



Ricardo
Energy & Environment

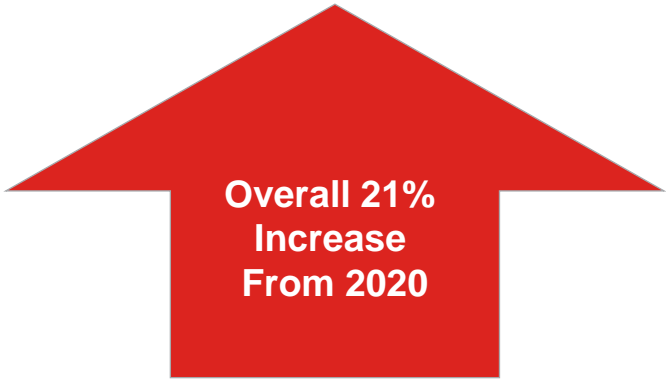
AGS Airports **Carbon Footprint 2021**

In accordance with the UK Government's Conversion Factors
for Company Reporting

Report for AGS Airports Limited

All Scope emissions = 104,984 tCO₂e

All figures reported are Market-based, unless specified otherwise.



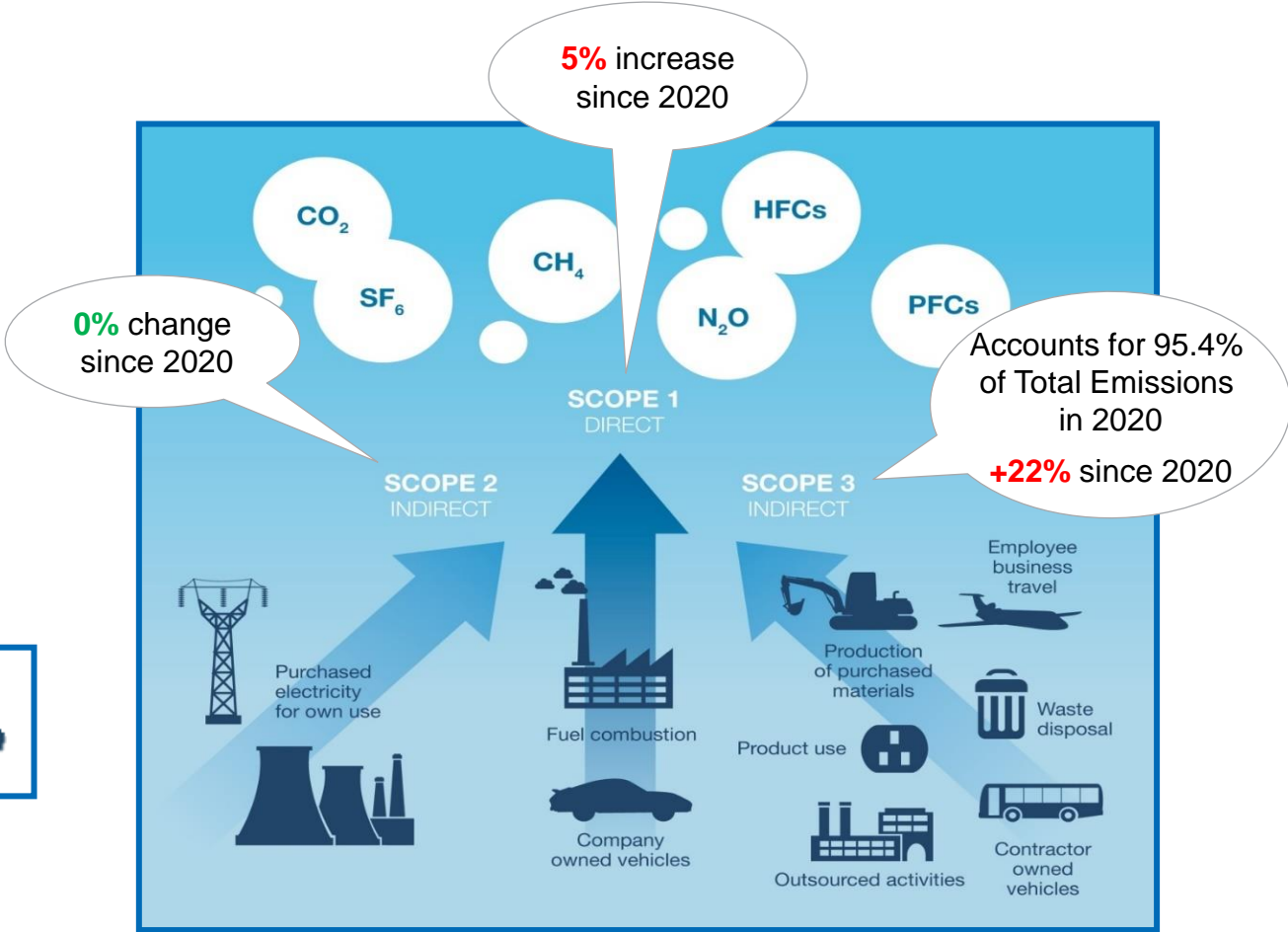
Overall increase likely primarily due to the removal of travel restrictions related to the Covid-19 pandemic, and approaching pre-pandemic business levels.



Number of aircraft movements have increased by 9.6% since 2020



Passenger numbers have increased by 5.8% since 2020



Scope 1 and Scope 2 emissions have seen an overall increase of 5% since 2020. This is likely due to increases in activity returning to pre-pandemic levels.

Included Emissions Sources

The following emissions sources are included in the 2021 carbon footprint for the AGS Airports:

Scope 1: Direct emissions:

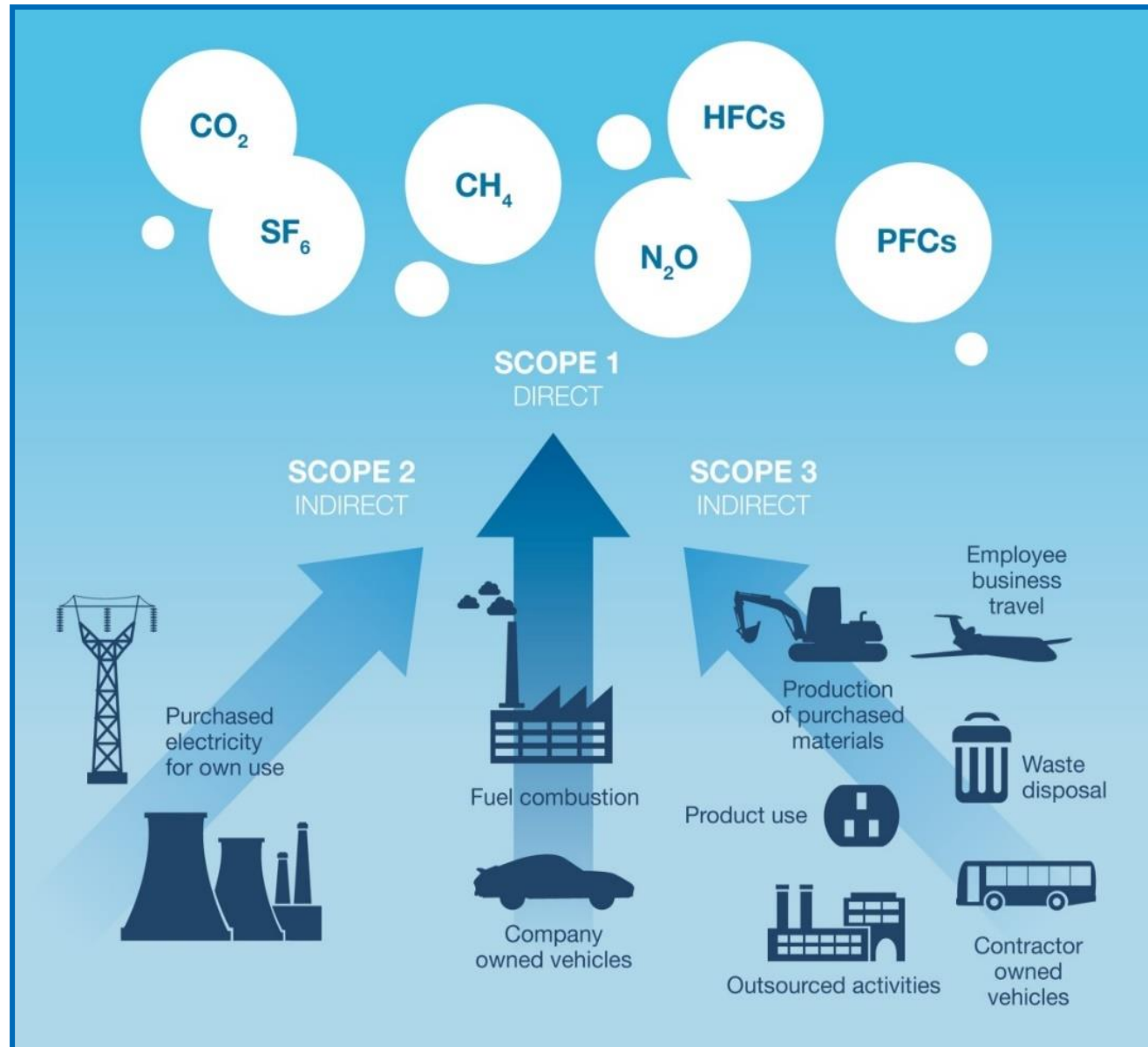
- Fuels burnt on site (boilers, generators, operational vehicles, fire training)
- Refrigerant gas losses
- Airport glycol based de-icer

Scope 2: Indirect emissions:

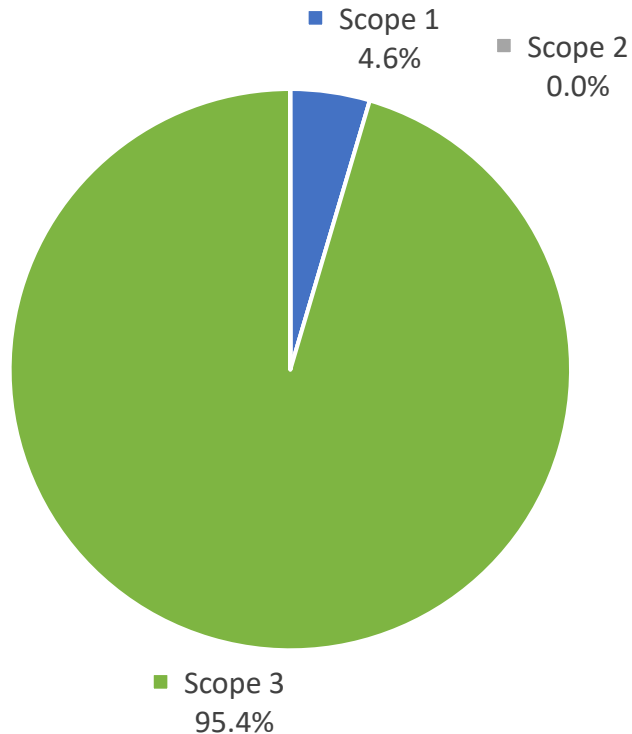
- Purchased electricity

Scope 3: Indirect emissions:

- 3rd party operational vehicle fuels
- 3rd party glycol based de-icer
- Tenant energy (any sub metered electricity and natural gas recharged to tenants)
- Aircraft LTO cycle, APU usage and engine testing
- Business travel
- Water supply and wastewater treatment
- Staff commute
- Passenger surface access
- Waste disposal and material use



Key Stats - Carbon Emissions by Scope 2021



	Total 2021 emissions (tCO ₂ e)	% of total emissions
Scope 1	4,800	4.6%
Scope 2	0	0.0%
Scope 3	100,167	95.4%
Outside of Scopes	17	0.02%
Total	104,984	100%

Scope 1:

Emissions on-site, or an associated process, from the combustion of fossil fuels, e.g. natural gas, oil, LPG, company-owned vehicles, airport glycol based de-icer.

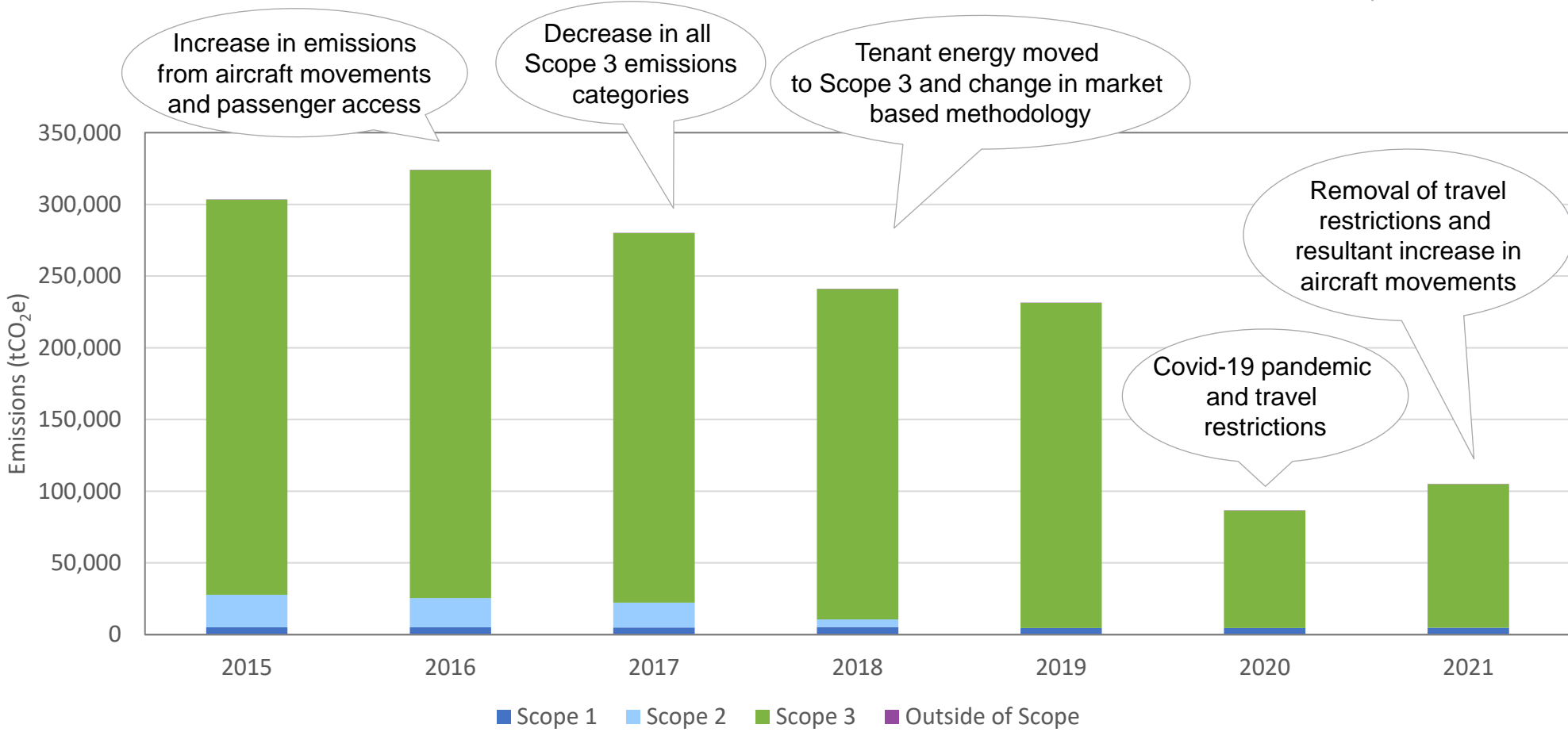
Scope 2:

Emissions associated with the use of electricity imported from the grid or from a third party supplier of energy in the form of heat or electricity.

