



Position on

Revision of the Trans-European Energy Networks Regulation (TEN-E) and Infrastructure Governance

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ACER-CEER Position on revision of the Trans-European Energy Networks Regulation (TEN-E) and Infrastructure Governance

Key messages

ACER issued two Position Papers on 22 June 2016¹ and on 31 May 2017² about possible improvements of the European framework for energy infrastructure development, including the Trans-European Energy Networks (TEN-E) Regulation. The present Position Paper develops proposals on issues where ACER and CEER, based on the experience of national regulatory authorities (NRAs), clearly see that legislative changes could improve the planning and implementation of electricity and gas infrastructure.

ACER and CEER invite the Commission to consider that improvements to the TEN-E regulation may not suffice to support the realisation of all the different types of assets needed to achieve the decarbonisation targets. The TEN-E has been conceived around the specific needs of network infrastructures and it may not represent the most suitable tool to support new assets and infrastructures (potentially even non-regulated and non-TSO-promoted): the limited number of smart grids, storage units and LNG facilities having obtained the PCI status during the last years proves that this Regulation performs better for the type of assets it had been designed for.

As a general principle, in the context of the Green Deal, ACER and CEER recommend revising the energy infrastructure categories to better reflect the need for addressing energy system decarbonisation. In this regard, for new sustainable³ infrastructure categories to be under the umbrella of the TEN-E Regulation, it would be necessary to develop specific criteria to assess them.

1. Area 1 – Improving Infrastructure Development Governance

- Scenarios for network development planning should be developed jointly for electricity and gas, in a neutral way;
- Most of the problems that arose during the past implementation of the Regulation could be ascribed to the regulatory role inappropriately attributed to the ENTSOs, despite their conflict of interest;
- ACER should be conferred the powers to approve the ENTSOs' proposal on the cost benefit analysis (CBA) methodology, and to request amendments by the ENTSOs, or directly amend it after consulting the ENTSOs;

¹ "Delivering Efficient European Networks: Position of the Agency for the Cooperation of Energy Regulators on improving the efficiency of the European framework for energy infrastructure development", 22 June 2016. http://www.acer.europa.eu/official documents/position_papers/position%20papers/acer%20position%20on%20eip.pdf

² "Position of the Agency on Potential Improvements to the Energy Infrastructure Package", 31 May 2017. https://www.acer.europa.eu/Official documents/Position Papers/Position%20papers/ACER%20Position%20on%20Potential%20Improvements%20to%20the%20EIP.PDF

³ In this context ACER/CEER would like to refer to the proposed Taxonomy Regulation spelling out criteria for sustainable financing. Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on the establishment of a framework to facilitate sustainable investment - COM/2018/353 final

- ACER should be conferred the powers to issue binding guidelines on the major infrastructure-related deliverables: the Scenario Development Report, the CBA Methodology and the Ten-Year Network Development Plan (TYNDP);
- ACER should be empowered to issue binding amendment requests on the draft TYNDP;
- National Regulatory Authorities should be empowered to approve and to amend the national network development plans.

2. Area 2 – Principles for PCI scope

- The energy infrastructure categories should be simplified;
- All TEN-E groups should be brought to a European dimension, serving resource efficiency and transparency and improving the process results;
- The TEN-E Regulation is an instrument to deal with trans-European energy networks. As such, the PCI process is not the most appropriate tool to address small-scale projects;
- The current criteria to identify the significant cross-border impact of a project should be improved.

3. Area 3 – Improving the TEN-E processes

- Sustainability criteria have to get the priority focus in the selection of projects of common interest (PCI), in particular for gas projects;
- For the TEN-E Regulation, besides the project promoters, the role of other involved parties like National Regulatory Authorities and other organisations which act in the interest of society should be emphasized;
- NRAs should be entitled to reject an investment request if the project fails to provide positive net benefits at EU level;
- PCIs in an advanced project status should be distinguished from less advanced PCIs, and TEN-E mechanisms should be differentiated according to the advancement status;
- ACER's powers to obtain information on all TYNDP aspects should be extended to include non-TSO project promoters;
- The currently yearly frequency of the ACER PCI monitoring report should change to once per PCI list;
- Fundamental project information (i.e. commissioning date, capacity increase, project status and project cost) shall be made publicly available;
- The unit investment cost activity should be regularly repeated (e.g. every 4 years);
- The TEN-E Annex(es) on the CBA methodologies should be concise, providing only the main principles of the CBA;
- Risk-related incentives should be dismissed;
- ACER and CEER see Article 14(2)(a) as the key criterion for CEF grants for works and recommend considering a wider spectrum of benefits;
- The sustainability dimension should be explicitly added in the list of positive externalities considered for CEF grants for works;
- The "lack of commercial viability" criterion should be dismissed. In some cases, a scattered distribution of benefits across countries could justify the request for CEF support;

• The sequential step between CBCA and CEF grants for works should be revised, allowing conditional CBCA decisions and a second (final) decision to be taken after a grant decision is made.

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Background and purposes of infrastructure regulations

The Third Energy Package⁴, the TEN-E Regulation⁵ and the Clean Energy for All Europeans Package⁶ aim at facilitating the development of the European energy networks. ACER and CEER believe that there is room and need for further improving the efficiency of energy network development. Delivering on the objectives of the Energy Union and of the Green Deal⁷ will require major investments in networks.

ACER and National Regulatory Authorities (NRAs) are significantly involved in the implementation of the TEN-E Regulation and of other EU provisions regarding infrastructure investments, such as the Ten-Year Network Development Plans (TYNDPs).

