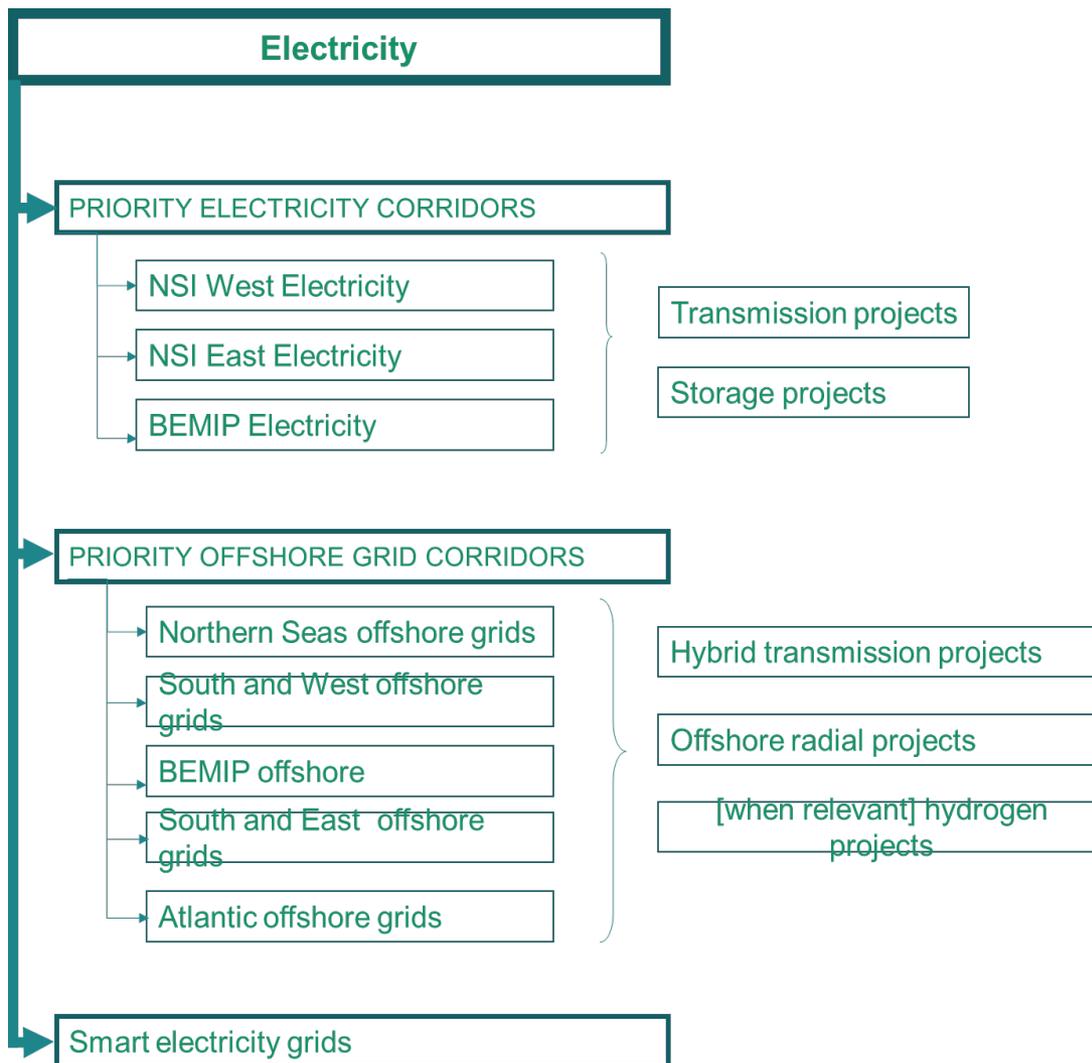
Revised EU cross-border planning rules

Co-legislators reached a political agreement on a revised TEN-E Regulation on 15 December covering:

