

Warmup®

The world's **best-selling** floor heating brand™



Development



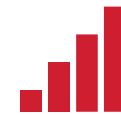
Trust



Sustainability



Innovation



Growth

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Sustainability Report

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Vision & Mission

To be the most trusted, innovative, and accessible radiant heating and cooling brand in the world.

We want to change the way people heat their homes so that they live in the most comfortable, efficient, & sustainable environments.

We will do this by driving the global adoption of the most CO₂ efficient and comfortable Smart heating solutions, through research, product development, and exceptional service.

Since 2019 we have helped our customers save over 270,000t* of CO₂e, compared to using traditional heating methods. From 2024 to 2028 we plan to facilitate an additional 888,000t* of lifetime CO₂e savings. This will require innovative and engaging marketing activity, alongside technical and regulatory influence to change behaviour.

** Internal calculation based on GHG protocol methodology (category 11 – use of emissions). Assumes a lifetime of products for 25 years vs gas boiler & radiators.*



Sustainability Pillar

Develop a sustainable business model that is genuinely focused on addressing climate change and make a meaningful contribution to the reduction of emissions through the adoption of our systems.

Our guiding principles and values mean that we will always strive to be:

Proud of what we do and what our stakeholders think of us.

Positive in our mindset, attitude and the way we interact with all stakeholders.

Proactive in delivering what our stakeholders need, before they ask.

Person to person accountable by helping each other to succeed, learn and advance, while always treating each other with the respect we deserve.



Sustainability Pillar

Our planet is experiencing climate change driven by human emissions of greenhouse gases.

It is estimated that **18%*** of CO₂ emissions globally are from energy use in buildings.

We must reduce global emissions, and we will contribute as heating experts, as an organisation, and as individuals.

We can help in two distinct ways; through working towards achieving net zero greenhouse gas emissions by 2050 as an organisation (**INTERNAL**) and delivering our vision to help others live more sustainably using our products and services (**EXTERNAL**).

* source: International Energy Agency, 2023, <https://www.iea.org/energy-system/buildings>



Sustainability Pillar

Our ambition is to:

INTERNAL - Halve our greenhouse gas emissions by 2030, achieve net zero by at least 2050, and report our progress on an annual basis. By doing so we are proud to be aligned with the United Nations' Race to Zero Campaign.

EXTERNAL - Make a meaningful contribution to the global reduction of CO₂ emissions by increasing the adoption of energy efficient radiant heating and cooling solutions, worldwide.

To get there, we will:

INTERNAL - Build on our existing efforts to reduce our carbon footprint by engaging in an accredited environmental impact program. In 2023 Warmup achieved this goal through EcoVadis and was awarded a bronze medal.

EXTERNAL - Create technical models of our system benefits and use these to create marketing materials aimed at our audiences and industry groups to increase desirability and influence regulatory changes to support the adoption of our systems.



Sustainability Pillar

More specifically, we will:

INTERNAL - Review our products and packaging to reduce non-recyclable materials. Measure and reduce our operational carbon footprint by looking at our equipment, travel, waste, and energy sources.

EXTERNAL - Invest time and resources to drive the adoption of our systems through optimised marketing to our audience groups, enhanced technical demonstration of the benefits of our products and using our influence to press for regulatory change.

Our challenges are:

INTERNAL - To embed sustainability into our day-to-day business practices.

EXTERNAL - To convince our audiences and industry groups to change decades-old habits.



Our SDG Alignment



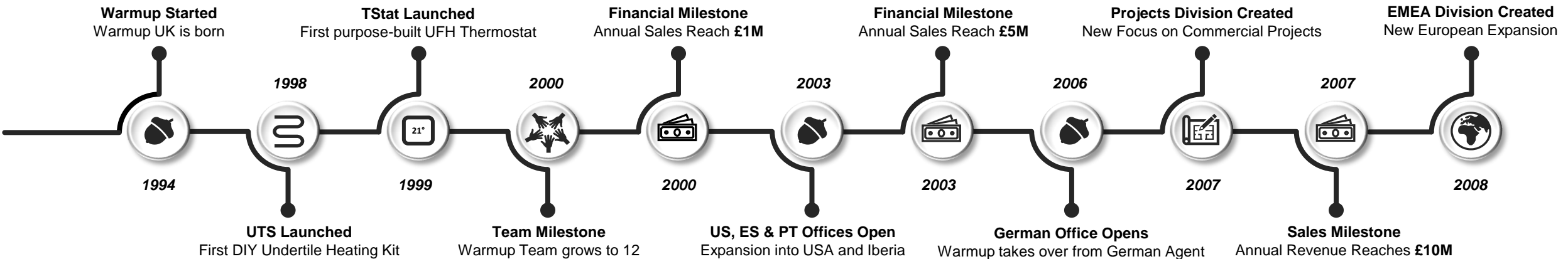
At Warmup, we recognise the importance of aligning ourselves to the UN's Sustainable Development Goals.

- **7 – Affordable & Clean Energy**
 - Providing heating systems which are energy efficient and compatible with renewable energy sources
- **8 – Decent Work & Economic Growth**
 - Providing sustainable, safe and happy employment in our local communities with sustainable economic growth
- **9 – Industry, Innovation & Infrastructure**
 - Manufacturing products in the construction industry sustainably & are built to last
- **11 – Sustainable Cities & Communities**
 - Change the way people heat their homes so they live in the most comfortable & sustainable environments
- **12 – Responsible Consumption & Production**
 - Working with our partners to ensure sustainable manufacturing & procurement
- **13 – Climate Action**
 - Helping our customers reduce their carbon emissions with every system sold



Striving for the Best

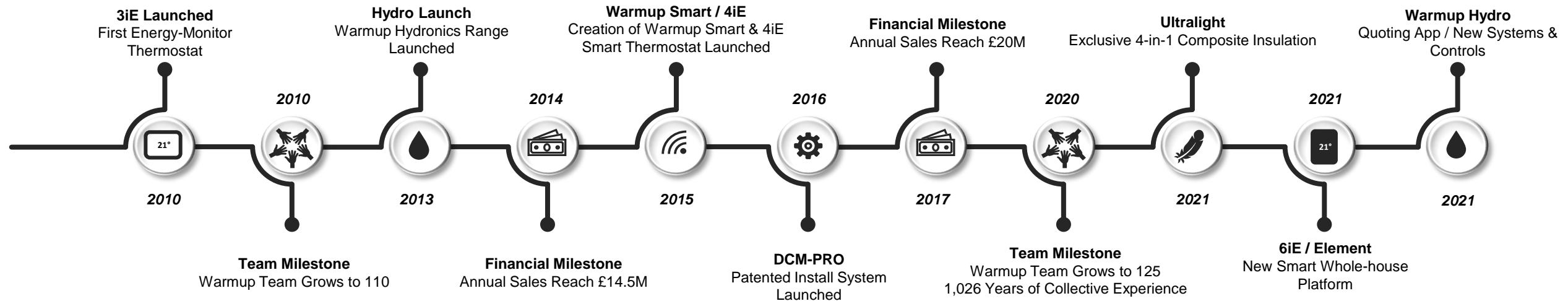
Since our start in 1994, Warmup made a commitment to always provide the absolute best in terms of products, services, warranties, and information, and is still the guiding principle for everything we do. We invest heavily in product lines based on proprietary information, gathered during over 20,000 hours of testing in our multi-million-pound EN442-2-designed German Research Centre, ensuring we maintain our position as thought leaders. Our lab work, combined with information from our global network of occupied test-houses and connected devices, gives us the hard data required to respond to ever-changing industry trends. This guarantees swift delivery of the latest innovations for heating design, energy efficiency improvements, and CO₂ emission reduction. As a company, we have taken plenty of risks over the years, but in doing so, have built a smart, conscientious, energetic, and loyal team, eager and able to make the world a better place.





And Becoming the Best

The fruits of Warmup's R&D investment are most visible in products such as our international range of Smart Controls, as well as our DCM-PRO range, which holds multiple international patents and has rapidly become the gold-standard for electric floor heating installations. Developments, such as our Ultralight 4-in-1 insulation, the first insulation made specifically for radiant floor heating, helps further differentiate Warmup from its rivals who must rely on mass exporters for their product development. The international expansion of our Hydro Range offers the latest in quoting tool and digital development, making the entire process of specifying, buying and installing as simple as possible. Our approach of designing only the best products and providing the best services, warranties and information resources, based on a solid foundation of research, means that while others wait for the future to arrive, we make it happen.





Sustainability Timeline

Committed to Net Zero target

- Organised by BEAMA, aligned with UN
- B Impact Assessment – benchmark
- Mapped operational footprint
- SLT engagement
- Incorporated sustainability in strategy

Reduce our & our value chains' emissions:

- Remove plastics from packaging
- Electric fleet
- Green energy supply (offices & warehouses)
- Product design / manufacturing
- Reduce waste from warehouse
- Engage suppliers & value chain
- Adopt green methods of transport

Net Zero carbon emissions



2019

2021

2022

2023

2030

2050

Measuring our emissions

- GHG Protocol
- Scope 1, 2 & 3 (Global)



NOW

- Ecovadis Bronze
- Verify our figures
- Supply chain
- Marketing



Cut our emissions by 50%



Highlights



EXTERNAL It is estimated that 18% of CO₂ emissions globally are from energy use in buildings. We must work together to reduce global emissions and Warmup are committed to being an industry leader in this effort. We want to help people reduce their environmental impact by transitioning to a more sustainable way to heat and cool their homes. Our ambition is to make a meaningful contribution to the global reduction of CO₂ emissions by increasing the adoption of energy efficient radiant heating and cooling solutions, worldwide. We will invest time and resource to drive the adoption of low-carbon systems whilst pressuring for regulatory change. We are focused on becoming the most authoritative provider of radiant heating and cooling solutions in the world.

As a trusted heating and smart controls company based in the UK for over 30 years, we've been invited to the technical committee advising the Government Department for Energy, Security & Net Zero on the upcoming Future Homes Standard. Our team of experts is dedicated to providing guidance and support to help make Net Zero a reality for homes around the world and are actively facilitating this through our work improving building standards. We're proud to have earned a reputation for technical excellence and innovation.

INTERNAL In our work as a company that believes in being a force for positive change in the world, we will also focus on sustainable business practices. Warmup will halve our greenhouse gas emissions by 2030 and are working towards Net Zero by 2050. We are committed to our alignment with the SME Climate Hub global initiative to become a carbon neutral organisation. We are proud to have been awarded a Bronze Model by Ecovadis, a leading institution providing business sustainability ratings through independent analysis. This award represents our first step towards becoming one of the world's most sustainable under floor heating companies. Warmup has applied the GHG (Greenhouse Gas) Protocol methodology to accurately calculate our carbon emissions, helping us to keep on track with our targets.



Our Progress So Far

As people across the world actively look at reducing their carbon footprint, we want to be a part of the solution. We are actively reducing our own carbon emissions and are working towards a Net Zero position.

INTERNAL We are committed to becoming a Net Zero company with a focus on environmentally conscious supply chains. We are actively reducing our CO₂ emissions created by the production and delivery of our products to market. We are proud to be aligned with the SME Climate Hub global initiative and the United Nation's Race to Zero campaign. We are committed to halving our carbon emissions by 2030. We are focused on reaching a Net Zero output by 2050. We will continue to measure our carbon footprint annually.

EXTERNAL Our technologies actively help with global reduction in CO₂ levels. Our products reduce energy usage by up to 35% compared to traditional radiator systems whilst still achieving the same level of comfort. The smarter use of energy provided by our heating systems will facilitate renewables and Net Zero technologies. From 2024 to 2028 we plan to facilitate an additional 888,000t* of lifetime CO₂e savings. . We are committed to sharing our values and mission with our customers.

** Internal calculation based on GHG protocol methodology (category 11 – use of emissions). Assumes a lifetime of products for 25 years vs gas boiler & radiators.*



Challenges Ahead

Warmup are dedicated to the research and development of new technologies to bring sustainable warmth to people's lives. We want to ensure that every aspect of our business is working in harmony with the natural world.

We will continue to measure our emissions annually.

As part of our optimisation strategies, we are continually improving our data capturing methods.

We have a defined **strategy for reduction targets**, with the first pledge being the halving of our emissions by 2030.

Our strategy includes a firm **execution for reductions**.

We are **committed to integrating sustainability** within day-to-day business decisions.

With our global reach, **we want to influence others around us** to take their carbon reduction targets seriously.

As the energy sector looks towards more sustainable heating and cooling solutions, such as the **electrification of domestic heating** and the use of **heat pumps**, our range of **electric and water systems and Smart controls** are positioned to be the **future of heating**.

We are dedicated to enhancing the **efficiency** of our technologies. Our **research and development-led approach** to design means we are continually **optimising** our existing products whilst **innovating** new directions in low-carbon heating and cooling.



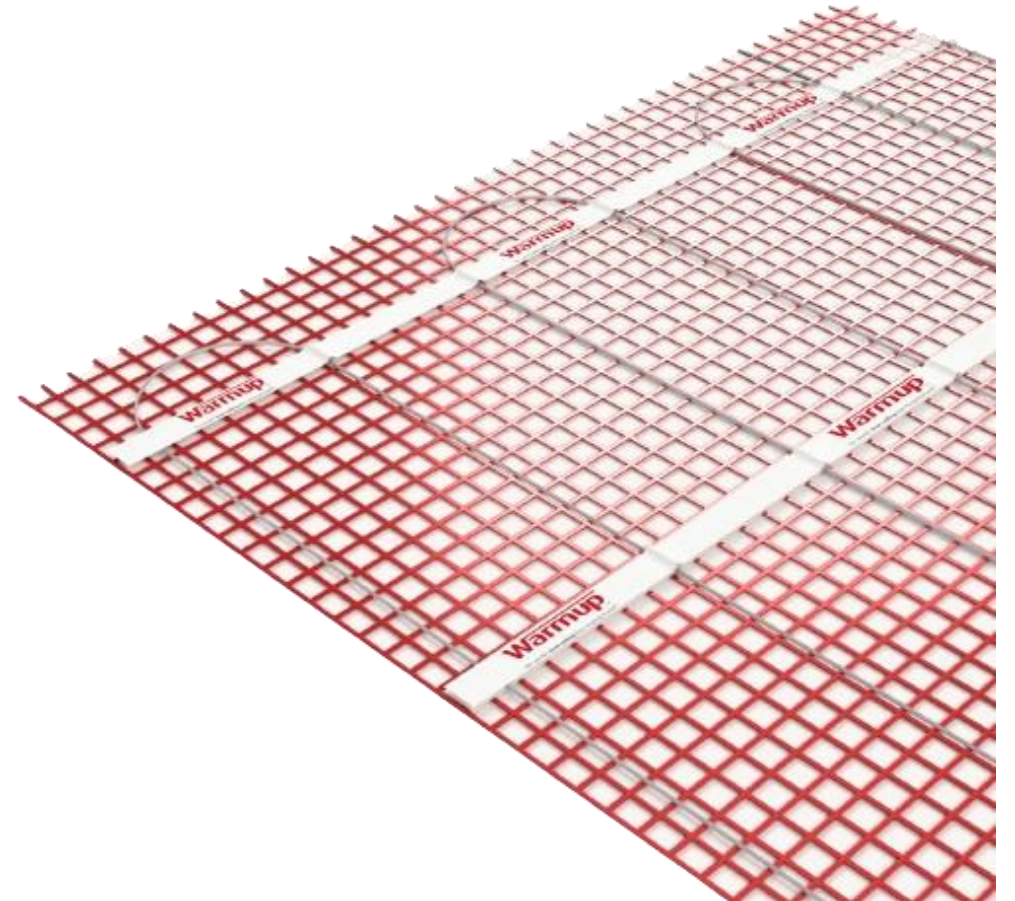
Our Range of Solutions

Our heating systems utilise radiant heat technology which is up to 35% more efficient than traditional heating methods. As we work towards a carbon neutral position, our team of experts can measure the total CO₂ saved per m² through the adoption of our systems – meaning we can stay on-track with our targets.

