

**INTER-AMERICAN  
DEVELOPMENT BANK**

**Meeting the Energy Challenge: Regulatory Reforms are Key!**  
**September, 2015**



# Outline

- 1. Energy sector challenges**
- 2. Energy efficiency and conservation**
- 3. Investment needs and regulation for a new era**
- 4. Wrap up**

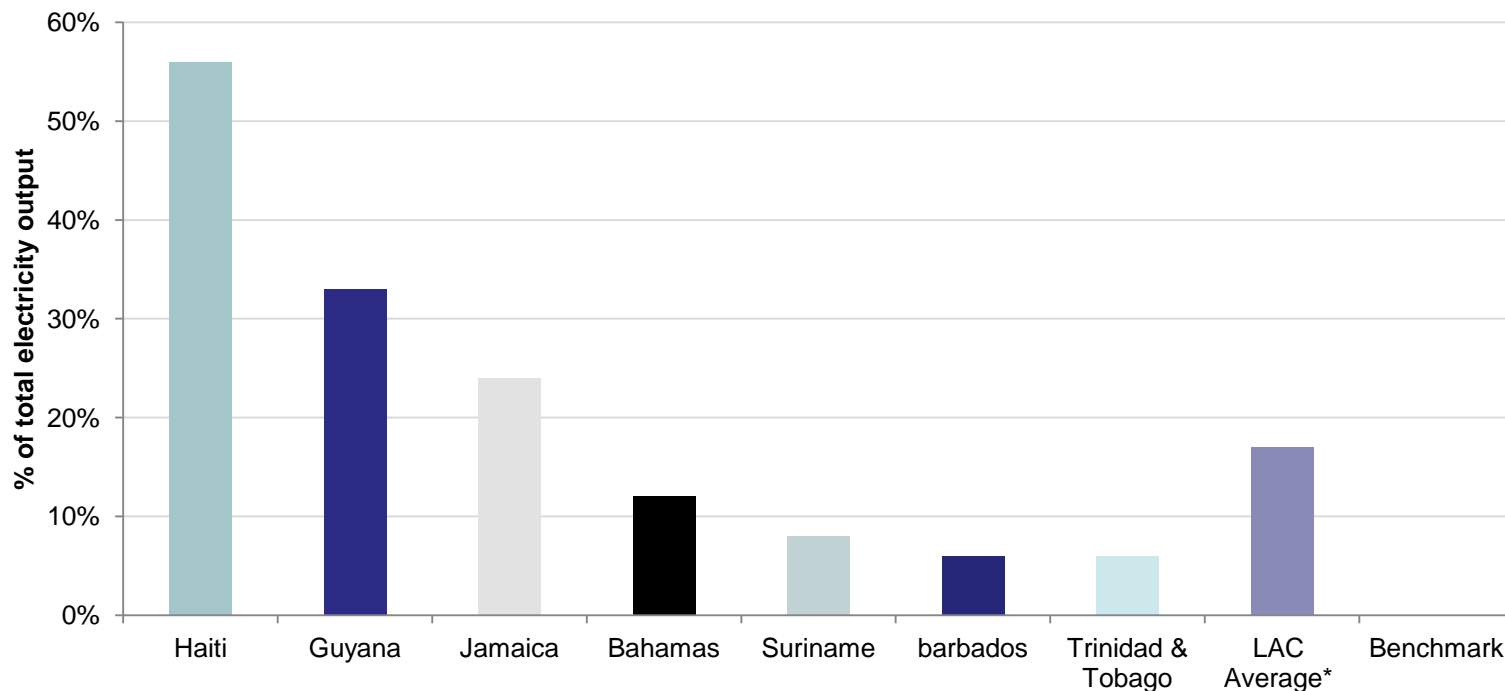
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1. Caribbean region and the fossil fuel market
- 2. Energy efficiency and conservation**
3. Investment needs and regulation for a new era
4. The road ahead

