

# **Minutes of a meeting of the Climate and Environment Panel (Panel of the Scrutiny Committee) on Tuesday 12 September 2023**

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## **Committee members present:**

Councillor Hollingsworth (Chair)

Councillor Kerr

Councillor Miles

## **Officers present for all or part of the meeting:**

Pedro Rocha Abreu, Air Quality Officer

Juliet Nicholas, Energy and Sustainability Manager

Alice Courtney, Scrutiny Officer

## **Also present:**

Councillor Anna Railton, Cabinet Member for Zero Carbon Oxford and Climate Justice

## **Apologies:**

Councillor Dunne sent apologies.

## **9. Declarations of Interest**

None.

## **10. Chair's Announcements**

None.

*The Panel agreed to consider items 7, 8, 9 and 10 next on the agenda, followed by items 4, 5, 6 and 11.*

## **11. HRA Energy Efficiency Projects 2023/24**

Juliet Nicholas, Energy & Sustainability Manager introduced the report, highlighting that Oxford City Council had set a target of getting 95% of its housing stock to an Energy Performance Certificate (EPC) C or above by 2030, alongside a commitment to reach net zero carbon emissions as a city by 2040 – going beyond EPC C. The report set out a proposed piece of work to deliver HRA energy efficiency projects using a budget previously agreed by Council.

Cllr Anna Railton, Cabinet Member for Zero Carbon Oxford and Climate Justice added that this work was completely separate from the Clean Heat Streets trial in Rose Hill, which was delivered through a different funding pot.

In response to questions, the Panel was advised that:

- The Air Source Heat Pump (ASHP) trial undertaken in 2022/23 was a very small trial with a focus on monitoring efficiency; the efficiency of the ASHPs was found to be very high and the Council was in the process of taking the learnings from that project so that it could look to rollout other projects.
- The cost to deliver circa 40 heat pumps (£500k) was an estimation and included not only the pumps and installation, but also additional costs such as remedial works to residents' homes where required following the removal of gas boilers; the budget included contingency.
- Circa 40 ASHPs would be installed in 40 fairly standard detached or semi-detached homes; they would not be installed in flats.
- The procurement route for delivery of the projects had not yet been decided upon; value for money considerations would be taken into account as part of the procurement process.
- It was felt that the proposal to conduct EPCs in circa 350 HRA properties in 2023/24 was realistic in the timeframe with the budget available; further EPCs would be undertaken in future years.
- The Council had a piece of software which gave an indication of the EPC of each of the HRA properties, even if the property did not have an EPC lodged; conducting EPCs would help test the data and the accuracy of the software.
- Soft market testing had been undertaken and it had been found that there was capacity within the market in respect of the projects for design and delivery, though capacity was expected to become more problematic in future years as demand for specialist suppliers increased.
- If the Council awarded the contract to Oxford Direct Services as main contractor with a number of sub-contractors, project management and ensuring sub-contractors were delivering would form part of the delivery programme.
- There was the possibility of exploring medium-to-long term relationships with suppliers, contractors and sub-contractors as part of the procurement process.
- Taking advantage of economies of scale could be explored.

The Panel **agreed** to recommend to Cabinet that:

1. The Council explores the full range of procurement options for the delivery of the projects, including alternative suppliers and the possibility of establishing medium-to-long term relationships with suppliers, contractors and sub-contractors.
2. The Council sets a timetable for achieving a full set of EPCs for its HRA properties.

*Juliet Nicholas, Energy & Sustainability Manager left the meeting and did not return.*

## **12. City-wide Smoke Control Area Declaration**

Pedro Abreu, Principal Air Quality Officer introduced the report, giving an overview of the plans for the creation of a city-wide Smoke Control Area (SCA).

Cllr Anna Railton, Cabinet Member for Zero Carbon Oxford and Climate Justice added that the emphasis of this work was very much centred around Public Health.

In response to questions, the Panel was advised that:

- Consideration would be given to how the report from the Chief Medical Officer, Chris Whitty, on air pollution could be drawn out in the publicity about the SCA.
- Oxford was not the only city outside of London looking at implementing a SCA; Reading was also in the process of establishing a SCA and had recently launched the public consultation.
- Consideration would be given to how the Council could best leverage local expertise from the universities in its communications campaign.
- The decision to exclude moored vessels from the SCA was a deliberate decision; the process for including boats within a SCA was slightly different and there was a general consensus that the Council did not want to make changes without having worked with the various boating communities to identify and address barriers to them adopting cleaner fuel types.
- The Council was trialling 'eco-mooring' to provide electric infrastructure to help reduce pollution along Oxford's waterways; one of the outputs of the trial would be testing what works and establishing a continuing education campaign.
- The grant funding that the Council had received to deliver the 'eco-mooring' trial included funding for a Community Engagement Officer; it was intended that this post would make vital links with the various boat dwelling communities and produce specific air quality guidelines for the waterways.

The Panel **agreed** to recommend to Cabinet that:

1. The Council ensures clear messaging in its publicity campaign that moored vessels are exempt from the Smoke Control Area, and communicates the rationale for the exemption.
2. The Council commits to working with the various boating communities (e.g. boaters living on permanent moorings and visiting boaters) to identify and address the barriers to these communities adopting cleaner fuel types; and explores grant funding opportunities to support the work to address these issues.