Warmup has a full range of solutions to lower CO₂ emissions. For example:

- Replace your central heating controls with Warmup Smart Controls to save 421kg CO₂ per year (17% reduction).
- Upgrade your kitchen and bathroom to Warmup Electric floor heating with smart controls to save 885kg CO₂ per year (35% reduction).
- Transform your home with a full Warmup Water floor heating system with a heat pump to save 2067kg CO₂ per year (82% reduction). Combine with a renewable energy source such as solar for a zero-carbon home heating system.

* Based on typical 100m² home meeting Part L 2002 building regulations and 2022 GHG Protocol emission factors.

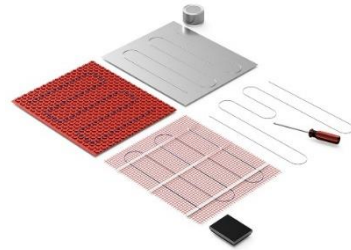




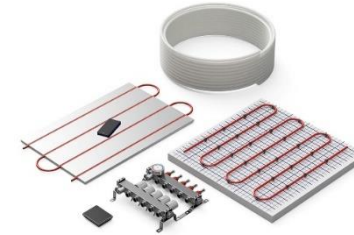
Our Range of Solutions



Central Heating Controls Upgrade



Electric Underfloor Heating and Controls



Water Underfloor Heating, Controls and Heat Pump

		Typical Cost	CO ₂ Saving/yr			Typical Cost	CO ₂ Saving/yr			Typical Cost	CO ₂ Saving/yr
1	Replace central heating control with Warmup Smart Control	£140	421kg (17%)	3	Bathroom renovation with electric underfloor heating	£580	95kg (4%)	6	Water underfloor heating ground floor. Warmup Smart Central heating controls	£1260	962kg (38%)
2	Multi zone Warmup Smart central heating controls	£280/£545	751kg (30%)	4	Electric underfloor heating in bathroom. Warmup Smart Central heating controls	£720	845kg (33%)	7	Water underfloor heating ground floor. Electric underfloor heating upstairs	£3970	1162kg (46%)
				5	Electric underfloor heating in kitchen & bathroom. Warmup Smart Central heating controls	£1090	885kg (35%)	8	Whole house underfloor heating with heat pump	£9520 (grants available)	2076kg (82%)



Our Pathway to Net Zero

In June 2019, the United Kingdom became the first major country to set a net-zero target for carbon emissions by 2050. The future of home heating is therefore not in fossil fuels but in renewable energy and more energy-efficient heating and cooling solutions. Warmup are proud to support BEAMA's Future Homes Standard initiative to future-proof new homes across the country through the specification of low-carbon heating systems. Our work within the sustainable energy sector will help make our world a greener place.

From 2024 to 2028 we plan to facilitate an additional **888,000t*** of lifetime CO₂e savings. We are committed to sharing our values and mission with our customers.

These savings are equivalent to over **two million barrels of oil** used.

These **reductions in CO₂e will increase** each year as we welcome more users.

** Internal calculation based on GHG protocol methodology (category 11 – use of emissions). Assumes a lifetime of products for 25 years vs gas boiler & radiators.*





Our Pathway to Net Zero



Warmup is a sustainable business partner & is committed to Net Zero.



We were awarded an EcoVadis Bronze Medal for our sustainability efforts in areas including human rights, ethics, and procurement.



Our systems are up to 35% more efficient than traditional heating systems.



We achieve this through the Radiant Effect, lower water temperatures, and Smart control systems.



We invest in R&D and proprietary technology to back up our claims.



Efficiency of Our Products

Underfloor heating is up to 35% more efficient than traditional heating systems.

Underfloor heating is a **cleaner**, more **sustainable** way to heat a building. Warmup's systems require **less energy** to reach optimal comfort temperatures than traditional radiators and our range of heat controls will maximize on this **energy performance**.

From our international centres of expertise, including our in-house research centre in Germany, we are continually developing our existing product range whilst working on new sustainable heating solutions to meet the ever-changing heating requirements of today's consumers.

Our systems utilise the Radiant Effect

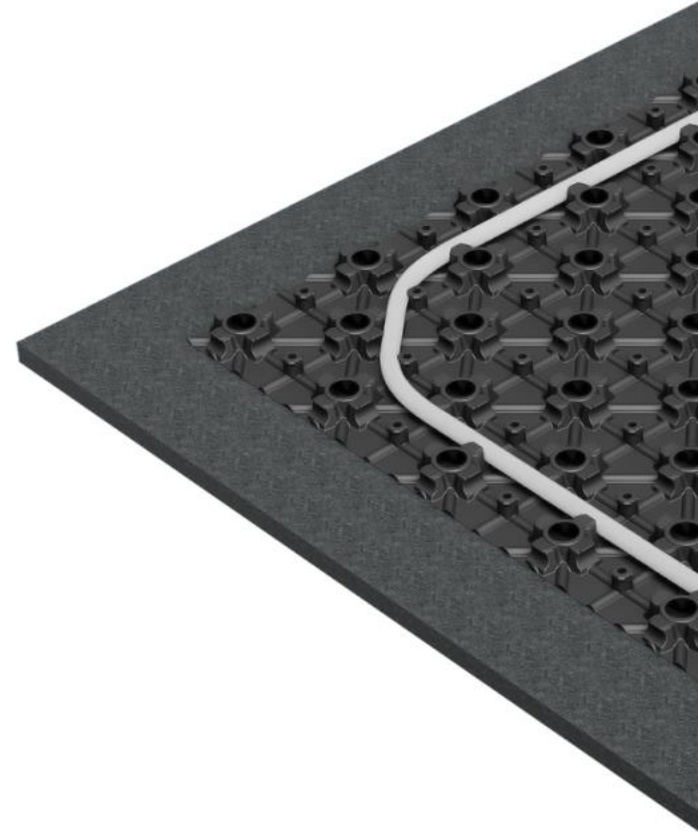
Warmup's heating systems utilise radiant heat technology to gently warm the people and objects in a room directly, from the ground up. This process reduces heat loss and uses less energy and lower air temperatures to reach optimal comfort temperatures compared to traditional heating systems.

Our systems require lower water temperatures

Our water systems operate at lower temperatures than other heating systems whilst still retaining the same level of warmth and also improves the efficiency of the heat source, including low-carbon heat sources such as ground or air source heat pumps and biomass boilers.

Our systems are controlled more efficiently

Smart multi-zone thermostats improve energy performance by ensuring only the spaces that are required to be warm are heated. Our Smart technology facilitates automatic heat functionality; offering radiant warmth at the right temperature, at the right time, automatically with less wasted energy.





The Radiant Effect

Our systems utilise the Radiant Effect

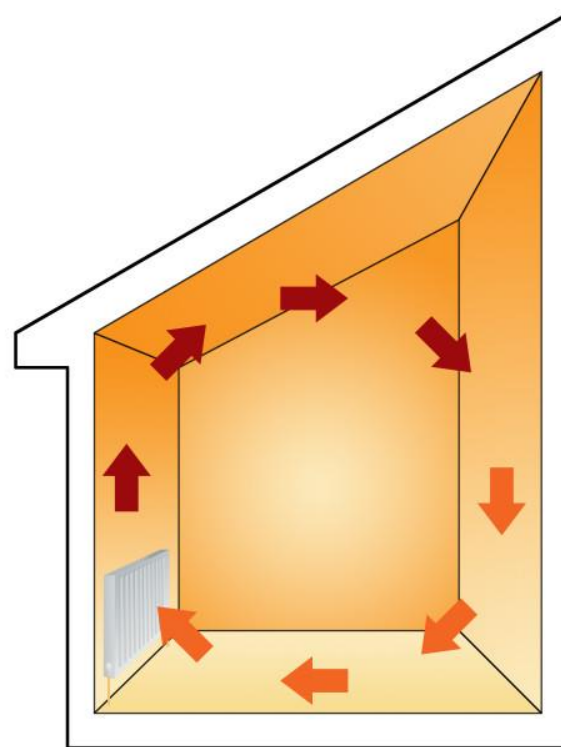
Warmup's heating systems utilise radiant heat technology to gently warm the people and objects in a room directly, from the ground up. This process reduces heat loss and uses less energy and lower air temperatures to reach optimal comfort temperatures compared to traditional heating systems.

Example: A 20m² living room with 'typical' insulation levels of a UK home and a target comfort temperature of 18.5°C

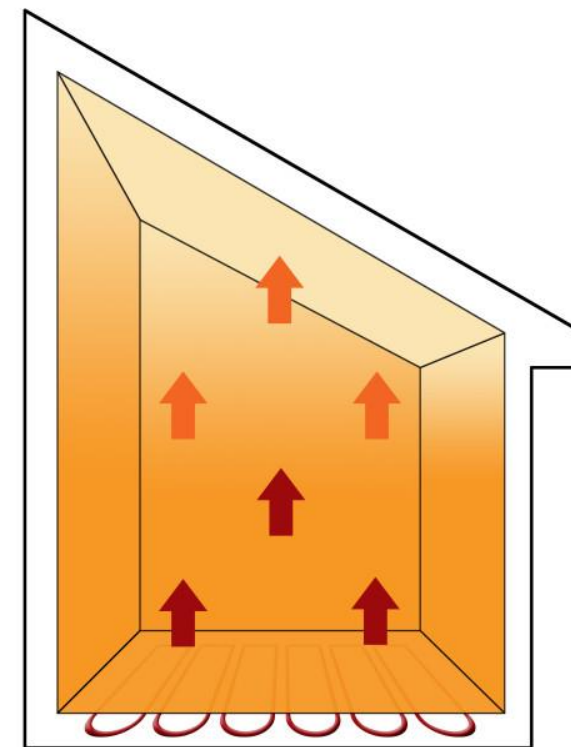
Required air temperature with **UFH** = 18.5°C

Required air temperature with **radiators** = 19.1°C

Saves 505 kWh/yr (8% reduction in energy use as a result of UFH radiant effect)



Radiator Heating



Underfloor Heating



Lower Water Temperatures

Our systems require lower water temperatures.

Our water systems operate at lower temperatures than other heating systems whilst still retaining the same level of warmth which improves the efficiency of the heat source, including low-carbon heat sources such as ground or air source heat pumps and biomass boilers.

Radiator operating temperatures:

Flow: 55°C Return: 50°C

Typical heat pump efficiency coefficient: **2.7**

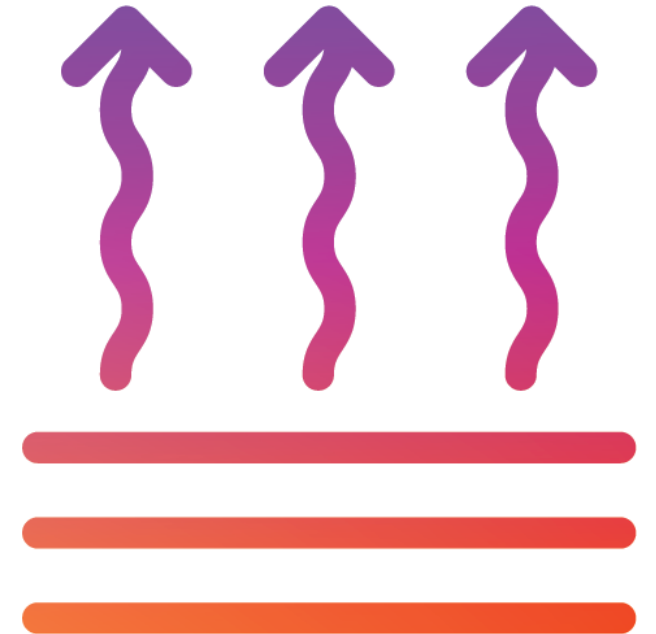
Underfloor heating operating temperatures:

Flow: 35°C Return: 30°C

Typical heat pump efficiency coefficient : **3.2**

(+18.5% reduction in energy usage vs radiators)

Underfloor heating also uses a larger mass of water than radiator systems, which works more effectively with the limited cycles of heat pumps.





Smart Controls

Our systems are controlled more efficiently.

Smart multi-zone thermostats improve energy performance by ensuring only the spaces that are required to be warm are heated. Our Smart technology facilitates automatic heat functionality; offering radiant warmth at the right temperature, at the right time, automatically with less wasted energy.





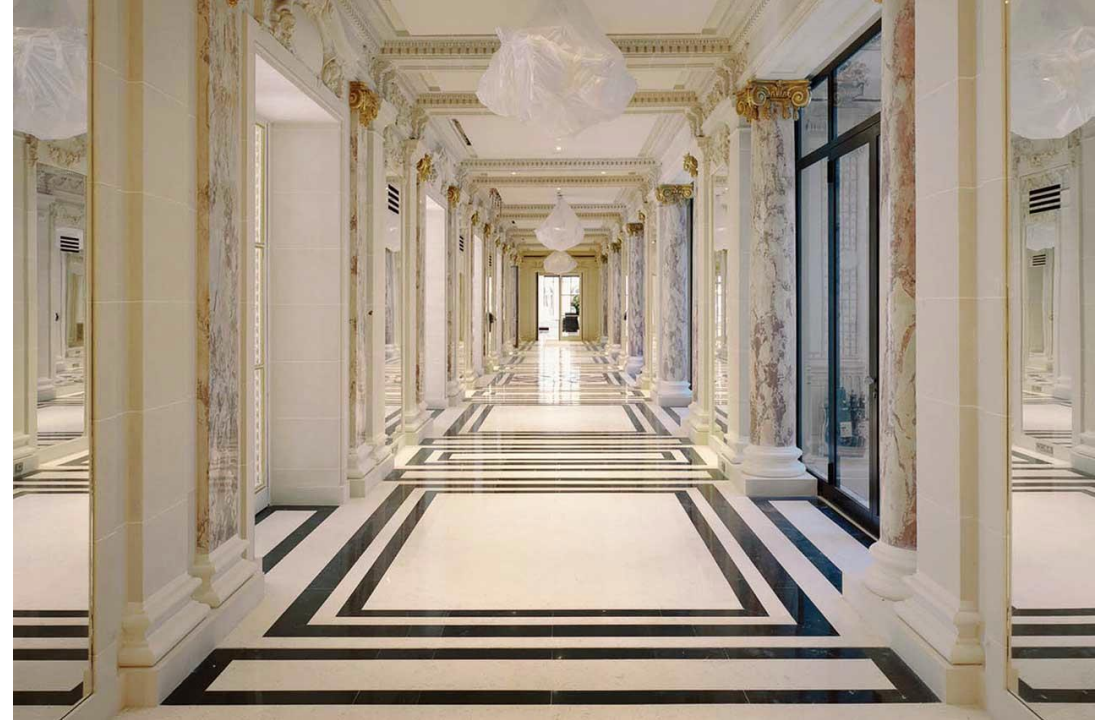
Case Studies

Warmup products are helping to reduce the carbon footprint of over 2.7 million homes across the world.

