



International
Partnership for
Geothermal
Technology

The International Partnership for Geothermal Technology

Ólafur Flóvenz

ISOR

16 November, 2011

IPGT



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The International Partnership for Geothermal Technology (IPGT) was established by the governments of the United States of America, Australia and Iceland in 2008.

It was intended to provide a forum for government and industry leaders to coordinate their efforts, and collaborate on projects.

Charter



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The IPGT Charter that defines the partnership was signed August 28, 2008 in Iceland.

Switzerland was accepted for membership in the IPGT and signed the Charter on October 6, 2010.

The IPGT welcomes New Zealand today, on November 16th, 2011.



From left to right:

Australian Ambassador to Denmark and Iceland
Sharyn Minahan, Icelandic Minister of Industry,
Energy and Tourism Ossur Skarphedinsson and US
Department of Energy Acting Assistant Secretary
Katharine Fredriksen

Goals



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The IPGT is working to bring about widespread, international commercialization of advanced geothermal technologies, relying on the joint expertise of geothermal leaders throughout the world.

IPGT Goals:

- Accelerate the development of advanced geothermal technologies
- Exchange of information on best practices and lessons learned
- Accelerate research, development and demonstration
- Identify and avoid blind alleys
- Maximize our efforts, limit duplication



IPGT



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IPGT is not a funding body

IPGT is focused on sharing information, helping to define priorities and facilitate multinational cooperation in geothermal development

Organization



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The Steering Committee is composed of 2 members from each country. One is supposed to come from a governmental agency and another from the geothermal industry.

The IPGT Secretariat is the principal coordinator of communication and activities.

It is agreed that the chairmanship of the Steering Committee and the Secretariat should rotate among the member countries

Both were originally in USA DoE but the chairmanship was transferred to Iceland in 2010 and the secretariat to Australia recently.

The group expresses its appreciation to DoE for their leading role during the first years of IPGT.

Steering Committee



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Governs the overall framework and policies of IPGT

Provides directions to the secretariat.

Reviews programme of collaborative projects

May create project groups as needed

Meets at least once per year

All determinations should be made by consensus.

Steering Committee



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Iceland

Gudni A Jóhannesson – Chairman

Director General, Orkustofnun

Ólafur G Flóvenz

General Director, ISOR

Australia

Catherine Zerger

Manager - Geothermal Energy

*Department of Resources Energy and
Tourism*

Anthony Budd

Geothermal Energy Section Leader

Geoscience Australia

Arno Schaaf

Business Development Director,

Petroleum & Geothermal, CSIRO

New Zealand

Anne Berryman

National Manager Science Development

Ministry of Science and Innovation

Greg Bignall

Senior Scientist, GNS Science

Switzerland

Gunter Siddiqi

*Head of Geothermal Research Program - CCS and Power
Generation Program, Swiss Federal Office of Energy*

Markus O. Häring

CEO, Geothermal Explorers Int. Ltd

United States

Jay Nathwani

*Lead Analyst - US Department of Energy Geothermal
Technologies Program*

Karl Gawell

Executive Director, Geothermal Energy Association

Secretariat



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- Has administrative function.
 - Organize meetings of the steering committee and project groups.
 - Arrange teleconferences and workshops.
 - Receive and forward membership requests to the Steering Committee.
 - Coordinate communications of IPGT activities.
 - Acts only on matters as instructed by the steering committee
 - Runs the IPGT website
-

Secretariat



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The Secretariat is administered by the Australian Department of Resources, Energy and Tourism:

- Matthew Deady (main contact)
- Catherine Zerger (alternate contact)
 - Email: IPGT@ret.gov.au

Working Groups



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The IPGT has established Working Groups in seven high-priority topic areas. Each Working Group is led by a team of Conveners, one from each country.

Priority Topic Areas:

- Lower Cost Drilling
- Zonal Isolation and Packers
- High Temperature Tools
- Reservoir Modeling
- Stimulation Procedures
- Exploration Technologies
- Induced Seismicity



Working Group Tasks



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Working Groups Conveners have organized teams of approximately 15 technical experts to accomplish the following tasks:

- Develop white papers to identify challenges, opportunities and objectives in each technology area
- Generate a research plan to address barriers and identify areas where joint research can be undertaken



