

»» Input to the panel discussion „From resource assessment to bankable projects“

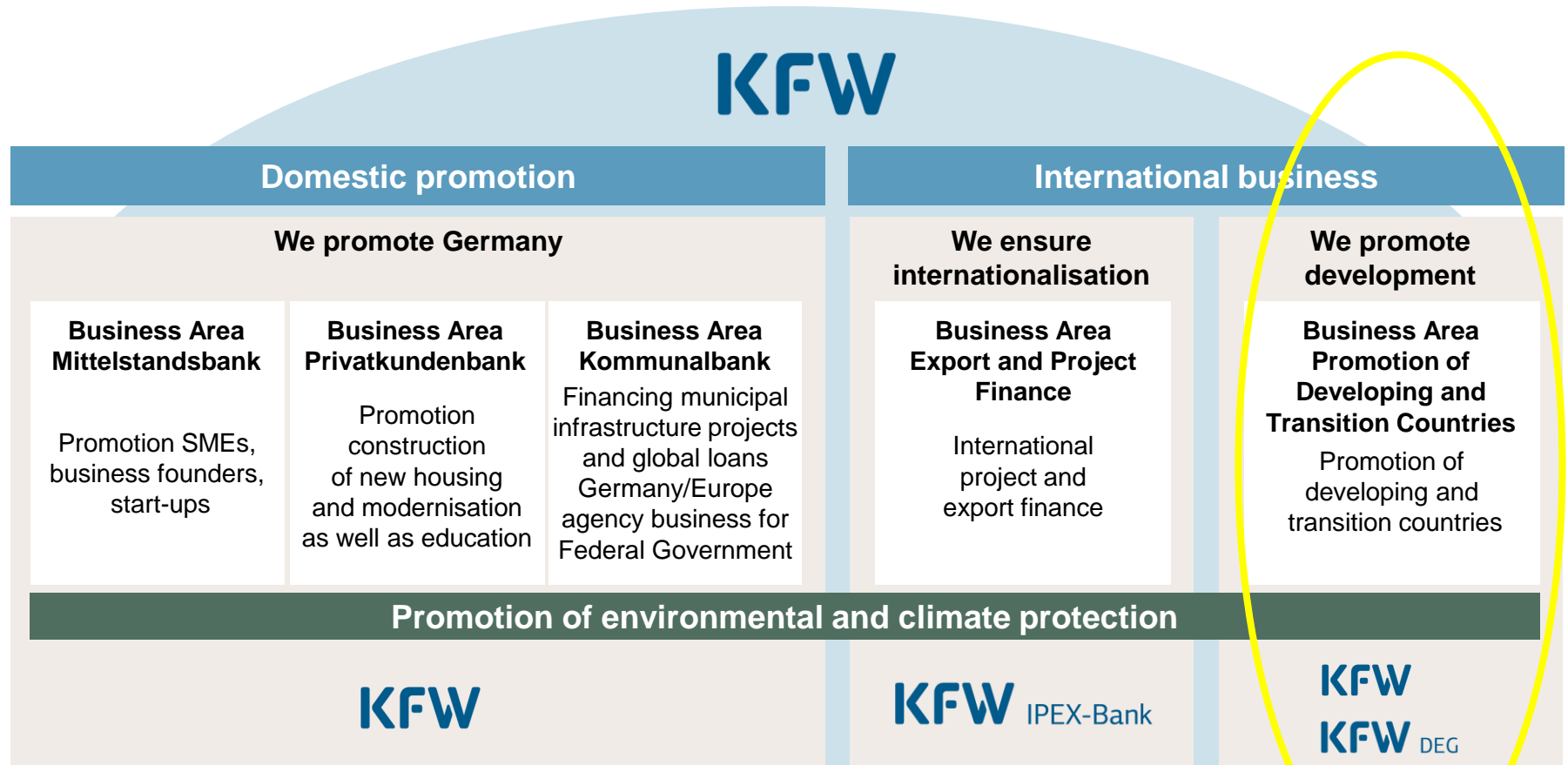
Florian Ziegler

IRENA, 22nd of June 2013

Bank aus Verantwortung

KFW

»» KfW Banking Group



»» Local Presence



October 2012

»» Core Competencies of KfW Entwicklungsbank

We provide more than money – our core competencies are:

1. Climate and environment protection

We are the world's largest financier of renewable energies in developing countries.

2. Financial sector development

We are world leaders in the area of financial system development and microfinance.

