Gatwick's Northern Runway Project

Briefing for Eastbourne Borough Council's Scrutiny Committee

There is a strong case for growth, supported by national policy

Government policy and scenarios underpin our plans:

1. DfT Forecasts of Aviation Demand (2017 and 2022)

2. Airports National Policy Statement (2018)

3. Making Best Use of Existing Runways (2018)

The Northern Runway Project case for passengers, stakeholders and local communities:

1. Enable pent-up demand for flying in the South East to be met, creating jobs and GVA in the process

2. Satisfy current demand for slots from existing airlines that want to grow (both short and long haul) and new airlines wishing to enter Gatwick – increasing market competition

3. Enable main runway peak operations to run at an average of 48 movements per hour (rather than 55), creating greater resilience to disruption

4. Reduce taxi times, runway hold times and airborne holding (stacking) by 33%, 43% and 25% respectively

5. Reduce the risk of delay and time overruns to the benefit of passengers, airlines and the local community.
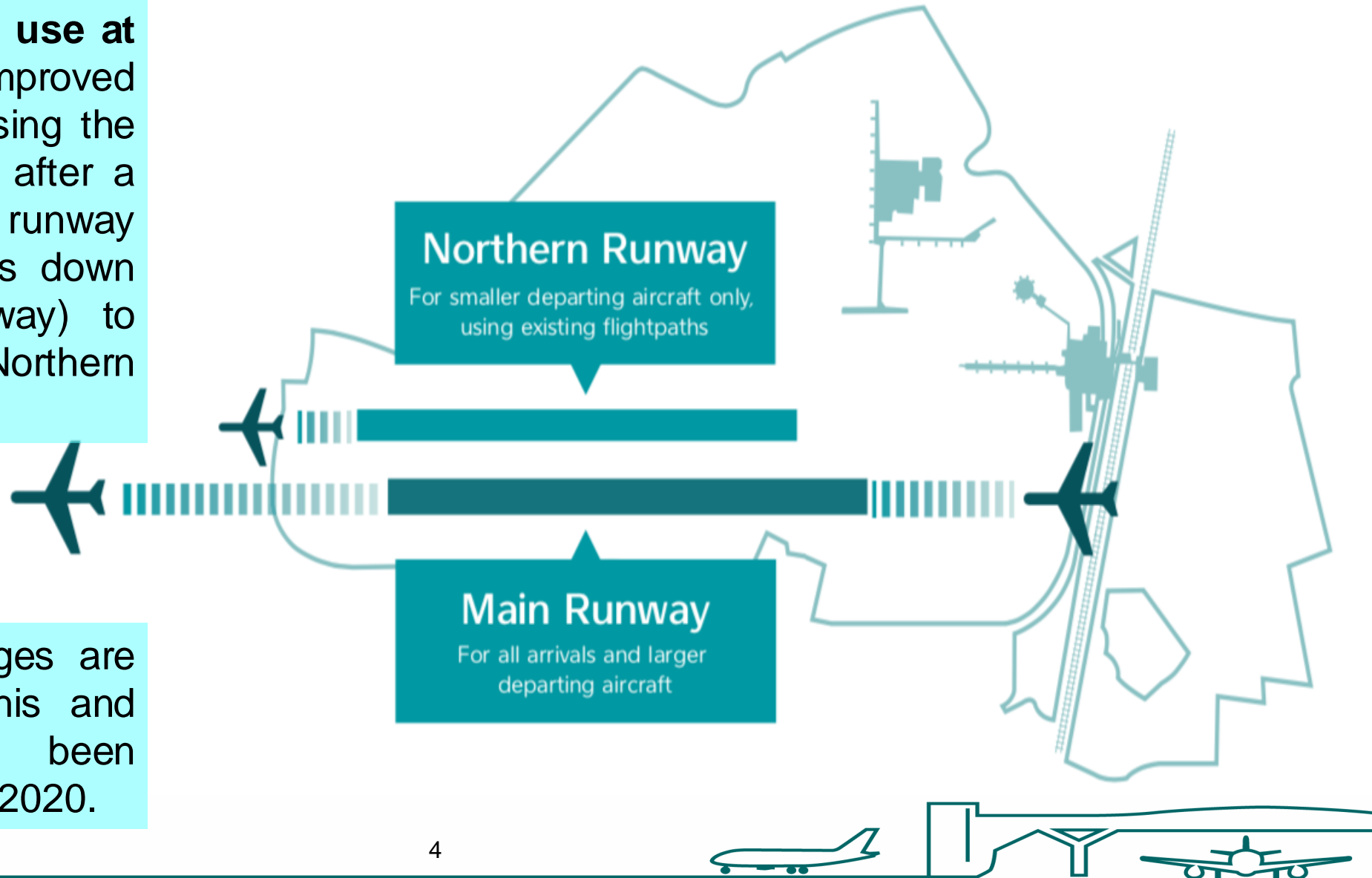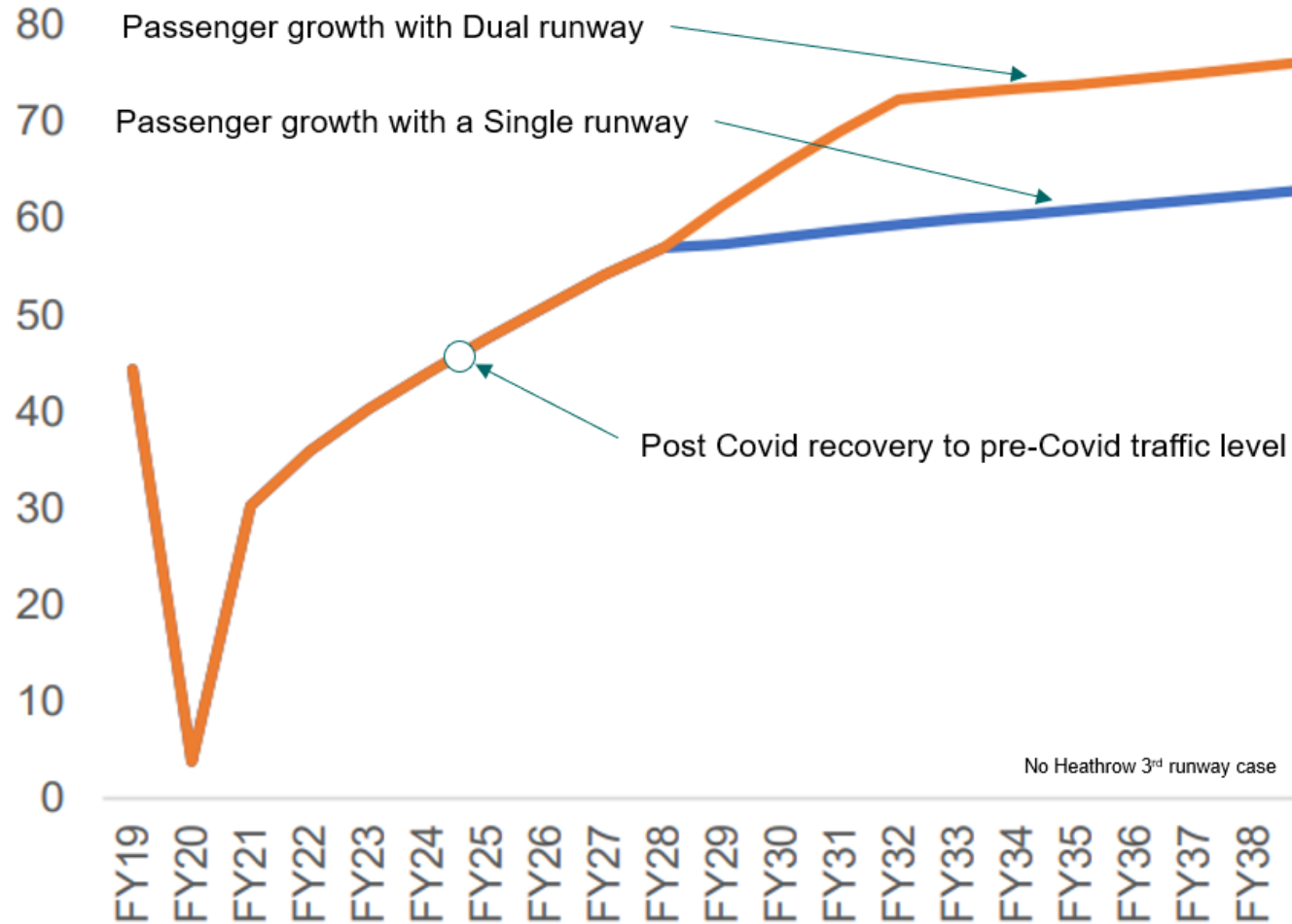
Our Northern Runway

