



Carbon Reduction plan

Our Net Zero Roadmap

31st January 2024

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Introduction

We love our planet. It's our home. It's our source of food and water. But changes to our climate are impacting our resources. That's why, as part of the **Our Planet** pillar of our wider **Social and Sustainability Promise**, Wave has committed to reaching Net Zero by 2030, doing our bit to contribute to limiting global temperature increases to below 1.5°C.

By achieving net zero by 2030 we will also be aligning with most of the water industry in the UK. This ensures our customers have the peace of mind of a decarbonised water supply chain by that date and contributes to the UK's goal to be carbon neutral by 2050.

Scope

The purpose of this document is to outline a road map for the achievement of net zero by Wave across its scope 1, 2 and 3 emissions using a science-based approach.

The document also acknowledges that we are an extremely small emitter of carbon and details Wave's efforts to maximise our impact by influencing the UK's ambitions to decarbonise the wider economy.

Scope 1 emissions

Emissions you directly create

Scope 2 emissions

Emissions from power you buy to fuel your operations

Scope 3 emissions

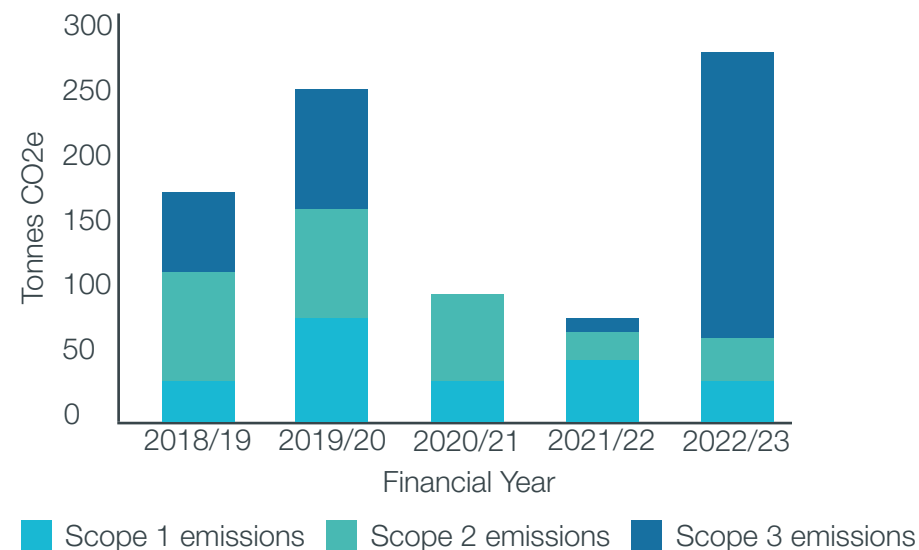
Emissions in your supply chain



Our emissions

Like most businesses, Wave was forced to close its offices during the COVID-19 pandemic in 2020, dramatically reducing our overall emissions. Since reopening, Wave has embraced a hybrid working approach which has seen a large increase in the number employees working from home on a regular basis. To ensure the impact of this home working was adequately captured we have included its carbon impact in our scope 3 emissions from 2022/2023 and accounts for the large increase in scope 3 emissions in that year.

Although we have made every effort to accurately capture our emissions, we are aware that our reported scope 3 emissions still do not include all emissions from our supply chain and this is something we aim to improve through 2023/2024 and 2024/2025.



	Scope 1 emissions (Tonnes of CO2e)	Scope 2 emissions (Tonnes of CO2e)	Scope 3 emissions (Tonnes of CO2e)	Commentary
2018/19	29.7	77.27	61.65	
2019/20	78	79.34	94.77	
2020/21	33.65	57.55	0.64	Covid impacted period, offices closed but homeworking not factored into Scope 3 emissions
2021/22	41.19	23.83	8.39	Covid impacted period, offices closed but homeworking not factored into Scope 3 emissions
2022/23	34.7	22.24	222.09	Offices reopened but with significant portion of workforce based from home, this homeworking factored into scope 3 emissions and considered the “new normal”

