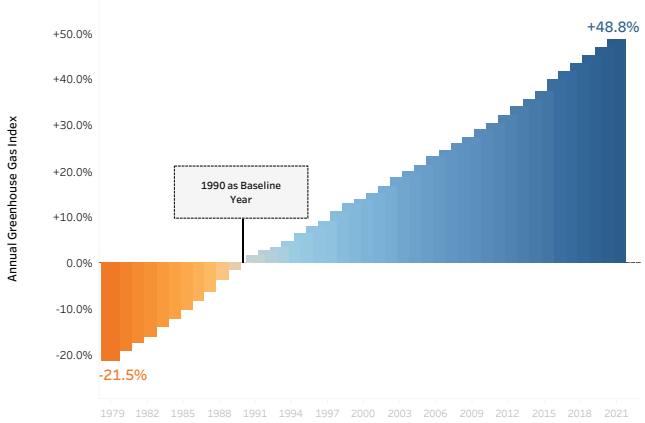
Global Radiative Forcing:
Uderstanding the Annual Greenhouse Gas Index (AGGI)

Global radiative forcing is a measure of the imbalance between the incoming solar radiation and the outgoing thermal radiation in the Earth's atmosphere, used to evaluate the effects of human activities such as emissions of greenhouse gases (GHGs), deforestation, and aerosol emissions on the Earth's climate. It is used to monitor changes over time and evaluate the relative impact of different human activities on the Earth's climate.

Annual Greenhouse Gas Index (AGGI) over Time

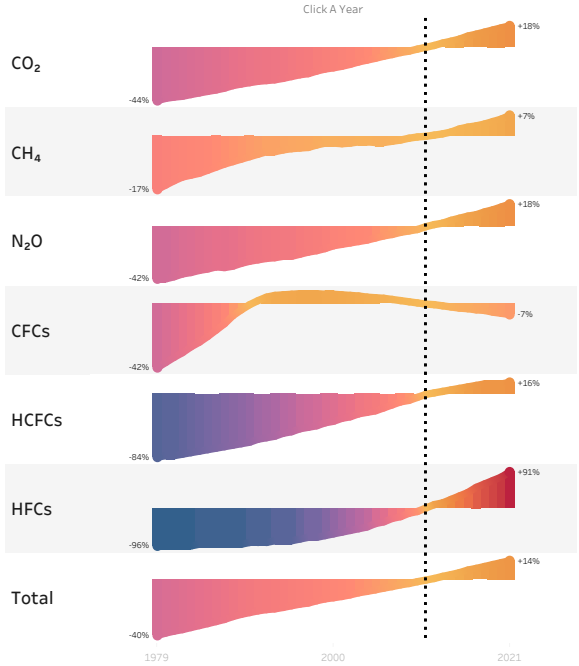


Annual Greenhouse Gas Index (AGGI) is a metric that tracks the overall warming impact of all GHGs in the atmosphere. It is calculated by comparing the total warming impact of GHGs in a given year to 1990 as a reference year.

5 Gases
are mainly resposible for
96%
of the global raditive force by GHGs since 1979

The most well-known GHG is carbon dioxide (CO_2), which oncentration has been increasing due to human activities such as burning fossil fuels, deforestation, and industrial processes. Rising CO_2 levels can cause ocean acidification by absorbing into the oceans, which could harm marine life and disrupt the food chain.

GHGs Emission of Past 23 Years Compared to 2011



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Data Source: https://gml.noaa.gov/aggi/aggi.html