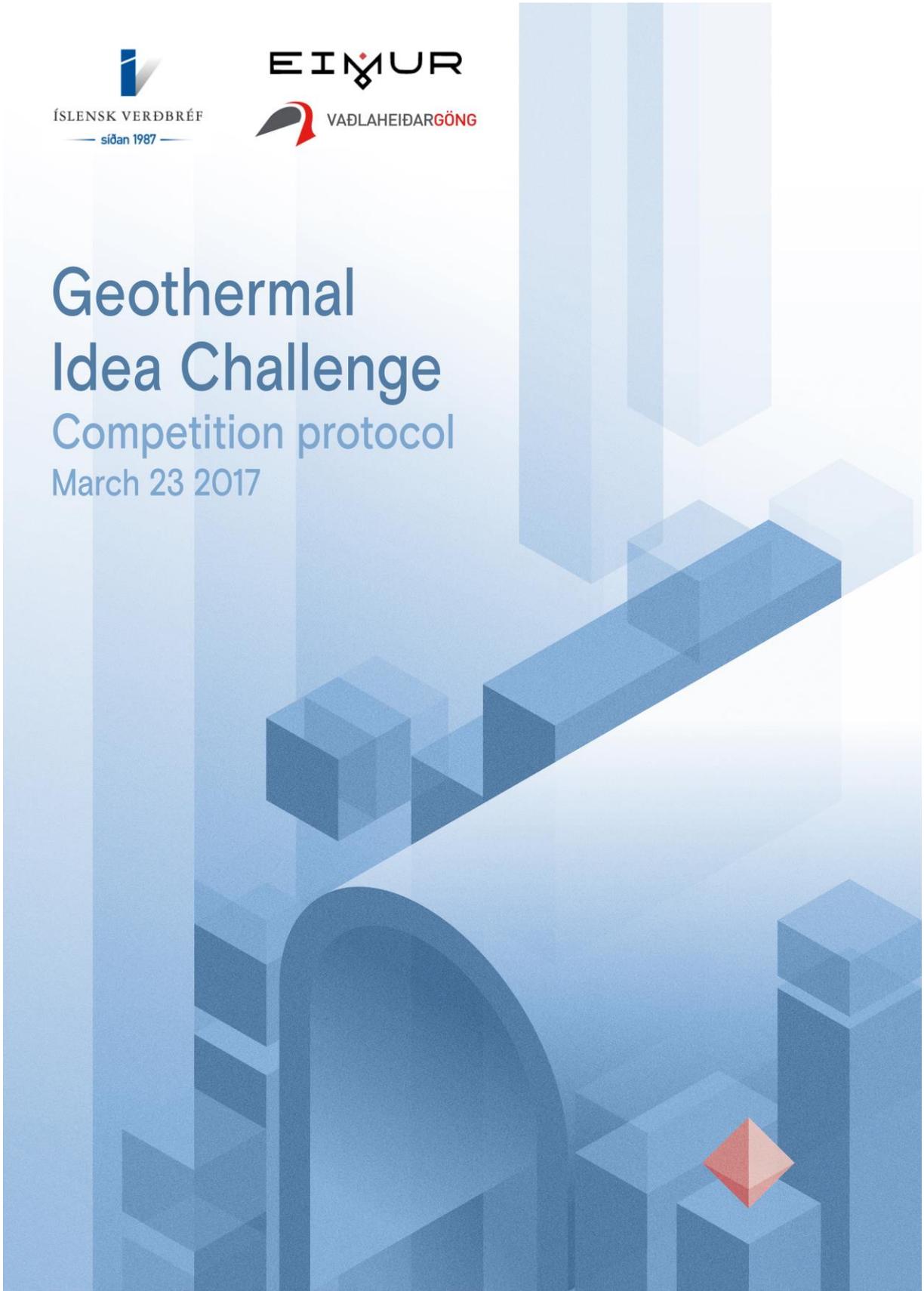




Geothermal Idea Challenge

Competition protocol
March 23 2017



What is it all about?

This Idea Challenge on the utilization of low to medium enthalpy resources in Northeast Iceland is held by EIMUR in cooperation with Íslensk verðbréf and Vaðlaheiðargöng hf. There are no restrictions on the type of utilization being suggested. The goal is to receive varied ideas on the utilization of low to medium enthalpy resources.

In February 2014 a warm water vein (46°C) was hit while the Vaðlaheiði tunnel was being constructed. The water flow and temperature has now stabilised and is thought to be quite a resource that today is just flowing out to sea.

One of EIMUR's goals is to encourage increased sustainability of the communities in Northeast Iceland with better utilization of resources but the water in Vaðlaheiði tunnel is a good example of a resource that should not go to waste. Various ideas of possible utilization have already been named, but with this competition the hope is to increase the likelihood of utilization becoming a reality.

