



## EXECUTIVE SUMMARY FOR PRIVATE SECTOR ACTORS

### International collaborative RD&D

**The Paris Agreement stipulates that accelerating, encouraging and enabling innovation is critical to achieving an effective, long-term global response to climate change and promoting economic growth and sustainable development.** Collaborative approaches to climate technology research, development and demonstration (RD&D) are crucial for deploying mature climate technologies and developing emerging ones on a large scale. The aim of international RD&D collaboration is to enable each region and country to develop the capabilities needed to find its own path towards a low-emission, climate-resilient society and economy. Collaborative RD&D initiatives can be successful and effective, but careful attention must be given to their design and implementation, which has to be systemic and support capacity-building globally. This approach would ensure that such initiatives are better placed to help achieve the overarching goal of strengthening climate innovation around the world to address the urgent global climate challenge.

#### KEY FINDINGS FOR BUSINESS AND INDUSTRY ACTORS

The participation of the private sector is generally recognized as crucial to the translation of RD&D into market deployment. Although concerted efforts have been made to engage with the private sector under

many collaborative RD&D initiatives, the extent of the private sector's involvement remains limited in the early stages of the technology cycle. Instead, the private sector is mainly involved in the demonstration, incubation, commercialization and diffusion phases, which come too late to ensure that companies' needs are properly incorporated, for instance, with regard to intellectual property arrangements. Engagement in collaborative RD&D initiatives mutually benefits the private sector and the other actors involved in a number of ways, including through:

- Access to **new approaches to RD&D**;
- Identification of **new applications and markets** for climate technologies;
- Leverage of **additional investments** to advance the commercialization of climate technologies;
- **Reduction of financial risks** entailed by research and innovation for the private sector;
- Opportunities for **capacity-building** within the company;
- Enhanced **competitiveness, technological competence and innovation capability**.

#### OPTIONS FOR ACTION

Private entities are encouraged to engage in **networks or consortia** dedicated to RD&D of climate technologies in order to share experiences with other enterprises, researchers and academics and acquire knowledge about good practices. Participating in **thematic networks** within an RD&D programme would allow for exchange of knowledge with other RD&D groups of public or private entities on specific thematic areas, making that RD&D initiative more successful.

Engaging in RD&D programmes via **public-private partnerships** would enable private actors to diminish the high levels of risk entailed by research and innovation, particularly for small and medium-sized enterprises (SMEs), while accessing new markets and commercialization opportunities. Linking public and private funding would optimize the use of resources thanks to pooling personnel and equipment and support the involvement of innovative SMEs.

Engaging in RD&D programmes would also enable good management of intellectual property and **intellectual property rights (IPR)** and reduce associated costs and risks. This would involve, for example, developing an appropriate IPR framework between partners during the design and planning phase of RD&D programmes.

The relatively recent thematic area of **technology-based incubators and accelerators** is a good example of a new instrument that promotes collaboration and innovation among private sector actors, research centres and/or higher education institutions with a view to making national industries in participating countries more competitive. This collaboration would enable private actors to gain access to international markets and funds and to new technologies and innovation.

**Collaborative entrepreneurial experimentation** (in both the private and publicly funded settings) and **resource mobilization** in terms of skills and human capital from related industries are crucial assets that would become available to private actors through engagement in RD&D programmes.

The need for the private sector to commit to research is not just a financial matter; it also relates to the human resources invested on research. The chance to **empower qualified staff** in the context of RD&D programmes and provide them with the necessary resources to apply their knowledge represents an important **capacity-building** opportunity for companies, increasing competitiveness, technological competence and innovation capability.

Another field in which private actors could play an important role is the **financial sector**. Interactions with private investors are rarely sought in collaborative technological RD&D and could be explored further to mutual benefit. Cooperation with and among private sector actors would contribute to the design of RD&D programmes and of business schemes that can **attract private investors** and lead to discoveries during the commercialization phase.

**For more information** please refer to the compilation of good practices and lessons learned on international collaborative research, development and demonstration initiatives of climate technology, available [here](#) on TT:CLEAR.

