

**RES4Africa Foundation  
Knowledge Platform**

**Financial Instruments to  
galvanize private sector project  
development**

*Cassa Depositi e Prestiti*



# A number of market barriers and failures still hamper private investments in the African RE sector

The Platform covers the following thematic areas:

Technologies

Policies and regulations

Access to market

Permitting

**Financing**

Operation

Sustainability



## Financial Instruments to galvanize private sector project development

**What is the context:**.. in order to ensure electricity access to the 600m Africans to whom it is still precluded, the continent will require an annual investment of USD 70 billion in renewable energy projects in the next 10 years. Problematically, a number of market barriers and failures still hamper private investments.

**Why is this relevant:** Although Africa is endowed with abundant natural resources for renewable energy (wind, solar, hydro), the continent has only represented 2% of global RE capacity increase and 80% of infrastructure projects fail at the feasibility and less than 10% reach financial close

### What are the key questions:

- Which are the main economic and financial barriers to private investment?
- Which are the key financial instruments available for private Investors?
- How do they work?

# Rationale & Market Failures preventing private investments in RE projects

## HUGE NEEDS & ABUNDANT RESOURCES

- More than 600m people have no access to electricity in Africa
- Heavy reliance on fossil fuels; urgent need to diversify
- Africa requires an annual investment of USD 70 billion in renewable energy projects in the next 10 years
- Continent is endowed with abundant natural resources for renewable energy (wind, solar, hydro).

## LACK OF PROJECTS

- Only 4-6 RE IPP projects reaching financial close each year in SSA
- 80% of infrastructure projects fail at the feasibility and less than 10% reach financial close
- Africa has only represented 2% of global RE capacity increase

## MARKET FAILURES & BARRIERS

- Market failures include: affordability, weak legal and regulatory frameworks, lack of competitive tenders, offtaker creditworthiness, low capacity for project preparation and implementation.



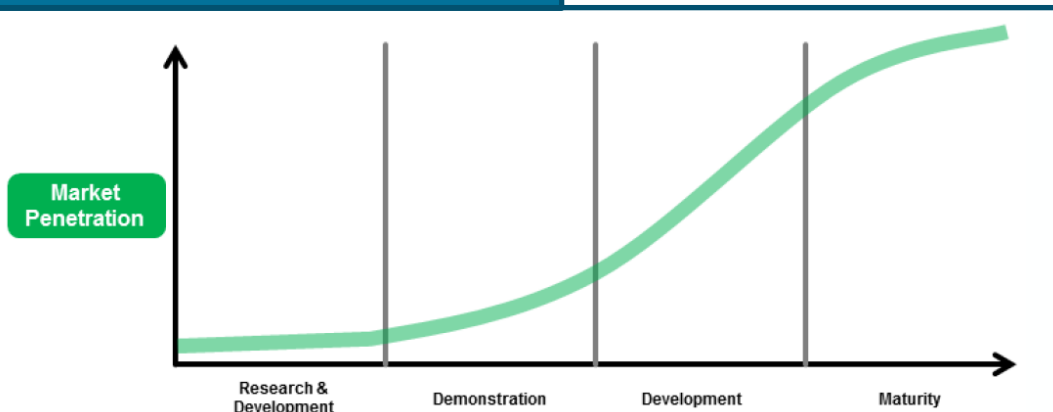
**Economic and Financial barriers preventing private investments in RE projects**

# Economic barriers

## Emmission Externality

- Negative emission externalities
- RE projects are affected indirectly
- In disadvantage compared to fossil fuel-based energy generation because of GHG emission externalities that are not considered in the decisions of the fossil energy producers.

