arcpartnership

Carbon Reduction Plan

Delivering real value, **together**

Nottinghamshire County Council | SCAPE

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Foreword

When I became Leader in May 2021, Nottinghamshire County Council approved a new Corporate Environmental Policy that reaffirmed its commitment to protecting and enhancing our environment for current and future generations. We're absolutely committed to reducing our environmental impact, reducing our emissions, and delivering greener growth and development.

We will do this through innovation, through changing the way we work as an organisation, and importantly also in a way that seeks to match carbon savings with sustainable public finances. This is particularly true when it comes to our new buildings and economic development.

The council published its own detailed Carbon Reduction Plan in 2023, with challenging interim targets to meet. You can read more about our environmental commitments on our website **here.**

In our plan, we acknowledge the critical importance of our alternative service delivery providers, including Arc Partnership, who look after our property portfolio and who will play a key technical role in helping us deliver low carbon heating and energy efficiency improvements across our assets and estate.

I am therefore delighted to endorse this Carbon Reduction Plan for Arc Partnership, on behalf of Nottinghamshire County Council. It shows a real sense of purpose to reduce the carbon emissions of the business and an impressive commitment to, where possible, mitigate the impact of these emissions locally in our Nottinghamshire communities.

Councillor Ben Bradley MP
Leader of Nottinghamshire County Council

Introduction

Leaving a sustainable legacy

Arc Partnership is a joint venture between Nottinghamshire County Council and SCAPE, dedicated to supporting the council's property and land portfolio. In line with the council's policies, and as part of SCAPE's 10-year vision, we commit to leaving a sustainable legacy within communities in Nottinghamshire and across the wider D2N2 region.

Continuing reductions towards absolute zero and a net positive position at the soonest opportunity.

Acting to address the climate and ecological emergencies is both the right thing to do and a legal duty in the UK. Our legacy must therefore be to reduce our own emissions at source, to cut existing levels of atmospheric Greenhouse Gas (GHG) and to help mitigate the impacts of global warming at a local, national and global level.

Our verified carbon footprint is just over 3,360 tCO_2e per year (2021/22 baseline). These emissions arise from site, in our office workplace, from commuting and business travel and the activities of our supply chain.

We will take immediate responsibility for our residual emissions, initially through insetting investments in carbon reduction projects in UK communities and (subject to policy review) through certified offsetting investments, to secure net zero status no later than 2028.

We have set out clear roles and responsibilities within our business to ensure progress is made in line with expectations, and that we are accountable to our local government owners and the communities we serve.

Ensuring everyone plays their part is key, and we have committed to becoming a carbon literate organisation by 2024,

In addition, we will support staff engagement at every step, and provide communication that enables informed choices and a business-wide change in our culture, because we understand that **small changes make a big difference.**

The Mill Adventure Base

A purpose-built urban adventure centre at Kings Mill Reservoir in Sutton in Ashfield, with energy-efficient insulation and lighting.

Introduction

Our commitment to change

We understand the responsibility we have to reduce the environmental impact of our organisation's operations, and the need to be accountable and transparent about our Greenhouse Gas emissions.

This Carbon Reduction Plan identifies our verified carbon footprint. It sets out science-based targets and an investable action plan that seeks to deliver emission reductions of 50% by 2028. It also underlines our commitment to being accountable for this work, both to our local government owners Nottinghamshire County Council and SCAPE Group, through our Joint Venture Board of Directors, and to the people and businesses in the communities that we serve.

We commit to taking immediate responsibility for the emissions we cannot reduce straight away. Annually, we will invest in carbon insetting projects; making responsible contributions to equivalent decarbonisation efforts within local communities.

No later than 2028, we will review the costs and benefits of purchasing certified carbon offsetting credits to secure net zero status as an organisation.

Daniel Maher
Managing Director,
Arc Partnership

UK regulations and guidance

This plan is written acknowledging the context in which we operate, framed by legislation and government guidance. This plan, our Environmental Policy and our general approach are informed by the following UK law and best practice.

Legislation

The primary legal and regulatory context which this plan acknowledges and adheres to:

Environment Act, 2021

This aims to improve air and water quality, tackle waste, improve biodiversity and make other environmental improvements. The Planning Bill mandates the delivery of a minimum of 10% Biodiversity Net Gain in new developments, 30 year management plans and a system of biodiversity credits both on and off site.

Social Value Act, 2012

Public sector commissioners are required to consider how they could improve the economic, environmental and social wellbeing of their local area through procurement.

Climate Change Act, 2008

Set in law, emissions in England must be reduced by 78% by 2035, compared to 1990 levels.

Government policy and best practice

The guidance which shapes and is critical to our organisational approach to ESG (Environment, Social and Governance):

Procurement Policy Note 06/20

Taking account of social value when awarding Central Government contracts.

Carbon Reduction Procurement Policy Note 06/21

Carbon reduction plans are required for every procurement over £5m.

Construction Playbook V2

Procurement guidance which introduces and strongly recommends Whole Life Carbon assessments, which, having been discussed in parliament in 2022/23, is expected to be mandated in the medium-term.