The Dual Runway Concept

Only one runway is in use at any one time – improved capacity comes from using the necessary dead period after a landing on the main runway (while the aircraft slows down and vacates the runway) to allow a take-off on the Northern Runway.

Minimal airspace changes are required to facilitate this and these have already been approved by the CAA in 2020.

Northern Runway
For smaller departing aircraft only, using existing flightpaths

Main Runway
For all arrivals and larger departing aircraft

Passenger number projections

Passenger growth with Dual runway

Passenger growth with a Single runway

Post Covid recovery to pre-Covid traffic level

No Heathrow 3rd runway case

DUAL runway

- 80 million passengers per year by 2047
- 386k flights per year

SINGLE runway

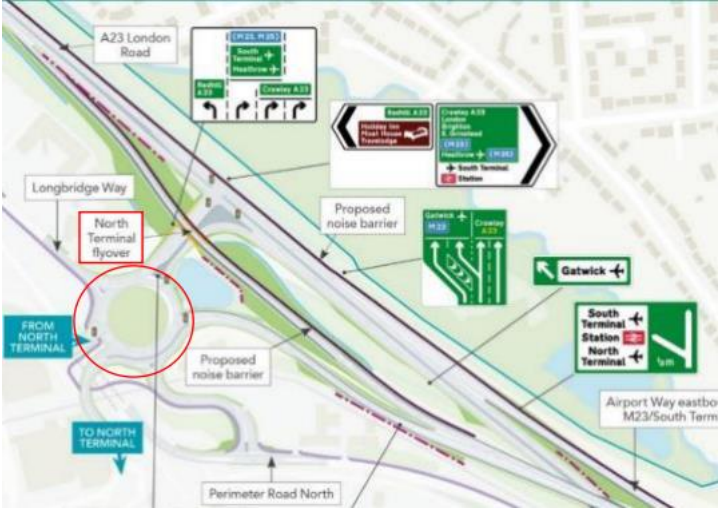- 67 million passengers per year by 2047
- 320k flights per year

Airfield Infrastructure required

New Pier 7 & stands

Small extensions to North & South Terminals

Taxiway changes

Taxiway changes

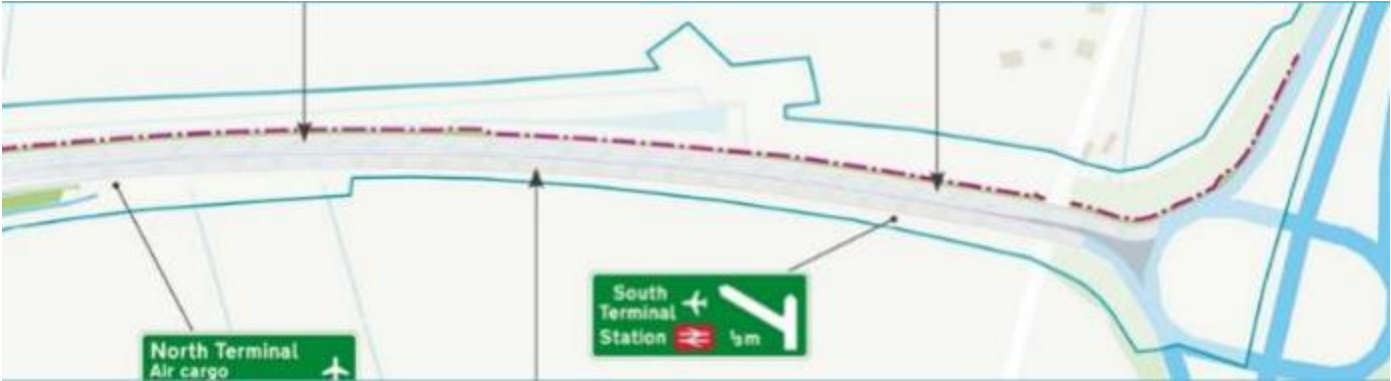# Surface Access Improvements

South Terminal Interchange

North Terminal Interchange

Longbridge Roundabout

M23 Spur

A number of changes were proposed to the road network around Gatwick in a second consultation in Summer 2022

Car parking locations

- Total additional parking spaces now proposed for NRP = c. 900

- This represents a reduction in provision per mppa from 1,000 (2019) to 765 (2038 with NRP)

