

Net zero framework for action 2023/24



Foreword

At Scottish Enterprise **our goal is to transform the economy by helping businesses innovate and scale**, through our central role in the delivery of Scottish Government's National Strategy for Economic Transformation (NSET). An important part of this is our support for the transition to a net zero economy, which will be key in delivering economic transformation for Scotland.

We are now at the mid-way point on our journey towards our 2025 net zero ambitions, which we first set out in 2021. This is our second annual update to Scottish Enterprise's net zero framework for action, which highlights the progress we have made so far and identifies our priority actions for 2023/24.

Our net zero plan shows how our activity will support significant, long-term, and systemic change to help transform Scotland's economy. By building Scotland's international, innovation and investment capabilities we will help attract private sector investment to support innovation and scale up net zero economic opportunities. Internally, we will continue to build net zero and fair work into everything we do, promoting these as key drivers of sustainable business competitiveness to ensure we deliver economic growth with purpose.

Globally, we are facing a dual crises of climate change and biodiversity loss. Despite the challenges these bring to Scotland, this plan builds the foundations for our approach to respond positively to these. Working with businesses across Scotland we will help them **realise the benefits and opportunities of the just transition to net zero**.

We've made good progress over the last two years in addressing our 2025 net zero ambitions and this delivery plan retains the same five key areas of focus to ensure consistency:

- Supporting net zero innovation in businesses and organisations
- Delivering projects and programmes
- Place development
- Enabling activities
- Becoming a net zero development agency by 2040.

We know that helping companies re-invent their business models to adapt to a net zero economy requires significant effort. Scottish Enterprise wants to support the economy to make this change by leading, influencing and creating opportunities for Scotland's just transition to net zero. To open up new markets, create jobs and ensure long-term business resilience, we recognise our role in helping others to understand the opportunities and risks, to take action and to commit to positive change – **for people, for planet and the prosperity of the Scottish economy**.

Adrian Gillespie
Chief Executive



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Photos front cover.

Left: Sunamp thermal storage technology factory in Tranent, East Lothian

Middle: Aerial view of Seagreen Offshore Wind Farm off the coast of Angus in the North Sea

Right: Lawers Dam hydro-electric scheme at Ben Lawers National Nature Reserve

Our progress 2022/23

We achieved

- **341,000k tonnes reduction in CO₂** from our supported businesses/projects
- **80% reduction** in Scope 1, 2 and 3* emissions in 2022 compared with the 2015-16 baseline

* Scope 3: excludes emissions resulting from Scottish Enterprise's operational support

We introduced

- an approach aligning our business support **funding to net zero outcomes**
- a new **supporting measure** to baseline the number of circular economy projects we support, to inform future development in this area – we supported **93** projects

We created

- a **leading in net zero** climate literacy training programme for Scottish Enterprise colleagues now being rolled out across the organisation
- a new **investor proposition** for Hydrogen and updated our inward investment propositions on Energy Transition, Offshore Wind, Low Carbon Heat and Low Carbon Transport

We developed

- a model to **baseline the carbon impact** of our business plan outcomes for 2021/22. We are now working to evolve and calibrate this model to ensure accuracy
- a **decarbonisation pathway** for all the buildings in our investment property portfolio (IPP), developing a roadmap to deliver a practical programme to reach net zero for the portfolio through to 2035
- a detailed biodiversity assessment of three of our IPP sites, to inform the delivery of a pilot project and a **biodiversity action plan for the SE IPP**

We launched

- **eight net zero aligned innovation calls**, including the Can Do Innovation Challenge to decarbonise Heavy Duty Vehicles – **awarding 12 Scottish companies with a share of £560,000**
- the **net zero accelerator**, a free, online tool to support businesses' net zero journeys. Since its launch over 400 companies have registered to use the tool



Our net zero ambition

Our net zero approach is to lead, influence and create opportunities for Scotland's just transition to net zero.

Our net zero ambition focuses on economic opportunities that deliver benefits to the environment and society.

We are continuing to embed a focus on net zero across everything we do to increase Scotland's sustainable prosperity. This includes decarbonising the way we operate – reaching net zero by 2040 (Scope 1, 2 and 3 emissions related to our own emissions) – while also baselining and reducing the emissions from our operational support (Scope 3).

Our approach to net zero goes beyond decarbonisation of emissions and encompasses a broad range of areas which are fundamental to achieving a just, net zero economy. These include, adapting to climate change, protecting and improving biodiversity, stimulating circular economy practices and business models, supporting green jobs and a just transition for businesses and sectors.

Scope 1 – All direct emissions from sources owned or controlled, such as company vehicles or fuel combustion on site such as gas boilers

Scope 2 – Indirect emissions from the generation of purchased electricity used by the organisation or company

Scope 3 – All other indirect emissions that occur in a business or organisation's value chain, and from activities such as business travel, homeworking, investment, goods and services, procurement and waste.

2025 ambition in our five key areas of focus

Each area includes a clear vision of where we want to be in 2025 to achieve our long-term strategic ambition:

1. Supporting net zero innovation in businesses and organisations

By 2025 we have helped Scotland become a leading location for net zero innovation, supporting businesses to access new market opportunities to improve their competitiveness and resilience.

2. Delivering projects and programmes

By 2025 we have helped to shift Scotland's economy to invest and innovate in a just, net zero future, building on Scotland's distinctive climate-related strengths and opportunities.

3. Place development

By 2025 we have embedded and strengthened the focus on net zero in place-focused projects, partnership delivery and the management of our own property portfolio.

4. Enabling activities

By 2025 we have focused on expanding climate-related economic opportunities while reducing the (scope 3) emissions associated with this.

