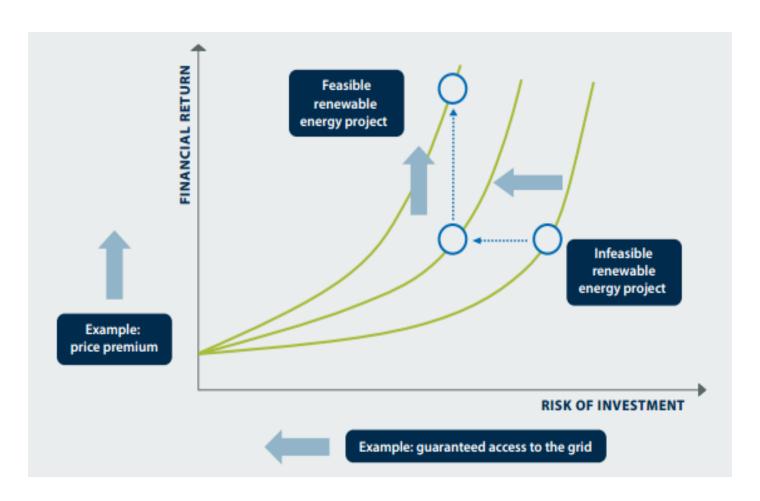


A Key Role for Governments in Advancing Sustainable Energy: How to De-risk Investments?

Alexander Ochs
Director of Climate and Energy, Worldwatch Institute
Chair, LEDS GP Energy Working Group

Asia LEDS Forum, Day 2, Track 4: How to attract sustainable energy investments? June 28th, 2016

What is derisking?



Source: UNDP Derisking Renewable Energy Investment (DREI), March, 2015

Prominent barriers/risks to SE investments (1)

- Technological Barriers
 - Lack of available data and information
 - Transmission and distribution challenges
 - → Need for integrated resource planning
- Social Barriers
 - Lack of public acceptance
 - Vested interest in business as usual
 - Not In my backyard
 - → Need for up-to-date, fully inclusive data gathering and communication

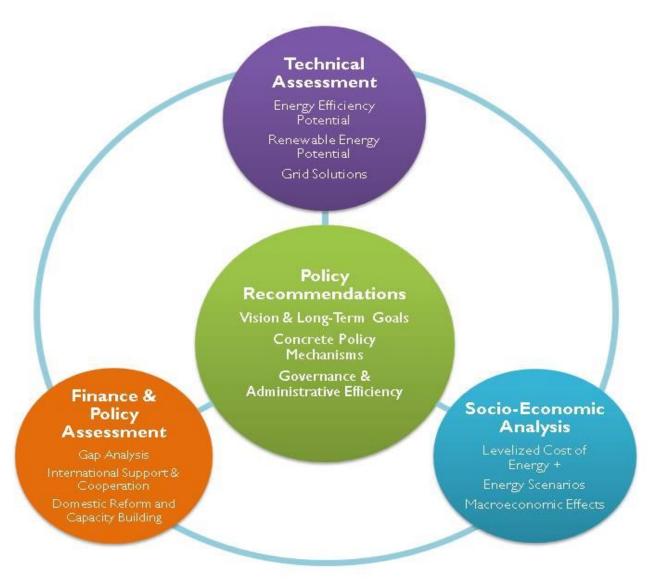
Source: Woldwatch: Study on the Development of the Renewable Energy Market in Latin America and the Caribbean, IDB 2014

Prominent barriers/risks to SE investments (2)

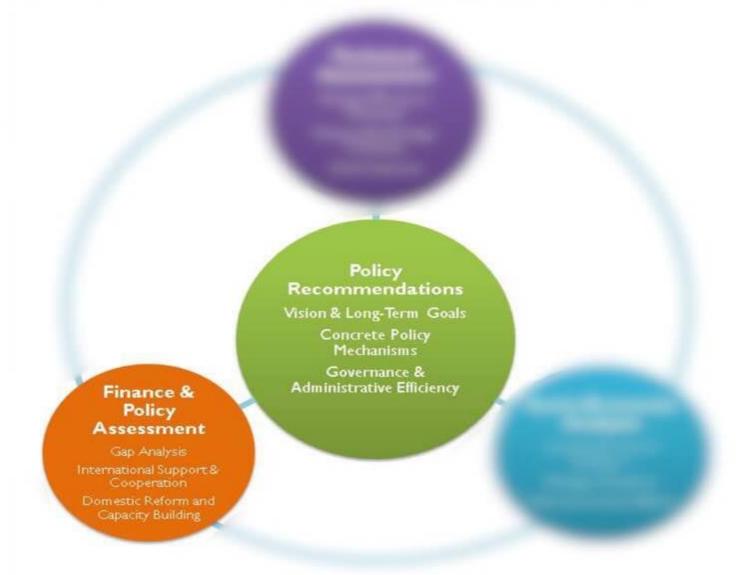
- Market Barriers
 - Restricted grid and power market access
 - Lack of economies of scale
 - High transaction costs
 - Counterparty risk
 - Fossil fuel subsidies
 - → The need to create open, fair, and competitive electricity markets
- Finance Sector Barriers
 - Currency risks
 - Inadequacy of financial products
 - Underdeveloped financial sectors
 - → The need for active financial sector development

