Jisc

# Net zero roadmap

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# Net zero roadmap

# / Context

We recognise that there is a global climate emergency and we have a responsibility to understand and address our own contribution through transformative change.

In addressing the climate emergency, the UK government has a binding target to reach net zero emissions by 2050 in order to keep global warming below 1.5 degrees. Jisc has previously made the commitment to reach net zero by 2040, ten years ahead of the national target, but there is the intention to bring this date forward once we have gained a better understanding of our footprint (especially those emissions falling within scope 3). We plan to cut our carbon emissions by over half by 2030 and be net zero across our operational emissions by 2040 and by at least 2050 for the remaining scope 3 emissions.



#### Why net zero and not just zero?

The reason we are using the term "net zero" and not just "zero" is because we will always produce some carbon emissions, but these are equal to carbon removal. For Jisc "net zero" means that we will remove as much carbon as we emit.

In 2020 Jisc began collecting emissions data in accordance with the Streamlined Energy and Carbon Reporting (SECR) requirement for our financial year ending 31 July 2020. In accordance with these requirements, Scope 1 and 2 carbon emissions were collated for the 18/19 and 19/20 reporting years. The 18/19 reporting year has been set as the baseline and forms the foundation of our Carbon Reduction Plan which was published at the end of 2022.

As the UK digital, data and technology agency focused on tertiary education, research and innovation Jisc is aware of the environmental cost of digital transformation and the greenhouse gas emissions associated with the manufacturing, distribution and use of ICT equipment (this is currently estimated to be 3% of global carbon emissions and is expected to increase to 14% by 2040).

As a digital provider we have a responsibility not only to reduce our own carbon footprint but also the portion of our members footprint attributable to the use of our products and services. Digital is also part of the solution to tackling climate change. We will work with colleagues and sector partners to make our products and services more sustainable to reduce their own carbon footprint.

It is important to recognise that setting out our roadmap is only the beginning of our journey. Alongside this roadmap we will be looking to commit to the UN Sustainable Development Goals (UNSDG's) and use them as a mechanism for driving sustainability across all or our activities.

As part of our further commitment to environmental sustainability we will develop an environmental management system to ISO14001 standard. This will help guide action across key environmental impact areas, such as consumption, waste and travel. Beginning next year, we will also make carbon reduction an explicit aspect of our procurement processes for our supply chain and look to adopt a net positive approach to our activity.

#### Introduction



This document sets out our principles and commitments in relation to addressing the climate crisis. It outlines our key milestones and the actions within our roadmap for becoming a net zero organisation.

This dynamic roadmap will be reviewed and revised as our understanding of our scope three emissions improves, and technology continues to innovate. We will review and revise accordingly any targets, milestones and actions. This will ensure that our response is delivered at pace and with real impact.

## Taking a principled approach

Whenever we take on a new and complex societal issue, such as addressing the climate crisis, we strive to first understand and then to define a principled approach to guide our efforts.

We plan to adhere to six key principles that will be vital as we continue to lead and innovate within the sector; and take additional steps on an ongoing basis to become a Net Zero organisation.

# Taking a principled approach (cont'd)

- **1. Grounding in science and maths**. We will use a science based target<sup>1</sup> approach to set appropriate and ambitious targets across our carbon emission sources.
- **2. Taking responsibility for our carbon footprint**. We will take responsibility for all our emissions and set key milestones to measure progress. By 2030 we can cut them in half and begin to remove more carbon than we emit each year.
- **3. Ensuring effective transparency.** We will publish an annual Environmental Sustainability Report that provides transparency on our progress, based on strong global reporting standards<sup>2</sup>.
- **4. Empowering our members**. Perhaps most importantly, we will develop and deploy digital technology to help our suppliers and customers reduce their carbon footprints.
- **5. Using our voice on carbon-related sector policy issues.** We will support new public policy initiatives that impact on our members/customers, to accelerate carbon reduction and removal opportunities.
- 6. Enlisting our employees. We recognize that our employees will be our biggest asset in advancing innovation, and we will create new opportunities to enable them to contribute to our efforts.