Scope 3:

Scope 3 is a category that includes the emissions from all other indirect sources. Scope 3 emissions are the consequence of the activities of AGS but arise from sources not owned or controlled by AGS. These include aircraft movements, passenger and staff travel to the airport, airside activities, waste disposal, water, and business travel.

Key Stats - All Scopes Summary



As can be seen, Scope 3 emissions have always been the largest contributor to the AGS Airport’s carbon footprint. The majority of which are from aircraft activities and passenger access to the airport.

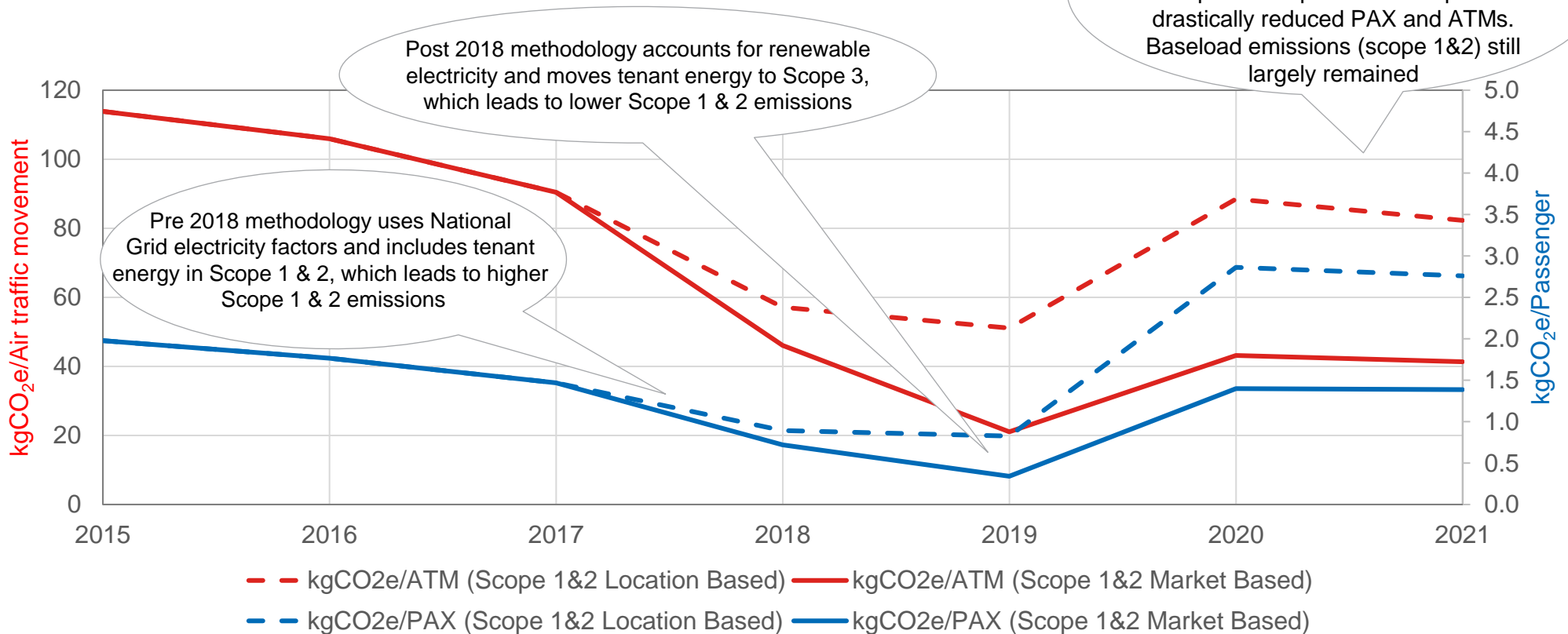
Key Stats - Intensity Metrics Comparison Over Time - 1



Intensity metrics allow comparison over time against other factors that fluctuate and have an impact on the environmental performance of the airports. The two chosen key performance indicators are aircraft movements and passenger numbers.

The chart below shows the scope 1&2 emissions per Aircraft Movement (ATM) and Passenger (PAX) for all AGS airports under both Location and Market-based reporting. The dashed lines are Location-based intensity metrics and the solid lines are Market-based.

2020 Global pandemic: increased emission intensity because the airport had to remain open and operational despite drastically reduced PAX and ATMs. Baseload emissions (scope 1&2) still largely remained



There has been an overall decrease in market and location based intensity metrics in 2021. During the recover from the pandemic, PAX and ATM numbers increased in 2021 at a faster rate than scope 1&2 emissions increased, causing a decrease in the intensity metrics for 2021. This suggests emission per aircraft journey and passenger reduced in 2021 when compared to during the pandemic. Emission intensity during the pandemic increased because the airport had to remain operational for limited travel, despite drastically reduced passenger numbers.

Key Stats - Intensity Metrics Comparison Over Time - 2



The table below shows the figures from the chart on the previous slide for:

- Location based and tenant energy in Scope 3 from 2018
- Market based and tenant energy in Scope 3 from 2018

	2015	2016	2017	2018	2019	2020	2021
ATM	243,122	239,424	245,217	230,122	219,867	105,961	116,140
PAX	13,998,509	14,381,510	15,116,571	14,754,592	13,610,698	3,273,904	3,463,704
% Change in ATM (year-on-year)	N/A	-1.5%	2.4%	-6.2%	-4.5%	-51.8%	9.6%
% Change in PAX (year-on-year)	N/A	2.7%	5.1%	-2.4%	-7.8%	-75.9%	5.8%
Scope 1 & 2 (tCO₂e) Location Based Tenant energy in Scope 3	27,679	25,360	22,176	13,134	11,230	9,371	9,558
kgCO₂e/ATM	113.8	105.9	90.4	57.1	51.1	88.4	82.3
kgCO₂e/PAX	2.0	1.8	1.5	0.9	0.8	2.9	2.8
Scope 1 & 2 (tCO₂e) Market Based Tenant energy in Scope 3	N/A*	N/A*	N/A*	10,589	4,626	4,574	4,800
kgCO₂e/ATM	N/A*	N/A*	N/A*	46.0	21.0	43.2	41.3
kgCO₂e/PAX	N/A*	N/A*	N/A*	0.7	0.3	1.4	1.4

* Note that for 2015-2017 no figures for the market based methodology are available

Key Stats - Intensity Metrics Comparison Over Time - 3



The table below shows the 2021 intensity metric figures for each of the three AGS airports for:

- Location based methodology
- Market based methodology

	Aberdeen 2021	Glasgow 2021	Southampton 2021	Total AGS 2021
ATM	64,503	39,720	11,917	116,140
PAX	1,148,982	2,078,962	235,760	3,463,704
% Change in ATM (year-on-year)	7%	15%	9%	9.6%
% Change in PAX (year-on-year)	12%	7%	-20%	5.8%
Scope 1 & 2 (tCO₂e) Location Based	2,766	6,022	770	9,558
kgCO₂e/ATM	42.9	151.6	64.6	82.3
kgCO₂e/PAX	2.4	2.9	3.3	2.8
Scope 1 & 2 (tCO₂e) Market Based Scope 2 Tenant energy in Scope 3	1,523	3,007	269	4,800
kgCO₂e/ATM	23.6	75.7	22.6	41.3
kgCO₂e/PAX	1.3	1.4	1.1	1.4

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AGS Airports Limited, a partnership between Ferrovial and Macquarie Infrastructure and Real Assets (MIRA), owns Aberdeen International Airport Limited (ABZ), Glasgow Airport Limited (GLA) and Southampton International Airport Limited (SOU). The airports operate 365 days per year, serving over 13.6 million passengers and handling around 220,000 aircraft movements. AGS airports also employ around 350 full time equivalent (FTE) employees.

To continue operating in an environmentally responsible manner, the airport needs to monitor and manage all its emissions from all operations – both those the airport is directly responsible for and those it can influence under its scope 3 emissions.

During the reporting year of 2021, national travel restrictions and the furlough scheme were still in place in the UK until spring in response to the ongoing Covid-19 pandemic. With the lifting of these restrictions, passenger numbers and aircraft movements saw an increase, and so did the related emissions.

The calculation of the annual carbon footprint will help AGS Airports Limited and the individual airports understand the different areas that contribute to their overall carbon footprint and monitor changes yearly. This process will help identify improvement opportunities, ultimately reducing AGS Airports' carbon footprint and associated costs. In addition, the success of any management strategies previously implemented can be evaluated.

**Aberdeen International
Airport**

GLASGOW
AIRPORT 

SOU
Southampton
Airport



Changes to Footprint Methodology

It is important to understand any changes in emissions that are a direct result of changes in carbon footprint calculation methodology, and not a change in operations. Therefore, the changes to the 2021 carbon footprint methodology that impact all airports are outlined below:

- WTT Emissions added to Electricity (Scope 3) in carbon footprint calculations in order to better encapsulate the emissions related to using the UK energy grid
- Staff commute emissions were calculated using a pre-covid survey and an average 2021 furlough figure to account for employees on furlough between January-September 2021.
- Business Travel methodology has been updated and improved in both 2020 and 2021 calculations. Estimates were slightly inflated in previous years but have now been corrected.
- Improved calculation methods for passenger surface access emissions was applied to 2019, 2020, 2021 calculations to more accurately show annual emission change
- CCD emissions estimated and reported separately from carbon footprint calculations in order to better encapsulate the emissions from aircraft movements beyond the immediate vicinity of the airport.
- Improved methodology for small aircrafts in Aircraft Movement emissions.
- Staff commute emissions were calculated using a pre-covid survey and an average 2021 furlough figure to account for employees on furlough between January-September 2021.

Carbon Emissions by Source and Activity 2021 - 1

The combined AGS Airport's emissions can be broken down by activity as seen in this table.

Emissions Source	Scope 1 (tCO ₂ e)	Scope 2 (tCO ₂ e)	Scope 3 (tCO ₂ e)	Outside of Scope (tCO ₂ e)	Total (tCO ₂ e)	% of Total Emissions
Aircraft movements	0	0	66,603	0	66,603	63.4%
Passenger surface access	0	0	22,442	0	22,442	21.4%
Utilities	4,285	0	3,567	0	7,851	7.5%
Staff commute	0	0	5,513	0	5,513	5.3%
Operational vehicles	436	0	539	14	990	0.9%
Aircraft Engine Tests	0	0	867	0	867	0.8%
Waste & Material Use	0	0	629	0	629	0.6%
Fire Training	79	0	0	3	81	0.1%
Business Travel	0	0	8	0	8	0.0%
Total	4,800	0	100,167	17	104,984	100.0%

The main activities that contribute to the footprint are aircraft movements and passenger surface access

Utilities include natural gas, heating fuels, de-icer, refrigerant usage in the terminal and electricity consumption

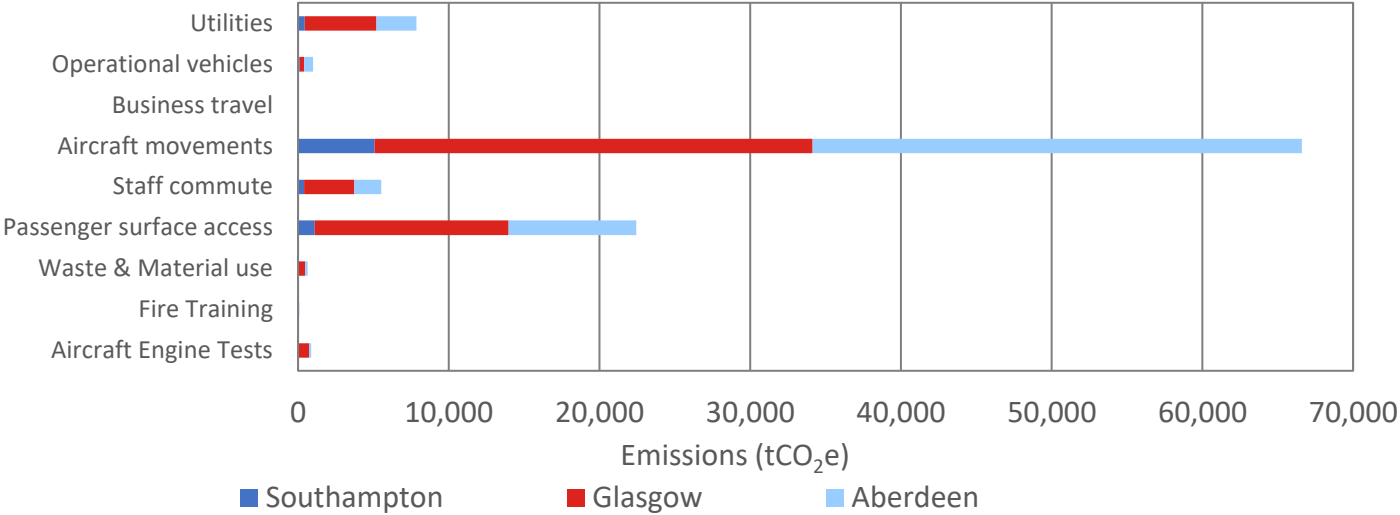
Fire training, waste and business travel contribute a small overall percentage of the carbon footprint

Accounts for the direct carbon dioxide (CO₂) impact of using biofuels in airport vehicles