3. Water

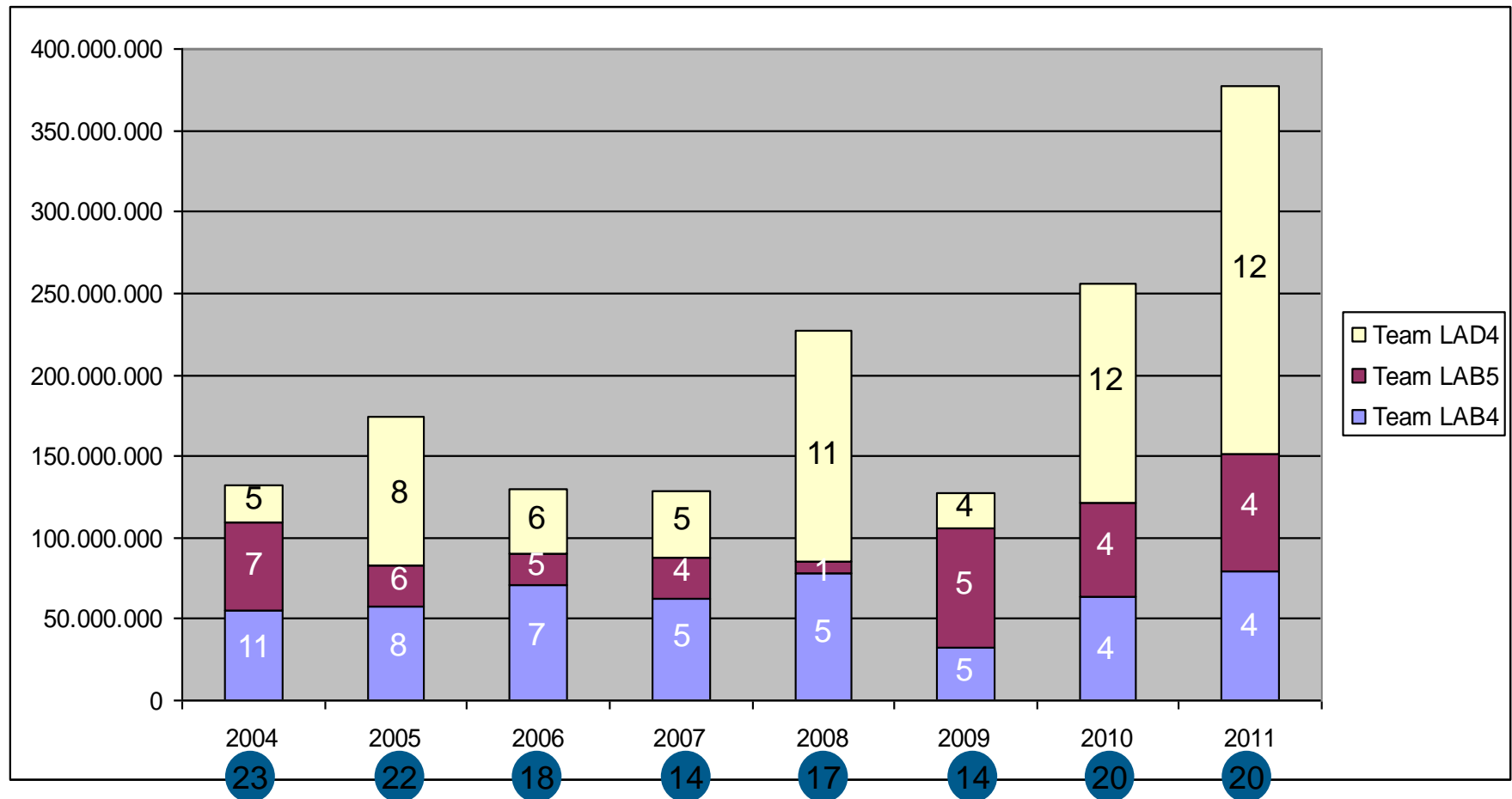
We are one of the most important suppliers of expertise and the world's third largest bilateral donor in the water sector.

4. Development research

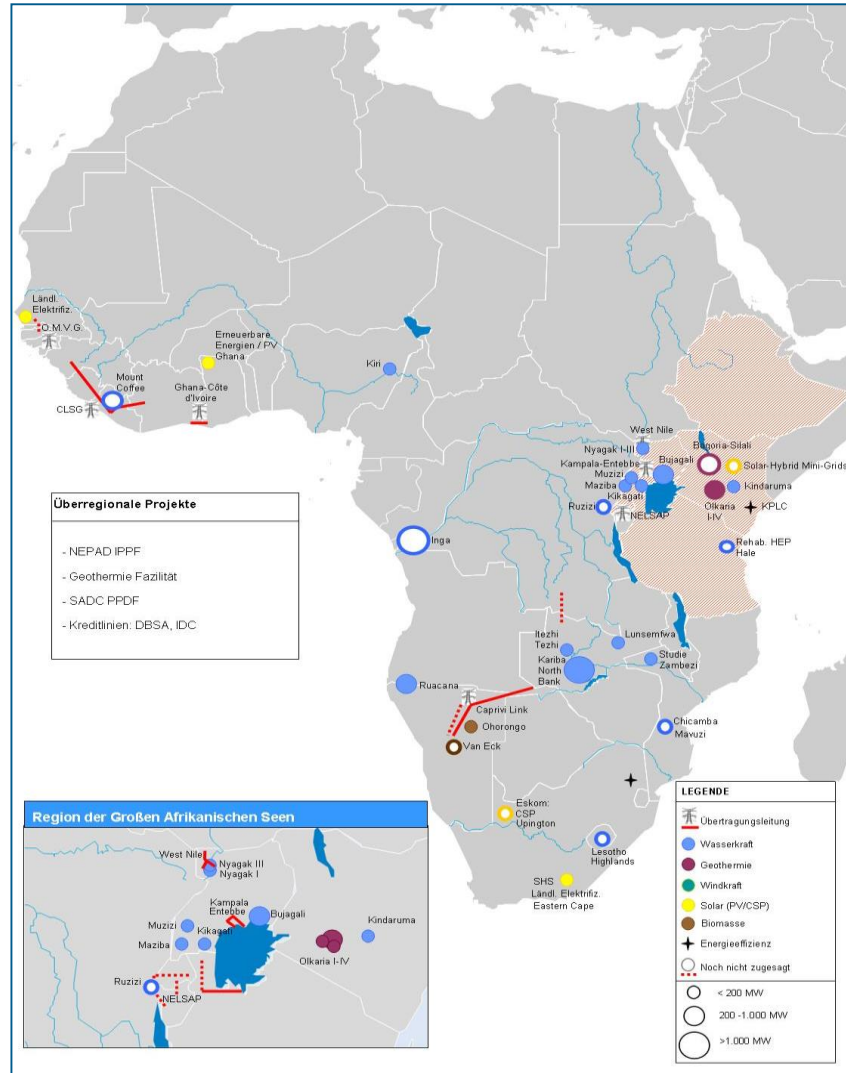
We promote interaction and synergies between scientific research and practice.



