

2025 SIDS NDE Joint Programme

CTCN Programmes –
AFCIA and EC

PRESENTER

CTCN Secretariat



CTCN Programmes

Technical Assistance Programmes and Initiatives

- **Adaptation Fund Climate Innovation Accelerator (AFCIA)**
 - AFCIA I will close in 2025 and is a 5 million USD fund
 - AFCIA II approved in 2024 and is a 10 million USD fund to finance 60 TAs up to May 2030
 - Coordination services of 3 million USD approved
- European Commission "**Climate Change and Security**" Programme
 - Launched in January 2023 for 3 million USD and 36 months
 - 10 country projects are currently under implementation globally
- European Commission "**Innovative Climate Solutions**" Programme
 - Launched in January 2024 for 2 million USD and 36 months to support 8 TAs
 - 5 country projects are currently under implementation globally
- **Pro-bono**: Two new TAs were identified for pro-bono support from the Republic of Korea (1) and from the Government of Japan (1)
- **Collaborative RD&D programme** with support from the Korean Ministry of Science and ICT (MSIT) to facilitate technical assistance projects (2 TAs under implementation), knowledge sharing events, twinning arrangements, and learning visits





ADAPTATION FUND

AFCIA I 2020 – 2025: 5 Million USD

ADAPTATION FUND

Climate Innovation Accelerator

SMALL GRANTS. BIG IMPACT.



AFCIA I – timeline and geographical coverage

- 2019**
Launch of UNEP CTCN-AFCIA
- Jan 2021**
First call for proposals
- April 2021**
Second call for proposals
- Sept 2022**
Third call for proposals
- Oct 2024**
Launch of AFCIA II
- Dec 2025**
Completion of AFCIA I



AFCIA I - Headlines

Type of Innovative Solutions

(collective, can be more than one per initiative)

Early Warning Systems (EWS)



Solar-Powered Irrigation System



Climate-Smart
Agriculture Technology



Pay as You Use



Agrometeorological Platform



Aquifer Mapping



Blockchain



Cross-Cutting



Drones Soil Mapping



Flood Mitigation Barrier



Flood Sensor Technologies



Rainwater Harvesting System



Water Drainage System



- AFCIA I, implemented **25 TAs**, out of which 15 were “acceleration projects” and 10 were “Enabling Environment” projects, with a minimum of 5 to be co-funded by the CTCN.
- 13 solutions were requested by countries, EWS, SPIS, Agriculture techniques and financial tailored solutions being the ones requested by different countries.
- AFCIA I, included 3.5 Million for the implementation of these 25 TA (and 1.5 million for support activities and UNEP CTCN staff).
- CTCN co-funded 1.8 million USD

Funding per region

2.5 million
Africa

1.5 million
Asia and
the Pacific

1 million
Latin America and
the Caribbean

250,000
Europe and
Central Asia

Launch of the Joint Impact Report

- A joint Impact Report was launched at Adaptation Futures conference in Oct 2025 in New Zealand, with the participation of the Vice Chair of the CTCN.
- This report includes 2 catalogues, one for UNEP CTCN and one for UNDP.
- Both catalogues follow the same table of contents, and the same design.
- It includes data analysis on the impact of AFCIA at programme level as well as snapshots of a selection of Technical Assistances.



Transition to AFCIA II

- A final annual programme report will be submitted to the Adaptation Fund in December 2025 (within 2 months after closure).
- A Terminal Evaluation will be initiated and terminated within 6 months after the closure of the programme. The TE will be contracted and managed by UNEP.
- AFCIA II and Coordination Services will ensure the transition of AFCIA programme to more adaptation technologies solutions.

"We've always known that water is our most precious resource. Now, we understand how to make the most of what we have."

- Dawood Hassan, farmer in the **Maldives**

"We need a WEF system that is simple and practical, with a clear business model, so farmers can install it easily and use it themselves."

- Luis Dias, Agência de Desenvolvimento do Vale do Zambeze, **Mozambique**

"The solution has enabled one of their greatest sources of data for their national hydrology yearbook."

