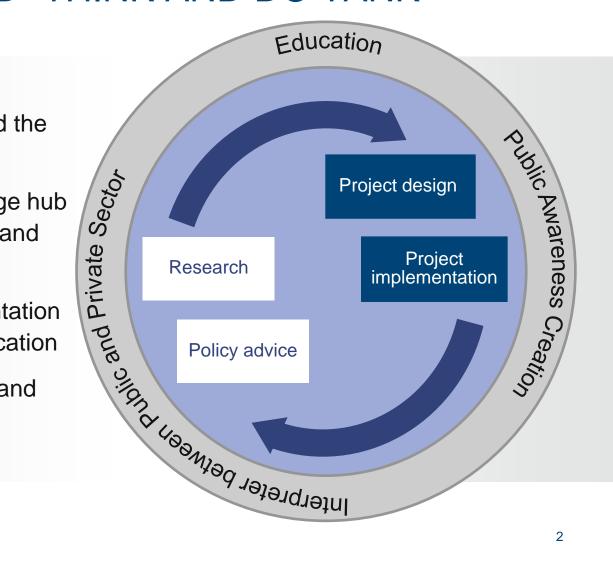


#### FRANKFURT SCHOOL - UNEP COLLABORATING CENTRE FOR CLIMATE & SUSTAINABLE ENERGY FINANCE

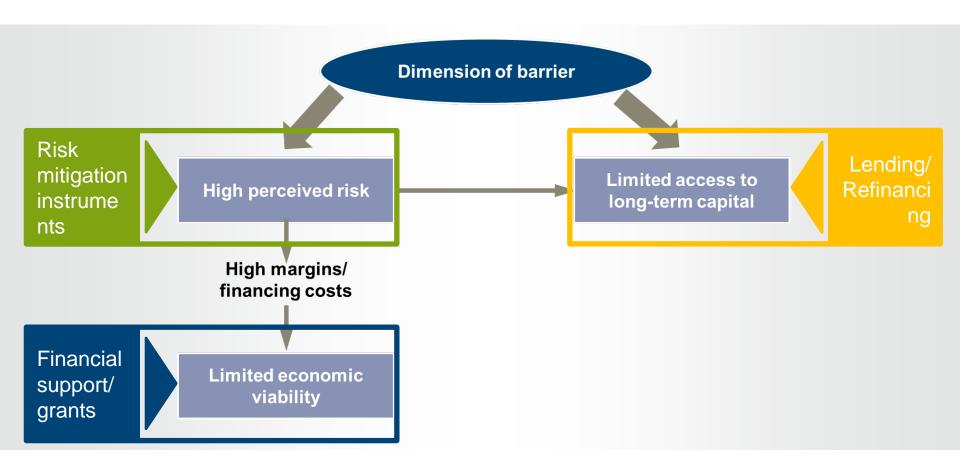
#### AN INTEGRATED "THINK AND DO TANK"

- Strategic collaboration between the UNEP and the Frankfurt School
- UNEP's main knowledge hub for sustainable energy and climate finance
- Research with an orientation towards practical application
- Implementing findings and instruments in the field





## Major barriers for RE infrastructure investments





## Risk categories

Required investment

#### Risk Cat. 3

(private sector cannot manage, public sector can manage these risks

#### Risk Cat. 2

(neither private nor public sector can manage these risks)

