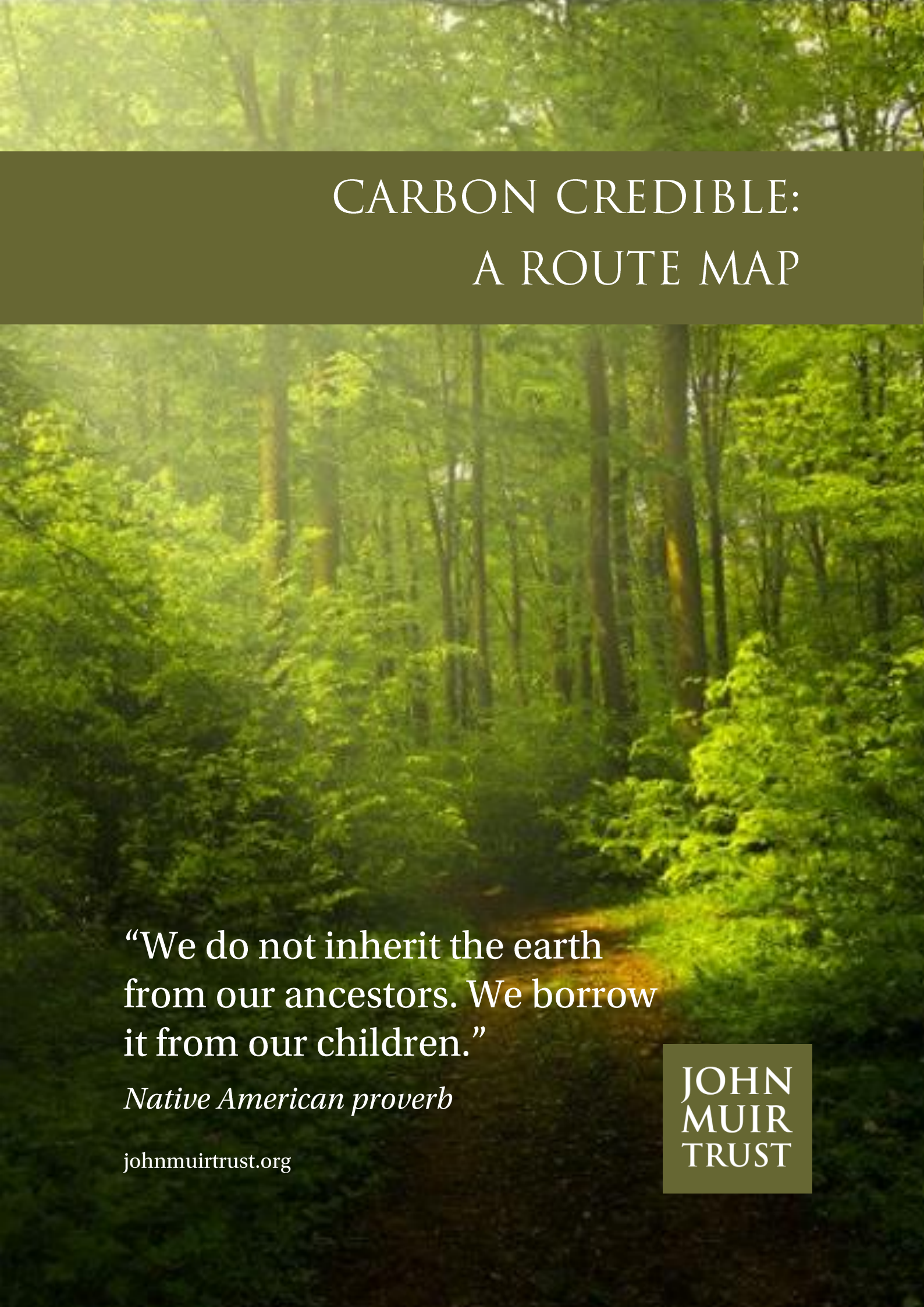
CARBON CREDIBLE: A ROUTE MAP



"We do not inherit the earth from our ancestors. We borrow it from our children."

