ZENOBĒ

2023 sustainability report

Starting sustainably and building the baseline

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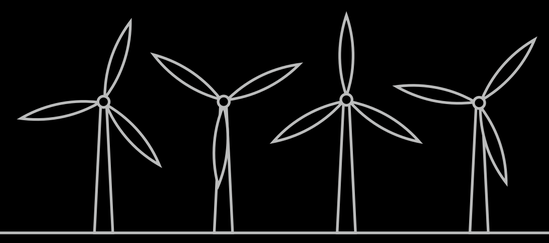


About this report

This is Zenobe's first sustainability report covering our global operations in the UK and Ireland, Europe, Australia, New Zealand, and the USA. The Company's journey started in 2017 with the mission to make clean power accessible. Since then, Zenobē has developed the application of batteries in the transit sector, electrifying bus fleets, and in network infrastructure, providing flexibility to aid the integration of renewable energy.

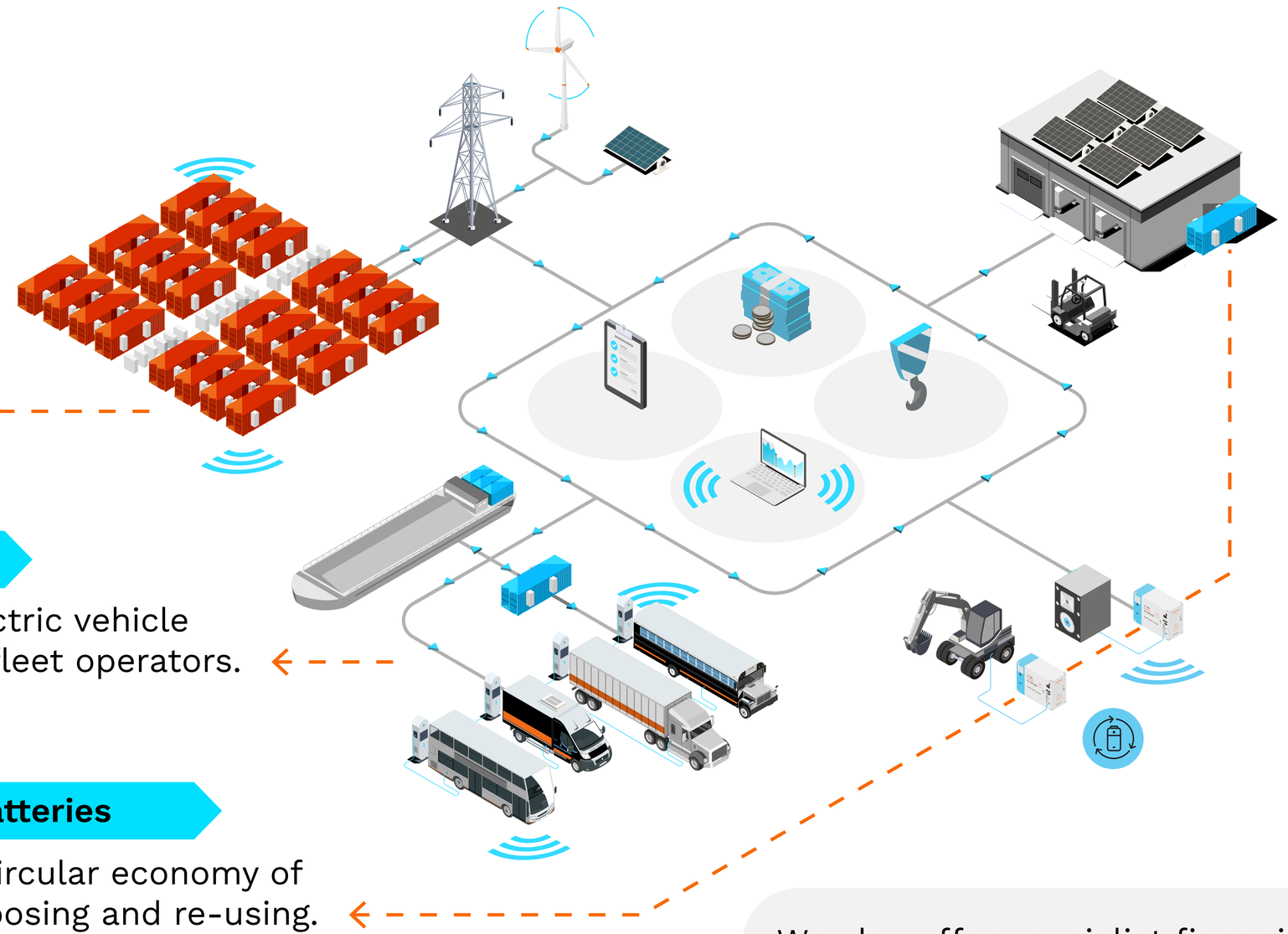
Both of these businesses displace polluting and carbon generating activities and thus growing our business grows the positive impact we have on the environment. This report provides information on our sustainability activities in 2023.

