

To get involved in improving Victoria's air quality and learn more about how small changes can make big air quality impacts contact:

David Beamont, Operations Manager
Victoria Business Improvement District

T 0203 056 7437
E david.beamont@victoriabid.co.uk
W www.victoriabid.co.uk

THE LITTLE GUIDE TO

Better Air Quality



“Air quality is about wellbeing and better and more sustainable business environments. We look forward to working with our BID members to make Victoria a healthy place in which to do business, live and visit now and for future generations.” **Ruth Duston, Chief Executive, Victoria BID**

Air Quality in Victoria

INTRODUCTION

Like most parts of central London, Westminster suffers from poor air quality, and consequently Victoria does too. Improving local air quality is vital to ensuring Victoria is a healthy and vibrant place to live, work, visit and do business in.

The Victoria Business Improvement District (Victoria BID) has done a great deal to raise the profile of local air quality within the area. Working with local businesses we have been undertaking a series of activities from delivery and servicing planning research to holding air quality seminars to promoting walking and cycling, but we need your help to increase the overall impact.

There are simple actions that every business can take now to improve air quality and as more businesses get involved the associated health impacts of poor air quality described in this guide will quickly diminish.

The information in this booklet is a basic introduction to the topic and demonstrates how easy it is to build improving air quality into your business activities.

IN THIS GUIDE

- ✓ Learn about the two major types of air pollution prevalent in London today and how they affect people's health
- ✓ Read what local businesses in Victoria are already doing to reduce air pollution
- ✓ Find out what activities you can explore in your business to improve air quality and about key tools you can use as part of your work

Vehicle-borne pollution has a negative impact on air quality, but the simple actions outlined in this booklet can help address this.

“Our message is that simple, small changes to business behaviours can improve local air quality and reduce health risks to people whilst making businesses more efficient.” **David Beamont, Operations Manager, Victoria BID**

SITUATION

Poor air quality in Victoria is mostly as a result of human activity, specifically local combustion - mainly diesel vehicles and gas boilers. The issue is complex but the sources are broadly:

- Transport (cars, taxis, buses and coaches)
- Buildings (gas from boilers)
- Supply chain (light and rigid heavy goods vehicles)

The pollutants of most concern are particulate matter (often referred to as ‘PM’) and Nitrogen Dioxide (NO₂). These have a significant impact on human health.

PARTICULATE MATTER (PM₁₀ AND PM_{2.5})¹

Particulate matter (PM) is a complex assemblage of non-gaseous material of varied chemical composition. It is categorised by the size of the particle, for example PM₁₀ describes particles with a diameter of less than 10 microns (µm). Most PM emissions in London are caused by road traffic, with engine emission and tyre and brake wear being the main sources.

NITROGEN DIOXIDE (NO₂)¹

All combustion processes produce oxides of nitrogen (NOx). In London, road transport and heating systems are the main sources of these NOx emissions. NOx is primarily made up of two pollutants - Nitric Oxide (NO) and Nitrogen Dioxide (NO₂). NO is of most concern due to its impact on health. However NO easily converts to NO₂ in the air - so to reduce concentrations of NO₂ it is essential to control emissions of NOx.

HEALTH IMPACT

Air pollution is a major environmental risk to health. Elevated levels or long term exposure to air pollution or both can lead to serious conditions affecting human health. This mainly affects the respiratory and cardiovascular systems, and can also lead to more serious conditions such as cancer and aggravate others. People with lung or heart conditions may be more susceptible to the effects of air pollution.

- Over 9,500 deaths in London in 2010 were estimated to be attributable to poor air quality²
- Air quality in Victoria does not meet health-based targets for NO₂³
- The health cost impact of poor air quality in the UK has been estimated to be around £15 billion⁴



Exposure to poor air quality can negatively affect our health and wellbeing.

“We recognise the impact businesses have on air quality and want to make a difference. We’re working with staff, suppliers and other tenants to reduce traffic by consolidating deliveries and redirecting personal post to alternative pick-up points.” **Antony Wiltshire, Director of Workspace & Facilities UK & Ireland, Edelman**

LOCAL IMPACT

Poor air quality is a local issue with each area having its own specific influencers such as the presence of transport hubs, congested road infrastructure and their own unique mix of residential, office and retail space.

The map on this page shows the emission profile for Westminster in 2013 for Nitrogen Dioxide (NO₂). The World Health Organisation and European Union health-based targets are for annual concentrations of NO₂ to be below 40 µg/m³.

From the map and legend it is clear that in 2013 most of the City of Westminster was in breach of health limit values, with the largest breaches along main roads. Using side streets when walking is one way of reducing your personal exposure to air pollution, but the key thing is to reduce air pollution now. Victoria BID is working hard to address this but there are simple actions that every business can take now to improve air quality.

