



# Introducing Appliance Standards and Labels in Belize

Jenny Corry Smith and Amit Khare, CLASP

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- Overview of CLASP
- S&L Background
- Belize Work Plan
  - Legislative Framework
  - Translate MEPS from Mexico and adapt to Belizean context
  - Impact and Market Assessments
  - Develop Mutual Recognition Agreements
  - Develop MV&E Framework
  - Approve Standards
  - Implementation



# CLASP improves the environmental and energy performance of appliances & equipment

Policy design & implementation

Promoting highly efficient products

Monitoring & evaluation

Resources & tools for practitioners

Training & capacity building

Create market for efficient off-grid products

Product technical analysis

Raising consumer awareness & comprehension



Country/Regional  
Technical Assistance

Global S&L  
Coordination

Global Research &  
Best Practices

Emerging  
Technology

Clean Energy  
Access



## Mexico

Technical Assistance to CONUEE – analyzed impacts on Mexican consumers and the national economy from minimum energy performance standards (MEPS).

## Belize

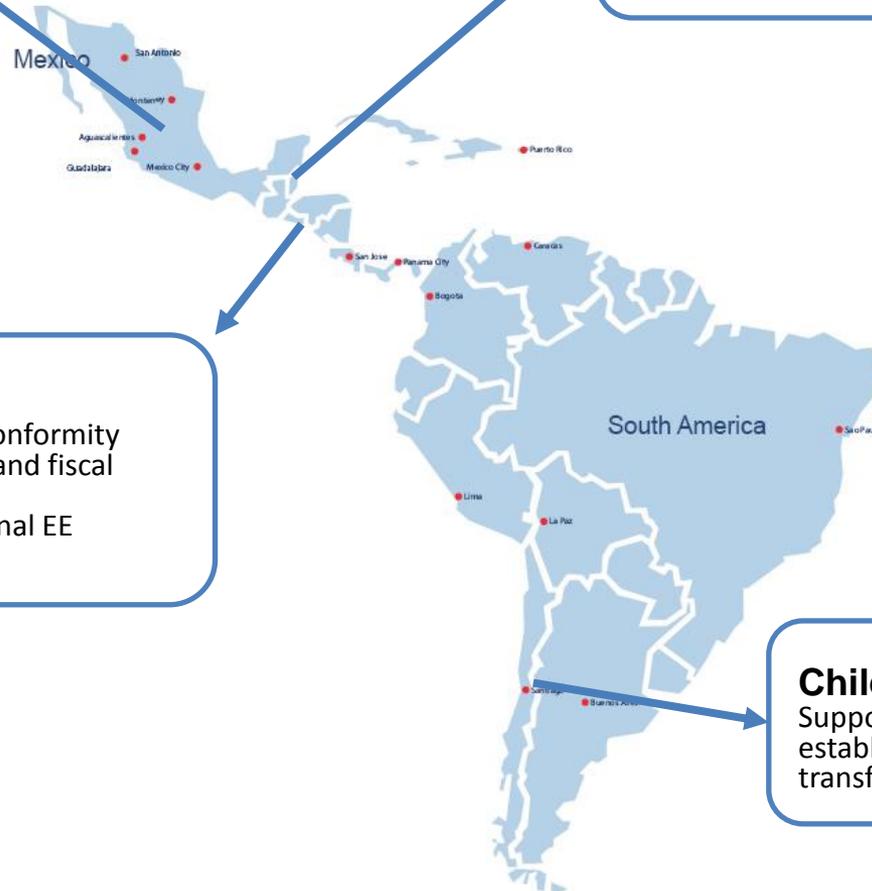
Assistance to MESTPU in the development of MEPS for various products.

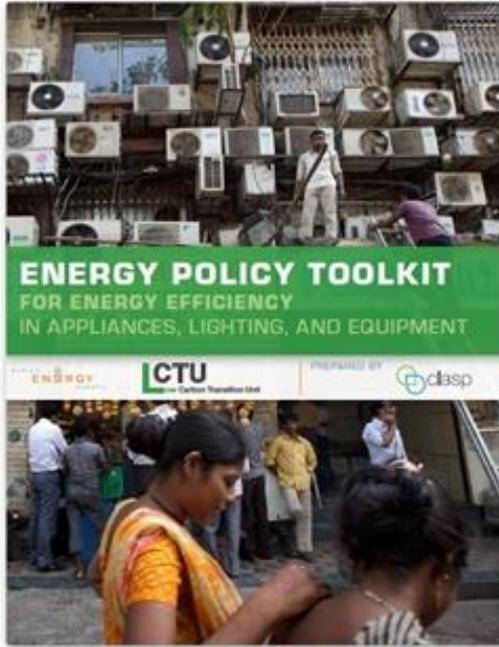
## Central America

Support in the development of conformity assessment procedures (MV&E) and fiscal incentives in El Salvador.  
Justification documents for regional EE standards for SICA.

