AeroShell

Shell has introduced a new lifecycle sustainability approach for its AeroShell aviation lubricants to avoid, reduce and then compensate for lifecycle carbon emissions

The aviation industry is still growing considerably. By 2050, we are forecast to see an increase of over 100% compared to 2019 in the number of yearly passengers, the number of jobs created and the worldwide economic activity supported by aviation. In the same time frame, CO_2 emissions are predicted to almost double, posing huge challenges for sustainable growth, and IATA has laid down a bold target of bringing member airline emissions to net zero by 2050.

The threat posed by climate change and the need for sustainability are irrefutable, and aviation will be held accountable for any failure to meet sustainability targets: 76% are willing to discontinue their relationship with a company as a result of its actions[1], and 70% believe that climate change should be the #1 priority for the industry[2].

What are we doing to help?

Sustainable Aviation Fuels, carbon credits, aircraft efficiency gains, new technologies and changes in customer behaviour will all help the sector to achieve net zero by 2050. And although fuel makes up a far larger proportion of carbon emissions from the aviation sector, AeroShell also wants to decarbonise its products. Our new range of lubricants aims to improve performance while helping customers meet their net-zero greenhouse gas (GHG)[3] or carbon emissions ambitions. Shell is committed to sustainability, and are working to avoid, reduce and compensate for the carbon emissions associated with the AeroShell range across each products' entire lifecycle.

Across Shell's entire global lubricants business[4] we are avoiding emissions by using more re-refined base oils, using more recycled content in our plastic packaging (in support of Shell's ambition of 30% PCR use by 2030), and we continue to reduce plastic usage where we can. We are also reducing emissions by getting over 50% of the electricity in our Lubricant Oil Blending Plants from renewable sources[5], optimising our network (reducing road transport by over 1.3 million miles since 2021) and improving operations, cutting the carbon intensity of our production process by more than 45% since 2016[6].

In addition, AeroShell has taken the decisions to compensate for the lifecycle carbon emissions are not currently being avoided or reduced by buying carbon credits. Our portfolio of projects which yield carbon credits are independently verified and assessed using approved greenhouse gas accounting methodologies. All of our projects meet external carbon standards (e.g. Verra, the American Carbon Registry, Gold Standard, or Chinese Certified Emission Reduction), and go through additional due diligence. Our growing portfolio includes Cordillera Azul National Park in Peru, which has generated 25.2 million carbon credits to date, and Katingan Mentaya in Indonesia, generating an average of 7.5 million carbon credits yearly. One carbon credit is equal to 1 tonne of CO_2 emissions avoided or removed.

More on our Sustainability Projects

It's not just through nature-based solutions that we're striving for sustainability. We've provided 50,000 solar cookers to residents in Zaoyuan, China, to combat the emissions that would usually come from coal-burning stoves. This initiative has diminished health-damaging air pollution while also decreasing fuel costs.

Our Urla Wind Power project, launched in Turkey in 2016, has reduced CO_2 emissions by over 26,000 tonnes per year, generating almost 46,000 MWh annually while supporting Turkey's domestic energy generation.

We've also reduced CO_2 emissions by over 408,000 tonnes per year by providing local smallholder dairy farmers across five regions in India with biofertiliser and biogas. As a result, we've given 225,000 people access to clean and renewable energy, with 90% of beneficiaries reporting an improvement in the air quality inside their homes.

1 "Beyond compliance, Consumers and employees want business to do more on ESG".

2 NATS Aviation Index 2020.

3 *GHG or CO_2e (CO_2 equivalent) refers to CO_2, CH_4, N_2O.

4 AeroShell forms a small part of Shell's global Lubricant's business (less than 1% of global production volume).

5 Over 50% of the electricity imported to our Shell Global Lube Oil Blending Plants (LOBPs) now comes directly from renewable sources through the installation of solar PV panels and green power contracts, or indirectly using renewable energy credits (RECs).

6 Based on full year 2022 data.

Disclaimer:
CO_2 compensation does not imply that there is no environmental impact from the production and use of the product as associated emissions remain in the atmosphere. CO_2 compensation is not a substitute for switching to lower emission energy solutions or reducing the use of fossil fuels. Shell businesses focus first on emissions that can be avoided or reduced and only then, compensate the remaining emissions.

"Carbon neutral" or "CO_2 compensated" or "carbon down" indicates that Shell will engage in a transaction where an amount of CO_2 equivalent to the value of the remaining CO_2e emissions associated with the raw material extraction, transport, production, packaging, distribution, loss in use and end-of-life of the product are compensated through the purchase and retirement of carbon credits generated from CO_2 compensation projects. Although these carbon credits have been generated in accordance with international carbon standards, the compensation may not be exact.

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