Address by Jón Atli Benediktsson, Rector of the University of Iceland, at the Arctic Circle Pre-Event at the University of Iceland: Can we remove CO2 from air and industrial streams in an effective

way?

Held in the Aula on Wednesday 13 October 2021, 1 pm

Chair, speakers, honoured guests.

It is my honour and pleasure to say a few words to open this exciting and urgent conference on climate science. This is the second time that the School of Engineering and Natural Sciences and the Engineering Research Institute at the University of Iceland under the outstanding leadership of Professor Emeritus, Julius Solnes, have organised such an event, which is also a Pre-Event for the 2021 Arctic Circle conference.

The previous conference took place in March 2018 and addressed the causes and consequences of global warming and accompanying climate change. That conference focused on understanding the physical and chemical processes that govern climate on our planet and evaluating the consequences of climate change in a scientific and factual way. It also included discussion of the main consequences of climate change for the biosphere, land and marine environments, glaciers, fish stocks and vegetation.

As we all know, due to the COVID-19 pandemic, very few face-to-face conferences have taken place over the last 18 months. Happily, the pandemic is now subsiding, at least in our part of the world, and our lives are gradually returning to normal, meaning that it has been possible to pick up this conference series where it left off.

The theme this time is a logical progression from the last conference, exploring action we can take to slow global warming. Technologies and methods have now been developed that enable us to systematically capture carbon dioxide, directly from the air but primarily from power stations and factories that burn fossil fuels. There is clearly a lot at stake, since 85% of all greenhouse gas emissions are caused by the burning of fossil fuels. If the carbon dioxide produced by coal and oil-fired power plants and major industry is not captured, we stand little chance of meeting the Paris Agreement's target of preventing global temperatures from rising by more than 1.5° Celsius by the end of the 21st century. Disposal of carbon dioxide from the atmosphere and industrial emissions is a challenge that scientists must tackle with increasing urgency. Research into disposal methods and their development has not received as much attention as it deserves, partly because it has not been profitable for large industrial companies to adopt carbon capture technologies when they can easily buy emissions allowances. This situation presents an ideal opportunity for Icelandic scientists to make a real impact, and we at the University of Iceland are proud of the outstanding work of Prof. Sigurður Reynir Gislason and his team and collaborators with carbfix in this respect.

The University of Iceland has recently adopted a strategy for the next five years prioritising advancement of the UN Sustainable Development Goals, which address the most pressing challenges facing humanity and will be key to maintaining our quality of life on Earth in the future. As creators of knowledge that play a key role in identifying solutions to these challenges, universities bear a lot of responsibility in this area. Our new strategy makes significant reference to the SDGs and sustainability and diversity are one of the four main strategic priorities, meaning that sustainability will form the basis of all work at the University. The two most important goals in our strategy in this context are: First, that the University of Iceland will become a leader in the field of sustainability through teaching, research and knowledge creation and, second, that the University will lead the way in sustainable operations and carbon neutrality. Emphasis is also placed on ensuring that knowledge creation, research and teaching at the University have as broad an impact as possible and are used to promote equality, public health and solutions to climate hazards, social progress, sustainable economic stability, and innovation in all areas of society and industry. Through these efforts, the University of Iceland will make a vital contribution towards the SDGs.

It is also worth mentioning that the University of Iceland is now leading Aurora, a network of 11 prestigious European universities united by a shared commitment to social responsibility. The SDGs and climate issues are central to Aurora. The University of Iceland also became a member of the *University Social Responsibility Network*, USRN, this month. The goal of USRN is to bring universities together to collaborate and share potential solutions to various contemporary challenges, for example in the areas of equality, peace, sustainability and environmental issues, health, and universal prosperity. USRN has 16 member universities across the world.

4

International university rankings place increasing significance on societal impact. In 2021, for the third consecutive year, the University of Iceland was included in the *Times Higher Education University Impact Rankings*, a list of the world's top performing universities for social and economic impact with respect to the SDGs. The list ranks universities based on their performance against indicators of societal and economic impact and advancement of the SDGs.

The new Strategy of the University of Iceland sets out clear and ambitious goals for the development of teaching, research and innovation. It thereby sends a clear message about the University's intention to advance and cultivate a leadership role in sustainable development.

Dear guests. As I previously mentioned, the reason we can now hold this conference and the Arctic Circle Assembly after such a long hiatus is that humanity has united to tackle the pandemic. I allow myself to be optimistic that the pandemic will inspire us to change our attitudes and that the experience will reveal a path to reaching our goals. Now is our chance. It could be argued that one of the most important lessons of the pandemic was that humans were able to achieve what was previously considered impossible – global unity against an imminent threat.

6

Dear guests. This conference will feature lectures from many of the University of Iceland's and our partner institutions' leading specialists in climate action, demonstrating the University of Iceland's initiative in fostering reasoned debate about all aspects of this important issue.

I wish you a very enlightening conference.

Thank you.