


THE
NORTHBANK



TRAFALGAR SQ · STRAND · ALDWYCH

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To get involved in air quality projects and see how small changes can make a big difference, please contact the BID:

☎ 0203 697 9279

✉ info@thenorthbank.london

🐦 @TheNorthbankBID

WWW.THENORTHBANK.LONDON



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A LITTLE GUIDE

Improved Air Quality For You



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 the Northbank are already doing to reduce air pollution
- Look at some top tips employees can do to reduce exposure
- 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
- The Northbank and Covent Garden Business Low Emission Neighbourhood is launched

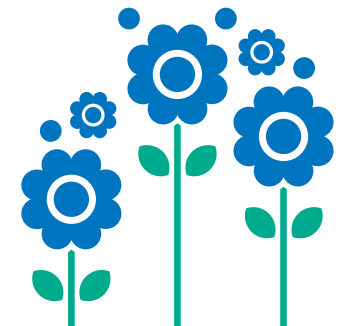
You are the key to cleaner air

Like most parts of central London, Westminster suffers from poor air quality, and consequently the Northbank does too. Improving local air quality is vital to ensuring the whole of our community has a healthy and vibrant place to live, work and visit.

Working with local businesses we have been undertaking a series of activities such as very practical research looking re-planning deliveries and services into buildings and streets; social media air quality campaigns; promoting walking and cycling in cleaner air routes and more, 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 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.



The Context and the Issue



Poor air quality in The Northbank BID is complex but broadly the result of emissions from:

- Road traffic (taxis, buses, deliveries and servicing vans)
- Buildings (gas from boilers) The pollutants of most concern are particulate matter (often referred to as 'PM') and Nitrogen Dioxide (NO₂)

PARTICULATE MATTER (PM10 AND PM2.5)

Particulate matter (PM) is a complex grouping 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 emissions and tyre and brake wear being the main sources.

NITROGEN DIOXIDE (NO₂)

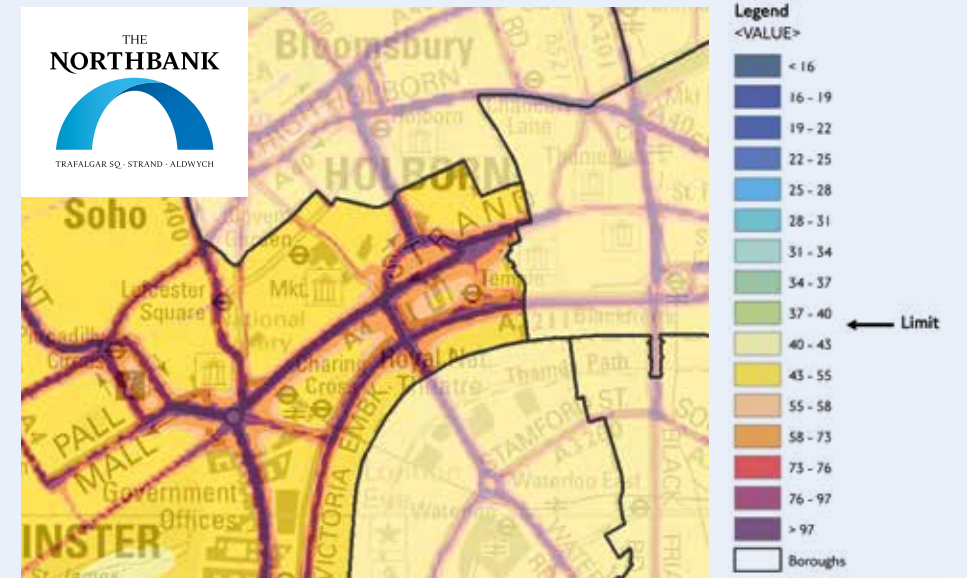
All combustion processes produce oxides of nitrogen (NO_x). In London, road transport and heating systems are the main sources of these NO_x emissions. NO_x is primarily made up of two pollutants – Nitrogen Oxide (NO) and Nitrogen Dioxide (NO₂). NO is of most concern due to its impact on health. However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

There is a great deal of work already being done by Westminster City Council, the GLA, TfL and DEFRA but not all targets are being met.