- New and updated infrastructure categories and a reconfiguration of priority corridors and areas;
- Dedicated offshore planning provisions;
- No natural gas under TEN-E*, but support for hydrogen, electrolysers and local low-carbon and renewable gases;
- Enhanced regulatory and permitting provisions to accelerate PCI implementation;
- Strengthened cross-sectoral energy infrastructure planning;
- Projects of Mutual Interest with third countries

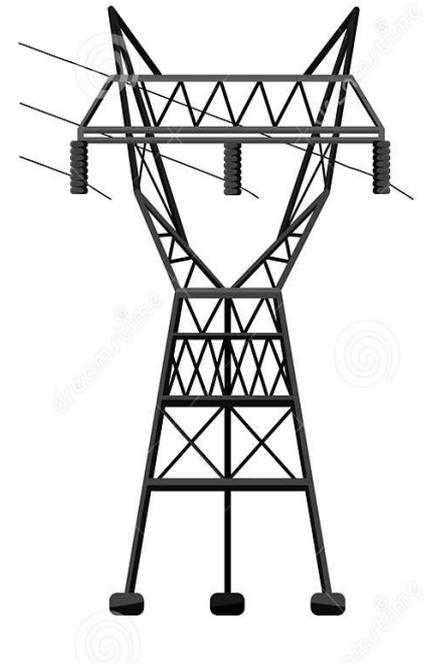
Entered into force in June 2022.

Increased focus on electricity infrastructure



Electricity transmission (2/2)

- Rules and indicators for assessing cross-border impacts:
 - Increase in the grid transfer capacity, or the capacity available for commercial flows, at the border by at least 500 Megawatt compared to the situation without commissioning of the project,
 - Decrease in energy isolation of non-interconnected systems in one or more Member States and increases the cross-border grid transfer capacity at the border between two Member States by at least 200 MW



Electricity transmission (1/2)

- No substantial changes for “traditional” electricity transmission projects;
- Eligible projects:
 - high and extra-high voltage overhead transmission lines with a voltage of 220 kV or more (crossing the border or in a MS with cross-border impact)
 - underground and submarine transmission cables, if they have been designed for a voltage of 150 kV or more.

The existing CBA methodology continues to be used with some modifications and improvements possible.

Electricity storage

No substantial changes to the scope of storage projects nor the cross-border impacts:

***energy storage facilities**, in individual or aggregated form, used for storing energy on a permanent or temporary basis in above-ground or underground infrastructure or geological sites, provided they are directly connected to high-voltage transmission lines and distribution lines designed for a voltage of 110 kV or more. For Member States and small isolated systems with a lower voltage overall transmission system, those voltage thresholds are equal to the highest voltage level in their respective electricity systems.*

***for electricity storage**, the project provides at least 225 MW installed capacity and has a storage capacity that allows a net annual electricity generation of 250 GW-hours/year.*

Support for offshore renewable grid development



- The TEN-E operationalizes the ambitions in the EU Strategy for Offshore RES by including:
 - New infrastructure categories for hybrid offshore grid projects and offshore radial lines to implement five offshore priority corridors across the EU; where appropriate, hydrogen projects can also be included;
 - Offshore grid planning provisions;
 - Enhanced regulatory tools;
 - Permitting provisions to accelerate implementation to facilitate scale-up of offshore grids to the target 300 GW in 2050;

Hybrid offshore grid projects and offshore radial lines under its scope

Falling under the “electricity transmission category”, offshore hybrids and radial lines are defined as following:

*any equipment or installation falling under category referred to in point (a) enabling transmission of offshore renewable electricity from the offshore generation sites, (**energy infrastructure for offshore renewable electricity**).*

*any equipment or installation falling under category referred to in point (a) having dual functionality: interconnection and offshore grid connection system from the offshore renewable generation sites to two or more Member States and third countries participating in projects of common interest and projects of mutual interest, including the onshore prolongation of this equipment up to the first substation in the onshore transmission system as well as any offshore adjacent equipment or installation essential to operate safely, securely and efficiently, including protection, monitoring and control systems, and necessary substations if they also ensure technology interoperability inter alia interface compatibility between different technologies, (**offshore grids for renewable energy**).*

