BBC LEARNING ENGLISH

6 Minute English

Melting ice sheet: Is it too late?

This is not a word-for-word transcript

Neil
Hello. This is 6 Minute English from BBC Learning English. I'm Neil.

Georgina
And I'm Georgina.

Neil
With no end in sight to the coronavirus pandemic, many people can't wait for the year 2020 to end.

Georgina
But with the coronavirus dominating the newspaper headlines, attention has moved away from an equally serious global issue which has quietly been getting worse – climate change.

Neil
August 2020 saw the hottest temperature recorded anywhere in modern times – 54.4 degrees Celsius in California's Death Valley.

Georgina
The same month also saw record amounts of ice melting into the oceans around Greenland and the Arctic - huge icebergs breaking away from the edge of the **ice sheet** – a thick layer of ice which has covered a large area for a long time.

Neil
Greenland's ice sheet is three times the size of Texas and almost 2 kilometres thick. Locked inside is enough water to raise sea levels by 6 metres.

Georgina
But global heating and melting polar ice has many scientists asking whether it's now too late to stop. Have we have reached the point of no return? In this

programme we'll looking at the effects of climate change on the Arctic and asking if it's too late to change.

Neil
And learning some of the related vocabulary too. Now, Georgina, you mentioned record levels of ice melt in the North Pole but the scale is hard to take in. The amounts are so big they're measured in gigatonnes – that's a billion metric tonnes.

Georgina
Imagine a giant ice cube 1 kilometre by 1 kilometre by 1 kilometre.

Neil
So my quiz question is this: how many gigatonnes of ice are now melting into the ocean every year? Is it:
a) 450 gigatonnes?,
b) 500 gigatonnes?, or
c) 550 gigatonnes?

Georgina
I'll take a guess at b) 500 gigatonnes.

Neil
OK, Georgina, we'll find out later. Now, glaciologist Michalea King has been monitoring the melting of Arctic ice by satellite. Here she is answering a question from BBC World Service programme, *Science in Action,* on whether the destruction of the ice sheet is now unavoidable:

Michalea King
If we were to say… define a **tipping point** as a shift from one stable dynamic state to another, this certainly meets that criteria, because we're seeing now that the **ice sheet** was more or less **in balance** prior to 2000 where the amount of ice being drained from the **glaciers** was approximately equal to what we are gaining on the surface via snow every year.

Georgina
Ice is made from snow falling on Greenland's **glaciers** - large, slow-moving masses of ice. At the same time though, ice is also lost through melting.

Neil
These two processes of making and melting ice kept the ice level **in balance** - having different parts or elements arranged in the correct proportions. Essentially the melting ice was replaced by newly frozen ice.

Georgina
But now, the glaciers are shrinking faster than new ice is being accumulated and the situation may have reached a **tipping point** - the time at which a change or an effect cannot be stopped.

Neil
So, does this mean that global heating and ice melting are now running automatically, separate from the amount of greenhouse gases humans are pumping into the atmosphere? And does that mean should just give up on the planet?

Georgina
In fact the situation is far from simple, as Michalea King explains here to BBC World Service programme, *Science in Action*:

Michalea King
We can definitely control the rate of mass loss, so it's definitely not a **'throw your hands up'** and just not do anything about it – give up on the ice sheet kind of situation – that's certainly not the message I want to send – but it does seem likely that we will continue to lose mass… but of course, a slow **rate** of mass loss is highly preferred to large annual losses every year.

Neil
Michalea thinks that changes in human activity can still slow the **rate** – or speed at which something happens, in this case the speed of Greenland's **ice sheet** melting.

Georgina
She's convinced it's not too late for collective action to save the planet, so it's not yet time to **throw your hands up** – an idiom meaning to show frustration and despair when a situation becomes so bad that you give up or submit.

Neil
It's a positive message but one which calls for everyone to do what they can before it really *is* too late.

Georgina
Because the **rate** of ice melt is still increasing, right, Neil?

Neil
Yes, that's right – in fact, that was my quiz question, Georgina – do you remember?

Georgina
Yes, you asked me how many gigatonnes of Greenland's **ice sheet** are now melting every year. I said b) 500 gigatonnes.

Neil
And you were…correct! In fact some of these giant ice cubes are like small towns, almost a kilometre tall!

Georgina
So there's still work to be done.

Neil
In this programme we've been looking at the **rate** – or speed – of ice melt in Greenland's **ice sheet** - the thick layer of ice covering a large area of the Arctic.

Georgina
Previously, the melting ice was replaced by newly formed ice on **glaciers** – large masses of slow-moving ice. This kept the Arctic **in balance** – having different elements arranged in proportion.

Neil
But the effects of global heating have brought us close to a point of no return, called a **tipping point** - the time at which a change or an effect cannot be stopped.

Georgina
The situation is serious but there's still time to take action and not simply **throw your hands up** – show frustration and despair when you want to give up.

Neil
That's all for this programme, but if you want to find out more about climate change and Greenland's ice sheets, search BBC's *Science in Action* website.

Georgina
And for more trending topics and useful vocabulary, remember to join us again soon at 6 Minute English. Bye for now!

Neil
Goodbye!

VOCABULARY

ice sheet
thick layer of ice covering a large area of land for a long period of time

glacier
very large, slow-moving mass of ice

in balance
having different parts or elements arranged in the correct proportions

tipping point
time at which a change or an effect cannot be stopped

rate
speed at which something happens or changes

throw your hands up
(idiom) show frustration and despair when a situation becomes so bad that you give up or submit