

Energy Transition Scotland Case Study - Winner Ross-shire Engineering



(RSE) Ross-shire **Engineering**

Ross-shire Engineering (RSE) is headquartered in Muir of Ord in the Highlands, with facilities located across the UK. Operating in the water and wastewater, hydro, and general engineering sectors, RSE's inhouse delivery team design, fabricate, install, and commission innovative modular engineering solutions.

RSE is a trusted clean water technology company, developing marketleading products and solutions for purifying drinking water, recycling wastewater and cleaning water in industrial processes. We are disrupting the water sector, delivering water treatment products, technologies, and services to clients across the UK. RSE provides offsite modular build solutions using a low-carbon approach compared to traditional construction methods and our unique offering to the market focuses on innovation, efficiency, and excellence.

Sustainability and the environment are at the heart of RSE, working towards their ambitious Net Zero targets, including operational Net Zero by 2030, and Net Zero by 2035. RSE's Net Zero Strategy focuses on three core areas to reduce emissions and achieve an energy transition.

Category description: Energy Transition Scotland Award

Highlights

RSE's three key Net Zero focus areas concentrate on reducing the reliance on fossil fuel across the business. By the end of April 2023, RSE will be supplied with 100% green electricity across the whole of the business.

EV charge points installed across the business for employee and visitor use.

Hydrotreated Vegetable Oil (HVO) is also being introduced to fuel plant and generators.

Installed 370kW of solar panels on facility buildings, use a biomass boiler to heat one of the workshop buildings and harvesting rainwater in another.

Developing new energy efficiency processes and products, such as delivering the first ceramic membrane water treatment plant in Scotland.



The Energy Transition Scotland Award recognises organisations who have set out clear objectives to engage with and adopt energy saving measures, installations, and activities both internally and externally.

RSE has additionally invested in their workforce, supporting 800+ jobs in Scotland including a dedicated successful graduate and apprenticeship programme.

Investment in Life Cycle Assessments has been key to developing two of RSE's low carbon solutions to replace carbon-intensive designs. The RSE - Light Modular Build (RSE-LMB) uses galvanised steel structures instead of the traditional and less sustainable glass reinforced plastic (GRP) kiosks. The RSE - Timber Modular Build (RSE-TMB) has also been developed to use timber as a replacement for GRP, providing even further embodied carbon reductions and allowing structures to be fully recyclable at the end of life.

Sustainability and working with nature are key to the solutions that RSE delivers, with technologies such as the Ceramic Membrane Treatment Plant reducing energy consumption, chemical use and increasing the lifespan of infrastructure. RSE's nature-based solutions are additionally being developed by the Innovations team to implement modernised wastewater treatment methods and processes.

Key to reducing emissions and transitioning to a "greener" vehicle fleet has been achieved through the introduction of an EV/Hybrid car leasing scheme to reduce carbon emissions from their employee's cars and vans. An expanding aspect to the transition is the switch from diesel to hydrotreated vegetable oil (HVO) in the company's direct vehicle fleet.

The transition to clean energy is the cornerstone of RSE's Net Zero 2030 target. Excellent policies and management systems are in place to ensure that RSE's approach is and remains as efficient as it can be, with procedures and actions continuously reviewed to ensure they are the best they can be. RSE's use of data to inform decision-making is particularly impressive and it allows the organisation to have an excellent understanding of its environmental impact and how to improve it.



Quote from the company:

"RSE is honoured to have won the VIBES Energy Transition Scotland award and to be recognised for our commitment to our operational net zero targets. We actively aim to significantly reduce carbon emissions as set out in our carbon reduction plan, by transitioning from traditional fossil fuel methods towards low carbon technologies and adopting renewable energy into our project processes and business operations. As RSE continues to become established in Scotland, we are committed to investing in sustainable practices and renewable upgrades across the business, with the aim of highlighting to an energy intensive industry the importance of a green energy transition."

Allan Dallas: RSE MD