## Chile

Support Ministry of Energy in the establishment of MEPS for distribution transformers.

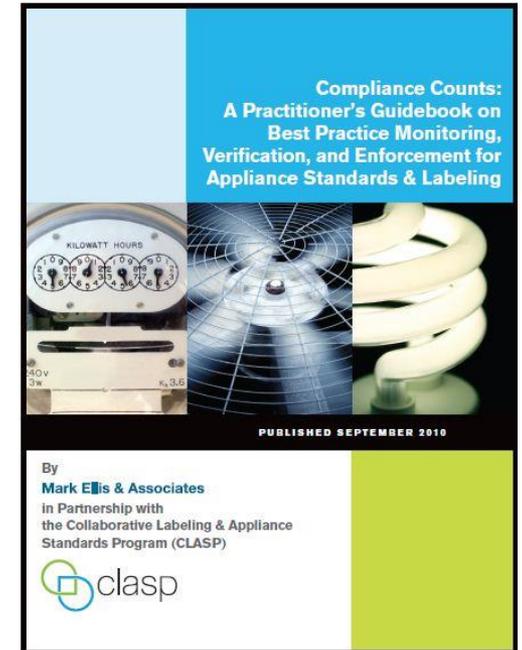




S&L Policy Toolkit

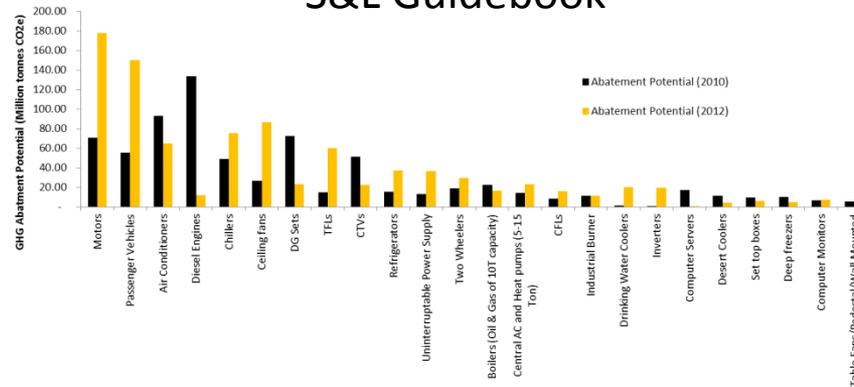


S&L Guidebook

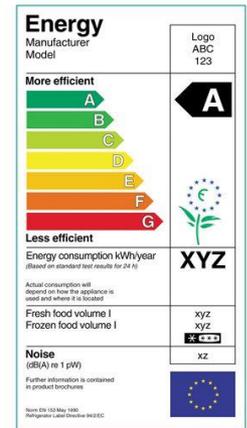
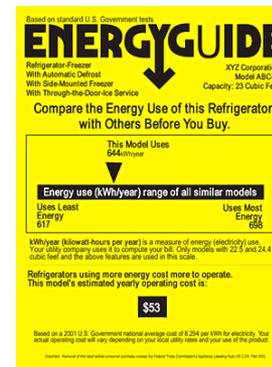
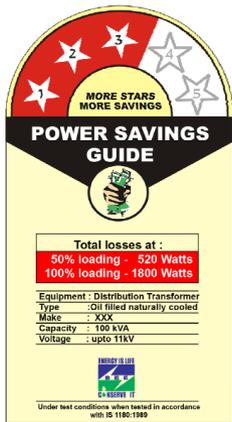


MV&E Guidebook

Product and Policy Analysis Tool (PPAT)



- Energy efficiency standards “PUSH” the market towards greater energy efficiency by removing inefficient products from the market.
- Energy efficiency labels “PULL” the market by allowing consumers to recognize and compare different products.





Reducing the energy consumption of a product...