»» Growing commitment to energy infrastructure development in Africa – 1 –



»» Growing commitment to energy infrastructure development in Africa – 2 –



»» Key Prospects and Challenges for Future Investments

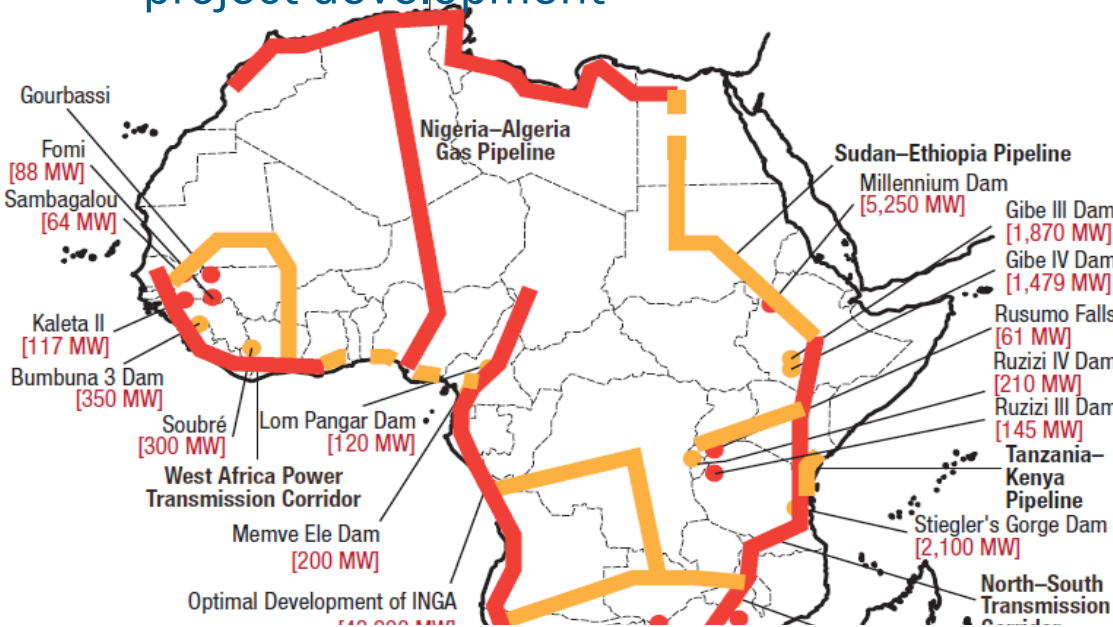
PROSPECTS

- › Clear evidence of relevance of energy investments for mitigation of / adaptation to climate change as well as economic and social development
- › Huge investments requirements in SSA, due to decades of underinvestment and significant and sustainable economic growth (“African Lions”)
- › Sectoral framework conditions in some key countries have improved considerably (sector reform, private sector access, etc.)

CHALLENGES

- › Pipeline of well-prepared projects almost exhausted – new efforts required
- › Many project types (especially access to energy) not viable as loan operations – grants required
- › Remaining sector policy issues in some key countries
- › Limited / non – recourse structures extremely time consuming
- › Requirement of sovereign guarantees and loan guarantees, especially in post-HIPC countries for loan operations (EAC rarely an option)
 - › World Bank PRG attractive but cumbersome and difficult to obtain
 - › Commercial providers not available/ viable

»» A lot of good ideas – only a few projects well prepared => need for project development



drilling to support the 400MW is scheduled for *telligent's* East African at other projects on (800M by 2021) and 800M by 2019) – for initial infrastructure to has already called for developers of both

each the 2,596MW aria in the Naivasha ria I and II by GDC 014, for which steam ransmission contracts nother 280MW by asibility study is under :MW from 2014, for date: Kenya, below, for

