



Geothermal Development Facility Latin America

GGDP Roundtable

The Hague, November 20th 2013

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Bank aus Verantwortung

»» Geothermal Energy – Key features



Source: ESMAP 2012

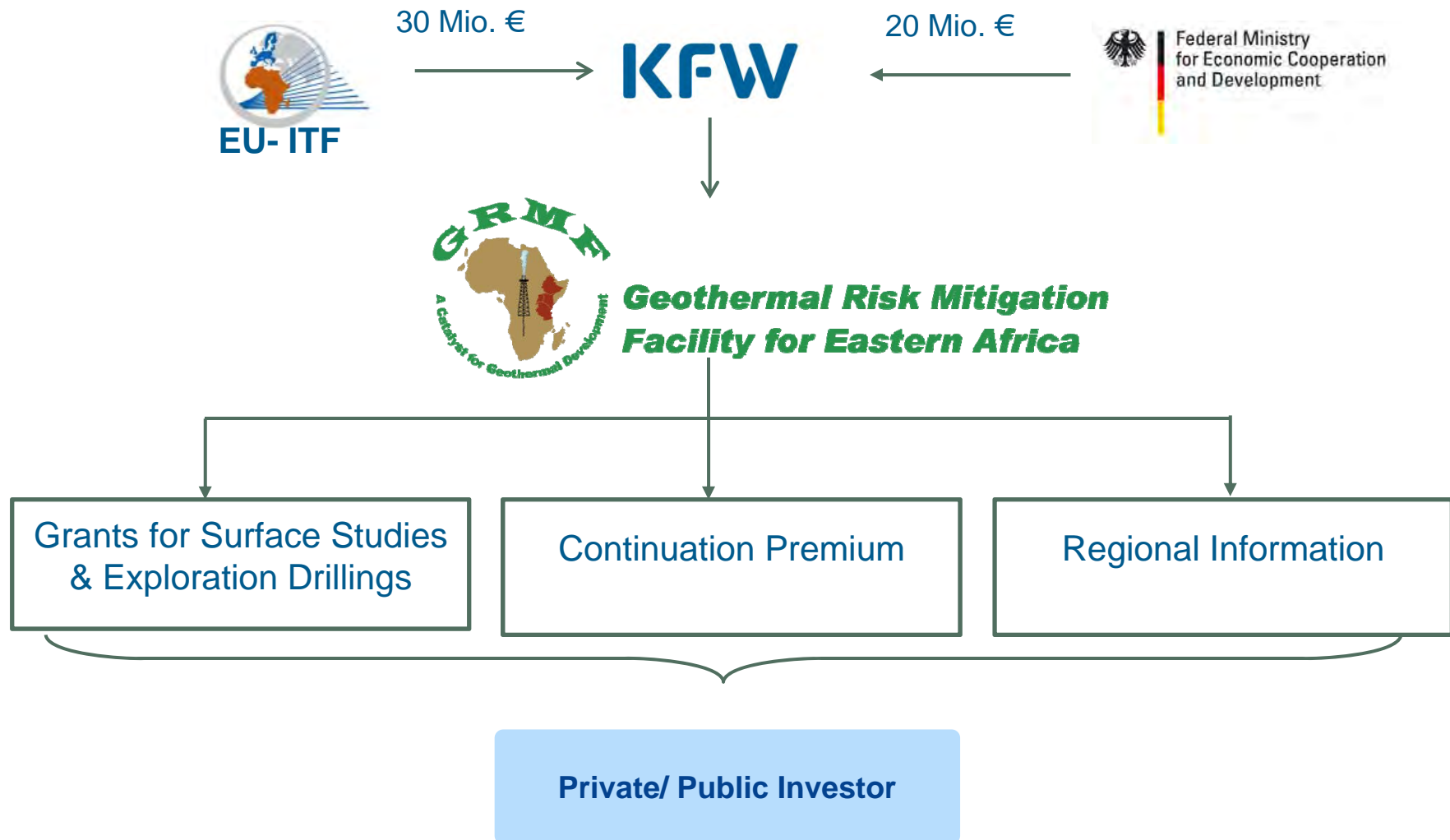
What are the benefits ?

- A proven technology
- A stable source of base-load power
- Very low CO₂ emissions
- Relatively low levelized cost of electricity EUR 0,05-0,10/kWh

What are the challenges?

