

Our approach to sustainability

Healthy air, sustainably

We are proud to provide healthy indoor air for our customers around the world and we know we have a role to play to ensure a more sustainable future. We want to continue to accelerate a low-carbon future with the health and wellbeing of people and the planet at its core.

Our journey to net zero continues and this year, as well as providing an update on our key sustainability initiatives, we also provide more insight around our emissions and how we plan to target reductions and actions that we will take to reduce them. In addition, we have carried out a study to help scale the carbon benefit of our heat recovery products sold around the world.

Carbon reduction targets

This year we have set new targets for carbon reduction over the short, medium and long term which will enable us to achieve our commitment to a net zero carbon future. The targets we have set this year have been set in line with the principles of Science Based Initiatives, and we will continue to refine our targets before being approved by Science Based Initiatives later in the year.

» See more on **pages 38 and 39**

Carbon avoidance

Volusion manufactures a range of heat recovery products that help our customers save energy from buildings. The energy saved also saves carbon, so the application of these products provides a route for avoiding emissions. This year we have carried out a study with Arup to help us scale the carbon avoided by the heat recovery products we have sold in FY22 over a single year of their life.

» The results of that study can be seen on **pages 36 and 37**

Risk management

This year we have carried out a detailed review of physical risks (acute and chronic) to ensure we understand the resilience of our critical properties to climate change. Climate change poses a physical risk to the buildings that we occupy including offices, factories and warehouses.

» You can see more detail on **pages 44 to 47**

What we are reporting on this year

We recognise the importance of the recommendations from the Task Force on Climate-related Financial Disclosures and have implemented many of the recommendations this year. We anticipate the impact that the Task Force on Climate-related Financial Disclosures reporting requirements will have on our business, and have reported in depth on our climate-related risks and opportunities.

» See more on **page 40**

We report on energy use under SECR regulations and have committed to a zero carbon future, aiming to be a net zero carbon business by 2040. This year we have provided more insight into our emissions, including scope 3.

» See more on **page 41**

Finally, we incorporate the framework of international and independent body the Sustainability Accounting Standards Board (SASB) to help track our progress.

» See more on **page 47**



How we align to the UN Sustainable Development Goals

We have aligned our strategy to the United Nations Sustainable Development Goals, which are the blueprint to achieve a better and more sustainable future for all.



SDG3

The design of Volution's products helps support SDG target 3.9: "By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination." Specifically, 3.9.1 – "Mortality rate attributed to ambient air pollution".

In action – Our purpose is to provide healthy air, sustainably, supporting the health and wellbeing of people within buildings.



SDG7

The design of Volution's products helps support SDG target 7.3: "By 2030, double the global rate of improvement in energy efficiency." Specifically, 7.3.1 – "Energy intensity measured in terms of primary energy and GDP".

In action – With a focus on sales of low-carbon products, Volution sells product solutions targeted at reducing carbon emissions of buildings by making them more energy efficient to run.



SDG8

Volution's ambition to be a diverse and inclusive employer supports SDG target 8.5: "By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value."

In action – Volution's ambition is to ensure a diverse and inclusive workplace for everyone.



SDG11

Volution's products and its approach to minimising its operational impacts support SDG target 11.6: "By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management." Specifically, 11.6.2 – "Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10 in cities (population weighted))."

In action – Many of the Group's products include filtration designed to remove fine particle matter from the air helping to improve air quality.



SDG12

SDG target 12.5 ("By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse") is core to Volution's approach to sustainability and its ambition to limit its impact on the environment. Specifically, 12.5.1 "National recycling rate, tons of material recycled".

In action – Volution continues to focus on the adoption of recycled material, with 67.2% of the plastic used within our own facilities from recycled sources in FY22.



SDG13

Volution's ambition to reduce carbon emissions and minimise its impact on climate change supports SDG 13.2: "Integrate climate change measures into policies, strategies and planning."

In action – Volution has set our ambition to become net zero by 2040 and has been carbon neutral since FY21 for scope 1 and 2 emissions. In addition, we are signatories to the CEO Water Mandate and the UN Global Compact.

Product

Our ambition

To champion the energy saving potential of our products and solutions and support the net zero ambitions of the countries in which we operate. To continue to develop clean air solutions that protect people's health and increase their comfort in an ethical and responsible way.

» See more on page 34

Planet

Our ambition

To reduce our environmental impact by improving business efficiencies and minimising our impact on the climate. To focus on the quality of materials we use to support the creation of a circular economy, and eliminate all forms of waste across our value chain.

» See more on page 38

People

Our ambition

To continue to develop an engaging and inclusive workforce where our employees feel valued and can fulfil their potential. To build relationships with the local community, provide support where needed, and leave a lasting legacy.

» See more on page 48

Product

Heat recovery devices form a key growing category within our low-carbon sales. This year, with the acquisition of ERI, we have strengthened our position for future growth.

Introduction to energy recovery technology

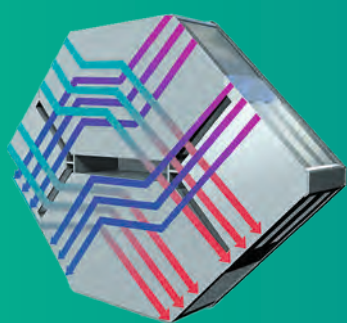
A key approach to decarbonisation of buildings is preventing energy loss in heated or cooled air as it is exhausted from the building for ventilation. To prevent the energy loss, heat recovery cells can be used in the airstream to ensure the energy is recovered. This year, Volution acquired Energy Recovery Industries (ERI), which is a global supplier of key heat recovery technology.

ERI – overview

Established in 2010, ERI designs and manufactures a range of innovative and highly efficient air-to-air heat recovery devices for use in industrial, commercial and residential ventilation systems. Products are manufactured in ERI's modern, high quality production facility in Bitola, North Macedonia, and are supplied to heat recovery and air handling unit manufacturers around the world.

Energy recovery technology

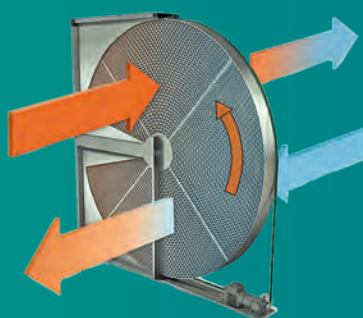
ERI manufactures three types of heat exchangers: plate, rotary and an integrated enthalpy solution branded Accuair.



Counterflow kombi heat exchanger

Plate heat exchangers

Plate heat exchangers consist of a series of plates stacked together which form a large internal surface area. Air is then exhausted from inside the building and passed over one side of the plates and at the same time fresh air is introduced into the building on the opposite side of the plates. The large surface area allows heat to be transferred from one side to the other. The process allows recovery of energy by either passing energy from heated air leaving the building into the incoming air in buildings in colder climates or passing heat into the outgoing air for air-conditioned buildings in warmer climates. In this way it recovers energy in all climates. The exchangers can be up to 93% efficient.