Native American proverb

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JOHN MUIR TRUST

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Carbon Credible

Climate change and biodiversity loss are two intertwined crises that negatively impact wild places, species and ecosystems. Additionally they have direct impacts on people's wellbeing, the economy and society. The Covid-19 crisis has also heightened people's awareness of the fragility of our systems and our impact on the natural world.

There is some good news, though—it's not too late to recover the situation. We know that conserving natural habitats, repairing key ecosystem and connecting people to wild places are crucial to success. Organisations everywhere are beginning to re-evaluate their priorities in order to reduce emissions.

The John Muir Trust has been meeting the challenge of climate change with nature-based direct action since our launch in 1983.

More trees, less grazing and less soil erosion means more carbon is sequestered, absorbed by plant life and stored in the ground for long- term capture.

However we want to go further.

The John Muir Trust is committed to being a 'Carbon Credible' organisation.

We prefer to use this term rather than expressing our intentions as 'net zero', since that puts an emphasis on reducing the production of carbon while neglecting consumption.

We intend to take a more systemic, conscious and holistic approach, which examines all aspects of our varied operations, from land management to policy to engagement.

This Route Map contains a number of actions that we will prioritise to reduce our organisational emissions, lock-up carbon on our land and promote pro-environmental thought leadership – leading by example.

Our approach to delivering these carbon actions over the next years will remain flexible, allowing us to adapt to changes in the political, social and legislative environment, and to seize opportunities as they arise.

Our vision is to:

- Reduce operational emissions through a step-change approach
- Measure carbon stored and sequestered on our land
- Promote pro-environmental thought leadership and advocacy.

WITH A BOLD LIST OF SUSTAINABILITY COMMITMENTS, WE ARE INVITING ORGANISATIONS EVERYWHERE TO FOLLOW OUR LEAD

Our Approach

PRINCIPLES OF CARBON CREDIBLE
Our Route Map contains key principles which serve as strategic guidance to carbon credible:

Change our culture

Empower our staff, Board of Trustees and members to embrace a carbon credible mindset to reduce emissions across all aspects of our services, whilst maintaining our focus on our charitable purpose.

Prioritise emissions reduction over offsetting

Prioritise delivering carbon reduction in all our operations and only apply offsetting to balance out our hard-to- reduce residual emissions.

Deliver early

Look for innovative technical and behavioural solutions as we work towards carbon credible, in order to achieve emissions reductions earlier than our target timeline.

Work beyond the boundary of net zero

Contribute to tackling the global climate emergency by reducing emissions from activity outside the scope of the net zero boundary.

Be evidence-led, transparent and accountable

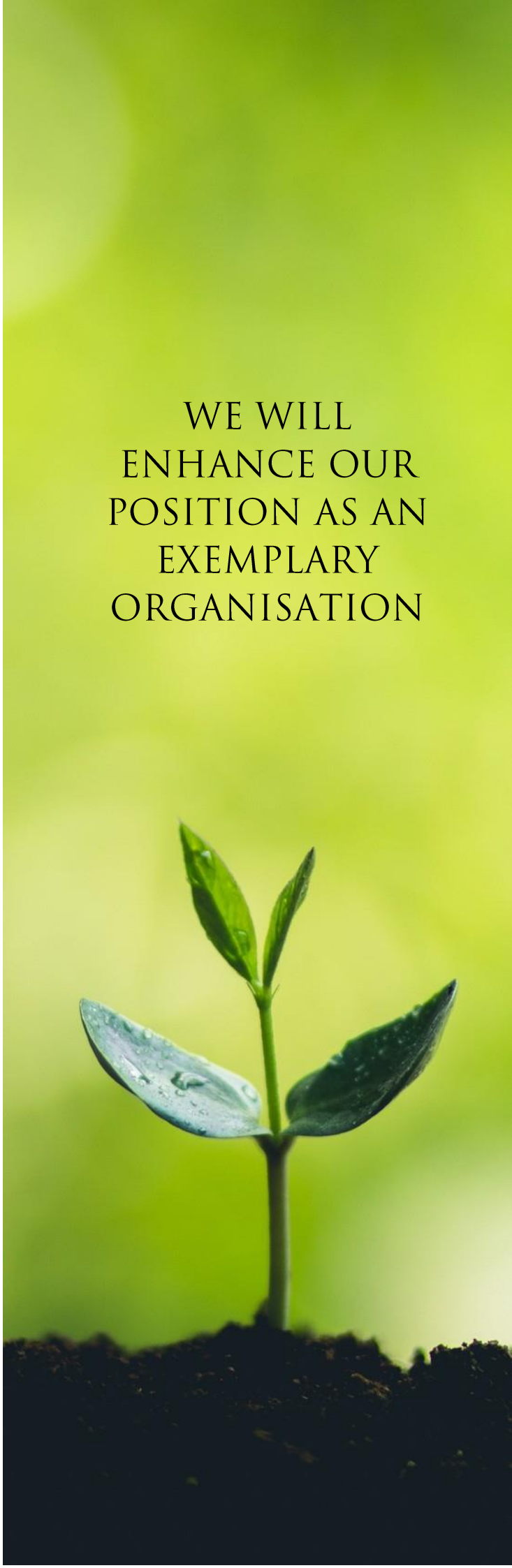
Be grounded in scientific evidence and publish our annual footprint on our website and social media channels to encourage scrutiny by our members and stakeholders.

