National Library of Scotland

Climate Action Plan 2021-2025

Contents

Librarian's statement

It is my great pleasure to introduce the Library's new Climate Action Plan, a positive vision laying out how we intend to improve our sustainability between now and 2025. Becoming a sustainable organisation is one of the main objectives in our Library strategy, '[Reaching People](#)', and so I'm pleased that we now have a Climate Action Plan to realise these ambitions. As with every public body in Scotland, we have a responsibility to ensure our buildings and estate are as efficient, resilient and sustainable as possible, to help Scotland reach its net-zero target. The work outlined in this document contributes not only to library strategy, but wider Scottish ambitions.

As well as helping us minimise our environmental impact, the content of this Plan will help us achieve other objectives in 'Reaching People', such as our strategic priority to safeguard collections. Over the coming years, temperatures will fluctuate, and the risk of significant climate events will increase, potentially making our fragile collections increasingly vulnerable. It's therefore vital that we implement policies that best protect our collections and Scotland's national heritage from the effects of climate change. Our sustainability work is not just about becoming energy efficient; it plays an essential role in our work collecting and safeguarding Scotland's cultural memory.

This Climate Action Plan builds on the great work that our Estates team have been doing for years, using their expertise and dedication to make our buildings and services efficient and cost-effective. The action already taken and the measures detailed here would not be possible without them. As well as new measures to improve the efficiency of our buildings, the Plan details how we will streamline sustainability into all aspects of our work. Every member of staff should feel included and supported in our mission to become a sustainable organisation. We all have an important role to play.

Something exciting to watch out for over the next four years is how the Library will engage the public with the issue of climate change. In addition to greening our buildings, the Plan also discusses the various ways we can educate the general public on the climate crisis and hopefully inspire people to take action in their own lives. We hold a magnificent collection of books, maps, moving images and sound recordings, all of which can connect users of the Library to the natural world. Engaging new audiences and supporting learning and research are cornerstones to our 'Reaching People' strategy, and I'm pleased to see the Climate Action Plan finding ways to implement these strategic objectives over the coming four years.

The climate crisis is perhaps the defining issue of our time and is inextricably linked to so many other social problems. The Library therefore has a responsible to engage meaningfully in this discussion, both in terms of our operations and how we choose to use the national collections. I'm glad we now have a robust Climate Action Plan, meaning we can play our role as a leading public body in Scotland and help communities respond to this most serious of problems.

Executive summary

In this Climate Action Plan, the Library sets out a sustainability vision in response to the growing threats the climate crisis poses to every aspect of our lives and work. Whilst the actions detailed in the plan only take us to 2025, we have nevertheless set in motion an ambitious target to become net-zero by 2045 at the latest. In the short-term, the Library is aiming for a 72.5 per cent reduction in greenhouse gas emissions by 2025 from our 2008/09 baseline. Furthermore, we are aiming to recycle 70 per cent of our waste, reduce the amount we send to landfill to 5 per cent and fully decarbonise our fleet by 2025. We'll be working with partners and third parties to help bring down our indirect emissions and play a positive social role through our procurement decisions, all in the service of helping the Library reach net-zero by 2045 at the latest.

However, our climate ambitions go beyond our estate. Recognising our influential role in society, we are committed to promoting our resources to help improve climate literacy, empowering individuals and communities to respond to the climate crisis in their day-to-day lives. Through our public programming, events, and online engagement, the Library is in a strong position to help society take action against this existential threat. However, as well as promoting climate resources, we are also interested in collecting climate resources, and so we will continue our efforts to record and collect responses to the climate crisis. Our collections work in this area will include documenting the response to the climate crisis whilst also playing a major role in building knowledge, awareness, and resilience, thereby helping individuals and communities actively respond to our changing climate.

Abbreviations

CILIPS	Chartered Institute of Library and Information Professionals
COP	Conference of Parties
IPCC	Intergovernmental Panel on Climate Change
LEEP	Library Environmental Energy Platform
SDGs	Sustainable Development Goals
SLIC	Scottish Library and Information Council
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change

Introduction

Purpose and scope

The purpose of this Climate Action Plan is to lay out a positive sustainability path for the Library. We present our vision of what we want the Library to look like in 2045, as well as outlining actions to be put in place between now and 2025. The outputs and targets of the Plan are therefore an interim step towards the Library's ultimate goal of reaching net-zero emissions by 2045.

Much of this plan follows the path set by the Scottish Government. The Climate Change (Scotland) Act 2009 requires public bodies to: contribute to carbon emissions reductions targets, contribute to climate change adaptation, and to act sustainably. Furthermore, public bodies are encouraged to go above and beyond, considering other ways they can positively contribute towards Scotland's climate change targets. This document is therefore structured around the Scottish Government's Climate Change Duties, with sections on Adaptation, Mitigation, Sustainable Development, and Wider Influence.

Organisational overview

The National Library of Scotland protects and preserves Scottish culture and knowledge. As the only legal deposit library in Scotland, the Library is entitled to claim a copy of all published items in the UK and Ireland. This means that the Library now holds more than 30 million items – books, magazines, scholarly journals, science publications, newspapers, music, and maps. Though formally existing since an Act of Parliament in 1925, the functions of the Library were updated by the National Library of Scotland Act in 2012. Broadly, the Library serves to preserve and develop its collections; make those collections accessible, encouraging education and research, both formal and informal; exhibit and interpret objects in the collections, and promote collaboration with external parties.

The Library's Climate Action Plan

Reaching People, our 2020-2025 strategy, lays out a positive vision for the Library. As well as pledging to increase access and engagement, the strategy commits the Library to continually improve its sustainability efforts and minimise its environmental impact. The Climate Action Plan will help us meet the objectives set out in our strategy, as well as contribute positively to the national climate change targets.

The Library has already made tremendous progress in this area. Thanks to a collective effort, we have reduced our greenhouse gas emissions by almost 70 per cent from 2008/9. Additionally, we have cut our energy usage in half, saving over £2 million in the process.

Our sustainability efforts have not gone unnoticed, and we are happy to have been recognised for our achievements with our partners. As well as acting as an Ambassador for Zero Waste Resource Efficiency in Scotland, the Library has gained Platinum Status in Resource Management by Zero Waste Scotland. Furthermore, the Library was a finalist in the 2018/19 Energy Institute Awards as well as a finalist and winner at the 2019 Premises and Facilities Management (PFM) Awards

However, concerted effort and monitoring is required across the whole Library to further improve our sustainability practices – which is why we have developed this Climate Action Plan for the next four years. This is one of several Climate Action Plans which will be developed up to 2045.

Becoming net-zero by 2045 at the latest

All these Plans will build toward our vision which is:

As well as reaching net-zero, we will mainstream sustainability into every aspect of our operations. We will continue our leadership role, encouraging other bodies in Scotland to adopt similar sustainability measures. Furthermore, we hope that this plan, along with subsequent reporting, will inspire more people to engage with the Library. From our vast collection of resources, individuals can educate themselves on the climate crisis, build resilience within communities, and ultimately help Scotland achieve its net-zero target by leading sustainable lifestyles.

