

Public consultation on the Establishment of the Innovation Fund

A eurelectric response paper

eurelectric represents the interests of the electricity industry in Europe. Our work covers all major issues affecting our sector. Our members represent the electricity industry in over 30 European countries.

We cover the entire industry from electricity generation and markets to distribution networks and customer issues. We also have affiliates active on several other continents and business associates from a wide variety of sectors with a direct interest in the electricity industry.

We stand for

The vision of the European power sector is to enable and sustain:

- A vibrant competitive European economy, reliably powered by clean, carbon-neutral energy
- A smart, energy efficient and truly sustainable society for all citizens of Europe

We are committed to lead a cost-effective energy transition by:

investing in clean power generation and transition-enabling solutions, to reduce emissions and actively pursue efforts to become carbon-neutral well before mid-century, taking into account different starting points and commercial availability of key transition technologies;

transforming the energy system to make it more responsive, resilient and efficient. This includes increased use of renewable energy, digitalisation, demand side response and reinforcement of grids so they can function as platforms and enablers for customers, cities and communities;

accelerating the energy transition in other economic sectors by offering competitive electricity as a transformation tool for transport, heating and industry;

embedding sustainability in all parts of our value chain and take measures to support the transformation of existing assets towards a zero carbon society;

innovating to discover the cutting-edge business models and develop the breakthrough technologies that are indispensable to allow our industry to lead this transition.

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WG Climate Change

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Public consultation on the Establishment of the Innovation Fund

Fields marked with * are mandatory.

Public Consultation on the Establishment of the Innovation Fund

The EU emissions trading system (ETS) [after 2020](#) foresees the establishment of the Innovation Fund to accelerate the commercialisation of low-carbon technologies. 400 million allowances will be reserved from 2021 onwards for this purpose. In addition, a further 50 million of unallocated allowances from 2013-2020 will be added, together with, as early as 2019; any possible un-used or remaining funds from the [NER 300 Programme](#). Further 50 million allowances could be added to the fund post 2025, if these are not used for free allocation to industry.

The Fund will support innovation in low-carbon technologies, processes and products in industrial sectors listed in Annex I of the EU ETS Directive. The Fund should stimulate the construction and operation of projects that aim at the environmentally safe capture, use of CO₂ (CCU) and its geological storage (CCS), as well as innovative renewable energy and energy storage technologies in the territory of the European Union. Technologies receiving support should not be commercially available yet, but shall be sufficiently mature to be ready for demonstration at pre-commercial scale.

Furthermore, the ETS Directive sets a number of key features of the Innovation Fund:

1. Up to 60% of the relevant costs of projects may be supported,
2. Project selection will be done based on objective and transparent criteria, including, among others, the potential for emission reductions, potential for wide application or significant lowering of transitioning costs towards a low-carbon economy in the concerned sectors,
3. Technologies to be supported are not yet commercially available, but represent breakthrough solutions or are sufficiently mature to be ready for demonstration at pre-commercial scale,
4. Up to 40% of the Innovation Fund's support for eligible projects (that is up to 24% of projects' relevant costs) may be pre-financed (may not depend on achieved reduction of greenhouse gas (GHG) emissions) provided that pre-determined project milestones are met,
5. Projects in all Member States, including small-scale projects, are eligible to apply.

During the first half of 2017, the European Commission hosted a series of stakeholder consultations with representatives from energy-intensive industries, the energy and finance sectors. The [resulting summary report](#) points to over 80 potential technologies, including cross-cutting innovations, such as CCUS, green hydrogen or energy storage.

This public consultation will gather the views of the wider public on additional, more detailed, design elements of the Innovation Fund, as an input to the Impact Assessment accompanying the

Commission's proposal for a delegated act.

The questionnaire is divided into 6 sections. Section 1 relates to the identification of the respondent and is obligatory for all respondents. The following multiple choice questions in Sections 2-5 relate to key elements identified in the [Inception Impact Assessment](#) for the Establishment of the Innovation Fund. An open question at the end of each Section allows complementing any of the previous answers. Section 6 allows providing additional comments and uploading supporting documents.

