

# Capacity Building on the National Systems of Innovation

Thursday, 26th March 2026

2026 Joint Programme:  
Africa NDE Forum & Capacity Building

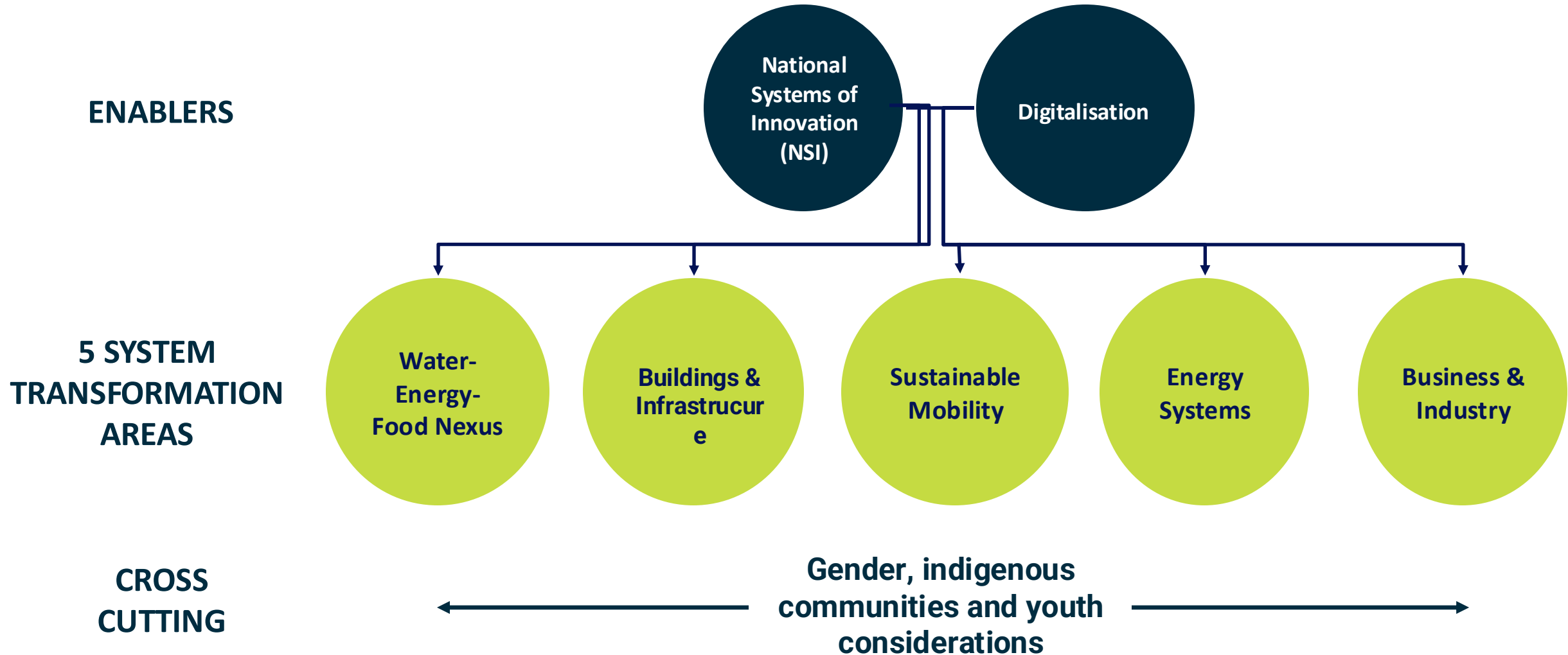




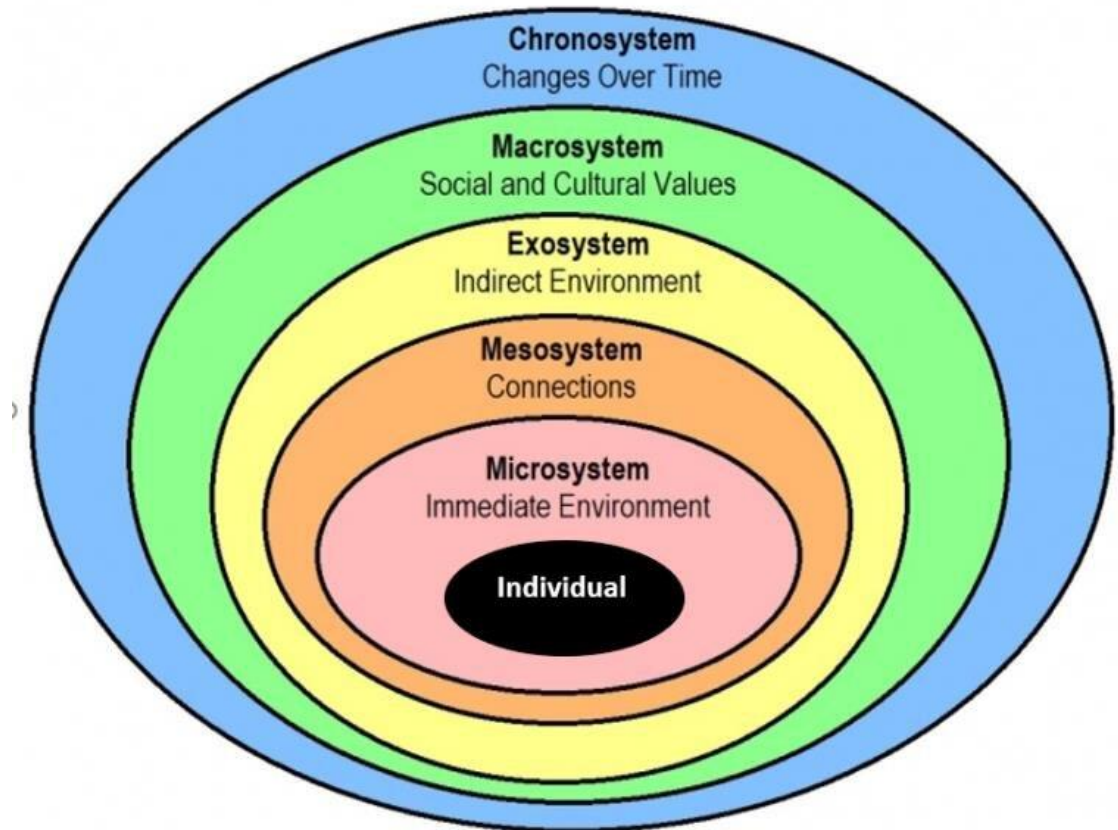
**Recap**

**CTCN 3<sup>rd</sup> PoW and  
2025 program**

# CTCN's Impact: System Transformation

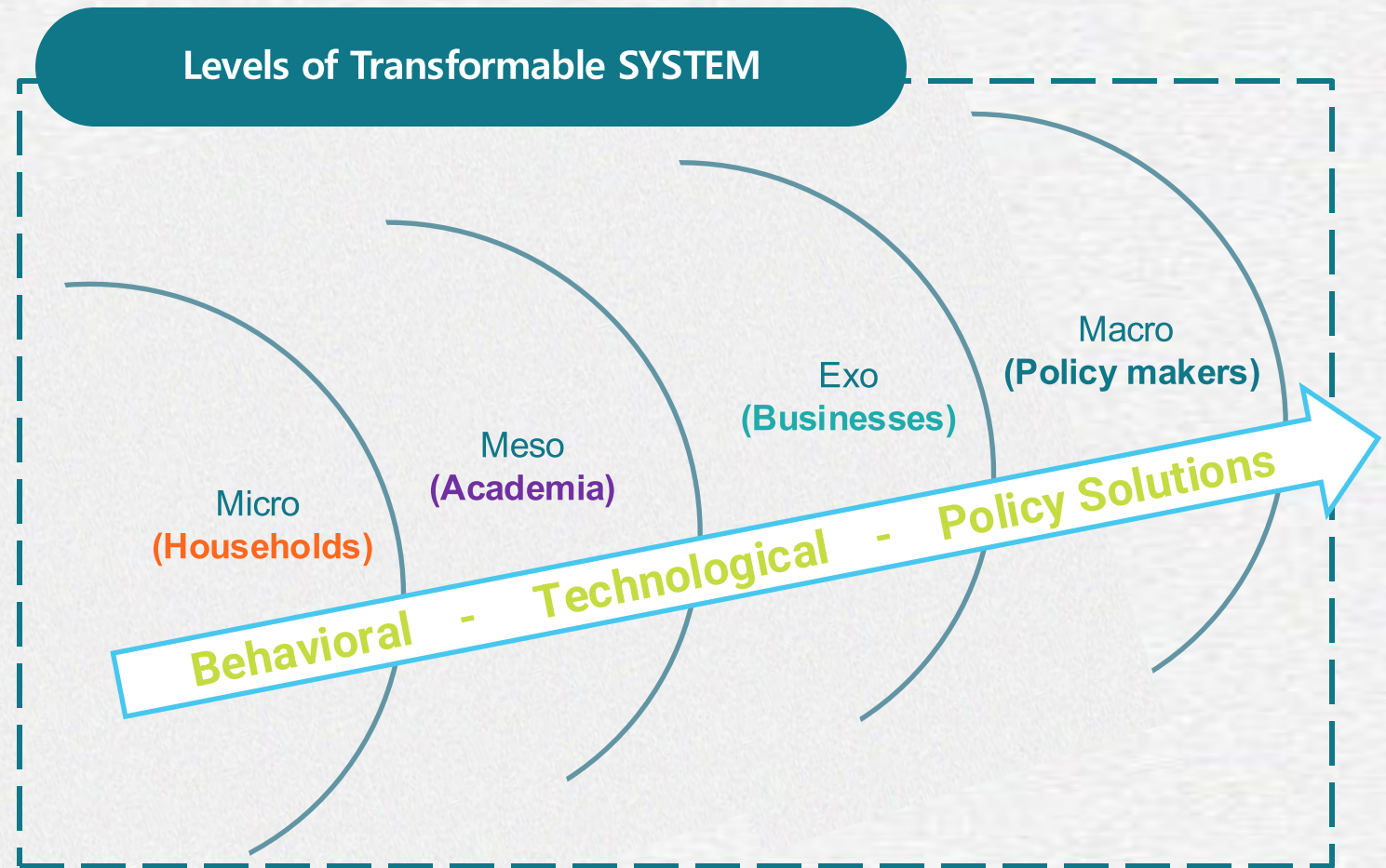


## People Action



Bronfenbrenner's ecological system theory (1994)

**A project linking each actor's solutions, penetrates the system**



# Your reflection on an impact and the purpose of it

## What is an impact to you?

What is an impact to you? / Qu'est-ce qu'un impact pour vous ?

28 / 35 64

Most popular

change 6

Also prominent

action 3 changement 3 effect 3 progress 3

advancement 2 intervention 2 lasting change 2

positive change 2

Other responses

a knock on effect 1 adaptive 1 antananarivo 1 appreciation 1

awareness 1 bring 1 capacity 1 changement de temperature 1

difference 1 engagement 1 event 1 ghg reduction 1 hery 1

impactful implementation 1 implementation 1 improvement 1 influence 1

knowledge 1 knowledge transfer 1 le changement 1 learning 1

madagascar 1 magnitude 1 marque 1 massive change 1 modification 1

news 1 paradigm 1 policy influence 1 positive 1 positive gain or negative 1

progression 1 promotion and facilitatio 1 results 1 shift 1 state improved 1

technology transfer 1 un changement positif ou 1

## Why do we need an impact?

Why do we need an impact? / Pourquoi est-il important d'avoir un impact ?

29 / 35 29

Motivation	Value of intervention
To effect desired change	To demonstrate progress or current position
Stimulation,	Un résultat d'une intervention
To make positive, progressive change.	To improve the livelihood and state of the environment
POUR SAUVER LE MONDE	It shows there is progress
Pour avancer vers l'avant par rapport à la situation de base	To assess progress
Pour une décision utile à prendre	Because we live in a global village and we hold the responsibility to care for the planet
Change and improve from the current situation Measure of progress	To create resilience,adopt specific interventions,
Pour voir l'action de l'intervention positive ou négative	Pour proposer un changement vers le progress
To make a positive intervention	For early warning
Helps the earth and mankind	Change
To motivate action	To achieve set national goals
To change a situation for the better	To trigger positive intervention
Respond to climate implementation	Evaluer les efforts
implementation efficiently in climate action	



**Overview**

**2026 Programme**

Home > Technical Assistance > Active Technical Assistance

Filter by sectors  
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Sectoral roadmaps and strategies...