5. Become a net zero development agency by 2040

By 2025 Scottish Enterprise has reduced emissions by 70% compared with our 2015/16 baseline.

Priority actions 2023/24

We have reached the half-way point on our journey to meeting our 2025 ambitions. While we have made strong progress and are on track to realise those ambitions, there is still more to do. Future actions are set against the backdrop of growing challenges for businesses including rising energy costs, supply chain disruption and inflation.

At the heart of Scottish Enterprise's role is **supporting businesses to respond to those growing challenges**, helping them to innovate and scale to transform the economy. We aim to provide the right support and resources to companies at all stages in their journey to net zero, raising awareness of growing opportunities and helping them realise the benefits of a just transition to net zero.

Our eight priority actions for 2023/24 focus on **strengthening and building** on our priorities from 2022/23 and developing new activities which will bring us closer to our 2025 ambitions. These priority actions are underpinned by supporting actions which will be delivered across the organisation as we **continue to embed net zero across everything we do**.

Our eight priorities for the year ahead

1. Encourage more companies on their net zero journey by continuing to embed our approach to offer funding only to companies who can already demonstrate or – with our support – are willing to adopt fairer and more sustainable business practices.
2. Continue to develop and signpost to appropriate tools and resources to help companies develop their own credible net zero action plans, including the development of a Net Zero Academy programme.
3. Deliver innovation and funding support to help businesses invest in net zero market opportunities and green jobs.
4. Increase our focus to expand green energy market opportunities and stimulate new capital investment that will help accelerate Scotland's just transition to net zero – including green heat, hydrogen, decarbonising transport, offshore wind and other energy technologies.
5. Implement pilot projects within our investment property portfolio to help map the pathway towards net zero. Strengthen the alignment and contribution of place-based innovation project activities alongside partners and businesses to help accelerate a just, nature-positive transition to net zero.
6. Develop a Values First statement to clearly communicate the expectations we have of the companies and partners we work with in terms of their alignment with our net zero, fair work and equalities, diversity and inclusion values, which deliver direct business benefits.
7. Continue to calibrate and evolve our model to baseline our carbon footprint across our operational support, using external input, helping to increase the carbon efficiency of our operational delivery.
8. Quantify our digital emissions and explore ways to reduce those emissions resulting from the shift to utilising more online channels and remote working.

Supporting net zero innovation in businesses and organisations

Our focus remains to support Scotland to become a **leading location for net zero innovation** and fair work. We know innovative businesses drive growth and are more competitive, which in turn helps create better quality jobs. We will continue to develop and signpost companies to the right tools and resources, to help them develop their own net zero action plans and innovative solutions to support the transition. Our aim is to support Scottish companies to capitalise on the opportunities of transitioning to net zero and increase the capacity of businesses to adapt to climate change, particularly in relation to domestic and international supply chains.

In 2022 we introduced an approach to align our business support funding to net zero outcomes, asking businesses to have in place a credible plan to reduce their operational emissions to net zero by 2045 at the latest. Where they do not currently have a plan in place, we offer support to help them develop one. In 2023/24 we will further embed this approach, reviewing the implementation and criteria for the distinct types of businesses we support. We will also **offer innovation support and awareness raising activities to help businesses** invest in net zero market opportunities and green jobs.

In particular, we will develop a Net Zero Academy programme to be delivered by Scottish Enterprise's Sustainability Specialists team. The Academy will work with a cohort of Scottish companies to provide expert advice and guidance on how to develop their own net zero plans.

As part of our 2023/24 Performance Measurement Framework, we will build on our existing measures to track CO₂ emissions savings as a direct result of our support and the number of circular economy projects and real living wage green jobs supported or safeguarded relating to our activities.



Compack Cartons' new green packaging facility in Livingston, supported by Scottish Enterprise

Supporting business resilience

Recent energy price volatility has negatively impacted Scottish businesses with many companies experiencing significant rises in both energy and gas costs. This has necessitated those companies to consider changes to their operations to negate cost rises, build resilience and remain competitive.

Scottish Enterprise, predominantly through the support provided by our Sustainability Specialists team, has worked with a range of companies over this period to address the cost of doing business while helping them accelerate their journey to net zero. This support includes help to develop net zero action plans that identify energy efficiency improvements, appraisal of on-site renewable energy options, development of business cases for investment in plant and equipment that improves environmental performance, and capital support for the installation of new technologies.

One example of this support is to the company [Eastern Exhibition & Display Ltd.](#) An award-winning design, print and installations company producing high quality exhibition and display materials and solutions for clients.

Based in Musselburgh, the business was established over 40 years ago and employs 25 skilled staff. Managing Director, Shevy Kapoor, is leading the business through a programme of investment in new equipment and new processes to deliver new products and services while increasing efficiency and reducing carbon emissions.

With our support Eastern Exhibition has produced a detailed Net Zero action plan, calculating its Scope 1, 2 and 3 carbon emissions, with a robust plan to reduce these in line with targets to reach net zero emissions before 2045. Our support has also enabled the business to purchase new energy and resource efficient equipment as part of the plan to reduce emissions. Support from the Scottish Manufacturing Advisory Service (SMAS) is helping the business to introduce new manufacturing processes while the layout of the factory is reconfigured.

The business has already made great progress on its Net Zero journey, with an **estimated reduction of over 180 tonnes of CO₂ emissions** in 2022 compared to its 2019 baseline. With high profile customers increasingly asking the business to assess the carbon impact of each completed installation, Eastern Exhibition's Net Zero action plan, and the methodology developed for calculating and verifying emissions, gives clients and stakeholders even greater confidence and certainty in working with the company.

