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DESTINATION GREEN: THE NEXT CHAPTER



Heathrow: sustainability leadership

Matthew Gorman

Sustainability & Environment Director,
Heathrow Airport





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Heathrow today

80 million
passengers a year



82
airlines serving
204
destinations in
85
countries



76,000 jobs
supported at the airport



34%
of UK exports by value for
non-EU exports

2
full length
runways
and
4
operational
terminals



9
routes to other UK
airports



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Expansion benefits

10,000

total apprenticeships by 2030



4

Logistics Hubs across the UK

NPS enables at least

260,000

additional ATMs per annum



2x

current cargo capacity for British exporters



Up to

40

new long haul trading routes

Up to **40,000**

new local jobs



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Noise



Area affected by noise >55dB Lden (standard European measure)

2016: c. 684,000 people

Source: The Economist



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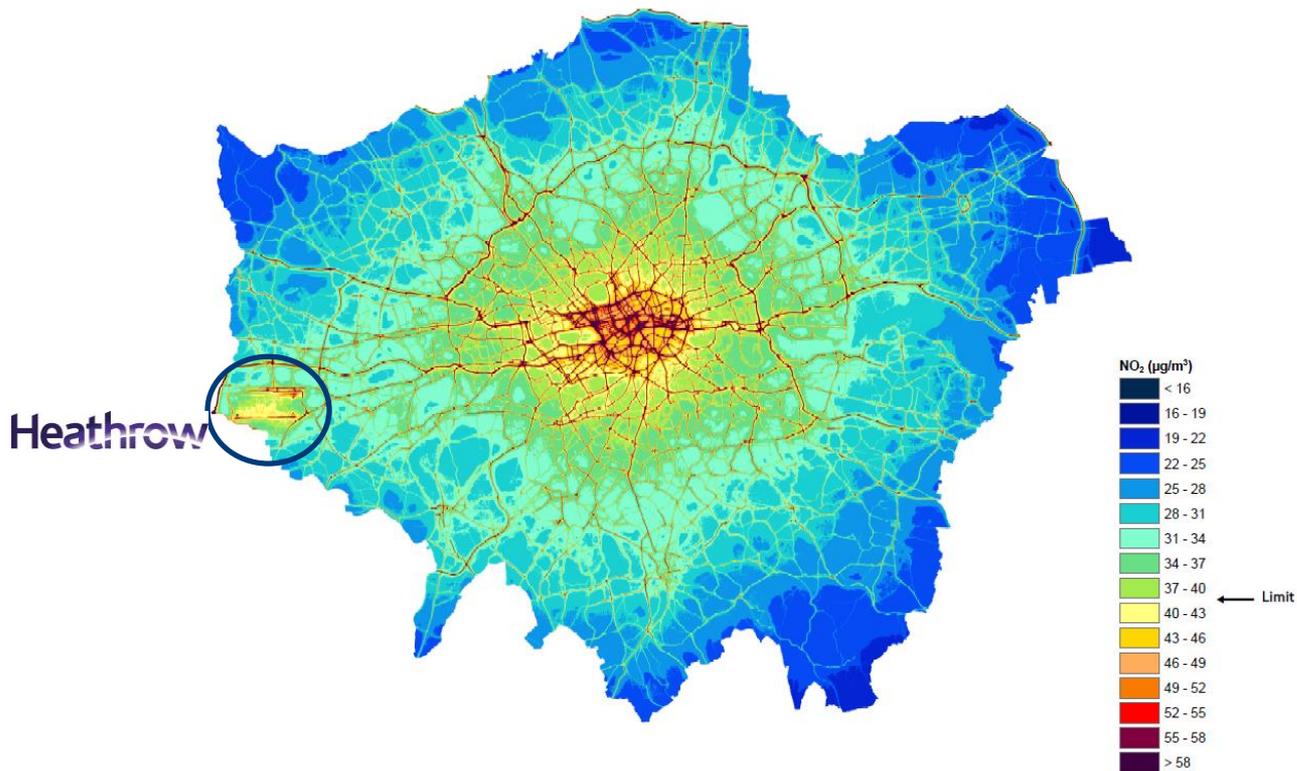


