



ICELAND'S CHAIRMANSHIP
ARCTIC COUNCIL 2019-2021



Regional Development and Food Security in the Arctic: The Role of Geothermal Energy

Date: October 20th, 16:00 – 18:00 GMT

Organiser: Icelandic Arctic Cooperation Network

Co-Organisers: Icelandic Chairmanship of the Arctic Council 2019 – 2021, Rannsóknamiðstöð Íslands RANNÍS, SSNE, Eimur

Globally, the use of geothermal energy has been growing steadily in the past years due to its renewable nature, low carbon footprint and versatility of use. It's versatility lies primarily on the fact that it can both be used for the production of electricity or directly for domestic heating and industrial purposes. In the Arctic region, the utilisation of renewable energy sources has been a central topic as fossil-fuel based energy production is expensive, has a heavy carbon footprint, generates risk of pollution and is subject to fluctuations in the supply chain. This event aims to shed light on the current role of geothermal energy and its potential for the sustainable development of Arctic societies. In particular the emphasis is put on regional societal and industrial development and food security.

In Iceland, geothermal energy represents up to 66% of Iceland's primary energy use. It is most widely applied for district heating, but is also essential for local food production where, for example, fresh vegetables are grown in geothermally heated greenhouses. Icelandic greenhouse farmers all provide to the Icelandic food market, reducing its dependence on international imports. Currently there is a rising interest in Iceland for further utilisation of geothermal resources for food production on a larger scale.

The event draws on the UN Sustainable Development Goals, the Icelandic Arctic Council Chairmanship (2019-2021) theme on *Climate and Green Energy Solutions*, and Iceland's Climate Action Plan for 2018 – 2030. The webinar brings together experts and stakeholders to discuss the role of geothermal energy in municipal and regional development, and its application for food production. Local food production can both stimulate regional economic and societal growth, and enhance the security of its inhabitants. The main objectives are to:

- Promote the importance of renewable sources in relation to food security, and share knowledge of sustainable food production in cold climates.
- Create an international network of experts and stakeholders, including communities, academics, and the public and private sectors, with the goal of exploring opportunities for future collaboration.
- Outline strategy for moving towards sustainable development and renewable energy solutions in northern communities. (The summary from the session would include ideas to that effect.)

PROGRAM

- **Opening Remarks – Ministry for Foreign Affairs, Iceland**
- **Chair:** Introduction (5min) – **Jennifer Spence, Executive Secretary, Sustainable Development Working Group, Arctic Council**
- **Topic 1:** Shaping of regional sustainability indicators in the creation, implementation & monitoring of sustainable development in Iceland. (5min) – **Bjarni Herrera, CEO, CIRCULAR**
- **Topic 2:** The role & use of geothermal energy in the Arctic: Analysis of the Icelandic case, synthesis of best practices, Lessons Learned. (5min) – **Alicja Wiktorja Stoklosa, Project Manager, GEORG Geothermal Research Cluster**
- **Topic 3:** Food security & production in cold climates: Analysis of the Dutch case. Synthesis of best practices & lessons learned. (5min) – **Martin van der Hout, Former Secretary General, Dutch Association of Geothermal Operators**
- **Topic 4:** Involvement of private and industrial stakeholders in regional & municipal development in the Arctic. (5min) – **Heiðar Guðjónsson, Chairman, Arctic Economic Council**
- **Topic 5:** Perspective from First Nation's Kitselas on the development of geothermal energy in British Columbia, Canada (5min) – **David Try, Board Chair and Board Director, Kitselas Geothermal Inc.**
- **Open Discussion** (45min up to 1h)
- **Topic 6:** Greenhouses, heating and cold climates: The problems of infectious diseases in seeds and crops (5min) – **Dirk Janssen, Lead Researcher and Virologist, Instituto de Investigación y Formación Agraria y Pesquera de Andalucía IFAPA**
- **Topic 7:** Technical aspects of geothermal energy and the development of greenhouses and fish farms (5min) – **Marten Ahlm, Application Expert, Alfa Laval**

COMMENTATORS

- **Marit Brommer, Executive Director, International Geothermal Association**
- **Hjalti Páll Ingólfsson, Operational Manager, GEORG**
- **Alexander Richter, Managing Director, Iceland Renewable Energy Cluster**
- **Sigurður H. Markússon, Business Development Manager, Landsvirkjun – National Power Company of Iceland**

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