



Tunbridge Wells Borough Council

Corporate Net Zero Strategy

Accessible Version

15 July 2026



TWBC
CLIMATE ACTION



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1. Foreword

Tunbridge Wells Borough Council has long recognised the urgency of the climate challenge. Since declaring a Climate and Biodiversity Emergency in 2019, we have taken meaningful steps to reduce our emissions and embed sustainability into our operations. This strategy marks the next stage of that journey, moving from ambition alone to a clear, credible, and evidence-based pathway that will ensure we deliver real and lasting change.

I am proud that this Corporate Net Zero Strategy is built upon robust data and principle, whilst being aligned and verified to recognised national and international standards. By adopting the British Standards Institution (BSI) Net Zero Pathway we are leading the way in local government. Achieving independent verification from BSI, demonstrates our commitment to transparency, accountability, and best practice.

However, I want to address an important issue head on. This pathway does reset our Net Zero target deadline to 2047. It's important to explain why this is.

Firstly, following our 2019 Climate and Biodiversity Emergency declaration, we did not yet have a full and comprehensive understanding of our emissions profile or the scale of the challenge involved in achieving net zero. Our approach to measuring emissions, defining emissions boundaries and planning delivery was less mature than it is today. We now have a much clearer understanding of the work required and this updated timeline reflects a more realistic picture of the situation and the actions required to achieve our ambition. Secondly, and relatedly, as standards and best practise have improved, we have also become much clearer on the reporting requirements for achieving net zero. This has significantly increased the hill we have to climb, but it's important that we are being more rigorous with our approach and alignment to best practice, to ensure that when we say that we have achieved net zero, it has real meaning.

But that is not to say that we are scaling back our ambition. Since 2019, we have achieved a 54% reduction in scope 1 and 2 emissions by investing in new initiatives including: heat pump and solar pv installations, fleet electrification and energy efficiency improvements. We have greater control over emissions from these scopes, and so we are being much more ambitious by reducing these emissions significantly earlier than our 2047 timeline. In short, when we can move quickly, like with the electricity we use, we are. The areas that will take longer include things like the emissions from our supply chain.

This strategy is not simply a plan for the Council; it is part of our wider contribution to tackling climate change in local government. As we look ahead to local government reorganisation and evolving national policy, this approach provides a strong and credible foundation for a future unitary authority. I am confident that by working together, we can deliver on this commitment and play our part in achieving net zero for Tunbridge Wells Borough Council and for West Kent.

Councillor Rob Wormington

Portfolio Holder for Environment and Sustainability

2. Executive Summary

Tunbridge Wells Borough Council (TWBC) is committed to taking decisive and credible action on climate change. Since 2019, we declared a Climate and Biodiversity Emergency and have achieved a 54% reduction in fuel and electricity emissions. This new Corporate Net Zero Strategy (CNZS) sets out a clear, deliverable pathway for reducing greenhouse gas (GHG) emissions across all operations and achieving net zero emissions by 2046/47.

This strategy reflects an evolution from ambition-led commitments towards a robust, evidence-based, and externally verifiable approach, aligned with the British Standards Institution (BSI) Net Zero Pathway and international standards including ISO 14064-1 and ISO IWA 42:2022. It provides a transparent and realistic route to net zero, giving confidence that emissions reductions will be achieved in practice.

Using our newly BSI verified baseline, TWBC emitted 8,215.7 tonnes of CO₂ equivalent (tCO₂e) in 2024/25. The majority of these emissions arise from indirect sources within our supply chain, contracts, and leased assets (Scope 3).

TWBC will achieve net zero GHG emissions by 31 March 2047 (financial year 2046/47).

This will be delivered through:

- At least a 90% reduction in absolute emissions across all our emissions scopes;
- A focus on direct emissions reductions first, minimising reliance on offsetting;
- A reduction in total emissions by at least 50% each decade;

This strategy is underpinned by a detailed Carbon Reduction Plan, setting out interventions required across all service areas to achieve net zero, alongside a recognition of reliance on external factors. Such actions include:

- Decarbonising our estate through asset rationalisation and the replacement of gas heating with electric alternatives;
- Transitioning to renewable electricity, supported by renewable procurement and on-site generation;
- Electrifying our vehicle fleet and supporting low carbon staff travel;
- Driving supply chain decarbonisation through procurement policy and supplier engagement;
- Collaborating with contractors and partners to reduce emissions from major services.

This strategy presents a clear, realistic, and externally verifiable route to net zero. By aligning with recognised standards and prioritising real emissions reductions, TWBC demonstrates leadership and responsibility in addressing climate change in a comprehensive and transparent way. The approach presents a credible and verified approach for TWBC's emissions boundary that can be taken forwards upon the introduction of Local Government Reorganisation in 2028.

The challenge is still significant, particularly given the scale of our indirect emissions. However, with sustained commitment to the pathway, strong governance, and effective partnerships, we will deliver our net zero ambition and contribute meaningfully to national climate objectives.

3. Introduction

In July 2019, TWBC declared a Climate and Biodiversity Emergency (FC29/19) and set an ambition to make our operations, services, and buildings net zero. We subsequently established a cross-party Climate Emergency Advisory Panel (CEAP), which, collaborating with council officers and external consultants, developed a Corporate Carbon Descent Plan (CCDP) to support the delivery of net zero by 2030. Our commitment was subsequently reaffirmed through the 2025 Strategic Plan, which identified climate action as a one of our four priorities.

Since the first CCDP was developed, it has become increasingly clear that, while the 2030 target was deliberately ambitious, it was unachievable within the original framework. In particular, the target declaration did not sufficiently account for delivery, wider indirect emissions or provide a transparent, verifiable pathway aligned with emerging best practice.

As a result, in October 2025, Cabinet (CAB83/25) agreed to review the council's approach to net zero and to align with the British Standards Institution (BSI) Net Zero Pathway (BSI NZP). This decision was taken to improve transparency, ensure consistency with recognised standards, and establish a robust, achievable, and externally verifiable route to net zero.

In January 2025, we completed the first stage of this process by re-establishing our emissions baseline, which was independently verified by BSI in accordance with ISO 14064-1 Greenhouse Gas Requirements. This strategy forms the second stage, achieving BSI verification against ISO IWA 42:2022 Net Zero Guidelines. Having achieved verification from BSI against these standards, TWBC will become the first local authority in the UK to be verified against the BSI Net Zero Pathway.

This strategy builds upon our progress and learnings since 2019. Since 2019 we have delivered a wide range of decarbonisation and renewable energy projects across our leisure centres, contracts, temporary accommodation properties, and our core corporate assets. Alongside continued improvements in our GHG emissions calculation and monitoring processes, we have a clearer picture of how to progress as an organisation towards net zero and what challenges we will need to overcome. This new Corporate Net Zero Strategy:

- Clarifies the council's net zero target and associated interim targets;
- Presents the council's updated pathway to net zero;
- Sets out the council's revised approach to achieving this pathway;
- Presents a carbon reduction plan, establishing actions required to meet net zero;
- Highlights the required resources to deliver against the net zero target;
- Presents how progress will be monitored, measured, and communicated.

This strategy presents a robust, evidence-based approach to net zero that establishes best practise in Kent to take forwards into local government reorganisation. This approach will ensure that climate action is embedded consistently across future governance, financial planning, and delivery.

4. What is Net Zero?

Past emissions released since the industrial revolution have already ensured global temperature rise will occur, along with inevitable changes to this climate and our lives. To avert the worst impacts of climate change, the Intergovernmental Panel on Climate Change (IPCC) and the UNFCCC Paris Agreement 2015, determined that globally we need to limit warming to well below 2.0°C and preferably 1.5°C above pre-industrial levels. Whilst these temperature limits are still not deemed safe, nor will they stop climate change, they will help prevent the worst impacts.

In order to achieve this, there is clear global consensus that we must reach net zero emissions globally by mid-century (2050).

As defined by the IPCC:

‘Net zero emissions are achieved when anthropogenic [human-induced] emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period [of time].’

The terms net zero and carbon neutrality are often used interchangeably, however, they have different definitions. Carbon neutrality refers to general counterbalancing of emissions, irrespective of the progress reducing emissions in the first instance. Carbon neutrality allows for ongoing emissions, provided they are counterbalanced, whereas net zero requires deep emissions reductions, only relying on counterbalancing to neutralise hard to reduce emissions.

Essentially, to achieve a state of net zero, GHG emissions must be reduced to the point at which only the hardest to reduce can be balanced by removals. The result of this being a net total reduction in emissions to zero, as illustrated in the image below:

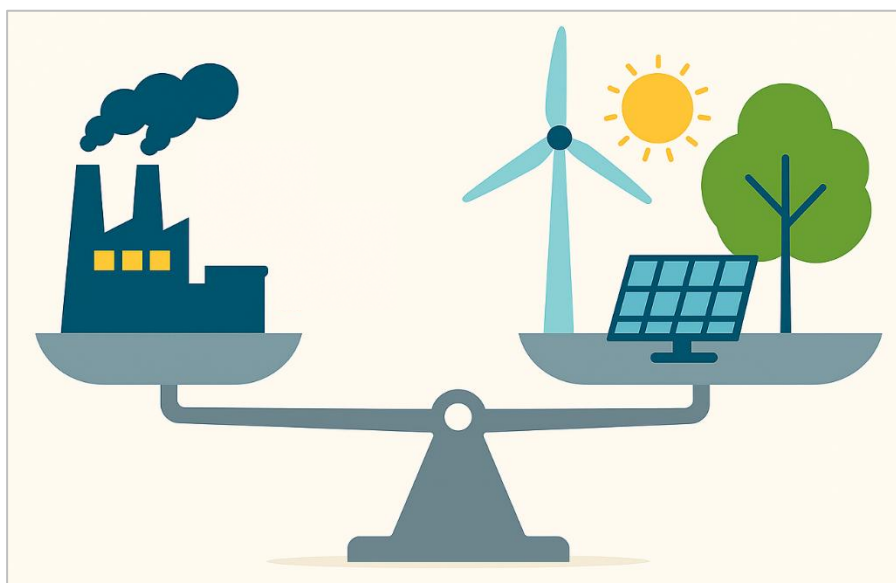


Figure 1: Net Zero Balanced Emissions

5. Our Journey So Far

Building on our 2019 Climate and Biodiversity Emergency declaration, between 2021 and 2025 we implemented a corporate carbon descent plan alongside four annual action plans, delivering significant reductions in scope 1 and 2 emissions.