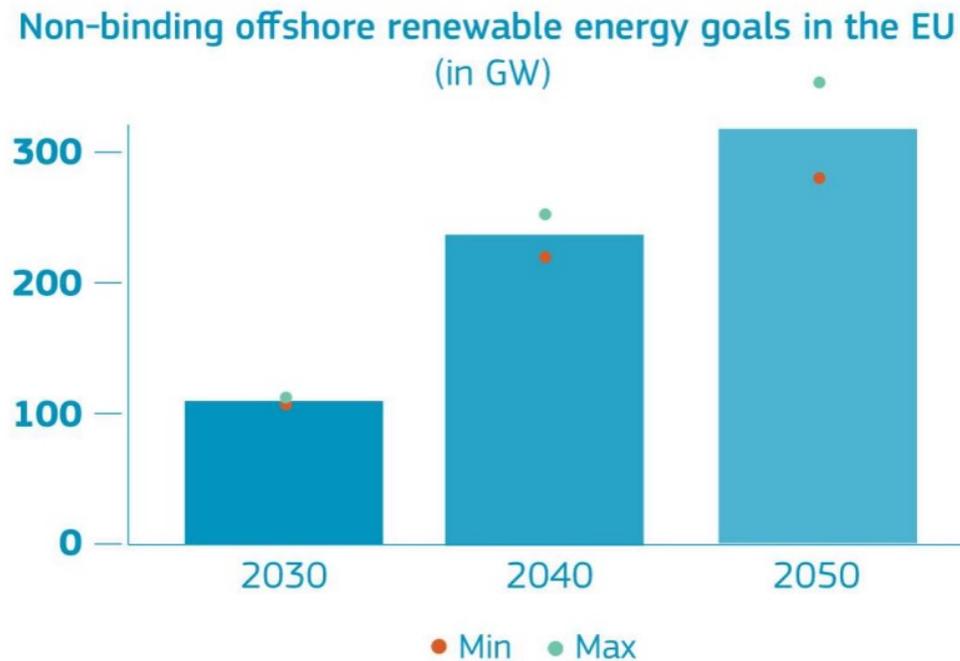


Rules and indicators for cross-border impact of offshore radial lines

***For offshore renewable electricity transmission:** the project is designed to transfer electricity from offshore generation sites with capacity of at least 500MW and allows for electricity transmission to onshore grid of a specific Member State, increasing the volume of renewable electricity available on the internal market.*

The project shall be developed in areas with low penetration of offshore renewable electricity and shall demonstrate a significant positive impact on the Union's 2030 targets for energy and climate and its 2050 climate neutrality objective and shall contribute significantly to the sustainability of the energy system and market integration while not hindering the cross-border capacities and flows.

January 2023: Non-binding offshore goals for the EU



Smart electricity grids

Updated provisions in the revised TEN-E aiming at supporting scale-up of smart electricity grids through:

- Simplified selection criteria to reflect technological development, digitalisation and cybersecurity in transmission and distribution network;
- Streamlined cross-border impact;
- Clarification of the categories of eligible promoters:
 - TSOs from two or more Member States
 - TSOs and DSOs from two or more Member States
 - DSOs from two or more Member State, as long as interoperability is ensured.

Rules and indicators for cross-border impact of smart electricity grids

*for smart electricity grids, the project is designed for equipment and installations at high-voltage and medium-voltage level, **and involves TSOs, TSOs and DSOs, or DSOs from at least two Member States.** The project may involve only DSOs provided that they are from at least two Member States and provided that **interoperability is ensured.** The project shall satisfy **at least two of the following criteria:** it involves 50 000 users, generators, consumers or prosumers of electricity, it captures a consumption area of at least 300 GW hours/year, at least 20 % of the electricity consumption linked to the project originates from variable renewable resources, or it decreases energy isolation of non-interconnected systems in one or more Member States. **The project does not need to involve a physical common border.** For projects related to small isolated systems as defined in Article 2, point (42), of Directive (EU) 2019/944, including islands, those voltage levels shall be equal to the highest voltage level in the relevant electricity system;*

1st PCI/PMI process

June 2022

Oct 2022

Nov 2022

Jan 2023

June 2023

RG rules of
internal
organisation

PCIs
submission
s for all the
categories
of projects

Candidate
projects [NRAs
+] public
consultation –
3 months

Draft
PCIs lists

For all
categories

electricity

Specific per
categories

CO2

...