MONITORING AIR QUALITY

We have installed an air quality monitor to record levels of NO₂ on the Aldwych. For live air quality levels across the Northbank visit the map on our air quality web page. The map below 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: thenorthbank.london/making-progress/public-realm-and-environment

Annual Average NO₂ concentrations, 2013



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 quality
- Air quality in the Northbank does not meet health-based targets for NO₂
- The health cost impact of poor air quality in the UK has been estimated to be around £15 billion

LOCAL IMPACT

Poor air quality can be dealt with at a local level 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.

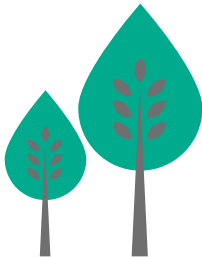
The map on page 5 shows the emission profile for the Northbank in 2013 for Nitrogen Dioxide (NO₂). The World Health Organisation and European Union health based targets are for annual concentrations of NO₂ to be below 40 µg/m³. From the map and legend it is clear that in 2013 most of the City of Westminster 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.

The Northbank BID is working in partnership with local organisations and businesses to develop solutions to improve local air quality and promote the area as a healthy place to work, live, visit and do business.

Next steps

Organisations in the Northbank can do their bit. There are simple actions that every business can take now to improve air quality:

Communications	Transportation	Built Environment	Supply Chain
Raising the profile of air quality to staff	Promoting walking & cycling with maps & events	Reducing gas consumption	Reducing the number of vehicles delivering
Policy and communications	Reducing taxi usage	Installing ultra-low NOx technologies when replacing boilers	Choosing suppliers with a lower emission vehicles



Business committing to improve local air quality



AIR QUALITY CHAMPIONS AND PLEDGES

Industry can play a part in reducing air pollution. The following businesses on the Northbank have signed a pledge to show their commitment to champion air quality.

The businesses involved are:

- Ambassador Theatre Group
- Nimax
- Strand Palace Hotel
- Lyceum Theatre
- Savoy Theatre
- Playhouse Theatre
- Novello Theatre
- Aldwych Theatre
- Duchess Theatre
- Vaudeville Theatre
- Corbin & King (Delauney)
- Trafalgar Studios
- St Martin-in-the-Fields
- Charing Cross Station
- DK Publishing
- Shell
- 80 Strand
- LSE
- Covington & Burling LLP
- Forrester Research Inc
- Caffè Nero
- King's College London
- Punter Southall
- The Courtauld Institute
- Amba Hotel Charing Cross

Next step... Join the efforts and sign up to the Air Quality Pledge – email: info@thenorthbank.london



WORK, LIVE, VISIT, BUSINESS



AIR QUALITY PLEDGE CERTIFICATE

This is to certify that:

COMMIT TO:

Communications **Raising the profile of air quality**
The Built Environment **Reducing gas consumption**
Transportation **Promoting walking and cycling to staff and visitors**
Supply Chain **Reducing deliveries**
TO IMPROVE LOCAL AIR QUALITY

Pledge Signatory:

Northbank BID Signatory:

City of Westminster Signatory:

Steve Blogs
Operations Director

Matthew Dixon
Chairman

Councillor David Harvey
Cabinet Member for Environment,
SPorts and Community


City of Westminster

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Communicate

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

- Embed air quality awareness 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-five organisations and theatres have already signed Air Quality Pledge Certificates

Up to 40%
of workplace
deliveries are
personal parcels



www.northbank.clickcollect.london

CLICK. COLLECT. CLEAN AIR.

Northbank BID's new micro-site and film 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 the Northbank area adds to traffic congestion and worsens air pollution. The site nudges people towards delivery options such as click and collect in-store, Amazon Locker, Doodle and others. Many options are free and there are fantastic deals on some of the paid-for services.

Next step... Use our 'Click. Collect. Clean Air.' campaign to promote alternatives to workplace delivery of online shopping.

www.northbank.clickcollect.london

Contact the BID for any collateral you need to help promote this campaign.

CLICK. COLLECT. CLEAN AIR.

No one likes missing a delivery at home, but having online shopping sent to your work address adds to traffic congestion and air pollution.

By using a 'click & collect' service you can help reduce the number of vans on our streets, making Northbank a nicer, safer and healthier place to visit, shop and work. It's convenient, easy and affordable.