The case for change

The evidence is clear. There is a global climate crisis. And it is not going away.

Even with the world focused on COVID-19, the effects of our changing climate were on full display in 2020. Raging wildfires brought devastation to California, Siberia, and Australia. Flooding across the world – from Indonesia to Nigeria to Nicaragua to China to Bangladesh – displaced hundreds of thousands of people. And the world braced as it endured stronger and more frequent hurricanes.

The science is unambiguous: if the world continues on its current path, disasters like these will become more and more frequent (IPCC: Summary for policymakers in 'Global Warming of 1.5°C', 2018).

Within our lifetimes the natural world has suffered serious and, in some cases, irreversible damage: biodiversity collapse, ecosystem loss, and mass species extinction. But people are not detached from the natural world. Human systems, economies, and ways of life are already seeing massive disruption. Food security, water supply, and the very places we live are all threatened in our warming world (IPCC: Summary for policymakers in 'Global Warming of 1.5°C', 2018).

Scotland is not immune from these global changes. Record rainfall has caused local communities to endure greater flooding, putting homes, businesses, and wellbeing in jeopardy. Coastal erosion threatens many significant heritage sites across Scotland. It's not just our health and economies that are vulnerable now and in the future; our very history is at risk.

It's clear then that the effects of the climate emergency are not just ecological.

But the impacts of the climate crisis are not felt equally. Both across the world and within countries, it is the most vulnerable – indigenous communities, people of colour, and people from low socio-economic backgrounds – who are bearing the brunt of our changing planet. Those who contribute the least to this crisis are the ones suffering its worst effects (United Nations: Climate justice, 2019).

And yet, despite some great progress in policy and technology, global emissions are still rising (United Nations: Emissions Gap Report 2020).

However, people are saying enough is enough. Increasingly, citizens are expecting bolder and more urgent action to be taken by governments to address the climate crisis. We have seen demonstrations and protests fill the streets of the world's cities. Students from every corner of the globe participating in school strikes, demanding their futures be taken seriously. A neurodiverse global movement has led the way to make climate change a mainstream issue. Across society, there has been a growing consensus that the climate crisis is the biggest challenge of our time – around the world as well as in Scotland.

In 2019 Scotland declared a climate emergency, with the renewed aim to reach net-zero emissions by 2045 at the latest (The Global Climate Emergency – Scotland's Response: Climate Change Secretary Roseanna Cunningham's statement, 2019). Businesses and public bodies are expected to play their part in helping Scotland achieve its climate targets through their operations. Plus, with COP26 set to be held in Glasgow later this year, the

world will be looking to Scotland as the international community meet to implement the agenda of the Paris Agreement.

The National Library of Scotland, therefore, has a crucial role to play. The ambitions detailed in this Climate Action Plan are contextualised, so readers know how they fit into other climate agendas, whether set by the Scottish Government or international bodies such as the United Nations (UN).

As mandated by the Scottish Government, we report annually on our sustainability. In these reports, the major strides the Library has made internally to improve our carbon footprint and energy efficiency is evident.

However, these reports mainly detail our past achievements. The purpose of this Climate Action Plan is to lay out our vision for the future: what we want the Library to look like in 2025 and beyond, linking our ambitions to international policy, national legislation, as well as the wider Library strategy.

But we have reasons to act other than helping Scotland meet its targets. The inherent tragedy of climate change is that it affects every area of our lives in some way. This includes national heritage. As weather events have grown more extreme in recent years, heritage organisations around the world have had to adapt in order to preserve cultural memory. Whilst this includes castles and monuments directly affected by heavier rain and coastal erosion, it also includes archives. Our archives are vulnerable to changes in temperature and humidity, as well as the obvious danger of flooding, and so it is in our interest to adapt to ensure the collections continue to be protected over the coming years.

Libraries offer spaces of shelter and resilience to the communities they serve. We therefore have a responsibility to the public in implementing our sustainability agenda. That is why we have taken a holistic approach to meeting our climate responsibilities. The actions detailed in this plan include improving our carbon management and energy efficiency in the coming years, so the Library can achieve its net-zero target by 2045. But the plan also demonstrates how we intend to use our resources — our collections, digitised items, and our many digital resources — to help educate individuals and build resilience in communities facing the climate crisis. The Library sits on a wealth of information. We have maps showing the effects of coastal erosion and flooding in Scotland. We hold a moving image archive that documents Scotland's evolving relationship with industry and nature. And we hold books on every subject matter imaginable — from climate science to climate justice — both in our collections and through the digital resources linked on our website. The scope of this Climate Action Plan does not end in the Library's buildings.

Context

International context

Paris Agreement

In December 2015, the global community came together at COP21 to sign the Paris Agreement, the most ambitious and far-reaching range of climate pledges ever agreed upon by world leaders. The Agreement commits states to keep global average temperatures well below 2°C above pre-industrial levels, whilst pursuing efforts to keep temperatures below 1.5°C above pre-industrial levels (United Nations: The Paris Agreement).

Given the scale of the desired outcomes, it will take a collective effort to meet the targets laid out in 2015. Local governments, businesses, and civil society all have a role to play to keep global temperatures within the 2°C target. Here, libraries can play a meaningful role in meeting these targets. By sharing resources, designing relevant exhibitions, and setting an example through our own carbon reductions, the National Library of Scotland recognises its role in influencing wider society and helping deliver the outcomes of the Paris Agreement.

IPCC Special Report on Global Warming of 1.5°C

Following the ambition to keep global temperatures well below 2°C and ideally below 1.5°C degree warming, the United Nations Framework Convention on Climate Change (UNFCCC), the governing body of the COP process, asked the Intergovernmental Panel on Climate Change (IPCC), which provides scientific advice to the UNFCCC, to write a report comparing the effects of 1.5°C warming with 2°C warming.

The report is a sobering read. The natural world would still suffer tremendously if the lowest ambition of the Paris Agreement is met. With further environmental destruction comes increased hardships for human communities, with the poorest and most vulnerable globally being most impacted, being hit first and worst. Often, these communities rely on the natural environment for their livelihoods. Sea-level rise in a 2°C world would have devastating implications for coastal communities and low-island states. Moreover, exceeding the 1.5°C limit would have devastating implications for global poverty, food security, and access to water and energy.

The stark conclusions of the report made headlines around the world when it was published in October 2018. Written by 91 authors from 40 countries, the report concludes that meeting the 1.5°C target would require 'rapid and far-reaching transitions' as well as unprecedented mitigation and emission reduction efforts.

So far, progress has not been made. To meet the 1.5°C target, global emissions would need to be cut by 7.6% ever year for the next ten years.

Instead, global emissions are still rising (United Nations: Emissions Gap Report 2020).

The report reminds us that we cannot be complacent. The world celebrated the signing of the Paris Agreement, but even if the minimum targets were met by states — and we are still a long-way off from that — the world would still suffer horrific losses to biodiversity, ecosystems and culture. The National Library of Scotland understands that all of us need to step up and be more proactive. Reading the IPCC report, it is clear what's at stake.

