

Carbon Concerns

Since the dawn of the industrial age, the global economy has become increasingly dependant on the use of fossil fuels to power our businesses and our way of life. The consensus among the majority of the world's climate scientists is that human activities have had the most significant effect on the level of greenhouse gas (GHG) emissions.

If greenhouse gas emission trends continue, rising air temperatures will cause a number of problems worldwide such as the retreat of mountain glaciers, reduced snow-cover, earlier snow melt, rising sea levels and the movement north of some species habitat.

How much do we emit?

About three-quarters of the CO₂ emissions caused by human activity during the past 20 years comes from the burning fossil fuels like coal in order to power the electricity we use and the cars we drive. The rest is predominantly due to land-use change, especially deforestation.

In the United States:

- The average U.S. citizen emits roughly 6.6 tons of greenhouse gases each year
- More greenhouse gases are emitted per person in the U.S. than in any other country
- With only 4.6 of the world's population, U.S. greenhouse emissions account for roughly 25 percent of global emissions
- CO₂ emissions have grown more than 18 percent since 1990
- The Department of Energy projects CO₂ emissions will increase another 37 percent by 2030

The role electricity generation plays

Electricity generation is responsible for 33 percent of greenhouse gas emissions and the demand for electricity is growing rapidly. The world will consume 75 percent more electricity in 2020 than it does today -- and that demand will triple by 2050, according to the World Energy Council.

In the U.S., electricity generation is responsible for:

- 38% of the carbon dioxide (CO₂)
- 66% of the sulfur dioxide (SO₂)
- 40% of the mercury

The role transportation plays

CO₂ emissions from transportation also make a significant contribution to the greenhouse gas emissions released today.

According to recent data:

- Transportation accounts for 14 percent of the world's human activity related emissions
- The average passenger vehicle, driven 12,500 miles per year, emits about 11,450 pounds of CO₂ per year