Based on this involvement, which includes the preparation of several monitoring reports⁸ on TYNDPs, on projects of common interest (PCIs), on cross-border cost allocation decisions, on risk-related incentives and other contributions by opinions, recommendations and papers, ACER and CEER observe that:

- The process of selection of projects of common interest is relatively consolidated;
- Still, there is no evidence that the identified priorities are optimally set, with most of the TYNDP projects being included in the PCI lists. The major instrument of project prioritisation set out by the TEN-E Regulation (the cost benefit analysis methodology applied to both TYNDPs and PCIs) is to some extent applied in the electricity sector, while it seems sometimes disregarded in the gas sector;
- The ACER and NRA inputs to the cost benefit analysis (CBA) methodologies, the TYNDP-based assessment of specific projects and the process of selecting PCIs are not sufficiently taken into account;
- There is no evidence that major barriers to the development of infrastructures with cross-border impact are sufficiently tackled: a significant number of projects continues to be delayed by reasons exogenous to the project promoters.
- In many cases, cross-border cost allocation decisions did not lead to transferring cost coverage between beneficiary countries but seemed to aim at fulfilling one of the requirements for applications to Connecting Europe Facility (CEF) co-financing;
- The few proposals by transmission system operators and decisions taken by NRAs on risk-related incentives⁹ seem to suggest that the national regulatory frameworks sufficiently cover the risk associated with infrastructure development.
- ACER experience in monitoring PCIs and TYNDPs shows that promoters' inputs sometimes feature low accuracy/high inconsistency, partly due to different reporting requirements for different processes and inappropriate promoters' claims for

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⁴ In this paper, "Third Energy Package" refers to Directives 2009/72/EC and 2009/73/EC, Regulations (EC) No 714/2009, (EC) No 715/2009 and (EC) No 713/2009.

⁵ Regulation (EU) No 347/2013.

⁶ In this paper, "Clean Energy for all Europeans Package" mainly refers to Directive (EU) 2019/944 and Regulations (EU) 2019/942 and (EU) 2019/943.

⁷ Communication from the Commission, The European Green Deal, COM(2019) 640 final, 11 December 2019.

⁸ Including a recent (still unpublished) ACER-NRA work to monitor the first experiences of integrated and coordinated planning. This work shows that the current activities are mainly limited to the coordination of scenario assumptions in a few countries.

⁹ Between 2013 and 2018, only 6 requests have been made by promoters for the granting of project-specific risk mitigating incentives under Article 13, of which 2 in electricity (2 in the Netherlands) and 4 in gas (1 in the Czech Republic, 1 in Slovakia and 2 in Lithuania). One request in electricity and 3 in gas eventually led to the granting of project-specific incentives. In addition to the Dutch, Lithuanian and Slovak NRAs, the Belgian NRA granted project-specific incentive measures to a non-PCI electricity project.

confidentiality of some information, and that promoters ask to reduce the reporting burdens to the extent possible.

Consequently, ACER recommends, on the one hand, improving the development of TYNDPs and, in particular, the way in which long-term scenarios are designed. On the other hand, the distribution of responsibilities and prerogatives must evolve to give greater weight to the regulators, as independent administrative authorities, in the evaluation and validation of projects.

In this perspective, ACER and CEER reflections and proposals follow key purposes of TEN-E Regulation and other infrastructure-related provisions, in line with European energy policy objectives, including the Energy Union and the Green Deal:

- Identify and unlock projects with a clear value for the society;
- Avoid some project promoters going ahead with projects which have low value for EU network users and citizens;
- Improve the efficiency of processes relating to infrastructure planning and PCIs.

1 Improving Infrastructure Development Governance

1.1 Scenarios for network development planning

ACER and CEER see scenario development as a critical step in long-term infrastructure planning. Scenarios are meant to cope with future uncertainties and are supposed to reflect the energy policy goals and orientations.

Currently, the scenario development process is run by the ENTSOs, taking into account stakeholder input to the extent they see fit. There is no regulatory approval or possibility for ACER to request amendment of the scenarios. The Agency produces a non-binding opinion to help guide the scenario development process, which, however, so far had limited impact on the adopted scenarios.

Looking back at TYNDPs over the past decade, ACER has repeatedly underlined the shortcomings of the ENTSOs' approach to scenario building in terms of stakeholder involvement and transparency. The ENTSOs deployed methodological orientations that clearly supported the development of new infrastructure without providing counterfactuals allowing to evaluate scenarios and associated outputs.

Scenarios have to be neutral from any interest in the energy sector that could systematically favour some specific options against others. In the context of the energy transition, ambitions in terms of reduction of the environmental footprint of energy supply and consumption are very high. Technological neutrality is thus crucial to effectively investigate various pathways to our future energy systems and to ensure trust of all stakeholders in the process of European network development.

A second aspect is the accuracy of the representation of energy systems, namely the combination of different components in terms of supply and consumption. Accuracy refers to technologies but also to time granularity, including issues relating to non-controllable energy sources, peak shaving and energy storage. In this respect, scenario development has to be an open process gathering expertise from various stakeholders.

In sum, ACER and CEER insist on two aspects: neutrality of scenario development and structure/content of scenarios, which must have a scientific basis, without inherent bias towards infrastructure investment and with an increasing attention to energy transition and sustainability.

1.1.1 Joint scenarios for electricity and gas are to be developed in a neutral way

Scenarios are an important pillar of network development. To help overcome any perception of bias in their development, scenarios should be elaborated in a way that guarantees that they do not reflect any partial interest of project promoters. With the current governance of scenario development, avoiding criticism of overestimation of the benefits of new investments is a difficult, if not impossible task.