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Air quality





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Climate change



2007
Climate
Camp
next to
Heathrow

2008
Climate
'flash
mob'
when T5
opened



2008
Greenpeace
protest
Heathrow
Making every journey better



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“Heathrow 2.0”

Ten flagship goals



1 A GREAT PLACE TO WORK

- 10,000 apprenticeships by 2030
- Reflect local diversity at every level by 2025



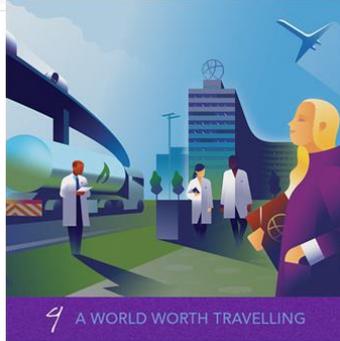
2 A GREAT PLACE TO LIVE

- We will seek to at least halve the number of flights leaving after 2330 on non-disrupted days
- Airside ultra-low emissions zone by 2025
- 50% airport passenger journeys made by public and sustainable transport by 2030



3 A THRIVING SUSTAINABLE ECONOMY

- Largest 100 towns and cities connected to Heathrow by 2033
- Direct supply chain colleagues working at Heathrow will be transitioned to be paid the London Living Wage by the end of 2020



4 A WORLD WORTH TRAVELLING

- An aspiration to make growth from our new runway carbon neutral
- Establishing the Heathrow Centre of Excellence
- Carbon neutral airport by 2020



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Noise

Our goal is to expand Heathrow whilst affecting fewer people with noise than today

Collaboration with airlines and NATS

is crucial to delivering a quieter Heathrow

Expansion means...



Steeper approaches



End of routine stacking



Increased time without night flights



Runway alternation



Quieter aircraft



Respite through alternated flight paths

This noise contour map shows the size of the 57db (Leq) noise contour in 1974 compared to 2013.

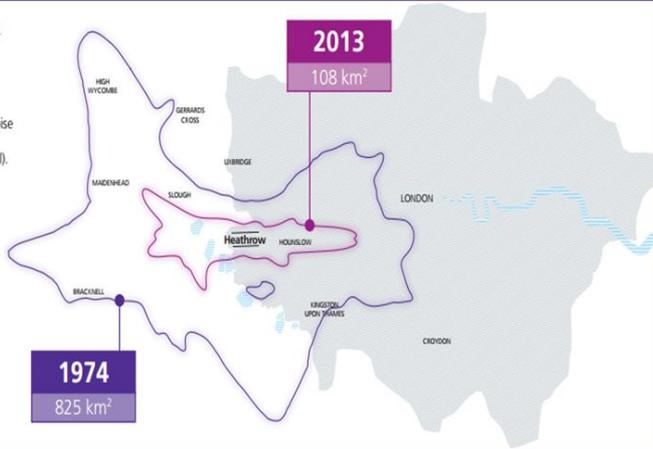
2013 57dBA contour

Leq equivalent sound level of aircraft noise in dB(A) averaged over 16 hours (often called equivalent continuous sound level).

1974 35NNI contour

Until 1990, the official index of aircraft noise exposure in the UK was the Noise and Number Index (NNI).