On his experience of working with Scottish Enterprise, Shevy Kapoor said:

“It has been a pleasure working with the team at Scottish Enterprise. The support post COVID has been invaluable supporting my growth plans to ensure Eastern remains a robust sustainable business as it approaches 50 years of trading in a few years. Our clients are more than ever demanding solutions that align to their sustainability goals and having the support from Scottish Enterprise reviewing our business and emissions has been invaluable and gives us a platform to continue our goal to be net zero by 2045”.



The importance of **circular economy** activities by businesses is highlighted in the Scottish Government's National Strategy for Economic Transformation as a new market opportunity that can drive innovation and create job opportunities. We know circular economy practices make good business sense and can **enhance the sustainability and competitiveness of businesses**. In response to the increasing demand for resources, energy and food due to global population increase, a growing amount of waste and a worsening of environmental problems, companies across different sectors are already adopting circular principles to reduce costs, increase revenues and manage risks. Evidence tells us that those businesses who lead innovation in business models and technology can drive the transition to a circular economy.

To support this, we will continue our focus to work with businesses and supply chains to scale up the adoption of circular economy activity within our projects and support to businesses. We also aim to undertake a pilot project to work with a Scottish Enterprise supported company and its supply chain to identify ways of increasing productivity through circular approaches. The learning from this pilot will then be used and shared in our support with other businesses and their supply chains.

100% renewables powered timber kit factory

The first of its kind in the UK, NorFrame a specialist in timber frame kit packages, will manufacture its product using power generated from an on-site Anaerobic Digestion plant fuelled by silage from a neighbouring farm. This unique process eliminates the need for fossil fuels to heat or power the facility and its processes. And any waste from the digestion process, is then used as fertiliser for next year's crop, **creating a fully organic, closed fuel cycle**.

NorFrame were the first recipients of Scottish Enterprise's Low Carbon Manufacturing Challenge Fund (LCMCF), receiving a **grant of £750,000**. The grant will support the design and build of the £4 million factory, which will initially **create 11 new jobs and safeguard a further 14**. The LCMCF is a competitive mechanism which was created to support innovation in low carbon technology, processes, and innovation.

NorFrame's certified timber comes from forests managed to strict environmental, social and economic standards under the Forrest Stewardship Council UK (FSC) and Programme for the Endorsement of Forest Certification (PEFC).



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The economy and nature are intrinsically linked. **A thriving, growing and resilient economy needs nature.** Investment and innovation in nature-based solutions are fundamental to ensuring businesses can continue to grow, remain competitive and create jobs. This is being increasingly recognised by businesses globally, with significant developments underway on how to mitigate business impact and benefit from working in harmony with the environment. The Scottish Government recently published its draft [Biodiversity strategy to 2045](#), setting out Scotland's vision for a thriving environment. To support this vision, we will work with businesses who have the capabilities to respond through innovation to benefit from the opportunities. We will also continue to work with partners to raise awareness and support businesses to monitor and respond to their impact on nature and invest in nature-based solutions.

As emissions already locked in result in growing climate impacts globally, **climate change adaptation** is fast becoming a priority issue for future business and supply chain resilience. Scottish Enterprise has an important role to work with business organisations, [Adaptation Scotland](#) and others to raise business awareness so that companies can take a strategic approach to addressing the risks and opportunities of climate change. We also play a vital role in ensuring that the infrastructure and investments we and others make today will be climate-resilient over the coming decades. Working alongside the Scottish Government we will continue to contribute to the UK and Scottish climate adaptation strategies.

Green finance is a crucial enabler to unlock capital investment to accelerate the transition to net zero. We will increase our focus and develop existing resources to capitalise on green finance opportunities to more effectively integrate capital investment to accelerate net zero and raise company awareness of new ESG (Environmental, Social, Governance) reporting and investment requirements.



Delivering projects and programmes

For Scottish Enterprise, transforming the economy is about supporting projects that will result in more, **higher quality jobs, increased wages, faster productivity growth, improving environmental quality** and at a level that makes a visible difference. We want to concentrate our efforts on the first three pillars of the Scottish Government's National Strategy for Economic Transformation (NSET), where we can harness the innovation needed to build Scotland's international competitiveness and deliver new investment into the economy. This includes playing a leading role in the transition to a just, net zero economy and transforming Scotland's green energy industries and supply chains.

In 2023/24 we will increase our focus on **creating an internationally competitive green energy industry** in Scotland that will help accelerate Scotland's just transition to net zero. We will do this by stimulating innovation and investment in Scotland's supply base and entrepreneurs to take advantage of the enormous scale of economic opportunities, supporting diversification into green energy from fossil fuel activities, and targeting inward investment and capital investment to scale up Scotland's capabilities. This will cover hydrogen, offshore wind, green heat, and decarbonisation of transport – as well as other energy technologies that will be essential to delivering a net zero energy future for Scotland. A thriving green energy industry in Scotland will deliver significant economic benefits, in addition to the social and environmental benefits from the just transition to net zero.

Decarbonising the global shipping sector

Smart Green Shipping (SGS) is a systems design and engineering company based in Dumfries that is developing unique retrofit sails and technology for sustainable commercial ships to enable the reduction of emissions from certain ship types by at least 20%. Global shipping can take advantage of wind-assisted power solutions to decarbonise the sector, which currently emits over one million tonnes of greenhouse gas (GHG) emissions per day.

