Framework Convention on
Climate Change

Building New Green Sectors: The Role of Climate Tech, Acceleration Ecosystems, and Scale-Up Pathways in Structural Diversification

1. *Name of proposing Party or organization.*
   Frontier25 (2)

2. *Brief description of the proposed study:*
   Economic diversification increasingly depends on a country's ability to identify emerging sectors where it can build competitive capabilities, create quality employment and strengthen long-term economic resilience. This case study will examine how countries can identify, develop and scale new sectors linked to the low-emissions transition, with a particular focus on the role of climate technology, entrepreneurship and innovation ecosystems in enabling structural transformation. The United Arab Emirates provides a relevant case of a country seeking to translate the global energy transition into new areas of economic opportunity. Alongside large-scale investment in renewable energy and other low-carbon infrastructure, the UAE has sought to build an innovation-driven economy by supporting emerging technologies, entrepreneurship and new business models across areas such as clean energy, low-carbon industry, circular economy, water, food systems and climate adaptation. The study will explore how governments can identify sectors with potential for diversification and determine where public intervention can help move promising technologies and enterprises from early-stage innovation towards commercial deployment and scale. It will examine the enabling conditions required for this process, including research and innovation support, access to finance, infrastructure, market development, regulation, skills, procurement and access to domestic and international customers. Particular attention will be given to the role of climate technology startups as potential vehicles for diversification. Startups can introduce new technologies and business models while creating new capabilities, supply chains and employment opportunities. However, the pathway from startup innovation to a meaningful new economic sector is not automatic. The case study will examine the barriers that can prevent promising technologies and companies from progressing beyond demonstration or pilot stages, including financing gaps, limited market access, regulatory uncertainty, capability constraints and insufficient

connections between innovators, corporates and public institutions. Drawing on the UAE experience and international evidence, the study will identify practical approaches for governments seeking to build new sectors rather than simply attract established industries. It will consider how accelerator and innovation programmes, public-private partnerships and ecosystem-building initiatives can contribute to sector formation, and how these interventions can be integrated with wider economic and workforce strategies. The objective is to provide practical lessons on how countries can systematically identify emerging diversification opportunities to support the enabling conditions for scale and connecting innovation policy with broader goals of competitiveness, job creation, resilience, economic transformation and the just transition.

3. *United Nations region to be covered by the case study:*
   Asia-Pacific;

4. *Country or countries to be covered by the case study*
   United Arab Emirates

5. *Area of the case study:*
   The identification of potential new sectors for diversification ;

6. *Expected duration for completion of the case study (in months):*
   1

7. *Contribution of the submitting organization*
   Technical inputs;Data;Authorship;Financial contribution;

8. *Can the study be developed without financial support from the UNFCCC?*
   No

9. *If no, please provide the estimated range of required financial support in USD (Please note that the UNFCCC is not a donor organization and has limited funding):*
   50000

10. *Please provide the status of any preliminary work undertaken that could serve as a basis for the study, including a link to any available reports, if available.*

Piloting to Scale: Bridging the Deployment Gap of Climate-Deep Tech in the UAE (https://frontier25.com/our-insights/research/piloting-scale): The report looks directly at why hardware-intensive climate technologies struggle to move towards scale. It identifies gaps in infrastructure, capital and regulation and proposes an action framework around piloting infrastructure, tailored financing and governance. This maps almost perfectly onto the proposed UNFCCC question of how new sectors are developed and scaled. Sustaining Startups: Bridging the Financial Gap in the UAE Climate-Tech Ecosystem (https://frontier25.com/our-insights/research/policy-brief-bridging-financial-gap-uae-climate-tech-ecosystem): The policy brief examines the financing gap facing UAE climate-tech companies, particularly when moving from early stage to growth stage, and looks at regulatory, financial and infrastructure barriers to scaling. The Frontier25 Launchpad itself provides value as a real-world dataset and implementation experience: The programme serves as a pathway for green startups to establish and scale in the UAE, incorporating regulator/policymaker access, mentorship, investor introductions, workshops, market access and regulatory support. The 2024 Carbon Solutions cycle (https://frontier25.com/our-news/recent-news/uicca-launchpad-programme-start-ups-and-smes-present-carbon-reduction-technologies-ahead-cop29) selected eight companies, with technologies spanning carbon capture/removal, waste-to-energy, hydrogen fuel cells and carbon accounting. The 2025 Circular Economy cycle (https://frontier25.com/our-news/recent-news/uicca-reveals-final-cohort-10-climate-tech-startups-participate-launchpads-circular-economy-cycle) provides an additional cohort of ten startups across waste valorisation, reusable packaging, circular water, recycling and related technologies.

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