- Chilungamo Banda, Principal Hydrologist at the Dept of Water Resources, **Malawi**





ADAPTATION FUND

AFCIA II 2025 – 2030: 10 Million USD

ADAPTATION FUND

Climate Innovation Accelerator

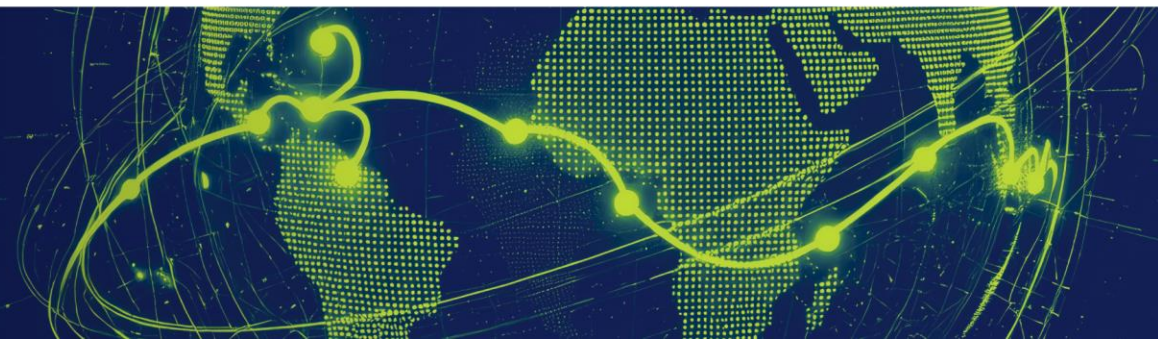
SMALL GRANTS. BIG IMPACT.



AFCIA II - Objective

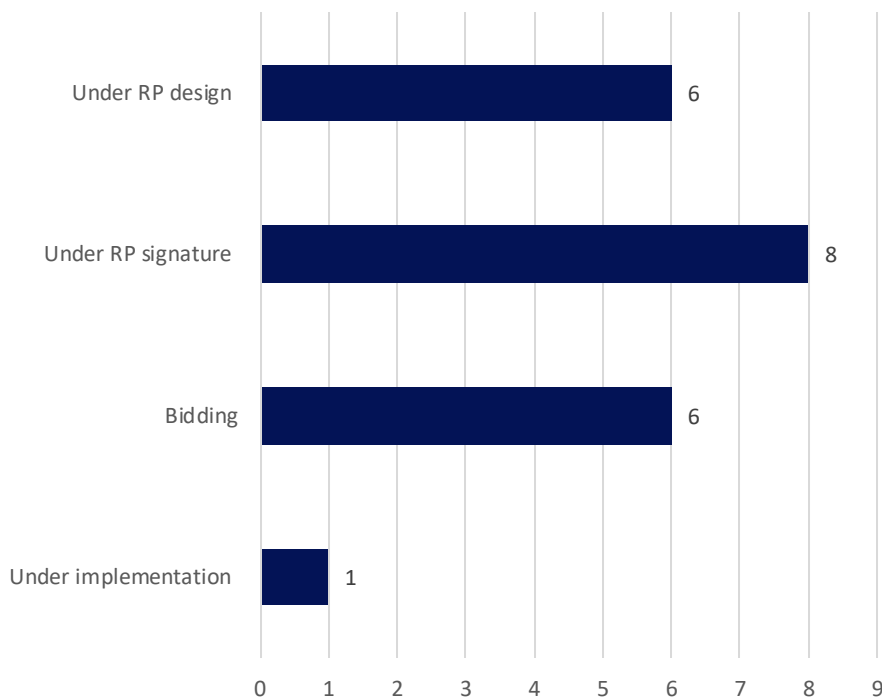
Support countries to test, scale up and leverage innovative, transformative, and locally led climate adaptation technologies across the technology cycle and anchor these into National Systems of Innovation.

- 60 projects to be implemented with a focus on SIDS and LDCs.
- 40 under Component 1 (technologies are identified, assessed and tested) – Average budget for TAs round 150,000 USD.
- 10 under Component 2 (technologies are scaled up) - Average budget for TAs round 100,000 USD.
- 10 under Component 3 (technologies are leveraged through the promotion of enabling environments (NSI), finance and knowledge) - Average between all TAs should be equal to 80,000 USD.

