

## 【欧州】【Common, 海事】

# Common - Emerging technologies: European Commission launches first call for clean technology projects under the Innovation Fund to boost the European economy

Andrea Antolini Former Researcher JTTRI

### 【概要 : Summary】

The European Commission's first call for projects under the new Innovation Fund is expected to support larger projects ranging from energy storage to hydrogen fuel development as well as projects for renewable energy, energy-intensive industries, and carbon capture, use and storage projects. These projects could help boost employment also as part of a green recovery in the post COVID-19 era. The Innovation Fund is based on the EU's emission trading system (EU-ETS) and uses the revenues of the auctioning of emission allowances under the EU-ETS to finance innovative low-carbon technologies and projects. The eligible projects should be able to prove that they avoid GHG emissions and that they are market-ready and able to help making the EU's economy carbon-neutral. The projects will also be selected, based on their innovation potential as well as their financial and technical maturity.

By covering the period 2020 to 2030, the Innovation Fund's primary target is to pave the way for these low-carbon technologies and projects that lead to climate neutrality. Furthermore, in the current economic crisis caused by the COVID-19 pandemic, the Innovation Fund is also expected to help boost the EU economy's green recovery.

On 3 July 2020, the European Commission launched

the first call under the Innovation Fund with a first budget of EUR 1 billion for promising, market-ready clean energy and low-carbon solutions.

### 【記事 : Article】

#### 1. The EU-ETS as basis for new environment related technologies

The EU-ETS is one of the main initiatives of the EU's policy to combat climate change and covers more than 11,000 power stations and manufacturing plants in the 27 EU Member States plus Iceland, Liechtenstein and Norway, as well as aviation activities in these countries. In total, around 45% of total EU-GHG emissions are regulated under the EU-ETS. The "cap-and-trade" approach allows companies to buy and sell emission allowances as needed, giving companies flexibility in cutting their GHG emissions. In the EU-ETS 1<sup>st</sup> trading period from 2005 to 2007, the system was successfully established as the world's biggest carbon market. However, the number of allowances, based on estimated needs, turned out to be excessive. In the second trading period 2008-2012, the number of allowances was reduced by 6.5%, but the surplus of unused allowances and credits continued to push down the carbon price. Under the third trading period from 2013-2020 a EU-wide cap on emissions

(reduced by 1.74% each year) and a progressive shift towards auctioning of allowances in place of cost-free allocation was introduced. Regarding the fourth trading period from 2021 to 2030, the European Commission presented a revision in July 2015, in line with the EU's 2030 climate and energy policy framework. The proposal aims to reduce EU-ETS emissions by 43% compared to 2005. The Innovation Fund, as one of the world's largest programmes for the demonstration of innovative low-carbon technologies, uses the revenues of the auctioning of emission allowances under the EU-ETS to finance innovative low-carbon technologies for renewable energy, energy-intensive industries, as well as energy storage, and carbon capture, use and storage.

Furthermore, in the current economic crisis caused by the COVID-19 pandemic, the Innovation Fund is expected to provide financial support to projects in order to boost the EU economy's green recovery by creating new jobs and paving the way to climate neutrality.

## 2. The NER 300 programme

The New Entrants' Reserve (NER) was a large funding programme for innovative low-carbon energy demonstration projects, and was set up for the third phase of the EU-ETS. The NER 300 programme's funds have been distributed to projects selected through two rounds of calls for proposals, covering 200 and 100 million allowances respectively and involved all EU Member States. It supported the demonstration of a wide range of CCS technologies, namely pre-combustion, post-combustion, oxyfuel, and industrial applications, and renewable energy technologies, namely bioenergy, concentrated solar power, photovoltaics, geothermal, wind power, ocean, hydropower, and smart grids.

The programme is conceived as a catalyst for the demonstration of environmentally safe carbon capture and storage (CCS) and innovative renewable energy technologies on a commercial scale within the EU. Managed by the European Commission, the

programme funds 39 projects in various technology categories. The NER 300 funding pooled together about EUR 2 billion for innovative low-carbon, innovative renewable energy technologies on a commercial scale within the EU.

The projects that had received funding from the NER 300 programme reached final investment decisions by December 2016 and entered into operation by December 2019 at the latest. Due to the challenging global and EU economic environment, some of the projects found it difficult to raise sufficient additional financial support and had to be withdrawn. Thereafter, the Commission decided to reinvest the unspent funds from the first NER 300 call amounting currently to some EUR 623 million. The unspent funds are reinvested through existing EU financial instruments managed by the European Investment Bank (EIB). After the NER 300 projects ended, the Commission focused on preparing the first call under the new Innovation Fund.

## 3. The new instrument to support clean technologies: The Innovation Fund 2020–2030

As the successor of the NER 300 Programme and for the period 2020–2030, the European Commission launched the EU-ETS based Innovation Fund. This Innovation Fund improves the risk-sharing for the projects by giving more funding in a more flexible way through a simpler selection process. It also opened to projects from energy-intensive industries. The Innovation Fund focuses on innovative low-carbon technologies and processes in energy intensive industries, including products substituting carbon intensive ones, Carbon capture and utilisation (CCU), Construction and operation of carbon capture and storage (CCS), innovative renewable energy generation, and energy storage. With a funding of EUR 10 billion, market-ready projects related to clean energy innovations could be supported over the next decade. The Innovation Fund will work with other green recovery programs to secure jobs and lay a foundation on which to

restart the European economy, in particular now, that the economy is suffering of the COVID-19 pandemic' s impact.

