Deutsche Bank
DB Climate Change Advisors

GET FiT Programme

Scaling-up renewable energy in developing countries

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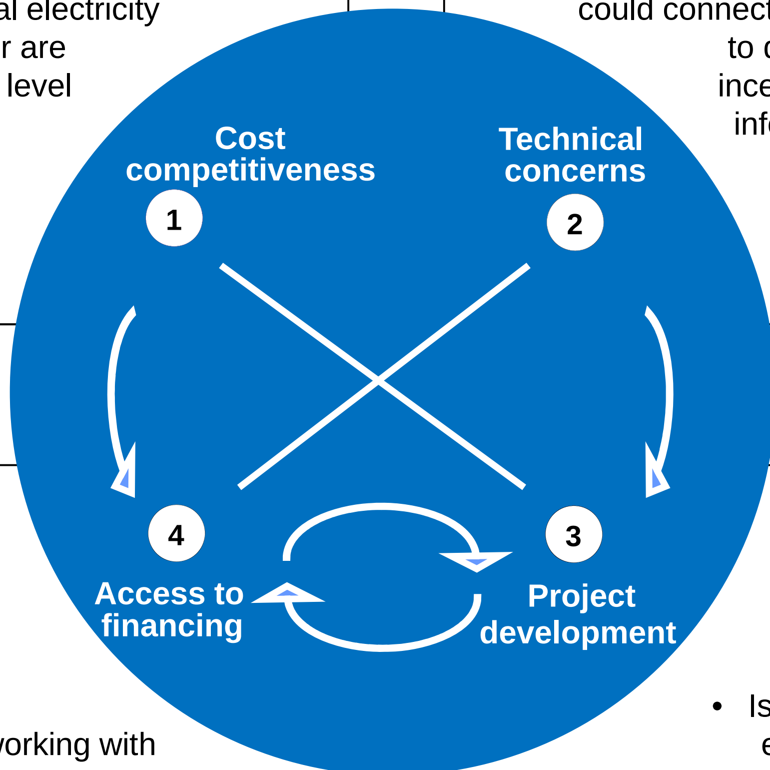
Passion to Perform

A number of barriers typically constrain renewable energy scale-up in developing countries…

- Are renewable energy technologies cost-competitive with traditional electricity generation technologies and/or are incentive programs in place to level the playing field?

- Is there a stable grid that a renewable energy project could connect to? Are grid data readily available to developers from utilities? Are there incentives in place to encourage utility information sharing with independent power producers?



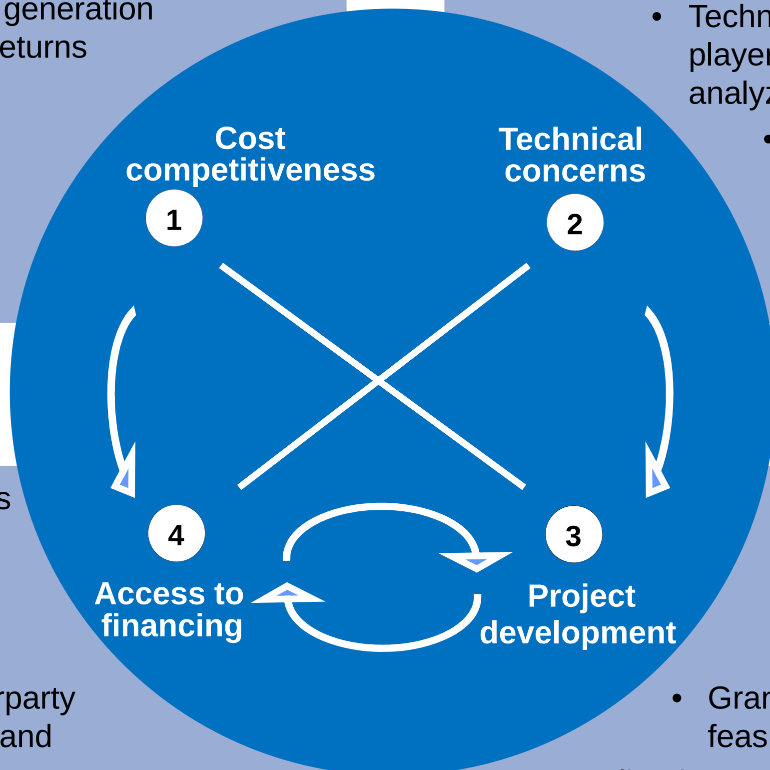
- Do utilities and/or local project developers have experience working with feed-in tariff policies, power purchase agreements (PPAs), and/or standard offer contracts?