From the dry cleaners or corner shop near your home to the train station on your commute, there are parcel collection points all over London



Simply choose a local collection point when shopping online or use the collection point's address as your own



Many options are free and we have negotiated fantastic deals for some of the paid-for services

Find your most convenient collection point, and receive discounted deliveries online at
www.northbank.clickcollect.london





Commuter experience: Office Worker

78% Lower pollution
Using near-surface tube trains



A rethink on commuting and transport



For most people coming into central London, the commute can represent their most significant exposure to air pollution each day.

Promoting walking and cycling for a healthier workforce:

- 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
- Route your journey on our air quality widget showing cleaner air walking or cycling routes www.thenorthbank.london/cleanair

COMMUTER POLLUTION EXPOSURE MONITORING

In 2017 the Northbank conducted a study with Kings College London to investigate personal pollution exposure of 8 employees in the area. Volunteers wore pollution exposure monitors every day for two weeks and this information, along with GPS location data was used to assess differences in exposure between contrasting routes and/or modes of transport for each participant.

In most cases, the volunteers were able to change some aspect of their commute to avoid pollution and so reduce their exposure, some by a large percentage. In most cases, **reductions of around 25% to 40% were achieved but for two people this was much greater, up to a 90% reduction.**

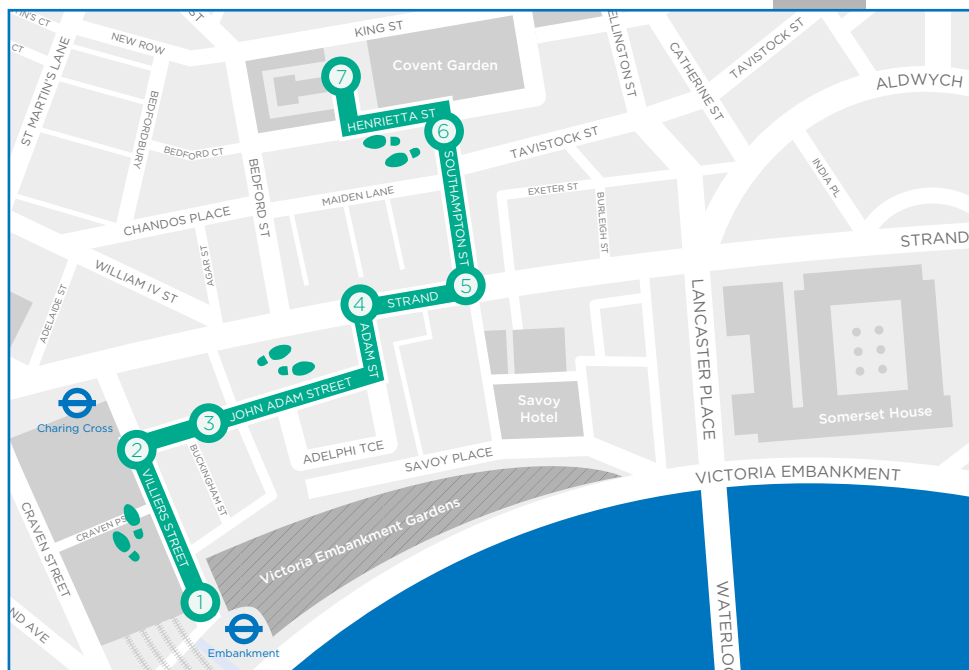
Next step... This study demonstrates that there are changes that commuters into the Northbank area can undertake immediately to reduce their exposure to pollution. See the report on our website Environment page, and see where you can make similar changes to minimise your exposure too.



Cleaner, greener streets initiative

With so much research saying that simply taking back routes reduces your pollution exposure, we have designed low emission routes from Villiers Street to Covent Garden. There are several hanging flower baskets along the route to make the ambient experience better for pedestrians.