London boundary



Heathrow is quieter now than it was in the 1970s even though we have double the number of air traffic movements



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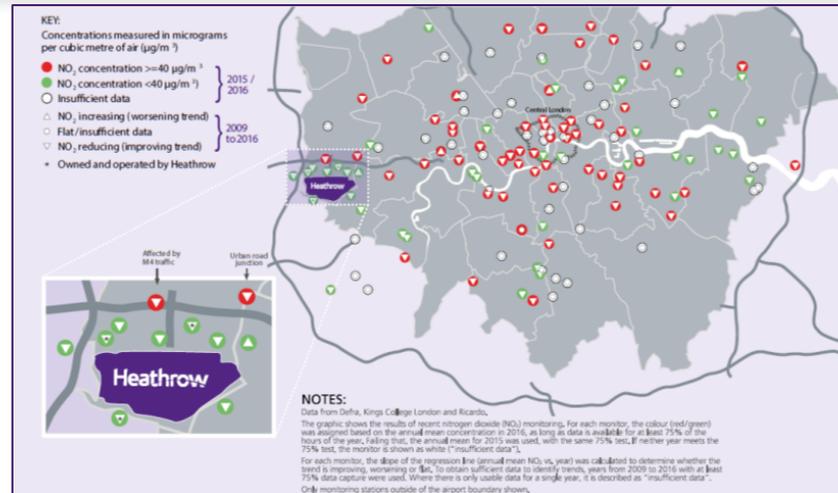
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Air quality

Heathrow has made a
16% reduction
 in ground based NOx emissions
between 2008-2013

Almost **55% of vehicles** on London's roads are forecasted to be electric by 2030. This will improve London's air quality by reducing the city's average concentration of nitrogen dioxide by as much **as 8%.**



9 out of 11 air quality monitors near Heathrow are within legal limits

The two that breach are **next to the M4**



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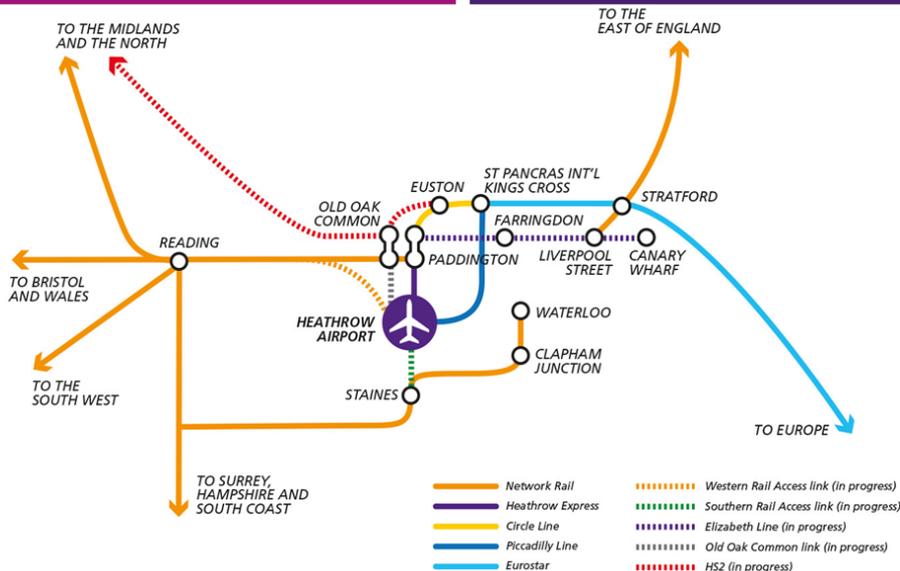
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Surface transport

70% of the UK will be within 3 hours of Heathrow by 2030

We have committed to the NPS target of at least 50% of passenger journeys to be made by public transport by 2030