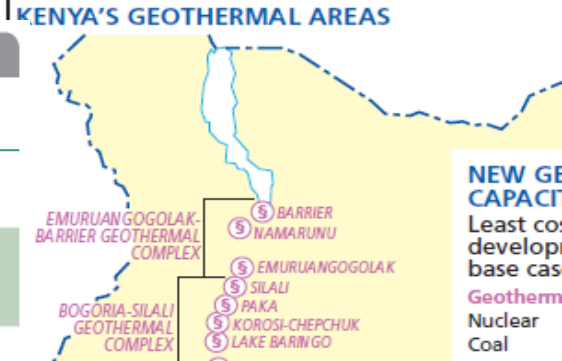
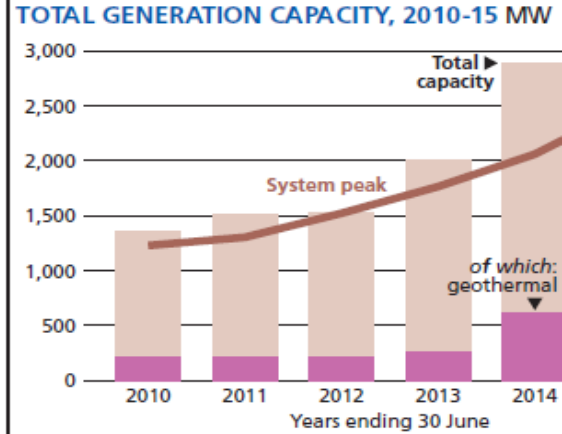
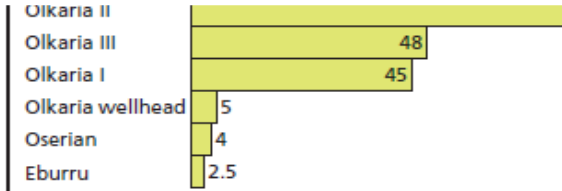
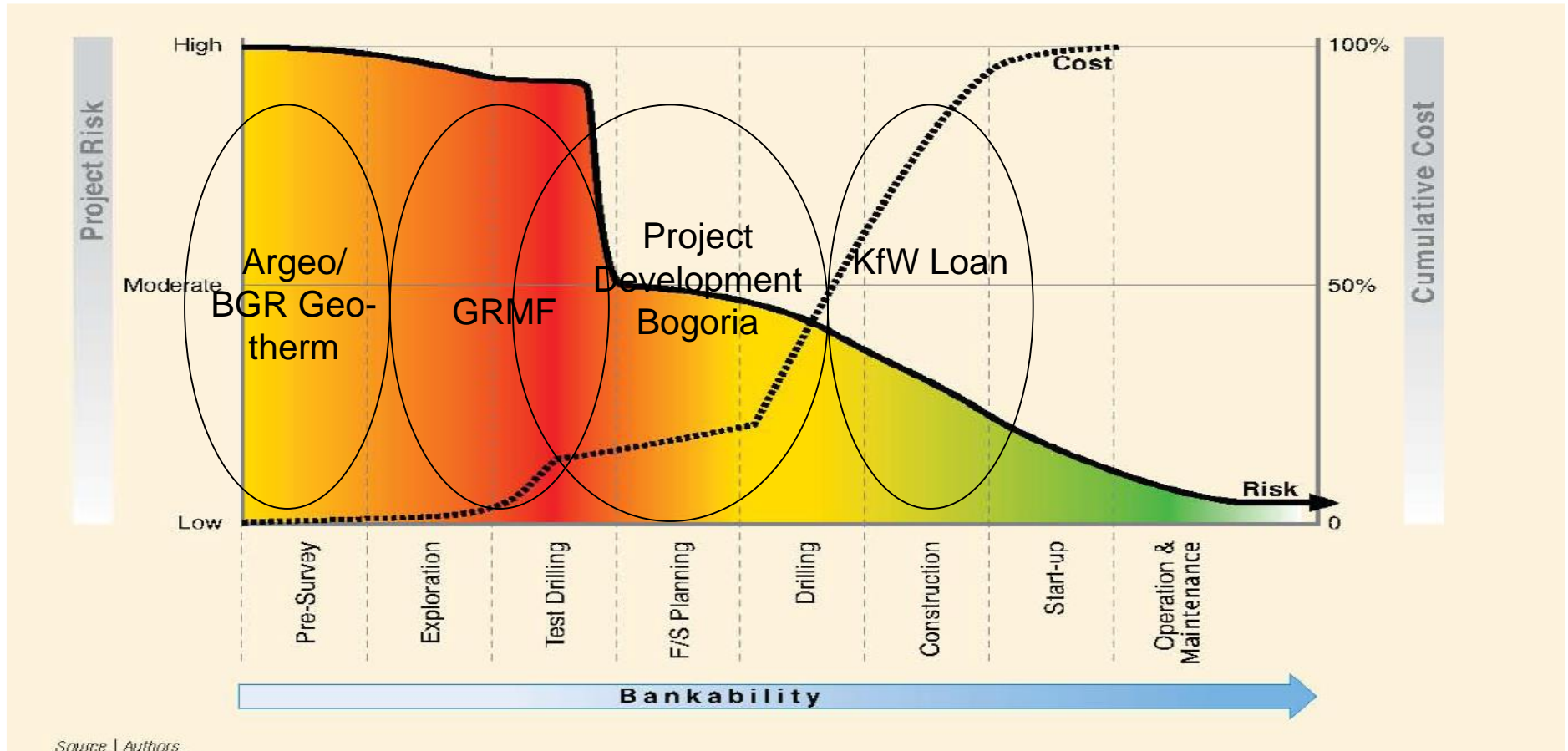


