

Case Study Aldi Eco Concept Store



Summary

• Location: England, Leamington Spa

• Capacity: 209 kWp

• Type: Rooftop solar PV

• **Developer:** Aldi (Solar PV Installed By EvoEnergy)

• Owner: Aldi

• Panel type: Monocrystalline

• Completion date: June 2023



EvoEnergy is the UK's leading renewable energy company. We offer a range of complementary services and technologies to secure our client's energy future and carbon targets. We consult, develop, design, construct, monitor and maintain projects to deliver financial savings and renewable energy for leading brands all over the country.

Overview

The Aldi Eco Concept Store in Leamington Spa represents a groundbreaking venture in the realm of sustainable retail. As part of Aldi's £11.6m investment in Coventry and Warwickshire, this store stands as a testament to the company's dedication to environmental sustainability. At its core, the store is designed to significantly cut carbon emissions and promote sustainable practices, setting a benchmark in the retail sector. It incorporates advanced solar photovoltaic (PV) technology, sustainable building materials, and customer engagement initiatives aimed at fostering responsible consumption. The integration of these elements makes the store not only a center for eco-friendly shopping but also a symbol of Aldi's commitment to a sustainable future.



Project Summary

The drivers behind the Aldi Eco Concept Store were twofold: to reduce the environmental impact of retail operations and to encourage sustainable consumer behaviours. The project's main challenge was to integrate these eco-friendly features into a cohesive and functional retail space. Key challenges included selecting sustainable building materials that would not compromise the store's structural integrity and implementing innovative technologies such as solar PV systems. The project aimed to cut carbon consumption by up to two-thirds, addressing both Aldi's environmental goals and the increasing consumer demand for sustainable shopping options.

Outcomes/Solution

The Aldi Eco Concept Store achieved remarkable outcomes in terms of energy efficiency and sustainability. The 209kWp solar PV system is estimated to generate 167,409 kWh of clean electricity annually, resulting in a reduction of 34,666kg of CO₂ emissions in the first year. The store's design will also significantly decrease energy demand by 57% compared to conventional stores.

Sustainable building materials played a crucial role in the project's success. Timber fibre insulation, cement replacement concrete, and low-temperature tarmac were used to minimise the store's carbon footprint during construction and operation. The partial green roof contributes to biodiversity and efficient stormwater management.

Customer engagement initiatives are central to the store's operation. The 'hard to recycle' unit and nuts and coffee refill fixture encourage consumers to participate in sustainable practices, fostering a culture of responsible consumption. These features, along with energy-saving initiatives like chiller doors and a structurally optimised building, highlight the store's comprehensive approach to sustainability.



Community Benefit

The store serves as an educational platform for sustainable living, promoting ecofriendly practices among consumers. Its recycling and refill stations directly involve the community in sustainability efforts, while the use of local supply chains for construction materials supports the regional economy. The environmental benefits of the store extend beyond its walls, contributing to the wider community's ecological health through reduced carbon emissions and promotion of biodiversity via the green roof. By setting a new standard in ecoconscious retailing, the store inspires other businesses in the area to adopt similar sustainable practices, driving a collective move towards a greener future.

Local Benefit

The Aldi Eco Concept Store has had a significant impact on the local community and economy. It is part of Aldi's broader expansion plan in the UK, which includes the creation of 2,000 new jobs, contributing positively to local employment opportunities.





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