Our Global Projects Division work with leading developers in both the domestic and commercial sector to create a more sustainable future for the construction industry and with our latest advancements in hydronic technology, we are positioning ourselves as the go-to partner for radiant heating and cooling solutions.

"The assistance provided by Warmup is first class. Right from the warehouse team who load up our vans in the mornings to the accounts department, the project managers, the directors - they offer us support constantly, allowing us to do our job smoothly. I would recommend Warmup to anyone in our profession. The best product, the best value for money and the best service"

Adam Brundell, Circa Installations Limited.



The Peninsula Hotel, Paris, France



Running Costs

Running Costs

Running costs are estimates based on building standards and Warmup's own testing. For full details click here.

Project Size: 100.0 m² Electricity Cost: 33.9 p/kWh Gas Cost: 10.4 p/kWh Insulation Levels: 1996-2002

Also Upgrade to a Heat Pump?

System	Typical Running Cost	Reduction in annual CO2 emissions	Estimated annual energy use
Electric Underfloor Heating	£3,191 /year	1,686 kg	9,425 kWh
Hydro Underfloor Heating	£1,025 /year	1,078 kg	9,856 kWh
Smart Home Upgrade	£1,332 /year	458 kg	12,809 kWh

Additional costs and savings for each system:

- Electric Underfloor Heating: Increase vs. traditional radiator system: £1,633 /year
- Hydro Underfloor Heating: Saving vs. traditional radiator system: £534 /year
- Smart Home Upgrade: Saving vs. traditional radiator system: £227 /year

Each system includes a "Get an instant quote" button.

The enhanced energy performance of our range of heating systems and controls can lower both the carbon footprint of a property and its running costs. Warmup are developing advanced tools to assist our customers and industry partners in discovering exactly how much they could save with our technology at the click of a button.



Progress Graphs

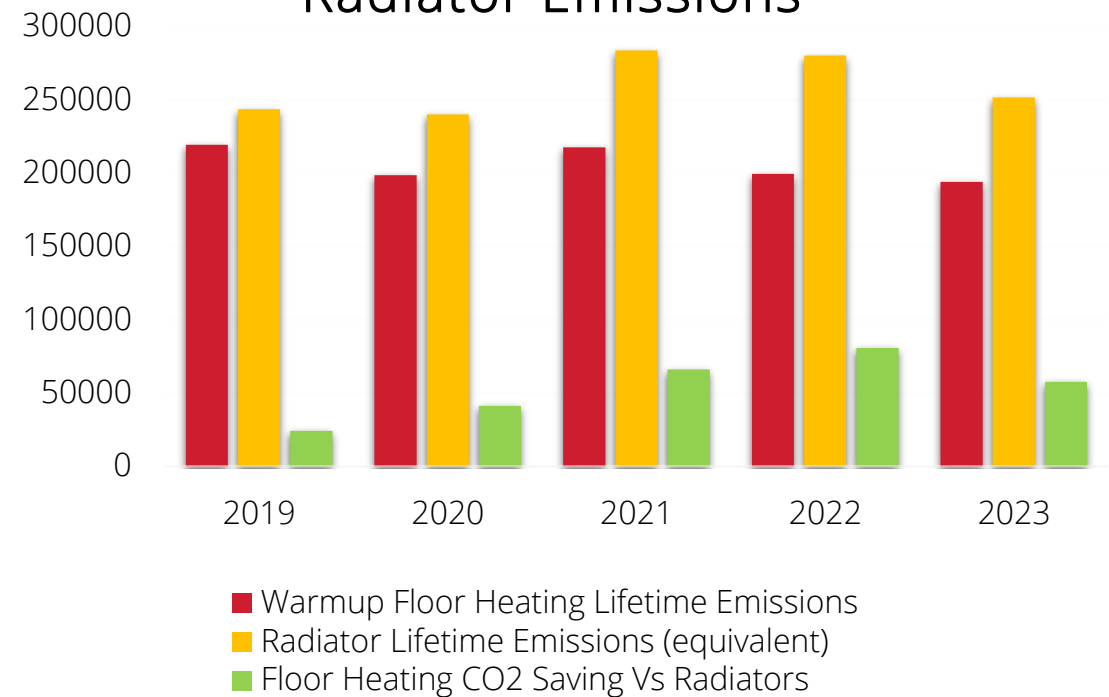
The UK electricity factor is prone to fluctuate from year to year as the fuel mix consumed in UK power stations (and auto-generators) and the proportion of net imported electricity changes.

These annual changes can be large as the factor depends very heavily on the relative prices of coal and natural gas as well as fluctuations in peak demand and renewables. Given the importance of this factor, the explanation for fluctuations will be presented here henceforth.

In the 2019 GHG Conversion Factors, there was a **10%** decrease in the UK Electricity CO₂e factor compared to the previous year. In the 2020 update, the CO₂e factor decreased (compared with 2019) again by **9%**. In the 2021 update, the CO₂e factor again decreased by **9%** (in comparison to the 2020 update). The above decreases are all due to a decrease in coal use in electricity generation and an increase in renewable generation.

In the 2023 update, the UK Electricity CO₂e factor has increased by **7%** (compared to the 2022 update) due to an increase in natural gas use in electricity generation and a decrease in renewable generation.

Warmup Floor Heating Lifetime Emissions (tCO₂) vs Equivalent Radiator Emissions





Internal Sustainability

As well as reducing the energy usage, and energy wastage, of our customers, we are also committed to reducing the energy usage of our operations. At Warmup, we refer to this as 'internal' sustainability.

We have **clear goals, objectives, procedures, and policies** in place to manage our CO₂e emissions.

We focus on three strategic areas of our business; **environment, labour & human rights, and ethics.**

We are **dedicated to assessing our carbon footprint** throughout our supply chain, from product design and development to freight transportation methods and our own office emissions.

Our team are expected to ensure that **environmental issues are given adequate consideration** whilst conducting their own works. We pride ourselves on delivering the best service possible and do so by having the **industry's best people on our team.**



GHG Methodology

Warmup has applied the GHG (Greenhouse Gas) Protocol methodology (<https://ghgprotocol.org>) to accurately calculate its carbon emissions. The process involved a comprehensive assessment of various emission sources which are detailed in the body of the report.

By adhering to the GHG methodology, Warmup ensured transparency and accountability in its carbon calculations, enabling the company to identify key areas for emission reduction and further enhance its commitment to combat climate change.

These include direct and indirect emissions from electricity to run our buildings, manufacturing, transportation, and energy consumption throughout the product lifecycle.

GHG Protocol Scope and Boundaries: Our sustainability report covers Scope 1, Scope 2, and selected Scope 3 emissions as defined by the GHG Protocol.*

**All our GHG figures are pending verification from an external verified body and have been calculated to the best of our ability. Once the figures have been verified, they will be published externally.*





Operational Boundaries

Scope	Sub-scope	Activity	Essential?	Data Quality
Scope 1 – Direct Emissions	1.1	Stationary combustion	Yes	High
	1.2	Mobile Combustion	Yes	High
	1.3	Fugitive emissions from air-conditioning	Yes	Medium
	1.4	Other fugitive or process emissions	No	No
Scope 2 -Energy	2.1	Purchased electricity – location based	Yes	High
	2.2	Purchased electricity – market based	No	No
	2.3	Purchased heat and steam	No	No
Scope 3 – Upstream	3.1	Purchased goods and services	Yes	Medium
	3.2	Capital goods	No	No
	3.3	Fuel and energy related activities (not included in scope 1 or scope 2)	No	No
	3.4	Upstream transportation and distribution	Yes	Medium
	3.5	Waste generated in operations	Yes	Medium
	3.6	Business travel	Yes	Medium
	3.7	Employee commuting	No	No
	3.8	Upstream leased assets	No	No
Scope 3 - Downstream	3.9	Downstream transportation and distribution	Yes	Medium
	3.1	Processing of sold products	No	No
	3.11	Use of sold products	Yes	High
	3.12	End of life treatment of sold products	No	No
	3.13	Downstream leased assets	No	No
	3.14	Franchises	No	No
	3.15	Investments	No	No

Calculating Warmup's total climate impact is an extensive process, especially for emissions within scope 3.

An impact analysis was performed to determine the boundaries of Warmup's emissions in each category to identify the overall impact. High impact emissions categories are included whilst minor or no impact categories are excluded.

Overall, Warmup's reported emissions can be considered comprehensive, and can be expected to cover at least 98% of the entire value chain emissions.

Scope 2.1 emissions include all the heating requirements of Warmup premises some of which utilise their own products as heating methods.

Employee commuting is kept to a minimum with many employees utilising a work from home option.

Scope 3.11 emissions are based on an average kWh consumption for all systems in Warmup's electrical & hydronics ranges over their lifespan.



Scopes of Emissions

SCOPE 1



- Gas for Buildings & Fleet
- >1% total emissions
- Electrification of buildings & fleet

SCOPE 2



- Electricity for buildings
- >1% total emissions
- Solar / renewables

SCOPE 3



- Products, transport, waste
- 99% of total emissions
- Product design, optimising transport, *'remove, reduce, reuse, recycle', use of emissions*



Scopes 1, 2, & 3

Scope 1 includes direct emissions from company-owned or controlled sources, such as fuel combustion in company vehicles, gas emissions from manufacturing processes, and leakages.

Scope 2 covers indirect emissions from purchased electricity.

Scope 3 includes emissions from activities that are not directly owned or controlled by the company that occur upstream and downstream in the value chain, such as purchased goods and services and transportation.

Total greenhouse gas emissions are quantified in carbon dioxide equivalents (CO₂e). This recognises that different greenhouse gases (Carbon dioxide, Nitrogen oxides, Methane etc.) have different global warming factors.

For each emission calculation, relevant GHG protocol emission drivers and factors have been used. The emission factors come from DEFRA, EPA, and GHG.

All our GHG figures are pending verification from an external verified body and have been calculated to the best of our ability.

Once the figures have been verified, they will be published externally.



Summary of Emissions

Group Overview CO₂e (tonnes)

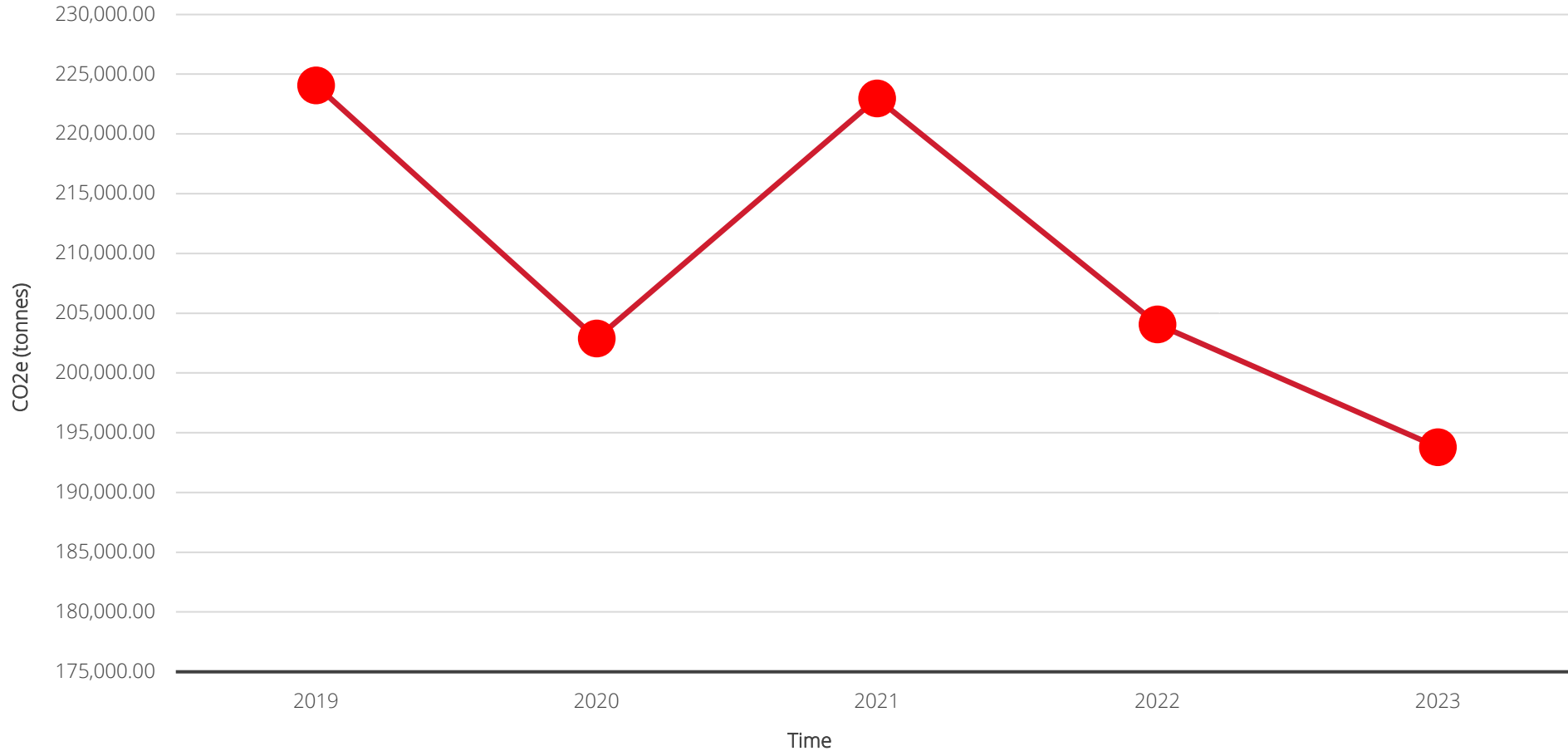
Category	2019	2020	2021	2022	2023
TOTAL	224,273.35	202,864.12	223,100.69	204,619.95	193,887.50
Scope 1	136.02	46.69	78.45	101.00	57.91
Scope 2	72.90	52.88	56.97	55.68	48.65
Scope 3	224,064.43	202,764.55	222,964.77	204,463.27	193,780.94

2030 Target – 112,415.33 tonnes CO₂e



Visualised Summary

Total Summary of Emissions in CO₂e (tonnes)