Comparable unused low to medium enthalpy resources are in various areas in the region and therefore the competition will be open for suggestions for those as well. Information on geothermal resources in Northeast Iceland is available later in this document.

Goals

The goal of this competition is to encourage and bring forth ideas of utilization of low to medium enthalpy resources in Northeast Iceland, ideas that might possibly be used in other regions as well.

Selection board considerations

The selection board will emphasize the following when evaluating proposals:

- Is it a cohesive solution?
- Is it sustainable and does it have a low ecological footprint?
- Is it employment-generating?
- Is there a real target group?
- Originality and innovation, is it a new way to utilize low to medium enthalpy resources?
- Is there a possibility for an acceptable profitability?
- Is it likely to become reality?

Type of competition

This is a general idea competition and is open to everyone.

Prize

The total prize amount is 2.000.000 ISK. First prize will be at least 1.500.000 ISK. Íslensk verðbréf will also offer the winner assistance with:

- Possible financing options
- Creation/evaluation of a business plan and evaluation of needed investment
- Creating tenders, final agreements and other legal transactions.

Description

The competition is focused on generating ideas on varied utilization of low to medium enthalpy resources in Northeast Iceland. Low to medium enthalpy resource in this case is considered to be water that is <150°C at 1 km depth.

Competition arrangement

The competition is an idea challenge and participation is open to everyone.

Competition protocol

This competition protocol is accessible at EIMUR webpage (www.eimur.is). No further information is handed out, except for the reports mentioned here above.

Submissions

Submissions, i.e. all information – pictures, drawings and text, shall be set up as an A1 poster (size 840 mm high and 594 mm wide) and handed in on a stiff poster made of paper or Styrofoam. The usage of pictures (photographs, diagrams etc.) as possible is encouraged to explain your idea. Still the main idea should be explained in a text, the main premise and goals. An electronic copy should also be submitted. Please note that by the end of the competition an exhibition of the submitted ideas will be held. Therefore it is allowed to submit a short report along with the poster, which will not be shown to anyone except the jury. This is done so that if participants believe it's vital for them to send in information to the jury that for some reason they don't want to be made public.

Inquiries

The option to make inquiries is open during a specific period of time. Inquiries should be made to the competition confidant. See competition dates here below.

The confidant will send a copy of all inquiries to the jury. All inquiries along with the jury's answers will be posted on EIMUR's webpage (www.eimur.is). See competition dates here below.

Deadline, labelling and submissions

Submissions shall be handed in electronically to tillogur@eimur.is no later than 4 p.m. May 22. The same deadline is to submit the printed poster (according to the description here above) to the confidant's address, to Norðurorka offices. A post stamp or airmail before the deadline runs out is sufficient if a receipt from the post office or airport freight service is provided to the confidant.

When the submission has been received the submitter will receive a submission number via email. This also applies to submissions sent via post.

Submitting before the deadline is mandatory for a submission to qualify.

Competition deadlines

Competition opened: Mars 23 2017

Inquire deadline: April 12 2017

Inquire answers submitted: April 21 2017

Submission deadline: May 22 2017

Competition jury

The jury will compose of:

Appointed by EIMUR:

Arnheiður Jóhannsdóttir, director of Visit North Iceland

Kristján Þór Magnússon, mayor of Norðurthing

Sigríður Ingvarsdóttir, director of Innovation Iceland

Appointed by Íslensk verðbréf:

Jón Steindór Árnason, director of Tækifæri

Appointed by Vaðlaheiðargöng hf:

Ágúst Torfi Hauksson, formaður stjórnar Vaðlaheiðarganga hf

Jury secretary:

Albertína Friðbjörg Elíasdóttir, director of EIMUR.

If the jury decides there is a reason to call in an outside council, it will be experts from EIMUR's expert panel.

Competition confidant

Competition confidant appointed by EIMUR's expert panel:

Name: Guðmundur Haukur Sigurðarson, director of Vistorka

Address: Rangárvellir

Email: tillogur@eimur.is

All inquiries and comments should be directed to the confidant.

Results and exhibition

The jury will have finished their work by the end of May. An exhibition of submitted entries will be held by the end of May/beginning of June. At the exhibition opening the competition winner will be announced.

Right to exploitation and proviso

The competition holders will not own the right to exploitation and do their authors continue to own all rights to exploitation according to the Icelandic Copyright Act.

EIMUR's goal with this competition is first and foremost to draw forth new ideas on the utilization of low enthalpy geothermal resources in Northeast Iceland. Whether the idea of utilization is regarding Vaðlaheiðargöng or other resources in the region, it is important to remember that part of a possible execution of idea and thereby the making of a possible business plan is to gather all necessary permits for the utilization with the appropriate authorities. Those might be i.e. landowners or other owners of geothermal rights, public entities or energy companies that hold concessions to the distribution of heat in specific areas.