Sustainable Development Goals (SDGs)

Again in 2015, the international community came together to set a roadmap for a sustainable future. The UN Sustainable Development Goals, or SDGs, are 17 holistic ambitions for countries to adopt ([United Nations: The 17 Goals](#)). Though there are 17 separate goals, they are each interconnected and will require an integrated approach by global players to implement the sustainable future envisioned. For example, the ambition to end poverty has its own goal (Goal 1: No Poverty) but ending poverty in practice will require simultaneous efforts to improve education, gender equality, and health infrastructure globally, each covered separately in the SDGs.

As with the Paris Agreement, it will take more than governments to meet the targets laid out by the SDGs. Businesses, civil society, and individual citizens can all play their part to improve their practices and influence others.

The Library can make a meaningful contribution in delivering the SDGs. Although action on education is formally embedded in Goal 4 of the SDGs (Quality Education), education more broadly plays an essential role in delivering all 17 goals ([IFLA: Access and opportunity for all, 2016](#)). As a formal site of knowledge we understand our role in delivering the specific targets embedded in the SDGs. Given the size of our collections, as well as the number of e-resources we offer, the Library is uniquely placed to help educate the public on the range of topics covered by the SDGs. Therefore, we are not simply committed to Goal 4 of Quality Education; the Library has a role to play in delivering each and every one of the SDGs.

Education will have a profound influence over people's understanding and capacity to respond to global challenges, not least the climate crisis. Some of the SDGs are explicitly climate-specific, for instance: Goal 7: Affordable & Clean Energy; Goal 11: Sustainable Cities & Communities; Goal 13: Climate Action; Goal 14: Life Below Water, and Goal 15: Life on Land. However, all of the goals are interlinked and can ultimately contribute to meaningful climate action, both in Scotland and across the world.

National context

Scottish National Performance Framework

[The National Performance Framework](#) lay out a set of Outcomes, aligned with the Sustainable Development Goals (SDGs), envisioning an inclusive, sustainable, and resilient Scotland.

As with the SDGs, there are several outcomes that directly link with the environment ('live in communities that are inclusive, empowered, resilient and safe', 'have a globally competitive, entrepreneurial, inclusive and sustainable economy', 'value, enjoy, protect and enhance the environment') but the outcomes are inherently interlinked, meaning it will take a holistic and integrated approach by stakeholders to help deliver this positive vision of a future Scotland. By amending our internal energy practices to creating inclusive spaces so everybody can feel safe learning about the environment, there are a myriad of ways the Library can positively contribute towards Scotland's National Outcomes.

Climate Change (Scotland) Act 2009

A major legislative milestone came with the [Climate Change (Scotland) Act](#).

When it passed in 2009, the Act laid out a target for Scotland to reduce its carbon emissions by at least 80 per cent by 2050.

Several public bodies, including the National Library of Scotland, were identified as 'Major Players' in delivering the targets of the legislation. These public bodies, due to their size and societal influence, were therefore responsible for setting an example for other bodies to follow.

Climate Change (Emissions Reduction Targets) (Scotland) Act 2019

In April 2019, First Minister Nicola Sturgeon announced a climate emergency in Scotland. It followed mass civil society demonstrations, in Scotland and around the world, plus a realisation that ambitions would need to be raised to adequately confront the challenges posed by the climate crisis.

Following this announcement, the Scottish Parliament passed the [Climate Change (Emissions Reduction Targets) (Scotland) Act](), amending the Climate Change Act from a decade earlier. Scotland now has a target of achieving net-zero greenhouse gas emissions by 2045, with renewed interim targets.

Again, public bodies such as the National Library are expected to play a major role in delivering successful outcomes from these targets. As well as improving our own energy efficiency and setting a date for when we aim to become net-zero, we also have a role to inspire others to help Scotland meet its targets.

Internal context

In 2010, the Library published its first Carbon Management Plan. In it, the Library set out targets to help contribute to Scotland's ambition to become a low-carbon nation. In the past 10 years, the Library has surpassed the initial Scottish Government targets (42 per cent GHG emissions reduction and 40 per cent energy consumption reduction).

By the 2019/20 financial year, with 2008/09 set as our baseline year, the Library had achieved a 69.09 per cent GHG emissions reduction and a 50.76 per cent reduction in energy consumption.

The Library, therefore, has already made tremendous strides in improving our own sustainability and contributing towards Scotland's climate targets. This Climate Action Plan should therefore be viewed in the context of a continual process of transformation to help make our operations greener, more resilient, and efficient. However, as Scotland has ramped up its climate ambitions, so should we. This Plan, as well as building on work the Library has already put in place, is also an interim step towards the Library reaching 'net-zero' by 2045.

As for everyone else, 2020-21 presented tremendous challenges to the Library. Our operating environment has changed, and as such we are working with restricted financial and human resources. The Library faces enormous challenges as the world continues to confront COVID-19, but we must not let these challenges detract from the ever-present and accelerating risks that our changing climate poses to our lives and livelihoods.

However, as well as presenting challenges, the 2020-21 year has also presented opportunities for the Library to revaluate how it works. Homeworking has now become the norm and has demonstrated that this mode of working can continue to some degree even after it is safe to resume office work. We have also seen a significant shift towards on-line training and conferences and expect this to continue into the 'new normal'. All this should help reduce emissions from staff commuting and contributing to staff wellbeing.

The Library has seen that it is indeed possible to implement broad changes when the circumstances call for it. Following on from COVID-19, we will not revert to old ways of thinking, but instead use these new circumstances to change our practices for the better, contributing to a smarter, safer, and sustainable Scotland.

How will we get there?

This section of the Plan outlines 'How will we get there'. This is very much the core of the document and we have structured it around the Scottish Government's Climate Change Duties. These are:

- Adaptation
- Mitigation
- Sustainable Development
- Wider Influence

Each of the themes are explained below with the actions that fall under this category.

Adaptation

Our world is already seeing massive disruptions caused by our changing climate. There are policies we must implement to mitigate these disruptions, but some effects of climate change are already happening and will continue to happen into the future, due to historic emissions and feedback loops. We see this every time a village floods following heavy rain, for example. Therefore, as well as putting in place strategies to mitigate climate change, we need to prepare for the inevitable and unavoidable effects of the climate crisis that are already present and will continue to cause disruption to our lives, our mental health, and local economies in the future.

Adaptation measures can be both reactive, responding to disruptions already here, and proactive, responding to anticipated disruptions. Crucially, proactive adaptation practices can bring benefits to those who implement them, whether they be countries, communities, or libraries.

No matter how strongly we mitigate emissions, some adaptative practices will have to be implemented. Even if we stopped emitting all greenhouse gases today, we would continue to see the delayed effects of climate change for decades to come, meaning we are yet to see the consequences of historic emissions. Appropriate adaptation therefore needs to be proactive as well as reactive, considering the future as well as the present landscape.

