

Climate Jargon

Sometimes it feels like a whole other language when talking about emissions. Let's break down a few buzz words.

Emissions and carbon

Driving a vehicle produces all kinds of emissions. These can be tiny particles from tyres slowly wearing down, microscopic pollutants produced by brake pad friction, or even the “new truck smell” of interior surfaces. But by far the most emissions come out of a truck’s tailpipe due to burning diesel as a fuel. **Tailpipe emissions** can be separated into two main groups: noxious emissions and greenhouse gas emissions.

Noxious emissions are associated with bad air quality and pollution, and include oxides of nitrogen (NO_x), oxides of sulphur (SO_x), and fine and ultrafine particulate matter (PM₁₀ and PM_{2.5}). Because of their health impacts, noxious emissions have been regulated in Australia for decades using the Australian Design Rules (ADRs) or equivalent **Euro standards**. Euro I was introduced in the 1990s and was limited compared to today’s standards. Euro III, Euro IV and Euro V standards rolled out in the following decades, and Euro VI starts in November 2024, placing very strict limits on the noxious emissions that any newly sold truck can emit from its engine.

Greenhouse gas emissions are different, even though they also come from burning fuel (and other sources like air conditioning gases). They refer to several different gases contributing to climate change with **carbon dioxide (CO₂)** by far the most common. That’s why people talk about “**decarbonisation**” or reducing their “**carbon footprint**” when referring to reducing the amount of greenhouse gases a business produces. For truck operators, this generally means burning less fuel and operating more efficiently or switching to lower carbon energy/fuel.

Offsets and carbon credits

Cutting carbon out of business operations can be difficult though, so some businesses pay other businesses to make the cuts for them. If the second business manages to emit less or finds another way to reduce emissions (e.g. by planting trees), they create a “**carbon credit**” equal to the emissions that would have been produced otherwise. Other companies can then buy this credit to cancel out or “**offset**” their own emissions.

Australia’s carbon credits are called **ACCUs** – each ACCU represents 1 tonne of greenhouse gas emissions that have been ‘saved’ by Australian businesses. Truck operators can apply to the Australian Government to create ACCUs if they can prove they have emitted less than they otherwise would have. They can then sell these carbon credits to other companies looking to neutralise their own emissions.

If a company buys enough carbon credits to equal the emissions that they produce themselves, they can claim to be “**carbon neutral**” – their purchased offsets cancel out their own emissions.



From January 2025, greenhouse gas emissions will be regulated for cars and light commercial vehicles, under the **New Vehicle Efficiency Standard**. This standard does not apply to Australian trucks, but similar rules do apply overseas. **Around 70%** of the global truck market is covered by some kind of CO₂ standard.

Australia will slowly get access to the more fuel efficient models developed to meet those stricter international rules. For Australian truckies, that means more truck models that burn less fuel will become available to buy in the years ahead.



Access all the resources here

Targets, Paris Agreement & net zero

The **Paris Agreement** is the international pledge to keep global temperatures from rising more than 1.5–2 degrees. To do this, many countries (and companies) are aiming to be “**net zero**” by 2050. Unlike simply purchasing offsets to become ‘carbon neutral’, net zero means doing everything possible to reduce greenhouse gases then only offsetting leftover emissions as a last resort. In this way, our ‘net’ impact on the climate (emissions minus offsets) will effectively be nil.

Australia has a target of being ‘net zero’ by 2050 too, which means phasing out use of most conventional diesel fuel. The first milestone to achieving net zero is 2030, by which time Australia aims to **reduce emissions by 43%** compared to our emissions in 2005. The target for 2035 is currently being set by the Australian Government.

To date, there are no specific targets or emissions reduction rules for the trucking sector. But this does not mean that truck operators won’t be affected.

Scope 3 and supply chain emissions

Around 60% of companies listed on the ASX have a net zero goal. As they reduce their direct emissions from electricity and other energy consumption, these companies are looking at their supply chains to reduce so-called “**Scope 3 emissions**”. Broadly, Scope 3 emissions are those that a company is indirectly responsible for through their people, products, and purchasing. For freight owners and consignors, freight transport is often one of the biggest sources, even if they don’t operate the trucks themselves. The challenge of reducing those emissions is then passed on to the freight carrier or truck operator.

From January 2025, some of Australia’s largest companies will need to report to the government on their emissions as part of the new **Australian Sustainability Reporting Standards**. Each year, they will need to show how they are reducing greenhouse gas emissions, including the suppliers transporting their goods. A lot of companies are also facing pressure from investors, shareholders, and customers to cut supply chain emissions even faster.

If any of your freight customers are affected by these rules, expect to be asked for information on your operational emissions – and how you plan to cut them – very soon.

Find out more

Q&A about the new [Australian Design Rule](#) mandating Euro VI Standards.

The Clean Energy Regulator has [more information on the Australian Carbon Credit Unit \(ACCUs\)](#) and how to participate.

The Department of Climate Change, Energy, the Environment and Water has published [an overview of the Paris Agreement and Australia’s targets](#).

In January, the ABC provided a good [overview of the Australian Sustainability Reporting Standards](#) and what it means for corporate customers.

[Visit the Vehicle Emissions Star Rating website](#) for more on understanding emissions.

Get Fleet Fit has been designed by NatRoad to guide truck operators towards improved fuel efficiency and reduced emissions in alignment with future government regulations and customer expectations. We’ve developed a 5-step roadmap to help create a clear, actionable plan for your business, plus more detailed information on important topics to help you along your unique journey.