> *In 2023, Zenobē deployed more electric bus and network batteries replacing more polluting activities with clean power. We consider ourselves at the beginning of our sustainability journey and welcome ideas to add to our plans for next steps.*

Dr Donald Weir, CEO, Zenobē

Our mission is to make clean power accessible.

Zenobē designs, finances, builds and operates **battery-based services.** We're transforming grids to enable the uptake of more renewables, electrifying fleets for cleaner air and then repurposing EV batteries as power solutions.



1. Network infrastructure

We develop, finance, build and operate grid-scale battery storage systems.

2. Fleet electrification

We provide end-to-end electric vehicle and software solutions for fleet operators.

3. Second life batteries

We support the circular economy of batteries - repurposing and re-using.

We also offer specialist financing, construction, operational support and software management to help de-risk our battery storage and fleet electrification offerings.

Zenobē is an ambitious and experienced team of infrastructure, technology, and finance experts. Between 2017 and 2023, the team has successfully raised over £1.6 billion in equity and debt funding to scale sustainably, support our growth, and increase our positive impact.

Key to our success is our team who are...

Pioneering and agile
We're accelerating the transition to clean power and transport with distinct solutions, numerous 'firsts' and sector-leading partnerships.

Collaborative
Teamwork is key to achieving common goals and building a strong work culture. We're technology agnostic, strategic in our partnerships, and open in our ways of working.

Dependable
We solve problems for our customers and build solutions that are effective and efficient. Our team is focused on ensuring customers understand the changes needed to decarbonise – and how to take advantage of this opportunity.

Values that have been recognised by:

IJGlobal ESG AWARDS 2023

ENERGY STORAGE AWARDS

UK BUS AWARDS

We have hit a number of key milestones

Environmental

Social

Governance

2017	2018	2019	2020	2021	2022	2023
14MW storage capacity	63MW storage capacity	73MW storage capacity	75MW storage capacity	175MW storage capacity	237MW storage capacity	435MW storage capacity
4 second life batteries available	10 second life batteries available	42 second life batteries available				
9 vehicles in 1 depot	125 vehicles in 6 depots	371 vehicles in 22 depots	661 vehicles in 22 depots	>1500 vehicles in 75 depots		
£45m equity funding	Rebranded as Zenobē	£50m multi source funding	£172m multi source funding	£46m debt funding	£287m multi source funding	c.£900m multi source funding
	ZENOBĒ	Santander, Jera	Infracapital, NatWest			Infracapital, KKR
Equal opportunities policy	4,505 tCO_2e avoided	8,935 tCO_2e avoided	13,309 tCO_2e avoided	26,267 tCO_2e avoided	47,722 tCO_2e avoided	167,373 tCO_2e vavoided
		CSR Policy issued		Introduced awards for good work	First 100 employees	SHEQ & Sustainability function established
				Introduction of volunteer days	Anti-slavery & human trafficking policy	Became ISO 14001, ISO 27001, ISO 9001, ISO 45001 certified
				First employee survey	Anti-bribery & corruption policy	

And we have big plans for the future

	2024	2025	2030
Network Infrastructure	435MW	735MW	4.5GW
EV batteries on buses	1,400	2,200	14,000
Annual CAPEX spend*	£366m	~£600m	~£900m

*CAPEX figures represent the planned spend for each respective year and are not cumulative.

We are delivering clean power at scale across the world

- Network infrastructure
- EV fleet
- On-site battery
- Zenobē offices

Australia

Brisbane
Newcastle
Leichhardt
Sydney
Leppington
Canberra
Melbourne

New Zealand

Auckland
Christchurch

UK & Ireland

Inverness
Blackhillock
Aberdeen
Dundee
Glasgow
Wishaw
Eccles
Kilmarnock South
Riverside
Harrogate
York
Leeds
Sheffield
Capenhurst
Nottingham
Hill Farm
Leicester
Birmingham
Coventry
Cambridge
Kerry
Claredown
Newport
Oxford
Cardiff
Brindley
Slough
London
Aylesford
Guildford
King's Barn
Portsmouth

Europe

Beveren x2
Breda
Sint-Niklaas
Roeselare
Moeskroen

Watford
Enfield
Edgware
Walthamstow
Holloway
Barking
Stratford
Ealing
London
Rainham
Walworth
Plumstead
Heathrow
Brixton
Twickenham
Catford
Merton
Croydon
Sutton

Sustainability Strategy

In the first half of 2023, Zenobē established its dedicated Safety, Health, Environment & Quality (SHEQ) function, integrating sustainability into the core of our business. Throughout the remainder of 2023, the focus was on planning and prioritising key initiatives for 2024, building a baseline that would mean we could begin the year with strong momentum.