### Search active technical assistance

national Filters

Showing 1 - 6 of 6 results Sort by

<b>13 Mar 2024</b> <b>Development of a National Plan for Integrated Fire Management in Colombia</b> Reference number: 2024000024 Country: Colombia Objective: Adaptation, Mitigation Sector: Early warning and Environmental assessment Phase: Implementation	<b>05 Jan 2022</b> <b>Development of a framework and roadmap for a National Innovation System to foster low-carbon and...</b> Reference number: 2022000001 Country: Zambia Objective: Adaptation, Mitigation Sector: Cross-sectoral Phase: Completed	<b>02 Apr 2020</b> <b>Developing a national policy for deploying and scaling up e-mobility in Ghana</b> Reference number: 2020000010 Country: Ghana Objective: Mitigation Sector: Transport Phase: Completed
<b>17 Mar 2020</b> <b>Developing a national framework for deploying and scaling up e-mobility</b> Reference number: 2020000007 Country: Zimbabwe Objective: Mitigation Sector: Transport Phase: Completed	<b>26 Jul 2018</b> <b>Development of a national roadmap for the use of low-temperature geothermal power in thermal conditioning in...</b> Reference number: 2018000018 Country: Uruguay Objective: Mitigation Sector: Renewable energy Phase: Completed	<b>08 Feb 2017</b> <b>National certification system for energy auditors</b> Reference number: 2017000005 Country: Pakistan Objective: Mitigation Sector: Energy efficiency Phase: Completed

## Regional Relevance – Africa

African countries' priorities across agriculture, water, and energy highlight strong demand for technologies such as solar, irrigation, and climate-resilient crops. Increasingly, digitalization is emerging as a key enabler to enhance coordination, efficiency, and adaptive management, pointing to readiness for system-level transformation.

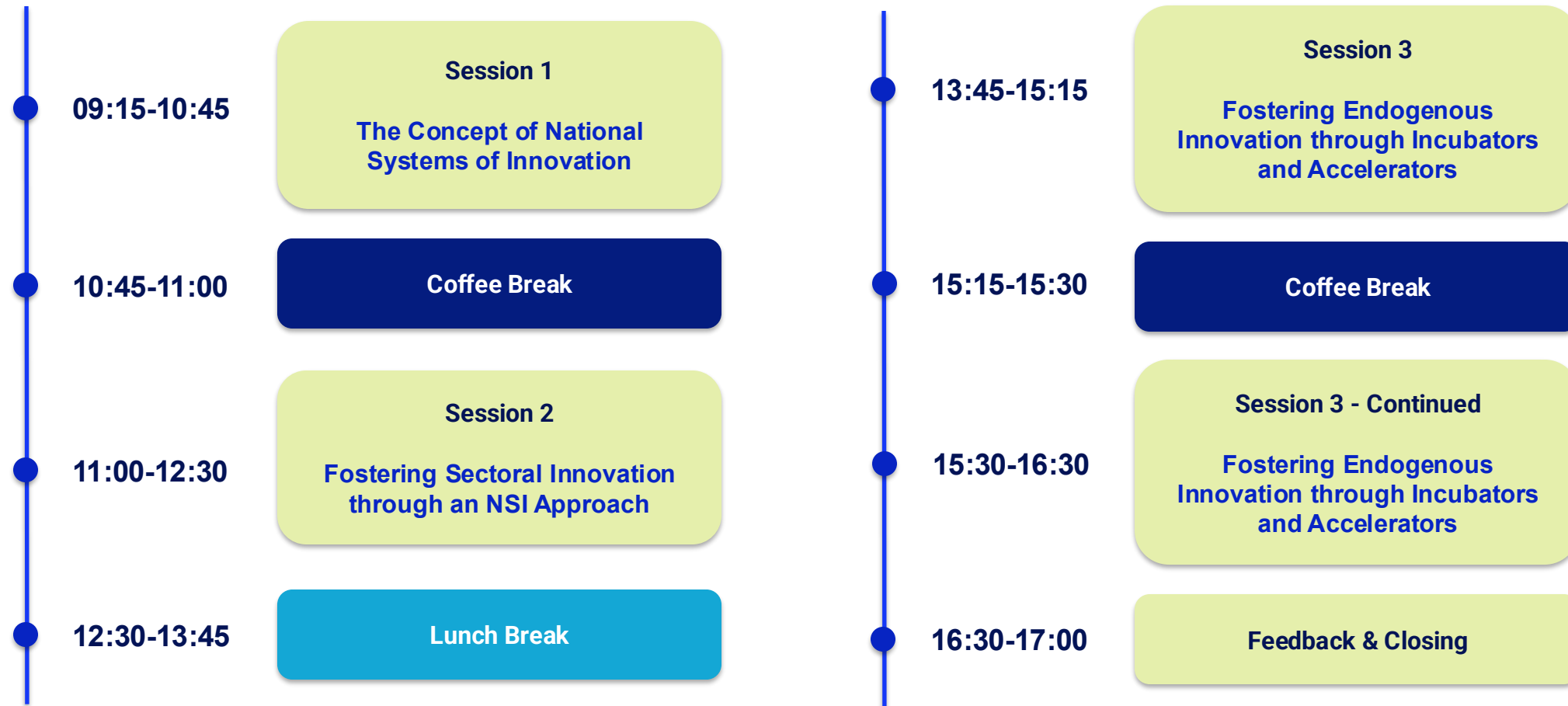
## Why National Systems of Innovation (NSI)?

National Systems of Innovation provide a practical lens to operationalize system transformation. By strengthening linkages between policy, finance, research, and markets, NSI enable countries to not only adopt technologies, but adapt, scale, and sustain them in local contexts.

## This workshop will support NDEs to:

- Apply NSI thinking to climate technology deployment
- Strengthen sectoral innovation and institutional coordination
- Identify actionable technical assistance opportunities
- Leverage incubators, accelerators, and digital tools for scale and impact

# Today's Workshop Schedule



## Session 1 - The Concept of National Systems of Innovation

### National Systems of Innovation as a Concept of “Actors, Institutional context, Linkages”

Benjamin S. Karmorh, Jr, TEC Member, Non-Annex I, Liberia

### Lessons learned from the National System of Innovation in South Africa

Kogilam Govender, NDE, South Africa

### On the path of strengthening the National System of Innovation

Antonio Uaissone, NDE, Mozambique

### Q&A

### Reflection on the concept and examples of NSI presented

## Session 2 - Fostering Sectoral Innovation through an NSI Approach

### Examination of TEC Policy Brief - Setup and implementation of National Systems of Innovation

Thanh Thanh Tranova, Network Engagement & Capacity Building Specialist, CTCN

### Individual work: Application of NSI logic to National Priority Sector

### Peer feedback on the designed sectoral NSI

### Sharing of Learnings

## Session 3 - Fostering Endogenous Innovation through Incubators and Accelerators

### Incubators and Accelerators within NSIs

Fred Onduri, TEC Member, Non-Annex I, Uganda

### Insights from mapping technology incubators and accelerators in developing countries (virtual)

Omar Agodim, Consultant, TEC-UNIDO

### Supporting Africa’s Cleantech Transition (virtual)

Manasa Suresh, Associate Industrial Development Expert, GCIP

### Supporting Green Innovation in Tunisia

Chaima Soudani, Investment Director at CDC and Greentech Initiative Coordinator

### Q&A

### Individual Work: Mapping national needs and priorities related to climate technology incubator and accelerator – in NDCs, NAPs and TNAs

### Group Discussions on opportunities and challenge for integrating incubators and accelerators in national climate planning and programming in Africa

### Sharing of Learnings

## Structure of the Session

Participants will work in four groups, organized by language to support effective exchange:

- Two French-speaking groups and two English-speaking groups.
- Each group will have a facilitation lead or rapporteur to help guide discussions and report back to plenary.
- Each group will choose a note-taker(s).

## Materials and Preparation

Key materials to support readiness and deeper engagement:

- Digital workbook for individual reflections (with few printed copies available)
- Case studies for background context for session 2
- Additional case cards will be introduced to guide group work in Session 2

## Flow of the Session

The session will move from initial framing and individual reflection, to group-based discussions using case materials, and conclude with shared insights and collective learning in plenary.

*Listen*

*Reflect*

*Discuss*

*Share*

**1**

# The Concept of National Systems of Innovation

# Setting the scene: National systems of innovation

Africa NDE Forum | 23 - 26 March 2026 | Hammamet, Tunisia



**United Nations** Climate Change  
Technology Executive Committee

**Benjamin S. Karmorh**  
Member, Technology Executive Committee

# Definition: What is a national system of innovation (NSI)?

“a network of **actors, institutional contexts & linkages** that underlie national technological change”, for example by initiating, modifying, importing and diffusing innovations & new technologies.

## Actors

Organizations that participate in technology development & transfer e.g. technology firms, universities & financiers

## Institutional contexts

Norms, cultural practices & laws that shape actor efforts e.g. government policies that affect how the private sector invests in a particular sector

## Linkages

Interactions & relations between the actors & the institutional context e.g. flows of information & knowledge, & collaboration between firms, universities & research institutes



# Linkages: What is the interplay of NSI and climate action?

When looking at an initiative aiming to foster innovation for climate action at the national level (NSI), this may cover different governance levels, technologies and sectors:

**Regional/local  
systems of innovation**

**Sectoral systems of  
innovation**

**Technological innovation  
systems**

The key to utilizing these interlinkages is taking a systemic approach – one that is:

- Aligned with national climate and development priorities;
- Informed by an understanding of the local context and adaptable to new circumstances; and
- Enriched by the participation of various innovation actors to facilitate alignment.



# Role: What are the functions of NSI?

NSI may perform the following functions, across different stages of the technology cycle - research & development, demonstration, market introduction & commercialization, and diffusion:

- **Knowledge development and diffusion** - knowledge expansion, dissemination & combination
- **Entrepreneurial experimentation** - with new technologies, applications & strategies
- **Market formation** - demand and choices, product positioning, standards & rules of exchange
- **Influence on the direction of search** e.g. technologies, problems & solutions, resource allocation
- **Resource mobilization** - financial & human resources, infrastructure
- **Legitimation** - regulative, normative & cognitive legitimacy by stakeholders
- **Development of positive externalities** - pooled labor markets, complementary technologies & specialized suppliers



# Actions: How can NSI be strengthened?

Strengthening NSI requires three key complementary actions:

## 1. Develop the fundamental elements, e.g.

- build a strong education system
- invest in research, development & demonstration
- implement enabling policies, including to support market creation

## 2. Focus on specific climate technologies e.g.

- identify the stages of the technology cycle that might require most support
- undertake technology demonstration & deployment
- help overcome barriers to innovation

## 3. Develop national strategic & coordination capabilities e.g.

- identify roadmaps to meet innovation priorities for climate & development
- identify innovation gaps to be addressed to successfully progress on these roadmaps
- coordinate activities across the innovation cycle



# Strengthening NSI: What are key policy areas & actors?

## Key policy areas

- Innovation policies
- Higher education policies
- Intellectual Property Rights policies
- Sectoral policies & targets
- Regulatory policies & instruments
- Fiscal & financial incentives & risk-capital policies
- International agreements, policies & technical norms

## Key actors

- Governments
- Universities & scientific societies
- Private sector
- Finance providers
- International actors
- Media



# Challenges: What are systemic barriers for NSI?

- **Infrastructural failures** – Absence or inadequate quality of infrastructure (e.g. knowledge & physical)
- **Hard** (e.g. laws, regulation) **and soft** (e.g. culture, social norms) **institutional failures** - Absence or inadequate capabilities of institutions
- **Interaction failures** (strong and weak network failures) – Absence, inadequate quality or intensity of interactions
- **Capability failures** relating to firms and other actors - Absence of required/relevant institutions or their inadequate capabilities
- **Lock-in** in systems, institutions, infrastructures & technologies
- **Directional, reflexivity, and coordination failures**



# Financing NSI: Strengthening enablers & overcoming barriers

- Exploring **innovative, customized & flexible funding frameworks**
- Developing financial instruments that **reduce the risk & opportunity cost for local actors**
- Facilitating **private sector participation** in strengthening NSI e.g. by regulatory reforms & incentive programs
- Strengthening **entrepreneurial ecosystem** to enhance effectiveness of NSI e.g. incubators & accelerators

Explore TEC publications:  
[unfccc.int/ttclear/tec/documents](https://unfccc.int/ttclear/tec/documents)



United Nations Climate Change  
Technology Executive Committee

2015



2017



2018



2018



2023



# Conclusion

Developing countries can strengthen the financing of National Systems of Innovation (NSI) by adopting diverse and flexible funding approaches beyond government resources, including private sector and international support. Key strategies include reducing investment risks through tailored financial instruments, improving the business environment to attract private sector participation, and strengthening entrepreneurial ecosystems through incubators and accelerators.

