

Metrology for Energy and Environment

Lessons and Opportunities

Agenda

- Program description
- Implementation
- Project's highlights
- Lessons and opportunities

Description

AN OAS AND NIST INITIATIVE:

WHAT?

Reinvigorate **role of metrology**
in Energy and Environment

Strengthen metrology **capacities**
and **infrastructure**

Promote **technical cooperation**
in the region

Enhance communication
among **technical** and **political**
communities



HOW?

Policy **dialogue**

Capacity **building**

Knowledge **sharing**

Research **opportunities**

Technical **exchanges**

Expert **advice**



WHO?

All active
OAS Member States

National **Metrology Institutes**

Normalization and
Accreditation Bodies

National Ministries of Energy
Environment, Health, and Economy

Academia

- ❑ 4-year program
- ❑ Funded by US-OAS
- ❑ NIST as technical counterpart

Implementation

OPPORTUNITIES	ACTIONS	RESULTS
Limited technical capabilities.	<ul style="list-style-type: none">• Funded 10+ country-driven sub- projects.• Enable scientific research opportunities and technical cooperation.	<ul style="list-style-type: none">• 28 LAC countries benefited.• 21 actions started by beneficiaries• 4 new metrology services supported
Communication gap between key stakeholders.	<ul style="list-style-type: none">• High-level awareness-raising.• Support policy development.• Inter-institutional coordination.	<ul style="list-style-type: none">• Raised visibility of Metrology.• Supported adoption of Central America energy efficiency technical regulation.
Diverse set of country's needs and challenges.	<ul style="list-style-type: none">• Established champions by theme.• Prioritized country joint initiatives.• Enabled opportunities for regional cooperation.	<ul style="list-style-type: none">• Created a network of 40 cities collaborating on air quality measurements.• 55% of projects executed were joint initiatives.

Air Quality Monitoring in LAC

- 2018: Quality assurance of air quality measurements (Costa Rica, Mexico, United States)
- 2019: Traceability of air quality measurements (Mexico, Argentina, Colombia, United States)
- 2020- 2022: Traceability of Ozone Measurements (Mexico, Argentina, Colombia, United States)



Energy Efficiency

- 2017-2020: Technical support in the process of harmonization of EE lighting standards in Central America.
 - Technical exchanges, trainings, expert advice
 - Recommendations to the EE regulations (general and public lighting)
 - Market analysis each CA country
- 2018: Energy Efficiency Testing for Refrigerators and Air Conditioners (Jamaica)
- 2018: Energy Efficiency tour at Intertek - CARIMET
- 2019 -2020: Capacity Assessment of BSJ and TTBS to operate EE testing laboratories (refrigeration, air conditioning and lighting)



Other initiatives

- Awareness raising on the role of Metrology on the Environment, the Energy, and the Public Health.
- Technical Exchange on the Development of a Solar Simulator (UV irradiance levels).
- Scientific exchange to strengthen services associated to power quality.



Lessons and opportunities

- Country driven proposals focus, helped improved sustainability of actions and their impact.
- Communication gap between key stakeholders continues to be a challenge.
- Diverse set of needs and challenges create opportunity for north-south and south-south cooperation.
- More opportunities for scientific exchanges and cooperation for emerging technologies.

Thanks

Bibiana Serna
Project Management Consultant, OAS
bserna@oas.org