Carbon Reduction Code for the Built Environment

A construction industry code of practice, mapping and connecting a number of disparate initiatives into a universal framework for carbon reduction. There are three levels of commitment, allowing organisations to be either a pledger, a signatory or a champion.

Baseline and scope

Scope

In this plan, we are working from an independently verified carbon emissions baseline for the 2021/22 financial year, of 3,360 tonnes of CO_2e.

This includes the direct and indirect emissions relating to all of Arc Partnership's activities, from workplace energy use to business travel. We have also included our direct and indirect supply chain emissions from:

Pre-Construction

Design and consultancy

Regeneration and major projects

Construction

Risk management

Responsive repairs and emergency

We will begin by reducing the statutory emissions that we can measure and control. This plan currently excludes emissions from built environment projects funded by our clients, which Arc Partnership manages and procures for the council and other public sector organisations.

This is not because we are ignoring this major source of emissions. Working alongside the council and Via East Midlands, we are committed to being accountable for the impact of these capital projects. As a priority, we will develop the capability to measure, manage and reduce emissions from capital projects, and address this key source of emissions.

We also understand our responsibility to influence and advise our clients and stakeholders. Based on industry research, we have estimated that the project or 'capital' carbon Arc Partnership influences is around 8,000 tonnes of CO_2e per year.

Our carbon emissions baseline 2021/22

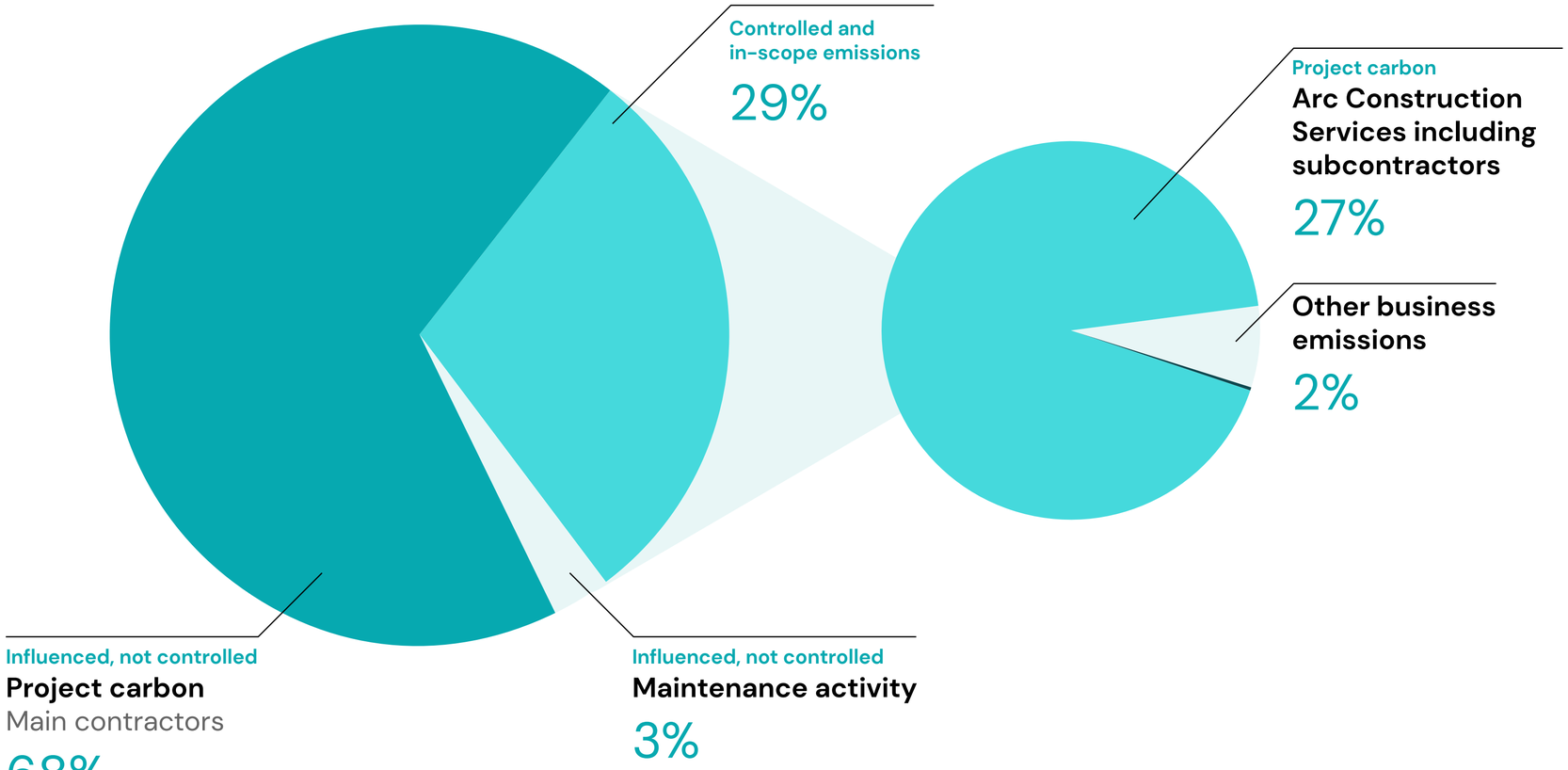
3,360 tCO_2e per year

Our estimated commuter and home working mileage both fall outside the scope of this plan, but we do intend to voluntarily report on and seek to reduce these non-regulated emissions, as part of our commitment to environmental accountability.

2021/22

Arc Partnership Baseline

Total emissions influenced and in-scope for reporting



In 2021/22 Arc Partnership controlled or influenced emissions totalling over

11,360 tCO_2e

In 2021/22, the emissions in-scope were just over

3,360 tCO_2e

Estimated project or 'capital' carbon Arc Partnership influences

8,000 tCO_2e

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Managing project carbon

The built environment accounts for around 40% of all UK carbon emissions[1]. As an organisation with considerable influence, it is vital that we take responsibility for the emissions we can control and influence.

Challenges and opportunities

The Construction Playbook published by Central Government advocates for whole-life carbon assessment in all projects, and regulation is expected to follow in the coming years.

We are developing a common reference framework for use by the council, Arc Partnership and Via East Midlands to account for and reduce upfront project carbon.

Project carbon is reported as scope 3 emissions by many local authorities when investing in building and infrastructure projects.

Successfully managing this is a shared responsibility, which will require collective action and effort from all parties, including the council as investor, our designers, procurers and contractors.

In this plan, we set out our commitment to addressing the upfront carbon arising in projects delivered by Arc Construction Services. The focus initially is on the Construction Stage (A5 in figure 1) which we are directly responsible for and able to control.

We will leverage the nationally-recognised work being undertaken by SCAPE Group to support our local procurement of low carbon projects.

Life Cycle Assessment

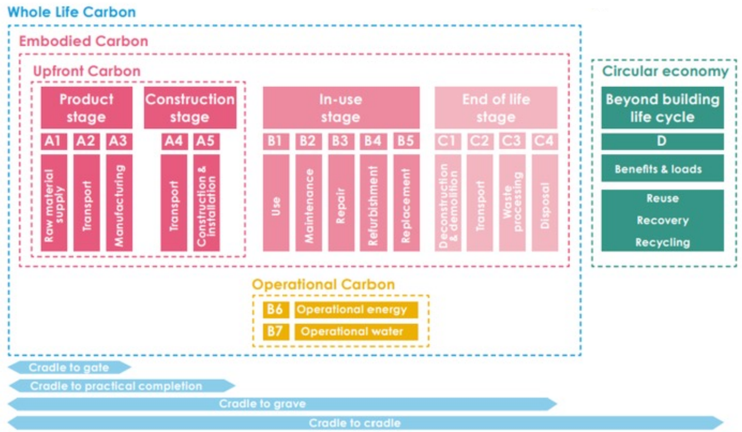


Figure 1
Reproduced from the
LETI Embodied Carbon Playbook

[1] UK Government, 2022

Categories of activity and regulatory scope

Workplace

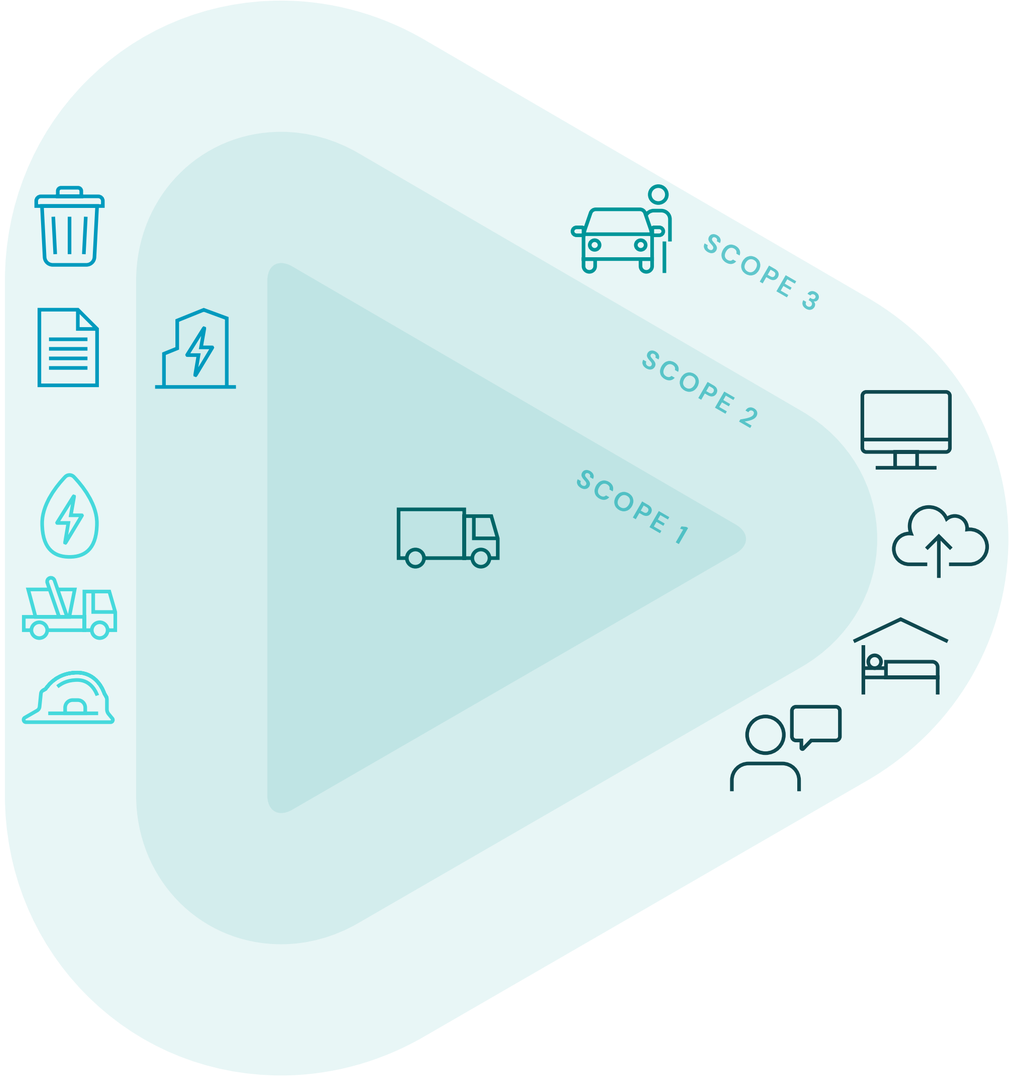
- Energy / water use
- Waste
- Paper use

Construction

- Energy / fuel / water use
- Construction waste
- Subcontractors

Fleet

- **(Divested in 2022)**
  Our baseline includes 3 historic fleet vehicles



Business travel

- "Grey fleet"
  Employee vehicles

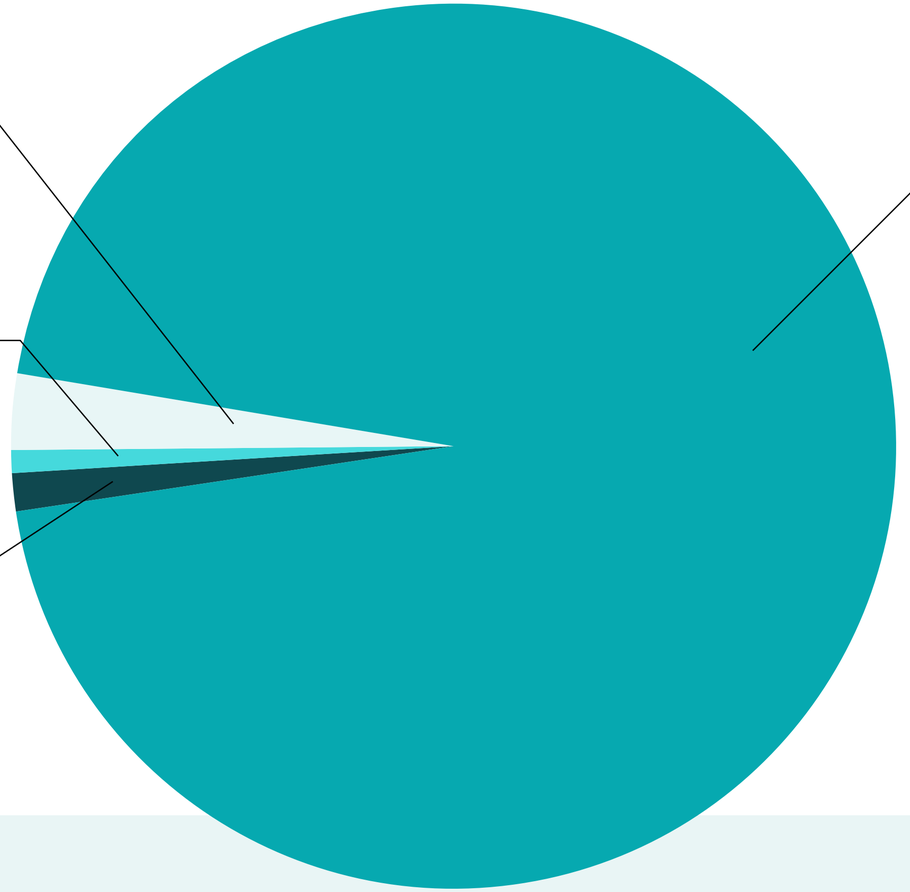
Supply chain emissions

- ICT hardware
- Data storage
- Venues and accommodation
- Consultancy services

2021/22

Baseline Greenhouse Gas emissions

(in tonnes of CO_2 equivalent)



Other supply chain
2.8%
94 tCO_2e

Business travel
0.9%
30 tCO_2e

Workplace
1.2%
42 tCO_2e

Arc Construction Services (ACS) including subcontractors
95%
3,193 tCO_2e

Additionally, outside formal scope:

82 tCO_2e commuter travel

55 tCO_2e home working

Sources of our emissions
and how to reduce them

Workplace emissions

The challenge

Our office space is leased until 2028 and currently uses over 206,000 kWh of electricity a year.

- Arc Partnership is responsible for 48% of this (98,880 kWh), and SCAPE Group is responsible for the remainder.
- Emissions also arise from energy use and maintenance of shared building areas, controlled by the landlord.
- In our baseline year, our electricity was not yet sustainably procured, so emissions (54 tCO_2e) arose from normal UK electricity grid averages.
- The internal office, fitted out in 2018, has efficient, fully electric HVAC systems (heating, cooling and ventilation). However, energy use intensity is 116 kWh/m^2/yr, which could be significantly improved.
- Local government benchmarks suggest a target of 65 kWh/m^2/yr should be achievable (Chartered Institute of Building Services Engineers) and the LETI Climate Emergency Design guide recommends 55 kWh/m^2/yr.

54 tCO_2e
of Greenhouse Gas emissions
per year

47,462 kwh
energy used
per year

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Workplace emissions

Objectives

Source all energy sustainably by Q2 2023/24.

Reduce office energy use intensity, targeting 65 kwh/m²/ year by Q4 2023/24.

Ensure our future office space aligns with our ambition to be net zero by 2028.

116 kWh/m² yr
Current energy use

65 kWh/m² yr
Target energy use
by Q4 2023/24

Actions

- Work with the landlord to ensure emissions linked to our service charges are reducing.
- Procure a new energy supply contract in line with UK Green Building Council guidelines, which uses 100% renewable energy from a supplier that is actively increasing capacity for renewables on the UK grid.

Reduce energy demand by:

Conducting an office energy use review

Implementing technical and behavioural measures to reduce demand

- Undertake an asset review to ensure our future office accommodation aligns with our low carbon ambitions, evaluating the options at the end of our current lease.

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Arc Construction Services emissions (site)

Our work on site, through our contracting arm, Arc Construction Services, accounts for over 95% of our emissions.

The challenge

Construction is an emissions-heavy process, and this makes up most of our carbon footprint. However, these emissions are also something that all project team members and stakeholders can influence, and collectively we can make a big contribution to the UK's net zero target.

Taking control of project carbon requires engagement across the business, not just on site. The key sources of controllable emissions, or those that we can influence are:

- The design of new build and maintenance interventions.

  This is influenced by our clients' ambitions and budget and our design and specification choices. The materials we specify and use on site have high levels of embodied carbon (large scale emissions created from the manufacturing and transport processes).

- Construction waste generation from on site activities, which can be substantial.
- Indirect energy use onsite for rented site accommodation and from generator fuel.
- Transport of people and materials to site.

As managing contractor, we are accountable for the emissions created by our subcontractors at project delivery level, and this makes up most of our overall carbon footprint.

Workplace emissions (site)

Objectives

- **Establish a specific plan to reduce project carbon emissions by the end of Q2 2023.**
- **Enable an in-house project carbon management service as part of Arc Partnership's service provision to Nottinghamshire County Council and other clients.**
- **Set a realistic target for Arc Construction Services project carbon reduction and establish a detailed road map by the end of 2023/24.**

Actions

- Undertake a detailed opportunities review for Arc Construction Services and a specific detailed action plan for this area of the business by the end of 2023/24.
- Ensure a best practice group for onsite carbon reduction is formed between Arc Construction Services and Arc Partnership's framework contractors.
- Deliver carbon literacy training to all Arc Construction Services site managers and other key stakeholders/ influencers within project teams (e.g. designers/cost managers).
- Develop professional capability, tools and capacity to plan, account for and manage project carbon in delivery for Arc Construction Services and all projects by the end of 2024/25.
- Ensure our design standards and approach minimise carbon and waste, and work with our clients to ensure this is financially sustainable.
- Divest of our fleet and phase out diesel generators for site accommodation as part of a journey to zero diesel projects.
- Measure site waste and mileage and set targets to reduce these.

Scope 3: Supply chain emissions

Scope 3 emissions, including those from on site subcontractors, make up more than 95% of our carbon footprint.

The challenge

- To be truly accountable for our direct and indirect carbon emissions, we are committed to reducing scope 3 emissions – those that are created as part of our supply chain.
- We intend to align our procurement approach to the Carbon Reduction Procurement Policy Note (06/21) and take a category management approach in assessing our supply chain's commitment to carbon reduction.
- We will make the requirements optional for existing suppliers, but mandatory for all new suppliers as appropriate.

In addition to the emissions arising from Arc Construction Services, our scope 3 emissions also include:

Venues and accommodation

IT equipment and IT and telecomms services

Data storage

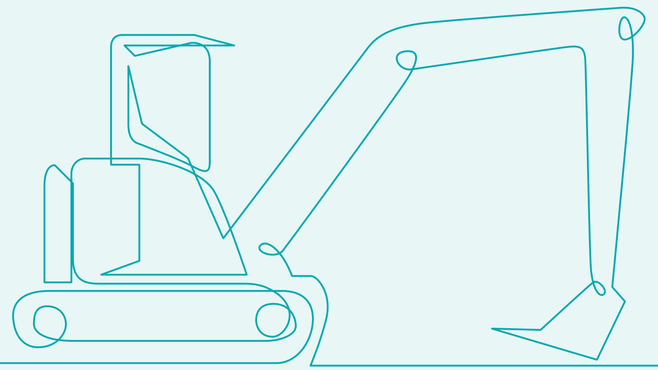
The emissions from subcontractors of Arc Construction Services have been included in our site emissions.

Supply chain emissions

Objectives

All supply chain partners to be aware of Arc Partnership's carbon reduction approach by the end of 2023/24.

Supply chain partners to provide transparent emissions data and have carbon reduction plans in place by 2026.



Actions

- Develop guidance for our supply chain partners based on Carbon Reduction Procurement Policy Note (06/21) which allows us to plan for, measure and manage carbon more effectively and with a greater degree of accuracy.
- Support supply chain partners with the creation of Carbon Reduction Plans for their organisations and operations.
- Develop buying standards for the use and purchasing of venues, accommodation and IT equipment.
- Embed carbon reduction into the procurement criteria for all suppliers over time.
- Incrementally introduce carbon reduction targets into supply chain contracts to encourage best practice.

Business travel

The challenge

We procure, design and deliver projects and maintenance of assets across Nottinghamshire, meaning that some business travel is essential.

- Business travel emissions arise from our “grey fleet” – the vehicles our employees own and use for work and a small number of domestic flights.
- The 2020 pandemic has taught us that we can work smarter, and we have developed a balanced approach which combines office, remote and home working.
- In the short-term, making good decisions about where and when to work, and how we travel is key.
- In the medium/long-term the UK-legislated transition to low carbon transport includes the introduction of Electric Vehicles (EVs), which supports the decarbonisation of business travel.
- The UK government expects 1 in 5 vehicles to be fully electric by 2030.
- We know that adopting active travel approaches and reducing the time spent travelling will also improve employee health and wellbeing, and reduce parking space pressures.

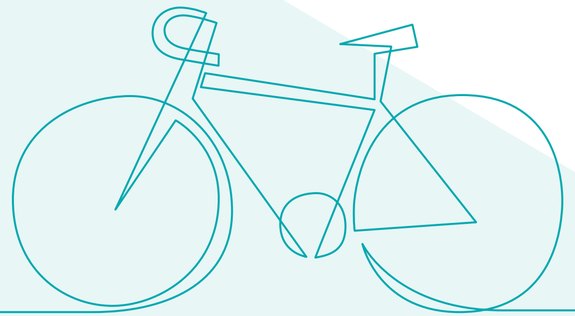
100,000 miles
travelled per year

30 tonnes
of CO_2e per year

Business travel

Objectives

To reduce emissions from business travel, delivering a year-on-year reduction of 5%.



Actions

Educate our employees and enable informed choices on the relative impact of different transport choices, as well as the benefits of car sharing and minimising avoidable journeys.

Phase out the use of car allowances and create a holistic and attractive pay and reward policy, which encourages carbon conscious choices.

Promote the use of car sharing by introducing the national car sharing mileage rate for essential business journeys.

Support the transition towards low-emission vehicles and communicate the benefits including:

- Review the available incentive schemes and facilitate future employee adoption.
- Increase availability of charging spaces for Electric Vehicles (EVs) provided by the landlord at our office and other key destinations.

Encourage active travel and the use of public transport where appropriate for business use.

Mobilising our team

We recognise that our employees are crucial to the success of our carbon reduction commitments.

We can only deliver this plan if our team understands why we need to act. They need to share our business ambition to do things differently and be given the information, support and ability to make those changes.

Research from many other organisations and advice from our peers suggests this will require:

Leadership
Our expectations for change need to be clearly communicated and our senior leaders must visibly lead by example.

Carbon literacy
Our team need to know where our emissions come from and why doing things differently matters.

Informed choices
Our team must have the knowledge and tools they need to make practical and realistic choices in their day-to-day work and make informed decisions.

Rewards, incentives and recognition
We understand that change can be hard. We want to reinforce proactive action and carbon-conscious behaviours.

An opportunity to make a difference
Our team want to know how they can make an impact professionally, and as part of wider society by volunteering in the local community.

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Mobilising our team

Objective

To create a net zero organisational mindset and business culture to ensure all people-led activity is delivered in line with our carbon reduction ambitions.

Changing behaviour

Actions

Deploy a strategic communications and engagement programme to:

- Launch this plan, its context and its importance to our 369 strategy. Communicate our expectations from employees.
- Share individual actions and activities, particularly at management level and above, to provide inspiration and visible leadership.

Provide relevant learning and development to help employees understand the Carbon Reduction Plan, including:

- Re-promote our Environmental Policy.
- Arrange certified carbon literacy training for all staff by end 2023/24 at the latest.

Ensure carbon reduction is included in HR processes including actions to:

- Develop and launch a carbon neutral welcome pack.
- Review recruitment practices to ensure we attract candidates with the right mindset and skills to support our carbon reduction ambitions.

Changing behaviour

Actions

Maintain clear and consistent communications, which identify the behaviours and work-place decisions employees can make that will make a positive impact, including:

- Informed travel decisions
- Printing less and using digital platforms
- Choosing venues and accommodation that are low-carbon
- Using less energy in the office and at home, from sustainable sources
- Using, storing and sharing data in a smarter way

Empower and incentivise staff through an attractive reward and recognition scheme specifically for sustainability.

Delivery Plan and Carbon reduction pathway

Timeline

Cut carbon in absolute terms by 50% by 2028 and secure net zero status

Switch energy supplier
explore off-site renewables

Staff engagement programme and Carbon Literacy training for most staff by the end of 2023/24.

Learning and Development (L&D) programme to embed professional carbon management skills.

Offsetting from 2023/24, **officially from 2026**

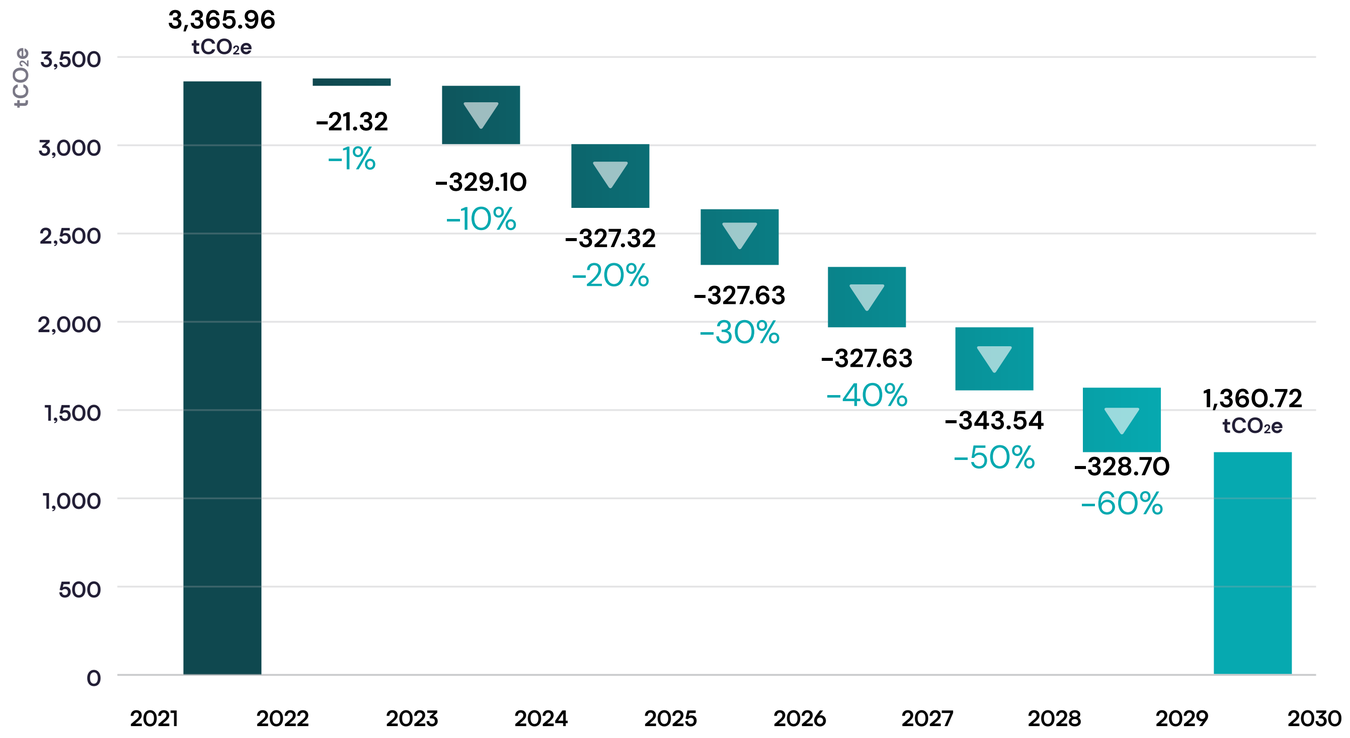
2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 | 2027/28 | 2028/29 | 2029/30

Progressive reductions (2023-2026)

- **20% reduction** in emissions from **business travel** over 4 years
- **30% reduction** in emissions through **data centre usage** over 4 years
- **40% reduction in supply chain emissions** through enhanced procurement specifications
- Specific detailed review and focus on key Arc Construction Services activities

Relocate to a low carbon office at end of lease

Carbon reduction pathway and targets



Our plan is driven by science-based targets to mitigate the pace of climate change and contribute to the UK's plan to limit global warming; this means taking urgent and immediate action to limit new emissions as much as possible.

Targets

We will cut carbon in absolute terms by 50% by 2028 and secure net zero status.

We will have reviewed and resolved our policy on offsetting and will have transparently published any investment made.

By 2030, we expect to have reduced our emissions by 60%.

Investing to reduce and mitigate our carbon emissions

To deliver this plan, we will need to invest in transformative actions.

To fund this investment, we have established an Internal Carbon Levy, which:

- is reviewed annually
- is indexed to UK carbon credit prices
- reflects our actual carbon emissions from the preceding 12 months.

Investment priorities

We will prioritise the use of funds to deliver activities that reduce our business emissions (as set out in this plan). At year-end, any remaining balance in the fund will be used to:

- Invest in community-level climate change mitigation and resiliency, targeting schemes in the communities within Nottinghamshire ("insetting")
- Invest in UN-certified carbon credits to enable us to be a truly net zero business ("offsetting").

We will publish a short policy on prioritising insetting and offsetting activities and providing details of any projects that are funded in this way.

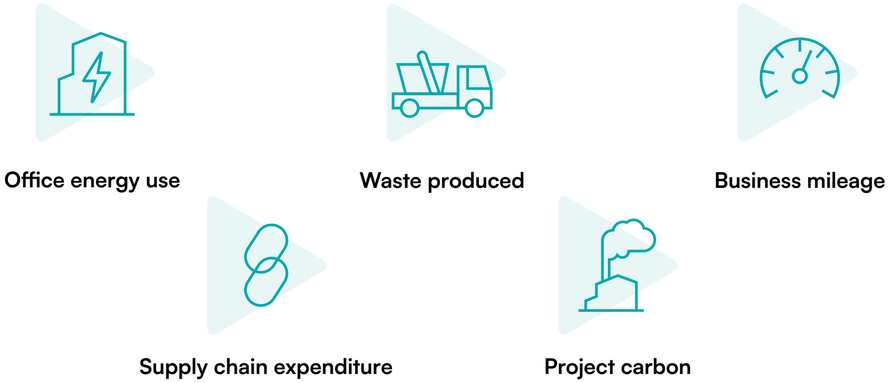
Brooke Farm

An employment and training centre for adults with learning disabilities fitted with energy-efficient heating and lighting.

Governance, measurement and reporting

Our emissions need to be carefully managed, and we have established the following approach to ensure we are transparent and accountable.

To ensure carbon management becomes an inherent part of Arc Partnership's performance management, governance regime and ESG approach, we will consistently measure the activities from which our in-scope emissions arise including:



Starting with our baseline year, we will externally verify our emissions annually, and consider **ISO 14064 accreditation** at the earliest opportunity.

We will publish our progress and report on the management of these metrics and the reduction of the associated carbon emissions to:

- Nottinghamshire County Council annually
- The Joint Venture Company Board biannually
- Employees through quarterly internal progress reporting

Roles and responsibilities

Executive Leadership Team

Responsible for ensuring the business implements the necessary activities to deliver the carbon reductions identified in this plan.

Performance Director

Responsible for ensuring that measurement, verification and reporting activities are undertaken in line with the standards identified in this plan.

All employees

Responsible for ensuring they understand what they can do in their own role to enact this plan and to support others in doing the same.

Glossary of terms

Climate emergency

The critical and urgent state of the Earth's climate system due to anthropogenic (human-caused) climate change. Many public bodies have made a Climate Emergency Declaration, emphasising the need for immediate and drastic action to mitigate and adapt to the adverse effects of climate change, to prevent irreversible and catastrophic consequences for humanity and the planet.

Offsetting

Offsetting, specifically carbon offsetting, refers to a practice where individuals, organisations, or governments take actions to compensate for their carbon emissions by supporting projects that reduce Greenhouse Gas emissions elsewhere. Offsetting is used to achieve a balance between the amount created and the amount removed or reduced, which in turn reduces their carbon footprint.

Insetting

Insetting, also known as carbon insetting, is a concept that focuses on reducing or offsetting carbon emissions within a specific company or organisation's value chain or operations. Unlike offsetting, which typically uses external projects, insetting usually involves internal reduction initiatives to balance out the emissions generated.

Greenhouse Gas emissions

Greenhouse Gas (GHG) or carbon emissions. Expressed as tonnes of CO_2 equivalent (**tCO_2e**), Greenhouse gas emissions from human activities strengthen the greenhouse effect, contributing to climate change. Most is carbon dioxide from burning fossil fuels: coal, oil, and natural gas.

Net zero

Achieving net zero means reducing Greenhouse Gases produced by human activity, to be achieved by employing nature-based solutions and strategies such as carbon capture and storage.

Carbon neutral

Carbon neutral means that the level of carbon dioxide removed from the atmosphere is equal to or greater than the emissions created.

Whole-life carbon

The carbon emissions resulting from the materials, construction and use of a building over its entire life, including its demolition and disposal.

Retrofitting

The process of making changes to existing buildings so that energy consumption and emissions are reduced.