

Professor Sigfusson's Global Energy International Award Acceptance Speech

President Putin,
International Award Committee,
Distinguished Audience,
Ladies and Gentlemen!

I stand before you here at this moment, as a Laureate of the Global Energy International Prize, to accept in all humility the great honour shown to me – and by the same token to a large number of scientists and developers working with the fuels of the future.

In our times we are constantly reminded of the dangers to the environment of our dear Planet Earth which are lurking around the corner. Before we know it we will be faced with cataclysmic climate changes.

The human species has certainly conquered the globe, and is having an ever greater effect on the other inhabitants of the planet. Our present energy and fuel consumption leaves a carbon footprint which will be extremely hard to eliminate.

An important part of what is desperately needed now is the reduction of the carbon content of fuels. My contribution and most of all my country's contribution towards decarbonization has been to harness an ever larger proportion of our renewable energy potential or 72%, highest ratio in the world.

In my country I am certainly standing on the shoulders of giants who for the past century or so have paved the way for the use of sustainable energy. Please allow me to pay tribute here to the work of Steingrimur Jonsson, Jakob Gislason, Gunnar Bodvarsson, Johannes Zoega and Bragi Arnason, to name but a few of the important pioneers of energy in Iceland.

The production of hydrogen and its use as a fuel in Iceland can serve as a model for the rest of the world. To move away from the use of hydrocarbons to the use of a new fuel base demands that we become more skillful in hydrogen technology. The challenges are enormous, and often they seem to go against some fundamental properties of nature. It has indeed become my task to tame

the proton – to harness the lightest and most common of all elements, hydrogen, in order to serve the world.

It is also humbling to stand here in St. Petersburg in the country of some of the leading scientists of history, as I was reminded when I visited the laboratories of Mendeleev, the founder of the periodic table, some years ago. It is an honour for me personally to have studied the textbooks of prominent Russian physicists such as Landau and Lifshitz – as well as to be a direct academic descendant of Professor Kapitza who spent his fruitful period in Cambridge, England, and left his mark there.

My thoughts today also include gratitude to my own University of Iceland, Icelandic New Energy, IPHE and HFP in Brussels for providing a platform for taming the proton. I am pleased that Rector Kristin Ingolfsdottir of the University of Iceland is with us here today.

May this honour be a guiding light for the many young scientists and engineers working towards a better energy future for the world. My role as a teacher, guiding young scientists in their quest for a new energy technology, has been a privilege and has given me a great deal of important inspiration.

I thank you from the bottom of my heart!