Scenarios should depict a coherent evolution of the European energy system, therefore the scenarios ¹⁰ should be jointly developed for both sectors. The requirement in Annex V(2) of Regulation (EU) 347/2013 (compatible data sets for electricity and gas) should be strengthened.

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¹⁰ As currently defined in Annex V, (1)(a)(b) of the TEN-E Regulation.

1.1.2 Scenario development should follow binding guidelines

Scenarios serve TYNDP simulations and associated tasks such as CBAs. Their design should be consistent with what is required for ENTSOs to fulfil their duties. Thus, **the scenario development process should follow binding guidelines**, including general provisions and technical guidance. The timing of the first edition of these guidelines should be defined by law, with later updates, if required.

The scenario binding guidelines to follow when developing the scenarios should encompass:

- A definition of the inputs (variables that describe scenarios, including policy objectives for the long-term) and outputs, their granularity and which entities should take part in providing inputs (e.g. European Commission, Member States through National Energy and Climate Plans, transmission and distribution system operators);
- Main procedural aspects such as mandatory milestones and stakeholder consultation procedures, including the public and specific entities to ensure neutrality and the provision of most up-to-date inputs;
- Defining which time-horizons (study years) should be covered;
- A comparison of the evolution of the main outputs of the new scenarios vs. the last ones;
- The market and network data to be made publicly available, and other transparency requirements.

In case the European legislators prefer that the ENTSOs remain in charge of scenario development, ACER and CEER consider that this would reinforce the need for ACER drafting the binding guidelines. ACER should also get a clear role in monitoring their application.

1.2 ACER scrutiny on methodologies for cost benefit analysis

CBAs are a cornerstone of the PCI selection and treatment process. A range of decisions depend on them, including with respect to cross-border cost allocation decisions. Insufficient robustness of CBAs undermines the legitimacy of PCI lists and forces project promoters and NRAs to conduct specific studies when submitting and processing investment requests. While specific analyses are necessary since several details are not covered by a pan-European method, methodological robustness and transparency need to be reinforced. Consistency between the methods applied for gas and electricity also needs to be improved.

ACER should be requested to elaborate guidelines for the development of the CBA methodology. The aim is to provide the ENTSOs with clear directions on which aspects to focus on (e.g. monetisation and quantification, security of supply, sustainability, etc.), building on medium- and long-term recommendations of the previous ACER Opinions and taking care to harmonise the sectoral CBAs.

As a complement, **ACER should be entitled to approve and to amend the CBA methodologies**. Via the power to amend¹¹, this would ensure that CBAs evolve at a satisfactory pace through time and that previous CBAs are not considered as fall-back solutions in case of

established, for the development of network codes, in Article 59(11) of Regulation 2019/943, and for terms, conditions and methodologies adopted under the network codes, in Article 5(6) of Regulation 2019/942.

¹¹ The Clean Energy Package has systematically clarified the principle that all proposals for terms, conditions or methodologies from stakeholders with commercial interests need the neutral scrutiny of NRAs or ACER. To be effective, the obligation to scrutinise proposals from stakeholders with commercial interests must include the right to amend the respective proposals. The principle that ACER or NRAs can modify drafts submitted to them, is

rejection. ACER may be requested to run a public consultation before approval, while avoiding overlaps with the former consultation by the ENTSO, to allow further inputs by stakeholders.

Shifting the approval power to ACER would help streamline the process, which currently requires at least two opinions (one by ACER and one by the EC plus optional opinions by Member States), one new document by the ENTSO after the opinions, and an EC approval, prolonging the process (the past two rounds in electricity and in gas lasted more than three years each) and creating unnecessary administrative burdens.

1.3 ACER scrutiny upon European Ten-Year Network Development Plans

1.3.1 ACER should issue binding guidelines for TYNDP development

The TYNDP guidelines should be binding to ENTSOs and developed by ACER, focusing on how the TYNDP is to be developed in terms of admission criteria for projects ¹², process, stakeholder consultation and required outputs. Aspects related to the fair treatment of all project promoters and the transparency of the process ¹³ also are of paramount importance. These guidelines could also cover the objectives of cross-sectoral integration and energy transition.

1.3.2 ACER should issue binding amendment requests on the draft TYNDP

ACER's binding amendment requests should be introduced, so as to cover any flaws of the draft TYNDPs that ACER and NRAs might identify, including those which require re-running simulations on certain aspects of projects' assessment that can only be done by the ENTSOs.

1.4 National network development plans

Consistency of the national network development plans (NDPs) and the EU TYNDPs and coherence with the PCI processes require cooperation between the Commission, ACER, NRAs and ENTSOs. The administrative burden for promoters should be reduced and consistency of obtained information improved.

1.4.1 Increased consistency between national plans and the European TYNDP

The preparation of a national network development plan should be mandatory in each Member State, even in case TSOs are under the regime of ownership unbundling.

National network development plans should be defined and published on a biennial basis¹⁴. The timing of NDPs needs to be fine-tuned with the timing of the European TYNDP in order to provide proper and timely inputs and avoid discrepancies at later stages.

¹² Cf. ACER Opinion 22/2017 on the admission criteria for the electricity TYNDP 2018. https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2 022-2017.pdf

¹³ Instead of the one-off guideline required by Annex III.2(5) of the TEN-E Regulation, this should be updated every two years.

¹⁴ As repeatedly recommended by ACER, e.g. in its Opinion 13/2019.
https://www.acer.europa.eu/Official documents/Acts of the Agency/Opinions/Opinions/ACER%20Opinion%2
013-2019%20on%20national%20electricity%20TYNDP-NDP%20consistency.pdf

Each Member State should have a single national development plan for electricity infrastructure development and a single plan for gas infrastructure development. In Member States with several TSOs in a sector, NDPs should be developed by all TSOs in a joint and coordinated way. Transmission projects promoted by third parties should be assessed as part of the NDPs.