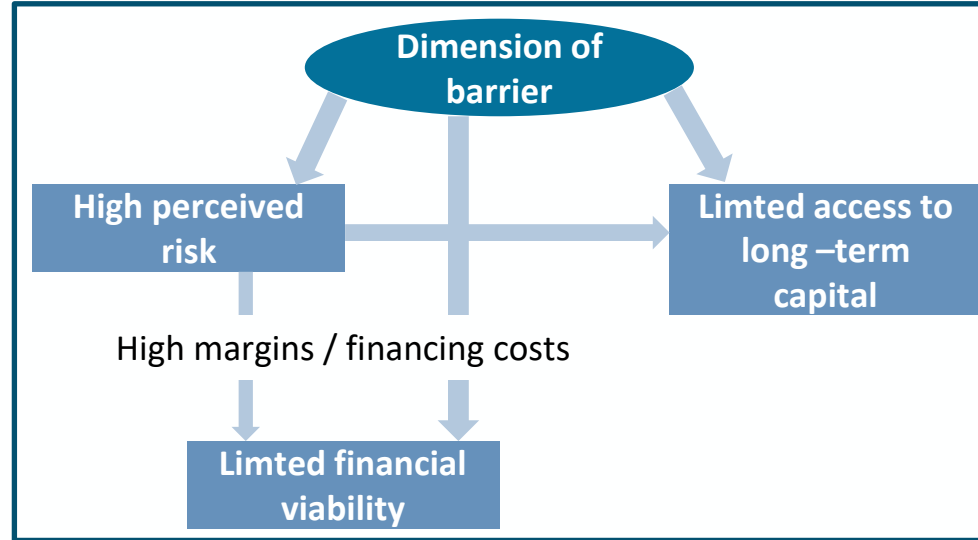
## Innovation Externality



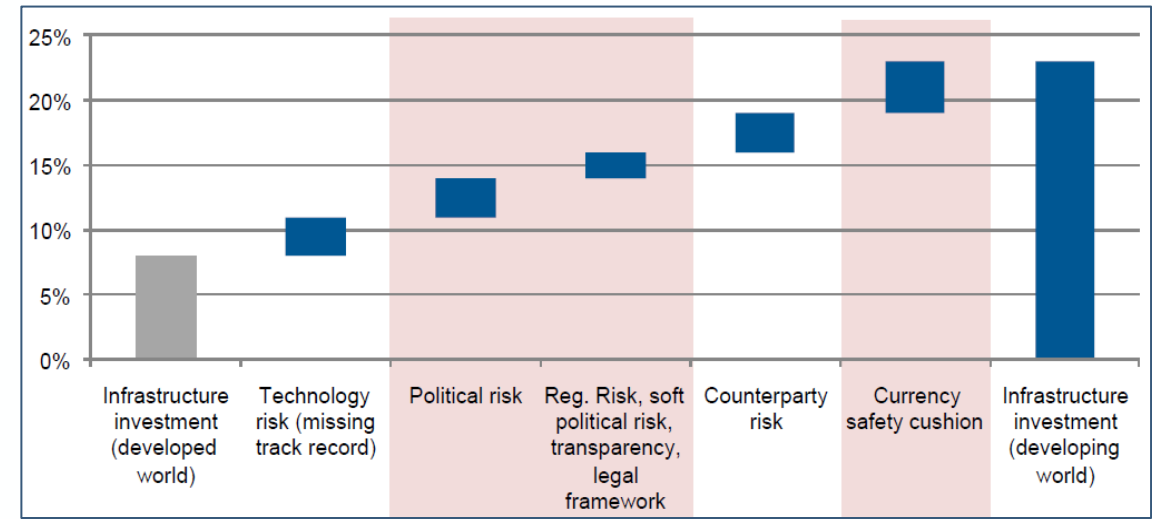
## Policy instruments to address economic barriers

- (i) **Institutional approaches** which facilitate the internalisation of externalities,
- (ii) **Command and Control** Instruments, and
- (iii) **Economic / Market-Based** Instruments.