Some industries and sectors will need to adapt more than others. Businesses and organisations that own coastal sites, for instance, will have to quickly adapt to the changing coastlines of Scotland over the coming years. Yet every organisation needs to be resilient in the face of the climate crisis. Implementing strong adaptation measures is particularly relevant for the Library. Our collections and archives are vulnerable to changes in temperature, humidity, and climate, as well as being at risk from flooding. To ensure the smooth continuation of operations well into the future, it's in the Library's best interest to introduce strong and effective adaptation measures into our everyday operations and practices.

A lot of the actions we need to take will depend on evidence gathered from an initial risk assessment, and so the below actions may change in line with new evidence as we learn it.

1. **Adaptation**

   1.1. **Outcome:** We understand the ongoing risks that the climate crisis poses to the Library.

   1.1.1. **Output:** Develop a Library-wide Climate Change Risk Assessment, informed by Adaptation Scotland, and embed into the Library's Risk Management Framework.

   1.1.1.1. **Action:** Review climate change risk governance, roles, responsibilities and skills sets. Put in place necessary resources.
   To be completed by: 2022

   1.1.1.2. **Action:** Carry out an initial literature / peer review.
   To be completed by: 2022

   1.1.1.3. **Action:** Identify the climate change risks faced by the Library.
   To be completed by: 2022

   1.1.1.4. **Action:** Complete the initial Climate Change Risk Assessment.
   To be completed by: 2022

   1.1.1.5. **Action:** Embed within the Library Risk Management Framework.
   To be completed by: 2023

   1.2. **Outcome:** The Library's infrastructure is resilient and adaptable to the threats posed by the changing climate.

   1.2.1. **Output:** Continue to develop a Climate Change Adaptation Plan, informed by Adaptation Scotland's Adaptation Capability Framework

   1.2.1.1. **Action:** Complete the initial Climate Change Adaption Plan.
   To be completed by: 2023

   1.2.2. **Output:** Continue to develop the Library's Environmental Energy Platform (LEEP) system to allow for remote monitoring and management of the Library estate.

   1.2.2.1. **Action:** LEEP accessible via the Cloud.
   To be completed by: 2025

   1.2.3. **Output:** Continue the focus on building maintenance as the primary measure to protect the Library's estate against the increasing threats created by the changing climate.

   1.2.3.1. **Action:** Continue to make the case to funders for necessary funding to address deferred maintenance necessary to create a resilient estate.
   To be completed by: Ongoing

   1.3. **Outcome:** The Library's people and work practices are resilient and adaptable to the threats of climate change.

1.3.1. **Output:** Review the Adverse Weather Policy and Travel Disruption Policy to provide staff with a transparent, managed set of principles to follow when impacted by adverse weather disruption.

    1.3.1.1. **Action:** Review the Adverse Weather Policy and Travel Disruption Policy.
    To be completed by: 2022

1.3.2. **Output:** Provide training for staff to enhance their flexibility, adaptability and resilience in the face of the unpredictable change posed by the threat of Climate Change.

    1.3.2.1. **Action:** Identify staff training requirements and develop annual training delivery plans.
    To be completed by: Ongoing

1.4. **Outcome:** We are able to continually deliver our services, with measures put in place to ensure our operations remain resilient and adaptable to the ongoing effects of the climate crisis.

1.4.1. **Output:** Update the Business Continuity Framework and the Salvage & Response Plans to ensure they are adapted for climate change. Provide clear delineation of roles and responsibilities across staff to ensure business continuity.

    1.4.1.1. **Action:** Complete update of policy and delineation of roles.
    To be completed by: 2022

1.4.2. **Output:** Ensure all relevant staff with business continuity responsibilities have a wider awareness of climate change and possible implications.

    1.4.2.1. **Action:** Complete business continuity training plan and initial roll out for all staff.
    To be completed by: 2023

1.4.3. **Output:** Continue to develop and then scenario test Business Continuity Plans.

    1.4.3.1. **Action:** Undertake scenario testing of Business Continuity Plans focusing on climate risks where appropriate.
    To be completed by: 2023 - 2024

1.4.4. **Output:** Continue to provide assistance and support for collections across Scotland under threat from the changing climate.

    1.4.4.1. **Action:** Continue as active members of the Glasgow Area Disaster Planning Network (GADPN) and Edinburgh Collections Response Networks (ECRN) and respond to developments of networks across Scotland.

    To be completed by: Ongoing

1.5. **Outcome:** We take a preventive approach to managing our collections to protect them against the threats posed by climate change.

1.5.1. **Output:** Increase and improve the integrated pest management programme, protecting the collections from the risk of pests, and providing staff training in pest identification and management.

    1.5.1.1. **Action:** Deliver a focused pest trapping programme and identify new pest risks. Input into the National Integrated Pest Management (IPM) database.

    To be completed by: 2022

    1.5.1.2. **Action:** Deliver initial enhanced staff pest training.

    To be completed by: 2023

1.5.2. **Output:** Develop a Business Case for a quarantine triage area within our Causewayside building and review ingest protocols to best protect collections from the increase threat of infestation and contamination arising from climate change.

    1.5.2.1. **Action:** Deliver a new triage area and associated protocols.

    To be completed by: 2022

    1.5.2.2. **Action:** Deliver a quarantine area and associated protocols.

    To be completed by: 2024- 25

1.5.3. **Output:** Accelerate our boxing programme as the first line of defence to protect our collections against damage from the challenges posed by changes in humidity and temperature.

    1.5.3.1. **Action:** Complete the Library Boxing Strategy and set annual prioritisation and boxing targets by 2021-22.

    To be completed by: 2022

1.5.4. **Output:** Review the options/Develop a Business Case for enhancing our housekeeping standards the cleaning of stacks, book cleaning and inspection of collections to mitigate the increased risks of pest, mould and other biological damage resulting from climate change.

    1.5.4.1. **Action:** Implement enhanced cleaning regime of stack floors.

    To be completed by: 2023-25

    1.5.4.2. **Action:** Establish an ongoing stack floor cleaning rolling programme.

    To be completed by: 2024-25

1.6. **Outcome:** Our employees understand the principles of climate adaptation and how that relates to their work.

1.6.1. **Output:** Provide training and support to all staff to understand and respond to the effects of the climate crisis, both on the Library and in their home setting.

    1.6.1.1. **Action:** Make available a programme of all staff training to enable staff to understand and respond to the effects of the climate crisis.

To be completed by: 2022

1.6.2. **Output:** Create a Sustainability Hub on Sharepoint where staff can access training and learning resources related to the Climate Action Plan.

1.6.2.1. **Action:** Develop the internal communications plan for sustainable development, offering staff a centralised hub where they can learn and reference information regarding international, national, and internal sustainability issues.

To be completed by: 2022

1.6.3. **Output:** Create a climate induction pack for all new staff.

1.6.3.1. **Action:** Include adaptation training in the Library's induction pack for all new staff.

