

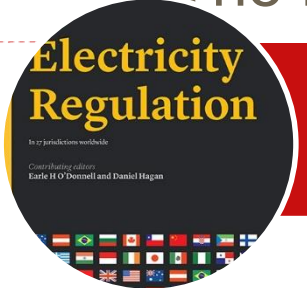
# Promoting Sustainable Energy for Equitable Development

**GLZ approaches on decentralised renewable energy**





# The Main Challenges for decentralised RE



Regulatory framework for the electricity sector needs to provide **easy market-access**, on fair terms, to **private sector entities and IPPs**

Unclear policy framework – **Are SME and the off grid sector relevant to climate and electrification?**



Shortage of **qualified professionals**



**No access to finance due to many (perceived) risks**

- Political risks
- Changes in legal or regulatory policies
- Off-taker risk
- Currency risk
- Technology and resource risk
- SME lack financial track record

**Untested business models:** business models are often hindered by an inflexible tariff structure for cost (high upfront costs yet low ability-to-pay)





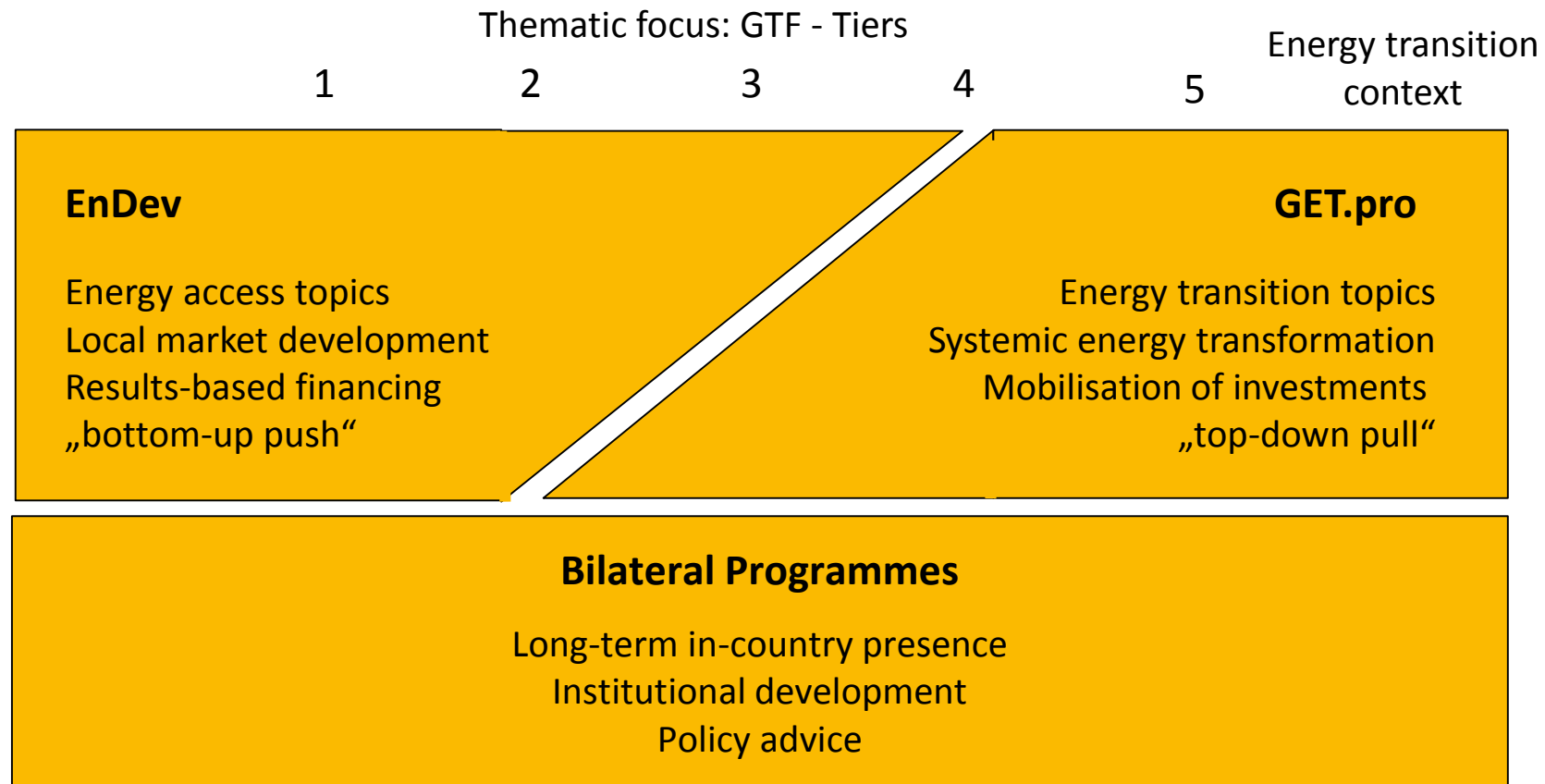
## GIZ's contribution to off-grid Development

