

Decarbonisation in action

Energy products helping deliver results for Councils



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Agenda

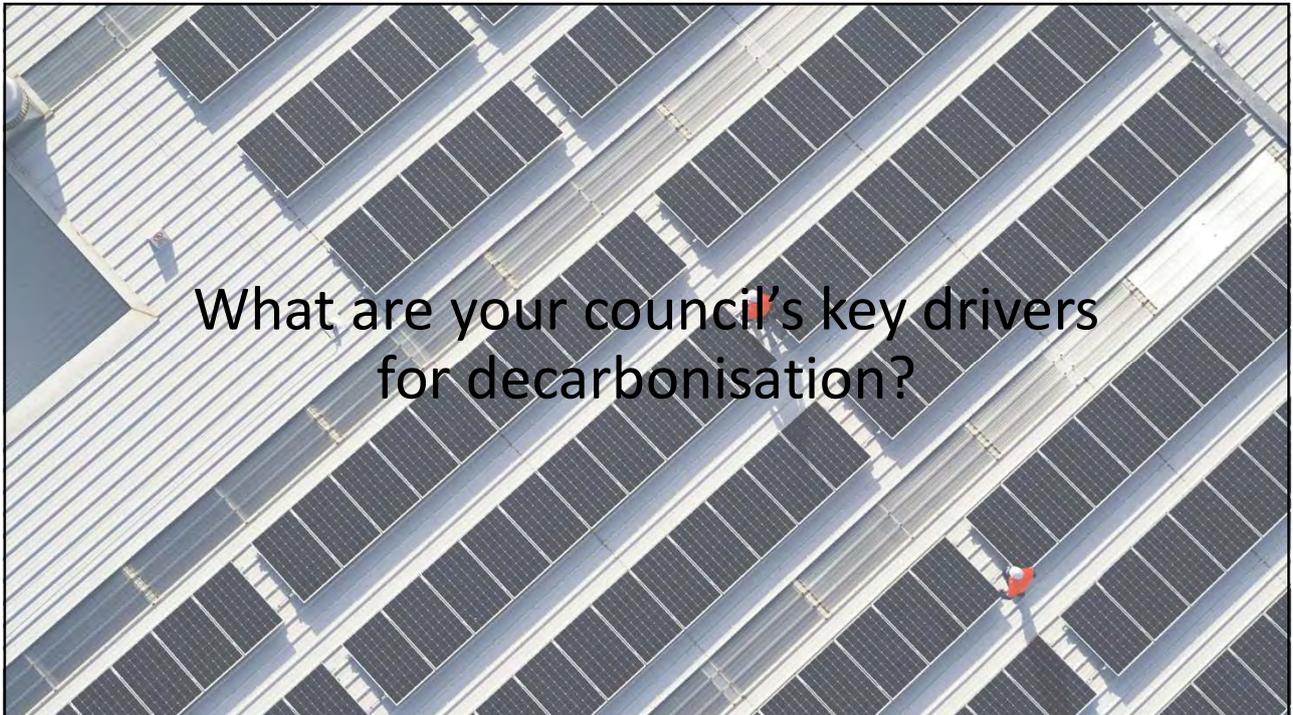
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The Council Challenge	Unpack the top energy and decarbonisation drive & challenges facing Councils	01
Origin's Energy Suite	An insight into Origin's current and emerging energy solutions designed to help cut emissions and costs	05
Council case studies	Hear how other Councils are putting energy products into action	07

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The Council Challenge:

Key Drivers for Action

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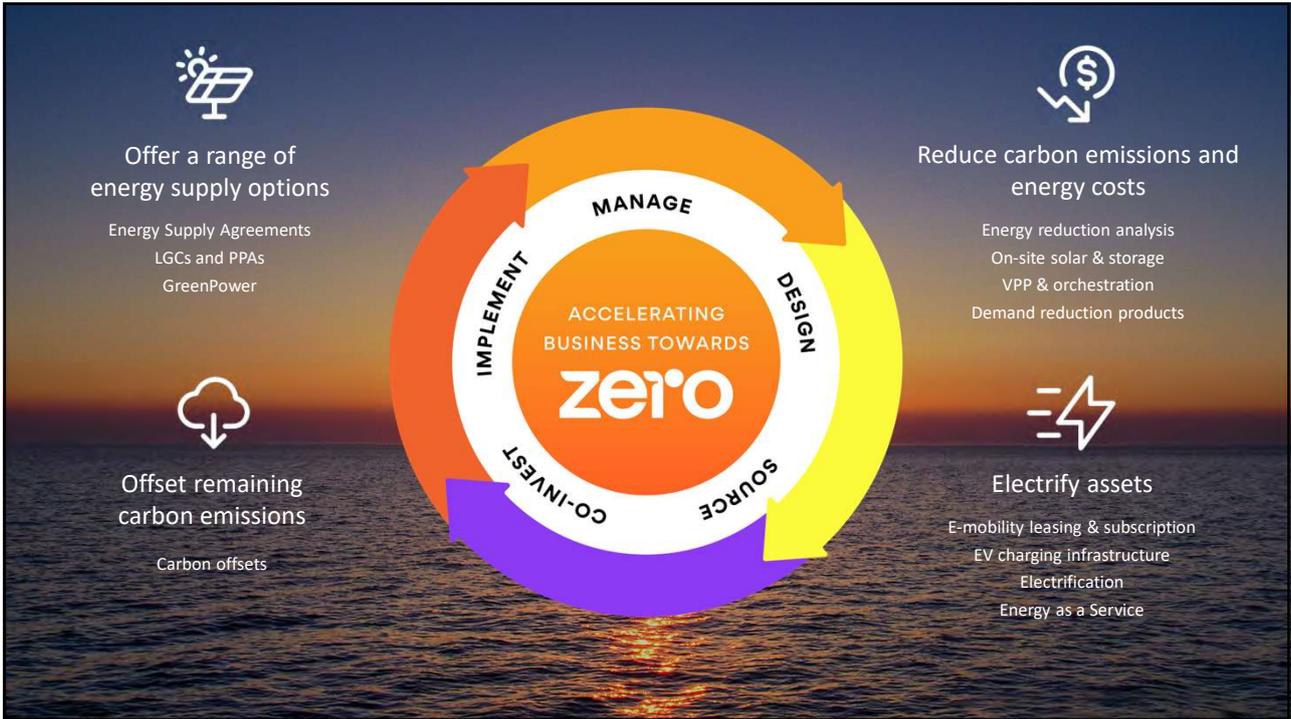


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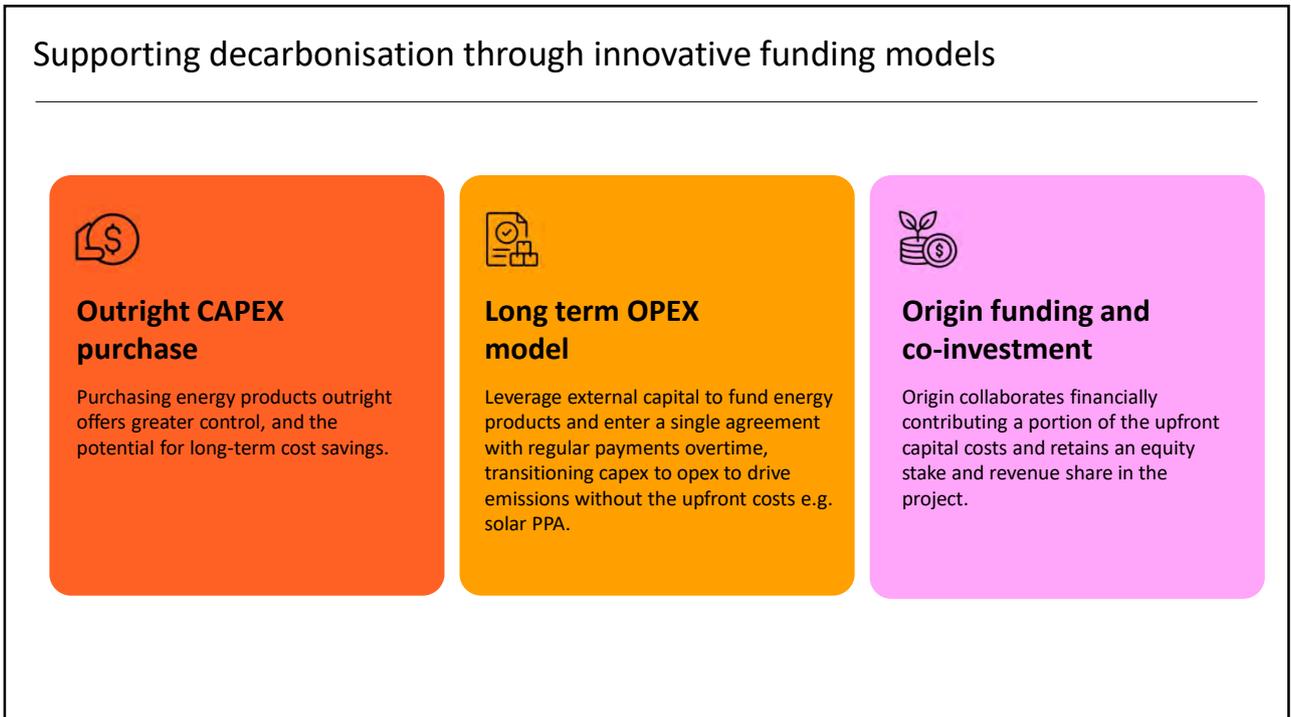
Origin's Energy Suite: 6

