

**Overseas Private Investment Corporation:**  
The U.S. Government's  
Development Finance Institution



**--MEETING THE ENERGY CHALLENGE--**

**Promoting Foreign Investment:  
What are the Barriers?**

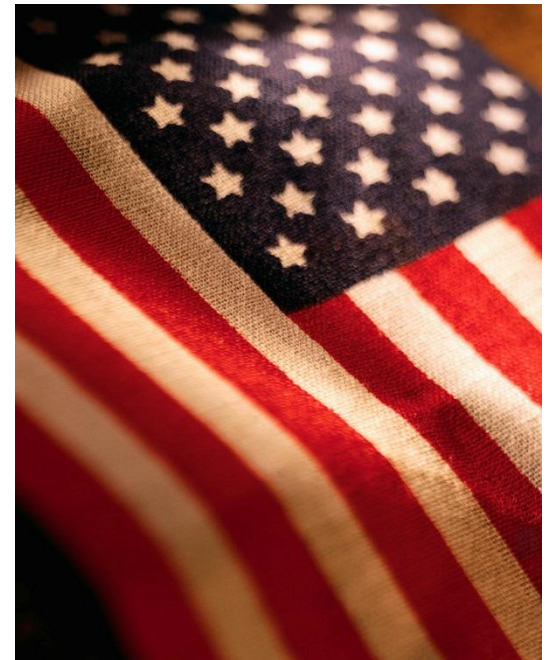
**Lynn Tabernacki  
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# Overseas Private Investment Corporation

As the U.S. Government's development finance institution, OPIC mobilizes the participation of U. S. private capital to support sustainable economic development in emerging markets

Since its founding in 1971, OPIC has supported over **4,000 projects** and provided almost **\$200 billion of investment** In emerging markets.

- Self-sustaining
- 160+ developing countries
- Long Term Project Financing &
- Political Risk Insurance



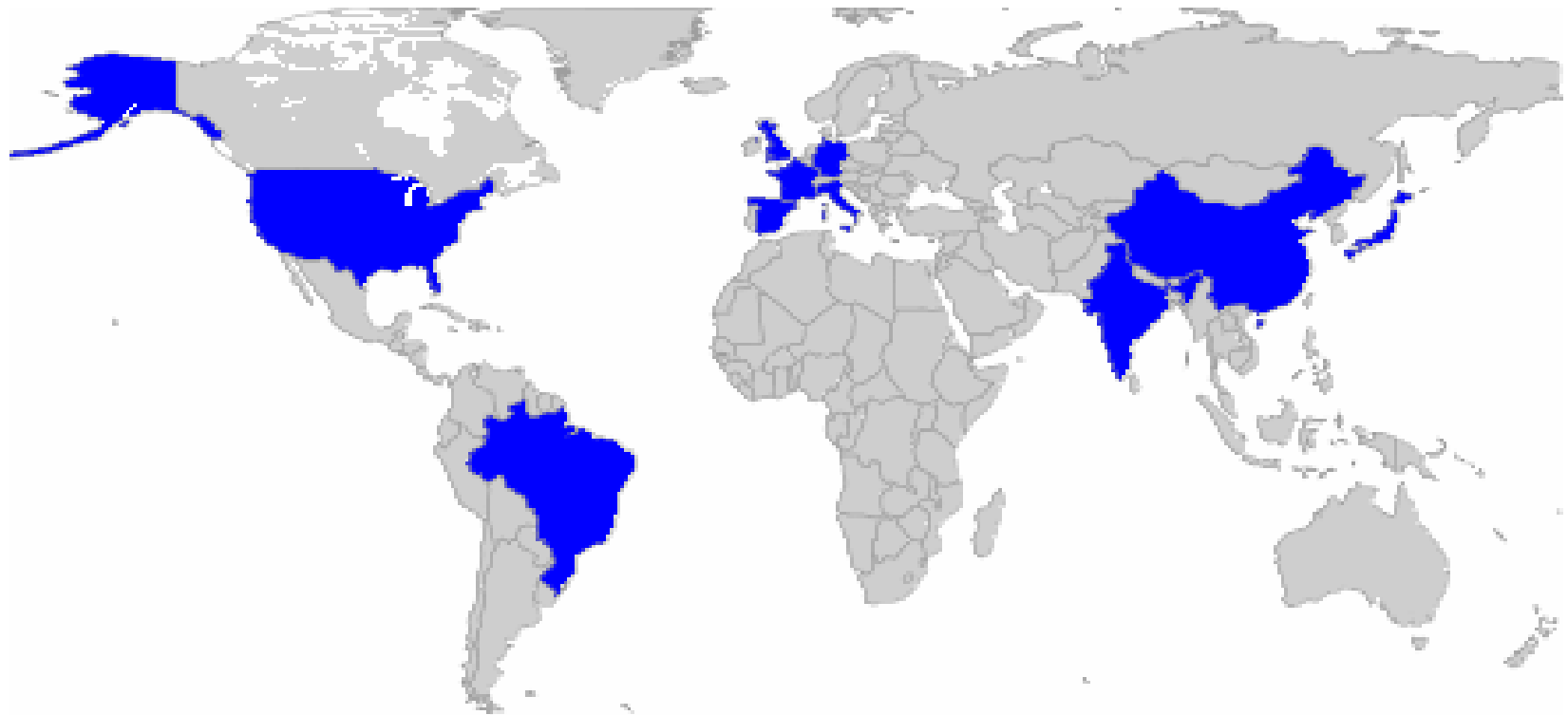
# Over **\$1.0 Billion** in commitments to Renewable Energy Projects each year for the last 4 years