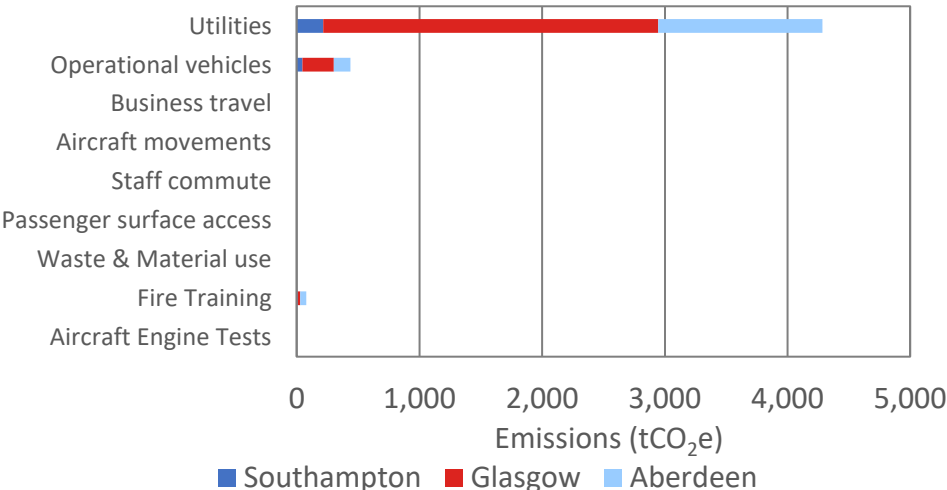
Carbon Emissions by Source and Airport 2021 - 2



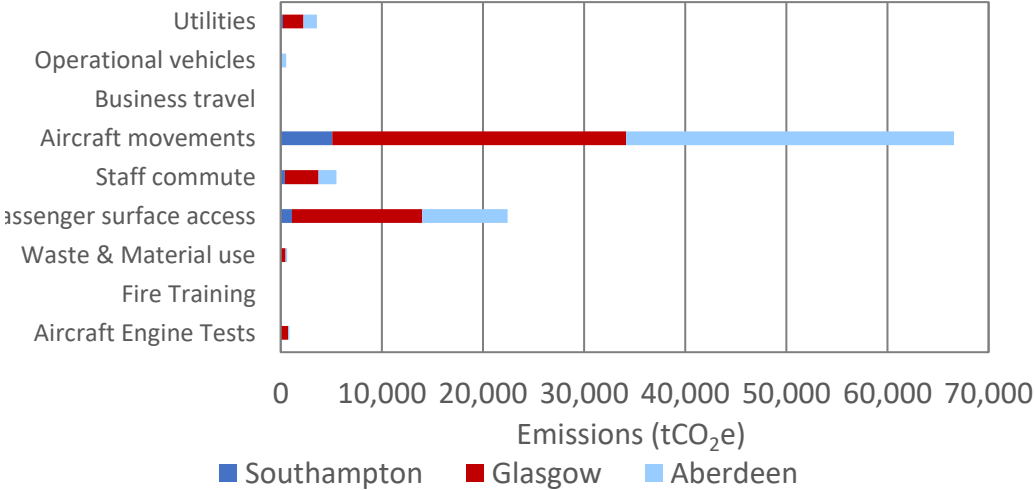
All Scopes carbon emissions split by source/activity



Scopes 1 and 2 carbon emissions split by source/activity



Scope 3 carbon emissions split by source/activity

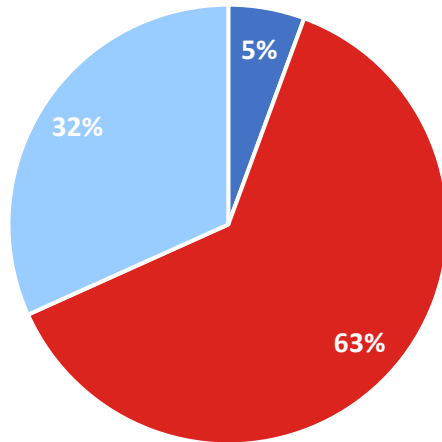


Airport Carbon Emissions by Scope



Scope 1

4,800 tCO₂e
4.6% of Total Emissions



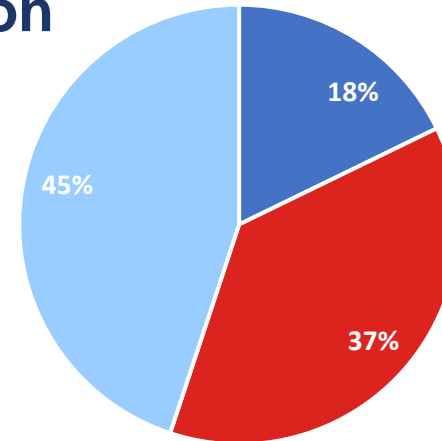
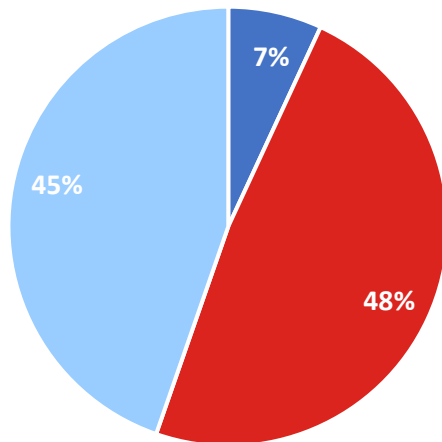
Scope 2

0 tCO₂e
0.0% of Total Emissions

Aberdeen Glasgow Southampton

Scope 3

100,167 tCO₂e
95.4% of Total Emissions



Outside of Scopes

17 tCO₂e
0.02% of Total Emissions

* Percentages shown are of total AGS emissions (2021)

Note: Out of Scope fuels are considered net zero as the growth phase absorbs as the amount of CO₂ released through combustion

Scope 2 Location and Market Based Emissions



Scope 2 = 0.0 tCO₂e (0.0% of Total)

