

Modeshift National Sustainable Travel Awards 2021



Contribution to sustainable travel – Organisation Winner

Birmingham City Council and National Express West Midlands (NXWM)

Vision to become UK's most sustainable bus company

Sponsored by Brightwayz

What did the project involve?

National Express West Midlands has been carrying out pioneering work to make bus travel as green as possible and reduce air pollution. This includes introducing new technology to make their fleet of 1600 buses cleaner and greener. In February 2020, National Express outlined a vision to become the UK's most sustainable bus company, with their fleet becoming zero emission from 2030. This includes:

- The retro-fitting of 800 older buses with new exhaust systems. Currently over 80% of the bus fleet is Euro VI or zero-emission and within a couple of years the entire 1600 fleet will meet these standards.
- In July 2020 their first electric bus fleet was launched in Birmingham, followed by Coventry and Solihull. 29 fully electric buses now operate across the region, producing zero carbon emissions at the tailpipe.
- 20 hydrogen buses, the world's first zero-emission hydrogen fuel-cell double-deckers, will be operated in 2021 as part of Birmingham City Council's Clean Air Hydrogen Bus Pilot.

Who was involved and what was their role?

The entire National Express West Midlands team - including engineering, drivers, sales & communications. National Express West Midlands has also shown commitment to ensuring their own staff are encouraged to travel sustainably. They gained Modeshift STARS Business Bronze accreditation in 2020. Their MSS Travel Plan included providing extra cycle racks and offering discounted bikes through the Cycle to Work Scheme (over 400 applications this year).

What was the cost and how was the project funded?

- £90 million invested on nearly 350 brand new vehicles which are the cleanest and greenest on the market.
- For the electric bus fleet £3 million of funding was provided by OLEV in 2016 to fund the difference between a normal bus and an electric bus.

- 20 hydrogen buses are funded by Birmingham City Council, GBSLEP, OLEV and Fuel Cells and Hydrogen Joint Undertaking

How does this initiative or project meet at least two of the Awards criteria?

Innovative: West Midlands is a pioneer area for sustainable bus travel

Partnerships: Partnership working with many organisations e.g. bus manufacturers, TfWM, BCC and businesses. The Clean Air Hydrogen Bus pilot for example, is being carried out in collaboration with BCC, Wrightbus & ITM, who will be producing and dispensing the hydrogen fuel from the new re-fuelling hub at Tyseley Energy Park. Joint lobbying with active travel organisations e.g. Sustrans.

Sustainability: National Express West Midlands will learn which routes lend themselves to hydrogen or electric buses & identify the most efficient mix of vehicles in their fleet. Performance data to be shared with other organisations to inform wider fleet operations nationally.

Barriers and solutions: Need to encourage people to try bus travel - various solutions to this, includes easier & flexible ticketing, fare cuts & capping, a new Travel Pass Portal, promotions and supporting Birmingham's Clean Air Zone through the Scrappage and Travel Scheme

What were the results, and what future plans do you have for the project?

The vision to become the UK's most sustainable bus company is ongoing. In their first year of operation, 29 electric buses clocked up over 850,000 miles and saved over 1400 tonnes of carbon dioxide. The electric buses are powered by renewable energy from wind turbines.

Coventry has become the 'All Electric Bus City', this includes:

- 130 electric double deckers arriving in 2022
- 30 electric single deckers coming in 2023
- 16 more electric buses in 2024

Coventry garage built in 1986 – needs total conversion from diesel fuelling to electric charging. 250kw per day from the solar panels on the garage roof - stored in two big batteries and released overnight to charge buses. Even the garage van will be electric!

Working with Transport for West Midlands (TFWM), NXWM has put in a bid for DfT funding for 200 more hydrogen buses as part of the Zero Emission Bus Regional Areas (ZEBRA) and are through to the next round of the fast-track scheme.