North Terminal long stay
2,000 spaces

Car Park H
3,700 spaces

3,035 spaces

NORTH TERMINAL

Car Park J
890 spaces

SOUTH TERMINAL

REALIGNED NORTHERN RUNWAY

MAIN RUNWAY

Maintenance Area 01 Car Park
(after main construction)
2,400 spaces

Car Park X and V
2,370 spaces

Purple Parking

Transport and local infrastructure

**Share of airport-related (with Northern Runway operation) future traffic on local roads:**
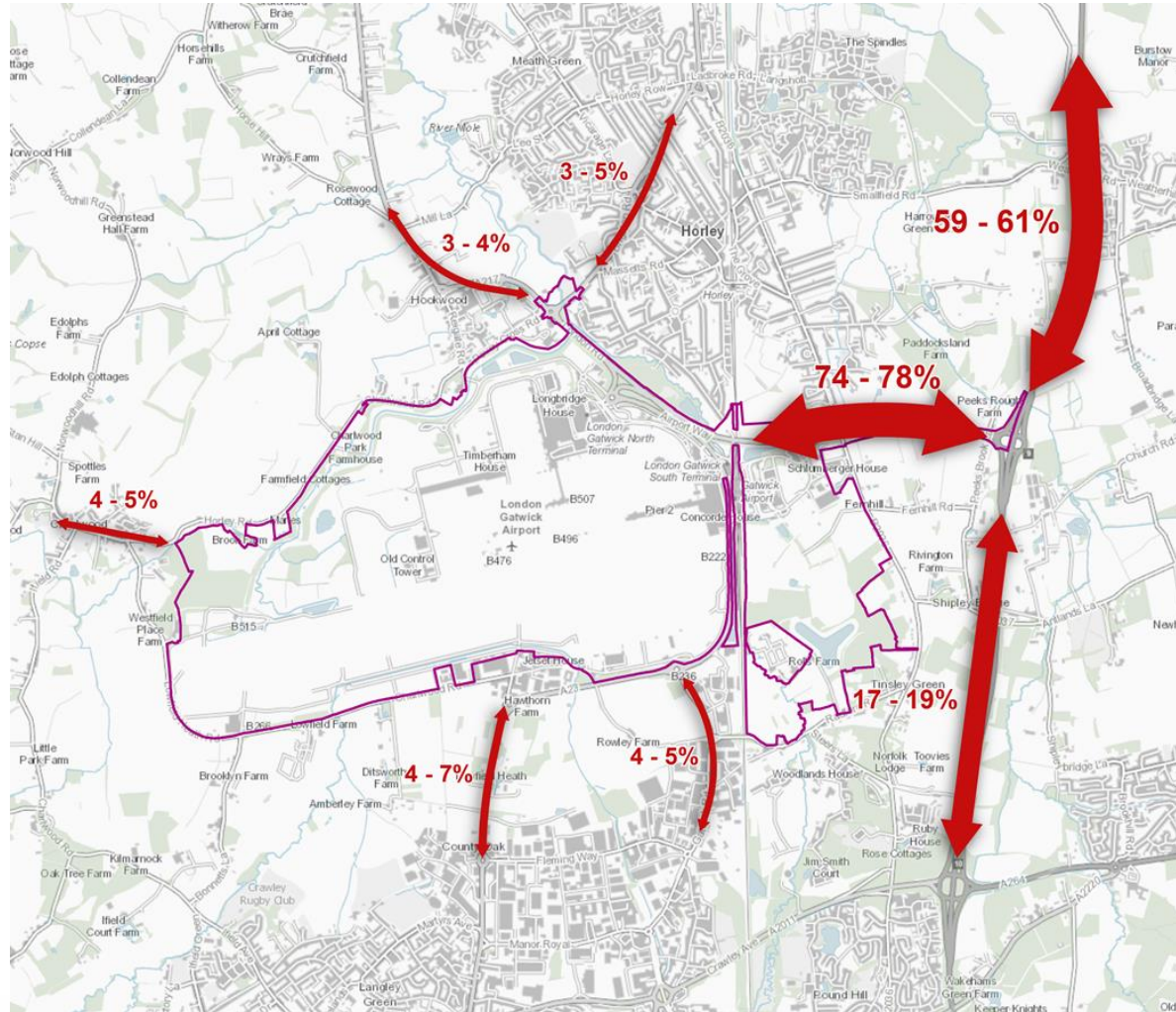
Potential Environmental Mitigation Areas

Longbridge Roundabout – surface water drainage measures, landscaping, ecological mitigation planting and open space replacement (approximately 2ha)

Existing staff car parking area - replacement open space (approximately 0.6ha)

Existing staff car parking area - replacement open space (approximately 0.4ha)
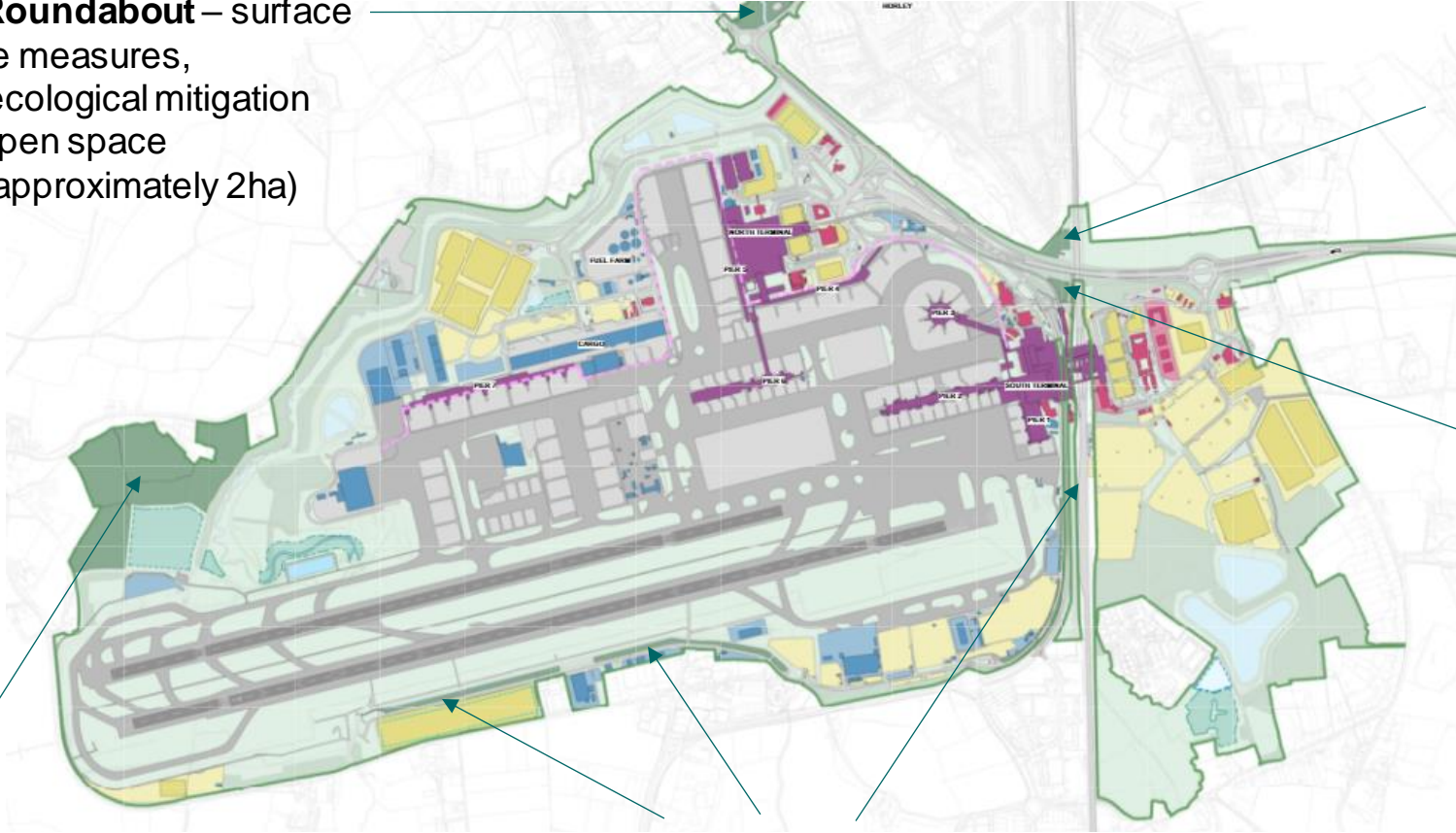
Brook Farm – ecological habitat creation (approximately 19ha required)

