Rödl & Partner

Globally active

Risk Mitigation Funds – Examples GRMF / GDF

Kai Imolauer | Mayors‘ Geothermal Club, Budapest | 8-9 October 2015

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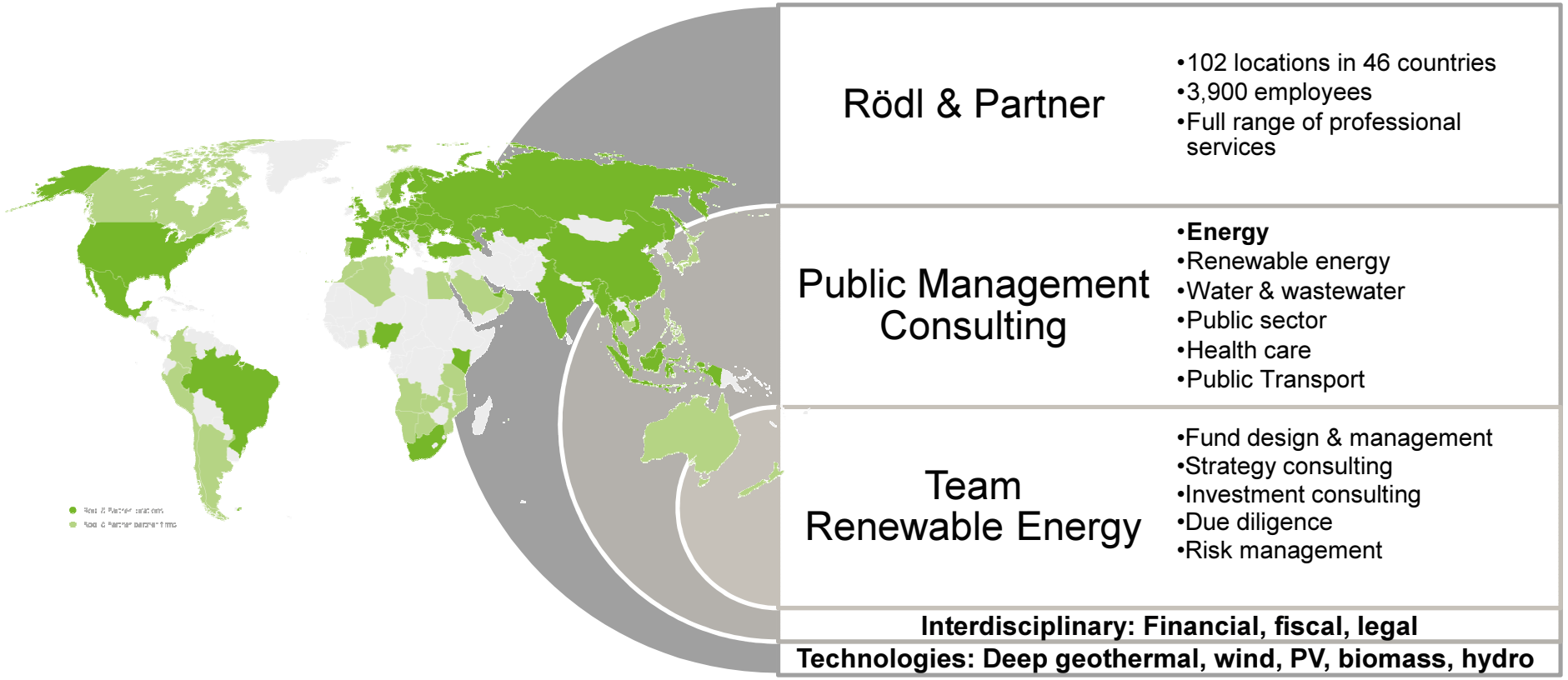
Who is Rödl & Partner?



