

# Inputs for an ambitious ETS Innovation Fund

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## Introduction

The European Bank for Reconstruction and Development (EBRD) delivers transformational change in close cooperation with countries and the private sector through policy dialogue and capacity building, in combination with investments for climate change mitigation and adaptation.

The EBRD supports the Innovation Fund as a means to catalyse lasting decarbonisation by accelerating the access to and deployment of low carbon and climate resilient technologies.

The Bank provided detailed inputs to the design of the Innovation Fund during the expert consultation in 2017. In the current public consultation, additional inputs are provided to emphasize the need for geographic inclusion, mobilisation of funding (including through financial instruments), and the deployment of low carbon technologies across sectors through a clustering approach.

The EBRD's key recommendations for the Innovation Fund are summarized below, with additional detail provided on the following pages.

- ***Geographic inclusion.*** Eastern Europe has inherited industrial infrastructure that is ageing and heavily polluting. The NER300 failed to support decarbonisation in this region and disproportionately supported projects in the most developed regions of the EU. For Eastern Europe to benefit long term, the Innovation Fund can help to sponsor innovative technology deployment in the region, to support decarbonisation where it is needed most. The proposed Accredited Entity approach would help to ensure the delivery of such geographic inclusion.
- ***An implementation modality through Accredited Entities.*** The practice of regular calls for individual projects has proven to be unsuitable for the promotion of innovation technology. Therefore, for the Innovation Fund we advocate open architecture and direct access to EU instruments through Accredited Entities. The European multilateral and bilateral financial institutions have different strengths and resources, and are able to provide an array of finance instruments and other forms of support best suited to their respective regions. Providing these institutions with direct access to the Innovation Fund will ensure complementarity with other EU instruments and thereby maximize the Fund's collective impact. The accredited entities would be selected on proven ability to carry out programmatic approaches at scale, whilst ensuring sound banking, environmental and social standards, integrity and competitive procurement, in order to deliver the innovation impact.
- ***Programmatic investment.*** In EBRD's experience it is necessary to work in concerted effort on both the policy and investments sides to deliver the leverage and scale required for new technologies to be taken up. To maximize impact, the Innovation Fund should therefore foster and fund programmatic proposals that holistically

consider these aspects. The development of such programmes requires careful preparation and extensive stakeholder consultation. It is therefore necessary that these programmes are not subject to tendering processes but rather follow a process of using Accredited Entities that have demonstrated ability to deliver these processes.

- ***Decarbonisation of industrial clusters.*** Deep decarbonisation requires the deployment of technologies that reduce emissions across sectors. Leveraging the co-location of installations from multiple sectors will enable combined investment in transformative technologies at industrial scale.

## **Geographic inclusion**

The NER300 failed to deliver on its promise of a balanced project portfolio and disproportionately supported projects in the most developed regions of the EU, leaving Eastern Europe attached to the legacy of emissions-intensive industry. Decarbonisation in this region will require regional coordination and attention to geographic inclusion with respect to both funding volume and number of projects under the Fund. A funding approach through Accredited Entities, which is programmatic rather than project-level, is proposed to ensure geographic inclusion. Accredited Entities would be the arranger for a region of priority, and have access to a predetermined budget with an overarching goal such as emissions reductions of a regional industrial cluster.

## **The role of Accredited Entities under the Innovation Fund**

The EBRD's experience is that the practice of regular calls for individual projects does not deliver innovation technology, but rather introduces a barrier to parties that are not organised in this way. The Innovation Fund represents the opportunity to manage funds through a call for Accredited Entities, rather than for individual projects. Accredited Entities under the Fund would be organisations with the capacity to structure a total package of capacity building, technical assistance and finance. These Entities may include the European multilateral and bilateral financial institutions, each with their respective strengths and resources. Providing these Entities with direct access to the Innovation Fund through an open fund architecture will provide for the most effective use of funds.

Accredited Entities would have a key coordination role at regional and cross-sectoral scales, and would best ensure knowledge sharing and harmonisation of goals among member states. This role is especially important to minimize redundancies among the numerous available EU instruments. This level of coordination is only achievable under an open and accessible Fund architecture.

