

Launching of the TEC compilation of good practices and lessons learned

Good practices and lessons learned on countries' international collaborative RD&D initiatives

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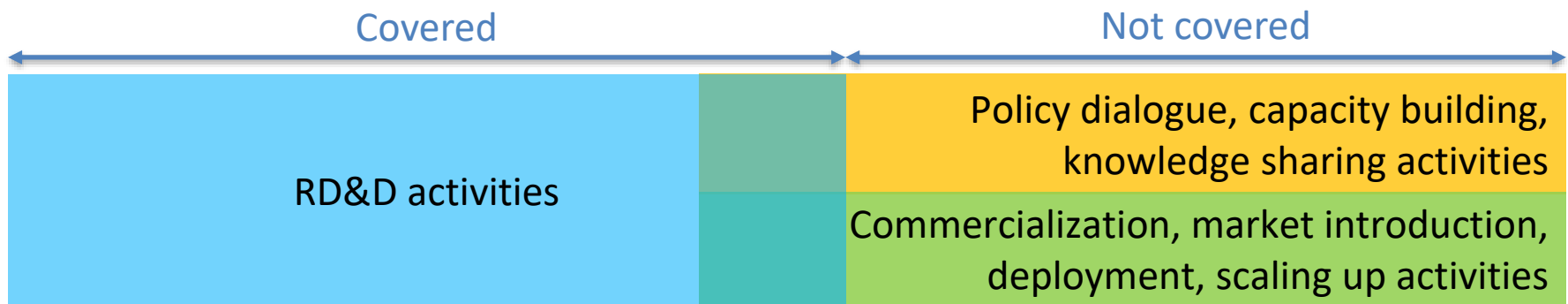
Objective of the compilation

To understand what lessons can be learned from existing international RD&D collaborations relevant to the technology framework in the Paris Agreement and identify a set of good practices.

Scope of the analysis

'International collaborative climate technology RD&D initiatives':

- Initiatives in which different countries or regions jointly conduct (or fund)
- RD&D activities, i.e. Research to Demonstration of
- Climate technology for mitigation and adaptation (IPCC definition)



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Eight selected case studies

Name of initiative	Mitigation/ Adaptation	Technology cycle stage	Type of collaboration	Sector/ Tech focus	Geography		Size
					Geographical scope	Region	
Indo-US JCERDC	Mitigation	R&D	Bilateral; Network of consortia	Energy	country, N-S	US, India	Small
Mission Innovation	Mitigation	R&D to demonstration	Multilateral; Platform	Energy	Global, N-N, N-S, S-S, Triangular	All	Large
IEA TCP	Mitigation	R&D to commercialization	Plurilateral Platform	Energy	Global, N-N, N-S, S-S, Triangular	All	Large
Dewfora	Adaptation	Prototype, demonstration	Plurilateral Consortium	Water-drought management	Regional; N-S	Africa, Europe	Small
CGIAR	Mitigation, adaption (not climate-specific)	R&D to commercialization	Plurilateral Network	Agriculture	International, N-N, S-S, N-S	All	Large
JIRI	Mitigation, adaptation (not climate specific)	R&D financing	Plurilateral Platform	Cross-cutting	International/Regional; N-S, S-S	Europe, LAC, SIDS	Small
CYTED	Mitigation, adaptation (not climate specific)	R&D to commercialization	Multilateral Platform	Cross-cutting	International/Regional, country; N-S, S-S	Spain, Portugal, LAC	Large
AFACI	Adaptation (not climate specific)	R&D to commercialization	Multilateral; Network	Agriculture	Regional, S-S, Triangular	Asia-Pacific	Small

Case study: Joint Initiative on Research and Innovation

Focus	Mitigation/adaptation	Not climate-specific, covers mitigation and adaptation
	Technology cycle stage	Research and development financing
	Sector	Cross-cutting
	Geographical scope	International/Regional (bi-regional); North–South, South–South
	Geographical participation	European Union, Latin American and Caribbean States, small island developing States
Organization	Type of collaboration	Plurilateral platform
	Actors	Governments, government implementing agencies, research and educational organizations, industry, small and medium-sized enterprises
Budget	ERANET LAC project	EUR 2.9 million in total (2013–2017) from FP7
	Joint calls for tenders	EUR 37.5 million in total (2013–2018)
	Joint Initiative and Research	Unknown

Case study: Joint Initiative on Research and Innovation

- ERANet-LAC project → EU-CELAC Interest Group
- 4 calls for proposals, 335 submitted, 64 funded
- Funding: 68% from EU, 32% from LAC
- Projects: joint knowledge platforms, new materials research, lab testing, tech piloting.

Table 8: Number and budget of proposals funded from 2013 to 2018

Scope ³⁰	Proposals requested/ eligible	Proposals funded	Budget funded (requested) (EUR millions)
All	335/271	64	36.5 (186.4)
Health	122/99	29	16.2 (70.1)
Energy	27/24	8	4.9 (15.7)
Bioeconomy	78/64	14	7.3 (40.0)
Biodiversity	83/64	12	5.2 (37.4)
Information and communication technologies	25/20	6	2.9 (13.2)

Case study: Joint Initiative on Research and Innovation

Success factors & lessons learned

- 'Peer learning' (from North-South to North-South-South)
- Replicability

Identified good practices

- Embedding the RD&D collaborative initiative in a broader, long-term cooperation,
- Ensuring equal partnerships and joint ownership
- Engaging a large number and variety of countries
- Building on existing structures and processes
- Designing initiatives for sustainability

Identified good practices

1. **High-level political buy-in**, operationalized in structural implementation processes
2. **Joint ownership and funding**, and equal partnership between developed and developing country participants
3. **Broad participation and stakeholder engagement** from the beginning
4. **Alignment with national priorities**, needs and capabilities
5. **Alignment** of the initiative's design **with the technology and its context**
6. **Suitable governance and management** processes of initiatives
7. Structured **evaluation and continual adjustment**
8. Design for **long-term sustainability**
9. Combine technological hardware RD&D with '**soft- and orgware**' **activities**

Observations and lesson learned

- Of the large number of initiatives, only a limited number is engaged in actual **funding or implementation of RD&D** (or 'hardware')
 - Of these, relatively few cover climate change **adaptation**
- The bulk of initiatives are **public sector-led**
 - Private sector involvement in the early stages of the technology cycle is limited, focusing more on the demonstration, incubation, commercialization and diffusion phases
- Only few initiatives undertake **regular independent, publicly available evaluations** that are transparently reflected in organizations and allow others to learn as well
- In light of the PA goals of international collaborative RD&D initiatives, **local presence and capacity building** in developing countries appears to be a crucial part of effective developing country participation on an equal footing

Recommendations

Core recommendations for further international RD&D initiatives are:

- **Strengthen assessment and learning** of successful collaborative RD&D initiatives, so that lessons learned are transparent and independently established. Additional learning from failed collaborations.
- **Facilitate flexible and evolving participation of countries** in line with national needs and capacities, taking into account large differences.
- **Pay particular attention to the “how” of private sector-participation.** Relevant private sector actors (and other stakeholders) are often involved too late to still incorporate their needs.
- **Enhance collaborative technological RD&D & put it in broader context.** Many initiatives are focused only on dialogue, coordination or information sharing and capacity building. Hardware needs to be consistently accompanied by ‘soft- and orgware’ activities, such as standard- & norm-setting. Pay attention to ecosystem-level factors.
- **Strengthen local capacity building** to enable equal and more productive partnerships, enhancing effectiveness of RD&D collaborations.

Thank you!