- Is the risk-return profile attractive for equity and debt investors? Are risk-mitigating measures in place for the major risk categories?

…necessitating a set of strategies to overcome these barriers

- Direct financial incentives, such as FiTs, to level the playing field with conventional generation providing IPPs with sufficient returns

- Proving techno-economic feasibility through pilots
  - Technical assistance for local market players and for local government to analyze renewable potential
    - Incentives for utilities to provide high quality grid data as a basis for renewable energy project development



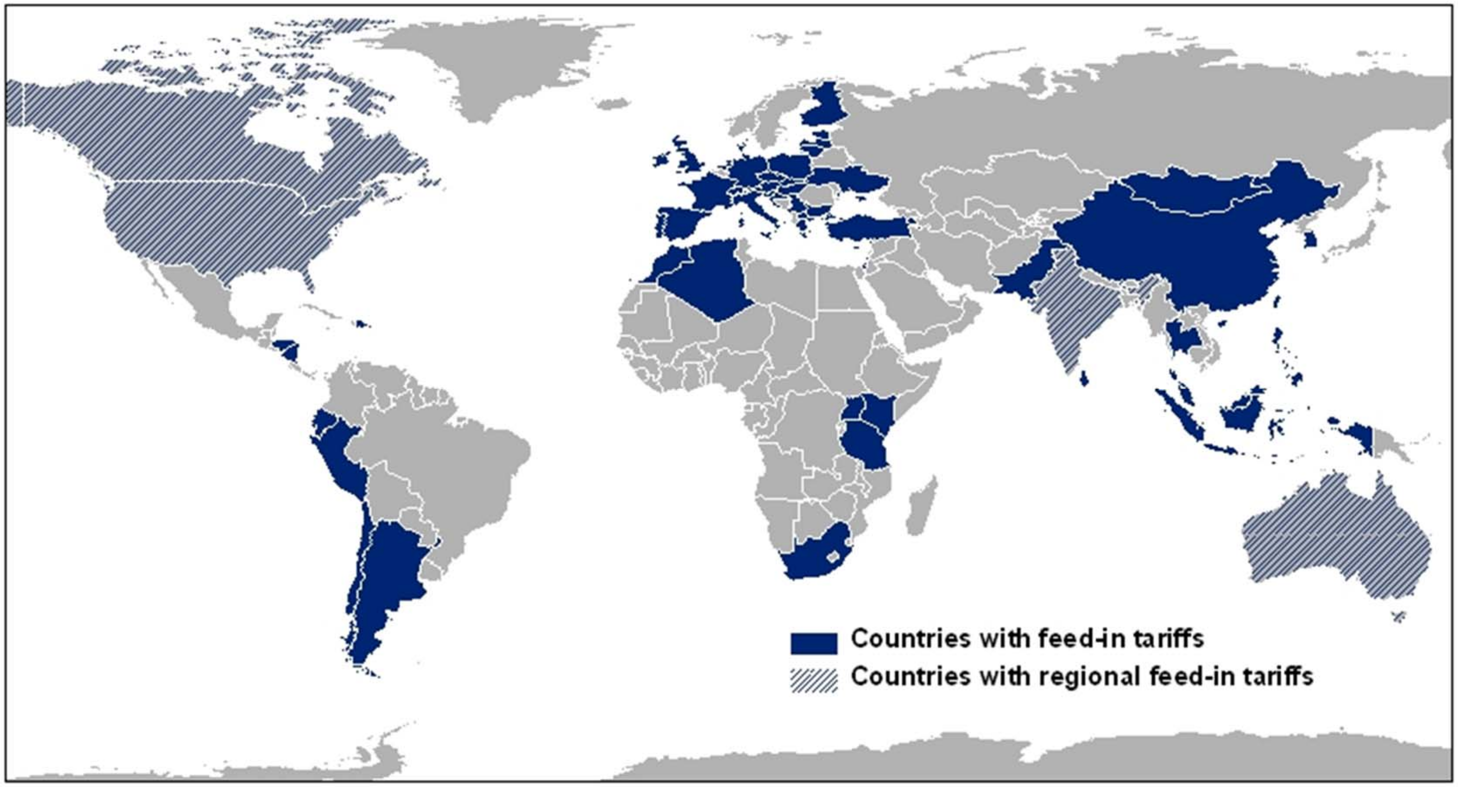
- Stable and transparent policies that provide financiers with Transparency, Longevity, and Certainty, such as FiTs
- Risk mitigating instruments: guarantees to mitigate counterparty risks, political risk guarantees and currency hedging instruments
- Capacity building for local banks

  - Grant funding/financial support for feasibility studies
- "Streamlined" process for projects approvals by government agencies and utilities

Source: DB Climate Change Advisors.