All projects of cross-zonal relevance included in any NDP should automatically be included in the EU TYNDP as soon as they can. Each TYNDP needs to have a reference to the latest approved NDPs and to draft NDPs, where applicable.

1.4.2 NRA scrutiny on national development plans

The Third Energy Package Directives required NRAs to consult, to monitor and, more generally, to scrutinise the national network development plans, with differentiations depending of the unbundling status of the TSO(s).

In addition, pursuant to Article 51(5) of Directive 2019/944 and Article 22(5) of Directive 2009/73/EC, the NRA shall examine whether the national network development plan covers all investment needs identified during the consultation process and may require the transmission system operator to amend its ten-year network development plan.

According to EU legislation, these Articles currently apply only for the case of independent transmission operators. However, they were implemented in national laws of many Member States, irrespective of the unbundling status of the TSOs. In about half of the European countries, the relevant NRA has been empowered to approve the network development plans.

To offset specific market failures that could induce some TSOs not to consider specific investments that would bring greater social welfare in the long-run and to prevent inefficient investments whose costs would be borne by consumers, ACER and CEER recommend that, in each Member State:

- the relevant NRA should have the power to approve the NDP, as NRAs are best fitted to ensure their NDPs are fit for delivering a sound infrastructure development and reach a sufficient level of quality.
- the NRA should have the power to amend the NDP, including the inclusion or removal of specific investments where needed.

2 Principles for PCI scope

2.1 Revised energy infrastructure categories

Annex II of the TEN-E Regulation defines the energy infrastructure categories: electricity transmission and storage infrastructure (for which four regional groups are set up according to Annex I), electricity smart grids (1 group), electricity highways (1 group), gas infrastructures (4 regional groups), oil (1 group) and carbon dioxide networks (1 group).

As a general principle, in the context of the Green Deal, ACER and CEER recommend revising the energy infrastructure categories to better reflect the need for addressing energy system decarbonisation. In this regard, for new sustainable infrastructure categories to be under the umbrella of the TEN-E Regulation, it would be necessary to develop specific criteria to assess them.

2.1.1 Sector-coupling projects

Sector coupling projects like power-to-gas can have cross-border relevance depending on the size and the topology.

ACER and CEER are very reluctant on the role of TSOs in this technology field: firstly, non-TSO project promoters should play a role in developing these projects, under market conditions.

But the current TYNDP process is structured around TSOs. Such process can lead to discrimination and distortions in two directions: either non-TSO project promoters may face difficulties entering the process, or the regulatory scrutiny is far less developed for such projects because of missing regulatory oversight.

ACER and CEER consider that all (potential) PCIs should be treated equally and assessed in a thorough manner. In case of "new" projects of an energy system integration nature, a due scrutiny for projects from non-regulated promoters needs to be anchored in the regulation as well.

A new project category "Cross-sectoral projects" could be envisaged. Alternatively, power-to-gas projects may be deemed "energy storage" according to the definition in Article 2(59) of Directive (EU) 2019/944¹⁵. Regarding priority corridors (Annex I), a new thematic area for cross-sectoral projects (comparable to "smart grids") could be created.

2.1.2 Simplification of some energy infrastructure categories

In the PCI lists, the electricity highways category resulted only in a double labelling of already-selected projects.

This shows that "highways" can simply be treated and assessed as electricity transmission projects. Therefore, the electricity highways thematic area should be dismissed.

The electricity storage projects were assessed separately from electricity transmission projects and may have received relatively limited attention in the discussion and analysis carried out in the electricity regional groups.

¹⁵ 'Energy storage', in the electricity system, includes the conversion of electrical energy into a form of energy which can be stored, the storing of such energy, and the subsequent use as another energy carrier.

Therefore, it seems preferable to separate the energy storage projects from the assessment of electricity transmission investments. This may facilitate the development and improvement of a specific methodology for energy storage projects.

As regards the smart grids category, there is room for improvement of the definition and for a clarification of the criteria (in particular, monetised benefits) to be considered for smart grid project assessment.

The categories of oil projects, which do not contribute to the current decarbonisation targets, should be dismissed.

2.2 Bringing all TEN-E groups to a European dimension

During the last PCI selections, the discussion and decision criteria have been progressively harmonised across the regional groups and to some extent across the sectors.

The logical consequence would be to bring the groups to a European dimension, serving resource efficiency and transparency and improving the process results. The following EU-wide groups are proposed:

- electricity transmission investments group;
- electricity smart grids group;
- gas investments group;
- carbon dioxide and hydrogen networks group;
- energy storage investments group;
- if deemed appropriate, cross sectoral investments group.

2.3 Considerations on small-scale projects

The evolution of the energy sector calls for better coordinating distribution and transmission. As the Clean Energy Package already mandates NDPs for electricity DSOs and an EU DSO entity is provided for, this could be duplicated for gas, after practical implementation and evaluation of the impacts in the electricity sector.

Nevertheless, ACER and CEER note that the TEN-E Regulation is an instrument to deal with trans-European energy networks. According to Article 170 of the Treaty on the functioning of the European Union, action by the Union (regarding the trans-European networks) shall aim at promoting the interconnection and interoperability of national networks as well as access to such networks. It shall take account in particular of the need to link island, landlocked and peripheral regions with the central regions of the Union.

