Agenda item 4 (a) iii – Incubators and Accelerators

Draft Knowledge Product on Climate Technology Incubators and Accelerators

Context, mapping results, preliminary findings, next steps

TEC/2026/32/6

TEC 32 & Joint session of the TEC - CTCN Advisory Board
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United Nations Climate Change
Technology Executive Committee

UNIDO

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I. Context and background

Background

As per **Activity A.2.2 – incubators and accelerators (I&As),** under the TEC rolling workplan for 2023-2027, in 2026, the TEC is to prepare a knowledge product on the topic, as well as key messages and recommendations from this work.

At a glance: Work of the Activity Group since TEC 31

- Oct 2025 : Initiation of technical work i.e. compilation of I&As
- Nov 2025 (@COP 30): Presentation of the work to the COP 30 Action Agenda partners
- Jan 2026: Sharing a draft annotated outline of the knowledge product and an initial compilation of climate technology I&As in developing countries
- Jan/Feb 2026 : Outreach to interested partners (CTCN, GCF and Activation Group 28, FAO) for inputs to the initial compilation
- Feb/Mar 2026 : Mapping/analysis of 30 I&As and development of the draft knowledge product, i.e. focused on the mapping exercise
- Mar 2026: Presentation of initial findings from the mapping and organization of a roundtable discussion at the Africa NDE Forum

Status of work

II. Overview of the draft knowledge product

Chapter 1: Introduction, context and methodology

- **Background :** Building on previous work by the TEC on National System of Innovations (NSIs) and I&As, the knowledge product aims to advance the understanding of the design and operation of climate technology I&A in developing countries.

- **Objectives :**
  - **Provide an overview** of a diverse range of climate technology I&A in developing countries
  - **Identify practical pathway** for the development of funding proposal that incorporates I&A and seek to build effective ecosystems for start-up
  - **Offer policy insights from the development and operation of I&As**, including with regard to conducive enabling policy environments and financing modalities

- **Scope and methodology :** This paper focuses on describing how climate technology I&As function across a range of developing country contexts, drawing on insights from a curated set of real-world examples

- **Structure of the paper**

Chapter 2. Definition, function and evolution of climate technology Incubators and Accelerators

DEFINITION

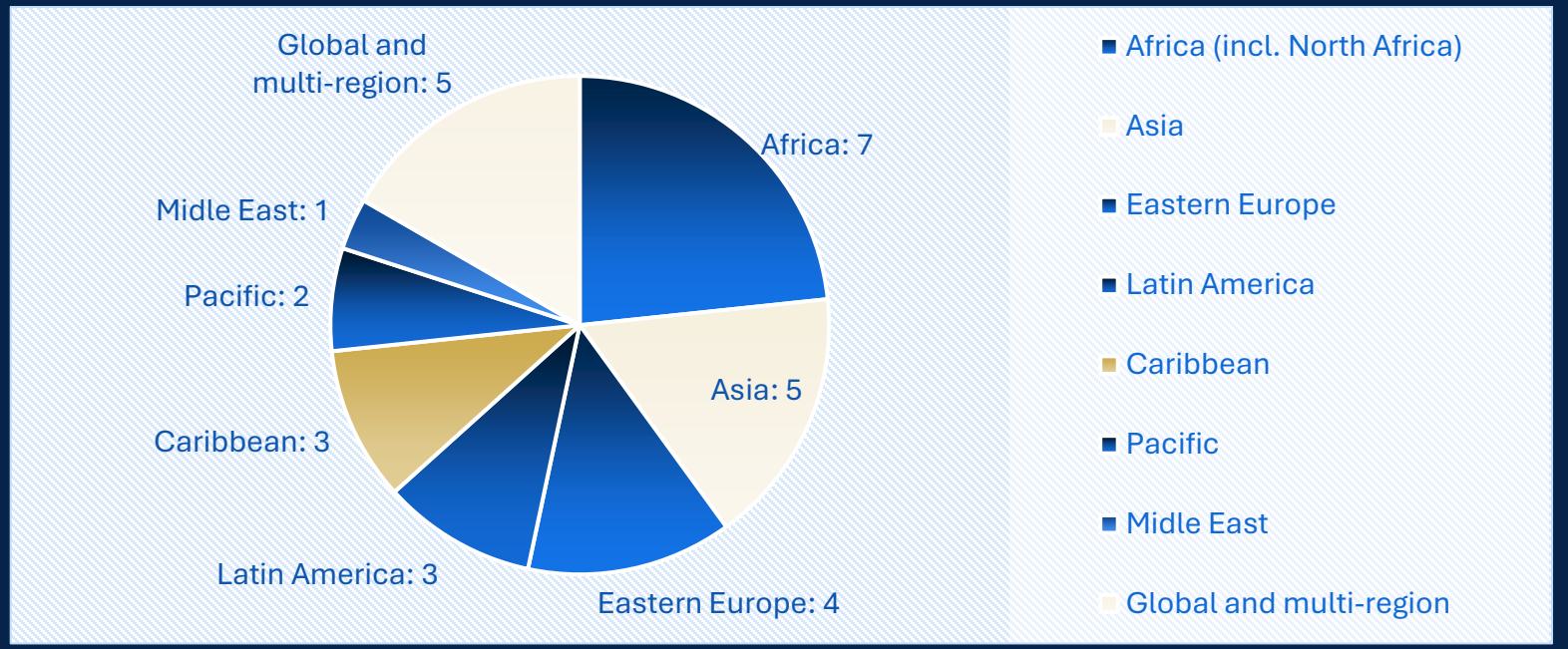
*"Climate technology I&A are specialized actors or institutions that enable early-stage innovators, researchers and emerging ventures to advance climate relevant technologies from ideas to adoption. In developing country contexts – where innovation ecosystems often remain thin, fragmented, or constrained by limited access to finance – I&A "provide broad-ranging support to entrepreneurs, helping them to develop business know-how, market connections and technical capacity, and providing guidance on sources and procedures for access to finance".**