Key steps included planning for a comprehensive materiality assessment, partnering with the carbon accounting platform Watershed, improving data collection company-wide and developing essential policies to guide our sustainability strategy.

During this time, we established our strategic pillars below, which are aligned with our mission to make clean power accessible and integrated into our broader business strategy.

Accelerating renewables and electrification

We do this by deploying grid-scale battery storage to capture otherwise wasted energy, and by enabling organisations to electrify their heavy vehicles at speed.

Supporting customers, communities and our people

We are dedicated to fostering strong relationships with our customers, supporting local communities, and investing in our workforce to create a positive social impact.

Ensuring good governance

We uphold the highest standards of governance, transparency, and ethical business practices, ensuring accountability and integrity in all our operations.

United Nations Sustainable Development Goals

For Zenobē's sustainability strategy to be relevant and focused, it was important for us to seek an external point of reference.

The United Nations Sustainable Development Goals (SDGs) seek to tackle global challenges like poverty, inequality, climate change, environmental degradation, prosperity, and the promotion of peace and justice. These goals aim to create a more sustainable world by 2030 and provide a useful and verified external framework against which we could test our strategy.

Zenobē fully endorses the vision of all 17 goals, but we see five specific goals where we can make a meaningful impact.

Keep an eye out for the SGD icons throughout this report - you will see how we contribute to each.

SUSTAINABLE DEVELOPMENT GOALS

By providing innovative energy storage solutions that enable increased integration of renewable energy.

Our modular solutions remove technological and financial risk for operators, enabling them to electrify at speed.

Our electric fleets help operators bring zero emissions vehicles to their communities which improve air quality and deliver better public transport.

Using EV batteries in second-life applications, to ensure we increase the lifetime carbon savings of each battery and keep them out of landfills.

Decarbonising the energy and transport sector.

Our people

We're powered by passionate and talented individuals who believe in a cleaner, more sustainable future. At Zenobē, it's the people who make the difference. From engineers to project managers to business development and corporate functions, our people bring a pioneering mindset, collaborative approach and dependable nature - all values that ensure the success of our common goal: to make clean power accessible.

We invest in our team through learning and development programs, by placing Diversity, Equity & Inclusion (DE&I) at the heart of the workplace and maintaining an ongoing commitment to employee wellbeing through flexible working and mental health resources.

2023

265	1,463	68f 197m	25%
Global headcount	Training hours used	Gender breakdown	Women in Leadership Roles

In an inclusive work environment, all voices are heard. Our team are engaged on a quarterly basis and given the opportunity to feedback on areas they think we could improve.

Of 265 people surveyed in 2023, we received an 85% response rate.

They're positive about our...

Innovation and creativity

Flexible working

Growth and future potential

Positive working environment

Talented people

But would like to see more...

Clarity on strategy and resource allocation

Better benefits including for family

Improvements to collaborative working including systems and processes

Clarity on company goals/roles and career paths

This feedback shaped Zenobē's People Strategy in 2023, which included:

Placements for students, giving them firsthand insight into the energy and transport systems of the future.

Annual learning and development (L&D) budget of £1,500 per person, to use for training opportunities including courses on soft skills, professional certifications, and job-specific training.

We used 1,463 hours in 2023.

DE&I (Diversity, Equity and Inclusion) calendar that highlights cultural festivities and events celebrates diversity.

ZenHub (our company intranet) provides a place for employee engagement and promotes inclusiveness and cultural awareness.

Company off-site, offering opportunities to get to know each team, deep-dive on the business strategy and enjoy team-building activities.

Keeping our people safe

Safety, health, and the environment are crucial for any business and core to what Zenobē does. Creating a safe and healthy environment for our employees, contractors, and visitors is paramount – and we want to lead by example. That's why we brought the majority of Health & Safety activities in-house, managed by our SHEQ team.

New Health & Safety Policy	Monthly SHEQ Committee meetings	1100+ H&S Training Hours
763.459+ Hours worked	Zero Lost Time Injury	1.31 Total Injury Frequency (TIF)
bsi ISO 45001 Occupational Health and Safety Management CERTIFIED — OHS 755648	bsi ISO 9001 Quality Management Systems CERTIFIED — FS 755649	bsi ISO 14001 Environmental Management CERTIFIED — EMS 755646

It's a journey of continuous improvement and Zenobē's SHEQ team has developed a baseline of lagging and leading indicators to enhance the business' ability to measure and improve safety performance.