New hedging

Ecology and Biodiversity

Museum Field

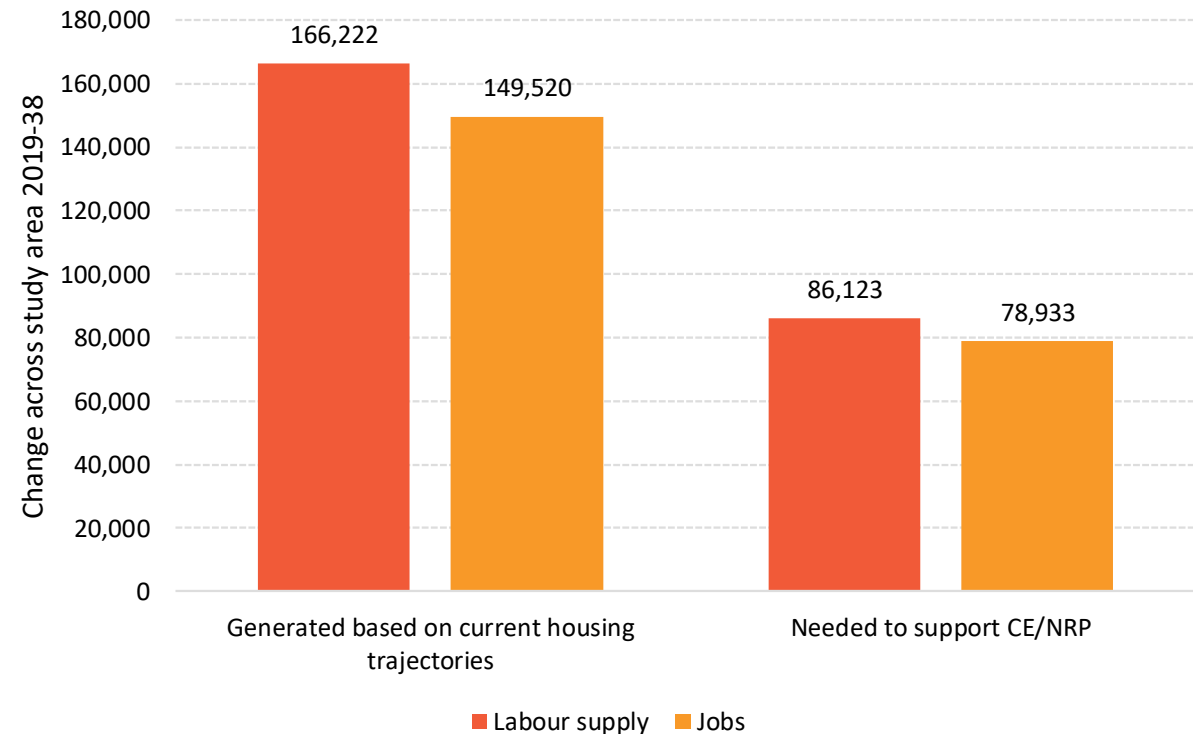**Car Park B**

Longbridge Roundabout

- The project has been exploring ways to maintain or improve the overall biodiversity balance following the Environment Act being granted Royal Assent in 2021, as well as replacing any loss of public open space.

- Several areas of on-airport and off-airport land have been selected and the Summer 2022 consultation contained early concept designs for how these might contribute to delivering the required outcomes.

Housing impact

- Assessed 12 scenarios total over 2019-38 period

- Outcomes:

  - **Current housing** trajectories expected to yield 166,000 labour force growth, supporting 149,000 jobs

  - **Forecast job growth** (with the Project) is 86,000 which would require labour force growth of 79,000

- **Conclusion - Current housing trajectories would provide more than enough labour supply**

Outcomes – Labour supply and jobs:

Chart: Change across study area 2019-38

Category	Labour supply	Jobs
Generated based on current housing trajectories	166,222	149,520
Needed to support CE/NRP	86,123	78,933

Jobs, growth and community benefits

Economics – local benefits

Summary of the economic impacts of the project in 2038:

Gatwick Airport — 3,200 jobs / £284m GVA

Gatwick Diamond — 10,900 jobs / £889m GVA

Coast to Capital LEP — 16,400 jobs / £1.3bn GVA

Five Authorities area — 18,400 jobs / £1.5bn GVA

Total UK — 20,300 jobs / £1.6bn GVA

Eastbourne aviation jobs in 2019

392 Total Aviation Jobs

- 19%
- 16%
- 38%
- 4%
- 23%

- Airlines
- Airports & Other Aviation Support Activities
- Supply Chain - Air Transport
- Aerospace & MRO
- Supply Chain - Aerospace & MRO
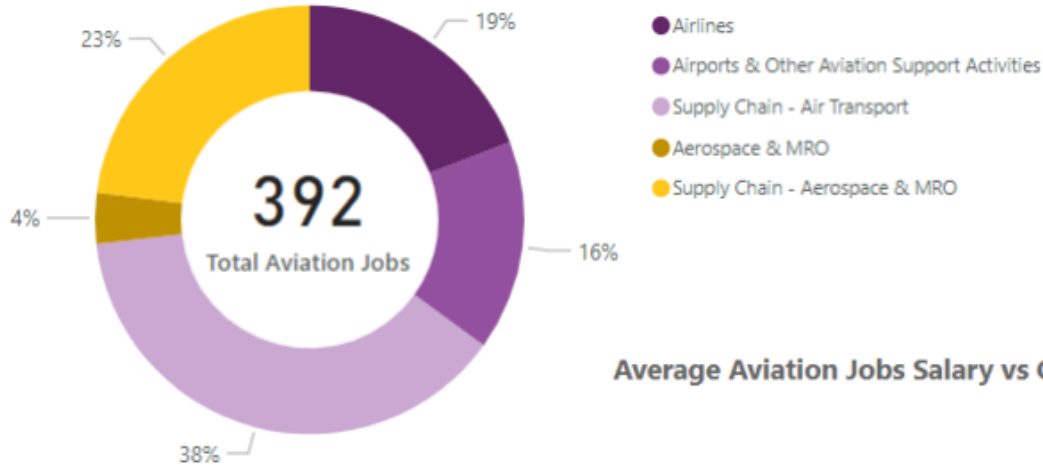
Average Aviation Jobs Salary vs Constituency Average

	Salary
Aerospace & MRO	£41,109
Airlines	£32,040
Airports & Other Aviation Support Activities	£41,290
Constituency Average Salary	£29,072

Aviation Jobs in Great Britain

Westminster Parliamentary Constituency

Eastbourne

Country	Region	PCON Code	Total Employment
England	South East	E14000684	48,400

Unemployment Rate 2019	Unemployment Rate 2020
4.9%	7.3%

Deprivation Ranking

251 — Out of 533 in England (1 being most deprived)

Number of Residents with Jobs in Air Transport

Airlines	75
Airports & Other Aviation Support Activities	62
Air Transport Supply Chain Jobs (Airlines + Airports & Other)	150
Total Air Transport Jobs	287

Number of Residents with Jobs in Aerospace & MRO

Aerospace & MRO	15
Supply Chain - Aerospace & MRO	90
Total Aerospace & MRO	105

Source: Aviation Jobs in Great Britain Dashboard – York Aviation, July 2021

Inbound tourism

- **Millions of visitors from overseas arrive in the UK through Gatwick each year**, underpinning extensive tourism receipts that support UK and regional employment and value-added, as well as boosting exports.

- Research from 2017 showed:

    - **5.5 million overseas visitors** arrived via Gatwick in 2017 spending **40.3 million nights** in the UK and adding £3.9 billion in expenditure.

    - **£4.7 billion of the UK's GDP** in 2017 was attributable to Gatwick's overseas visitors.

    - Overseas visitors spent **9.2 million nights staying in the South East** and 21.6 million nights staying in London, having arrived at Gatwick.

- Gatwick works actively with local partners to **promote tourism in Sussex, Surrey and the wider local area.**

Supporting local businesses

- Local and regional businesses can **register their interest in working with Gatwick as a supplier and sign up to future newsletters**, via a simple form on the airport's website.

- Small and medium-sized businesses based within RH, BN, CR, KT, TN, GU, PO, ME, CT, BR, SM and DA postcodes can register their interest to provide Gatwick and its supply chain with a range of services.

- Gatwick continues **to develop its strategy to ensure the airport's procurement and supply chain spending supports businesses based in the region** – building on the £113 million spent across the region in 2019.