Table 5.1 PIDA PAP—energy sector

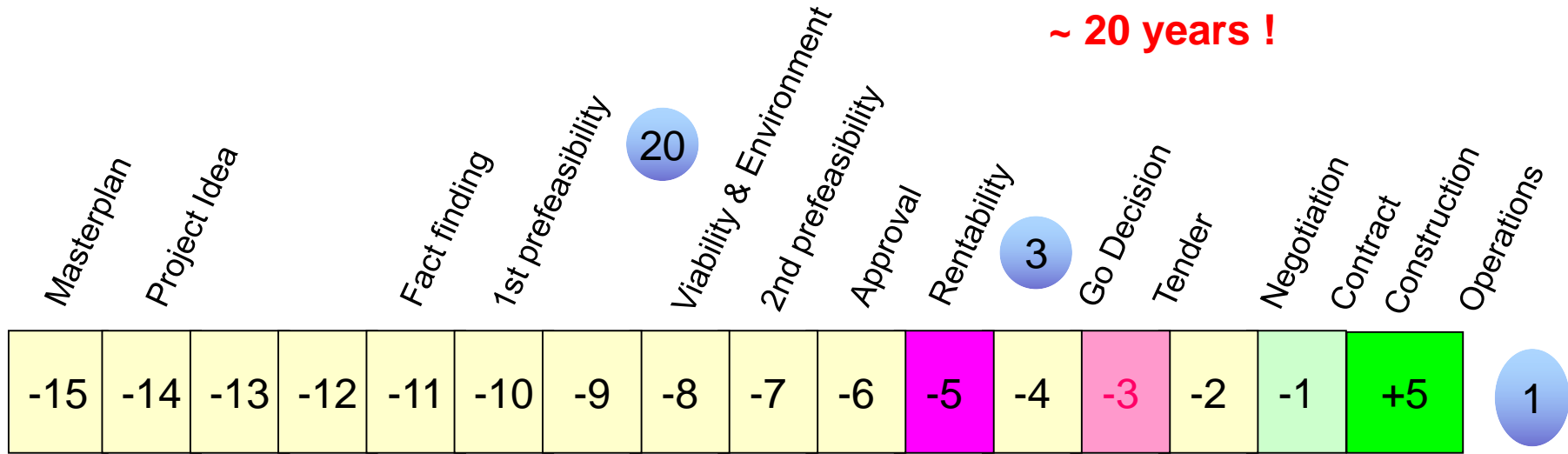
Project	Description	Stage	Cost (US\$ millions)	Countries	REC	Region
1. Great Millennium Renaissance Dam	Develop a 5,250 MW plant to supply domestic market and export electricity on EAPP market	S4	8,000	Ethiopia, Nile basin	COMESA/IGAD	Eastern
2. North–South Power Transmission Corridor	8,000 km line from Egypt through Sudan, South Sudan, Ethiopia, Kenya, Malawi, Mozambique, Zambia, Zimbabwe to South Africa	S2	6,000	Kenya, Ethiopia, Tanzania, Malawi, Mozambique, Zambia, Zimbabwe, South Africa	COMESA/EAC/SADC/IGAD	Southern
3. Mphamda-Nkuwa	Hydroelectric power plant with a capacity of 1,500 MW for export on the SAPP market	S2	2,400	Mozambique, Zambezi basin	SADC	Southern
4. Lesotho HWP phase II hydropower component	Hydropower programme for power supply to Lesotho and power export to South Africa	S2	800	Orange-Senqu River Basin	SADC	Southern
5. Inga III Hydro	4,200 MW capacity run of river hydropower station on the Congo river with eight turbines	S2	6,000	DRC Congo River	ECCAS	Central
6. Central African Interconnection	3,800 km line from the DRC to South Africa through Angola, Gabon, Namibia and to the north to Equatorial Guinea, Cameroon	S1	10,500	South Africa, Angola, Gabon, Namibia, Ethiopia	ECCAS	Central

»» Project development – example KfW - geothermal



Source | Authors.