Northbank CLEANER STREETS INITIATIVE

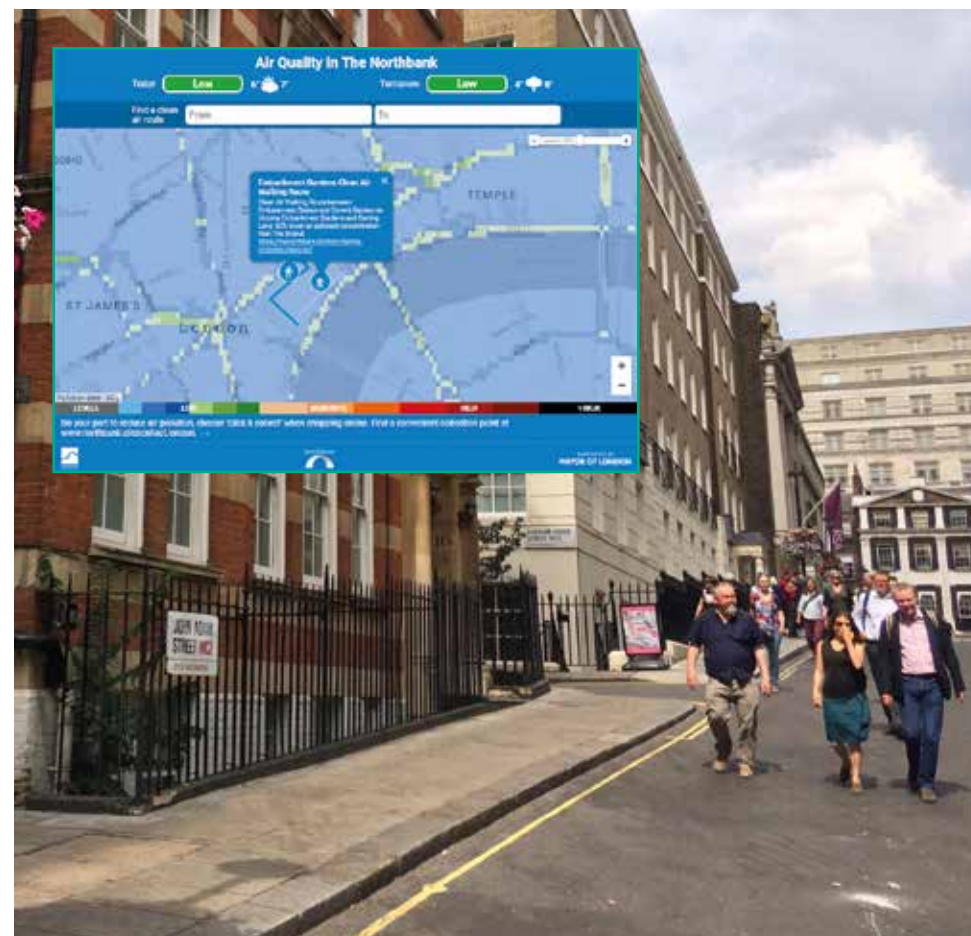


Taking this quieter route can reduce your exposure to pollution by 47%

CLEAN AIR ROUTE FINDER

Our Clean Air Route Finder makes it easy to find the lowest pollution route to your destination. Plot your low emission route now, visit: thenorthbank.london/making-progress/clean-air.

Next step... Contact the BID if you would like to embed the route finder on your intranet or website.



A closer look at deliveries and servicing



REPLANNING DELIVERIES AND SERVICE TO YOUR BUILDING

Delivery vans and collections form the greatest contributor to air pollution – by reducing these we can make the streets nicer and cleaner for users.

By rethinking when and how businesses and organisations receive their deliveries and waste collections, we can discover potential savings in money and what could be a huge reduction in pollution via emissions.

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

- 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

DELIVERY SERVICE PLANS (DSP) – FUNDING AVAILABLE

Our businesses have benefitted from free delivery and service planning advice and information bespoke to their business. Martin-in-the-Fields, London School of Economics, Network Rail and 80 Strand have received their own Delivery & Servicing Plan that highlight potential changes to the way they currently operate. These plans include measures that could help deliver cost benefits as well as ways to reduce or retime deliveries and collections.

Next step... Complete a quick questionnaire and receive funding to make deliveries to your site cleaner and more efficient: www.deliverbest.london

Specific industries have looked at air quality and considered what they can do to play a part in helping to reduce their impact.

“Undertaking the two week survey made us realise that we could reduce the frequency of vehicular deliveries to St Martin’s, particularly with our catering offer, by simply planning further ahead and by ordering non-perishable goods in larger quantities.” **Chantal Lane, Office Administration Coordinator**

“This will be a useful tool for changes that can be made now or gradually incorporated” **Dan Reeves, LSE Residences Sustainability Officer**

THEATRELAND

Over the past year we have held workshop sessions with Northbank’s theatreland providing them with expert information and what solutions are possible to reduce their emissions impact. They have also received maps to inform their visitors of the proximity of their next destination, thus reducing the reliance on unnecessary taxi journeys.