Since 2018/19, when our emissions from scopes 1 and 2 were 3,218.2 tCO₂e, we have achieved a reduction of 54%. This has brought emissions from these scopes down to 1,403.1 tCO₂e in 2024/25. Of this reduction 12% came from scope 1 and 88% from scope 2, both covering our energy and fuel consumption.



Figure 2: TWBC Scope 1 and 2 Emissions Since 2018/19

The above emissions are comparing our new 2024/25 base year against previous emissions reports. Future progress in achieving emissions will be compared against this updated 2024/25 base year.

Emissions reductions to date have been achieved by the successful delivery of the following interventions:

Asset Decarbonisation

- Our North Farm Depot and the Weald Sports Centre benefitted from a £1.5m Government decarbonisation grant to improve building efficiency and install air source heat pumps.
- Long term vacant properties have been renovated, with improved insulation, double and secondary glazing, and the installation of air source heat pumps.
- We received Government grant funding to develop a heat decarbonisation plan for Royal Victoria Place.

- We received Swimming Pool Support Fund grant funding to install new pool covers and LEDs at the Weald.
- We delivered a programme of streetlighting LED upgrades throughout the town.
- The Nevill Cricket Pavillion has switched to electric heating.

Renewable Energy Generation

- Solar PV arrays have been installed on several of our sites:
 - The Amelia Scott
 - The Weald Leisure Centre
 - Tunbridge Wells Sports Centre
 - North Farm Depot
- Across our solar pv arrays we generated over 100,000 kWh of clean, renewable energy in 2023/24.

Transport:

- 88% of our vehicle fleet is now hybrid or electric.
- Since 2018/19, we have reduced diesel consumption by over 4,500 litres, contributing to a 63% reduction in emissions from our vehicle fleet.
- Following the Town Hall rationalisation and implementation of hybrid working, we have reduced staff business travel mileage by almost 100,000 miles per year.

Resources and Efficiency

- Buried beneath the Amelia Scott is a rainwater harvesting tank, holding 15,000 litres of water (enough for 200 baths). This is used to reduce mains water consumption.
- Since 2018/19 we have reduced electricity consumption by over 4,000,000 kWh across all sites.
Since 2018/19 we have reduced gas consumption by over 800,000 kWh across all sites.
- We have reduced diesel consumption across our waste collection contract by over 60,000 litres, through route and service optimisation.

6. Our New Net Zero Approach

Currently, there are no statutory obligations on local authorities to follow specific approaches or paths to net zero. Until there is clear direction from the UK Government, local authorities are required to establish their own approach to achieving net zero. This results in a mismatch of approaches, calculation methodologies, and claims across the public sector, with little in the way of formal verification of net zero achievement claims.

Previously TWBC's approach has been to follow general best practise from other local authorities, in alignment with the Local Government Association (LGA) and Greenhouse Gas Protocol (GHGP). However, we have not undergone any external verification of emissions reports, plans, and net zero targets since the initial CCDP was developed in 2021.

Our original 2030 target was set as part of the 2019 climate and biodiversity emergency declaration (FC29/19), following sector wide declarations and setting of ambitious targets throughout 2019:

“Tunbridge Wells Borough Council recognises the overwhelming weight of scientific evidence pointing to man-made climate change ... agreeing an ambition to make the Council's operations carbon neutral by 2030”.

The declaration and target were set without full understanding of the time, cost, and feasibility involved in achieving such an ambitious target within 11 years. As standards and emissions reporting best practice have developed, we noted several significant emissions sources were not present in our initial base year emissions calculations. Our initial plan was also heavily reliant on offsetting, rather than achieving actual deep emissions reductions.

Consequently, the difficult, but necessary decision was made to revise the existing approach, to fully capture TWBCs emissions and build a realistic and deliverable net zero pathway. Importantly, it was agreed to follow a framework that provides greater transparency and consistency, giving our residents and councillors confidence that net zero goals are being pursued responsibly and effectively.

The BSI NZP framework was identified as a UK standard that offers independent assessment and verification of an organisation's net zero strategy. It ensures alignment with international best practice by guiding organisations to accurately calculate emissions, develop credible reduction plans, and verify net zero achievements through formal auditing.

This structured approach provides a clear, credible pathway to net zero. It also enables TWBC to earn the BSI 'Mark of Trust.' This is a visible endorsement that signals to stakeholders our commitment to delivering climate action to the highest possible standards.

Following this framework for TWBCs revised net zero approach, will allow for the official verification of net zero upon its achievement. In doing so, providing confidence that net zero has been achieved in accordance with best practise, aligned to international standards, and verified by the UK's national standards body.

7. Our GHG Emissions Baseline

Since our initial CCDP we have implemented significant methodology improvements to calculate our annual greenhouse gas (GHG) emissions. As part of the BSI NZP, we have aligned our reporting to ISO 14064-1, which has included the implementation of an enhanced measurement system for our scope 3 emissions categories, alongside the collection of more complete and accurate primary data, and higher quality proxy data.

We have re-established our base year to reflect this change in approach, choosing the first historical year in which we have a complete and accurate set of primary data.

Our updated base year is 2024/25, in which TWBC emitted **8,215.7 tonnes of carbon dioxide equivalent** (tCO₂e).

In 2026, we successfully achieved *ISO 14064-1 Greenhouse Gas Requirements* verification for this base year. This achievement followed a comprehensive series of verifications conducted by the British Standards Institution (BSI).

This verification provides independent recognition that the council's emissions calculations are materially correct, transparent, and a fair representation of the organisation's carbon footprint. The report achieved reasonable assurance to 5% materiality; the highest level of assurance BSI provides.

7.1. Scope 1: Direct Emissions

Scope 1 emissions come from direct sources of combustion within our boundary. These sources include:

- Natural gas consumption;
- Other stationary combustion fuels (biofuel, biomass, petrol, propane);
- Vehicle fleet fuel consumption (petrol, diesel);
- Refrigerant gas leakage.

Emissions from scope 1 were **687.1 tCO₂e** in our 2024/25 base year, 8.4% of TWBCs total emissions.

7.2. Scope 2: Indirect Emissions

Scope 2 emissions come from indirect electricity sources within our boundary. These sources include:

- Purchased electricity across our estate;
- Purchased electricity across our streetlighting;
- Purchased electricity at our data centre;
- Purchased electricity at public electric vehicle (EV) chargepoints.

Emissions from scope 2 were **723.4 tCO₂e** in our 2024/25 base year, 8.8% of TWBCs total emissions.

7.3. Scope 3: Indirect Emissions

Scope 3 emissions come from all other indirect sources within our boundary. These sources include:

- Transmission and distribution losses;
- Well to tank;
- Water supply and treatment;
- Business travel;
- Commuting;
- Homeworking;
- Upstream leased assets;
- Downstream leased assets;
- Supply chain contracts;
- Supply chain purchasing card;
- Tier 1 contracts.

Emissions from scope 3 were **6,805.1 tCO₂e** in our 2024/25 base year, 82.8% of TWBCs total emissions.

A full overview of TWBCs emissions can be found in our [GHG Emissions Report 2024/25](#).

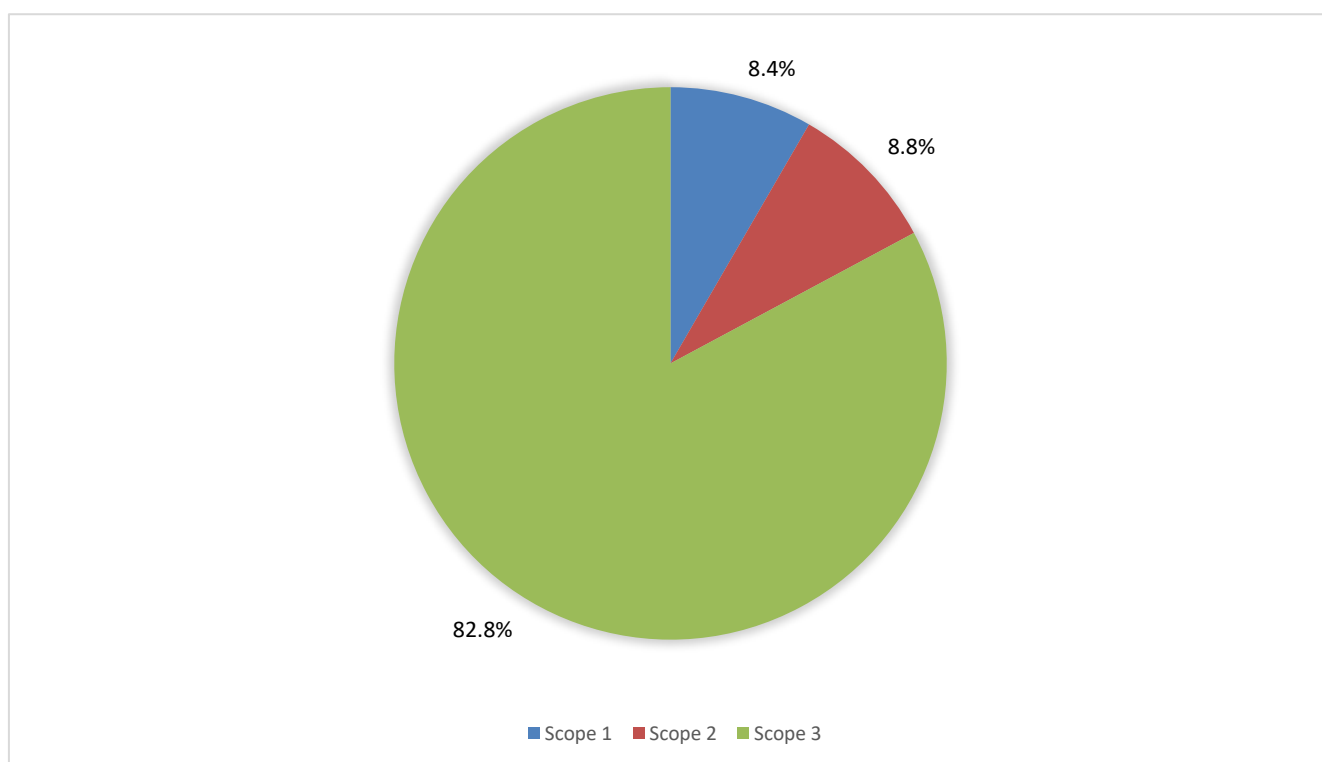


Figure 3: TWBC Emissions Scopes

8. Our Net Zero Target and Pathway

Tunbridge Wells Borough Council's target is to have achieved net zero greenhouse gas emissions by 2046/47.