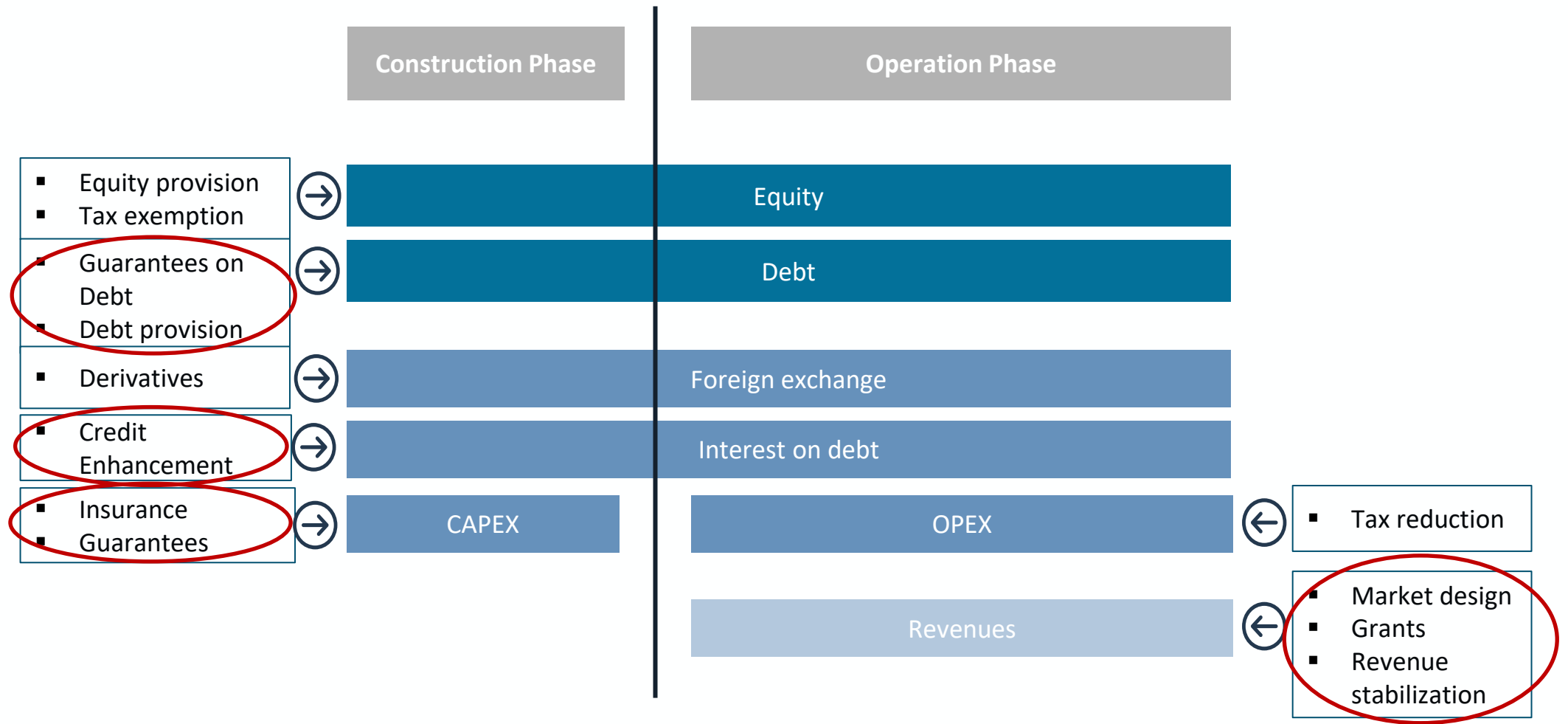
# Financial Barriers especially in EMDE



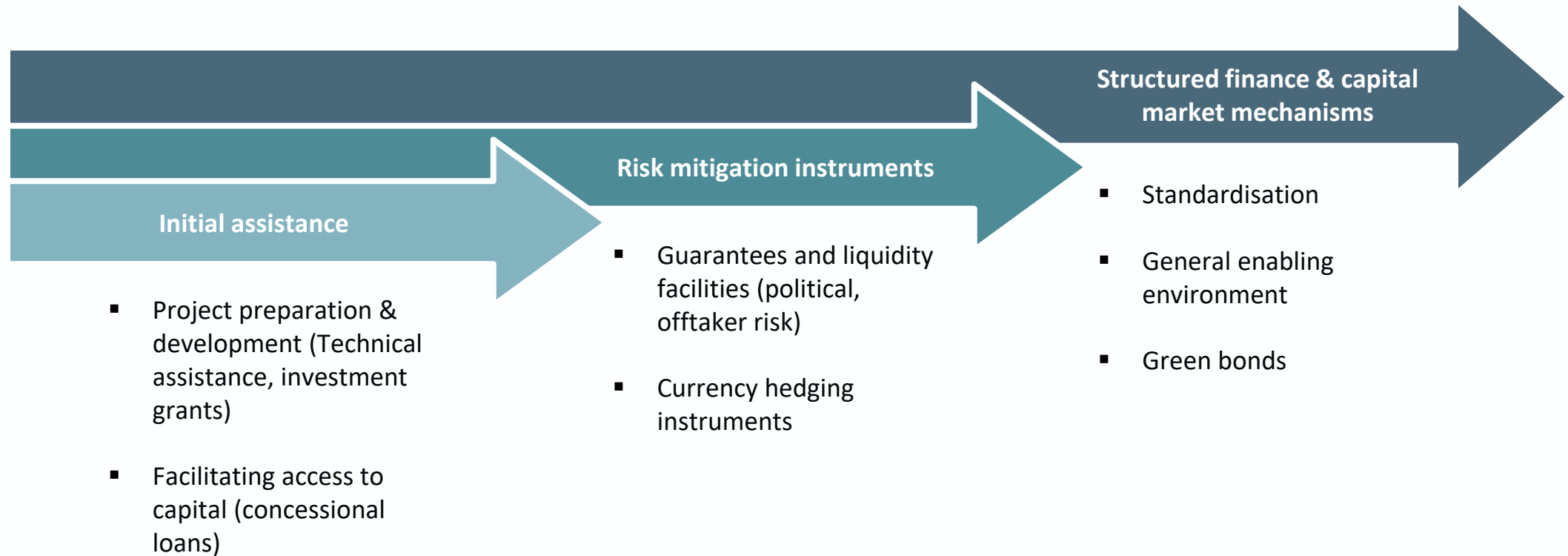
## Risk Margin in EMDE



# Infrastructure project and possible public intervention



