Perspectives series
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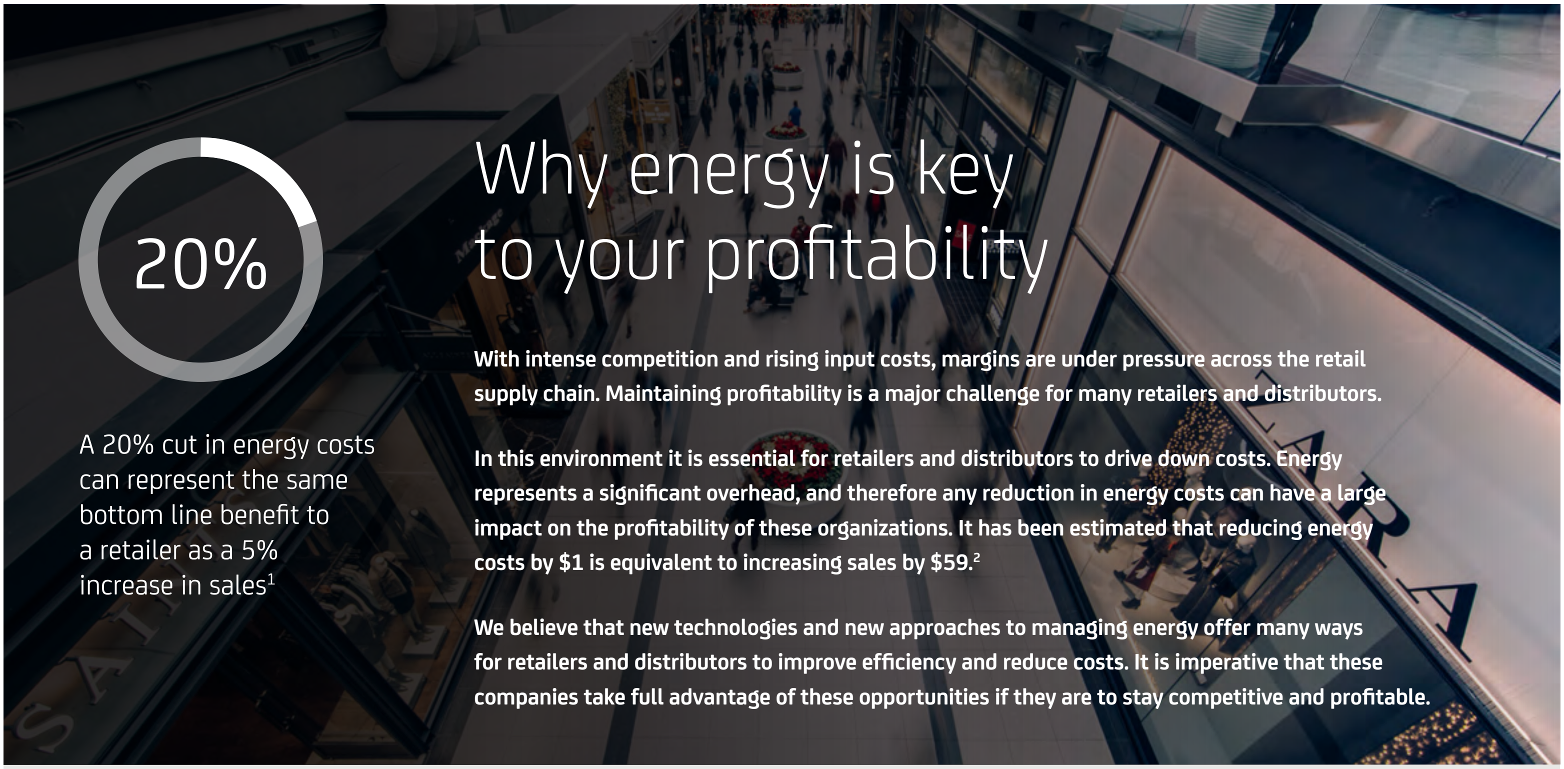
Drive efficiency and profitability with a targeted energy strategy

Powering a sustainable future for the retail and distribution sector

centrica
Business Solutions



20%

A 20% cut in energy costs can represent the same bottom line benefit to a retailer as a 5% increase in sales[1]

Why energy is key to your profitability

With intense competition and rising input costs, margins are under pressure across the retail supply chain. Maintaining profitability is a major challenge for many retailers and distributors.