We have supported the company on its journey alongside our sister agency South of Scotland Enterprise. SGS has been developing its high-tech sustainable sails with **grant support of £1.8 million** from Scottish Enterprise in 2022 and additional **investment** most recently alongside MOL Drybulk Ltd. This support has enabled SGS towards building and installing the world's first full size FastRig at Hunterston PARC on the Clyde. FastRigs are designed to be easily fitted to existing ships and, when combined with technology from SGS via its weather routing system, fuel savings of at least 20% and up to 30%, which have been verified via external academic analysts.

SGS CEO, Di Gilpin, said: "None of this could have happened without Scotland's vision and understanding of the complexities and interconnectedness of global shipping and its urgent need for emissions reductions solutions. Scottish Enterprise provided SGS with a large R&D grant and co-invested alongside one of Japan's leading shipping companies Mitsui OSK Line Dry Bulk. Being based within the SOSE region SGS benefits from ongoing local support and knowledge around recruitment, IP and, perhaps most importantly, being part of the like-minded, ambitious community emerging there."



Visualisation of FastRigs installed on a dry bulk ship© Smart Green Shipping

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We already have a number of delivery mechanisms underway to support this aim, such as the Offshore Wind Port Development Support Programme providing targeted support to ports to progress the environmental studies and technical development required to attract investment.

We are delivering the £17.6 million [Green Heat Innovation Support Programme](#) (GHISP) to support innovation and capital investment that will accelerate the roll out and adoption of green heating solutions, to encourage the growth of Scotland's green heat market. [Heatsource](#), Scotland's Low Carbon Heat Network project, funded by Scottish Enterprise, is a collaborative knowledge hub bringing together the heat community in Scotland to explore opportunities in low carbon heat.

We also launched the first Green Heat Accelerator Programme supporting 12 early-stage businesses working on decarbonising heat in buildings in Scotland.

Green Heat Accelerator

Our Green Heat Accelerator was a pilot programme aimed at supporting a cohort of SMEs delivering products and services in low carbon heat and have ambitions to grow, to deliver against the Scottish Government's [Decarbonising Heat in Buildings Strategy](#) and help meet the target of 68% reduction in emissions from buildings stock by 2030.

The programme ran from October 2022 to February 2023 and consisted of a mix of three in-person workshop sessions and three months of virtual classes alongside individual mentoring, with the aim of building leadership and management skills, making connections, and helping the SMEs to develop their commercialisation growth plans. The programme supported **12 early-stage companies, to develop a growth plan** and progress will be monitored for 12 months, between March 2023 and March 2024.

The programme was delivered in partnership with Carbon Limiting Technologies (CLT). CLT is a consultancy specialising in commercialisation of low carbon innovation and has experience in running accelerators for cleantech businesses.



Green Heat training at Edinburgh College, Edinburgh Scotland

There is an increasing policy focus on supporting a **just transition to net zero**. The Scottish Government has a strategic approach which supports the delivery of NSET, through specific Just Transition Plans. Scottish Enterprise has complementary roles relating to the just transition: influencing long-term planning to rebalance Scotland's economy, helping businesses decarbonise and transition to new markets and working with employers to help their workers benefit fairly from a just transition.

Key projects we will deliver this year include increasing our emphasis on growing green energy and other emerging industries to provide new, high-value business and job opportunities across Scotland. We will support a just transition through the development of the [Energy Transition Zone](#), in the North East of Scotland and continue working in partnership with the [Grangemouth Future Industry Board](#) to support the development of a baseline, vision and just transition plan for the Grangemouth industrial complex.



Aerial view of Grangemouth on the Firth of Forth

A Just Transition

The Grangemouth industrial cluster is widely recognised as Scotland's foremost manufacturing region, with specific expertise in chemicals and oil and gas processing. Grangemouth is Scotland's focal point for downstream oil and gas processing, playing a key role in fuel supply, as well as producing many chemical feedstocks and products that are currently vital for everyday life. Furthermore, the area employs approximately 7000 people and contributes an annual GVA of over £800 million. However, the site is also responsible for around 8-9% of Scotland's carbon emissions, and as such is a critical area to decarbonise in order to meet climate change targets.

Despite significant challenges, decarbonising Grangemouth would equate to the reduction of a significant portion of Scotland's overall emissions. Furthermore, the region is well-placed to play an even wider role in achieving a Just Transition to net zero for Scotland. Existing expertise in producing and handling of hydrogen with opportunities to become a hydrogen production hub of the future, a depth of chemicals expertise that is highly compatible with bio-based manufacturing, and potential to attract new and innovative industries via co-location, could all further Grangemouth's status as an exemplar low-carbon cluster, whilst maintaining and re-purposing skills and jobs that will be necessary in a net zero economy.

We are working with the Scottish Government and partners within the Grangemouth Future Industry Board to produce a Just Transition Plan for Grangemouth over the next 12 months, taking a co-ordinated approach to ensure the plan is co-designed alongside industry and other stakeholders with a vested interest. Collectively, we have four key priorities:

- preserve and enhance the economic contribution of the manufacturing cluster
- reduce emissions to net zero
- capture and amplify existing assets such as skills and knowledge to progress the transition, and
- ensure that the transition is fair for all

Watch the [Grangemouth 360](#) video for more information.

Place development

We are building on the preparatory work completed in 2022/23 to implement pilot projects within our investment property portfolio **to help map the pathway towards net zero**.

Scottish Enterprise manages a diverse portfolio of buildings and land assets which support our economic development objectives, including providing business space and development land. During 2022/23 we completed a detailed review of the building stock to map the route to decarbonise our portfolio through to 2035, together with an assessment of opportunities for energy generation and biodiversity improvement. In 2023/24 we will begin to deliver pilot projects that support this decarbonisation strategy. These will include early action projects to decarbonise the building stock, improve biodiversity and bring suitable sites to market for energy generation and storage.

