Organization of American States

CENAM
CENTRO NACIONAL DE METROLOGÍA

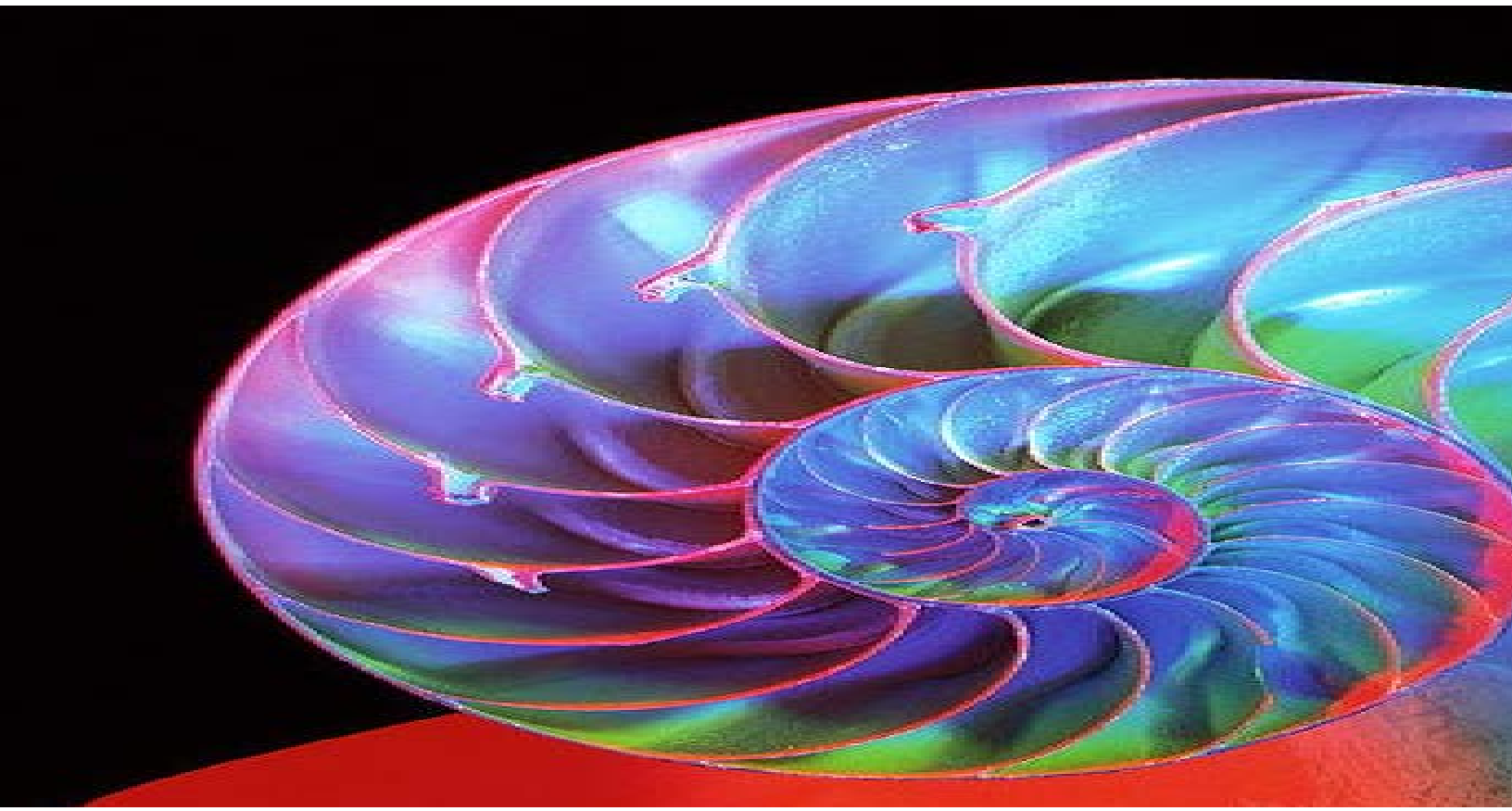
NIST
National Institute of Standards and Technology
U.S. Department of Commerce



Workshop Technical Program

Renewable Energy and Climate Science for the Americas: Metrology and Technology Challenges

CENAM, October 8-9, 2013



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Planning Workshop for an Initiative on Renewable Energy and Climate Science for the Americas: Metrology and Technology Challenges

Organized by NIST, OAS and CENAM

CENAM, Querétaro, México
October 8-9, 2013

Background

Implementation of renewable energy and climate change related policies around the globe will require access to accurate, internationally recognized measurements and standards. These will be critical for both policy-making purposes as well as evaluating the impact of mitigation efforts. Such capabilities will be equally important for assessing the impact of energy and climate change policies on the economic development of each country. National Metrology Institutes (NMI) in each country need to be aware of the measurement and standards capabilities necessary for implementation of such policies, and must be able to ensure the quality and international acceptance of data on Air Quality and Greenhouse Gas (GHG) measurements and characterization of renewable energy sources.