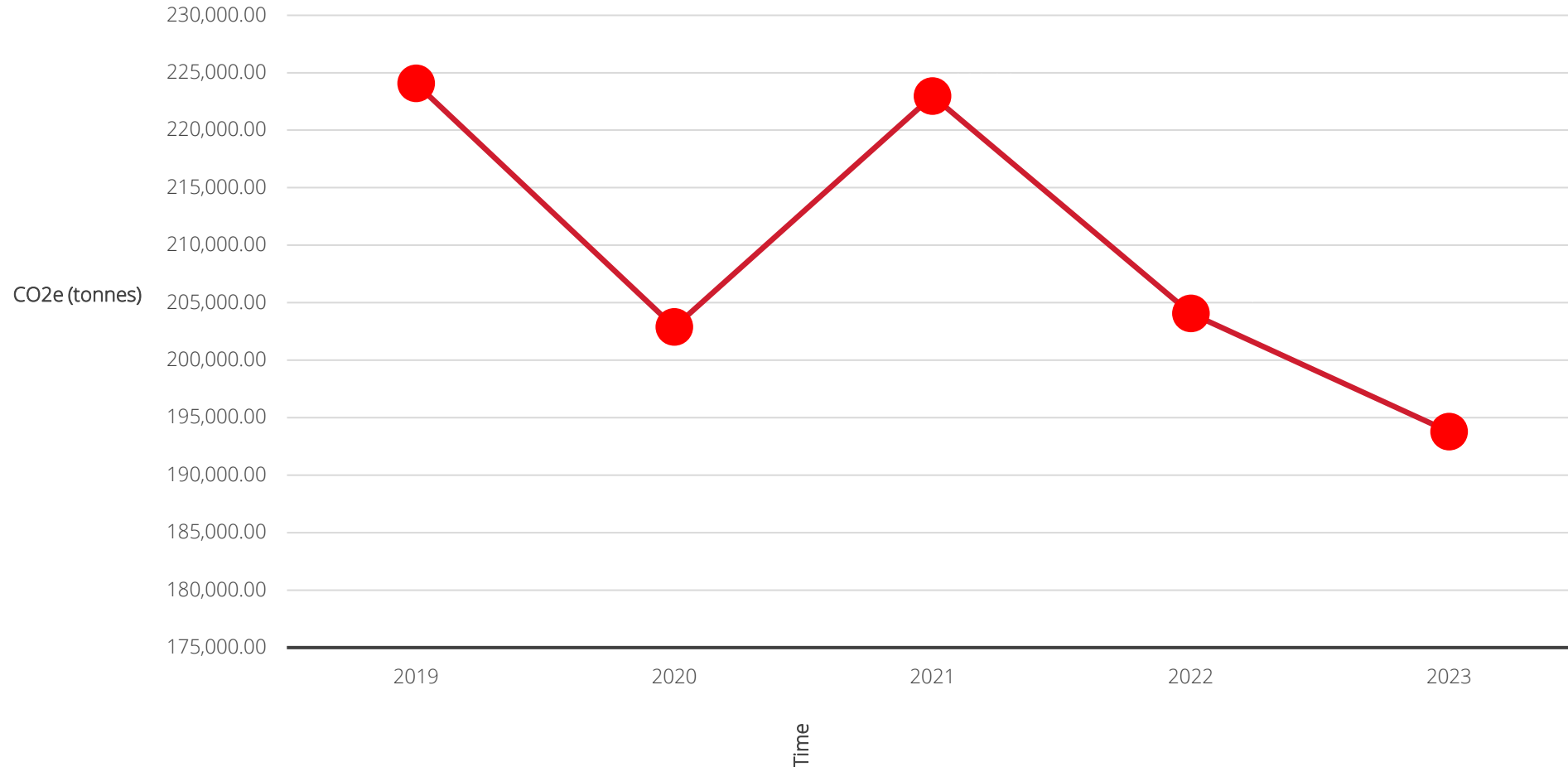


2030 Target – 112,136.675 tonnes CO₂e



Visualised Summary

Total Summary of Emissions in CO₂e (tonnes)



2030 Target – 112,136.675 tonnes CO₂e



Emissions: Scope 1

We have made fantastic progress in reducing our emissions from our fleet & heating our buildings. In 2023, we have already exceeded our 2030 target of halving our emissions for scope 1.

In the UK, we have moved away from the use of gas as a primary energy source in all our buildings. During 2022, we handed back our oldest and least efficient building which was run off gas powered heating and replaced it with a new facility with much higher levels of insulation and which runs off electricity and this is reflected in our 2023 figures.

In terms of our fleet, we have transitioned our fleet to electric so are no longer relying on fossil fuels to carry out our trips for company owned vehicles. At the end of 2023 **over 70%** of our fleet was fully electric, with **over 20%** plug in hybrid models. Less than 10% of our company owned fleet was still running solely on petrol and diesel fuel sources.





Emissions: Scope 1 Data



Scope 1 Overview CO₂e (tonnes)

Category	2019	2020	2021	2022	2023
TOTAL	136.02	46.69	78.45	101.00	57.91
Stationary Combustion	20.75	19.28	36.10	37.02	21.30
Mobile Combustion	115.27	27.42	42.35	63.98	36.61

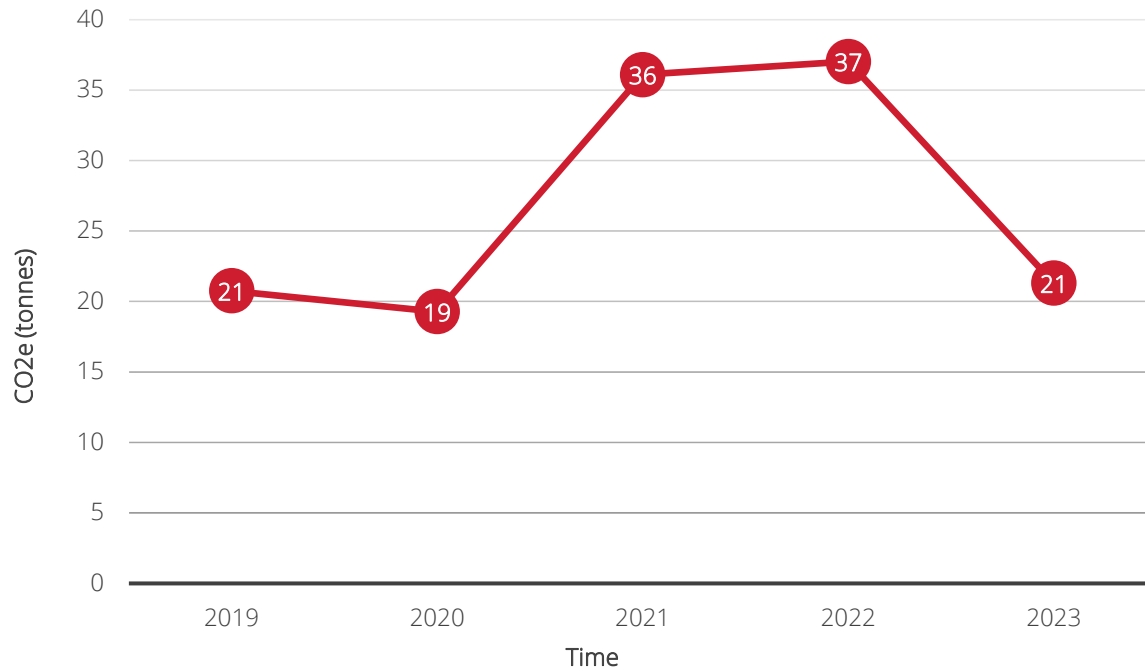
2030 Target – 68.01 tonnes CO₂e



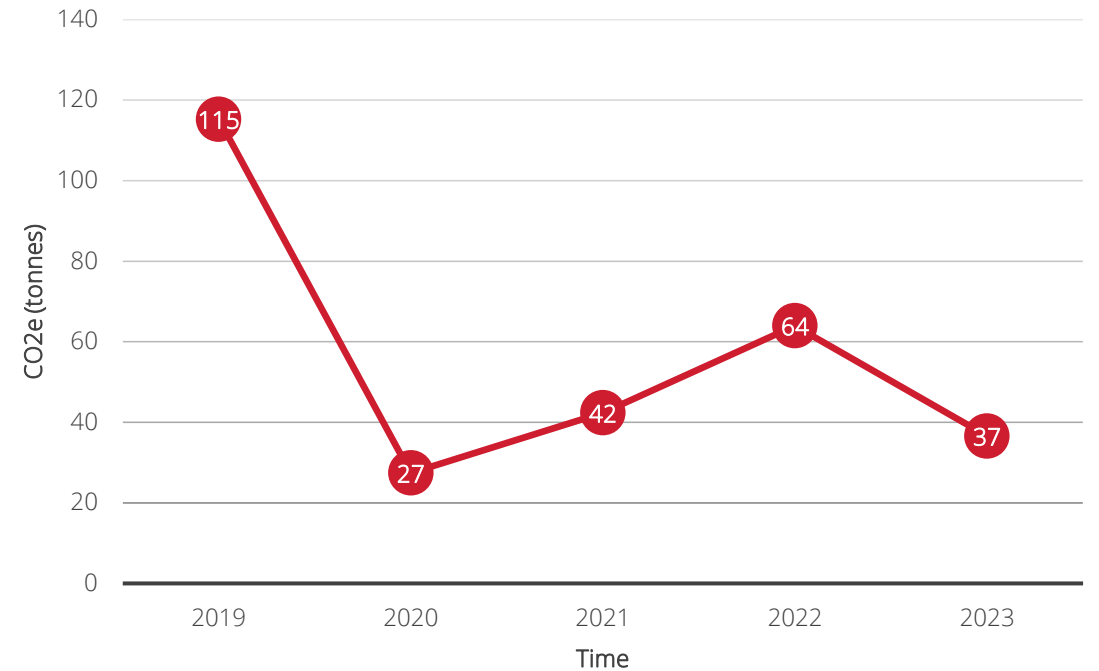
Visualised Scope 1

Total Scope 1 Overview CO₂e (tonnes)

Scope 1: Stationary Combustion



Scope 1: Mobile Combustion



2030 Target – 68.01 tonnes CO₂e

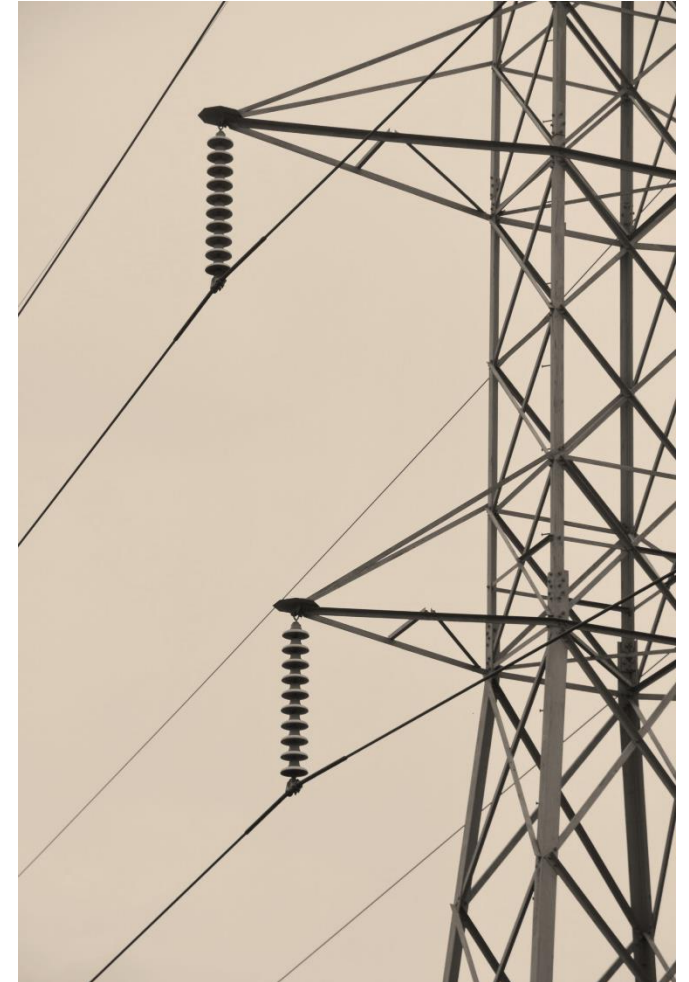


Emissions: Scope 2

As we expand our global operations and adopt the usage of electricity instead of gas to power our buildings, our electricity demands will increase. However, through our energy conservation measures, we have reduced our electricity emissions by a third already.

These measures include:

- The use of solar panels on our buildings, creating our own green energy. Our main HQ in London utilises solar energy and we are looking to expand this initiative through the installation of solar panels across our other operations.
- Committing to renewable energy tariffs for our Head Office, with plans to roll this out across of the rest of our operations upon contract renewal.
- Educating staff to minimise the use of unnecessary electricity.
- Using energy-efficient operational equipment.





Emissions: Scope 2 Data



Scope 2 Overview CO₂e (tonnes)

Category	2019	2020	2021	2022	2023
Purchased Electricity	72.90	52.88	56.97	55.68	48.65

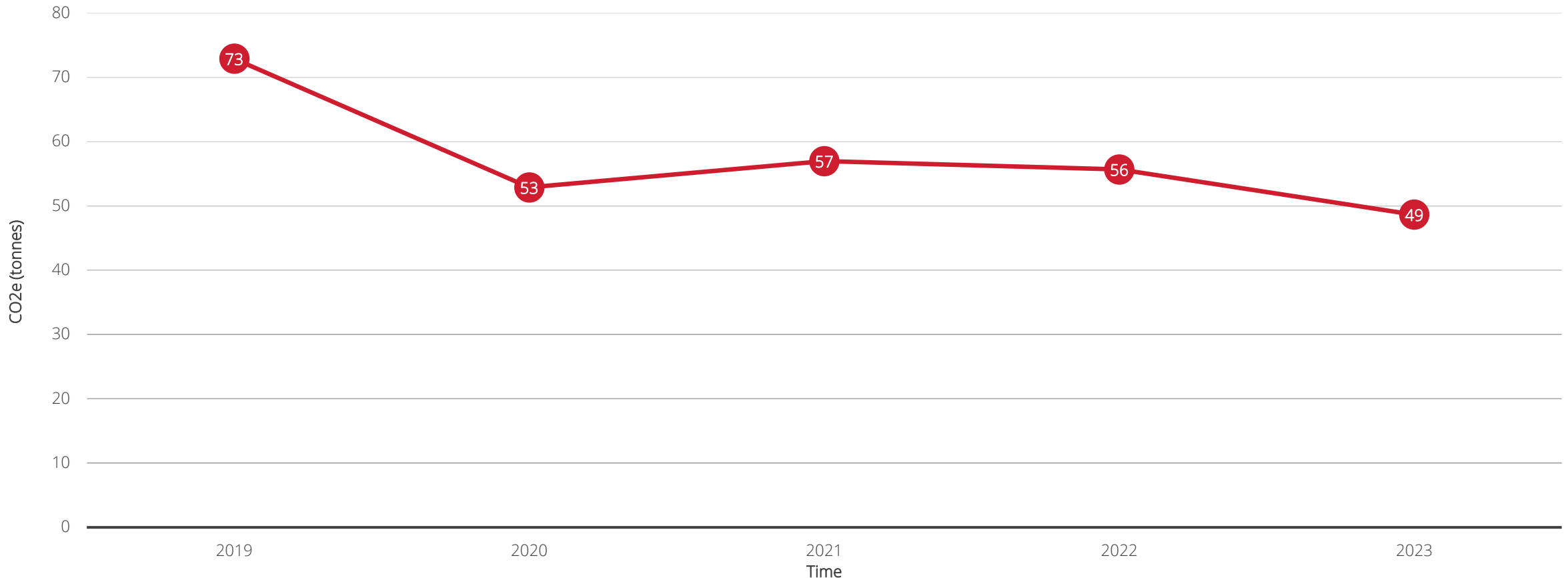
2030 Target – 36.45 tonnes CO₂e



Visualised: Scope 2

Total Scope 2 Overview CO₂e (tonnes)

