

GET FiT in Developing Countries

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<http://www.dbcca.com/research>

GET FiT builds upon the high-level concepts included in recent proposals

Recent proposals share the following characteristics:

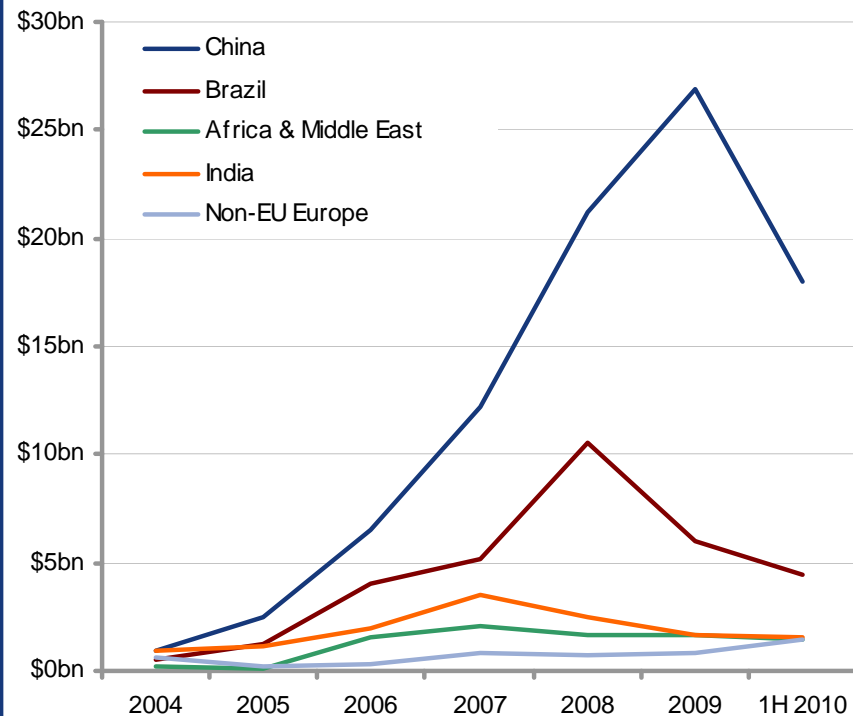
- They are high-level concepts developed prior to the COP-15.
- Many recommend providing long-term premium feed-in tariff payments, although some also propose low-interest loans, technical assistance, etc.
- Capitalization focuses on carbon emissions trading revenues (emissions auctions, carbon tax proceeds), national donations, and/or multi-lateral bank sponsorship.
- They envision being embedded in the existing international infrastructure (e.g. GEF trust fund, World Bank Climate Technology Fund).



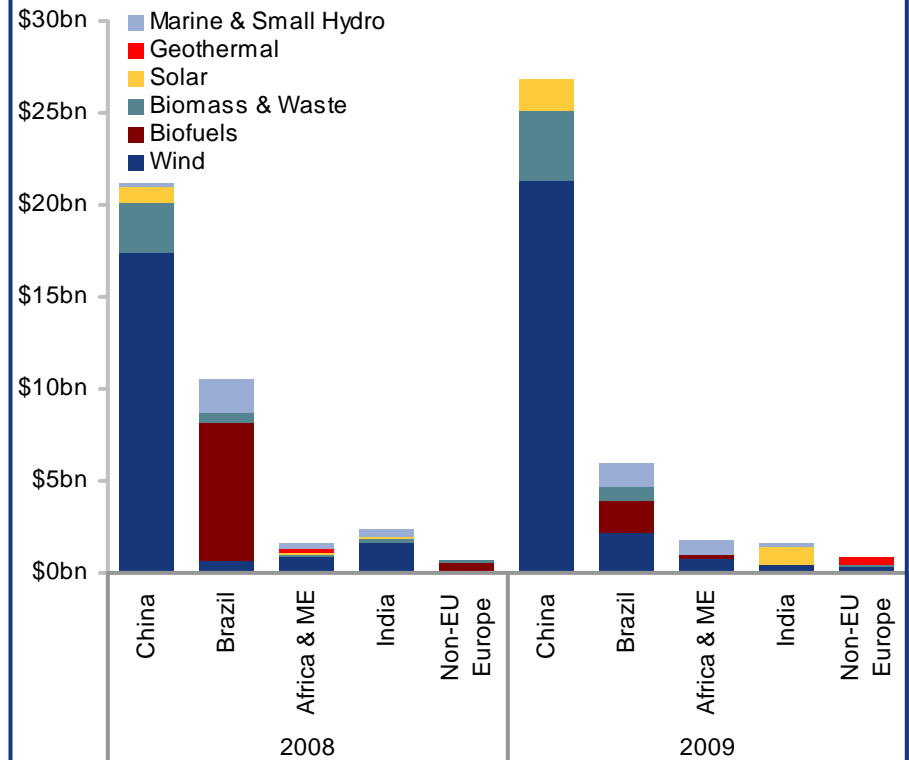
GET FiT takes these proposed concepts a step further and explores implementation details to reflect the concerns of project developers/owners and financiers.