Take account of life-cycle costs

Work with expert organisations, contractors, and suppliers to reduce our joint supply chain emissions and build carbon credibility into our tendering processes.

Influence others

Engage with our partners, visitors and local communities on encouraging carbon credible behaviour.



Internal Emissions

The scope of our baseline assessment covers emissions from the day-to-day operations and activities of the Trust.

This encompasses Scope 1, Scope 2 and upstream Scope 3 emissions.

For the purposes of targeting action, these emissions have been grouped into three categories: Energy, Transport and Supply Chain & Waste.

This includes:

- Staff commuting
- Business travel
- Building fuel and energy use
- Homeworking emissions
- Waste (including from litter picking)
- All other expenditure & expenses.

See glossary for definitions

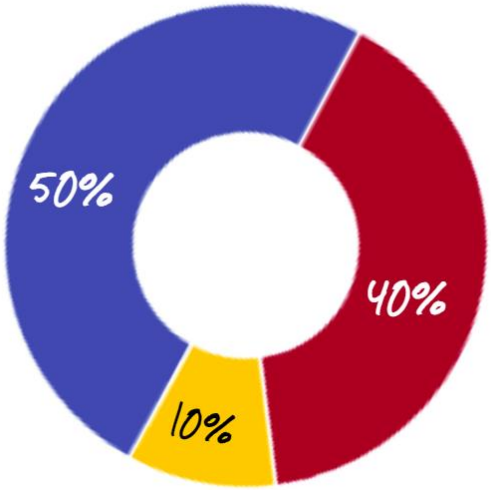
Baseline: 2019

Footprint: c.479 tonnes of CO_2-e

Supply Chain & Waste	tCO_2-e
Scope 3 – All expenses & expenditure	235
Scope 3 – Waste	4
TOTAL	**239**

Transport	tCO_2-e
Scope 1 – Trust vehicles	27.9
Scope 2 – Trust EVs	0.1
Scope 3 – Commuting, business travel	164.7
TOTAL	**193**

Energy	tCO_2-e
Scope 1 – Fuel combustion	19.3
Scope 2 – Electricity	17.3
Scope 3 - Homeworking	10.2
TOTAL	**47**



