



**A Keynote Speech**  
**by**  
**the President of Iceland**  
**Ólafur Ragnar Grímsson**  
**at the**  
**World Investment Forum 2010**  
**Investing in Sustainable Development**  
**Xiamen, China**  
**7 September 2010**

Your Excellencies,  
Ladies and gentlemen

It is a great honour for me to address you here in Xiamen and engage in a dialogue on how to achieve sustainable development, how countries and corporations can win the green race and how fundamental energy transformation can help to prevent irreversible climate change.

I come from a country where the glaciers are already receding, where our seas are the home to the North Atlantic ‘marine motor’ which drives the entire conveyor belt of ocean currents all around the globe, where we constantly hear reports from our neighbours in Greenland on how large blocks of ice keep falling into the ocean at an accelerating rate, illustrating the threat of rising sea levels in Asia, Africa and the Americas; perhaps mankind’s greatest security concern.

Iceland is, however, not only a country where climate change can be observed at first hand. In recent decades our history has also shown how a fundamental energy transformation can become the basis for sustainable development and lasting prosperity, even despite the recent financial crisis.

In my youth, over 80% of Iceland’s energy came from fossil fuel in the form of imported coal and oil. We were a poor nation, primarily of farmers and fishermen, and Iceland was classified by the UNDP as a developing country right down to the 1970s. Now, despite the present economic difficulties, we are among the most prosperous nations in the world, largely due to the transformation which has made our electricity production and space heating 100% based on clean energy.

Our geothermal development began more than fifty years ago when pipes were laid below gravel streets in a few small towns, bringing hot water to homes; gradually, major power projects have been developed that now provide electricity for aluminium smelters, data storage centres and other high technology and IT-based industries.

The abundance of clean energy is the main reason why Iceland is now, notwithstanding the financial crisis, an attractive investment location for foreign companies. In ever-growing numbers they are willing to go anywhere if there is permanent and secure access to clean energy. Such provisions could give numerous developing countries a strategic advantage in the 21<sup>st</sup> century global economy.

It is a fascinating paradox that the green energy achievements made in recent decades, principally in the Western World, could, within the right policy framework, turn out to be of great benefit to the developing countries, to Asia, Africa and Latin America.

The climate crisis is primarily a call for a fundamental energy revolution, a comprehensive transformation from fossil fuel to green energy sources such as solar, wind, geothermal, hydro and biomass sources.

In all of these categories, the nations of the South enjoy a richer potential than those of the North. Thus, a green energy era could be a time of renaissance, a progressive century for the developing world.

Bright sunlight and the strong prevailing winds characterise conditions in the South. What is less well-known is the abundance of geothermal resources which in many ways are the golden secret of the global energy debate.

Although we all learn in school that there is a huge fireball inside the Earth, we tend to forget or ignore its enormous energy potential. With modern drilling and engineering technologies, it is now possible to harness this heat to further economic and social development, rural and urban electricity production, the creation of industrial regions and organic agriculture, for aluminium smelters and greenhouses, for spas and data storage centres.

One great advantage of geothermal, solar and wind energy sources is that the scale of investments can be tailored to the need. The excess capacity and huge initial investment costs inherent in big coal and nuclear power plants are absent from the equation, because the tapping of solar, wind and geothermal sources can be adjusted to the needs of a few

households, a small village, a growing town or emerging industrial projects.

A few decades ago, this important energy dimension was entirely absent from the formulation of economic strategies, simply because the technological development of green energy was still in its early stages. Now, however, developing countries can base their prosperity on proven green energy technologies which can be tailored to every stage of development and to the needs of different regions.

With respect to their geothermal potential, most countries in Africa, Asia and Latin America are still in the early stages of this process. China has recently discovered how coal plants can be replaced by geothermal sources for urban space heating. Indonesia and the Philippines are planning increased electricity generation from geothermal sources. In East Africa, countries like Kenya and Djibouti are looking at this resource in a fresh way, as are many countries in Central and South America, and even in the Middle East.

It has been the privilege of Icelandic energy and drilling companies, engineering firms and other players to engage in such clean energy projects in many parts of the world and thus help, especially the nations of the South, to consolidate productive basis for sustainable development.

The United Nations' Geothermal Training Programme, which is located in Iceland, has in recent decades trained nearly 400 students from over 30 developing countries. They have benefited from cooperation with a core of the best scientists, engineers and technicians in the world and witnessed at first hand what can be done. Thus, the South already has a community of advanced geothermal experts, waiting to be given an even greater role in the energy transformation of their respective countries.

The beauty of geothermal energy for economic and social development is that it is not just an energy resource. It can also be used for greenhouse agriculture and other types of productive farming, helping rural areas, as Kenya has discovered, to grow products for high-priced markets in developed countries. It can also provide warm water and clay chemicals for spas and other tourist locations, for urban and rural recreational and health centres, bringing lifestyle benefits to the local population.

The utilization of geothermal, solar, wind and other clean energy resources offers not only a wealth of new opportunities for economic development and an enhanced competitiveness in the 21<sup>st</sup> century global economy, but is above all a win-win situation for the nations of the South.

For my country, it will continue to be a great honour and a privilege to help others to learn from our experience, from our technological expertise and energy transformation.

Also, and more importantly, I strongly believe that such cooperation is our moral duty, because thus we can contribute successfully to mankind's struggle with the greatest challenge of our times, the threat of irreversible climate change.