How we're building sustainable businesses

Emergent Energy Solutions

centrica
Business Solutions

Contents:

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Now is the time to act on decarbonization

Decarbonization puts pressure on organizations at a time when uncertainty is widespread and financial performance is vital. But leading sustainable business leaders know that acting now, even if it incurs short-term cost, will leave them better off in the long term. They are not waiting for the perfect time to act — they know that the sooner they start, the greater the benefits.

Sustainable business leaders stay head of rapidly changing regulations, by decarbonizing before policy demands it and making sure they have the relevant data available to make decisions. Energy strategy is a quick win to be competitive, profitable and sustainable, with many organizations taking full advantage of IoT to gain a competitive edge. They believe sustainability is everyone's business, but they know they cannot do it alone, embracing partnerships, data and the help of outside experts.

There is no time to waste in cutting carbon and addressing other sustainability issues. The science is clear, and the policy landscape has changed to reflect that. You need to act now to stay ahead of impending regulations, react to market and social demands, improve brand image and help to make a positive contribution to local communities. And that journey starts with our energy insights solutions.

How Centrica Business Solutions is helping organizations to become more sustainable

We're proud to be helping organizations around the world to navigate their net zero journey and helping them to build a sustainable business. Through our expertise, commercial strategy and renewable technologies, we are supporting businesses to address sustainability and decarbonization to ensure their future growth while simultaneously balancing the needs of profit and planet.

In this booklet, we share case studies of customers who have leveraged our energy insights solutions as the first step in their pursuit of net zero. They show how our IoT sensors enable customers to:

> Identify energy waste and reduce emissions

> Gain device-level, real-time insight into energy consumption

> Be proactive in avoiding costly down-time

> Develop a data-driven strategy to enhance building performance

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Resilience through insights

Acting now to ensure your business can survive future challenges is the key to building a resilient and sustainable business.

Our energy insights solutions help customers to understand and withstand risks, meet their regulatory requirements, and adapt to changing market and societal demands.

Read the case studies →

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Case study

CMR Restaurants

One of the largest restaurant operators in Mexico, CMR, worked with S2G Energy to implement Centrica Business Solutions' Panoramic Power™ technology, reducing their energy consumption and unlocking significant cost savings.

The challenge

In 2016, CMR partnered with S2G Energy to reduce its energy consumption through its Energy Management-as-a-Service (EMaaS) program. They wanted to provide local restaurant managers with the insight required to manage energy usage more effectively in order to reduce their operational costs and environmental impact, without negatively affecting the performance of the restaurant.

The solution

S2G Energy deployed Centrica Business Solutions' Panoramic Power wireless sensor technology to collect real-time energy data at a circuit-level of granularity. This enables restaurant managers to understand their energy consumption and take steps to ensure they are using power in the most efficient way.

The result

By changing the way its restaurants use energy, CMR reduced their energy consumption by 11.4 GWh for the first quarter of 2020 - a 17% reduction. This has enabled them to avoid $1.2 million in unnecessary energy costs.

Find out more →

11.4GWh

cumulative energy reduction in 3 years

308%

return on investment

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Case study

Altex Group

S2G Energy harnessed Centrica Business Solutions' Panoramic Power wireless sensors and PowerRadar™ to help Altex Group take control of its energy costs.

The challenge
In 2018, the total energy consumption across Altex Group's nine production sites surpassed 65,000 MWh and they were looking to make operations more energy efficient. At the same time, they were looking to improve financial planning processes.

The solution
The sensors were deployed in each production facility to capture the energy consumption data of refrigeration equipment, air compressors, cooling towers, evaporators and other critical assets. The sensors transmit the energy data in real-time to Centrica Business Solutions' complementary energy management platform, PowerRadar, which meets Altex Group's need for real-time data visibility to support critical by-the-minute business decisions.

The result
Altex Group has achieved an overall 8% savings on energy costs over two years, equating to MXN$17m (US$843k). When related to production, energy intensity per ton has been reduced by 7.5% while peak demand spikes have also decreased. This has resulted in CO_2 emission savings of 53,553 tons and a 2,180 MWh reduction in energy used.

Find out more →

$17M

MXN reduction in energy costs

53K

reduction in CO_2 emissions

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Sustainability through data

Without strong, consistent leadership and clear internal communication, efforts to embed sustainability will fail.

We're helping our customers develop a culture of sustainability in their organizations, by empowering their teams with the tools and data to succeed.

Read the case studies →

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Case study

Pincroft

Harnessing Panoramic Power technology from Centrica Business Solutions, Pincroft can proactively manage energy consumption across their plant – enabling them to reduce energy waste and improve their environmental impact.