Engagement with international partners is also critical, as they provide expertise, resources, and opportunities for collaboration. Overall, a coordinated and innovative financing approach is essential to overcoming systemic barriers and enhancing innovation for climate action.



# Observations from South Africa's National System of Innovation with a focus on climate change

CTCN NDE Forum 2026

by

Kogi Govender  
SA CTCN NDE  
March 2026

Making *sure* it's possible

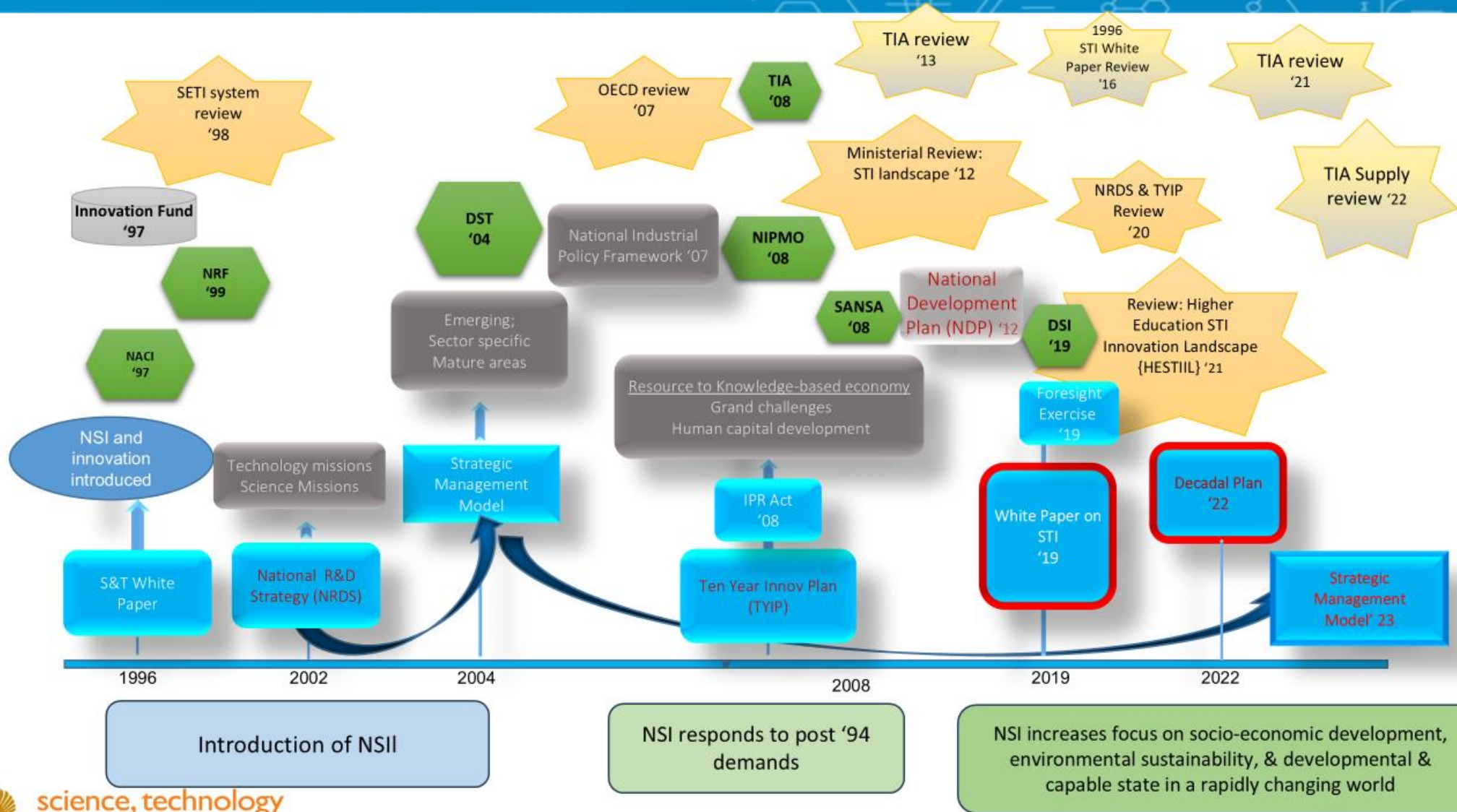


science, technology  
& innovation

Department:  
Science, Technology and Innovation  
REPUBLIC OF SOUTH AFRICA



# South Africa's STI Policy Landscape



# Observations and learnings

## Policy continuity matters more than policy change

South Africa has maintained a relatively stable innovation policy trajectory—from early post-apartheid strategies to the STI White Paper. This consistency enabled institutional maturation and long-term programmes.

### Lesson:

System benefit more from **iterative refinement than constant redesign.**

## Monitoring and indicators are critical for system learning

Through NACI STI Indicator Reports, South Africa has built a strong culture of:

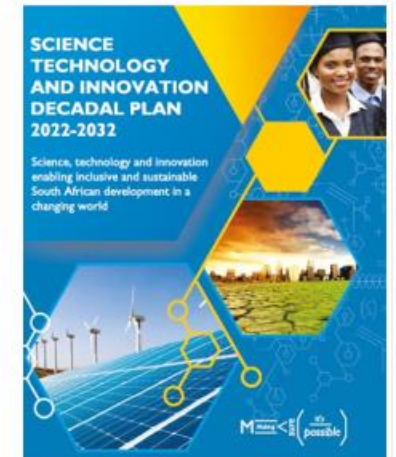
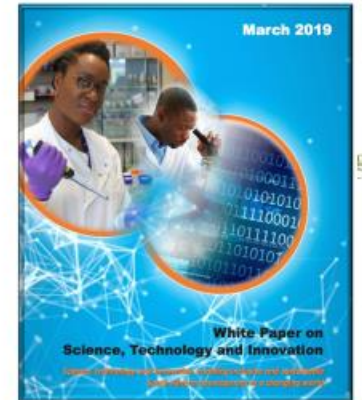
- Measurement
- Benchmarking
- Evidence-based policy

### Lesson:

Without robust indicators, innovation systems **cannot self-correct or improve strategically.**

INNOVATION TOWARDS  
A KNOWLEDGE-BASED ECONOMY  
Ten-Year Plan for South Africa  
(2008 – 2018)

Department of Science and Technology



# DSTI Mantra “placing science, technology and innovation at the centre of government, education, industry and society”

## Hon. Dr Blade Nzimande, Minister DSTI

### Strong public sector leadership is essential—but not sufficient

The Department of Science, Technology and Innovation has played a central coordinating role, supported by entities. Private sector participation remains comparatively weak.

### Lesson:

Government can **build the system**, but **industry essential to drive scale and impact**.

Academy of Science of South Africa



Council of Scientific and Industrial Research



Human Sciences Research Council



National Advisory Council on Innovation



National Research Foundation



South African Council for Natural Scientific Professions



South African National Space Agency



Technology Innovation Agency



- **Mission-oriented programmes can align the system**
- Mobilize funding
- Link science to societal challenges
- **Lesson:**  
“Grand challenges” are effective tools for system-wide coherence and impact

- **Global integration strengthens national systems**
- South Africa benefits from:
- International research collaboration
- Participation in global science programmes
- **Lesson:**  
Integration into global knowledge networks enhances capability and visibility, especially for emerging economies.

## The global change research plan



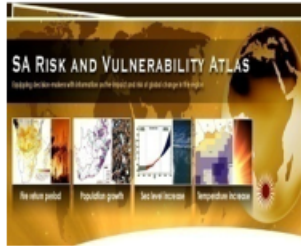
A	B	C	D
<b>Understanding a changing planet</b>	<b>Reducing the Human Footprint</b>	<b>Adapting the way we live</b>	<b>Transition to Sustainability</b>
<ol style="list-style-type: none"> <li>1. Diagnostics, monitoring and adaptive management.</li> <li>2. Dynamics of the oceans around southern Africa.</li> <li>3. Dynamics of the complex internal earth system.</li> <li>4. Linking the land, the air, and the sea: Improving model predictions at different scales.</li> </ol>	<ol style="list-style-type: none"> <li>1. Waste minimisation methods and technologies.</li> <li>2. Conserving biodiversity and ecosystem services.</li> <li>3. Institutional integration to manage ecosystems and the services they offer.</li> <li>4. Doing more with less.</li> </ol>	<ol style="list-style-type: none"> <li>1. Preparing for rapid change and extreme events.</li> <li>2. Planning for sustainable urban development in a South African context.</li> <li>3. Water security for South Africa.</li> <li>4. Food and fibre security for South Africa.</li> </ol>	<ol style="list-style-type: none"> <li>1. Dynamics of transition at different scales – mechanisms of innovation and learning.</li> <li>2. Resilience and capability.</li> <li>3. Options for greening the developmental state.</li> <li>4. Technological innovation for sustainable social-ecological systems.</li> <li>5. Social Learning for sustainability, adaptation, innovation and resilience.</li> </ol>



### HYDROGEN SOCIETY ROADMAP FOR SOUTH AFRICA 2021 DEPARTMENT OF SCIENCE AND INNOVATION



# Environmental Sustainability & climate change (STI indicator report)



## Patents per Million Population: Solar Thermal Energy Technology (Measures innovation in harnessing the sun's heat for energy)

Year	China (Leader)	South Africa	Brazil	India
2011	5.345	1.026	0.790	0.001
2020	18.170	0.199	0.028	0.000

Source: Computed from International Renewable Energy Agency data (2024 South African STI Indicators Report)

## Patents per Million Population: Wind Energy Technology (Measures innovation in harnessing wind power)

Year	China (Leader)	South Africa	Brazil	India
2011	2.979	0.725	1.292	0.002
2020	7.603	0.204	0.070	0.000

**Strong research programmes**  
**Embedded in programmes are**  
**platforms for education and training**  
**Research Chairs**  
**Centres of Excellence**  
**Biannual Global change conferences**

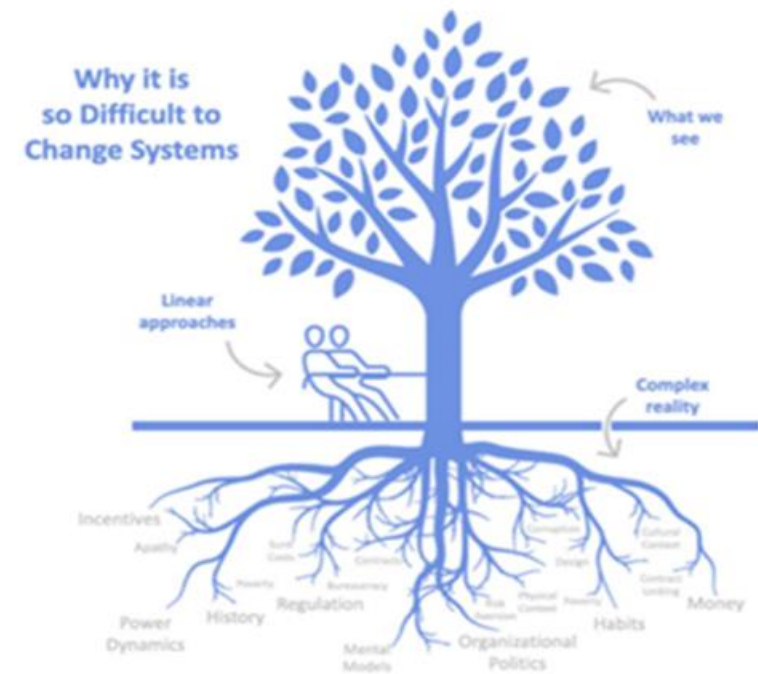
## SASSCAL

Southern African  
 Science Service Centre for  
 Climate Change and  
 Adaptive Land Management