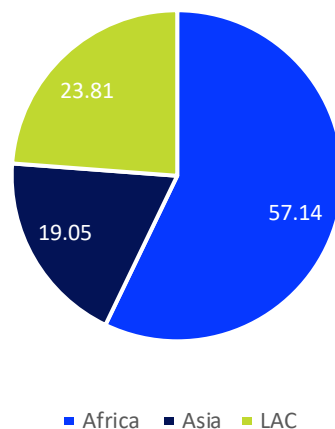


AFCIA II - Objective

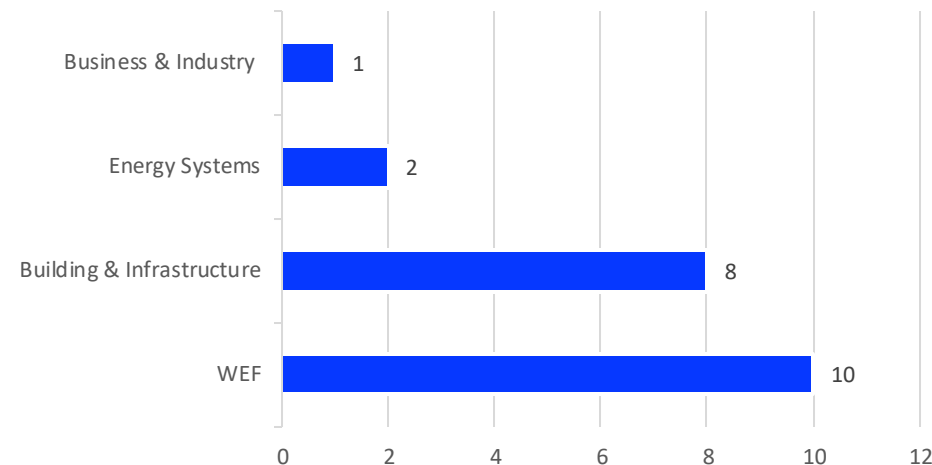
Status of AFCIA II



AFCIA II - current geographical coverage



AFCIA II By SoT



- A total of 21 requests have been received so far.
- More than 80% are in LDCs and SIDS.
- Project ideas are under preparation by the Pacific (multi-country on sea level rise), in LAC (Costa Rica, Dominican Rep), and Africa (Ghana, Malawi).
- Half are NSI and half are Digitalization

