



NOTTINGHAM SUSTAINABILITY KEY FACTS

Ambition to become the first Carbon Neutral City in the UK by 2028

Since 2002 Nottingham has reduced its carbon emissions by 41%

£15m investment into one of the UK's largest electric bus fleets

Nottingham's entire tram network now runs on 100% renewable power

Early adopter of electric vehicle (EV) infrastructure, including battery storage and bi-directional chargers





Climate change has become a cause for concern across the world. The last 4-year period has been the warmest on record, and extreme weather events are becoming more severe and common. July 2019 recorded the highest UK temperature of 38.7°C.

A big factor in the change in our climate is the impact of gases, mainly CO₂, in trapping heat in the atmosphere. This has led to over 300 local authorities declaring climate emergencies and the realisation of the need to rapidly reduce carbon emissions to zero.

Current progress

Nottingham has already reduced city wide CO₂ emissions by above 42% since 2005', surpassing previous carbon reduction targets. However, the city still emitted 1.17 million tonnes of CO₂ in 2017, enough to drive the average car 6 billion miles!

Now, Nottingham must go further to reduce emissions and lower its carbon footprint to play our part in preventing a dangerously warmer world. The draft [Carbon Neutral Action Plan](#) builds on the [Nottingham 2028 Carbon Neutral Charter](#) by setting out high-level objectives in order to achieve a resilient and sustainable carbon-neutral Nottingham by 2028.



The landmark [GlaxoSmithKline Carbon Neutral Laboratory](#) houses state-of-the-art teaching and research facilities and a communal winter garden, and Luxonic were tasked with implementing an innovative lighting and control solution to supplement the Carbon Neutral project's sustainability.

With energy efficiency as the main priority, Luxonic recommended the use of its Skylux® UD, Slimlux® D61, and Hi Mount ranges for the university's almost wholly wooden development. Ideal for communal areas, Hi Mount pendant luminaires were installed within the winter garden and circulation spaces, Slimlux® were incorporated into the laboratory's integrated service rafts and office spaces, along with Skylux® UD in circulation spaces and teaching areas. Each luminaire was linked to a DALI control system, with intelligent technology bolstering GSK's overall energy savings.

Thanks to Luxonic's low-powered LED luminaires, the [University of Nottingham](#)'s Carbon Neutral Laboratory conducts ground-breaking chemical research in facilities lit by incredibly energy efficient luminaires. The university's overarching goal is to eventually achieve 'Outstanding' BREEAM accreditation, which Luxonic's innovation in lighting and controls will surely help deliver.





Universities leading the way

In 2020, the University of Nottingham and Nottingham Trent University were named 3rd and 4th most sustainable universities in the world by UI Green Metric thanks to their world-class research, rigorous energy efficiency practices and innovative policies.

Nottingham is the only city in the world to have 2 universities in the top 20 ranking.





Energiesprong

Winner of a national innovation award, the first pilot project for Nottingham City Homes (the ALMO managing and maintaining Nottingham's council housing) completed in early 2018 radically transformed ten social rent homes in Sneinton (seven terraced three-storey houses and three bungalows).

It delivered super insulated, low maintenance and almost net zero energy homes. This project was the first in the UK to pioneer the Dutch 'Energiesprong' (energy leap) initiative, which has radically upgraded the energy efficiency of thousands of homes in the Netherlands.


New wall panels were prefabricated off-site and arrived in 'full storey heights' complete with ample insulation and a durable board finish ready to crane into place. The radical retrofit was completed in less than one week with occupants able to remain in residence throughout the works. Tenants report warmer homes, cheaper bills, and the exteriors look fantastic and have really enhanced the neighbourhood. This project is now being rolled out to many more homes across the city.

Harvey Hadden Solar

Harvey Hadden leisure centre is a large site with available rooftop space and car parks making it an ideal site for solar energy generation.

Energy Services have delivered two solar projects for the centre. A 200kWp roof solar panel system and the UK's first publicly-owned solar car park 67 kWp system. These PV systems were installed without any disruption to the day-to-day running of the popular leisure centre. Since generation started, Harvey Hadden has regularly benefited from 100% off-grid energy through the summer.