This means that upon the end of the 2046/47 financial year (31 March 2047) our GHG emissions will be operationally reported as zero, in line with the accounting and reporting methodology of ISO 14064-1 Greenhouse Gas Requirements and principles of ISO IWA 42:2022 Net Zero Guidelines.

Any offsets will be purchased where required for the period 01/04/2046 – 31/03/2047, upon completion of the GHG report when residual emissions quantities are known.

8.1. Interim and Long-Term Targets

To ensure that we stay on track to achieving net zero GHG emissions by 2046/47, we set interim, scope specific targets every five years. These are detailed in the below tables.

This guarantees that we reduce our total GHG emissions by at least 50% every decade, allowing us to contribute our fair share to global emissions reductions. These interim targets will be reviewed and updated every three years as per the BSI NZP requirements.

Scope Interim and Long-Term Targets

	Scope 1 Emissions	Scope 2 Emissions	Scope 3 Emissions
Interim	2029/30: 23.7% reduction. 2034/35: 68.3% reduction.	2029/30: 98.6% reduction. 2034/35: 99.3% reduction. 2039/40: 99.5% reduction. 2044/45: 99.7% reduction.	2029/30: 29.7% reduction. 2034/35: 59.9% reduction. 2039/40: 75.4% reduction. 2044/45: 85.2% reduction.
Long Term	2035/36: 100% reduction (Net Zero).	2046/47: 100% net reduction (Net Zero).	2046/47: 100% net reduction (Net Zero).

Total Emissions Interim Targets

Target Year	2029/30	2034/35	2039/40	2044/45	2046/47
Interim Target	35% gross reduction.	64% gross reduction.	80% gross reduction.	88% gross reduction.	100% net reduction.

8.2. Net Zero Principles

It is widely accepted that the achievement of net zero will require an element of offsetting, to tackle residual emissions that are too difficult to reduce directly. As such, whilst the IWA 42:2022 Net Zero Guidelines prioritises emissions reductions, once total emissions across all three scopes are reduced to at least 10% of the base year, offsetting can take place.

Emissions will be reduced to 'near zero' across all scopes until total emissions drop to a minimum 10% of our base year emissions. At this point we will offset these residual emissions to achieve net zero. This means that we will be eligible to offset all remaining emissions for 2046/47 and thus, achieve net zero.

However, we will continue with interventions to reduce actual emissions beyond the achievement of net zero to reduce reliance of offsetting. By 2049/50 we expect to have reduced actual emissions by at least 95%, leaving just 5% of our total emissions to offset. This halves the offset requirement faced upon the initial achievement of net zero in 2046/47.

If reductions exceed those modelled in this pathway (bringing GHG emissions down to 10% of the base year earlier than anticipated) we will pursue net zero verification at the earliest opportunity.

The below table highlights our projected gross and net emissions reduction milestones:

Year	Gross GHG Emissions (tCO ₂ e)	Quinquennial % Reduction	Base Year % Reduction	Net GHG Emissions (tCO ₂ e)	Quinquennial % Reduction	Base Year % Reduction
2024/25	8,215.7	-	-	8,215.7	-	-
2029/30	5,350.2	-35%	-35%	5,350.2	35%	35%
2034/35	2,960.3	-45%	-64%	2,960.3	45%	64%
2039/40	1,680.4	-43%	-80%	1,680.4	43%	80%
2044/45	1,008.8	-40%	-88%	1,008.8	40%	88%
2046/47	787.2	-22%	-90%	0.0	100%	100%
2049/50	377.6	-52%	-95%	0.0	-	100%

8.3. Achievement of Net Zero

Upon achievement of net zero in 2046/47 only residual emissions will remain in our emissions boundary. We will continue to report the basis of our net zero claim annually, including a breakdown of continued emissions reductions and offset requirements.

Alongside this achievement will be a plan to maintain this net zero balance over the long term, (multiple decades), including annual reporting of the offsets purchased, retired, and how these have been independently verified.

8.4. Net Zero Pathway

The net zero pathway below (figure four) has been modelled to achieve the following requirements:

- 50% reduction in GHG emissions every decade (figures highlighted in green)
- Offsetting once GHG emissions have been reduced to at least 10% of base year emissions (figure highlighted in red).
- Net Zero by 2050 at the latest.

This pathway consists of various GHG emissions reduction interventions available to the council, including energy reduction, renewable generation, procurement of renewable electricity, electrification of gas, petrol and diesel and the use of biofuels. Our net zero pathway also models national trends and interventions, such as the UK's 2030 clean power pledge, and the projected electrification of the national car fleet. The pathway methodology is provided in Appendix C.

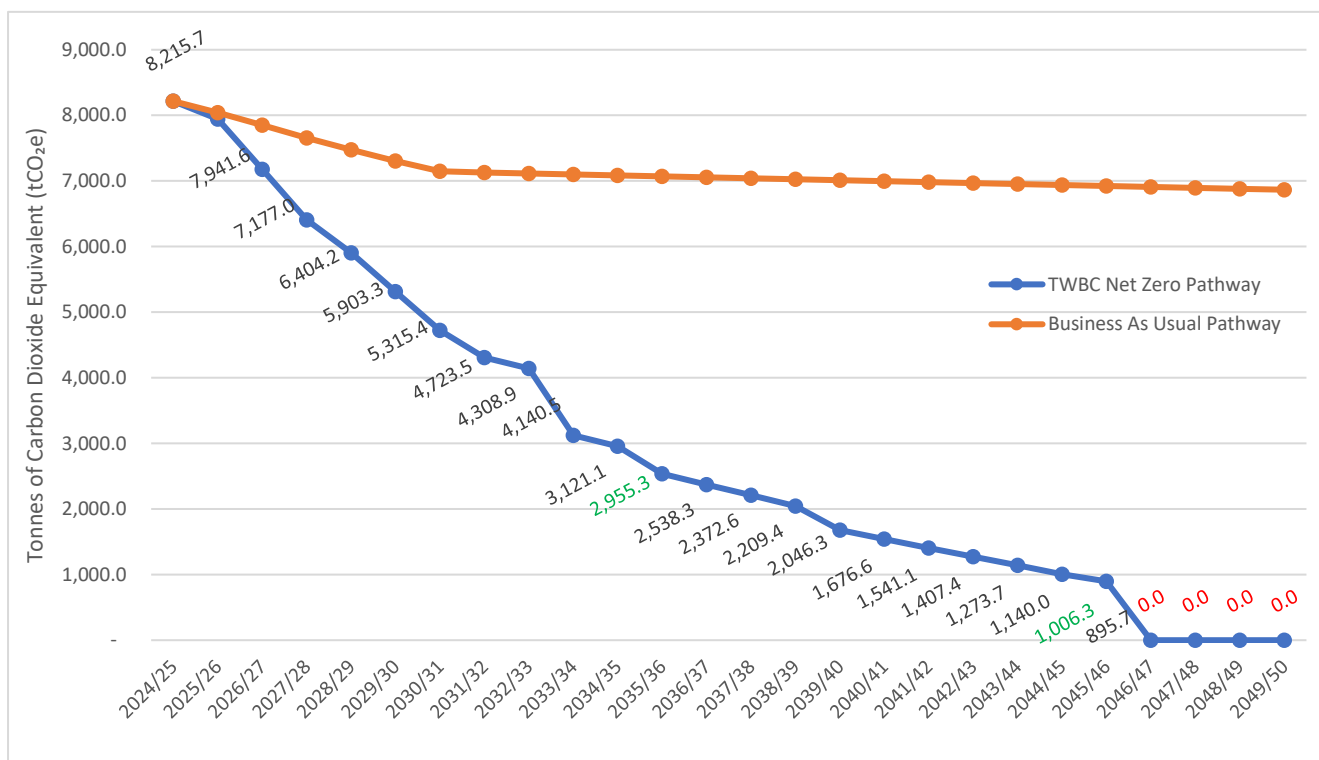


Figure 4: TWBC Net Zero Pathway v BAU (Net)

Figure five highlights how scope 1 and 2 emissions are reduced rapidly over the first 10 years of the pathway. Scope 3 emissions are clearly the largest contributor to our emissions, and therefore, reduce gradually over 21 years.