Scope 2: Purchased Electricity



2030 Target – 36.45 tonnes CO₂e



Summary Emissions: Scope 3 Data



Scope 3 – Overview CO₂e (tonnes)

Category	2019	2020	2021	2022	2023
TOTAL	224,064.430	202,764.550	222,964.770	204,464.000	193,780.941
Purchased Goods & Services	3616	2878	3921	3395	2505
Upstream Transport & Distribution	377	359	706	855	418
Recycled Waste	36.27	23.82	25.21	15.23	7.815
General Waste	18.14	10.01	7.83	10.33	6.646
Business Travel	22.02	4.65	10.82	79.97	89.20
Downstream Transport & Distribution	651	594	687	627	726
Use of Emissions	219,343.99	198,794.76	217606.91	199,481.47	190,028.28

2030 Target – 112,032.215 tonnes CO₂e



Summary Emissions: Scope 3 Data



Scope 3 – Overview CO₂e (tonnes)

Category	2019	2023	Change (%)
TOTAL	224,064.430	193,780.941	-13.5%
Purchased Goods & Services	3616	2505	-30.7%
Upstream Transport & Distribution	377	418	+10.9%
Recycled Waste	36.27	7.815	-78.5%
General Waste	18.14	6.646	-63.3%
Business Travel	22.02	89.20	+305%
Downstream Transport & Distribution	651	726	+11.5%
Use of Emissions	219,343.99	190,028.28	-13.4%

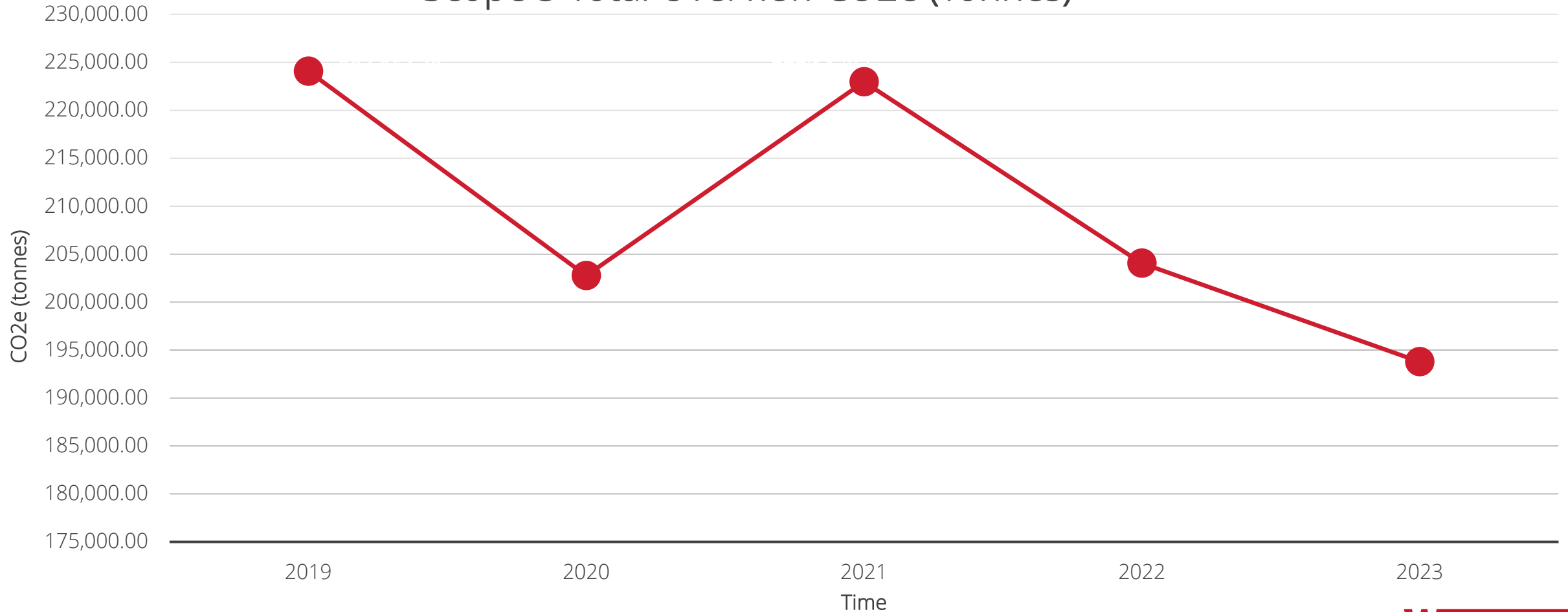
2030 Target – 112,032.215 tonnes CO₂e



Visualised: Scope 3

Total Scope 3 Overview CO₂e (tonnes)

Scope 3 Total Overview CO₂e (Tonnes)



2030 Target – 112,032.215 tonnes CO₂e



Emissions: Scope 3 – Purchased Goods & Services

As a company who deals with physical products that you can feel and touch, purchased goods and service makes up a large proportion of our total emissions. While we know this is significantly less than if we were selling traditional heating methods such as radiators, our work doesn't stop there. We have already made good progress on reducing the emissions of our purchased goods and services, having **reduced by them 30%** in 2023. We will continue to reduce them by:

- Introducing recycled materials in our products & packaging. E.g., Our Ultra-12, Nexxa-12 & Nexxa ranges contain **recycled materials**.
- Optimising our packaging and using less materials. Implementing just one new box size on a core range is estimated to save **5.5 tonnes** of carbon every year.
- Incorporating sustainability into product design for the most **efficient** manufacturing process & **reducing materials** wherever possible.





Emissions: Scope 3 – Purchased Goods & Services



Purchased Goods & Services CO₂e (tonnes)

Category	2019	2020	2021	2022	2023
Purchased Goods & Services	3616	2878	3921	3395	2505

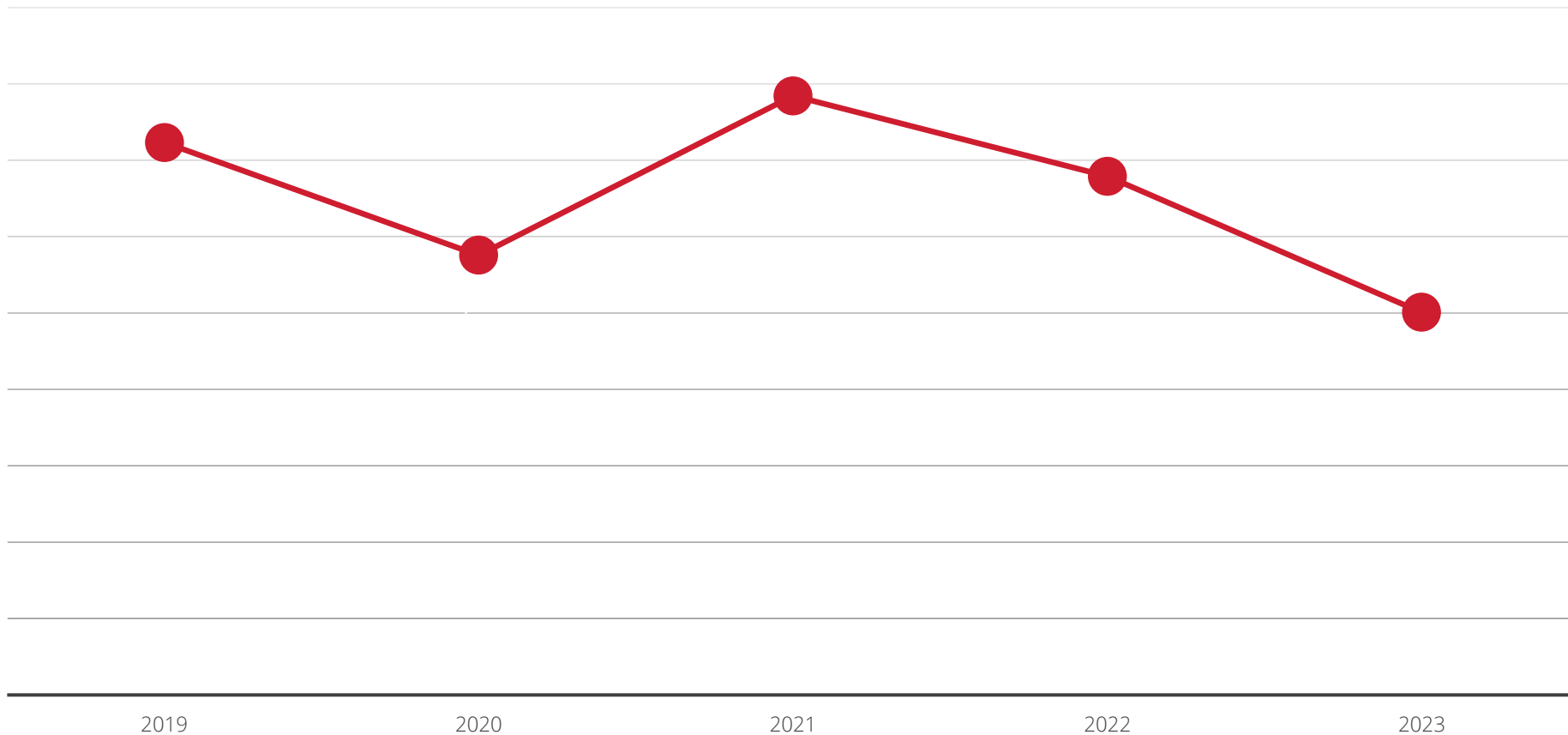
2030 Target – 1,808 Tonnes CO₂e



Visualised: Purchased Goods & Services

Overview CO₂e (tonnes)

Scope 3: Purchased Goods & Services



2030 Target – 1,808 Tonnes CO₂e

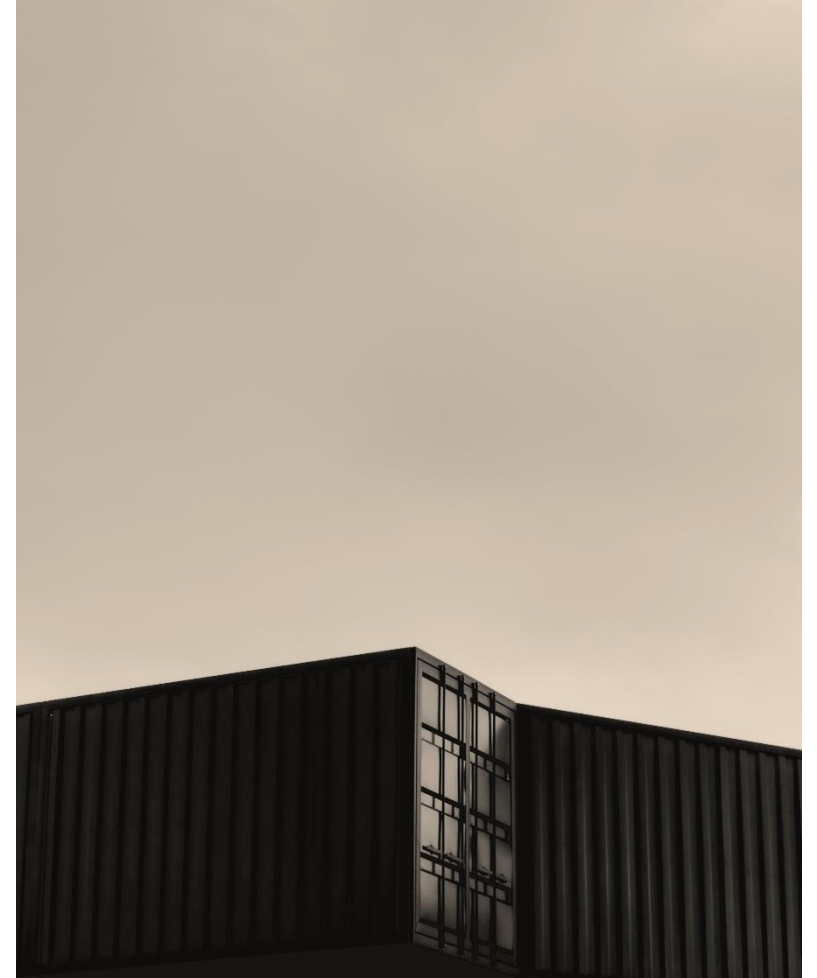


Emissions: Scope 3 – Transport & Distribution

Warmup is committed to incorporating sustainable practices throughout its operations, including its shipping of goods around the world. Warmup's sustainability policy for shipping goods aims to minimize its environmental impact while ensuring efficient and reliable delivery.

We aim to maximise the space in every parcel, every pallet, and every container, and actively seek to reduce our carbon footprint by optimising transportation routes, consolidating shipments, utilizing low-emission vehicles, and avoiding air travel where possible.

We are actively collaborating with our logistics partners who share our sustainability values and encourage them to adopt greener practices. By implementing these measures, Warmup strives to contribute to a more sustainable future by reducing the carbon emissions for waste, conserving resources, and minimizing greenhouse gas emissions associated with its shipping operations.





Emissions: Scope 3 – Upstream Transport & Distribution

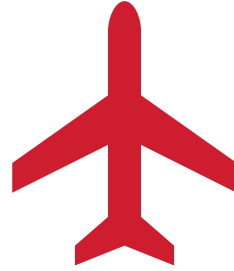


Upstream Transportation & Distribution CO ₂ e (tonnes)					
Category	2019	2020	2021	2022	2023
TOTAL	377	359	707	854	419
Road	48	61	82	134	44
Sea	279	228	407	659	329
Air	50	70	218	61	46

2030 Target – 188.50 Tonnes CO₂e



Emissions: Scope 3 – Downstream Transport & Distribution



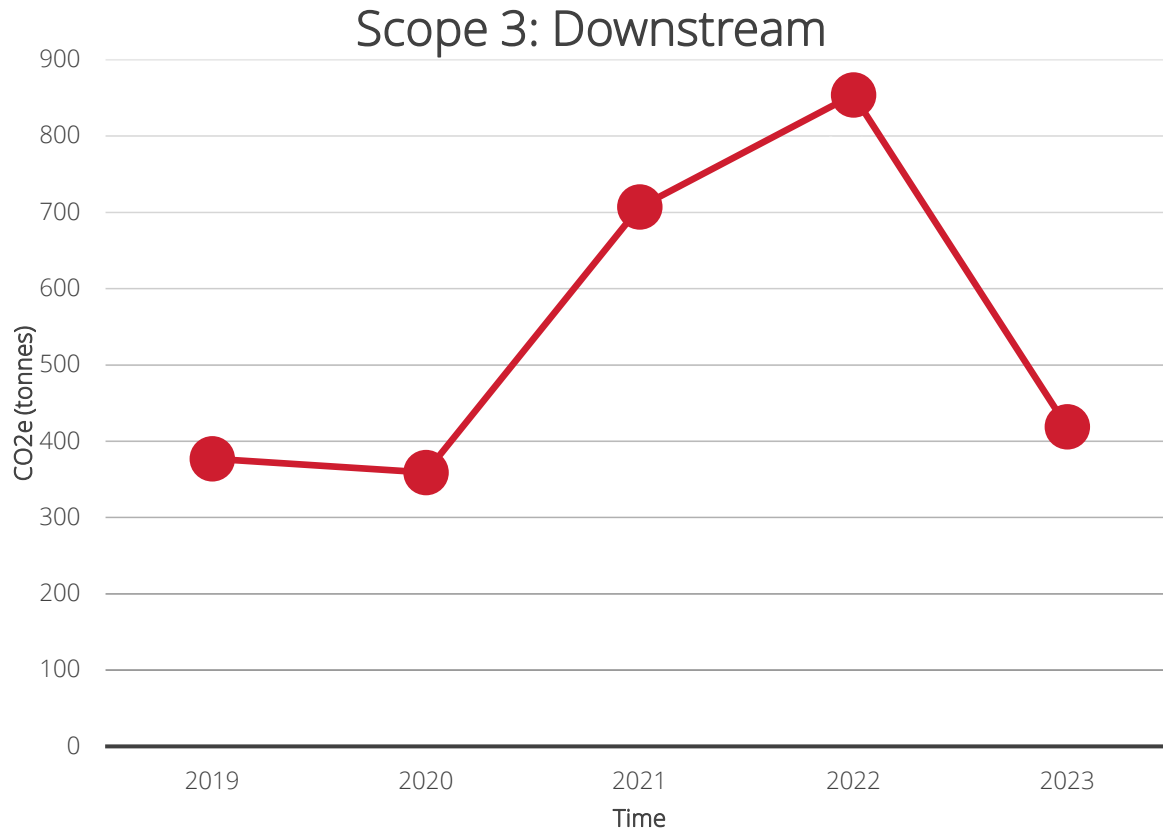
Downstream Transportation & Distribution CO ₂ e (tonnes)					
Category	2019	2020	2021	2022	2023
TOTAL	651.00	593.97	686.80	627.40	725.90
Road	469.10	428.30	533.00	502.90	618.80
Sea	27.00	12.10	3.10	4.90	1.60
Air	154.90	153.30	150.70	119.60	105.50

