International Conference on Sustainable Cooling
Scaling-up Efficient Clean Cooling: What Is Needed And How To Finance It?
The case of Panama

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**Scaling-up Efficient Clean Cooling – Panama**

**Context**

**The challenge**

- Services-driven economy
- Sustained increase in electricity demand: 5.2% per year until 2050 (BAU scenario)
- Cooling represents up to 80% of the total electricity consumption
- Low diversified generation matrix
  - Mainly hydro and thermal
- High Exposure to international oil price volatility and Climate Change impacts (droughts)

The perfect storm 2014: high Oil prices & droughts

**The action plan**

- Diversify the Electricity matrix
- Cleaner technologies
- Release the pressure on the demand side

1. Development of Regulatory Framework
   - EE Standards and labeling for appliances
   - Sustainable Construction Guide
2. Capacity Building
   - Capacity building workshops on GBC and EE S&L
   - Capacity building to local journalists
3. Enhanced Regional Coordination
   - Behavioral change Action Plan
   - Behavioral-change communication strategy
4. Mainstream Private Investments in EE
   - Design of an EE Fund

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**Electricity generation by source (GWh 2016)**

**Electricity generation (2000-2016, TWh)**

Source: Statistical year-book, OLADE 2017

*As of 2016, otherwise indicated*
Energy efficiency is the most economical, fastest, and sustainable solution to achieve a clean, resilient and cost-effective energy sector. However, several barriers undermine its further implementation:

- **Capital-intensive technologies**
  - Lack of incentive and limited access to capital

- **Inadequate financial instruments**
  - Unconventional revenue flow (savings vs cash-flows)
  - No project-finance alike
  - Capacity within the local bank sector
  - High transaction costs
  - Unsuccessful previous experiences

× Bulk procurement – Lack of scale
× Conventional Fund – Transaction costs
De-risking mechanism to mainstream private capital for EE in Panama
Scaling-up Efficient Clean Cooling – Panama
Proposed Instrument

De-risking mechanism to mainstream private capital for EE in Panama

The pilot program includes a new and simplified model with lower transaction costs with the following features:

- Creating the incentive: Preferential conditions for EE financing (interest and/or tenure)
- PPP approach crowding-in commercial banking sector
- Simplified assessment and monitoring: EE Regulatory Framework
- Reduced transactional costs: local banking existing structures and EE Regulatory framework
- Efficient use of public resources with minimal intervention and limited reputational risk
- Specific EE Instrument (avoiding blended RE & EE products)
- Reduced impact on the fiscal space and public debt through contingent liability

PILOT – Easy to Scale-up
Political will and ownership – National Champion
Favourable investment environment

Source: Energy Efficiency Outlook 2018, IEA