In the Americas, the Inter-American System of Metrology (SIM) has undertaken a major effort to strengthen the measurement and standards infrastructure in the hemisphere. This initiative will build on that effort by establishing a new focus to develop a robust infrastructure for renewable energy and climate science in each country; this effort would directly support the activities planned within Energy and Climate Partnership of the Americas (ECPA). ECPA established seven principles as its pillars including energy efficiency, renewable energy, cleaner and more efficient use of fossil fuels, energy infrastructure, etc. This initiative clearly addresses many of the ECPA pillars, and will facilitate the implementation of technologies and promote economic development in the region.

The objectives of the Planning Workshop at CENAM are to:

1. Identify technology and metrology areas where training and sharing of best practices would be most beneficial for countries of the Americas;
2. Start planning of workshops to improve local and regional measurement and standards infrastructure for renewable energy and climate science;
3. Explore ways to promote regional and international partnerships to share approaches and best practices for expanded utilization of renewable energy, measurement of air quality, GHGs and other pollutants, and efficient energy use and distribution systems; and
4. Develop an initial Action Plan for the Americas.

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October 8, 2013 Tuesday Afternoon

Plenary Session - Overview of Metrology and Technology Challenges

2:00-2:05 PM	Welcoming Remarks and Workshop Introduction	Dr. Claire Saundry SIM (NIST)
2:05-2:20 PM	Investing in Metrology to support Climate Science and Renewable Energy in the Americas: A project executed by NIST and OAS	Mr. Ruben Contreras (OAS)
2:20-2:50 PM	Climate Change Issues and Metrology Challenges US Projects – INFLUX, LA Basin Opportunities for Global Metrology Activities	Dr. James Whetstone NIST (USA)
2:50-3:20 PM	Urban GHG Measurement Efforts Planned in So. America Renewable Energy Activities in Brazil	Dr. Humberto Brandi INMETRO (Brazil)
3:20-3:50 PM	Air Quality Monitoring Activities in Mexico City	Dr.Francisco Guzman Mexican Petroleum Institute (IMP)
3:55-4:15 PM	Break	
4:15-4:45 PM	Renewable Energy Activities in Mexico	Dr. Antonio del-Rio-Portilla University of Mexico
4:45- 5:15 PM	Airborne Particulate Monitoring	Dr. Greg Smallwood NRC (Canada)
5:15-5:45 PM	Current NIST Research Activities on: Building Energy Efficiency, Solar Energy Electrical Measurements/Smart Grid	David Yashar NIST (USA)
5:45-6:15 PM	SIM Participation in Quality Infrastructure for Energy Efficiency and Renewable Energy Sources in Latin-America and the Caribbean – a PTB Project and an update on current activities in Argentina	Dr. Héctor Laiz, INTI (Argentina)
6:15-7:00	General Discussion	

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October 9, 2013 Wednesday Morning

Panel Discussion - Setting Priorities (9:00 – 11:00 am)

9:00	Welcome	Humberto Brandi, INMETRO and Hratch Semerjian, NIST
9:15	Introductory Remarks	James Whetstone, NIST

9:30 Brief Presentations* (not to exceed 10 minutes) by representatives from:

- ANDIMET – Juan Carlos Casillo, Instituto Boliviano de Metrología
- CAMET – Ileana Hidalgo, LACOMET, Costa Rica
- CARIMET - Robert Medford, Grenada Bureau of Standards
- NORAMET - Dr. Jorge Koelliker-Delgado, CENAM, Mexico
- SURAMET – Dr.-Ing. Héctor Laiz, INTI Argentina
- PTB – Alexis Valqui – International Technical Cooperation

10:30 Panel Discussion - Needs and Priorities

Objective: To identify common themes, needs and priorities!

Possible Topics of Discussion:

- Greenhouse Gas (GHG) Measurements
- Airborne Particulate Measurements
- Biofuels Standards/Biorefineries
- Renewable Energy (Bio, Wind, Solar, etc.)
- Energy Efficiency for Buildings
- Energy Distribution Infrastructure/Smart Grid
- Natural Gas Distribution Infrastructure
- Sustainability/Life Cycle Analysis
- Quality Infrastructure
- Other?

Wrap-up Session – Future Activities (11:00 am – 12:30 pm)

Open Discussion to develop an Action Plan for the Americas

- Metrology Needs
- Technology Needs
- Training Needs
- Regional Collaborative Activities
- Resource Strategies

Expected Outcome:

Discuss and agree upon an initial **Action Plan** for metrology infrastructure development for **Renewable Energy and Climate Science in the Americas**