Next steps... Let’s continue the conversation about how industry-specific supply chains can be rationalised. Contact the BID if you would like to receive a funded DSP rationalising your deliveries and servicing.

So practically what can businesses do?



Top 5 Actions for **Businesses** to tackle the air quality issue:

1

Complete a quick questionnaire and receive suggestions to make deliveries to your site cleaner and more efficient
www.deliverbest.london

2

Use our 'Click. Collect. Clean Air.' campaign to encourage your staff to use alternatives to workplace delivery of online shopping. **www.northbank.clickcollect.london**

3

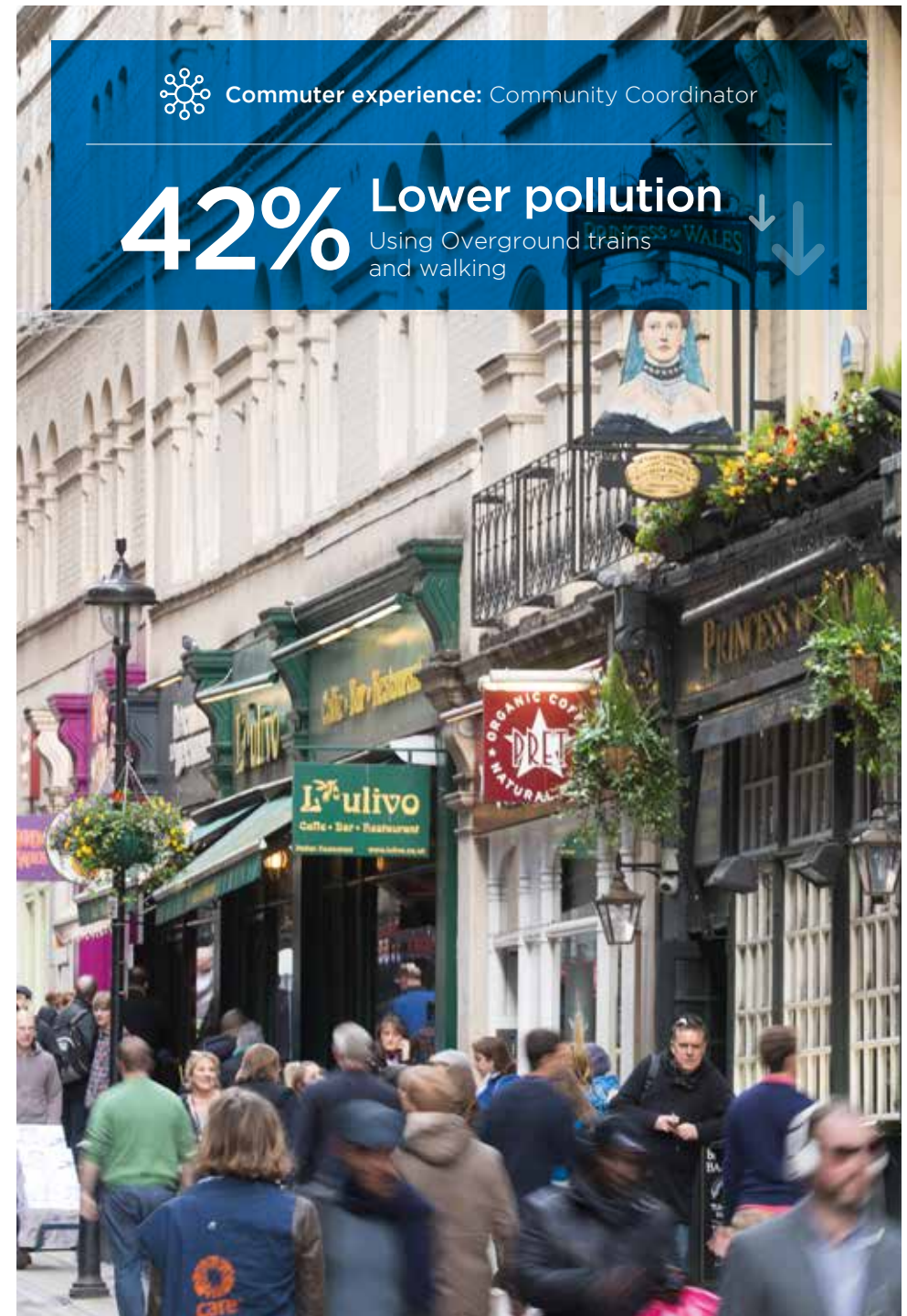
Choose cleaner vehicles for your fleet
locity.org.uk/locity-commercial-vehicle-finder