Approach

To make sure that we make a tangible difference, Wave is committed to maintaining an honest, ethical and environmentally-sensitive operation. To support action towards this commitment, Wave's approach to improving environmental impact is guided by our **Carbon Reduction Hierarchy**. Wave's Carbon Reduction hierarchy is a three-tiered strategy, encompassing the following:

1. Reduce emission production in a given activity. ← Preferred route
2. If it is not possible to further reduce carbon emissions, procure out.
3. If it is not possible to procure out, then offset emissions. ← Least preferred route

This tiered strategy allows Wave to continuously monitor our environmental performance, with the aim of shifting our environmental impacts through the hierarchy to make a measurable difference in real terms. Alongside this tiered strategy, Wave is committed to using a science-based approach in the measurement and verification of progress made towards net zero within our operations. In doing so, Wave has adopted the following industry-recognised measurement practices to monitor our CO2 emission performance:

- Our Carbon Reduction Plan is completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.
- Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard and uses the appropriate Government emission conversion factors for greenhouse gas company reporting.
- Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard.

Influencing our supply chain

In addressing Scope 2 & 3 emissions, Wave is also driving ethical value throughout its supply chain. We actively select and manage all sub-contractors in line with our robust Quality, Environmental and Health and Safety management systems that have been accredited to ISO 9001:2015, 14001:2015 and 45001:2018 standards. We also hold ourselves accountable to these management systems in delivering contracts for customers. Wave's new supplier process also requires prospective suppliers to detail:



Their targets to reduce their Carbon Footprint.



What incentives they offer for sustainable transport options.



What sustainability practices have been adopted or are encouraged within their operation.

Our Road Map to Net Zero



Our ambition - Net Zero by 2030

The Climate Change Act was amended in 2019 to commit to a target to reach net zero by 2050. The change was recommended by the Committee on Climate Change (CCC) and was adopted by the UK Government in a response to the 2016 Paris Agreement's long-term goal to limit an increase in global temperatures to 2 degrees Celsius above pre-industrial temperatures to limit the impact of climate change.

What is Net Zero?

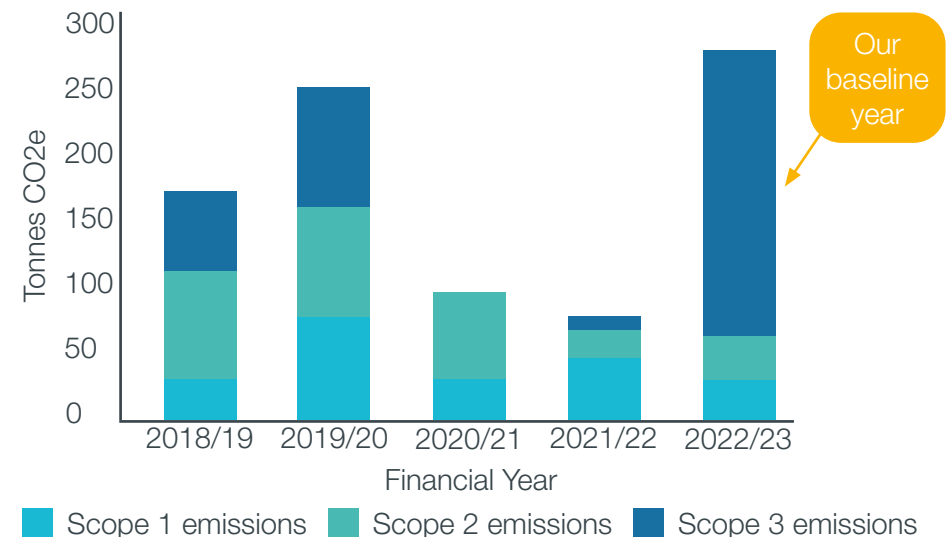
Net zero is achieving a balance between the carbon emitted to the atmosphere from human activity and the carbon absorbed from it - no longer adding to the total amount of greenhouse gases in the atmosphere.