As part of our corporate social responsibility (CSR) strategy we have already been working to minimise the negative impact of our organisation and activities as part of our charitable mission. In delivering net zero we will use this knowledge, alongside our key principles, to embed sustainability across the organisation.

**Leadership and strategic direction:** The leadership team understand sustainability is an organisational imperative. As a driver for change 'Be a force for good' is one of the key themes in Jisc's Strategy 2023-2025 and will form the foundation of a new sustainability Strategy.

# **Delivery (cont'd)**

#### Governance

A new sustainability governance structure will be adopted to provide a framework of authority, accountability and transparency to our staff, funders and members.

#### Budget

The financial cost associated with delivery of net zero will be calculated as part of developing a Pathway to Net Zero Plan.

#### A head of environmental sustainability and graduate environmental sustainability officer have been recruited to work across the organisation to guide and support net zero projects.

Staff

#### Culture

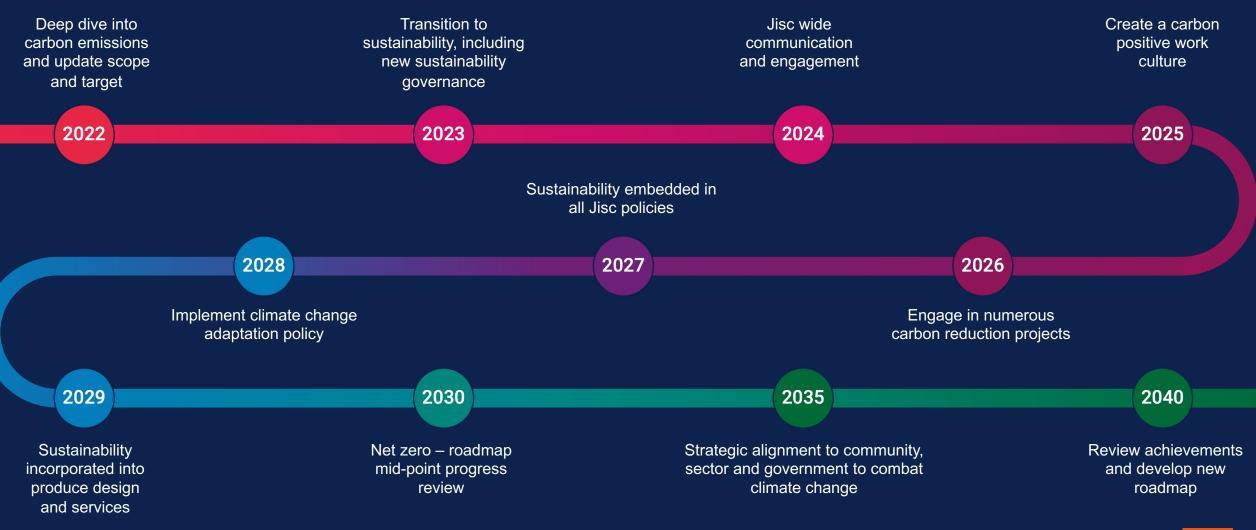
Effective communication and engagement will be key in delivering the cultural change required to meet our sustainability and net zero ambitions.

#### Performance

Key milestones have been set to ensure that progress towards net zero remains on track.



## **Delivery - key milestones**





#### Source of our emissions

#### We are committed to reaching net zero by 2040.

We have classified our emissions sources into three groups:

- Net Zero which covers all our direct operational emissions (scope one and two) along with emissions linked to business travel and staff commute;
- Net Zero+ which covers those emissions associated with our supply and value chain. These emissions are less understood and more of a challenge to measure.
- Out of scope which covers working from home emissions. These may be considered at a later date.