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Risk Mitigation Funds – Our Track Record

Client	Deliverable
Geothermal Pilot Project Unterhaching	▪ Development of the first insurance for drilling exploration risk worldwide signed with Munich Re
Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	▪ Development of a concept to cover the exploration risk of geothermal deep drillings in Germany
KfW Development Bank	▪ Development of a risk insurance model for discovery risk in Indonesia
European Union	▪ GEOFAR - Development of financial and government support mechanisms to reduce barriers to entry for early stage geothermal projects by means of a subsidy and guarantee fund (Intelligent Energy)
African Union Commission (via KfW)	▪ Fund management for the Geothermal Risk Mitigation Facility – East Africa (GRMF) for surface studies and exploration drillings.
Corporación Andina de Fomento (CAF via KfW)	▪ Development of a comprehensive risk mitigation fund concept for discovery risk in Latin America (“GDF”)

Selection of Geothermal Support Mechanisms – Worldwide

Geotherm II
GDF
GeoFund
IGEF
BNEF
GSDP
MIRIG
GRMF
NER 300
Geofund 2
ACEF
GGDP
EAGER
ARGeo
Olkaria IV
DPSP 1
REP

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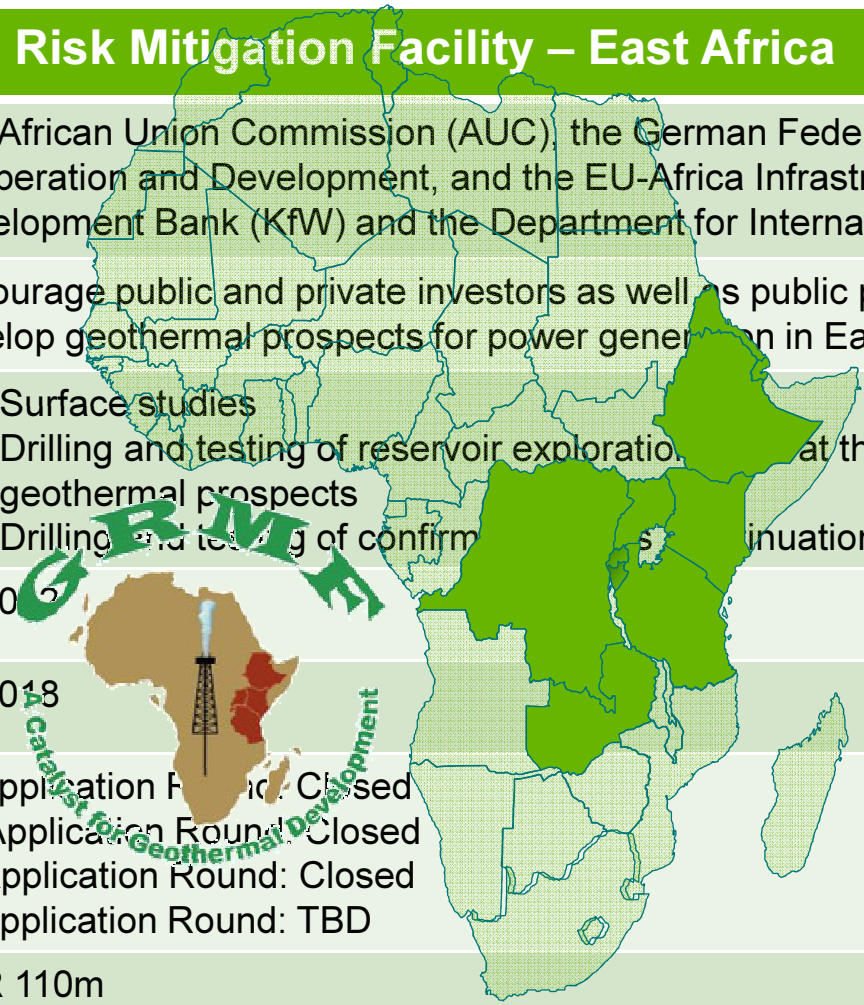
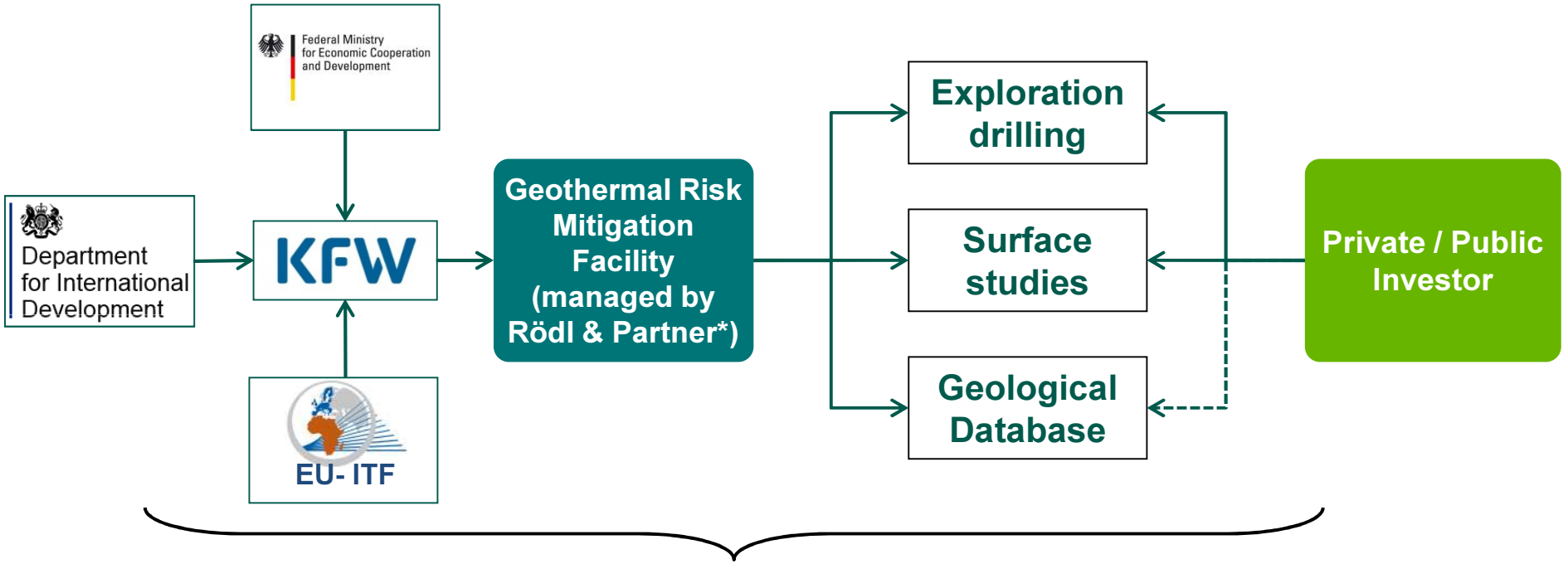
What is the GRMF?

