

CASE STUDY

Sustainable Success in Orkney: Wilson's Journey Toward Net Zero

James Wilson (Orkney) Ltd, known locally as Wilson's, is Orkney's longest established cash and carry and delivered wholesale service. It supplies all of the island's local authority food outlets - including the hospital, schools, and care homes - as well as independent retailers and hospitality businesses.

Based in Stromness, the company has a dedicated team of 18 employees and has been a proactive force in environmental sustainability since 2017. That year, an internal review identified energy efficiency measures as a way to achieve potentially significant cost savings.



Keith Leonard
Managing Director



Sustainability Journey

In 2017, the first action by Wilson's was to replace the fluorescent lighting with LED lights throughout the warehouse and office.

Since then, Wilson's commitment to reducing carbon emissions has been accelerated through its engagement as members of the Scottish Wholesale Association (SWA). The company has leveraged SWA's guidance and connections to access national opportunities that support its sustainability goals.

Energy Efficiency Assessment

In 2021, one opportunity highlighted by the SWA, a business energy efficiency assessment carried out by Dr Clare Carden, was commissioned thanks to funding from Zero Waste Scotland.

The assessment identified a potential **38% reduction in carbon emissions** from Wilson's electricity use, equivalent to **35.91 tonnes of CO₂e annually**, and **estimated annual cost savings of £9,791** from energy efficiency opportunities in refrigeration, office heating and insulation, hot water, and the introduction of solar PV panels.

The assessment report became a strategic roadmap, instilling confidence and enabling the company to conduct cost-benefit analyses and prioritise projects based on impact and return on investment.

Implemented Measures

- **Cutting refrigeration energy use:** Energy-saving measures introduced include keeping walk-in freezer and chiller doors closed when not in use, installing an EndoCube system to reduce the number of cooling cycles, replacing an inefficient freezer, and removing six display freezers from service – all contributing to a significant boost in onsite energy efficiency.
- **Smarter heater swap:** An oversized immersion heater was replaced with a smaller and more efficient model.
- **Solar power pays off:** A 25kW solar PV system onsite now generates approx. 10% of the energy used, cutting estimated CO₂e emissions by 3.3 tonnes annually. With current energy prices, the system is expected to pay for itself within five years.
- **Driving down emissions:** The environmental impact of Wilson's transport fleet has been significantly reduced by replacing older vehicles that used traditional fuels such as diesel, with low-emission ones. Both of Wilson's forklift trucks, and two of their seven vehicles are now electric – making up 30% of Wilson's road fleet.

Thanks to signposting by SWA, the company was able to access interest-free financing through Business Energy Scotland, making the transition to cleaner transport more affordable.

All heavy goods vehicles have also been replaced by smaller 3.5-tonne vans, cutting CO₂ emissions and allowing for more efficient routing. This change also makes staff recruitment easier, addressing the current shortage of HGV drivers.

- **Charging ahead:** Vehicle charge points, funded by grants from the UK Government Office for Zero Emission Vehicles, are now in daily use.





Impact and Recognition

The company estimates that it has achieved a **30% decrease in Scope 1 emissions** through vehicle fleet replacement with low-emission models and a reduced number of refrigeration units.

For Scope 2 emissions, **a 10% reduction has been leveraged from their installation of solar PV panels**. To add to this, 100% of Wilson's purchased electricity comes from renewable sources, according to their energy provider.

Scope 3 emissions, while more difficult to measure, are being addressed through **reduced business travel** by encouraging remote participation in events and meetings and providing free electric charging onsite as an incentive for staff to switch to electric vehicles. The company has also reduced its downstream impacts by using reusable containers and eutectic plates, used for maintaining temperature control when transporting goods to remote locations.

What's Next?

Wilson's plans to continue to reduce carbon emissions by replacing its fleet with low emission vehicles (LEVs) and expanding its solar panel installation, increasing renewable energy production on-site.

However, progress now depends on improved energy network infrastructure through the planned connection of a new substation in Orkney to one at Dounreay on the Scottish mainland, enabling up to 220MW of renewable electricity via a subsea cable. This enhancement, along with upgraded local infrastructure, is critical. Without it, Wilson's will not be able to install additional charge-points to support more LEVs, as their current chargers already use all available capacity.

Customer Expectations

Operating in support of a small island community, Wilson's acknowledges the environmental sensitivity of its location, and the importance their customers place on responsible operations.

The local authority is Wilson's largest customer. The company has secured this public contract through an open bidding process and has consistently been recognised for the quality of its submissions. A key factor in winning these bids has been Wilson's evidence-based reporting on progress toward carbon neutrality.

Being a smaller company located at the far end of the supply chain, it must also work within tight margins and carefully prioritise any changes made. Support from national initiatives, highlighted and facilitated by SWA, has played a crucial role in accelerating progress toward the organisation's carbon reduction goals.

Conclusion

James Wilson (Orkney) Ltd exemplifies how, with the right guidance and support, small businesses can be leaders in sustainability. Through strategic partnerships and a clear commitment to environmental responsibility, the company continues to make impactful changes that benefit both its operations and the planet.

“As a small enterprise, we find the additional intellectual and administrative horsepower provided by SWA membership to be disproportionately beneficial, and therefore vital when navigating national initiatives.”

James Leonard
General Manager