The majority of the UK Water Industry is committed to achieving net zero by 2030. As part of our Sustainability Promise we have also adopted this target to align with the sector, this gives our customers confidence that water related carbon emissions will significantly reduce through the water supply chain in readiness to meet net zero, twenty years in advance of the national target.

We believe it is important to act now to preserve and enhance the environment for future generations. We're working tirelessly to educate others on the stresses put on UK water supplies which will inevitably increase in the future as we experience the effects of climate change and an increasing population.

Our baseline

Wave is at the beginning of the net zero journey collecting and interpreting our carbon output data. We have taken the decision to use 2022-23 (1st of April 2022 to 31st of March 2023) as our baseline year, as operations have now resumed to business-as-usual post the COVID 2019 pandemic. The data collected during this period was not representative of Wave's business as usual operations, due to Government imposed restrictions - employees were obligated to work from home and adopted a virtual approach to internal and external meetings eliminating the need for commuting to offices and business travel during this period. Our baseline year is the first year we have measured the impact of employees working from home.



Wave has already begun the process of reducing our net carbon emissions. In 2023, we sponsored the Carbon Trust tree planting activity in Brazil, which offset the equivalent of 200 tCO₂e (71.68% of our total 2022/23 baseline gross emissions). As we move through our carbon reduction hierarchy, we will seek to bring in further initiatives which focus on reducing gross emissions. This is explored on page 9.

Baseline year (2022/2023) carbon emissions breakdown		
Emissions	Total (tCO ₂ e)	As a proportion of total baseline gross emissions (%)
Scope 1	34.70	12.43%
Scope 2	22.24	7.97%
Scope 3	222.09	79.59%
Total gross emissions	279.03	100%
Carbon offsets	200 (Pacajai REDD+ Project in Brazil)	71.68%
Net carbon emissions	79.03	28.32%

Post-pandemic we've embraced a hybrid style of working – resulting in many employees working from home and less travel to and from the offices. This has created a shift in some emissions that would have fallen into Scope 2 such as energy used in our offices to fall under Scope 3.

- ◆ Increased working from home - 300+ employees working at separate locations as opposed to working from 2 office sites.
- ◆ Less commuting. We acknowledge this was not measured previously.
- ◆ Less power required in offices. Although energy is used to light and heat the buildings, meeting rooms are not used as frequently, and the number of computers being used in the offices has fallen significantly leading to a reduction in energy.

Year	Scope 1	Scope 2	Scope 3*
2018/19	29.7	77.27	61.65
2019/20	78	79.34	94.77
2020/21	33.65	57.55	0.64
2021/22	41.19	23.83	8.39
2022/23	34.7	22.24	222.09



*Wave's scope 3 emissions include hotel stays, taxi travel, train travel, air miles, car miles (private vehicle claiming business miles), home working, water supply and waste collection.

