

# Key Concept Notes for Technical Assistance

1 September 2025  
Asia NDE Forum  
CTCN Secretariat

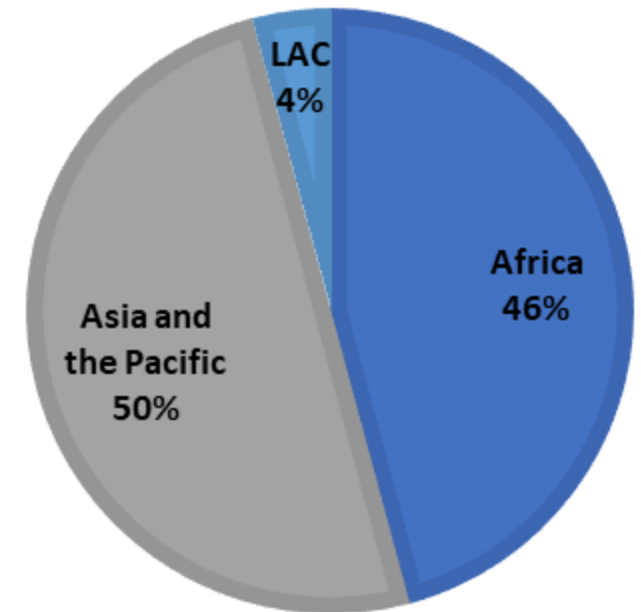
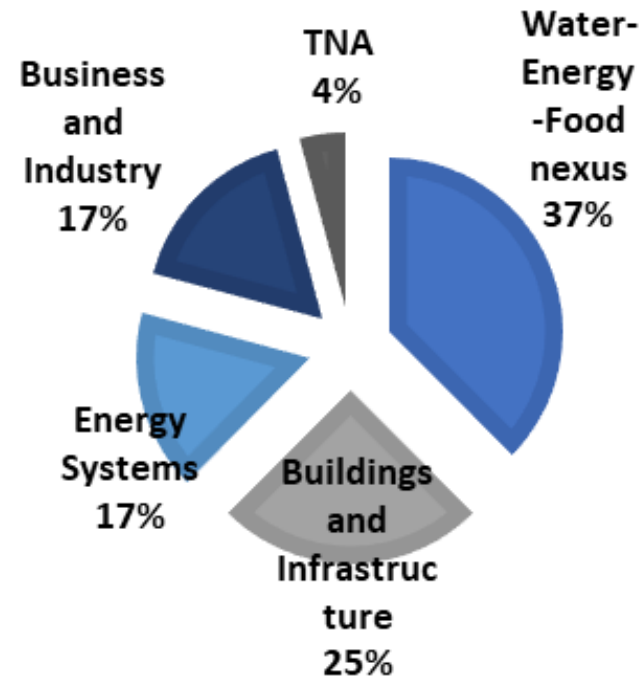
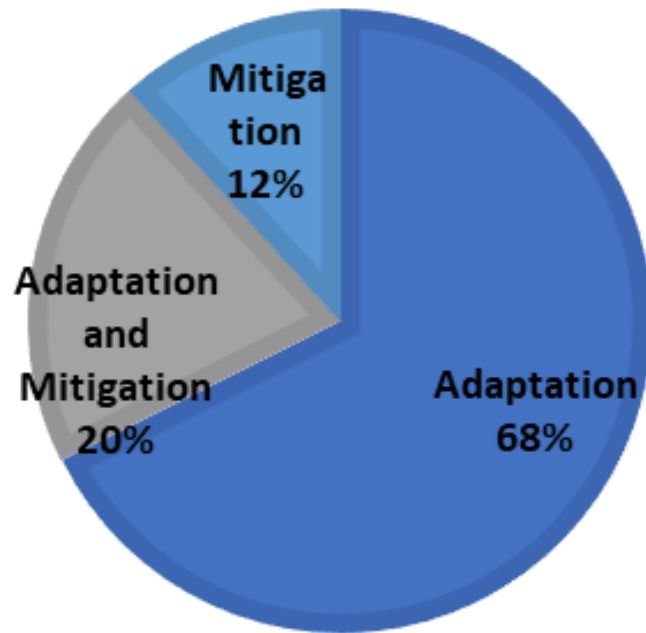


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# Global Trends for Technical Assistance in 2024

# Overview: Technical Assistance in 2024

105 Technical assistance interventions at various stages of implementation  
24 Technical Assistance interventions completed in 2024



