

The TEN-E regulation and the upcoming Connecting Europe Facility (CEF)

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About half of the estimated infrastructure investment need of 20 billion € per year is expected to be hindered by

- Permit granting delays
- Regulatory obstacles
- Financing difficulties



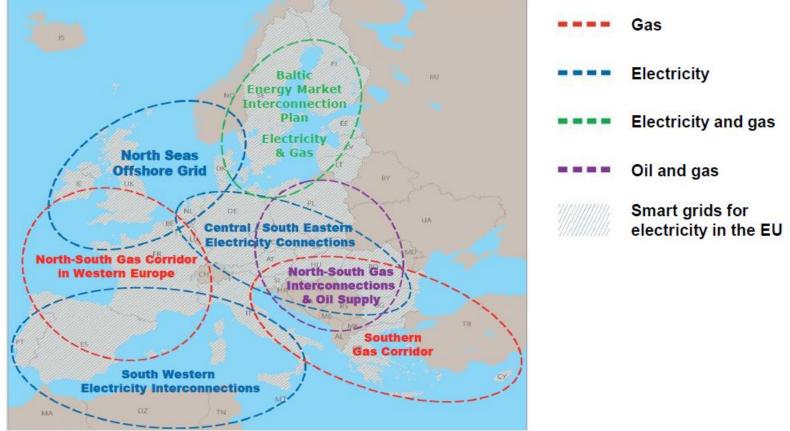
Infrastructure targets

- **10% electricity interconnections** (2002 Barcelona)
- End energy isolation (upcoming CEF)
- N-1 and reverse flows in gas (2010 SoS regulation)

347/2013 Priority corridors



12 Priority corridors



Source: European Commission

347/2013 PCI selection

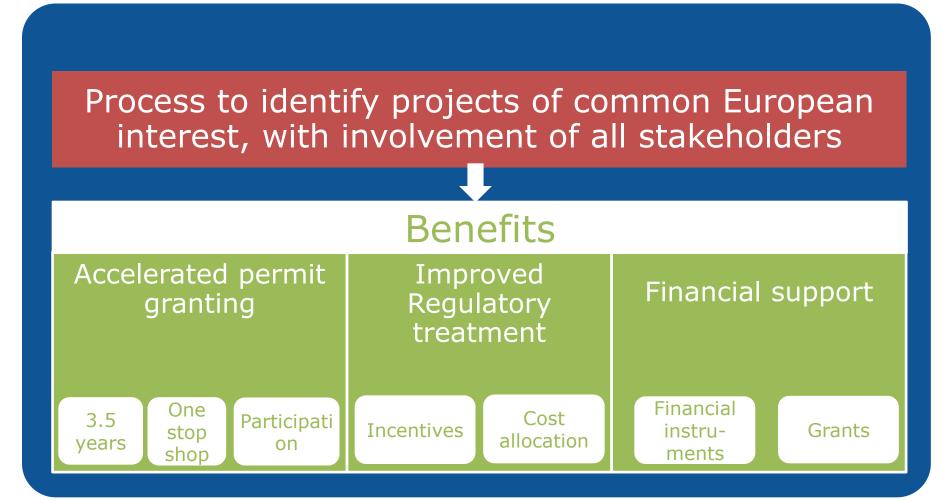


Process of PCI selection

ENTSOs (<i>G/E</i>)	Project promoters	NRAs (<i>G/E</i>)	Regional Groups	ACER (<i>G/E</i>)	European Commission
 Prepare TYNDPs for gas and electricity 	 Submit projects Criteria CBA 	 Check application of criteria Cross- border relevance 	 Evaluate projects Rank Adopt regional lists 	 Opinion Cross- regional consistency 	 Adopt Union-wide list of projects of common interest (no ranking)

347/2013 PCI benefits







Definition: Smart Grid projects

"Any equipment or installation, both at transmission and medium voltage distribution level, aiming at **two-way digital communication**, **real-time** or close to real-time, interactive and intelligent monitoring and **management** of electricity generation, transmission, distribution and consumption within an electricity network in view of developing a network **efficiently integrating the** behaviour and actions of all users connected to it - generators, consumers and those that do both in order to ensure an economically efficient, sustainable electricity system with **low losses** and

high quality and security of supply and safety."