Important priority  
representing **1/3** of all  
commitments in each year

# The Global Renewable Energy Market

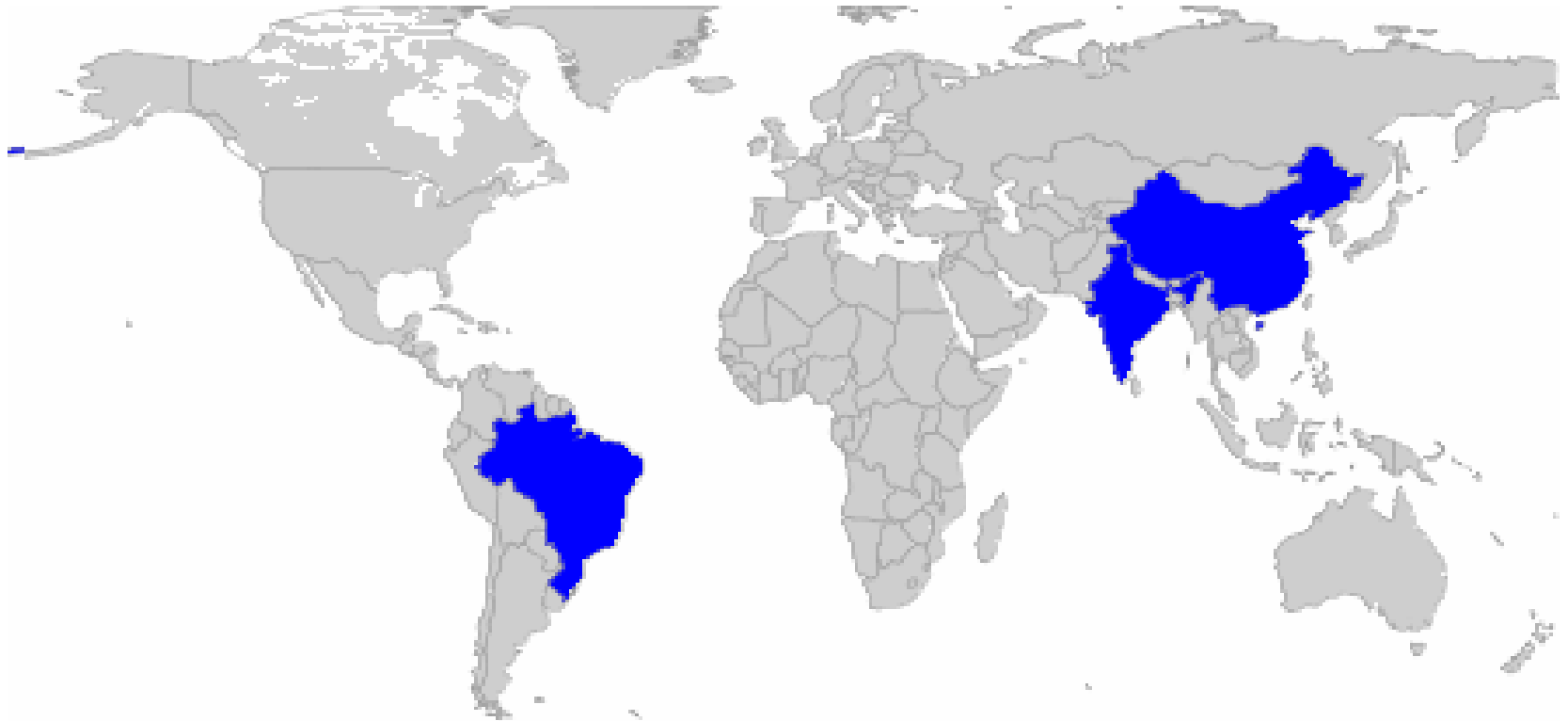
Total World Market for Renewable Energy Investment in 2014 =  
\$270 billion