Rotary heat regenerator

Rotary heat exchangers

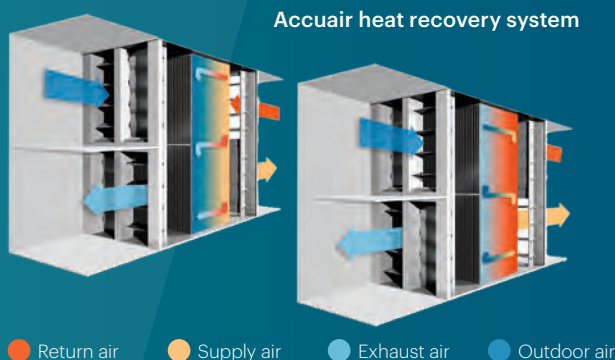
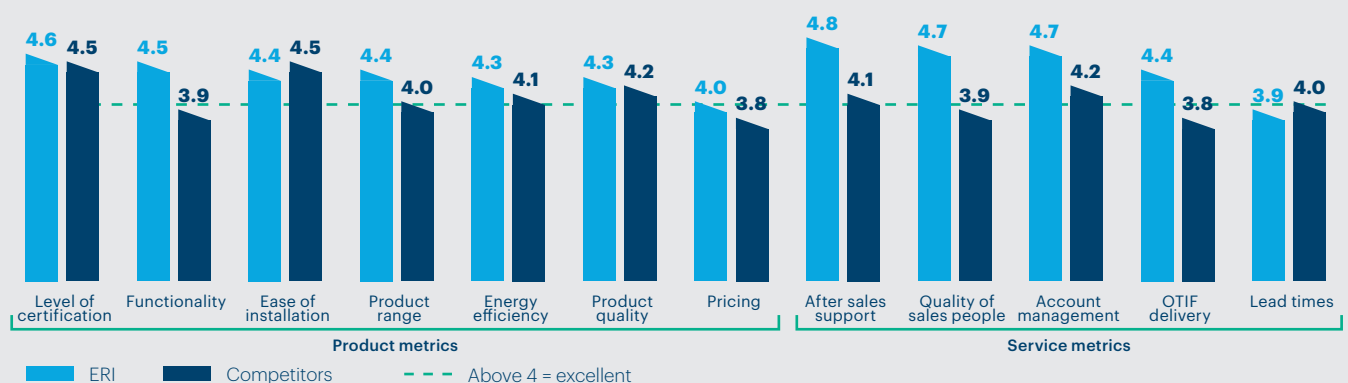
Rotary heat exchangers are a regenerative type of air-to-air heat exchanger that consists of a rotating wheel. During the heating season, air is exhausted from the building, warming the rotating disc. Air from outside is introduced across the opposite side of the disc, recovering the heat and also capturing the humidity released from the disc, so enriching the air to prevent it drying out. This process provides heat exchangers with up to 85% efficiency.

ERI: Customer service excellence

Since its inception, ERI has been focused on delivering the best possible customer experience and, as part of the acquisition process, Volusion carried out a third party customer referencing exercise. This benchmarking exercise was carried out with a range of international customers, with ERI consistently outscoring competitors on a range of product and service metrics. The pre-existing expansion plan referenced in our public announcement in September 2021 supports further growth ambitions and delivers improvements to availability and a reduction in lead times.

ERI's performance score vs key performance criteria

Average score: 1 = poor, 5 = outstanding



Accuair

In colder, dry climates, plate heat exchangers offer very high efficiency but can remove too much moisture from the air as it condenses on the colder sections of the plates. This can cause excessive drying out of the air. Accuair has been designed as an enthalpy system to also recover up to 70% of the moisture. It does this whilst retaining an efficiency of up to 95% and prevents the air becoming too dry.

Revenue from heat recovery devices

This year, 30.1% of our revenue came from heat recovery units, components or installation ancillaries. This forms 45% of our low carbon sales and is a key technology for the decarbonisation of buildings.

Revenue from heat recovery units, components or installation ancillaries

30.1%

Carbon avoidance

This year we commissioned a piece of work with Arup, to help compare the avoided emissions from our heat recovery products sold in FY22 against our operational emissions over the same period.

Carbon emissions avoidance from our heat recovery sales

Applying heat recovery ventilation solutions in airtight, well insulated new buildings, or deep energy efficient refurbishment of existing buildings, can offer reductions in the energy used for heating or cooling. As well as energy reductions, and associated financial savings, there are also the parallel carbon emissions that are avoided.

To help scale the impact of our products we commissioned a piece of work with Arup, to help compare the avoided emissions from our heat recovery products sold in FY22 against our operational emissions over the same period.

As our products provide continuous reductions in energy over their lifetime, they avoid far more than just one year's operation and every year our sales add to the installed base, so avoiding more emissions. However, our approach here is to provide a comparison of our FY22 operational emissions against one year of emissions avoided by the heat recovery products we manufactured and sold over our financial year 2022.

Methodology

The methodology considers both domestic and non-domestic buildings, following the design standards and guidance in SAP 2012 and CIBSE Guide B2. The total heat load is a function of the fabric heat losses, heat losses due to infiltration and heat losses due to ventilation. The calculated energy savings and greenhouse gas (GHG) emissions reductions relate to the reduced heating load due to the selected MVHR product.

The methodology considers:

- number of devices sold per country;
- device airflow rate (24 hours/day for domestic, 14 hours/day for non-domestic);
- device heat recovery efficiency;
- external temperature according to country;
- relevant emissions factors for gas and electricity according to country;
- internal setpoint temperature of 21°C (with 12°C setback for non-domestic);
- any energy used in running of the fans within the heat recovery devices; and
- product performance as tested for the Ecodesign Directive.

Results

223,065 tCO₂e

Avoided emissions

Based on the methodology described, our products avoid 223kt CO₂e.

52,345 tCO₂e

Scope 1, 2 and 3 emissions

This equates to avoided emissions equivalent to

over 4x

our operational emissions.

Definition – emissions scopes

Scope 1 emissions are direct emissions from fuel combusted in our own facilities and vehicles and scope 2 emissions are indirect emissions from the generation of electricity or heating that we purchase for use in our business. These emissions have been reliably measured and independently verified. Our scope 3 emissions include all other activities in the supply chain as well as the positive impact of using our products.

Definition – avoided emissions

Avoided emissions are those emissions avoided from the use of Volution Group heat recovery products. Avoided emissions are not included within scope 1, 2 or 3 emissions, and do not form part of reporting of total emissions or net zero targets for the Group.

Assessment and verification

Our scope 3 emissions have been independently assessed and used to develop Science Based aligned targets.

» For more information and detail on the Arup methodology see: <https://www.volutiongroupplc.com/sustainability/avoided-emissions/>

» See page 32 for more detail on our emissions and our reduction targets

ARUP



CO₂e
Assessed
Supply Chain



223,065 tCO₂e

Avoided
emissions

52,345
tCO₂e Scope
1, 2 and
3 emissions

Volution Group MVHR product sales can deliver emissions savings of 223 ktCO₂e worldwide. For comparison and scale, that is equivalent in greenhouse gas emissions to over 28,000 homes' energy use for a year*.

* Calculated by the EPA Greenhouse gas equivalents calculator. See more here: www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results

Sustainability continued

Planet

We have set detailed targets for scope 1 and 2 emissions that are aligned to our net zero ambitions, and have made significant progress in our scope 3 plans.

Emissions reduction target setting

Volusion is committed to a net zero carbon future. This year we have set new targets for carbon reduction over the short, medium and long term which will enable us to achieve our commitment to a net zero carbon future. The targets we have set this year have been set in line with the principles of Science Based Targets initiatives (SBTi), and we will continue to refine our targets before being approved by SBTi. We have signed the SBTi commitment to net zero and will seek approval of our detailed plans within the required two years after signing the commitment. We will report against our new targets each year in our Annual Report.