Low Temperature District Heating

Nottingham City Homes (NCH) has invested in an innovative approach for social housing to supply heat and electricity generated from residual waste collected in Nottingham. Its primary motivation in this has been improvement of tenant comfort and reduction of bills, while supporting the 2028 city ambition.

Low temperature district heating (LTDH) allows heat generated from a wide range of renewable sources to be efficiently transmitted across the city. It can also link to new energy storage technologies to provide stable supply of energy.



Nottingham Good Food Partnership

In 2016, Nottingham Green Partnership supported a call from its food sub group members for The City of Nottingham to join the Sustainable Food Cities Network. The Sustainable Food Cities Network helps people and places to share challenges, explore practical solutions and develop best practice in all aspects of sustainable food.

The key themes of SFC were seen as the best route forward to join together and strengthen the wealth of local food based activity taking place across the city and importantly, to learn from the success and experience of the SFC membership. SFC has over 50 members, including Good Food East Midlands, the first region to achieve network membership.

SFC has now extended its work beyond the UK: Nottingham's membership will provide the city with the opportunity to share its wealth of knowledge and food history with an international audience.

A large cherry blossom tree in full pink bloom dominates the foreground. The tree's branches are thick and dark, with numerous clusters of bright pink flowers. In the background, a green fence and other trees are visible under a clear sky.

Trees for Cities

The City Council is committed to planting 50,000 new trees by the end of 2023. This started in winter 2019 with 300 tree 'whips' (young trees) planted at Southglade Park, 1,650 at Clifton Playing Fields and 1,200 planted at Colwick Park.

So far in 2020, a further 2,800 whips have been planted at Southglade Park, and later in the year, 3,200 will be settled at Hadden Wood, Bilborough. Funding for this first stage of planting has come from the Trees for Cities charity and Nottingham City Council.

Blue-Green City

The University of Nottingham's Water Works Interdisciplinary Research Cluster is a collection of more than 140 engineers, scientists, geographers, historians, health experts and many more, working in collaboration to pioneer new ways to address global water challenges. Water Works also supports local research, such as transforming Nottingham into a Blue-Green city, and is therefore assisting in the development of the Blue-Green Cities project between Nottingham City Council and the University of Nottingham.

The future vision of how Nottingham may adapt to become more resilient to the impacts of climate change, through the prioritisation of Blue-Green infrastructure to manage water challenges and deliver multiple co-benefits to the environment and society, is a key collaboration between the University and City Council. The details of these water challenges, and other environmental and social challenges linked to climate change, are being developed in order to enhance and link blue green infrastructure priorities.



A close-up photograph of a bee on a yellow flower, with white daisies in the background. The bee is positioned on the yellow petals of a flower, facing towards the left. The background is a soft-focus green and white, suggesting a garden or field setting.

Bee Friendly Nottingham

As part of the Council's commitment to biodiversity, we have set the following corporate target to 'Ensure Nottingham is a "bee-friendly" city with suitable habitats in every neighbourhood'.

A programme of relaxed mowing throughout the city has been introduced to improve feeding and nesting habitats for bees and other pollinating insects. Reducing vehicle use will decrease carbon emissions, by mowing the vegetation once a year. Targeted along roadside verges, the rewilding of corridors for wildlife will help create 'corridors' of open space, building resilience to the changes in climate.

Visual displays of wildflowers help to improve both people's experience of the city and their connectedness to nature, as well as undoubtedly improving habitats for our pollinators and the benefits they bring us.

Other planting schemes, educational activities and increased community engagement are key to contributing towards a 'Bee Friendly Nottingham' and will be introduced as part of this scheme.

Additional information and useful links

[Carbon Neutral Nottingham 2028](#)

[Nottingham 2028 – Carbon Neutral Charter](#)

[D2N2 – Local Enterprise Partnership](#)

[Nottingham Economy and Development / Strategies and Plans](#)

[How Nottingham is racing to be the UK's First Carbon Neutral City – The Independent](#)