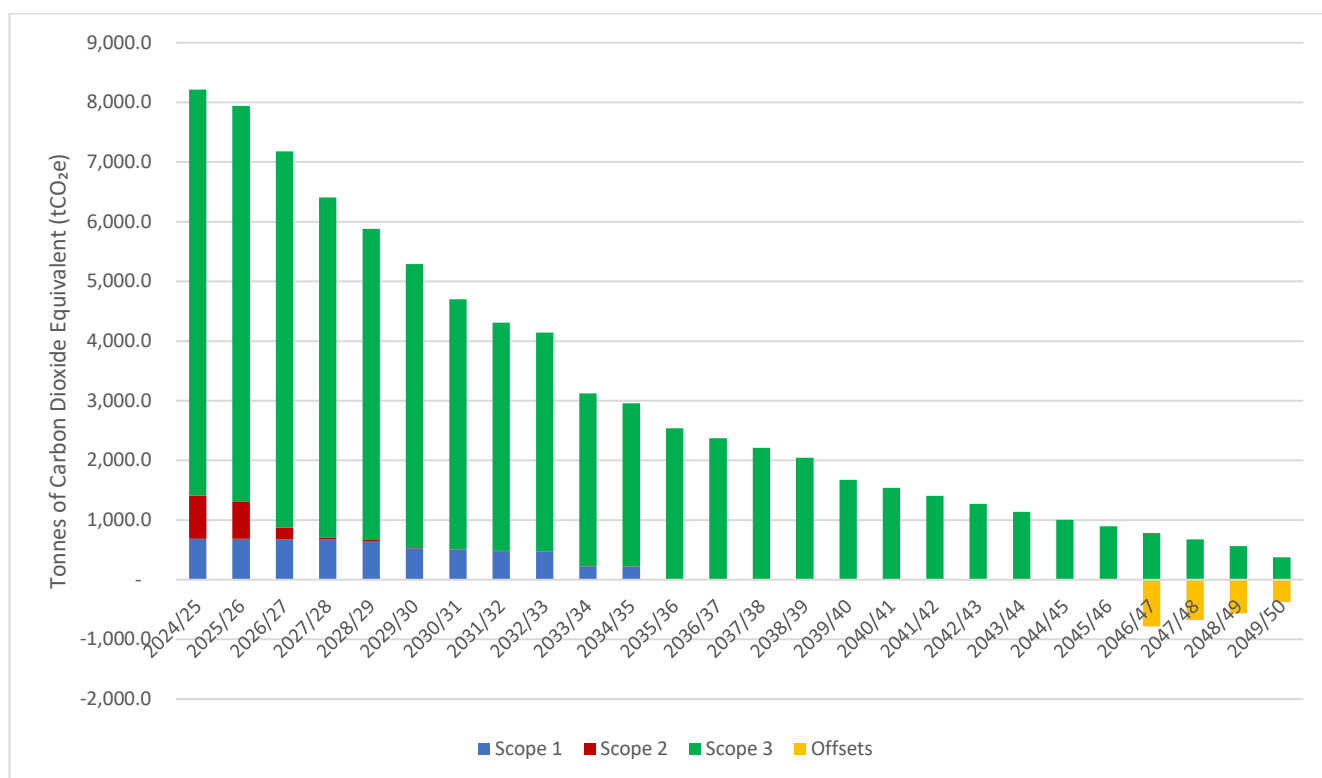


Figure 5: TWBC Net Zero Pathway (Net)

Pathway in Practise

Pathway modelling inherently sets strategic scenarios, rather than forecasting. It is assumed that interventions are delivered on time, budget and perform as expected. In practise, changes to national policy, funding availability, technology, behaviour change, and organisational priority can materially impact the real world alignment to this pathway. Consequently, this pathway should be treated dynamically. As part of the BSI NZP, we will annually review progress against interim targets; a process that will require updates to that pathway, to reflect changes to real world conditions.

8.5. Gross Pathway

Figures six and seven below show the gross pathway, highlighting modelled GHG emissions reductions prior to offsetting. This pathway shows that to reach net zero emissions there is a target gap from 2046/47 which keeps total GHG emissions above zero. These are referred to as residual emissions and are the last remaining emissions that are difficult to reduce.

As per ISO IWA42:2022 we can offset once emissions reach at least 10% of base year emissions. This is achieved in 2046/47, highlighted in red. From this date, all subsequent emissions can be offset and net zero can be claimed, as shown in figures two and three.

Reductions continue gradually from 2046/47 to 2049/50, reducing our requirement to offset. GHG emissions are directly reduced by 95% in 2049/50. This approach exceeds the minimum standard requirement to reduce emissions by 90% against total base year emissions.

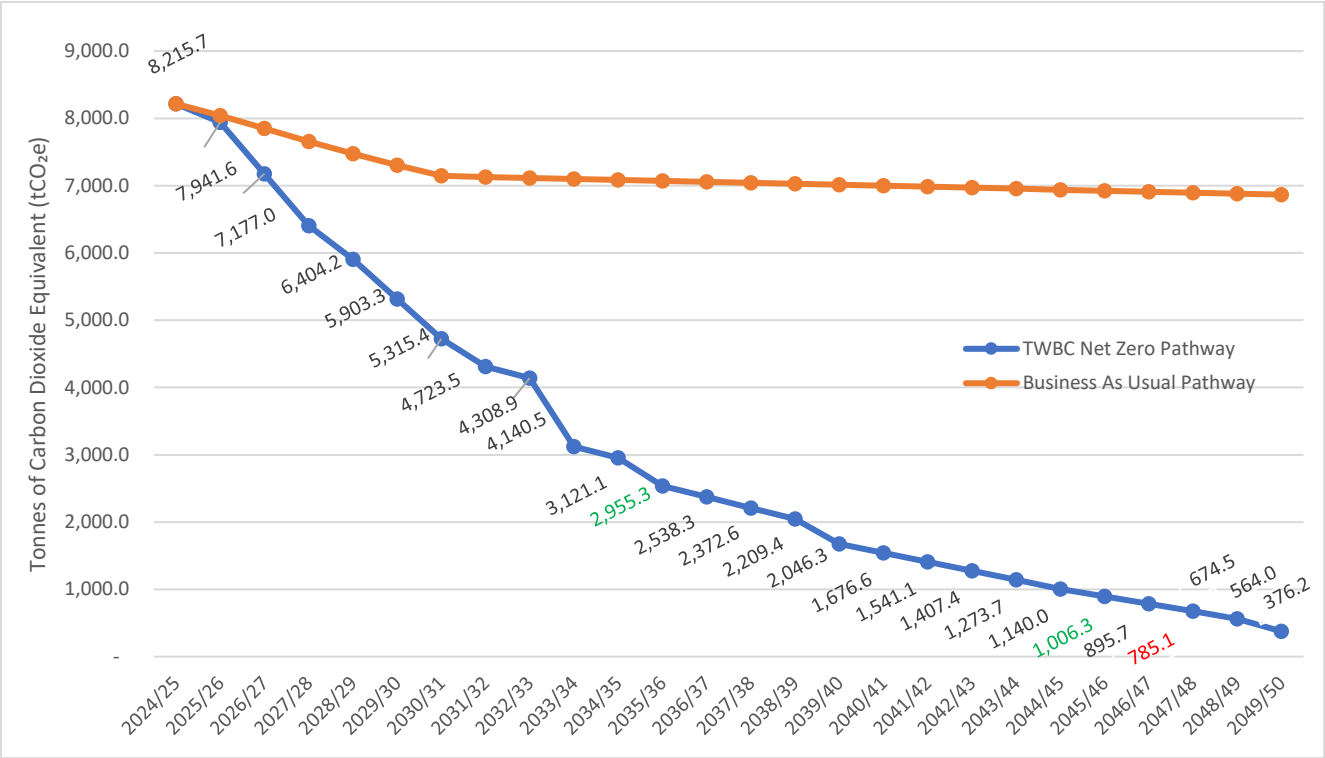


Figure 6: TWBC Net Zero Pathway v BAU (Gross)

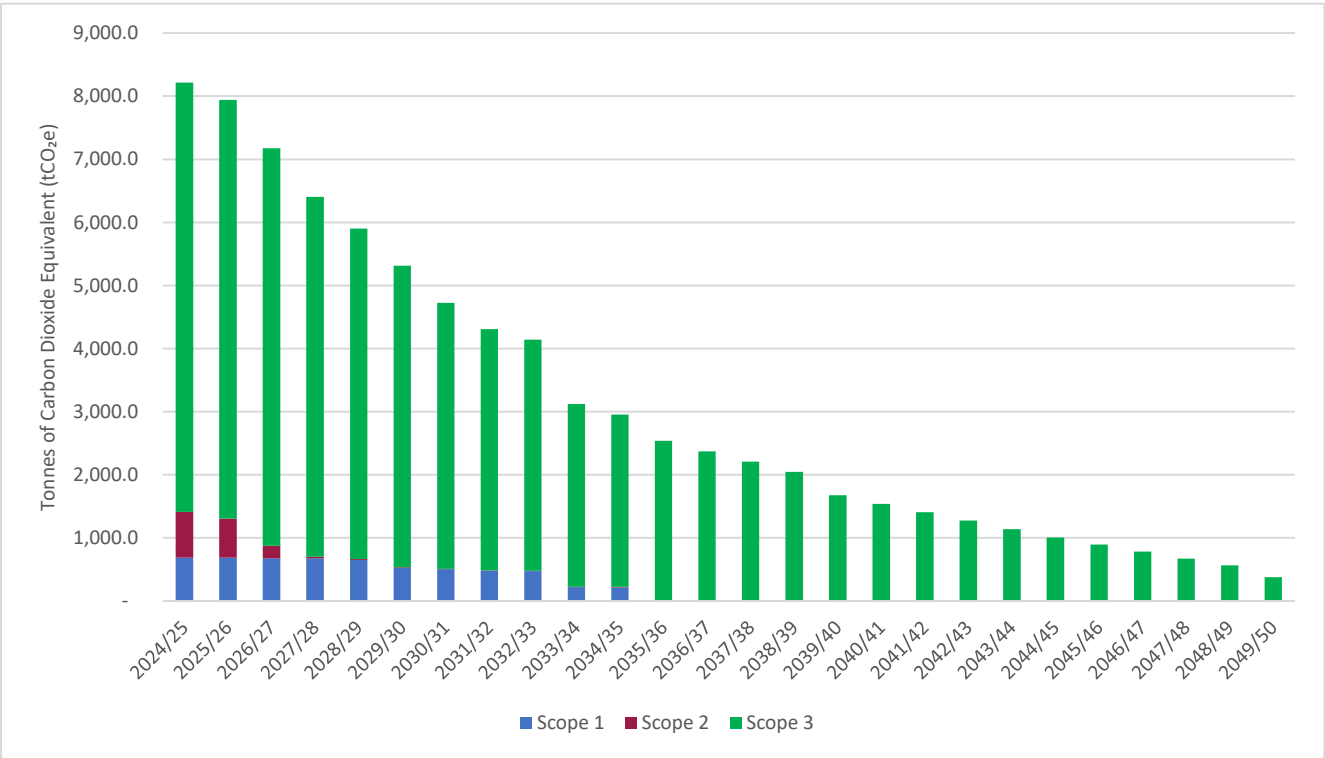


Figure 7: TWBC Net Zero Pathway (Gross)

Scope 1 Reduction Pathway

Figure eight sets out our scope 1 emissions reduction pathway, compared with a business-as-usual scenario. Without intervention, emissions remain broadly flat at 687.9 tCO₂e, whereas the planned pathway delivers a step change in reductions through the late 2020s and early 2030s. These measures drive scope 1 emissions to net zero by 2035/36 (100% reduction), demonstrating alignment with enhanced ISO IWA42:2022 targets to achieve a state of no scope 1 GHG emissions.