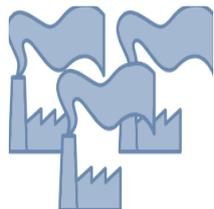
on aggregate, reduces overall energy use.



This reduces power demand...



which reduces electricity and fuel consumption in existing power plants...



and reduces the need to build new power plants to produce more electricity.

# Benefits of S&L

Resulting benefits include:

Reduced capital investment in energy supply infrastructure;

Enhanced national economic efficiency by reducing energy bills;

Enhanced consumer welfare;

Enhanced energy independence;

Strengthened competitive markets;

Reduced emissions to meet climate change goals;

Averted urban/regional pollution.



Potential annual savings in 2030 for **Belize** from a transition to more efficient refrigerators, ACs, lighting, motors, and distribution transformers.



Reduce electricity use  
 → by over **57.6 GWh**  
 → Approximately **12%** of current electricity use

...equivalent to  
**1** 20MW  
 power plant




Save **11.5 million US\$**  
 on electricity bills

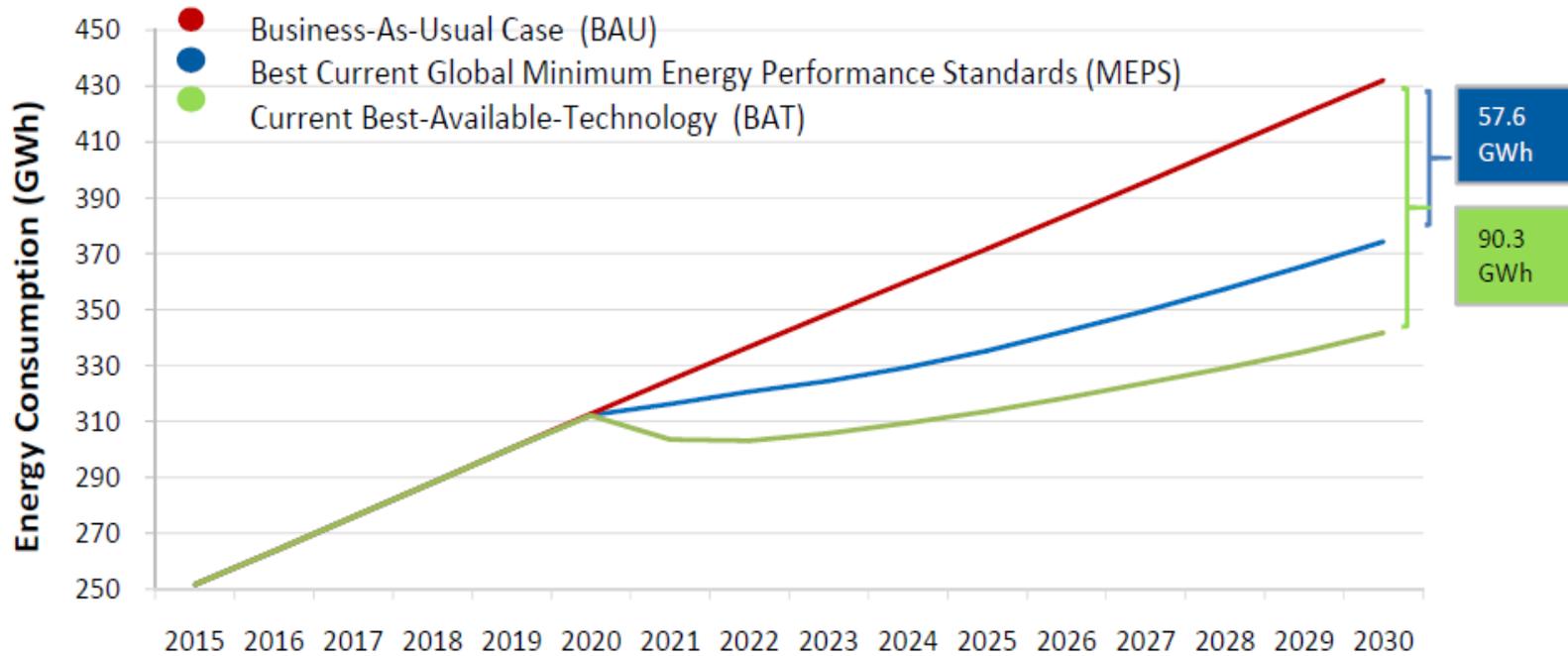


Reduce CO2 emissions by  
**50 thousand tons**

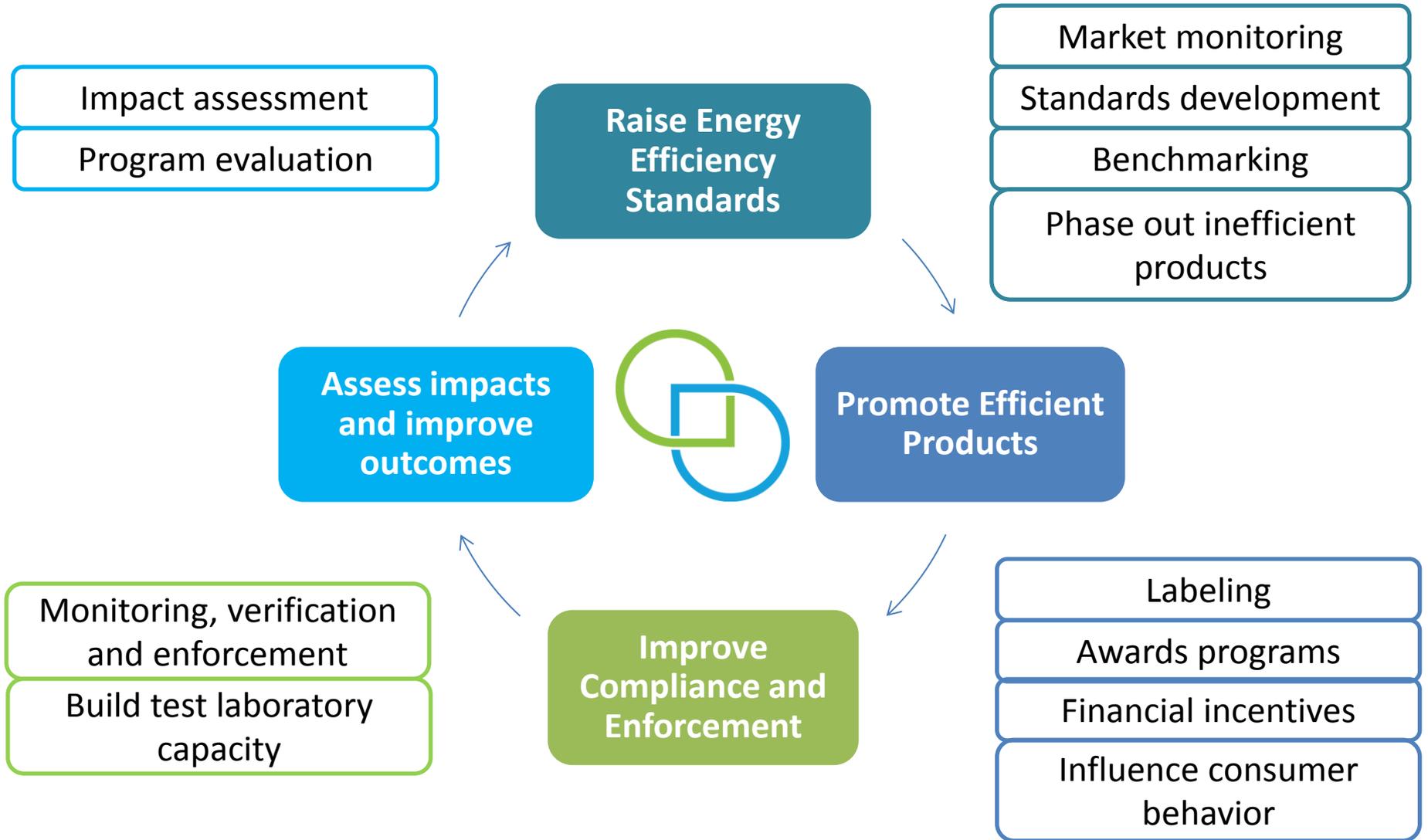
...equivalent to  
**30 thousand**  
**passenger cars**



# The Energy Savings Potential of Appliance Efficiency in Belize



# The virtuous cycle of appliance energy efficiency programs



## Proposed Activities to Implement S&L

- Establish Political and Legal Legitimacy for Standards
- Translate MEPS from Mexico and adapt to Belizean context
- Impact and Market Assessments
- Develop Mutual Recognition Agreements
- Develop MV&E Framework
- Approve Standards
- Implementation





# Activity 1: Establish Political and Legal Legitimacy for Standards

- Examine existing legislation to determine what authority the government has to establish an S&L program

## **Two Stages to develop legal authority:**

- *Framework legislation* authorizes an agency to implement S&L
  - *Regulations* are promulgated by an implementing agency. These are tailored to specific product types
- Once legislation is passed:
    - Education may be required for key stakeholders
    - Assign authority and responsibility for implementation
    - Maintain political support for program development and operation through an open dialogue with manufacturers and policy makers.

