

Renewable diesel

Renewable diesel is a sustainable, carbon-negative replacement for petroleum-based diesel.

It is produced from renewable, sustainably sourced biomass and because its overall composition is identical to diesel, it can be used as a direct replacement with no need for equipment modification or blending.

Renewable diesel process

Our renewable diesel is produced predominantly from sustainably sourced biomass.

The biomass is first processed to prescribed sizes, then decomposed using high-temperature pyrolysis.

The thermochemical process decomposes the biomass to produce a syngas, which is then further processed and distilled to produce renewable diesel.

Valuable by-products produced include high-quality, graphene-rich biochar and wood vinegar.

Biomass processing

Syngas production

Biochar extraction

Syngas conversion

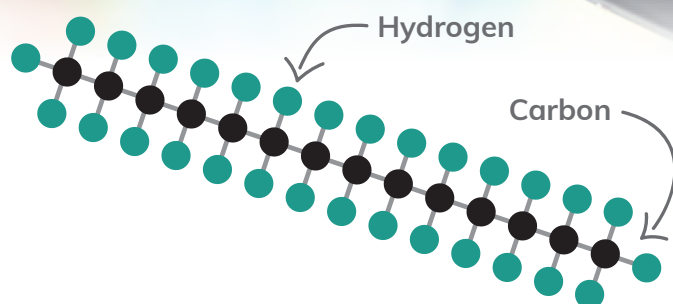
Wood vinegar/
water extraction

Renewable
diesel distillation

Environmentally and commercially sustainable technology

Our biorefinery uses commercially proven proprietary technology that has undergone a rigorous commercial and environmental analysis by independent providers.

It has been assessed by three global insurance syndicates that are able to provide technology performance guarantees for the technology.



Renewable diesel

Renewable diesel and petroleum-based diesel share the same overall composition.

This means renewable diesel can be used as a direct replacement for crude oil-derived diesel without any modifications.

Our technology produces renewable diesel that has been certified to US and European diesel standards and will meet the Australian Fuel Quality Standards for Automotive Diesel.

Biodiesel

In the US, the terms "biodiesel" and "renewable fuels" are often used interchangeably, however, in Australia, renewable diesel and biodiesel are different fuels.

Biodiesel differs in chemical composition to diesel in the proportions of carbon and hydrogen, as well as the presence of oxygen.

This means it can only be used by blending with traditional fuels (up to 20% of a fuel mix) or by modifying fuel systems to suit.

