

Consequences of Warming

Human activity has added about 2,040 billion metric tons of carbon dioxide to the atmosphere since 1750. In response, the planet is warming. Change is already visible. Severe droughts, storms and heat waves are becoming more common. Global sea level is rising as the ocean warms and ice sheets melt, leading to more coastal floods. **Climate is changing, and we are seeing the consequences.**

How Do Impacts Progress?

Some consequences of climate change are visible now, and more are developing over time and as warming increases. Without major CO₂ reductions, rising temperatures may trigger severe impacts. What **could** this mean over the next 100 years?

BEFORE AND AFTER

SLIDE to see changes over time

PRESS for next location



Average global temperature in 2001 was 0.4°C (0.7°F) above the 1901–2000 baseline.

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NOW TO SOON

Record-breaking heat is becoming more frequent and extreme.

Extreme weather events are more frequent than they were in the early 1900s.

Arctic and other sensitive ecosystems are altered, perhaps irreparably.



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OVER THE NEXT FEW DECADES

Vulnerable species could migrate or go extinct in greater numbers, disrupting ecosystems worldwide.



Sea-level rise could displace millions of people in the second half of the century.

OVER THE NEXT 50–100 YEARS

Droughts, floods and forest fires may reduce global food and water supplies.

Food and water shortages could set the stage for political instability.



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The future is uncertain.

But the risk of catastrophe becomes greater as CO₂ emissions continue.

Warming of 3°C (5.4°F) or more could bring severe, widespread consequences.

FLPA/Alamy