# Technical Assistance - Global Water-Energy-Food Nexus

## Trends

Solar Irrigation Pumping system

Climate smart agriculture

Water management technology  
(drainage systems)

Agrometeorological platform

Rainwater harvesting system

Tree Monitoring

EWS Flood



Country	Title
Eswatini	Feasibility study for the utilization of solar energy for sugarcane irrigation pumping for emerging commercial small cane growers in the Eswatini
Ghana	Solar irrigation technology options for smallholder farmers in Ghana through innovative climate adaptation financing mechanisms,
Indonesia	Technical practices for <b>climate-smart agriculture</b> in Indonesia
Maldives	<b>Skimming well gallery system</b> for agricultural use in HDh.Nolhivaranfaru of Maldives (AFCIA)
Nepal	Customized <b>weather and climate information system</b> for climate-resilient agriculture in Nepal (AFCIA)
Pakistan	Improving adaptive capacities of water sector through <b>surface rainwater harvesting</b> technology adoption (AFCIA)
South Africa	Tree Monitoring for Climate Adaptation in the City of Mbombela (Pro-bono K)
Sudan	Community-based flood and drought early warning system in Sudan using Satellite-based transmission technology for real-time automatic water level telemetry system (AFCIA)
Sudan	Soil erosion valuation to support climate resilient agriculture and food security (AFCIA)

# Technical Assistance - Global Buildings & Infrastructure

## Trends

Flood forecasting

Green Building

Framework for Forestry sector

ICZM

Smart water metering



Country	Title
Bangladesh	Enhancing <b>longer lead-time flood forecasting</b> and strengthened community dissemination in Bangladesh (Pro-bono K)
Pakistan	Adoption of <b>green buildings</b> in Pakistan to achieve Pakistan's Nationally Determined Contribution
Samoa	Developing a framework and methodology to carbon sinks from the forestry sector using Earth observation in Samoa
Solomon Islands	The establishment of an Integrated Coastal Zone Management (ICZM) Plan to protect the mangroves through Ecosystem based adaptation solutions
Tunisia	Smart drinking water network in Tunisia: first phase in Sousse and Monastir (GCF Readiness)
Zimbabwe	Development of Green Building Standards

# Bangladesh: Enhancing longer lead-time flood forecasting and strengthened community dissemination in Bangladesh

**Implementation period:** 2023-2024

**Project status:** Completed

**NDE:** Dr. Md. Kamruzzaman, Director General,  
Department of Environment, Bangladesh

**Project proponent:** Sazzad Hossain, Bangladesh  
Water Development Board (BWDB)

**Implementing partner:** Pohang University of  
Science and Technology (POSTECH), Weatherpia  
Co., Ltd.

**Main objective:** To develop a medium- to long-  
range flood forecasting system for the Ganges-  
Brahmaputra-Meghna river basins