Descent Trajectory

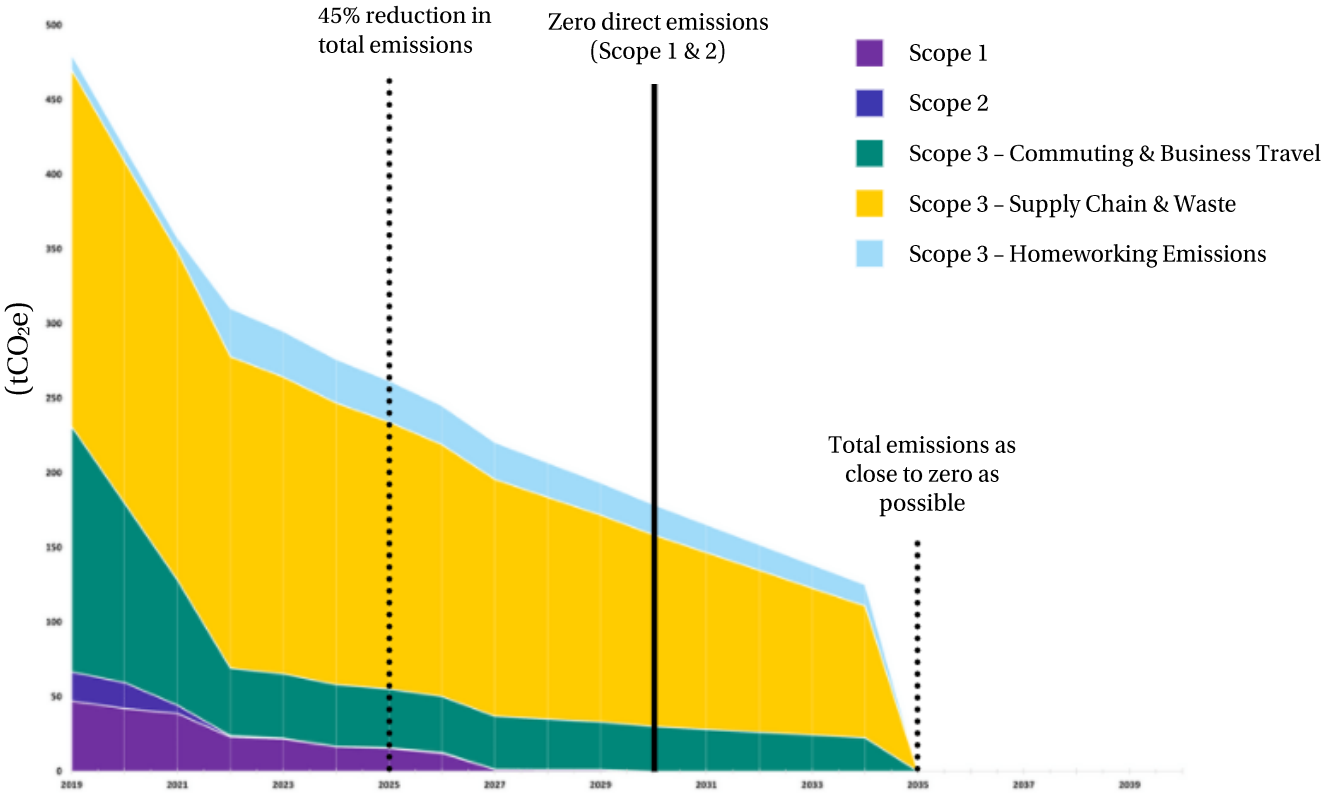
AIMS: REDUCE DIRECT EMISSIONS TO ABSOLUTE ZERO BY 2030. REDUCE TOTAL EMISSIONS TO AS CLOSE TO ZERO AS POSSIBLE BY 2035 AT THE LATEST.

We have developed an emissions descent trajectory based on guidance from the Science Based Targets Initiative (SBTi), which provides advice for organisations to set science-based targets in line with the 1.5°C goal of the Paris Agreement.