What has been done so far in developing markets?

New project finance investment into developing countries, 2004 – 2009, \$bn



New project finance investment into developing countries by sector, 2008 & 2009, \$bn

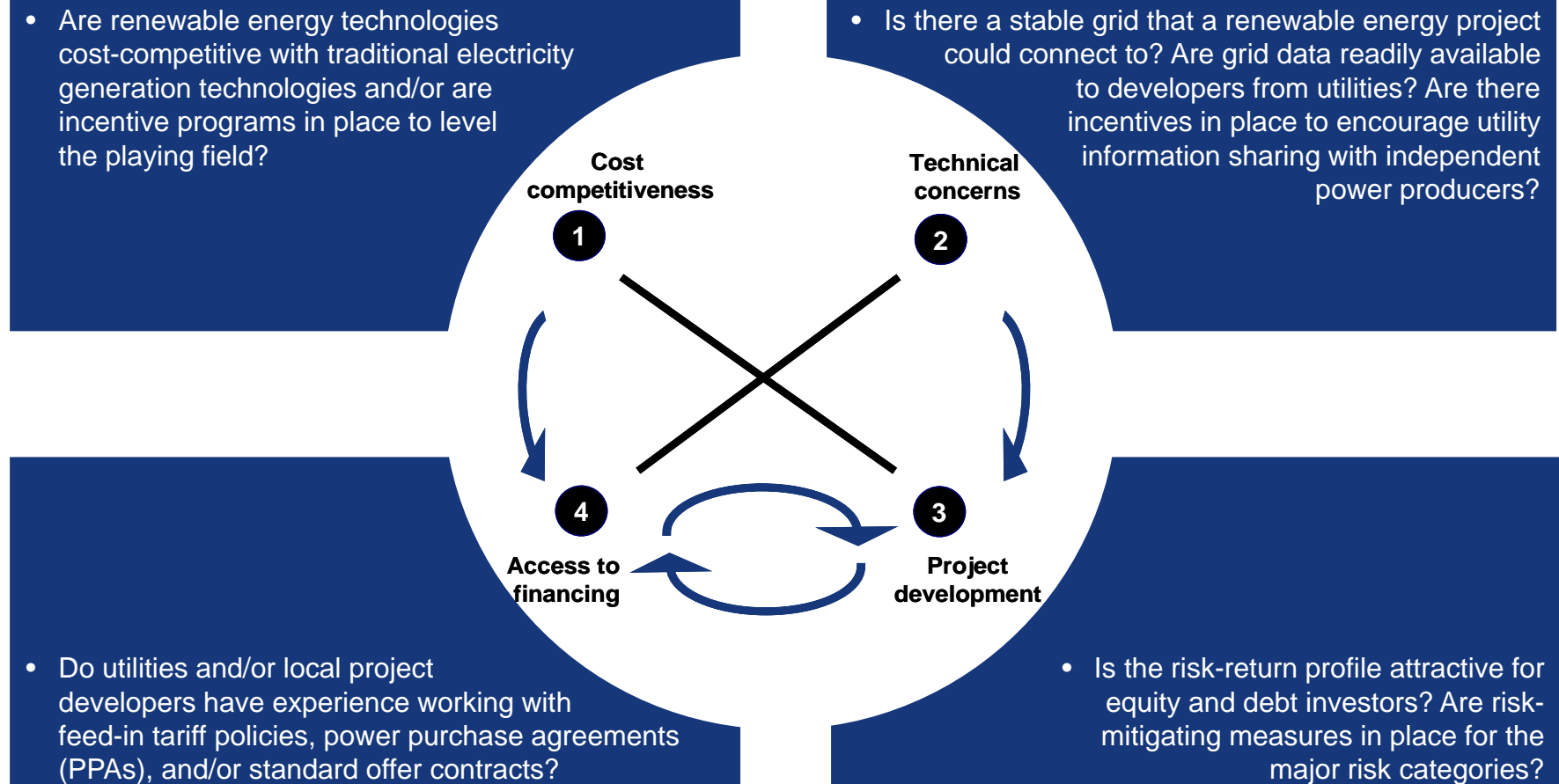


Source: Bloomberg New Energy Finance, 2010.