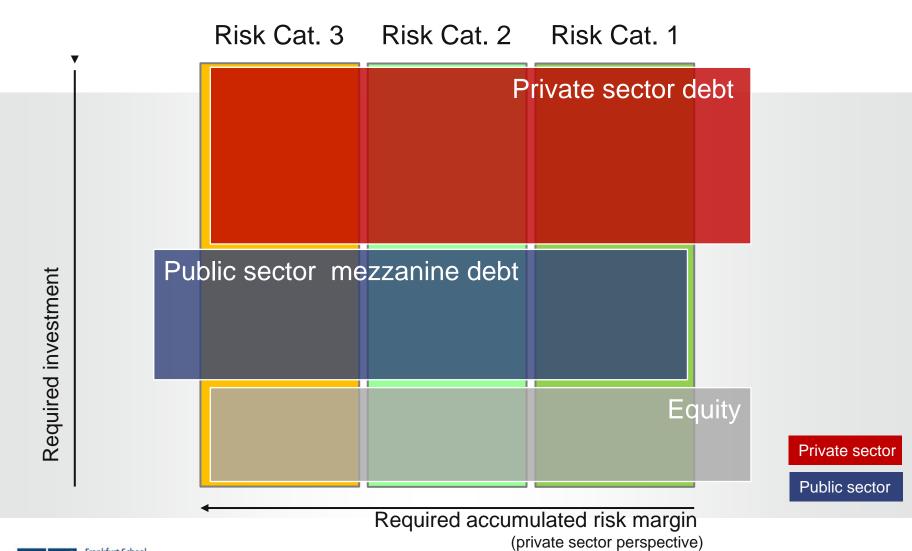
#### Risk Cat. 1

(private sector can manage the risks)

Required accumulated risk margin (private sector perspective)