∗TEC (2018). TEC Brief #12, Energizing entrepreneurs to tackle climate change, UNFCCC Technology

TYPE OF I&A	*CHARACTERISTICS*
INCUBATORS Technology Readiness Levels 1-4	**Longer-term programmes supporting ideation, research-to-prototype development, and early business formation:** • university settings, donor programmes, national hubs.
ACCELERATORS Technology Readiness Levels 5-9	**Timebound, cohort-based programmes (6-16 weeks) focused on validation, pilot preparation, investment readiness, and early commercialization**. • Sub-types: **Market-driven accelerators** & **Network-based or distributed accelerators**
HYBRID MODELS	**Combine incubation and acceleration within a single institutional structure**. **Hybrids are particularly important in developing countries** (thin early-stage pipelines and ventures require continuity across multiple TRL stages)

Chapter 3: Mapping climate technology incubators and accelerators in developing countries

Mapping of 30 I&A in developing countries, 18 based in one country & 12 based in multiple countries, regions

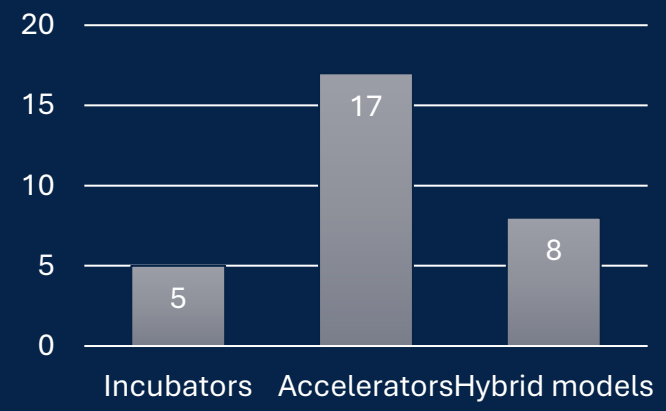


Chapter 3: Mapping climate technology incubators and accelerators in developing countries

