

# Innovation Fund Workshop

Chemicals&Bio-based Industries

Pulp&Paper

Oil&refining

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BERLAYMONT, Brussels

# Questions Raised

- **What kind of innovation** is needed to successfully make the transition to a low-carbon economy in your industry/area of investments?
- **With which type of support** and financial instruments could the EU facilitate the development and quick adoption of breakthrough innovation that we need?
- **Which modalities for public support** can make the difference between failure and success from your point of view?

# Related key 6 themes:

## *Morning session:*

Theme 1: **What are technology innovation needs for turning the industry into a low-carbon mode?**

Theme 2: **How to make the low-carbon innovation happen?**

Theme 3: **How could Innovation Fund help?**

## *Afternoon session:*

Theme 4: **What are the needs in terms of financing (volume) and capital (type) to address the technological and business challenges** related with decarbonisation?

Theme 5: **How could public funds help - How should the Innovation Funds be structured?**

Theme 6: **What financing products should the Innovation Fund offer** to match the risk profile of beneficiary projects?

## **Theme 1: What are technology innovation needs for turning the industry into a low-carbon mode?**

- Which **key technology innovations** do you plan or foresee?
  - Energy-saving solutions: how much GHG mitigation can they deliver?
  - Breakthrough process solutions: what are they?
- Focus on **process or product innovation**?
- What can **CCS and CCU** deliver?
- Will the de-carbonisation happen in isolation or via **synergies with other sectors**? Please explain...

## Theme 2: How to make the low-carbon innovation happen?

- What are the **major risks and barriers** for corporate low carbon innovation investments? Please rank them.
- What are the **emerging business models** for low-carbon innovations (how do you see the demand evolving) in your sector? What **cooperation structures** could work? (co-operative R&I? PPP-style? Industrial symbiosis?)
- Will (and if yes how) the **emerging product and materials innovations** change your production patterns and infrastructure?

### Theme 3: How could Innovation Fund help?

- IF will address **TRL 6 – 9: many small projects or few big ones?**
- How should the **technology boundaries** (for competition) be set? Closed detailed technology list or sector-specific technology range allowing cross-cutting technologies?
- In the **application process**: should the IF work on the basis of continuous submission (first-come, first-served), or staged calls for all projects or differentiated approach for large and small projects? Appropriate time gap between the calls (consistent with the demand for funding?)
- Would a multistep **submission system** consisting of 1. Expression of Interest, 2. Full project proposal (technical and financial due diligence) and 3. Project selection, be seen as an administrative burden or rather an administrative lean procedure?
- What project **evaluation and selection criteria** would you see as fair but robust to ensure maximum impact?
  - Equal priority for the decarbonisation pathway? (e.g. energy efficiency / electrification based on RE / process improvement / product improvement )
  - Priority for breakthrough technologies or for evolutionary improvement?
  - Other?

## Theme 4: **Financing needs (volume) and capital (type) to address the technological and business challenges** related with decarbonisation.

- What are the **key drivers** for your company **to invest into low-carbon innovation?** (e.g. Costs savings/Productivity gains/Green image/Pressure from investors/shareholders/Preventing the stranded assets/other)
- What is the **minimum project internal rate of return** in your sector for **high-risk, highly innovative projects?** What is the **acceptable payback time?**
- What **type of funding is needed** in different stages of your investments?
- How do you **financially structure your low-carbon innovative projects** in terms of financing of CAPEX and OPEX? Where would you seek **external financing?** What are the **key requirements (conditions) from private sector financiers?**

## Theme 5: How could public funds help? **How should the Innovation Fund be structured?**

- How can a **limited fire-power** of the Innovation Fund be addressed (amount of monetised allowances will not cover the demand)? How can it be made **bigger and flexible**? Should it?
- How would you see the **Innovation Fund in combination** with other funds (H2020, EFSI) and Member States support. Would you see **Innovation fund's support as a qualifier** for additional support from the Member States or other EU related Programmes (EIT-KIC's)?
- Are **state aid** (notification) rules limiting factor for your potential interest in public funding?
- **Should Innovation Fund work directly** with industries, **or via Member States' Ministries?**



## Theme 6: **What financing products should the IF offer** to match the risk profile of low-carbon innovations?

- **Which products** should the Innovation Fund offer **and when**?
  - project development grants, investment grants, guarantees, risk-sharing, debt financing, equity-type and equity financing? If a combination, how to match the project cycle?
- What **type of support** would have the major impact in terms of mobilising the private investments? How to achieve **more bankable projects**?
- **How long a period** before actual project financing from the market should the Innovation Fund's support cover (how long does it take to reach project commissioning)?
- **Should the IF be revolving**, ensuring recycling of proceeds back to industry?
- Should the Innovation Fund provide **ex-post** (results-based), **or milestone-based financing**? Which milestones would you see in the project cycle? How their achievement can be verified?
- Any **specific ideas on new types of financing products** that you would seek/need?