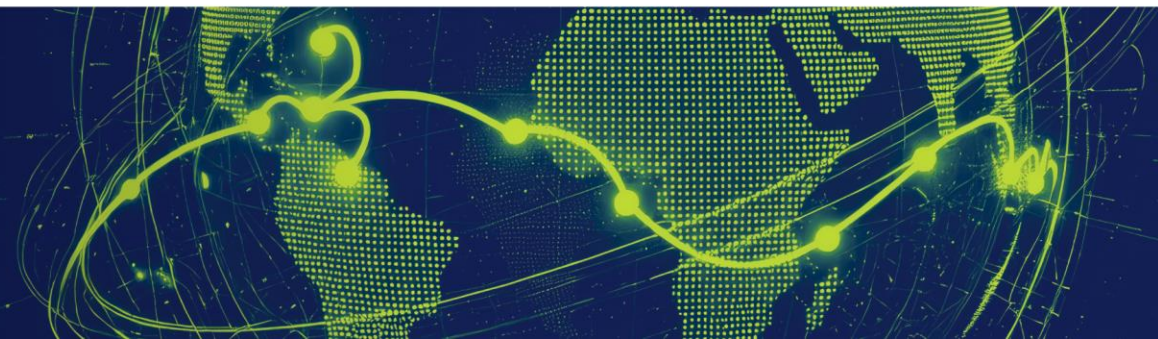


CLIMATE CHANGE AND SECURITY PROGRAMME

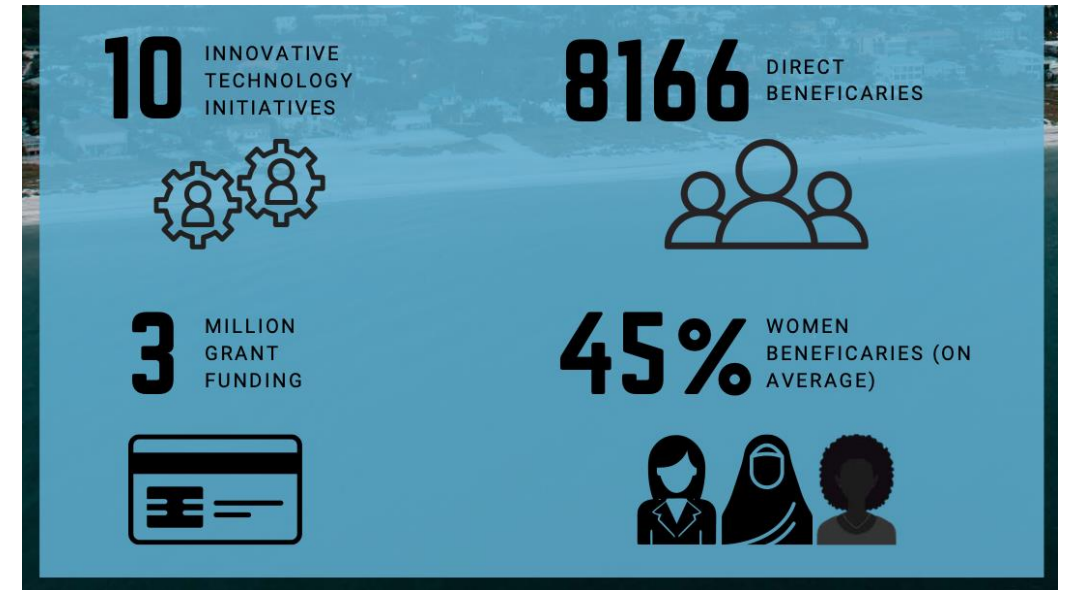
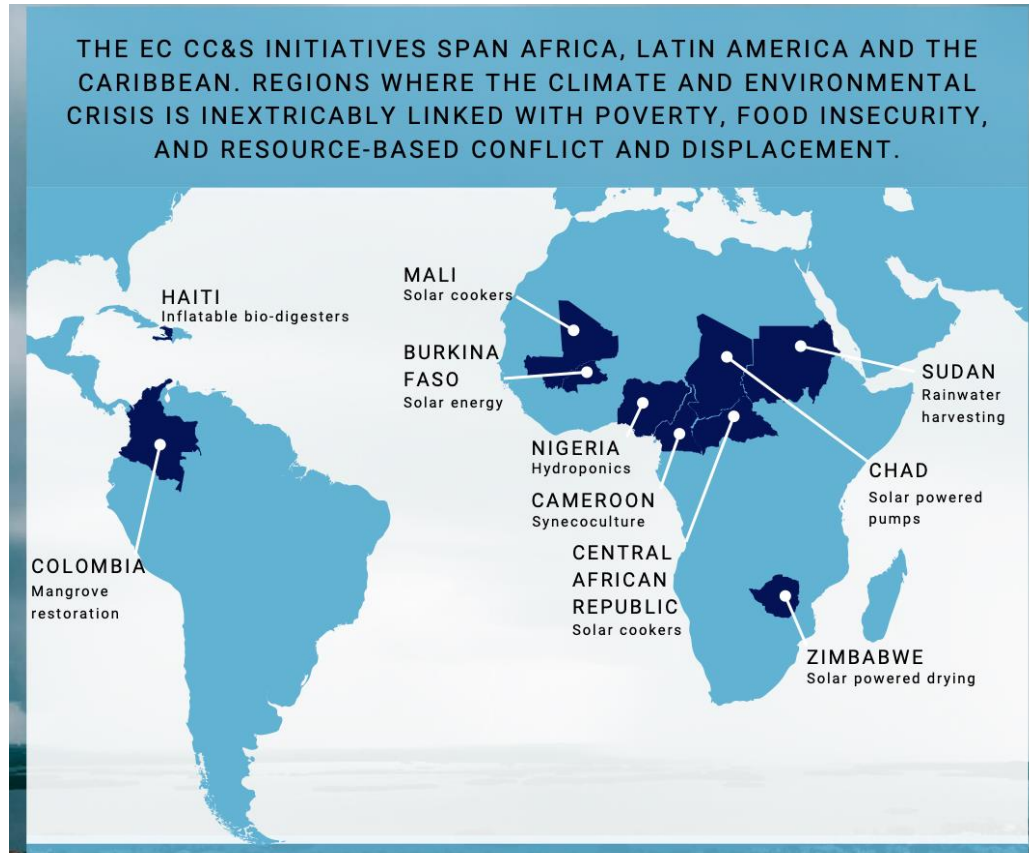


**Funded by
the European Union**

**3 Million USD
2023-2025**



Overview of the portfolio of projects – EC CC&S



From January 2023 to December 2025

Objective: Supporting Climate change conflict-induced communities globally

Programme : 10 projects implemented in 10 different countries, 90% in LDCs.

