Oxford creates the blueprint for the zero-emission city

Date for ZEZ to be introduced in two phases has been delayed by Covid-19, but it will still go ahead in 2021

London is often touted as the UK leader when it comes to addressing emissions from road transport with the introduction of a low emission zone in 2008 and ultra-low emission zone (ULEZ) in 2019.

But the city, arguably, setting out the most ambitious plans to tackle the climate crisis is Oxford, which has already outlined its blueprint for a zero-emission zone in the city centre by summer 2021.

While that's a Covid-19-enforced delay from the original December 2020 launch date, it's also the first phase of a two-stage plan that will cover the entire city centre by 2022.

Part one, dubbed the 'red zone', incorporates a small central area of the city and will charge all non-zero-emission vehicles £10 for entering between 7am and 7pm; part two, the 'green zone' will cover the rest of the city and offer discounted charges for vehicles that comply with the London ULEZ (see panel).

But those are simply the headlines; Oxford City Council has a far-reaching strategy to improve air quality and reduce carbon which includes support for local businesses, investment in active travel and public transport, and an overhaul of its own fleet.

Tom Hayes, recently appointed deputy leader at the council, has been Oxford's cabinet member for green transport and zero carbon since 2017. He's also a transport policy board member at the Local Government Association and well versed in the need to address the climate agenda.

"When the city council declared a climate emergency in January 2019, we recognised we had to take unusual measures to tackle an unusual situation," Hayes said. The biggest challenge? "To bring people along with us – we have to have zero-carbon citizens."

Consequently, Oxford became the first UK city to hold a citizens' assembly on climate change to seek the views of residents and businesses. This looked at the main causes of carbon emissions in the city (transportation contributed 19%) and asked for their recommendations.

Active and sustainable transport topped the list, with widespread support for a zero-emission zone and segregated cycle lanes. But, they also wanted Oxford City Council to lobby central Government for a change in the framework, including bringing forward the ban of petrol and diesel vehicles from 2040 to 2030.

The announcement of a zero-emission zone (ZEZ), first mooted by the council in 2017, has nurtured an environment for innovative suppliers to begin trialling sustainable transport solutions, while Oxford recognised its responsibilities lay in creating the infrastructure to facilitate behavioural change among business and the public.

"We've committed a £19 million budget to the zero-carbon agenda," Hayes says. "But we've also seen investment come into the city."

Among new sustainable transport businesses springing up in the city are Pedal and Post, which delivers mail, including medical supplies to one of the universities, and Oxwash, a laundry cleaning service. Both use cargo bikes, e-bikes and pushbikes to make their deliveries.

The coronavirus crisis, while having a terrible impact on people's lives and the global economy, has given the city council and the public a glimpse of a future ecosystem where personal transport is far less essential.

Deputy council leader Tom Hayes believes car clubs may provide part of the solution to Oxford's pursuit of clean air. Right: Hayes gets involved with local schoolchildren on an environmental project

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>
> **Tom Hayes, deputy leader Oxford City Council**

"What we are looking at is a real-world experiment of what would happen if you took private cars off the road, seeing the benefits in terms of quieter streets, reduced air pollution and cleaner air to breathe, but also looking at the future of social distancing when we are on the street," Hayes said.

"We are looking at widening the pavements in core parts of the city, giving roads over to buses so they have priority or to segregated cycle lanes. We're looking at how we increase the number of bike journeys (pushbikes and e-bikes) within the city but we are also looking at how those new segregated cycle lanes connect into the villages and towns of the county."

Much of this work will be a continuation of the Connecting Oxford policy, with some tweaks and fine-tuning to adapt to the Covid-19 pandemic. The policy includes a £300 million proposal to develop a cycle greenways initiative serving the city and neighbouring districts, which saw the city council work closely with the county council, as it did on the ZEZ proposals.

Electric vehicle (EV) uptake by local business and the public is critical to a successful implementation of the zone, and fundamental to that is the charging infrastructure.

The £41m Energy Superhub Oxford (ESO) rapid charging project is a three-year joint initiative led by Oxford City Council and Pivot Power (an EDF Renewables company).

Aided by £10m from the Government, ESO will install an 8km (five-mile) private wire network around the south of Oxford connecting public charging facilities at Redbridge Park & Ride to the national grid. It has capacity to expand with EV adoption and provide power for local businesses seeking to electrify their fleets.

The first stage will see installation of 20 charge points ranging from rapid (50kW+) to ultra-rapid (150kW+), capable of charging a car in 15-50 minutes, and 30 fast charge points (at least 7kW) which can charge a car over a period of hours.

The project will also fund a 'try before you buy' scheme for Oxford's Hackney Carriage drivers with Electric Blue, enabling drivers to trial one of two models – an all-electric Nissan Dynamo or an LEVC – for a two- or four-week period. From 2025, drivers will only be able to get a licence if they have a zero-emission-capable cab.

Overall, ESO aims to save 10,000 tonnes of CO_2 per year by 2021, rising to 25,000 tonnes per year by 2032.

While Oxford is focused on achieving zero carbon, the strategy has a multitude of additional benefits that became clear during the Citizens Assembly.

"People were saying if you have fewer vehicles on the road, then you not only achieve a reduction in air pollution, but you improve public health," Hayes says. "You improve safety. You allow for more spaces to be taken over for trees which improves the scenery. You make it a more walkable city.

"We thought it was about trade-offs; but it's about the co-benefits. And that's a big learning for us and other councils."

BUSINESS CONSULTATION KEY TO ZEZ INTRODUCTION

Oxford City Council took the decision to delay its zero-emissions 'red zone' until summer 2021 to protect local business at a difficult economic time. It also allows time for additional consultation.

The proposals ban all non-zero-emission vehicles from entering the red zone between 7am and 7pm, including vans and HGVs which are delivering goods and services to local businesses.

The inevitable argument from the trade associations was that it was unfair to penalise operators when there were no compliant models available in those vehicle segments.

Tom Hayes is dismissive of such suggestions: "It's a zero-emission zone within a 12-hour period – you can shift your deliveries outside of that. We've seen businesses make even bigger changes to respond to the pandemic."

The extension to the green zone will be "sensitive to business considerations, but not defined by them", Hayes said.

"We will reflect on the hours of operation, whether they are seven-to-seven, and the vehicles types that are best responding to the red zone. It's important to incorporate learning and not just rush in to have a clear air zone or zero emissions."

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