>>> Time frame for the development of a large hydro power project



Number of projects

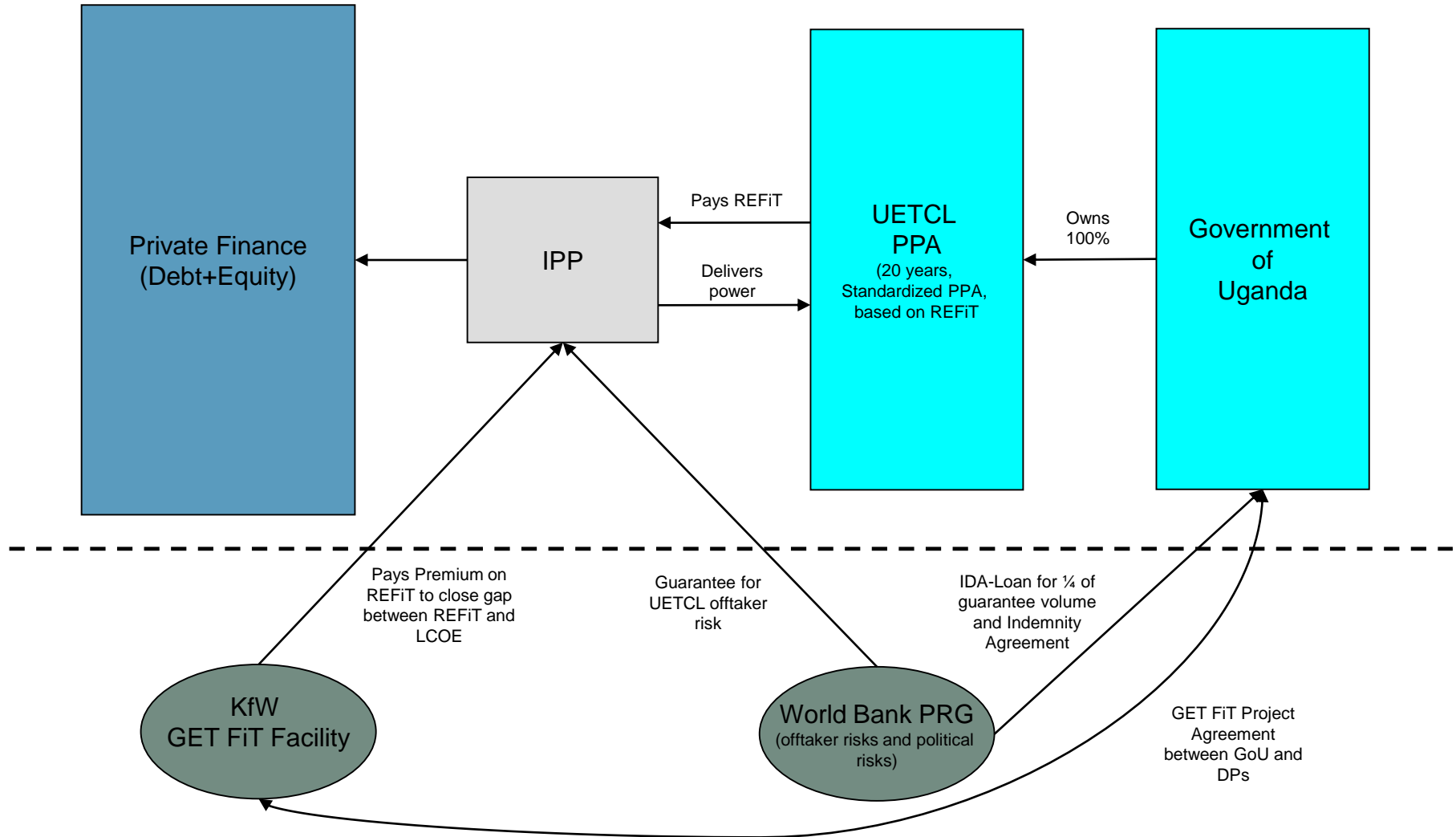
How can we reduce this long time frame ?