The following contributions are already being made from the current portfolio:

- **Improved framework conditions for decentral energy supply:** Key aspect of almost every bilateral project in Africa; structured advisory tools via the global programme GET.pro
- **Investment mobilization:** local market development through EnDev (e.g. results-based financing); pipeline development and access to finance via GET.pro
- **Productive and consumptive use of energy:** enabling households to consume and utilise energy for income generating activities, and local enterprises as well as social institutions to expand and improve their products/services (e.g. Uganda)
- **Vocational education and training:** development of certification schemes, curricula, training of trainers, promotion of local training institutions; as autonomous projects (e.g. Egypt) or as components of bilateral programmes (e.g. Nigeria)
- **Partnerships:** promotion of partnerships on communal level; e.g. via the implementation of the Covenant of Mayors

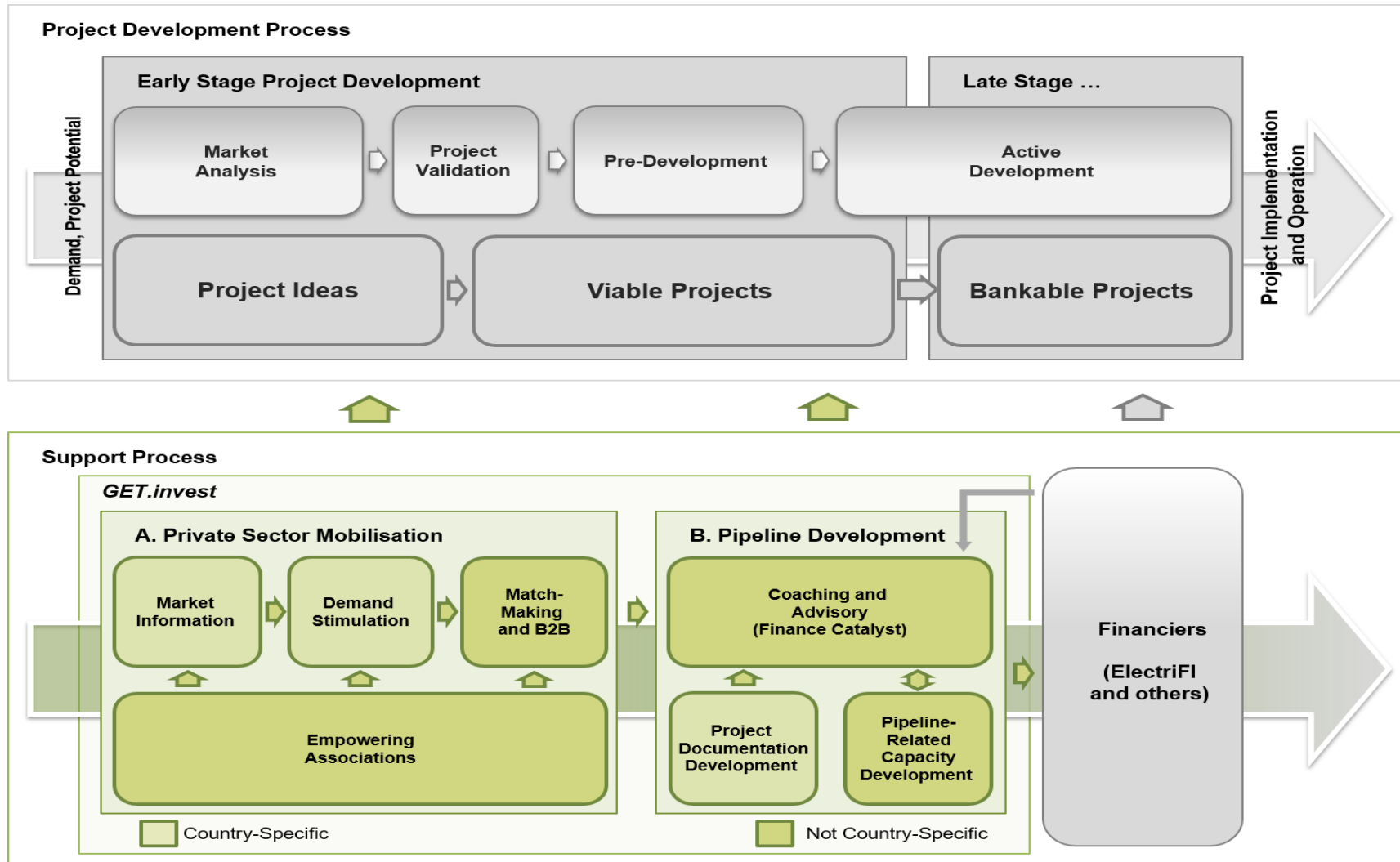


## Project Examples – EnDev, GET.pro, Bilateral Programmes





# Project Example GET.pro: Investment mobilization approach

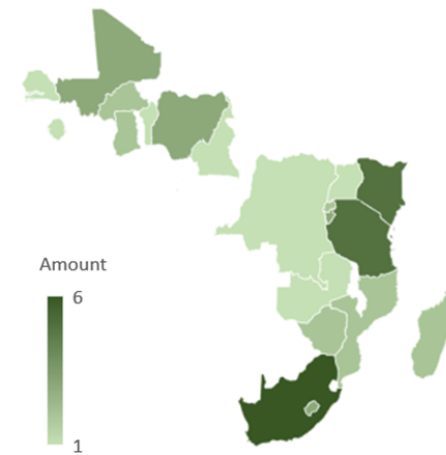
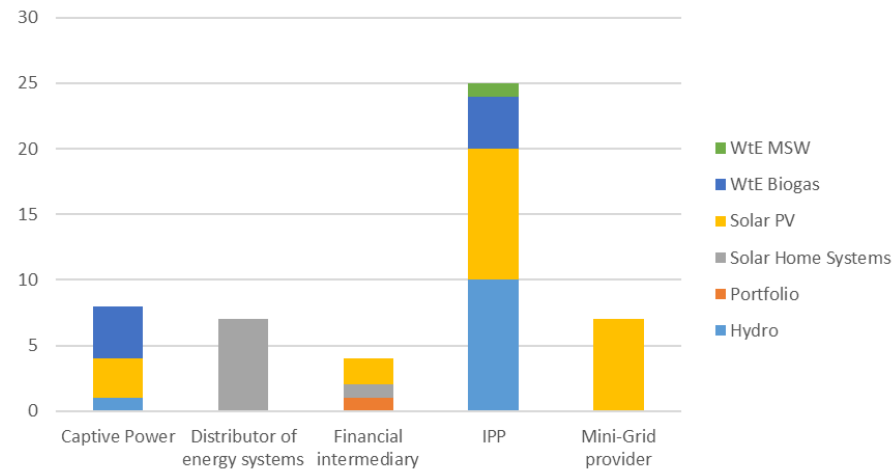


<https://www.africa-eu-renewables.org/finance-catalyst/>



## Activity Highlight 2 – Finance Catalyst ctd.

- Since 2016, Finance Catalyst has received 330+ applications
- Currently, 51 projects receiving assistance



- 17 projects already successfully introduced to financiers



## Promotion of Solar-Hybrid Mini-Grids in Kenya



- Focus: remote rural areas
- Aim: Promote the development of greenfield solar-hybrid mini- and micro-grids
- Main objective: contribute to cost-effective and sustainable power supply in rural areas
- Partner institutions: MoEP, REA, ERC, KPLC



