





### FOSTERING GROWTH IN ENERGY EFFICIENCY AND RENEWABLE ENERGY



Caribbean Clean Energy Program



CDB/OUR/USAID-CARCEP
EMERGING REGULATORY ISSUES
WORKSHOP
Regulatory Management In the Face of Technological and
Economic Disruptions In Electricity Sector
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#### The Regulatory Role

- Not to manage
  - But: ensure prudent management
- Not to set policy
  - But: provide information and guidance, including on scope of authority
- Not to choose winning technology
  - But: be part of discussion of what technologies will help achieve basic objectives





#### **Process and Transparency**

- Reactive v. proactive
- The value of regular communication between and among regulator, ministry, utility, market participants, technology developers, customers (e.g. IRP process)
  - Allows anticipation and preparation
  - Allows for understanding of political dynamic
  - Benchmarking development
  - Learning from experience





# "Internal" v. "External" Technologies

- Relevance of the difference
  - Degree of utility/regulator/government "control"
  - Predictability of pace of deployment
- Internal
  - storage, smart meters, advances in grid scale generation, SCADA
- External
  - EVs, distributed solar, conservation, customer behavior









## **Scale and Cost Matter**

- Example: net metering limits
- Example: intermittent resource integration









#### **Smart Meters**

- Value of ubiquity
- Deployment issues
- Cost recovery issues
- Unintended consequences (good and bad)









### Storage

- Implications for generator investment/retirement
- Ownership (DG) issues
- System operation issues
- Implications for renewable (intermittent) development
- Cost recovery issues
- Tariff design issues (e.g. monetization of time of use/time of operation value)









#### Solar

- Solar
  - Will new tariff result in lower price outside US?
  - Mobile solar?









# **Sharing Information and Experience**

- Inter-Island information exchange
  - What is showing up?
  - What is working (and not working)?









#### **Planning for the Unknown**

- Implications for pricing
  - Importance of economically "correct" tariffs (discourage "uneconomic" system bypass)
- Flexibility within structures
  - Revenue Cap "off ramps"
  - Special contract authority
- Process
  - Incremental v. quantum
- Likely issues
  - Cost recovery
    - New and stranded









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# Thank You!