## **Programmatic investment**

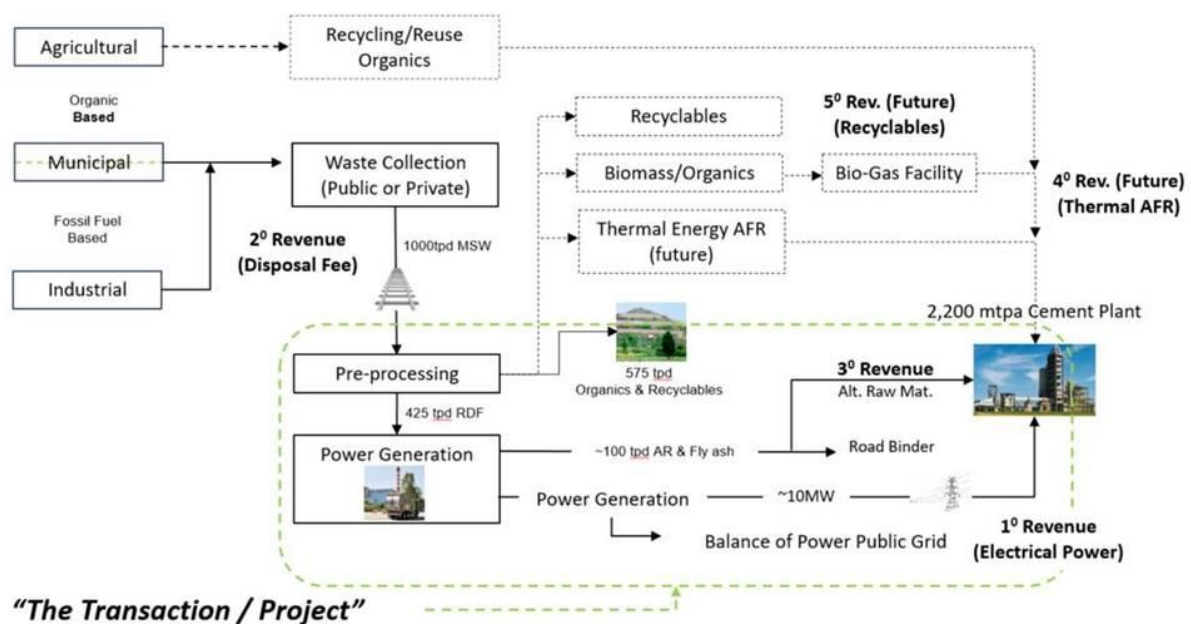
Emphasis on a programmatic level, rather than project level, is envisioned to ensure financial close and the delivery of decarbonisation over time. In EBRD's experience, innovative technologies flourish only in a supportive policy environment with the necessary understanding of market conditions and socio-economics. Harmonisation of policy dialogue, technical capacity, and finance by Accredited Entities will ensure the most effective application of the Innovation Fund, and help to create the market for the long term sustainable uptake of these technologies.

Accredited Entities additionally could provide an array of finance instruments that would be matched to project technology readiness levels, and thereby de-risk large investments and mobilise co-financing for long-term technology adoption.

## Decarbonisation of industrial clusters

Whereas the NER300 supported a widespread portfolio of demonstration-scale projects, the Innovation Fund should strongly encourage the formation of fewer, but larger scale industrial clusters to enable cross-sector decarbonisation. Deployment of transformative technologies will be accelerated where co-located and inter-related industries can benefit from these technologies.

Concentrating funding on fewer, larger installations will give rise to economies of scale and risk-sharing thereby ensuring the sustainability of the transformational technologies supported through the Fund. Physical co-location in industrial clusters also facilitates industrial symbioses, wherein material and energy streams can be exchanged across sectors with a corresponding reduction of emissions and material waste. In EBRD's experience, these clusters also facilitate opportunities for innovation in the bio-economy, ensuring that excess heat supply from industrial process is well used in the building sector, and the development of circular economy business models. Box 1 below provides an example of how an industrial cluster can be targeted for decarbonisation.



**Box 1: Cross-sectoral decarbonisation approach: illustration of relationships within an industrial cluster, through the example of alternative fuels substitution in the cement sector.** Programmes facilitate cross-sector decarbonisation through, for example, onsite energy generation, reduction and recycling of waste materials, and fuels substitution for process emissions reductions. In EBRD's experience, financing an industrial cluster is best managed through a programmatic approach.

The Innovation Fund will exceed the NER300 in terms of funding volume and should set a high ambition for emissions reductions in keeping with this increase. Transformative technologies will require higher co-financing rates and higher capital investment, compared to projects funded under the NER300.