Our perimeter includes all companies and subsidiaries in the Group. Our base year for target setting aligned with SBTi is 2022 to ensure we are using as accurate a base position as possible. As we grow in part through acquisition, the base level will be re-assessed when appropriate and targets will be adjusted accordingly.

We have worked with Carbon Footprint to forecast our emissions to 2050 using a combination of activity based and spend based data, from a base year of 2022. The forecast includes (i) Passive reductions – those that will happen without any action from Volusion such as decarbonisation of the electricity grid, (ii) Market-based reductions – those achieved by selecting “green” energy tariffs, (iii) Active reductions – those achieved by the deliberate actions of Volusion making technological, behavioural and operational changes within the business, and (iv) carbon offsetting. The results of this forecast have been used to assess whether we are aligned to our net zero ambitions.

Scope 1 and 2

We have made significant reductions in our scope 1 and 2 intensity metric since 2014 (page 42). Our forecast shows that a combination of Passive, Market-based and Active reductions in emissions puts us on a path to a 90% reduction in carbon emissions by 2050 at the latest. The same forecast shows that we will reduce emissions by significantly more than 50% by 2030.

Our forecast and the detailed targets within it are aligned to the SBTi requirements.

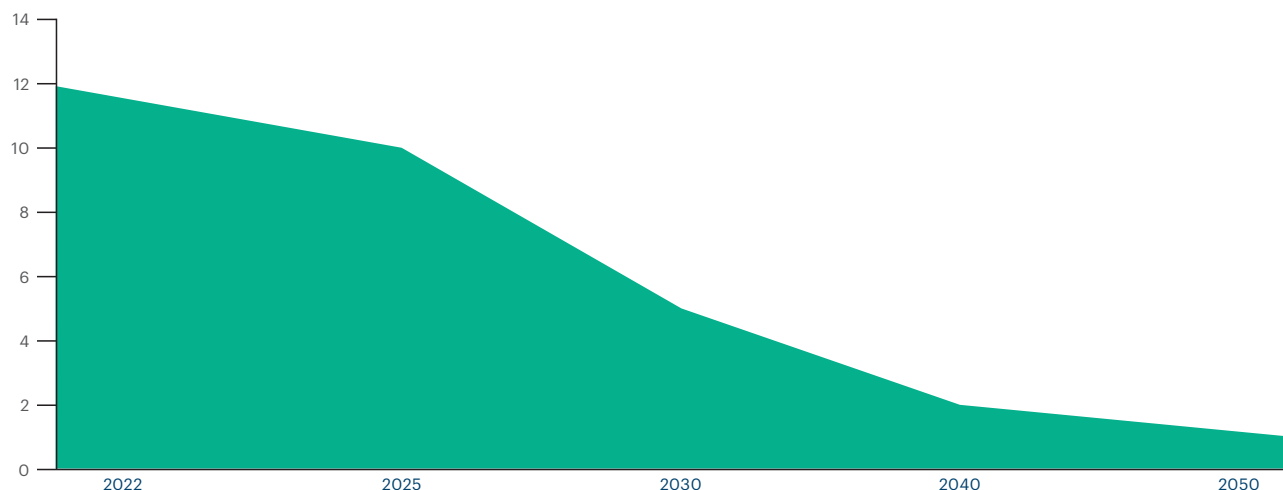
Scope 3

Our forecast for scope 3 emissions shows that our current detailed plans, along with passive reductions, will deliver a significant reduction in our scope 3 emissions. The forecast shows a reduction in scope 3 emissions of around 40% by 2030 and over 60% by 2050. We recognise that these forecast reductions are not yet aligned with our net zero ambitions and will work on further plans and targets to bridge the remaining gap.

A significant portion of the residual emissions in the forecast are the result of the input materials, most notably plastics used in the production of our products. Over time we will explore ways of reducing this embedded carbon which may include reducing the quantity of plastic used in our products, utilising closed-loop recycled plastic, or alternative raw materials.

In reality, it is expected that there will be a more rapid passive reduction in supply chain emissions than has been observed previously due to the availability of low-carbon technology and hence we expect the gap to close when we review in future years.

Scope 1 and 2 emissions forecast reductions (tonnes of carbon per £ million of revenue)



Targets and metrics

Recycled plastic

Volution used 3,948 tonnes of plastic in its manufacturing facilities in 2022 (2021: 3,742 tonnes). Virgin plastic has a significantly higher carbon footprint than recycled plastic, the disparity varying by type of plastic.

We have already removed the equivalent of over 300 tonnes of carbon by switching to recycled plastic since we set our target in 2020. Our targets out to 2025 will remove approximately 700 more tonnes of carbon from our emissions base line.

By 2025 – 90% recycled plastic = 700 tonnes of carbon removed

Air freight

Volution uses air freight from time to time to move high value or time critical components and products around the Group to ensure good levels of customer service. We recognise this is not a sustainable option and we are aiming to reduce air freight from the Group to the lowest level possible, without any impact on customer service. Switching from air freight to sea freight can save 97% of the carbon emissions for an average freight movement from East Asia to the UK.

By 2030 – 90% reduction in air freight = 11,000 tonnes of carbon removed

Renewable energy

In 2022 Volution sourced 74% of its electricity needs from renewable sources or contracted renewable tariffs. We aim to move any remaining electricity purchased from national grids to contracted renewable tariffs in the next two years, as well as continue to invest in owned renewable energy such as solar panels.

By 2025 – 100% of electricity across the Group from renewable sources or renewable tariffs = 800 tonnes of carbon removed

By 2030 – 50% reduction in natural gas use in UK by switching facilities to electricity = 250 tonnes of carbon removed

Owned vehicles

It has been Volution's policy to change the fleet to hybrid or fully electric since 2021 as and when each vehicle needs replacing. At the end of 2022 30% of the fleet was hybrid or electric. We aim to transfer the fleet to entirely electric only by the end of 2030.

By 2030 – 100% of fleet fully electric = 650 tonnes of carbon removed

Supplier choice

All of Volution's suppliers agree with our Code of Conduct and are required to be aligned to our values. As businesses are increasingly required to comply with carbon reporting requirements, it is becoming easier to assess suppliers against our carbon reduction commitments. We will select suppliers where possible that are aligned to our carbon reduction targets and will therefore be able to reduce the carbon emissions we are responsible for. This is an area where it is difficult to set exact targets, but we will track and report on savings made through supplier selection.

Definitions – carbon neutral

To offset carbon emissions, credits can be purchased by carbon removal projects (such as afforestation) or by paying for activity in other sectors that reduces carbon emissions elsewhere, for example paying for renewable energy projects to replace the burning of fossil fuels.

Our 2022 carbon neutral status boundary includes all scope 1 and 2 emissions and colleague commuting.

Definitions – net zero

The maximum feasible emissions reductions of carbon have been made and only residual emissions are counterbalanced by carbon removal credits.