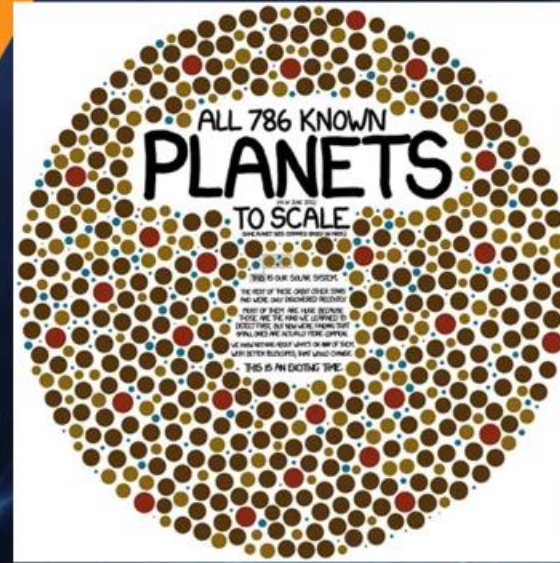
# Persistent Challenges, STI indicator report (Latest to be released 26/03/26)

- **Gini Coefficient** : remain one of the world's most unequal societies
- **Economic Spillovers**: The NSI's contribution to addressing the "triple challenge" of poverty, unemployment, and inequality remained a key focus area
- **Innovation Chasm**: While knowledge production (publications) grew from **3,693 (2000) to 27,208 (2022)**, patent applications declined by **40% over the last decade** (from **371 in 2013 to 223 in 2022**)
- **R&D Investment Stagnation**: Gross Expenditure on R&D (GERD) stood at just **0.62% of GDP (2023/2024)** , far below the 1.5% target, emphasising the need for more business sector investment.
- **Private Sector Hesitancy**: Despite tax incentives under **Section 11D** of the Income Tax Act, business R&D investment remained insufficient.
- **Global Competitiveness**: An overall drop in patent applications was observed, although foreign IP payments **decreased** and South African IP sales **increased**.

# Reflections



Dankie  
Enkosi  
Ha khensa  
Re a leboga  
Ro livhuwa  
Siyabonga  
Siyathokoza  
Thank you



Making < sure (it's possible)

Acknowledgements:  
Lindile Adonis: STI measures  
Specialist



science, technology  
& innovation

Department:  
Science, Technology and Innovation  
REPUBLIC OF SOUTH AFRICA



# National Innovation System



Republic of Mozambique Ministry of Education and Culture  
National Directorate of Science, Technology and Innovation



Funded by  
the European Union

## Strengthening the National System of Innovation in Mozambique

**Hammamet, Tunisia**

**March 23rd -26th 2026**

**Presenter:** Antonio Uaissone  
DNCTI

# Presentation objectives



**Provide an overview  
of the technical  
assistance.**



**Share progress and  
highlight the initial  
findings.**



**Outline how  
Mozambique plans to  
foster innovation.**

# Scope of Technical Assistance

*NIS Framework & Roadmap for Low-Carbon Climate-Resilient Development — Mozambique*

**Objective:** Introduce an effective NIS that fosters low-carbon and climate-resilient economic development in Mozambique through endogenous innovation.

## 1 NIS Working Group

- Form multi-sector WG (up to 20 members)
- 2-day in-person inception workshop
- 4 quarterly validation meetings

WG member list · Workshop report · Meeting minutes | **Month 1–13**

## 2 National Innovation Environment Assessment

- Policy & regulatory landscape mapping
- Stakeholder & sector ecosystem mapping
- SWOT analysis (strengths, weaknesses, opportunities, barriers)

National Innovation Environment Report | **Month 2–4**

## 3 NIS Framework & Roadmap

- NIS Framework: vision, governance & priority actions
- Implementation Roadmap: timelines, budgets & KPIs
- Aligned with NDC, NAP & STI Strategy

NIS Framework · Implementation Roadmap | **Month 5–10**

## 4 Institutional Innovation Support

- Revitalization strategy: Maluana S&T Park
- University Innovation Support Centre concept
- ≥3 financing mechanism concept sheets

Park strategy · Centre concept · Finance concepts | **Month 7–10**

## 5 Communication & Engagement

- Multi-stakeholder communication plan
- National Innovation Dialogue (50 participants)
- Press release · closing webinar

Communication Plan · Innovation Dialogue Report | **Month 9–15**

# Context: The National Development Ambition



**Strategic vision**



**Role of innovation**



**Policy and  
institutional reforms**

# Context: Climate Reality



**Climate vulnerability**



**Impacts of climate change**



**Economic and development challenges**

## Context: Why Strengthen Mozambique's National Innovation System?

1

**Bridge the  
policy-  
implement  
ation gap**

2

**Connect  
knowledge  
to market**

3

**Mobilize  
risk capital**

4

**Build  
systemic  
resilience**

5

**Foster  
inclusive  
participatio  
n**

# Preliminary results of the National Innovation Environment Assessment (1)

System Architecture

Legal & policy framework



```
graph TD; A[Legal & policy framework] --> B[Research capacity]; B --> C[Innovation ecosystem]; C --> D[Academia-industry linkages];
```

Research capacity

Innovation ecosystem

Academia-industry linkages

## Preliminary results of the National Innovation Environment Assessment (2)

### Stakeholder Perceptions: Key system challenges

Policy execution  
gaps

Weak  
research–  
industry  
linkages

Funding “Valley  
of Death”

Limited private  
sector  
engagement

Centralized  
innovation  
ecosystem

# Initial findings on the National Innovation Environment Assessment (3)- SWOT ANALYSIS.

## **STRENGTHS (Internal)**

- Young and energetic demographics
- Modernized policy framework
- Strategic institutional centers

## **WEAKNESSES (Internal)**

- Prohibitive cost of capital
- Knowledge sovereignty risk
- Functional fragmentation

# Initial findings on the National Innovation Environment Assessment (4)- SWOT ANALYSIS.

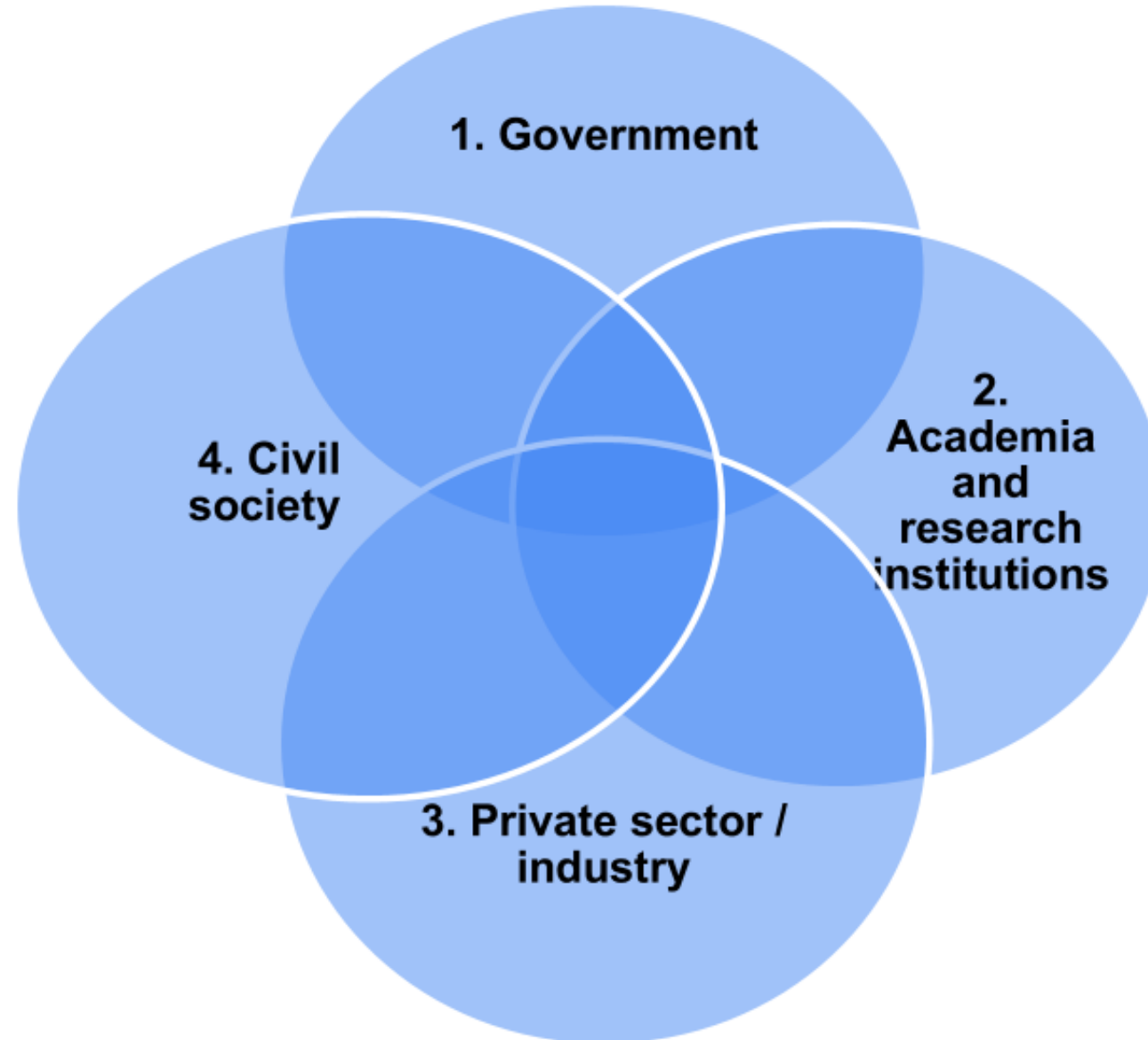
## **OPPORTUNITIES (External)**

- Regional markets and carbon finance
- SADC value chains
- Energy innovation

## **THREATS (External)**

- The “Resilience Trap”
- Carbon Border Adjustment Mechanism (CBAM) risks
- Infrastructure dependency

# The Quadruple Helix Innovation Model



# Priority Initiatives for Innovation Infrastructure

## 1. Revitalize Maluana science & technology park

*Objective:* Strengthen coordination across innovation actors.

*Addresses:* Functional fragmentation in the innovation ecosystem.

## 2. University innovation centres & strengthened incubators

*Objective:* Enhance entrepreneurship support and technology transfer.

*Addresses:* Weak academia-industry linkages.

## 3. Dedicated innovation financing mechanisms

*Objective:* Provide funding to scale promising ideas.

*Addresses:* The “Valley of Death” for early-stage innovators.

# Expected Results

*NIS Framework & Roadmap for Low-Carbon Climate-Resilient Development — Mozambique*

**Outcome:** Enhanced endogenous capacity for innovation through effective policies, institutional support, and strengthened innovation capacities across relevant stakeholders.

## **NIS Policy Framework**

A government-endorsed framework with vision, governance structures, and priority actions aligned with Mozambique's STI Strategy, NDC, NAP, and climate commitments.

## **Implementation Roadmap**

A sequenced, costed roadmap with timelines, lead institutions, and KPIs—bridging the NIS vision to actionable steps for climate-resilient innovation.

## **Innovation Environment Assessment**

Comprehensive mapping of policies, stakeholders, and sectoral capacity, plus a SWOT analysis establishing the evidence base for NIS design.

## **Strengthened Institutions**

Revitalization strategy for Maluana S&T Park, a concept for university innovation centres, and  $\geq 3$  tailored financing mechanisms for SMEs, startups & R&D.

## **Stakeholder Engagement**

An active NIS Working Group, inception workshop, quarterly consultations, and a National Innovation Dialogue catalyzing cross-sector ownership.

## **Communication & Visibility**

A multi-stakeholder communication plan, innovation dialogue report, press release, and closing webinar amplifying NIS adoption and attracting follow-on investment.