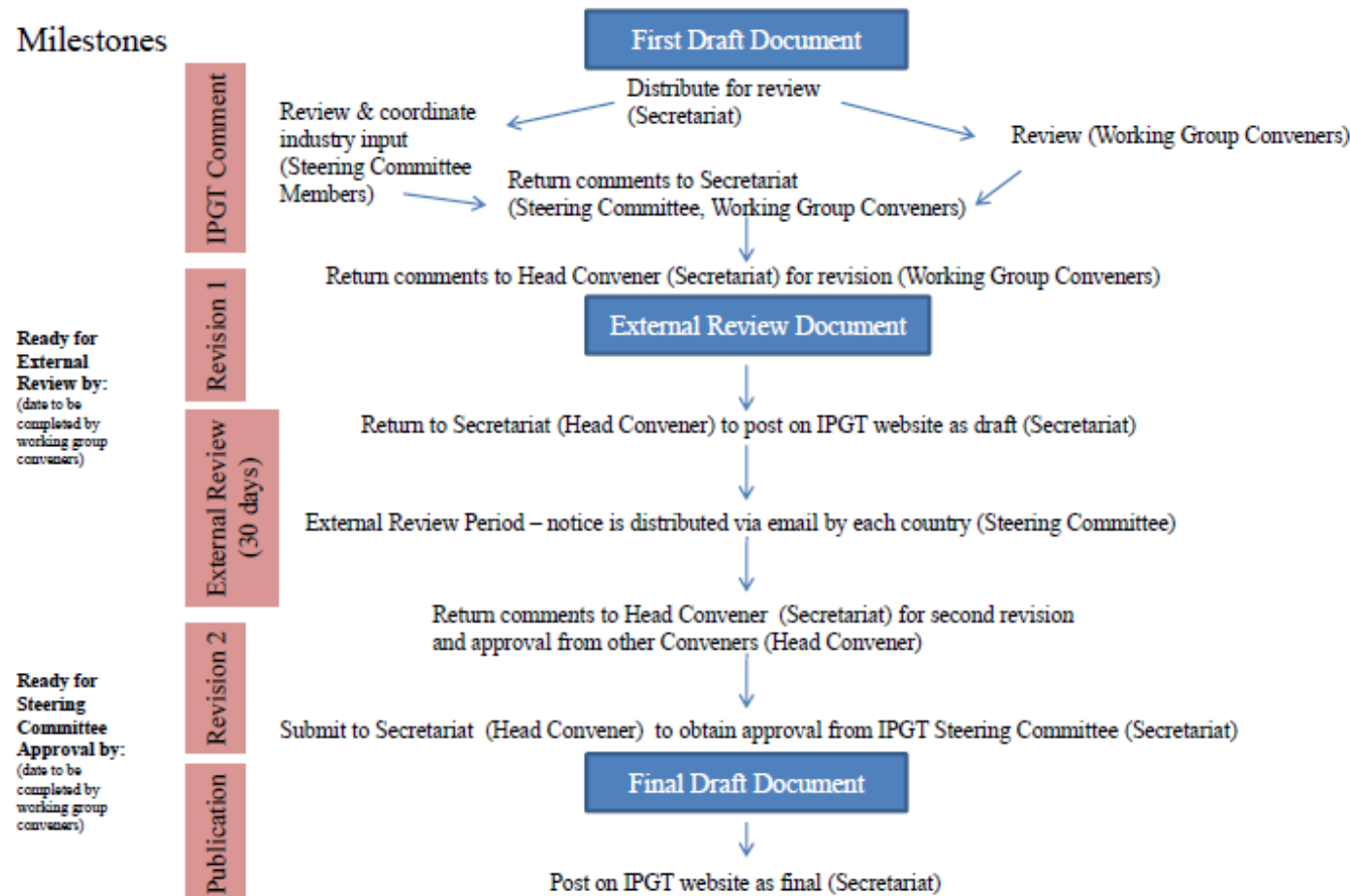
Publication flow chart



IPGT Publications Flow Chart Final Draft

SC-060-10
8 December, 2010

Milestones



White Papers



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Five white papers have been drafted and are available on the IPGT website

- Exploration
- Zonal Isolation
- Stimulation Procedures
- High Temperature Tools
- Reservoir Modeling



Joint Activities



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Joint Workshops

- August 2008 Identified priorities, laid groundwork for IPGT collaboration (Reykjavik)
- May 2009 Discussion of reservoir stimulation and exploration technology needs (Nesjavellir, Iceland)
- February 18, 2010 Reservoir Modeling Workshop (Reykjavik, Iceland)
- October 6, 2010 Swiss Signing Ceremony and Working Group Briefings (Reykjavik)
- May 3, 2011 Induced Seismicity Workshop (Paris)
- June 10, 2011 Working Group Briefings and Roadmapping (Washington, DC)
- November 14, Induced seismicity workshop in Melbourne

Joint Research

A US-Iceland project *Advanced 3D Geophysical Imaging*

Technologies for Geothermal Resource Characterization, by Lawrence

Berkeley National Lab, MIT, ISOR and Reykjavik University began in mid-2010

Membership



The IPGT strives to be as inclusive as possible. In order to join the IPGT, a country must demonstrate the following (at a minimum):

- **Active government involvement and financial support for geothermal technology research and development**
- **Active geothermal companies in a position to further the development of geothermal technologies located in that country**

To apply for membership, countries may submit a letter and documentation to the Secretariat from the appropriate government agency describing how the country meets the criteria above and how the country will contribute to the IPGT.



What have we gained?



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Active cooperation between governmental bodies dealing with geothermal energy policy and funding.

IPGT has brought together large group of scientist to targeted workshops on specific topic areas and facilitated scientific and technical cooperation.

IPGT has established working groups of experienced geothermal experts to create the white papers.



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Thank You

For more information, please visit:

www.internationalgeothermal.org