4

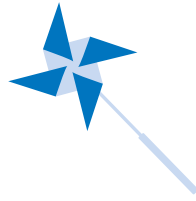
Encourage staff to walk, cycle and take public transport and be mindful of busy streets and routes **thenorthbank.london/making-progress/clean-air** for the Clean Air Route Finder

5

When scheduling progressive maintenance and plant upgrades look to reducing gas consumption with ultra-low NOx boilers and lean burner retrofits



So practically what can you do?



Top 5 Actions for **Individuals** to take responsibility for the air that you breathe:

1

Choose "Click & Collect" instead of having online shopping delivered to your workplace. Find a convenient collection point at **www.northbank.clickcollect.london**

2

Don't be idle – turn your engine off when stationary, loading or waiting at the roadside **www.westminster.gov.uk/dont-be-idle** or encourage others to

3

Avoid heavily polluted and congested routes by choosing clean air walking & cycling routes **www.cleanairroutes.london**

4

Walk, cycle and take public transport instead of driving

5

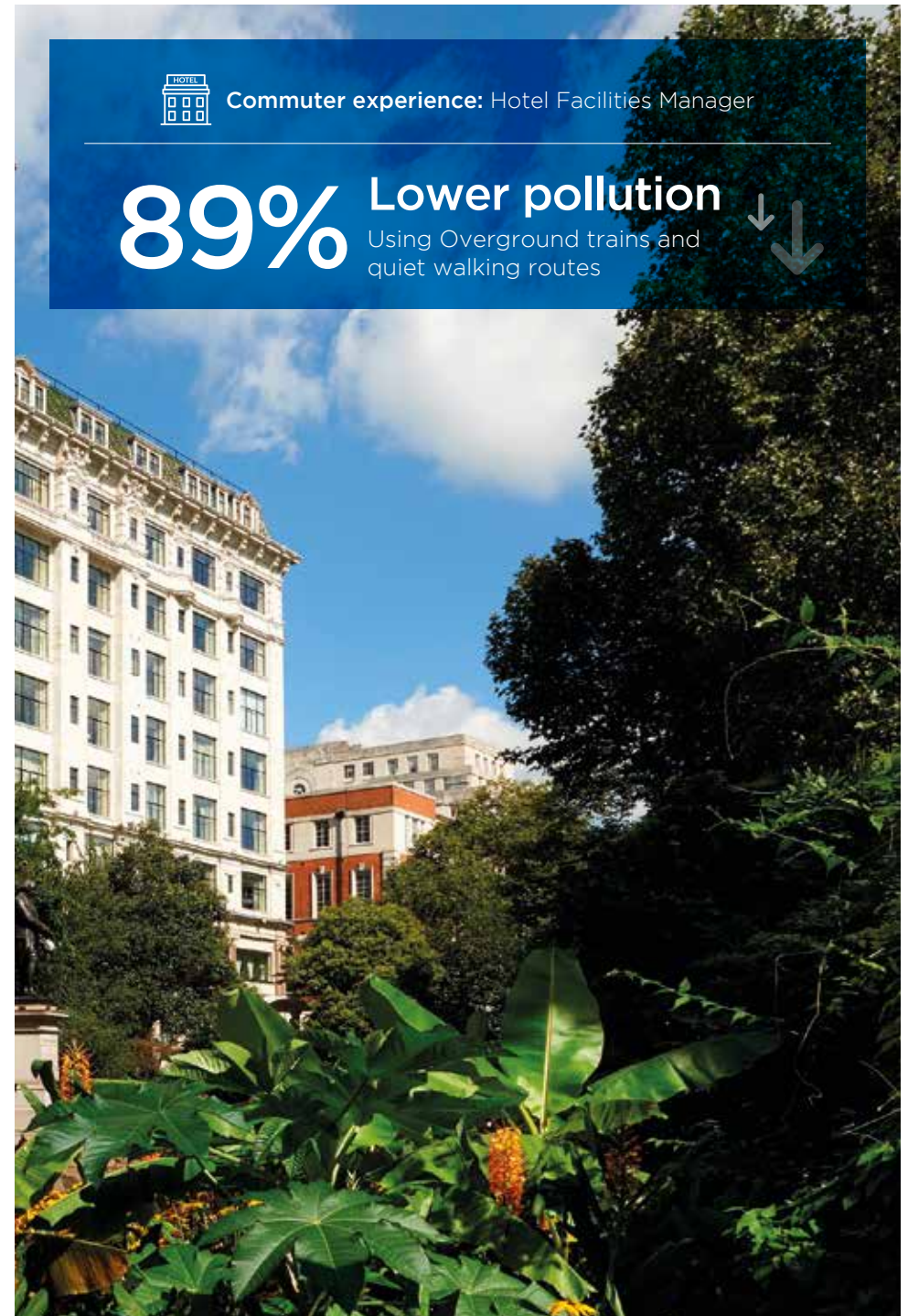
Share these tips with your colleagues, friends and family