To be completed by: 2022-23

1.7. **Outcome:** We provide support for other collections, sharing knowledge and offering practical advice to other organisations to safeguard heritage throughout Scotland and innovate ways to respond to the climate crisis.

1.7.1. **Output:** Continue to support PhD collaborations with Heriot Watt, working to find ways to optimise environmental collections storage whilst improving energy efficiency.

1.7.1.1. **Action:** Publish and implement the recommendation of the PhD 'Applying ANN technology to determine acceptable microclimate parameters for the National Library of Scotland's Collections to enable significant energy efficiency improvements' and disseminate the findings.

To be completed by: 2024-25

Mitigation

Mitigation refers to the actions we take to mitigate the effects of the climate crisis. This typically means reducing or eliminating our greenhouse gas emissions, but also includes efforts to draw down greenhouse gases from the atmosphere, for instance by using carbon capture technology or natural carbon sinks. Mitigation is distinct from adaptation in that adaptation refers to actions responding to the unavoidable effects of climate change, either present or predicted. Like with adaptation, mitigation efforts can be deployed across all levels of society – from national energy upheavals to retrofitting individual buildings to make them more energy efficient.

The Library has already made tremendous strides in this area. Starting from our 2008 / 2009 baseline, over the last 11 years the Library has reduced its greenhouse gas emissions by 69.9 per cent [National Library of Scotland: Public Sector Sustainability Report 2019-2020], far exceeding the Scottish Government's targets. Furthermore, we have reduced our energy consumption by 50.76 per cent compared to the 2008/09 baseline [National Library of Scotland: Public Sector Sustainability Report 2019-2020]. We're extremely proud of our achievements and the recognition we have received for our efforts. But there is more we can do, detailed in this plan.

As well as educating the public on the science and politics surrounding mitigation, the Library has a role to play to help contribute towards Scotland's climate ambitions as well as the international effort to mitigate the impacts of the climate crisis. Staff will be empowered to make changes in their working practices to help us reach their targets, and improved data monitoring will further help us determine where we can make energy savings. Crucially, we will consider the impact of our indirect emissions, working with partners to help influence significant changes in energy reduction and efficiency in all aspects of our work. Over the next four years, we will continue to explore options, learning from our initial activities and pilot projects to optimise our mitigation efforts up until 2025 and beyond.

2. **Mitigation**

    2.1. **Outcome:** The library has reached Net Zero from its direct operations by 2045.

        2.1.1. **Output:** Continue to develop the Carbon Initiatives Register and identify funded projects estimated to deliver the 2025 GHG reduction target.

            2.1.1.1. **Action:** 72.5% GHG emissions reduction from the baseline.

            To be completed by: 2025

            2.1.1.2. **Action:** GHG emissions reduction projects delivered with predicted GHG reduction estimates achieved.

            To be completed by: Ongoing

    2.2. **Outcome:** We continually improve our understanding of the direct and indirect impacts that the Library has on climate change.

        2.2.1. **Output:** Carry out a study to fully understand the direct and indirect emissions and energy consumption from the Library's IT.

            2.2.1.1. **Action:** Obtain data.

            To be completed by: 2023-24

2.2.1.2. **Action:** Use this data to inform future procurement of services.

To be completed by: Ongoing from 2023-24

2.2.2. **Output:** Develop a method, based on existing procurement procedures, to determine or estimate indirect greenhouse gas emissions from third parties and evaluate them as weighted and scored environmental criteria in relation to the Library's emission reduction targets.

2.2.2.1. **Action:** Develop the methodology for cloud services by 2021-22. Use the method in the next and following cloud service procurements. Development and use for other goods and service categories by 2023-24 as needed.

To be completed by: 2024

2.2.3. **Output:** Identify the goods and service categories and contract values to which this will apply.

2.2.3.1. **Action:** Identify these categories.

To be completed by: 2023

2.3. **Outcome:** We have optimised our energy efficiency.

2.3.1. **Output:** Improve our sub-metering capabilities and integrate into the LEEP system to enable real-time monitoring of emissions/energy consumption, allowing the Library to micromanage its energy usage.

2.3.1.1. **Action:** Real time energy dashboard delivered and visible via intranet.

To be completed by: 2023

2.4. **Outcome:** We have minimized the use of gas in our operations.

2.4.1. **Output:** Pilot an air source heat pump installation at George IV Bridge and evaluate the cost / benefits in the context of the portfolio of GHG reduction initiatives.

2.4.1.1. **Action:** Air source heat pump pilot project completed and evaluated.

To be completed by: 2022

2.5. **Outcome:** We have decarbonised the Library fleet.

2.5.1. **Output:** Replace our remaining diesel fleet with a wholly electric fleet.

2.5.1.1. **Action:** Decarbonised the Library fleet and roll out electric vehicle driving training to all relevant Library staff.

To be completed by: 2025

2.6. **Outcome:** We minimise our business travel.

2.6.1. **Output:** The Business Travel and Expenses Policy is updated and activities monitored to deliver a reduction in GHG emissions.

2.6.1.1. **Action:** Changes in Policy and behaviours deliver a 20% GHG emissions reduction by the end of the Plan period.

To be completed by: 2025

2.7. **Outcome:** We promote active travel and low carbon alternative travel options for staff and users.

2.7.1. **Output:** Embed and encourage inclusive Active Travel in the workplace and commute of all our staff.

2.7.1.1. **Action:** Promote low-carbon travel alternatives to staff and users, making it easier for them to identify low GHG alternatives.

To be completed by: Ongoing

2.7.2. **Output:** Continue to promote an inclusive Active Travel friendly workplace in continuing collaboration with carbon-reducing organisations.

2.7.2.1. **Action:** Promote opportunities for active travel within the Library, working with local partners when appropriate.

To be completed by: Ongoing

2.8. **Outcome:** We make it easy for both users and staff to engage with the Library remotely.

2.8.1. **Output:** Promote the continued use of video conferencing tools as an alternative to travelling to in-person meetings and events.

2.8.1.1. **Action:** Continue our 'One Third Digital' efforts, aiming to make a third of our collections available in digital format by 2025.

To be completed by: Ongoing

2.8.1.2. **Action:** Continue to provide staff with digital equipment to ensure smooth continuation of home-working when required.

To be completed by: Ongoing

2.8.1.3. **Action:** Maximise the use of video conferencing tools as alternatives to travelling to in-person meetings when this is the most environmentally-friendly option.

To be completed by: Ongoing

2.9. **Outcome:** We have minimised the use of water in our operations.

2.9.1. **Output:** Put in place the means to understand water consumption by property.

2.9.1.1. **Action:** Install utility water metering across the estate and actively monitor.

To be completed by: 2023

2.9.2. **Output:** Develop the initiatives register to minimise the use of water in Library operations to the fullest possible extent.

2.9.2.1. **Action:** Focus maintenance works to eliminate leaks from pipework and plant.

To be completed by: Ongoing

2.9.2.2. **Action:** Where viable, ensure all tap replacements are water saving taps.