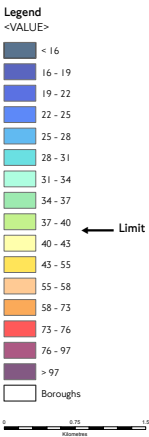
MONITORING AIR QUALITY

We have installed an air quality analyser in our office to record levels of NO₂ on Buckingham Palace Road. For live air quality levels across Victoria visit the map on our air quality web page. The map is produced by the London Air Quality Network that is managed by Kings College London and draws on data from our and other analysers and enables us to track improvements over time.

Visit: www.victoriabid.co.uk/work/air-quality



NO₂ annual mean concentration (µg/m³) in the City of Westminster in 2013.
Map: LAEI 2013, GLA and Crown Copyright.



1. Air Quality for Public Health Professionals - City of Westminster. Greater London Authority. November 2012
2. Understanding the Health Impacts of Air Pollution in London, Kings College London. 2015

3. Air Quality for Public Health Professionals - City of Westminster. Greater London Authority. November 2012
4. Air Pollution: Action in a Changing Climate. Defra. 2010

Air Quality Solutions: What You Can Do Today

COMMUNICATIONS

Raising the profile of air quality through policy implementation and campaign support:

- Embed air quality into your procurement, corporate responsibility and environment policies
- Launch campaigns internally to promote walking and cycling using air quality as a core driver for change
- Become an Air Quality Champion – twenty-three organisations and theatres have already signed Air Quality Pledge Certificates and choose where they can help from a pick list that includes the suggestions covered in this guide and more

CLICK. COLLECT. CLEAN AIR.

Victoria BID's new website raises awareness of alternative delivery methods for online shopping. None of us like to find a missed delivery note on our doormat when we get home, but having online shopping sent to Victoria adds to traffic congestion and worsens air pollution.

The site nudges people towards delivery options such as Click and Collect, Amazon Locker, Doddle and others. Many options are free and there are fantastic deals on some of the paid-for services.

Visit: www.victoria.clickcollect.London

"Improving air quality is a real priority for Land Securities and increasingly important for our building occupiers in Victoria. As a consequence, we are continuing to raise awareness and reduce emissions in and around our buildings." **Caroline Hill, Head of Sustainability, Land Securities**

TRANSPORTATION

Promoting walking and cycling for a healthier workforce:

- Promote walking and cycling – safely and using low emission routes
- Utilise the 'cycle to work' scheme, and online apps such as CityAir
- Explore private hire vehicle contracts with hybrid and electric variants
- Launch campaigns to support environmental initiatives that improve air quality

THE TELEGRAPH MEDIA GROUP

The Telegraph Media Group's 'Bike Library' holds several Brompton fold-up bikes that staff can sign out. They can also purchase bikes through a benefits exchange scheme.

Over eighty bike parking spaces are available on site and showers are readily available. Staff also benefit from an on-site bike check service for their own bikes that helps to ensure they are in tip-top condition. Collectively these activities boost the appeal of and encourage cycling.



More and more businesses in Victoria are taking steps to help improve air quality and have signed up to the Air Quality Champions initiative.

Photos: Victoria BID/Mickey Lee.

AIR QUALITY CHAMPIONS

Businesses that become Air Quality Champions choose their sector focus and where they can help from a pick list that spans communications, transportation, the built environment and the supply chain and report back on their progress throughout the year. The current businesses involved are:

- | | | |
|---|--------------------------------|---|
| • Ambassador Theatre Group and Victoria Apollo Theatre | • Edelman | • Sunovion |
| • Caffè Nero | • Grosvenor Britain & Ireland | • The Association for the British Pharmaceutical Industry |
| • China Britain Business Council | • Guoman – The Grosvenor Hotel | • The Passage |
| • Delfont Mackintosh Theatres and Victoria Palace Theatre | • Informa | • The Rubens at the Palace Hotel |
| • DONG Energy | • Intuit | • The Telegraph Media Group |
| • Doubletree by Hilton in Victoria | • Land Securities | • Victoria Place Shopping Centre |
| • DP World | • Ophir Energy | • Westminster Cathedral |
| | • PA Consulting | |
| | • Ruffer | |

“We got involved in the project to engage with our customers and staff, helping to raise awareness and help to improve air quality, by reducing vehicle emissions associated with deliveries from our supply chain.” **Juliet Hayes, Safety & Environmental Advisor, Ambassador Theatre Group**

SUPPLY CHAIN

Reducing the number of vehicles delivering to site and demanding a lower emission profile of the fleet:

- Incorporate air quality, alongside other environmental targets, into supply chain policies
- Reduce the number of vehicles delivering to your office
- Share services with neighbours and organisations on different floors for business basics like stationery and toiletries
- Demand a lower emission vehicle that delivers your goods and services
- Ask drivers to refrain from idling their vehicle engines when visiting your site
- Explore consolidation services and low emission supply opportunities through Victoria BID

AIR QUALITY TOP TIP

The next time you speak with your supplier, ask them when they are going to go electric or hybrid – the more people that ask, the faster you’ll see electric or hybrid vehicles on the street.