**KfW**

- 15 m Euro



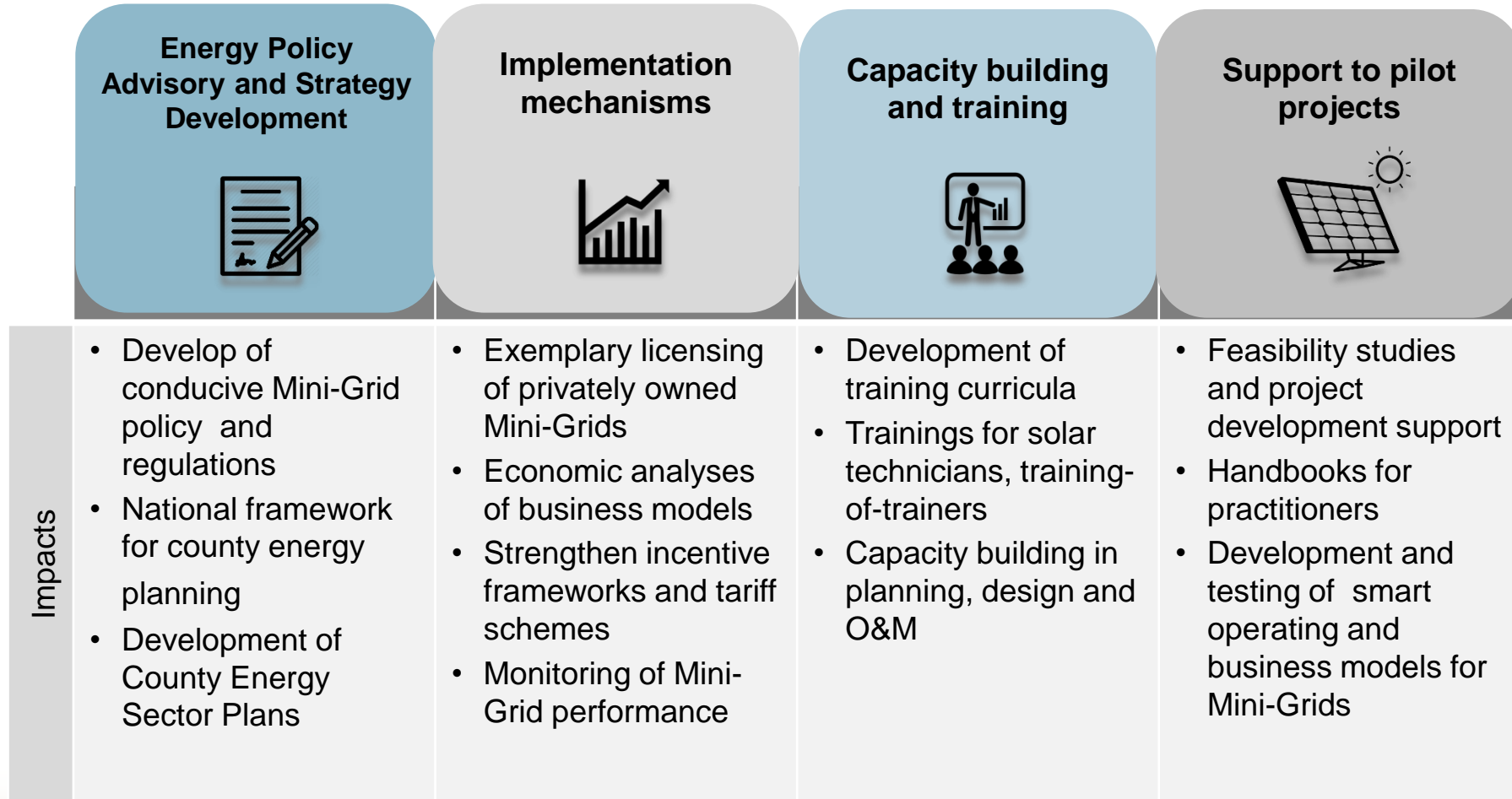
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- 7.5 m Euro