In this environment it is essential for retailers and distributors to drive down costs. Energy represents a significant overhead, and therefore any reduction in energy costs can have a large impact on the profitability of these organizations. It has been estimated that reducing energy costs by $1 is equivalent to increasing sales by $59.[2]

We believe that new technologies and new approaches to managing energy offer many ways for retailers and distributors to improve efficiency and reduce costs. It is imperative that these companies take full advantage of these opportunities if they are to stay competitive and profitable.

Retailer margins are shrinking

Retailers face saturated markets, low consumer confidence and slow growth in consumer spending, which is impacting growth opportunities within the sector. The U.S. retail sector grew at only 0.5% per annum in the five years to 2018.[3] The downward pressure on retail margins is flowing through to the supply chain, with distributors facing intense demands from retailers to lower their costs.

Online and low-cost retailers are rapidly growing and increasingly pervasive. Online sales in the U.S. are expected to grow from $360bn in 2016 to $603bn in 2021.[4] Coupled with intense competition across key retail segments, such as grocery and electronics, there is constant pressure to lower retail prices.

These factors, combined with rising input costs, including energy, rent and salaries, are threatening already slim retailer and distributor margins. According to Deloitte, the composite net profit margin across the top 250 global retailers in FY2016 was just 3.2%.[5]

To drive efficiency, retailers and distributors are increasingly investing in technology, such as self-serve terminals and automation. U.S. retailers plan to increase their overall IT spend by 5.6% in 2018 as they continue to focus on digital transformation.[6]

However, the need for new technologies, stores, channels and distribution centers means that there is limited capex to invest in back-end infrastructure, such as energy. Finding ways to overcome this challenge and drive greater energy efficiency throughout the supply chain will be key to protecting the margins of retailers and distributors.

0.5%

The U.S. retail sector grew at only 0.5% per annum in the five years to 2018[7]

67%

Online sales in the U.S. are expected to grow 67% between 2016 and 2021, from $360bn to $603bn[8]

$600bn

Amazon and Walmart, who together sell $600bn of goods a year, are significantly contributing to deflationary pressures in the retail sector

3.2%

According to Deloitte, the composite net profit margin across the top 250 global retailers in FY2016 was just 3.2%[9]

5.6%

U.S. retailers plan to increase their overall IT spend by 5.6% in 2018 as they continue to focus on digital transformation[10]

The role of energy in driving retail success

With energy representing a high percentage of overhead and expected to escalate year over year, retailers and distributors must capitalize on opportunities to improve energy efficiency and reduce costs to improve narrow margins. This is particularly true for the grocery cold chain, where refrigeration costs can account for 60% of the energy bill for supermarkets and up to 70% for cold chain distributors.[11]

Dependence on energy will only increase as retailers and distributors become more reliant on technology across all aspects of their operation. Access to scalable, low-cost energy supply will become even more vital to reduce pressure on margins. 88% of respondents in a Centrica Business Solutions survey agreed that there were opportunities for coherent energy strategies to help them achieve strong financial performance.[12]

New efficient energy technologies and approaches to managing energy can improve efficiency and reduce costs. For example:

- On-site, behind-the-meter solutions like solar PV and combined heat and power (CHP), coupled with intelligent energy storage to buffer and optimize demand, significantly reduce energy consumption utility bills.
- Lighting is a significant cost for retailers, accounting for 20% of energy consumption in an average retail environment.[13] Replacing older lighting technologies with LED can improve efficiency by up to 90%.[14]
- Poorly maintained equipment often leads to declining energy efficiency. Effective maintenance of heating, ventilation, lighting and cooling systems is another means of controlling energy usage.
- Regular cleaning of ventilation systems can increase efficiency by as much as 25% compared with unmaintained systems.[15]
- Demand response (DR) solutions also help to reduce net energy costs by optimizing on-site assets such as refrigeration units to minimize consumption and generate payments from the grid.
- Central to cutting energy costs is visibility of how energy is used and where the inefficiencies are. Real-time energy sensors and analytics solutions now enable retailers to drive greater efficiency.