Source: Woldwatch: Study Development RE Market in LAC, IDB 2014

Smart governmental energy planning



Smart governmental action



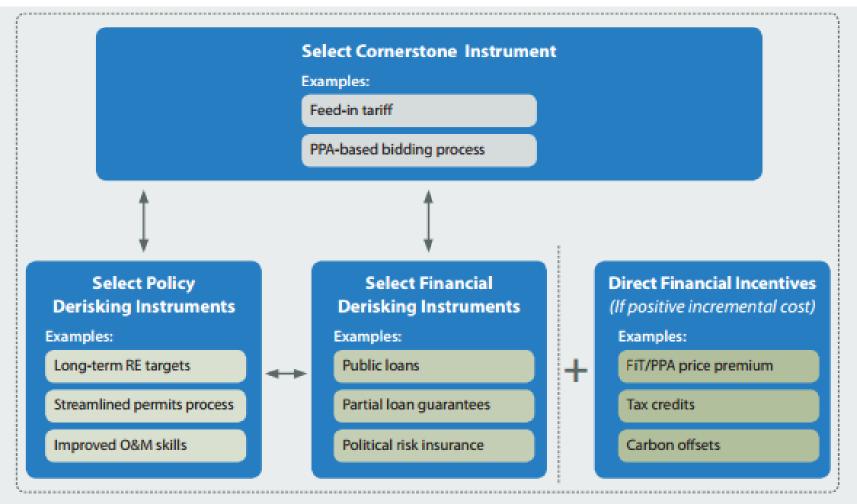
"Long, loud, and legal!" Importance of frameworks and goals

- Current energy targets
 - China: 20% primary energy consumption from RE by 2030
 - India: 40% non-fossil fuel electricity capacity by 2030
 - Indonesia: 23% of total energy consumption by 2025
 - Laos: 30% of energy consumption by 2025
 - Philippines: 50% primary energy needs by 2030
 - Thailand: 25% of total energy output by 2022
 - ASEAN: RE to be 23% of regional fuel mix by 2020
- Current Energy Policies
 - 146+ countries globally have RE support policies (national or state/provincial level) are they working?
- Criteria for success
 - Mandatory, short- and mid-term goals, MRV
 - Cohesion of development, climate, energy plans & policies

Effective SE Governance

- An institutional home for SE
 - E.g., own department in the energy ministry
 - Liaison in the top office of PM or President; in the finance ministry
 - Agency/commission for planning, data information support
 - Parliamentary committee
 - Stakeholder processes
 - Collaboration with sub-federal level
- Governmental mainstreaming, support from the top, clear institutional responsibilities, necessary human & financial capacities
 - Creating a transparent repository of capacity building needs
 - Developing mandates, tools, guidelines, and management information systems
 - Joining active Communities of Practice

Cornerstone Policy and Derisking Instruments



• Source: Glemarec (2011), adpted by UNDP Derisking Renewable Energy Investment (DREI), March, 2015

Support policies/cornerstone instruments

- Target key investment risks; the foundation upon which complementary policy and financial de-risking instruments are built
- Regulatory policies/measures
 - e.g., Legal framework for IPPs, grid access regulation, norms and standards (e.g. for RE portfolio, buildings, appliances), role of regulators and individual players
- Market-based policies
 - e.g. tax incentives, FiTs, auctions/tenders, emissions trading
- Driving renewable energy projects most effective when
 - regulatory policies are coupled with market-driven support policies
 - additional policy and financial de-risking measure complement cornerstone policies

Example for permitting process

CNE includes CNE Resource and the applicant Application CNE publishes CNE receives Application publishes the Application Environproduction for a the granting Granting of in the Special CDEEE the reports concession to Electricity for a mental analysis by Definitive of the Regime provisional Grid study guarantee Guarantee of the provisional request in Supervision permanent Impact Study a company concession SIE and concession provisional Production concession of PPA Board (SIE) (SEMARENA) authorized a national concession at CNE **Facilities SEMARENA** concession by CNE newspaper Register

Solutions

- Streamline process and requirements
- Create one-window stop

© Worldwatch Institute 2011-2016

Thank You

More in formation on the web:

www.ledsgp.org

www.worldwatch.org

Feel free to contact me with questions or comments at:

aochs@worldwatch.org

Write the LEDS GP Energy Working Group at:

energy@ledsgp.org