#### Source of our emissions (cont'd)

Scope one Natural gas Diesel oil Refrigerant gases

Scope two Grid electricity

Scope three T&D losses for purchased electricity Business travel Staff commute Scope three Supply chain Transport and distribution Waste and recycling Water and water treatment Electrical use of leased assets Electrical use by our customers

Out of scope Working from home

Net zero

Net zero plus



#### Where we are now

Before we set our out our individual actions to meet our milestones, it is important to know where we are starting from.

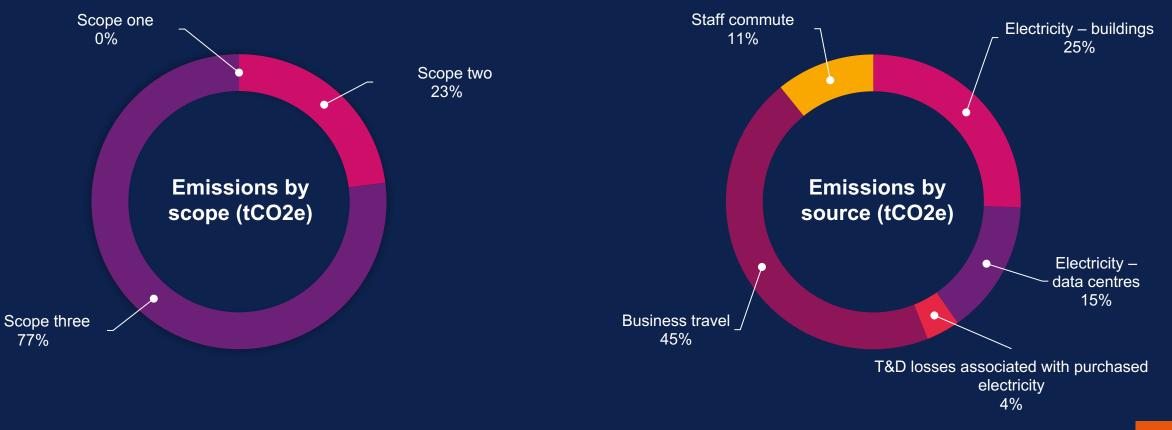
Carbon emissions are generated throughout Jisc's value chain and understanding where the emissions are generated enables us to focus on opportunities to make reductions.

Our carbon footprint consists of emissions in our direct control (known as scope one and two) and those which we can influence (scope three).

Jisc's 2021/22 carbon footprint has been calculated to be 543.86 tCO2e. We have identified some gaps in our reportable emissions for this period and have since developed mechanisms to ensure that they are captured moving forward.

#### 2021/22 Carbon footprint

# $543.86_{\text{tCO2e}}$





#### Getting to net zero by 2040

The challenge of scope three emissions is mirrored across the sector and we will work with others in the sector and industry to develop a better understanding these emissions.

We plan to implement the following measures to deliver net zero:

- Jisc operational emissions decarbonisation and demand reduction projects
- Jisc supply and value chain emissions opportunities to reduce scope three emissions
- **Responsible investment** investment in a portfolio which provides growth and income through the integration of environmental, social and governance (ESG) considerations
- **Carbon removal** investment in a portfolio of negative emission technologies to balance emissions. This includes projects such as: afforestation and reforestation, soil carbon sequestration, bioenergy with carbon capture and storage (BECCs) and direct air capture (DAC).

In addition to becoming net zero, as an organisation, we will support our members in reducing their own carbon footprints. We intend to do this through transparency in the carbon impact of our services and products, providing support and guidance through our own learnings and working with Department for Education (DfE) to develop a standardised reporting framework for the sector.