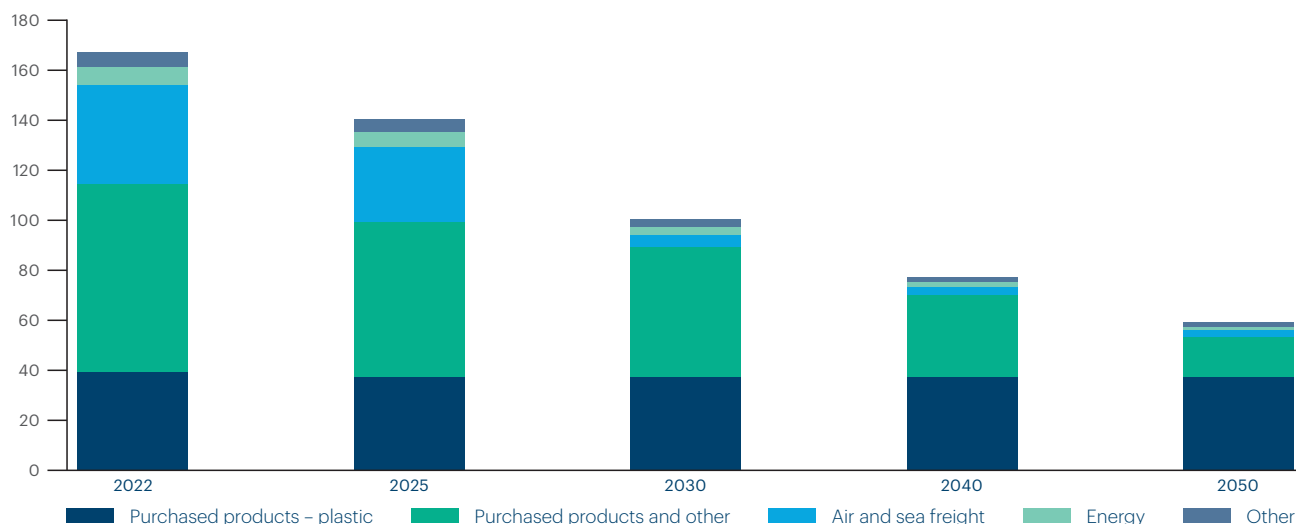
Our net zero target boundary includes all scope 1, 2 and 3 emissions, both upstream and downstream.

Definitions – Science Based Initiatives

The Science Based Targets initiative (SBTi) is a global body enabling businesses to set ambitious emissions reductions targets in line with the latest climate science. It is focused on accelerating companies and financial institutions across the world to halve emissions before 2030 and achieve net zero emissions before 2050.

Our letter of commitment confirms that we will set a long-term science-based target to reach net zero value chain GHGs emissions by no later than 2050 in line with the SBTi Net-Zero Standard, submit it for SBTi validation and publish it, within a maximum of 24 months.

Scope 3 emissions forecast reductions (tonnes of carbon per £ million of revenue)



Task Force on Climate-related Financial Disclosures

We are committed to consistent and transparent reporting aligned to the recommendations of the TCFD, and will continue to work with our stakeholders to provide comprehensive data.

We comply with the FCA's Listing Rule 9.8.6R(8) and make disclosures consistent with the 2017 TCFD recommendations and recommended disclosures across all four of the TCFD pillars: Strategy; Governance; Risk Management; and Metrics and Targets.

Tackling climate change is embedded in our purpose and in how we run our business and is therefore a theme that runs throughout our Annual Report. It should be noted that we do not consider Volusion to be at significant risk of material adverse impact from climate change and we are well positioned to seize the opportunities that it presents. The table on page 46 provides the disclosures against the eleven recommendations of the TCFD. We will continue to develop our disclosures in 2023 taking into account evolving best practice.

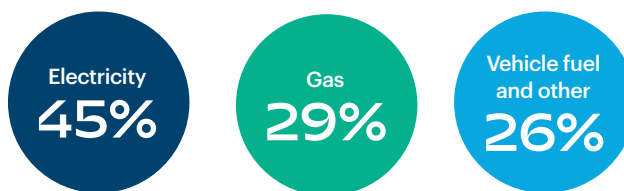
Energy efficiency actions in 2022

In 2022 we continued to drive energy efficiency and waste reduction across the Group, inspired by engaged colleagues making local improvements, including:

- Replacing bubble wrap packaging with cardboard in our inVENTer brand.
- Working with our Chinese suppliers to remove polystyrene packing from products supplied into our Australasia businesses.
- Zero waste to landfill in our UK ventilation business.
- Awarding of ISO 14001 Environmental Standards to our UK business.
- The continued development of new and innovative, highly efficient heat recovery products across the Group.



Scope 1 and 2 emission sources 2022



The largest portion of our location-based scope 1 and 2 emissions is from the electricity we use in our facilities. In 2022, our reported "market-based" emissions have reduced significantly, as we transitioned UK procured electricity to 100% renewable sources (approx. 60% of total electricity used across the Group).

Scope 3 emission sources 2022



The largest portion of our scope 3 emissions is from freight and transportation of raw materials and products. "Other" includes all other categories of scope 3 emissions.

Methodology

The table on the next page details the energy consumption and greenhouse gas (GHG) emissions from the activities of the Group. The GHG emissions have been calculated using the UK Government's most recent GHG Conversion Factors for Company Reporting and using country specific conversion factors for our overseas businesses from reliable sources including the Association of Issuing Bodies (AIB) and the Australian and New Zealand environment ministries. 2021 scope 1 and 2 emissions have been restated to use the country specific conversion factors for our overseas businesses.

A market-based methodology has also been applied where our electricity is sourced from renewable sources, with non-renewable tariffs converted at the residual rates.

We have continued to improve the quality of scope 3 data gathering and reporting, but recognise the difficulty in providing accurate and consistent data for the supply chain. This year our scope 3 reporting is more detailed than in prior years, with approximately 50% of emissions calculated based on detailed activity-based methodologies and the remaining 50% calculated based on spend-based methodologies. This provides us with a solid foundation that we have selected as the base year for our target setting. There are no material omissions from the mandatory reporting scope.

Location-based emissions from	2022				2021				2020
	kWh	CO ₂ e tonnes			kWh	CO ₂ e tonnes			CO ₂ e tonnes
Electricity, gas and other fuels	15,190,765	85%	2,691	73%	17,102,816	84%	3,302	80%	2,993
Petrol and diesel vehicle fuels	2,725,723	15%	657	18%	3,140,342	16%	744	18%	1,137
Refrigerants			328	9%			92	2%	66
Total	17,916,488	100%	3,677	100%	20,243,158	100%	4,137	100%	4,196
Scope 1	8,337,673	47%	2,039	55%	11,133,933	55%	2,368	57%	
Scope 2	9,578,815	53%	1,637	45%	9,109,225	45%	1,769	43%	
Total Scope 1 and 2	17,916,488	100%	3,677	100%	20,243,158	100%	4,137	100%	
Scope 1 UK	4,225,189	51%	1,018	50%	7,956,324	71%	1,535	65%	
Scope 1 overseas	4,112,485	49%	1,021	50%	3,177,609	29%	833	35%	
Total Scope 1	8,337,673	100%	2,039	100%	11,133,933	100%	2,368	100%	
Scope 2 UK	6,043,237	63%	1,169	71%	5,389,136	59%	1,144	65%	
Scope 2 overseas	3,535,578	37%	469	29%	3,720,089	41%	625	35%	
Total Scope 2	9,578,815	100%	1,637	100%	9,109,225	100%	1,769	100%	
Total Scope 1 and 2 UK	10,268,426	57%	2,187	59%	13,345,460	66%	2,679	65%	
Total Scope 1 and 2 overseas	7,648,063	43%	1,490	41%	6,897,698	34%	1,458	35%	
Total Scope 1 and 2	17,916,488	100%	3,677	100%	20,243,158	100%	4,137	100%	
Market-based emissions									
Scope 2 UK	6,043,237	63%	194	24%					
Scope 2 overseas	3,535,578	37%	605	76%					
Total Scope 2	9,578,815	100%	799	100%					
Total Scope 1 and 2 UK	10,268,426	57%	1,212	43%					
Total Scope 1 and 2 overseas	7,648,063	43%	1,626	57%					
Total Scope 1 and 2	17,916,488	100%	2,838	100%					
Carbon credits purchased			(4,194)				(4,325)		
Net Scope 1 and 2 emissions (market-based)			(1,356)				(188)		
Scope 3 emissions									
Purchased goods – plastic			12,087	25%					
Purchased goods – paper/packing			2,955	6%					
Purchased goods – metals			3,134	6%					
Purchased goods – other			8,854	18%					
Purchased services			333	1%					
Employee commuting			1,072	2%					
Upstream distribution			11,107	23%					
Downstream distribution			9,126	19%					
Total Scope 3			48,668	100%					
Total Scope 1, 2 and 3			52,345						
Avoided emissions			(223,000)						
Net total emissions (market-based)			(175,688)						
Scope 1 and 2 intensity			11.9				15.1		