Our innovation and place activities include support for the development of key strategic locations. In 2023/24 we will continue to ensure that these locations are developed in line with our net zero ambitions including supporting Renfrewshire Council to complete the Advanced Manufacturing Innovation District Scotland (AMIDS) [District Heat Network](#) which has facilitated low carbon solutions for the [National Manufacturing Institute Scotland](#) (NMIS) & [Medicines Manufacturing Innovation Centre](#) (MMIC) and working with [Edinburgh BioQuarter](#) partners to secure delivery of a district heat network to supply existing and planned development.



Edinburgh BioQuarter

Edinburgh BioQuarter is a leading location for healthcare delivery, ground-breaking medical research and health innovation. The vision is to unlock BioQuarter's full innovation potential, accelerate its growth and become a global destination for pioneering health innovation and enterprise. Along with Scottish Enterprise, it is backed by the City of Edinburgh Council, NHS Lothian and the University of Edinburgh. Each organisation brings experience and expertise in areas crucial to BioQuarter's success and future development plans. Over the next decade BioQuarter will transition into Edinburgh's Health Innovation District – a new mixed use, urban neighbourhood of Edinburgh, centred on a world leading community of health innovators and companies.

The partners are committed to achieving an exemplar net zero development and have agreed a sustainability strategy with a focus on net zero carbon buildings, biodiversity net gain and climate change adaptation. Scottish Enterprise has supported the partners to develop an energy masterplan to examine options for energy generation as the site develops, including the supply of heat to the site via a heat network which all buildings can utilise. This is proposed to serve new buildings on the site's masterplan, with connection to existing buildings on site in due course, including the NHS Royal Infirmary of Edinburgh and the Royal Hospital for Children and Young People, and the potential to serve social housing off-site. A more detailed feasibility study commissioned by the City of Edinburgh Council on behalf of the partners has now been completed. It examines the potential for a new heat network or connection to the upcoming Shawfair Heat Network in Midlothian.

Aerial view of Edinburgh BioQuarter



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In our place-focused activities we also engage with a broad range of stakeholders including regional economic partnerships. During 2023/24 we will continue to work with them to address economic opportunities and decarbonisation activity aligned with our net zero ambitions. These activities will include implementation of the first phase of the [Tay Cities Clean Growth Initiative](#), collaboration with regional partners to complete the Ayrshire Energy Masterplan, continuing to support development of the [Energy Transition Zone](#) in Aberdeen together with engaging with partners to develop the detailed business plan for the [Forth Green Freeport](#)



Aerial view of Dundee's waterfront, Firth of Tay

Tay Cities Clean Growth Initiative

The [Tay Cities Clean Growth Initiative](#) is a vibrant regional collaboration project. Scottish Enterprise is working in partnership with the four local authorities of Angus, Perth & Kinross, Dundee City and Fife, to highlight and support the Tay region's competitive advantages in the low carbon economy. Supported by the [Tay Cities Deal](#), the initiative aims to stimulate economic growth in the development of low carbon products and services that directly support the wider global mission to tackle climate change and achieve environmental sustainability.

The Tay Cities Clean Growth Initiative brings together smart, innovative businesses and academia, connecting projects from the Tay Cities Deal and beyond, creating a community that works together and presents the Tay Region's clean growth opportunities and synergies collectively. Clean Growth in the Tay Cities Region has a special focus on; Sustainable Mobility, Green Agri-tech, Clean Energy, Circular Economy and Data & Digital Solutions.

Scottish Enterprise is leading the way in actively encouraging and nurturing synergies between projects, public and private sector and galvanising regional partnership working. We understand the huge importance of skilled labour and regional talent and commissioned a study looking into the skills demands and the needs of businesses arising from the opportunities of the clean growth sector. An online platform was also launched to enable and encourage businesses, industry, academia and others to collaborate, share knowledge and drive low carbon and clean growth innovation and investment.

Enabling activities

As a publicly funded organisation we want to ensure we clearly communicate our expectations to the companies and partners we work with. We are developing a **Values First** statement to clearly outline and promote our approach on net zero, fair work and equalities, and diversity and inclusion. A growing body of evidence shows that businesses who adopt values-based leadership, and embed net zero, fair work and equal opportunities within their operations, benefit from higher performance. They are better able to attract and retain customers, employees and investment. Diversity also drives better decisions, and they enjoy a stronger reputation as an innovative business. This supports our focus already embedded in Scottish Enterprise's goal to transform the economy, underpinned by a commitment to promoting fair work and net zero. The *Values First* statement will be positioned to be easily accessible to the companies and partners we work with.

Last year we began the development of a model to quantify the carbon footprint and impact of Scottish Enterprise's Business Plan outcome measures, to provide a baseline of our total scope 3 emissions in relation to the support we provide. We developed a working model which allowed us to calculate the baseline figures for 2021/22 and we now plan to use the model to calculate the total emissions for 2022/23. Over the next year we plan to continue to calibrate and evolve the model to increase its accuracy. Informed by external expertise, we aim to use the results to help increase the carbon efficiency of our operational delivery.

Quantifying our carbon footprint across our operational support

Scottish Enterprise has developed an approach to quantify the carbon footprint and impact of our Business Plan outcome measures (scope 3 emissions). This looks at how the economic development objectives we set around R&D, capital investment, growth funding, living wage jobs and international sales result in carbon impacts.