GRMF = Geothermal Risk Mitigation Facility – East Africa	
Established by	The African Union Commission (AUC), the German Federal Ministry for Economic Cooperation and Development, and the EU-Africa Infrastructure Trust Fund via KfW Development Bank (KfW) and the Department for International Development (DFID).
Objective	Encourage public and private investors as well as public private partnerships to develop geothermal prospects for power generation in Eastern Africa
Grants for two types of activity	• Surface studies • Drilling and testing of reservoir exploration wells at the most promising geothermal prospects • Drilling and testing of confirmation wells (continuation premium)
Start Date	03/2015
End Date	04/2018
Current Stage	1st Application Round: Closed 2nd Application Round: Closed 3rd Application Round: Closed 4th Application Round: TBD
Facility Size	EUR 110m



What is the Structure of the GRMF?

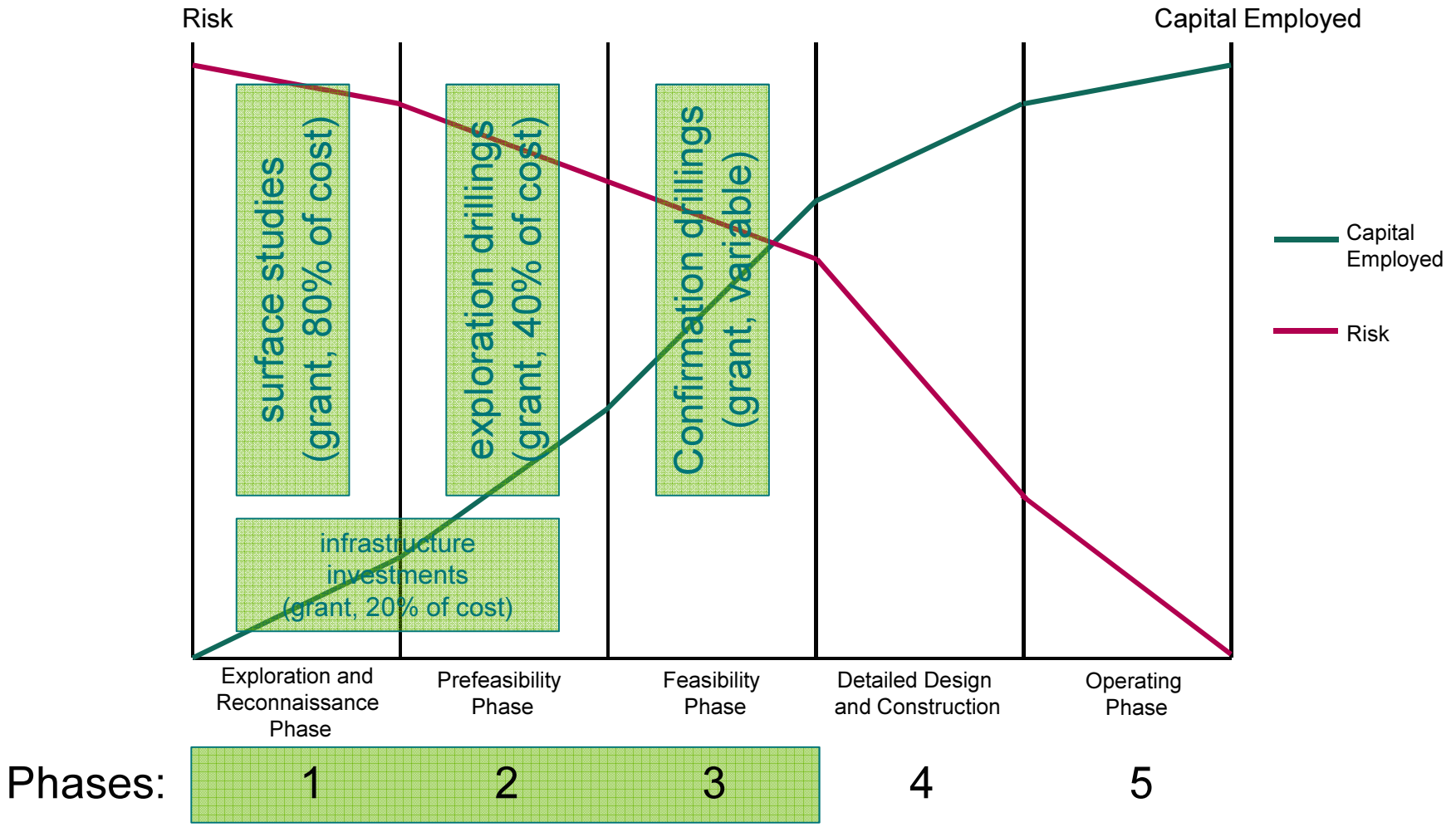


AUC Regional Geothermal Coordination Unit (RGCU)

- Information & coordination of countries, developers, donors, etc.

*technical advisory provided by Mannvit, Iceland

What are the Instruments of the GRMF?



What is the Objective of the GRMF?

Initial Countries: Ethiopia, Kenya, Rwanda, Tanzania, Uganda
Additional Countries since 2013: Burundi, Comoros Islands, Djibouti, D.R.Congo, Eritrea, Zambia

What are the Instruments of the GRMF?

Instruments

Drilling Project Support

- **40%** of **Exploration Drilling Costs**
- **20%** of **Infrastructure Costs** in connection with a drilling project
- **Continuation Premium:**

The lesser of **30%** of the drilling program grant or of the developer's share of **Exploration Drilling Costs** as Continuation Premium for subsequent development steps

Exploration Drilling at geothermal prospects once the optimal locations for the drilling and testing of reservoir confirmation wells have been determined.