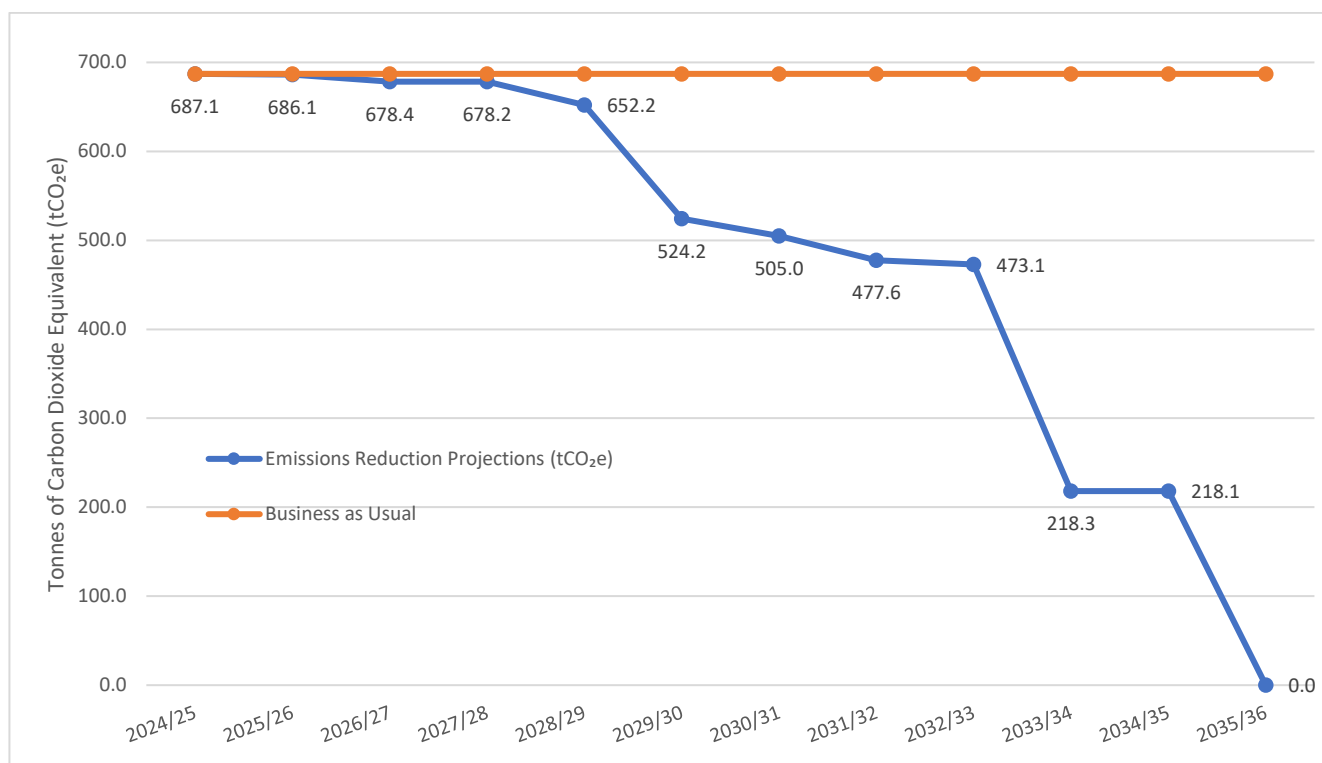


Figure 8: Scope 1 Emissions Pathway

Scope 2 Reduction Pathway

Figure nine shows our projected scope 2 emissions pathway, compared with an unabated electricity scenario. Without any intervention, electricity-related emissions remain flat at just over 723.4 tCO₂e, reflecting ongoing reliance on grid electricity. Figure seven further shows that with expected grid decarbonisation in alignment with the Government's green power pledge, GHG emissions rapidly drop until 2030, at which point there is a gradual reduction to zero modelled until 2050. In contrast, our reduction pathway delivers a rapid fall in emissions by the late 2020s, outpacing the expected decarbonisation of the national grid. This is achieved through renewable electricity procurement and increased on site generation, in addition to national grid decarbonisation.

Emissions are reduced to near zero by 2030/31 (98.4% reduction) with residual emissions declining progressively towards net zero, as the national grid further decarbonises towards 2050.

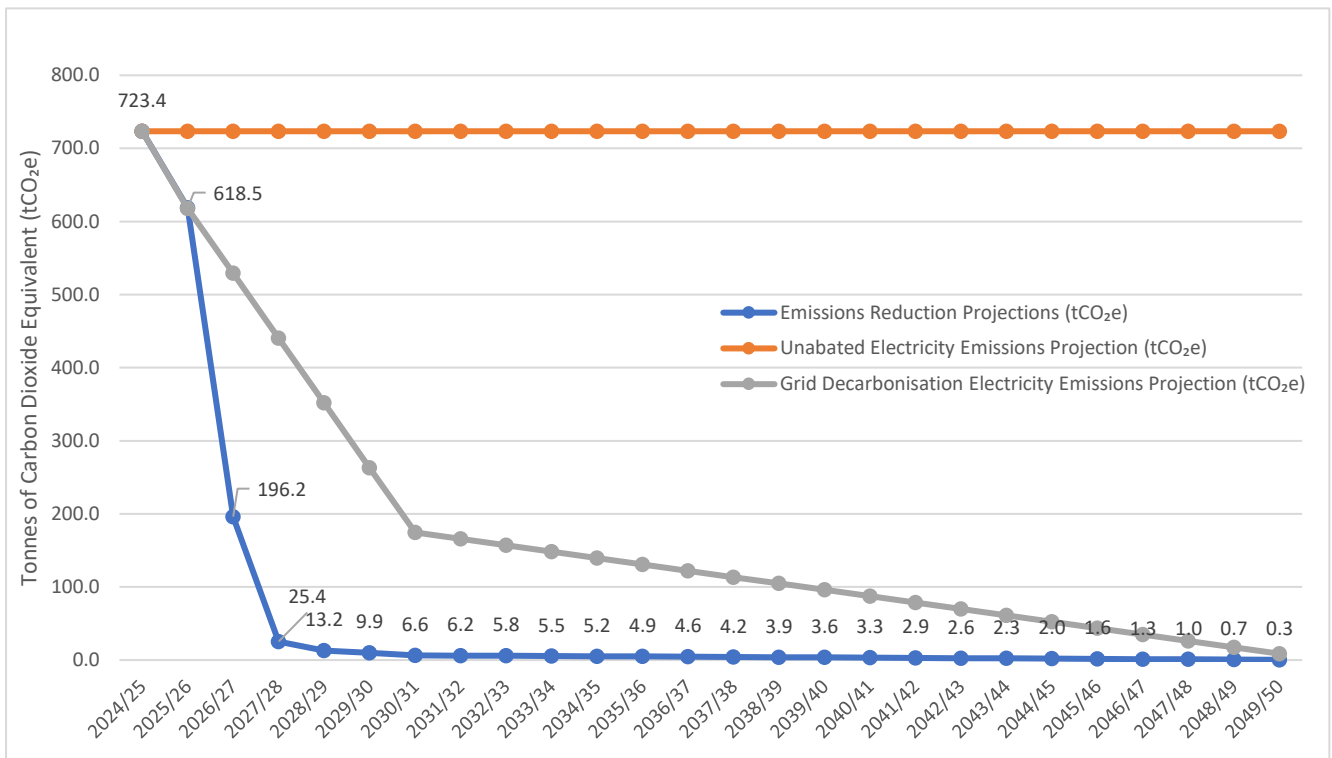


Figure 9: Scope 2 Emissions Pathway

Scope 3 Reduction Pathway

Figure ten sets out our scope 3 emissions reduction pathway, compared with a business-as-usual scenario. Under a business-as-usual scenario, scope 3 emissions remain flat at 6,805.1 tCO₂e, highlighting the significance of indirect emissions in our emissions portfolio.

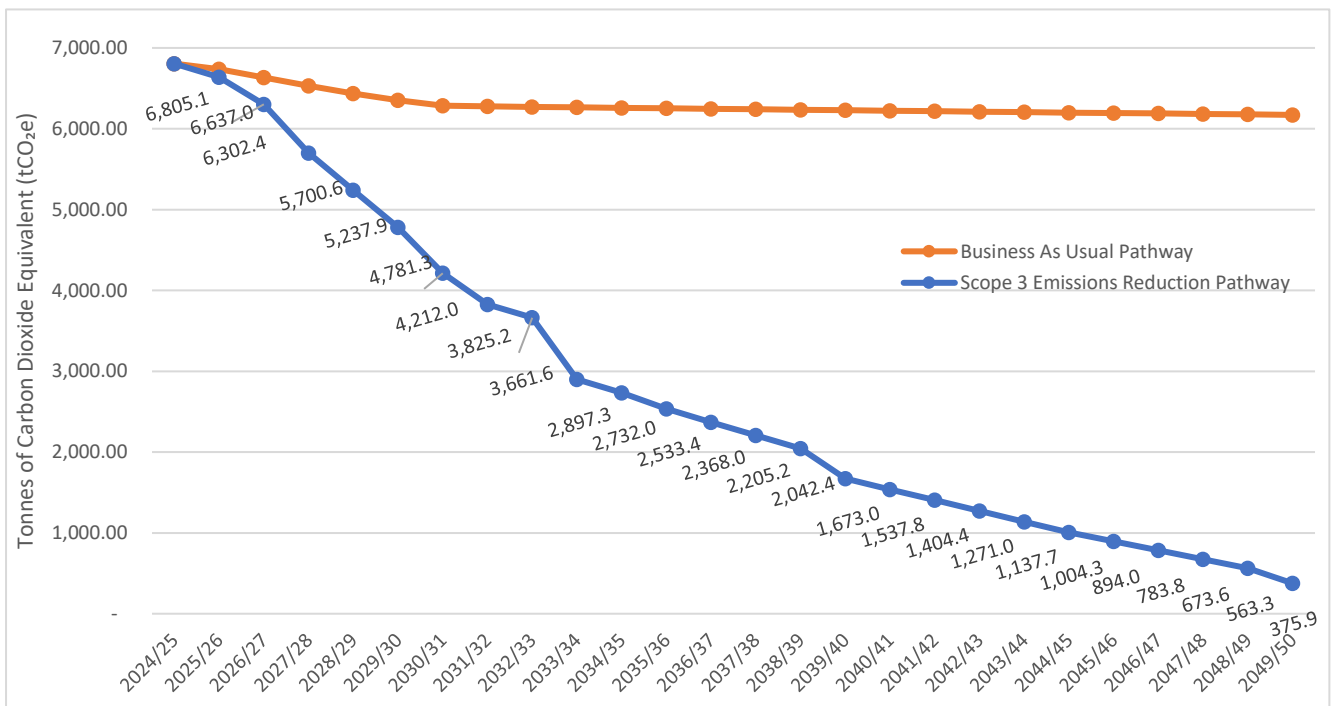


Figure 10: Scope 3 Emissions Pathway

This reduction pathway demonstrates a planned, long-term decline driven by supplier engagement, low carbon procurement, behaviour change and decarbonisation of contracts.

