# Is Australia on Track with Emissions?

Imagine a future where bushfires burn hotter, floods strike harder, and the Great Barrier Reef fades into memory. That future is not far — unless we act now.

Since 1850, global temperatures have steadily risen—closely mirroring the sharp increase in greenhouse gas emissions from industrialization. It's a stark reminder that human activity is driving climate change. Urgent action is needed to limit global warming.

The 2015 Paris Agreement aims to limit global temperature rise to below 2°C, with efforts to cap it at 1.5°C above pre-industrial levels.

Australia is just 0.3% of the global population, yet it ranks among the highest per-capita carbon emitters. As a global leader in economy and innovation, its climate actions carry weight far beyond its size.

By 2030, Australia aims to cut emissions by 43% from 2005 levels and reach 82% renewable electricity.

By 2050, the country targets net zero emissions.

While our GDP has risen significantly since 2005, Australia's National Greenhouse Accounts data by the Department of Climate Change shows Australia's emissions have decreased steadily during the same period, demonstrating a decoupling of economic activity from emissions intensity.

However, a critical gap still remains: our current trajectory falls short of our 2030 Paris Agreement target of a 43% reduction. This underscores the urgent need for more impactful policy and behavioral changes to achieve our climate commitments.

Data from the Australian Energy Statistics, shows that Australia has progressed considerably in renewable energy and emission intensity of the grid. We've seen consistent growth in renewable sources, leading to a decline in greenhouse gas emissions per gigawatt-hour.

Still, our current trajectory falls short of the 2030 target of 82% renewable energy.

Energy Statistics data shows how different industry-sectors consume renewable energy. Transport is the largest energy consumer, predominantly reliant on non-renewable fuels. Primary industries like agriculture, mining, and construction heavily depend on non-renewable sources, while manufacturing and residential sectors show promising adoption of renewables.

Though Australia targets 82% renewable energy generation by 2030, but till date, most states lag significantly. However, states like South Australia and Tasmania demonstrate impressive leadership, nearing or exceeding targets.

While we show a consistent reduction in per capita emission over the years, we still remain significantly higher than China, whose emissions are steadily increasing, and the EU, which continues its decline from already lower levels. Though the trajectory of the US closely mirrors us.

Our 2024 Climate Action Tracker rating highlights a stark reality. The overall rating is "Insufficient," indicating current policies are likely to lead to over 3°C of global warming. This "Insufficient" rating extends across policies, 2030 targets vs domestic pathways and fair share contributions, and is “Critically Insufficient” in climate finance.

The Clean Energy Regulator data offers some hope. Individuals in Australia are driving a huge change, with over four million rooftop Solar installations reaching a cumulative 25.5 GW capacity by November 2024.

Australia leads the world in per capita solar electricity generation, producing 1,774 kWh per person in 2023, surpassing the UAE and the Netherlands.

Notably, over one-third of South Australian homes now feature rooftop solar.

This sustained upward trend in both number of rooftop installations and cumulative PV capacity, highlights the strong public adoption of solar technology and its significant contribution to Australia's renewable energy landscape, reinforcing the potential for individual actions to drive meaningful change.

As a nation, Australia has made strides in decoupling economic growth from emissions and boosting renewables. However, a significant gap remains in meeting our Paris Agreement targets, and our international climate action ratings are still "Insufficient." While individual efforts offer hope, urgent and ambitious policy changes are critical for Australia to accelerate progress and fulfill its global climate responsibilities.