The approach uses Scottish Government industry official data, using carbon level estimates per million pounds of revenue by sector to calculate the carbon totals from the achievement of our Business Plan outcome measures. This is a similar approach used by the Scottish Government in the calculation of the carbon impacts of its budget. Instead of financial spend used by the Scottish Government, we use our Business Plan outcome measure achievement data, which is then converted to carbon totals. The approach has been discussed and refined based on conversations with Scottish Government, Highlands & Islands Enterprise, South of Scotland Enterprise and the Fraser of Allander Institute.

The carbon is a consumption-based approach consistent with the Scottish National Performance Framework "carbon footprint" [National Indicator measure](#). This means it counts carbon at the point of use in Scotland and all stages up to it regardless of where it is generated.

The key findings are that:

- The achievement of Scottish Enterprise Business Plan outcome measures are largely in low carbon intensity sectors (44% of business plan measure contributors are in the lowest carbon intensity sectors in Scotland)
- A small proportion of higher intensity sectors contribute most of the carbon impact (1% of projects make up one third of the carbon impact)
- Manufacturing contributors make a higher disproportionate impact to the total, as do water supply and waste contributors
- Professional services and ICT projects make up a lower disproportionate impact to the total

The methodology for assessing carbon is being used to better understand Scottish Enterprise's carbon impacts and will be developed on an annual basis to inform our policy, including revisions to existing results where appropriate. This will be used to inform future decisions and support our ambition of reducing our scope 3 emissions by 2025.

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We are committed to **building capacity and knowledge** across the organisation on net zero, continually reviewing the resources we have available for colleagues to access and build their understanding of climate change, with a specific focus on how we can support businesses.

Building on the delivery of climate literacy training to Scottish Enterprise leaders in 2021/22, we created a 'Leading in Net Zero' climate literacy programme in 2022 which is now being delivered to 700 Scottish Enterprise staff across all teams. The new training will help colleagues confidently advise businesses on climate risks, growing market opportunities and new developments.

To support our ambition on embedding net zero across everything we do, we will further develop our focus on net zero within our project development and approval processes, particularly including consideration of climate change adaptation, biodiversity improvement, the circular economy, and the just transition.



Becoming a net zero development agency by 2040

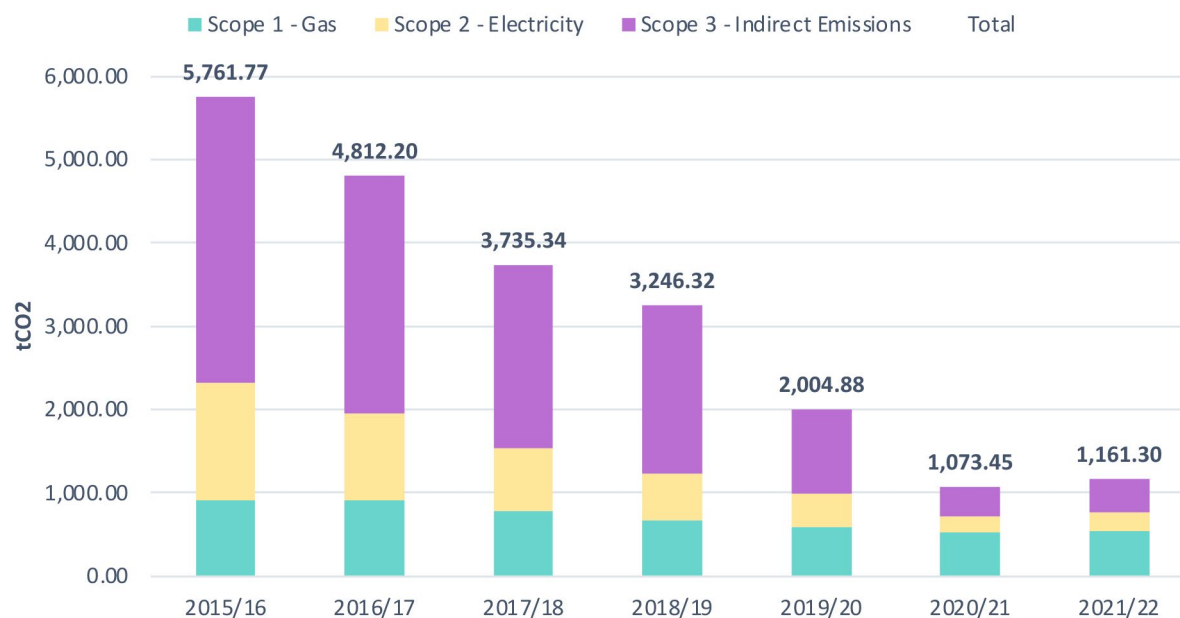
Scottish Enterprise is committed to achieving net zero by 2040, with an interim target of 70% by 2025 compared with our 2015/16 baseline. We are making positive progress and are on course to meet both of these targets. Whilst we are on track, we are not easing our activities and we are continually looking for new ways to adapt and respond to changes in ways of working to support our carbon footprint reduction.

In 2021/22 the largest contributions to emissions were office space (35%), the investment property portfolio (32%) and emissions arising from home working (26.5%). Overall, we have achieved **an 80% reduction in emissions in 2022** compared with the 2015/16 baseline.

We are beginning to see a small rebound from the decrease in emissions which occurred during the Covid-19 pandemic, reporting a 1% increase in emissions from the previous reporting year (2021/22). This increase was anticipated and we project there may be another slight increase during 2023/24. However, we will work to limit this and ensure we do not return to pre-pandemic emissions levels. Although there was a 1% increase in emissions, we have achieved our annual reduction target and are still on track to exceed our interim target reduction of 70% in 2025.