1 project co-funded by the CTCN.

Average value of the TAs: 185,000 USD.

Geographical coverage:

- 2 projects in LAC (Colombia & Haiti)
- 9 projects in Africa

Direct beneficiaries: 63,000

% women : 63%

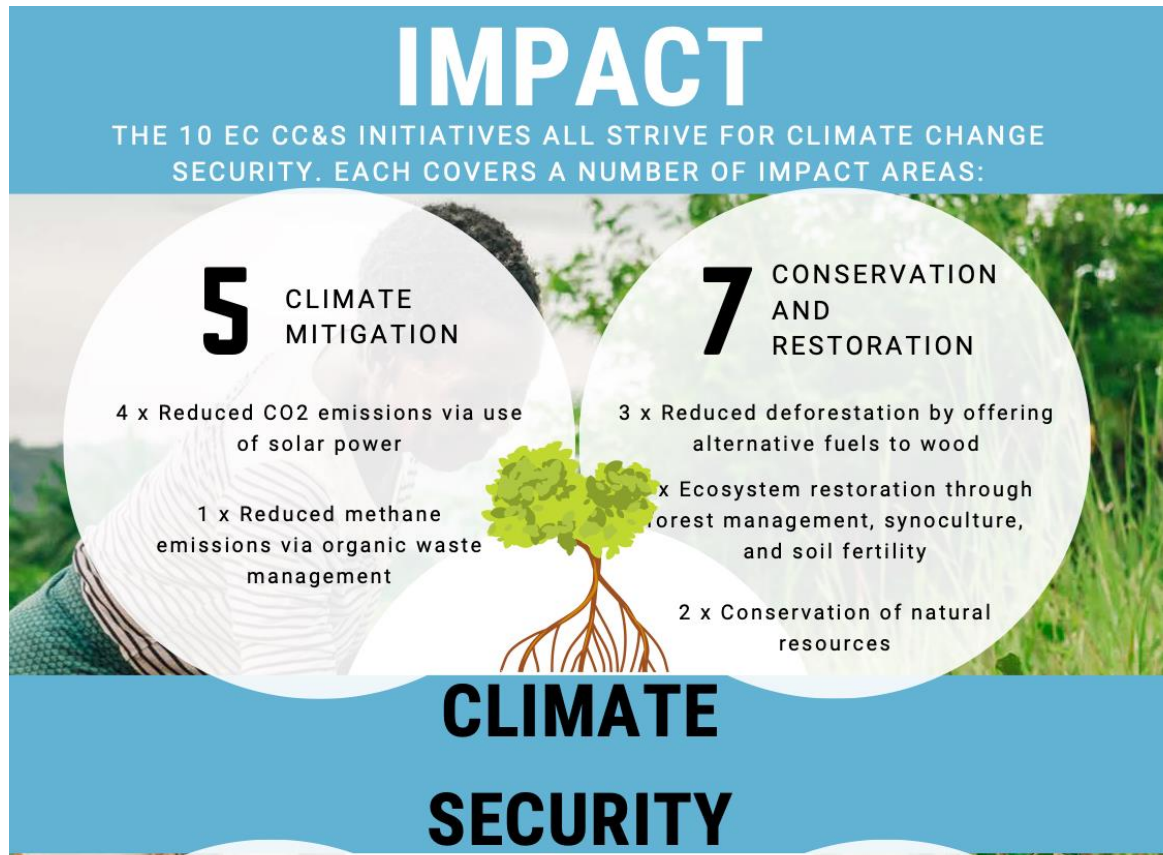
% youth : 42%



Climate Change and Security by Sector

IMPACT

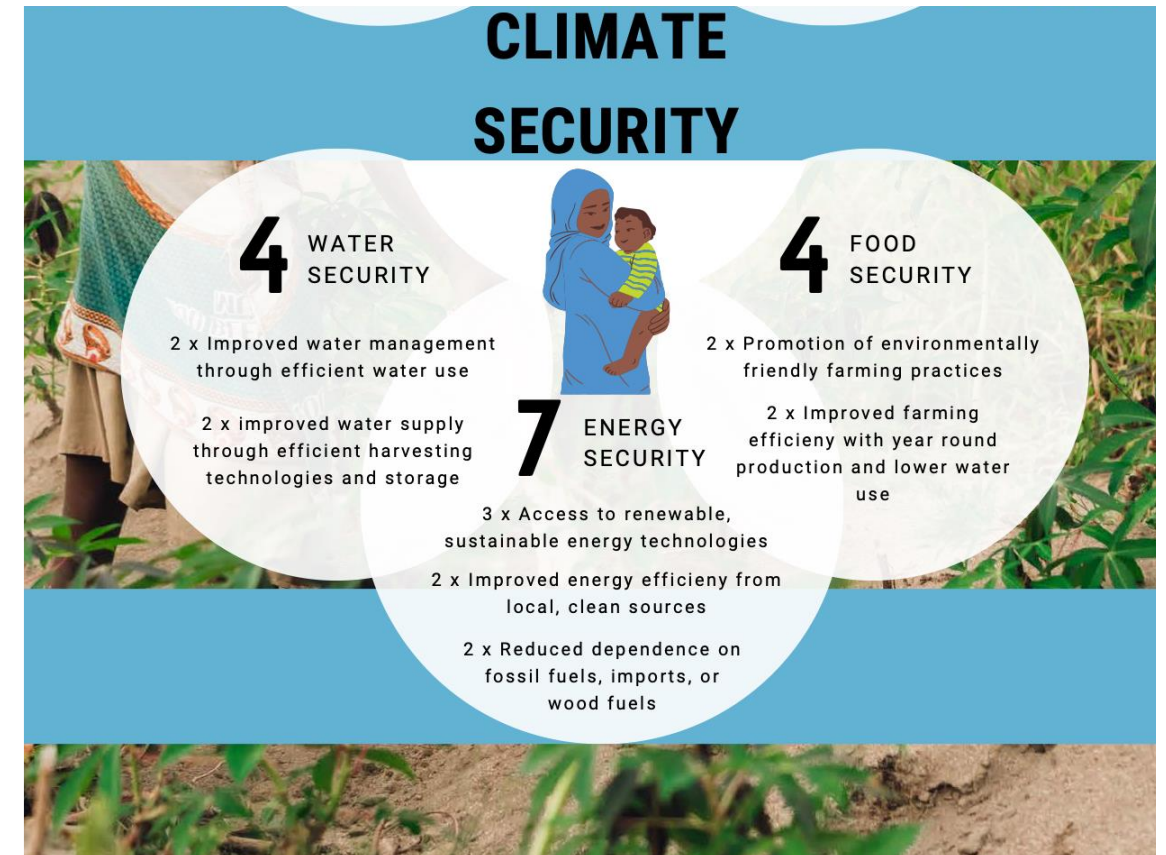
THE 10 EC CC&S INITIATIVES ALL STRIVE FOR CLIMATE CHANGE SECURITY. EACH COVERS A NUMBER OF IMPACT AREAS:



- 5 CLIMATE MITIGATION**
 - 4 x Reduced CO2 emissions via use of solar power
 - 1 x Reduced methane emissions via organic waste management
- 7 CONSERVATION AND RESTORATION**
 - 3 x Reduced deforestation by offering alternative fuels to wood
 - 1 x Ecosystem restoration through forest management, synoculture, and soil fertility
 - 2 x Conservation of natural resources

CLIMATE SECURITY

CLIMATE SECURITY



- 4 WATER SECURITY**
 - 2 x Improved water management through efficient water use
 - 2 x improved water supply through efficient harvesting technologies and storage
- 7 ENERGY SECURITY**
 - 3 x Access to renewable, sustainable energy technologies
 - 2 x Improved energy efficiency from local, clean sources
 - 2 x Reduced dependence on fossil fuels, imports, or wood fuels
- 4 FOOD SECURITY**
 - 2 x Promotion of environmentally friendly farming practices
 - 2 x Improved farming efficiency with year round production and lower water use



Knowledge Transfer through Roadmaps

2 Roadmaps are being designed

Roadmap #1 on how the right enabling environment (including standards, policies, frameworks, certification, national auditors, National Systems of Innovation (NSI), capacity building, and incubators etc.) can support the creation of a market for climate technologies, (and consequently support the participation of private sector).

Roadmap #2 on community-led projects in countries at risk of conflict on what factors we can encourage at community level to access innovation.