- Plant size limited by available resource
- Relatively high investment cost of EUR 3-4 Mio./MW
- Considerable Exploratory Risk acts as a serious impediment

»» Geothermal Risk Mitigation Facility East Africa



»» Geothermal Risk Mitigation Facility East Africa – Status Quo

Successful first application round in 2012/2013

Expression of Interest

- 11 expressions of interest
- More than 50 % of applications for drilling projects
- Public, private & public private partnerships
- Institutions and companies from East Africa & int. companies

Application

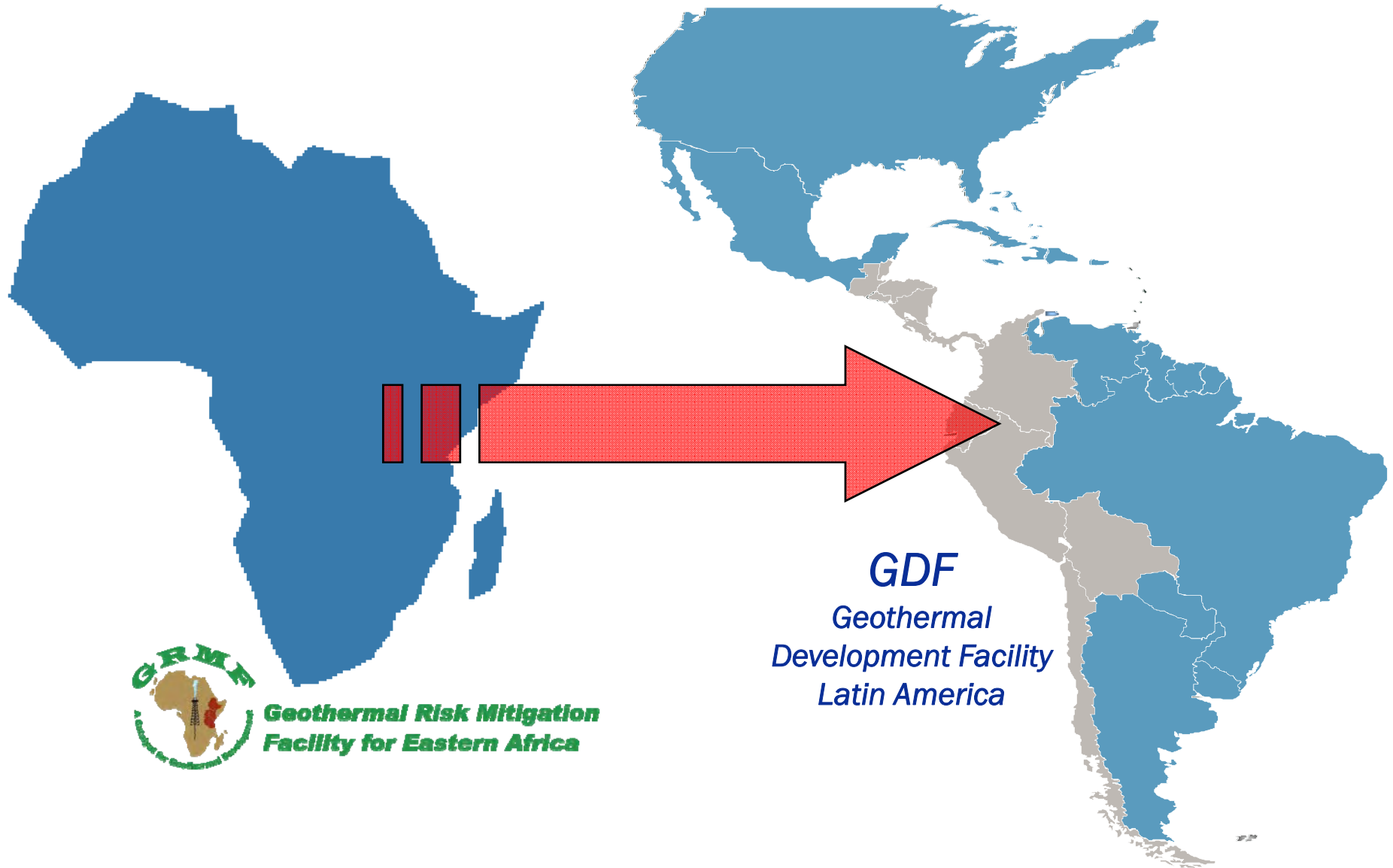
- Out of 8 shortlisted projects 7 applications were submitted
- 6 drilling projects and 1 surface study
- 5 projects are invited to sign a Grant Agreement

Outlook

- Extension to 11 countries:
 - Burundi, Comoros, Djibouti, DRC, Eritrea & Zambia
- Additional funds required for rounds 2 – 4
- Other donors interested to join

→ This shows, that GRMF is the right instrument at the right time!