### 13. Air Pollution

Pedro Abreu, Principal Air Quality Officer introduced the presentation and highlighted that the Council had statutory duties in relation to air quality and had published its Annual Air Quality Status Report in June 2023. He added that there was a Council commitment to improve air quality through the Air Quality Action Plan. A copy of the presentation slides is included in the minutes pack.

In response to questions, the Panel was advised that:

- Not all of the air quality monitoring stations were shown on the map yet; the Council was in the process of migrating the content from its old air quality website to a new one, which was due to launch on 18 September 2023.
- Indoor air pollution caused by fumes in commercial kitchens was managed through the Council's Environmental Health Team, which visited and assessed installations to ensure compliance with the relevant standards.
- Possible alternative solutions to diesel generators used by street traders would be explored.
- The provision of public information boards on air quality was on the Council's agenda; work had been paused while the new air quality website was being developed.

- Consideration would be given to how the impact of air quality on people, rather than just places, could be incorporated into future Annual Air Quality Status Reports.
- Much of the way in which data on air quality was presented was as a result of statutory requirements to present information in a certain way.

The Panel **agreed** to recommend to Cabinet that:

1. The Council produces an accessible and easily digestible executive summary to sit alongside the Annual Air Quality Status Report in future years; to include what the Council has done, next steps and any issues which are likely to delay progress on particular actions.
2. The Council considers how to identify and promote the broader benefits of action to improve air quality.

*Pedro Abreu, Principal Air Quality Officer left the meeting and did not return.*

## **14. Net Zero Masterplan**

The Panel considered the Net Zero Masterplan, which set out Oxford City Council's actions over the next two years to achieve its two carbon targets: a Net Zero Estate and Operations by 2030 and a Net Zero City by 2040. The Panel focussed discussion on how it might best add value and ensure constructive scrutiny of this standing item going forward.

In discussion, the Panel agreed that focussing solely on the actions rated 'red' was not helpful, though actions which were persistently 'red' should be considered in more detail, if the action was within the Council's control to influence. The Panel also noted that it would be helpful to have a one-page summary alongside the document setting out key changes since the last iteration, including where priorities had changed, and other key issues to draw to the Panel's attention; the Panel requested that the Scrutiny Officer speak to officers about providing this for future meetings.

The Panel noted that a lot of the current measures within the Masterplan cited lack of staffing, resource or specialist skills; and without those things the items may not be deliverable, so there were implications for the Council's budget and training priorities. The Panel requested that an appropriate senior representative from the Environmental Sustainability Team be invited to the next meeting of the Panel to address issues around resourcing; reflecting on the financial realities of local government and any lateral insights of how to continue to progress the actions if budget bids were not successful.

*Cllr Anna Railton, Cabinet Member for Zero Carbon Oxford and Climate Justice left the meeting and did not return.*

## **15. Notes of the previous meeting**

The Panel agreed the notes of the meeting held on 27 June 2023 as a true and accurate record.

## **16. Climate and Environment Panel Work Plan**

The Panel considered the Work Plan.

The Chair highlighted that, owing to some ongoing work related to the Tree Management Policy the Panel was not able to consider the Policy as part of the commissioned item on Tree Planting and Maintenance until that work had concluded.

The Panel:

1. **Agreed** the Work Plan.
2. **Approved** the draft scopes for Scrutiny-commissioned items on Tree Planting and Maintenance (subject to the point above); Energy Generation and Solar Potential on Council Buildings; and Retrofit.
3. **Delegated authority** to the Scrutiny Officer to schedule the items into the Work Plan in discussion with relevant officers.

**17. Report back on recommendations**

The Panel **noted** the following Cabinet responses to its recommendations:

- Draft Carbon Reduction and Sustainable Retrofit Guidance for Historic Buildings Technical Advice Note
- Biodiversity Update

**18. Dates of future meetings**

The Panel **noted** the dates and times of future meetings.

**The meeting started at 6.00 pm and ended at 8.00 pm**

**Chair .....**  
**2023**

**Date: Wednesday 29 November**

*When decisions take effect:*  
*Cabinet: after the call-in and review period has expired*  
*Planning Committees: after the call-in and review period has expired and the formal decision notice is issued*  
*All other committees: immediately.*  
*Details are in the Council’s Constitution.*

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# Air Quality Annual Status Report 2022

**Update on year achievements and current levels**



Climate and Environment Panel –Scrutiny Meeting 12th September 2023

# Major Achievements during reporting period

(July 2022 to June 2023)



## **July 2022 - Inauguration of Energy Super Hub**

(42 new fast and ultra rapid charging points)

## **January 2023 - Deal signed to bring 159 electric buses to Oxford**

(Project funded by ZEBRA scheme))