Knowledge Transfer through Technology Fact Sheets

3 Technology Fact Sheets are being finalized on:

- Solar-powered Irrigation System
- Rainwater harvesting systems
- Solar cooking appliances



Rainwater harvesting systems

Aimed increasing variability of global rainfall patterns and more frequent droughts driven by climate change, rainwater harvesting can serve as a valuable climate adaptation and mitigation strategy, providing a sustainable alternative water source. Rainwater harvesting refers to a range of methods for collecting and storing rainfall using water pans, tanks, reservoirs and dams to help sustain water supply during dry spells and droughts. The catchment area is the area where the rainfall or water runoff is initially captured and is in most cases either the roof-top of a house or building, ground surface or rock surface.



Source: UN Women, December 2018



Hydroponic farming systems

Conventional farming is under mounting pressure from climate change, land degradation, and water scarcity, threatening global food security. Hydroponics offer a climate-smart alternative that can be adapted to different contexts. By producing crops in controlled environments, hydroponic systems reduce exposure to erratic weather and protect production from the disruptions that often affect open-field agriculture.

Crucially, hydroponics consumes far less water than soil-based agriculture, making it a valuable solution for drought-prone and desertifying regions.

Hydroponic farming is a method of growing plants without soil. Instead, crops receive all essential nutrients through a water-based solution enriched with soluble fertilizers, with plants supported by inert structures. This method enables precise control over plant nutrition, water use, and growing conditions, leading to faster growth rates and higher yields compared to traditional soil-based farming.



Source: UN Women, December 2018



Solar cooking technology

Solar cooking technologies provide a zero-emission, low-cost, and sustainable alternative to biomass cooking methods that address both energy insecurity and climate change. These technologies can supplement or replace biomass fuels, especially in regions with high solar irradiance, improving household energy security, enhancing community resilience, and contributing to national climate targets.

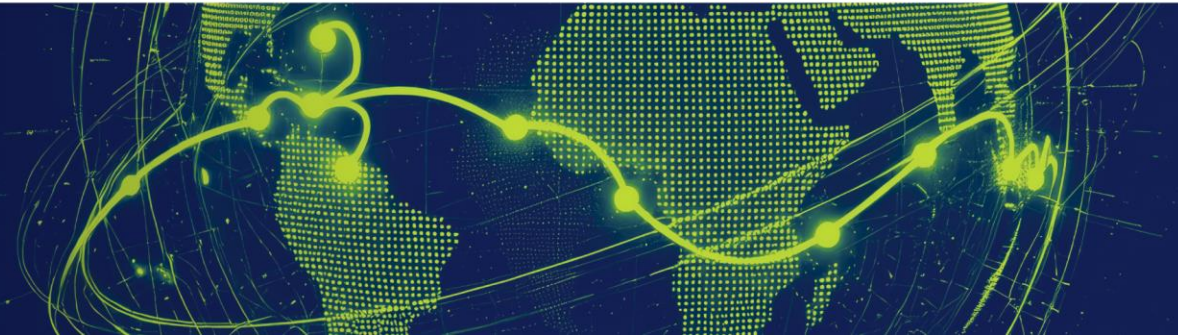
Solar cooking is particularly suitable for sun-rich countries, including those in Africa, South Asia, and Latin America. Where integrated strategically into climate technology frameworks, solar cookers can help achieve targets related to clean energy access, emission reductions, gender equity and rural development, as part of their Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAP).

Quote: "When we co-create with the community and merge scientific and indigenous knowledge, we come out with very sustainable and welcome kinds of innovations."
-Community Mobilization for Positive Empowerment



Dissemination and Comms materials

- 6 photo/video missions organized to EC Climate Change and Security pilot projects
- Dissemination of videos on UNEP and CTCN channels
- Preparation of web stories
- Interviews with direct beneficiaries
- High quality photos





