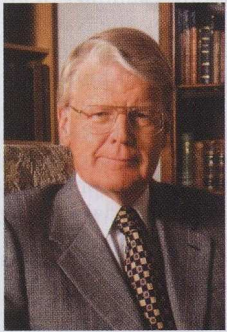


# SOLVING THE BIGGEST PROBLEM

Ólafur Ragnar Grímsson, President of Iceland

**Important decisions concerning the future direction of mankind must be based on the best available scientific knowledge. Real progress is achieved when we succeed in bringing together, for a common purpose, scientists and decision makers. In that spirit, I have supported cooperation between universities in Iceland, Europe and the United States aimed at sequestering carbon dioxide in basaltic rock, hoping that we can prove that it will stay there in solid form forever.**



Ólafur Ragnar Grímsson, the President of Iceland

Over a decade ago, when I delivered as President my first New Year's Address to the people of Iceland, I emphasised the importance of dealing with the threat of climate change. I referred to the scientific work of Dr. Wallace C. Broecker, professor at Columbia University. At the time, I had never met him, but I was impressed by his research into the conveyor belt of the ocean currents and how it advanced our understanding of global climate.

When Wally Broecker and I subsequently met at the Global Roundtable on Climate Change, convened in New York at Columbia University, I discovered his interest in Iceland, and thus I decided to encourage cooperation among Wally,

his Columbia colleagues, Klaus Lackner and Juerg Matter, and outstanding Icelandic scientists.

It was both a pleasure and an honour to be able to invite Wally Broecker to Iceland to deliver the first Presidential Lecture, a new series which I initiated early in 2006. During his stay in Iceland, we decided to establish cooperation among the Icelandic scientific community, energy companies, environmental agencies and international experts to further Wally's idea of setting up a scientific consortium in Iceland which would conduct a pilot project on binding carbon in Icelandic basaltic rocks.

I believed that if we could succeed in getting such players interested in the project, it could lead to a major contribution from Iceland to the fight against climate change.

The Icelandic people have for centuries been proud of Iceland Spar, the mineral that shines like silver; in our language it is called "silver-rock". We know that it is formed through the interaction of carbon, oxygen and basalt. Thus it is exciting for us to find out whether this compound can be created in a special way; whether carbon dioxide can be bound chemically into a solid form underneath the beautiful Icelandic landscape instead of being released into the atmosphere.

We succeeded in establishing a fully fledged scientific project involving world-class scientists, professors, doctoral students and energy-company experts. They were all enthusiastic. It has been a great pleasure for me to work with Sigurður Reynir Gíslason and other professors at the



The CarbFix CO<sub>2</sub> injection site in southwest Iceland. The Hellisheidi power plant under construction is in the lower right, the moss-covered basaltic lava flow in the center of the figure, and the basaltic hyaloclastite (broken glass) mountains in the distance. The injection well is located in the lava fields in the upper left part of the photo. PHOTO: S. R. GÍSLASON



Helgi Arnar Alfreðsson, one of several PhD students in the CarbFix project, sampling one of the monitoring wells at the Hellisheidi site. PHOTO: E. S. EIRKSDÓTTIR

University of Iceland, the experts at Reykjavík Energy and foreign scientists, such as Eric Oelkers, who has been firmly behind the project from the very beginning.

It is still too early to predict a breakthrough from this intriguing project, but when international journalists or world leaders want to know more, my answer has always been: these outstanding scientists and experts would not be spending their valuable time on this effort if there was not at least a reasonable probability of success. When we know the results, and if they are positive, we will be able to engage in discussions with government leaders, scientific institutions, universities and other organisations in Russia, India, the United States and other countries where there are huge expanses of basaltic rock.

I welcome the opportunity to share these reflections with your readers and thus encourage scientists to work hand in hand with policy-makers in order to solve the biggest problem facing mankind at the dawn of the 21<sup>st</sup> century. ■■