Sustainability continued

Task Force on Climate-related Financial Disclosures continued

Governance

The Board's oversight of climate change has been enhanced through the newly created management Sustainability Committee, attended by our Senior Independent Director, Amanda Mellor and formed of senior representatives of the business including the CEO, the CFO and MDs and FDs from across the Group.

The Sustainability Committee met twice during the year and reported to the Board. Decisions made by the Committee included the approval of new ESG KPIs and our carbon reduction targets. In reviewing our carbon reduction targets and the emissions forecasts produced in partnership with Carbon Footprint, the Committee re-iterated its support and commitment to achieve our targets, and to work to close the gap in our scope 3 emission plans.

The Board reviews principal risks, including those concerning climate change and regulatory responses. Board engagement has also been important in shaping Volution's sustainability strategy and carbon reduction plans. Our strategy sets out our strategic response to the transition to a net zero economy and limiting the effects of climate change.

Metrics and targets

This year we have set new targets for carbon reduction over the short, medium and long term which will enable us to achieve our commitment to a net zero carbon future (see pages 38 and 39). The targets we have set this year have been set in line with the principles of Science Based Initiatives, and we will continue to refine our targets before being approved by Science Based Initiatives later in the year. We will report against these targets each year in our Annual Report.

We have continued to deliver a year-on-year reduction in our chosen measure of carbon intensity, reducing by 20% since last year, cumulatively 67% lower than nine years ago when we first started reporting this measure.

Whilst this does not necessarily represent an absolute reduction in carbon emissions, our Group has grown substantially over that time (see pages 8 and 9), and this demonstrates how our scale, continuous improvement and investment in energy efficiency have effected change.

Carbon removal credits

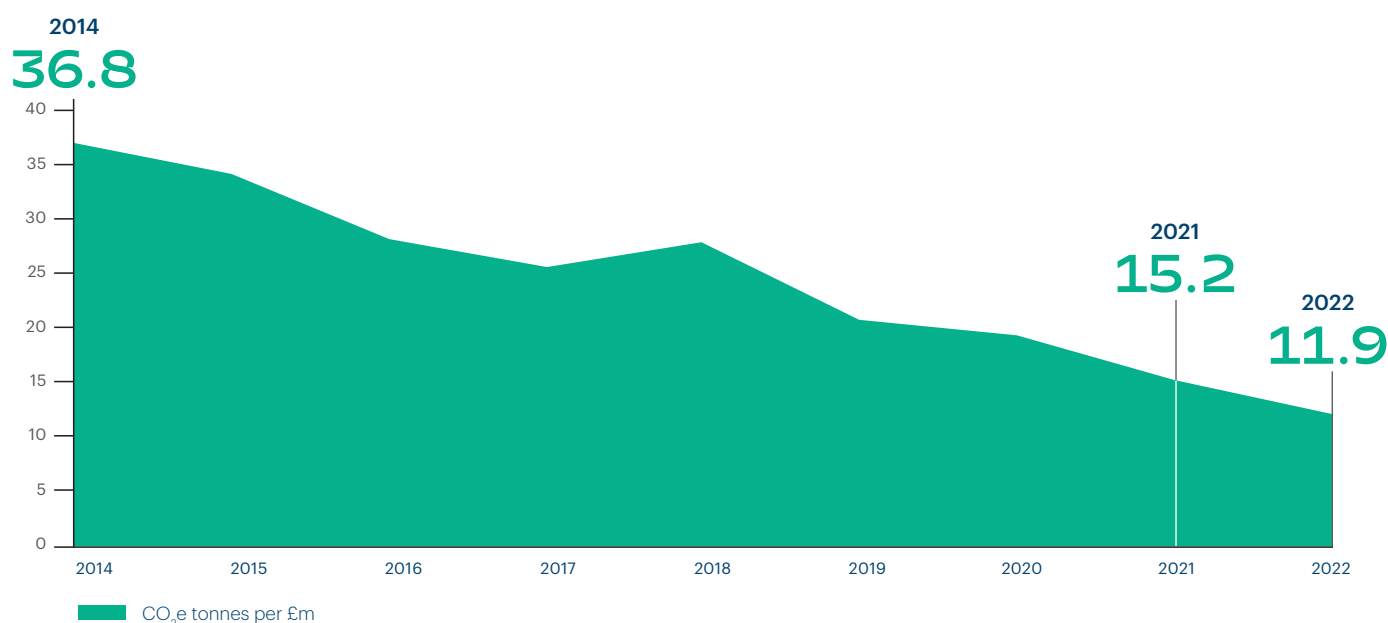
We have purchased offset credits which are certified by the Gold Standard. Whilst we understand that the use of carbon offsetting is only a stage on the way to our net zero future, we are confident the emissions reductions we are supporting are real, measurable and verifiable. We have opted to offset 110% of our in-scope emissions, going beyond carbon neutral and aligning with our energy positive product portfolio.

We are supporting a project which aims to provide healthy indoor air in Uganda. Most families living in Uganda cook indoors with traditional three-stone or open fires fuelled with wood which can create serious health implications as well as being a significant source of GHG emissions. The Energy Efficiency Improvement Project implements energy efficient cookstoves to households. The verified project aligns to our purpose to provide healthy air sustainably and also the UN SDGs that we support, including 3 – Good Health and Wellbeing, 7 – Affordable and Clean Energy, and 13 – Climate Action.

Net zero perimeter

2021 was our first year as a carbon neutral business for scope 1 and 2 emissions and we committed to increasing the perimeter of our carbon neutral boundary each year. This year we have delivered against that commitment and have increased our carbon neutrality to include scope 1, scope 2 and also a significant element of our scope 3 emissions – the emissions from colleague commuting. Many of our colleagues already live local to our sites or commute to work using low-carbon options such as cycling, and we will continue to offset the carbon emissions as well as encourage more low-carbon commuting.

Carbon intensity reduction 2014 – 2022



2022 net zero perimeter

	CO ₂ tonnes
2022 net zero perimeter	
Scope 1	2,039
Scope 2	799
Colleague commuting	1,072
Total perimeter	3,910
Carbon offset	(4,194)
Net emissions	(284)
2021 net zero perimeter	
Scope 1	2,368
Scope 2	1,769
Total perimeter	4,137
Carbon offset	(4,325)
Net emissions	(188)

“

We are committed to a net zero carbon future and believe that we can make a difference.”