The challenge

As one of Europe's largest commission textile finishers, Pincroft's operations are very energy intensive, requiring large amounts of hot water, steam and electricity. Recognizing both the environmental and economic benefits of minimizing energy waste, they wanted to gain visibility into their usage.

The solution

Panoramic Power sensors were deployed, collecting real-time energy data from over 100 sources across their critical energy-consuming assets. They also leveraged communication bridges to capture third party meters monitoring their hot and cold water, steam and gas, alongside their production lines output. Through PowerRadar, Pincroft can extract the data to carry out further in-depth analysis in their in-house Power BI platform.

The result

Pincroft now has visibility into how much energy their equipment consumes on a minute-by-minute basis, enabling them to identify opportunities to improve efficiencies. The solution has also helped to create a cultural shift, from seeing energy as a fixed cost towards one that can be proactively managed and improved.

[Find out more →]

94%

reduction in weekend energy costs

3mo

payback period

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Case study

Excela Health

Excela Health in Western Pennsylvania have been recognized for their energy efficiency efforts throughout the 2 million square feet of its three hospitals and satellite facilities.

The challenge
To support their mission to improve the health and well-being of every life they touch, Excela Health recognized they needed to be conscious of their carbon footprint. To accomplish this, the Excela team required data to understand and manage its energy usage.

The solution
Panoramic Power wireless self-powered sensors were installed on the circuitry at five of their healthcare facilities. Through the PowerRadar platform, the team gained a wealth of actionable energy data. With the ability to deliver energy insights down to the equipment or device level, Centrica Business Solutions helped support a plan that wouldn't disrupt operations or critcal care.

The result
The data yielded insights into exactly where Excela Health could shed load consumption during Demand Response events. By reducing use from their HVAC systems, lighting and elevators, they were able to curtail more than 3.5 MW at three of their locations. For the Excela Health team, this use of energy insights solutions took their Demand Response strategy to a new level and increased earnings by $50k.
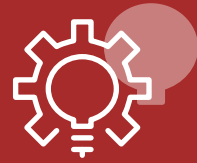
Find out more →

3.5MW
curtailed usage

$50K
incresed earnings

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Energy innovation and IoT

Controlling emissions through renewable energy sources and energy efficiency has an immediate effect on net zero targets.

Our energy insights solutions enable organizations to analyze and optimize operations, so you can balance the demands of planet and profit.

Read the case studies →

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Case study

The Franklin

The Franklin is a 2.48 million square foot, two-building, multi-tenant office property and home to some of Chicago's most prestigious businesses. The property's annual energy use exceeded 40 million kWh.

The challenge
The Franklin's management and engineering team was searching for new ways to uncover energy efficiency opportunities. Critical areas included heating energy at the property's hundreds of fan-powered boxes, scattered throughout its tenant-occupied floors.

The solution
PowerRadar revealed that the majority of tenant floors consume electricity during unoccupied hours and that night-time setback controls were keeping the floors at unnecessarily warm temperatures at night. It was also revealed that heating was operating throughout the year resulting in simultaneous heating and cooling during summer months.

The result
PowerRadar data enabled building operators to correct these problems and reduce annual energy use by more than 3 million kWh. The projected energy cost savings enable the property to recover its investment in less than six months. The project was awarded an Excellence in Engineering award from the ASHRAE Illinois Chapter and earned Energy Performance in a Single Site honors from the U.S. DOE Smart Energy Analytics Campaign.

Find out more →

$214k
annual energy cost savings

3m kW
annual energy savings

Case study

Global Fashion Retailer

By putting our energy into saving theirs, we're helping a global fashion retailer cut energy waste and annual costs by nearly $1.2M.

The challenge
With over 400 stores in 50 countries, the company was keen to gain a better understanding of their energy consumption. Having that knowledge would help them cut costs, reduce their carbon footprint and better support their corporate sustainability pledge.

The solution
Panoramic Power sensors were deployed across six of their sites. The real-time data was collected and analyzed via PowerRadar, giving the retailer actionable insight by highlighting where the operation was inefficient, enabling them to minimize any risks. The data was also integrated into the customer's own building management system, so their energy and facility managers could monitor consumption levels at every location.

The result
Centrica Business Solutions smart technology and expert insight helped reduced energy use by 15%, and saved the retailer $17,500. As a result, Panoramic Power and PowerRadar have been rolled out across 60 stores in North America, Europe and Asia, with a projected annual saving of $1,200,000.

