Principles for an effective Innovation Fund

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NER 300: essential Valley of Death financing instrument
NER300 provides a much needed boost to the demonstration of innovative renewable energy technologies in Europe, helping them progress towards commercialisation and industrial roll-out.

NER300 addresses the “Valley of Death” of financing, plugging the gap between R&D funding, and revenue support instruments such as Member States’ renewable energy support schemes. However, industry experience suggests that there is room for improvement as the NER 300 does not fully tackle some of the essential challenges faced by innovative and capital intensive technologies:

- Lack of upfront funding. Revenue support gives a long term market visibility, yet does not address the risks of early-stage technologies. Lack of clarity over who bears the risk in case of project failure.

R&D funding is vital to early stage technological development, yet lacks the scale needed for energy demonstration/pilot projects.

The need and appetite for an EU-level instrument large enough to push innovative renewable energy to commercial viability is beyond doubt. The new Innovation Fund should build on the lessons learnt from the NER 300 to further boost investments in innovative and sustainable energy technologies.

A fit-for-purpose Innovation Fund

1. Upfront funding and fit-for-purpose financial instruments
Upfront finance is vital to the demonstration stage. Any instrument targeting projects in that stage should have inbuilt investment support.

Revenue support can be used to incentivise project performance in the longer term, but is generally better suited for proven technologies, for which commercial loans or instruments are readily available.

Both should be complemented by financial instruments that can bear the risk of innovative project under-performance. Project risk insurance or first loss guarantees for instance would help remove risk and make projects more investable.

2. Limit awards to individual projects to €300m
For the Innovation Fund to leverage significant private investments, it needs to take forward a number of projects in a variety of countries and of different technologies rather than a few very large ones.

This “portfolio” approach will reduce the risk of a handful of large awards drying out the fund without, necessarily, proving beneficial for innovation and stimulating further investments. Independent analysis has shown that most innovative energy projects can be effectively supported with less than €300m\(^1\). The predecessor programme, NER 300, made no award greater than this.

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\(^1\) Adelphi 2015, [https://www.adelphi.de/sites/default/files/mediathek/bilder/Project%20volumes%20and%20co-financing%20rates%20for%20the%20industrial%20sector%20in%20the%20Innovation%20Fund.pdf](https://www.adelphi.de/sites/default/files/mediathek/bilder/Project%20volumes%20and%20co-financing%20rates%20for%20the%20industrial%20sector%20in%20the%20Innovation%20Fund.pdf)
3. **Replicable projects boost industrial competitiveness**

To boost Europe’s industrial competitiveness and strengthen exports, the Innovation Fund should focus on those technologies that have a high replicability potential, and therefore, significant potential for cost reductions through economies of scale. Cost-effective renewable technologies will lead to reductions in cost of energy in the EU and third countries.

The development, demonstration and deployment of individual components and systems should equally be supported to ensure broad industry participation. These are integral parts of a demonstration plant and its supply chain, and will contribute to creating a new industrial sector. Awards under the Innovation Fund should, therefore, be made on the basis of a first-of-a-kind or innovative project being replicable. As under NER 300, replicability criteria should be included and be part of the ‘eligibility check’.

4. **Create a high and stable carbon price to maximise the value of the Innovation Fund and provide a real boost for EU innovative investments**

A high and stable carbon price is necessary to maximise the Innovation Fund’s financial resources – generated by the auctioning of 450 million allowances. A carbon market that is oversupplied until the mid-2020s will be unable to sustain price levels compatible with the EU’s expectations of raising between €4.5bn and €11.3bn.

The Market Stability Reserve is necessary, but additional measures are required to curtail the overhang of allowances at the start of trading phase 4 in 2021.