## DKTI Programme “Promotion of Solar-Hybrid Mini-Grids” in Kenya

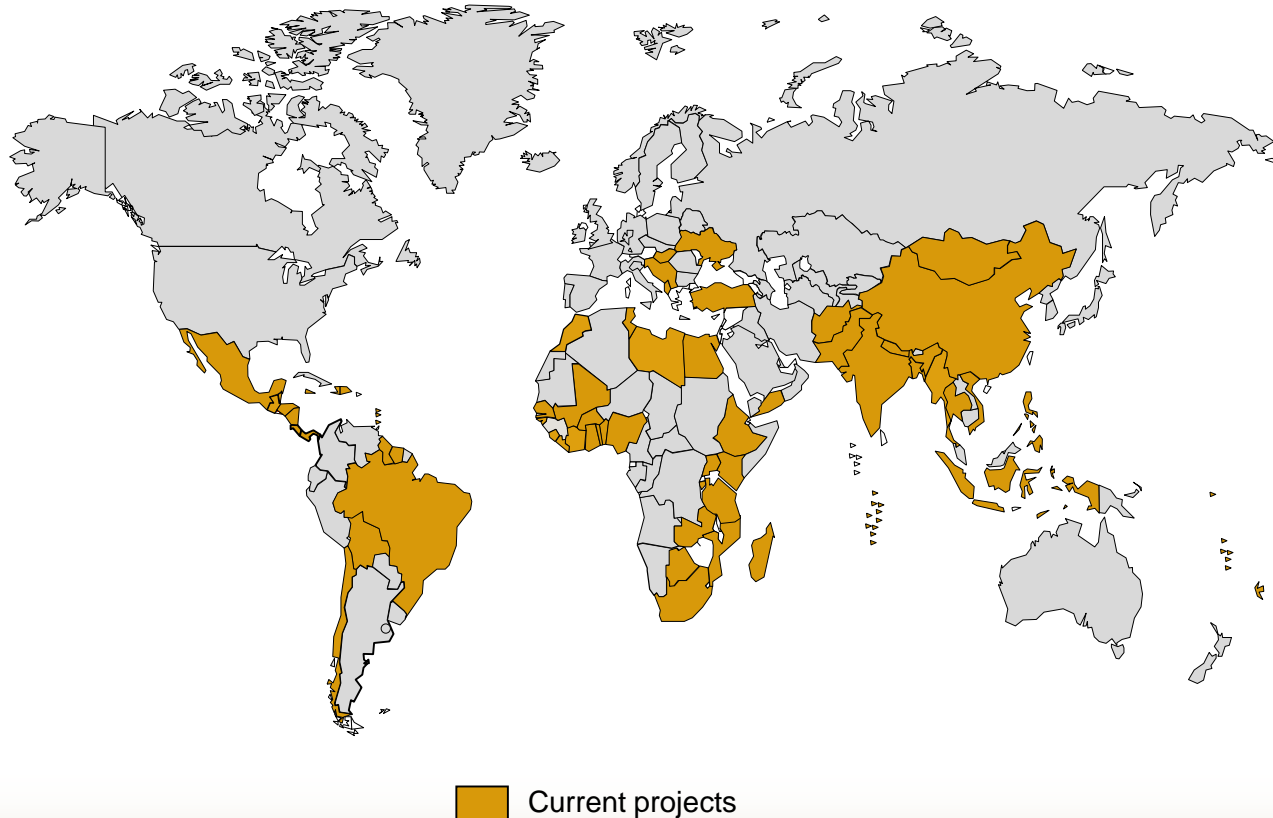
Multi-level approach:







## Ongoing GIZ Programs to support the energy: GIZ Portfolio world wide (not exclusively off-grid)



**GIZ worldwide  
energy projects: 170  
Volume: EUR 750 m.**

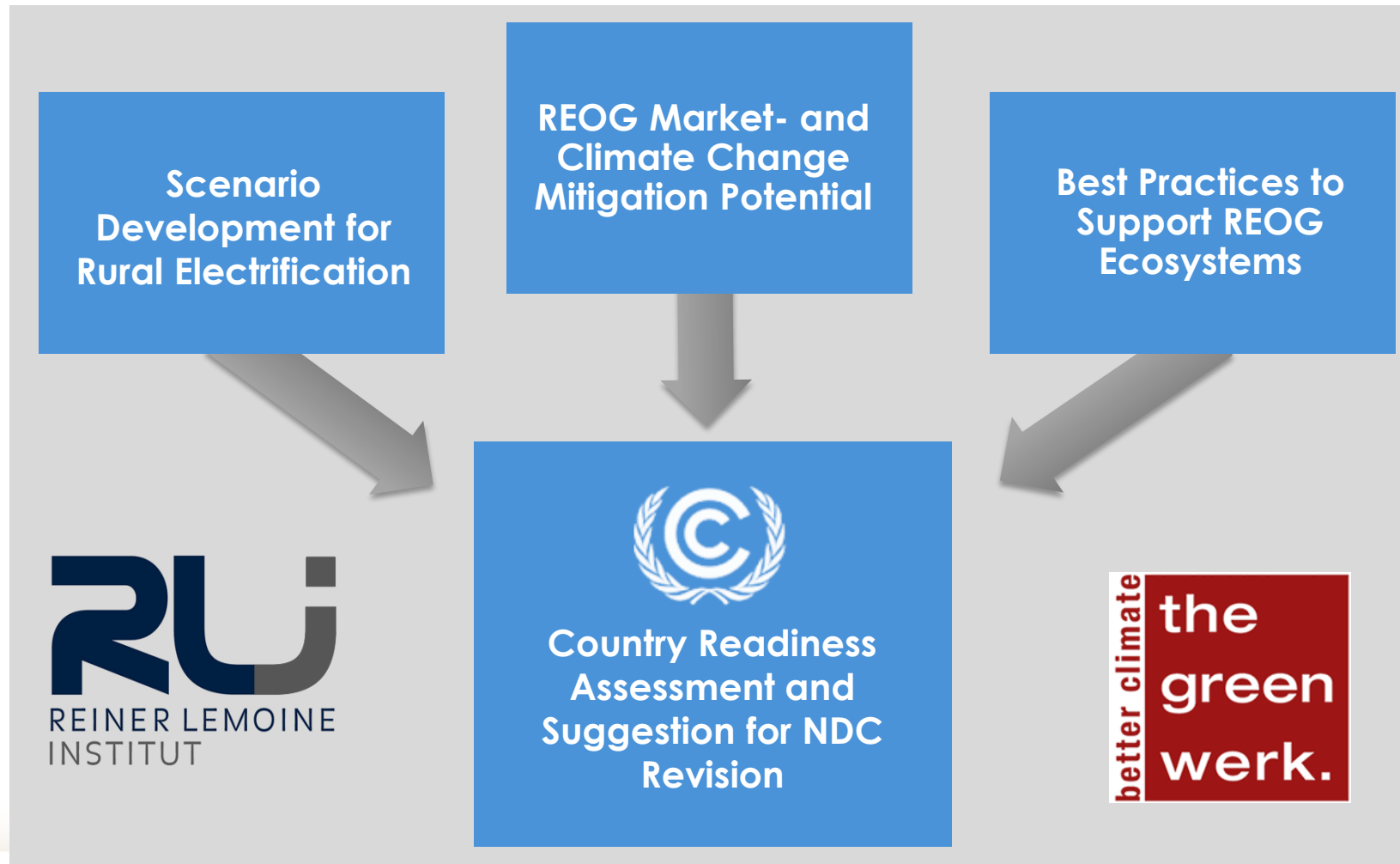
- Africa: 12 %
- Asia: 30 %
- Europe: 17 %
- Latin America: 18 %
- MENA region: 12 %
- Trans-regional: 10 %



**Side Event Tomorrow:  
12:30 – 14:00**

**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

## Renewable Energy Off-grid Components of NDCs and their Market and Climate Change Mitigation Potential





# Thank you!

**Stefan Mager**

Strategies for renewable energy for climate protection in developing countries

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## GET.invest „Market Segments“ / Technologies

| On-Grid Electricity   | Off-Grid Electricity   | Non-Electricity  |
|---|--|--|
| <p><i>IPP (large)</i></p>  <p>✗</p>                      | <p><i>Mini-Grids</i></p>  <p>✓</p>                  | <p><i>Household Cooking Energy</i></p>  <p>?</p>  |
| <p><i>IPP (small)</i></p>  <p>✓</p>                      | <p><i>Solar Home / Inst. Systems</i></p>  <p>✓</p>  | <p><i>Commercial Thermal Energy</i></p>  <p>?</p> |
| <p><i>Commercial &amp; Industrial E.</i></p>  <p>✓</p> | <p><i>Solar Lighting / Lanterns</i></p>  <p>?</p> | <p><i>Liquid biofuels</i></p>  <p>✗</p>         |



## Why looking at decentralised renewable energy

- The big, centralized energy companies are struggling with a variety of internal problems.
- The utilities are unable to ensure SDG 7 achievement.
- The utilities have little interest in investing in rural areas.



Energy supply must be driven by broad involvement of the people, by small and medium-sized companies, municipalities, cooperatives, and other public associations.

Broad initiatives are needed to ensure reliable and affordable electricity supply in rural areas

**7** AFFORDABLE AND  
CLEAN ENERGY