Note:
Working hours 2022: 352,280
Working hours 2023: 763,459

Metric	2022	2023
RIDDOR incidents	0	0 -
Lost Time Injuries	0	0 -
Lost time injury frequency (LTI)	0	0 -
Days Lost to work-related injuries	0	0 -
Days Lost to work-related illness	-	261
Non-lost time injuries	1	5 +
Total injury frequency (TIF)	0.57	1.31 +
Near misses	8	12 +
H&S training score	87%	88% +
Safety observations	-	151

Supply chain responsibility

Improved supplier due diligence in place

ESG questionnaire now included in all major tenders → As part of major NI tenders suppliers are assessed on ESG criteria with SHEQ team review → Engaged with OEM's, creating a European manufacture base about reducing carbon footprint from transport

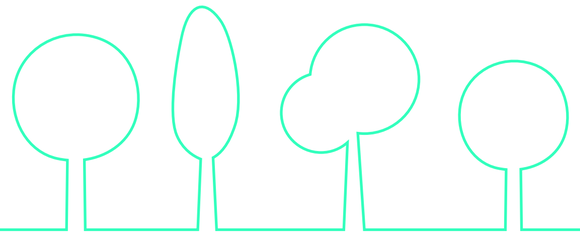
Key Pillars of Global Procurements ESG Plan

In 2023 we also developed key pillars of our global procurement ESG plan for 2024 and beyond. This included:

Environment

Sustainable Sourcing: Include a sustainability impact measure in supplier evaluations where appropriate as part of major tenders

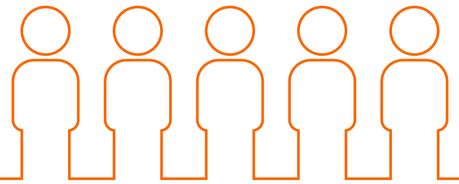
Reduce carbon footprint in the supply chain: Aim to work with top 10 suppliers on major projects across EV and NI to improve carbon footprint of solutions - 2025.



Social Responsibility

Due Diligence: Deep dialogue ongoing with key BESS suppliers about their efforts to remove modern slavery risk from their supply chain.

Fair Labour Practices: Better processes for auditing suppliers and supply chain traceability in place by start 2025.



Governance and Ethics

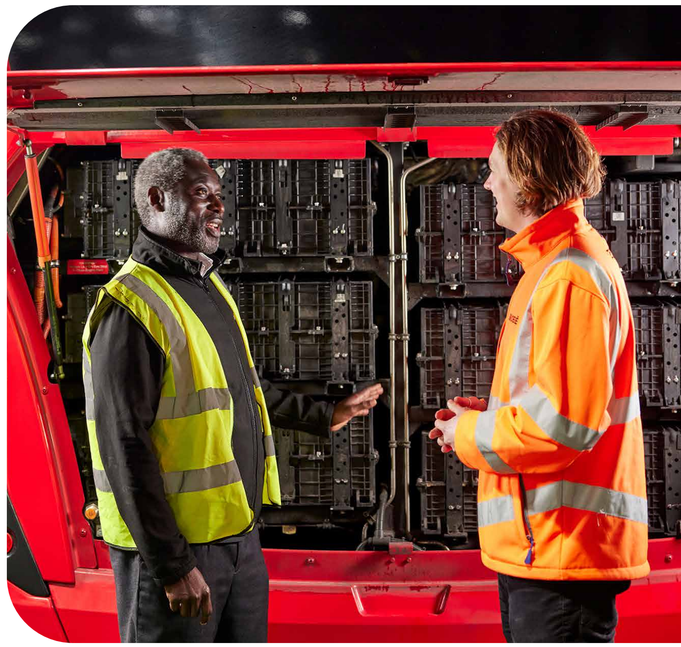
Supplier Code of Conduct: Develop & enforce comprehensive ESG compliance framework for suppliers.

Collaboration: Build partnerships with suppliers committed to sustainable and ethical practices. Many of our BESS suppliers are already undertaking great work on ESG with ever-increasing scrutiny.

Materiality assessment

As we established our sustainability function, setting a strong foundation was essential for ensuring long-term success and impact. A materiality assessment is the starting point of any credible sustainability strategy, helping to identify and prioritise the key environmental, social, and governance (ESG) issues that matter most to our business and its stakeholders.

This assessment is particularly crucial at this early stage, as it will guide the development of a focused and relevant strategy. By understanding which areas have the greatest potential impact, we can direct our efforts and resources toward the initiatives that align with our values and stakeholder expectations, laying a strong groundwork for sustainable growth.



Our approach
We partnered with Business for Social Responsibility (BSR) to carry out a guided materiality assessment. BSR supported our team throughout the entire process, starting with the planning phase in late 2023, officially kicking-off in early 2024.

BSR®

1. Identifying key stakeholders and defining business success for Zenobē.

2. Researching and identifying relevant sustainability trends.

3. Identifying and developing a “long list” of potentially material topics.

- Researching peers and competitors' sustainability priorities
- Researching current and pending regulations, global and industry trends and reporting standards (UNSDG’s, GRI, TCFD, SASB) collate a list of over 100 potential sustainability issues.
- Finalise a list of topics most relevant to Zenobē, determined and grouped by environment, social, product and services, and governance. We set a baseline of 23 material issues.