## Hydrological Modeling for Flood Prediction

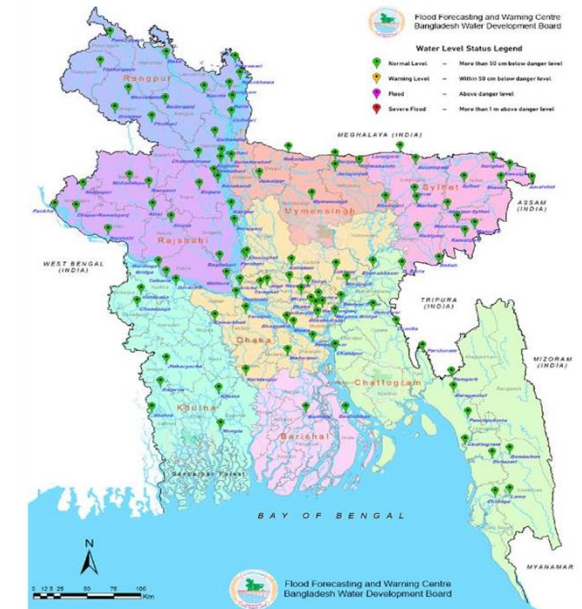
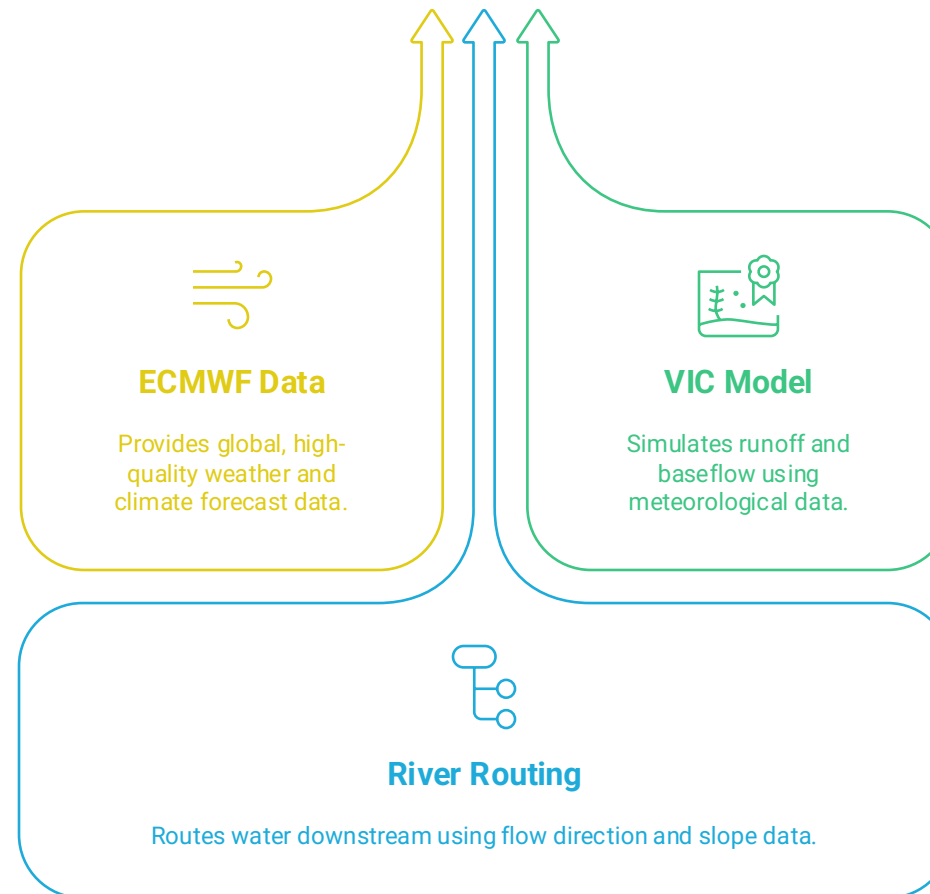


Figure 1. Flood forecasting stations in Bangladesh (Updated On: 24 Apr 2024)  
(Flood Forecasting & Warning Centre, 2024)

