The Caribbean Solar Energy Society (CSES) was inaugurated on 4<sup>th</sup> July, 1989 in St. John's, Antigua at a meeting of technologists interested in the utilization of renewable energy technologies in the region. The meeting was convened by the late Professor Oliver Headley, then Professor of Chemistry at the University of the West Indies, Trinidad.

The purposes of the Society are:

- to foster science and technology in the application of alternative energy (e.g. solar, wind, biomass, hydro, geothermal etc.);
- to encourage research and development in alternative energy with special emphasis being placed on regional collaboration;
- to advance the utilization of alternative energy;
- to promote education in the fields related to alternative energy;
- to gather, compile and disseminate information relating to all aspects of alternative energy.

The activities of the CSES in past years have been important in terms of sensitizing the public about Renewable Energy. The CSES has also been instrumental in bringing together key persons working in RE, such as researchers, students, the private sector and government officials. Through its conferences and workshops, research findings are shared, the private sector is provided a forum to highlight their work in the region, students gather and share information, and sectors of the public have the opportunity to receive training in areas such as Crop Drying, Solar Water Heating, Photovoltaic Technology, amongst others.

The Caribbean Solar Energy Society is pleased to present SATIS 2012 and wishes all participants a productive week and a bright future powered by renewables.

# **Acknowledgements**

The Caribbean Solar Energy Society wishes to acknowledge with gratitude the support of the Caribbean Community (CARICOM), the Government of Spain, through la Agencia Española de Cooperación Internacional para el Desarrollo (AECID) - the Spanish Agency for International Development Cooperation, and the Organization of American States (OAS).



# SATIS 2012 Renewable Energy Workshop

Opening Ceremony 9 May 2012 8:30 - 9:30 a.m

#### Welcome

Dr. Indra Haraksingh President, Caribbean Solar Energy Society

#### Welcome

*Mr. Joseph Williams*Manager, CARICOM Energy Programme

### Greetings

Mr. Kevin de Cuba
ECPA Caribbean Initiative Manager, Organization of American States

#### Greetings

His Excellency Joaquin Aristegui Laborde
Ambassador from Spain to CARICOM

#### Address

Senator The Honourable Darcy Boyce
Minister in the Office of the Prime Minister with responsibility for Energy
and Energy Affairs, Barbados

### **Closing Remarks**

Mr. James Husbands
Vice President, Caribbean Solar Energy Society









SATIS 2012 — Day 1			
Solar Thermal Systems			
10:00 - 11:30	Introduction to Solar Heating Technology - Indra Haraksingh The Sun, Solar Radiation, Solar Geometry, Radiation Characteristics of Buildings		
11:30 - 12:00	<b>Solar Water Heating: The Business Perspective</b> - James Husbands		
Lunch (12:00 - 1:00)			
1:00 - 4:30	Solar Thermal Systems - Indra Haraksingh Solar Collectors, Concentrating Solar Power, Solar Water Heater Systems, Swimming Pool Heating, Passive Solar Architecture		

<b>SATIS 2012</b> – Day 2			
Solar Photovoltaics/Wind Energy			
(Participants choose one track)			

(Participants choose one track)				
	Solar Photovoltaics - Indra Haraksingh	Wind Energy - Margo Guda		
8:30 - 12:00	Theory and Systems of PV Materials for Solar Cells Photovoltaic Systems	Wind Energy Basics Resource Assessment Description of the Wind Resource Overview of Small Wind Turbines		
Lunch (12:00 - 1:00)				
1:00 - 3:00	Design & Installation - Solar PV systems Applications	Harvesting Energy Caribbean Wind Farm Issues		
3:00 - 5:30	Field Trip - SWH Facility			

SATIS 2012 – Day 3			
Solar Cooling			
8:30 - 12:00	Solar Cooling - Henk de Beijer & Jacqueline Bridge Introduction to Solar Cooling Technology, Thermodynamics Fundamentals, Solar Cooling Systems		
Lunch (12:00 - 1:00)			
1:00 - 3:00	Solar Cooling - Henk de Beijer & Jacqueline Bridge Sizing a Solar Cooling System, Economics of Solar Cooling Systems, Case Studies		
Coffee (3:00- 3:15)			
3:50 - 4:30	Open Forum: The Environmental Impact of Renewables		
4:30 -5:00	Closing Ceremony		

## **The SATIS Series**

The SATIS (Sustainable Applications of Tropical Island States) series is an initiative of the Caribbean Solar Energy Society (CSES) and has served as a valuable forum where scientists, researchers, government officials, business executives and other persons interested in some aspect of renewable energy meet and deliberate on issues pertaining to not only the Caribbean region but the world generally. SATIS 2012 is the eighth in this series.

The objectives of the SATIS series are:

- To bring together scientists and technologists from in and outside the Caribbean to present, discuss and develop views on various areas of renewable energy.
- To identify the most cost-effective applications of renewable energy, particularly for the Caribbean.
- To review the efficient utilization of traditional energy sources and discuss the implications of energy efficiency on the development of photovoltaic and solar thermal technologies.
- To focus on research pertaining to energy technology development in buildings, transportation, utilities and industry.