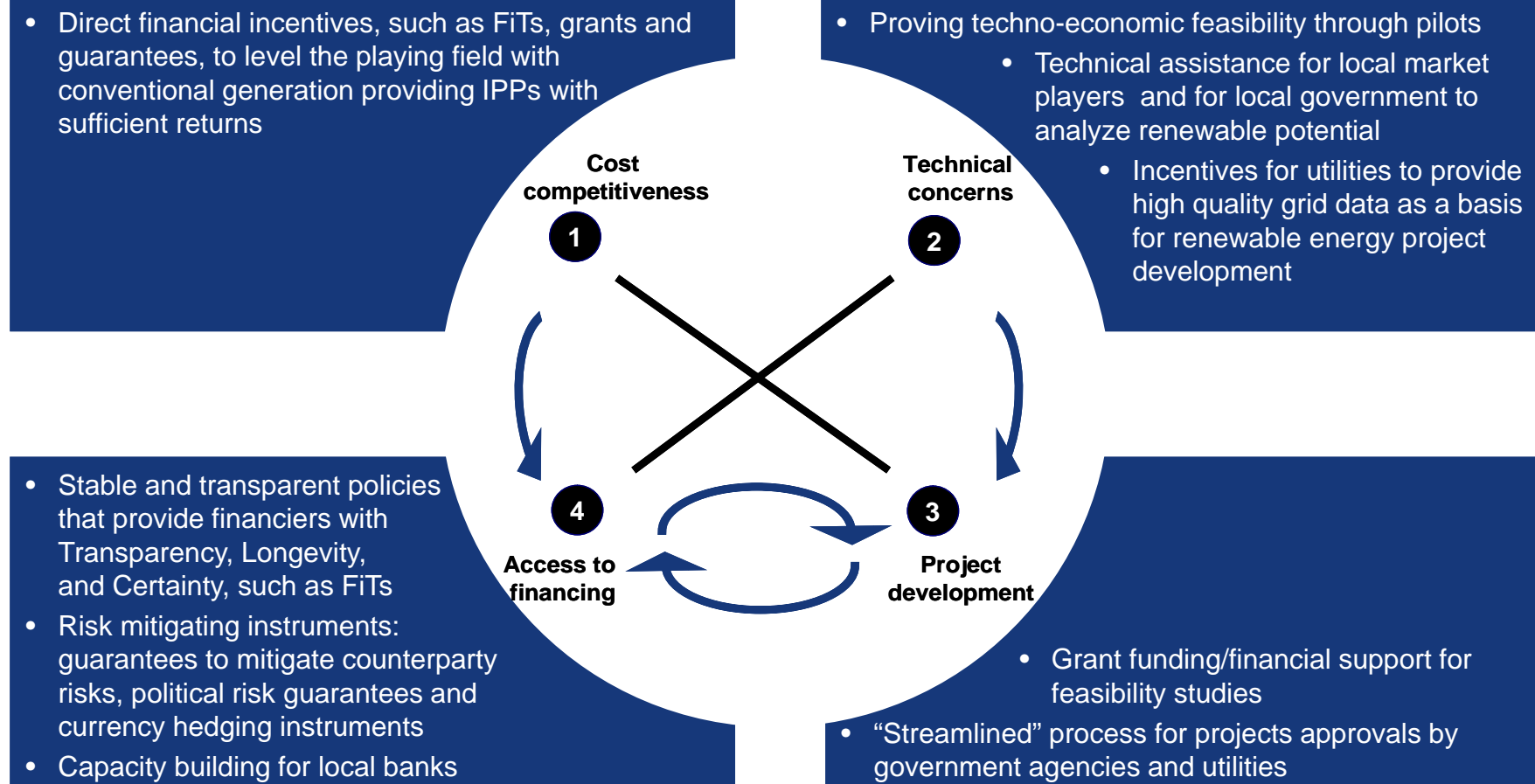
Sources of private capital

- CDM / Offset markets--dependent on Carbon market developments
- Corporate Project Finance market
- Infrastructure (Real Estate) Funds: Institutional and Individual investors
- Social Investors: Mission Related and Program Related Investments
- Microfinance: Proven source of capital, but may not be of sufficient scale

Obstacles to capital deployment...