We are continually working to find ways to reduce our carbon footprint. In 2023/24 we will focus on implementing actions to reduce the carbon footprint associated with our investment property portfolio (outlined in our Place Development focus area).

Emissions reduction from baseline year



Scope 3 figures shown do not include any emissions resulting from our operational support. We are continuing to develop a model to baseline the Scope 3 emissions related to our operational activities as part of our 2023/24 plan.

*Full Scottish Enterprise Climate Change Report 2021/22 can be downloaded from the [Sustainable Scotland Network](#) website.

20-Net zero framework for action 2023/24

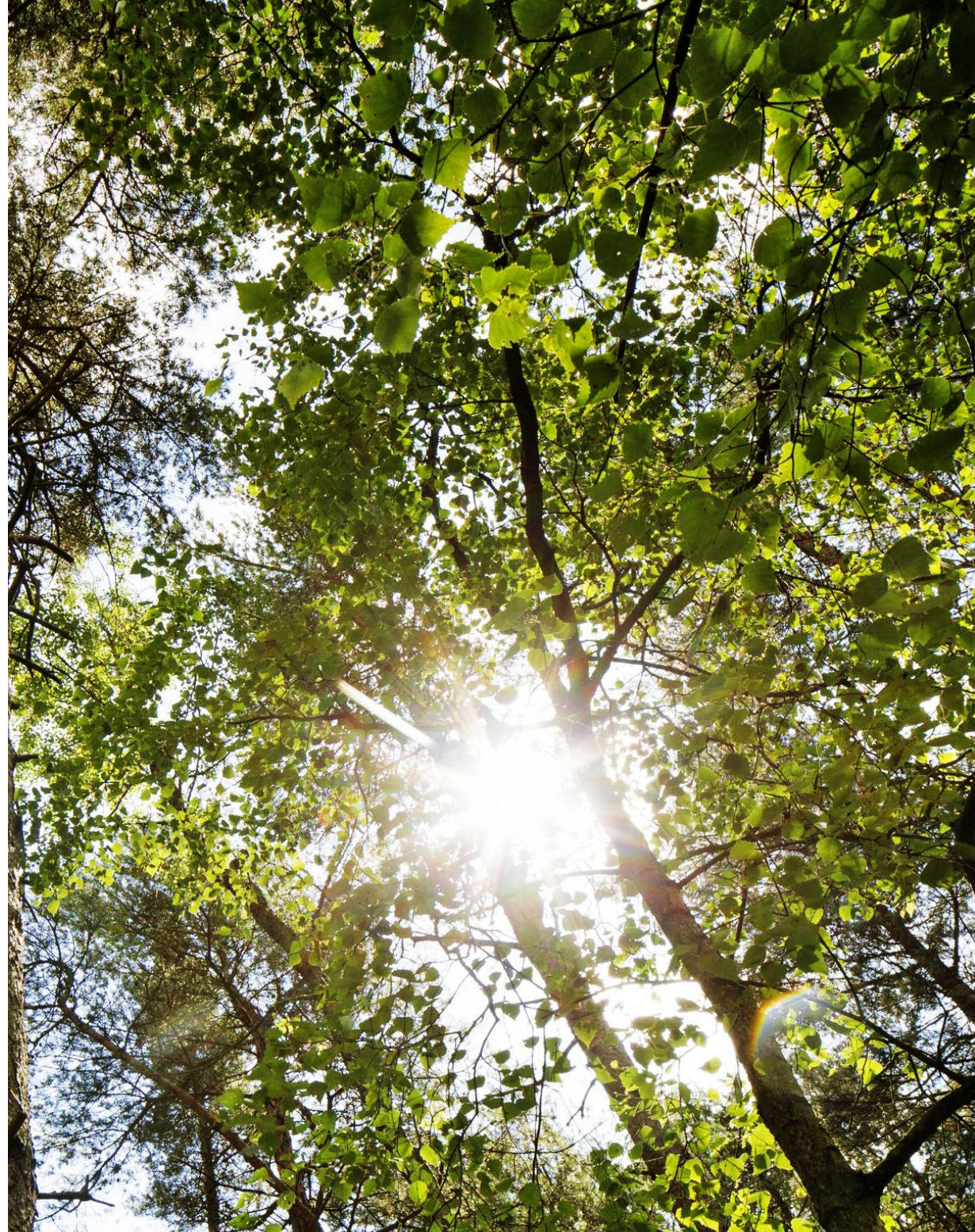
Outlined below are other aspects of our carbon footprint reduction which we will be focusing on in 2023/24.

Digital – During 2022/23 we made progress towards reducing our digital emissions by reviewing and reducing the carbon footprint of one of our websites, this project will continue to be a focus in 2023/24. Through the review of our digital emissions, we have identified actions which will be implemented to reduce the emissions generated from our digital activity and continue our focus on our digital carbon footprint.