- Gatwick **recently held an Economic Summit** to discuss with local business and economy stakeholders how they can work together to support growth and the regional economy.
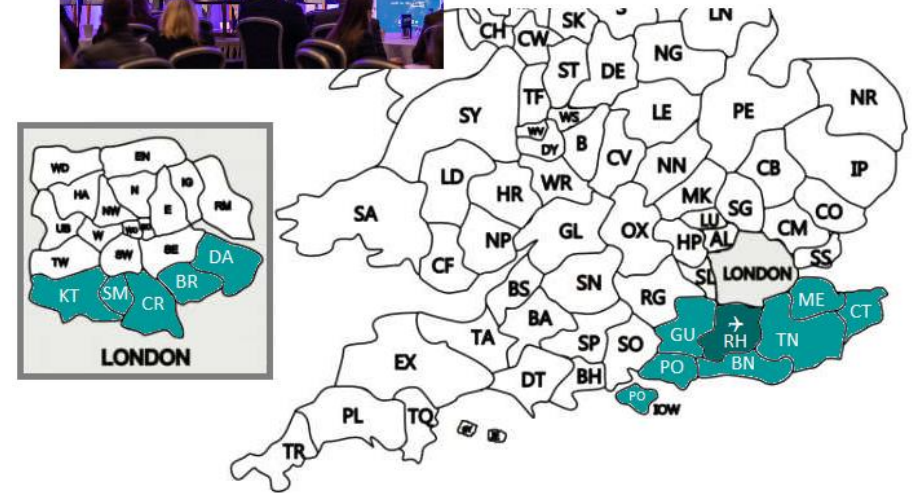
Community benefits

Our Northern Runway Project would generate additional opportunities to support local communities, for example, through:

- **Community Funding** - building on the success of the Gatwick Airport Community Trust and Gatwick Foundation Fund

- **Gatwick Education programme** – including access to in person and online events and resources

- **Partnerships to deliver key projects/outcomes** e.g. tourism, conservation

- An **Employment, Skills and Business Strategy Implementation Plan** will be submitted as part of the application for Development Consent.

Environmental mitigation and reaching net zero

Definitions

- GHG = greenhouse gas emissions
- Carbon used as shorthand

Carbon Neutral

- No GHG reduction necessary

- Offset GHG emissions

GAL has been carbon neutral since 2017 via ACA L3+

Net Zero

- Reduce GHG emissions as far as possible

- Removal of any residual GHG emissions

Absolute Zero

- Eliminate GHG emissions

- No offset or removals

20
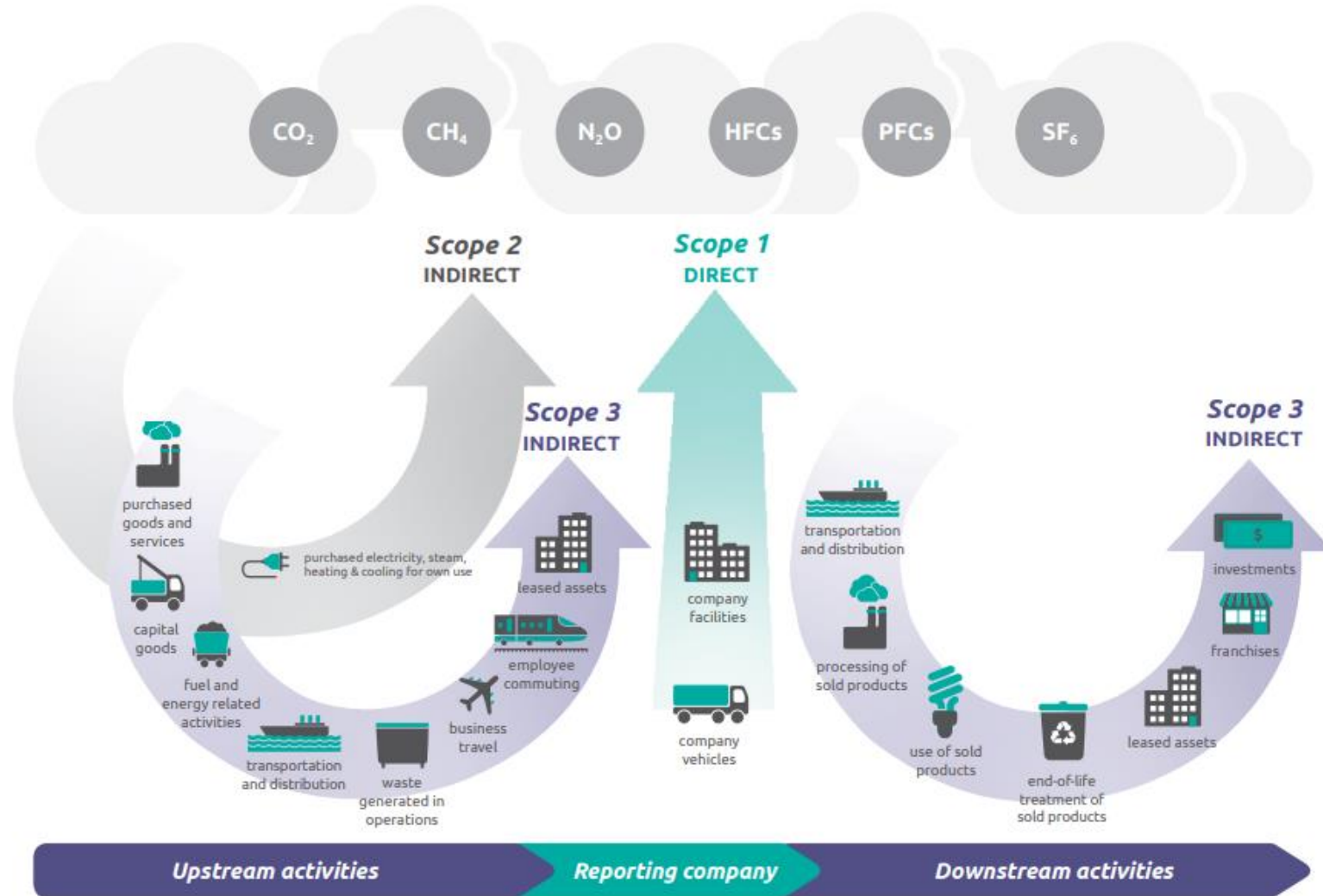
Scopes

GHG Protocol, World Resources Institute & World Business Council for Sustainable Development, 2013

airport carbon accreditation
MAPPING | REDUCTION | OPTIMISATION | NEUTRALITY

Which emissions can occur at an airport?

Scope 1

Emissions from airport controlled sources
- 01 Vehicles/ground support equipment belonging to the airport
- 02 On-site waste management
- 03 On-site waste water management
- 04 On-site power generation
- 05 Firefighting exercises
- 06 Boilers, furnaces

Scope 2

Emissions from purchased electricity
- 07 Off-site electricity generation
  - A Heating
  - B Cooling
  - C Lighting

Scope 3

Emissions from other sources related to the activities of an airport
- 08 Aircraft landing
- 08 Aircraft taking off
- 10 Aircraft ground movements
- 11 Auxiliary Power Unit
- 12 3rd party vehicles/ground support equipment
- 13 Passenger travel to the airport
- 14 Staff commute
- 15 Off-site waste management
- 16 Off-site water management
- 17 Staff business travel

Note: The presented list of possible emissions sources at the airport is not exhaustive. Furthermore, the operational structure of every airport is different. Therefore, not all of the depicted emissions sources are present at every airport.

Design: inextremis.be - Illustrations: fotolia.com

Gatwick Airport Limited's Greenhouse Gas Emissions

Gatwick Airport Limited's Scope 1, 2 and 3 emissions are detailed below including a breakdown of each[24]. Information on data boundaries and on verification is provided overleaf.