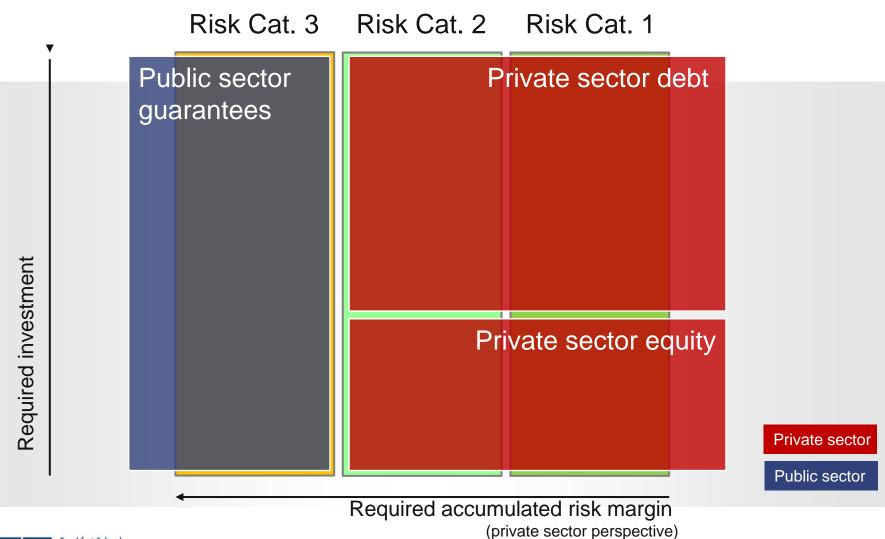


# "Horizontal slicing"

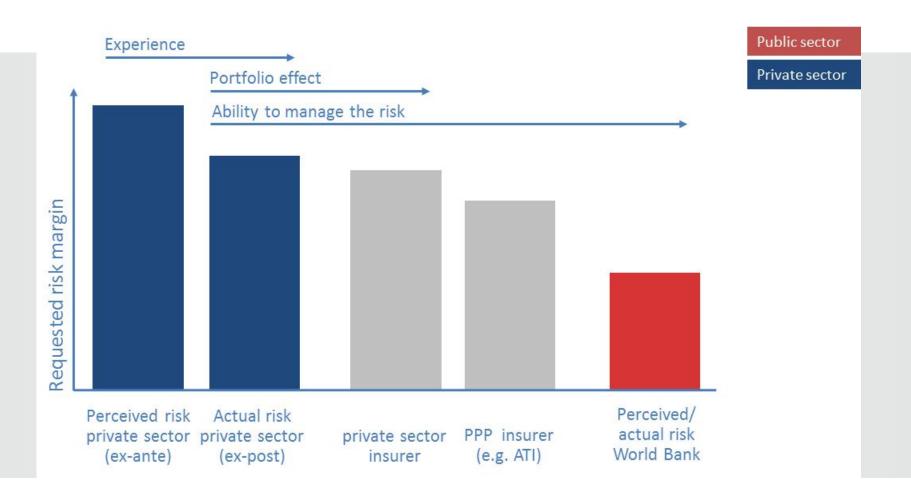




## "Vertical slicing"



## Cost efficiency of risk mitigation instruments



# GET FiT Pilot Uganda



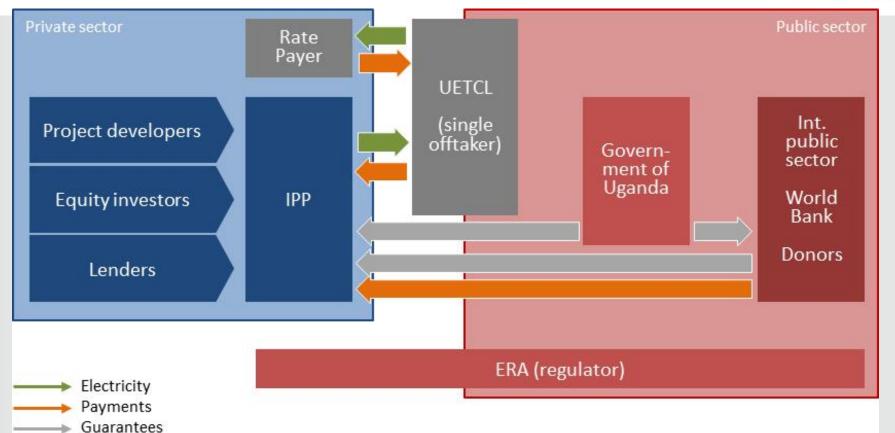
- GET FiT concept introduced by Deutsche Bank in April 2010
- Implemented by KfW in Uganda as pilot country with donor support from UK, Norway and Germany
- Launched in May 2013
- Supports approx. 125 MW IPP RE generation capacity, primarily bagasse and small hydro. PV to come
- "Upgrade" of existing FiT regulation comprising Worldbank PRG guarantees and FiT top-up over 5 years



# GET FiT Pilot Uganda



# **GET FIT UGANDA**



# Renewable Energy Performance Platform





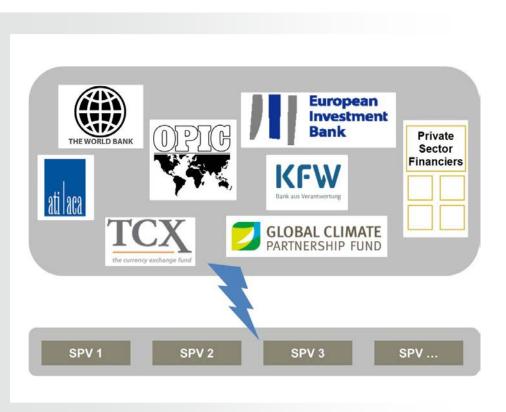
- Small/Medium scale projects (1-15MW) often fail to attract financing even in countries which principally have introduced a supportive regulatory environment and offer competitive tariffs.
- Smaller projects often face a range of risks which escalate the cost of finance to the point that the project becomes 'unbankable'.
- REPP seeks to mobilise private sector development activity and investment in small/medium projects through
  - 1) improved access to existing risk mitigation instruments,
  - 2) long term lending and
  - 3) results-based financial support



#### Challenges for small/medium scale RE



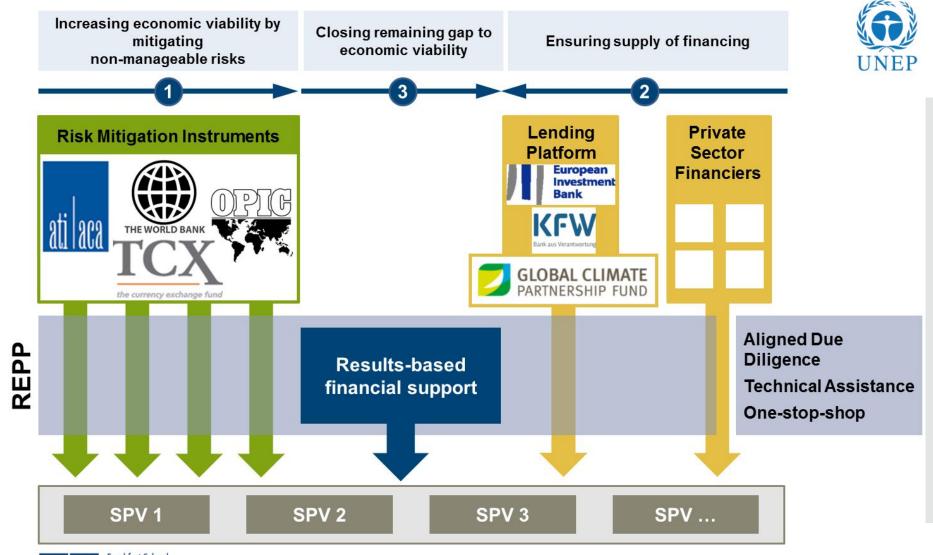




- Access to finance for projects is hindered by the lack of bankable projects, experienced developers and low feed-in tariffs that hardly allow for cost recovery in markets where average generation costs are high.
- High (perceived) political risks, doubts regarding the creditworthiness of the offtakers and the unsuitability of available financial products explain the reluctance among banks and other investors
- High transaction risks and consequently high risks of sunk costs combined with low ticket sizes limit appetite of commercial lenders
- High transaction costs burden access to risk mitigation instruments