# Energy efficiency and conservation

- Most Caribbean countries have an opportunity to improve their power sector efficiency by replacing old and inefficient power plants and reducing transmission and distribution losses in interconnected power systems
- Technical efficiency is in line with comparators
- Conservation offers substantial benefits: Smart Programs

**Electricity losses in Caribbean Countries**



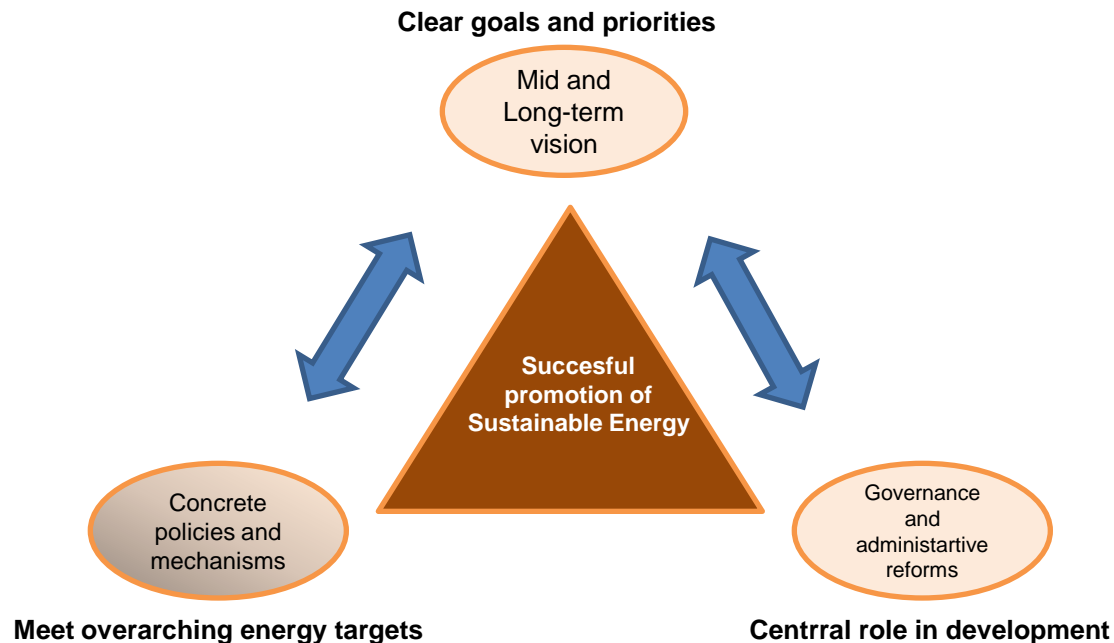
\*LAC average without Haiti

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# Investment needs and regulation for a new era

In order to foster private sector participation, promote renewables and incentivize energy efficiency, the region will need major investments and the appropriate regulations for this new era....



- **Promoting renewable energy and low carbon technologies as Natural Gas**
- **Transparency and competitiveness**
- **Private sector participation and PPP where needed**

# Investment gap

- **Over 70% of generating capacity will reach the end of its useful life in the next decade.**
- **Investment decisions are complicated by dramatic oil price changes.**
- **Total investment required is much too high for sovereigns to finance.**
- **High debt blocks access to concessional development financing.**

# How is the electricity sector organized in the Caribbean?

Country	Utility	Jurisdiction	Government ownership	Role	IPPs for Power Generation
The Bahamas	BEC	All, except Grand Bahama	100%	G   T   D	No
	GBPC	Grand Bahama	0%	G   T   D	No
Barbados	BL&P	All, only license, but no monopoly	6.3%	G   T   D	No
Guyana	GPL	All	100%	G   T   D	Yes
Jamaica	JPS	All	19.9%	G   T   D	Yes
Suriname	EBS	All, except 2 mines and rural areas	100%	G   T   D	Yes
Trinidad and Tobago	T&TEC	All, not exclusive	100%	G   T   D	Yes