## *Examples of National Framework legislation:*

- Mexico: Ley Federal Sobre Metrología y Normalización of July 16, 1992

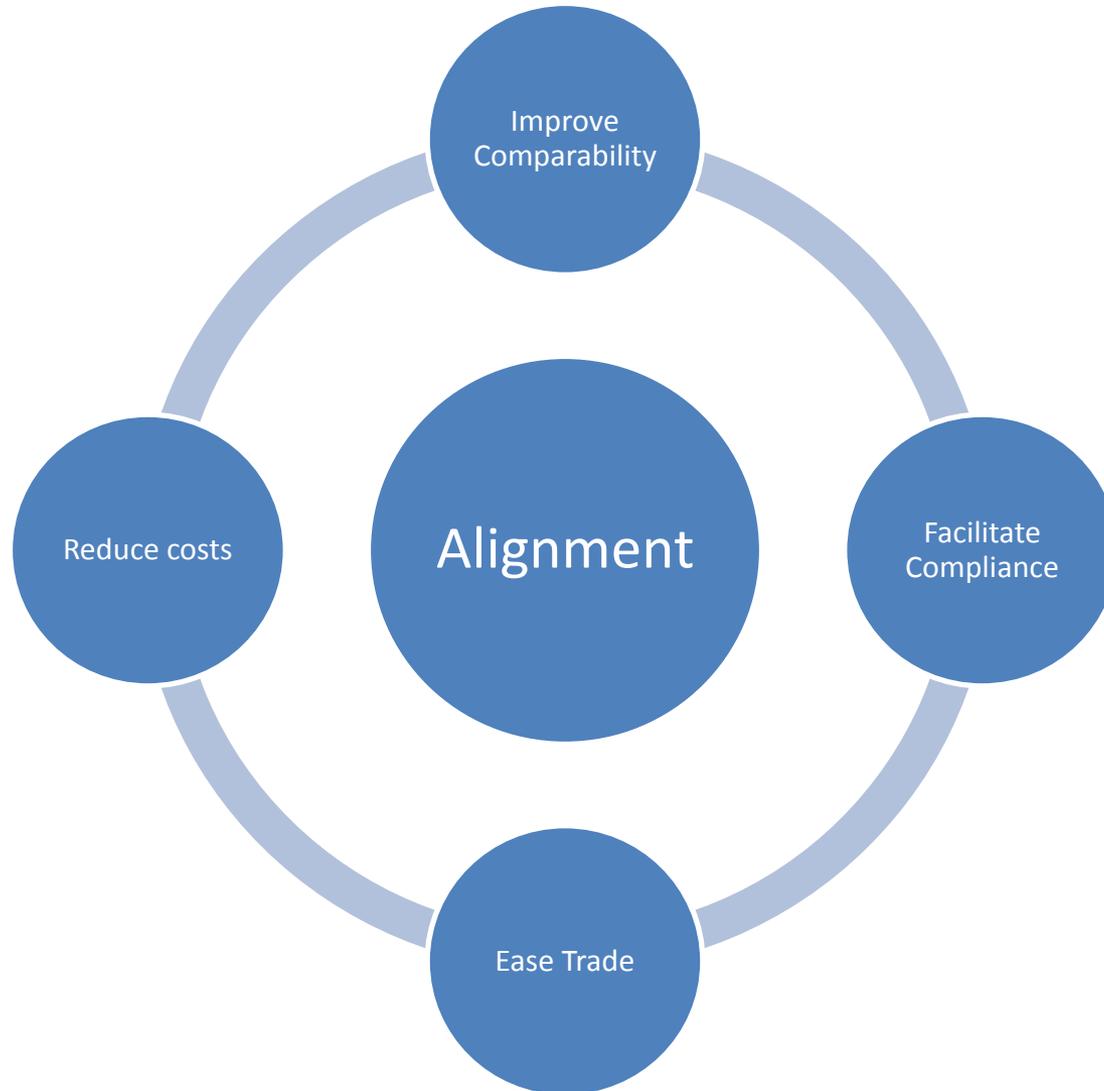


## Activity 2: Translate and Adapt Mexican MEPS

- Mexico has a strong S&L program and is an important trade partner with Belize
- Mexico's MEPS are well aligned with the US, although some of the efficiency levels are lower than those in the US
- Other countries in Central America are moving towards alignment with Mexico
- Mexico's CONUEE is supportive of alignment
- Once standards are translated the language will need to be adapted to fit the legislative framework in Belize

Status: MEPS for translation have been identified and intent to align has been communicated to the Mexican government.

