

## **Council – 16 September 2019**

### **Notice of motion – Climate change**

I set out below a notice of motion to Council on 16 September 2019 from Councillors Nawaz, Hussain, Shires, Burley, Jeavons, Underhill, Gultasib and Worrall:

This Council recognises that

- Climate Change is having a marked impact on the lives of the people of Walsall and of the world.
- The impact of Climate Change is a real threat to the future of our World and there is a responsibility on all of us to do all we can to reduce the negative impact from our activities on the environment.
- As a Local Authority we have a negative impact on the environment through our use of fossil fuels, energy wastage, inefficiencies in insulation of our buildings, the reliance on diesel fuelled vehicles and machinery etc

This council therefore resolves to call a Climate Emergency – as a number of boroughs across the country have done so.

In accepting that there is a Climate Emergency this Council resolves to develop strategies to reduce our Carbon Footprint and categorically commits to making Walsall Council a net Zero Carbon authority by the year 2030.

### **Context**

It is widely acknowledged that the implications of climate change affect all sectors of the economy and can have a profound effect on personal behaviour and community wellbeing. As Walsall Council's Corporate Plan strives to reduce inequality and create an environment that provides opportunities and maximises potential, it is important to demonstrate a commitment to sustainable growth.

The Local Government Association declared a Climate Emergency at its Annual General Meeting in July and agreed to establish the Climate Emergency Network Special Interest Group, to support councils and lobby central Government. Within a month, more than half of the UK's local authorities had declared a "Climate Emergency" to galvanise support for the climate change agenda and set a clear target to become carbon neutral.

The APSE Climate Emergency: Council Declarations Briefing notes, "There is a clear role and opportunity for local authorities to explore their assets and assess how they can best be used for renewable energy developments, in order to transition to a carbon neutral

council". It is also recognised the requirement for a clear plan of action that is supported by and embedded in the local authority as a whole.

## **Background**

Walsall first demonstrated its commitment to tackle climate change when it signed the Nottingham Declaration in November 2006. The authority soon adopted a Climate Change Strategy and Action Plan, which considered the actions it needs to take in response to the challenge of climate change.

In 2010, the Walsall Council Carbon Management Programme outlined an ambition that "by 2021 Walsall will be well on the way to achieving its goal to become a leading council in the field of environmental sustainability". Part 4 of the associated Carbon Management Plan detailed a list of projects that have been ongoing since this time and include the installation of more efficient infrastructure in Council buildings and a move to LED street lighting. There has also been subsequent pieces of work such as the Transport in Walsall strategy that aims to "enhance health and wellbeing within local communities by increasing active travel and improving air quality".

Redressing poor air quality is a statutory function for the Council and is an important focus that spans multiple service areas. In 2017, the Council adopted the Black Country Air Quality Supplementary Planning Document which sets out simplified guidance for dealing with air quality and is aimed at all those involved in the submission and determination of planning applications where air quality needs to be addressed.

More recently, together with Dudley MBC, Sandwell MBC, Wolverhampton CC, Walsall Council was issued with a Ministerial Direction to consider air quality mitigation measures that could bring forward compliance with the National Air Quality Objective for nitrogen dioxide. The Black Country targeted feasibility study combined submission was completed on 31st July and the Council received a formal acceptance response from DEFA on Friday 5th October 2018. It was recognised that the M6 J10 improvement works will go some way to address the air quality around the A454 Black Country Route and therefore Walsall Council were the only Council out of the five authorities not to be tasked with the implementation of air quality improvement measures.

As part of the Walsall Plan 2019-2021, developing travel plans to encourage more active travel by the workforce and residents is a priority. This is currently being developed by Transport and Public Health for Walsall Council.

Public Health has also worked with Pollution Control and NHS Walsall CCG to analyse local air pollution levels and Chronic Obstructive Pulmonary Disease (COPD) hospital admissions. We have found the two to be correlated, whereby when PM2.5 levels increase in Walsall, so do hospital admissions for COPD (see attached appendix 1).

In Walsall Council's corporate building energy efficiency is being driven in the design and refreshment works. In the last 5 years the Civic centre complex has had a 50KW photovoltaic

system installed to reduce the amount of energy the council purchases. The internal areas have had the lighting replaced and improved by installing LED lighting which is also has occupancy detection and day light dimming technologies incorporated. A high energy user were the air conditioning systems in the ICT suite, these have recently been replaced with new inverter drive systems which will increase the efficiency in utility and maintenance costs. The replacement of the building management services (BMS) in the Council House has enable more control of the existing heating system. Within the 2 Active Living Centres at Bloxwich and Oak Park there are combined heat and power systems which help on the reduction of the electricity consumption of these buildings. These projects identified have an impact on both energy consumption and the reduction of the council footprint. A smaller area where the carbon footprint and energy efficiency is taken into account is the purchase of white goods for the corporate buildings, this element we endeavour to purchase only A or A+ rated electrical equipment.