Amanda Mellor, Independent Non-Executive Director



Resilience to climate change

This year we have carried out a detailed review of physical climate risks (acute and chronic) to ensure we understand the resilience of our critical properties to climate change. Climate change poses a physical risk to the buildings that we occupy including offices, factories and warehouses.

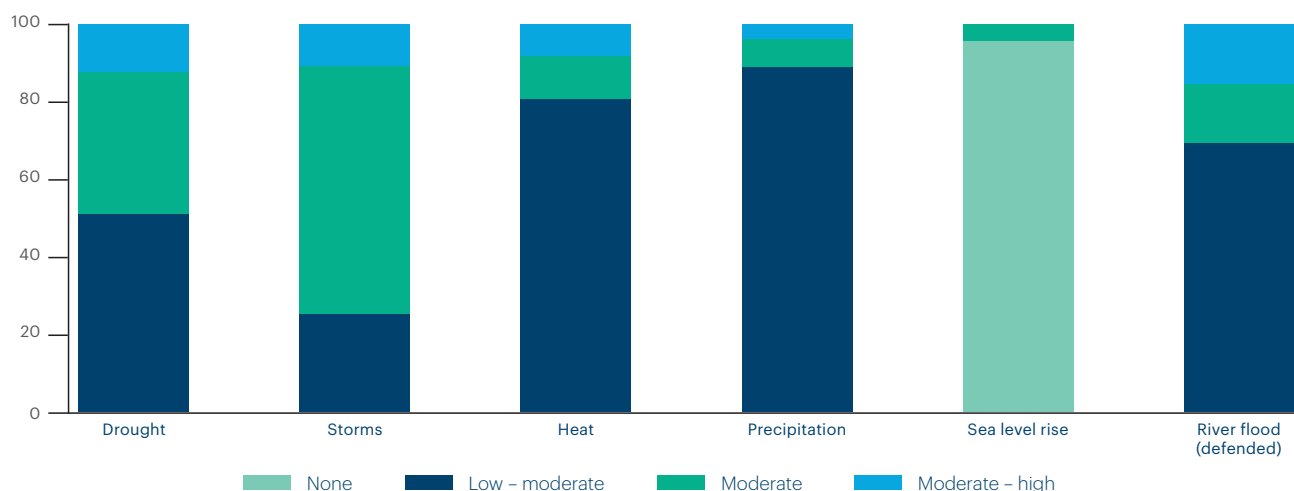
We worked with WTW consultants to forecast the impacts on our specific locations of different climate change-related hazards – including sea level rise, extreme heat, drought, storms, fires, riverine flooding, and precipitation. All assets were assessed using state-of-the-art data and models from the insurance industry and latest scientific research.

15% of locations analysed (equivalent to four sites) have a moderate to high exposure to flood from flood defended rivers in the current climate, with only one more site at risk as a result of climate change, with only one more site at a high risk as a result of climate change by 2050. In the long term in the 2050s and beyond, drought and heat stress could have an increased potential impact, including water scarcity, higher risk of fires and an impact on operations, safety and wellbeing.

None of our significant manufacturing sites are expected to be at risk of significant impact from climate change under the 1.5°C scenario under the short, medium or long term, or under the 4°C scenario under the short or medium term. This forward-looking data will inform our planning, mitigations, and acquisition strategy and we will regularly review the risk under >1.5°C scenarios over the long term.

% of business locations at risk from climate events

4°C “hot house” scenario - 2050



Sustainability continued

Task Force on Climate-related Financial Disclosures continued

Risk management

Climate change and regulatory response risks are included as part of our overall risk management framework which is described on pages 62 to 71.

Having completed a thorough review of climate risks and opportunities, we have concluded that these risks are most appropriately managed by including their potential impact within existing principal risks where relevant, rather than defining a separate principal risk. We have therefore updated the principal risks described on pages 62 to 71 to include the impact of climate change. Failure to effectively respond to climate-related risks may compromise our reputation and strategy for growth and so we will continue to closely monitor these risks and will continue to evaluate whether this should become a principal risk in the future. We have given clear emphasis to both our transition and physical risks and opportunities.

It is important to note that our sustainability ambition is to champion the energy saving potential of our products and solutions and support the net zero ambitions of the countries in which we operate. The regulatory tailwinds should significantly increase demand for our sustainable and innovative ventilation solutions, while our leadership position in the UK, Continental Europe and Australasia means that we are well positioned to seize this opportunity.

We have considered both scenarios when looking at the risks and opportunities below.

TCFD category	Potential impact of climate change	Scenario	Potential materiality		
			Short term	Medium term	Long term
Transition opportunities <ul style="list-style-type: none"> • Products and services • Markets 	Increased demand for low emissions products and services and public sector incentives to deliver national carbon reduction and net zero commitments.	1.5			
		4			
Physical risk – acute and chronic	Changing weather patterns, linked to climate change, may directly damage our production facilities or disrupt our supply chain.	1.5			
		4			
Transition risk – reputation	Investors and lenders may show a preference to allocate capital to businesses with smaller climate impacts, and customers may select competitors which are perceived as having delivered on their plans to reduce carbon.	1.5			
		4			
Transition risk – policy and legal	Governments may implement taxes or charges which penalise businesses that do not reduce carbon, also increasing the input cost of energy, freight and materials.	1.5			
		4			
Transition risk – policy and technology	Governments may implement stricter regulation, rendering elements of our product portfolio non-compliant.	1.5			
		4			

Scenario analysis

We assess our risks and opportunities under a 1.5°C Paris aligned scenario and a 4°C “hot house” scenario to provide a broad view of outcomes. Under a 1.5°C orderly scenario, risks relate primarily to the transition to a net zero world, the regulatory response, and the changing political, consumer and investor expectations. Under a 4°C scenario, the physical impacts of a changing climate will become more apparent. These scenarios are aligned to the Network for Greening the Financial System’s (NGFS) climate scenarios. The timeframes used when identifying the principal risks for Volution are over a relatively short term due to their material impact on strategy and financial performance targets. Climate change impacts are likely to appear over a much longer timeframe, which we have aligned to the NGFS scenarios. These are short term (less than 5 years) which is the period over which we prepare detailed bottom up plans, medium term (5-15 years) which is the period over which our continued strategy to provide healthy air sustainability under our three strategic pillars will be delivered including specific targets to reduce carbon, and long term (beyond 15 years) which is the period aligned to the useful economic life of some of our property assets and where the potential impacts under different scenarios are less certain. These different periods have allowed us to assess risks and opportunities that are immediate and well defined to those which may arise over time but which are much less certain.

Potential materiality



We have adopted the same approach to the materiality of these risks and opportunities as for our principal risks and uncertainties. For the purpose of this table, we have compiled the likelihood and impact of each risk/opportunity into a single assessment of materiality.