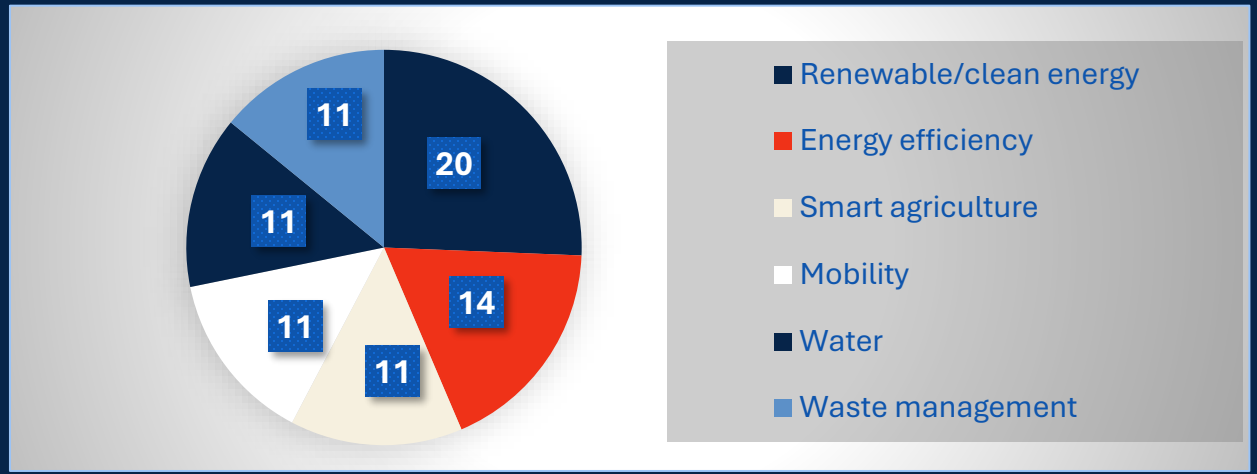
Most of the I&A are accelerators

There is a strong concentration of activities in 6 main sectors with a focus on Renewable/clean technology