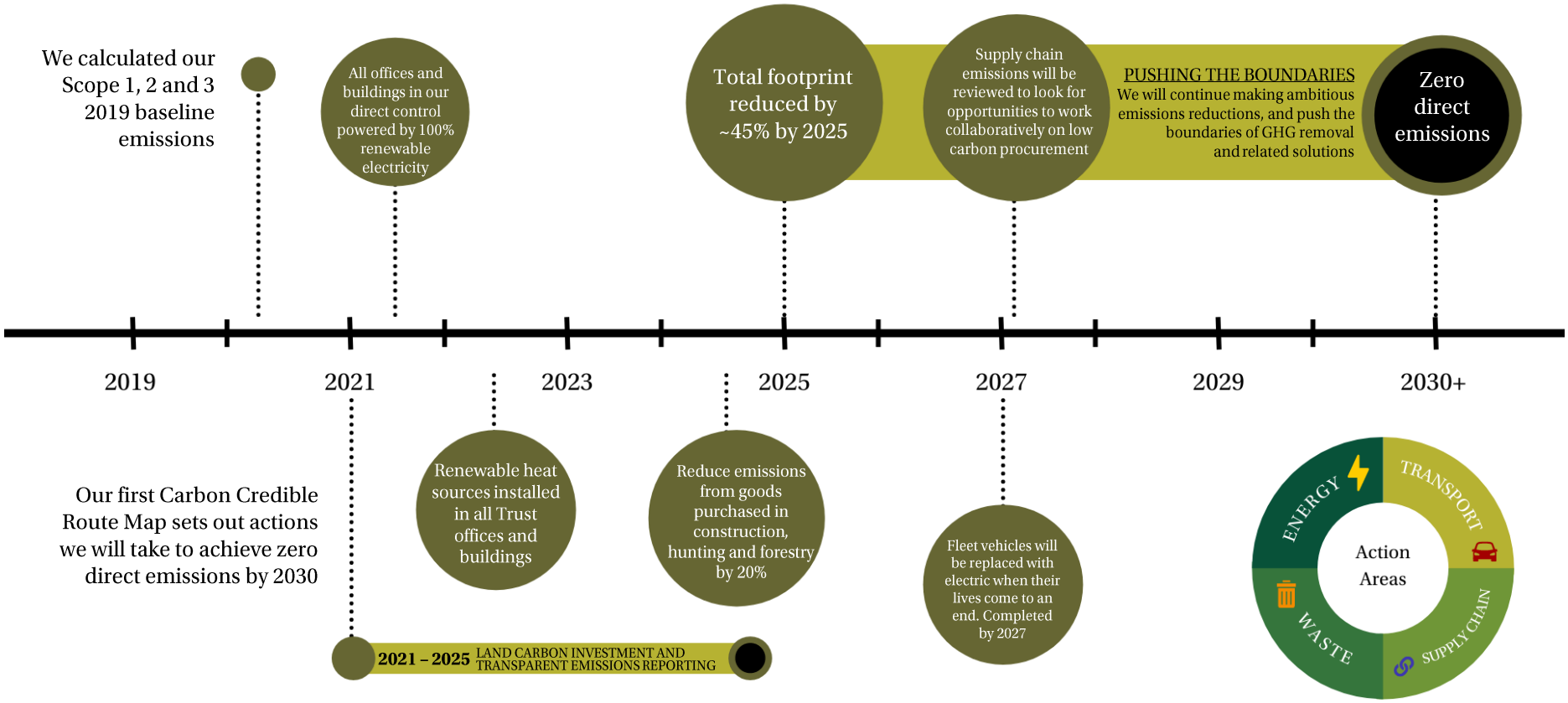
We understand that there is unpredictability and uncertainty associated with emissions calculations and reductions, therefore we recognise that we will undoubtedly have a small number of residual emissions from activities outwith our control.

Once all possible emissions reduction activities have been undertaken, we aim to internally offset (referred to as 'insetting') residual emissions through carbon sequestering activities on the land we manage.

We recognise that our targets are likely to fluctuate due to uncertainties such as future hybrid models of flexible working, however we plan to find innovative solutions and will continuously revisit and update our descent trajectory targets as a result.



Carbon Reduction Timeline



ENERGY

Scope: Home-working, office building fuel and energy use
Baseline: 47 tCO_2e

ACTIONS

- Switch all buildings under our direct control to renewable energy suppliers that invest in new renewable generation capacity.
- Explore the use of photovoltaics and/or mini hydro schemes across appropriate sites in order to generate our own electricity directly.
- Replace all older lighting with LEDs and default to eco settings on all appliances.
- Engage with staff on relevant home-working emissions issues such as green energy suppliers and home energy efficiency.

BEHAVIOURAL AND CULTURAL CHANGES

Green Nudges: Monitoring of energy usage will be improved with installation of smart meters and closer control of fuel involved in the operation of our infrastructure. PIRs and automated switch off of equipment not in use will be explored and implemented where appropriate.