28 tph to Heathrow by early 2020s up from 18 tph today



Heathrow is the UK's largest coach and bus interchange



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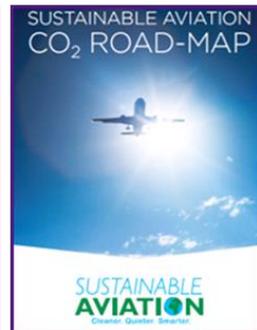
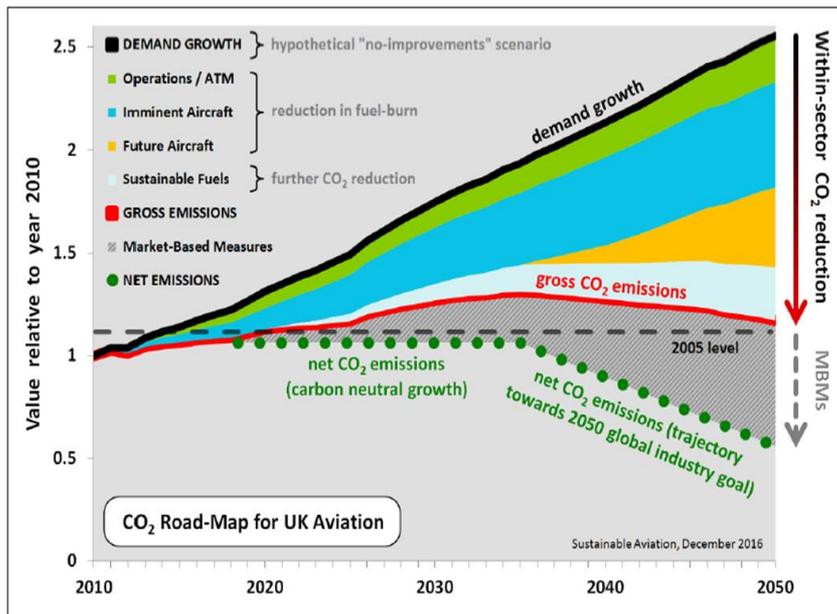
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Carbon

We can decouple growth in traffic from growth in emissions, and **further reduce CO2** through carbon trading

ICAO goal of **CNG 2020** through CORSIA
Heathrow goal of **Carbon neutral expansion**



Establishing a **Centre of Excellence** for sustainability in aviation
your.heathrow.com/centreofexcellence



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Using our scale & influence to drive change

HEATHROW'S ROADMAP TO CARBON NEUTRAL GROWTH

Heathrow

We've set out our initial thinking on how we will achieve our aspiration for growth from our new runway to be carbon neutral. In practice this will mean no net growth in emissions from additional flights following expansion. Our plan shows how we want to take a lead on the carbon emissions challenge globally through 4 key action areas:

ACCELERATING NEW AIRCRAFT TECHNOLOGY

Supporting electric flight by offering free landing fees for a year at the airport for the first aircraft to operate a commercially viable electric flight.

FREE FEES



Offering financial incentives, like cheaper landing fees, for cleaner and quieter aircraft. Investigating the use of environmental performance as a key consideration for flight slot allocations.

MODERNISING AIRSPACE AND MAKING GROUND OPERATIONS MORE EFFICIENT

Reducing emissions from aircraft on the ground through reduced taxi times, increased access to on-stand power sources, and fewer engines used while moving around the airport.



Modernising airspace around Heathrow in line with the UK Government's national plans.

ENCOURAGING SUSTAINABLE ALTERNATIVE FUELS



Providing on-airport infrastructure for airlines to use sustainable fuels at Heathrow, while also supporting their development.



Consulting with airlines and local authorities on how landing charges and biofuel plants could be used in future to incentivise and facilitate the use of sustainable fuels.