We will share the results of our materiality assessment in our Sustainability Report to be published in 2025.

Carbon avoided

By addressing both the energy and transport sectors—two major sources of global emissions—our projects are helping to build a more sustainable, low-carbon world. We are dedicated to maximising our impact, working with customers and partners to deliver clean power and transport solutions at scale.

In 2023, the electric fleets we support along with our large-scale grid batteries avoided the release of **167,373 tonnes of CO_2 equivalent** (tCO_2e) from entering the atmosphere.*

Breaking down the numbers:

Electric Fleets

62,350 tCO_2e

That's the same as the emissions from 774 diesel buses operating for one year.

Zenobē plays a major role in decarbonising the transport sector at scale. The electric vehicles we support replace the use of fossil fuel fleet which in turn improve air quality in communities and lower the carbon footprint associated with the transportation sector.

Network Infrastructure

105,023 tCO_2e

That's displacing 170MW gas peakers from emitting CO_2 through the operation of our large-scale batteries.

Our grid-scale batteries ensure that renewable energy, such as wind and solar, is stored efficiently and utilised when needed, preventing energy waste, reducing reliance on fossil- fuel-based power generation and reducing consumer's bills.

To see this impact in practice, head to the case studies section (p19-p23)

What do we mean by carbon avoided?
Carbon avoided refers to the amount of green house gas emissions prevented through the operation of our large-scale battery storage and EV fleet we support. By replacing traditional fossil-fuel- based systems with renewable energy and EV infrastructure, Zenobē reduces emissions that would have otherwise been produced.

*our carbon avoided methodology has been externally verified by DNV.

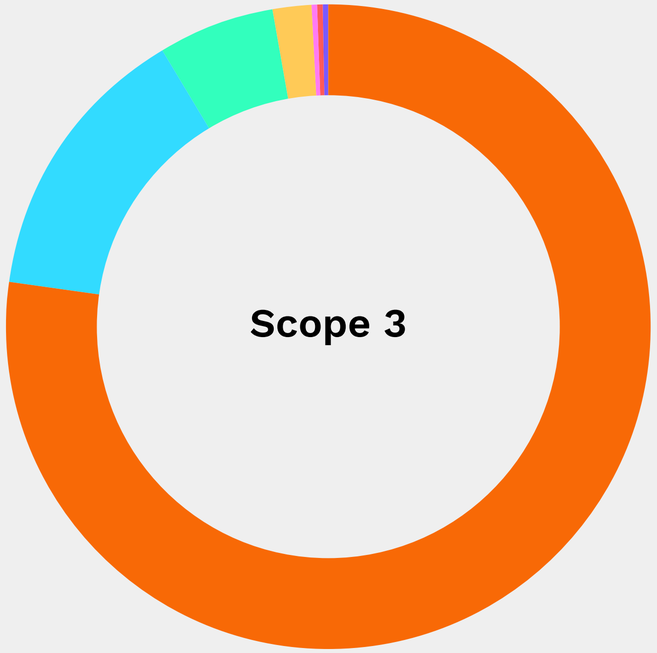
Carbon footprint

Our first-ever corporate carbon footprint. A significant milestone for Zenobē, underscoring our deep commitment to transparency, accountability, and leadership in addressing climate change. Working with Watershed we measured our Scope 1, 2, and 3 global emissions in 2023. The GHG Protocol splits emissions into scopes based on the party directly emitting. The combined total of this is our carbon footprint.

- **Scope 1** - 318 tCO_2e 0.1%
- **Scope 2** - 3,796 tCO_2e 1.4%
- **Scope 3** - 274,512 tCO_2e 98.5%

Fuels used on our construction sites

Electricity consumption in offices and operational sites



- Capital goods (77.3%)
- Fuel & energy related activities (14.1%)
- Investments (6.0%)
- Purchased goods & services (1.7%)
- Business travel (0.5%)
- Downstream leased assets (0.2%)
- Employee commuting (0.1%)

Next steps and ambitions:

1. Continuously monitor and improve the quality of our data, with a focus on scope 3 emissions.
2. Develop a strategy which sets reduction targets.
3. Engage with our suppliers, customers, and partners to agree on plans to reduce environmental impact.

Supporting local communities in Leitholm, Eccles and Birgham, Scotland.

Challenge

Our 400MW Eccles BESS is located in a rural, farming area in the Scottish Borders. Our site is the first of several similar sized battery schemes under development in the immediate area. The community, whilst supportive of Zenobe's scheme, is concerned that the proliferation of other similar developments nearby will lead to the industrialisation of high-quality agricultural land, and effects extending over many years.