## **March 2023 – 27% of OCCs fleet is fully electric**

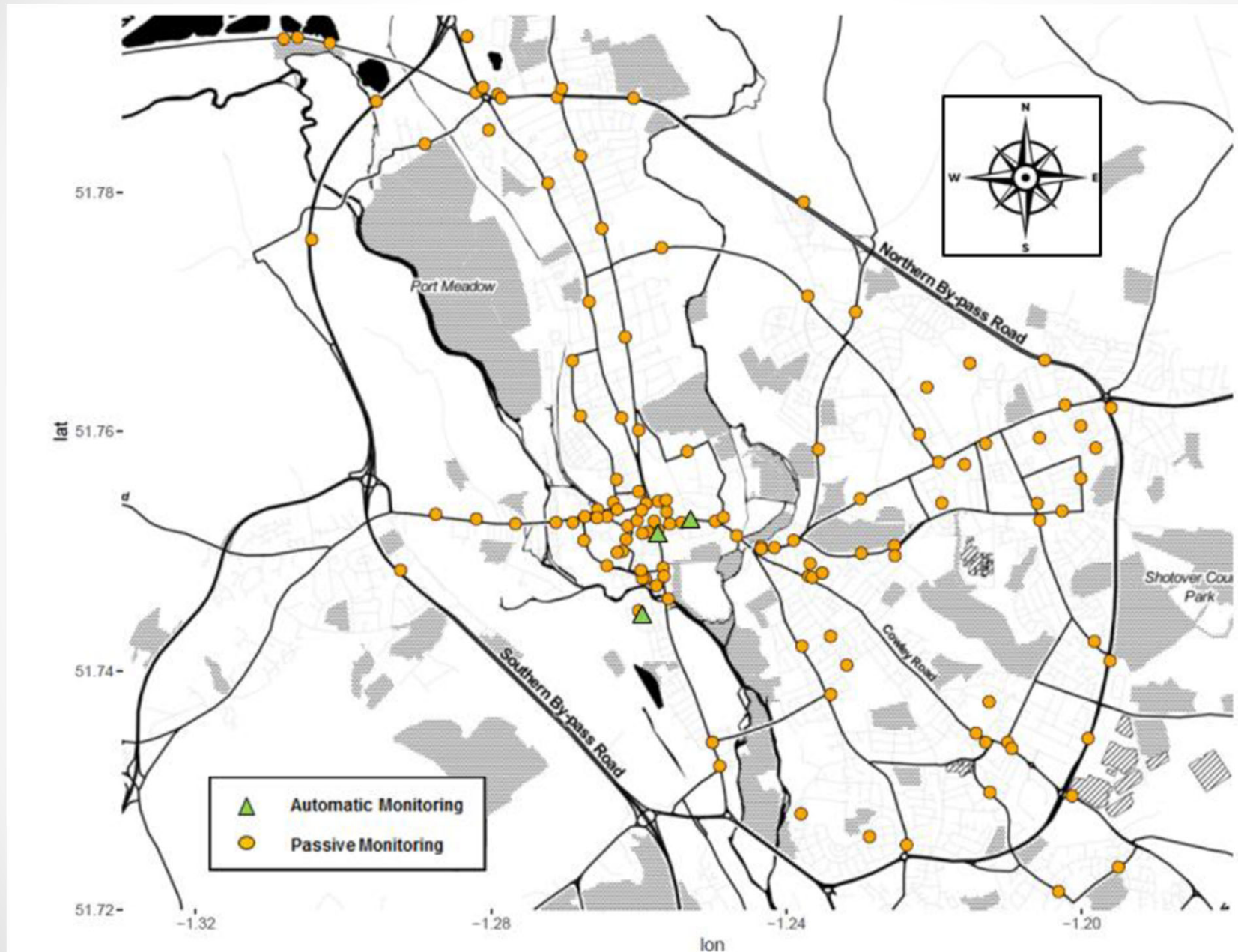
(commitment of having 25% of its fleet fully electric by the end of 2023 fully met)