Industrial clusters have high decarbonisation potential. The investment volume in each cluster must be sufficiently ambitious to support innovative technology deployment at scale, while also ensuring funds provide sufficiently for a geographically-balanced portfolio at Fund level. For example, based on a conservative EUA price of €12, the Innovation Fund could provide for the decarbonisation of five large-scale clusters with support of €1 billion each. Co-finance, harmonisation with other EU funds, and increasing EUA prices could significantly increase the amount of clusters funded and their funding level. In addition to funding the decarbonisation of existing clusters, the Innovation Fund has the potential to incentivize their formation in regions where industrial activities are not currently co-located.

## **Eligibility criteria**

The Innovation Fund's funding eligibility should consider projects across sectors and allow for competition between projects, rather than be pre-defined by a list of technologies.

Deadlines for reaching specific milestones should be set to ensure that projects will reach a satisfactory state of maturity for lasting emissions reductions. Financial milestones, rather than construction milestones, are best suited to reporting requirements and the financial instruments proposed for use under the Fund. Importantly, these milestones should also provide sufficient time for projects to reach maturity, which may be longer in the case of innovative technologies when compared to conventional project finance.

There should be no minimum threshold for project size. In EBRD's experience, successful projects have ranged from appliance-scale investments with Green Economy Financing Facilities to industrial-scale energy efficiency investments through direct finance with loans, risk guarantees and equity investments.

## **Type of support**

Whereas grant funding is a valuable instrument to support the earlier stages of technological development, the Innovation Fund's role will be to support the transition of innovative technologies to commercial viability. The funding instruments that best support this transition are risk guarantees, working capital finance and convertible loans. These Financial Instruments allow for greater co-finance mobilisation from the private sector to ensure the full-scale deployment of technologies to the market. Importantly, if the support instruments are in tune with the private sector, it will also help to avoid the crowding out effect we have seen in past instruments. Furthermore, the Fund should allow for the combination and convertibility of different instruments depending on technology maturity and achievement of milestones.

Though grants remain suitable in some situations, we advocate greater financial instrument usage in the form of loans and risk guarantees. In EBRD's experience, grant intensity in the range of 10-20% is sufficient support for transformational change when combined in a customized approach with financial instruments that reflect the underlying risks.

It is EBRD's experience that in order to have transformative impact funding must be accompanied by additional forms of support. Legislative and regulatory changes are often needed, requiring stakeholder engagement and underlying socio-economic research, to create the enabling environment for new technologies. It is EBRD's view that the Innovation Fund

should support policy dialogue, technical pre-feasibility studies, financial analyses, and capacity building to create the enabling environment for the new technologies and provide for their long-term survival and market uptake.

### **Selection process**

To reduce administrative burden and provide for a synergetic project portfolio, project selection would be best carried out by Accredited Entities, rather than through an Innovation Fund focal point. Under such a structure, the Accredited Entity would be allotted a total funding envelope that it would use to sponsor qualifying projects. The Entity in its turn would ensure competitive allocation of the funds, in line with its organisational rules. Therefore the Accredited Entity would be the arranger for a region of priority, and have access to a predetermined budget that would be tied to an overarching goal such as emissions reductions of a regional industrial cluster. Such a selection process ensures geographic and technological diversity under the Fund. Sustainability co-benefits should also be considered in the selection process.

Administrative burden of the Innovation Fund management would be reduced by delegation among Accredited Entities, which would have dedicated institutional capacity for the screening of proposals and financial arrangement of the various proposed forms of support.

### **Harmonisation of funds at the EU and national level**

The diversity of support available in the EU funding landscape reinforces the need for fund management by Accredited Entities in an open architecture. Where possible, EU and member state funding sources should be combined to hedge against EUA price fluctuations and mobilise co-financing.

The Innovation Fund will complement the goals of the Modernisation Fund by promoting technological transition for emissions reductions. There are several potential industrial clusters that would benefit from simultaneous energy efficiency upgrades under the Modernisation Fund, while in parallel implementing process emissions reductions such as those that will be funded by the Innovation Fund. To support such arrangements, governance between these funds should be aligned as much as possible, again most effectively achieved through management by Accredited Entities.

Delineation between funds at the EU level should be based primarily on technology readiness level. Whereas the Modernisation Fund focuses on mature technologies, the Innovation Fund should remain focused only on those projects that are in the transition to commercial viability at scale. Similarly, technologies at earlier stages of development should seek funding through the Horizon 2020 successor or sector-specific research and development fund.