What's working and what's next

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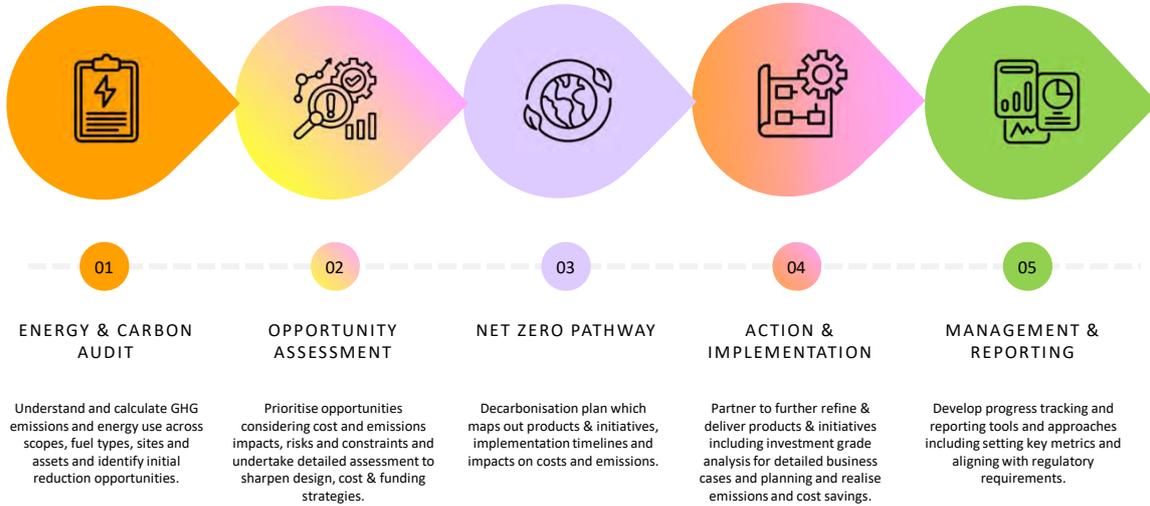


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End to end energy partnership



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Council case studies

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Power Melbourne – BESS solution with City of Melbourne

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Challenge

City of Melbourne wanted a way to provide residents and businesses with access to more affordable energy, while supporting the transition to renewable energy.

Solution

Origin Zero designed a battery solution that will:

- establish a network of community batteries across the city and a battery-linked retail electricity offering for the community
- design, supply and install 1MWh BESS capacity at three sites across Melbourne, with plans to provide operations and maintenance support, and orchestration services with an aim to scale across more sites.

KEY BENEFITS



Strategic partnership

Origin and City of Melbourne to drive market awareness and aim to help accelerate commercial battery applications.

SD1



Orchestration of assets

Origin will orchestrate the batteries via our Virtual Power Plant, sharing an agreed percentage of the revenue.



Engagement

This project aims to scale the network of batteries through partnerships with local universities, corporates and other councils.

SD2



13

Logan City Council and Origin tackle decarbonisation together

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Challenge

Logan City Council wanted to achieve 100% renewables and carbon neutrality while minimising costs and maximising revenue streams. As the Logan population grows rapidly, the demand on the energy grid increases, highlighting the need for innovative energy solutions to manage costs and emissions.

Solution

Origin Zero designed an end-to-end decarbonisation partnership that includes electricity procurement with LGCs from Daydream Solar Farm in QLD, support to install a largescale solar and battery system and orchestrate the battery through Origin's VPP as well as enrolling Logan's back-up generation assets, our demand response program and delivering a co-created energy knowledge building program for the Council's key stakeholders.

Outcome

Logan City Council and Origin have signed an Australian-first, 3-year, multi-scope energy agreement that aims to accelerate region's net zero goals while supporting the energy grid.