Typology of I&A

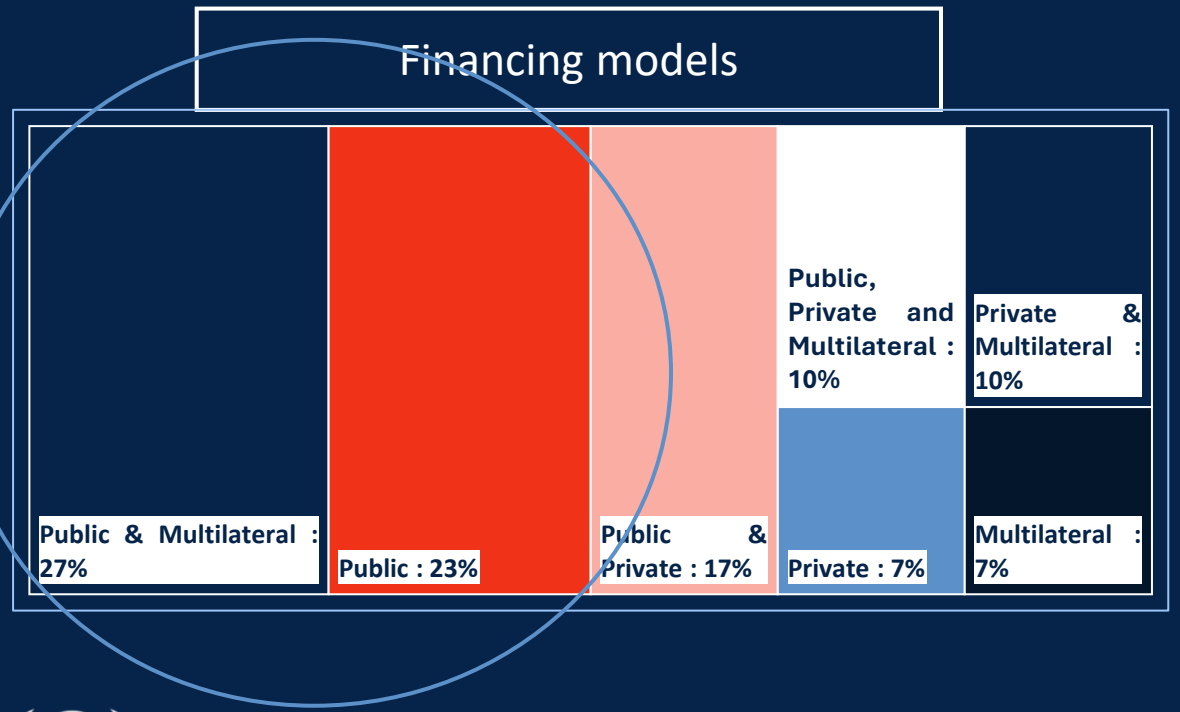


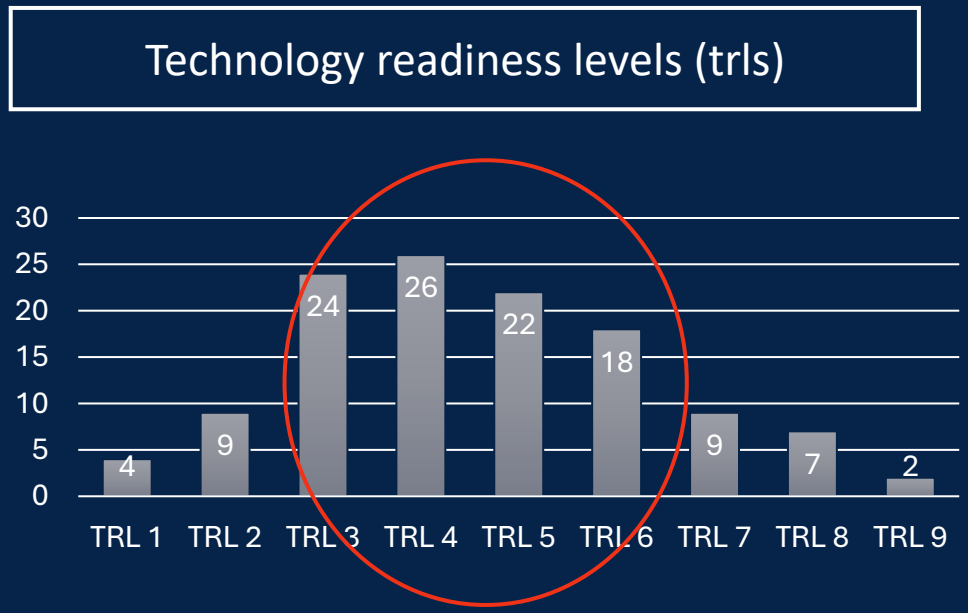
Distribution of the six main focus sectors



Chapter 3: Mapping climate technology incubators and accelerators in developing countries

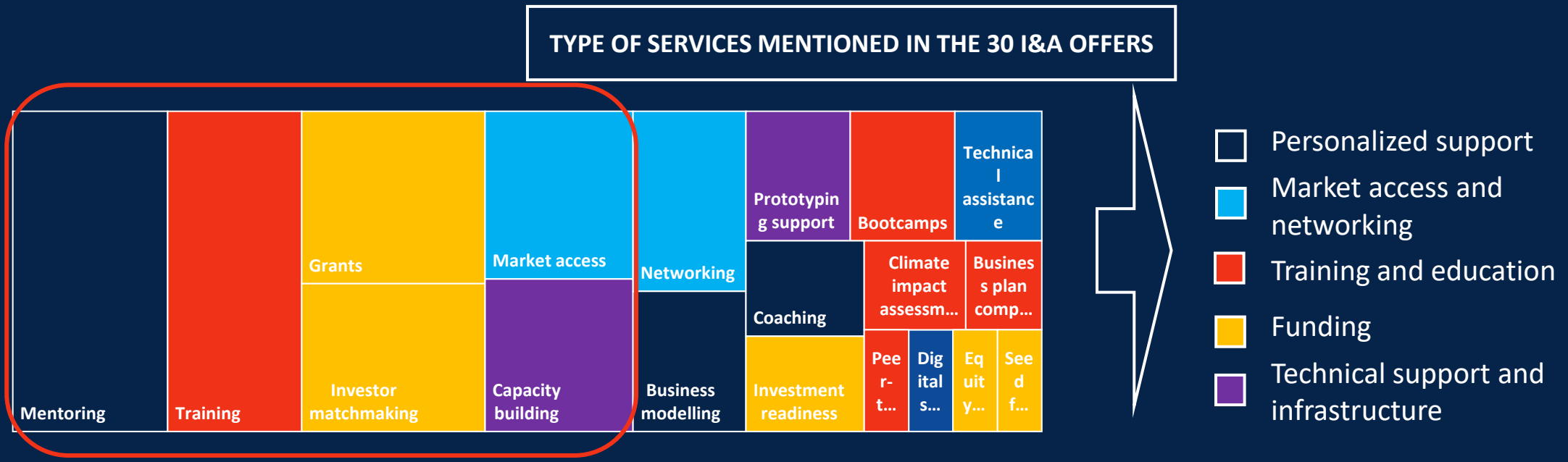
Most of the I&A analyzed are financed by public/or and multilateral programs and support Technology readiness levels between TRL 3-6