Scope 3 emissions are halved every decade following this pathway, with TWBC emitting 2,732.0 tCO₂e in 2034/35 (59.9% reduction from base year) and 1,004.3 tCO₂e in 2044/45 (85.2% reduction from base year).

Reductions are sustained through to 2050, consistent with the ISO IWA42:2022 requirement for credible pathways to net zero that address material scope 3 sources. Reductions of 89% and 95% are achieved by 2046/47 and 2049/50, meaning that cumulative residual emissions of 2,396.6 tCO₂e will need to be offset over this period to achieve net zero. Residual emissions in 2049/50 sit at 6.5% of the 2024/25 base year.

8.6. Offsetting Criteria

Offsetting is an intervention built into this pathway, which is only used to tackle residual emissions that cannot be reduced significantly within the required timeframe. However, only high-quality removal-based credits will be used for the purpose of achieving and claiming net zero. This means offset credits will only be used where they are generated from projects that remove emissions rather than reduce them.

Offsetting through credits will only be used upon the reduction of total TWBC emissions by at least 90% of the 2024/25 baseline (section eight). Where credits are required, they will meet the requirements set out in section 10.2 of the ISO IWA42:2022 standard.

When using credits, TWBC will:

- Source credible verified credits accepted against credible accounting standards, e.g. Gold Standard, CDM & VERA;
- Specify which type of credits are used and where the credits are held (e.g. registry used, type of project);
- Specify what GHG emissions, areas and scopes are covered by the credits;
- Ensure credits are comparable in durability to the GHG emissions being counterbalanced;
- Confirm if credits are being used for additional voluntary action or to counterbalance residual emissions;
- Correctly retire credits in an official registry.

9. Carbon Reduction Plan 2026/27 – 2046/47

The following carbon reduction plan sets out all the interventions required for TWBC to have achieved net zero by 2046/47.

This plan will be operationalised through bi-annual action plans, setting out deliverable actions over a two-year period, to deliver the below interventions. These plans will assign clear responsibilities, budgets, whilst setting measurable milestones for delivery, tracking and reporting.

As highlighted in previous sections, there are some emissions sources with modelled interventions to be delivered at a sectoral or governmental level. These interventions are included below to provide a complete picture of what is required for TWBC to achieve net zero.

9.1. Owned and Operated Buildings and Assets

Rationalisation of assets within the property portfolio.

No.	Intervention	Service Area	Scope	Delivery	Indicative Cost (£000's)	tCO ₂ e Saving
1	The Wesley Centre Estate rationalisation, as per the asset management plan.	Property	1	2026/27 – 2027/28	£200	6.7
2	The Camden Centre Part of the Royal Victoria Place Shopping Centre redevelopment.	Property	1	2028/29 – 2029/30	tbc	26.1
3	The TN2 Centre. Estate rationalisation, as per the asset management plan.	Property	1	2029/30 – 2030/31	£600	13.3

Replacement of gas boilers with suitable electric alternatives.

No.	Intervention	Service Area	Scope	Delivery	Indicative Cost (£000's)	tCO ₂ e Saving
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4	Grosvenor Recreation Ground Pavillion Replacement of existing gas boilers with an electric alternative.	Property	1	2027/28 – 2028/29	–£50	2.8
5	Crematorium Office and Chapel Replacement of existing gas boilers with an electric alternative.	Property	1	2027/28 – 2028/29	–£100	14.3
6	Temporary Accommodation Properties Annual replacement of two existing gas boilers with electric alternatives.	Property	1	2027/28 – 2033/34	–£1,950	4.5
7	Royal Victoria Place: Ely and Palm Court Redevelopment with installation of ASHPs for heating.	Property	1	2026/27 – 2029/30	–£77	7.6
8	Royal Victoria Place: Main Centre Planned maintenance to replace gas heating with electric alternative.	Property	1	2030/31 – 2035/36	–£695	68.6
9	Tunbridge Wells Civic Complex (Town Hall, Police, Theatre) Replacement of gas boilers with electric alternative.	Property	1	2032/33 – 2033/34	–£2,305	227.4
10	Kent and Sussex Crematorium Cremators Replacement of end-of-life gas cremators with electric alternatives.	Property	1	2034/35 – 2035/36	–£5,000	195.2
11	The Amelia Scott Replacement of four gas boilers with electric alternative.	Property	1	2028/29 – 2029/30	–£400	86.5
12	8 Dudley Road Replacement of gas boiler with electric alternative.	Property	1	2029/30 – 2030/31	–£150	0.8

9.2. Stationary Combustion Fuels and Biofuels

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO ₂ e Saving
13	Depot Petrol Jet Washer Replacement of petrol jet washer with an electric alternative.	Facilities	1	2026/27 – 2027/28	–£3.5	0.04

14	Ice Rink Compactor Replacement of propane compactor with electric alternative.	Assembly Hall Theatre	1	2029/30 – 2030/31	£75	0.7
15	Ice Rink HVO Generators Upgrade substation to deliver mains powered events at Calverley Grounds	Assembly Hall Theatre	1	2026/27	£42.5	1.0
16	Hawkenbury Recreation Ground Replacement of current biomass boiler with electric alternative.	Property	1	2033/34 – 2034/35	£1	0.1

9.3. Electricity Procurement and Generation

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO _{2e} Saving
17	Core Asset Renewable Electricity Procurement Procurement through LASER Green Basked 'mini PPA' product.	Procurement / Facilities	2	2025/26 - 2026/27	£50	586.6
18	Royal Victoria Place Car Park Solar Canopies Deliver a solar canopy project on the RVP multistorey car park.	Property	2	2025/26 - 2026/27	£1,800	51.5
19	Royal Victoria Place Renewable Electricity Procurement Work with managing agent to procure high quality renewable electricity.	Property	2	2027/28	tbc	92.0
20	LED Streetlighting Upgrades Investment in the future safety of our resident through a second phase of LED streetlighting upgrades to approximately 250 streetlight columns in Royal Tunbridge Wells. Opex savings from phase one can help offset capex from phase two.	Facilities	2	2027/28 – 2028/29	£60	9.6
21	Government Intervention: Clean Power Pledge National Government led decarbonisation of the national grid, reducing emissions from electricity consumed across TWBC owned assets and public EV chargepoints.	National Government	2	2025/26 – 2029/30	n/a	600.7 (in 2030)

9.4. Vehicle Fleet

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO ₂ e Saving
22	Facilities Diesel Van Replace diesel van with an electric alternative. Electrical connection to the front of Town Hall would have to be re-established for charging.	Facilities	1	2027/28	-£50	1.6
23	Hybrid Parking Cars Replace two self-charging hybrid cars with electric alternatives.	Parking	1	2029/30	-£50	3.4

9.5. Business Travel and Commuting

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO ₂ e Saving
24	Electric Vehicle Salary Sacrifice Introduction of a staff EV salary sacrifice scheme.	HR / Finance	3	2027/28	-£30	24.3
25	Sectoral Intervention: Private Travel Decarbonisation Natural electrification of private vehicles, decarbonising private and business travel alongside grid decarbonisation.	n/a	3	n/a	n/a	319.6

9.6. Downstream Leased Assets

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO ₂ e Saving
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26	Cemetery Lodge (TW Property Holdings) Estate rationalisation, as per the asset management plan.	Property	3	2026/27 – 2027/28	tbc	12.4
27	TW Property Holdings Properties Replacement of existing gas boilers with electric alternatives at a rate of two properties per year.	Property	3	2028/29 – 2036/37	-£850	23.1
28	RVP Commercial Units Replacement of existing gas heating with electric alternative.	Rivington Hark	3	2035/36	tbc	0.1
29	Temporary Accommodation Replacement of existing gas heating with electric alternatives.	Property	3	2028/29 – 2030/31	-£150	8.4
30	Leased Properties Replacement of existing gas heating with electric alternatives. For sites with accurate data, we will decarbonise at a rate of two properties per year. For sites where we rely on EPC data, a linear reduction is assumed until 2050.	Property	3	2032/33 – 2049/50	-£1,600	151.2
31	Government Intervention: Clean Power Pledge National Government led decarbonisation of the national grid, reducing emissions from electricity consumed across TWBC downstream leased assets.	National Government	3	2025/26 – 2049/50	n/a	267.6

9.7. Upstream Leased Assets

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO _{2e} Saving
32	Temporary Accommodation Replacement of existing gas heating with electric alternatives at an assumed rate of two properties per year, over 11 years. This is dependent on the property lessor to deliver.	Property	3	2030/31 – 2040/41	n/a	21.3

33	Government Intervention: Clean Power Pledge National Government led decarbonisation of the national grid, reducing emissions from electricity consumed across TWBC upstream leased assets.	National Government	3	2025/26 – 2049/50	n/a	15.6
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9.8. Tier One Contracts