Top 10 countries account for \$192 billion in investment,  
about 71% of all investment in 2014

# Investment in Developing Countries

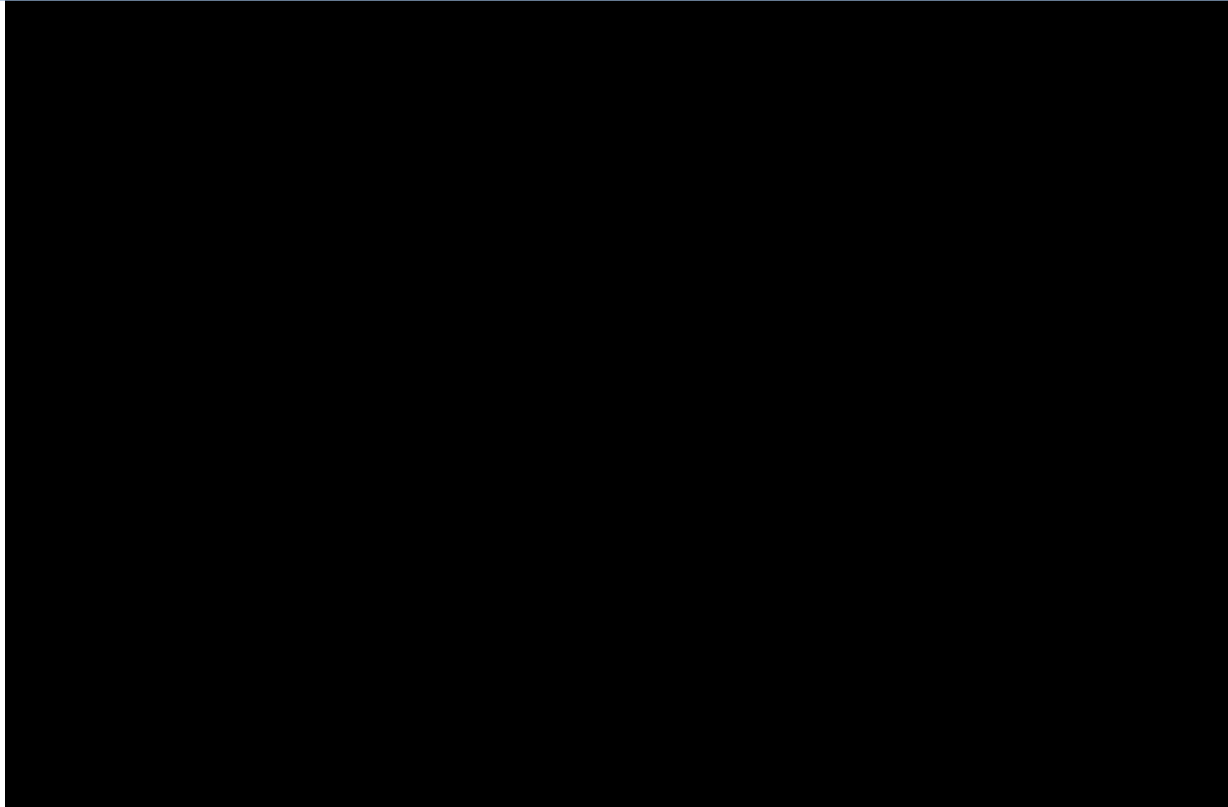
Renewable Energy investment in Developing Countries in 2014 was approximately \$131 billion\*



**Investment in Developing Countries is 49% of all renewable energy investment globally**

# The Obvious Opportunity

Renewable Energy investment in the Caribbean in 2014  
was negligible



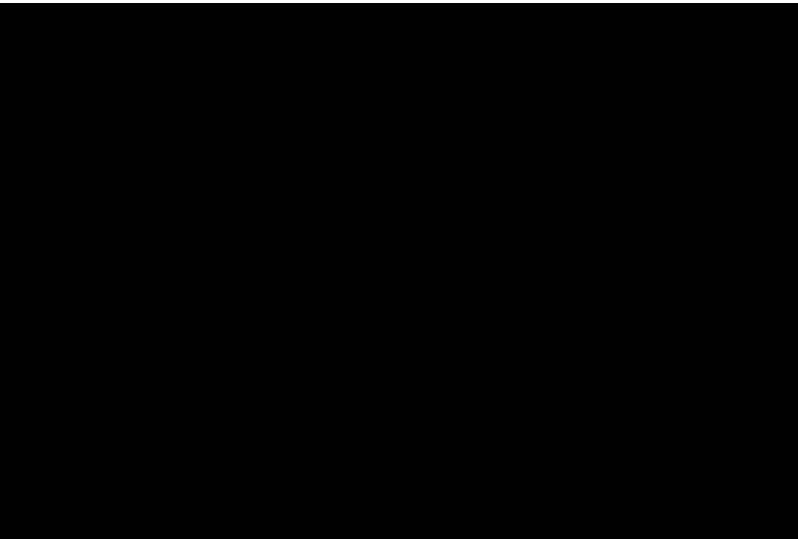
**The Caribbean is the Renewable Energy Frontier**

