



THE GOVERNMENT OF THE
REPUBLIC OF TRINIDAD AND TOBAGO

Ministry of Energy and Energy Affairs/ Renewable Energy Committee

Framework for Policy Development and Current Initiatives

January 26, 2010





Renewable Energy Committee (REC)

Name	Organisation	Position
Mr. Vernon De Silva	MEEA [Chairman]	Director of ERPD
Dr. Indra Haraksingh	UWI, St Augustine	Lecturer, Department of Physics
Mr. Wayne Punnette	Ministry of Trade & Industry	Deputy PS (Ag)
Mr. Narine Charran	Ministry of Public Utilities	Senior Economist
Professor Adel M. Sharaf	Graduate Studies-Research and Development, U.T.T	Professor of Energy Systems and Vice Provost
Ms Denise Hakim	Ministry of Housing & Environment	Research Analyst
Mr Allen Clarke	T&TEC	Senior Engineer, Generation Interface
Mr. Gregory Jones	Research Planning and Technical Services Division, STTE	Senior Economist
Ms Marcia Maynard	National Energy Corporation	Team Leader, Business Development

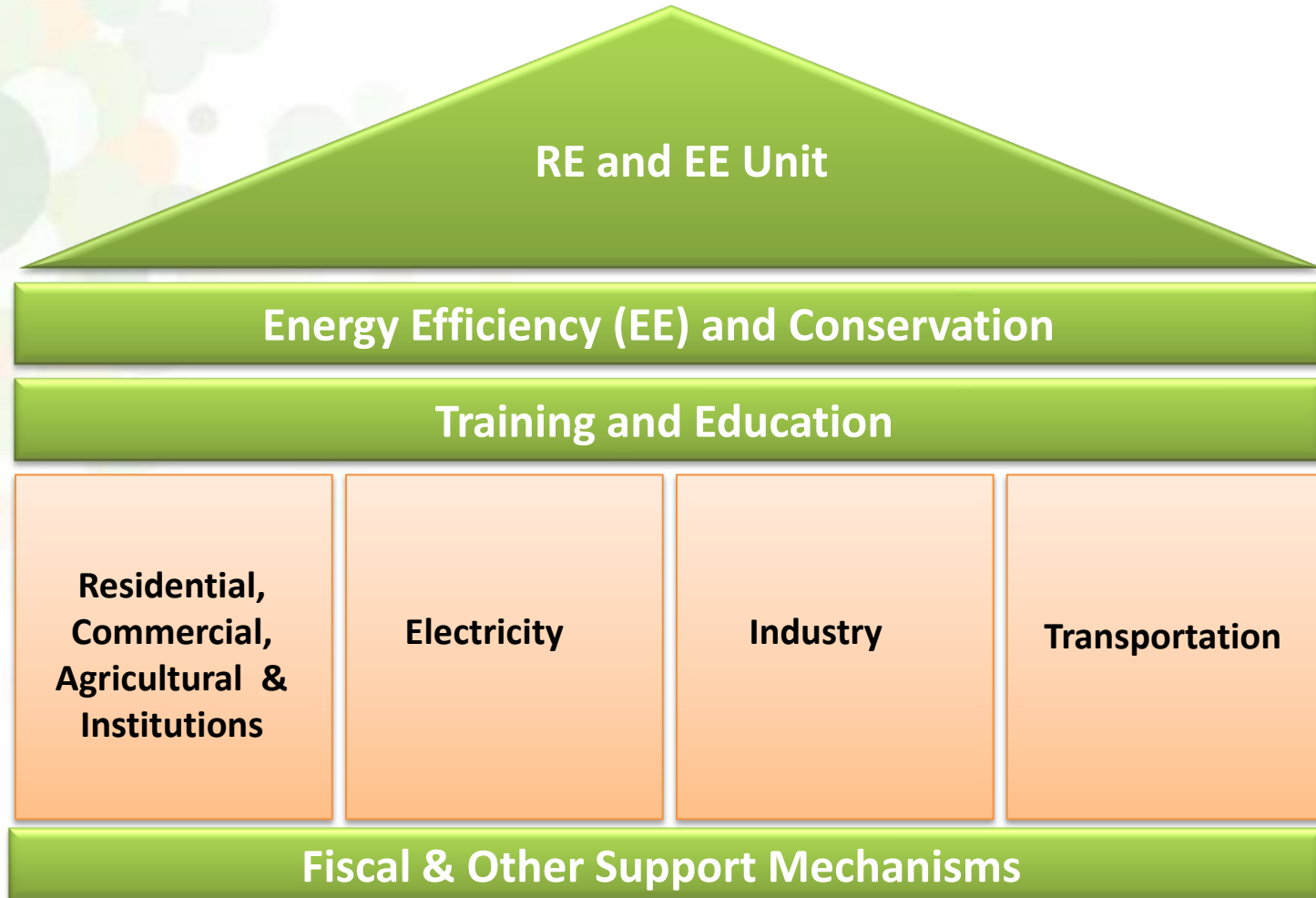


Mandate of the REC

- Identify feasible and practical renewable energy (RE) technologies in various sectors
- Make recommendations on the level of incentives required to promote the use of RE technologies
- Identify appropriate R&D to advance the implementation of RE technologies in T&T
- Identify opportunities for linkages between RE and other industry
- Identify mechanisms and strategies for financing RE projects by local and international agencies, including carbon trading schemes
- Identify legislation and regulation that would be necessary for the exploitation, development and use of RE