Culture Change: Support will be provided to our staff through carbon engagement webinar series, the creation of sustainability policies, providing training materials and sharing information on our intranet, we will empower our staff to utilise energy efficiently.

Carbon Credible: We will scope feasibility and costs of renewable energy installations on our buildings and estates, including car parks. We will provide support for our staff to switch to green home energy tariffs where possible, to improve our homeworking emissions position.

TRANSPORT

Scope: Staff commuting, business travel
Baseline: 193 tCO_2e

ACTIONS

- Transition travel patterns to encourage increased use of public and active transport.
- Phase out fossil fuel fleet vehicles and equipment, and replace with electric equivalents.
- Reduce unnecessary journeys whilst maintaining essential activities through increasing exposure to information about the carbon consequences of a journey, providing alternative eco-modes of transport as well as promoting the increased use of video conferencing technology.
- Create a feasibility study to identify well-connected, more convenient central office location, which offers ultimate energy efficiency and more centralised commuting.

BEHAVIOURAL AND CULTURAL CHANGES

Green Nudges: Business travel carbon emissions will be monitored and published internally. Staff can tangibly see emissions from journeys with progress and departmental targets to be published quarterly, encouraging friendly, inter-departmental competition.

Culture Change: We will embed positive remote working practices into our internal policies. This will promote the increased use of video conference technology to replace face-to-face meetings where appropriate. We will provide support for choosing active travel or public transport and incentivise this wherever possible.

Carbon Credible: The feasibility of installing electric vehicle charging points at selected facilities will be explored. We will also explore EV salary sacrifice schemes and consider Climate Perks such as Journey Days, to empower staff to live their values and choose low-carbon holiday travel.

SUPPLY CHAIN & WASTE

Scope: Expenses and expenditure, waste
Baseline: 239 tCO_2e

ACTIONS

- Introduce paperless internal systems and undertake a review of hardcopy membership communications.
- Select and work collaboratively with suppliers that offer carbon credibility and embed sustainability into our procurement processes.
- Commission research to gain a deeper understanding about our emissions from land activities such as deer management, helicopter use and forestry.
- Find an alternative to landfill for non-recyclable waste collected from litter picks.

BEHAVIOURAL AND CULTURAL CHANGES

Green Nudges: Printer software has been updated to record and report the number of sheets printed to encourage a paperless office. Landfill and recycling bins will be located strategically to make sustainable behaviour options more prominent.

Culture Change: We will embed low-carbon, sustainable procurement into our internal policies. Consideration is given to the carbon credibility of a supplier or activity within spend requests and preference given to construction projects that utilise local labour and materials.

Carbon Credible: We are investing in our knowledge of our Scope 3 emissions, such as using drones to monitor deer populations and exploring alternatives to plastic tree tubes.

Land Emissions

AIM: ASSESS HOW MUCH CARBON IS STORED IN OUR LAND AND LOOK FOR FINANCIAL SOLUTIONS TO DELIVER CARBON SEQUESTRATION THROUGH NATURE-BASED SOLUTIONS.

Our work protecting and repairing wild places has never been more important or relevant. Over the coming months we will be utilising carbon mapping and habitat tools to provide estimates for the amount of carbon stored on our land and the sequestration potential of natural regeneration and habitat restoration.

We are currently undertaking work that will estimate the annual carbon emissions budget from the land we manage, in order to set a baseline for current emissions / sinks and to inform future land management. We hope to publish our first 'Carbon Emissions Baseline Report' towards the end of this year.

'INSETTING' CARBON

While our focus first and foremost is on the reduction of GHG emissions, currently there are technological limitations and emissions associated with activities outwith our control.

Therefore, inevitably our operational footprint will have a relatively small amount of residual emissions. We aim to be able to quantify the emissions we can 'inset' through our land, to help enable us to mitigate our impact whilst we work on reducing our own emissions.

WILDER CARBON

Typical carbon financing schemes focus mainly on tree planting and peatland restoration. Whilst important, there are many other native habitats that not only sequester carbon, but provide benefits for biodiversity and local communities.

Through our new partnership with Wilder Carbon, we hope to engage new audiences and attract investments which support holistic nature-based solutions, allowing us to continue our conservation work whilst covering our long-term costs.