Surface Studies Support

- **80%** of **Surface studies Costs**
- **20%** of **Infrastructure Costs** in connection with a surface study

Surface Studies to determine the optimal location for reservoir confirmation wells at geothermal prospects that have previously been extensively studied are eligible for funding.

Regional Geothermal Database

Not defined how setup and cooperation with others will be organized

Visit
www.grmf-eastafrica.org
for further information!

GRMF - concept

Objective:

Encourage **public & private investors**
and to mobilize financing for development of
geothermal power plants in East Africa

Initial Countries: Ethiopia, Kenya, Rwanda, Tanzania, Uganda
Additional Countries since 2013: Burundi, Comoros Islands, Djibouti, D.R.Congo, Eritrea, Zambia

Instruments

Drilling Project Support

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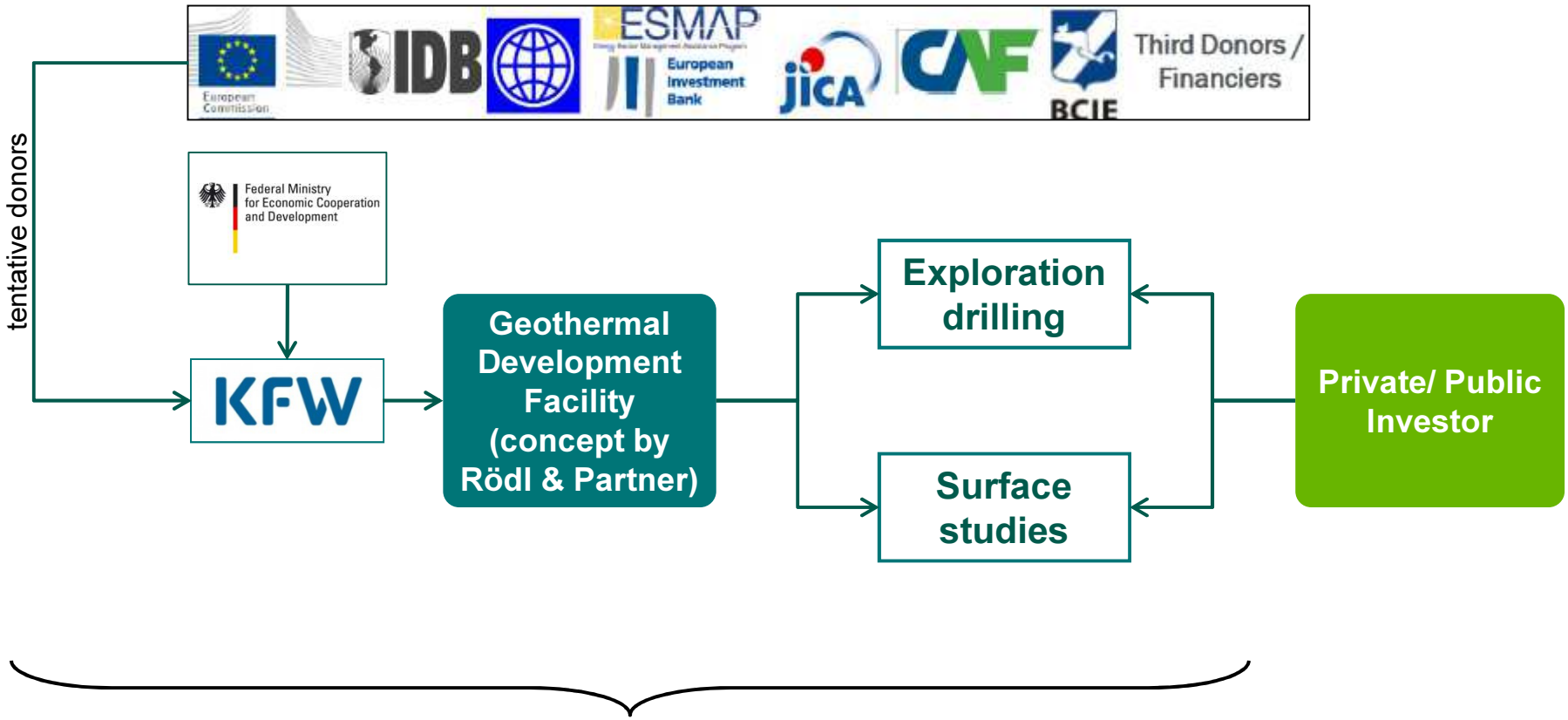
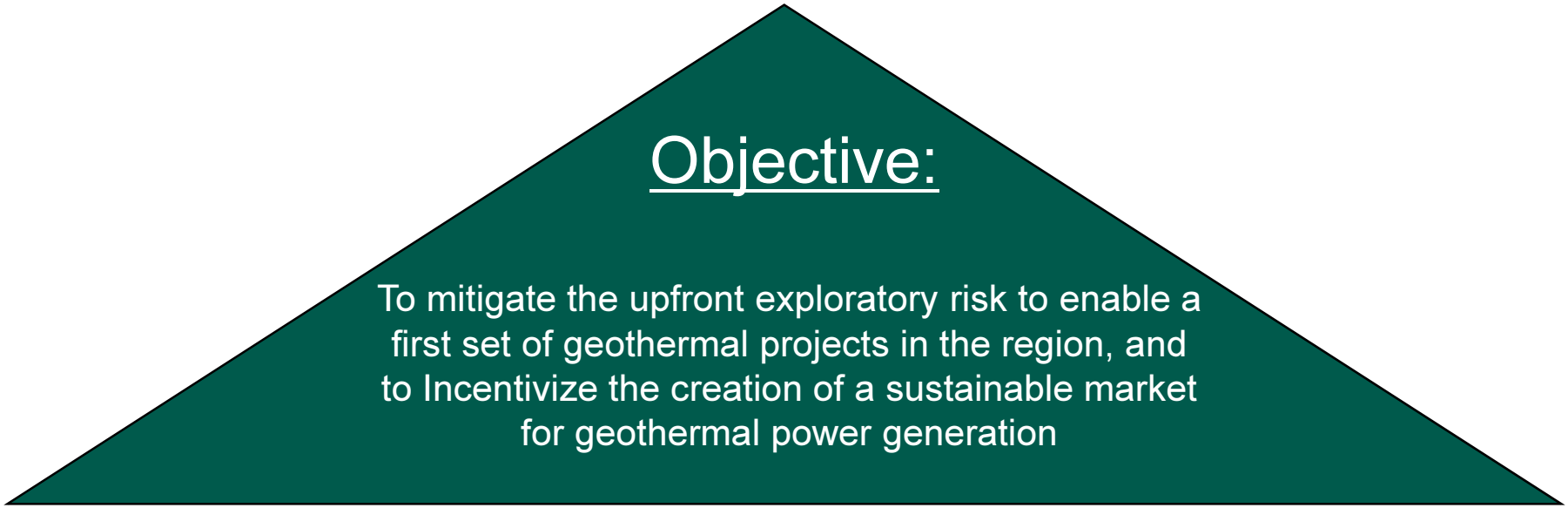
What is the GDF (tentative)?