Endorsements:

Edmund Salt, Bus Development & Partnership Manager, TFWM: *“As part of the West Midlands Bus Alliance, NXWM has continued to lead the way with its zero-emission bus pledge and commitment to never buy another diesel bus; whilst investing in its current fleet to ensure a minimum Euro VI standard to play an important role in tackling the climate emergency facing the region.”*

Mel Jones, Head of Transport Planning and Network Strategy, BCC: *“The vision for Birmingham’s transport is for a sustainable, green, inclusive, go-anywhere network. The pioneering work being carried out by NXWM, supports this vision and will help to tackle climate change and promote the health and well-being of Birmingham’s citizens.”*

Feedback from the Expert Panel of Judges:

“Good to see the range of alternative technologies used within the same bus fleet. Good ambition and vision for 2030. High impact.”

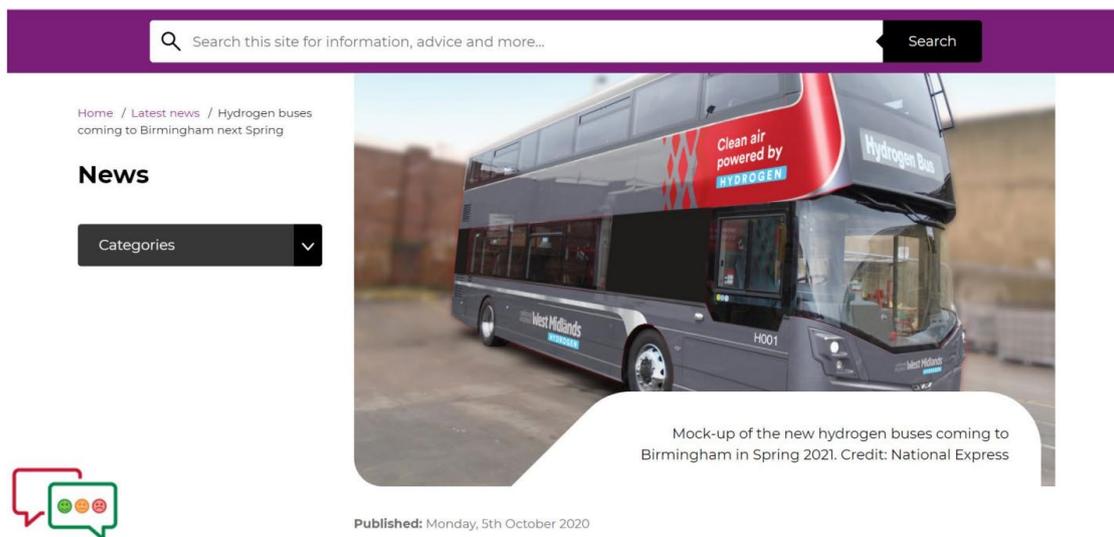
“Forward thinking commitment and vision to clean up public transport services providing health benefits for all and contributing to improved Air Quality. Installing technology and infrastructure will provide the necessary resources for delivering public transport services that benefit the environment. Partnership working enabling to identify appropriate routes and plans to address ticketing and fares increasing patronage provides an excellent coordinated approach.”

Evidence:

<https://nxbus.co.uk/west-midlands/sustainable-travel>

<https://nxbus.co.uk/west-midlands/sustainable-travel/clean-air-zone>

<https://www.birmingham.gov.uk/news/article/727/hydrogen-buses-coming-to-birmingham-next-spring>



The screenshot shows a news article interface. At the top is a purple search bar with the text "Search this site for information, advice and more..." and a "Search" button. Below the search bar, the breadcrumb path reads "Home / Latest news / Hydrogen buses coming to Birmingham next Spring". The main heading is "News". There is a "Categories" dropdown menu. The main image is a mock-up of a double-decker hydrogen bus with "West Midlands" and "H001" branding. The bus has a red and white livery with the text "Clean air powered by HYDROGEN" and "Hydrogen Bus". Below the image is a caption: "Mock-up of the new hydrogen buses coming to Birmingham in Spring 2021. Credit: National Express". At the bottom left of the article area is a feedback icon with three colored circles (green, yellow, red) and a speech bubble. The publication date is "Published: Monday, 5th October 2020".