APOLLO VICTORIA THEATRE

By working with their supply chain partners the Apollo Victoria Theatre negotiated a new ‘super contract’ to provide all services through a single supplier. Mains filtered water is now also installed reducing bottled water requirements and therefore deliveries.

This consolidation reduced consumable and water deliveries from 12 to 4 per week.

ZERO & LOW EMISSION SUPPLIERS DIRECTORY

Our Zero & Low Emission Suppliers Directory is specifically aimed at helping you choose a supplier that uses these specific types of vehicles. By choosing a supplier that delivers your goods and services in a zero or low emission vehicle you are directly helping to tackle poor air quality – not only around your office but along the entire route the vehicle takes.

Visit: www.victoriabid.co.uk/work/zle-directory

Air Quality in Victoria

THE BUILT ENVIRONMENT

Reducing gas consumption and installing low emission technologies:

- Minimise the use of your back-up generator if you have one
- Reduce gas consumption and install ultra-low NOx boilers when fitting new or upgrading equipment
- Assess the energy needs of the building to improve efficiency and reduce gas usage
- Install ultra-low NOx boilers or at least a leaner burner
- ‘Green’ the building – schemes of all sizes can help

THE RUBENS AT THE PALACE HOTEL

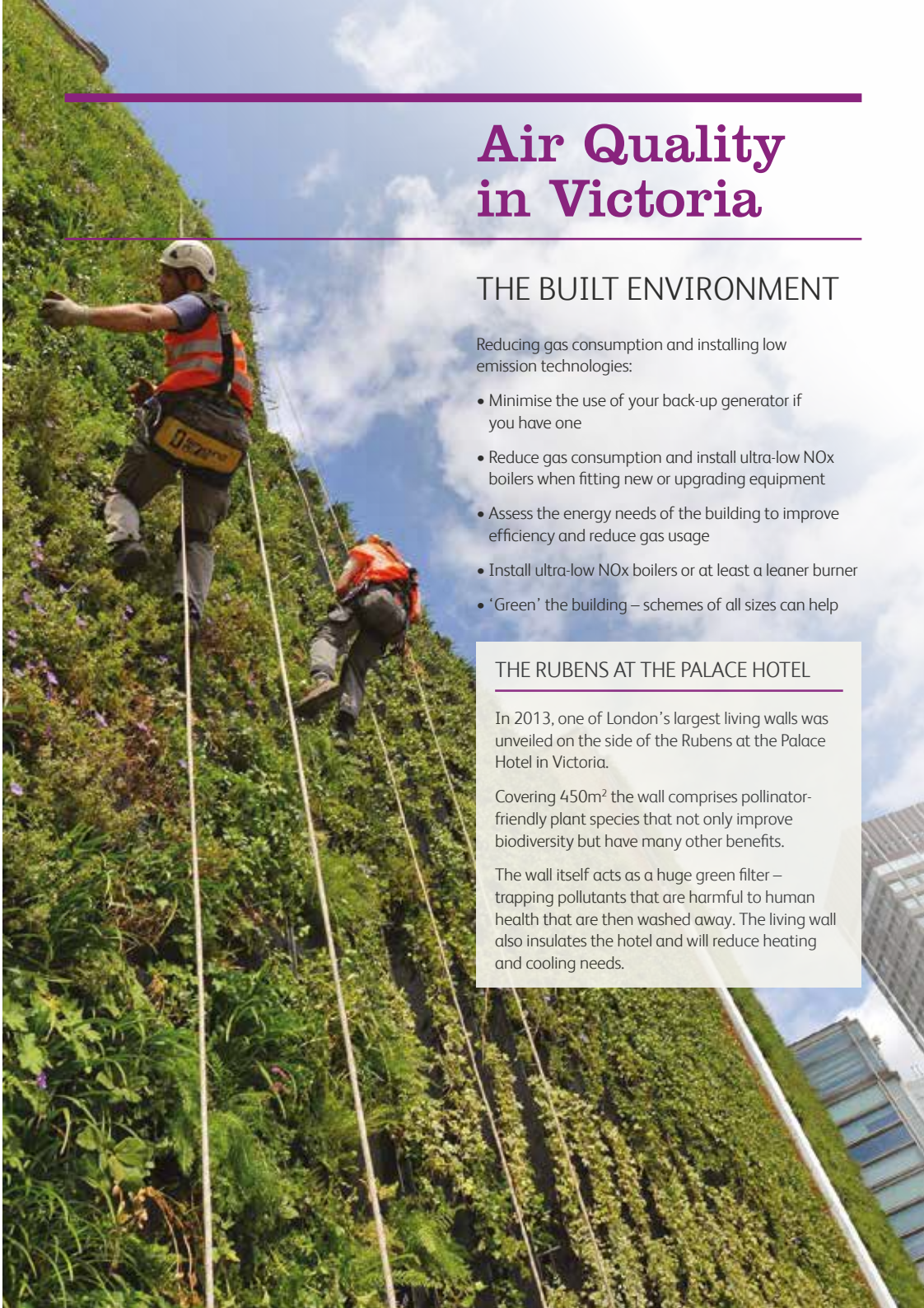
In 2013, one of London’s largest living walls was unveiled on the side of the Rubens at the Palace Hotel in Victoria.