- **Planning and investment roles depend on the market structure, with each type of entity bringing its own set of priorities, perspectives and criteria**
- **With privately-owned and vertically integrated utilities, the utility typically makes decisions on generation, asset planning and new investments**
- **With vertically unbundled electricity markets, planning and investment decisions are made by regulators, utilities, and IPPs**



## A deeper look into the regulatory framework

Country	Utility	Electricity Regulator	Tariffs Adjusted for Cost	Fuel Adjustment	Incumbent has Exclusive Right to Generate	IPPs Allowed	Capacity Expansion Decisionmaker
The Bahamas	BEC	Govt	No	Yes	Yes	Yes	Govt / Utility
Barbados	BL&P	FTC	Yes	Yes	Yes	Yes	Utility
Guyana	GPL	PUC	No	Yes	No	Yes	Utility
Jamaica	JPS	OUR	Yes	Yes	No	Yes	OUR
Suriname	EBS	EBS, but limited	Yes	No	No	Yes	EBD / MNH
Trinidad and Tobago	T&TEC	RIC	Yes	Yes	No	Yes	Utility

- **Some countries set tariffs below the cost of service, thereby endangering the viability of the utility**
- **Even in countries with credible regulators, utilities do not often have incentives to invest in the least-cost technology for electricity generation as regulatory structures guarantee the utility a return on their investment in generation assets, without requiring or encouraging the utility to consider all energy sources**

# What are the problems in the energy sector?

## Regulatory policies are weak

- Net-metering can be implemented but is missing a push—only Barbados and Jamaica have implemented; TT has not considered it; other 3 are considering
- Feed-in tariff schemes cannot be deployed as legal infrastructure is missing in Barbados, Guyana and Jamaica and has been suggested in the other 3
- Renewable portfolio standards are missing in all 6 countries that require energy producers to generate a specified fraction of their energy from renewables
- IPPs are not permitted in The Bahamas and Guyana; TT is considering; others have permitted

## Energy efficiency is lacking

- National energy efficiency standards that establish long-term targets for energy savings that utilities must meet through customer energy efficiency programs are not present in The Bahamas, Barbados and Guyana; and are only in early stages in the other 3
- Appliance labeling requirements do not exist in any of the 6 countries but have suggested in Jamaica and TT

## Fiscal incentives are inadequate

- Only Barbados and Jamaica have tax credits for energy efficiency
- Barbados, Guyana and Jamaica have tax reduction for energy efficiency; the policy has been suggested in Suriname but TT does not have it
- Public loans and grants aimed at energy efficiency are available only in Barbados
- Green public procurement requirements have not been introduced in any of the 6 countries