# Public finance can play a key enabling role – covering early stage risks and helping new markets reach maturity.

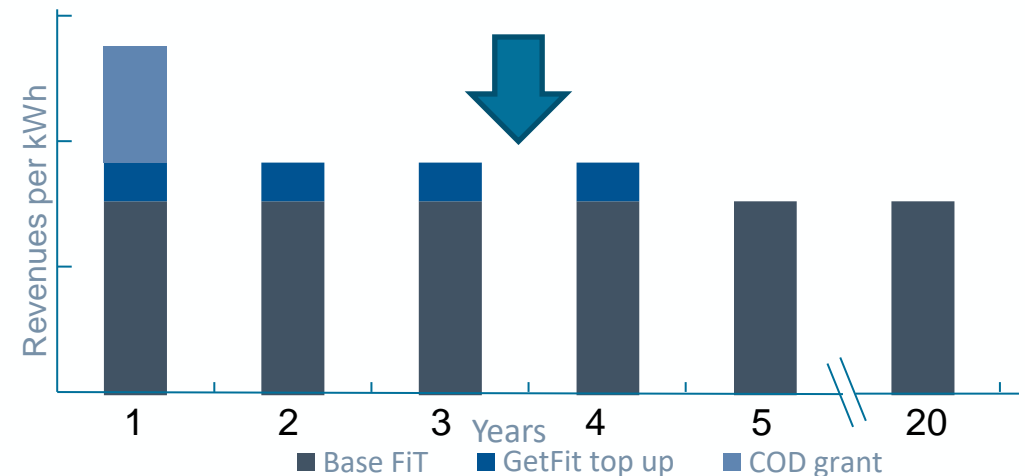
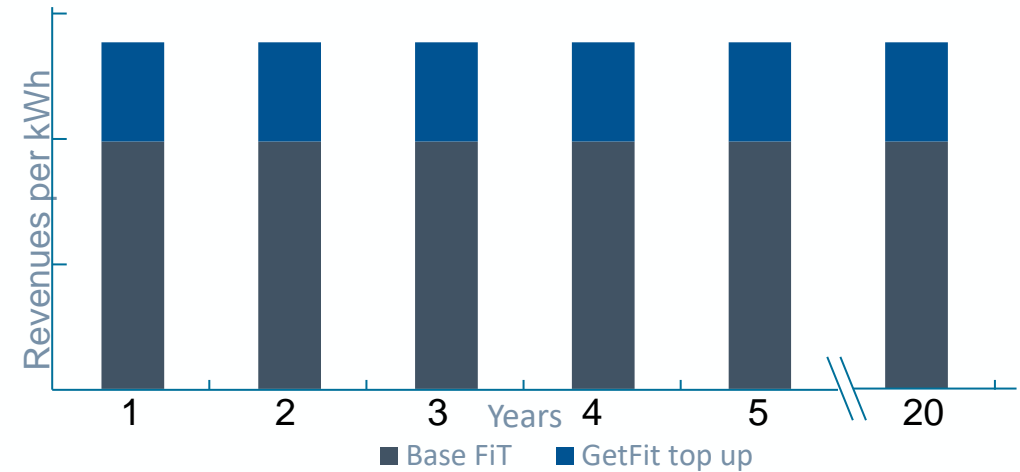