2030 Target – 325.50 Tonnes CO₂e

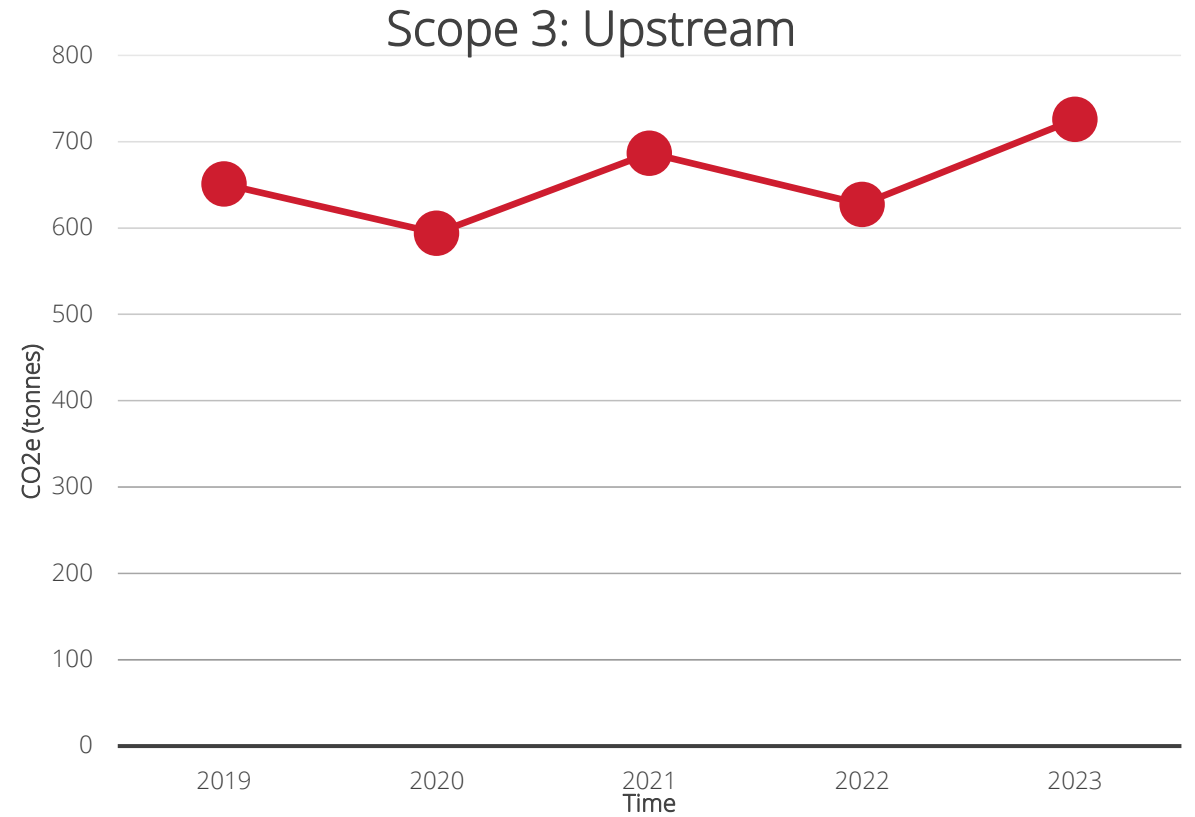


Visualised: Transport & Distribution

Overview CO₂e (tonnes)



2030 Target – 325.50 Tonnes CO₂e



2030 Target – 188.50 Tonnes CO₂e



Emissions: Scope 3 – Operational Waste

As a business who deals in physical products within the construction industry there is a degree of waste from our operation. Our main focus is on minimising the waste, especially that of which goes to landfill. We have confirmed that all of our waste providers divert our waste from landfill which has **led to us reducing our emissions by over 73%!**

We promote recycling wherever possible and ensure responsible disposal practices. Warmup actively promotes a culture of waste reduction and encourages employees to adopt practices such as reusing packaging materials, implementing efficient inventory management systems, and reducing unnecessary packaging. The majority of our warehouse packaging is made from recycled cardboard which of course can be recycled.

We also prioritise the use of recyclable materials and partners with waste management organizations to ensure proper sorting and recycling of our waste streams. Warmup continuously seeks opportunities to optimize its warehouse layout and processes to minimize waste and improve resource efficiency. By adhering to these principles, Warmup strives to create a sustainable warehouse operation that contributes to a circular economy and minimizes its environmental impact.





Emissions: Scope 3 – Operational Waste



Waste CO ₂ e (tonnes)					
Category	2019	2020	2021	2022	2023
General Waste	18.14	10.01	7.83	10.33	6.646
Recycled Waste	36.27	23.82	25.21	15.23	7.815

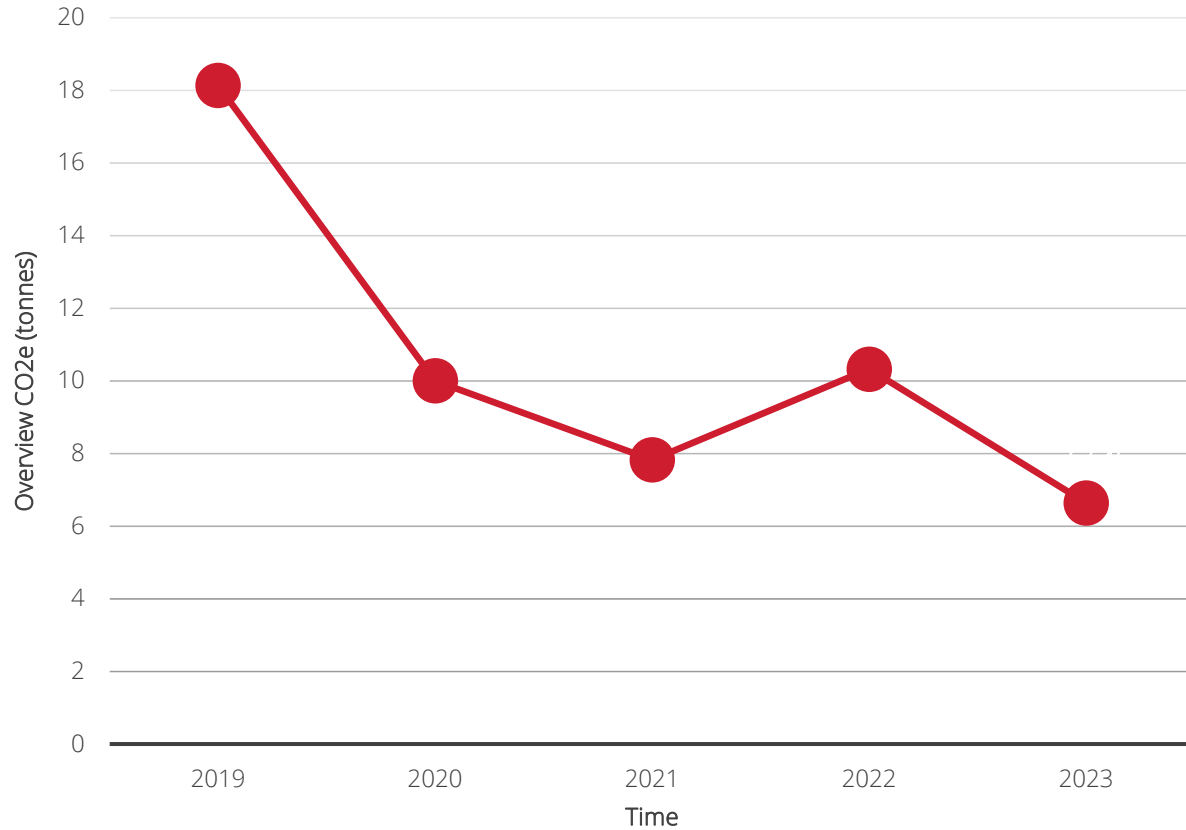
2030 Targets – 9.07t CO₂e & 18.14t CO₂e



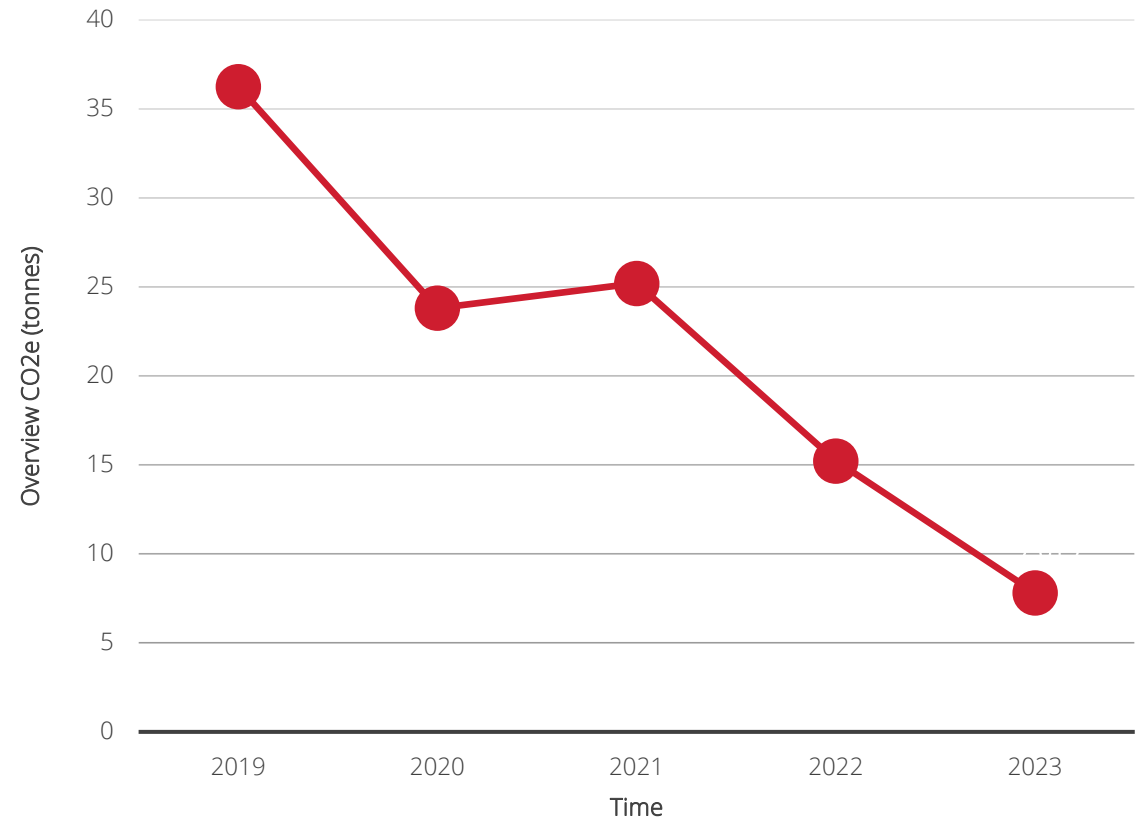
Visualised: Operational Waste

Overview CO₂e (tonnes)

Scope 3: General Waste



Scope 3: Recycled Waste



2030 Targets – 9.07t CO₂e & 18.14t CO₂e



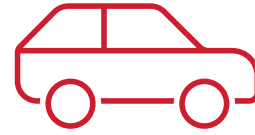
Emissions: Scope 3 – Business Travel

While technology today means we do not need to physically travel to every meeting, we appreciate that sometimes nothing can beat meeting face-to-face with our customers, suppliers, and stakeholders. When travel is unavoidable, Warmup promotes the use of public transportation or carpooling to reduce carbon emissions. In terms of air travel, this is only used whenever essential and there are no other reasonable means possible.





Emissions: Scope 3 – Business Travel



Business Travel CO₂e (tonnes)

Category	2019	2020	2021	2022	2023
TOTAL	22.17	4.63	10.10	86.10	89.20

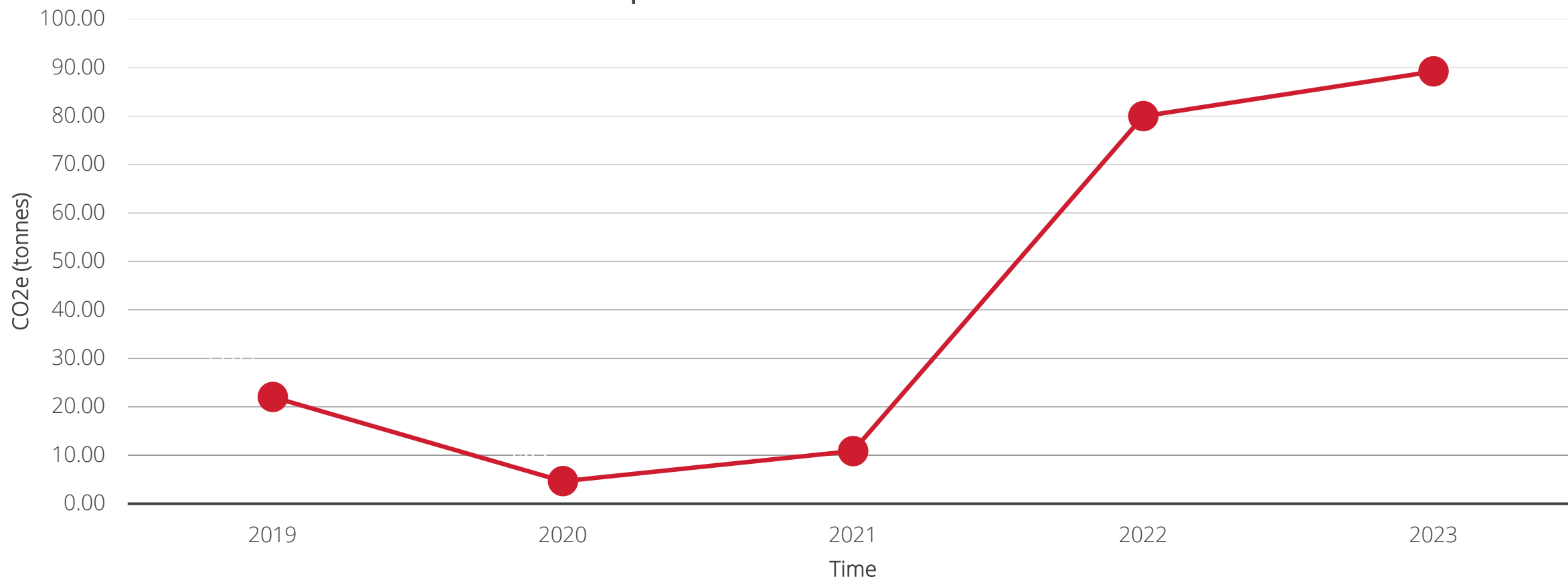
2030 Target – 11.085 Tonnes CO₂e



Visualised: Business Travel

Overview CO₂e (tonnes)

Scope 3: Business Travel



2030 Target – 11.085 Tonnes CO₂e



Emissions: Scope 3 – Use of Emissions

Our heating solutions are designed for better energy performance and can help to reduce global carbon emissions, while also delivering on comfort. We are constantly striving to deliver greater efficiency through innovations in the way our systems are designed, how they operate and how they are used.