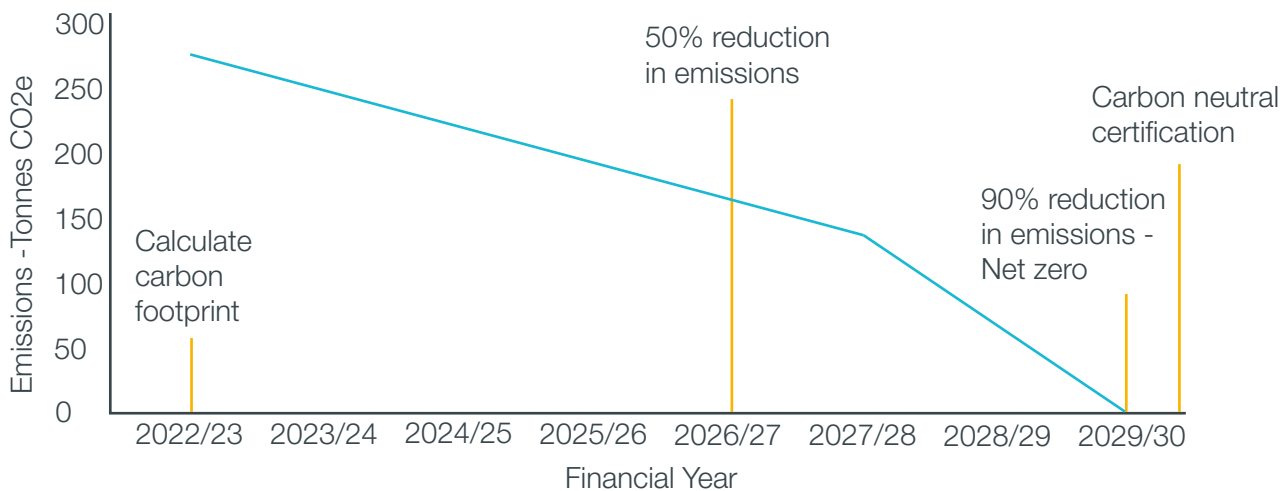
Although our Hybrid working policy has increased our total carbon emissions, we believe this is still a positive step in the journey to Net Zero. Previously the employee commuting emissions were not captured and are therefore not seen in the dataset. Allowing employees to work from home will significantly reduce carbon emissions as Wave's workforce is spread out around the UK, however we're unable to demonstrate this, and this is why a decision to make 2022/23 as our baseline year was agreed.

Emission reduction targets

To achieve Net Zero by 2030 we have set the following emissions reduction targets from 24/25 through to 2030.

Targets for scope 1 and 2 and 3 emissions reduction		
Year	% change from 22/23	Target reduction in Tonnes of Co2e
2024/25	20	56
2027/28	50	140
2029/30	90<	280

Wave carbon reduction forecast



Planned initiatives

Our Net Zero target will not be met without a specific plan that focuses on key initiatives and deliverables that align with our strategic approach to reduce, procure out and offset.

Scope	Approach	Initiative
1	Reduce	Install retrofit energy saving devices in Wave offices.
		Reduce miles driven for work – utilize technology to reduce in person customer visits, encourage employee use of public transport through awareness and education.
2	Procure out	Influence landlord to enable Wave offices to be supplied with green energy.
3	Reduce	Lead by example and educate employees to use less energy at home using the Alaya platform.
	Procure out	Review supplier award criteria and ensure preferential weighting is given to suppliers who minimise the carbon impact of their operations.
	Offset	<p>Establish an annual Wave Carbon Reduction Fund to finance projects to offset remaining scope 3 emissions that cannot be reduced or procured out rather than purchase generic carbon credits.</p> <p>This will ensure Wave can directly support projects both in the UK and abroad that not only offset carbon emissions but support our wider Social and Sustainability goals.</p> <p>The fund will be reviewed and scaled annually to ensure it can continue to meet the emissions impact of Wave.</p>



Supporting the UK wide decarbonisation strategy

Decarbonisation is not a new concept for industry; National and European climate change targets and environmental legislation have existed for a long time and the harmful effects of Greenhouse Gasses (GHGs) are well-known. More recently however, the 2019 amendment to the Climate Change Act enshrined in law a commitment to reach net zero carbon emissions by 2050, making Britain the first major economy to do so. Industry and specifically clusters of industry are some of the largest emitters of GHGs, accounting for around one sixth of all UK emissions. Unsurprisingly, these areas have been asked to lead the way and have two low carbon clusters by 2030, with one net zero by 2040.

While Wave has our own route to net zero, the reality is that our carbon footprint is significantly smaller than many of the large water-users within our customer-base. We recognise that our ability to do good extends beyond our operation, with a much greater potential to reduce emissions by influencing and supporting our customers through their own route to net zero and by improving water efficiency.