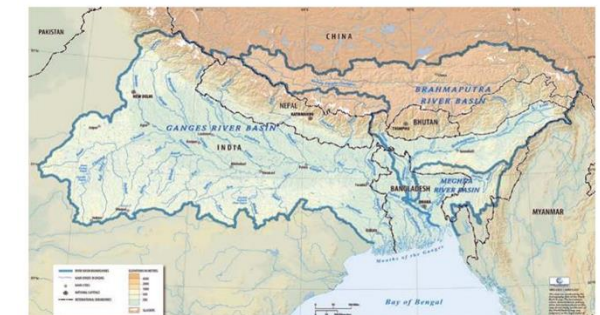
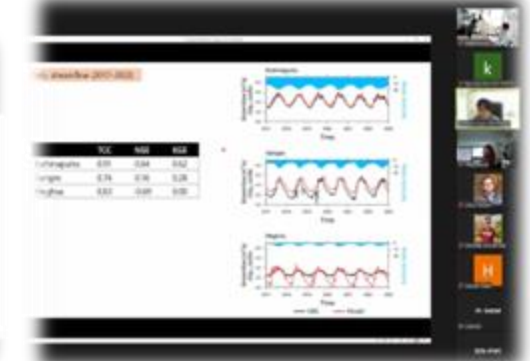
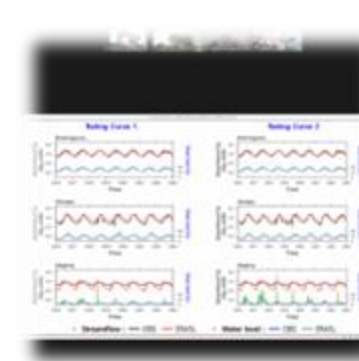
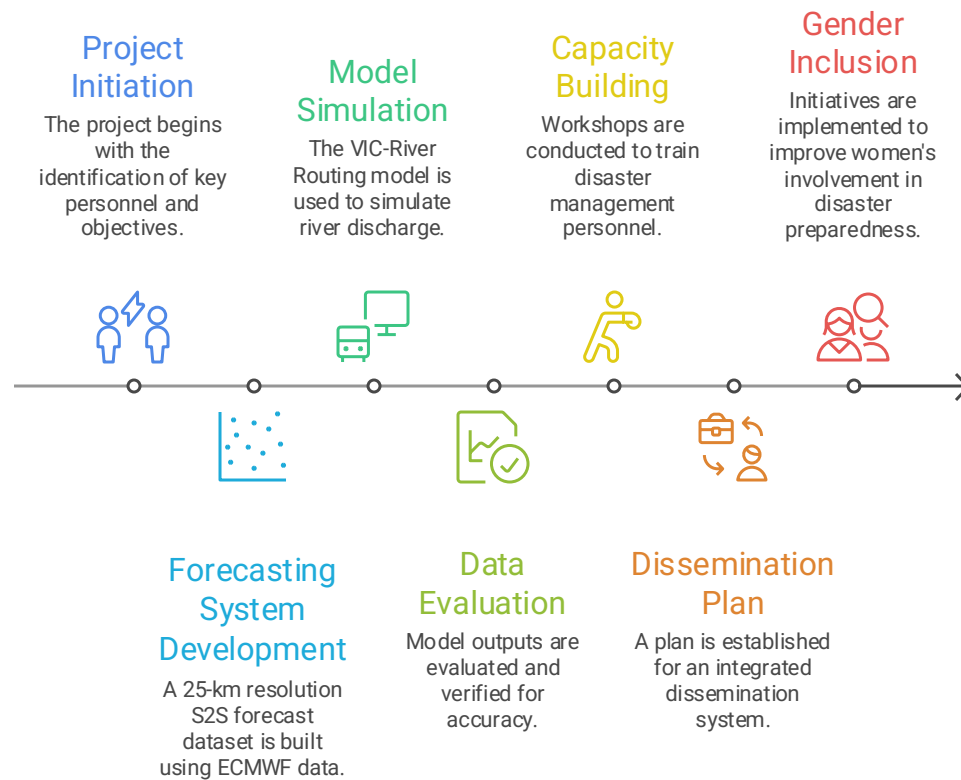


Figure 2. The Ganges-Brahmaputra-Meghna River Basins (World Bank, 2017)

# Bangladesh: Enhancing longer lead-time flood forecasting and strengthened community dissemination in Bangladesh

## Key outputs:



## Trends

Efficient appliances

Green Hydrogen

Framework for EE



Country	Title
Lebanon	Development and implementation of an efficient appliance strategy (GCF Readiness)
<b>Mongolia</b>	Feasibility study of a combined heat and power supply using <b>green hydrogen</b> (Pro-bono J)
Nigeria	Developing an Institutional Framework for the Energy Efficiency Act and Regulations targeting energy intensive sectors (household and industries) in Nigeria
<b>Thailand</b>	Development of <b>national hydrogen strategy and action plan</b> for accelerating Thailand's net-zero target

# Technical Assistance Highlights in Business & Industry

## Trends

Market assessment

Technology framework

Circular Economy Roadmap



Country	Title
Cambodia	Market assessment in the <b>application of climate technologies in the agriculture sector</b> for rural development in Cambodia
Pakistan	<b>Technologies Framework for Implementation of Nationally Determined Contributions</b> for Pakistan
South Africa	Developing an STI-led cross-sectoral Circular Economy Roadmap for abating GHG emissions in South Africa
Zambia	Development of a framework and roadmap for a National Innovation System to foster low-carbon and climate resilient economic development in Zambia

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# Priority Topics for Technical Assistance for 2025 and beyond

# Technical Assistance Process

## 1 Request Submission

Evaluation of requests for technical assistance within **2 weeks**, depending on clarity of the request.

## 2 Response Plan Design

Development of response plans within **2-3 months**, provided that the necessary information is available and key stakeholders are responsive.

## 3 Bidding Process

Conduct of the competitive bidding process for about **8 months** depending on UNON procedures

## 4 Project Implementation

Delivery of the technical assistance between **12-18 months** depending on the requested activities.

## 5 Monitoring and Evaluation

Execution of monitoring and evaluation activities on an **ongoing basis**.