Case study: A U.S. supermarket chain reduced utility bills by $3.7M/year after implementing energy insight solutions, energy storage, and refrigeration system adjustments.

However, despite these opportunities, many retailers and distributors struggle to manage their geographically dispersed energy portfolio and deploy more efficient, integrated energy solutions because of expertise or capital constraints. 51% of retail and wholesale respondents in Centrica Business Solutions research said they believe they do not have enough internal expertise to monitor and implement efficiency improvements.[16] Many of these organizations do not seek expertise beyond what they employ internally, meaning opportunities to reduce costs are missed.

By working with specialist energy companies, who can offer innovative technology, expert advice, flexible funding models and specialist resources, retailers and distributors can drive greater efficiency throughout their operations.

Case study: Ornua Foods achieved cost savings of $41,800 per year and reduced carbon emissions by 476 tons following the installation of a new CHP plant.

60%

The percentage of retail and wholesale respondents in Centrica Business Solutions research who said they believe they do not have enough control over energy usage[17]

60%

The percentage of retail and wholesale respondents in a Centrica Business Solutions survey who agreed that investing in energy efficient solutions was very important[18]

88%

The percentage of respondents in Centrica Business Solutions research who agreed that there were opportunities for coherent energy strategies to help them achieve strong financial performance[19]