Annex II.1(e) of Regulation (EU) No 347/2013



A smart grid project has a *significant* crossborder impact (can become a PCI) only if:

- high-voltage & medium voltage $\geq 10 \text{ kV}$
- min 50.000 users
- consumption area \geq 300 GWH/year
- 20% renewable generation variable in nature
- 4 project partners = involves transmission and distribution system operators from at least two Member States



Smart grid projects can become a PCI, if they contribute to all of the following:

- ✓ Integration of network users
- Transmission efficiency and interoperability
- Network security, system control and quality of supply
- ✓ Market functioning
- ✓ Users' involvement in energy usage



Smart Grid PCIs are eligible for grants for works, if they

✓ CBA showing positive externalities

Have a business plan showing lack of commercial viability

Grants for studies and financial instruments are available for all PCIs

347/2013 Grant amounts

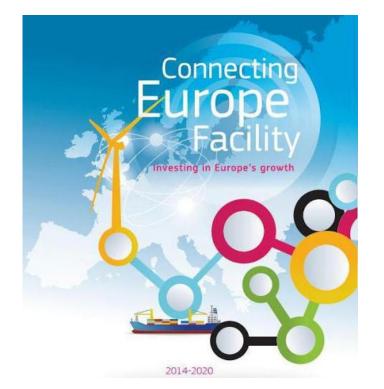


Grants for works

- Financial aid shall not exceed 50% of the eligible cost.
- May be increased to a maximum of 75% for actions which
 - provide a high degree of regional or Union-wide security of supply, or
 - strengthen the solidarity of the Union or
 - comprise highly innovative solutions.

CEF Overview





Affording huge energy infrastructure investments

Promoting the objectives of decarbonisation taking into account the specificities of disadvantaged regions

Supporting TSOs financing possibilities for **projects not commercially viable** with significant **positive externalities**

Smoothing network tariffs disproportions and softening the negative social impacts of nonintegration.

The Connecting Europe Facility supports investments in trans-European energy networks for socialeconomically beneficial investments.





Budget distribution Connecting Europe Facility 2014-2020

Estimation only current prices	2014	2015	2016	2017	2018	2019	2020	Total
Grants	365.7	436.8	664.5	766.8	826.2	960.0	1,192.4	5,212.4
Financial instruments	40.6	48.5	73.8	85.2	91.8	106.7	132.5	579.2





The three-step logic for PCIs

- 1. The market should have the priority to invest
- 2. If investments are not made by the market, **regulatory solutions should be explored**, if

necessary the relevant regulatory framework should be adjusted, and the correct application ... should be ensured.

3. Where the first two steps are not sufficient to deliver the necessary investments in PCIs, Union financial assistance could be granted..."



How to allocate the funds ...

The amount of financial assistance to be granted to the actions selected shall be modulated based on a

- cost-benefit-analysis of each project,
- the availablility of Union budget resources,
- and the need to maximise the leverage of Union funding.



Priority for financial instruments

- "In the energy sector, the budget envisaged should as a priority be allocated in a form of financial instruments..."
- "... the Commission should endeavour to give priority to the use of financial instruments..."
- "... in many cases sub-optimal investment situations and market imperfections may be more efficiently tackled by financial instruments than by grants."
- "Energy project promoters should be encouraged to explore the possibility of using financial instruments before applying for grants for works."





Setting priorities among PCIs

- "The first two work programmes ... aiming at ending energy isolation and eliminating energy bottlenecks."
- ... ensure sectoral diversification ... as well as ... gradual geographical diversification ..."
- "... concentration on the projects with the highest European added value is necessary to achieve the desired impact."
- "...public financing is needed for projects required from a security of supply or solidarity perspective..."
- "... provide for **alternative supply or transit routes** and source of energy."





- High standards for Smart Grid projects to become a project of common interest
- ✓ Necessary Smart grid project configuration untypical
- Connecting Europe Facility does not put prioritisation on Smart Grid PCIs in 2014 and 2015
- ✓ Grants for works are possible, but full funding is unlikely
- Sufficient regulatory incentives are an important prerequisite
- ✓ So far only 2 Smart Grid PCIs, but potential for more ...