Based on the above, the PCI process is not the most appropriate tool to address small-scale projects. The number of PCI candidates should remain manageable and facilitate their monitoring and timely implementation. The current concept of significant cross-border impact of PCIs should be kept, while considering the improvements discussed in the next section.

2.4 Improving the criterion of significant cross-border impact of a PCI

Under the current legislation, PCIs must either be an interconnector or have a "significant cross-border impact", as defined in Annex IV.1 of the TEN-E Regulation.

The requirements are different for electricity and gas projects, and some aspects remain subject to interpretation:

- in electricity, internal transmission projects are subject to firm (absolute) capacity cutoff levels, set at 500 MW. The cross-border grid transfer capacity as defined for internal projects is not defined as to the way in which it is calculated (i.e. Net Transfer Capacity bilaterally agreed by involved TSOs, transfer capacity calculated based on flow-based approaches or nominal transfer capacity).
- for gas projects, the "significant impact" has to meet a relative criterion: 10% increase of cross border capacity. It is not clear whether the 10% threshold refers to peak (daily) or longer term, e.g. weekly or annual, increase in capacity.

According to Regulation EU 2019/943, a cornerstone of the EU electricity market design is the bidding zones. To ensure greater consistency of the Regulations, the notion of "cross-border" impact should be replaced in the TEN-E by the notion of "cross-zonal" impact, as long as it is relevant in terms of achieving the single electricity market, where zones refer to the bidding zones (electricity). This approach would reduce the need for different provisions for "internal projects" and would be consistent with the current modelling of the system followed by ENTSO-E simplifying the TYNDP analysis, as well as the PCI selection.

In gas, entry-exit zones play a similar role, it would be relevant to have a comparable approach when reducing internal congestions actually serve the integration of the European gas market.

In electricity, a single threshold for significant cross-zonal impact should be set and apply both for projects linking two zones and for zone-internal projects, for reasons of coherence and simplification. The threshold could be set for instance as a capacity increase of 200 MW compared to the situation without the project.

In gas, it may be considered that significant cross-border impact should be defined:

- in terms of both peak and long-term physical flow capability, in absolute and relative terms:
- in terms of the impact on capacity products markets, e.g. increase of interconnection capacity offered at the relevant trading hubs, in absolute and relative terms.

3 Improving the TEN-E processes and associated provisions

3.1 Future-proof criteria for sustainability of gas PCIs

The revision of the TEN-E Regulation takes place in the context of the Green Deal, which calls for further decarbonising the energy system to reach climate objectives, as well as for greater consistency of the regulatory framework for energy infrastructure with the climate neutrality objective.

The Green Deal emphasises that the power sector must be based largely on renewable sources, complemented by the rapid phasing out of coal and decarbonising of gas. At the same time, the EU's energy supply needs to be secure and affordable for consumers and businesses. For this to happen, it is essential to ensure that the European energy market is fully integrated, interconnected and digitalised.

Therefore, the Green Deal calls for a holistic view of several criteria: RES integration and sustainability, as well as security of supply and market integration.

ACER and CEER consider that the TEN-E Regulation already fits to a large extent the criteria of the Green Deal.

In particular, regarding sustainability:

- for electricity projects, Article 4(2)(a)(ii) of the TEN-E Regulation lists sustainability, inter alia through the integration of renewable energy, as a specific criterion for electricity transmission and storage projects;
- as far as gas projects are concerned, Article 4(2)(b)(iv) of the TEN-E Regulation already identifies, among the specific criteria for gas projects: sustainability, inter alia through reducing emissions, supporting intermittent renewable generation and enhancing deployment of renewable gas;
- the cost-benefit analysis methodology for electricity include benefits related to RES integration, to the reduction of losses, to the reduction of greenhouse gas emissions and of other emissions, environmental impacts and residual impacts
- Article 12(4) of the TEN-E Regulation requires the concerned NRAs, when deciding to allocate costs across borders, to take into account also the environmental costs and benefits.

As far as gas projects are concerned, sustainability criteria have to get the priority focus in the PCI selection.

The sustainability criteria need to be strengthened in the sense that gas projects need to demonstrate positive benefits in terms of sustainability of the energy system.

Improvement should take place by expanding the sustainability dimension in the gas costbenefit analysis methodology. Significant contribution to sustainability could be assessed according to the classification system presented in the final report of the Technical Expert Group on Sustainable Finance¹⁶ as "green", i.e. economic activities that make a substantial contribution to climate change mitigation or adaptation¹⁷.

3.2 More balanced roles and responsibilities in the TEN-E processes

The TEN-E Regulation is currently focused on project promoters as the only parties activating several processes.

Annex III.2(1) of the TEN-E Regulation indicates that promoters wanting to obtain the status of project of common interest shall apply for it.

Some project promoters may be reluctant to carry out the efforts for PCI application, even though their projects may provide a high benefit to society and could potentially be identified as projects of common interest.

While project promoters' applications would remain the default option, if the PCI status could be supportive to successfully developing such projects (in terms of permit granting, cross-border coordination and/or EU financial support), it should be ensured that the identification of priority projects for Europe is not fully left to the willingness of promoters. **Therefore, the NRAs of the countries hosting a TYNDP project should be entitled to jointly require project promoters to apply for PCI.**

This proposal could also be meaningful when the promoters of different investments in a TYNDP cluster have different intentions on their applications for the PCI selection.

Selection as a PCI should imply that a project fulfils the necessary conditions in terms of net positive impact for the society. Nevertheless, the assessment of benefits is subject to methodological issues and selections often result from including qualitative aspects. As a result, the PCI status may be a presumption of positive impact.