High water demand technologies

Carbon Capture, Utilisation and Storage (CCUS) and development of low Carbon Hydrogen networks are the key approaches recommended for industrial decarbonisation and many projects are underway, some as part of the Government's Cluster Sequencing. Wave has identified that to be feasible, these projects will require a considerable amount of water, and this may not be readily available due to other pressures such as the growing population, drought resilience, unsustainable abstraction, limitations to the wholesaler water infrastructure and impacts of climate change.



What is Wave doing to help?

In 2022, Wave presented a number of industrial inward investment plans on the South Humber Bank to Anglian Water Services, chiefly driven by carbon capture and hydrogen power generation, in response to Government legislation. These plans evidenced an increased forecast in water demand is required to support the regions industry and associated water-intensive processes. This forecast is against a backdrop of the Environment Agency proceeding with plans to manage (reduce) closely existing industrial and wholesaler licensed water abstractions.

Wave's ongoing work led to the 8th February 2023 Water Conference, where we outlined to Defra the relationship between industrial water requirements and decarbonisation. Ten letters were presented to Ofwat on 29th March 2023, which included the biggest water users in Immingham and Stallingborough, as well as Wave CEO, Lucy Darch. These letters now form the foundation of future discussions with the Environment Agency, Defra and Ofwat on the need for joined-up water thinking to support Humber industry for the long term. This work is being led by Simon Crane (Industrial Account Manager at Wave) and Wave's Industrial Team who understand the strategic national importance of the South Humber petro-chemical industry.

Additionally, we have been speaking with industrial growth organisations such as NEPIC and CATCH, as well as regulators such as the Environment Agency to ensure a coordinated approach. Whilst Wave can't guarantee that water will be available in the volumes required, we are playing a key part in the national decarbonisation story and raising the profile of the importance of water as part of these projects. Wave is also experts in water efficiency and see that as a vital piece in reducing the demand shortfall, nationally. The big picture is we need to use water more wisely, which means saving water at home and at work, to help facilitate our route to net zero.

How will this benefit customers?

The UK is facing a significant water shortage within the next 20-30 years. As it stands today, it's expected that by 2050, we'll need an extra 3.4 billion litres of water each day to meet demand. By leading the discussions with government and industry now, Wave is acting to safeguard future supply for household and non-household water users.

