

# Air Quality and Carbon

## An expanded Heathrow Airport is capable of meeting legal air quality requirements and complying with the UK's carbon obligations.

Poor air quality is caused by harmful levels of pollutants, including nitrogen dioxide, which can have serious impacts on human health. Emissions from diesel cars, vans and lorries are major contributors to high levels of nitrogen dioxide.

The Government has developed a national Air Quality Plan to tackle harmful emissions. This plan is being revised and a new draft plan will be published for public consultation by 24 April 2017.

The Government considers that an expanded Heathrow Airport is capable, with the right measures, of meeting legal air quality requirements.

The airport must play its part in this. Any planning application for development from Heathrow Airport must provide details of how it would:

- Achieve its pledge of at least 50% of passengers using public transport to get to the airport by 2030, and 55% by 2040; and
- Achieve its pledge of a 25% reduction in staff car trips by 2030, and 50% by 2040.

“ This Government will only grant development consent if we remain satisfied that a new runway will not impact on the UK's compliance with its air quality obligations. ”

Chris Grayling, Secretary of State for Transport, 25 October 2016

The Government also expects the airport to use an extensive range of measures to improve air quality, which could include:

- Rewarding airlines for using cleaner aircraft;
- Reducing emissions from aircraft before they get to the runway; and
- Charging points and priority parking for zero- or low-emission vehicles.

## Carbon

Additional aircraft movements would be the largest source of carbon emissions at an expanded Heathrow.

The Climate Change Act 2008 set a 2050 target for the UK to reduce its greenhouse gas emissions by at least 80% from 1990 levels.

Although international aviation emissions are not included in this target, the Airports Commission looked at the different ways in which these emissions might be addressed by 2050.

The Government agrees with the Airports Commission's assessment that expansion at Heathrow is compatible with the UK's carbon obligations.

Heathrow Airport is expected to demonstrate best practice in reducing emissions of carbon and air pollutants during construction. This could include, for example:

- Sourcing materials locally to reduce transport distances;
- Using low-emission construction vehicles and equipment; and
- Transporting materials to the site by rail rather than road.

# Noise

Heathrow expansion would be accompanied by a range of measures to tackle the noise impacts of aircraft.

High exposure to noise is an annoyance, can disturb sleep and can also affect people's health. Aircraft operations are by far the largest source of noise emissions from an airport.

New technology is already making aircraft quieter. This trend is expected to continue, with approximately 480-640,000 people expected to be affected by aircraft noise (at 55dB Lden) from an expanded Heathrow in 2030. Although this is up to 60,000 more people than would be affected without expansion, it is significantly fewer than the 770,000 who experience this level of noise today.

The Government expects particular efforts from Heathrow Airport to manage noise, with potential measures including:

- Providing people near the airport with predictable periods of respite from aircraft noise through runway alternation (noting that for those communities on final approach paths respite is expected to reduce from approximately a half to a third of the operating day);
- New binding noise performance targets in consultation with local communities and other interested parties; and
- A ban on scheduled night flights for six and a half hours each night.

Local communities and other interested parties will be consulted further about all of these measures before they are taken forward.

For those noise impacts that cannot be mitigated, Heathrow Airport has committed to providing insulation for schools, community buildings and residential properties most impacted by noise. A total of 160,000 households could be eligible to benefit from this.

For indicative representations of the areas which could be affected by noise from an expanded Heathrow and the areas which could be eligible for compensation or insulation, please see the interactive map table located nearby.



# Appraisal of Sustainability

Under the Planning Act 2008, in order for a National Policy Statement (NPS) to be designated it must undertake an Appraisal of Sustainability (AoS).

The main purpose of an AoS is to ensure that the likely environmental and socioeconomic effects of the NPS, at a national level, are identified, described and evaluated.

The AoS examines the likely social, economic and environmental impacts that could arise as a result of the designation of the Airports NPS, including an assessment of alternatives to the Heathrow Northwest Runway scheme.

The AoS considers the potential impacts of expansion, without the benefits of the mitigation package put forward by the scheme promoters, unless otherwise stated.

All three shortlisted scheme promoters continued to refine their proposals after the formal submission of their scheme designs to the Airports Commission in May 2014. These refinements were not captured within the Airports Commission's appraisals, but have been assessed within the AoS.

During later stages of detailed design, further variations are expected in order to continue to reduce negative environmental and social effects.

In addition, the Government has continued to work on environmental impacts and the development of the best possible package of supporting measures to mitigate the impacts on local people and the environment.