A short summary of the key design elements and the related problems identified is provided at the beginning of each section.

General information about respondent

* 1. In what capacity are you completing this questionnaire?

In your professional capacity or on behalf of an organisation

* 2. Please indicate your First name :

Text of 3 to 200 characters will be accepted

Krzy

* 3. Please indicate your Last name :

Text of 3 to 200 characters will be accepted

Laskowsk

* 4. Please indicate the name of your company, organisation, or institution (if your organisation is registered in the Transparency Register, please give your Register ID number) :

Text of 3 to 200 characters will be accepted

eurelectric, Transparency Register ID number: 4271427696-87

If your organisation is not registered, you can [register now](#). Please note that contributions from respondents who choose not to register will be processed as a separate category 'non-registered organisations/business'.

5. Contact email address:

The information you provide here is for administrative purposes only and will not be published

klaskowski@eurelectric.org

* 6. For individuals, please indicate your country of residence, for professionals, please indicate your main country of operations/headquarters :

Belgium

***7. Please indicate the type of organisation (please select the option that fits the best) :**

- ☐ Private enterprise
- ☐ Professional consultancy, law firm, self-employed consultant
- ☒ Trade, business or professional association
- ☐ Non-governmental organisation, platform or network
- ☐ Research and academia
- ☐ Social partners
- ☐ National, regional or local authority (mixed)
- ☐ Other

***8. Please indicate the size of your company, organisation or institution :**

- ☒ a) Micro or small enterprise (10-49 persons employed)
- ☐ b) Medium-sized enterprise (50-249 persons employed)
- ☐ c) Large enterprise (250 or more persons employed)

***9. To which category of stakeholders does your organisation belong?**

- ☐ a) Potentially directly benefiting from the initiative (energy intensive industries, in particular steel, iron, aluminium, copper, oil refining, chemicals & bio-based industries and pulp & paper, cement, lime, glass & ceramics, renewable energy generation and storage, and industries/power plants utilising CCS/CCU)
- ☒ b) Indirectly benefiting from the Initiative (EU/National Industry associations, Environmental NGOs, National/Regional authorities and EU institutions; European Investment Bank/international or national financial institutions; Member States)
- ☐ c) Other

***10. Please indicate your preference for the publication of your response on the Commission's website:** (Please note that regardless of the option chosen, your contribution may be subject to a request for access to documents under [Regulation 1049/2001](#) on public access to European Parliament, Council and Commission documents. In this case the request will be assessed against the conditions set out in the Regulation and in accordance with applicable [data protection rules](#).)

- ☒ Under the name given:
I consent to publication of all information in my contribution and I declare that none of it is subject to copyright restrictions that prevent publication
- ☐ Anonymously:
I consent to publication of all information in my contribution and I declare that none of it is subject to copyright restrictions that prevent publication

Eligibility criteria

The Innovation Fund will support deployment of innovative renewable energy technologies and industrial break-through innovation in low-carbon technologies and processes in the European Union. The energy intensive industries to be covered are those in the Annex 1 to the ETS Directive, concretely: ferrous metals, non-ferrous metals, cement and lime, glass and ceramics, chemicals, oil refining, pulp and paper, including potential application of environmentally safe CCU technologies in these industries, that would substantially contribute to climate change mitigation. The renewable energy sectors to be covered comprise innovative production from: wind, ocean, geothermal, biomass and solar sources. In addition,

energy storage and CCS are also eligible.

The Innovation fund will be designed to help innovative projects to cross the "valley of death" and reach commercial viability.

Eligible projects should contribute substantially to climate change mitigation through a significant reduction of GHG emissions.

11. Which are the five most important highly innovative technologies in your view that will be key to decarbonise the industry and power sectors in the EU and therefore need to be demonstrated over the coming decade?