# Air Quality Monitoring Locations in 2022

6



Measurements of NO<sub>2</sub> at **127** locations in the city

# Nitrogen Dioxide

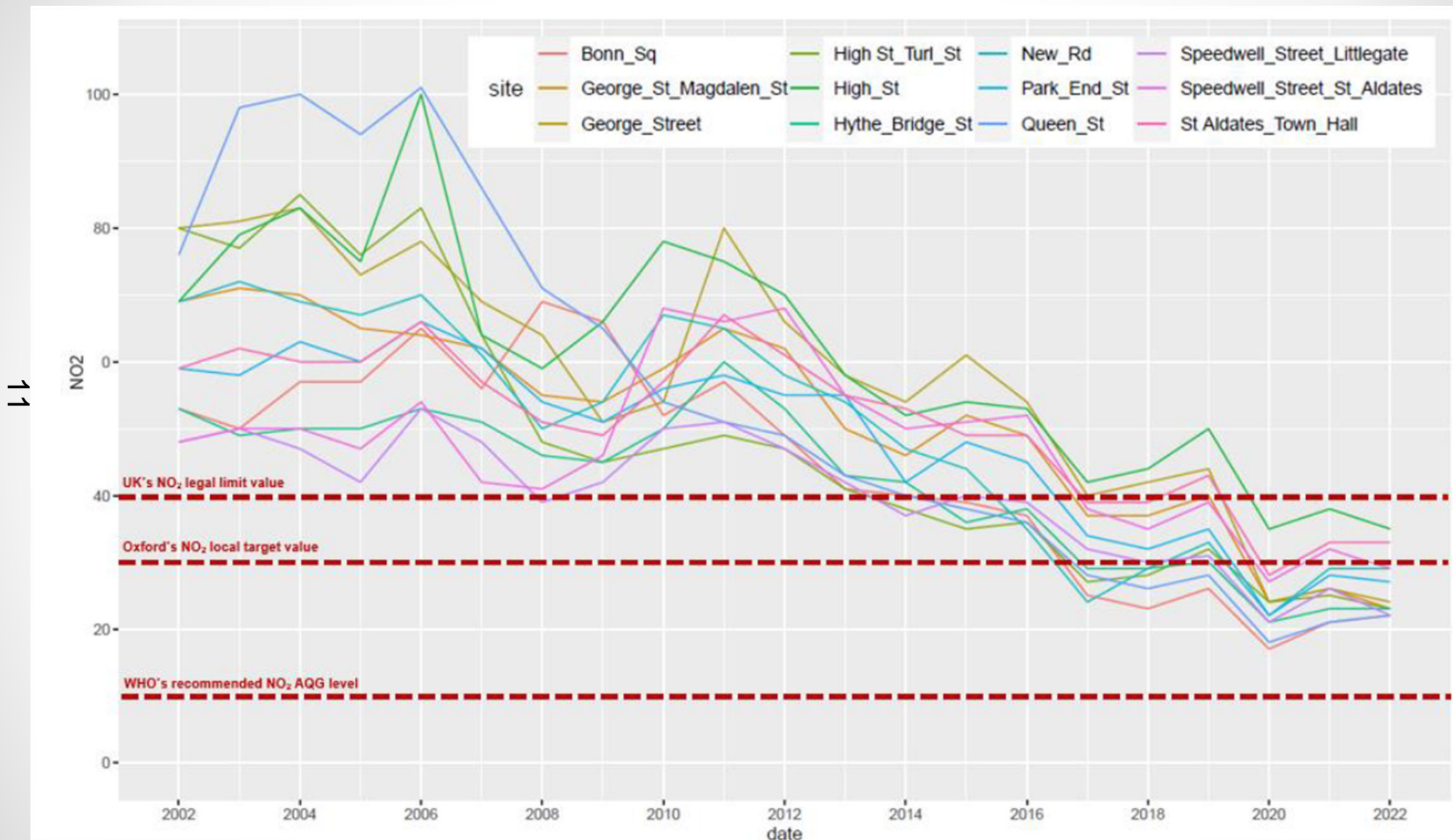


**Legal Target: Annual mean 40 ug/m<sup>3</sup>**

**Oxford's Local Target: Annual mean 30  
ug/m<sup>3</sup> (by 2025)**

# NO<sub>2</sub> – Air Quality Objectives: Annual Mean of 40 µgm<sup>-3</sup>

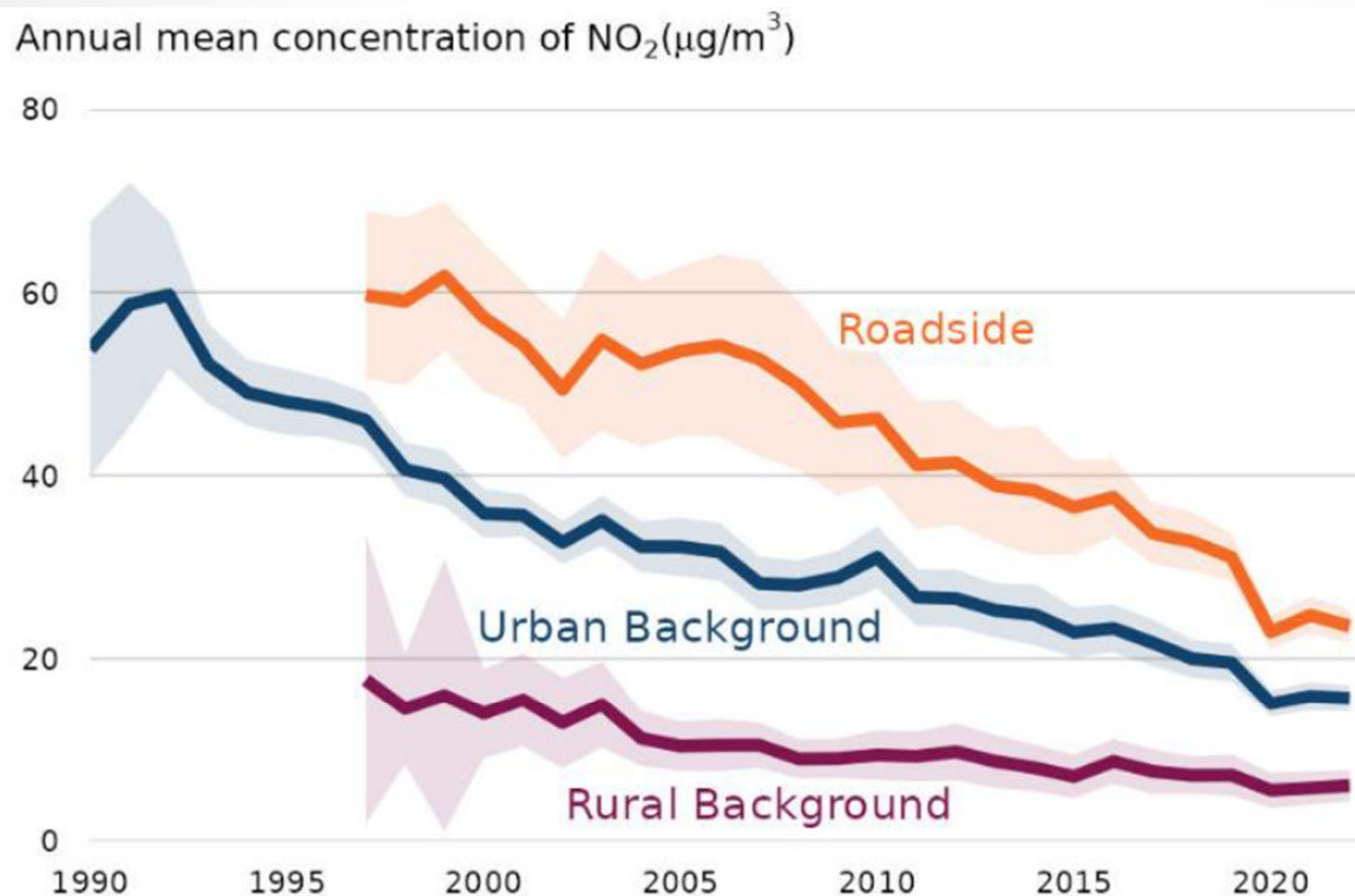
Long term trends of Annual Mean NO<sub>2</sub> at Oxford's historic diffusion tube sites, 2003-2022



