Case Study: Hewitson Limited



Challenges:

Hewitson Limited acknowledges that carbon emissions pose a significant sustainability challenge, primarily due to the energy demands of their operations. Their excavators, dumpers, and other heavy machinery are still predominantly powered by diesel engines, which contribute substantially to greenhouse gas emissions.

Hewitson Limited recognises its responsibility to reduce its carbon footprint and invests annually in its fleet to equip vehicles with the most fuel-efficient engines available, including electric and hybrid equipment. However, after a trial held at one of their projects, the hybrid and electric technology in excavators and dumpers currently only has the battery capacity to run for 5 hours, which is inadequate for them and slowed project efficiency. Additionally, the cost of electric excavators is currently more than double the cost of a diesel model, which is not economically feasible for the company.

Impact:

Hewitson Limited has capitalised on the School's informative videos, e-modules, and presentations to identify areas for improvement within the business. The sustainability shorts have proven highly valuable, offering concise toolbox talks that help raise sustainability awareness among workers on site. Hewitson Limited found a significant lack of sustainable knowledge, with some drivers leaving their machines idling when not in use rather than shutting them down and restarting them. The toolbox talk on machine idling teaches employees the most sustainable ways to operate their machines day-to-day, leading to significant long-term carbon reduction and cost savings.

The education on HVO fuels has also proved extremely valuable, teaching Hewitson Limited that the fuel was directly applicable in tier 5 diesel engines, without the need for changes in infrastructure. At Callerton Academy, an ongoing project, they tested their fleet on HVO fuel and trialled the fuel usage of an excavator and dumper running on diesel, compared to an excavator and dumper running on HVO over 597 litres. Their case study found a massive reduction of CO2, with the diesel engine producing 1.5 T/CO2, while the HVO engine produced just 0.02 T/CO2.

Resources:

Assessments - The assessments have been highly useful for Hewitson Limited, providing a clear measure of progress and understanding. They help identify knowledge gaps and guide the implementation of best practices across the business.

Action Plan -

- Continue trialling HVO on new plant equipment.
- Aim to have all machinery on Morgan Sindall projects running on HVO fuel.

Fact box



Company

Hewitson Limited

No of employees

106

HQ

Eaglescliffe, Stockton-on-Tees

Website

www.hewitsonltd.co.uk

Main contact

01642 786989

Services

Groundworks, Civil Engineering, Soft/Hard landscaping.

About

Hewitson limited is a familyrun commercial civil and groundworks company that brings generations of expertise and dedication to every project. We pride ourselves on delivering high-quality, reliable services and prioritise local employment, community engagement, and sustainable practises.



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- Report the company's carbon footprint to the board once a quarter.
- Continue sending more employees on environmental training days to improve both environmental and health and safety welfare on-site.

E-learning modules - Hewitson Limited's employees have gained significantly from the easily accessible training, which has led to enhanced knowledge in areas ranging from waste management to social value. The e-modules and presentations on HVO fuel also guided the company towards transitioning to the new technology. Learning that manufacturers now approve its use in diesel engines was key in building trust in HVO fuel's validity.

Value gained:

Making use of the tools and resources provided by the School has been pivotal to Hewitson Limited's commitment to reducing its carbon footprint. By enhancing sustainability understanding across the group, Hewitson can improve operations, mitigate risks, and achieve long-term cost savings. Additionally, as many major clients now require membership in the school, this has helped the company gain a deeper understanding of client requirements, become more competitive when bidding for tenders, and enhance its reputation within the industry.

Future proofing:

- The company is committed to staying compliant with all relevant legislation.
- Hewitson plans to advance its sustainability journey by increasing access to the School's resources for key team members, as well as attending further training and events.
- The company will continue its research into renewable fuels like HVO and closely monitor the development of new hybrid and electric vehicles.