KEY BENEFITS



Orchestration of assets

Once installed, Origin will orchestrate the battery to maximise behind the meter savings and front of meter value.



Long duration storage

Origin and Logan City Council will Pilot long duration storage at wastewater treatment plants to maximise solar benefits.



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Slide 13

SD1 Could we say:
Origin and City of Melbourne to drive market awareness and
aim to help accelerate commercial battery applications.
Duerdoth, Sarah, 2025-08-25T01:03:39.488

KW1 0 Yep! Sounds good!
Wood, Katie, 2025-08-25T01:24:55.394

SD2 Amend to:
This project aims to scale the network of batteries through
partnerships with local universities, corporates and other
councils.
Duerdoth, Sarah, 2025-08-25T01:04:34.020

KW2 0 Yep! Sounds good!
Wood, Katie, 2025-08-25T01:24:57.524

Slide 14

SD1 If this is referring to LGCs we cannot describe it as renewable
energy procurement.

Fine if you are talking about a PPA or solar D&C.
Duerdoth, Sarah, 2025-08-25T01:05:49.713

KW1 0 Updated!
Wood, Katie, 2025-08-25T01:25:34.963

Armidale Regional Council - Strategic collaboration on decarbonisation

Challenge

Armidale Regional Council (ARC) sought innovative solutions to drive renewable energy across the region in line with its strategic sustainability goals.

Solution

Origin Zero has developed a comprehensive energy partnership with ARC that integrates many of Origin's products and services to support the achievement of ARC's decarbonisation, financial, and Renewable Energy Action Plan objectives.

The partnership is anchored in a Decarbonisation Pathway and Implementation Plan, which identifies the highest-value energy and emissions reduction opportunities. Origin provides end-to-end support to deliver these solutions, spanning energy efficiency and demand management, electrification of assets and fleets (including EVs and charging infrastructure), onsite solar and battery storage, and participation in flexibility programs.

Outcome

ARC and Origin have entered a two-year, multi-scope energy agreement grounded in a comprehensive energy and carbon audit, which will inform a decarbonisation pathway designed to accelerate the region's net zero goal.



KEY BENEFITS



Guided Implementation

Origin provides tailored, expert support throughout the project lifecycle, ensuring seamless delivery and confidence at every stage.



Roadmap to results

Origin is working alongside Armidale Regional Council to deliver a tailored roadmap that transforms decarbonisation goals into clear, actionable outcomes.

Origin's Energy Suite:

Further detail

BM1 [@Findlay, Hannah] - please check copy

Moskalev, Blaise, 2025-08-06T02:19:34.536

Solar

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Installing on-site solar allows businesses to generate renewable energy, lower emissions and reduce long-term electricity costs, making it a significant step towards achieving net zero emissions.

Origin Zero's solar panels meet CEC standards with product guarantees, performance warranties, proactive maintenance and monitoring optionality. Your business will have access to real-time monitoring and data support through EnergyZone, helping you to keep track of any savings, energy targets, and giving you peace of mind.

KEY BENEFITS



Save money and lower emissions

Installing on-site solar can often be the most significant step a business takes to accelerate on the journey towards net zero. By generating and using the renewable energy, your business can lower emissions and reduce electricity costs over the long-term.



Make money by feeding in excess solar energy

A range of federal and state government incentives may be available when installing solar. And feed-in tariffs may allow your business to monetise any surplus energy you generate but don't use.



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Battery Energy Storage Solutions

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Origin Zero offers comprehensive support by supplying, installing, and maintaining batteries.

Batteries can help businesses reduce energy costs, and enhance solar utilisation, with optional Virtual Power Plant (VPP) enrolment to maximise operational efficiency and savings, and support grid stability.

KEY BENEFITS



Take control of your business's energy costs

If your battery is connected to the VPP, Origin will charge it when energy prices are low and sell stored energy back to the grid during peak-demand times. The revenue this generates can help offset your business's electricity costs.



Support grid stability

If connected to the VPP, your battery can generate additional revenue by being made available to assist in restoring grid frequency when it falls outside the normal operating range through the Frequency Control Ancillary Services (FCAS) market.



Avoid costly upgrades when electrifying your site

If connected to the VPP, batteries may also lower the need for costly upgrades to the power grid when your business wants to install assets like Electric Vehicle chargers.



Reduce peak demand

Enrol your battery into the VPP so that we can optimise its output to reduce your peak demand, thereby lowering your business's network demand charges.