...Require strategies to overcome renewable energy barriers

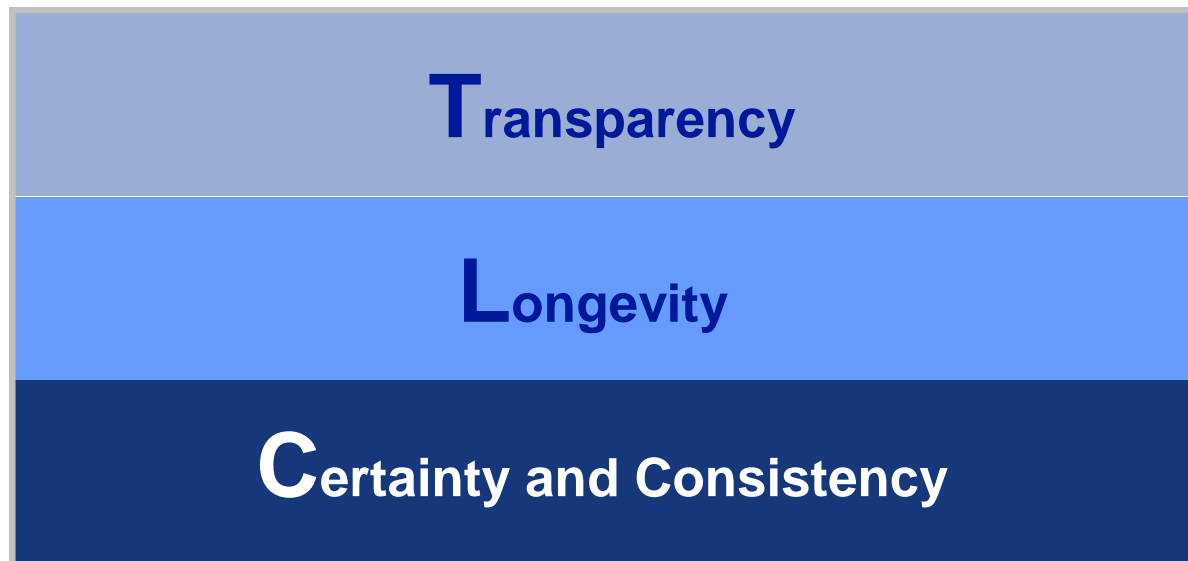


Equity return expectations

- Will vary with country risk premium
- Social Investors 5-10% required returns
- Corporate and Institutional investors look for 9-11% returns plus country risk premium in mature infrastructure, and 20-25% returns as the development and technology risk rises.
- This is in hard currency (US\$, Euro)

What do investors want from policy?

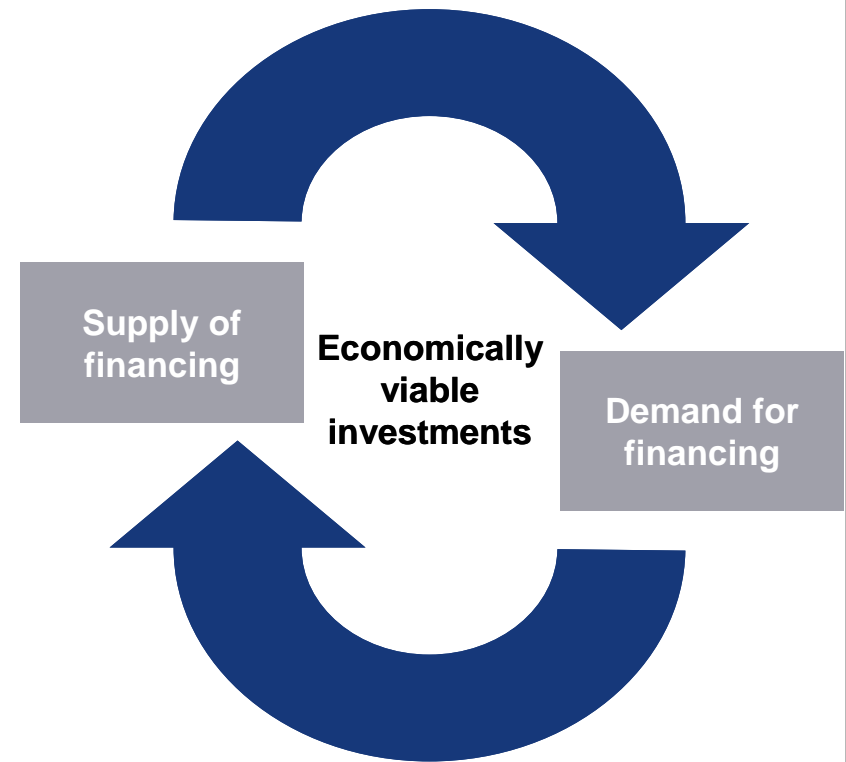
Investors essentially look for 3 key drivers in policy:



In assessing the potential success of policies, these factors should be taken into account.

The GET FiT Mission

- Support renewable energy scale-up and energy access in developing countries through the creation of new international Public-private Partnerships (PPPs)
- Catalyze the supply / demand for private sector financing of renewable energy projects in both middle- and low-income countries
- Support national renewable energy policies that mitigate investment risks and challenges that financiers and developers face, and attract significant private capital as part of broader, low-carbon growth plans
- Adapt international renewable energy policy best practices to the developing country context to support on-grid and off-grid projects, and lighthouse PPAs
- Bridge to grid parity for renewable energy both by allowing developing countries to gain experience with renewable resources prior to break-even scenarios and by adjusting incentive rates to reflect lower prices over time
- A program concept intended as a template for climate finance programs post-Copenhagen



In essence, GET FiT is simple

- International AAA-rated donors: national governments, development banks, and international climate-related funds provide premium payments for renewable energy in the appropriate policy structure to this market in partnership with developing country governments. The payments would be structured in a way to support renewable energy technologies' progress towards grid parity. This is a major de-risking for investors and can establish fair and sufficient returns.
- Developing countries' governments and utilities administer the process.
- An array of technical and risk mitigation programs will need to be aggregated and coordinated as well.
- Private investors then deploy capital in renewable energy projects.

Risk mitigation strategies

Risk/Barrier	Mitigation Strategy	GET FIT Program	Partner country	Utility	Int'l. Sponsor of GET FIT	Third parties
Development risk	Transparent approval processes	(indirect)	●	◐	○	○
	Equity investor carries economic risk	○	○	○	○	○
Construction risk	Transparent approval processes	(indirect)	●	◐	○	○
	Equity investor carries economic risk	○	○	○	○	○
Revenue risk	FiTs or grants mitigate price risk	●	●	◐	◐	○
	Guarantees mitigate counterparty risk	●	●	○	○	○
	Equity investor carries volume risk	○	○	○	○	○
Currency risk	Hard currency GET FIT premium	●	○	○	○	○
Political risk	Political risk guarantees	○	○	○	○	●



= Primary role



= Secondary or optional role



= No role

Source: DBCCA analysis, 2010.