Strategic response and resilience	Impact on financial statements
The energy saving potential of our products and solutions and ability to support the net zero ambitions of the countries in which we operate. We are part of the Green economy (evidenced by the LSE Green Economy Mark).	The opportunity is conservatively built into going concern and impairment reviews. Relevant monitoring: % of revenue made up of Low-carbon products
Our main production assets are not exposed to direct risks of extreme weather or other impacts of climate change over the short or medium term. We engage with our supply chain and maintain alternative sources and sufficient inventory to avoid the impact of short-term disruption. Our geographic spread from our international acquisition strategy helps to mitigate the impact of local disruption.	There is no material impact on Going Concern, Impairment, or useful economic lives of our assets, nor any required increase in opex or capex to mitigate or replace our assets. Relevant monitoring: Continuing review of our portfolio of properties
Sustainability is at the heart of our purpose and key to our strategy. We have appropriate governance and KPIs in place to ensure delivery of our strategy. We continue to engage with our investors and lenders and are confident our strategy is well understood.	There is no material risk that we would be unable to raise sufficient funds for future business requirements that could impact our growth strategy, Going Concern or Viability. Relevant monitoring: Average weighted interest rate and availability of financing
We engage with our suppliers to positively challenge and improve our production supply chain with a focus on eliminating waste, minimising emissions and maximising efficiency. Our carbon reduction targets mitigate potential penalties or charges.	There is no material impact on Going Concern, Impairment, or useful economic lives of our assets, nor any required increase in opex or capex to mitigate or replace our assets. Relevant monitoring: Adjusted profit margin %
As active members of trade associations across our Group, we influence directional change in building regulations and improve industry guidance. We are committed to investing in innovation to support breakthroughs in sustainable living and ensuring that emission reduction is a core consideration in our solution design.	There is no material impact on Going Concern, Impairment, or useful economic lives of our assets, nor any required increase in opex or capex to mitigate or replace our assets. Relevant monitoring: Spend on new product development

Sustainability continued

Task Force on Climate-related Financial Disclosures continued

Recommendations of the TCFD

Recommended disclosures	Reference	
Governance <ul style="list-style-type: none"> Describe the Board's oversight of climate-related risks and opportunities Describe management's role in assessing and managing climate-related risks and opportunities 	Sustainability Governance (see page 42) Board activities during the year (see page 81)	<ul style="list-style-type: none"> Our governance structure provides clear oversight and ownership of the Group's sustainability strategy and management of climate risk and opportunity. In 2021, we established the Group management sustainability committee and Board member Amanda Mellor assumed Board oversight responsibility for Volution's sustainability strategy and targets.
Strategy <ul style="list-style-type: none"> Describe the climate-related risks and opportunities the organisation has identified over the short and longer term Describe the impact of climate-related risks and opportunities on the organisation's business, strategy and financial planning Describe the resilience of the organisation, taking into consideration different future climate scenarios 	Our business model (see pages 24 and 25) Climate change risk and opportunity review (see pages 44 and 45) Physical risk resilience review (see pages 44 and 45)	<ul style="list-style-type: none"> Our purpose is to provide healthy indoor air, sustainably and this commitment to sustainability is integral to everything we do. It shapes our values, steers our strategy and informs our capital allocation. Our business model is underpinned by our sustainability pillars of Product, Planet and People. Our sustainability ambition is to champion the energy saving potential of our products and solutions and we are well positioned to seize the opportunities that regulatory tailwinds bring us. We have identified transition risks related to reputation, policy and regulation, and technology but have not assessed any of these risks as high under either scenario under the short, medium or long term. We have undertaken a review of our major production and warehouse locations for physical risk using independent, science based analytics, and have concluded we are not exposed to significant risk. In preparing the Group's financial statements, we have considered the impact of climate-related risks on our financial position and performance, and have not identified any material adverse impact on the financial statements or judgements within.
Metrics and targets <ul style="list-style-type: none"> Disclose the metrics used by the organisation to assess climate-related risks and opportunities Disclose scope 1 and 2 and if appropriate scope 3 emissions Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets 	Carbon reduction forecast and targets (see pages 38 and 39) Carbon emissions scope 1, 2 and 3 (see pages 40 and 41)	<ul style="list-style-type: none"> We developed two key sustainability metrics in 2020 to measure our progress against our net zero ambitions: the % of revenue derived from low-carbon products, and the % of recycled plastic used in our manufactured products. During the year we developed our ability to measure the energy saving potential of our Heat Recovery products, demonstrating the benefit of continuing to increase sales of those products. In 2021 we set out our ambition to be carbon net zero by 2040. This year, we have set detailed forecasts and targets for the short, medium and long term which are aligned to our net zero ambitions for scope 1 and 2, and make good progress against our net-zero ambitions for scope 3. We have provided details of our scope 1, 2 and 3 emissions on both a location and market basis, and have progressed the quality of the scope 3 data by using detailed activity based methodologies.
Risk <ul style="list-style-type: none"> Describe the organisation's processes for identifying and assessing climate-related risks Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organisation's overall risk management 	Climate Change risk and opportunity review (see pages 44 and 45) Risk management and principal risks (see pages 62 to 71)	<ul style="list-style-type: none"> We have continued to embed climate risk into our broader risk management framework and have integrated climate change into our principal risks. In 2021 we introduced a climate related risk review, which this year we have improved to consider the risks and opportunities under the short, medium and long term, as well as over our chosen climate scenarios.

The Sustainability Accounting Standards Board (SASB)

The SASB Foundation was founded in 2011 as a not-for-profit, independent standards-setting organisation. Volution provides information in alignment with SASB reporting guidelines for its sector (electrical and electronic equipment). The below table shows the reported topics and metrics and where further detail can be found within this report.

Accounting metric and SASB code	Response/data/reference
Energy management	
Total energy consumed (RT-EE-130a.1)	Our total energy consumption across the Group during the year was 17,916,488kWh, representing all electricity across all of our facilities. A small but increasing proportion is “off grid”, exemplified by the solar array on the Reading facility. The percentage of electricity used that was from renewable sources including renewable tariffs was 73.7%.
Percentage of grid electricity (RT-EE-130a.1)	
Percentage renewable (RT-EE-130a.1)	
Hazardous waste management	
Amount of hazardous waste generated, percentage recycled (RT-EE-150a.1)	4,381kg of hazardous waste generated during the manufacturing, distribution or other processes, collected by an external comparator and recycled where possible.
Number and aggregate quantity of reportable spills and quantity recovered (RT-EE-150a.2)	Zero reportable spills and therefore no recovered quantity to report.
Product safety	
Number of product recalls issued, total units recalled (RT-EE-250a.1)	Zero product recalls related to product safety issued during the year and therefore zero units recalled.
Total amount of monetary losses as a result of legal proceedings associated with product safety (RT-EE-250a.2)	No monetary losses as a result of product safety issues.
Product lifecycle management	
Percentage of products, by revenue, that contain IEC 62474 declarable substances (RT-EE-410a.1)	We manufacture a large proportion of our products ourselves and use no IEC 62474 declarable substances in the production process. We are continuing to review supply chain products for relevant substances and will report in future if necessary.
Percentage of eligible products, by revenue, that meet Energy Star criteria (RT-EE-410a.2)	This metric is not relevant at a global level as it is only applicable in the US and Canada.
Revenue from renewable energy-related and energy efficiency-related products (RT-EE-410a.3)	Revenues derived from products that are low carbon account for 66.1% (2021: 62.1%) of total revenue (see page 11).
Materials sourcing	
Description of the management of risks associated with the use of critical materials (RT-EE-440a.1)	Our suppliers make a vital contribution to our performance and engaging with our carefully selected, high quality supply chain ensures we can maintain security of supply. Reviews and supplier audits are carried out to ensure compliance with our Code of Conduct and our policies on the prevention of bribery, corruption and modern slavery. The Group is exposed to fluctuations in the price of raw materials and has implemented certain procedures to limit exposure to rising prices, including hedging of foreign currencies with which a proportion is purchased.
Business ethics	
Description of policies and practices for prevention of bribery, corruption and anti-competitive behaviour (RT-EE-510a.1)	Volution is committed to complying with all applicable laws and regulations in the countries in which we operate. Our policies are available on our website.
Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption (RT-EE-510a.2)	No legal proceedings and no monetary losses.
Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour (RT-EE-510a.3)	No legal proceedings and no monetary losses.
Activity measures	
Number of units produced by product category (RT-EE-000.A)	A breakdown of revenues by activity and product type is shown on page 144.
Number of employees (RT-EE-000.B)	Workforce statistics are shown on page 25. The average number of employees in the year was 1,898 (2021: 1,475).
Reportable accident frequency rate	Reportable accident frequency rates are shown on page 11. We report frequency rates per 100,000 hours worked, representing an approximation of the hours worked during a person's lifetime, and allowing comparability across our business units and with other companies. Reportable accidents per 100,000 hours worked in 2022 was 0.25 (2021: 0.20).
Fatalities	
Fatalities	Zero fatalities occurred during the year.
Minor accident frequency rate	Minor accident frequency rates are shown on page 11. We report frequency rates per 100,000 hours worked, representing an approximation of the hours worked during a person's lifetime, and allowing comparability across our business units and with other companies. Minor accidents per 100,000 hours worked in 2022 was 0.43 (2021: 0.61).