# Next Steps (1): Designing the NIS Framework & Roadmap

The NIS  
Strategic  
Framework

The  
Implementation  
Roadmap

Public-Private  
Co-Creation

# Next Steps (2) Operationalizing priority initiatives



Mobilize strategic partnerships



National stakeholder roundtables



Targeted SME support

# Continuing our momentum – Regional Peer Network



1. Regional collaboration & peer learning



2. Knowledge sharing & best practices



3. From strategy to implementation



MUITO OBRIGADO!  
Thank you very much for  
your attention!

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Time for  
**Q&A**

# Reflection on the concept and examples of NSI presented

*Group Discussions*



*1) How does the NSI operate in your country, and which actors or linkages are currently present or absent?*

*2) What gaps and challenges do you see between your work and the national innovation system?*

*3) What are the lessons learned regarding the set-up and strengthening of the NSI in your context?*

*1) Comment fonctionne l'INS dans votre pays, et quels acteurs ou liens sont actuellement présents ou absents ?*

*2) Quelles lacunes et quels défis constatez-vous entre votre travail et le système national d'innovation ?*

*3) Quels enseignements avez-vous tirés de la mise en place et du renforcement de l'INS dans votre contexte ?*



# Coffee Break

# 2

## Fostering Sectoral Innovation through an NSI Approach

# Examination of TEC Policy Brief

Setup and implementation  
of National Systems of Innovation

*Group Exercise*



## Brazil - Brésil



This document is part of a collection of six case studies selected from the work conducted by the Technology Executive Committee (TEC) on "Good practices and lessons learned on the setup and implementation of National Systems of Innovation". It specifically focuses on the bioethanol innovation system in Brazil.

The Summary for Policymakers of the TEC's work presented in June 2022 explains that the primary objective of an innovation system is to produce, diffuse, and use innovations. To accomplish this objective, the Technology Executive Committee (TEC) identifies specific activities or functions that should be carried out to facilitate the innovation process. Based on empirical evidence, innovation studies identify several main functions as outlined in Table 1. Following to what extent an innovation system performs these functions, according to security and access the innovation system's achievements, failures and gaps or barriers.

The functions assessment found that the functions of knowledge development and diffusion (K2), implementation of innovation (I2), and market formation (M2) are key functions for the Indian ICT study case.

**Table 1. Main roles of innovation system**

Function	Role	Key Functions	Regulation
Knowledge development and diffusion	Knowledge development and diffusion	Knowledge development and diffusion	Regulation
Implementation of innovation	Implementation of innovation	Implementation of innovation	Regulation
Market formation	Market formation	Market formation	Regulation

(French-speaking group)

## India - Inde



This document is part of a collection of six case studies selected from the work conducted by the Technology Executive Committee (TEC) on "Good practices and lessons learned on the setup and implementation of National Systems of Innovation". It specifically focuses on the Indian Bureau of Energy Efficiency (BEE).

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(English-speaking group)

## Haiti - Haïti



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(English-speaking group)

## Indonesia - Indonésie



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The Summary for Policymakers of the TEC's work presented in June 2022 explains that the primary objective of an innovation system is to produce, diffuse, and use innovations. To accomplish this objective, the Technology Executive Committee (TEC) identifies specific activities or functions that should be carried out to facilitate the innovation process. Based on empirical evidence, innovation studies identify several main functions as outlined in Table 1. Following to what extent an innovation system performs these functions, according to security and access the innovation system's achievements, failures and gaps or barriers.

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(French-speaking group)

# Guiding Questions for Each Case

1. *What is the market structure of the sector (e.g., competitive, concentrated, state-led)?*
2. *What regulatory or policy frameworks shape innovation in this sector?*
3. *Which stakeholder segments were engaged, and what roles did they play?*

1. *Quelle est la structure du marché du secteur (par exemple, concurrentiel, concentré, piloté par l'État) ?*
2. *Quels cadres réglementaires ou politiques encadrent l'innovation dans ce secteur ?*
3. *Quels segments de parties prenantes ont été impliqués et quels rôles ont-ils joués ?*

# Sharing of Case Learnings



# Individual work

## Application of NSI logic to National priority sector



# Individual Exercise: NSI Functions Applied to Sectors

Refer to your workbook for your own reflections on:

## Step 1. Define the sector context

- What national priority or challenge does the sector address?
- What is the current innovation maturity level?

## Step 2. Map the system

- Key actors (public, private, intermediaries, finance, users)
- Existing policies and initiatives

## Step 3. Diagnose gaps

- Where are linkages weak?
- Which capabilities or incentives are missing?

## Step 4. Identify leverage points

- What 2-3 interventions could strengthen the system?
- Which actors would need to lead or coordinate?

## Step 5. Reflect on feasibility

- Political or institutional enablers
- Potential resistance or risks

# Peer Feedback on the designed sectoral NSI





# Lunch Break

# 3

## Fostering Endogenous Innovation through Incubators and Accelerators

# Incubators and Accelerators within National Systems of Innovation

Africa NDE Forum | 23 - 26 March 2026 | Hammamet, Tunisia



**United Nations** Climate Change  
Technology Executive Committee

**Fred Machulu Onduri**  
Member, Technology Executive Committee

# What are incubators and accelerators?

## Incubators

An incubator is any sort of environment designed to support start-ups, often over a period of 1-5 years, including by providing a physical location and business, marketing, technical and/or financial support services

## Accelerators

An accelerator typically provides mentoring, peer learning and skills development support to entrepreneurs over a period of 3-6 months, often in exchange for a small equity stake in the resulting venture.

---

## What are the main differences?

1

Incubators have a longer **history**, hence more experience, learning and standard operating models

2

Incubators often support all types of business, while accelerators are often more **focused** on high-tech entrepreneurship.

3

In terms of **operational model**, incubators often support entrepreneurs for a longer **durations**, with less competitive **selection process** compared to accelerators.

4

The **source of funding** for incubators is often public entities, while accelerators are often funded by corporates and venture capitalists.



# Linkage: What is the role of incubators & accelerators in NSIs?

One of the functions of national systems of innovation is supporting the **entrepreneurial experimentation** – to reduce uncertainty with new technologies, applications & strategies.

## Actors

Private firms  
Government  
Risk-capital providers  
Philanthropists

## Policies

Ease of starting a business  
Risk-capital policies  
Start-up support programmes  
Incubator programmes

## Indicators

Start-up support services  
SMEs introducing innovation  
Market introduction of new technological products  
Experimental application projects

Advancing the climate agenda: development, acceptance and diffusion of **new mitigation and adaptation technologies**; creation of **green jobs** and **skills**; strengthening **innovation ecosystems** for climate action and SDGs; and more.



# Services: How incubators and accelerators support innovation for climate action?

Incubators and accelerators, as part of the NSIs, play an important role in generating new products, services, businesses, organizational models and behavioural changes, to speeds up and scales up national efforts to address climate change.

## Addressing challenges

- Weak entrepreneurial support systems
- Fragmented linkages to climate technology markets
- Inadequate finance for entrepreneurial activities

## Fostering enablers

- By reducing risk and providing support for business development, marketing, and technical services
- By providing the opportunity to interact with potential partners, markets of suppliers and buyers, customers and supporting firms
- By connecting entrepreneurs with sources of finance and investment



# Strengthening climate technology I&As in developing countries

- A strong national systems of innovation fosters entrepreneurial activities and could help unlock financing for incubators and accelerators, including by crowding in private finance.
- Despite the potential benefits, incubators and accelerators focused on climate technology constitute a small share globally, and specifically in developing countries. More in-depth analysis of the topic is needed.

**Explore TEC publications:**  
[unfccc.int/ttclear/tec/documents](https://unfccc.int/ttclear/tec/documents)



**United Nations** Climate Change  
Technology Executive Committee

2017



2018



2018



2026 (forthcoming)

TEC-UNIDO  
work on  
climate  
technology  
I&As in  
developing  
countries



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**United Nations** Climate Change  
Technology Executive Committee

# TEC-UNIDO Paper on Climate Technology Incubators and Accelerators

Session 3: Fostering Endogenous Innovation through Incubators and Accelerators

Africa NDE Forum, Thursday 26 March 2026



# Background of climate technology I&A paper

## Objective

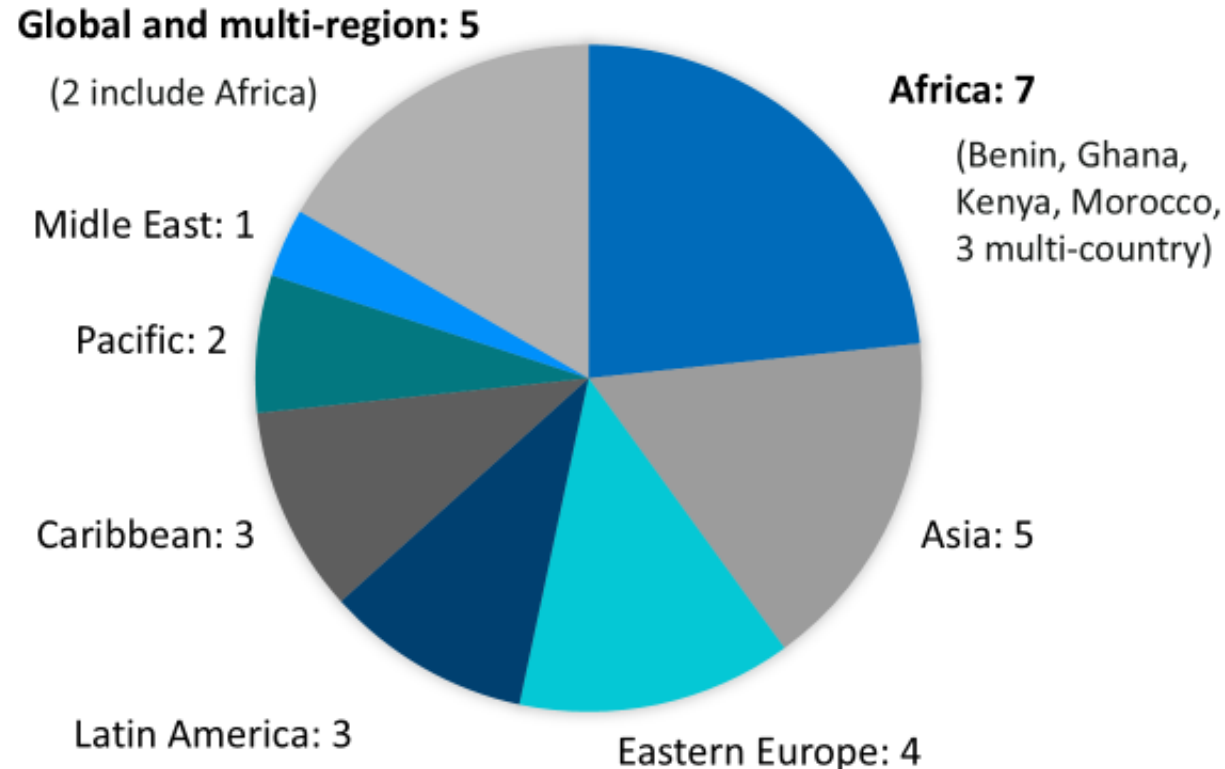
- **Provide an overview** of climate technology I&A in developing countries
- **Identify practical pathways** for the development of funding proposals that incorporate I&A and seek to build effective ecosystems for start-ups
- **Offer policy insights** from the development and operation of I&A

## Key elements

- Mapping of **30 climate technology I&A in developing countries**
- **Selection criteria:** geographic coverage, thematic scope, stages of support, service offerings, financing models, and the actors involved



# Geographic distribution



## Africa Insights

- Strong regional accelerator presence: e.g. ClimAccelerator Africa, Catalyst Fund, 500 Global
- Prominent national hubs: e.g. Ghana Innovation Climate Centre (GCIC), Kenya Climate Innovation Centre (KCIC), UM6P StartGate