Solution

We created a community engagement programme to identify key challenges and opportunities for local community improvement. Activities Undertaken in 2023:

- **Stakeholder Mapping:** Identified key groups, including neighbours, local community members, interest groups, schools, and politicians.
- **In-Person Meetings:** Engaged with Community Councils to introduce proposals, discuss community benefits, and explore opportunities for local suppliers.
- **Resident Meetings:** Held sessions to share proposals, answer questions, and discuss community impacts.
- **Public Meeting:** A public meeting chaired by local Member of Parliament and other local politicians, attended by c.140 people, to address community questions and concerns.
- **Direct Neighbour Outreach:** Zenobe team visited nearest neighbours to discuss project benefits and local support initiatives.
- **Heat Hack Initiative:** Partnered with the Royal Academy of Engineering to support energy-saving measures and decarbonise the local Community Centre.
- **Community Challenge Identification:** Met with Community Council leaders to address issues like increased isolation due to bus service cessation.
- **Community Benefit Fund:** Planned a fund for annual donations to local charities and support for nearby neighbours throughout the project duration.

In 2024 we will focus on refining our approach for stakeholder and community engagement at a company-level, to enhance communication and identify long-term benefits for local communities.

Finance

Zenobē's financial strategy is intricately linked to our sustainability objectives. Our strong ESG credentials have helped us to secure competitive financing terms, reflecting investor confidence in our ability to deliver on both financial and environmental performance. Our UK and Ireland EV platform financing benefits from a green use of proceeds framework, securing improved terms for its environmental impact. Our latest UK battery financing was marketed as a green loan, attracting strong interest from a wide range of lenders and driving market leading terms for the sector.

As of Dec 2023

Total equity raised - £1.050m
Total debt raised - £550m
Buses funded - c. 1000
Battery storage funded - 430MWs
Number of lenders – 12

In 2023, we raised £600 million in equity, led by KKR, and secured £270 million in additional funding from Infracapital to accelerate fleet electrification and grid-scale battery storage projects. These investments drive forward our business growth and therefore the environmental benefits we can deliver.

Largest Project Finance facility for battery storage projects to be arranged in Europe

In Q1 2023, Zenobē secured £235 million of debt from a club of five banks to support the build-out of grid-scale battery storage in Scotland.

CIBC Rabobank Santander SIEMENS Siemens Financial Services

The debt structure includes a £400m accordion facility that will be used to debt finance future projects. A significant contribution to driving Scotland's energy future, the debt facility reflects Zenobē's ongoing £750 million investment in Scotland's green infrastructure. It will support construction of two 200MW/400MWh strategically located batteries, expected to prevent the emission of approximately 4.1 million tonnes of CO_2 emissions over 15 years.

EV - National Express Coventry

In 2021 National Express, part of Mobico Group, was awarded funding from the UK Government's Department for Transport as part of Coventry's successful bid in the. All-Electric Bus City scheme. Zenobē was named the key service provider to deliver end-to-end electrification of the operator's fleet and depot. As of September 2023, 130 electric buses serve the streets over Coventry, reducing vehicle emissions in the city and improving air quality.

Challenges

Project scale:
One of the largest diesel-to-electric bus depot conversions in Europe, with new design and delivery challenges.

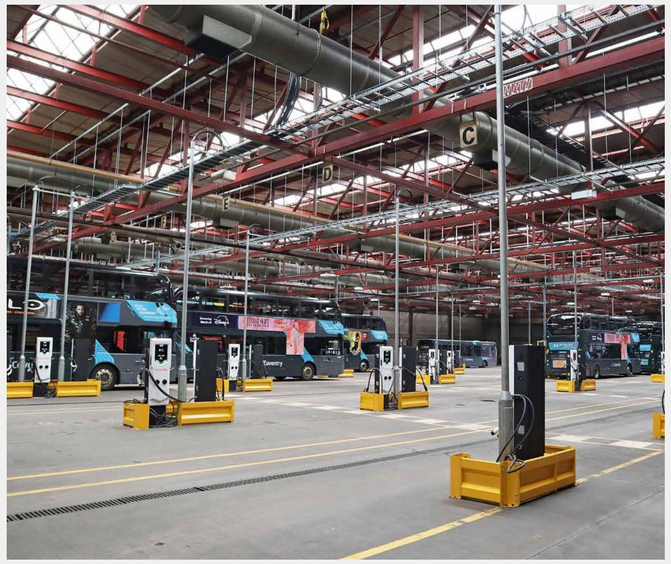
Insufficient power from grid:
Existing power supply was unable to safely charge a full fleet of electric buses.

Minimising energy costs:
The need to power the new fleet in the most cost-efficient way.

Future-proofing:
Ensuring the infrastructure can support future phases of electrification.