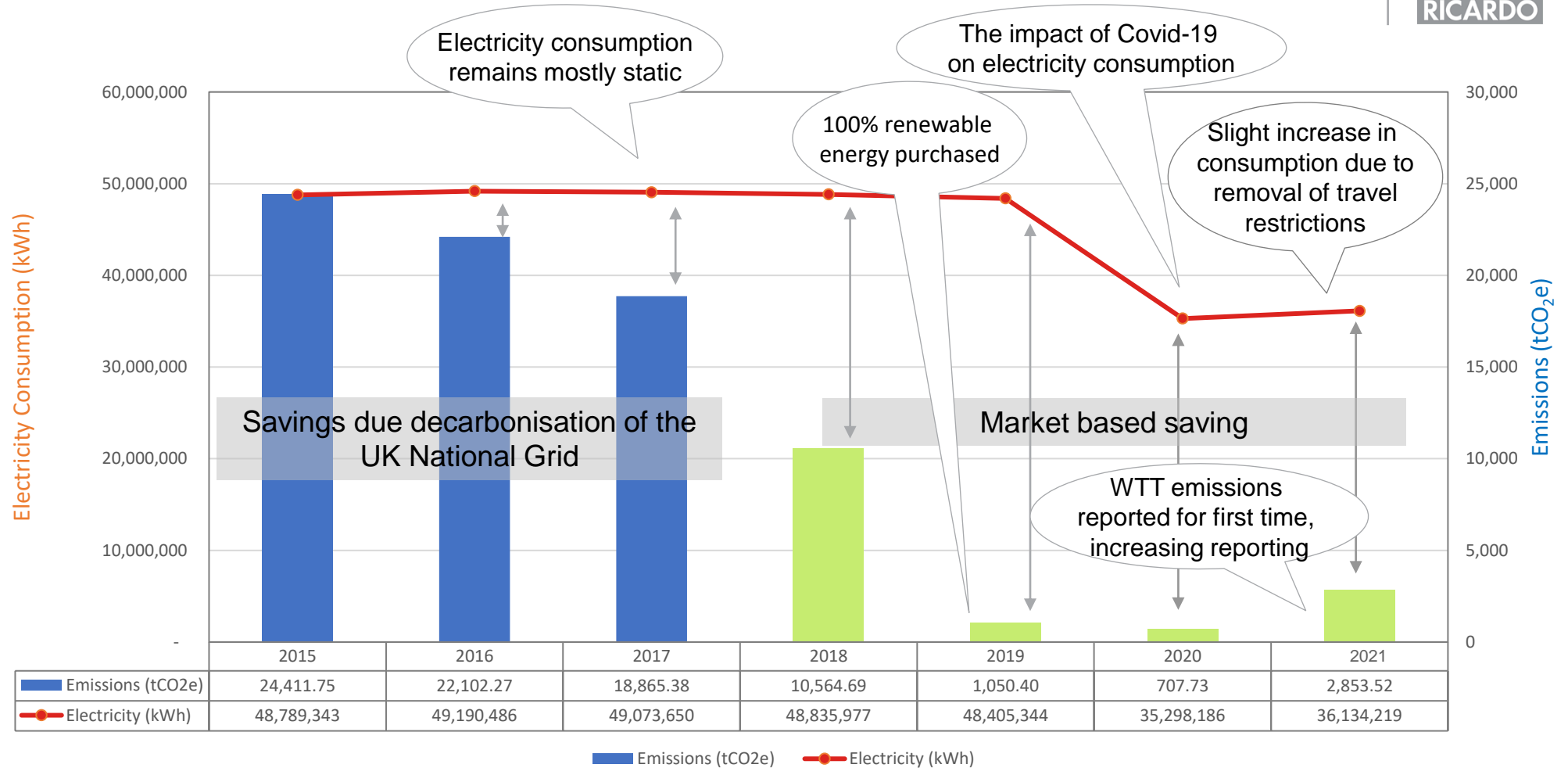
Scope 2 emissions relate to the electricity consumption at the airport. These can be calculated as:

- Location-based method; this reflects the average emissions intensity of macro-scale (regional/national) electricity grids where energy consumption occurs. Companies reporting using this method should use the regional/National Grid average emission factor. In the UK, this would be sourced from the UK Government Conversion Factors for Company Reporting.
- Market-based method; this reflects the emissions from the electricity that a company is purchasing. Energy suppliers in the UK are already required, by law, to disclose to consumers the fuel mix and GHG emissions associated with their portfolio or tariffs. AGS selects to purchase energy that is greener than the National Grid average emissions factor. The advantage of procuring energy that is higher in renewable energy sources than that of the National Grid average emissions factor is outlined in the table below.

	Location-based (tCO ₂ e)	Market-based (tCO ₂ e)
Airport Electricity Emissions (Scope 2)	4,758	0

- Here, market-based emissions are zero because AGS Airports purchased 100% green electricity from its energy suppliers. A supplier statement has been provided which indicates that the supply is 100% renewable and REGOs will be available in mid-2022.
- The following slide provides an annual comparison of the electricity consumption and relevant emissions at AGS Airports.

Comparison of Electricity Consumption and Carbon Emissions



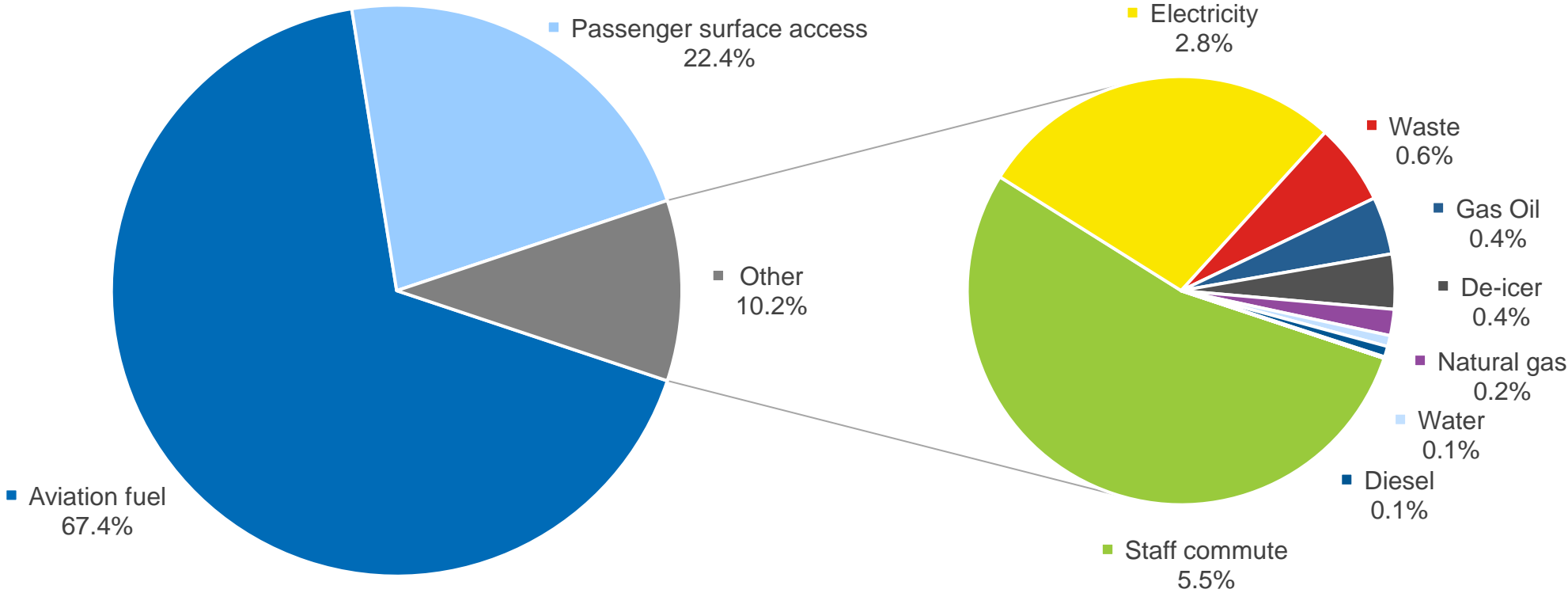
There was only a slight deviation in total electricity consumption (in kWh) from 2015-2019. The majority of emissions savings during this period are due to the increase of renewables on the national electrical grid. From 2018 the airport started reporting on a market based methodology (with a lower emissions intensity), and from 2019 AGS purchased 100% renewable electricity with zero emissions. From 2020, electricity consumption and the resulting emissions reduced due to the Covid-19 pandemic. In 2021, emissions from electricity have increased mainly because of the inclusion of Well-To-Tank (WTT) emissions for the first time to enhance reporting.

Note: to allow for better comparison to previous years, the figures for electricity emissions above include tenant electricity use, as well as Transmission and Distribution (T&D) and WTT emissions.

Scope 3 Emissions Sources



Scope 3 = 100,167 tCO₂e (95.4% of total)



The Scope 3 figure above for electricity is inclusive of the emissions associated with Transmission and Distribution (T&D) and Well-To-Tank (WTT) only. AGS procures 100% renewable electricity, however, it still receives energy from the UK electricity grid and therefore it is best practice to report these Scope 3 emissions. Emissions sources <0.1% were removed from this graph.