# The Caribbean Energy Opportunity

The Caribbean Region arguably presents one of the best opportunities for Renewable Energy growth



- *Abundant Renewable Resources*
- *Commercial premise of renewable energy under existing conditions*
- *Hard Currency ties*
- *Ever-increasing energy demand*
- *Attention on Resiliency*



# The Caribbean Energy Challenge

## Challenges are surmountable

- *Individual markets are comparably small*
- *Regulatory frameworks differ from one another and often need to be revised in each country*
- *Timelines for development can be long (i.e. expensive)*
- *Capacity building is a necessity*
- *Unintended Consequences affecting the Utility*
- *Attracting debt and financing can be a challenge*



# Identifying Financing Solutions

Many projects do not progress simply due to lack of capital.  
Where is the capital?



## Developers can access capital

- Identify the likely Investors and Financiers
- Identify markets that support investment, specifically:
  - Private sector investment
  - Energy sector investment

# DFI's Role: Fill the Market Gaps

In many markets, the DFIs must step in when private banks are absent and to provide demonstration effect to build confidence in markets.

- *Design products for traditional project development and implementation*
- *Support SME investors and small projects generally*
- *Address the gap in equity funding for typical equity risks*
- *Provide technical advice to governments for ensuring bankable transactions*



# Everything Doesn't Work Everywhere



The solutions vary and will depend on the attributes of the market.  
Each project has its own solutions

## *Energy Efficiency Solutions*

- Low cost, immediate, energy savings solutions
- Private sector: residential, commercial, & industrial buildings
- Public sector: office buildings, hospitals, schools, streetlights