The EU-ETS provides the main long-term incentive for these low-carbon technologies to be deployed, by providing the revenues for the Innovation Fund from the auctioning of 450 million allowances from 2020 to 2030, as well as any unspent funds from the predecessor programme NER 300. So far, under the InnovFin EDP, three projects have been selected to benefit from the NER 300 unspent funds support, amounting to some EUR 73 million. Under the Project development assistance (PDA), four projects have benefited from the NER 300 undisbursed funds. Furthermore, under the CEF Debt Instrument, three projects are financed by unspent funds of the NER 300, including innovative renewable energy projects in the transport sector such as clean vehicles, fuels, charging infrastructure or transport networks.

Moreover, unspent funds from withdrawn projects under the second NER 300 call, amounting currently to some EUR 735 million will be channelled into new projects under the Innovation Fund.

The NER 300 successor programme, the Innovation Fund, improves the risk-sharing for projects by giving more funding in a more flexible way through a simpler selection process and is also open to projects from energy-intensive industries.

For the period 2020-2030, the Innovation Fund will have a budget of about EUR 10 billion, depending on the carbon price. With the European Green Deal in place, the Innovation Fund would be one of the world' s largest programmes for the demonstration of innovative low-carbon technologies, financed by revenues from the auction of emission allowances from the EU-ETS. Under the Innovation Fund, projects in the areas of renewable energy, energy-intensive industries, energy storage, and carbon capture, use and storage will be funded. The aim is to provide a boost to the creation of local future-proof jobs, climate neutrality and the development of new climate technologies.

Successful applicants for funding under the Innovative Fund will be able to receive grants covering up to 60% of the costs necessary to speed up the introduction of their products on the market. The beneficiaries' selection among applicants will be based on how far they are involved in revolutionizing the energy sector, including renewable energy and carbon capture and utilization as well as energy storage, among others.

According to the European Commission' s Vice President Frans Timmermans, this call for proposals under the Innovation Fund is an important sign that the EU will continue to invest in projects like clean hydrogen or other low-carbon solutions for energy intensive industries. The EU will also support the energy storage, grid solutions, and carbon capture and storage.

The Innovation Fund should encourage also other interested stakeholders to invest into low-carbon technologies. Also projects, which are not considered market-ready, but yet can show that they have potential, will be eligible to seek assistance from a smaller fund of EUR 8 million. Over the course of the Innovation Fund' s period from 2020 to 2030, the funds can also be used in cooperation with other public funding initiatives, such as state aid or other EU funding programmes.

Since 15 June 2020, the Innovation and Networks Executive Agency (INEA) is managing a part of the Innovation Fund programme via grants.

On 3 July 2020, the European Commission opened the EU' s Innovation Fund' s first call for proposals. The larger projects ranging from energy storage to hydrogen fuel development should be able to prove that they are market-ready and able to help making the EU' s economy carbon-neutral by the end of the decade. Applications will be handled by the EU Funding and Tenders and implementation will be carried out by INEA. The final responsibility for the selection of projects that will be awarded the Innovation Fund grant or the PDA support lies with the European Commission. The EIB is tasked with the overall management of the Innovation Fund and will

report regularly to the Commission.

The projects will be selected for the funding based on their potential to avoid GHG emissions, as well as their innovation potential, financial and technical maturity and potential for scaling up and based on their cost efficiency. All projects in the EU Member States, as well as projects in Norway and Iceland, will be eligible to apply for funding.

INEA will report regularly to the European Commission and provide feedback on general orientations for further development of the Innovation Fund. The EIB will be in charge of the monetisation of the Innovation Fund allowances and the management of the Innovation Fund revenues.

The deadline for the submission of applications is 29 October 2020. Successful projects will be announced in the first quarter of 2021, when the second phase of the Innovation Fund will also be announced. If requested by the Commission, Member States will also advise and assist the Commission in setting general orientations for the Innovation Fund, as well as in addressing problems in the implementation of a project. Regulatory and financial support from a government or local authority will be an important element to evaluate the maturity of projects.

#### 4. Conclusion

Although the Innovation Fund was not specially created as a response to the COVID-19 pandemic-related economic crisis in the EU, it can be expected to have some positive impact. With its future-oriented target to support clean energy and low-carbon solution projects, the Investment Fund can financially support the implementation of large-scale projects that support the European Green Deal's target to reach net-zero emissions by 2050. Since the risks for the commercialisation of projects, related to renewable energies and low-carbon technologies cannot be underestimated as a hurdle to introduce new projects, like the example of floating wind farms shows. In this respect, the Innovation Fund's grants up to 60% of

the costs necessary to speed up the introduction of the clean technology products on the market could help the new clean energy and low-carbon technologies to reach the commercialisation stage. In the economic crisis triggered by the COVID-19 pandemic, it is not only important to help the economy to recover to its pre-crisis state, but also to support the implementation of clean energy and low-carbon solution projects, as they have the potential to help achieving the 2050 net-zero GHG emission target of the European Green Deal.

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