

Table of Contents

- Introduction about Frozen Worlds
- Effects of the frozen worlds on our food resources
- Effects of the frozen worlds on our energy resources and climate change
- Effects of the frozen worlds on our health and happiness
- What we can do

What is Arctic Region?

The Arctic region is the northernmost region of the planet, consisting of the Arctic Ocean and parts of Russia, Greenland, Canada, USA, Norway, Iceland, Sweden and Finland that lie above the 'Arctic Circle'.



What is the Antartic?



At the other end of the earth, the Antarctic is the world's highest, driest, windiest and coldest continent. It is bigger than Europe and is so dry that it's actually classed as a desert.



Effects of the frozen worlds on climate change

Arctics vast expanse of ice and snow reflects sunlight, which helps cool the Earth's surface. This phenomenon is known as the albedo effect. As the Arctic ice melts due to global warming, it exposes darker ocean water beneath. Dark surfaces absorb more sunlight, leading to further warming in the region. This positive feedback loop accelerates climate change, contributing to rising global temperatures.

Effects of the frozen worlds on climate change

- The Arctic region contains vast reserves of fossil fuels, including oil and natural gas. Melting ice has made these resources more accessible, leading to increased interest in Arctic energy exploration and production.
- The extraction of fossil fuels in the Arctic can have several impacts: it can exacerbate climate change by releasing more greenhouse gases, it poses environmental risks, and it can lead to geopolitical tensions over resource rights.

Effects of the frozen worlds on our health and happiness

Loss of ice from the poles is causing weather systems to change because the Arctic and parts of Antarctica are warming faster than the rest of our planet. We are already seeing more droughts and flooding around the world. Also, when ice melts it will cause sea levels to rise so that millions of people and lots of wildlife could see their homes disappear below the waves.

Changes in Arctic climate patterns can influence the frequency and severity of extreme weather events worldwide. These events, such as hurricanes, floods, and wildfires, can lead to injuries, displacement, and emotional distress.

What can we do?

Addressing the complex issues of pollution, ice melting, and their far-reaching impacts in the Arctic demands a concerted global effort. By swiftly reducing greenhouse gas emissions, protecting Arctic ecosystems, and minimizing pollution through international agreements and sustainable practices, we can mitigate climate change and safeguard the health and happiness of Arctic communities and the planet as a whole. Additionally, supporting indigenous rights, investing in research and adaptation measures, and raising public awareness are crucial steps towards building a more resilient Arctic and a sustainable future for all.