When a project reaches a sufficient maturity and the project promoters submit an investment request, they have to provide detailed information about the project, with updated information on the technical design, on costs and a benefit assessment including a split among benefitting countries.

When assessing the investment request, the concerned NRAs have to jointly check that project benefits actually outweigh project costs. After they have carried out such an analysis, the concerned NRAs should be entitled to reject an investment request if the project fails to provide positive net benefits at EU level, taking into account potential uncertainties on benefit calculations. More generally, the PCI decision making process should ensure that no host country would be required to carry out projects if negative impacts at a national perimeter are not compensated.

According to section 5 of the report, "substantial contribution" includes the following NACE activities: Transmission and Distribution of Electricity, Storage of Electricity, Storage of Hydrogen, Manufacture of Biogas or Biofuels, Retrofit of Gas Transmission and Distribution Networks

¹⁶ The report can be found at: https://ec.europa.eu/info/sites/info/files/business_economy_euro/banking_and_finance/documents/200309-sustainable-finance-teg-final-report-taxonomy_en.pdf

Article 12(2) of the TEN-E Regulation limits the activation of cross-border cost allocation procedures (and consequently the possibility to apply for Union financial assistance in the form of grants for works) "only if at least one project promoter requests the relevant national authorities to apply this Article". While this process is to remain the default one, it has to be acknowledged that project promoters may take a private perspective in their actions regarding these procedures, while NRAs take a societal perspective. However, NRAs' powers are not always sufficient in all Member States (and should be reinforced as previously discussed).

For this reason:

- the NRAs of the hosting countries should be allowed to jointly request all project promoters to submit a joint investment request;
- each NRA should have powers to require a project promoter which is expected to recover costs from the national tariff to apply for Union financial assistance.

3.3 Two different advancement categories of transmission PCIs

ACER and CEER recommend distinguishing between projects which are advanced (and fulfil a minimum requirement of having been approved as part of the NDPs) from less advanced projects¹⁸ which require further maturity prior to full NDP inclusion, scrutiny and possible approval and, thus, full PCI eligibility.

Less advanced ("under consideration") projects may acquire benefits of the PCI label according to their needs (i.e. being at an early stage, the less advanced ones should not activate cross border cost allocation, they may only access grants for studies).

Article 3(6) of the TEN-E Regulation should be amended to state that "under consideration" PCIs shall be proposed for full inclusion, scrutiny and possible approval in the relevant NDP following a positive outcome of studies, before further NRA decisions on the project.

3.4 Reporting and data collection

3.4.1 ACER powers to collect data

ACER's powers to obtain information on all TYNDP aspects should be extended to include non-TSO project promoters. Article 3(2) of Regulation (EU) 2019/942¹⁹ should be amended and cover third party project promoters to align the level playing field to all project promoters.

3.4.2 Frequency of the ACER PCI monitoring report

Given that the PCI list is usually adopted at the end of a certain year (year "n"), the ACER PCI monitoring carried out in the year "n+1" (conducted during the first half of that year) does not

¹⁸ This distinction already partly happens in Annex III.2(1), third bullet of the TEN-E Regulation.

¹⁹ At ACER's request, the regulatory authorities, the ENTSO for Electricity, the ENTSO for Gas, the regional coordination centres, the EU DSO entity, the transmission system operators and the nominated electricity market operators shall provide to ACER the information necessary for the purpose of carrying out ACER's tasks under this Regulation, unless ACER has already requested and received such information.

allow sufficient time for substantial advancement of the projects in comparison to their status at the time when the projects were included in the PCI list.

The timing of such monitoring should be changed accordingly, so that a longer period elapses between the adoption of the PCI lists and the carrying out of a monitoring round, as it is already the case in the Agency's monitoring activities on TYNDPs.

Therefore, the current yearly frequency of the ACER PCI monitoring report should change to once per PCI list. The report should be produced in due time to provide fresh inputs for the selection of the next PCI list.

3.4.3 Transparency on fundamental project information

Confidentiality claims regarding fundamental project data is a re-occurring issue during different NRA/ACER activities. Some project promoters unduly claim confidentiality for a wide range of project information which requires a time-consuming process to resolve the claims.

The intended redaction of basic project data casts shadows on the reliability of the related project assessments, as it does not allow other parties to check and verify the data, while transparency may also facilitate project implementations by building trust of the stakeholders and by allowing the decision makers of different procedures to have consistent information on the projects.

In this regard, ACER and CEER reaffirm²⁰ that **fundamental project information** (i.e. commissioning date, capacity increase, project status and project cost) shall be made publicly available for projects included in the Union list of PCIs, the EU TYNDPs and the National network development plans. This may also apply to certain data currently being exclusively available within the Regional Groups (i.e. ranking of the projects, thresholds for selection, measures taken or to be taken to conclude the permit granting process with the least possible delay).

3.5 Reports on unit investment costs

One of the most significant barriers to the assessment and monitoring of network developments by ACER and NRAs is the incompleteness or lack of accurate, detailed and up-to-date information. For their regulatory tasks, NRAs need access to the relevant information concerning investment plans, projects and related costs (planned and actual).