In future there are a number of other schemes where the same ethos is applied, these will include a new heating and ventilation system for the Civic Centre all designed with A Rated boilers and more manageable heating controllers. To improve the thermal value of the Civic Centre there is a scheduled scheme to replace the windows to energy efficient units, the exact specification is still to be determined. The Council House heating system is also scheduled to be replaced, this will be incorporated with the new BMS for control and will improve the building heating performance.

The Councils energy purchasing process has recently changed, the authority has procured an energy brokerage to review the council's usage and purchasing strategy, this will include risk strategy, buying options and the potential of green supplies. This brokerage will be linked to a new energy Bureau provider who will monitor usage and accuracy and give regular reports to the council on a customised report, including measurable elements that will be requested.

It is important that employees of Walsall Council play their part in securing energy efficiency. Facilities Management will be working with the communication team to deliver a monthly message to be delivered to employees to encourage them to assist in the council energy efficiency drive.

## **West Midlands Climate Emergency Declarations**

On the 28<sup>th</sup> June, the West Midlands Combined Authority [WMCA] board declared a "Climate Emergency" and resolved to establish a regional target for carbon reduction supported by a practical action plan for delivery.

A report followed on the 26<sup>th</sup> July and the following recommendations were acknowledged:

- (1) A West Midlands target of net-zero emissions no later than 2041, with interim targets based on a 2018 baseline of 36% reduction by 2022, and 69% reduction by 2027, supported by the corresponding carbon budgets was set.

- (2) Note the estimated financial cost of this transition as 1-2% of GDP, which was estimated at £40 billion for the West Midlands over the period to 2041, and that bringing the target forward ahead of 2041 would require additional investment, was noted.
- (3) An inclusive transition which protected marginalised communities, maximised support for West Midlands businesses, and helped individuals to change their own behaviours, was committed to.
- (4) It was noted that a Carbon Reduction Action Plan would be brought back to the WMCA Board in autumn 2019.
- (5) It was noted that proposals for additional funding would be submitted to the Government ahead of the November 2019 budget or Comprehensive Spending Review to accelerate the West Midlands carbon transition.

The report outlined that the above mentioned Carbon Reduction Action Plan would focus on four distinct areas:

- (1) Clean Growth – focusing on carbon reduction, green business growth, waste reduction and economic inclusion which benefits marginalised communities.
- (2) Clean Air – focusing on an improvement in air quality across the region, working closely with local authority partners and supporting improvements in clean transport, enabling lower emissions (e.g. via electric charging), and creating incentives for citizens and businesses to change behaviours and lifestyles.
- (3) Nature Gain – focusing on growing and improving ‘natural capital’ the quality of our waterways, green spaces, public realm, biodiversity and resilience to the effects of climate change.
- (4) Leading by Local Example – focusing on our own assets, performance and the extent to which we, as anchor institutions in this region, are living up to the values we espouse for others.

## **Benefits and Challenges**

The Council will need to adapt and change on a strategic and operational level if a carbon neutral target is to be realised.

Energy – many local authorities have already recognised that they can have an impact on climate change by focusing on renewable energy generation, for example installing solar panels on council buildings, and energy efficiency programmes such as LED Streetlighting. This is often seen as an area within the Council’s control in so far as they own assets and land and can demonstrate real progress over time.

Fleet Management – As users and owners of large fleets of vehicles, local authorities will need to take action towards electrifying their fleet if they are to meet carbon neutrality targets. This challenge will also include the charging infrastructure needed to support the use of the fleet across the borough.

Procurement – A Council will not be able to fulfil its commitment to being carbon neutral if it imports goods from supply chains that are carbon intensive. It is therefore important to identify low/ zero carbon sources for food, materials, vehicles and services.

Local Business – Large companies and SMEs will need to be on board with any targets set and the Council will need to work closely with them to ensure success across the locality.

### **Next steps**

A target to be carbon neutral reflects the ambitions and ethos of the council, however it is recognised that the scale of the actions needed is significant. The Climate Emergency: Council Declarations Briefing recognises that “If a target is set, aspirations laid down and work commences towards that goal, then progress simply has to be made. If not, the council concerns is taking considerable political risk that it will be held responsible at a local level for that failure”.

Should the Council support this motion, to ensure success, dedicated resource with clear action plans, communications plans to manage expectations and regular monitoring of progress will be key.

