

Roadmap #1

# Building a National System of Innovation for Climate Technology Markets

→ This roadmap illustrates how the right enabling environment (including standards, policies, frameworks, certification, national auditors, capacity building, and incubators) can support the creation of a strong national system of innovation for climate technology.

PHASE 1

## Problem articulation

PHASE 2

## Invention & design

PHASE 3

## Prototyping & training

PHASE 4

## Monitoring, regulation & standards

PHASE 5

## Commercialization

PHASE 6

## Diffusion & scaling



Legend

- 1 Institutions**  
National innovation agencies / ministries / local authorities / innovation centres
  - 1 Innovators**  
Use co-design toolkits with stakeholders
  - 1 Barriers**  
Silos / lack of data / exclusion / top-down
  - 1 Enablers**  
Co-creation / gender responsive / inclusion / multi-stakeholder
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- 2 Institutions**  
Ministries / technical institutes / universities
  - 2 Innovators**  
Co-design sessions with stakeholders
  - 2 Barriers**  
Lack of flexible funding / under-representation of minority groups
  - 2 Enablers**  
Challenge funding / technical mentors / research pipelines
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- 3 Institutions**  
Standards bodies / local incubators / R&D centres / donors / NGOs
  - 3 Innovators**  
Engage in rapid testing with pilot users
  - 3 Barriers**  
Limited access to infrastructure / technical labs and guidance
  - 3 Enablers**  
Prototyping labs / public-private funding / mentorship networks
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- 4 Institutions**  
Standards bodies / regulators / ministries / innovation agencies
  - 4 Innovators**  
Partner with local standards offices / share M&E insights
  - 4 Barriers**  
Regulatory gaps / delays / fragmented systems
  - 4 Enablers**  
Open data platforms / validation grants / fast-track schemes
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- 5 Institutions**  
Development banks / ministries / private financing / chambers of commerce
  - 5 Innovators**  
Funding pitches / climate accelerators / engage with distribution partners
  - 5 Barriers**  
Investor risk aversion / fragmented distribution channels
  - 5 Enablers**  
Blended finance instruments / public-private alliances
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- 6 Institutions**  
Regional innovation platforms / ministries
  - 6 Innovators**  
Regional innovation platforms / ministries
  - 6 Barriers**  
Uneven infrastructure and service coverage / weak institutional support
  - 6 Enablers**  
Innovation aligned with national climate targets

For more information, read the full report UN CTN (2025). *Climate technology roadmaps: Creating an enabling environment and fostering community-led innovation in fragile settings.*

INCUBATOR

ACCELERATOR

VENTURE CAPITAL PRIVATE EQUITY