Article 11(7) of the TEN-E Regulation lays some groundwork for addressing these challenges, with the obligation to publish a report on unit investment cost (UIC) indicators and reference values. However, by stating a single date (by 16 May 2015) for the UIC report, the TEN-E Regulation only provides the legal basis for a one-time UIC report. The 2015 report²¹ proved

http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Publication/UIC%20Report%20%20-%20Electricity%20infrastructure.pdf

For gas, $\frac{\text{http://www.acer.europa.eu/official documents/acts of the agency/publication/uic\%20report\%20-\%20gas\%20infrastructure.pdf}{\text{publication/uic\%20report\%20-minutes/acts of the agency/publication/uic\%20report\%20-minutes/acts of the agency/publication/uic%20report\%20-minutes/acts of the agency/publication/uic%20report%20-minutes/acts of the agency/publication/uic%20-minutes/acts of the agency/publica$

²⁰ Cf. for instance ACER Opinion No 13/2019 of 22 May 2019 (p.56). https://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Opinions/Opinions/ACER%20Opinion%2013-2019%20on%20national%20electricity%20TYNDP-NDP%20consistency.pdf

²¹ For electricity,

to be a useful tool for project assessment, but its value is declining over time, due to changing market conditions and technologies.

To help improve the efficiency of network development, the continuous availability of planned and actual cost data and other project characteristics to ACER and NRAs should be ensured, to enable them accurately to monitor the progress of project costs and other project features over the various project development stages.

Therefore, ACER and CEER recommend that the unit investment cost activity should be regularly repeated (e.g. every four years).

The revised TEN-E Regulation should provide for an obligation on infrastructure owners, transmission system operators and third-party promoters, to provide the requested data.

3.6 Streamlining the TEN-E provisions about the CBA methodology

ACER and CEER recommend streamlining annexes IV and V of the TEN-E Regulation, so that they are less prescriptive, relieving rigid constraints on the definition of the CBA methodology, whilst ensuring that it addresses key principles. This action would provide more relevance to the CBA methodologies themselves, also considering that the current methodologies go well beyond the content of Annex IV.

The TEN-E Annex(es) on the CBA methodologies should be concise, providing only the main principles of the CBA (current Annex V), i.e.:

- Scope of the CBA (both sectoral²² and geographical).
- Main inputs and outputs of the CBA (including specific reference to mandatory Benefit-to-Cost ratio and Net Present Value²³).
- Priority should be given to monetised benefits²⁴.
- Benefits should be differentiated according to the level of reliability of their estimation methods.
- For which projects a CBA will be performed²⁵. Considering the necessity to equally treat projects and other potential uses of the TYNDP results, CBA should apply to all TYNDP projects.
- Specific provisions about the assessment of smart grids, projects providing flexibility (like power-to-gas), storage and other types of new projects should not be in the scope of ENTSOs methodology. The European Commission should be responsible for the respective CBA methodologies.
- Annexes IV(2), (3), (4) and (5) of the TEN-E Regulation should be significantly streamlined or even completely deleted²⁶.

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²² Benefits directly related to the electricity or gas methodology involve the European energy system only ("energy-system wide"); *not* refer to redistribution of income among market participants.

²³ Based on monetised benefits only.

²⁴ Due justification should be provided when quantified benefits are proposed due to technical difficulties in monetisation.

²⁵ Especially because currently ENTSOG proposes the CBA results only for PCI candidates.

²⁶ Annex IV(1) on the significant cross-border impact has a different content than the rest of Annex IV, as it does not relate to project assessment, but to eligibility conditions for the PCI selection.

• The reference to the "contribution to reaching the minimum interconnection capacity of 10 % installed production capacity" as an input for the selection of electricity PCIs needs to be revisited to avoid double counting.

3.7 Risk-related incentives

According to the latest ACER PCI Monitoring Report²⁷, the project-specific risk-related incentives of Regulation (EU) No 347/2013 have not been widely used by project promoters and project promoters have shown a limited interest to use them in the future.

Most widely-applied European regulation schemes account for non-diversifiable industry risk by already reflecting the risk of PCI projects undertaken by the peer group firms. ACER Recommendation No 03/2014 on incentives²⁸ concludes that existing regulatory frameworks already provide numerous measures to mitigate risks and – if necessary – provide incentives to ensure that the required investments are implemented.

The low number of actual and planned filings of applications for risk-related incentives can be considered as evidence that the existing risk rewards in national regulatory frameworks, together with the allocation of risks between TSO and customers, successfully cover the risk associated with infrastructure investments. Furthermore, PCIs may even have a lower risk than other infrastructure projects because of their priority status and the political support they get from authorities. Additional rewards are therefore in general not necessary, as they may offer incentives for inefficient over-investment and they may provide a biased signal in favour of some projects.

As Article 13 of the TEN-E Regulation may cause more danger than benefits from successfully promoting the establishment of PCIs, ACER and CEER propose **risk-related incentives to be dismissed**.

3.8 Considering all benefit categories when evaluating possible CEF grants

Article 14(2)(a) of the TEN-E Regulation requires, as a mandatory criterion for CEF grants for works for the main energy infrastructure categories, that the project specific cost-benefit analysis provides evidence concerning the existence of significant positive externalities, such as security of supply, solidarity or innovation.

ACER and CEER consider that a positive benefit-cost balance is of paramount importance for each PCI, also given (i) the requirement in the Treaty on the Functioning of European Union (article 171) that the Union's activities on trans-European networks shall take into account the potential economic viability of the projects and (ii) the criterion in Article 4(1)(b) of the TEN-E Regulation that the potential overall benefits of the project outweigh its costs.

https://www.acer.europa.eu/Official documents/Acts of the Agency/Recommendations/ACER%20Recommendation%2003-2014.pdf

²⁷ ACER, Consolidated report on the progress of electricity and gas projects of common interest, June 2019. https://www.acer.europa.eu/Official_documents/Acts of the Agency/Publication/CONSOLIDATED%20REPO RT%20ON%20THE%20PROGRESS%200F%20ELECTRICITY%20AND%20GAS%20%20PROJECTS%20 OF%20COMMON%20INTEREST%20-%202019.pdf

Therefore, ACER and CEER see Article 14(2)(a) as the key criterion for CEF grants for works and recommend considering a wider spectrum of benefits.

