




GeoThermHydro
Renewable Energy






**Seminar in Chile about
Geothermal Power Plants
Exploration – Design – Construction
Operation**






But first our Basic in Geothermal

- The companies in the group origin several decades back, the oldest to 1932.
- They have played a key role in developing geothermal power in Iceland and abroad.
- In geothermal they have all expertise and know how needed from the very beginning of exploration stage, through drilling phase, construction and commissioning of the real plant.
- The education and experience are in the fields of geology, geophysics, geochemistry, environment, engineering both mechanical, electrical and structural, risk assessments, production, scaling, corrosion and deposit problem handling.
- High and low voltage electrical, transmission, control and protection, IT and security, testing and commissioning. Solution for H₂S corrosion.


GeoThermHydro

- Introduction of our people:
 - Bjarni Gautason, Senior Geologist, Head of Akureyri Branch of Iceland GeoSurvey.
 - Þorleikur Jóhannesson, Mechanical engineer, Department Manager, Geothermal Heat and Power Systems at Verkís.
 - Carlos Jorquera, Managing Director of GTH, Chile.
 - Harpa Elín Haraldsdóttir, Office Manager, GTH, Chile.
 - Gunnar Ingi Gunnarsson, Foreign Development, Verkís.






Why this new company

- Verkís and Iceland GeoSurvey are ready and willing to export its long and strong experience in geothermal and share with others.
- By joining forces, we can cover almost every item necessary to identify, develop and harness geothermal power resources. Together the companies comprise of about 400 personnel.
- The focus of this company is global but we seek local partners in every project.









GeoThermHydro

- Agenda for this seminar:
 - Drilling for geothermal exploration. by Bjarni Gautason
 - Steam supply system. by Þorleikur Jóhannesson
 - Geothermal Power Plants. by Þorleikur Jóhannesson
 - Operating experience of geothermal power plant. by Gunnar Ingi Gunnarsson
 - Reservoir management. by Bjarni Gautason







Our services

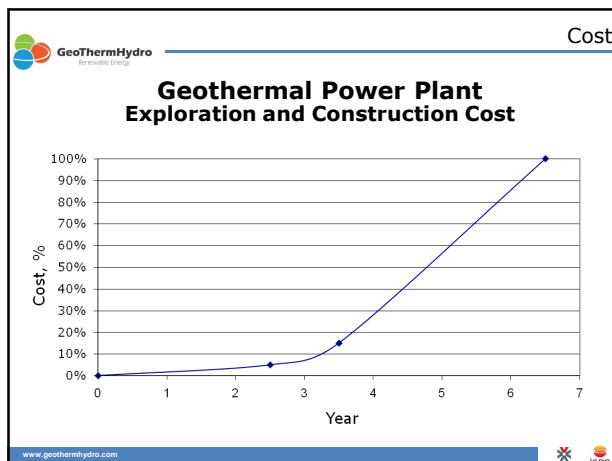
- Project Management
- Exploration and evaluation of fields
- Feasibility studies, bankable feasibility reports
- Environmental impacts studies
- System and wells design and detail design
- Preparation of tender documents
- Material procurement
- Supervision of construction
- Commissioning of power plants





In the beginning

- Utilizing high temperature geothermal fields requires cooperation between many parties
- There is time involved
- There is risk involved
- Knowledge and experience is not everywhere and you should check their statements



Project development

- Step 1: Gathering and evaluation of existing data
- Step 2: Exploration stage
- Step 3: Pre-feasibility Report
- Step 4: Drilling and testing of exploration wells
- Step 5: Feasibility Report
- Step 6: Conceptual design
- Step 7: Design, construction, drilling, supervision
- Step 8: Testing, commissioning, training
- Step 9: Operation