Maximise benefits of on-site solar

Where the battery is not connected to the VPP, store excess solar generation in the battery for later use, saving money and maximising on-site renewable energy utilisation.



Connected to VPP

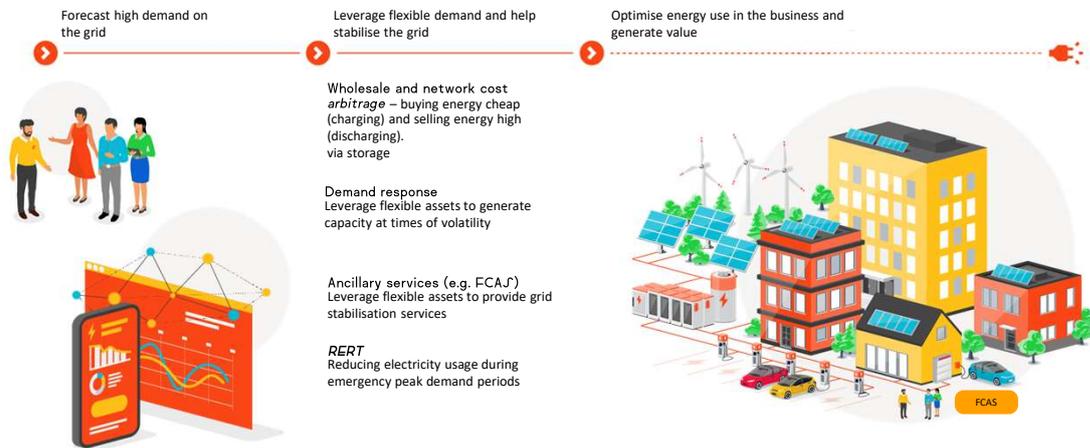


Not connected to VPP

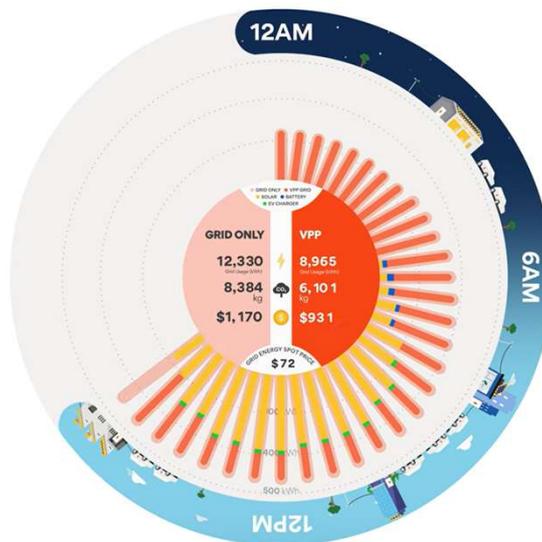
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Orchestration of assets - the VPP connected business

Our VPP manages over 400,000 Distributed Energy Resources (DERs) with more than 1.5 GW capacity, aiming for 2GW by FY26. DERs include solar, batteries, generators, and EV chargers.



How our VPP (Origin Loop) supports the products to work for you



Long Duration Energy Storage (LDES)

Long duration energy storage systems can hold large volumes of electricity for extended periods (typically 8 hours or more), a crucial foundation for Australia's transition to a reliable, clean energy grid as it phases out fossil fuels.

Various technologies are being explored including vanadium flow, compressed CO₂, lead-acid and more! LDES delivers the following unique advantages:

- Tackles intermittent renewable energy misalignment with consumption patterns.
- Multi-day energy flexibility: complete overnight energy demand secured by storing surplus renewables and releasing it during low generation periods.
- Deeper discharge capability: extended power supply that offers 10+ hours of a cost effective & eco-friendly solution.

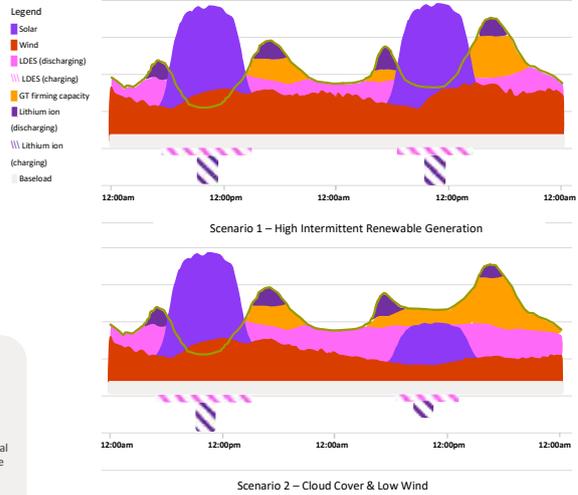
ORIGIN INNOVATION



Origin is partnering with Allegro Energy to invest in & pilot 8-hour LDES BESS with future opportunities to expand to 12-hours using Allegro's Redox Flow Battery water-based microemulsion technology – more economical, safer and more environmentally friendly than LI technology.