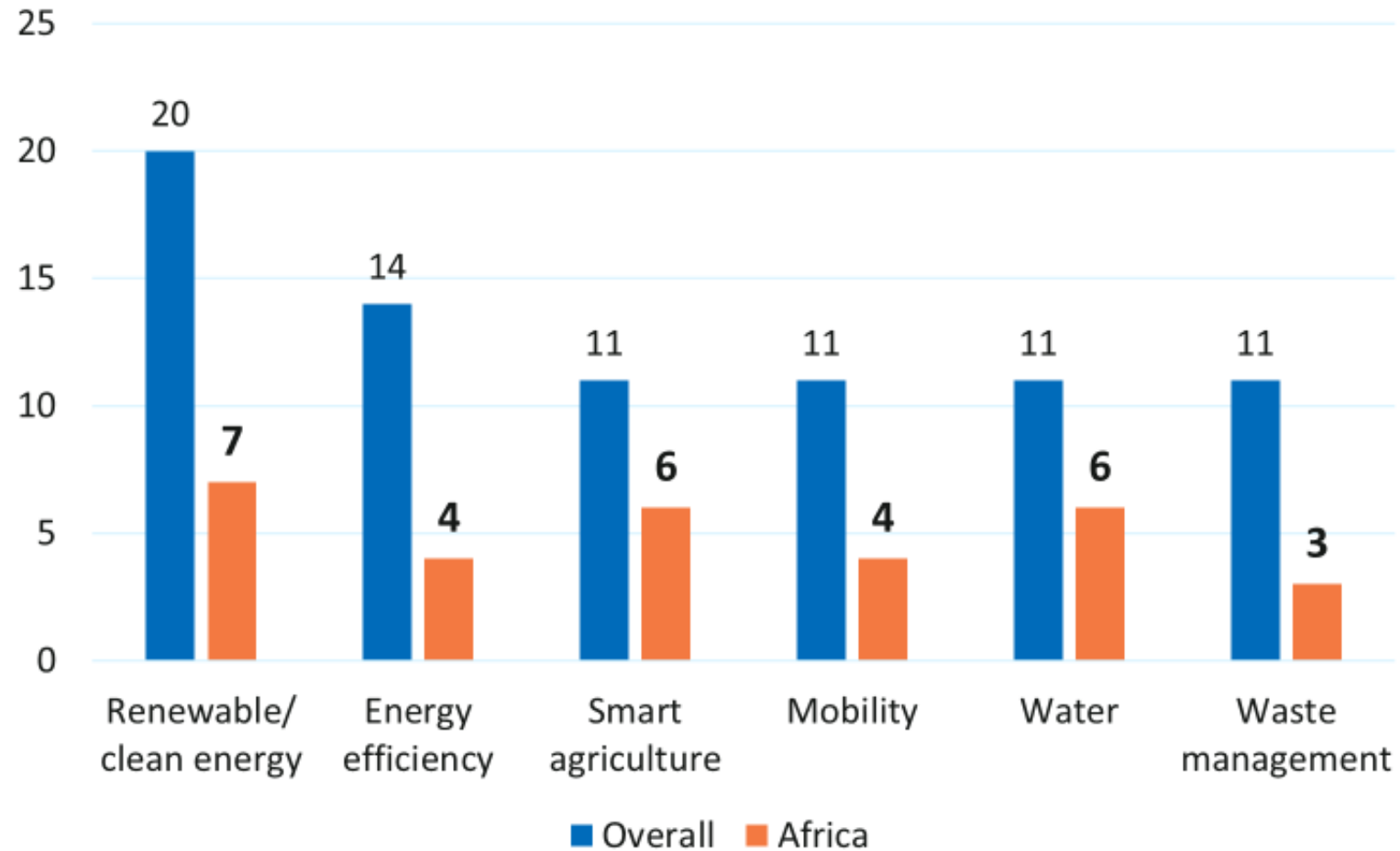


## Typology of I&A

Type of I&A	Characteristics	Overall	Africa
<b>Incubators</b>	<ul style="list-style-type: none"><li>• Longer-term programmes supporting ideation, research-to-prototype development, early business formation, lab access, mentorship, market discovery, and founder skills building.</li><li>• Common in university settings, donor programmes, and national hubs.</li></ul>	5	<b>2</b>
<b>Accelerators</b>	<ul style="list-style-type: none"><li>• Timebound, cohort-based programmes focused on validation, pilot preparation, investment readiness, and early commercialization.</li><li>• Often function as “readiness engines”, preparing ventures to absorb blended or commercial capital and enter procurement or pilot partnerships.</li></ul>	17	<b>5</b>
<b>Hybrid models</b>	<ul style="list-style-type: none"><li>• Combine incubation and acceleration within a single institutional structure.</li><li>• Particularly important in developing countries where early-stage pipelines are thin and ventures require continuity across multiple TRL stages.</li></ul>	8	<b>2</b>



## Sector focus





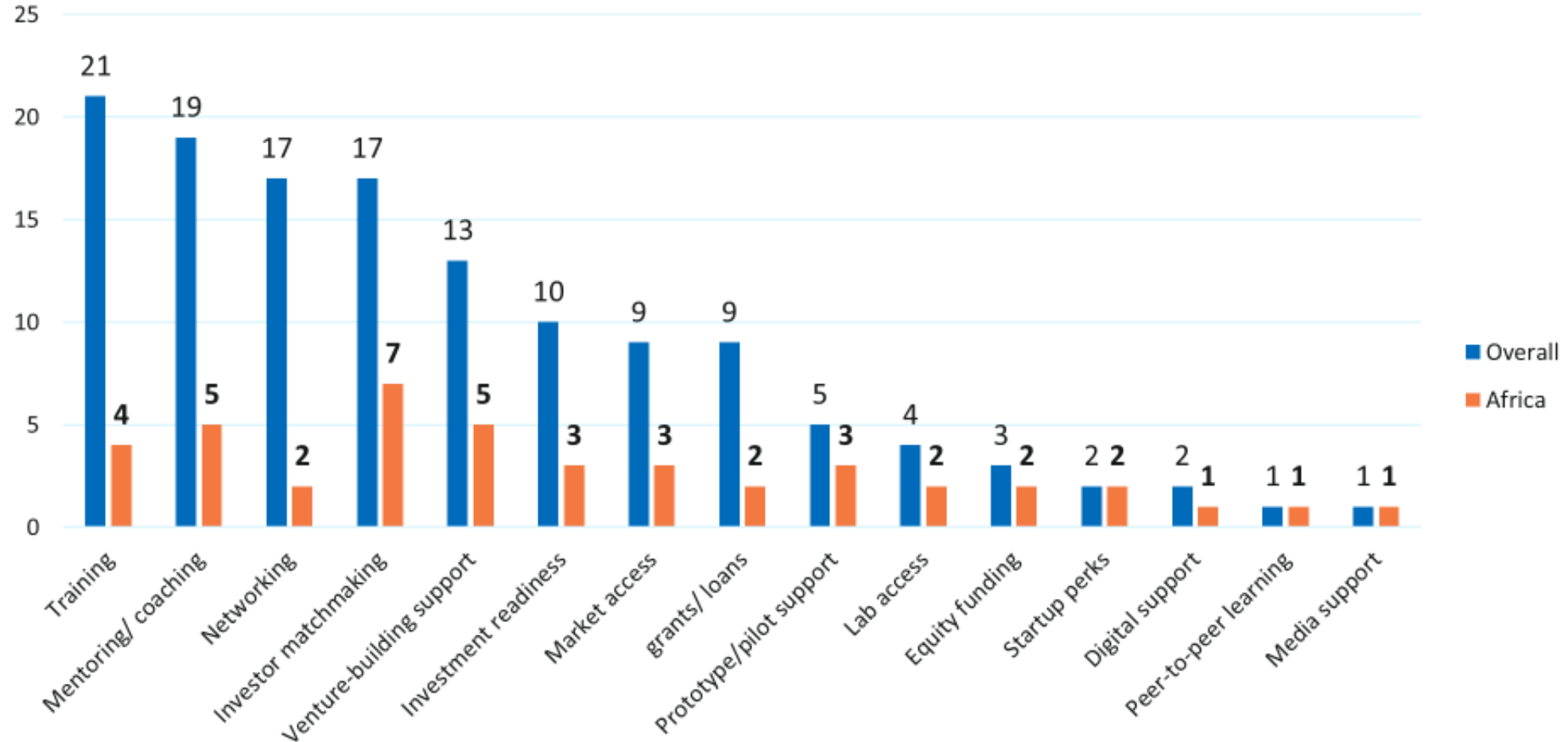
## Technology Readiness Levels (TRLs)

- Most support **concentrated** at TRL 3–6 (prototype → validation)
- Few late-stage TRL 7–9 accelerators
- Some TRL 1–3 early programmes feeding pipeline

Africa I&A / TRL	1	2	3	4	5	6	7	8	9
500 Global				X	X	X			
Benibiz 2	X	X	X						
CATAL1.5°T				X	X	X			
Catalyst Fund				X	X	X			
ClimAccelerator Africa			X	X	X	X	X		
CTCN Youth Climate Innovation Programme			X	X					
GCIC			X	X	X				
KCIC			X	X	X	X	X		
UM6P StartGate		X	X	X	X				



# Service offered





## Financing and business models of Africa I&A

- Dominated by **public & multilateral funding** and **no private-only models**
- **3 offer grants:** ClimAccelerator Africa, 500 Global and UM6P StartGate
- **3 offer equity:** Catalyst Fund, KCIC and CATAL1.5°T
- **Small to medium cohorts** : 15 to 40

Africa I&A	Model
CTCN Youth Climate Innovation Programme	Multilateral
Catalyst Fund	Private, Multilateral
Benibiz 2	Public
ClimAccelerator Africa	Public
GCIC	Public, Multilateral
KCIC	Public, Multilateral
CATAL1.5°T	Public, Multilateral
UM6P StartGate	Public, Private
500 Global	Public, Private, Multilateral



## Emerging models identified

- **Corporate-anchored and university-anchored hubs:** technologies de-risking
- **Donor-backed early-stage incubation models:** entrepreneurship capacity building
- **Network-based models:** scaling support across regions
- **Youth dedicated programmes:** pipeline and early skills building

Africa I&A	Model
UM6P StartGate	Corporate-anchored and university-anchored hubs
Catalyst Fund	Donor-backed early-stage incubation models
GCIC	
KCIC	
ClimAccelerator Africa	Network-based models
500 Global	
CATAL1.5°T	
Benibiz 2	Youth dedicated programmes
CTCN Youth Climate Innovation Programme	



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**United Nations** Climate Change  
Technology Executive Committee

# Thank you!

## Climate Technology Innovation

🌐 [www.unido.org](http://www.unido.org)

🌐 [www.unido.org/climate-adaptation-innovation-learning](http://www.unido.org/climate-adaptation-innovation-learning)

🏢 UNIDO Climate Tech Innovation

## Omar Agodim

Technical Advisor

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UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION

Progress by innovation

UN CTCN 2026 NDE Forum | Hammamet, Tunisia | 26 March 2026

# Supporting Africa's Cleantech Transition

United Nations Industrial Development Organization (UNIDO)

**Global Cleantech Innovation Programme (GCIP)**

Manasa Suresh

Associate Industrial Development Expert, UNIDO



# UNIDO: Inclusive and Sustainable Industrial Development

UNIDO is a specialized agency of the United Nations with a unique mandate to promote, dynamize and accelerate industrial development. UNIDO's mandate is reflected in Sustainable Development Goal (SDG) 9: "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation".

## UNIDO thematic priorities:

**ENDING  
HUNGER**

**CLEAN ENERGY  
AND CLIMATE ACTION**

**SUSTAINABLE  
SUPPLY CHAINS**



Progress by Innovation

**9** INDUSTRY, INNOVATION  
AND INFRASTRUCTURE



## ABOUT GCIP

# Empowering Cleantech Changemakers

The **Global Cleantech Innovation Programme (GCIP)** is led by UNIDO and supported by the **Global Environment Facility** and **Green Climate Fund**.

GCIP empowers cleantech startups and MSMEs in emerging markets to develop homegrown clean technology solutions for climate and energy transition challenges.

