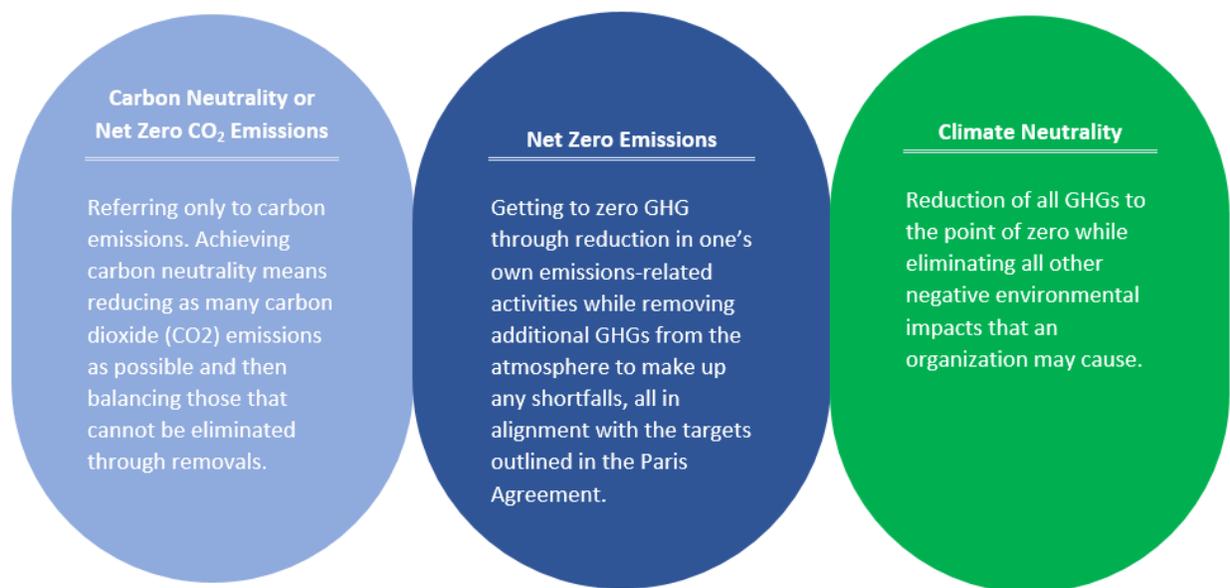


## Net-Zero Emissions: Cutting Generation and Increasing Offsets

Now that the effects of climate change are becoming more obvious nations are developing net-zero emissions plans. Net-zero emissions refers to a state where the greenhouse gasses produced by human activity are canceled out by the amount of gasses actively [removed](#) from the atmosphere. To reach net-zero, countries are working on a fast energy transition to renewable energy while decarbonizing the transportation sector.

### What Does Net Zero Emission Mean?

For a country to achieve net-zero emissions, it must balance the production of greenhouse gasses with how much it removes from the atmosphere. This requires a dual approach - finding ways to reduce initial greenhouse gas emissions and implementing strategies to remove unavoidable emissions.



Source: [Sphera](#)

This represents a substantial shift within global economies where some industries will be more impacted than others. For example, industries that produce a physical product tend to have long supply chains that are energy intensive. On the other hand, information technology has a significantly lower carbon footprint.

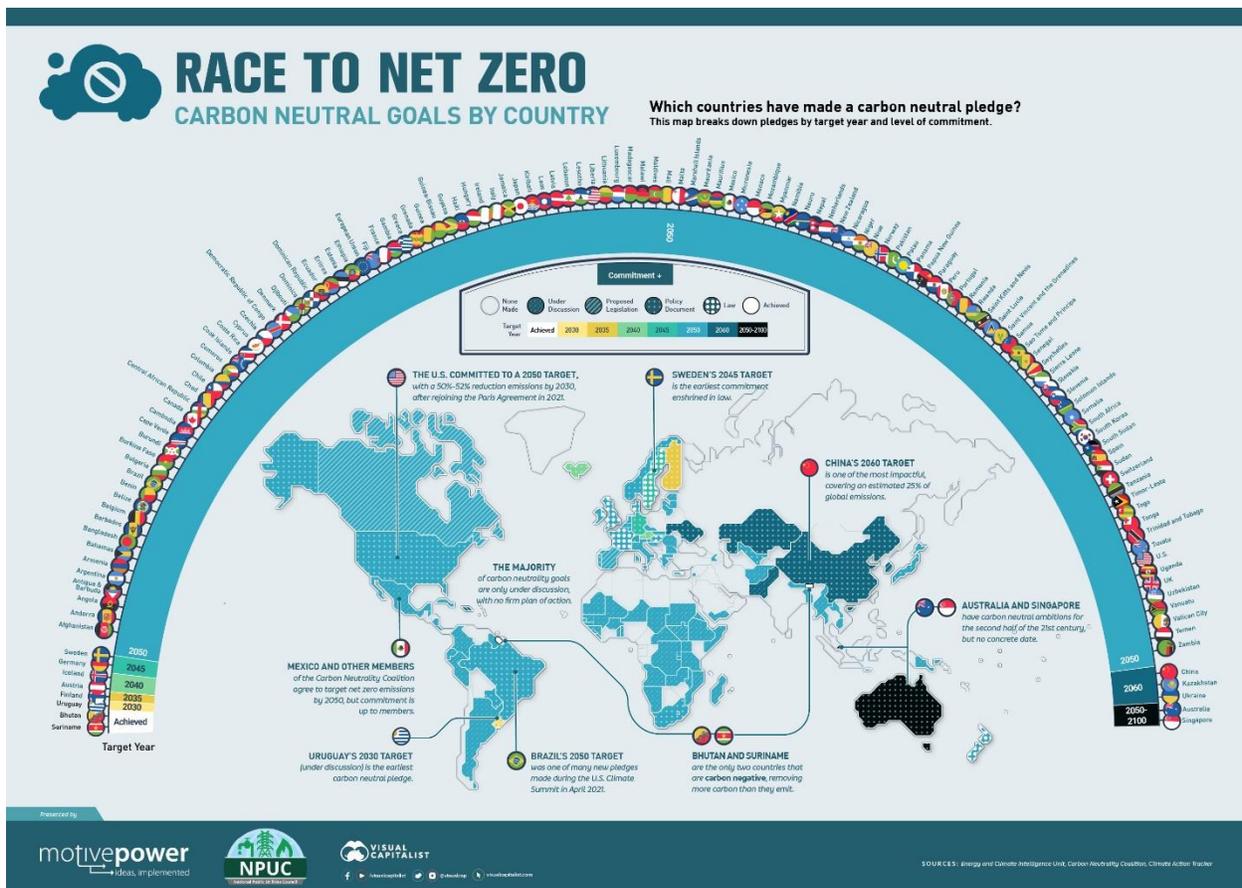
But regardless of the industry, net-zero emissions requires emissions reductions across all facets of the economy. As such, net-zero targets need cooperation and partnerships from industry stakeholders to transform their operations to low-carbon versions of themselves.