»» KfW – Uganda GET FiT – An Innovative Approach

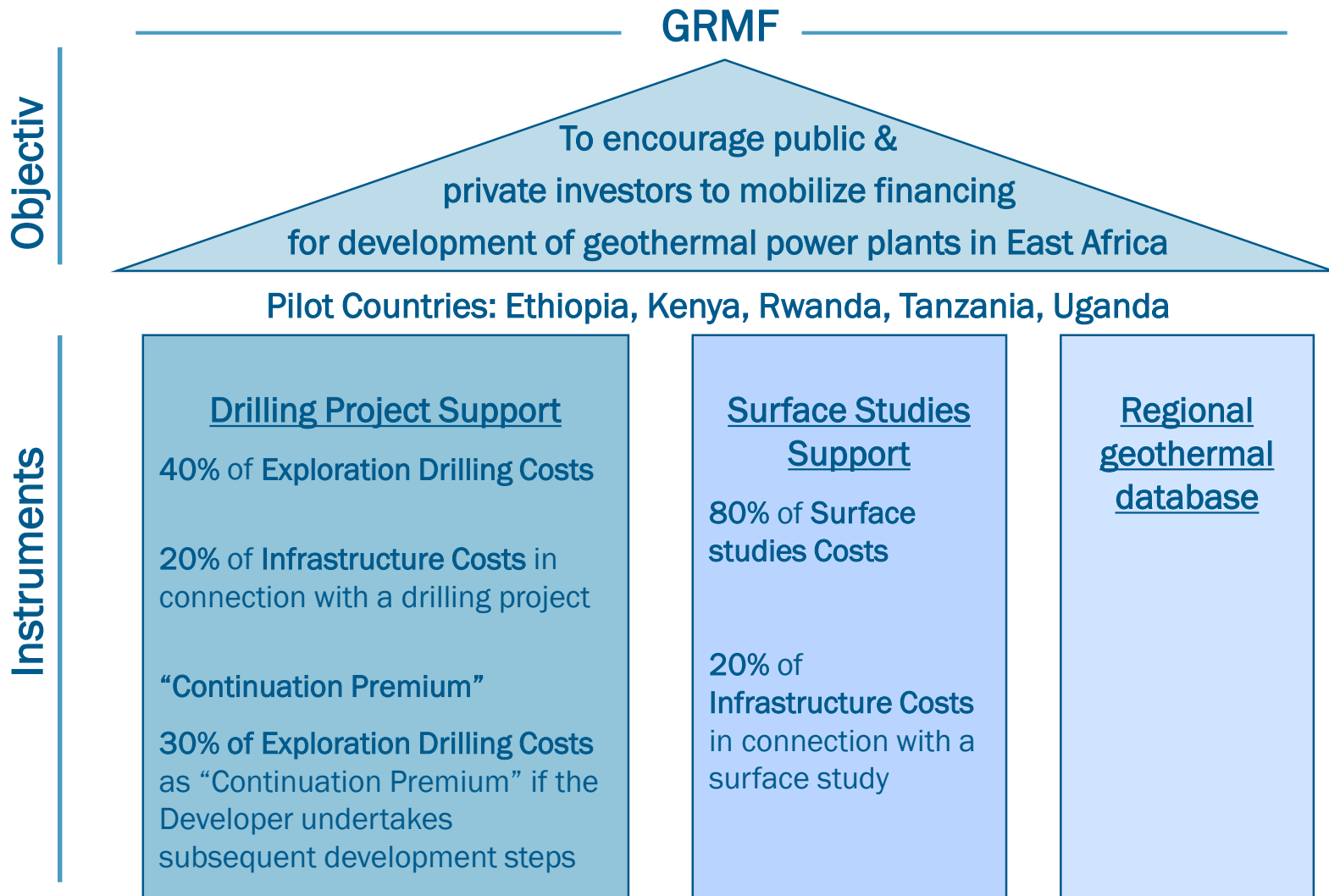
Three Components

Premium Payment Mechanism	Results-based premium payment on top of REFiT to incentivize developers/ financiers to enter the market
World Bank / MIGA Guarantees	Partial Risk Guarantee offered by the World Bank / MIGA to address political and off-taker risks
Private Debt/ Equity Financing	Private sector financing, collaboration between Deutsche Bank and local commercial banks
Technical Assistance to the Regulator	
Technical Assistance for Review of the Standardized PPA	