Chapter 3: Mapping climate technology incubators and accelerators in developing countries

Services offered by the I&A can be regrouped in 5 main categories : personalized support, market access and networking, training and education, funding, technical support and infrastructure



III. Preliminary findings on enabling environment and financing modalities

Preliminiary findings on conducive enabling environment

- **Systemic constraints** continue to limit the performance and scalability of climate technology I&A, including due to **fragmented national and sectoral innovation systems** – I&As functioning as standalone projects.
- **Public-private partnerships** (e.g. academia-government partnerships), including through **innovation hubs and centres of excellence** can play an important role as connecting platforms among I&As, governments, funders, universities, and youth.
- Though alignment with climate goals remains scattered, steadily growing focus on **digital transformation in start-ups ecosystems** offers opportunities for connecting technology I&As to climate objectives.
- **Private sector engagement in entrepreneurial experimentation** comes with opportunities and challenges, and conducive **regulatory frameworks** are key to ensure climate alignment and impact.
- **Stronger institutional orchestration and alignment with NDCs, NAPs, and TNAs** are necessary to transform fragmented entrepreneurial ecosystems into cohesive national pipelines for climate innovation and action.
- **Most I&A support innovators between TRL 3 and TRL 6** – from proof-of-concept to full-scale prototyping and field demonstration, often falling short of operational demonstration and implementation.

Preliminiary findings on conducive financing modalities

- The financing and business-model patterns of climate technology I&As in developing countries reveal an ecosystem that is **grant-dependent, structurally undercapitalized, and shaped by public and multilateral investment** imperatives.
- There are few emerging examples of **blended-finance or corporate-anchored** that support climate technology I&As in developing countries. Purely private-sector led models remain the exception.
- **Multi-country and regional support programmes** continue to play a key role in supporting I&As in developing countries with **cost-effectiveness**, including through **digital/virtual services**.
- If regulated effectively to align with national climate and development agenda, **private sector-led I&As are well positioned to advance sector-specific climate innovations**, e.g. in renewable energy and climate smart agriculture.
- **Concessional finance** from institutions such as the Green Climate Fund and Global Environment Facility continues to play an important enabling role, particularly for early-stage climate ventures that face limited access to risk-tolerant capital.
- Directing **climate-aligned investments towards I&As and related support ecosystems and capacities** would allow these structures to respond to both climate and business/societal needs.

IV. Looking ahead and next steps

Looking ahead

Further research, analysis and stakeholder inputs

1) Further analysis of the mapped I&As, including through in-depth case studies

Preliminary list of case studies:

- GCIP Armenia
- IKEA Green Entrepreneurship Accelerator Programme
- ClimAccelerator East Mediterranean
- Kenya Climate Innovation Center
- Cubo Itaú
- Adaptation Fund Climate Innovation Accelerator
- IDB Lab

2) Desk research, including portfolio analysis of financial institutions supporting climate tech I&As

Analysis of aspects related to the design and operation of I&As, funded as part of climate change projects:

- Rationale and design
- Private sector & investment linkages
- Post-project operation and results
- Scaling, replication & regional expansion
- Lessons learned

3) Stakeholder inputs and feedback (interviews, consultation, validation)

Interviews with governments, donors, investors, implementation partners, and innovators, addressing inter alia:

- Profile & positioning
- Governance
- Finance
- Services
- Results
- Challenges
- Lessons learned

4) Inputs and insights from interested contributors – contact: tec@unfccc.int

Looking ahead

Tentative timeline and next steps in 2026

- **Apr (TEC 32):** Feedback and guidance for further work
- **May – Jun**: Data gathering/validation: interviews + desk research
- **Jun – Jul:** Further development of the draft: case studies + findings + key messages and recommendations
- **Jul:** Organization of an online multi-stakeholder workshop to validate the findings
- **Sep (TEC 33)**: Guidance on the finalization of the draft
- **Nov (COP 31):** Publication launch
- **Remainder of 2026-2027**: Outreach + dissemination

Considerations at TEC 32:

- Feedback and guidance on the current draft
- Feedback and views on the preliminary findings
- Feedback on the proposed next steps