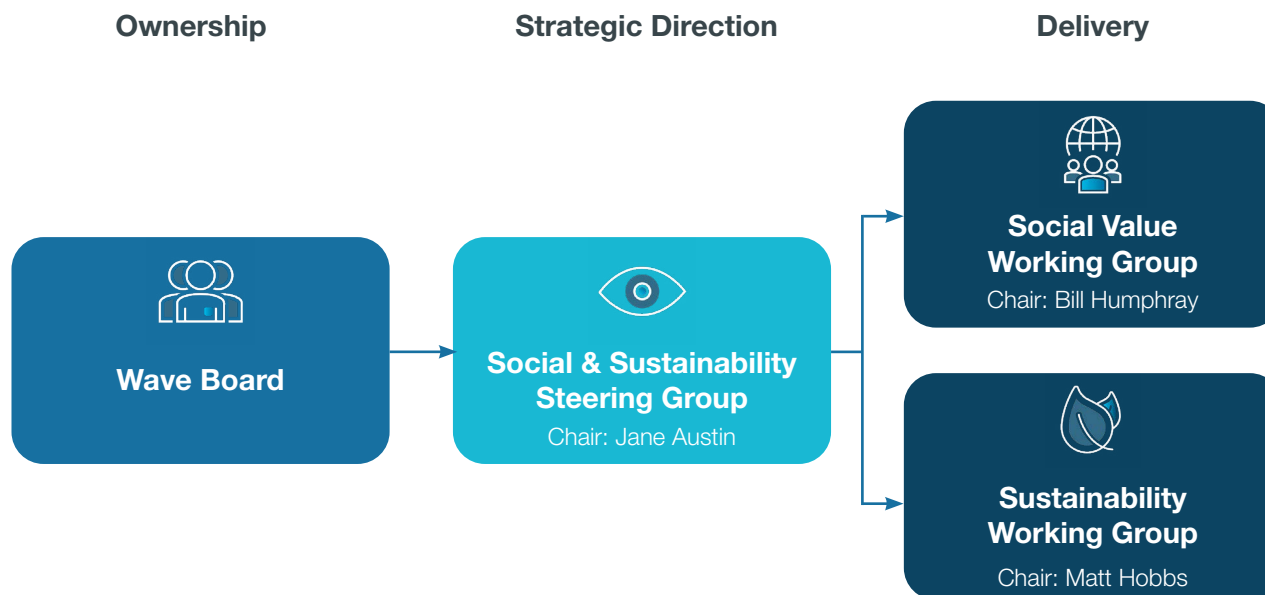


Governance

Governance approach to achieving net zero

Defining our unique Social and Sustainability Promise, we embrace a holistic approach, aiming to deliver social value and environmental benefits through both our delivery of water retail services and community projects. Wave's Social and Sustainability Promise, which encompasses our carbon reduction plan, is proactively developed, and contributed to by our longstanding working groups, comprised of colleagues across all Wave teams. Our Social Value Working Group proactively defines and develops our Social Value objectives in bi-monthly meetings, with on-going work in between meetings. The Sustainability Working Group works in the same way, developing ideas and proposing initiatives to support Wave's Sustainability efforts. Where a particular issue requires a focussed effort, sub-groups may emerge from these Working Groups, including a sub-group working to define our Carbon Reduction Plan.

Ideas from the Sustainability and Social Value Working Groups are consolidated for review by the Social and Sustainability Promise Steering Group, which is chaired by our HR Director (Jane Austin) who is also a member of Wave's Leadership Team. The Sustainability Promise Group define an aligned strategy and sign off on approved project plans which have been developed by the Working Groups.



Members of the Sustainability Working Group (as of November 2023)

- Matthew Hobbs, Support Services Manager
- Elizabeth Foster, Wholesaler Operations Coordinator
- Caitlin Allport, Marketing Executive
- Kellie-Marie Jackson, Digital Technology Manager
- Michael Carey, Public Sector Business Development Manager
- Samuel Barber, Solutions Architect
- Toni Graham, Billing Team Leader – Consolidated and Onboarding

The following are also members of the Carbon Reduction Plan sub-group

- Jonathan Hutchinson, Bid Manager
- Oli Shelley, Head of Operations/Water Efficiency
- Rachael Clifford, Trade Effluent Specialist

Decarbonisation steering group

To further-develop Wave's decarbonisation effort and to ensure Wave remain at the cutting-edge of what water retailers are committing to supporting customers' water requirements in the push towards achieving national decarbonisation efforts, a Wave Decarbonisation Steering Group has been setup in 2023.

This group is comprised of colleagues across Wave who proactively define and develop our decarbonisation strategy in bi-monthly meetings with on-going work between meetings. This group has Wave Leadership Team full support and is chaired by Tony March, Director of Public Sector and Industrial Customers. Steering Group outcomes are reported directly to the Wave Leadership Team.

Members of the Decarbonisation Steering Group (as of November 2023)

- Tony March, Director of Public Sector and Industrial Customers - Chair
- Oli Shelley, Head of Operations/Water Efficiency
- Lissa Balmer, Director of SME Customers
- Nigel Corfield, Industrial & Commercial Customer Director
- Robert Barker, Industrial Customer Manager
- Erica Hadley, Head of Industrial & Commercial Sales and Retention



Reporting on progress

Wave recognises the importance of being accountable for our commitments, as such progress against our road map to net zero will be published as part of our annual Social and Sustainability report (beginning in Summer 2024).

In line with our governance, this report is reviewed by our Social and Sustainability Steering Group and approved by our Board prior to publication.

A copy of our latest Social and Sustainability report can be found at www.wave-utilities.co.uk/sustainability.

This Carbon Reduction Plan has been reviewed and signed off by the board of directors.

Signed on behalf of Wave:



31st January 2024





Get in touch



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wave-utilities.co.uk/sustainability