Wernick®
GROUP

Wernick's Journey to Net Zero 2040

Driving clean growth and operational excellence in modular construction

Wernick's Journey to Net Zero 2040

Vision

Wernick Refurbished Buildings is committed to achieving operational net zero emissions (Scope 1 & 2) by 2030 net zero as a Group by 2040.

Our goal

To reduce on-site energy and fleet emissions through efficiency, electrification and clean power while ensuring business growth, resilience and client value.

Wernick's modular approach already lowers construction waste and improves energy efficiency. The next step is to make our factory operations and fleet carbon-free, aligning our growth with national and international climate goals.

Our starting point

Between 2022–2024, Wernick collected detailed data on:

- Electricity and fuel use across its factory and fleet (Scope1&2)
- Solar PV generation and production levels
- Financial and production growth (turnover and modules produced)

Baseline (2024):

- **Scope 1 (fuel):** 90,000 $kgCO_2e$
- **Scope 2 (electricity):** 35,000 $kgCO_2e$
- **Total:** ~130,000 $kgCO_2e$

Under a business-as-usual (BAU) pathway, emissions are projected to more than double by 2040 to ~350,000 $kgCO_2e$, driven primarily by production growth and continued reliance on fossil-fuelled fleet operations, despite grid decarbonisation.

Without action, Scope 1 (fleet & fuels) would represent 85% of all emissions by mid-century.

Our pathway to net zero

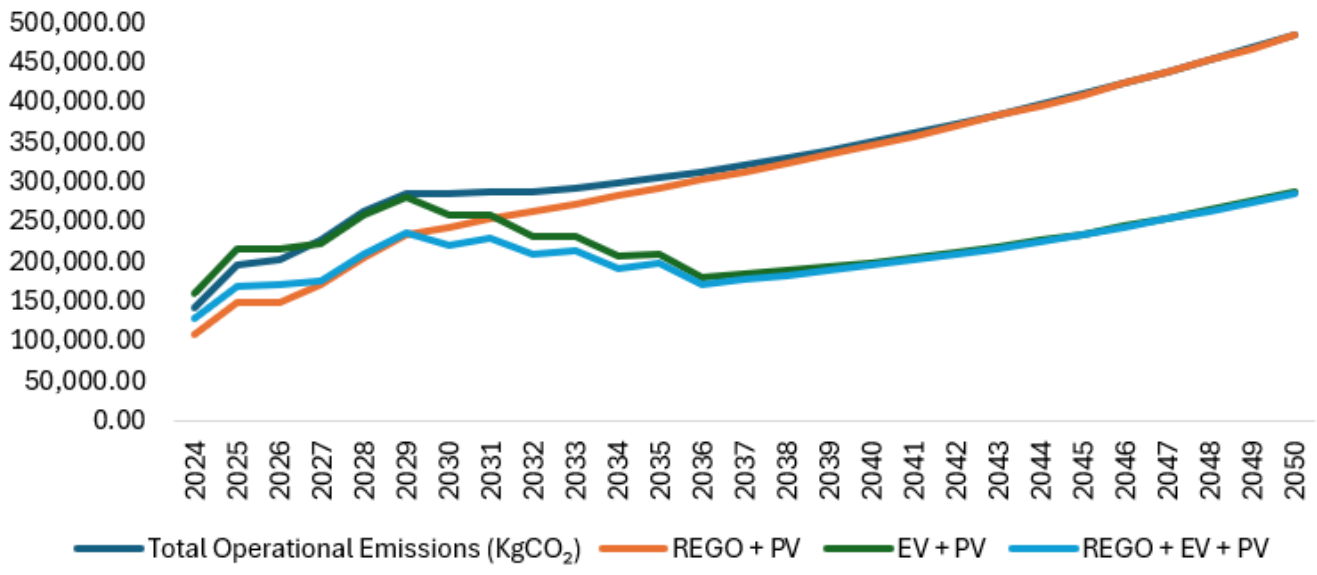
The Net Zero model built for Wernick Refurbished Buildings explores multiple intervention portfolios. Each intervention was assessed for emissions abatement, cost and feasibility.