Feed-in tariffs have supported renewable energy scale-up in countries at different stages of development

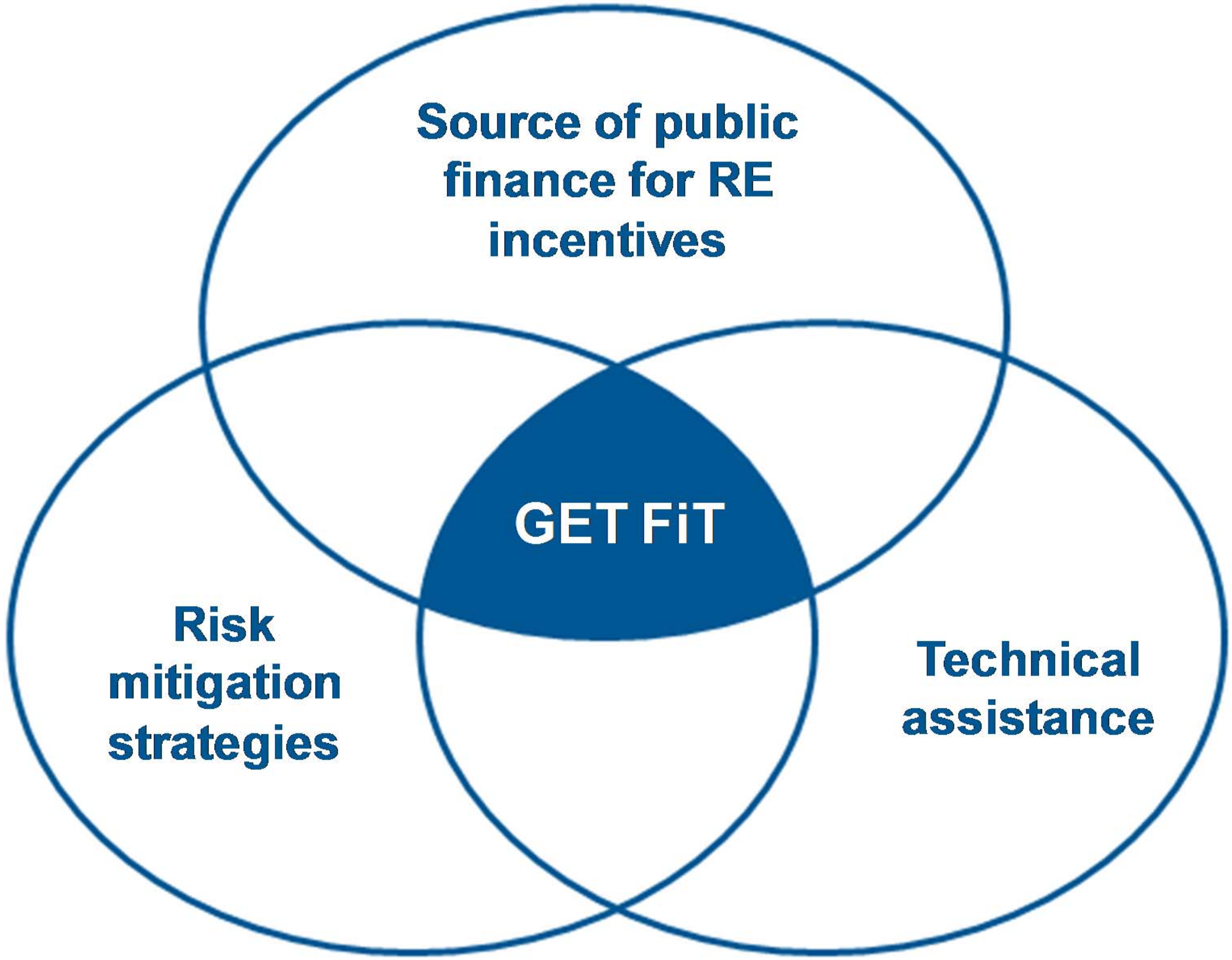
Feed-in tariffs are in place in ~28 developing countries; designs and impact vary widely



FiTs supported 75% of global PV capacity and 45% of global wind capacity through 2008 – they create markets for renewable energy

Source: DB Climate Change Advisors.

The GET FiT programme aggregates public finance, risk mitigation strategies, and technical assistance



Source: DB Climate Change Advisors.

The GET FiT solution can be used to address three different types of projects

Targeted GET FiT Support	GET FiT Solution
Advanced Feed-in Tariffs	Provide supporting payments for above-market premiums for renewably produced energy through advanced feed-in tariff designs that target on-grid, commercialized, renewable resources.
Lighthouse Power Purchase Agreements (PPAs)	Use power purchase agreements as a pre-FiT regulatory mechanism in countries that face grid integration constraints, or for technologies that have a limited in-country track record.
Mini-grids for Off-grid Applications	Adapt FiT design principles to create performance-based incentives for decentralized multi-user energy generation, especially mini-grids, in rural areas with limited grid infrastructure.

Source: DB Climate Change Advisors.

GET FiT Plus expands the possible set of public financing mechanisms used

Considered public financing mechanisms

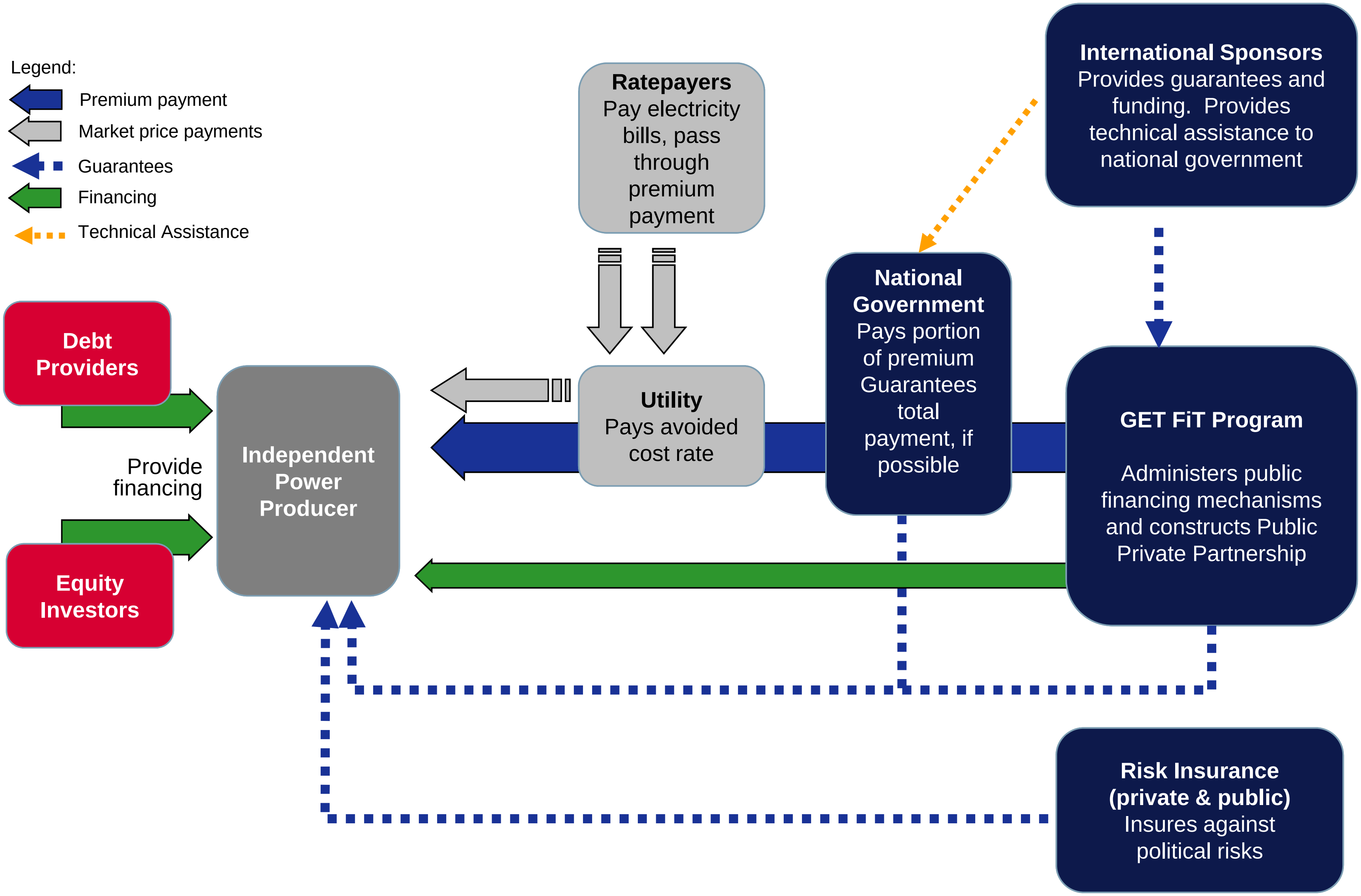
- Closing the gap between LCOE of renewable energy and the target LCOE
  - Performance based incentives, FiT premia
- Reducing the LCOE of renewable energy
  - Addressing equity financing component
    - Political risk guarantees
    - Counterparty / offtaker risk guarantees
    - Public first loss, mezzanine, or co-investments
  - Addressing debt financing component
    - Concessional financing
    - Offtaker risk guarantee
  - Addressing capex/depreciation component
    - Upfront investment subsidies

GET FiT

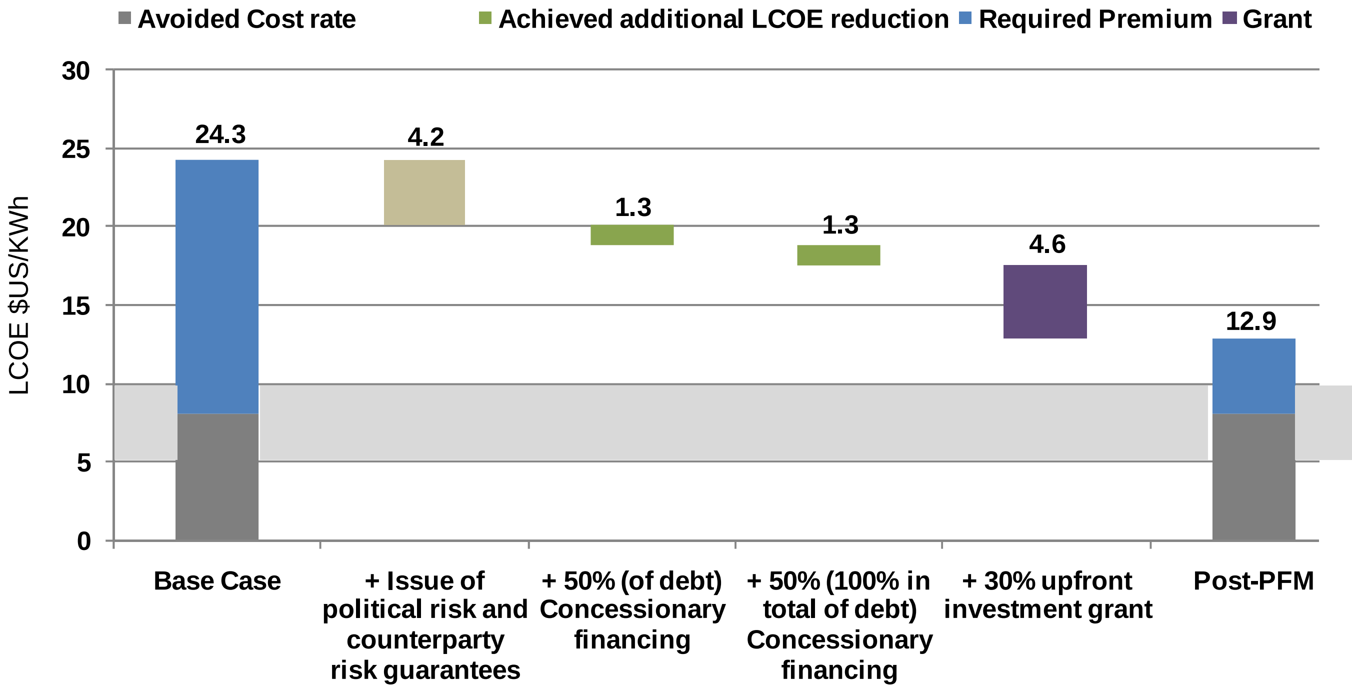
GET FiT Plus

Source: DB Climate Change Advisors.

The GET FiT programme works with partners to create markets for renewable energy in developing countries



GET FiT can bring down costs, and is most effective when all tools are used



Required financing for 1 GW of PV capacity

Political risk guarantee volume(1)		US$0.8bn	US$0.8bn	US$0.8bn	US$0.5bn
Concessionary financing volume			US$0.9bn	US$1.8bn	US$1.2bn
Upfront investment grant (3)					US$0.8bn
Premium to be funded above avoided cost rate (2)					
Upper end	US$3.0bn	US$2.1bn	US$1.8bn	US$1.6bn	US$0.6bn
Lower end	US$3.8bn	US$2.9bn	US$2.6bn	US$2.4bn	US$1.4bn

(1) Counterparty risk guarantee volume not shown as maximum exposure not meaningful
(2) LCOE target range of 6 -10 c/kWh, NPV of required FiT premium payments discounted at 6%
(3) Debt/equity split kept stable at 70/30 in upfront investment grant scenario

Source: DB Climate Change Advisors.

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