Traffic levels and NO<sub>2</sub> have decreased overall by **8%** in Oxford when comparing with 2021

NO<sub>2</sub> levels are still **24%** below pre-pandemic times (2019)

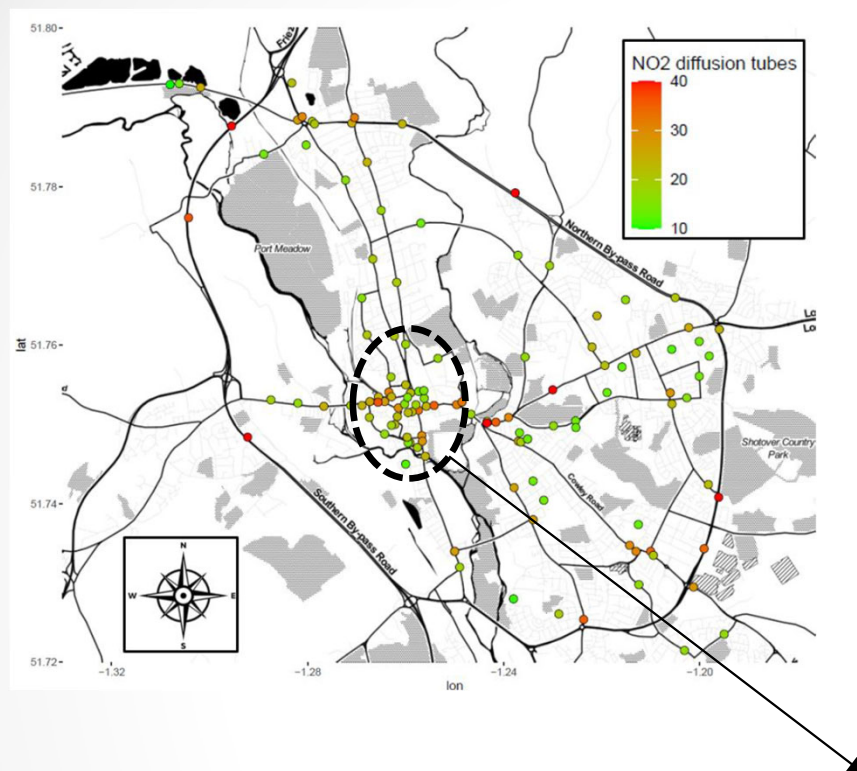
## **NO<sub>2</sub> – Annual Mean Concentrations in the UK (1990-2022)**



In 2022, average NO<sub>2</sub> concentrations at UK's AURN Roadside and Urban Background sites have [decreased](#) (on average) by 5% and 1% respectively, when compared with the measurements obtained in the previous year.



# Diffusion tube results for Oxford in 2022



**12 locations (out of the 127) are above local target for NO<sub>2</sub>:**

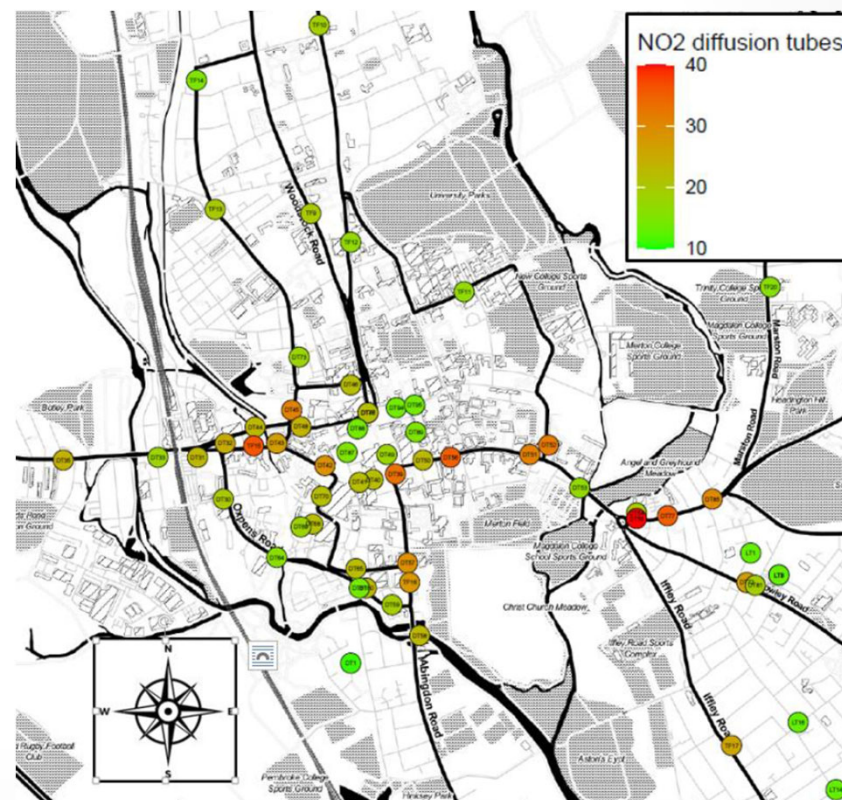
- Cutteslowe Round about
- High Street (2x)
- St Clements (2x)
- Worcester St
- Oxford Road (cross with Newmans Road)
- St Aldates
- Long Wall St
- Hollow Way Rd
- Park End St
- Olivers Road (facing Eastern Bypass)