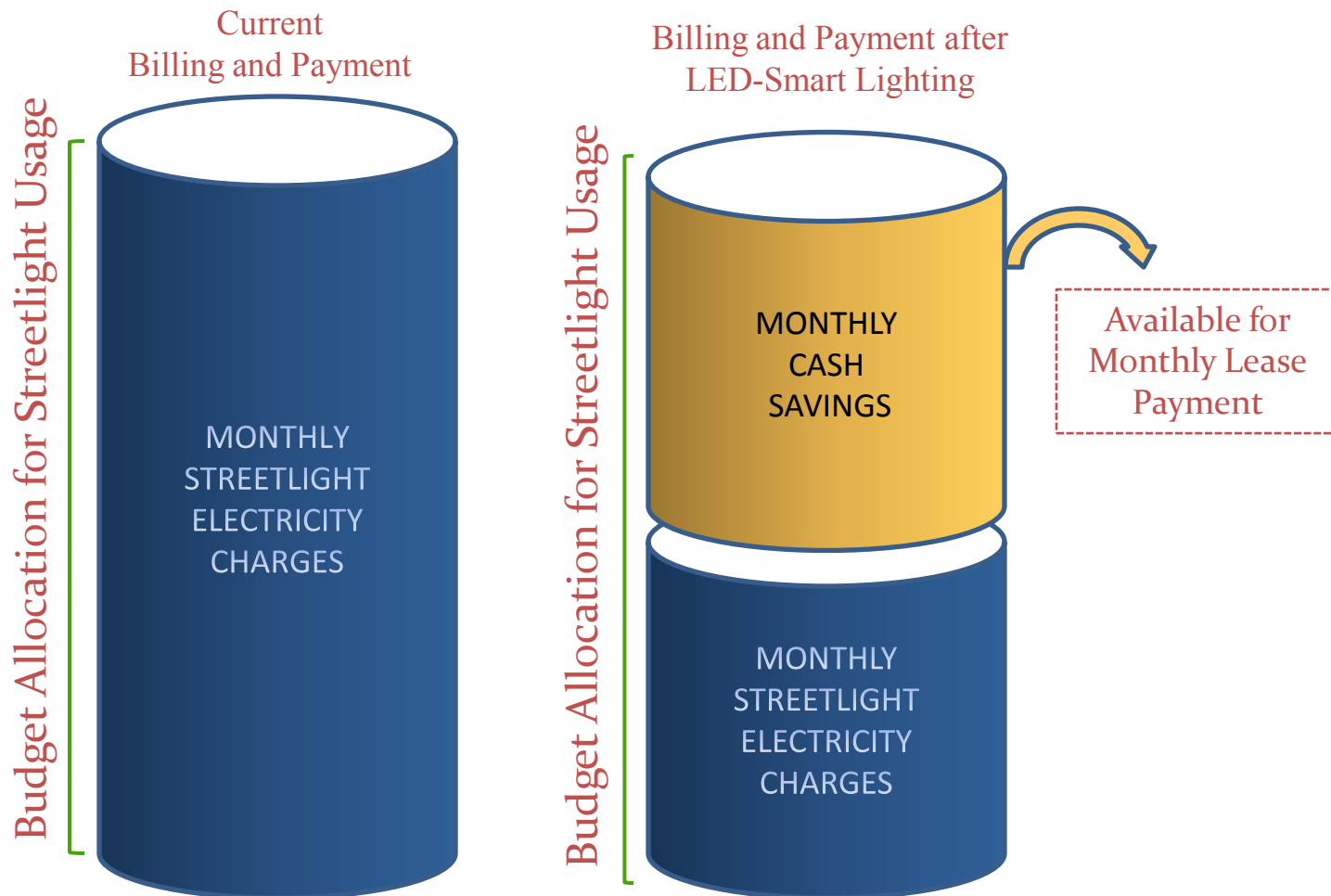
## *Distributed Generation*

- Self-generation both on-grid and off-grid
- System sizes range by building, village, or region
- Varied technologies for residential, commercial, industrial

## *Utility Scale Generation*

- Grid connected for large scale energy usage
- Government purchases from Independent Power Producers
- Energy mix is key to optimizing the system

# Energy Efficiency Leasing Solution



# Streetlight Financing trust structure



## Host Country

Increases public safety, reduces accidents and promotes commercial enterprise.

Residual cash flows are returned to the Municipality in both current and long term.

Shows progressiveness in implementing energy efficiency.

## The Utility

Accuracy in tracking monthly streetlight electricity usage, maintenance and billing.

Assurance of payment as Budget Allocation flows directly from the Trust.

Demand side improvements delay need for new power generation.

## The Investor

Provide solutions without major long term expenditure.

Access to stable, predictable cash flows for investor returns.

Ability to expand business and easily replicate for other markets

## OPIC

Consistent with mandate to support development by catalyzing the private sector.

Access to stable, predictable cash flows for repayment of the debt.

Promotes global energy efficiency initiatives.

# Distributed Generation Financing Solutions

Distributed Generation project sizes are generally fairly small.  
Solutions must keep transaction costs down.

## Aggregate

### When:

- It's possible to bundle a large number of small projects
- Diversified risks can be achieved
- No project can impact the portfolio's overall performance
- Key project attributes are comparable across portfolio

## Replicate

### When:

- Individual projects can bear their own financing
- Underwriting risks differ across projects
- Necessary across countries/regions where differing legal regimes impact financing
- Key project attributes are not comparable across portfolio

# Guidance on Key Elements of a PPA

Development Finance Institutions (DFIs) agree on fundamental requirements

Take and Pay – Offtaker pays for all Delivered and Deemed Delivered energy

Fixed Tariff for duration of PPA denominated in currency of the debt

Denominate or link PPA to the currency of the debt

Offtaker accepts the risk of Change in Law or Change in Taxes

Allow for Lender step-in rights (assignability)

Define Offshore Arbitration under International Arbitration rules

Limit termination rights of Offtaker and provide for Offtaker buy-out

# Other Attributes of Bankable Projects

OPIC can provide limited recourse fixed-rate debt financing of up to \$250 million per project and with up to 20 year tenors.

- ✓ **Creditworthy** offtaker
- ✓ **Equity** requirement
- ✓ Experienced and committed **management** team
- ✓ Proven **technology** and creditworthy **EPC contractor** with a strong track record
- ✓ Ample availability of renewable **resource**
- ✓ Financial projections exhibiting strong cash flows and maintenance of minimum **DSCRs**



# Real Life Implementation

**A number of Caribbean countries have adopted Renewable Energy targets and are speeding toward implementation**

OPIC is financing development, construction and operation of a 20MW solar photovoltaic power project in Clarendon Parish, Jamaica



OPIC is financing the construction of a 34MW wind farm in Jamaica, which will help reduce its dependence on expensive imported fuel and diversify its energy portfolio.





## Thank You

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