# Investments grants

## Instrument

- Grants **address the limited financial viability** of projects  
Upfront grants also address the lack of available funding **by reducing the required investment capital**
- The **timing and conditionality** of a grant payment can vary, from traditional **upfront grants** to **results-based support** over several years
- A key aspect of results-based grants for RE is that payments may **only be disbursed ex post** upon verification of results. This requires recipients to have access to capital to pre-finance the interventions
- A **front-loading of results-based grants can help to shorten payback periods** without creating massive moral hazard issues

## Example - GetFit





# Concessional loans

## Debt financing

- Address the barrier of limited supply of **long-term capital in immature financial markets**
- The involvement of the public sector in financing can have an **indirect risk mitigation effect**
- The provision of capital at more attractive interest rates (due to the cheaper refinancing of DFIs/IFIs) can also **help improve the financial viability of RE and EE investments**
- The implementation of refinancing instruments is often **complemented by capacity building for the involved financial institutions**

## Grant Element in Financing of DFIs

- DFIs/IFIs aim to support green or development driven projects with subsidised capital
- Loans that are extended on terms substantially more generous than market loans
- The concessionality is achieved either through **interest rates below those available on the market or by grace periods, or a combination of these**
- As a consequence, **DFI/IFI financing can also help bridge gaps in financial viability**

# Guarantees (1/2)

## Instrument

- Guarantees represent an **agreement by the guarantor to pay part of the costs incurred by an RE project** in case of specified events
- The guarantor offers the guarantee to the financier **against the performance of the entity receiving the finance**
- An individual guarantee typically covers a **portion of the losses** to the financier if specified events happen
- Guarantees are available in many different forms, for example, a **pari-passu** or a **subordinated** guarantee
- **Political, regulatory and off-taker risk guarantees** are primarily provided by the World Bank (WB) Group, including the Multilateral Investment Guarantee Agency (MIGA), and by other **Multilateral/Bilateral Development Banks** and export credit agencies