**Exceedances to the UK limit value for NO<sub>2</sub> in Oxford in areas of relevant public exposure:**

- St Clements – The Plain (43 ug/m<sup>3</sup>)

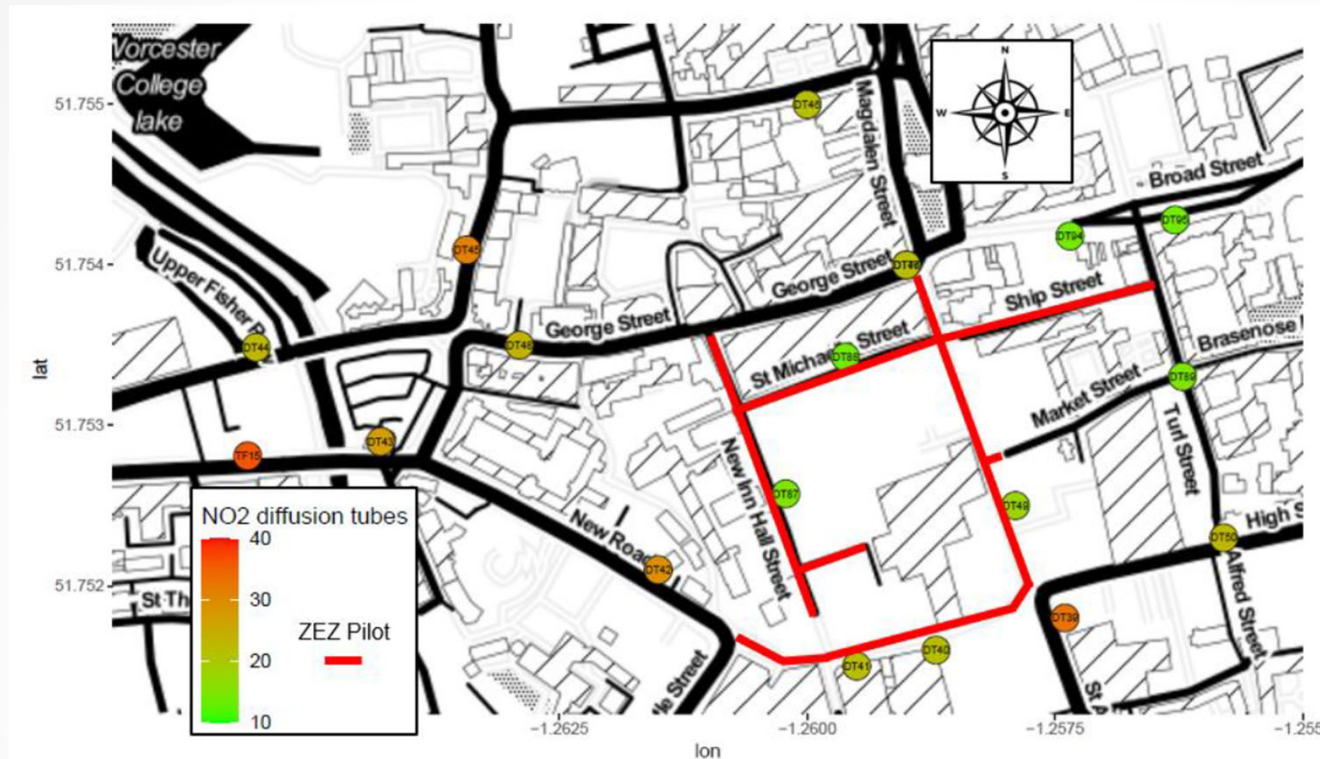
**Other exceedances:**

- Ring Road (2x) (42 and 43 ug/m<sup>3</sup>)
- Headington Hill (70 ug/m<sup>3</sup>)





# ZEZ Pilot - Impacts



- Cornmarket St, St Michaels St and George St (Magdalen St side) , saw NO2 reductions of  $3\mu\text{g}/\text{m}^3$ , the equivalent to 14%, 18% and 12% reductions each;
- George St (Gloucester Green side) and New Inn Hall St saw improvements in NO2 levels measured at  $2\mu\text{g}/\text{m}^3$  (8% and 12% reductions) each;
- NO2 levels at Queen St (DT40), Bonn Square (DT41) and New Road (DT42) were practically unchanged from 2021.