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO ₂ e Saving
34	Waste Collection Contract: Petrol Vehicles Replacement of existing petrol vehicles with electric alternatives	Waste and Street Care	3	2030/31	£60	1.0
35	Waste Collection Contract: Diesel RCVs Diesel use replaced like for like with HVO. Assumed 25% annual increase in HVO from 2028/29. A significant proportion of the fleet are due for renewable in June 2031, where electric alternatives will also be considered.	Waste and Street Care	3	2028/29	£1,552	947.7
36	Leisure Centre Contract: Gas Consumption Removal of gas from existing leisure centre and replacement with electric heating alternatives. <i>Assumed 10% heating savings from service improvements to Putlands through S106 funded works.</i> <i>Assumed full decarbonisation of gas at Putlands and Tunbridge Wells Centres in 2033/34.</i>	Property	3	2027/28 – 2033/34	-£6,873	629.8
37	Leisure Centre Contract: Electricity Collaborate with operator to procure high quality renewable electricity.	Property	3	2027/28	n/a	340.7
38	Leisure Centre Contract: Sectoral Intervention - Water Assumed linear decarbonisation of water emissions, in line with the water sector 2040 net zero target.	Water Sector / Government	3	2026/27 – 2039/40	n/a	4.9

39	Grounds Maintenance Contract: Petrol & Diesel Consumption Service improvements to be implemented from new contract and assumed net zero emissions by 2030 from this source, in alignment with supplier carbon reduction plan.	Parks and Sports	3	2026/27 – 2030/31	n/a	91.2
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9.9. Procurement: Supply Chain

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO ₂ e Saving
40	Suppliers: With Net Zero Targets Linear reduction modelled for all existing supplier with established net zero targets and carbon reduction plans	Procurement / Sustainability	3	2026/27 – 2049/50	n/a	1,517.3
41	Suppliers: Without Net Zero Targets Collaborate with supplier to establish pathway aligned net zero targets and establish carbon reduction plans from 2030/31 at the latest. Linear reduction to 2050 assumed.	Procurement / Sustainability	3	2026/27 – 2049/50	n/a	288.4
42	Remaining Suppliers: Sustainable Procurement Policy Update the sustainable procurement policy to establish minimum standards and requirements to implement sustainability into future contracts. Specifically, covering pathway aligned net zero targets, carbon reporting, and reduction plans. Linear reduction to 2050 assumed.	Procurement / Sustainability	3	2026/27 – 2027/28	n/a	1,524.7

9.10. Residual Emissions: Offsetting

No.	Intervention	Service Area	Scope	Delivery	Estimated Cost (£000's)	tCO ₂ e Saving
43	Offsetting Requirement: 2046/47 – 2049/50 Assumed cumulative offset of 2,396.5 tCO ₂ e at approximately £20 per tonne. <i>Offset requirement for hard to reduce emissions from commuting, homeworking, business travel, electricity, water, and suppliers.</i>	Sustainability	2 & 3	2046/47 – 2049/50	-£48	2,396.5
44	Offsetting Requirement: 2050/51 – 2099/2100 Continued offsetting is required beyond the net zero claim year. It is expected that residual emissions will reduce further, however, costs and emissions are assumed based on residual emissions in 2049/50 (375.9 tCO ₂ e).	Sustainability	2 & 3	2050/51 – 2099/2100	-£375	18,793.6

10. Critical Path to Net Zero Delivery

Delivery of this net zero pathway is dependent on a relatively small number of interventions which will aid in or directly deliver the majority of emissions reductions. These interventions (in particular: supply chain, major contracts, and high-energy assets), represent the most critical levers for change and therefore, from the critical path to achieving net zero. These interventions also carry the greatest delivery risk due to their scale, complexity, and reliance on external partners, funding, and wider system change.

Focusing on these interventions ensures that resources and governance are directed towards the areas of greatest impact.

- 1) **Supply Chain Decarbonisation:** Without the pathway cannot be achieved, delivering over 3,000 tCO₂e reduction combined across all supplier interventions.
- 2) **Waste Contract Decarbonisation:** This is the second largest individual emissions source, delivering over a 900 tCO₂e reduction.
- 3) **Leisure Contract Decarbonisation:** This is the third largest individual emissions source, also delivering over a 900 tCO₂e reduction.
- 4) **Core Estate Heat Electrification:** Delivers full decarbonisation of direct emissions by 2035, without reliance on offsetting (over 700 tCO₂e reduction).
- 5) **Core Estate Renewable Electricity Procurement:** This is the fastest and largest single lever to reduce scope 2 emissions (over 500 tCO₂e reduction).

11. Financial Considerations

Our carbon reduction plan provides an indicative cost of £24.4m to achieve net zero emissions. This is £3,000 per tCO₂e. These costs are estimates, determined based on previously delivered real world projects, data, and current market prices.

Costs are not all yet allocated and will contribute a combination of capital and revenue. Interventions will be taken forwards through the budget setting process and considered in the round with all other corporate priorities.

The public sector across the UK faces significant constraints on budgets and available finance, in most cases with sizable budget deficits to be addressed. However, delivering decarbonisation interventions can help ensure long term resilience and improved operational efficiency through energy efficiency measures and our commitment to net zero goals.

TWBC will maximise every opportunity to obtain government funding for climate action. To date we have received over £1.5 million in grant funding towards our corporate decarbonisation works. However, at the time of writing, Government decarbonisation funding has been dramatically reduced, which places greater responsibility on TWBC to fund interventions.

12. Governance

12.1. Measurement and Monitoring

To track progress against this strategy and the above carbon reduction plan, TWBC will produce annual GHG emissions reports to ISO 14064-1 standard. These reports break down emissions from all three scopes and will be compared against the 2024/25 baseline to establish whether pathway progress is being achieved. As part of the BSI NZP, we will complete full ISO 14064-1 GHG emissions verification every three financial years.

The methodology for ensuring accurate emissions data is provided in detail within our BSI verified 2024/25 GHG emissions report. This can be publicly accessed here: [Reducing the Council's Emissions - TWBC Climate Action](#)

Alongside this emissions report, an annual progress report will be provided for this strategy, outlining progress against actions listed in the actions plan and above carbon reduction plan. Progress against the above pathways and interim targets will be reported.

This progress report will be presented to Management Board, our Climate Emergency Advisory Panel and Cabinet annually, alongside the latest GHG emissions report. Further to this internal monitoring process, we will be audited annually by BSI, as part of the Net Zero Pathway process, to ensure progress against the carbon reduction plan stays on track.

12.2. Communication, Reporting and Transparency

To ensure this strategy is delivered successfully, every part of the Council must be held accountable. The below management plan highlights how we will do this:

- The Sustainability Team will oversee the delivery of this strategy.
- The Climate Emergency Officers Group will meet monthly to monitor and deliver actions from the action plans.
- Management Board will be informed of the strategy's progress through an annual progress report.
- The Climate Emergency Advisory Panel will meet quarterly and be provided with an annual update on progress and where appropriate, ad-hoc updates on specific interventions.
- Cabinet will be provided with an annual update on progress and where appropriate ad-hoc updates on specific interventions.
- BSI will conduct an annual audit on progress against the interim targets.
- BSI will conduct a tri-annual GHG emissions report verification to verify emissions calculations, and progress is correct and to standard.

This strategy is a live document, with objectives, actions, and timescales subject to alteration. An annual review and progress report will form an integral part of the monitoring process.

The purpose of the annual action plan review will be to review progress and amend actions, ambitions, and governance where appropriate to account for changes in legislation, funding, capacity, and strategy delivery.

This also provides transparency for wider internal and external stakeholders, such as employees, councillors, residents, and partners. Furthermore, enhanced transparency on TWBCs emissions helps communicate the council's commitment to reducing them.

The report will be published annually on the Council's dedicated website '[TWBC Climate Action](#)', where it will be publicly available in full.

12.3. Pathway Delivery Risks

High Risk

Scope 3 delivery represents the most significant risk, as over 80% of emissions rely on suppliers, contractors, and external partners beyond direct council control. The current approach assumes supplier decarbonisation and national trends (e.g. grid and fleet transition). Stronger enforcement mechanisms are proposed through contractual levers and compliance frameworks, to help mitigate the high likelihood of underperformance against the pathway.

Medium Risk

A substantial proportion of interventions are dependent on future funding approvals or external capital programmes. While costs are estimated at programme level, there is not yet a fully developed funding strategy or confirmed investment pipeline to guarantee full delivery against the pathway. Estimated costs are presented upfront to provide a high-level view of expected investment through to 2050. This should aid prioritisation and allocation of future funding.

Low Risk

The emissions baseline, methodology, and reporting framework are robust and independently verified, providing strong technical credibility and low risk of data inaccuracies. Governance arrangements, including annual reporting and BSI-aligned verification cycles, ensure consistent oversight and transparency. The approach to offsetting is conservative, standards aligned, and limited to residual emissions, minimising reputational risks from overreliance on offsetting.

Risk Management

To help manage risk of slippage against the pathway, the following escalation process will be followed upon the identification of implementation delivery issues (capacity, funding, procurement, asset incompatibility).

- Climate Emergency Officers Group identifies and troubleshoots issues.
- Portfolio Holder for Environment and Sustainability to be advised on issues and consult on resolution. Agree to solutions where they fit within direct decision-making powers.
- Issues escalated to Management Board where significant decisions are required.
- Cabinet report developed and presented to cabinet if required to proceed with mitigation measure.

13. Local Government Reorganisation

Local Government Reorganisation (LGR) presents both a challenge and an opportunity for TWBC to embed a robust and consistent approach to climate action within a future unitary authority. This strategy positions TWBC as a leader across Kent by adopting a verified, standards-aligned framework through the British Standards Institution Net Zero Pathway. By grounding its approach in independently verified data and internationally recognised standards, the council is not only delivering a credible route to net zero but also establishing a benchmark for other authorities to follow two tier authority structure transition towards unitary structures.

By acting now, we enter the LGR process with a clear, evidence-based, and externally verified strategy already in place. The strategy's alignment with ISO standards and the BSI framework ensures that it is technically robust, providing confidence to stakeholders and future partners within a reorganised structure.