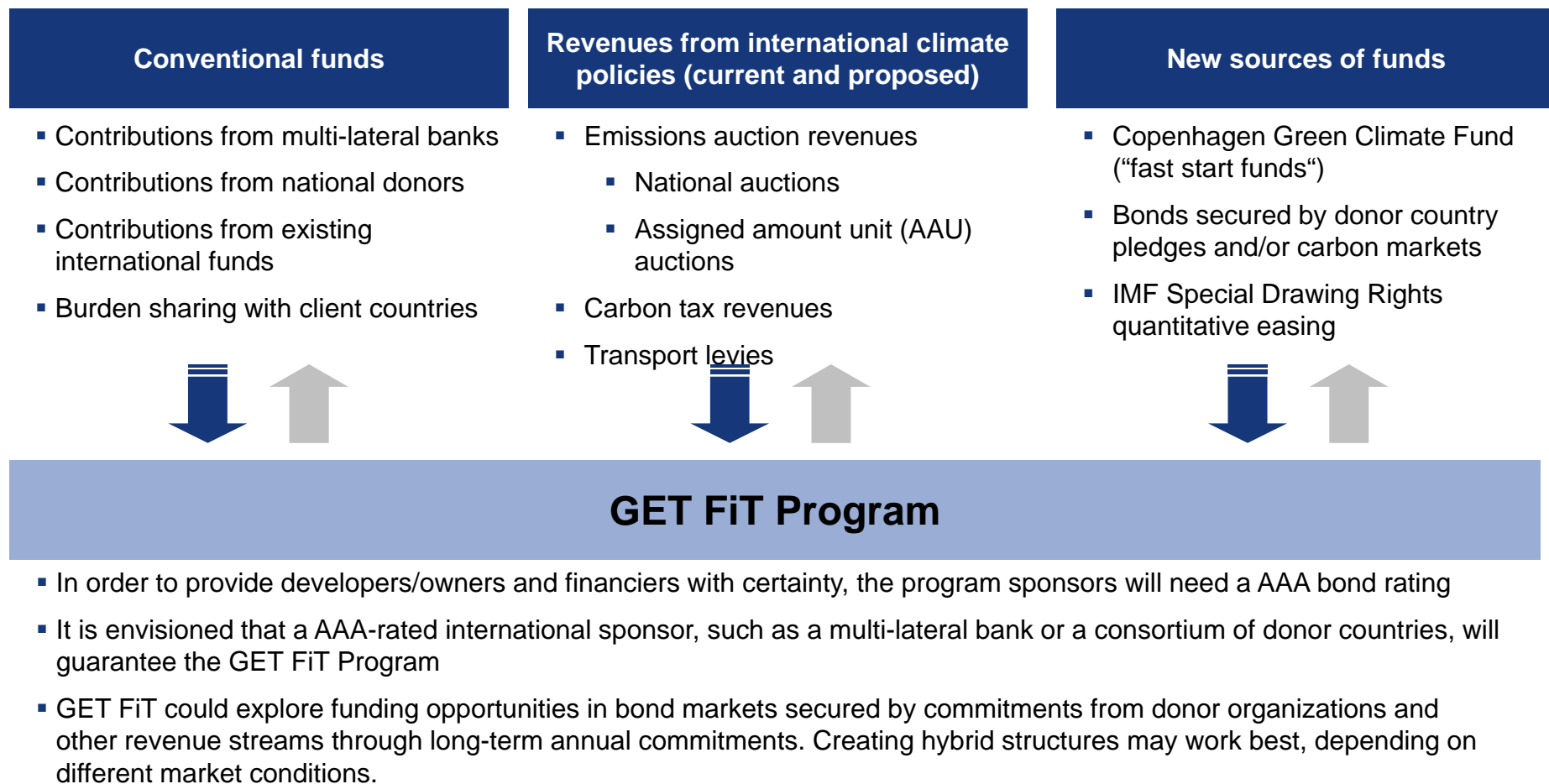
Providing technical assistance to address non-financial barriers

Target Sector	Governments and government agencies	Utilities	Local financiers	Local private sector players
Focus areas	<ul style="list-style-type: none"> ▪ Policy design such as advanced feed-in tariff policy design and resource diversity strategies ▪ Grid analyses ▪ *Resource assessments ▪ Project feasibility studies 	<ul style="list-style-type: none"> ▪ Grid management ▪ *Renewable energy integration 	<ul style="list-style-type: none"> ▪ Financial due diligence ▪ Risk mitigation strategies 	<ul style="list-style-type: none"> ▪ Renewable energy project development ▪ System construction, operation and maintenance