# Technical Assistance in Asia since the last NDE Forum

6 TA ideas under development

4 Technical assistances in the **design** stage

2 Technical assistances under **bidding**

7 Technical assistances under **implementation**

8 Technical assistances **completed**

# Technical Assistance in Asia by Countries

Country	Idea.	Des.	Bid.	Imp.	Com.
Bangladesh				1	1
Cambodia	1	1		1	1
Indonesia					1
Laos	1				
Malaysia	1			1	
Maldives			1		1
Mongolia	2		1		
Nepal				1	
Pakistan					3
Tajikistan	1	1			
Thailand				1	1
Timor-Leste				1	
Uzbekistan		1			
Vietnam		1		1	

**Total number of countries supported in 2024/25: 14**

# Overview: New TA Requests in Asia



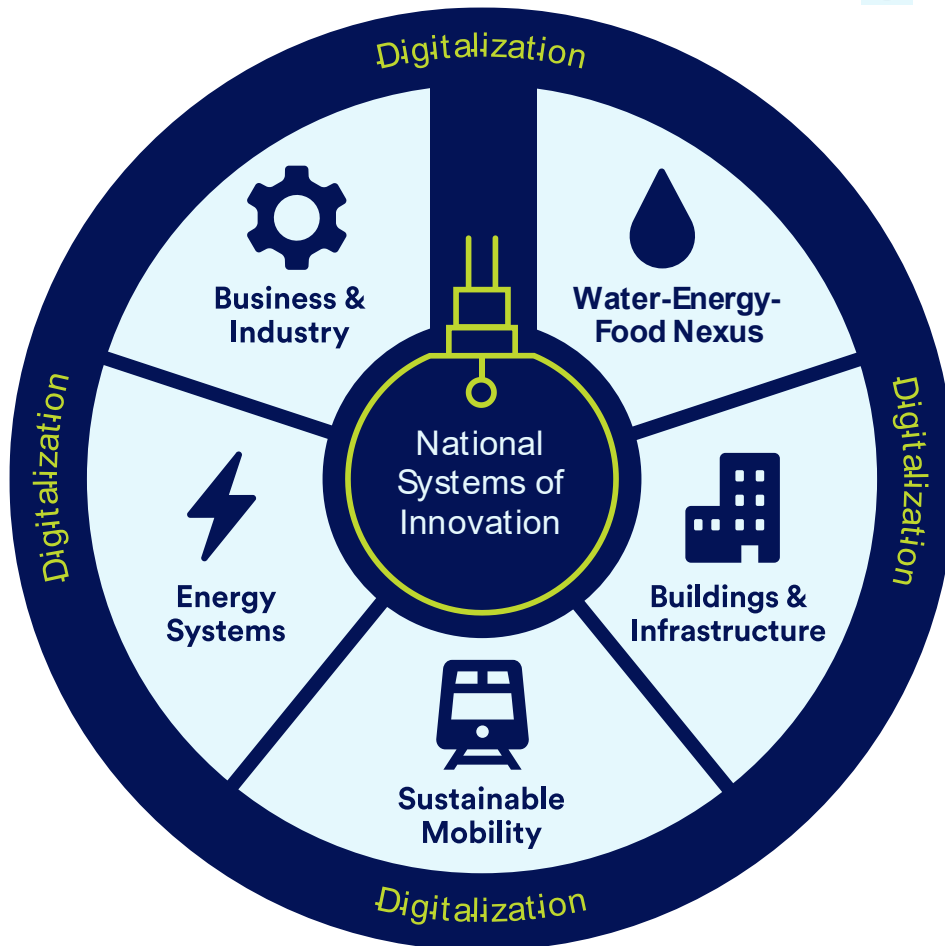
Cambodia, Laos, Mongolia, Tajikistan, Uzbekistan, Vietnam