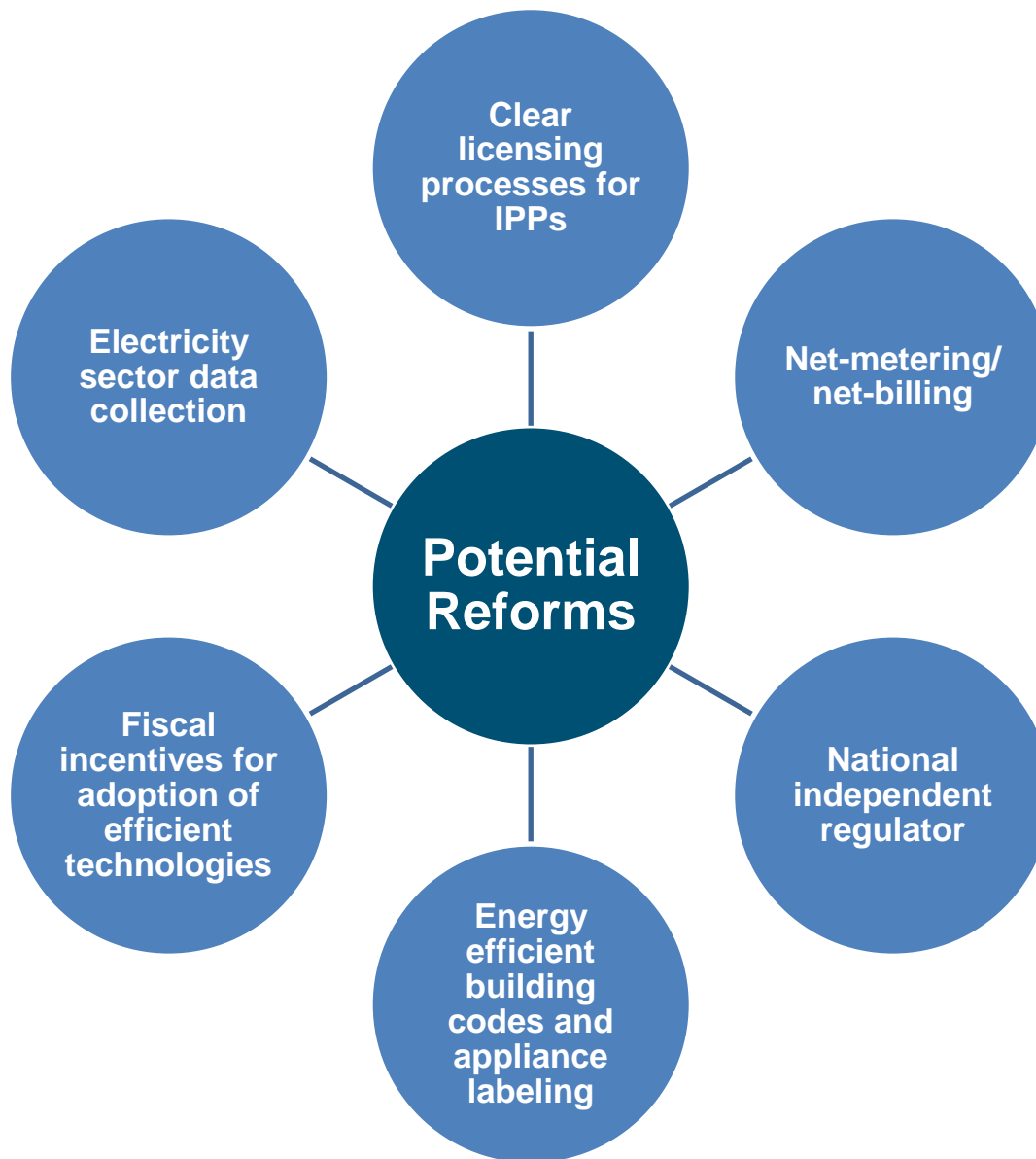
# Energy regulation for a new era

## Rationalization of Subsidies, Tariffs and Fiscal Incentives for Fossil Fuel

### Fiscal incentives

- Identify opportunities to align fiscal incentives with the goal of a diversified generation matrix
- Higher energy taxes will improve fiscal accounts, but reduce tariff benefits to consumers.
- Encourage the Private Sector to participate, either through direct investments or PPPs.

# Policy Options



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## The road ahead: some final remarks

- We need to ensure that fiscally strapped heavily indebted countries can actively engage in the diversification of the energy matrix. The principal issue for many countries is their limited fiscal space, which prevents them from taking advantage of the many programs currently available to finance energy investments.
- Most generation capacity must be replaced in coming years. Decisions should not be based on short term oil prices, and should prioritize renewables.
- Private investment should lead the way even if there is more fiscal space. In many countries legal and regulatory frameworks need to be changed to ones that encourage the private sector to be an effective partner, either through direct investments or via Public-Private-Partnerships (PPPs).
- Energy efficiency investments should be complemented by conservation and rationalization of transfers and incentives.



**Thank You**