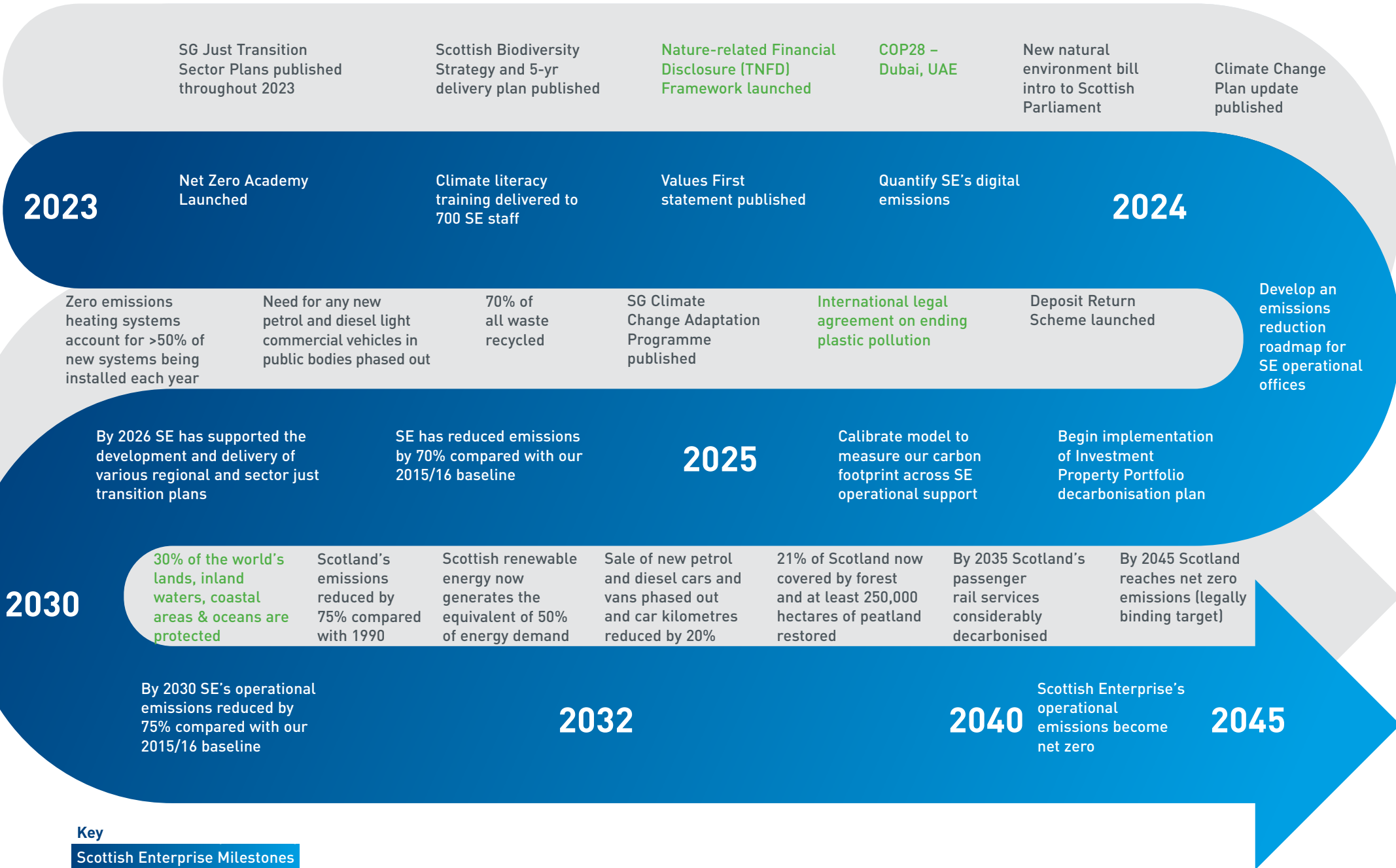
Operational travel emissions – We have fully embedded a process to monitor business travel emissions on an ongoing basis, highlighting any risk of exceeding limits put in place across the Scottish Enterprise divisions. To support this, we have six advocates representing each division who receive a monthly update showing travel statistics within their division which is shared with their leadership teams allowing them to review and manage travel emissions.

Scottish Enterprise operational offices and facilities – As part of our continued efforts to reduce our emissions in line with our 2025 and 2040 targets, we will develop an emissions reduction roadmap for our operational offices.

Procurement – We are continuing to actively promote net zero in our procurement processes. Where applicable, we require suppliers to provide evidence of their commitment to net zero by submitting their organisational strategy and plans to achieve this as part of tender submissions. We will also update our Sustainable Procurement Policy this year.



Our journey



2023

Net Zero Academy Launched

Climate literacy training delivered to 700 SE staff

Values First statement published

Quantify SE's digital emissions

2024

SG Just Transition Sector Plans published throughout 2023

Scottish Biodiversity Strategy and 5-yr delivery plan published

Nature-related Financial Disclosure (TNFD) Framework launched

COP28 – Dubai, UAE

New natural environment bill intro to Scottish Parliament

Climate Change Plan update published

Zero emissions heating systems account for >50% of new systems being installed each year

Need for any new petrol and diesel light commercial vehicles in public bodies phased out

70% of all waste recycled

SG Climate Change Adaptation Programme published

International legal agreement on ending plastic pollution

Deposit Return Scheme launched

Develop an emissions reduction roadmap for SE operational offices

2030

By 2026 SE has supported the development and delivery of various regional and sector just transition plans

SE has reduced emissions by 70% compared with our 2015/16 baseline

2025

Calibrate model to measure our carbon footprint across SE operational support

Begin implementation of Investment Property Portfolio decarbonisation plan

30% of the world's lands, inland waters, coastal areas & oceans are protected

Scotland's emissions reduced by 75% compared with 1990

Scottish renewable energy now generates the equivalent of 50% of energy demand

Sale of new petrol and diesel cars and vans phased out and car kilometres reduced by 20%

21% of Scotland now covered by forest and at least 250,000 hectares of peatland restored

By 2035 Scotland's passenger rail services considerably decarbonised

By 2045 Scotland reaches net zero emissions (legally binding target)

By 2030 SE's operational emissions reduced by 75% compared with our 2015/16 baseline

2032

2040

Scottish Enterprise's operational emissions become net zero

2045

Key

- Scottish Enterprise Milestones
- Scottish Policy Milestones
- Global Milestones