Text of 3 to 1000 characters will be accepted

A successful transition towards a low-carbon energy system requires a holistic approach of the Innovation Fund, which enhances flexibility of the system through integration of various technological solutions throughout the entire energy value chain e.g.: onshore and offshore wind, photovoltaic farms, centralised and decentralised storage solutions, waste-to-energy, demand-side response, e-mobility, smart charging infrastructure with vehicle to grid solutions, decarbonisation of industrial processes, optimal adaptation of existing and new technologies to local circumstances, cross-sector projects and smart grid solutions. Furthermore, CCS/CCU will have to play an increasingly important role for all industry sectors as it can ensure a smoother energy transition without creating harmful shortages that can negatively impact the economy or energy market.

Please specify for your own sector (as indicated in the introduction above). Cross-sector technologies can also be included, if relevant.:

Text of 3 to 200 characters will be accepted

The energy and transport sectors in particular are capable of creating many synergies as demonstrated in the first Connecting Europe Facility Synergy call. As an example Vehicle to Grid technologies.

12. To apply to the Innovation Fund funding, should eligible technologies be defined?

- ☐ a) Yes: Based on a pre-defined detailed list of eligible technologies per sector (as described in the introduction above), with a possibility of regular update (e.g. every 5 years);
- ☒ b) No: Eligible technologies should not be pre-defined allowing for competition between projects and across sectors
- ☐ c) Other

13. To ensure that the Innovation Fund would support innovative but realistic projects (i.e. those that would effectively materialize and reach market maturity), should its eligibility criteria set deadlines for reaching specified milestones?

- ☒ Yes
- ☐ No

** If yes, should these deadlines related to :*

- ☒ a) Investment process (such as a signature of Financial Close documents)
- ☐ b) Construction steps (such as commissioning of the construction)
- ☐ c) other

14. The revised ETS Directive agreement stipulates that small-scale projects can also be supported. To better define the scale of small-scale projects eligible for support of the Innovation Fund, should eligibility criteria set a minimum size for small-scale projects?

- ☒ a) Yes
- ☐ b) No

** If yes, what would be the appropriate minimum size (in terms of total capital expenditure in EUR) in your area of expertise, which would allow funding of small-scale projects at EU-level? :*

Text of 3 to 200 characters will be accepted

Yes, the eligibility criteria could be on a minimum CO2 reduction potential or on a minimum investment level at 15-20 M EUR.

15. If you wish, please provide additional comment(s) in more detail, focusing on elements related to eligibility criteria not mentioned in the answers above.

Text of 3 to 500 characters will be accepted

Competitiveness inside and outside of Europe is important so the Fund should also focus on supporting technologies which have the potential to become competitive and promote the EU industry globally. Priority should be given to breakthrough technologies and evolutionary improvement as Member States are at different stages of the energy transition and their respective economies and sectorial strategies differ. Projects should be of significant size to address first of a kind demonstration needs.

Type of support

The ETS Directive states that the Innovation Fund can provide support of up to 60% of the relevant costs of selected projects, out of which up to 40% may be pre-financed, provided that pre-determined milestones are attained. The majority of the Innovation Fund support (at least 60%) should be provided on the basis of verified (achieved) reduction of greenhouse gas (GHG) emissions, once projects are operational.

The Directive leaves room for modulation of maximum support rate (up to 60% of relevant costs) according to the project's technology risks, providing various forms of financial support such as grants, loans or equity, but also for covering specific type of costs (such as project development assistance along with the capital expenditure). This section therefore aims at collecting your views on the type of support the Innovation Fund should offer.

16. Should the maximum funding rate (i.e. up to 60% of relevant costs covered by the Innovation Fund as stipulated above) be:

- ☐ a) Variable depending on the stage of technology development (and related technology risks)
- ☐ b) Variable, based on a different approach, please specify
- ☒ c) The same for all eligible projects

17. Which form(s) of support should the Innovation Fund provide?

17.1 Which form of support do you consider most appropriate in relation to the stage of development?

Please rank from 1-5 (5 being most appropriate).

	Pilot production and demonstration (TRL * 6-7)	Initial market introduction (TRL 8)	Market expansion (TRL9)
Investment subsidies (grants)			
Risk guarantees			
Loans			
Equity			
Other (specify)			

**TRL means Technology Readiness Level*

http://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2016_2017/annexes/h2020-wp1617-annex-g-trl_en.pdf

17.2 Should eligible projects have a possibility to combine the above forms of support during the projects' lifecycle? Please specify and provide more detailed explanation for your answer above.