»» If we have a successful approach - why not replicate it ?



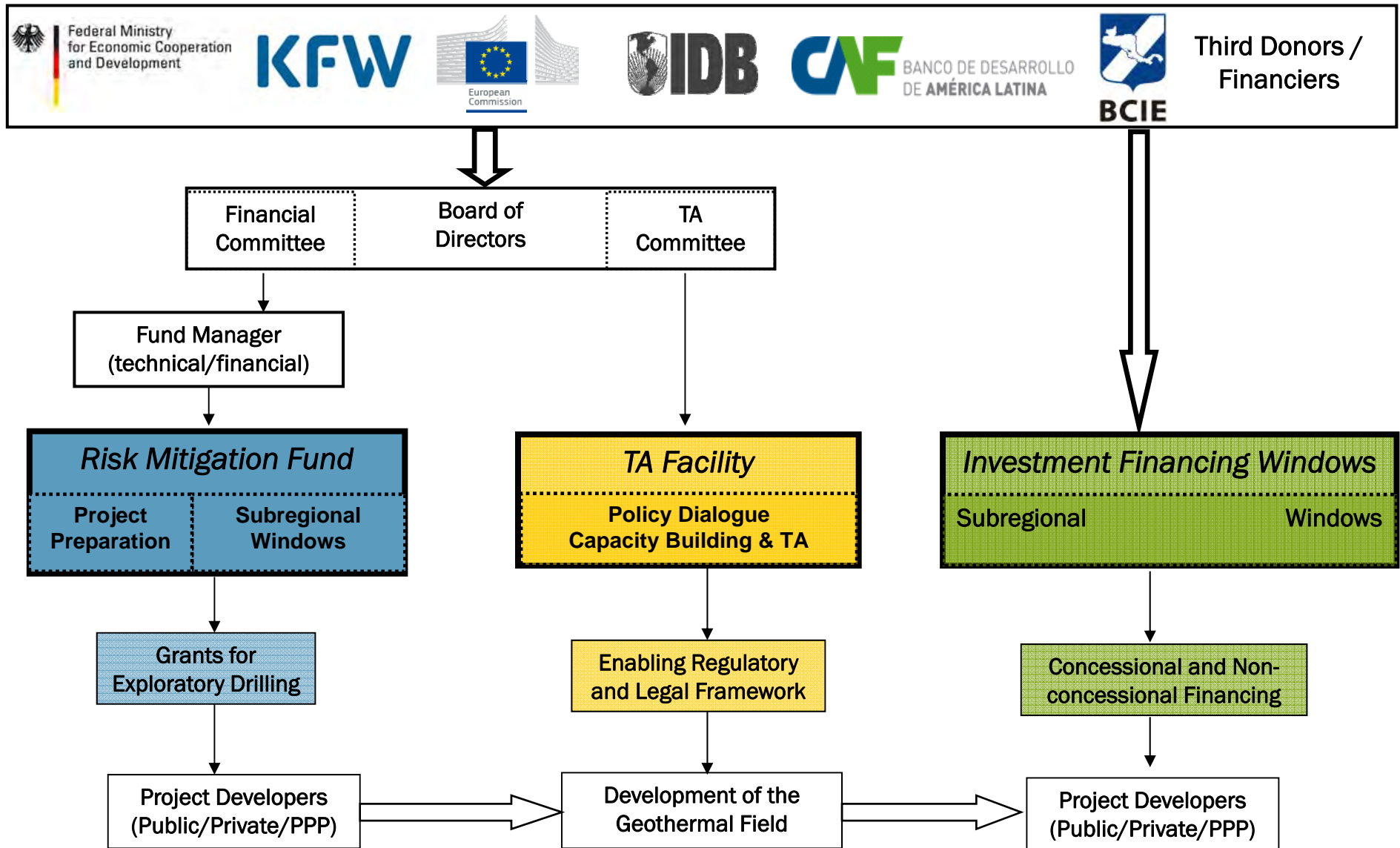
»» Latin America might be the right place at the right time...