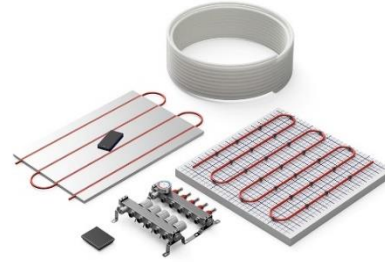
We've compared the CO₂ emissions of our electric and water floor heating systems with the equivalent radiator systems, in like for like environments, and have found significant savings; up to **28%** (80,000 tCO₂) reduction in lifetime CO₂ emissions for our systems installed in 2022.

As the grid moves towards decarbonisation, the CO₂ savings associated with our systems connected to heat pumps will continue to mount up in comparison to more traditional heating methods and we're proud that in addition to providing superior energy efficiency, our products also offer the added bonus of improved comfort and ease-of-use.





Emissions: Scope 3 – Use of Emissions



Use of Emissions CO₂e (tonnes)

Category	2019	2020	2021	2022	2023
Use of Emissions	219,343.99	198,794.76	217,606.91	199,481.47	190,028.28

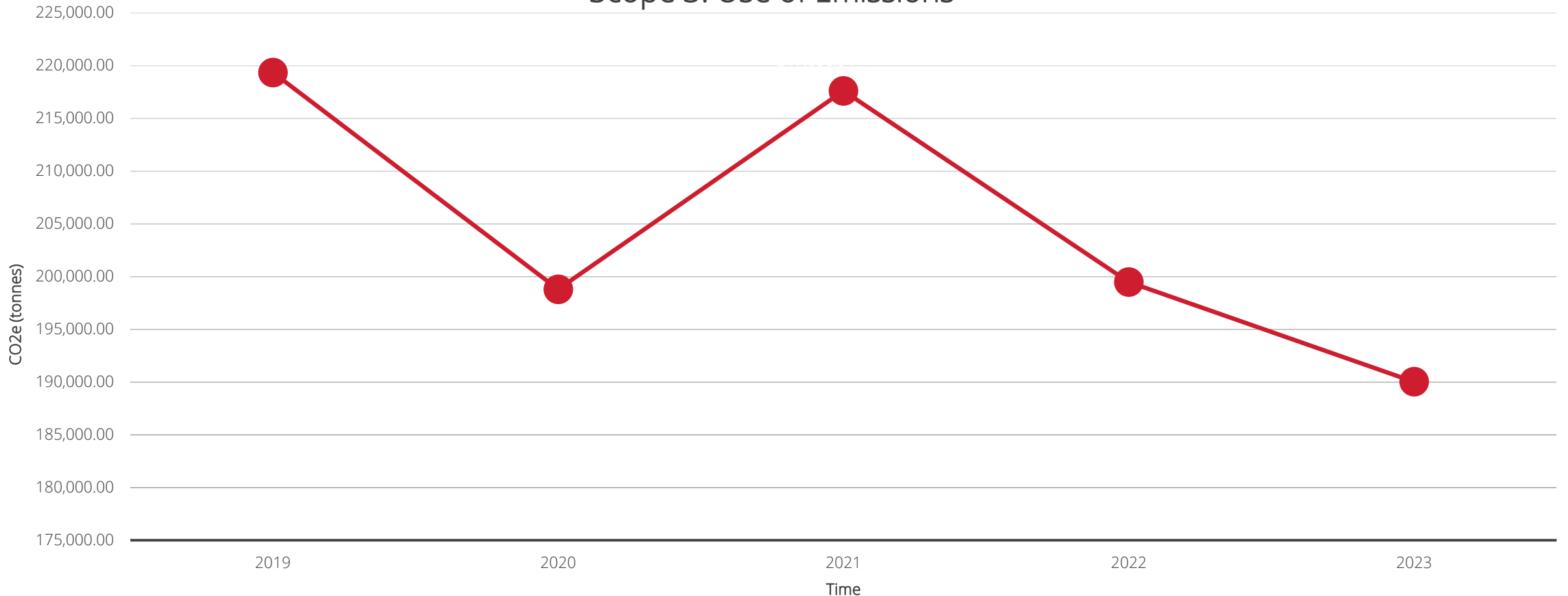
2030 Target – 109,671.995 Tonnes CO₂e



Visualised: Use of Emissions

Overview CO₂e (tonnes)

Scope 3: Use of Emissions



2030 Target – 109,671.995 Tonnes CO₂e



What Do All These Figures Tell Us?

The figures show that we are making good progress and, in some areas, outperforming our 2030 targets. We anticipate to hit our electricity target ahead of 2030, having reduced emission by **33%** and we have already hit our target of halving our emissions for:

- Scope 1 – Fleet emissions & Gas for Buildings
- Scope 3 – Operational Waste

However, there are still challenges ahead of us. As a manufacturing business most emissions sit in Scope 3, which is more difficult for us to control. For the 'use of emissions', we are reliant on the proportion of renewables used to generate energy for the grid. For purchased goods and services, we are planning to adopt metrics per m² so as we grow, we can measure a relative improvement rather than absolute.

At Warmup, we are taking encouragement from the fantastic progress already made across the group, however we know there is a way to go before we hit Net Zero so know we must maintain focus.

0 NET
ZERO



Environmental Reporting





Electricity Usage



Region	2022	2023	Change
TOTAL (kWh)	186,137	184,865	-0.07%
UK (kWh)	146,090	141,896	-2.87%
US (kWh)	22,796	19,059	-16.39%
DE (kWh)	14,330	20,793	+45.10%
FR (kWh)	2,921	3,117	+6.71%

In November 2023, Warmup's London offices at 704 Tudor Estate & 736 Tudor Estate switched to entirely renewable energy supplies.

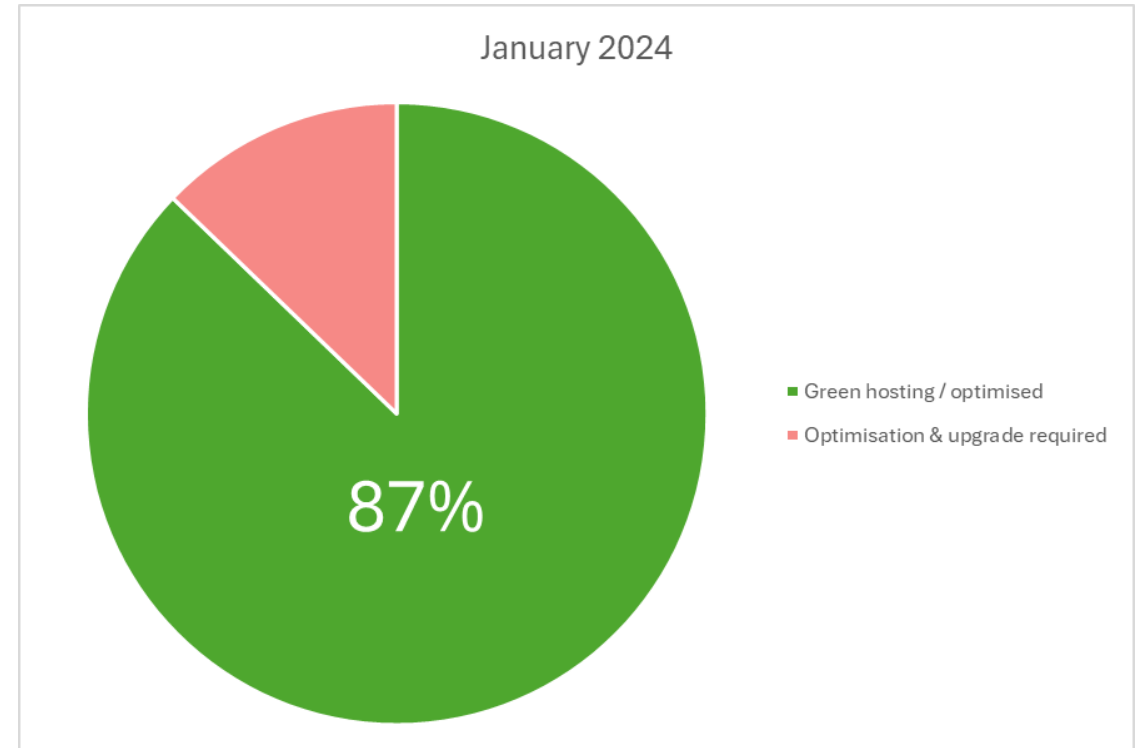
In 2023 our London offices generated a combined **9536 kWh** of electricity through our solar panels, equivalent to **10%** of the total electricity required to power them, and saving **1,954.5Kg** of CO₂ from being released.



Websites

Over 87% of our traffic is running on renewable energy with further plans to migrate the remaining 30 sites to renewable energy in the future.

"Whether it's through search engine optimisation, conversion rate optimisation, social media optimisation, PPC optimisation, A/B testing optimisation, server optimisation, or implementing strategies like caching the site or utilising a Content Delivery Network (CDN), all of these efforts collectively work to minimise online frictions. This makes it easier for users to find what they're looking for, subsequently reducing bandwidth consumption and contributing to a lower carbon footprint." - Shah, Senior Digital Manager.





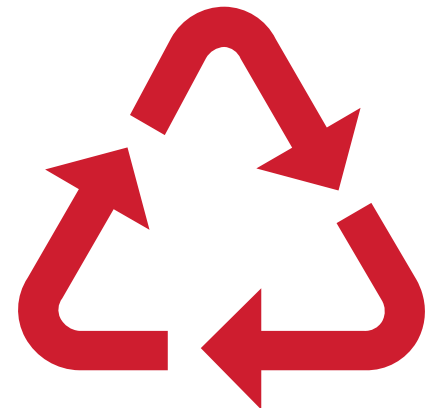
Operational Waste

In 2023, Warmup's UK and German owned warehouses generated a waste total mass of **28.25t**. Of this **10.04t** was general waste, all of which was diverted from landfill, **13.80t** of cardboard was recycled, and **4.41t** of plastic was recycled.

2023 also saw a key Sustainability and Environmental Policy target being achieved by the UK warehouse team, with dedicated cardboard and plastic recycling waste streams established across all UK production operations.

The initiative has been driven primarily by our UK's Operation Manager Sean Lenihan, and supported by Ken English, Ashim Bhowmick, Frank Uwimpaye Esdras, Nigel Campbell, and Alex Bernard. Great work, team!

Together they have implemented a more sustainable production process which has some great cost savings and will contribute further towards Warmup's Net Zero ambitions.





Labour & Human Rights Reporting



Human Rights





Conflict Minerals

In 2023 Warmup's Sustainability department undertook a risk driven review of Warmup's supply chain.

Both product and non-product suppliers were included, with **100%** of product suppliers within the scope providing a response.

Suppliers were asked to provide declarations regarding the use of any 3TG materials within our products and where they had been sourced from. From these responses we were able to determine that the risk of conflict minerals entering Warmups supply chain was very low.

Alongside the conflict minerals declaration, suppliers were also asked to provide codes of ethics, sustainability policies and certificates, and where possible EcoVadis membership.





Health and Safety

In 2023 Warmup recorded 5 accidents across all 3 UK warehouses with no reports to RIDDOR.

The estimated annual full-day equivalent (FDE) working days lost was **1 day***.

IOSH training has been identified for managers and supervisors and will be completed Q1 of 2024.

First aid and fire warden training was undertaken always providing coverage across all 3 of Warmup's UK buildings.



*FDE Lost = (usual hours worked/average hours usually worked) x working day's lost



Employee Development

It takes time to develop the knowledge and understanding to meet the demands of today's consumers. Our team of experts envision, develop and deliver solutions that help create more sustainable homes

Together we will acquire and **share our knowledge and experience** to collectively advance our business as it carries out the mission.

Our ambition is to **grow great teams across the world who feel inspired** and truly able to reach their full potential; resulting in a community capable of delivering on our vision and mission. More specifically, we will retain talent and shape future leaders from within, so that over time the collective value of the team increases.

To get there, we will adhere to our principles and values, **continuously improving our skills through education** and practice, as committed to in individual employee development plans.

Our challenge is to be true to our guiding principles and **prioritise our development commitments**.

The **wellness of our team** is of paramount importance and all our employees also have access to BUPA health insurance, life assurance, critical illness cover, income protection, and the cycle to work scheme.



Diversity

At the end of 2023 Warmup employed 136 people covering 20 nationalities.