	2019 Location-based	2019 Market-based	2020 Location-based	2020 Market-based	2021 Location-based	2021 Market-based	Externally Verified[1]
Scope 1 direct emissions tCO_2e	12,223	–	7,778	–	10,163	–	✓
Scope 2 direct emissions tCO_2e	25,443	5	15,394	0[25]	13,024	128[26]	✓
Scope 3 indirect emissions total tCO_2e	696,628	683,512	193,125	193,126	136,973	131,087	✓
Total Scope 1&2 direct emissions tCO_2e	37,666	–	23,172	–	23,187	–	✓
Total Scope 1,2 and 3 tCO_2e	734,294	695,740	216,297	200,094	160,159	141,377	✓
Emissions Breakdown (tCO_2e)							
Scope 1							
Natural Gas	9,705		6,581		8,202		✓
Vehicle and equipment fuel	1,215		700		619		✓
Fire training materials (including propane)	34		16		36		✓
Refrigerant gas	1,269		481		1,306		✓
Scope 2							
Purchased electricity (location-based)	25,443		15,394		13,024		✓
Purchased electricity (market-based)	5		0[25]		128		✓
Solar	0		0		0		✓
Scope 3							
GAL business travel (tCO_2e)	418		62		48		✓
Other airport operations[27] (tCO_2e)	26,484		13,024		10,203		✓
Airport staff commuting (estimated, tCO_2e)	45,482		21,582		19,443		✓
Passenger surface access (estimated, tCO_2e)	195,692		38,176		28,646		✓
Aircraft take-off and landing cycle (estimated, tCO_2e)	426,923		118,318		76,361		✓
Aircraft engine testing (estimated, tCO_2e)	1,629		1,963		2,272		✓

Second Decade of Change and 2030 goals

- Northern Runway Project developed alongside our second Decade of Change to 2030 sustainability policy

- Policy sets out the **Airport's goals for 2030** on:

  - **the transition to Net Zero** for Airport, Surface Access and Aircraft emissions by 2050

  - contributing to **local environmental stewardship** (waste, water and biodiversity), and

  - **supporting the local economy, people and communities** (noise, partnerships, diversity and accessibility).

- The 2030 goals take account of **local and national sustainability priorities**, and allow Gatwick to play a role in supporting the UK reaching net zero and the UN Sustainable Development Goals.

SECOND
DECADE OF CHANGE
TO 2030

Sustainability Policy
Our Second Decade of Change to 2030

YOUR LONDON AIRPORT
Gatwick

Net zero

6. Airport Emissions:

- Reducing GAL Scope 1 and 2 emissions by a further 25% by 2030 (i.e. reach 80% under 1990 baseline) as part of a science-based goal of reaching net zero before 2040;

- Sourcing 50% of airport network electricity and 50% of heat network from UK renewable sources via onsite generation and direct purchase agreements (PPAs) by 2030;

- Requiring all GAL and airport duty vehicles, ground support equipment and mobile construction equipment to meet zero or ultra-low emission standards by 2030.

7. Aircraft and Surface Access Emissions:

- Playing our part in UK aviation and ground transport transition to net zero carbon.

- Working with airlines and fuel providers to implement the Sustainable Aviation decarbonisation roadmap and interim goals; and setting a science-based target for Gatwick.

- Working with transport partners to increase airport passenger and staff usage of public transport and zero and ultra-low emission journey modes to 60% by 2030.

KPI	2019	2020	2021	New KPI for 2021	Externally Verified[1]
Airport Emissions					
Airport-wide energy and fuel consumption					
Natural gas (MWh)	61,018.24	40,276.94	47,745.64		✓
Electricity (MWh)	150,888.78	96,913.25	89,108.60		✓
Vehicle and equipment fuel (Ml)	3.29	1.24	0.96	✓	✓
Refrigerant gas (kg)[19]	790	315	887	✓	✓
GAL energy and fuel consumption (sub-set of Airport)					
Natural gas (MWh)	52,786.69	35,792.43	44,781.70		✓
Electricity (MWh)	99,576.69	66,026.89	61,387.33		✓
Vehicle and equipment fuel (Ml)	0.45	0.26	0.24	✓	✓
Refrigerant gas (kg)	790	315	887	✓	✓
Propane (tonnes)	11	5	12	✓	✓
GAL direct emissions % cumulative change on 1990 baseline 82,843.5 tCO_2e (total scope 1 and 2, location-based accounting)	-54.53%	-72.03%	-72.01%		✓
Total Scope 1 and 2 per passenger (kg CO_2e)	0.81	2.28	3.71		✓
Percentage of electricity from renewable sources					
% REGO certificated	100.00%	100.00%	99.62%	✓	✓
% sleeved via power purchase agreements (PPA)	0%	0%	0%	✓	✓
% generated onsite	0.02%	0.05%	0.05%	✓	✓

[19] For clarity and comprehensiveness, refrigerants have been included at the airport level but these result from the GAL operations.

KPI	2019	2020	2021	New KPI for 2021	Externally Verified[1]
Aircraft and Surface Access Emissions					
GAL business travel (tCO_2e)	418	62	48		✓
Other airport operations[20] (tCO_2e)	26,484	13,024	10,203		✓
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Aircraft engine testing (estimated, tCO_2e)	1,629	1,963	2,272		✓
Surface access to the airport					
Passenger public transport use (%) – combined rail, bus/coach use	47%	Not available	42%[21]		✓
Air Quality					
Air Quality – NO_2 annual average at on-Airport site LGW3 (ugm-3)	29	17	18		✓
Air Quality – PM_{10} annual average at on-Airport site LGW3 (ugm-3)	14	14	14		✓
Air Quality – $PM_{2.5}$ annual average at on-Airport site LGW3 (ugm-3)	9	8	9		✓

[20] Includes airport third parties ground fuels and electricity; electricity T&D losses, airport water, wastewater and waste systems.

[21] Only partial data available for 2021, covering the period June-December 2021, due to the impact of COVID-19 on CAA survey activity.

Carbon – Gatwick today

- Gatwick was **London's first carbon neutral airport**.

- Gatwick has held **Airport Carbon Accreditation at level 3+ 'Neutral' level for direct emissions** (Scope 1 & 2 Fuels and Electricity) since 2017.

- Airport Carbon Accreditation is a **global carbon management programme for airports** that **independently assesses and recognises airports' efforts to manage and reduce their CO_2 emissions**.

NEUTRALITY

Airports at the 'Neutrality' level are carbon neutral – but to achieve this level, they have actively reduced their carbon footprint, engaged others on the airport site to do the same and offset any residual CO_2 emissions under their direct control.

46 **airports** have achieved carbon neutrality. These airports represent 7.1% of global air passenger traffic

airport carbon accreditation

Carbon – Northern Runway Project

- We are finalising our Carbon Action Plan (CAP) to explain how the airport will reach **net zero for Scope 1 and 2 emissions (i.e. those within our control) before 2040**

- The CAP will also describe how we intend to address GHG emissions from construction, surface access (passenger/staff journeys) and aircraft (Scope 3)

- The Government's Jet Zero strategy (July 2022) set a zero-emission target for "airport operations" in England by 2040 – there will be a call for evidence on this in early 2023

Gatwick's Northern Runway Project is compatible with the UK's Jet Zero obligations

In-sector interim targets

CO_2
- **38.2 $MtCO_2e$** in 2019
- **35.4 $MtCO_2e$** in 2030
- **28.4 $MtCO_2e$** in 2040
- **19.3 $MtCO_2e$** in 2050

Our High Ambition Scenario

% abatement from each measure in 2050

- 14 Mt CO_2e — 27%
- 8 Mt CO_2e — 15%
- 2 Mt CO_2e — 4%
- 9 Mt CO_2e — 17%
- 19 Mt CO_2e — 37%

Legend:
- ETS and CORSIA
- Fuel efficiency improvements
- Zero Carbon Aircraft
- SAF
- Abatement outside aviation sector

Department for Transport

Jet Zero Strategy
Delivering net zero aviation by 2050

July 2022
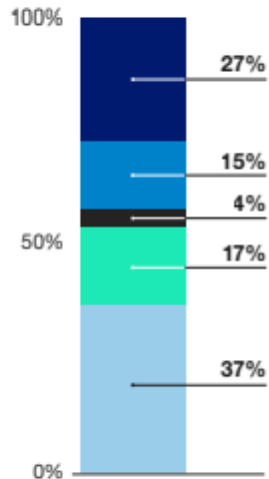
Gatwick's Northern Runway Project is compatible with the UK's Jet Zero obligations

Sustainable Aviation, the UK industry coalition published a Roadmap showing how UK aviation can reach net zero CO2 emissions by 2050, while accommodating further growth in line with the Government's Jet Zero Strategy.

