Net Zero Solutions for

Retail & Consumer Goods

The retail industry is transforming, driven by escalating environmental awareness and consumer preference for eco-conscious products, propelling manufacturers and retailers toward sustainable initiatives.

Concurrently, evolving regulations require a greener approach, demanding businesses to decarbonize their operations. Balancing costs & investments, addressing Scope 3 emissions, and enhancing data capabilities will be crucial breakthroughs for the retail industry's path towards net-zero in the future.

Challenges for Net-Zero

Balancing Costs & Investments

The profile of emissions abatement costs varies significantly among subsectors. Apparel retailers with stores in malls and multiunit buildings face hurdles in adopting heat pumps due to high conversion costs and dependence on landlords for operational feasibility; Grocers with transportation fleets face higher costs when transitioning to fuel cell electric vehicles due to the cold chain needed for perishables.

Complex Scope 3 Emissions

For retailers, value chain accounts for up to 98% of total emissions. 40% of retailers are on track to meet Scope 1 and 2 targets but less than 20% are meeting Scope 3.

Data Source: National Retail Federation, BCG & World Retail Congress

Data Capabilities Limitation

According to a 2022 BCG survey on data capabilities for sustainability information, one of the most cited challenges is a lack of access to relevant data (67%) and 36% of the sampled companies reported not having data dashboards

Data Source: BCG & World Retail Congress

Market Dynamics

Awareness for Supply Chain Emissions

Retailers are responsible for more than 25% of global emissions, with much of these emissions occurring in the retail value chain.

Data Source: BCG & World Retail Congress

Regulatory Shift Towards Sustainability

More than 70 leading retailers have committed to follow the British Retail Consortium Climate Action Roadmap. The plan has three key decarbonization milestones: stores by 2030, deliveries by 2035 and products by 2040.

Data Source: Raconteur

Growing Demand for Sustainability

In the five years following 2016, more than 65 leading global retailers set emission targets, and the number is more than doubling each year.

Data Source: McKinsey

Fines for Non-Compliance

Regulations such as the upcoming EU Corporate Sustainability Reporting Directive (CSRD), and Germany’s Supply Chain Due Diligence Act mandate companies to adhere to ESG requirements, failure will result in substantial fines and penalties.

Data Source: European Commission & Bundesregierung

Solutions

End-to-End Net Zero Solution

Univers's solution enables retail clients to seamlessly monitor energy consumption, reduce costs, and increase reporting accuracy of their own portfolio (Scope 2) and of their suppliers (Scope 3).

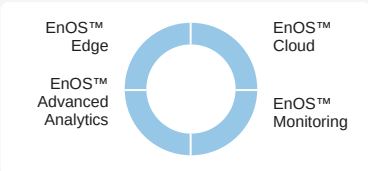
Edge Box

On-site hardware equipped with smart sensors and edge computing:

- Univers provides local installers to deploy energy metering
- Collect real-time data and integration with EnOS platform
- Enhance maintenance efficiency with data processing

EnOS™ AIoT Platform

Data management platform gathering data from entire portfolio to optimize energy usage of buildings and equipment, powered by core modules as follow:



EnOS™ Ark Platform & ERM Module

Carbon management system that bridges the gaps between energy supply, consumption, and energy/carbon trading markets.
Energy resource management module that simplifies energy consumption visibility, consolidates CO2 emission reports, and offers proactive alerting.

Value Creation

Univers's comprehensive solution empowers operators to unlock value* by leveraging its diverse array of features, leading to cost savings, revenue generation, and rapid decarbonization.

Asset Management

- Provides site-level and device-level energy consumption patterns and carbon emission visibility
- Reduces operational energy costs through actionable insights

+3~5%
Operational Savings

Energy Optimization

- Energy consumption and operation efficiency analysis
- Equipment health and alarm management
- Weather, cooling, and heating load forecasting

+5~25%
Energy Savings

Carbon Footprint & Data Analysis

- Integrated carbon footprint measurement & reporting
- Data synergy between Product carbon footprint, life cycle assessment, organization carbon accounting & supply chain carbon
- Supports ESG reporting, reducing concerns around greenwashing

- Reduce time & cost to report
- Increase data accuracy
- Transform data into value

*Value achieved will depend on variables specific to location and site (size of solar PV, size of battery, energy prices, solar irradiance etc.)

Case Study

Apparel Retailer

Univers assisted one of the worlds largest shoe & athletic apparel retailers in effectively reducing GHG emissions. Our transformative solution not only reduced carbon emissions but resulted in energy cost savings and a payback in less than 15 months.

01 Client Goals

70% Absolute reduction of GHG emissions in owned or operated facilities through 100% renewable electricity and fleet electrification

65% Reduction in Scope 1 & 2 emissions and 30% reduction in Scope 3 emissions by 2030

02 Solutions

Edge Hardware + EnOS™ Software
- Peak / load management
- Collect energy and HVAC data from energy meters and BMS

Cloud Energy & HVAC database with API
- Collect energy data from meters
- Expose data with API for Accenture's dashboard

Dashboard for data and value generation
- Display data from Univers' database
- Calculate the savings from monitoring

03 Expected Results

10–12%
energy saved per retail store

100+
stores connected with 250 electricity meters

Compliance
with data collection standards

<15 months
ROI achieved

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