People



“

Our people and their passion to deliver excellence is what makes us unique and fuels our ambition. Our business thrives when our people do and we recognise that this is only possible in an environment that is engaging, inclusive and safe.”

Michelle Dettman, Group Head of HR

Employee engagement

Our employee engagement activities during the pandemic were significantly limited. However, no sooner were the travel restrictions lifted, than the Executive Team was out on the road visiting local sites and meeting with shopfloor and office staff. We listened to stories of loss, reunions and service and what stood out was the resilience and commitment of our employees. The meaningful insights we gained through these informal conversations will shape our employee engagement agenda in the year ahead.

Across the globe, our team in Germany organised an adventure day where employees and their families and members of the local community participated in fun and learning activities about sustainability. Our team in Sweden hosted a Company-wide cross-functional team activity to immerse themselves in our strategy and our products.

Our Employee Engagement Forum, attended by Non-Executive Board member Claire Tiney and representatives from all countries, continues to receive positive feedback. This is a great opportunity for our employees to showcase successes and learnings as well as gain a deeper understanding of our strategic imperatives.



Executive team engaging with employees at ERI Corporation, North Macedonia



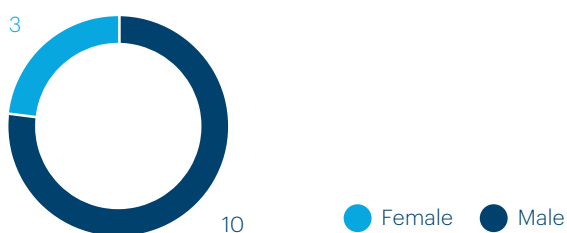
Kick-off event of the Women@Volution employee resource group

Diversity, equity and inclusion (DEI) and wellbeing

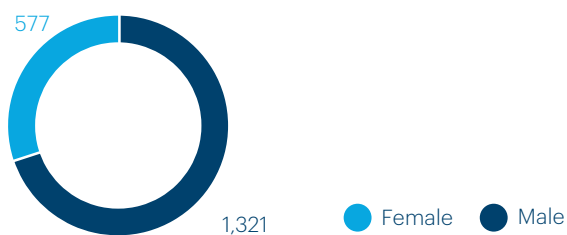
Our employees represent different nationalities, cultures, backgrounds and sexual orientations. We are determined to foster a culture of equity and mutual respect where all our employees feel valued and their contributions recognised. We have recently kicked off engagement sessions with our employees to shape our DEI agenda for FY23. We are also setting up a DEI Committee to steer us towards achieving greater gender and ethnic diversity in our leadership teams and an inclusive work culture and further enhance our employee wellbeing offering.



Senior managers¹



All other employees



Note

1. Legislation requires that we define "senior managers" as the directors of our subsidiary companies. However, the Board believes this information does not provide a meaningful analysis of how the Group operates so the data shown reflects the proportion of senior managers by our own internal grading system. The number also excludes Board Directors.



Sustainability continued

Learning and development

We are committed to building a learning culture at Volution and will continue to make significant investments in our learning platforms to ensure easy access and relevant content is available to our employees. In 2022, we focused on strengthening training in the areas of compliance, health and safety and information security. Our goal in FY23 is to roll out critical functional and leadership skills training to enable our employees to continue to grow their careers and build skills for the future.

We have made good progress in providing development opportunities for our employees and in FY22, 22% of vacancies were filled through internal moves.

Our communities

Our employees' commitment to support the communities we serve is unwavering and despite the Covid-19 constraints our employees continued to champion their selected charities.

22%

of roles filled internally
Target for FY23 >25%

187

Number of safety walks
Target for FY23 >250

11,167

Number of hours in formal training
Target for FY23 > 12,500



Some of the activities our teams engaged in to support their charities



Health and safety

Health and safety is of major importance to us when considering the day-to-day health, safety and welfare of our customers, employees and contractors. We are focused on our zero harm ambition and having the highest standards in the effective management of our health and safety obligations. In FY22 there were 187 safety walks carried out by senior managers across all our operations which is testament to the commitment and the duty of care our leaders have towards our employees.

In February 2022, our ventilation operations in the UK implemented a business wide management system in order to structure all quality, environmental compliance and health and safety recording. A notable achievement is the recent ISO 45001 certification gained across all our ventilation brands and their operations within the UK, demonstrating our robust health and safety management system. At a Group level we have seen a decrease in the reportable accident rate as compared to last year (excluding recent acquisitions) and are fully committed to further strengthening our health and safety culture across the entire organisation.

ISO 45001

Certification gained across ventilation operations in the UK

Supply chain

Across our operations, we see opportunities to lead suppliers to better ethical, social and environmental performance. We are increasing the level of transparency in our supplier selection and scheduled audit processes. We believe in the principles of respect, safety, inclusiveness and a shared ambition for continuous improvement for the conditions in which our people work and live. We believe that the same principles should be applied throughout the supply chains that work with us in fulfilling our purpose of delivering healthy air, sustainably.

These are some of the additional actions that we have taken in the past year to ensure that people working within our supply chains are treated in line with our principles and values:

- We have widened the scope of our physical Modern Slavery and Child Labour audits to include four new countries in line with the Global Slavery Index.
- We have offboarded a key supplier which would not co-operate with Modern Slavery and Child Labour audit requirements.
- Suppliers are now also required to disclose what policies they have in place that safeguard the rights and conditions of their employees. We expect them to develop these when they are not in place.

We will continue to increase transparency in how people are treated in our supply chains, and to strengthen checks and balances that will ensure compliance. We expect all our supply chain partners to reflect our commitment to treating people in accordance with the principles and values as stated in our supplier Code of Conduct.

In the second half of this year we are also proud to have become signatories to the CEO Water Mandate and the UN Global Compact. We are committed to accelerating sustainability efforts and scaling up our impact and have started workstreams to embed their principles in our operations and supply chains.



Strengthening our safety first culture