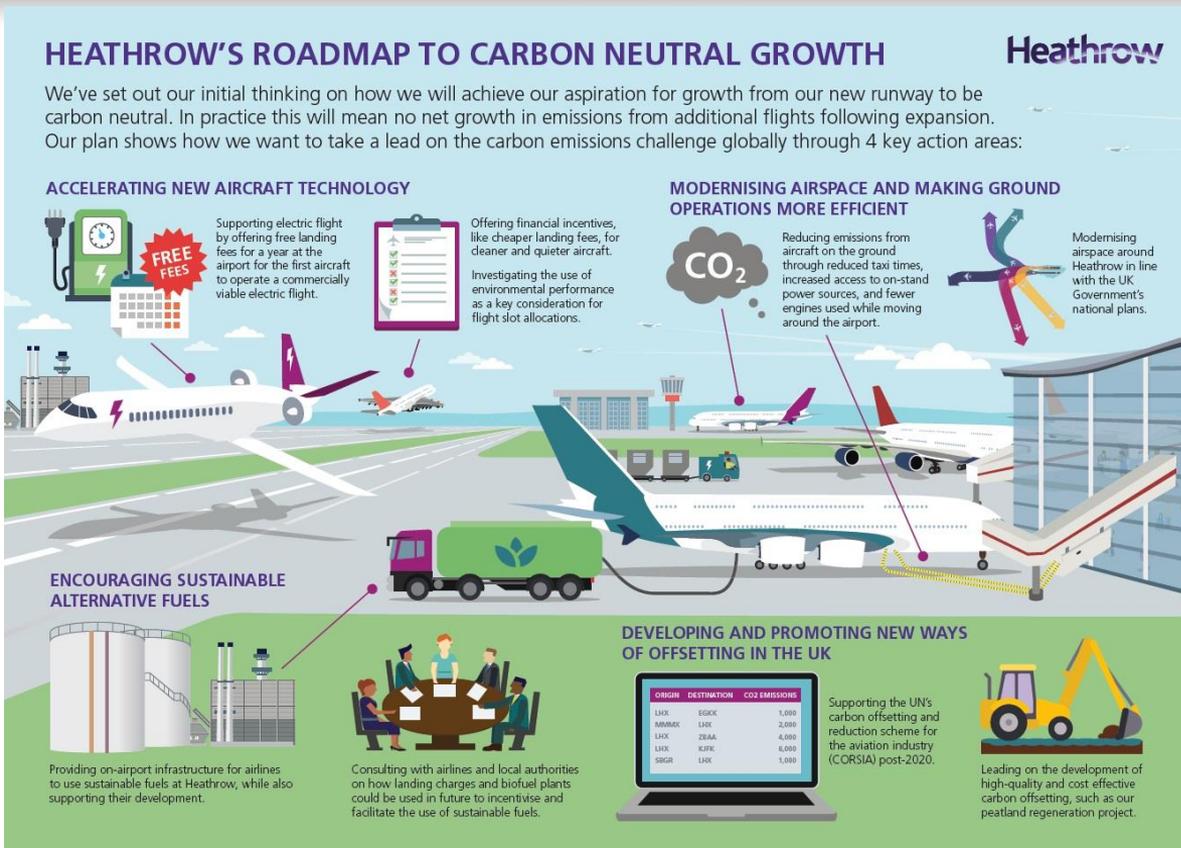
DEVELOPING AND PROMOTING NEW WAYS OF OFFSETTING IN THE UK

ORIGIN	DESTINATION	CO2 EMISSIONS
LHR	EGDK	1,000
MAN	LHR	2,000
LHR	ZSAA	4,000
LHR	KJFK	6,000
SGR	LHR	1,000

Supporting the UN's carbon offsetting and reduction scheme for the aviation industry (CORSIA) post-2020.



Leading on the development of high-quality and cost effective carbon offsetting, such as our peatland regeneration project.





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“You fly, you
protect”:
peatland
& natural
climate
solutions





A UK/ European perspective - accelerating debate on climate: politically....

Heathrow: former
Leader of the
opposition Labour
Party



Heathrow: recent
Extinction Rebellion
protest, April 2019

A study in changing Government policy: the last two decades in the UK:

- 2003 Government White Paper proposes three new runways nationally
- 2015 Airports Commission: case for more than one new runway not clear, partly because of carbon
- 2019 Committee on Climate Change report: aviation demand management may be needed to reach a net-zero carbon target for the economy by 2050



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An accelerating debate on climate: publicly....



Greta Thunberg's train journey through Europe highlights no-fly movement

Success of Sweden's flygskam campaign means rail-only travel agencies are getting a boost



- A word meaning “the shame of flying” now exists in Swedish, Danish, Dutch, German



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An
accelerating
debate on
climate:
investors



- 500 signatories
- Assets of nearly \$100 trillion



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THANK YOU