1 Energy management – the new profit centre for retail businesses, The Carbon Trust, April 2018
2 Supermarkets: An Overview of Energy Use and Energy Efficiency Opportunities, Energy Star https://www.energystar.gov/sites/default/files/buildings/tools/SPP%20Sales%20Flyer%20for%20Supermarkets%20and%20Grocery%20Stores.pdf
3 IBIS World Retail Sector Analysis, 2018
4 Retail e-commerce sales in the US from 2016 to 2022, Statista https://www.statista.com/statistics/272391/us-retail-e-commerce-sales-forecast/
5 Global Powers of Retailing Top 250, Deloitte, 2018
6 Store Experience Study 2018, RIS News
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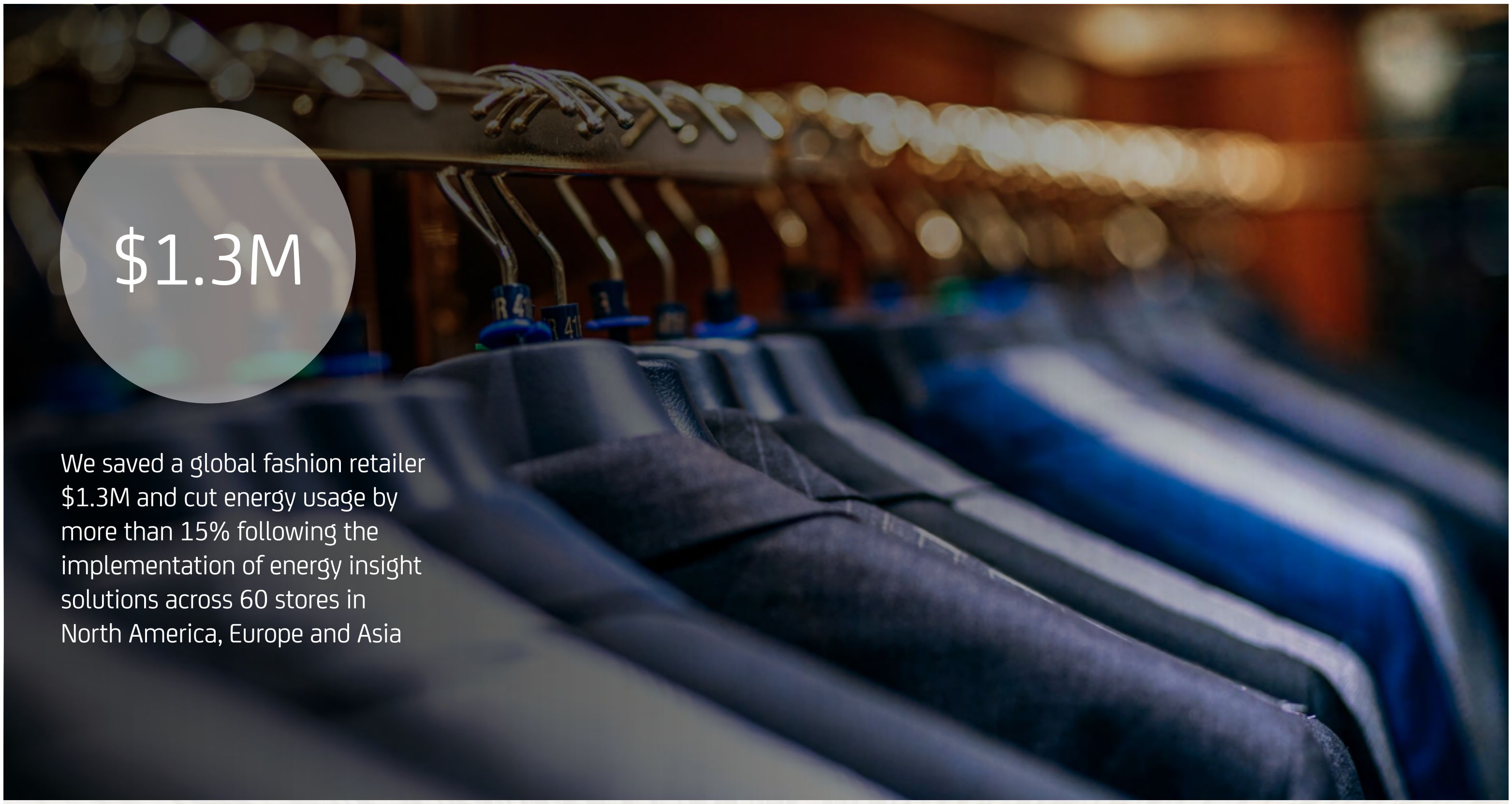
11 The 5 Coolest Energy Saving Solutions for Supermarkets, DEXMA https://www.dexma.com/energy-saving-solutions-for-supermarkets/
12 Energy Advantage Research, Centrica Business Solutions. Statistics based on a six-country survey of more than 1,000 energy decision-makers in large organizations
13 Energy management – the new profit centre for retail businesses, The Carbon Trust, April 2018
14 Centrica Business Solutions: https://www.centricabusinesssolutions.com/our-solutions/products/commercial-led-lighting
15 Energy management – the new profit centre for retail businesses, The Carbon Trust, April 2018
16–19 Energy Advantage Research, Centrica Business Solutions. Statistics based on a six-country survey of more than 1,000 energy decision-makers in large organizations



$1.3M

We saved a global fashion retailer $1.3M and cut energy usage by more than 15% following the implementation of energy insight solutions across 60 stores in North America, Europe and Asia

Your priorities

Our experience working with leading retailers and distribution companies have highlighted the energy strategies that we believe should be prioritized to maximize profitability:

- **Implement a targeted energy strategy** that improves efficiency and lowers overhead.
- **Gain better visibility of energy usage** across your retail and distribution network to enable inefficiencies to be easily identified.
- **Improve energy efficiency** in stores and distribution centers to reduce operating costs and protect margins.
- **Consider outsourcing aspects of energy management** to overcome internal constraints and reduce the demands on in-house teams.

Our solutions

Our success with leading retailers and distributors means we are ideally placed to help you drive operational efficiencies and take the pressure off narrow margins. We do this through:

- **Insight and analytics solutions** to identify inefficiencies and cost-reduction opportunities.
- **Energy efficiency solutions** (including audits, LED lighting, HVAC) that reduce your total energy consumption.
- **On-site generation (CHP, solar) and energy storage** that cut your consumption and reduce energy costs.
- **Flexible funding models** that help deploy new technologies and free up capital.
- **Optimization solutions,** including demand response, that create new revenue streams from your on-site energy assets.
- **End-to-end delivery capability and global reach** to accelerate deployment of more efficient solutions.

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