CLIMATE TECHNOLOGY CENTRE & NETWORK

UN environment programme

UNIDO

CTCN

CTCN's experience in Asia-Pacific

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COP25 Japan Pavilion

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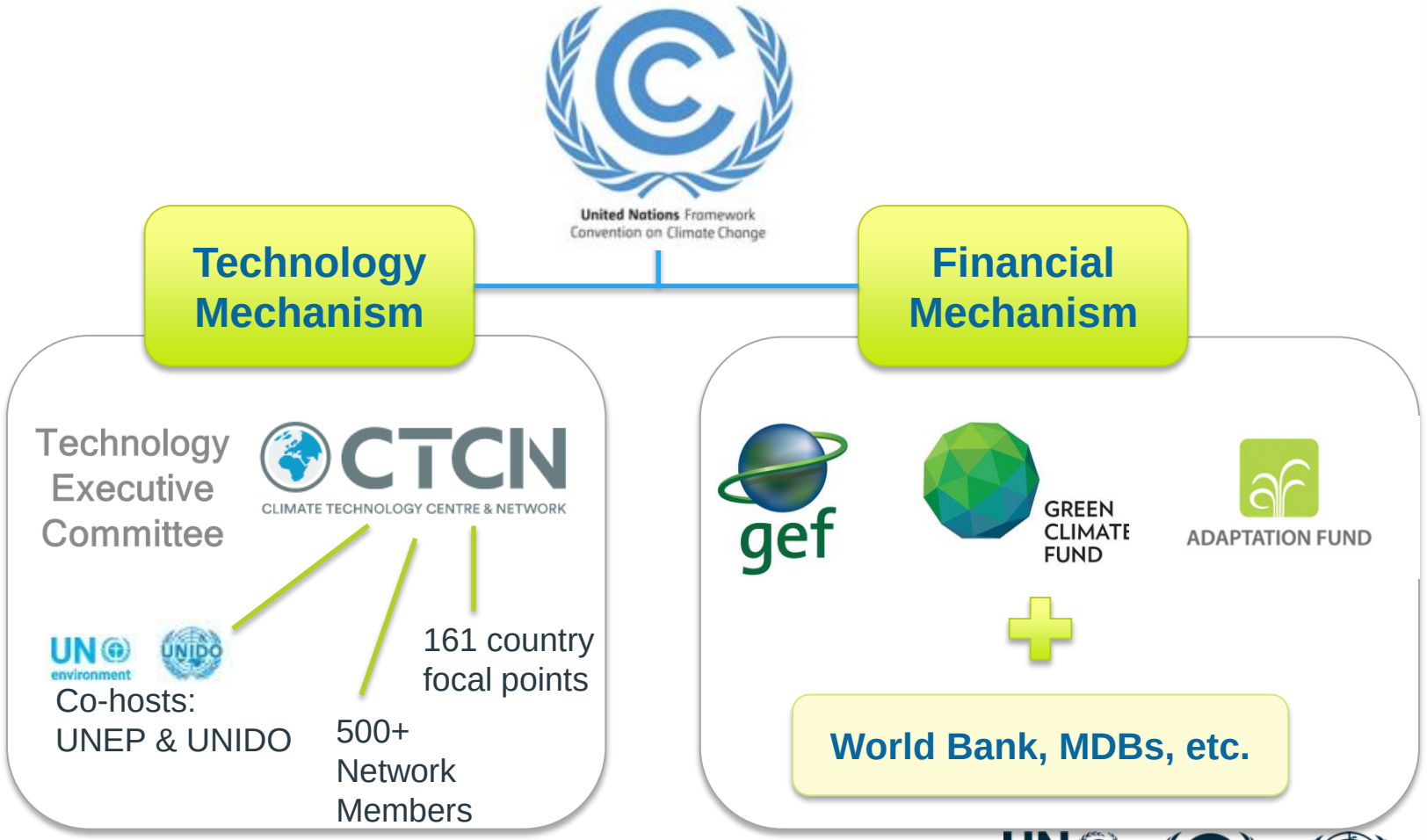
Climate Technology Centre and Network

- Operational arm of the UNFCCC Technology Mechanism.
- Mandated to support the development, transfer, deployment and dissemination of climate technologies.
- Work with Financial Mechanism & via 500+ expert implementing partners.
- Co-hosts: UNEP & UNIDO



About Us

CTCN Services

TECHNICAL ASSISTANCE

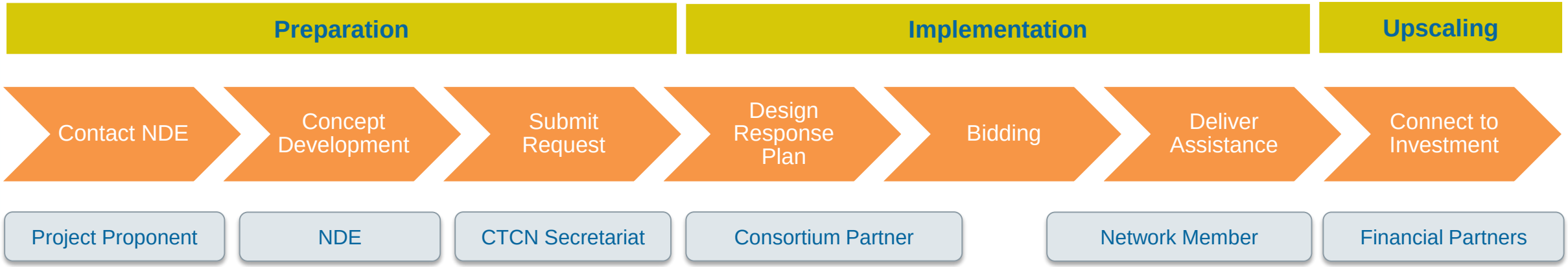
KNOWLEDGE SHARING

COLLABORATION & NETWORKING

Agriculture
Carbon Fixation & Abatement
Energy Efficiency
Forestry
Industry
Renewable Energy
Transport
Waste Management

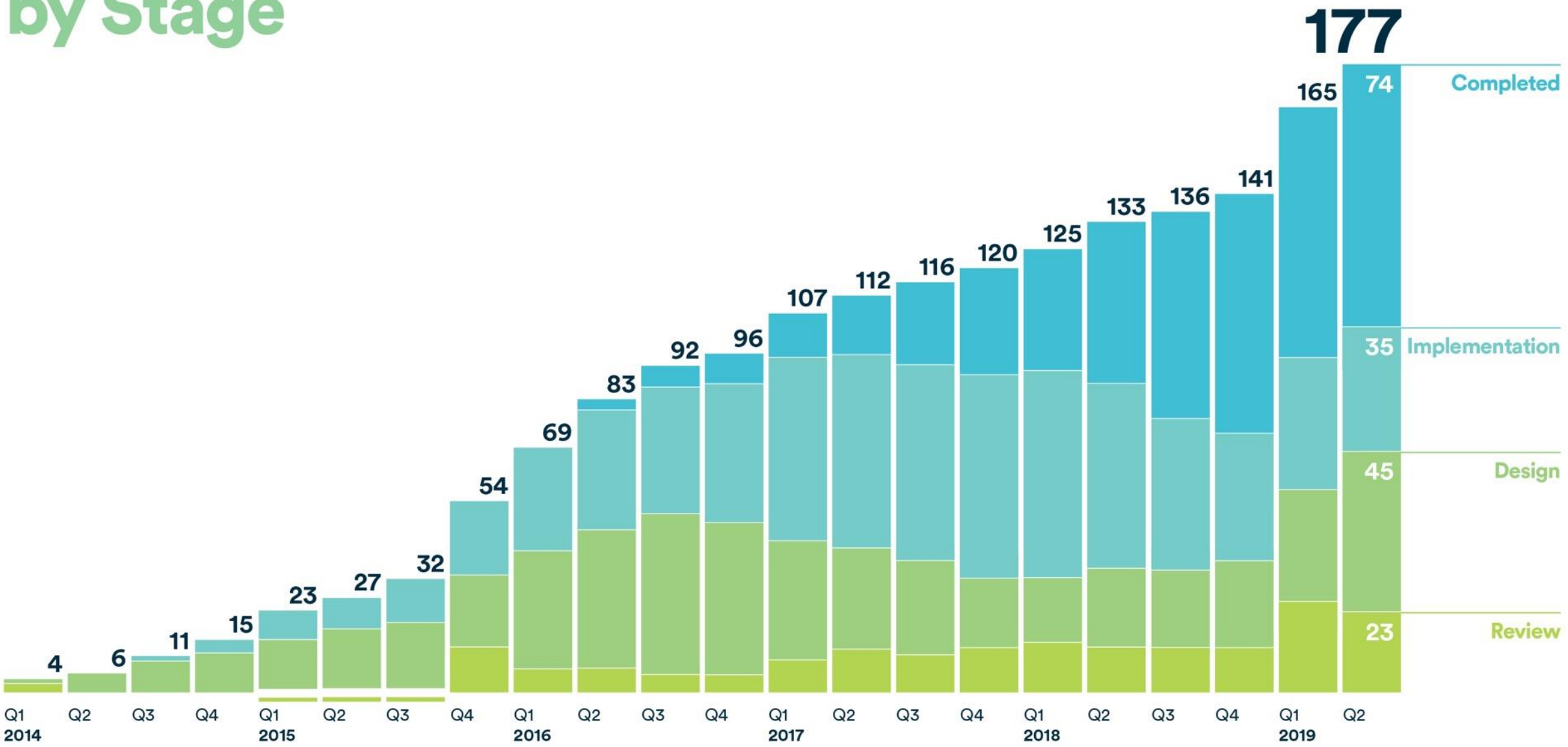
Agriculture & Forestry
Coastal Zones
Early Warning & Environmental Assessment
Human Health
Infrastructure & Urban Planning
Marine & Fisheries
Water

CTCN Technical Assistance: How it works

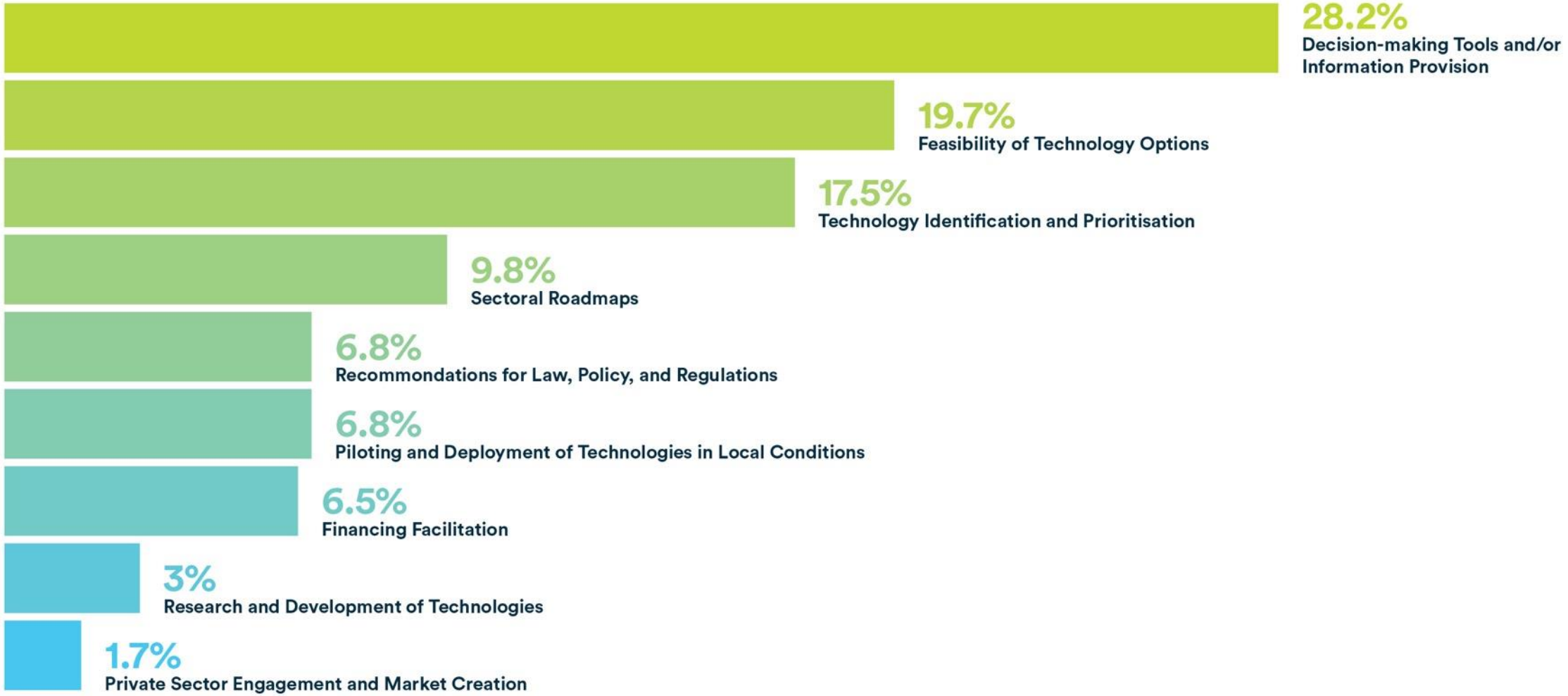


Distribution of Technical Assistance Requests

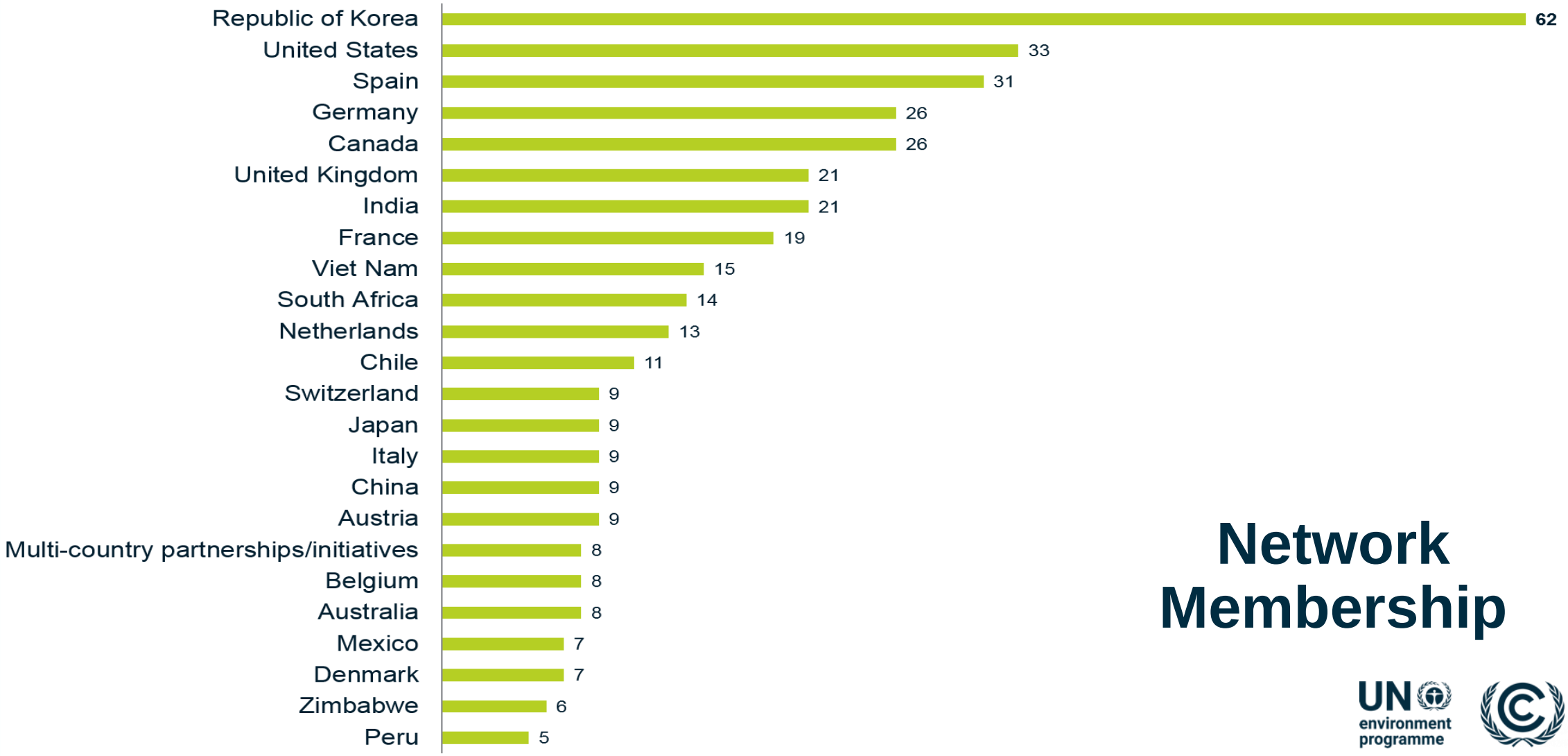
by Stage



Distribution of Technical Assistance Requests
by Type of Assistance



CTCN Network membership



Network Membership

CTCN promotes PPP in TA implementation

- Public-Private Partnership - key focus area under Program of Work 2019-22
- CTCN completed 2 Technical Assistances (TAs): Thailand and South Africa through PPP with support from Japan
- Multiple stakeholders representing public and private sector were engaged
  - NDE and technology experts from Japan; NDEs and beneficiary industries from Thailand and South Africa; CTCN Network members
- Key benefit of PPP arrangements
  - Industry-to-Industry networking and transfer of knowledge and technologies across countries

Benchmarking Thailand's steel industry

- **Objective:** The benchmarking would help identify energy saving and emission reduction potential through competition
- **Deliverables:**
  - Conducted a survey on energy consumption in 29 furnaces from 17 iron and steel mills
  - Benchmark on energy consumption pattern representing major energy consumers in the steel industry
  - Energy reporting guidelines and manual on energy efficient operation
  - Financing options including de-risking and leveraging private financing

Waste heat recovery with CCU in South Africa

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- **Objective:** Examine feasibility of the mineral CCU technology, determine emission reduction potential and assess cost efficiency of the hybrid system
- **Deliverables:**
  - Chemical analysis of exhaust gas from cement kilns and by-products
  - Financial assessment and market survey of the bi-products
  - Estimation of marginal abatement costs of the mineral CCU technology
  - Business plan, including cost estimation of pilot and demonstration scale plant

Stakeholders involved in the projects

Stakeholders	Thailand	South Africa
Japan's NDEs	Ministry of Economy, Trade and Industry (METI) & Ministry of Environment (MOEJ)	
Network member	New Energy and Industrial Technology Development Organization (NEDO)	Research Institute of Innovative Technology for the Earth (RITE)
Experts from Japan	• Japan Iron & Steel Federation (JIST) • Nippon Steel & Sumikin Research Institute • JFE Techno-Research Corporation	• Taiheiyo Engineering Corporation • Nippon Concrete Industries Co. Ltd. • Mitsubishi UFJ Morgan Stanley Securities • Tohoku University
Stakeholder in partner countries	• National Science &Technology Innovation Policy Office (NDE) • Iron & Steel Institute of Thailand (ISIT) and its member companies	• Department of Environmental Affairs (NDE) • South Africa National Energy Department Institute (SANEDI) • Association of Cementitious Material Producers (ACMP) and its member companies

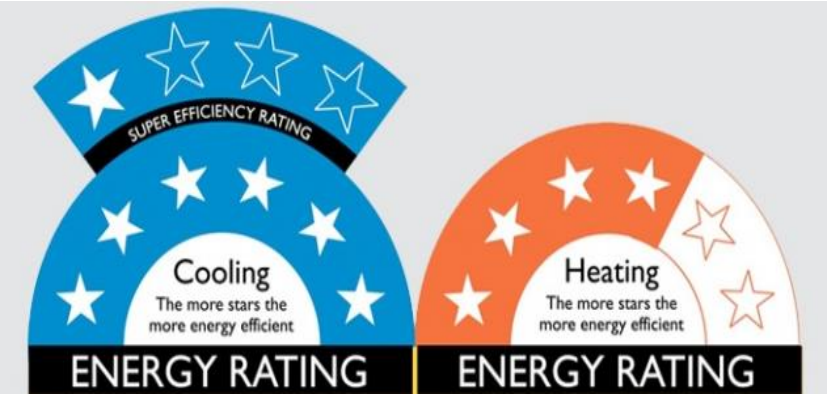
Energy certification course in Bangladesh

- **Objective:** Generate certified energy managers (EMs) and energy auditors (EAs) to spread efficiency measures in industry
- **Deliverables:**
  - Designed the course and developed study materials, training modules and manuals for EAs and EMs.
  - Develop the model question banks on topics related to energy efficiency to aid the aspiring EAs and EMs to prepare for examination for certification.
  - Conduct a Train-the-Trainer exercise for 13 trainers through a capacity development and knowledge exchange program in India.

Proponent	Sustainable & Renewable Energy Development Authority (SREDA)	TA implementor	National Productivity Council India
NDE	Department of Environment		

Air conditioning regulations in Papua New Guinea

- **Objective:** Set ground for energy labelling (EL) and Minimum Energy Performance Standards (MEPS) for refrigeration and air conditioning
- **Deliverables:**
  - A national database on baseline energy consumption and ozone-depleting substances for imported and domestic ACs.
  - Gap assessment on the enabling environment for EL and MEPS based on a thorough market assessment of AC sector.
  - Training to develop national capacities on testing and certification related to energy efficiency of AC systems



Example of energy labelling from Australia

Proponent and NDE	Climate Change and Development Authority	TA implementor	Econoler