Text of 3 to 500 characters will be accepted

TRL 8 should be supported with non refundable grants, from 9 onwards: risk guarantees, loans, equity or a mixture of financing options, depending on the project.

17.3 Should the Innovation Fund also provide specific project development assistance? If so, please rank the relevance, according to your assessment, of pre-feasibility studies, cost-benefit analyses and related work-streams, human capacity building and others (4 being most important):

- ☒ Technical pre-feasibility studies
- ☒ Financial analysis and plans
- ☒ Capacity building
- ☐ Others

18. Up to 40% of the Innovation Fund support may be pre-financed, provided that pre-determined milestones are attained. In your view, how should such milestones be defined?

- ☐ a) According to the investment process (i.e. project launch, financial close, commissioning, operation);
- ☒ b) Linked to specific construction phases (i.e. first procurement for plant parts signed, physical construction finalised, operation);
- ☐ c) Other

19. What are in your view the most important lessons learned from the monetisation of NER300 allowances / key aspects to be considered when deciding about the modalities, in particular the timing, of monetising the allowances available for the Innovation Fund?

Text of 3 to 1000 characters will be accepted

NER 300 prescribed that 200 M allowances had to be auctioned in the first round and 100 M in the second, which meant the EIB had to auction 200 M when the EUA price was very low, making the fund less effective. If the EIB could decide when to auction the value of the Innovation Fund could be increased.

20. If you wish, please provide additional comment(s) in more detail focusing on elements related to the type of support criteria not mentioned in the answers above.

Technology readiness level (TRL) should not solely be based on technology readiness categories but also take into account other additional project specific criteria with qualitative assessment on a case-by-case basis. Besides TRL, some institutions already introduced market readiness levels, which could be an opportunity for self-assessment of projects to define, what type of support is needed be it grants only or combination of grants with other financial instruments. Also, it may be worth considering to start with TRL7 as it seems to be the first level where the gap between R&D and innovation needs to be closed. For utilities manufacturing readiness level (MRL) may be equally important as other indexes. Technology boundaries should be set widely enough to allow for development and uptake of cross-cutting technologies in each sector and such projects should be additionally rewarded during appraisal phase for financing.

Application and Selection procedure

According to the ETS Directive on the selection procedure, "Projects shall be selected on the basis of objective and transparent criteria." In addition, projects should deliver material GHG emissions reductions, well below the ETS benchmarks (where applicable), and have potential for wide application and lowering the costs of transitioning towards a low carbon economy for the sectors covered.

21. How should the application process be organized?

- ☐ a) on a first-come, first-served basis
- ☒ b) through regular calls, at pre-defined dates
- ☐ c) other

22. How many stages should the application process have?

- ☐ a) a single-stage application process, requiring applicants to submit the full project documentation by a given deadline
- ☒ b) two-stage process consisting of expression of interest (based on a less than 10 page concept note) followed by the screening of pre-selected applications (based on complete project proposals)
- ☐ c) Other

23. What should be the optimal mix of project selection criteria, taking into account the key requirements set by the ETS directive? Please rank in the order of importance (0 being least important).

	<i>Ranking (0 - 6)</i>	<i>Comments (if non put N/A)</i>
Innovativeness		
Decarbonisation potential / contribution to emission reductions		
Expected performance (i.e. Cost per unit of performance)		
Project viability/ bankability/ robustness of the business model		
Cross-sector spill-overs / cooperation		
Scalability/ potential for widespread application		
Other, please specify		

24. Should there be a mechanism to ensure a balanced portfolio of projects?

- ☐ a) yes, with regard to sectors
- ☐ b) yes, with regard to technologies
- ☐ c) yes, with regard to sectors and technologies
- ☒ d) No

25. If you wish, please provide additional comment(s) in more detail focusing on elements related to the selection procedure not mentioned in the answers above.

Text of 3 to 500 characters will be accepted

To address some of these challenges clear and transparent selection procedure is needed which enables non-discriminatory facilitation process for development of projects (e.g. on-line Q&A where applicants send questions and answers which are subsequently made publicly available). Staged calls for a better planning of proposal preparation, on a six-month basis, and proceeding directly with full project proposal are preferable, followed by a negotiation phase.

Relation to the Other Funding Instruments

26. In your view, how should the Innovation Fund complement other funding mechanisms at the EU and national level? Such mechanisms are the for example EU Framework programme for research and innovation (Horizon 2020), European Structural and Investment Funds (e.g. ERDF) or Research fund for coal and steel). **Please specify.**

1000 character(s) maximum

Member States should also be able to co-finance projects on a voluntary basis from other public funds, including KIC and ESIF, assuming general state aid criteria are met. Financing criteria among different programmes should therefore be aligned to ease the entire process. Simplifying the administrative procedure with a view to allow for cross qualification would facilitate the process in case of request for additional support.

Fiscal incentives at national level and European level could be created to support the innovation projects and reduce the bureaucratic burden. Grants and de-risking instruments such as EFSI could enhance and mobilise the private investment ensuring projects can be bankable. This support could be adequate for some projects during commercialization phase, perhaps in combination with grants.

27. In your view, could the Innovation Fund avoid overlaps with other funding instruments and if so, how this should be done?

1000 character(s) maximum

Depending on type of investment there may be a need for a grant support, longer tenors for debt financing provided that they offer below market interest rates, other risk-sharing facility or a combination of the above. Grant element is vital to boost innovation and provide an initial incentive to start innovating, reducing the risk of the technological development and demonstration of new technologies. Grants should be used to facilitate bridging existing financial gaps to make innovative investments feasible. Grant element could be fostered by revolving types of financial solutions but projects' ability to stay realistically viable, thus, possible to conduct should play a major role in financial decision making.

28. In your view, how unnecessary administrative burden for applicants could be avoided? Please specify.

1000 character(s) maximum

29. If you wish, please provide additional comment(s) in more detail focusing on elements related to financing synergies not mentioned in the answers above.

1000 character(s) maximum

For early stages project finance needs to be complemented by grants, equity or equity-like financial instruments. Corporate finance merged with other financial sources such as existing public-private financial vehicles allow for financial engineering that can facilitate efficient structuring of the investment's funding.

Financial support could take the form of initial grant to start de-risking the project and supporting feasibility and engineering studies, moving to refundable payment for prototyping and pure financial instruments for construction. Refinancing should be enabled when advancement of the project leads to decrease of perceived risk. Such repayments would liberate transaction funds to finance other projects.

The possibility to get a grant in the first stage of the investment enhances the investor's interest in the research phase. A 0% cost subsidized loan could be a useful instrument in the first spread stage for small and medium projects

Final comments

30. If you wish to add further information, comments or suggestions - within the scope of this questionnaire - please feel free to do so here:

1000 character(s) maximum

To begin with the definition of innovation should be established in a very careful way as the concept may vary from case to case. The support of Innovation Fund support should not be a qualifier for additional support as it may result in too high criteria for financing on national level. Additionally, there should be a clear additionality of the Innovation Fund. Definition of other funding instruments such as Horizon 2020 or Connecting Europe Facility and their potential combination should be clearly described to provide guidance for project promoters. It is also advisable to create a strong combination between Member State's support and Innovation Fund with other funds despite the differences among Member States' funding schemes and their bureaucratic complexity.

In addition, you could also upload a document proving further information, comments or suggestions.

Please note that the uploaded document will be published alongside your response to the questionnaire which is the essential input to this open public consultation. The document is an optional complement and serves as additional background reading to better understand your position.

The maximum file size is 1 MB

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Contact

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eurelectric pursues in all its activities the application of the following sustainable development values:

Economic Development

- Growth, added-value, efficiency

Environmental Leadership

- Commitment, innovation, pro-activeness

Social Responsibility

- Transparency, ethics, accountability



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