Malaysia, Mongolia



Mongolia



**Cambodia WEF Nexus**  
Strengthening climate resilience through technology transfer and capacity development.

**Cambodia Rainwater Harvesting**  
Feasibility study of improved rainwater harvesting for sustainable agriculture.

**Laos Early Warning**  
Implementing Lao PDR's Early Warning for All Roadmap 2024-2027.

**Malaysia Adaptation Finance**  
Adaptation finance facility for business and industry.

**Mongolia Climate Resilience**  
Reducing smallholder vegetable farmers' vulnerability to climate change.

**Mongolia SF6 Reduction**  
SF6 reduction in the energy sector.

**Mongolia Cement Decarbonization**  
Cement decarbonization in the business and industry sector.

**Tajikistan AI Early Warning**  
AI-based Early warning system for Tajikistan.

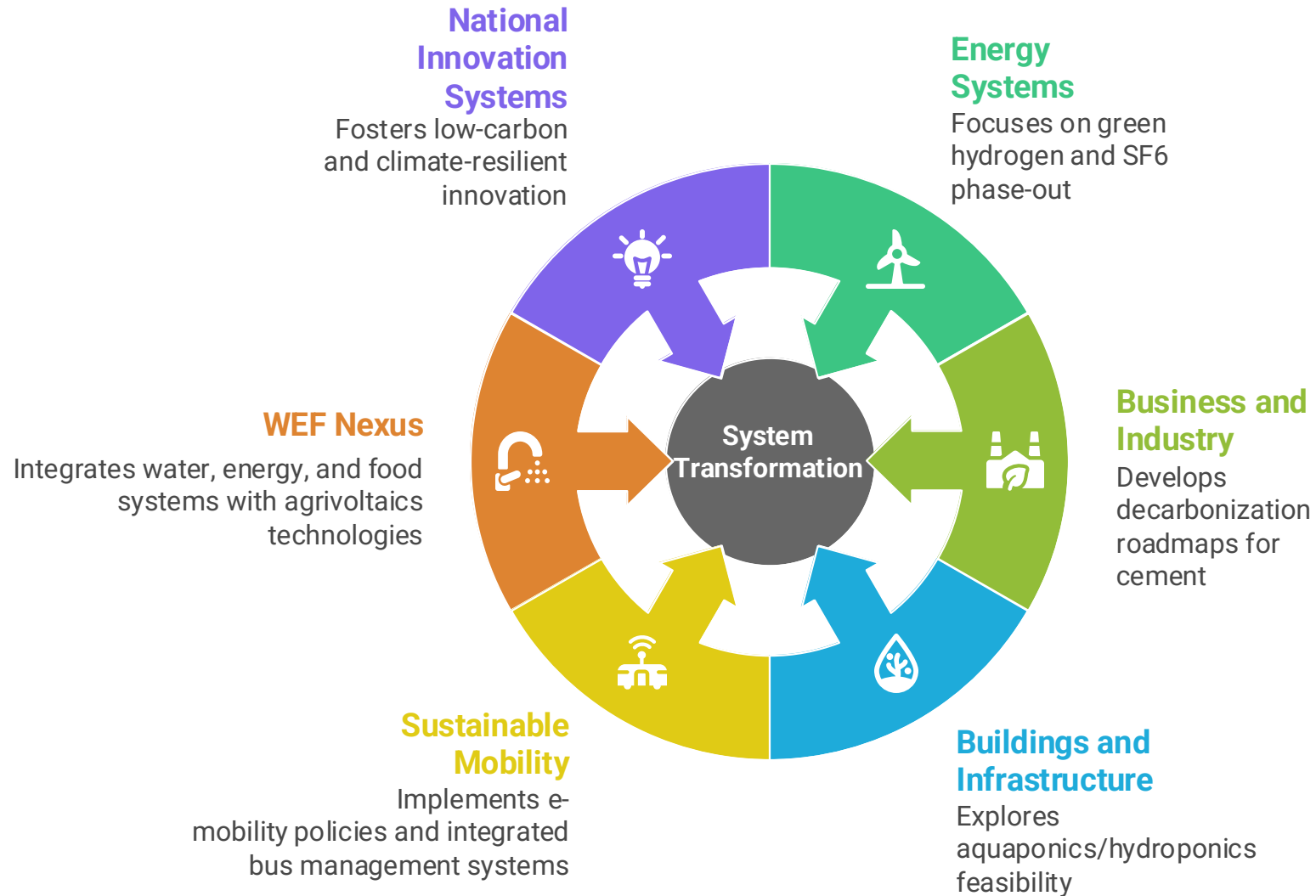
**Uzbekistan Desalination Study**  
Pre-feasibility study for groundwater desalination and resource recovery.

**Vietnam Climate Adaptation**  
Strengthening Hai Phong City's climate adaptation and disaster prevention.

**Tajikistan Data Management**  
Enhancing Weather and Climate Data Management through AI.

# Technical Assistance Priority Topics

As per System Transformation Areas and Key Enablers





UNFCCC\_CTCN



UNFCCC.CTCN



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Centre Network

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## Supported by:

