Regional meeting on Sustainable Energy For Asia Pacific Least Developed Countries

Benefitting From Global and Regional Energy Initiatives

Parimita Mohanty
UN Environment
Global and Regional Initiatives
United for Efficiency (U4E)
taking the en.lighten approach to the next low hanging fruits

• The en.lighten and U4E initiatives form part of the SE4ALL Energy Efficiency Accelerators on Lighting and Appliances & Equipment

• UNDP, ICA, CLASP, NRDC and UNEP launched the United for Efficiency (U4E) in 2014

• The Programme aims to join forces with private and public sector to expand the en.lighten approach to the next high impact opportunities,

• Supporting the second goal of the Secretary General’s SE4ALL initiative: double the global rate of improvement in energy efficiency
**United for Efficiency Partnership**

### Donors and International Organizations
- UNEP
- UNDP
- gef
- BMZ
- Australian Aid

### Partner Organizations
- International Copper Association
- clasp
- NRDC
- SAPP
- COPENHAGEN CENTRE ON ENERGY EFFICIENCY
- giz
- olade
- GELC
- China National Institute of Standardization
- National Lighting Test Centre
- bigEE
- tis
- topten international services

### Private Sector Partners
- OSRAM
- ABB
- B/S/H/
- PHILIPS
- Electrolux
- GC
- GLA
- Eskom
- mabe
- arçelik
- DEFY
- Whirlpool

### Countries
- 66 partner countries
- 19 partner countries
Successful market transformation

Minimum Energy Performance Standards

Supporting policies
promoting demand for efficient products
incl. innovative financing mechanisms,
loans and grants

Environmental sound life-cycle management
mercury, electronic waste, ozone depleting substances...

Monitoring, verification and enforcement programmes discouraging non-compliant products

Country assessments of potential savings & policy readiness

Global consensus on best practice policies

Gain political commitment from countries and regions

Implement national & regional product policies
Providing Expertise & Developing Tools
The U4E Country Partnership

Support in the development of project proposals and in mobilizing funds

Training (online and face to face) on particular aspects of the integrated policy approach

Technical guidance and expertise for the implementation of national and regional initiatives on energy efficiency in lighting, appliances and equipment
DISTRICT ENERGY IN CITIES INITIATIVE LAUNCH AT CLIMATE SUMMIT

Double Global Rate of Improvement of Energy Efficiency by 2030
WHAT IS DISTRICT ENERGY

CONNECTING RENEWABLE ELECTRICITY GENERATION

CONNECTING COMMERCIAL DEMAND

CONNECTING INDUSTRIAL DEMAND

SOLAR THERMAL CONNECTED TO DISTRICT HEATING

CAPTURING WASTE HEAT FROM SEWAGE AND WASTEWATER

WASTE INCINERATION

CONNECTING SOURCES OF "FREE COOLING"

CONNECTING RESIDENTIAL CUSTOMERS

ABSORPTION CHILLER CAPTURING WASTE HEAT

COMBINED HEAT AND POWER (CHP) PLANT
A GLOBAL PARTNERSHIP TO SCALE-UP MODERN DES
MULTIPLE BENEFITS TO ACHIEVE DIVERSE POLICY OBJECTIVES

Oslo, Norway's, employment benefits from DES are estimated at 1,375 full-time jobs.

Paris reduced refrigerant emissions from cooling by 90%.

GIFT City district cooling reduces peak electricity demand for cooling by 44%.

Cyberjaya lowered cooling costs by 39% through district cooling.
KEY OBJECTIVES

Increase **knowledge** of multiple benefits to promote district energy

**Demonstrate** the viability of district energy & develop city-wide policy-investment plans

Scale up district energy in cities by **replicating** best practice

Create an environment that favours **investment** in district energy

Double the rate of energy efficiency improvements for heating and cooling in buildings by 2030 through district energy
APPROACHES

LIGHT TOUCH
- CAPACITY BUILDING
  - RAPID ASSESSMENTS
  - NATIONAL WORKSHOPS
  - NEW ACTIONS, PROJECTS OR POLICIES

DEEP DIVE
- FACILITATING FINANCE
  - DEEP ASSESSMENT
  - TRAINING
  - PROJECT TENDERS
  - DES CITY-WIDE PLANS
  - MRV SYSTEM

REPLICATION
- CREATING A PIPELINE
  - NEW CITIES
  - RAPID ASSESSMENTS
  - VIRTUAL PLATFORM
  - MENTOR CITIES
  - MATCHMAKING
The Climate Technology Centre & Network

CTCN Mission:

To promote the accelerated development and transfer of climate technologies at the request of developing countries for energy-efficient, low-carbon and climate-resilient development
Background Information and Structure

• Operative arm of the UNFCCC Technology Mechanism
• Working for National Designated Entities
• In partnership with:
  • UNEP, UNIDO
  • 12 independent, regional and global consortium partner organizations with expertise in climate change technologies
  • International network of 300+ academic, multilateral, NGO and private sector institutions
  • Strategic Partner DNV GL
CTCN: Responding to Developing Country technology needs

• UNFCCC Technology Mechanism created in 2009 alongside Financial Mechanism (GCF+GEF) as part of Copenhagen Agreement

• Technology Mechanism consists of a Technology Executive Committee (policy guidance) and Climate Technology Centre and Network (operations)

• CTCN is donor-driven, co-hosted by UNEP & UNIDO

  • Work with Financial Mechanism + country focal points + partner organizations to leverage private sector expertise in service of Developing Country needs
CTCN: 3 core service offerings

• Technical Assistance
  • 170+ country-driven requests received from 67 countries; 10 completed to date, 30 under implementation
  • Expect 200 by end 2016, ±350 total by end 2017 (subject to funding considerations)

• Capacity Building
  • Regional Forums linking country focal points, private sector experts & GCF representatives
  • LDC Incubator Programme, expanding to SIDS

• Knowledge Management + Networking
  • >300 Network + Consortium implementing partners
  • Webinars, information portal, sharing best practice
  • Technology Library: Convention technology focus
CTCN service areas and core sectors

Service 1: Technical Assistance
- Energy Supply
- Energy Use
- Industry
- Agriculture
- Waste Management
- Forestry

Service 2: Knowledge Sharing
- Coastal Zones
- Infrastructure, Transport & Urban Design
- Early Warning & Environmental Assessment

Service 3: Collaboration & Networking
- Water
- Agriculture & Forestry
- Human Health
- Marine & Fisheries

Reduce GHG Emissions
Strengthen Climate Resilience

CTCN
Climate Technology Centre & Network

UNEP, C, UNIDO
Energy Use and Energy Supply (45-50%)
Transport (12-20%)
Industry (13-16%)
Serving as a **facilitator** between developing countries and technology experts

- Identification of technology transfer barriers
- Advice on policy, legal and regulatory frameworks to support technology transfer
- Technology feasibility assessments
- Technology identification
- Capacity building

“**The CTCN can accurately find the right experts, help to develop technology options, remove the barriers and also identify financial partners to implement technologies in countries.**”

**MR. ISSAKHA YOUM**
CENTRE D’ETUDES ET DE RECHERCHES SUR LES ENERGIES RENOUVELABLES, SENEGAL (CTCN NDE)
• Main challenges in accessing and absorbing International climate finance
  • Development of bankable project with scaling up potential
  • Need of Capacity Building, in-country institutional strengthening and strengthening inter-ministry coordination

• What to do to expand the engagement of private sector in LDCs in Asia Pacific
  • Harmonization of standards and products to promote trade
  • Bundling of services

• How can local and international energy entrepreneurs access the benefits
  • Joining platforms, Forums
  • Match making
THANK YOU
Global Consumption of Electrical Products in 2030

Global Electricity Consumption in 2030 – Business as Usual

- Heating
- Motors >375kW
- Electrolysis

Total: 31,000 TWh

Σ 56% of global electricity use

Data Sources: IEA Key World Energy Statistics 2013, IEA World Energy Outlook 2013, Lawrence Berkeley National Laboratory BUENAS Model; USEIA, UNEP