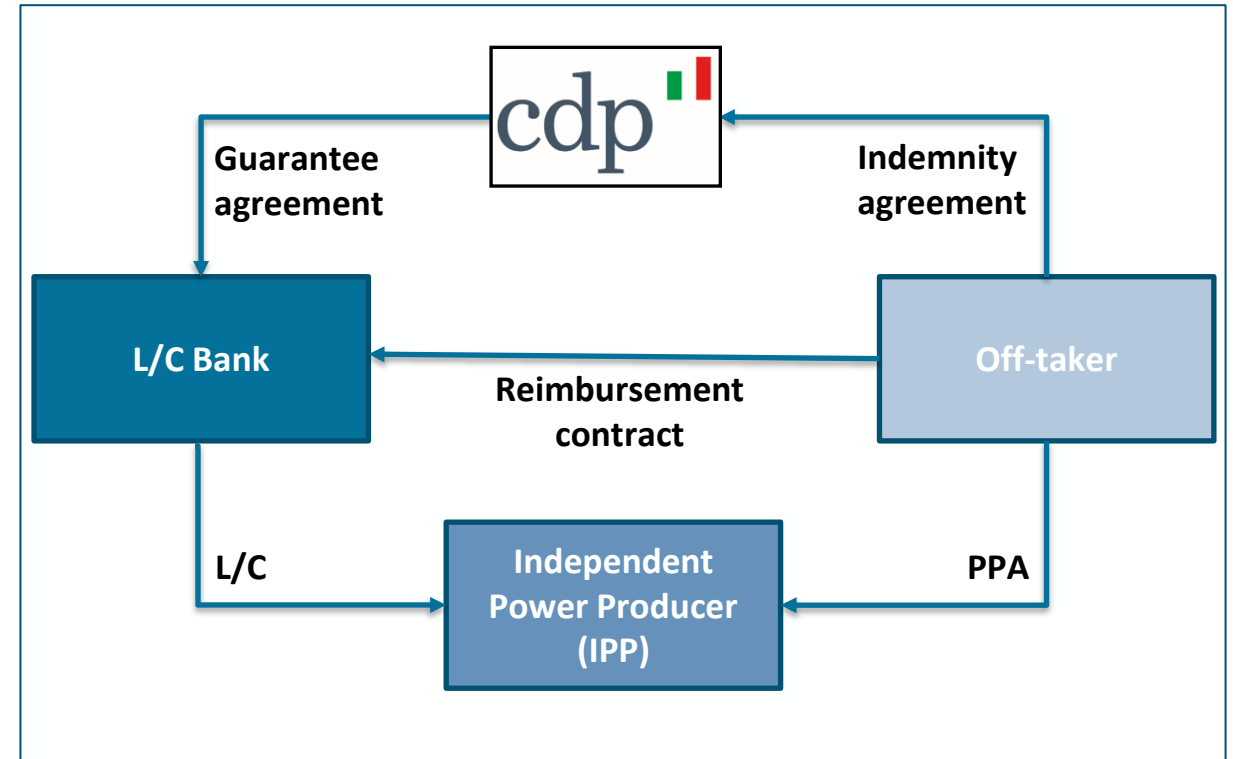
## Example – World Bank

- Guarantees will only be provided by the WB upon **request of the host government**, and will burden their International Development Association (IDA) envelope (which is basically the available credit line from the IDA)
- PRGs are **relatively cheap risk mitigation instruments** with a significant impact for large infrastructure projects.
- If an RE projects lacks financial viability because of higher perceived risks, **such guarantees can help make the risk profile more attractive** from the perspective of the private sector, and consequently reduce financing costs

## Guarantees (2/2)

### European Guarantee for Renewable Energy (EGRE)

- **Offtakers' non-payment risk** is considered critical by private investors for the development of Independent Power Producers (IPP)
- Public payment guarantee tool providing **short-term liquidity to IPPs**
- Main eligibility criteria of EGRE NS projects:
  - i. Renewable Energy projects
  - ii. On-risk tenor : 17 years max,
  - iii. Currency : EUR, USD or local currency,
  - iv. PPA to be signed with a financially sound State-owned offtaker



# Technical Assistance and General enabling environment

## Technical Assistance

- **Know-how transfer and capacity building in financial institutions, but also among policy makers who need to develop and implement supportive regulatory frameworks, are crucial**
- Nearly every support programme comes with technical assistance facilities attached
- For example, it is crucial that public agencies have the institutional capacity to manage financing instruments in an effective and transparent manner

## General enabling environment

- High levels of **transparency and longevity** of government decisions are crucial
- **Supportive regulatory frameworks** for RE and **targets** for RE electricity generation **show commitment and reduce opportunity costs**
- Providing support for the creation of an enabling environment **can be more powerful than a case-by-case support**

## Sources:

- Frankfurt School of Finance: “Certified expert in climate & renewable energy finance” course material
- Financing the transition to renewable energy in the European Union, Latin America and the Caribbean, EU-LAC FOUNDATION, AUGUST 2018
- Climate Finance as a Catalyst for Leveraging Private Sector Financing in the Energy Sector: Examples in Latin America, Carlos A. Cordova. World Bank Group

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