

Dear guests, ladies and gentlemen,

It is a great honour for me to address this event. The summary of the IPCC Special Report on the Ocean and Cryosphere in a Changing Climate is announced today in Monaco. Key scientists involved in this work have made the effort to come here to present its findings to us. It is important that the newest message of science is heard here in New York in the Climate Action Summit week. This report is not science for science's sake. It is science we need to guide us in adapting to a changing environment – and most importantly, to avert a planetary disaster. So again, thanks for your effort.

I am not a scientist, and I will not attempt to evaluate the findings of the new IPCC report. But they need to be known and understood by me and my colleagues in government and politics all over the world.

This report touches upon two issues that are especially relevant for Iceland with regard to climate change. It is about the sea, and it is about ice. Let me say here a few words about these topics, and then conclude with a thought on how science is relevant to policies and action. Because we need to listen to science. We need to act based on science and facts. The stakes could not be higher.

Ladies and gentlemen,

About the sea:

Over 70% of the surface of the planet is covered by water. We tend to think of climate change in connection with atmospheric temperatures. But that is just a small part of the story. With our emissions we are tinkering with the fundamental workings of planetary systems: Temperatures and heat flows, chemical cycles and food chains. Air, land and water; life on Earth.

The impacts of climate change are less visible to us in the ocean than on land. But they are no less profound.

The oceans take up around a quarter of our carbon emissions and soak up 90% of the excess heat. This has a big impact on the sea. Heat waves in tropical seas cause coral bleaching. Sea ice is receding – rapidly in the north. Ecosystems move towards the poles with warming trends, affecting fisheries and livelihoods. The northernmost ecosystems, however, have nowhere to go. With over 2 degrees of warming, the Arctic as we know it will change beyond recognition.

The change in chemistry is no less important. Ocean acidification is a real and serious threat to marine life. Today's ocean acidity is already greater than at any time in the previous 3 million years. And it is getting worse.

It is a silent threat as well, invisible to us. This report brings it forward: allowing us to see the looming catastrophe that we must avert.

Half of our homeland is the sea, says an Icelandic proverb. That is no exaggeration. Iceland is not only surrounded by the sea, but our economy is greatly dependent on fisheries. We see warm-water species moving into our waters and others moving north, out of our waters. Acidification is a special threat in cold polar waters, where the change happens more quickly with some of the most rapid changes happening north of Iceland. We do not know much yet what effect this will have on marine life and fisheries in Iceland in the future. Today, the Icelandic government is announcing increased efforts for studying ocean acidification. But we cannot halt acidification except by curbing carbon emissions. There is no other way.

Ladies and gentlemen,

A few words about ice:

The cryosphere, or the frozen areas of our planet cover about 10% of its surface. But it is here that we find the most visible impacts of climate change. The great thaw should be of great concern to the unfrozen 90% of Earth. It will raise sea levels and change water

cycles. It will affect hundreds of millions of people directly. It will affect all of us in some way.

Iceland is the only UN member state, as far as I know, that takes its name from the cryosphere. Glaciers cover over 10% of Iceland. Mighty glaciers and smaller caps of ice on high peaks are a cherished feature of the Icelandic landscape. They are retreating. So, we feel a special responsibility to give voice to the world's glaciers.

Last month, I participated in a goodbye ceremony for Ok, a well-known icy mountain in Iceland that has lost its status as glacier. Scientists counted over 300 glaciers in Iceland in 2000. Seventeen years later, 56 of them were gone. This is not a nerdy statistic; it is a countdown to disaster.

Warming over 2 degrees Celsius will almost certainly melt most mid-latitude glaciers – in the Alps, New Zealand, the Rocky Mountains and other places. Himalayan glaciers – often called the Third Pole – will shrink greatly in a 2 degree world, affecting the water supply of a big part of humankind.

If we do not act, the great ice sheets of Greenland and West Antarctica will reach the point of unstoppable bleeding, locking in sea level rise of up to a dozen meters or more.

A billion people live within 10 meters above sea level. Many are already feeling the effect of higher waters and more vulnerability to storm surges and disasters. So, we better listen to the message of our retreating glaciers.

We are giving Icelandic glaciers a stronger voice. My government is announcing today increased funds for glacier monitoring and related education programs.

Finally, a few words about science – and its meaning for policy and action,

We have entered the era where we humans are a dominant force in shaping nature. Our actions affect key chemical and biological cycles on Earth and transform entire ecosystems. There is no doubt about that. Those who claim that sunspots are to blame for recent climate change, or some other factor that is not us, have long since lost the plot. We cannot spend much time debating those who choose to close their eyes to science.

We must understand the science. Here, the role of the IPCC is invaluable. You take the best available results of scientific research and give it to us in understandable language. This allows us to take decisions based on facts.

Some voices despair at the findings of recent IPCC reports.

But I would ask us to embrace hope. If we humans can have such dramatic impact on life on this planet, then it is also within our powers to change course and limit the damage. We can accelerate the ongoing change towards clean energy. We can plant trees instead of burning forests. We can use nature-based solutions to soak up carbon from the atmosphere. We can change the signals of our economic system, so that it rewards green growth and clean solutions, but not pollution and unchecked consumption and waste.

The solutions are within our reach. It is the work of politicians – and us all – to grab them and use them. We should listen to the message of science here – of bleaching coral reefs and retreating glaciers. We should listen to the voices of the young generation, and vow to ensure that we hand over to them a world of hope.

Thank you,