European
Commission

Transparency and participation in the PCI process

The **TEN- E Regulation** establishes a **specific legislative framework** on the process preparation of the **Commission delegated act setting up the list of projects of common European interest**. This binding framework includes the setting up of Regional Groups as well as rules on their memberships, potential invitees, public consultation and decision making process.

The PCI process is an inclusive two-year regional and multi-stakeholder selection process:

Each Group shall invite, as appropriate, the organisations representing relevant stakeholders, including representatives from third countries, and, where deemed to be appropriate, directly the stakeholders, including producers, DSOs, suppliers, consumers, local populations and Union-based organisations for environmental protection, to express their specific expertise. Each Group shall organise hearings or consultations where relevant for the accomplishments of its tasks.

Meetings are webstreamed and materials are available on CIRCABC:

As regards the meetings of the Groups, the Commission shall publish, on a platform accessible to stakeholders, the internal rules, an updated list of member organisations, regularly updated information on the progress of work, meeting agendas, as well as meeting minutes, where available. The deliberations of the decision-making bodies of the Groups and the project ranking in accordance with Article 4(5) shall be confidential. All decisions concerning to the functioning and work of the regional groups shall be made by consensus between the Member States and the Commission.

How does the TEN-E support grid acceleration?

- By selecting necessary projects with highest benefit for the EU that address infrastructure bottlenecks
- Lower permitting duration
- Regulatory framework for splitting costs according to their benefits
- Transparency and consultation standards
- Monitoring to inform adequate political and technical support
- Eligibility for financing under CEF as a last resort

Consultation of stakeholders and transparency

Public participation and transparency in PCI implementation: cornerstones of the TEN-E policy;

- Member states and NCAs must publish a manual of procedures;
- Project promoters have to:
 - **conduct at least one public consultation** to inform stakeholders and help identify the most suitable location or routing for the project;
 - **establish and regularly update a website** with information on consultations timeline, progress, and outcomes and how it was taken them into account;
- Open access to information such as the economic and social benefits, costs or environmental impact of projects and early consultation of those affected was sought to address concerns and increase acceptance of PCIs.

How can the Commission help increase public trust, awareness and acceptance of PCIs?

- By enforcing the provisions of the TEN-E Regulation on **transparency and public participation** (including the creation and update of a **Transparency Platform for PCIs**)
- By carrying out **communication** campaigns, studies and useful communication tools and strategies to support project promoters in their engagement activities and promoting project benefits (Brochures, flyers, Press Releases, DG ENER website, replies to citizens enquiries/petitions etc.);
- By facilitating **exchange of best practices**;
- By supporting **regulatory initiatives** to building locally accepted PCIs.

Rules for eligibility under CEF for PCIs (1/2)

- As a general rule, all PCIs are eligible in the form of grants for studies and financial instruments;
- PCIs are eligible for grants for works only if:
 - Project CBA shows evidence of positive externalities (security of supply, system flexibility, solidarity or innovation);
 - The project received a cross-border cost allocation decision;
 - The project cannot be financed by the market or through the regulatory framework;

Rules for eligibility under CEF for PCIs (2/2)

- Non-eligible for financing under CEF for works: electrolyzers;
- **New:** hydro-pumped storage;
- Equal treatment for PMIs as regards eligibility under CEF as for PCI, under the conditions set out in Article 5(2) of CEF Regulation (EU) 2021/1153.

The Energy Infrastructure team

ener-c4-projects@ec.europa.eu
Infrastructure (europa.eu)