

Risk Mitigation Systems in Comparison

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SHORT DESCRIPTION

INTRODUCTION

The presentation deals with the concepts of public risk funds established to foster the development of geothermal markets in different countries of the world.

A comparison between the models of:

- KfW, Germany
- SAF-environment, France
- Ministry for Finance, Indonesia
- Swissgrid, Switzerland
- GRMF – Geothermal Risk Management Fund for East African Rift
- ARGEO, Worldbank

will be drawn. The existing models partially base on the concepts developed by Rödl & Partner such as

- KfW – Nation-wide soft loan program in Germany
- GEOFAR – Guarantee Fund system for EU – Commission
- National Development Agency, INDONESIA (revolving fund system)
- CAF (Corporación Andina de Fomento), South America, presently being developed: GDF – Geothermal Development Facility (South America).
- GRMF, East Africa, Rödl & Partner is assigned Fund manager, client is the African Union Commission

All particular fund systems follow the same objective: to lower the necessity of venture capital placement (financed from equity) in the early stages, which consequently enables projects to be developed and due interest reduction have a decreasing effect on LCOE (levelized costs of electricity). Hence, they impact the competitiveness of geothermal power generation in relation to alternative generation technologies and enable in particular the development of projects at all. Furthermore, projects with a less advantageous risk-reward-ratio (e.g. heat supply projects on medium or low enthalpy resources) face significant financing problems during the early stages which can only be financed by venture capital.

The expected outcome or profitability of such projects - taken the connected risk into consideration - will hardly lead to a placement of venture capital. A public fund system therefore takes the burden of early stage exploration or discovery risks and stimulates the market for geothermal projects and consequently leverages the investment in geothermal based infrastructure.