



UNLOCKING RENEWABLE ENERGY INVESTMENT:

THE ROLE OF RISK MITIGATION AND STRUCTURED FINANCE



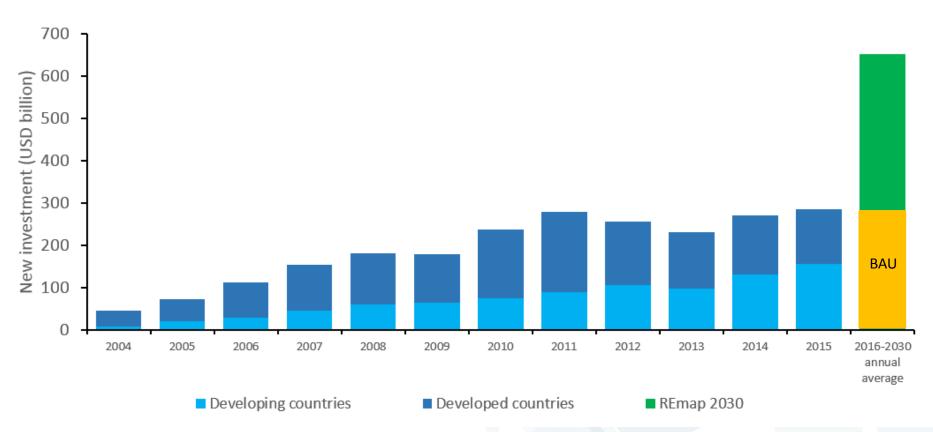
GGGW IRENA Side Event

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Investment needs to double the share of renewables





Investments in renewable energy capacity have to be scaled up considerably (more than triple in the decade up to 2030)

Challenges of mobilising private and institutional investors



- 1 Lack of project pipeline
- 2 Limited access to affordable capital
- High risk or perceived risk
- Small deal size & high transaction cost
- 5 Limited supply of dedicated financing tools

Research approaches



Comprehensive literature review on available financial instruments for RE

Survey on the use and usefulness of financial risk mitigation instruments

Analysis of case studies to identify success factors

- UK Walney Offshore Wind Farm
- Indonesia Sarulla Geothermal Project
- Jordan Aggregated Solar Project



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Advance projects from initiation to full investment maturity



Challenges

- Lack of project pipeline
- Difficulty of accessing early stage developing funding
- Limited capacity in project development and financial analysis

Instruments

- Project preparation facilities and funding
- Capacity building tools such as IRENA's Project Navigator
- Platforms such as IRENA's Sustainable Energy Marketplace: http://marketplace.irena.org

- Support project
 preparation through
 capacity building and
 dedicated grants
- Facilitate interaction between project developers and investors
- Improve project
 visibility and market
 transparency
- Build investor confidence with longterm project pipeline



Engage local financial institutions in RE finance



Challenges

- Limited access to finance
- Limited availability of attractive local debt
- Local financial institutions' limited experience in lending for renewables

Instruments

- Grants for training and capacity building
- Loan syndication (B-loan structures)
- Concessional loans
- On-lending facilities using credit lines

- Build capacity at local financial institutions
- Design and implement on-lending facilities for renewable energy projects
- Develop simpler tools to assess projects

Mitigate risks to attract private investors



Challenges

- Political risk
- Policy and regulatory risk
- Counterparty risk (power off-taker risk)
- Grid interconnection and transmission line risk
- Currency risk
- Liquidity and refinancing risk
- Resource risk
- Technology risk

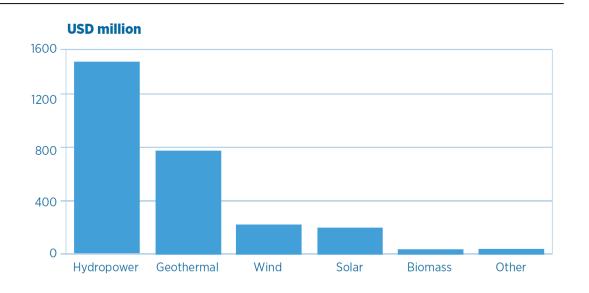
Instruments

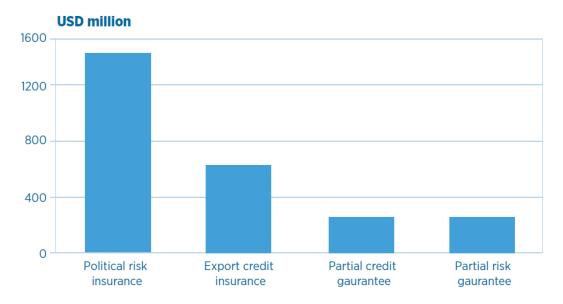
- Political risk insurance
- Partial risk guarantees
- Export credit guarantees
- Currency risk hedging instruments
- Local currency lending
- Liquidity facilities

Utilisation of guarantees in renewable energy projects



IRENA Survey (2014):
Use of guarantees for renewables remains
limited





Mitigate risks to attract private investors



Challenges

- Political risk
- Policy and regulatory risk
- Counterparty risk (power off-taker risk)
- Grid interconnection and transmission line risk
- Currency risk
- Liquidity and refinancing risk
- Resource risk
- Technology risk

Instruments

- Political risk insurance
- Partial risk guarantees
- Export credit guarantees
- Currency risk hedging instruments
- Local currency lending
- Liquidity facilities

- Enable greater
 issuance instruments
 to mitigate risks
- Develop new risk mitigation instruments, structures, funds or facilities targeting specific risks



Mobilise more capital market investment



Challenges

- Small deal size
- High transaction cost
- Limited liquidity in the market
- Limited attractiveness to large-scale investors
- Financial regulations restraining illiquid and riskier investments

Instruments

- Standardised contracts
- Aggregation of smallscale projects
- Securitised instruments
- Green bonds
- Yieldcos

- Standardised templates for: project documentation, tendering, contracting and due diligence processes
- Project aggregation
- Develop policy and guidelines for green bond issuance

Create facilities dedicated to scaling up RE investment



Challenges

- Need for dedicated focus on renewable energy
- Large agenda requires focused attention with specialized knowledge of renewable energy

Instruments

- Funds dedicated to renewables
- Specialized global facilities
- Regional facilities

- Establish financing facilities to issue risk mitigation instruments, cover transaction fees, and support the design of structured finance mechanisms
- Various funding sources for renewables can be pooled at national, global or regional level



Thank you!

