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Address given at the World Geothermal Conference 2005, Antalya, Turkey, April 2005

Mr. Chairman, ministers, distinguished guests.

I am honoured and grateful for this opportunity to address this World Geothermal Congress at the opening session and to serve as a member of the Honorary Commitee of the Congress.

In Iceland, we have lived with the geothermal activity of our country through the centuries and the utilization of geothermal heat has been a part of our national culture for the last decades. For this reason, Iceland has been very active in international cooperation in the geothermal field during these years. Icelanders were among the founders of the International Geothermal Assosiation in 1989 and there have always been Icelandic members on the Board of Directors of IGA. Moreover, Icelandic geothermal experts have been very active participants in the three World Geothermal Congresses.

Late last year, the Secretariat of the Geothermal Assoisation was moved from Italy to the capital of Iceland, Reykjavík, and the operating and the managment cost of the office will be financed jointly by the principal energy companies in Iceland and the Icelandic government. We surely hope that the location of the IGA Secretariat in Iceland will in the near future strengthen and sharpen the focus on the importance of geothermal utilization worldwide. We believe the IGA has an important role to play in the international energy community.

The utilisation of geothermal energy is one of the most important aspects of daily life and public welfare in Iceland. We are very proud of our achievements in recent decades in utilising our geothermal resources, first for residential heating and, more recently, for the generation of electricity. Geothermal resources are located all across the country but it was not until early in the last century that technology made it possible to replace fossil fuels by utilising geothermal energy for house heating. This trend started on a small scale some 70 years ago and by 1970 around 50% of all house heating in Iceland was geothermal while 45% of housing was heated by oil. During the oil crisis between 1973 and 1979 the government stepped up the systematic development of heating utilities in the rural areas of the country where geothermal energy use was possible. Today, approximately 88% of Icelandic housing is geothermally heated and 11% is electrically heated. This means that practically all house heating comes from renewable energy sources. The use of geothermal resources for the production of electricity has increased over the past decade from 5% of the total electricity consumption to 18%, and it is likely that this use will increase still more in coming years.

The multiple use of geothermal energy is, therefore, an important part of the energy use as well as the quality of life in Iceland. Geothermal use accounts for 54% of the primary energy use of the country and hydropower accounts for around 18%, which

means that approximately 72% of the country's total primary energy comes from renewable energy sources, a unique situation in the world. The use of these energy sources is of considerable economic significance for Iceland and one of the main pillars of the nation's welfare and prosperity in recent decades.

It is with pleasure that I draw your attention to the Iceland Deep Drilling Project which aims at drilling to some 5 km in a high temperature field to find 450-600 °C supercritical fluids during the next two years. This project will be described further at the congress. According to modelling, the power output from such wells could be 5-10 times higher than from conventional high-temperature wells. If this is technically and economically feasible, then the harnessable energy potential of high-temperature fields in volcanic regions in many parts of the world will be multiplied. This international research project is financially supported by the major energy companies in Iceland, the Government of Iceland, a number of international scientific funds, as well as a large number of universities and research institutions.

Discussion on global energy issues has increased dramatically in recent years. At the World Summit on Sustainable Development in Johannesburg in 2002, much of the discussion was focused on energy matters, on ways in which the role of renewable energy sources could be increased in world energy production in order to reduce emissions of green-house gases and eliminate poverty in developing countries.

The United Nations Framework Convention on Climate Change provides for the obligation of the world's nations to reduce greenhouse gas emissions, and there is no doubt that the increased use of geothermal energy could play a key role in many countries in this respect. Conferences such as this one are therefore an extremely important means of enabling the foremost geothermal energy experts of the world to find the best ways of utilising this important energy source, and I am absolutely certain that this will help us on the path to this noble objective that we have set ourselves.

In this context it is important to realise that the world primary energy demand is expected to grow by almost 60% between 2000 and 2030 according to a recent Scenario of the International Energy Agency, and fossil fuel is expected to account for around 85 % of this increase. The global energy-related CO_2 emission is expected to increase by 62% during this period, but unfortunately the share of renewable resources in the total energy consumption is expected to remain almost unchanged.

These figures tell us that we have to use all the options available in utilising renewable energy sources to combat climate change, especially where we have available clean technologies that can be used much more widely than today. Geothermal energy is very competitive in many parts of the world, and although it is not found in every country, it is estimated that hundreds of millions of people could benefit from both electricity and heat from new geothermal resources. This is particularly true for many developing countries and it is extremely important to increase the share of geothermal use in these countries in near future.

For the last twenty six years, Iceland has run the United Nations University Geothermal Training Programme to train geothermal professionals from the developing countries to engage in geothermal research and development in their

home countries. We consider this training programme to be a great success and are proud of the results of this programme and even more proud of the success that the students have achieved in their geothermal fields. I am sure that their studies at the UNU Training Programme in Iceland have contributed to the increased geothermal energy experience and use in their home countries.

I am especially pleased to announce that the Government of Iceland has recently decided to more than double our current allocations to International Development Aid. The goal is to reach this level in 2009. In our development efforts, we have focused particularly on promoting the sustainable use of natural resources, and in light of this fact geothermal energy is bound to receive considerable attention in the future. This increased support will be channeled to countries possessing unused geothermal resources with the objective of assisting them to develop their renewable energy resources.

In this respect I am pleased to inform you that the Government of Iceland has secured core funding for the UNU Geothermal Training Programme to expand its capacity-building activities by means of short courses in geothermal development in selected countries in Africa, and later in Asia and Central America. The announcement was made at the International Conference for Renewable Energies in Bonn in June 2004, where government delegates from 154 countries adopted a political declaration on ways of promoting renewable energy sources. About 200 proposed voluntary actions and commitments were incorporated into the International Action Programme of the conference.

The core activity of the UNU Geothermal Training Programme, with its six-month specialized courses in Iceland, will continue, but short courses will be added, first in Africa and later in Asia and Central America. The short courses will be organised in cooperation with the energy agencies/utilities and earth science institutions responsible for the exploration, development and operation of geothermal energy power stations and utilities in the respective countries. The first course in Africa is planned in Kenya in 2005 with participants attending also from the neighbouring countries. The time plans for the first courses in Asia and Central America have tentatively been set for 2006-2008.

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The technical programme of this congress is very impressive. I am certain that the information shared here during the week, and the ties of cooperation and friendship which will be established and strengthened will be of great value in promoting the increased use of geothermal energy worldwide.

I wish you a very successful congress.