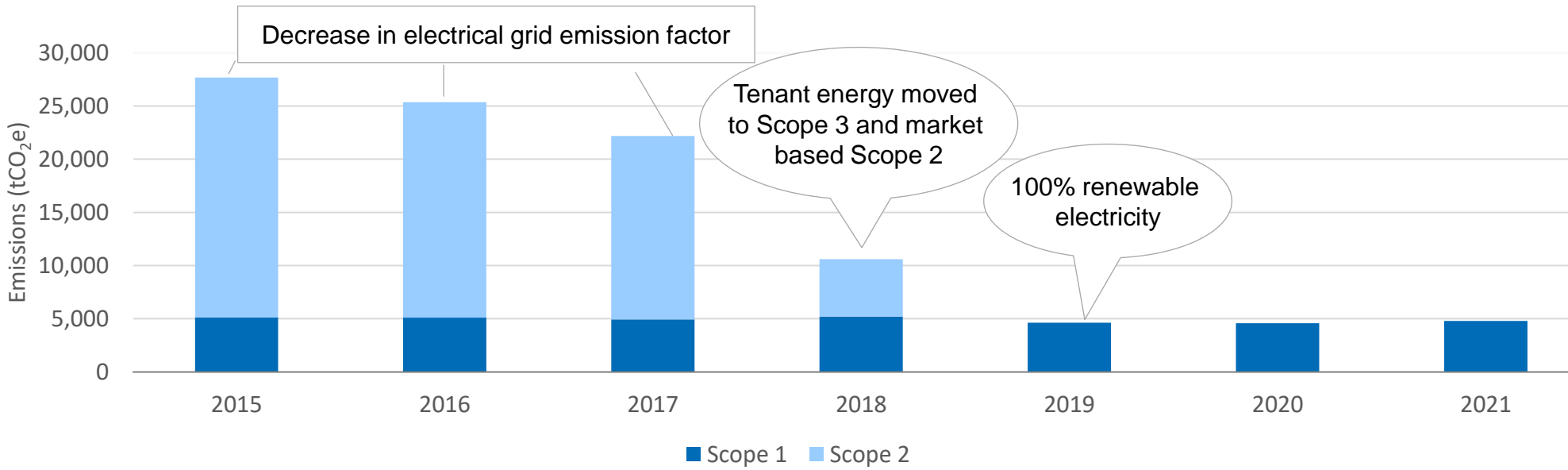
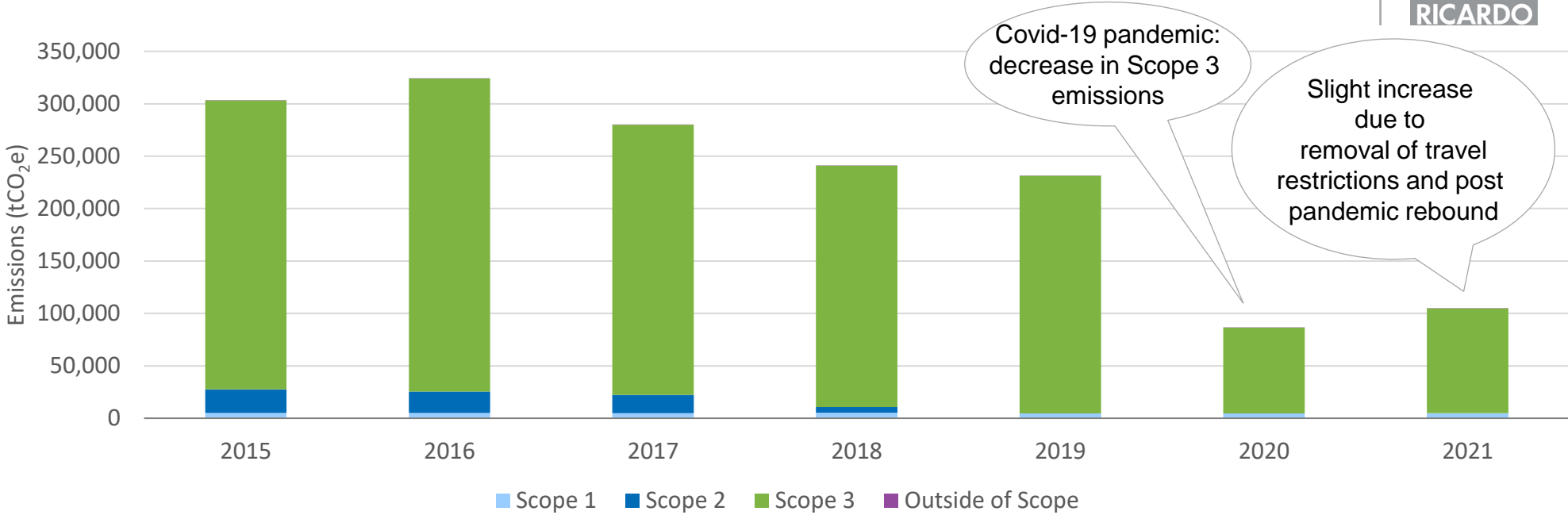
Landing Take-Off Cycle

Landing Take-Off Cycle (LTO) emissions account for aircraft movements which occur below 3,000 feet during flight.
Total LTO emissions for 2021 are **66,603 tCO₂e**.

EasyJet offset 100% of their aviation fuel emissions as per ACA guidelines and can therefore be claimed as carbon neutral. AGS airports have decided to continue reporting these emissions in their carbon footprint for clarity.

Total emissions from EasyJet that are offset are **9,792 tCO₂e** which is 15% of total LTO emissions.

Annual Emissions Trends - 1



Annual Emissions Trends - 2



The table below shows the figures from the charts on the previous slide, as well as the % year-on-year (y-o-y) change of the different emissions scopes.

Emissions by Scope	2015 emissions (tCO ₂ e)	2016 emissions (tCO ₂ e)	2017 emissions (tCO ₂ e)	2018 emissions (tCO ₂ e)*	2019 emissions (tCO ₂ e)*	2020 emissions (tCO ₂ e)*	2021 emissions (tCO ₂ e)*
Scope 1	5,129	5,091	4,924	5,208	4,626	4,574	4,800
Scope 2	22,550	20,269	17,252	5,382	0	0	0
Scopes 1 and 2	27,679	25,360	22,176	10,589	4,626	4,574	4,800
Scope 3	275,693	298,736	257,828	230,480	226,698	81,879	100,167
Outside of Scopes	48	36	32	28	12	19	17
Total emissions	303,419	324,132	280,037	241,097	231,336	86,472	104,984

% y-o-y change							
Scope 1	N/A	-1%	-3%	6%	-11%	-1%	5%
Scope 2	N/A	-10%	-15%	-69%	-100%	N/A	N/A
Scope 1 & 2	N/A	-8%	-13%	-52%	-56%	-1%	5%
Scope 3	N/A	8%	-14%	-11%	-4%	-66%	22%
Outside of Scopes	N/A	-25%	-9%	-14%	-57%	60%	-10%
Total	N/A	7%	-14%	-14%	-6%	-64%	21%

*Note that due to changes in methodology, 2015-2017 emission are reported using location based methodology and tenant energy is in Scopes 1 and 2. For 2018-21 emissions are reported using the market based methodology and tenant energy is moved to Scope 3.