# Benefits of Alignment



## Activity 3: Impact and Market Assessments

- MESTPU would set the criteria for the assessment
  - Criteria may include energy and CO<sub>2</sub> emissions savings, life cycle costs, incremental manufacturing costs, etc.
- Take advantage of existing resources
  - Customs database that tracks equipment entering the country
  - CLASP analysis on energy savings potential from refrigerators, ACs, and motors

Status: Some initial modeling has been done to estimate the energy savings potential for transitioning to more efficient lighting, ACs, refrigerators, transformers, and motors.

## Activity 4: Develop Mutual Recognition Agreements

A mutual recognition agreement (MRA) is an international agreement by which two or more countries agree to recognize one another's conformity assessments.

- Belize can develop MRAs with certification bodies and testing facilities in Mexico and Costa Rica
- Mexico's CONUEE has expressed support and willingness to cooperate

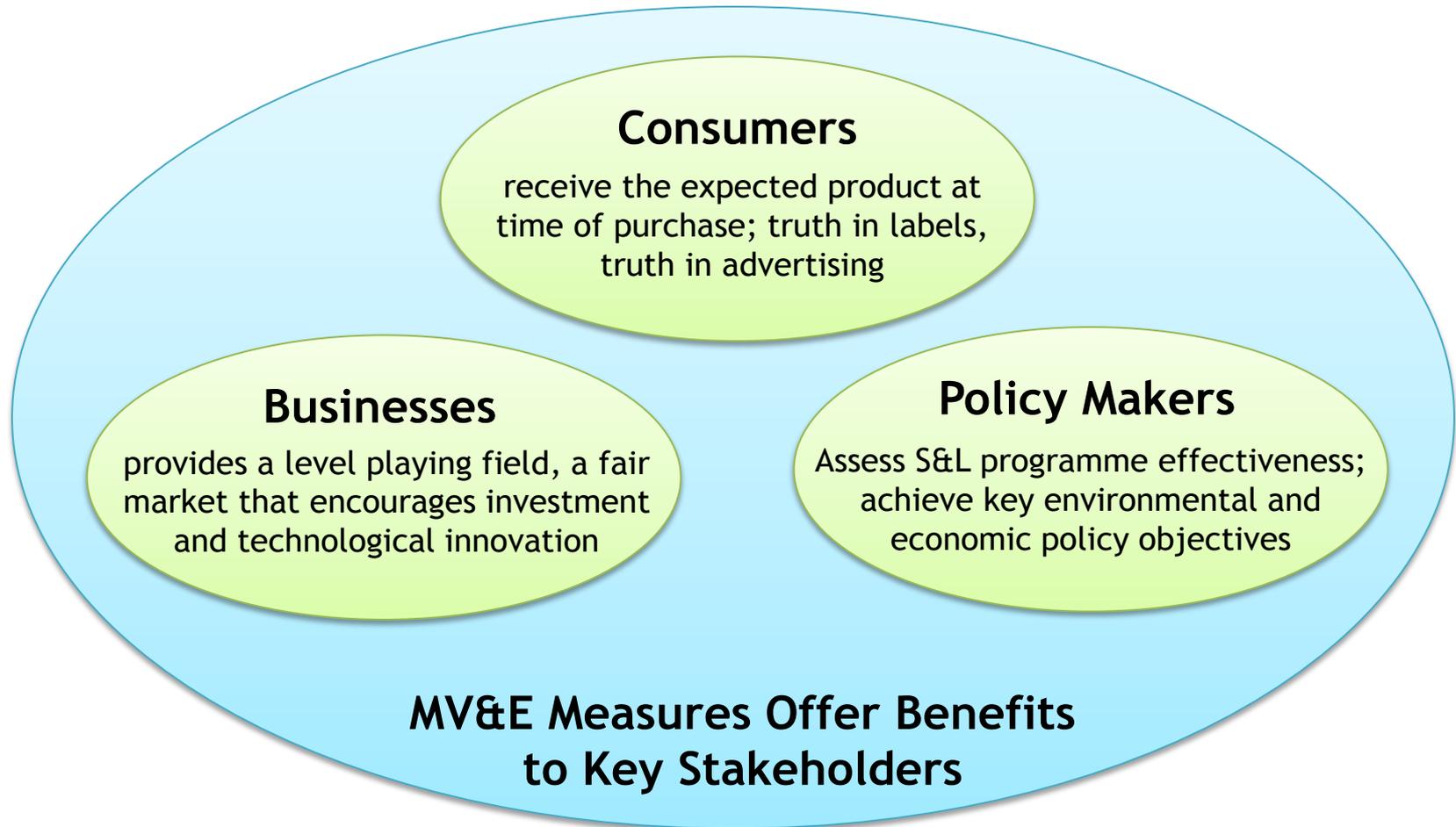
Status: CLASP has copies of MRAs from the EU, ASEAN, and Mexico that are under review. Need to determine if MRAs are a viable and cost-effective tool for Belize's MV&E program.