To be completed by: 2025

2.9.2.3. **Action:** All toilet cisterns are either dual flush or fitted with a Water Hippo.

To be completed by: 2025

2.10. **Outcome:** We work with partners and external stakeholders, investing in new technology and innovating to reduce our emissions and increase our energy efficiency.

2.10.1. **Output:** Continue our leadership role as Zero Waste Scotland Platinum Ambassadors in Energy Efficiency, providing workshops and seminars to help other organisations improve their adaptability to climate change.

2.10.1.1. **Action:** Hold a minimum of two workshops / seminars per year.

To be completed by: Ongoing

2.11. **Outcome:** The Library's data and resources on mitigation measures are openly available, helping the Library deliver its role as an educator to communities across Scotland.

2.11.1. **Output:** We publish our mitigation data as machine-readable structured data using non-proprietary formats.

2.11.1.1. **Action:** We publish our data in an open format to make it reusable and interoperable.
To be completed by: 2023

Sustainable Development

Sustainable development covers many areas. It is not a stand-alone concept but rather a process, something to be built into practices and operations.

The most famous definition of sustainable development comes from the Brundtland Report, also known as 'Our Common Future', a UN document published in 1987. The report defines sustainable development as development 'that meets the needs of the present without compromising the ability of future generations to meet their own needs' [Report of the World Commission on Environment and Development – Our common future].

Sustainability must be streamlined into every aspect of the Library's operations. There are several immediate steps we can take, such as increasing what we recycle and minimising what we send to landfill. However, the most effective way to reduce waste is to stop it from arising in the first place. A truly sustainable organisation will end up adopting and contributing to the circular economy: a system where resources are reused and waste minimised. That is why we're taking meaningful steps towards becoming a fully circular organisation, adopting sustainable practices in our procurement, business plans, and waste management.

But we can do more. We want to develop our collections and continue our work educating and inspiring communities in Scotland and visitors from around the world. And we can only do that by taking a sensible, long-view approach that allows us to continue our operations successfully and sustainably. As with governments implementing sustainable development policies at the national level, taking the long-term approach makes sense: financially, reputationally, and environmentally. Many of the items listed below are initial actions, which will be evaluated and reviewed to determine whether they should continue in future years.

3. **Sustainable development**

    3.1. **Outcome:** We have embedded sustainable development throughout our decision-making processes.

        3.1.1. **Output:** The Library's Treasury Management & Investment Policy is reviewed to include a section on 'Responsible Investing.

            3.1.1.1. **Action:** Treasury Management & Investment Policy revised.

            To be completed by: 2022

        3.1.2. **Output:** Enhance the business case approval process to include meaningful sustainability requirements.

            3.1.2.1. **Action:** Update business case approval protocols.

            To be completed by: 2022

        3.1.3. **Output:** Update the Library's Procurement Policy and Procurement Plan (Strategy) so that use of the Sustainability Tool is completed when developing the commodity strategy for all regulated Library advertised procurements and concession contracts.

            3.1.3.1. **Action:** Library's Procurement Policy and Procurement Plan (Strategy) updated.

            To be completed by: 2022

3.1.4. **Output:** Complete and report progress against the Flexible Framework. Set targets for continual improvement. Review annually.

    3.1.4.1. **Action:** Flexible Framework completed and targets set.

    To be completed by: Ongoing from 2022

3.1.5. **Output:** Complete the Prioritisation Tool to determine sustainable procurement risks and opportunities for the Library and set targets for continual improvement. Review annually.

    3.1.5.1. **Action:** Prioritisation Tool completed and targets set.

    To be completed by: Ongoing from 2023

3.1.6. **Output:** Ensure Delegated Purchasing Officer (DPOs) and Budget Holders are provided with access to training courses on Sustainable Development.

    3.1.6.1. **Action:** Roll out the initial DPO, contract manager and budget holder training.

    To be completed by: 2022

3.1.7. **Output:** Reduce environmentally-impact of providing hospitality.

    3.1.7.1. **Action:** Pilot local and vegetarian by default orders for events.

    To be completed by: 2023

3.2. **Outcome:** We consider how we can promote innovation and improve the economic, social and environmental wellbeing of the local area through the procurement process.

3.2.1. **Output:** Include a minimum of 10% weighting for economic, social, and environmental benefits in quality evaluations as a minimum in all advertised Regulated Procurements.

    3.2.1.1. **Action:** Minimum of 10% weighting for economic, social, and environmental benefits in quality evaluations in all advertised Regulated Procurements.

    To be completed by: Ongoing

3.3. **Outcome:** We work with our supply chains to drive continual improvements in our sustainable procurement.

3.3.1. **Output:** Continue to apply the principles of the OGC Government Buying Standards (GBS) in all procurements.

    3.3.1.1. **Action:** Ongoing.

    To be completed by: Ongoing

3.4. **Outcome:** The Library only buys what it needs, contributing to the circular economy by minimising waste wherever possible.

3.4.1. **Output:** We recycle as much of our waste as possible.

    3.4.1.1. **Action:** The percentage of waste that we recycle is at least 70%.

    To be completed by: 2025

3.4.2. **Output:** We minimise the waste we send to landfill as much as possible.

    3.4.2.1. **Action:** The amount of waste we send to landfill is reduced to 5%.

    To be completed by: 2025

3.4.3. **Output:** Conduct a comprehensive audit of waste streams and identify key target areas for waste reduction, with a focus on non-recyclable waste.

    3.4.3.1. **Action:** Initial audit of waste streams and target areas for waste reduction identified.

    To be completed by: 2023

3.4.4. **Output:** Encourage good waste management practice by adding terms to all new contracts that require contractors/suppliers to remove their waste from site.

    3.4.4.1. **Action:** Terms to all new contracts that requiring contractors /suppliers to remove their waste from site added to all new contracts.

    To be completed by: 2022

3.4.5. **Output:** Provide training to staff to contribute to the circular economy by accurately understanding, monitoring, and reviewing waste management and good procurement practice, including measures to prevent recycling contamination and stopping waste from occurring in the first place.

    3.4.5.1. **Action:** Develop training programme inc. e-learning modules for training to staff to accurately understand, monitor, and review waste management and roll out.

    To be completed by: 2023

3.4.6. **Output:** Work with our waste management provider to implement behaviour supporting measures.

    3.4.6.1. **Action:** Complete initial roll out of behaviour supporting measures.

    To be completed by: 2023

Wider influence

Meaningful change depends on people. It's not enough if climate information is confined to an elite few; the hearts and minds of everyone across Scotland need to change if we are to collectively meet our climate targets and work towards a greener, brighter, sustainable future.

In this plan, we have detailed how we are aiming to make our operations more efficient, delivering meaningful and quantifiable results that will help Scotland reach net-zero by 2045. However, our ability to influence goes well beyond our estate.

As a National Library, we play a formal role in society as a site of knowledge. In that role, we have the responsibility to empower individuals by enabling research, both formal and informal, into our relationship with the natural world. From climate science to climate justice, we hold materials that can provide insight, provoke discussion, and inspire change.