This will be achieved through a combination of emission reductions (aircraft and fuel technologies and efficient operations) and international carbon pricing and offsets.

24% CO₂

Sustainable aviation fuels could deliver a reduction in emissions of up to **24%**

22%

360 new aircraft are currently on order by UK airlines, which will improve the fleet-average fuel efficiency of UK aviation by **22%** by 2050

14%
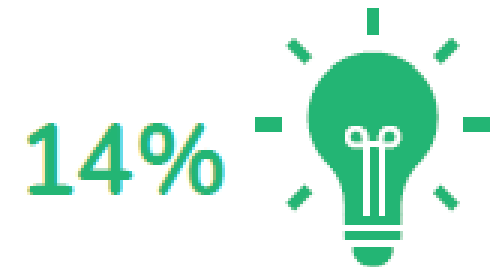
Airspace modernisation could deliver a reduction of up to **14%** in emissions by 2050

Aircraft noise

- Noise impacts are likely to be **no worse than 2018** levels by 2038

- **No flight path changes required** – so no noise impacts associated with new flight paths

- Departures only and mainly Code C (smaller aircraft)

- Mostly between 06:00 to 23:00, avoiding night-time

- Noise Insulation Scheme:

  - Inner Zone (450 households)

  - Outer Zone (3,300 households)

  - Schools with noise sensitive teaching spaces

- We have formed a **Noise Envelope Group** to support continuing work on our proposal to set limits on air noise from future operations at Gatwick within the DCO
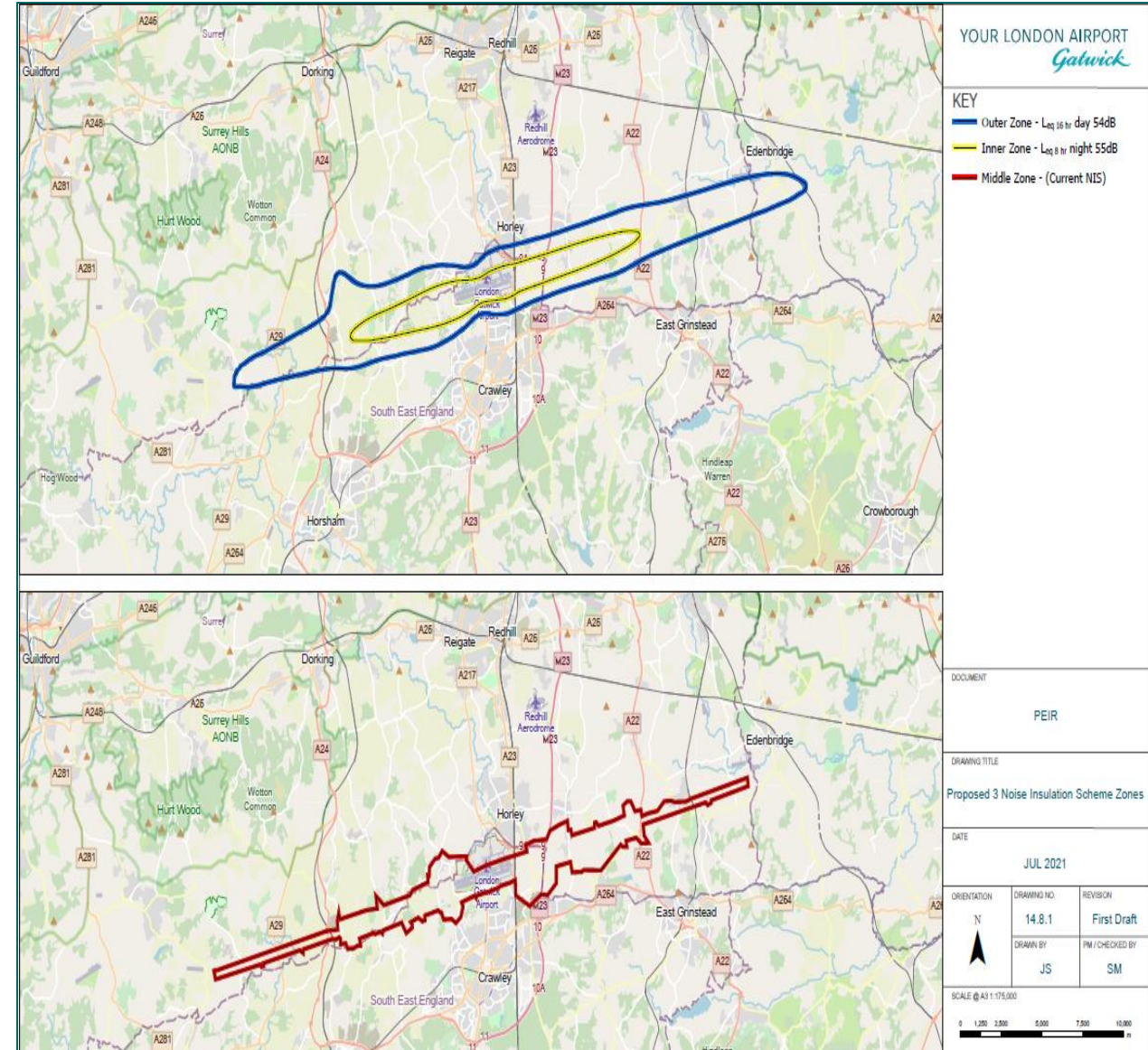
Air Quality

- Negligible impacts at all receptors for NO_2, PM_{10} and $PM_{2.5}$ in 2029 and 2032.

- No significant air quality effects predicted in any assessed years at human receptors.

