



National Energy Policy

2009 - 2030

Energy Conference on

"Developing a Sustainable Energy Future"

by

Jamaica Institute of Engineers In Assoc. With Academia and Industry

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www.mem.gov.jm

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Jamaica: National Energy Policy 2009 – 2030



"Securing Jamaica's Energy Future... Advancing Competitiveness...Promoting Sustainable Prosperity..."

Strategic Focus

Α modern, efficient, diversifi ed & environmentally sustainable energy sector providing affordable and accessible energy supplies with long-term energy security and supported by informed public behaviour on energy issues & an appropriate policy, regulatory and institutional framework

Vision



To Secure Jamaica's Energy Future, Advance Competitiveness and Promote Sustainable Prosperity

January 2011

Laying the Foundations



Website: www.mem.gov.jm

7 Priority Areas & Related Goals

- 1. Improved Energy Conservation and Efficiency
- 2. Modernized Energy Infrastructure
- 3. Development of Renewable Energy Sources
- 4. Energy Supply Security & Diversification of fuel Sources
- 5. Well-defined and established governance and regulatory framework
- 6. Government Ministries, Agencies & Dept as Model leader
- 7. Eco-efficiency and Green Economy

In order to address the current energy crisis and guide the future developments in the energy sector the GOJ through the National Energy Policy has Promulgated several long term strategies. "A modern, efficient, diversified and environmentally sustainable energy sector providing affordable and accessible energy supplies with long-term energy security and supported by informed public behaviour on energy issues and an appropriate policy, regulatory and institutional framework"

Goal 1: Jamaicans use energy wisely and aggressively pursue opportunities for conservation and efficiency	Goal 2: Jamaica has a modernized and expanded energy infrastructure that enhances energy generation capacity and ensures that energy supplies are safely, reliably, an d affordably transported to homes, communit ies and the productive sectors on a sustainable basis	Goal 3: Jamaica realizes its energy resource potential through the development of renewable energy sources and enhances its international competitiveness, energy security whilst reducing its carbon footprint	Goal 4: Jamaica's energy supply is secure and sufficient to support long-term economic and social development	Goal 5: Jamaica has a well-defined and established governance, instit utional, legal and regulatory framework for the energy sector, that facilitates stakeholder involvement and engagement	Goal 6: Government ministries and agencies are a model/leader in energy conservation and environmental stewardship in Jamaica	Goal 7: Jamaica's industry structures embrace eco- efficiency, natural capitalism and moves towards building a green economy
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Strategies and Key Actions to 2030 Implementation Framework – Action Plans etc.

Monitoring and Evaluation

Policy Review

Energy and Mining

NOW IT IS ALL ABOUT IMPLEMENTATION

- Energy Policy Approved by Parliament
- **Energy Policy Implementation:**
- •Energy Policy Next Steps Undertaken
- •Energy Conservation and Efficiency
- •Fuel Diversification Strategy
 - Alternative and Renewable Energy Sources
- •Governance Framework
 - •Implementation, Monitoring and Evaluation
- •Eco-Efficiency and Green Economy

Implementation Priorities

- Focus Areas
- Institutional Framework & Capacity Building
- Target Areas
 - Electric Utility
 - Transportation
 - Public Sector
 - Residential
 - Commercial & Industrial
- ECE Codes, Standards & Labelling
- ECE Market
- Working Hours Flexi-Time, Telecommuting

- Targets and Indicators
- Reduce Public Sector Energy Consumption 15% – 39%
- Increase Renewable Energy Contribution 20%
- Improve Private Sector Energy Efficiency
- Modernize Energy
 Infrastructure
- Low Carbon Economy

Jamaica's Energy Supply Matrix



STAKEHOLDERS' PARTICIPATION

- West Kingston Power
 Project
- Wigton Wind Farm Expansion
- Maggotty Hydro Project
- 480 MW Generation Replacement / Expansion
- LNG Infrastructure
- LNG Gas Supply
- JPS Licence
- Building Code

- World Bank Loan
- IDB Grant
- IDB Loan
- UNDP
- EU
- Republic of Germany
- PetroCaribe
- OLADE
- OAS
- ECPA
- CARICOM

POLICY SUPPORT- FINANCING

Projects and Programmes **IDB IDB** World Bank German Government EU OAS UNDP OLADE Total (preliminary)

(IDP Support) US\$350,000 US\$20,000,000 US\$15,000,000 US\$750,000 US\$310,000 US\$300,000 US\$60,000 US\$393.000 US\$37, 163,000



Linkages – Projects, Programmes & Policy



The Smart Grid Way - Jamaica Benefits

•Advanced metering to reduce system Losses;

- •Automation to measure and control the flow of power to/from consumers on a near real-time basis and improve the system reliability;
- •Intelligent load management of loads, congestion and shortfall.
- Improve access to energy
- Improved Power Quality
- Improve power system efficiency Lower
 System Heat Rate

Petroleum

- •Refinery Upgrade Project (RUP)
 - •Higher Efficiencies, Increase Capacity
 - Low Sulphur Diesel
- Alternative Fuel Options
 - •Bio-ethanol
 - •Bio-diesel Options
- •Pricing of Petroleum Products
- Incentives/Disincentives to change behaviour
- •Park and Ride, Telecommuting, etc

Strategic context of smart grids



At the heart of smarter energy is smart metering, providing the first step in a wave of change for the energy system







Renewable Energy Map 2015/16



Concept of Jamaica's New Electric Power Network



SMART ENERGY

The world's electricity network will change more in the next 20 years than it has in the last 100.

The decisions made in the next 5 years will determine whether the transition is considered a success.



Implementation, Monitoring and Evaluation Framework

 Position Paper on Generation Avoided Cost and Tariffs for RE •Smart Grid / Smart Energy •Low Carbon Road Map Mobilization of Carbon credits •Electricity Policy / Electricity Act •All Island Electricity Licence •Strengthening the Monitoring and Enforcement Capability of the OUR •EOI for Hydro Development •Wind and Solar Mapping/Development •Biomass/Sugar Cane Industry •Gas Sector Policy and Regulations •Energy Fund/ Line of Credit

Priority "Next Steps"

- Strengthening the Capacity of MEM and Its Implementing Agencies
 Strengthen Research, Monitoring and Evaluation
- Projects Implementation
 - Energy Security and Efficiency Enhancement Project
 - Public Sector Energy Efficiency Investment Project
 - Low Carbon Road Map and Carbon Mobilization
 - CHENACT 2
 - Other
- Policy Review and Updates
- Comprehensive Communication And Public Education Programme



Thank You

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