# Activity 5: Develop MV&E Framework



**Monitoring and Evaluation:** Coordinate with other agencies and evaluate the programme

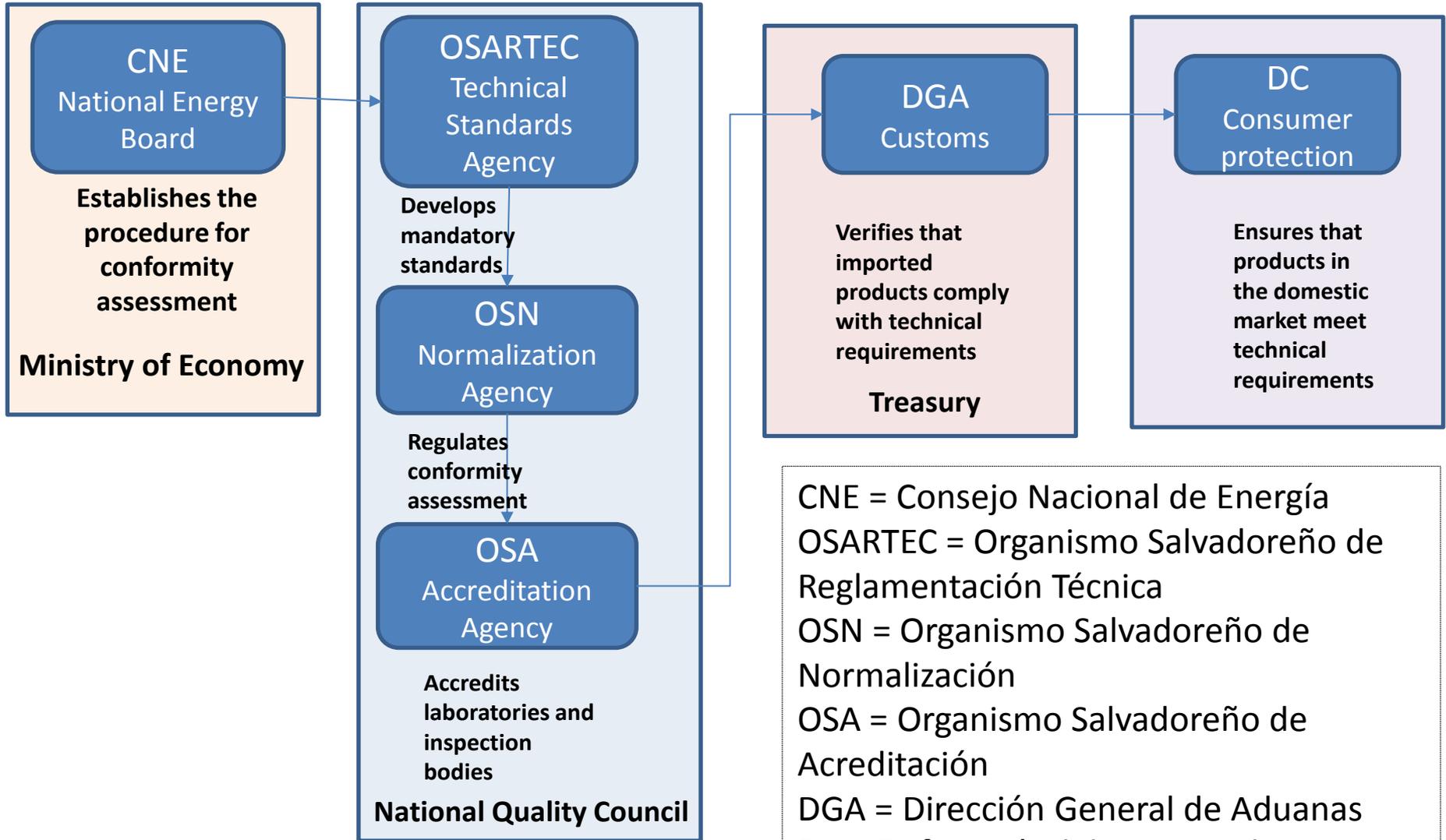
# Why is MV&E important?