Commuter experience: Hotel Facilities Manager

89% Lower pollution

Using Overground trains and quiet walking routes





What we are doing now: Business Low Emission Neighbourhood

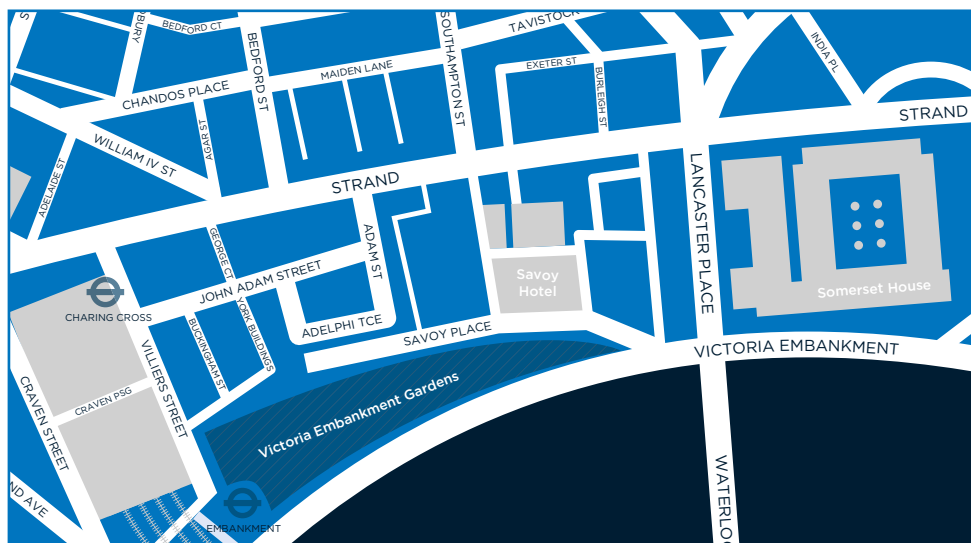
The Northbank BID has secured funding from the GLA to deliver a range of initiatives to improve local air quality in partnership with Westminster City Council. This is an area approach which will bring together all our work so far and provide more innovative projects to an extended area with Covent Garden.

Our area is very busy with cultural destinations, events and high numbers of visitors. The projects will make it much more inviting and encourage walking and cycling with street greening, wayfinding and lighting. Reduce engine idling, promote electric vehicles and suitable infrastructure for electric vehicles.

It will also bring in expertise from transport consultants to work with local business to help cut the number of unnecessary deliveries and provide information for staff and visitors.

Working together we can improve local air quality.

Contact us to be involved: info@thenorthbank.london or call **0203 697 9270**



MORE INFORMATION:

Westminster City Council, Air Quality Action Plan

www.westminster.gov.uk/air-pollution

Kings College, London Air Quality Network (LAQN)

www.londonair.org.uk

Greater London Authority

www.london.gov.uk/what-we-do/environment/pollution-and-air-quality

The Northbank BID

www.thenorthbank.london/making-progress/clean-air

