CARBON MARKET WATCH

July 2025

Innovation Fund – evaluation of its operation

Carbon market watch submission

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The Innovation Fund has supported innovation in technologies such as carbon capture and utilisation (CCU), carbon capture and storage (CCS), products substituting carbon intensive ones (such as hydrogen), and innovative energy storage technologies.

From 2020 to 2022, the Commission ran six competitive calls for proposals, divided evenly between large-scale and small scale projects. The selected large-scale projects focused heavily on the deployment of CCS and/or CCU projects for energy-intensive industries. In fact, out of €6.4 billion, more than €2.5 billion went directly into financing CCS and CCU projects. In comparison, a bit less than €1 billion was granted to low-carbon and renewable hydrogen projects.
Historically, CCS and CCU projects have been heavily funded between 2013 and 2020 by the predecessor of the Innovation Fund, NER300 (New Entrants Reserve). However, the Court of Auditors found out in 2018 that none of the CCS projects financed by NER300 saw the light of the day. This resulted in about €244 million of wasted investments.

Most of the small-scale projects for the years 2020 to 2022 focused on projects related to the power sector, such as the deployment of renewable energy and energy storage capacity. In addition to large-scale projects financing either low-carbon or renewable hydrogen, there are also eight large-scale projects focused on the manufacturing of components for the production of renewable energy, energy storage or renewable hydrogen (including electrolysers production), worth more than €600 million for the year 2022, and a single project for the year 2021 focusing on battery storage.

From 2020 to 2022, more than one third of the total Innovation Fund budget went to financing CCS and CCU projects. Most of these projects were targeted at the decarbonisation of the cement and lime sector, or to building CO2 storage capacity across the EU: this sector is the major beneficiary of Innovation Fund money, with about 11 projects worth almost €2 billion approved between 2020 and 2022. In addition, two small-scale projects, worth nearly €9 million, were selected. Most of the projects are focused on using CCS to reduce emissions from the sector through the deployment of CCS technology. Only one project is looking at clinker substitution (project Eraclitus in Spain, received €4.5 million from the Innovation Fund). As a result of the call for proposal for the year 2023, three large-scale projects focusing on the decarbonisation of cement and lime sector were selected and promised around half a billion euros in grants. In total, from 2020 to 2023, the cement and lime sector received at least €2.5 billion in grants from the Innovation Fund.
The second sector benefitting the most from the Innovation Fund is the chemicals industry, which received almost €1 billion (from 2020 to 2022). While the refineries sector comes third with about half a billion euros, and steel comes fourth with nearly €400 million (from 2020 to 2022).

While we acknowledge that there might be a need to support the deployment of CCS technologies to address unavoidable emissions in targeted sectors, such as cement and lime, the fact that a third of the Innovation Fund's total budget (from 2020 to 2022) went towards CCS technologies, which also tend to be energy intensive, is shocking.
As alternatives are being developed to support industrial decarbonisation, including in the challenging cement and lime sector through, for example, clinker substitution, more of the budget of the Innovation Fund should go towards technologies that encourage savings in the use of materials. This would mean that the rules of the Innovation Fund should be changed: materials saving should be explicitly assessed as a mandatory criterion with equal importance to the degree of innovation when assessing candidate projects.

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