Solutions

- ✓ 16-year Electric-Transport-as-a-Service contract covering management, financing, maintenance, and extended battery warranty for the full term.
- ✓ Design and build of charging infrastructure with substantially revised depot layout.
- ✓ Phased installation of network metering for smart charging and power load management.
- ✓ Development of on-site micro-grid with 193kWp solar PV and a 1.2MWh second-life battery.
- ✓ Installation of two oversized transformers and a power load management system for optimal power distribution, with plans for future electrification.
- ✓ Power Purchase Agreement (PPA) to ensure a cost-effective and sustainable energy supply.



140 battery-electric ADL/ BYD vehicles financed

140 Zerova chargers installed

193 kWp solar PV array

1.2 MWh on-site battery storage for optimal power usage

NI - Wishaw 50MW battery

The Wishaw Battery project is a 50 MW / 100 MW battery storage facility that went live in October 2023. It is the first transmission-connected battery in Scotland. Located just south-east of Glasow, the project is designed to enhance grid stability and support the transition to renewable energy.

The challenge

National Grid needed to manage constraints on the transmission system – excesses of power above the grids limits caused by the rapid shift to intermittent renewable generation.

The solution

By understanding how power flows in the region change with the uptake of onshore and offshore wind, Zenobē decided to build a battery at Wishaw. The battery provides the first Constraint Management Service in the UK, easing bottlenecks in the network. The site went live in September 2023.

The benefits

- ✓ 640GW renewable generation will travel from the UK's north to south in the next 15 years
- ✓ Secures power for those living near Glasgow and reduces Transmission system costs
- ✓ Enhances air quality as an emission-free stability solution compared to traditional methods
- ✓ 450,000 total CO_2 avoidance over 15 years of operation

640GW	450k	Secures	Improves
renewable power from North to South over 15 years	tCO_2 avoided over 15 years of operation	power for Glasgow, reducing transmission costs	air quality as an emission-free stability solution

Second Life - Extreme E

In 2023 Zenobē supported the electric off-road racing series Extreme E. The innovative and first-of-a-kind mobile microgrid solution powered the entire Extreme E village in remote areas by optimising the generation from a hydrogen fuel cell, solar array and back up HVO generators. Through events in Saudi Arabia, Scotland, Sardinia and Chile in 2023 the system was deployed and developed, whilst the fuel cell system was also developed.

Challenges

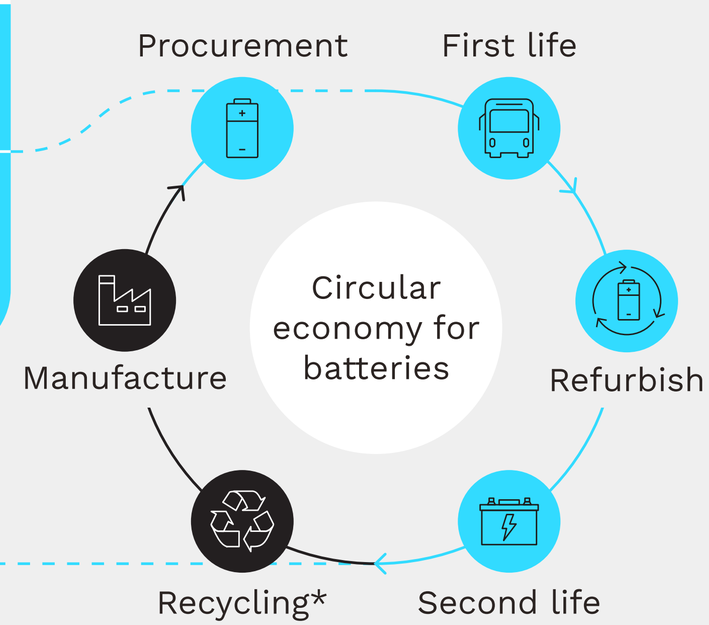
Extreme-E wanted to develop their very own microgrid to power the paddock operations of the event.

This was a crucial part of their plans to reduce the event's overall carbon emissions, whilst delivering exhilerating electric racing in remote locations from Sardinia to Chile, Saudi Arabia to Scotland.

Solutions

- ✓ 5 x 150 kWh portable battery units, made from repurposed EV batteries
- ✓ Development of a first-of-its-kind DC Powergrid to successfully optimise the generation from a hydrogen fuel cell, solar array and back-up HVO generators
- ✓ On-site support to manage and optimise the system

5 x 150kWh	1	80%	15 tonnes
second-life battery units deployed	DC Powergrid for energy distribution	of energy from emission-free fuel cell at Scotland race	CO_2 emissions saved p/yr with second-life battery



Some projects fuel consumption was reduced by over 1,000 ltrs/week, resulting in 2.7T/week of CO_2 savings.