Measure	Description	Carbon abated $kgCO_2e$	Financial impact (MAC*) £/ $kgCO_2e$
1. Renewable energy procurement (REGOs)	Transitioning to 100% certified renewable electricity by 2026	521,000	0.11 (low-cost, rapid action)
2. On-site solar PV	Phased PV rollout from 2026–2030 for self-consumption	48,500	-1.56 (cost-saving over lifetime)
3. Fleet electrification	Gradual transition to full electric fleet by 2035	890,000	0.46 (largest abatement, higher capital cost)

*MAC = Marginal Abatement Cost (cost per kg CO_2 avoided)

Wernick's Journey to Net Zero 2040

Combined net zero scenario



Scenario	2040 emissions	Key outcome
Business-as-usual	Transitioning to 100% certified renewable electricity by 2026	521,000
REGO + PV	Phased PV rollout from 2026–2030 for self-consumption	48,500
EV + PV	Gradual transition to full electric fleet by 2035	890,000
REGO + EV + PV	27,000 $kgCO_2e$	Operational net zero feasible by 2040

Over 90% emission reduction achievable through combined action. Residual emissions are expected to be minimised through ongoing efficiency and behavioural measures, with high-quality carbon credits used only for residual, hard-to-abate emissions, in line with emerging best practice.

Investment and payback

- Solar PV is a cost-negative intervention: lifetime savings exceed £75,000
- REGO contracts provide immediate low-cost carbon reduction and reputational benefits
- Fleet electrification requires upfront investment (~£400k NPV) but delivers the largest long-term carbon savings and positions Wernick for compliance with the UK Zero Emission Vehicle (ZEV) mandate

Smart sequencing allows savings from PV and REGOs to cross-subsidise fleet electrification costs.

Implementation roadmap

Timeline	Focus	Key actions
2025–2026	Rapid wins	Switch to REGO electricity, roll out energy efficiency upgrades
2026–2030	Solar deployment	Install PV systems for self-consumption and energy cost stability
2026–2035	Fleet transformation	Replace ICE vehicles with EVs and PHEVs; install charging infrastructure
2025–2040	Continuous improvement	Energy management, staff engagement, ISO 50001 systems

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Governance and delivery

Wernick's Net Zero Governance Framework distributes responsibility across departments:

- **Directors:** Strategic oversight and capital allocation
- **Fleet Manager:** Electrification rollout and charging infrastructure
- **Facilities team:** PV installation and maintenance
- **Sustainability Lead:** Monitoring, reporting and certification
- **All staff:** Efficiency, behavioural change and energy awareness

Decarbonisation is not just about technology. It's about people, planning and process discipline.

Benefits beyond carbon

- **Operational resilience:** Insulation from future energy price volatility through PV and electrification
- **Client confidence:** Credible, transparent emission data enhances bids and partnerships
- **Innovation & growth:** Low-carbon operations align with emerging procurement standards and ESG finance trends
- **Community & workforce:** Cleaner air, quieter fleet and improved workplace environment

The road ahead

Wernick's net zero roadmap establishes a technically sound and financially credible pathway to operational decarbonisation. The approach focuses on sequenced implementation, ensuring early actions build the capability and capital base for long-term transformation.

Strategic priorities

1. **Leverage low-cost interventions first:** REGOs and PV provide immediate carbon savings and hedge against energy price volatility
2. **Phase fleet electrification:** Plan charging infrastructure in line with UK network capacity and ZEV mandates
3. **Integrate governance and finance:** Embed emissions tracking within financial planning and asset renewal cycles
4. **Review annually:** Update model assumptions for prices, growth and grid factors to maintain credible trajectories

Key enablers for success

- Establish a Net Zero Steering Group to oversee delivery and reporting
- Link capital investment to abatement metrics and cost of carbon saved
- Embed ISO 50001 energy management for ongoing efficiency and verification

Strategic outlook

By 2040, Wernick will operate as a low-carbon modular manufacturer, aligned with the UK's industrial decarbonisation pathway. The roadmap provides a replicable framework for balancing carbon reduction, operational efficiency and commercial resilience, turning net zero into a lever for growth, not constraint.

By 2040, Wernick's refurbished buildings won't just deliver sustainable spaces, they'll be built in a sustainable way.

This document was developed as part of an academic dissertation placement project. It reflects student research and analysis and has not been independently verified or certified by Wernick Group or any accredited institution.