American



Belgian



Brazilian



British



Canadian



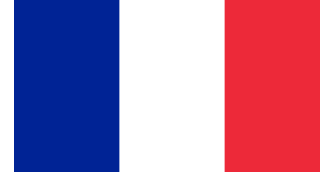
Czech



Dutch



French



German



Greek



Hungarian



Iraqi



Irish



Italian



Jamaican



Mauritian



Portuguese



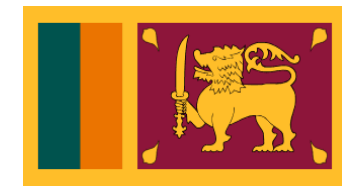
Romanian



Spanish

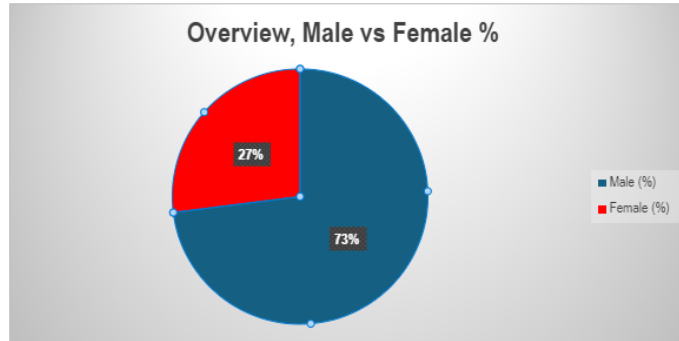


Sri Lankan

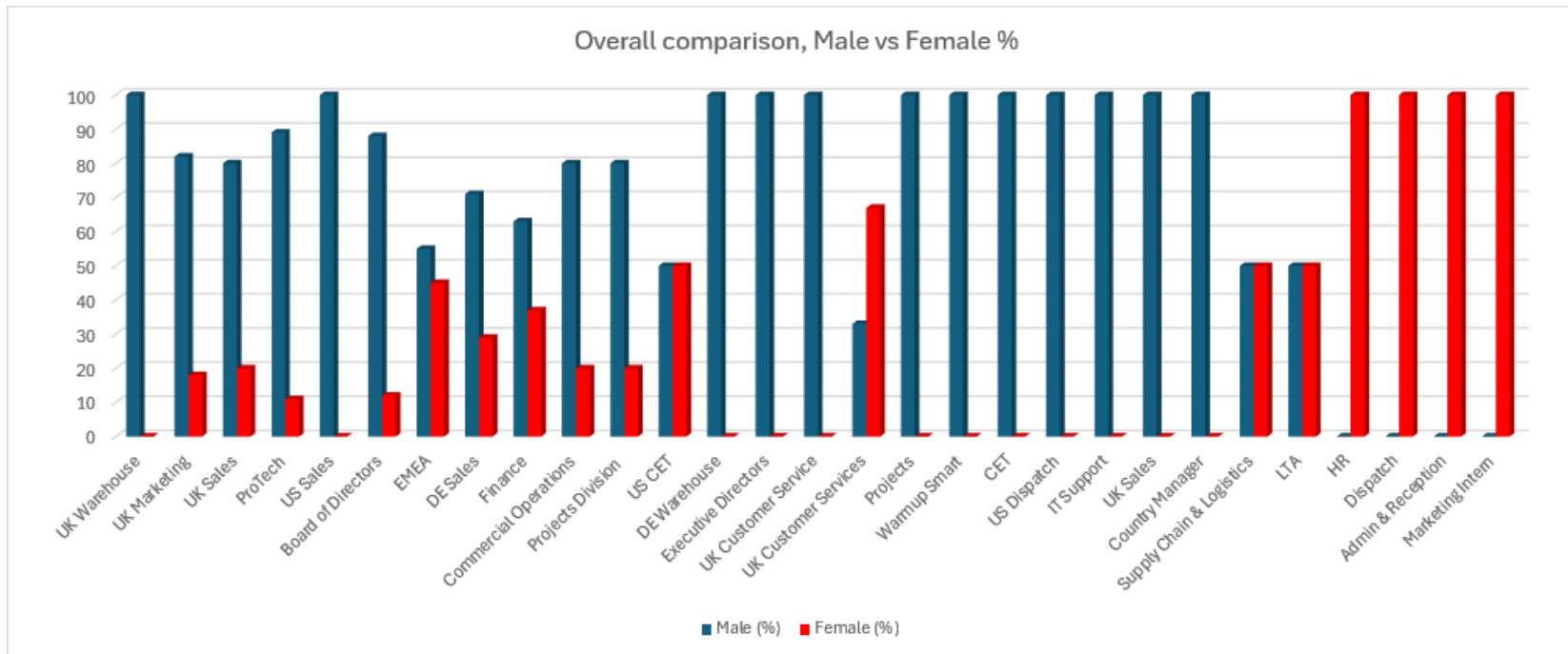




Diversity



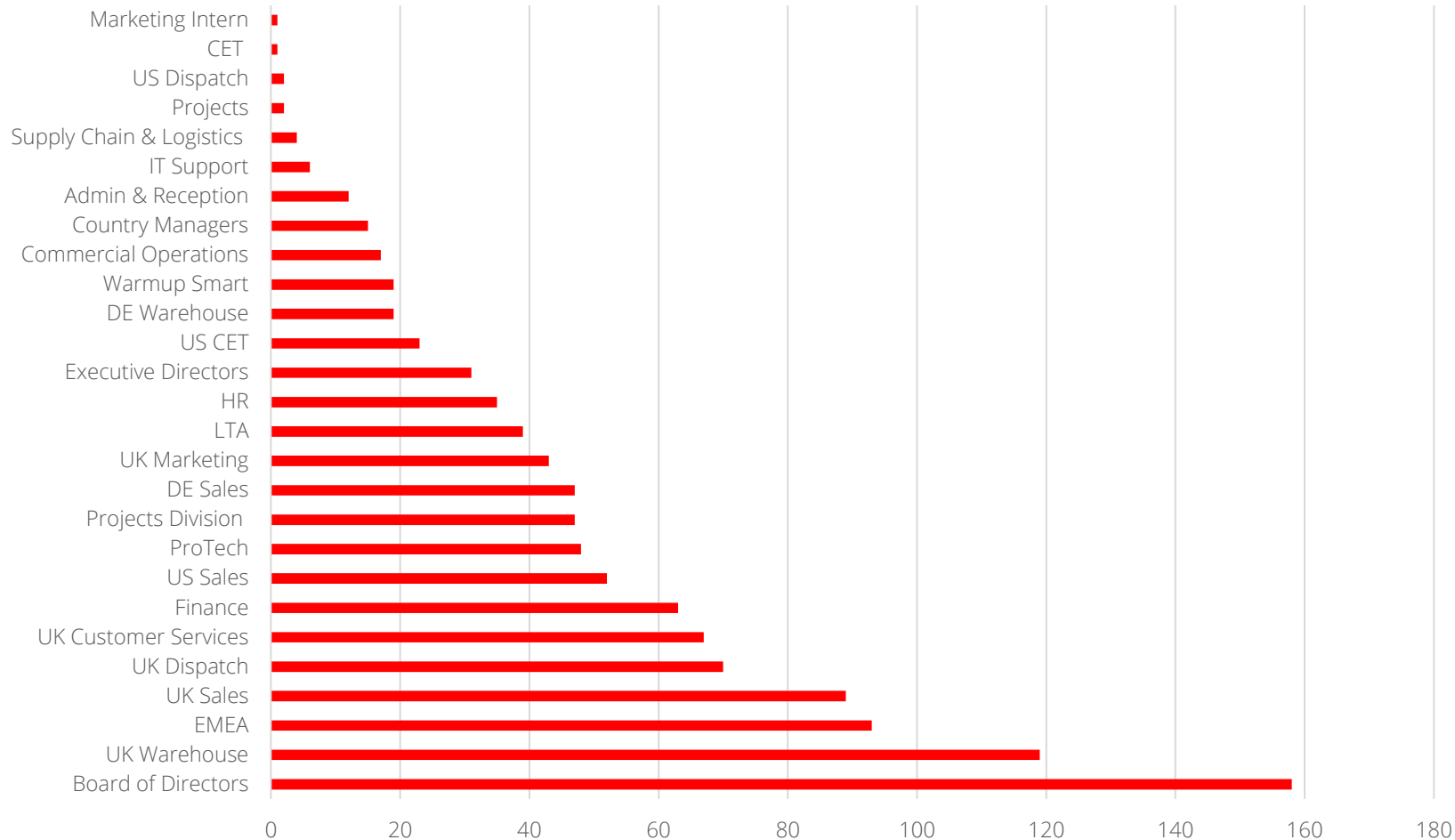
Across the Warmup group, **73%** of our employees were male & **27%** of our employees were female.





Workforce Experience

Total Experience



In 2023 the average number of years' experience per head remained high, dipping slightly from **8.55 years** at the end of 2022, to **8.43 years** at the end of 2023.



Living Wage Accreditation

Warmup has now achieved Living Wage Employer accreditation from the Living Wage Foundation.

The Living Wage is an hourly rate of pay, independently calculated each year based on the real cost of living in the UK and London.

The hourly rate is higher than the legal minimum wage which is voluntarily paid by Warmup to all of our UK staff.

For more information you can visit www.livingwage.org.uk.

Be on the look out for more information and for the logo appearing around Warmup's UK offices in the near future.





Annual Leave

Better wellbeing requires rest to recharge.

In prior years Warmup has allowed staff in the UK to sell up to 5 days of their annual leave allowance back to the company rather than taking the time off. This practice will not continue in 2023. Staff must take their leave during the calendar year.

This change is being made in recognition of the importance of time off work. It is widely recognised that annual leave contributes to

- Improved work-life balance
- Promoting better physical and mental health
- Giving the mind and body time to rest, recuperate and re-energise.

We encourage and value engagement at work. We value a positive attitude, flexibility, quality of work, work-rate and attendance from ourselves and our colleagues.

These qualities align us to our values - **proud, positive, proactive, and person to person accountable.**

To be at our best and show these qualities and values to the best of our ability we believe team members should use their annual leave allowance to avoid burnout.





Reporting: Ethics





Supply Chain Code of Conduct

Suppliers are graded not only by their perceived financial risk, but increasingly so by their commitments to social corporate responsibility.

In mid-2023, Warmup signed-up to the world-renowned and largest sustainability accreditation platform, EcoVadis, achieving a Bronze Medal for their efforts. This will further bolster Warmup's sustainability pillar and acts as another resource that can be used to share information quickly and easily on all matters related to sustainability. It will help to nurture and facilitate closer business relationships and foster collaboration on sustainability issues.

Warmup is committed to working with our supply chain on reducing associated environmental impacts, and in upholding high standards of ethical practice. We will ensure that our suppliers factor-in the scope of the GHG (Greenhouse Gas) Protocol methodology. We expect our suppliers to work on the reduction of their direct and indirect emissions.

We strive to provide the most energy-efficient products through research and product development, and through our exceptional service we aim to assist our customers in using our products in the most energy-conscious ways.



Corporate Responsibility

We are committed to our role as an industry changemaker and work with external organisations in the task of healing our planet and helping our communities.

We are proud of our work with the **Make It Wild initiative**, who raise awareness of the environmental impacts of the modern workplace. Our partnership has helped offset the CO₂ produced by our annual conference through the planting of trees across the United Kingdom.

Our sponsorship of the **Trussel Trust**, a leading food justice charity who work tirelessly to end hunger, has helped many people in their time of the need.

As a truly global company, Warmup have worked with charitable organisations internationally. Our USA team have raised funds for their local food bank and participated in **USPS Operation Santa**, whereby Warmup fulfilled the Christmas wishes of children across the country.



Volunteering

Maria and Lauren started off 2024 by using their lunch break to volunteer with Community Food Rescue at the local senior living housing facility, Glen Apartments.

"I am excited to share the incredible experience Lauren and I had yesterday during our lunch break when we volunteered with Community Food Rescue at the local senior living housing facility, Gen Apartments. Our time was devoted to distributing food to seniors in need, and Linda, from Community Food Rescue, managed to capture some photos of us in action. I'm excited to inform you that Community Food Rescue has shared these pictures on their Facebook and Instagram pages.

In showing our support, we reposted the content and tagged them. We have the green light to share our experience in writing, post pictures, and tag Community Food Rescue on our social media channels. Witnessing the positive response from the 25-30 individuals we assisted was truly heartening." - Maria, NAM CET Director.





Volunteering

We'd like to recognize the exceptional efforts of **Maria**, **Michael**, and **Melissa** from Warmup's USA office for leading the charge on volunteering in 2023.

Pictured left, they spent the day at Green Chimneys, scraping old paint and applying a layer of primer. After, they got a tour of the farm!

Green Chimneys offers day and residential programs for students who have been unsuccessful in traditional education environments and who benefit from a small, structured, and supportive setting, (K-12).

The natural surroundings create a safe, therapeutic environment for students with special needs, incorporating innovative animal-assisted and nature-based activities.





Sustainable Procurement Reporting

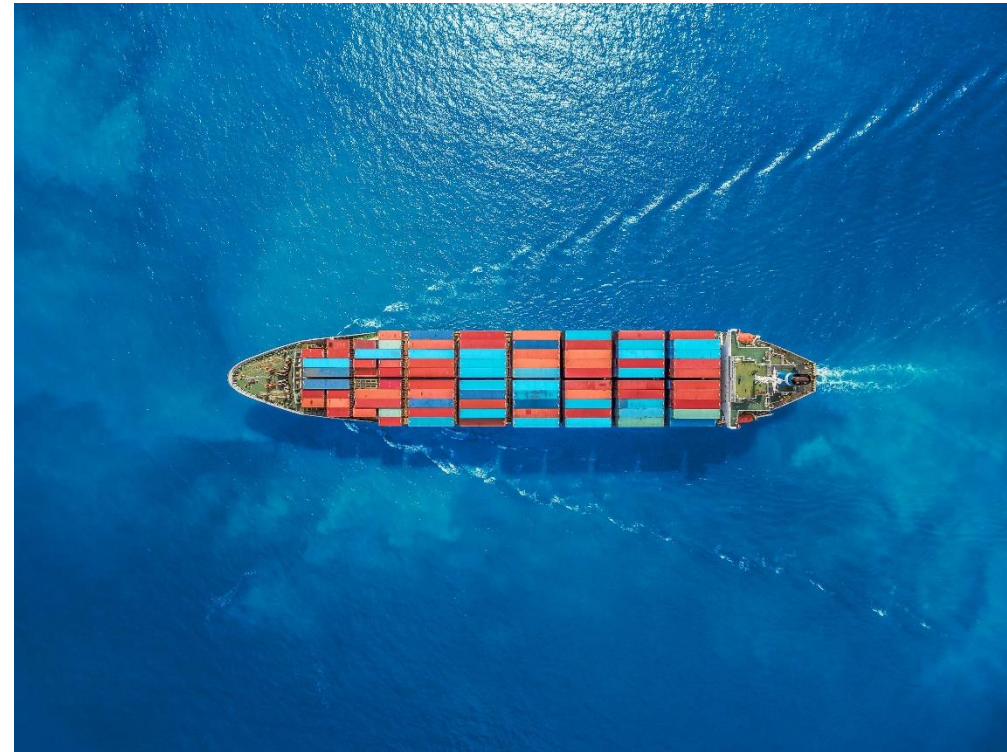
In 2023 Warmup signed off its inaugural Sustainable Procurement Policy to provide guidance and a framework for Warmup's procuring activities.

Sustainable procurement clauses were also implemented into supplier templates for the first time.

High risk suppliers were monitored all throughout 2023, successfully mitigating the risk of Warmup's supply chain.

These three actions and the subsequent awareness through training provided the supplier relationship managers with additional tools to engage with sustainability issues in the highest risk area of the supply chain.

The main drivers in the reduction of Co₂e output for purchased goods and services was the reduction in overall spend on transport across the group, as well as reducing the number of containers shipped. In 2023 Warmup shipped **11% fewer** containers than it did in 2022 through a more efficient procurement methodology.





What's Next on Warmup's Journey?

Warmup are committed to developing energy-saving technologies in the most sustainable manner.

We will embed sustainability into our day-to-day business practices and make a meaningful contribution to the global reduction of CO₂ emissions by increasing the adoption of radiant heating and cooling solutions. Warmup's work with industry leaders on renewable energy and sustainable home-building initiatives will have a positive impact on our planet.

We will continue measuring our emissions and improve our data capturing methods.

We will enhance our strategies for reduction targets.

We will integrate sustainability into our day-to-day business decisions.

We will influence our business partners with their sustainability objectives.

We will work together as a global team to become a Net Zero organisation.



Warmup[®]

The world's **best-selling** floor heating brand[™]