#### Jisc carbon roadmap to net zero

# The roadmap includes three 'levels' of sustainability maturity to reach net zero:

- Emerging: activities that are required early to address sustainability
- Established: our approach to sustainability is now established and structures are in place to support it
- Leading: we can now act as a model to others on sustainability

#### Key:

Leadership and governance



Partnerships and engagement



Products and services



#### Jisc carbon roadmap to net zero - emerging

Meet with executive leadership team to set scope for Net Zero

Develop Roadmap setting direction of travel to delivery of Net Zero Develop and implement plan to measure emissions falling within Net Zero+

Submit letter of intent to set a science based target for net zero

Finalise baseline calculation for Net Zero+

Emerging

Undertake gap analysis of existing carbon reporting Adopt the UN Sustainable Development Goals as framework for embedding sustainability

Set and implement sustainability targets and policies

Recalculate baseline for Net Zero Communication and engagement across Sustainability and Net Zero



#### Jisc carbon roadmap to net zero - established

Engage with research partners to support members in delivery of net zero

Deliver carbon literacy and environmental awareness training Low carbon and active travel opportunities available across commuter and business travel

Produce an operational strategy in-line with Net Zero ambitions Adopt circularity as approach for managing waste and the procurement of goods

**Established** 

Provide advice and support members in understanding their digital footprint

Environmental management system in place to manage environmental impact

Develop costed pathway to net zero and establish ring fenced budget

Demand reduction and renewable energy measures in place Adopt net positive as framework for embedding sustainability and net zero throughout supply chain



#### Jisc carbon roadmap to net zero - leading

Develop understanding of carbon footprint of products and services Investment in a portfolio of finance products which integrate ESG considerations Review progress against net zero and adjust roadmap accordingly

Incorporate sustainability into governance arrangements Produce framework for capturing and reporting FHE sector emissions

Leading

Establish Net Zero in IT network with FHE sector Investment in a portfolio of negative emission technologies Implement measures to reduce the carbon footprint of products and services Incorporate climate and sustainability responsibility into human resources (HR) process



# Our journey so far

Whilst the roadmap sets out the priorities as we move towards net zero it would be unfair to say that we are at the beginning of this journey. As part of our CSR strategy we began to take steps and have delivered on number of projects that align to net zero ambitions.

These projects are only the beginning and progress varies across the organisation. In some areas our innovation and transformation demonstrates clear leadership; whereas in others areas that understanding and change is only beginning to emerge.

We will continue to develop an understanding of our environmental impact and will be able to respond, adapt and improve accordingly as an agile organisation..

Jisc's journey may be challenging in places but defining our targets will allow us to move forward with clear goals. In future, progress against these set milestones and targets will be monitored and reported.

# Our journey so far (cont'd)

- Adopted a flexible approach to working which supports working from home
- Circular approach to network hardware and furniture
- Reduced energy consumption through installation of energy efficient lighting and solar panels
- Advocated for the use of green energy suppliers to buildings in which we are a tenant.
- 10% staff purchased a bike through the cycle to work scheme
- Planted 3,133 trees through our Trees for Life partner, to begin to offset carbon emissions from our train and air business travel.
- Collaborated with Honeywell to gather data through the building management system to address priority areas of power consumption.
- Provided guidance for our members on understanding the carbon impact of digital
- Transferred funds into environmentally friendly investment products

## Monitoring our progress

As previously discussed, Jisc are committed to achieving decarbonisation through a whole organisation approach that relies on a wide range of effective actions across our estate, products and services, governance and engagement activities.

We will monitor progress towards the key milestones and actions in outlined our Jisc Net zero roadmap to ensure that we remain on track and are taking the necessary measures to achieve net zero and beyond.

For transparency, performance will be monitored through the production of an annual carbon footprint to show consistent, measured change as we work through our carbon reduction activities.

This, alongside our wider environmental sustainability progress will be published in a new annual Environmental sustainability report that will detail our carbon impact and reduction journey. This document will be communicated through both internal and external channels.



- Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2°C above pre-industrial levels and pursuing efforts to limit warming to 1.5°C.
- 2. GHG protocol
- 3. <u>https://www.sciencedirect.com/science/article/abs/pii/S095965261733233X?via%3Dihub</u>

#### Thank you

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