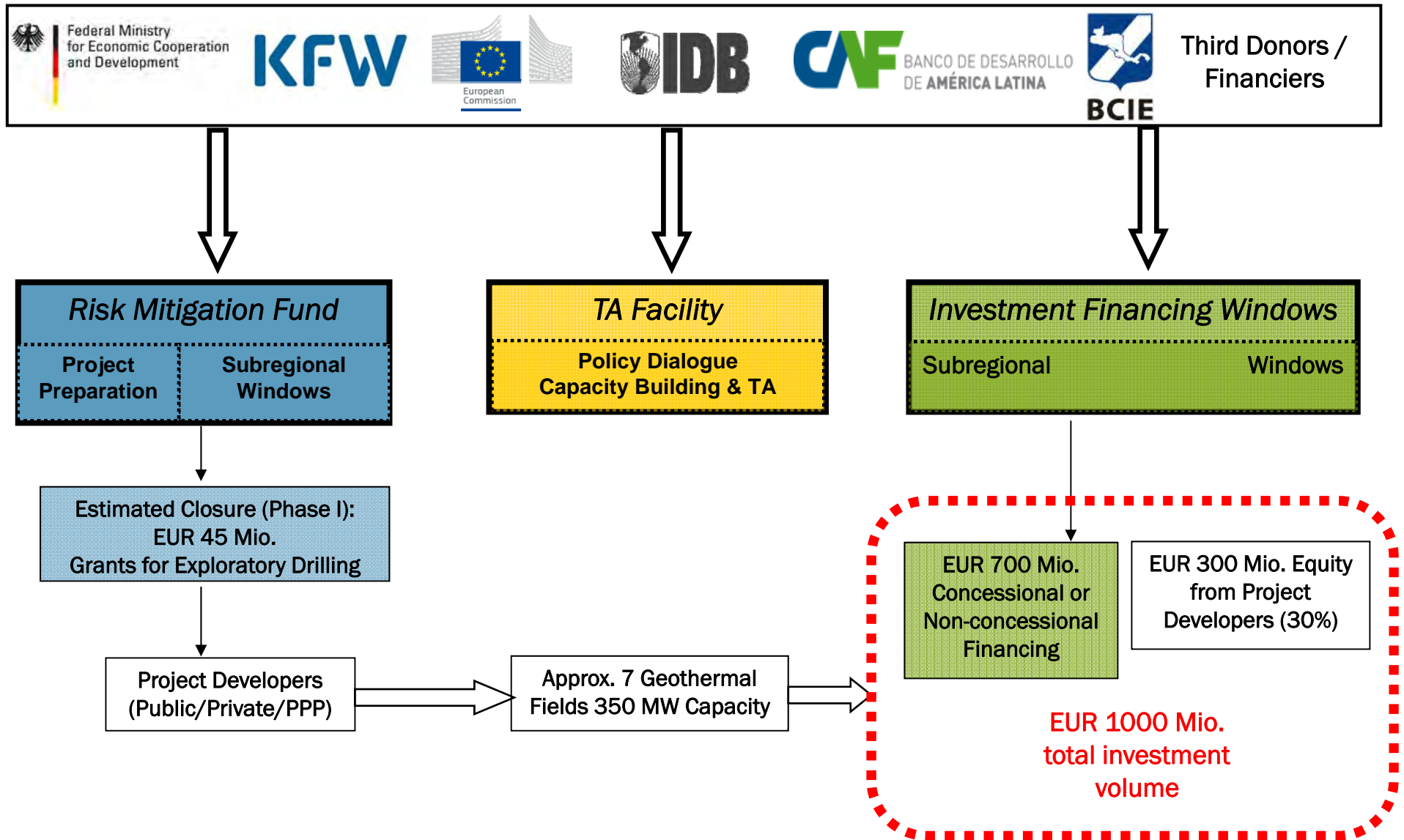
Source: IGA, 2011

- › Strong interest from governments, utilities and project developers
- › Considerable Geothermal Potential
 - › Central America:
Considerable amount of geothermal capacity installed and considerable pipeline of projects, however sector stalled due to lack of risk mitigation mechanisms and suitable financing.
 - › Andean Region:
Considerable pipeline of projects in advanced stages of development, however due to lack of risk mitigation mechanism and financing not a single commercial plant under operation so far.
- › Political Window of Opportunity

»» Geothermal Development Facility (GDF) – Potential Design



»» Geothermal Development Facility (GDF) – Potential Design



»» Geothermal Development Facility (GDF) - Summary

- › Generate considerable CO2 emission savings
- › Improve access to electricity
- › Provide a coordinated approach for market development
- › Develop a clean, cheap, proven and base-load capable technology
- › Leverage substantial investment flows



»» Thank you for your attention!

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