Underwriting geothermal risk and the experience of Munich Re

March 02, 2015
Risk of failure: Not a residual risk
Database: IFC 2012 (2,613 wells)

Probability of failure for geothermal wells: worldwide; regardless if exploration or development, all resources

Database: IFC 2012
Risk of failure: MR is closing the Gap

- High risk requires high returns
- Traditional capital markets are limited available to geothermal developers
- The capability to quantify and manage the risk through insurance and cooperation programs:
- Increases the bankability of geothermal projects
MR insurance structure for **High Enthalpy**

- **Premium for wells 1-2**
- **Premium for wells 3-4**
- **Premium for wells 5-8**

Possible Stepout MR

Possible Stepout MR

Possible Stepout Policyholder with Performance Bonus

Exploration Risk Insurance – Company Presentation Munich RE
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Thank You Very Much For Your Attention!

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Blueprint of the insurance structure for **High Enthalpy**

- **Premium for wells 1-2**
- **Premium for wells 3-4**
- **Premium for wells 5-8**

- **Possible Stepout MR**
- **Possible Stepout MR**
- **Possible Stepout Policyholder with Performance Bonus**

Legend:
- Well
- SW: Stimulation well if necessary
- Deepening if necessary
- Sidetrack if necessary