GDF = Geothermal Development Facility – Latin America	
Established by	German Federal Government, Latin American Investment Facility of the European Union (EU LAIF), Latin American Development Bank (CAF), Inter-American Development Bank (IDB), World Bank (IBRD)
Objective	To mitigate the upfront exploratory risk to enable a first set of geothermal projects in the region, and to incentivize the creation of a sustainable market for geothermal power generation.
Grants for two types of activity	• Surface studies (grant) • Exploration drillings (contingency grant) • Tentative: support for later stage development through financing
Start Date	2016 (tentative)
End Date	2026 (tentative)
Current Stage	Concept Stage
Facility Size	Approx. 45m initial funding commitment

What is the Proposed Structure of the GDF?



What are the Objectives of the GDF?



Target Countries: Central America, Andean Region

What are the Tentative Instruments of the GDF?

Instruments

Surface Studies Support

- **Percentage** of **surface studies cost**
- **capped** at a maximum **pre-determined amount**

Drilling Project Support

- **Percentage** of **exploration drilling costs**
- **two to three exploration wells**
- **Contingency:**
  - **Unsuccessful drilling**: No repayment (=conversion of percentage of project cost into full grant)
  - **Successful drilling**: Repayment of percentage of the contingency grant amount (=conversion of remainder to full grant)

Production Drilling and Construction Support:

- The **repayment** of the remainder of the contingency grant may be **refinanced** at favorable conditions through a **bridge finance instrument**..