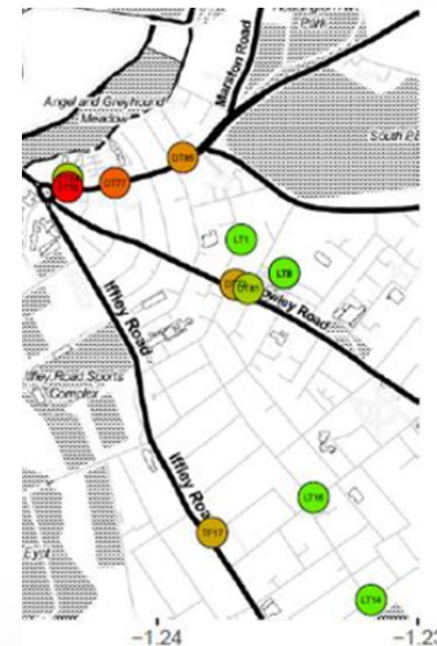
# East Oxford LTNs - Impacts

## Inside LTNs

- **All the monitoring locations inside these LTNs showed a decrease in NO<sub>2</sub>**, with the greatest effects seen on Divinity Rd (6ug/m<sup>3</sup> reduction or 33%) - 26 Prince Street (4 ug/m<sup>3</sup> or 24%), St Marys neighbourhoods (Howard St. and Hurst St.) 3 ug/m<sup>3</sup> 19%;

## On Boundary Roads

- **No perceptible negative traffic displacement impacts on Hollow Way Road and Oxford Road**, the three diffusion tubes in this area all consistently show practically no changes in the NO<sub>2</sub> levels compared with 2021;
- **NO<sub>2</sub> levels at Morrell Avenue reduced (by 3 µg/m<sup>3</sup> or 19%)**, which seems to indicate that no significant LTN impacts have been seen on this boundary road as a result;
- **St Clements has seen consistent increases in the NO<sub>2</sub> levels measured** St Clements The plain saw an increase in NO<sub>2</sub> of 4 µg/m<sup>3</sup> equivalent to 10% and St Clements 2 saw an increase in NO<sub>2</sub> of 5 µg/m<sup>3</sup> equivalent to 17%. This seems to indicate that this street has seen impacts of LTNs, via traffic displacement;
- **Cowley Road (crossing with James Street) show the highest increase in NO<sub>2</sub> levels measured (7 µg/m<sup>3</sup> or 35%)** with an annual mean increasing from 20 to 27 µg/m<sup>3</sup>



# Particulate Matter

## PM<sub>10</sub> and PM<sub>2.5</sub>

**Legal Target PM<sub>10</sub>: Annual mean 40 ug/m<sup>3</sup>**

**WHO Guidelines PM<sub>10</sub>: Annual mean 15 ug/m<sup>3</sup>**

**Legal Target PM<sub>2.5</sub>: Annual mean 10 ug/m<sup>3</sup>**

**WHO Guidelines PM<sub>2.5</sub>: Annual mean 5 ug/m<sup>3</sup>**



## PM<sub>10</sub>

**Clear downward trend since 2011 and slight increase in 2022 (up to 2ug/m3)**

Oxford St Ebbes -12 ug/m3 annual mean  
Oxford High Street – 16 ug/m3 annual mean