Thought Leadership

As part of our exemplary land management plans, we aim to be thought leaders in the carbon sphere. We are undertaking a number of exciting projects which will have positive impacts for the climate, biodiversity and local communities. We have also convened meetings with other eNGOs, public and community land managers to collaborate on carbon reduction strategies.

CROFTING CARBON

We are exploring models and financial mechanisms for carbon sequestration with crofters and grazing committees, to enable long term sustainable use of common grazings and crofting communities.

CIVTECH PARTNERSHIP

Together with partners Langholm Initiative, South of Scotland Enterprise and Southern Upland Partnership, funding has been secured for the development of technology for landowners to accurately, easily and cheaply assess the carbon stocks and sequestration on their land holdings.

SCIENTIFIC PROGRESS

We will be working closely with scientists and academic institutions to refine estimates in carbon data, undertake natural capital assessments and advance understanding of climate-related issues, such as using Life Cycle Assessment to understand both the carbon and environmental impacts of deer management.

WIDER WORK TOWARDS CARBON CREDIBILITY

We are actively engaging with staff, volunteers, members, John Muir Award participants, politicians, stakeholders, local communities, and businesses to take further action to reduce emissions from activities outwith the scope of our footprint boundary.

POLICY

We have proposed a novel Carbon Emissions Land Tax to help drive behaviour change for Scotland's major landowners to meet climate targets. We estimate that land has the potential to capture enough carbon every year on a scale equivalent to removing every single vehicle from Scottish roads. Search on our website or click here to read our proposal.

ENGAGEMENT

Each year the John Muir Trust enables people to engage with the carbon and nature crisis through the John Muir Award. Through the Award's Conserve Challenge, every participant makes a positive difference for wild places, reducing the stress on our natural environment and deciding how they can best give back to nature. From beach cleaning and tree planting to citizen science surveys, reducing personal carbon footprints and campaigning for change on climate emergency and biodiversity loss, the collective impact is significant. Across the UK in 2019, 43,202 people committed 302,414 hours of conservation (average of 7 hours per person) as part of their Award, valued at £1,533,682 (based on Heritage Lottery Fund figures). Working with around 1,000 Award groups and organisations each year, the Trust will continue to inspire people to make a personal difference and advocate for systemic change.

We are also engaging with young people through our Junior Rangers programme. We will empower them to have their say on climate and policy issues and have the opportunity to contribute to our internal carbon assessments.

Glossary

Term	**Definition**
Absolute Zero	Mitigation of organisational activities so there are no emissions whatsoever.
Carbon Credible	Holistic, conscious, systemic and ecologically-responsible action to reduce and minimise our carbon footprint. Making a distinction with 'net' zero, which unduly emphasises carbon removal and offsetting.
Direct Emissions	Emissions that are directly from owned or controlled sources.
Indirect Emissions	Emissions that are a consequence of our activities but occur at sources owned or controlled by another entity.
Net Zero	The balance between the amount of greenhouse gas produced and the amount removed from the atmosphere. We reach net zero when the amount we add is no more than the amount taken away.
Reducing emissions to as close to zero as possible	Reducing our emissions as much as we can before balancing the residual, hard- to-decarbonise emissions with carbon removals.
Scope 1	Direct emissions from owned or controlled sources.
Scope 2	Emissions from the generation of purchased electricity, steam, heating and cooling consumed.
Scope 3 (upstream)	All other upstream indirect emissions that occur in our value chain.
tCO_2-e	Tonnes of carbon dioxide equivalent.

As a conservation charity dedicated to the experience, protection and repair of wild places, the John Muir Trust has been meeting the challenges posed by the climate and biodiversity crises for decades. However, the scale of the challenge means we all need to be doing more.

We are committed to being **Carbon Credible** and will achieve this through a step-change in our organisational approach to carbon production and consumption, by locking up carbon permanently on our land and promoting pro-environmental thought leadership. With a bold list of sustainability commitments, we are inviting organisations everywhere to follow our lead.

For further information, please contact Nikki Gordon - Carbon Officer: nikki.gordon@johnmuirtrust.org

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