Look ahead 2024 & beyond

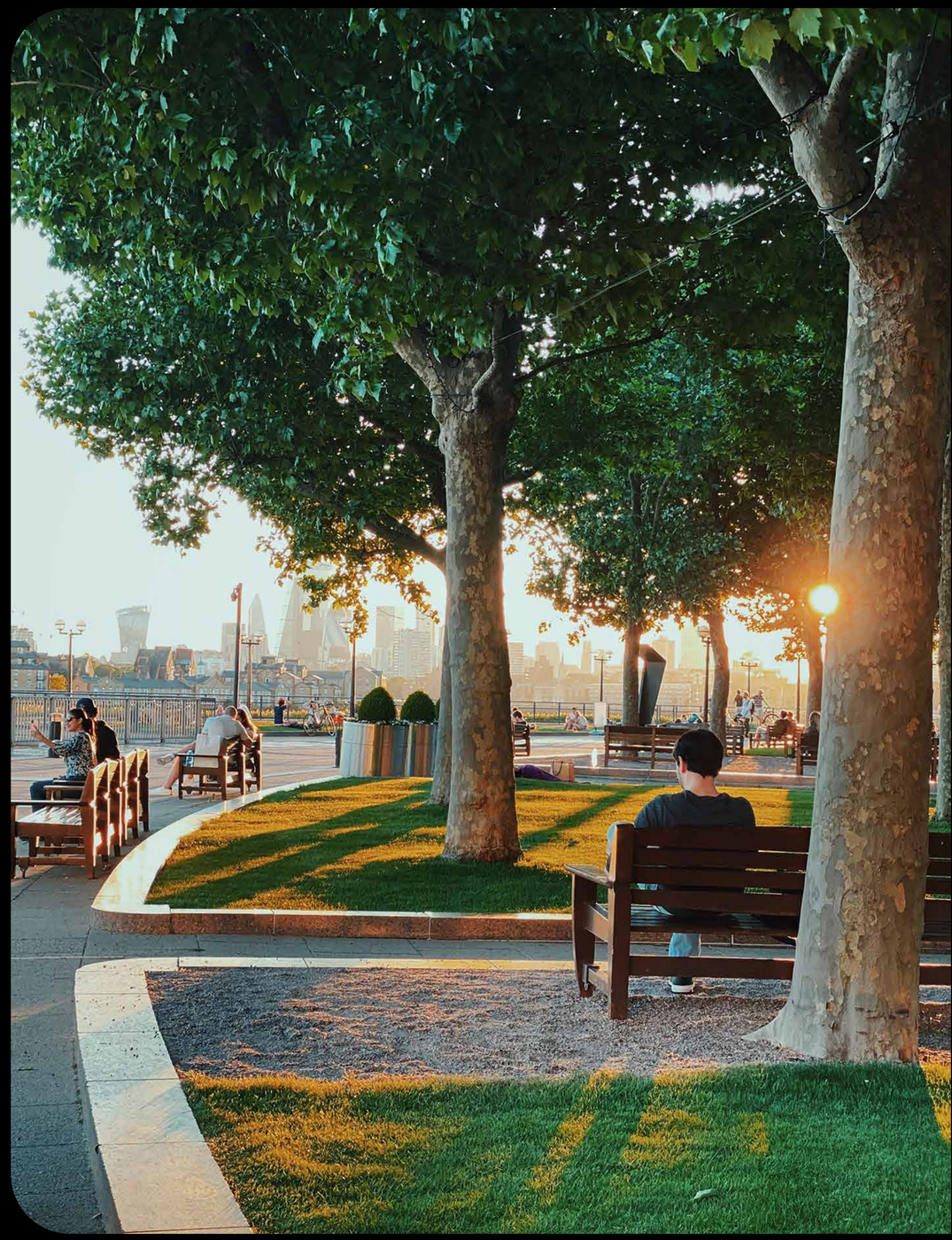
Zenobē is set for future growth in both electric vehicle and network infrastructure deployment'. This will increasingly take place in new countries, especially the US, Australia and New Zealand. Delivering this growth will ensure an increase in our environmental impact, supported by the foundation that is our sustainability strategy.

In addition to growing the scale of our impact, we will seek to increase the quality of our sustainability actions by challenging ourselves to further improve and monitor results using the indicators outlined in this report.

We will also seek to learn from others, either directly, or through the adoption of further standards such as the Global Reporting Initiative (GRI). We are committed to a more sustainable future and look forward to reporting on our progress.

> *At Zenobe, sustainability is at the heart of our mission. This report marks a significant milestone, showcasing our commitment to making clean power accessible and building a sustainable baseline for our business' growth. Together, we're driving the transition to a more sustainable future.*

Martyn Adeyinka, COO, Zenobē



Website
zenobe.com

Contact
contact@zenobe.com

LinkedIn
Zenobe Energy Ltd

X
@zenobeenergy

Address
First Floor, Burdett House
Buckingham St.
WC2N 6DU
United Kingdom

ZENOBĒ