#### European Investment Bank

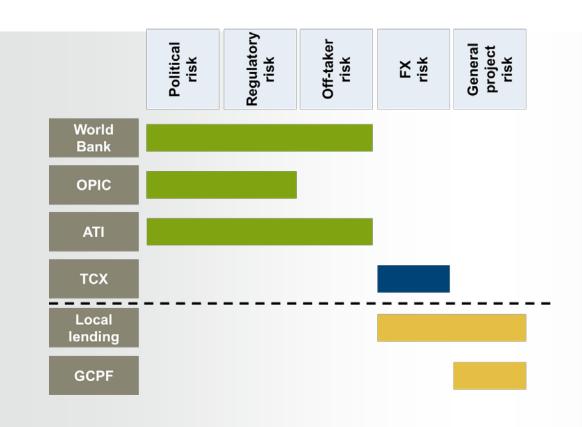
#### REPP concept



#### Risk mitigation instruments



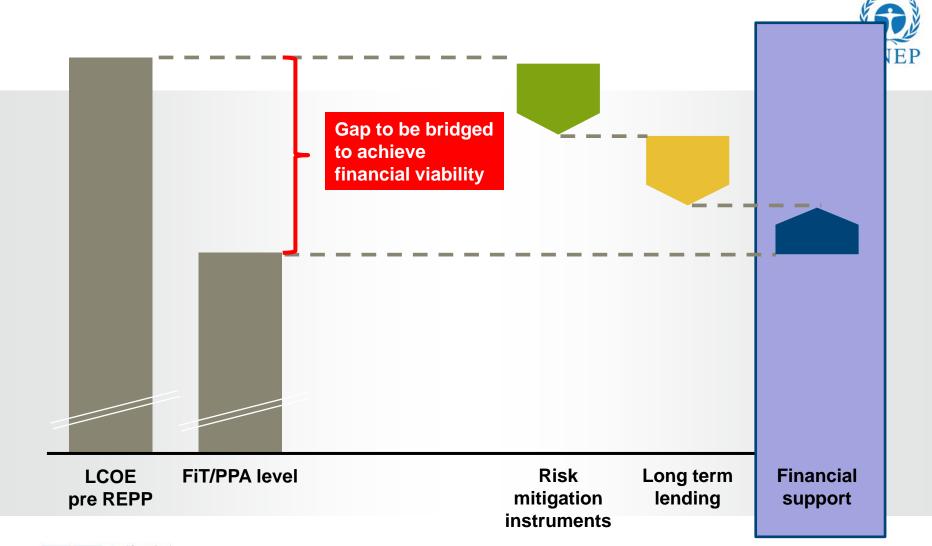




- Reduce margin requirements and/or increase the availability of capital and consequently reduce levelised cost of electricity
- Decrease the cost of financing for the project in a greater property than they cost for the public sector guarantee provider
- REPP projects pay the guarantee fee and/or REPP partners bear their own cost

#### European Investment Bank

## REPP – cost efficient use of donor money







# Expected impact of risk mitigation instruments





	Equity return expectations	Initial debt ratio*	Debt tenor	Debt risk margin
World Bank PRG (12m liquidity guarantee)	-4 - 5%	+25 - 65%	+3 - 5 years	-200 - 300 bps
ATI-ACA (12m liquidity guarantee)	-3 - 4%	+25 - 55%	+3 - 5 years	-100 - 200 bps
OPIC	-1 - 2%	+25 - 55%	+3 - 5 years	-100 - 200 bps
тсх	-2 - 3%	+0 - 40%	+/- 0	+/- 0
GCPF co investment or subordinated investment	-1 - 2%	+0 - 50%	+1 - 3 years	-100 - 200 bps

<sup>\*</sup>Before REPP support, a 35% Equity @25% and a 65% quasi equity portion @ 17% return is assumed. The 65% quasi equity portion will be gradually replaced by senior debt bearing lower interest as REPP instruments are added