In order to live up to our name as a truly representative body, we understand that the range of materials we offer should provide something for every knowledge-level: from researchers writing PhDs to those still unsure what the word 'sustainability' really means. Our users can not only learn about the science of climate, but also its history, how it can be seen through our map collection, and where it intersects with other issues, such as race, gender, and class, to name just a few.

However, as well as providing resources on the climate crisis, we are keen to continue our work collecting resources on the climate crisis. This work has already been started, with the Library taking in materials from Extinction Rebellion, documenting their role in advancing the national conversation on this issue. The Library's structure of climate resources is very much a two-way street: offering resources for education whilst also collecting resources for reasons of cultural preservation.

This section details how we intend to use our collections to help build resilience and improve climate literacy across Scotland. Additionally, the Wider Influence section gives us the space to consider how we can improve staff and user wellbeing in the coming years. In this way, we can cover several areas at once. For instance, due to our limited estate, the Library's ability to positively influence biodiversity is limited. However, if we partner with other organisations to organise staff tree-planting away-days, we can positively help Scotland's biodiversity whilst also providing staff with opportunities to get outside and enjoy green spaces, contributing to wellbeing.

4. **Wider influence**

    4.1. **Outcome:** We understand the ways in which our collections document and inform the response to climate change.

        4.1.1. **Output:** Develop Business Cases/Apply for external funding for the creation of curatorial capacity in response to the long term demands of the climate crisis, helping the Library to leverage its significant collections relevant to the climate and engaging audiences to build resilience and knowledge around the climate.

            4.1.1.1. **Action:** Identify areas of resource for curatorial capacity.

                To be completed by: 2022

4.1.2. **Output:** Carry out an analysis of our collections to understand how best we can document and inform the discussion on climate change, taking a broad definition of climate change which includes not just its scientific dimensions but also its political, economic, and social dimensions.

4.1.2.1. **Action:** Ongoing understanding of the collections.

To be completed by: Ongoing

4.1.3. **Output:** Create internal channels for members of staff to understand more fully how our collections relate to the climate crisis, for example through collection forums and a community of interest dedicated to this topic.

4.1.3.1. **Action:** Hold an annual collections forum dedicated to items from the collections related to the climate.

To be completed by: Ongoing

4.1.3.2. **Action:** Create an internal communications plan in preparation for COP26.

To be completed by: 2021

4.1.3.3. **Action:** Expand the community of interest dedicated to the climate crisis beyond COP26.

To be completed by: Ongoing from 2022

4.2. **Outcome:** We support individuals in accessing the full range of our information and resources to foster understanding, debate and the response to climate change.

4.2.1. **Output:** We provide engaging and accessible means to learn about the climate crisis, for example by producing research guides, pages on our website dedicated to the climate, and blog posts offering deeper and unique perspectives on the climate and its related issues.

4.2.1.1. **Action:** In the short-term, create and publish a series of accessible resources on the climate crisis and its related issues for audiences of all knowledge levels, for example a climate-focused page on our Maps website, a collections discovery tool for titles on the climate crisis, blog posts, social media engagement and other online resources.

To be completed by: 2022

4.2.1.2. **Action:** Continue and expand our web presence and curatorial engagement with the climate, including collecting materials around the climate.

To be completed by: Ongoing

4.2.2. **Output:** Incorporate climate change engagement as a strand in our public programming timeline.

4.2.2.1. **Action:** Ensure there is at least one climate-related strand in public programming in 2021-22 and increase incrementally over the next four years.

To be completed by: Ongoing

4.2.2.2. **Action:** Release and tour our climate-themed Moving Image Archive film 'Living Proof'.

To be completed by: 2021

4.2.2.3. **Action:** Publish materials for all knowledge levels in the lead-up to COP26 to help foster climate education.

To be completed by: 2021

4.2.2.4. **Action:** Create 'citizen science' resources, aids to help make the data in our collections relating to the climate understandable and accessible for the non-expert.

To be completed by: 2024

4.2.2.5. **Action:** Aim for at least 10% of our audience engagement work to be in this area, piloting an audience measuring project in an area in Scotland to ensure our work is reaching a diverse range of people.

To be completed by: 2022

4.2.2.6. **Action:** Continue this audience engagement measurement in two more areas.

To be completed by: Ongoing from 2022

4.3. **Outcome:** We enable research and innovation into the impacts of climate change, sharing our results and resources to promote best practice and foster learning.

4.3.1. **Output:** Publish data sets for the Library's Data Foundry relating to climate change, and programme climate change into the digitisation selection framework.

4.3.1.1. **Action:** Publish data sets relating to climate change on the Library's Data Foundry.

To be completed by: Ongoing from 2022

4.3.2. **Output:** Assess all new digitisation and Data Foundry proposals for climate change research potential and make such materials available in accordance with the Open Definition.

4.3.2.1. **Action:** Create a climate change research potential impact assessment of all new digitisation proposals.

To be completed by: Ongoing from 2022

4.4. **Outcome:** We partner with others to facilitate research into the impact of climate change on the library and archive sector, sharing our results and resources to promote best practice and foster learning.

4.4.1. **Output:** Support sector-wide initiatives to share collection management and research skills to increase adaptability and resilience in the face of the climate crisis, including through funded placements, workshops, and mentorships.

    4.4.1.1. **Action:** Develop a plan for sharing across the sector.

    To be completed by: 2022

    4.4.1.2. **Action:** Continue our leadership role as Platinum Ambassadors in Resource Management, providing workshops and seminars to help other organisations improve their adaptability to climate change.

    To be completed by: Ongoing

4.5. **Outcome:** We champion the wellbeing of our staff and users, recognising the challenging and emotional impact the climate crisis will play on people's lives.

4.5.1. **Output:** Offer support and resources for both staff and users who may suffer anxious feelings following engagement with materials related to the climate crisis.

    4.5.1.1. **Action:** Be able to sign-post staff and users to relevant organisations and resources to help deal with 'eco-anxiety'

    To be completed by: Ongoing

4.5.2. **Output:** Provide support for staff should they engage in difficult or uncomfortable conversations regarding the climate crisis.

    4.5.2.1. **Action:** Ensure staff are provided with adequate information and support should they need to engage in such conversations

    To be completed by: Ongoing

4.5.3. **Output:** Provide opportunities for staff to enjoy green spaces and encourage staff volunteering opportunities with environmental/sustainability organisations.

    4.5.3.1. **Action:** Research and highlight local opportunities for staff to get involved in to help increase wellbeing as well as contribute to Scotland's biodiversity targets

    To be completed by: Ongoing

4.6. **Outcome:** We lead the way in sustainability and climate education in the heritage sector, sharing resources and best practice to ensure a wide-ranging societal change when it comes to tackling the climate crisis.

4.6.1. **Output:** Engage with the Climate Heritage Network to fully participate in the industry-wide discussion regarding climate change and our response to it.'