Support national agencies in El Salvador to establish an effective monitoring, verification, and enforcement (MV&E) framework

- Review and update the existing MV&E
  - Product entry conditions
  - Monitoring and market surveillance mechanisms
  - Performance verification and enforcement
- Define roles and responsibilities of the various public entities for MV&E
  - Review of new legal framework
  - Analysis of institutional capacity and technical needs
  - Develop flow chart of expected processes
  - Mapping of roles and responsibilities of public entities

# Roles of Various Agencies in MV&E in El Salvador



CNE = Consejo Nacional de Energía  
 OSARTEC = Organismo Salvadoreño de Reglamentación Técnica  
 OSN = Organismo Salvadoreño de Normalización  
 OSA = Organismo Salvadoreño de Acreditación  
 DGA = Dirección General de Aduanas  
 DC = Defensoría del Consumidor

# MV&E Discussion Questions

- What information is currently required from a manufacturer to allow a product to enter the country and the appliance market?
- How can the existing database that is in place for products with refrigerants be leveraged for a national S&L program?
- How can the process be streamlined to avoid undue delays or impose unnecessary transaction costs when an S&L program is in place?
- Is there a certification agency? Accreditation agency?  
Consumer protection agency?



## Activity 6: Approve Standards

- Set up a technical committee with public and private participants
- Develop a TOR for the technical committee
- Adapt standards from Mexico to fit Belize context
- Conduct a standards advisory consultation with the Ministry
- Finalize standard
- Declare standard compulsory

Status: Will move forward once standards are translated.



# Thank you!

Jenny Corry Smith  
[jcorry@clasp.ngo](mailto:jcorry@clasp.ngo)

Amit Khare  
[akhare@clasp.ngo](mailto:akhare@clasp.ngo)



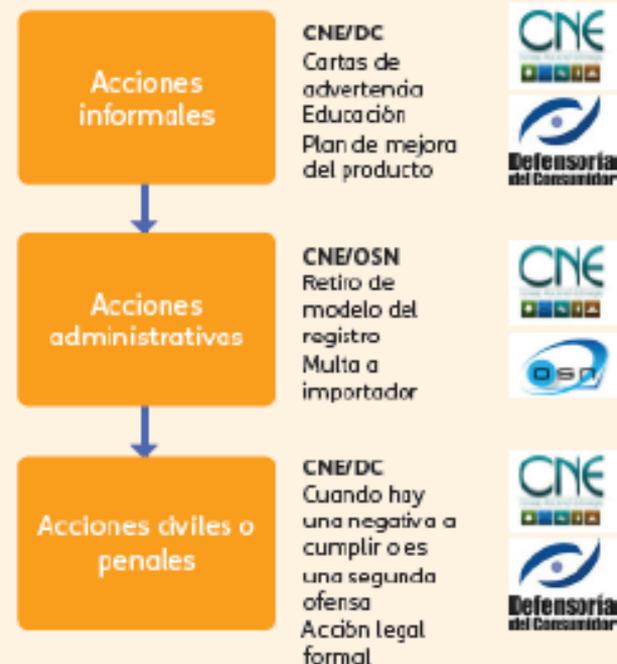
## 1. Registro y Certificación



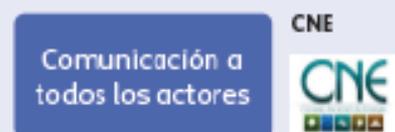
## 2. Monitoreo del Mercado



## 3. Fiscalización



## Comunicación



## Monitoreo y Evaluación