Find out more →

15%
less energy use across 6 stores

$1.2M
projected annual savings across 60 stores

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Operational efficiency

Cost is stopping many organizations from implementing low-carbon technology. But it is essential to rise above short-term pressures and recognize the benefits of investing in new technologies and processes.

We support our customers in navigating their financing options and managing energy costs, helping them to meet decarbonization targets and bring in new opportunities.

Read the case studies →

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Case study

CEMEX

Centrica Business Solutions' energy insights solutions is enabling global building materials giant CEMEX to make direct cost savings and efficiency improvements at sites across the UK.

The challenge
CEMEX is one of the world's biggest producers of building materials, with operations in more than 50 countries. Its industrial-scale plants and equipment consume large quantities of electricity at hundreds of production facilities, quarries, distribution centers and marine terminals.

The solution
Centrica Business Solutions deployed its energy insights solutions at three CEMEX locations to monitor a range of essential machinery, including pumps, conveyors and crushers. The live data was transmitted to PowerRadar, providing unique, comprehensive and real-time insights into energy consumption and asset performance, identifying inefficiencies, wastage and giving an overview of the overall health of the assets. Managers were immediately able to swiftly identify opportunities to save energy, to fix under-performing or faulty equipment and to organize their maintenance programmes more efficiently.

The result
Detailed analysis showed an operational bottle neck in the process. Fixing it immediately increased production. When added to further energy saving measures through the PowerRadar analysis, the solution delivered significant annual savings. As a result, CEMEX rapidly expanded the use of energy insights with more than 1,600 sensors now monitoring equipment at 42 of its UK quarries.

Find out more →

42
sites across the UK

20t/h
of increased production

Case study

South Port NZ

PowerRadar helps reduce capital expenditures and increases storage capacity at a 40-hectare commercial water port

The challenge
In 2019, South Port NZ partnered with Total Utilities to better understand the actual power demand of the site, identify opportunities to increase existing storage capacity and deliver customized solutions to meet the needs of customers on the island.

The solution
Panoramic Power wireless, device-level, energy monitoring sensors were installed at the port with minimal interruption to operations. Within days, the on-site infrastructure team gained real-time, granular visibility into the energy consumption and operation of their critical assets across the site. With this data, the team realized that the electrical capacity for their substations was being underutilized — adding more plugs to these substations doubled the reefer capacity without any major or costly upgrades.

The result
By choosing to implement Panoramic Power across the site, South Port NZ reduced their capital expenditure by US$600,000 and achieved an increase of 80% in container storage days compared to the previous year. In addition, they are now able to report on their carbon footprint annually, provide automatic reports on monthly energy use to port users and streamline efforts in identifying areas of high energy usage for investigating ways to lower the peak demand at the port.

Find out more →

60%

energy reduction

255

metric tonnes reduction in CO_2 emissions

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How we're making our own organization more sustainable

With a clear commitment to be net zero by 2045, we are already well on our way to becoming a sustainable business.

Since we embarked on our journey towards net zero, we have set, achieved and exceeded our targets along the way. When we set out in 2007 to cut our internal carbon footprint of our property, fleet and travel by 20% by 2015, we exceeded this target, achieving a 27% reduction. We've achieved this via property efficiencies, employee behavioral changes, utilizing technologies such as LED lighting, on-site solar, energy optimization and battery storage - alongside a move away from upstream generation and production. In 2015 we committed to further reductions of 20% by 2025 against existing levels - surpassing this target only four years later in 2018 - and leading to the creation of ambitions to reduce our internal carbon footprint and customer emissions in line with Paris goals out to 2030.

We're leading an ambitious energy transition by amplifying action as part of our People & Planet Plan - setting targets to help our customers be net zero by 2050 (28% reduction by 2030) while becoming a net zero business ourselves by 2045 (40% reduction by 2034) - five years earlier than its previous goal.

Why wait to join the transition? Contact us today for support in developing your decarbonization strategy and becoming a sustainable business.

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As we look to rebuild from COVID-19 and our biggest ever transformation, I want to do things differently and reshape our future to one that's fairer and protects the environment. That's why we've introduced our People & Planet Plan to create a more inclusive and sustainable future that supports our communities, our planet and each other.

CHRIS O'SHEA
GROUP CHIEF EXECUTIVE, CENTRICA

centrica
Business Solutions

About us

Partner with us for integrated energy solutions that accelerate your journey to a low-carbon future, balancing commercial success and environmental responsibility.

We analyze, finance, install, operate and optimize energy, working across every energy source to deliver efficiency, resilience and sustainability — and finding the right balance between what's good for your business and the planet we share.

Start your net zero pathway today and book a strategy call with us:

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