- Habitat Regulation Assessment work is ongoing but no significant effects on sensitive ecological receptors are anticipated
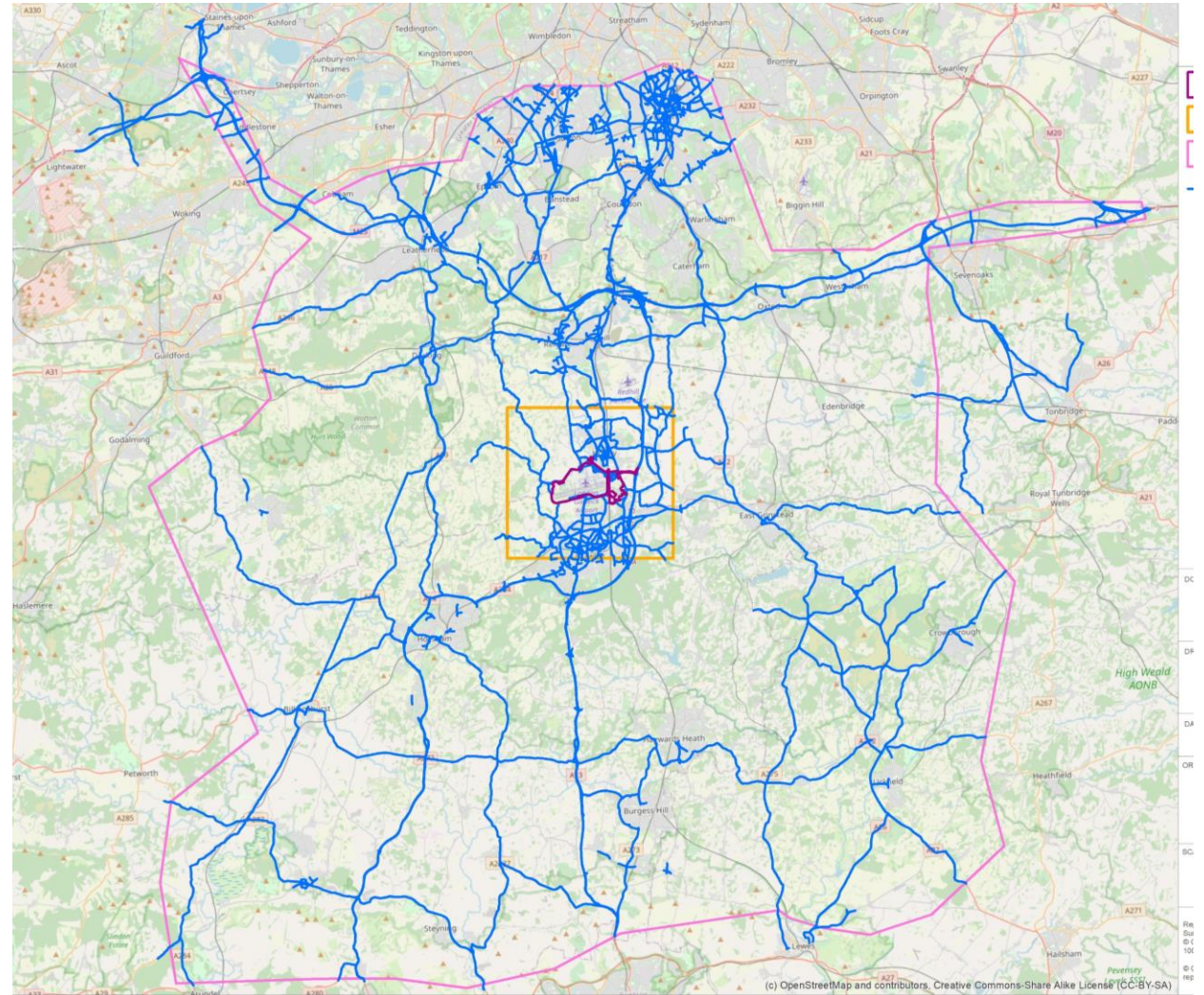
Development Consent Order process

The DCO process: The seven stages

We published our preliminary environmental information on the likely benefits and impacts of our draft proposals and consult local communities and statutory consultees on their views (as required by the 2008 Planning Act)

Once the application has been submitted, the Planning Inspectorate has 28 days to determine whether it meets the required standard to be examined. This includes deciding whether our consultation process in Stage 1 was adequate

Interested parties can send their views in writing to the Planning Inspectorate and also ask to be allowed to speak at one of the public hearings that will be held during the six months over which the Examination is held

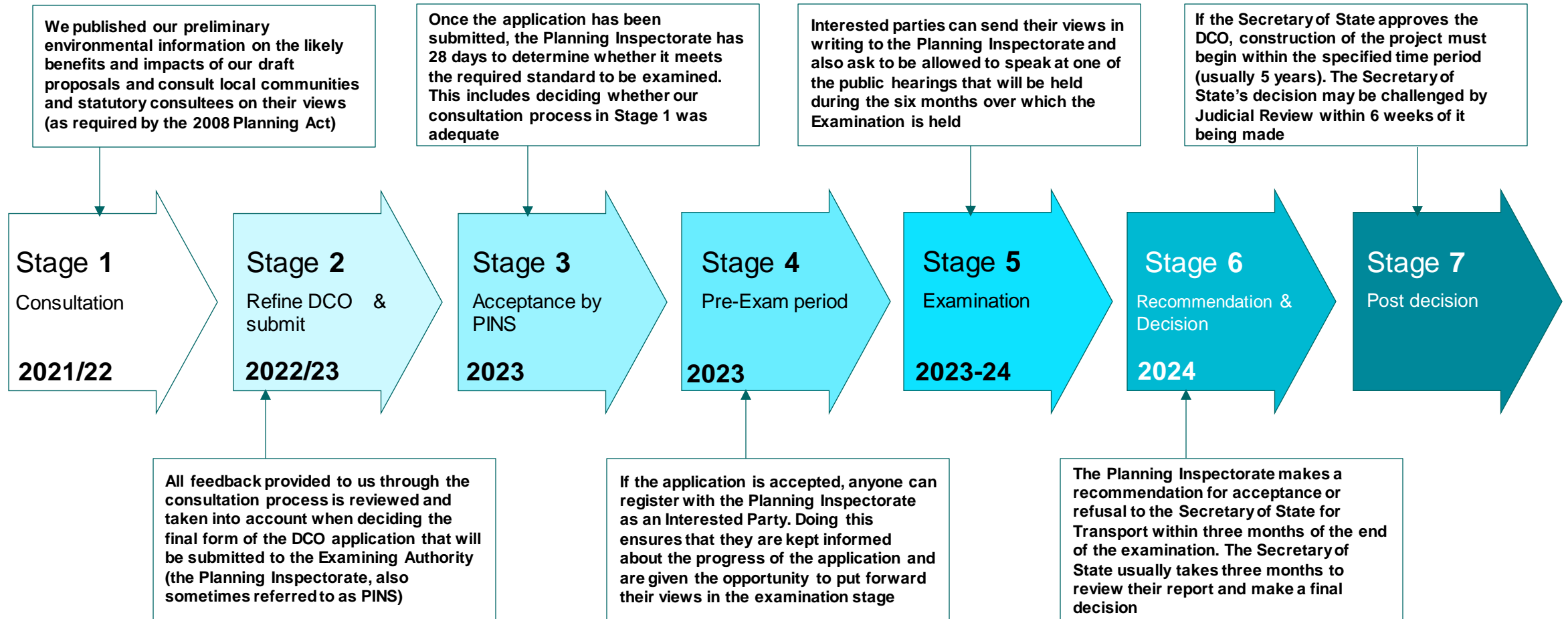If the Secretary of State approves the DCO, construction of the project must begin within the specified time period (usually 5 years). The Secretary of State's decision may be challenged by Judicial Review within 6 weeks of it being made

Stage 1
Consultation
2021/22

Stage 2
Refine DCO & submit
2022/23

Stage 3
Acceptance by PINS
2023

Stage 4
Pre-Exam period
2023

Stage 5
Examination
2023-24

Stage 6
Recommendation & Decision
2024

Stage 7
Post decision

All feedback provided to us through the consultation process is reviewed and taken into account when deciding the final form of the DCO application that will be submitted to the Examining Authority (the Planning Inspectorate, also sometimes referred to as PINS)

If the application is accepted, anyone can register with the Planning Inspectorate as an Interested Party. Doing this ensures that they are kept informed about the progress of the application and are given the opportunity to put forward their views in the examination stage

The Planning Inspectorate makes a recommendation for acceptance or refusal to the Secretary of State for Transport within three months of the end of the examination. The Secretary of State usually takes three months to review their report and make a final decision

END SLIDE