# What is Net Zero Carbon Emissions?

In practice this means finding opportunities within supply chains to reduce carbon outputs, becoming more efficient in terms of development, energy, and transport. Then, simultaneously exploring the ability to create offset programmes and other carbon capture projects. Some examples include carbon capture storage (CCS) developments like those seen in [Iceland](#) and [Australia](#) and pushes to replace fossil fuel energy and transportation with renewable [options](#).

Determining total emissions production can be difficult, but governments are focusing on reducing their output as much as possible to balance their carbon budget appropriately.

## Are any countries net-zero emissions?



Source: [Visual Capitalist](#)

So far two countries have reached net-zero emissions, Bhutan and Suriname. Also several nations are close to [achieving](#) this balance, like Uruguay and Finland. Overall, 137 countries have pledges to reach net-zero. While most have their targets to be reached by 2050, larger developing economies like China and India have set their goal for [2070](#).

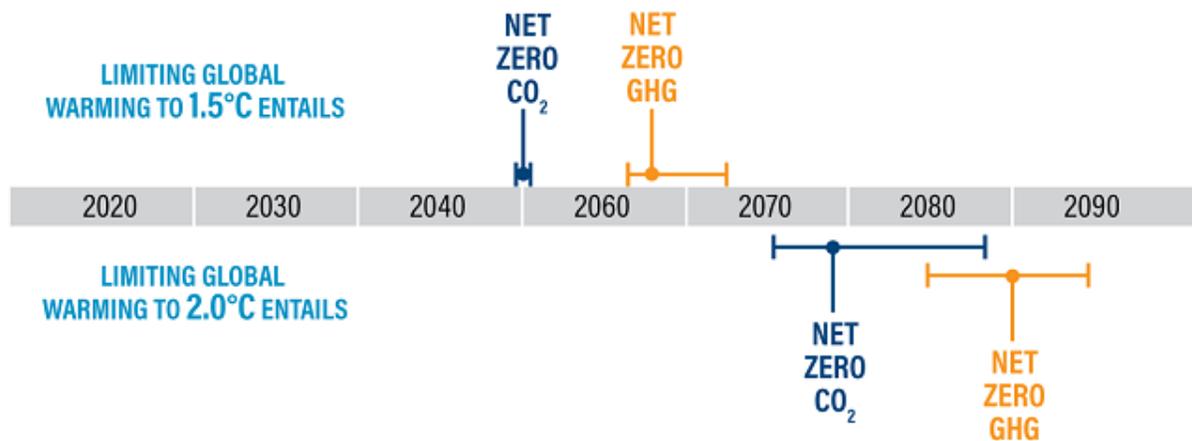
Countries are not alone in wanting to achieve net-zero, the private sector is also making an effort. Several private sector companies have much faster targets, like Price Waterhouse Cooper, which will decarbonize by the [turn of the decade](#).

## Why is Net Zero Emissions Important?

Achieving net-zero is crucial to reducing the impacts that climate change will have in the future. Greenhouse gasses contribute to warming the planet, which deregulates the Earth's environmental processes. This exacerbates natural cycles to create dangerous environmental events.

Scientists have determined that limiting warming to 1.5°C by 2100 would reduce the odds of catastrophic climate change - yet we are currently off track, and heading to a 2°C+ future. Therefore, countries have taken to setting net-zero emissions in order to achieve the 1.5°C goal and mitigate the consequences of climate change. However, in order to reach this target, net-zero must be reached by 2050.

### Global timeline to reach net-zero emissions



Source: IPCC Special Report on Global Warming of 1.5°C

 WORLD RESOURCES INSTITUTE

Source: [The City Fix](#)

## What Do We Do About Net-Zero Emissions?

Many nations are tapping into their natural environments to reach their goals. Both Suriname and Uruguay have large forests that act as carbon sinks, while other nations such as Costa Rica have large renewable energy sources.

Leveraging [natural resources](#) and ecosystems will help with reaching net-zero. Additionally, transitioning away from fossil fuels and creating more efficient supply chains have an important role to play. Once a country achieves net-zero, it can then take the next step of becoming a carbon-negative economy. Net-zero is the first step towards a more environmentally friendly future, we must work together to make it reality.