Direct funding of technical assistance

Aggregation of available multi-lateral, bi-lateral, and private sector resources

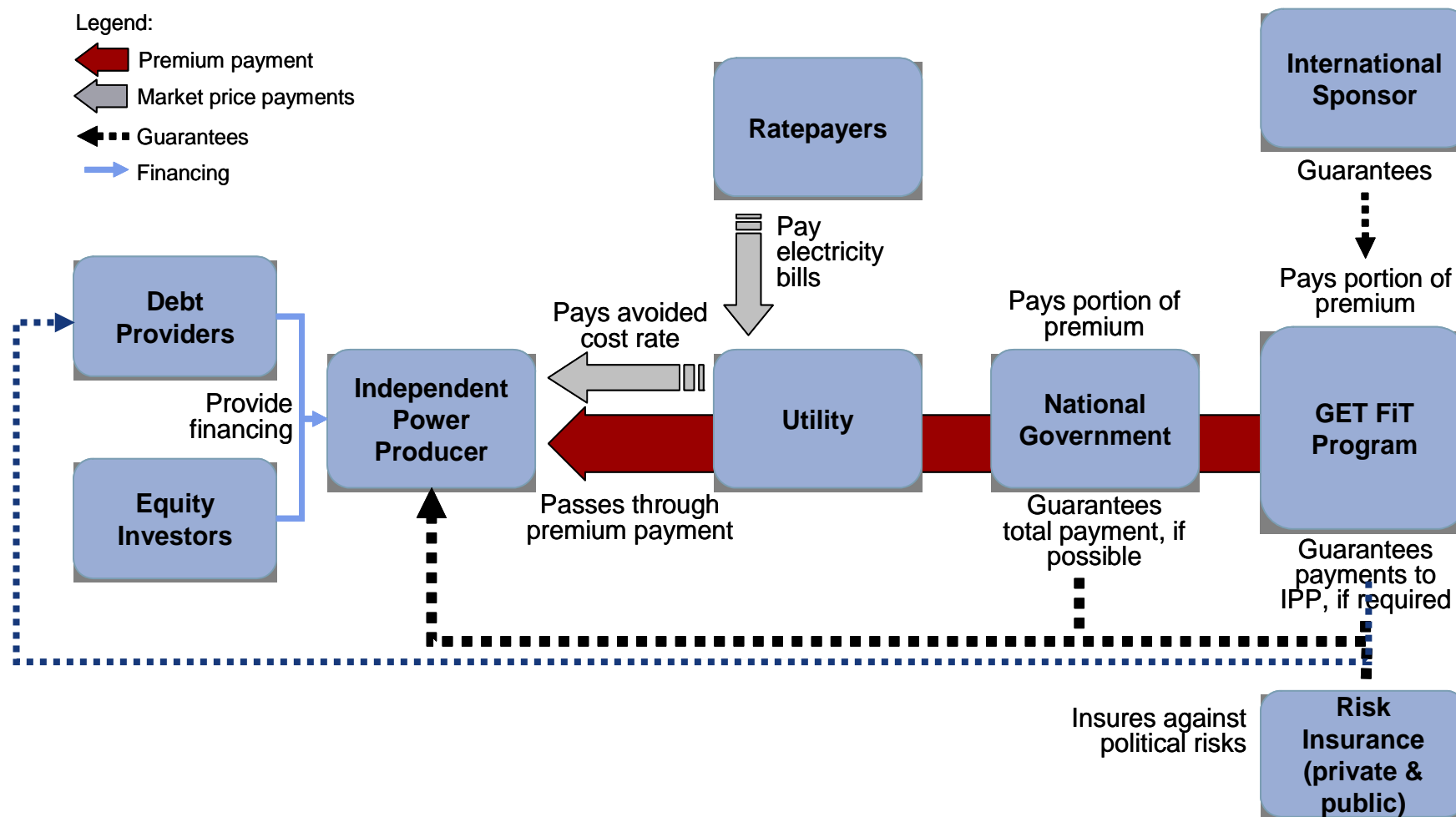
Capitalization – There are a broad range of current and proposed international funding sources



Best practice advanced FiT for developing countries

IT Design Features	Key Factors	TLC at the Right Price
Policy & Economic Framework	"Linkage" to mandates & targets	Yes
Core Elements	Eligible technologies	All renewables eligible
	Specified tariff by technology	Yes
	Standard offer/ guaranteed payment	Yes
	Interconnection	Yes
	Payment term	15-25 yrs 5-10 yrs
Supply & Demand	Must take	Yes
	Who operates (most common)	Open to all
Fixed Structure & Adjustment		
How to set price	Fixed vs. variable price	Adjusted for inflation
	Generation cost vs. avoided cost	Generation
	IRR target	Yes
How to adjust price	Degression	Yes - ending at LCOE breakeven
	Periodic review	Yes
	Grid parity target	Yes
Caps	Project size cap	Depends on context
	Policy cap	Based on transmission constraints and/or ratepayer impact
Policy interactions	Eligible for other incentives	Yes - eligible to take choice
Streamlining	Transaction costs minimized	Yes
CDM linkage	Does the national FiT policy take CDM into account?	Yes

Potential GET FiT Structure



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