Covering 450m² the wall comprises pollinator-friendly plant species that not only improve biodiversity but have many other benefits.

The wall itself acts as a huge green filter – trapping pollutants that are harmful to human health that are then washed away. The living wall also insulates the hotel and will reduce heating and cooling needs.

The Rubens at The Palace Hotel living wall – a big scheme with a big impact, but all greening schemes can help.

Photo: Red Carnation Hotels.



What Else is Being Done?

GREATER LONDON AUTHORITY AND TRANSPORT FOR LONDON ACTIONS

Air quality is a priority for the Mayor, and he has announced a bold package of measures for London. These include:

- Introducing an Emissions Surcharge for the most polluting vehicles in central London from Autumn 2017
- Proposing to extend the Ultra Low Emission Zone (ULEZ) all the way up to the North and South Circular
- Proposing to introduce the ULEZ standards London-wide for heavy vehicles and buses
- Promoting low-emission vehicles such as electric vehicles
- Age limits for taxis
- Committing to purchase only zero emission or hybrid buses from 2018, and retrofitting older buses to reduce NOx emissions by up to 90 %
- Providing £5million for five Low Emission Neighbourhoods – providing targeted measures for areas where air quality is poor
- Using the planning system to reduce emissions from new developments with Supplementary Planning Guidelines being adopted by boroughs
- Retrofitting homes and offices to make them more energy efficient
- Working with businesses, the Cross River Partnership and BIDs to deliver air quality improvements via the Clean Air Better Business (CABB) programme



Several new Routemaster II buses pass through Victoria. The number 38 route from Victoria to Clapton Pond uses the new Routemaster II along its entire route.

Photo: Victoria BID/Mickey Lee.

“Improving air quality is imperative if we are to create a healthy environment for our residents, workers and visitors, so it is great to see businesses taking the initiative and putting steps in place to reduce their impact and clean our air.” **Cllr David Harvey, Cabinet Member for Environment, Sport and Community, Westminster City Council**

CITY OF WESTMINSTER ACTIONS

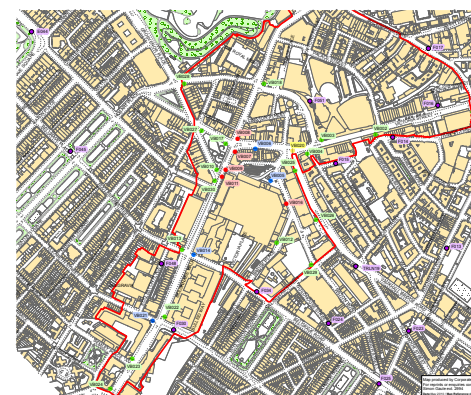
“Improving air quality in Westminster is a complex challenge and requires continued cooperation and collaboration if we are to make the progress we all want to see.” Councillor Heather Acton, Cabinet Member for Sustainability and Parking

- The first local authority to declare an Air Quality Management Area in 1999 and the first to produce an Air Quality Strategy and Plan in 2001
- Pioneered the initial concept of a Low Emission Zone
- Environmental Impact Assessments required for large developments
- Air Quality Assessments required for developments which are deemed to be significant in terms of air quality
- The Westminster Code of Construction Practice for major sites, requires developers to control and monitor dust emissions
- Infrastructure and incentivisation for electric and low emission vehicles
- Implemented a hierarchy of preferred fuels for replacement fleet vehicles: electric, electric hybrid, LPG/CNG, petrol and diesel



Several electric vehicle charging points are available within the Victoria BID footprint.

Photo: Victoria BID/Mickey Lee.



Victoria BID, Westminster City Council and Transport for London undertook a Legible London signage placement strategy in 2010 that led to the installation of 26 signs.

Map: Crown copyright/database right 2010.