Importantly, our approach creates a strong foundation that can be adopted and scaled within a new unitary authority, rather than requiring significant revision following reorganisation. Furthermore, by aligning with national legislation and recognised best practice, the strategy is inherently defensible, providing a strong basis for responding to scrutiny or challenge.

Overall, this approach demonstrates leadership in delivering net zero in a responsible and transparent way. Through independent verification, clear governance, and alignment with internationally recognised standards, precedent is set for accountability and credibility in climate action. As LGR progresses, this positions TWBC as a driver of coherent, consistent, and high-quality net zero strategy for the future authority.

14. Appendix A: Key Performance Indicators (KPIs)

The following KPIs will be used to track overall performance across all action plans and therefore, against the delivery of the Corporate Net Zero Strategy. KPIs will be reported through the annual reporting process. KPIs are more extensive for monitoring action plan progress and are detailed in full in each action plan.

Headline Progress

KPI	Metric
Total emissions (tCO ₂ e)	tCO ₂ e reduction
Annual emissions reduction	% annual reduction
Total interim target progress	% complete
Scope 1,2 and 3 annual emissions reduction	% annual reduction
Scope 1, 2 and 3 interim target progress	% complete

Delivery Performance

KPI	Metric
Interventions on track	%
Interventions delayed	%
Interventions completed	%
Total emissions reductions delivered vs plan	tCO ₂ e vs baseline
Financial resources allocated	% funded vs unfunded
Intervention spend	£ spent vs £ planned

15. Appendix B: Glossary

Anthropogenic: Refers to something that is caused or influenced by human activities. This term is often used in the context of climate change to describe the impact on the climate resulting from human activities, such as carbon emissions from industrial processes or transport.

Baseline Year: The reference year against which future emissions reductions are measured (in this case, 2024/25).

BSI NZP: British Standards Institution Net Zero Pathway

Business-as-Usual (BAU): A projected scenario in which no additional decarbonisation interventions are implemented beyond existing trends.

Carbon Neutrality: A state where emissions offsets are prioritised rather than being reserved for deep emissions reductions.

Climate Change Committee: The Climate Change Committee is an independent body established under the Climate Change Act (2008) that advises the UK Government on setting and meeting carbon budgets and on preparing for the impacts of climate change.

Decarbonisation Pathway: A planned trajectory showing how emissions will be reduced over time to achieve net zero.

Decarbonisation: Decarbonisation is the term used for removal or reduction of carbon dioxide (CO₂) output into the atmosphere.

GHG Emissions: Greenhouse gas emissions

Gross Emissions: Total emissions before offsets.

Interim Targets: Short- and medium-term emissions reduction milestones set to track progress towards net zero.

IPCC: Intergovernmental Panel on Climate Change.

ISO 14064-1: International standard specifying principles and requirements for quantifying and reporting greenhouse gas emissions and removals at the organisational level.

ISO IWA 42:2022: International guidance standard for achieving net zero, outlining principles for credible pathways, emissions reductions, and use of offsets.

Local Government Reorganisation (LGR): The restructuring of local authorities into new governance arrangements, typically forming unitary authorities.

Materiality: The threshold (e.g. 5%) used during verification to determine whether errors or omissions in emissions data are significant.

Net Emissions: Emissions after accounting for offsets.

Net Zero Target Date: The year by which an organisation aims to balance emissions with removals (TWBC: 2046/47).

Net Zero: Refers to the balance between the amount of greenhouse gases produced and the amount removed from the atmosphere, following deep reductions in emissions. The outcome is an overall net reduction in emissions to zero.

Offsetting: The process of compensating for emissions by funding projects that remove or reduce greenhouse gases elsewhere.

Power Purchase Agreement (PPA): Typically, a long-term contract to purchase electricity directly from renewable energy generators.

Reasonable Assurance: The highest level of confidence provided through BSI verification, indicating that emissions data is materially correct within an agreed threshold.

Residual Emissions: The remaining emissions that cannot be reduced further through practicable measures and are addressed through offsetting.

tCO₂e (Tonnes of Carbon Dioxide Equivalent): A standard unit for measuring greenhouse gas emissions, converting different gases into an equivalent amount of CO₂ based on their global warming potential.

TWBC: Tunbridge Wells Borough Council.

Verification: Independent assessment of greenhouse gas emissions data to confirm it is accurate, complete, and prepared in accordance with recognised standards.

16. Appendix C: Table of Figures

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Figure 7: TWBC Net Zero Pathway (Gross).....17

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Figure 9: Scope 2 Emissions Pathway.....19

Figure 10: Scope 3 Emissions Pathway.....19

17. Appendix D: Pathway Methodology

This pathway has been developed using an intervention-led modelling approach, combining the following:

- A 2024/25 baseline emissions inventory
- A Business-as-usual scenario
- A programme of defined decarbonisation interventions
- Externally driven decarbonisation trajectories (e.g. UK grid, water sector, supply chain)

This approach enables clear comparisons between a BAU emissions trajectory and a net zero pathway, which incorporates TWBC's planned interventions, operational changes, and sector-wide decarbonisation.

Baseline and BAU

The baseline year chosen is the 2024/25 financial year, with total emissions of 8,215.7 tCO₂e across scope 1, 2 and 3. This baseline is the foundation from which future TWBC decarbonisation interventions are measured against.

The BAU scenario assumes no additional interventions from TWBC. Emissions reductions do arise in the scenario but occurring only at a national level from UK grid decarbonisation and limited sectoral improvements.

BAU emissions decline at a modest rate over time to 6,866.8 tCO₂e.

Emissions Target Framework

Pathway modelling is built around achieving:

- Net Zero by 2050 at the latest.
- 50% reductions in emissions every decade.
- ≥90% emissions reduction prior to offsetting.
- Rolling five-year interim targets.

Further modelling is undertaken for suppliers and wider contracted services based on publicly reported net zero commitments and sectoral net zero targets. In some scenarios, linear reductions to achieve net zero by 2050 at the latest are assumed, where no publicly available targets exist.

Pathway Modelling

The pathway is developed by modelling a range of individual decarbonisation interventions across all three scopes, each with a defined implementation year, a clear description of the required activity, the resulting annual emissions reduction, and an estimated cost to TWBC.

Interventions can be categorised in the following categories:

- Asset rationalisation.
- Heat electrification.
- Fleet electrification.
- Energy efficiency.
- Renewable electricity procurement and generation.
- Supply chain decarbonisation.
- Procurement policy changes.
- Sectoral decarbonisation.

Interventions from all categories are aggregated annually to form the net zero trajectory, compared against the 2024/25 baseline.

Assumptions: Grid Decarbonisation

Grid decarbonisation is modelled based on the UK Government's Clean Power Pledge, which commits the UK to decarbonising the national grid to below 50gCO₂e per kWh by 2030.

A linear decarbonisation trajectory is applied to achieving 50gCO₂e/kWh by 2030 resulting in a significant, nationally dictated reduction in electricity emissions. A further linear decarbonisation trajectory is assumed to 2050, though this results in a more gradual decarbonisation of residual grid emissions.

It is also assumed that electricity transmission & distribution losses (T&D) and associated well-to-tank (WTT) emissions decline proportionally with grid intensity.

Heat and fleet electrification interventions are modelled to increase electricity demand, but overall emissions still decline because of this modelled grid decarbonisation.

Assumptions: Sectoral Decarbonisation

Sectoral assumptions are made for the several emissions sources, adopting linear decarbonisation trajectories to model decarbonisation, where there is a lack to real world data.

Water Supply and Treatment

A decarbonisation trajectory for all water associated emissions has been modelled in alignment with the water sector 2040 net zero commitment.

This approach has been taken as there is extremely limited ability to TWBC to directly reduce emissions from its water consumption, beyond rationalisation. Therefore, a reliance on water utility decarbonisation and national infrastructure improvements is built into the pathway, to provide a realistic a picture as possible of what will be delivered by the water sector.

Staff Commuting and Business Travel

Decarbonisation across these sources has been modelled based on the expected electrification of the national UK car fleet. Using Climate Change Committee projections for

how quickly the national fleet will electrify, 2030, 2040 and 2050 trends are attributed to existing vehicle use, to provide a reasonable estimate for future decarbonisation.

The assumption is that declining emissions per mile travelled will be observed, whilst annual mileage travelled will remain consistent.

Supply Chain and Procurement

A mixed modelling approach is adopted here to account for suppliers who have independently established their own emission reduction pathways and net zero. Where our suppliers have published such pathways and targets, these are used directly to model the decarbonisation of our contract with them.

Where no targets are available, emissions are modelled to decarbonise linearly to 2050. This is modelled as part of a policy intervention to require all suppliers to have net zero targets (latest 2050), provide contract carbon reporting and implement reduction plans from 2030/31.

Limitations

There are several limitations with net zero pathway modelling that should be recognised as part of its interpretation.

Firstly, this pathway relies on linear decarbonisation assumptions for interventions that take place over a significant period of time (e.g., the national grid, water sector, and supply chain). However, real world decarbonisation is typically nonlinear in nature, with step changes more often seen following the successful implementation of interventions. The scope 1 pathway (figure eight) clearly shows this, when compared to the scope 3 pathway (figure ten).

Secondly, a significant proportion of TWBCs emissions are indirect (scope 2 and 3), and are therefore, dependent on external factors to achieve decarbonisation. For example, grid decarbonisation, supplier net zero progress and vehicle fleet transition. This introduces an element of uncertainty around delivery.

Risks are identified in the delivery of this strategy in section 12.3, alongside mitigation approaches and opportunities.

18. Appendix E: Version Control

Document Name	Corporate Net Zero Strategy
Responsible Officer	Henry Saunders, Sustainability Manager

Version Number	Reason for Review	Author(s)	Date
1.0	First Version – Pre BSI Verification	H. Saunders, Sustainability Manager.	19.05.2026
2.0	Second Version – Post BSI Verification	H. Saunders, Sustainability Manager.	29.05.2026
3.0	Third Version – Final for Full Council	H. Saunders, Sustainability Manager.	26.06.2026

19. Appendix F: BSI Net Zero Pathway Certificate

The BSI Net Zero Pathway certificate is presented in full on the following page of this report.