Simon Neilson  
Executive Director, Economy and Environment  
11 September 2019

# Real-Time Local Surveillance of Air Quality In Walsall, West Midlands: Correlation with Chronic Obstructive Pulmonary Disease Admissions

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## Background

- Poor air quality remains the largest environmental risk to public health in the UK (DEFRA, 2017), and has more severe effects on vulnerable groups, for example the elderly, children and people already suffering from pre-existing health conditions.
- In addition, deprived areas of the UK are disproportionately affected by the impacts of poor air quality.
- The estimated impact of Nitrogen Oxide (NO<sub>2</sub>) gas pollution on mortality is approximately 23,500 deaths annually in the UK.
- Many of the sources of nitrogen oxides are also sources of small particulate matter (PM<sub>2.5</sub>).



- Walsall is an unitary local authority within the West Midlands urban conurbation.
- The West Midlands has the poorest air quality outside of London, with high pollutant levels associated mainly with road traffic.

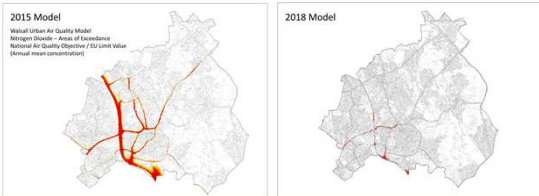


Figure 1. Modelled NO<sub>2</sub> Exceedances in Walsall Borough in 2015 (a) and 2018 (b).

- Notwithstanding NO<sub>2</sub> reductions in recent years, poor air quality in Walsall due to road traffic continues to cause exceedances of the National Air Quality Objective for NO<sub>2</sub> (Figure 1).

## Methods



Figure 2. Locations of Air Quality Monitoring Stations in Walsall.

- Walsall Council has implemented a system of continuous local surveillance of air quality, with monitoring stations distributed across the borough.
- These stations provide data daily on concentrations of NO<sub>2</sub> and PM<sub>2.5</sub>, which is thus more dynamic than in modelled systems.
- Admissions into acute care for Chronic Obstructive Pulmonary Disease (COPD) in Walsall were recorded by Walsall Clinical Commissioning Group.
- Data were normalised and mapped to allow for analysis of correlations.

## Results

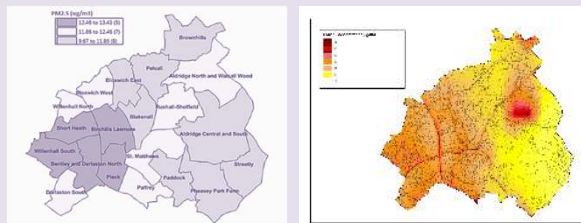


Figure 3. Particulate Matter (PM<sub>2.5</sub>) Concentrations in Walsall.

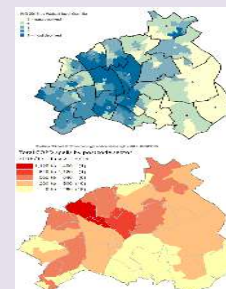


Figure 4. Deprivation Map of Walsall.

- Areas of high PM<sub>2.5</sub> levels are concentrated in the centre and west of the borough (Fig. 3a), which is typified by arterial road networks and heavy manufacturing (Fig. 3b).
- Areas with high air pollutant levels are highly associated with levels of deprivation in Walsall (Fig. 4).

Figure 5. Geographical Distribution of COPD cases.

- The geographical distribution of admissions to acute care for COPD, was closely correlated with PM<sub>2.5</sub> concentrations, with the west of the borough having the highest burden of disease (Fig. 5).

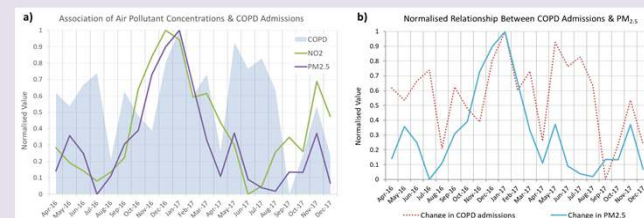


Figure 6. Association of Air Pollutant Concentrations and COPD Admissions.

- Concentrations of NO<sub>2</sub> and PM<sub>2.5</sub> are positively correlated with each other (Fig. 6a) and with COPD admission rates (Fig 6b).
- From April 2016 to December 2017, monthly average PM<sub>2.5</sub> levels ranged from 6.09-18.36 µg/m<sup>3</sup>.
- Peak pollutant levels, observed in January 2017, precipitated an excess of 54 admissions that month compared to the baseline, representing an 11.4% increase.
- The estimated cost to the local NHS economy of these excess admissions during this single month was £123,483, non-inclusive of the wider social and economic costs.

## Conclusions and Discussion

- Most of the highest levels of pollutants were observed in areas of high deprivation, which also accounted disproportionately for COPD admissions.
- Improvement of air quality and the resulting prevention of COPD admissions, will result in significant economic benefit to the healthcare economy.
- In addition, the link between clean air and better emotional and mental well-being is well-evidenced. Therefore, reducing air pollution is imperative to achieving a healthier and fairer society, and promoting health equality.