Certification for energy auditors in Pakistan

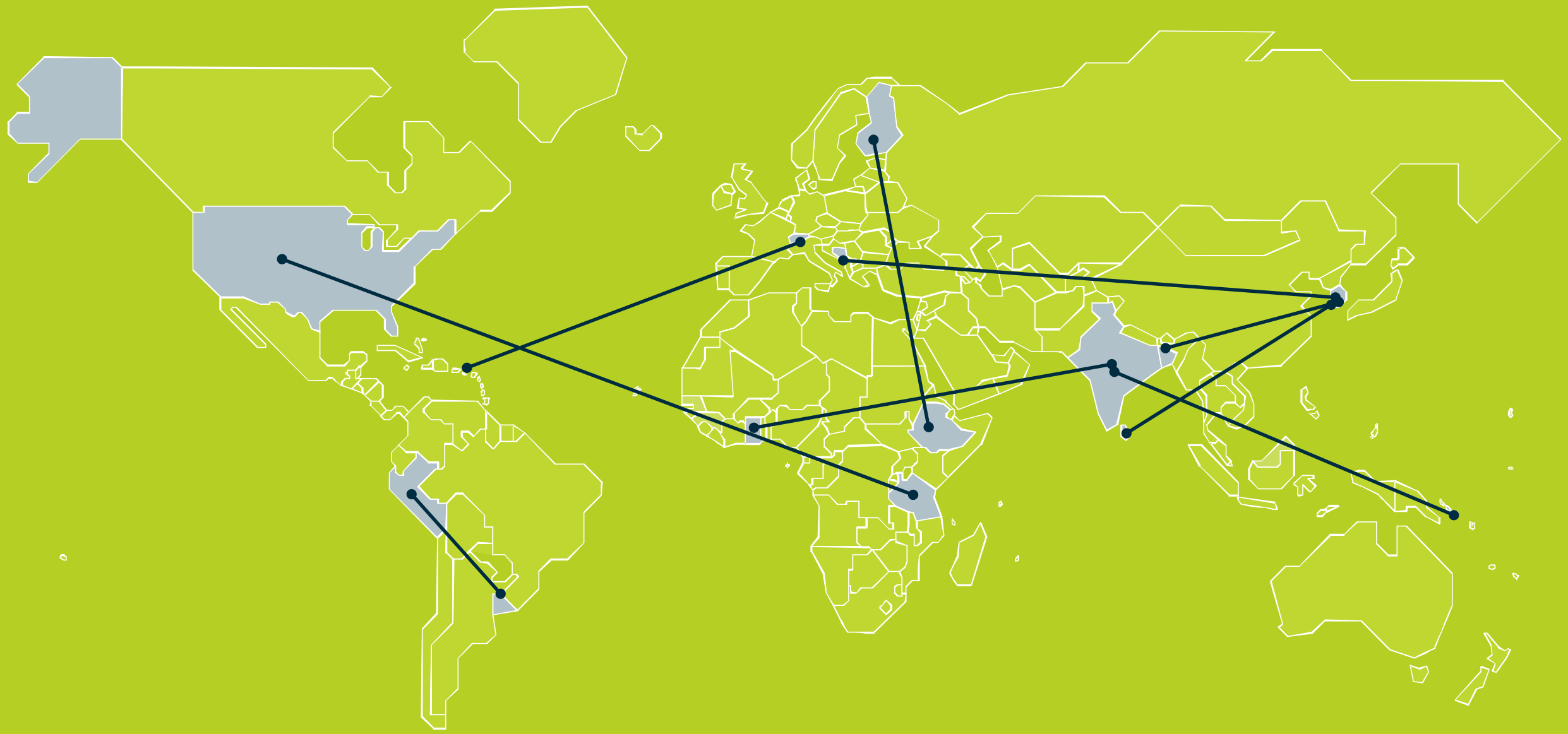
- **Objective:** Inform designated energy consumers and generate certified energy workforce to undertake efficiency measures in industry
- **Deliverables:**
  - Notify designated industry energy consumers about energy user classes
  - Develop guidelines, syllabus and course modules including the model question banks for examination
  - Conduct a two-week Train-the-Trainer program
  - Establish a national certification scheme for EAs

Proponent	National Energy Efficiency & Conservation Authority (NEECA)	TA implementor	The Energy and Resources Institute (TERI)
NDE	Ministry of Climate Change - Pakistan		

Other engagement approach in Asia and Pacific

- Capacity building and knowledge sharing:
  - CTCN private-sector matchmaking event for NDEs in Asia-Pacific: >70 bilateral meetings conducted between country focal points and Network experts
  - Deep-dive workshop on accelerating clean energy transformation with the private sector at Asia Clean Energy Forum 2019
  - Series of SME Clinics to help developing countries' SMEs based on transition from conventional technologies to more efficient technologies.

CTCN as Matchmaker
Connecting Countries with Experts Worldwide



Join CTCN Network

- **Commercial opportunities**: Pre-qualified access to competitive bidding to provide CTCN technical assistance services to developing countries
- **Connection**: Network with national decision-makers, thought leaders, and other Network members to expand your partnership opportunities and learn emerging practices
- **Visibility**: Increase your global recognition and showcase your success stories through events, reports and tools
- The membership is free of charge.
- Complete application on www.ctc-n.org/network

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