MELTING GLACIERS
A PROBLEM WE CAN NO LONGER IGNORE

Unless you live near Alaska, Antarctica, Greenland, or the Canadian Arctic, you may not give glaciers much thought. Perhaps you went aboard a cruise ship for an up-close view of these ancient, glistening crystal white and blue wonders! You may even have had the fortune of witnessing the spectacular calving of these enormous masses.
Then, you return home, share stories, scatter social media posts with incredible photos, and never give it another thought.

I was just like you! I stood on these thousand-plus-year-old monoliths and marveled at their immense size and beauty, believing that they were here long before man and would be here long after!

I was wrong! I couldn't see the tragic rate these glaciers were bleeding away through melting, calving, and recessing.

Why is this important?

Ice acts like sunscreen and air conditioning for the Earth and its oceans. Their brilliant white acts to reflect excess heat into space, cooling the planet.

Glaciers worldwide can vary from several hundred to several thousand years old and serve as a scientific record of climate change over time. We can gain valuable information about just how rapidly the planet is warming through these records by studying how climate has changed over time.

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When glaciers melt rapidly in Antarctica and Greenland, ocean currents slow down with the massive amounts of very cold glacial-melt water entering warmer ocean waters. Also, as ice on land melts, sea levels will continue to rise.

Why Are Glaciers Melting and Why Should We Care?

Since the early 1900s, many glaciers worldwide have been rapidly melting. Human activities are to blame for this phenomenon. Beginning with the industrial revolution, carbon dioxide and other greenhouse gas emissions have raised temperatures on the planet, even more in the poles, leading to the rapid melting and calving of the glaciers.

According to the World Wildlife Federation, “Even if we significantly reduce emissions in the coming decades, more than a third of the world’s remaining glaciers will melt before the year 2100. When it comes to **sea ice**, 95% of the oldest and thickest ice in the Arctic is already gone.”

According to scientists, if emissions continue to rise, the Arctic could be ice-free in the summer as soon as 2040 as ocean and air temperatures continue to increase. Melting glaciers create a catastrophic chain of events by adding to rising sea levels, increasing coastal erosion, increasing storm surge, and warming air and ocean temperatures, leading to more frequent and intense hurricanes and typhoons.

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The ice sheets in Greenland and Antarctica are currently the most significant contributors to global sea-level rise. Today the Greenland ice sheet is disappearing four times faster than in 2003 and already contributes 20% of the current sea-level rise. The rate at which the Greenland and Antarctic ice sheets melt will be a significant determiner of how much ocean levels rise in the future. If carbon emissions continue to rise, the melting rate of the Greenland ice sheet could double by the end of this century. (*Yes, the one we are almost a quarter of the way through!*)

Melting Sea Ice’s Impact on Weather Patterns.

The Arctic is increasing in temperature at twice the rate of anywhere else on Earth, and arctic sea ice is declining by greater than 10% every 10 years. As this ice melts, dark patches appear in the ocean, eliminating the sunscreen and air conditioning effect I spoke of earlier in this article, creating warmer air temperatures and disrupting the usual patterns of ocean circulation.

How Does This Impact Humans?

69% of the Earth's freshwater is in glaciers. As glaciers melt into the ocean, the freshwater mixes with the saltwater, making it no longer available for drinking or irrigation. If melting glaciers don't directly impact you, and you think you're safe from climate change, look around and compare your surroundings to 10 years ago. Warmer temperatures in warmer climates are causing receding lake shorelines. Growers of climate-vulnerable fruits such as grape vineyards are watching their crops perish. Dryer climates lead to more frequent and severe wildfires, destroying thousands of acres and homes and driving wildlife out of their habitats.

What Can Be Done?

Effective action on mitigating climate change involves educating people on the damage that is occurring now. It also means looking ahead, focusing on reducing the heat-trapping gases in the atmosphere that perpetuate the damage to our warming planet. There is good news! We all can play a huge part in reducing the damage by reducing emissions and reducing our carbon footprint with a few simple changes **and actually reverse the damage.**

If the Earth can reduce CO2 emissions by 45% in the next 10 years, glaciers can still be saved rather than their current rate of falling to zero by 2050.

Worldwide, we've already taken efforts to reduce emissions by increasing the use of renewable energy sources like solar energy and electric cars, but that is just a good start! While all mankind can take steps large and small to reduce their carbon footprint to reduce C02 emissions, innovative companies like WellPlanet Project are leading the solutions to remove emissions permanently!

WellPlanet Project is creating technology to remove 10 million tons of C02 directly from the air each year, the equivalent of 400 million trees! This technology uses only renewable solar and geothermal energy!

WellPlanet Project needs your help! With your help this Co2 capture technology is possible. Get involved today! Visit WellPlanet Project for ways you can help! **We're all in this together!**