»» KfW – Uganda GET FiT Implementation Structure

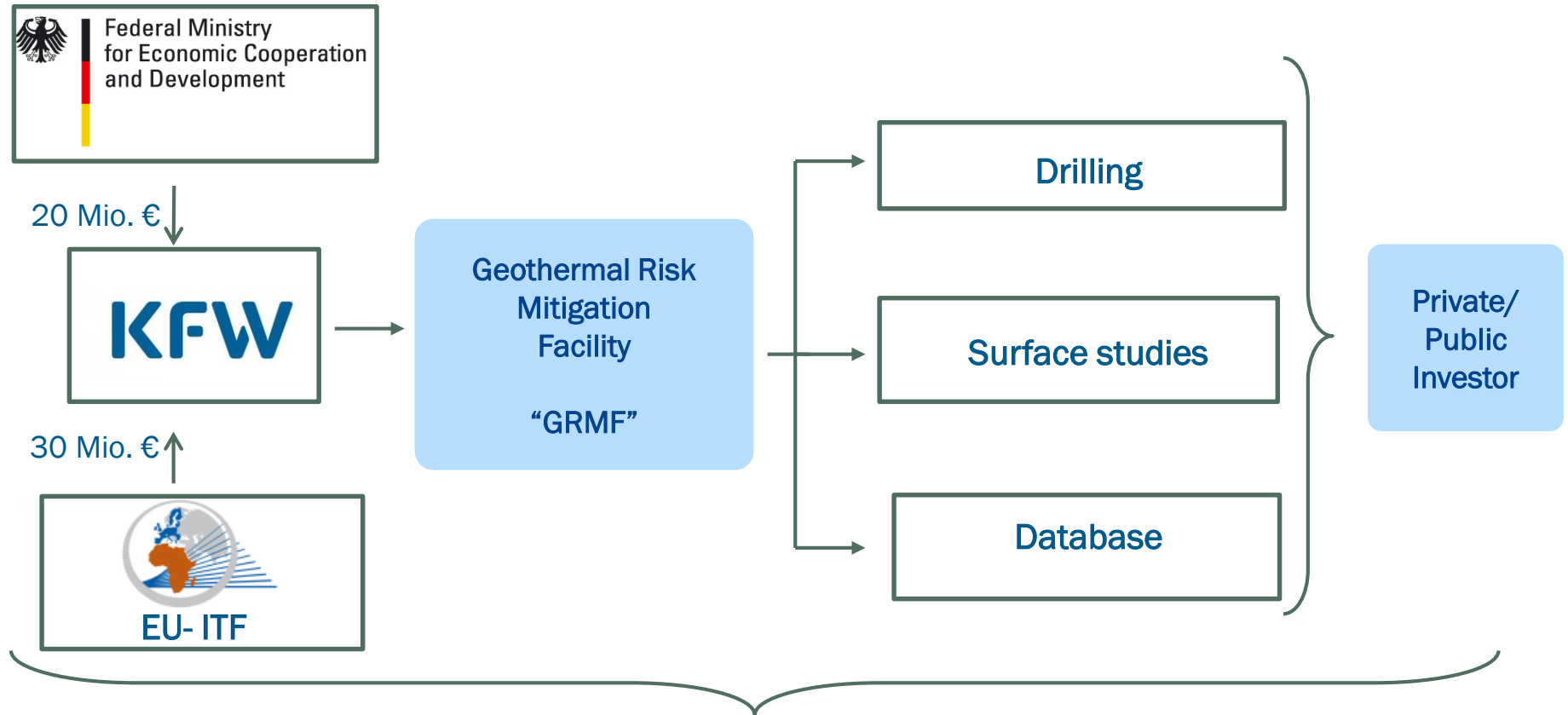


»» Concept of the AU-KfW Geothermal Risk Mitigation Facility



»» Concept of the Geothermal Risk Mitigation Facility

Project Design

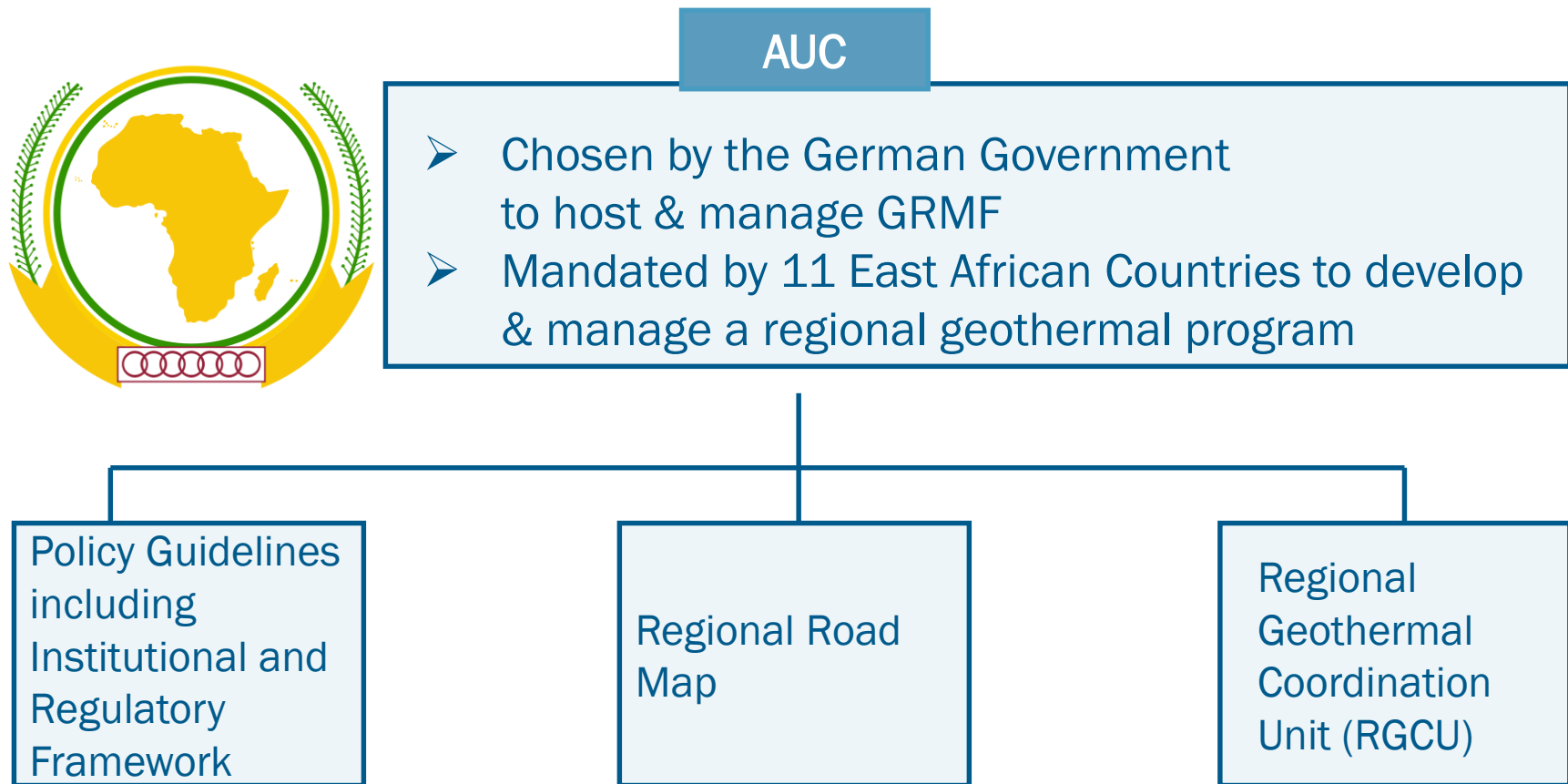


AUC Regional Geothermal Coordination Unit (RGCU)

- Information & Coordination of Countries, Developers, Donors etc.
- Evaluation of Geothermal Projects for GRMF

»» Concept of the Geothermal Risk Mitigation Facility

AUC's role & mandate



»» Application Procedure

Assessment Criteria



Criteria

- 1 Legal Entity
- 2 Planned activity/project
- 3 Status of Concessions, licenses and permits
- 4 Status of geological, geochemical and geophysical studies
- 5 Infrastructure (already available & necessary)
- 6 Work Plan
- 7 Financing Plan
- 8 Offtaker Potential

»»

Thank You for Your Attention!

Florian Ziegler

florian.ziegler@kfw.de

+49-69-7431-8706