    4.6.1.1. **Action:** Join the Climate Heritage Network and develop an engagement plan to maximise our influence

    To be completed by: Ongoing

4.6.2. **Output:** Actively work with the Scottish Library and Information Council (SLIC), the IFLA Environmental, Sustainability & Library Section (ENSULib), and the Chartered Institute of Library and Information Professionals (CILIPS) to develop, influence and promote training and best practice regarding sustainability.

    4.6.2.1. **Action:** Continue and strengthen our relationships with these organisations, actively participating and initiating activities to promote best practice

    To be completed by: Ongoing

Making sure things happen

In order for the actions of the plan to be successful, we need to ensure a robust and accountable governance structure is put in place to carry these actions through.

The Library will therefore be constituting a Climate Action Programme Team, with a Programme Lead who will coordinate the monitoring and reporting of the actions detailed in this Plan. Furthermore, it will appoint a 'Green Champion' on the Library Leadership Team (LLT) to ensure that there is formal participation at the highest level of the Library. Finally, each department across the Library will nominate a 'Green Champion' — someone who will help ensure the actions from this plan relevant to that department are actualised, monitored, and reported on.

The Climate Action Programme Team will develop an annual programme of work and will consider items such as the training focus for the next twelve months, what areas any waste audits should focus upon and whether the Plan needs to be updated. To support the work of the Climate Action Programme Team the Library will delegate it some financial resources which can be used to fund part of its annual programme of work.

The success of many of these actions depends in large part on staff engagement. In order for the Library to be a sustainable and energy-efficient organisation, staff need to be empowered to actively contribute towards delivering these targets through their daily work. That's why, as part of implementing this formal management structure, the Library will provide further training for all staff on how they can help us achieve our climate targets. This, along with a formal management structure with clear delineation of responsibilities, will help ensure the Library is effective and accountable in delivering the actions of this plan.

We will continually monitor our progress over the next four years. Progress will be measured in our publicly accessible annual reporting and we will continue to submit the Public Bodies Climate Change Duties report as mandated by the Scottish Government.

By putting in place this formal structure, the Library is committing to transparent and accountable action to be taken before 2025.

Measuring progress is of great importance, particularly on our quantifiable targets such as our emissions reduction targets. However, not everything can be so easily quantified. The success of the plan rests not just on hitting aims and targets, but in increasing staff and user wellbeing, resilience, and engagement with the climate crisis. These aspirations are less easy to measure, but that shouldn't stop us being committed to pursuing them just as diligently as we will our targets on energy and waste.

The actions of this plan take us to 2025, at which point the Library will publish a new Climate Action Plan (2025-2030). However, some actions and targets may need to be revised before that date. If this is the case, the Library will be transparent and forthcoming about our reasoning behind that decision.

Looking ahead

The outputs in this Plan will take us to 2025. But our work will not stop there. Just as these actions have built on the work the Library has done over the last 10 years, so too will these policies provide building blocks for the Library to continue its sustainability work so that we can deliver our net-zero ambitions by 2045 at the latest.

These actions have been written at the start of 2021. Circumstances, both external and internal, may well change over the next four years, and the actions listed may have to be altered to fit those circumstances. As always, we will strive to be transparent and open if we have to amend course.

No actions we take can stop the tide of climate change. Its erosive presence is already felt and will continue to get worse over the coming decades. But we can prepare for those changes, adapting our business practices and influencing our partners and supply chains to do likewise to ensure smooth business continuity and minimum disruption over the coming years. Likewise, whilst we cannot control the world's emissions, we can control our own. We will therefore work hard to reach net-zero and inspire others to do likewise, helping to mitigate a more insidious and destructive climate emergency. Perhaps most importantly, the work detailed in this plan will help to inspire others: activists, scientists, experts, novices… from seasoned campaigners to school pupils worried about their future, the Library holds resources that can help everyone make sense of the world.

The Library can help you understand the climate crisis. But it can also educate you on what the threats are, enable you to research the topic yourself, and empower you to fight back.

Glossary

Term	Definition
Adaptation	'In human systems, the process of adjustment to actual or expected climate and its effects, in order to moderate harm or exploit beneficial opportunities.' IPCC: Glossary, 2018
Air-Source Heat Pumps	'An air source heat pump is usually placed outdoors at the side or back of a property. It takes heat from the air and boosts it to a higher temperature using a heat pump. The pump needs electricity to run, but it should use less electrical energy than the heat it produces.' Which?: Air Source Heat Pumps Explained, 2021
Biodiversity	'Biological diversity means the variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.' (UN, 1992: Article 2: Use of Terms. In: Convention on Biological Diversity. United Nations (UN), pp. 3–4.)
Climate Justice	'Climate justice links human rights and development to achieve a human-centred approach, safeguarding the rights of the most vulnerable people and sharing the burdens and benefits of climate change and its impacts equitably and fairly. Climate justice is informed by science, responds to science and acknowledges the need for equitable stewardship of the world's resources.' Mary Robinson Foundation — Climate Justice: Principles of Climate Justice, 2020
Fossil Fuels	'Carbon-based fuels from fossil hydrocarbon deposits, including coal, oil, and natural gas.' IPCC: Glossary, 2018

Greenhouse Gas (GHG)	'Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth's surface, the atmosphere itself and by clouds. This property causes the greenhouse effect. Water vapour (H_2O), carbon dioxide (CO_2), nitrous oxide (N_2O), methane (CH_4) and ozone (O_3) are the primary GHGs in the Earth's atmosphere. Moreover, there are a number of entirely human-made GHGs in the atmosphere, such as the halocarbons and other chlorine- and bromine-containing substances, dealt with under the Montreal Protocol. Beside CO_2, N_2O and CH_4, the Kyoto Protocol deals with the GHGs sulphur hexafluoride (SF_6), hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs). See also Carbon dioxide (CO_2), Methane (CH_4), Nitrous oxide (N_2O) and Ozone (O_3).' IPCC: Glossary, 2018
Mitigation	'A human intervention to reduce emissions or enhance the sinks of greenhouse gases.' IPCC: Glossary, 2018
Net-Zero	'Net zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period. Where multiple greenhouse gases are involved, the quantification of net zero emissions depends on the climate metric chosen to compare emissions of different gases (such as global warming potential, global temperature change potential, and others, as well as the chosen time horizon).' IPCC: Glossary, 2018
Resilience	'The capacity of a social-ecological system to cope with disturbance, responding or reorganizing in ways that maintain its essential function, identity and structure, whilst also maintaining the capacity for adaptation, learning and transformation.' Stockholm Environment Institute: Arctic Resilience - Interim Report, 2013

Sustainable Development	Development that 'meets the needs of the present without compromising the ability of future generations to meet their own needs.' United Nations: Our Common Future - Report of the World Commission on Environment and Development
Wellbeing	'A state of existence that fulfils various human needs, including material living conditions and quality of life, as well as the ability to pursue one's goals, to thrive, and feel satisfied with one's life. Ecosystem well-being refers to the ability of ecosystems to maintain their diversity and quality.' IPCC: Glossary, 2018