**Full compliance with UK limit values + slightly above (by 1 ug/m3) WHO guidelines**

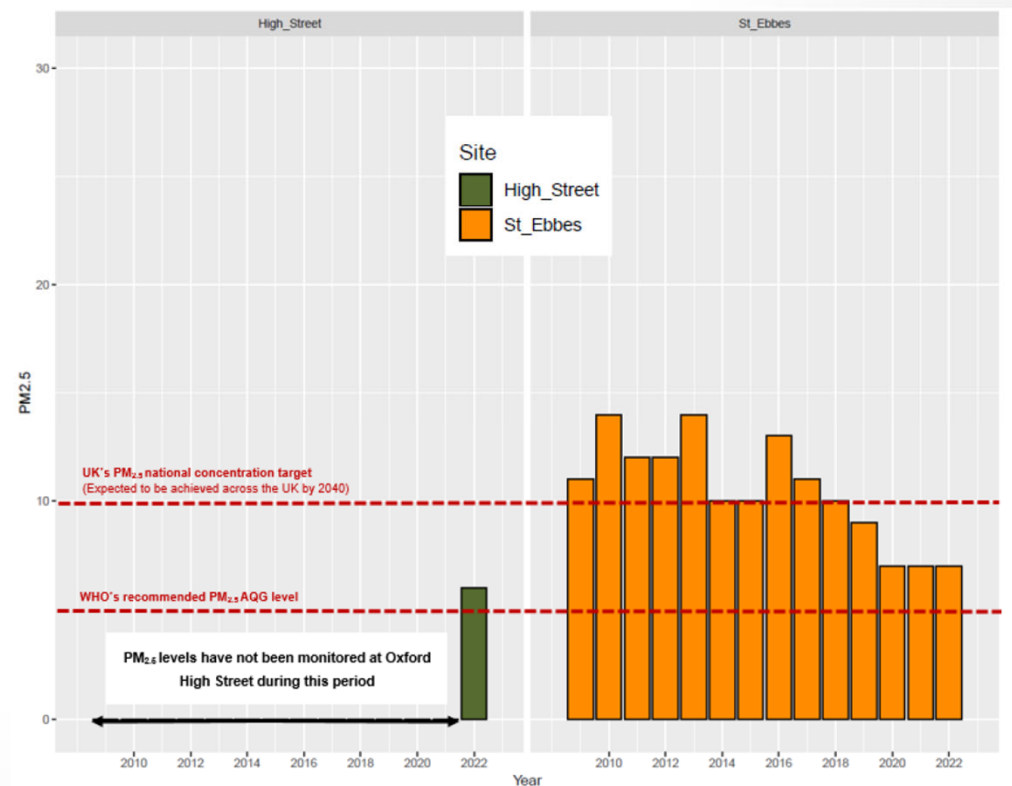
## PM<sub>2.5</sub>

Oxford St Ebbes -7 ug/m3 annual mean  
Oxford High Street – 6 ug/m3 annual mean

Levels have plateaued at St Ebbes

**Compliance with UK limit value**

**Slightly above (by 2 ug/m3) WHO guidelines**





# OX Air report – 9 recommendations

Low-cost sensor data should be used with caution for informative, educational and profile-raising applications because of the likely variability and uncertainty in raw sensor data - Oxford City Council is aware of the limitations of current low cost sensor technologies and therefore is only using these devices for educational purposes and citizen science – we do not officially report air quality data from these devices due to the limitations highlighted in this report.

Lobbyists and community groups should acknowledge the potential uncertainty in sensor data that that they commission compile and plan for handling of it - We try to inform community groups and members of the public of the high uncertainty levels of the raw data that comes out from these devices every time that the use of air quality sensor technologies is brought into discussion – a specific section of the new air quality website on air quality sensors is being developed so that members of the public have more direct access to information about these measurement techniques

The current state of the art in sensor low-cost sensor systems should only be used for LAQM applications with discretion and with traceable documentation attesting the handling uncertainty and / or absence of environmental effects in sensor signals e.g. use a model to correct for environmental interferences - The only air quality sensor projects that Oxford City Council i involved with relate with research grants being led by Oxford University to test these technologies. This guarantees that the results obtained are as accurate as they can ever be, as the air quality data is processed and adequately corrected by experts

Further research is needed to develop sophisticated correction models which can be used easily by all sensor users to handle the interfering effects of environmental parameters - This is a recommendation for the entire industry and for research institutions and Universities –Oxford City Council keeps engaging and with and participating in research projects with Birmingham and Oxford Universities on the testing of these technologies

Low-cost sensor performance should be regularly checked by co-locating with reference instrumentation at a heavily polluted environment such as a roadside / kerbside location e.g. before and after deployment (and at intervals in between, for long deployments) –This mandatory for every air quality sensor study that Oxford City Council is involved with

When purchasing new equipment it is recommended to arrange a returns / exchange policy with the vendor for sensors that can be demonstrated as having atypically behaviour(s) e.g. unsatisfactory signal noise, baseline offset for the intended application. Sensor vendors are encouraged (should) be open about interferences from environmental effects (temperature and relative humidity) and any testing that has been done in this regard for their products – These are recommendations for future users and vendors

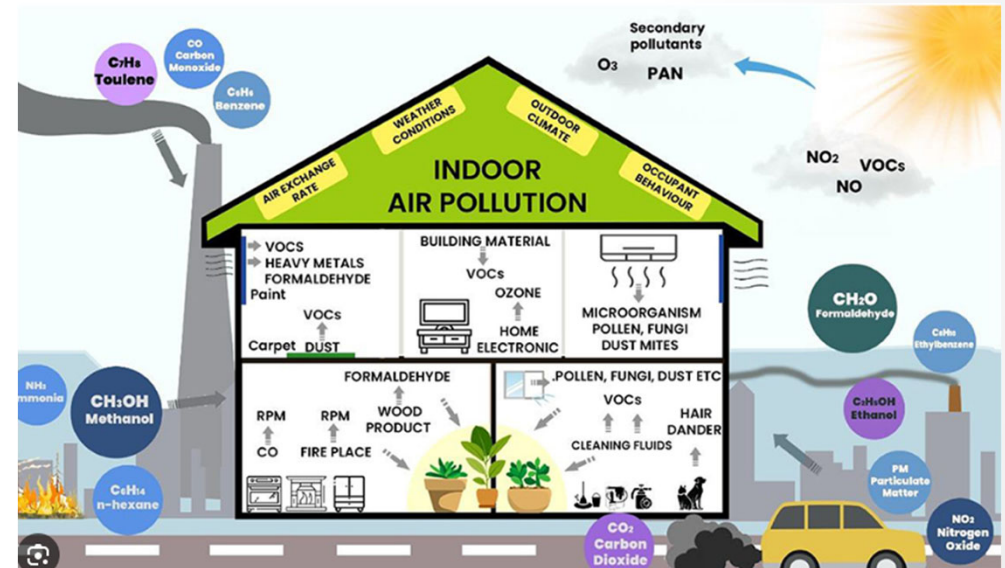
To facilitate the benefits of active engagement on AQ policy and bi-directional flow of information on local AQ issues, a web-based resource for logging AQ issues on a web-map and creating open, traceable dialogue should be evaluated e.g. the OxAir Map of AQ Anecdotes – Useful recommendation and something to take on board for any future citizen science project involving residents and the use of air quality sensor technologies

Sensor users to keep a watching brief on new sensor developments from vendors on data processing, algorithms and models for the correction of environmental interference effects –This is a recommendation for current and future users



# Indoor Air Pollution

- Currently does not form part of the LAQM regime that local authorities have the statutory duty to follow
- Our role as LA is therefore very much focused in providing advice to residents on means of reducing their exposure to poor indoor quality:
  - [Do You Fuel Good?](#)  
[Wood burning](#)  
[campaign](#)
  - Smoke Control Area Expansion



# Questions