## TECHNOLOGY FOCUS AREAS



**ENERGY  
EFFICIENCY**



**RENEWABLE  
ENERGY**



**WASTE  
BENEFICIATION**



**WATER  
EFFICIENCY**



**GREEN  
BUILDINGS**



**TRANSPORTATION**



**ADVANCED  
MATERIALS  
& CHEMICALS**



**17**

Partner  
countries



**1,850+**

Startups and MSMEs  
supported



**500+**

Cleantech experts  
trained



**>10M**

tonnes of GHG  
emissions to be  
mitigated by 2030

# GCIP

NETWORK 2022-2026

GRANT VALUE OF

~**USD 30**

MILLIONS

**1850+**

MSMEs SUPPORTED  
TO DATE

GLOBAL  
COORDINATION  
PROJECT



## ABOUT GCIP

# Empowering Cleantech Changemakers



## Startup Acceleration

GCIP's progressive acceleration services model takes cleantech MSMEs from idea to investment-ready, scalable enterprises. It provides mentoring, business model validation, pitch training, and competition platforms.



## Ecosystem Strengthening

GCIP supports individual startups and builds the national infrastructure around them. This means training mentors, judges, and trainers, and working with government agencies, R&D institutions, and industry associations to create lasting cleantech innovation ecosystems.



## Institutional Capacity

GCIP works at the systems level, guiding policy and regulatory frameworks that enable cleantech entrepreneurship to thrive. This includes ecosystem assessments, including the flagship GCIP publication - the **Global Cleantech Innovation Index**.



## Global Connectivity

The programme connects 17 countries across four continents, facilitating knowledge exchange, cross-border learning and investor networking through its annual Cleantech Days and the global coordination platform. This is what transforms GCIP from a collection of national projects into a global network.

## GCIP IN AFRICA

# Supporting Africa's Cleantech Transition

### ● **Lesotho**

Two cleantech acceleration cohorts in 2023 and 2024. Totally 27 startups were selected in the cohorts. One finalist repurposing plastic waste to produce durable paving bricks securing their first supply contract with a major company in the country.

### ● **Morocco**

180 green entrepreneurs have been trained; more than 50 mentors have been capacitated to support green startups; 37 startups have received direct funding (since 2022)

### ● **Namibia**

Ten cleantech enterprises supported within the 1st cycle of GCIP accelerator raised 174,559 US\$ investment; two innovation challenges

### ● **Nigeria**

Three cohorts of innovators supported (2022-2024); these companies have created over 7,000 jobs and raised over USD\$ 17 mln investment

### ● **Senegal**

2 cycles of accelerator conducted in 2024 and 2025; 25 semi-finalists in the 2025 cohort including 8 semi-finalists founded or co-founded by women. In the 2024 cycle, 19 enterprises supported

### ● **South Africa**

Supported 247 startups and MSMEs since 2014 through the GCIP South Africa acceleration activities; 4 cohorts within the 2022-2026 period; established the Cleantech Network with nine implementing partners nationwide



## GCIP as the growth catalyst supporting national systems for innovation

### GCIP delivers on this role through a clear mandate and collaborative approach:

- GCIP has a clear mission to identify innovators working on climate and clean technologies and help them grow faster, stronger and with meaningful impact.
- GCIP does not replace any institutions but amplifies what already exists within the NSI.
- GCIP acts as a bridge builder bringing all actors together - Ministries, universities, research centers, incubators and accelerators, private companies and investors.

### GCIP is not an isolated programme but strengthens the national system for innovation by:

- Helping researchers transform prototypes into real products
- Supporting entrepreneurs to survive and grow in competitive markets
- Providing policymakers with a clear view of emerging technologies
- Offering investors a pipeline of credible, validated innovations
- Giving the NDE a structured mechanism for climate technology support and deployment.

## EXAMPLES OF SOLUTIONS SUPPORTED BY GCIP

# Alumni highlights • GCIP Nigeria



Source: <https://www.koolboksnigeria.com/>

**KOOLBOKS**  
L I F E I S K O O L

## TECHNOLOGY: SOLAR-POWERED REFRIGERATION

**KOOLBOKS** specializes in solar-powered refrigeration solutions. Their flagship product, the Koolhome Freezer, offers reliable refrigeration even without a power supply. Koolboks offers its refrigeration units on a lease-to-own model removing the financial hurdle people face while acquiring off-grid refrigeration. Koolhome uses ice battery technology, able to offer 24 hours of refrigeration for 4 days even in the absence of external power sources. The company also works with businesses that depend on refrigeration for income generation.




<https://www.koolboksnigeria.com/>


## EXAMPLES OF SOLUTIONS SUPPORTED BY GCIP


# Alumni highlights • GCIP Lesotho


SPECIALISE IN THE ENERGY SERVICE

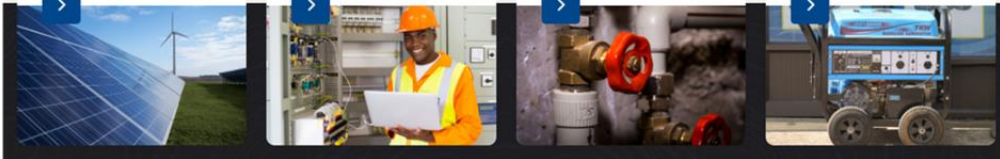
### Our Services

  
**Renewable Energy**  
Specializing in the supply and installation of solar power ...

  
**Electrical Services**  
Electrical services encompass a broad range of offerings ...


  
**Water Supply Services**  
Water supply services ensure reliable access to clean ...


  
**Powertools Rental**  
Our powertools rental services offer a convenient ...





LASTEST PROJECT

### Our Latest Projects

  
HA FOSO, MASERU  
High Pressure Solar Geyser

  
MAPUTSOE, LERIBE  
High Pressure Solar Geyser

  
SOLAR ENERGY4  
Maximizing Solar ROI

  
HA-MAKHATHA, LERIBE  
High Pressure Solar Geyser



## TECHNOLOGY: RENEWABLE ENERGY

**Mahlaseli Energy** is a renewable energy company providing solar off-grid solutions for water supply, solar, thermal and rural electrification in Lesotho. Mahlaseli Energy produces solar submersible pumps for farmers for irrigation and for spring catchments in rural communities. The company also produces solar lanterns and off-grid solutions for businesses, rural schools and clinics. Mahlaseli Energy's main Goal is accelerating access to affordable, reliable and sustainable energy for all in Lesotho and attaining SGD7 in the country by 2030.



<https://mahlaselienergy.co.ls/>

## EXAMPLES OF SOLUTIONS SUPPORTED BY GCIP

# Alumni highlights • GCIP Morocco

Facilitate the **integration of renewables** on any type of electricity grid worldwide.

We support the installation of more renewables around the world in maximizing solar penetration while ensuring grid stability.

**50+**  
countries

**2000+**  
plants installed in 50  
countries

**15M+**  
hours of operation

**300+**  
customers EPC & IPPs of  
solar / hybrid plants



Source: <https://elum-energy.com/>

**ELUM**  
ENERGY

## TECHNOLOGY: RENEWABLE ENERGY

**Elum Energy** is an energy and automation company that supplies cost-effective monitoring and control solutions for solar energy systems. Elum Energy provides simple solar energy systems solutions that are suitable for many applications, from islanded micro grids to grid-connected self-consumption applications or mixed applications. They have a broad global network and have deployed their solutions in more than 50 countries and territories around the world.



<https://elum-energy.com/>



UNITED NATIONS  
INDUSTRIAL DEVELOPMENT ORGANIZATION  
Progress by innovation





# INITIATIVE GREENTECH TUNISIE

26 mars 2025

# TODAY'S GREEN FLOW

01

INITIATIVE GREENTECH  
TUNISIE

02

GREENTECH  
FRAMEWORK

03

IMPLEMENTATION  
PATH

04

PÉRENNITÉ DE  
L'INITIATIVE



01

# GREENTECH INITIATIVE

## Engagement National et Objectifs de la NDC

La première NDC de la Tunisie, soumise en 2015 et mise à jour en 2021, fixe un objectif de réduction de 45 % des émissions de GES d'ici 2030, dont 28 % dépendent de financements internationaux.

## Transition Énergétique et Rôle du Secteur Privé

La Tunisie vise à atteindre 30 % d'ER dans son mix énergétique d'ici 2030.

## Adaptation et Gestion des Ressources

La NDC met l'accent sur l'adaptation aux changements climatiques, avec des initiatives pour la gestion de l'eau, la protection des écosystèmes côtiers et une agriculture durable.

## Ecosystème des startups

11,2 % des 1 077 startups labellisées en Tunisie, soit 121 startups réparties sur 20 gouvernorats, sont actives dans la Greentech, témoignant de l'intérêt croissant pour la transition écologique.

## Opportunité avec

Le programme Greenov'i, financé par l'Union Européenne et mis en œuvre par Expertise France, soutient le secteur privé dans la transition écologique et la réalisation des objectifs de la NDC.

# POSITIONNEMENT STRATÉGIQUE

## STARTUP ACT (Loi 2018-20)

- ✓ Avantages pour les Startups: une série d'incitations telles que le Label «Startup», le compte bancaire en devises, l'exonération d'impôts, etc.
- ✓ Avantages pour les investisseurs pour réaliser des investissements fulgurants et profiter des nombreux avantages offerts.
- ✓ Avantages pour les entrepreneurs, grâce aux particularités du cadre Startup Act.

## STRATÉGIE DE LA CDC

- ✓ Accompagner la transformation digitale et technologique.
- ✓ Soutenir l'innovation et l'entrepreneuriat .
- ✓ Renforcer l'inclusion économique et sociale
- ✓ Préservation de l'environnement et du climat

# OBJECTIF PRINCIPAL

Contribuer au développement Greentech en Tunisie pour la transition écologique et le développement durable.



## OBJECTIF SPÉCIFIQUE 1

Soutenir le développement des startups et PME tunisiennes opérant dans le secteur de la Greentech.

 Greentech



## OBJECTIF SPÉCIFIQUE 2

Promouvoir la visibilité des startups et des PME tunisiennes opérant dans le secteur de la Greentech, notamment celles portées par des femmes.

# OBJECTIFS DU PROGRAMME



Un programme qui allie impact et équité, en plaçant l'**égalité de genre** et la **diversité territoriale** parmi ses critères clés



**32**  
Startups



**10**  
Startups/PME

**Greentech Tunisie** soutient **42 projets** à travers deux instruments de financement et des actions de **valorisation/accès marché**.

# OPÉRATEURS DE MISE EN OEUVRE



## CAISSE DES DÉPÔTS ET CONSIGNATIONS

Fortement impliquée dans le développement de l'écosystème des Startups en Tunisie, la CDC gère différents programmes d'appui notamment le projet ENLIEN, FAST, Flywheel, le programme "Startups et PME innovantes en Tunisie", etc.



## SMART CAPITAL

Smart Capital vise à dynamiser l'écosystème entrepreneurial tunisien en stimulant l'innovation et en facilitant l'accès aux ressources pour les entrepreneurs. Elle est l'entité d'implémentation mandatée par l'État Tunisien pour déployer son programme national, Startup Tunisia.

# PARTENAIRE FINANCIER



L'initiative Greentech Tunisie est soutenue par **Greenov'i**, projet financé par l'**Union Européenne**, à travers le volet entrepreneuriat vert de son Programme « Tunisie Verte & Durable » pour l'appui à l'action environnementale en Tunisie, et mis en œuvre par **Expertise France**.

# PARTENAIRES INSTITUTIONNELS



**Ministère de l'Environnement**



**Centre International des  
Technologies de l'Environnement de  
Tunis - CITET**



**Ministère de l'Economie et de la  
Planification**



**Durée**  
30 mois

*Du 01/04/2025 au 30/09/2027*



**Budget**  
1,55 Million d'euros

# GREENTECH FRAMEWORK

SYNERGIES  
&  
PARTENARIATS

## UNION EUROPÉENNE

Financier principal via  
Greenov'i  
Programme Tunisie  
Verte & Durable

## EXPERTISE FRANCE

Supervision et  
conformité  
Transfert de bonnes  
pratiques

## MIN. ENVIRONNEMENT

Alignement stratégie  
nationale  
Expertise (Evaluation)  
Ancrage politique  
Coordination Locale

## CITET

Expertise technique  
Validation impact  
écologique  
Réseau

## MIN. ÉCONOMIE

Alignement stratégie  
nationale  
Ancrage politique  
Coordination Locale



**02**

# **GREENTECH FRAMEWORK**

# GREENTECH FRAMEWORK

Programme de  
financement



Actions de  
communication et  
de valorisation

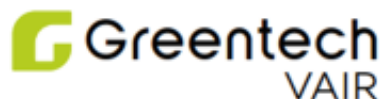
# GREENTECH FRAMEWORK

Volet

01

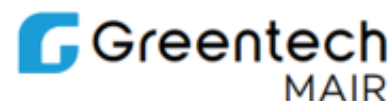
Programme de  
financement

Venture acceleration for  
impact and resilience



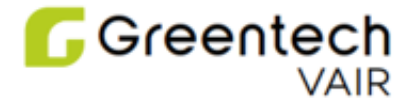
Financement hybride pour  
les Startups pour le  
développement de leurs  
POCs.