GDF - concept

Objective:

To mitigate the upfront exploratory risk to enable a first set of geothermal projects in the region, and to Incentivize the creation of a sustainable market for geothermal power generation

Target Countries: Central America, Andean Region

Instruments

Surface Studies Support

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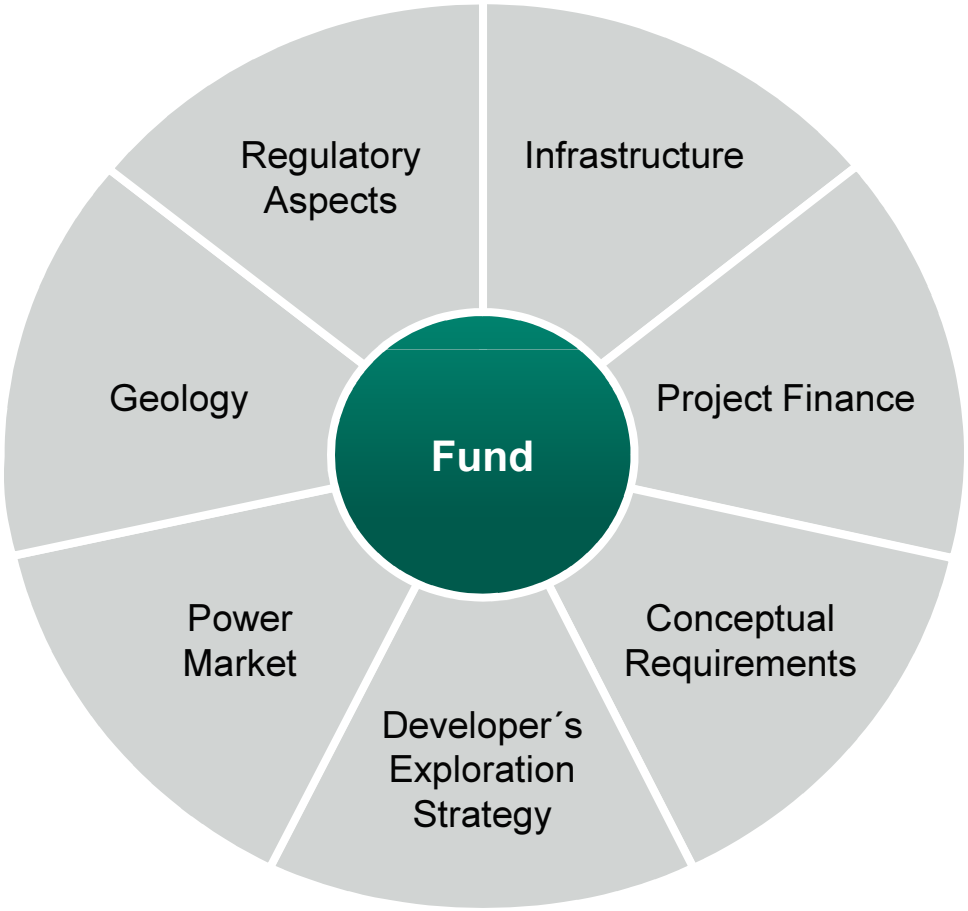
What Factors Influence Fund Design?



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„Each and every person counts“ – to the Castellers and to us.

Human towers symbolise in a unique way the Rödl & Partner corporate culture. They personify our philosophy of solidarity, balance, courage and team spirit. They stand for the growth that is based on own resources, the growth which has made Rödl & Partner the company we are today. „Força, Equilibri, Valor i Seny“ (strength, equilibrium, valour and common sense) is the Catalan motto of all Castellers, describing their fundamental values very accurately. It is to our liking and also reflects our mentality. Therefore Rödl & Partner embarked on a collaborative journey with the representatives of this long-standing tradition of human towers – Castellers de Barcelona – in May 2011. The association from Barcelona stands, among many other things, for this intangible cultural heritage.