

Climate Change: Causes

Greenhouse gases (GHGs) are vapors in the atmosphere, like carbon dioxide, that trap heat around the earth. When we use fossil fuels like coal, natural gas, and oil to power our homes, businesses, and vehicles, we release even more GHGs into the atmosphere.



Humans have released a significant amount of GHGs since the mid-1800s, and this has led to rising temperatures and other changes in our earth and climate.



Sources of Emissions



Electricity



Transportation



Industrial



Buildings



Waste



Agriculture

Climate Change: Consequences

Delawareans are already experiencing the impacts of climate change, with more on the way.



Increased Temperatures

Delaware temperatures have risen 2°F since 1900.

PROJECTED:

Delaware temperatures are expected to increase another 2.5-4.5°F by 2050, with an up to 8°F increase by 2100.



Hotter, Longer Summers

Historically, days above 100°F in Delaware have occurred less than once per year.

PROJECTED:

By 2050, Delaware can expect 2-8 days per year to reach above 100°F.



Rising Sea Levels

Sea levels at the Lewes tide gate have risen more than a foot over the last century.

PROJECTED:

Sea levels at the Lewes tide gate are expected to rise an additional 9-23" by 2050.



Increased Precipitation

Delaware averages 45" of rain per year, typically evenly distributed among seasons. Rainfall in the autumn has been increasing 0.27" per decade.

PROJECTED:

Overall rainfall in Delaware is expected to increase by 10% by 2100. The number of very wet days (2" or more of rainfall) will also increase.