Market Access for  
Impact and Resilience



Avance remboursable  
pour les Startups/PME  
pour la commercialisation  
de leurs MVPs.

# GREENTECH FRAMEWORK

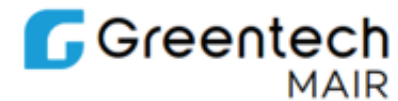


Type de financement : 70 % de subvention + 30% d'avance remboursable.

Modalité de restitution : 18 mois dont 6 mois de différé d'amortissement linéaire sur 12 mois.

Montant maximum : 75 000 TND.

Objectif : Financer 32 Startups de la Greentech à développer et valider leurs Preuves de Concept (Proof of Concept - PoC)



Type de financement : 100% Avance remboursable sans intérêt.

Modalité de restitution : 18 mois dont 6 mois de différé d'amortissement linéaire sur 12 mois.

Montant maximum : 150 000 TND.

Objectif : Financer 10 Startups/PME de la Greentech en vue de commercialiser leurs Produits Minimum Viables (MVP) et acquérir leurs premiers clients.

Volet

01

Programme de  
financement

# GREENTECH FRAMEWORK

Volet

02

Valorisation &  
communication


## VISIBILITÉ

Valorisation des solutions  
financées auprès des  
acheteurs potentiels

## EVÉNEMENTS

L'organisation  
d'évènements et de  
rencontres de valorisation

 Greentech  
MEET'UP

 Greentech  
COFFEE

# GREENTECH FRAMEWORK

Volet

02

Valorisation &  
communication

## VISIBILITÉ

### Capsules Vidéo

Capsule vidéo pour chaque bénéficiaire mettant en avant sa solution/son projet, afin de montrer concrètement l'impact et les progrès des projets soutenus et renforcer la visibilité des solutions développées auprès des acheteurs et investisseurs potentiels.

### Participation à des conférences nationales et internationales

Participation à des conférences nationales et internationales pour améliorer l'accès au marché des projets bénéficiaires en les présentant à des acheteurs et partenaires potentiels et en attirant l'attention d'investisseurs/VC intéressés par des solutions vertes innovantes. Cela permet aux projets de gagner en visibilité, d'étendre leurs réseaux et d'accroître leurs opportunités de croissance et de durabilité.

# GREENTECH FRAMEWORK

## EVÉNEMENTS

Volet

02

Valorisation &  
communication

### Meet'Up Greentech

Trois (03) Meet'Up Greentech annuels visant à rassembler les acteurs clés de la transition écologique, notamment les décideurs publics, les entreprises, les start-ups, les PME, les investisseurs et les experts du secteur.

Ces évènements offriront aux start-ups et PME une vitrine pour **présenter leurs solutions innovantes**.

Des **sessions de networking** et de **rencontres B2B** seront organisées pour leur permettre de nouer des relations avec des clients, partenaires et investisseurs potentiels.


 **Greentech**  
MEET'UP

### Green Innovation Coffee

Douze (12) Green Innovation Coffee : **Rencontres** (trimestrielles ou bimensuelles) autour d'une thématique précise (énergie renouvelable, agriculture durable, mobilité verte, etc.).

Chaque participant pourra partager ses projets, poser des questions, ou simplement réseauter dans une atmosphère décontractée.

***Les rencontres se feront à Tunis et dans d'autres régions afin d'accroître la visibilité du secteur Greentech en Tunisie.***

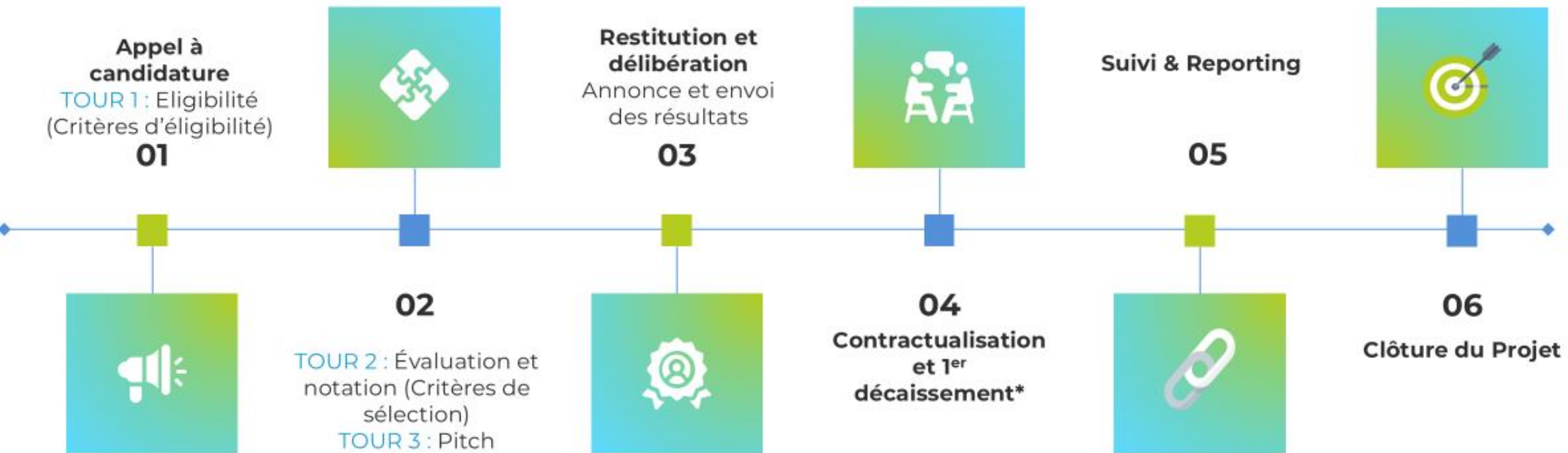
 **Greentech**  
COFFEE



**03**

# **IMPLEMENTATION PATH**

# IMPLEMENTATION PATH



\*Décaissement par tranches



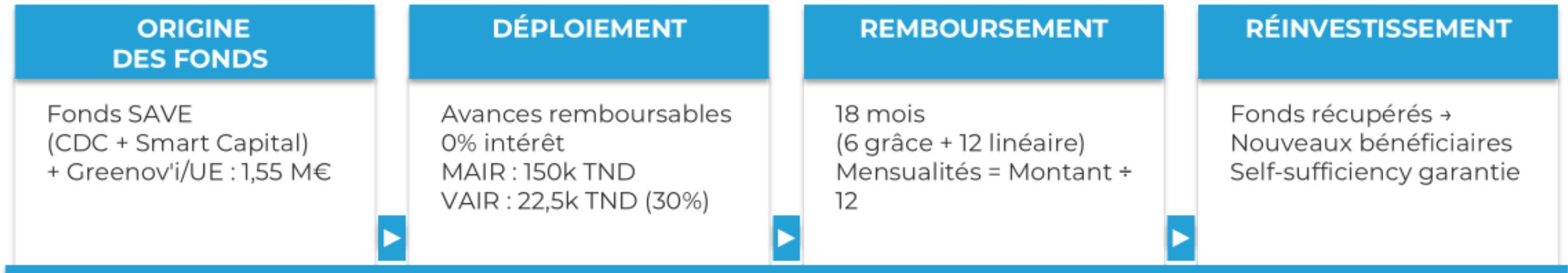
04

## **PÉRENNITÉ DE L'INITIATIVE**

# PÉRENNITÉ DE L'INITIATIVE

## L'AVANCE REMBOURSABLE

Financer - Récupérer - Refinancer → Le cycle vertueux



 **CYCLE VERTUEUX : CHAQUE REMBOURSEMENT FINANCE LE PROCHAIN ENTREPRENEUR VERT**

# PÉRENNITÉ DE L'INITIATIVE

## FINANCIÈRE

Revolving fund auto-alimenté  
Investisseurs/Clients attirés.

## OPÉRATIONNELLE

Communauté Greentech au sein de l'écosystème tunisien  
Startups vitrines  
Liens marchés durables

## SOCIALE

Aspect Genre et égalité régionale  
Emplois verts créés  
Culture innovation responsable

## CAPITALISATION

Bonnes pratiques  
Documentation (Suivi + Reporting + Evaluation)  
Modèle répliquable

## EFFETS MULTIPLICATEURS

42 startups et PME propulsées  
Success stories attirant des investisseurs internationaux  
Partenariats institutionnels = effet de levier continu  
Genre : modèles féminins inspirent nouvel écosystème  
Réseau et communauté Greentech



**SAVE THE DATE**



24/03/2026

**Deadline pour postuler**  
VAIR (2ème Cohorte) & MAIR



**Merci pour  
votre  
attention**



Time for  
**Q&A**

## Individual Work

Mapping national needs and priorities related to climate technology incubator and accelerator – in NDCs, NAPs and TNAs



Each NDE will review their latest NDC, NAP and TNA to examine:

- *Are climate technology incubator and accelerators identified as part of these plans?*
- **If yes**, in which sectors, with what objectives, and with the involvement of which actors?
- **If not**, which priority sectors may benefit from inclusion of incubators to promote and accelerate innovation, and why?

Suggested keywords:

Innovation

Research Development  
and Demonstration

Incubators

Accelerators

Startups

Chaque END examinera ses dernières CDN, PNA et TNA afin d'étudier les points suivants :

- *Les incubateurs et accélérateurs de technologies climatiques sont-ils identifiés dans ces plans ?*
- **Si oui**, dans quels secteurs, avec quels objectifs et avec la participation de quels acteurs ?
- **Sinon**, quels secteurs prioritaires pourraient bénéficier de l'inclusion d'incubateurs pour promouvoir et accélérer l'innovation, et pourquoi ?

Mots-clés suggérés :

Innovation

Recherche, développement et  
démonstration

Incubateurs

Accélérateurs

Startups



# Coffee Break

## Group Discussions

on opportunities and challenge for  
integrating incubators and accelerators  
in national climate planning and  
programming in Africa



1. **How do incubators and accelerators fit into NSIs in your country?** (e.g. Linkages to universities, labs, firms, investors, ministries, NDEs)
2. **What is working where and why?** (e.g. sharing good practices and lessons learned from operation of incubators and accelerators in Africa, and discussing contextual factors, enabling environments, financing model, actors involved, talent, infrastructure)
3. **How best to utilize incubators and accelerators for achieving national climate and sustainable development goals in your country?** (e.g. ideas for TA and project concepts to design and implement I&As)

1. **Comment les incubateurs et accélérateurs s'intègrent-ils aux INS de votre pays ?** (p. ex. liens avec les universités, les laboratoires, les entreprises, les investisseurs, les ministères, les IDE)
2. **Quelles sont les initiatives qui fonctionnent, où et pourquoi ?** (p. ex. partage des bonnes pratiques et des enseignements tirés du fonctionnement des incubateurs et accélérateurs en Afrique, et discussion des facteurs contextuels, des environnements favorables, du modèle de financement, des acteurs impliqués, des talents, des infrastructures)
3. **Comment optimiser l'utilisation des incubateurs et accélérateurs pour atteindre les objectifs nationaux en matière de climat et de développement durable dans votre pays ?** (p. ex. idées d'assistance technique et de concepts de projets pour concevoir et mettre en œuvre des I&A)

# Sharing of Learnings





UNFCCC\_CTCN



UNFCCC.CTCN



Climate Technology  
Centre Network

CTCN Secretariat  
UN City, Marmorvej 51  
DK-2100 Copenhagen, Denmark

[www.ctc-n.org](http://www.ctc-n.org)  
[ctcn@un.org](mailto:ctcn@un.org)

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