Nevertheless, it is appropriate to identify specific positive externalities – along the key policy objectives of the Union – to access CEF grants for works. For these externalities to be considered, clear principles should be defined in the TEN-E Regulation. Indicators and calculation mechanisms should be implemented in the CBA methodologies, in order to provide a common framework and reduce discretion.

According to the Green Deal, the sustainability dimension should be explicitly added in the list of positive externalities considered for CEF grants for works.

3.9 Reshaping the "lack of commercial viability" criterion for CEF grants

Article 14(2)(c) of the TEN-E Regulation implies that, for some energy infrastructure categories, CEF grants for works can be awarded to a PCI only if the project is commercially not viable. The instruments to test the commercial non-viability are the business plan and other assessments carried out by possible investors or creditors or the national regulatory authority.

ACER and CEER note that the concept of "commercial viability" may not be fully applicable to regulated infrastructure. The costs of regulated infrastructure projects – if they are deemed efficient by the regulator – in the large majority of cases will be recovered through regulated tariffs. This is the case when Article 12 of the TEN-E Regulation applies.

A gap may exist between the regulated tariff increase and the benefit(s) for the country(ies) contributing to the project. Such a gap does not correspond to a commercial viability problem *per se* but to a difference between costs and socio-economic benefits (whose distribution across countries could be spread and uncertain, depending on scenarios, and lead NRAs to be prudent when allocating costs). In some cases, CBCAs are not sufficient to cover the gaps between monetised benefits and costs for the contributing countries. In such a situation, CEF grants for works are likely to unlock the implementation of a PCI.

For the reasons above, the "lack of commercial viability" criterion should be dismissed. In some cases, a scattered distribution of benefits across countries could justify the request for CEF support.

3.10 Potential relation between CBCA and CEF grants for works

For the main energy infrastructure categories, Article 14(2)(b) of the TEN-E Regulation stipulates that grants for works can be only allocated to projects which already received a CBCA decision. This requirement does not apply for innovative projects (electricity smart grids).

This provision raises issues that were developed in 2016, in ACER's Position paper on EIP²⁹, which urged further investigation of the relationship between CBCA and CEF and to clearly define their purposes.

²⁹ Delivering Efficient European Networks: Position of ACER on improving the efficiency of the European framework for energy infrastructure development, 22 June 2016

The purpose of CBCA is linked to uneven distributions of project benefits and costs, with a net negative impact in at least one hosting country. The purposes of CEF grants for works currently in use aim at addressing the following potential issues:

- Support projects in countries with (claimed) tariff affordability issues;
- Support projects with financing gaps;
- Support innovative projects (e.g. electricity smart grids).

ACER and CEER observe that CBCA and CEF grants for works can be considered interlinked in case of spread distribution of benefits across countries and consequent financial viability issues. Nevertheless, there should not be a mandatory link between the two instruments.

In some cases, CBCA decisions may not be appropriate (when benefits, according to the results of the CBA, outweigh costs in all hosting countries), and a direct request for CEF support should be possible.

Support projects with spread benefits across countries:

PCIs may have financial gaps in host and contributing countries without necessarily being able to allocate the "uncovered" costs to other beneficiary countries. This results from different factors: (i) the assessment of the benefits is done at the EU level; national quantifications are only made at the time of the investment request; (ii) CBAs are and have to be based on different future scenarios to test projects against possible futures and reduce risks of inefficient network development; (iii) CBAs in these different scenarios may lead to positive national benefit-cost results in some cases and negative results in others; and (iv) some of the benefits are not monetised because there is an inherent difficulty in valuing some qualitative benefits. This issue is exacerbated when benefits are spread among several countries: quantifying individual benefits and finding a joint agreement between all the concerned parties may be complex and lengthy.

In these circumstances, CEF funding can make sense as a potential complement to the CBCA, in terms of covering financial gaps in a host or contributing country in situations corresponding to benefits which are difficult to monetise or are spread beyond being pragmatically allocable.

In terms of process, for projects with a spread distribution of benefits across countries, the sequential step between CBCA and CEF grants for works should be revised, allowing conditional CBCA decisions and a second (final) decision to be taken after a grant decision is made.

Support tariff affordability and other purposes:

A country may get a high socio-economic benefit but still be confronted by excessive increases of tariffs for network access. "Non-affordability" may be a significant barrier to the project implementation, in case the effect on network tariffs or operators' regulated asset basis would be too high.

In such a situation, CEF grants for works could serve the purpose of affordability. CBCA should not be mandatory. It should be possible to directly apply for CEF under the condition of a positive statement of the hosting NRA on a promoter's proposal to request CEF support³⁰. In

³⁰ For an interconnector, the process of "NRA positive statement" could be limited to one of the involved countries. Its main element would be the acknowledgement of project being beneficial for the country.

such a case, to avoid potential loops, no CBCA can be started by that promoter/NRA after the CEF decision.

Nevertheless, using CEF grants for works to support "affordability" would make its purpose similar to some other large EU funds (e.g. European Regional Development Fund, Cohesion Funds), which support, among others, infrastructure development, on a solidarity basis. Therefore, this use should be deprioritised, due to redundancy.

Similar considerations apply to other purposes serving external effects as per Article 14(2)(a), e.g. innovative projects which also contribute to spreading expertise and technological improvement in the Union, where CBCA is already not requested. Also in these cases, CEF support should not be redundant with other EU Funds, which already aim at supporting innovation, and have a clear cross-border/European dimension.