INNOVATIVE CLIMATE SOLUTIONS



**Funded by
the European Union**

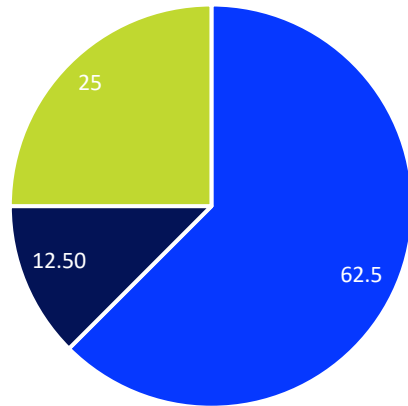
**2 Million USD
2024-2026**



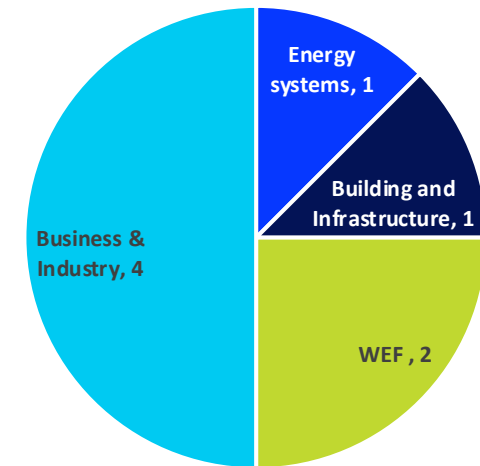
Programme objective – EC ICS

Accelerate the transfer, development, and deployment of carbon neutral and climate adaptation technologies in the most vulnerable countries.

ICS by geographical coverage



■ Africa ■ Asia ■ LAC



■ Energy systems ■ Building and Infrastructure ■ WEF ■ Business & Industry

Portfolio of EC ICS

Mitigation 50%
Cement Roadmaps (2)
SF6 phase out
Green Hydrogen

Adaptation (25%)
Aquaponics
Forest Fire Management

Cross-cutting (25%)
National System of Innovation
Agrivoltaics

14 Oct 2024

Decarbonization Roadmap in the Cement Sector in Zimbabwe

Reference number: 2024000041
Country: Zimbabwe
Objective: Mitigation
Sector: Industry
Phase: Design

03 May 2024

Feasibility study to develop an aquaponics facility based on a semi-enclosed/protected environment as a...

Reference number: 2024000032
Country: Peru
Objective: Adaptation, Mitigation
Sector: Agriculture
Phase: Implementation

13 Mar 2024

Development of a National Plan for Integrated Fire Management in Colombia

Reference number: 2024000024
Country: Colombia
Objective: Adaptation, Mitigation
Sector:
Early warning and Environmental assessment
Phase: Implementation

28 Feb 2024

Decarbonization Roadmap in the Cement Sector in Senegal

Reference number: 2024000019
Country: Senegal
Objective: Mitigation
Sector: Industry
Phase: Implementation

26 Feb 2024

Multi-country agrivoltaic technology project in West and Central Africa

Reference number: 2024000017
Country:
Congo - Kinshasa, Guinea, Senegal, Togo
Objective: Adaptation, Mitigation
Sector: Agriculture
Phase: Design

18 Jan 2024

Feasibility study on green hydrogen potential in Maldives and development of a national roadmap for sustainable...

Reference number: 2024000007
Country: Maldives
Objective: Mitigation
Sector: Renewable energy
Phase: Implementation

04 Jan 2024

Development of a Framework and Roadmap for a National Innovation System to foster low-carbon and...

Reference number: 2024000002
Country: Mozambique
Objective: Adaptation, Mitigation
Sector: Industry
Phase: Implementation

06 Oct 2023

Development of a SF6 Phase-out Roadmap and Pilot Projects in Kenya

Reference number: 2023000025
Country: Kenya
Objective: Mitigation
Sector: Industry
Phase: Implementation



Establishing Knowledge Hubs & Communities of Practice

- **Collections of knowledge products and communications assets:**
- **Events** - organized by topic, to include implementing partners, strategic knowledge partners, NDEs (mostly virtual, unless piggybacking on another event)
- **Knowledge Products:** Technical studies, research reports, impact reports and policy analyses.
- **Fact Sheets and Roadmaps:** Including eight dedicated fact sheets on cement, SF6, and hydrogen technology pilots and 3 Technical Fact sheets/Roadmaps on each technology.
- **Impact Report:** Summaries of project achievements, results, and lessons learned (for the ICS Programme).
- **Infographics**
- **Photo and Video Reportages:** Visual documentation to illustrate the technology (one idea is a video of an SF6 plant in Kenya).
- **Podcasts and Interviews:** Audio-visual interviews with subject matter experts and project leads.
- **Blogs and Q&As:** Informal reflections and stakeholder narratives to humanize technology adoption stories.
- **When appropriate, Communities of Practice** (through a WhatsApp group)



Thank you