Lead-Acid Battery Trials

Origin is partnering with an innovative bipolar lead acid battery manufacturer, rolling out 6 pilots to support local manufacturing. Completely recyclable, no cell-based fire risk and competitive economics vs Lithium Ion.



Community Batteries

Community batteries are not a one-size-fits-all solution—they encompass a range of energy products, each tailored to reflect the unique needs, aspirations, and character of the communities they support.

The definition of a community BESS varies widely but generally refers to a BESS(s) which delivers benefits to a community analogous to direct access to an onsite BESS through some type of virtual sharing mechanism.

The BESS is installed in the distribution network and orchestrated for maximum value which is distributed across funders e.g. network providers or large energy users, the orchestrator e.g. a retailer and the community. There are many ways to distribute value generated to residents e.g. residents receive a rebate on their bill to reflect the value of virtually using the BESS which is increased if they have solar.

KEY BENEFITS

Whole-of-community engagement & support

Avoiding costly network upgrades and backyard batteries while distributing value to support residents, businesses, the local electricity distributor and the wider system.

Emissions reductions and target achievement

Catalyzing renewable energy penetration by reducing grid constraints while driving return on investment



Slide 21

KW1 [@Cook, Kallen] can you please update for Lead-Acid similar to Allegro. If we can mention ARC Active, that would be great!

Wood, Katie, 2025-08-22T07:27:02.653

Demand Response

Demand Response (DR) allows businesses to earn additional income by reducing their grid electricity usage by turning off energy-intensive assets or operations or switching to back-up generation sources, for short periods of time.

Product options

- Capacity + Performance: Receive monthly credit based on agreed capacity and bonus payments by participating in Origin events.
- Performance only: Get paid upfront per MWh for participating in Origin events.



Does your council qualify?

- Can you utilise backup power sources like on-site generators?
- Do you have the flexibility to adjust energy-intensive operations during peak demand?
- Do you hold an existing Electricity Supply Agreement (ESA) with Origin Energy?

KEY BENEFITS



Unlock revenue streams

Participation in Demand Response benefits your business with a direct financial incentive to help offset your energy costs.



Support grid stability

Play an important role in enhancing overall grid reliability, contributing to stability in the network whilst helping to reduce extreme rise and fall of market prices.

Origin 360 EV Products and Services

Electric Employee Benefits

Help your employees access to a range of energy savings including cleaner transport with salary packaged EVs on subscription.

EVs for Business

Fully managed electric cars and light commercial vehicles with EV charging services specifically fit for fleets big and small.

EV Ready Buildings

Future-proofing residential and commercial buildings with EV charging, backbone infrastructure, load management systems (LMS) and simple billing solutions for residents.

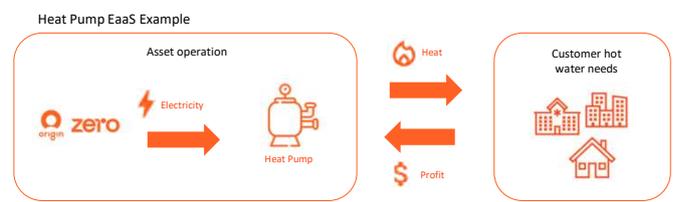
EV Charging

Simplifying EV charging from installation, monetisation and smart management to aggregated billing for work, at home and in public charging.



Energy as a Service (EaaS) + Electrification

Energy as a Service (EaaS) is when Origin Zero owns and operates an energy generating asset and sells energy in the desired form directly to a customer.



KEY BENEFITS

Improved operational efficiency

EaaS incentivises Origin to ensure energy-efficient asset operation by providing performance and efficiency guarantees. This ensures that your assets operate at their peak efficiency, maximizing energy savings and reducing operational costs.

Cost effective asset upgrades

You can install new or upgrade old assets without the need for upfront capital expenditure. This allows your business to improve your infrastructure, reduce overall energy consumption and lower emissions, all while saving on costs.