Framework for Renewable Energy (RE) Policy Development





Challenges to RE and EE Development

- **Subsidized Energy Product Prices** i.e. electricity rates and fuel prices, acts as a disincentive
- **No policy and legislative framework** – e.g. T&TEC Act makes no provisions for interconnection by potential RE power generators to the national grid; no specific provisions with respect to EE
- **Lack of Education and Awareness** by general population on RE and EE
- **Financing** – RE investments require greater financing for the same capacity vis-a-vis fossil fuel systems, resulting in higher lending rates
- **Market barriers** – The local RE market is still in an infant stage



Key Drivers for RE and EE

- Climate change
- Energy security
- Conservation of petroleum resources
- National development
- Increase export of petroleum products
- Employment and income generation
- Clean Development Mechanism



Opportunities

- Use of readily implementable & scalable green technologies in household, commercial, institutional & agricultural sectors

- Community Centres (solar PV, SWH)
- Government Housing & Other Buildings (SWH, PV systems, wind)
- Schools (eg. solar stills)
- Residential & Commercial e.g. Hotel industry (solar PV, SWH)

- solar PV for water pumping and purification
- solar crop driers
- single wind turbine systems for power generation for water pumping and lighting

- Energy Labelling (e.g. US Energy Star) will promote energy efficient products
- Green building codes should be established to meet international standards for building efficiency such as the Leadership in Energy and Environmental Design (LEED)
- Promote energy efficiency through encouraging energy audits



Opportunities re. Wind Project Initiatives

- Small scale wind demonstration (pilot) project (MHE & MEEA)
- Proposals by private entrepreneurs to generate own power supply utilizing wind resources (off-grid)
- Wind project to complement power supply to the national grid and reduce nation's carbon footprint

Wind Resource Evaluation Study:

- MEEA/NEC finalizing an RFP for hiring of an International Contractor to undertake a National Wind Resource Evaluation Study
- T&TEC, Meteorological Services Division, UWI Engineering Institute, UWI Physics Dept, BPTT and GM, Wigton Wind Farm (Jamaica)
- Tendering procedure through Central Tenders Board (CTB)



Creating an Enabling Environment

Ensuring international best practices in the development of product and technical standards

Collaboration continue between MEEA and T&T Bureau of Standards at two levels:

- **Specification Committee** comprising various stakeholders dealing with RE & EE product standards
- **Electrical Wiring Code Committee** already in place and a sub-committee has been formed to deal with compatibility issues involving RE power generation systems and tie-in to the national grid



Creating an Enabling Environment

Facilitating energy audits to promote energy efficiency

- Energy service company (ESCO) must be certified by the Minister with responsibility for energy
- One option is for TTBS to build capability which the MEEA could access- MEEA then act on recommendation of the TTBS
- Team being established to explore all the mechanisms to build local capability in energy auditing to include Consumer Affairs Division, MEEA, BIR, TTBS, NEC, MPU and Universities
- Examining rules and procedures for undertaking an energy audit, audit classifications, procedures to become certified, reporting formats...



Creating an Enabling Environment

Legislative Agenda

- A Team currently undertaking a review of the T&TEC and RIC Acts is being led by the MPU and includes MEEA, T&TEC, EID and RIC
(being dealt with later in the programme)

Education and Training – Training Workshops

- Collaboration on-going between MEEA and the Professional Education Unit of the UTT, and UWI :
 - Training workshops targeting DIY persons, electricians, plumbers, teachers
 - technologies: Solar water heating/PV systems
 - Short courses: 3 – 4 days, 30 participants, at 4 locations
 - Certificate of Participation
- Important role for National Training Agency and Electrical Inspectorate Division



Institutional Arrangement for RE and EE

Consideration is being given to the establishment of an RE and Energy Efficiency Unit whose Terms of Reference will include:

- Overseeing the introduction of RE technology and promoting public awareness campaigns, education and training
- Creating an appropriate regulatory environment
- Organizing long-term studies and surveys and identifying and assessing proposed RE projects
- Overseeing a national programme of energy audits and instituting energy efficiency programmes
- Developing a register of local RE and EE suppliers and service providers
- Developing and reviewing incentive programmes
- Pursuing funding for RE projects and promoting RE businesses
- Establishing working relationships with similar local, regional and international RE authorities



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**“If you want to go quickly, go alone,
if you want to go far, go together”**

Thank You





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NATIONAL ENERGY POLICY CONSULTATIONS