Annual Emissions Trends - 3

The following sources experienced the largest decrease in emissions from 2020, likely due to the continuing impacts of the Covid-19 pandemic:

- Aircraft engine testing emissions (Scope 3) **reduced** by 30%, largely due to the lack of data available for helicopter engine testing.
- Business travel emissions **reduced** by 81%, likely due to the increase in remote working and online meetings
- Operational vehicles emissions **reduced** by 19%

The following sources experienced an increase in emissions from 2020, due largely to removal of national travel restrictions, as well as change in methodology:

- Waste and material use emissions **increased** by 83% likely due to increased operations and passenger traffic in the airport since the lifting of travel restrictions. These numbers are still below pre-pandemic levels.
- Staff commute emissions **increased** by 57%, primarily due to the end of furlough scheme.
- Utilities emissions **increased** by 37%, due to the inclusion of well-to-tank emissions from electricity consumption for the first time. Comparing emissions from utilities without WTT emissions, these decreased 1% from 2020 to 2021.
- Aircraft movement emissions **increased** by 24%, likely due to increased business operations approaching pre-pandemic levels.



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Appendix – Outside of Scope Emissions

As per UK Government GHG Conversion Factors for Company Reporting guidance, Outside of Scope factors should be used to account for the direct carbon dioxide (CO₂) impact of burning biomass and biofuels. The emissions are labelled 'outside of scope' because the Scope 1 impact of these fuels has been determined to be a net '0' (since the fuel source itself absorbs an equivalent amount of CO₂ during the growth phase as the amount of CO₂ released through combustion). As a result, full reporting of any fuel from a biogenic source should have the 'outside of scope' CO₂ value documented to ensure complete accounting for the emissions created.

2021 = **17 tCO₂e** (0.02% of total emissions)

The following sections provide a summary of the methodology adopted by Ricardo Energy & Environment to calculate the 2021 carbon footprint for the Airports.

The standard approach to carbon footprinting is to use the Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard developed by World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI); this sets out a corporate accounting and reporting methodology for GHGs.

Scope 1 emissions are defined as direct GHG emissions arising from sources that are owned or controlled by the company. The emissions result from activities that the company can have direct influence on through its actions. Airports' emissions that are included are: natural gas use, company owned vehicles fuel use, fuel use for business travel, refrigerant gas use (from leaks during maintenance or malfunction), wood pallets and diesel use for fire training, propane combustion and kerosene combustion.

Scope 2 emissions are associated with the use of electricity imported from the grid or from a third-party supplier of energy in the form of heat or electricity. These indirect GHG emissions are due to upstream emissions from the production and delivery of fuel to power stations. Airports can influence the amount of electricity it uses; however, it has little control over the generation of the electricity and these emissions are therefore classed as Scope 2.

Scope 3 emissions is a category that includes the emissions from all other indirect sources. Scope 3 emissions are the consequence of the activities of AGS but arise from sources not owned or controlled by AGS. Airports do have some influence over Scope 3 emissions but the activities are not under its control. Sources included by Airports include aircraft (all aircraft movements up to a height of 1,000m above aerodrome level, and half the distance travelled between the airport and the origin/destination), employees commuting to the airport, passenger surface access to the airport, airside vehicle activities by third party operators, waste disposal and material supply (including production of the virgin materials), water (supply and treatment) and airport business travel.

The uncertainties associated with carbon footprint calculations can be broadly categorised into scientific uncertainty and estimation uncertainty. Scientific uncertainty arises when the science of the actual emission and/or removal process is not completely understood. For example GWP values involve significant scientific uncertainty. Estimation uncertainty arises any time GHG emissions are quantified. Estimations have been made within this footprint where areas have uncertainty have arisen.

Business Travel

Accounts data was provided for business travel (Scope 1 & 3). All transport mode data was provided in £ value and converted to distance travelled using the cost/km from Carbon Footprint and Project Register Tool (CFPRT) which can be found at <https://sustainablesotlandnetwork.org/resources/carbon-footprint-and-project-register-tool>. For those journeys where to/from locations and mode of transport were available, mileage was calculated using the <https://www.distance.to/tool>. The CFPRT collates cost data for all forms of public transport across the UK, and is managed and updated by Sustainable Network Scotland and Resource Efficient Scotland.

Passenger Surface Access

Emissions are based on surveys undertaken in 2018 and scaled to 2021 airport passenger numbers. Information was collated on the mode of travel and location of those who answered the survey. Methodology has been improved in the 2020 and 2021 calculations.

Staff Commute

For staff commute, a 2021 survey completed by the airport and third party staff was utilised to reflect staff commute before and during the Covid-19 pandemic. Responses from the airport staff were scaled up to the total FTE employees for each airport. Responses from third party employees were also scaled up to the full active third party passes at each airport. The survey respondents provided information on their modes of transport, distance travelled to work and the number of days worked per week. The survey included questions on these before and during the Covid-19 pandemic, including time on furlough. An assumption was made that the first 39 weeks of the year were still affected by travel restrictions, and an average figure of 19% was used to account for the employees on furlough. It was assumed no commute was made for the employees on furlough. The remaining 13 weeks were unaffected by furlough and pre-pandemic data was used.

De-icer

De-icer emissions have been calculated using the emissions factors provided in the latest version of the ACERT tool from the Airport Carbon Accreditation (ACA) scheme. This includes the emissions from glycol based de icer only, where diluted glycol was used (e.g. 50:50 glycol to water), the dilution rate has been taken into account in calculations to ensure only the amount of undiluted glycol was considered.

Engine Tests

To calculate the emissions from engine testing at AGS airports, a similar process was carried out to identify the engine type as per the LTO cycle detailed on the next slide. Other assumptions used for the calculations are:

1. It was assumed that two engines were tested in absence of further information within the data, to be conservative and maintain assumptions used previously
2. High power testing occurred for 10% of the full test time

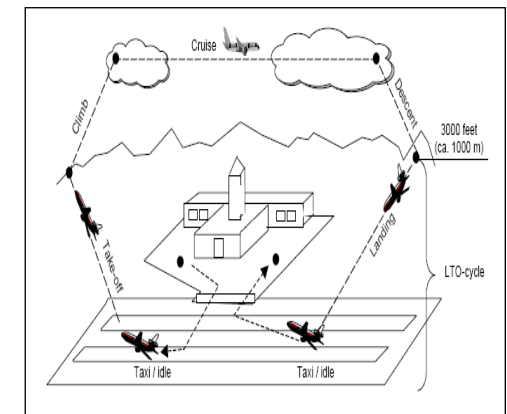
For ABZ, helicopter's make up around 80% of engine tests and so emissions for helicopters were calculated separately from fixed wing. Helicopter engine types were provided, along with estimated fuel burn as per the LTO cycle. Therefore, the following assumptions were used for helicopter engine tests at ABZ:

1. All engines were tested
2. Where time at full thrust was not provided, an assumption of 50% was used
3. Where a fuel burn rate (kg/s) was not provided for a particular helicopter model, the largest fuel burn rate available for helicopter models tested on site was used as a conservative estimate

Aircraft Movements

Data provided by AGS airports included the following information for each aircraft movement in 2021: Carrier, Aircraft registration, aircraft IATA code, aircraft ICAO code, engine type, Arriving/departing, and date of movement.

This data is used to identify the number and type of engines that each aircraft has, and the fuel burn per second at each stage of the landing take-off cycle (shown below) can be referenced from the latest version of the [ICAO databank](#).



Market-based method: As all of the 36,134,219 kWh of electricity consumption was supplied to the AGS Airports by a single supplier. AGS Airports contacted the supplier and asked for the details of the fuel mix. The following breakdown was provided for the year-ending 31st March 2021 (Source of Electricity, Percentage):

- **Renewables - 100%**

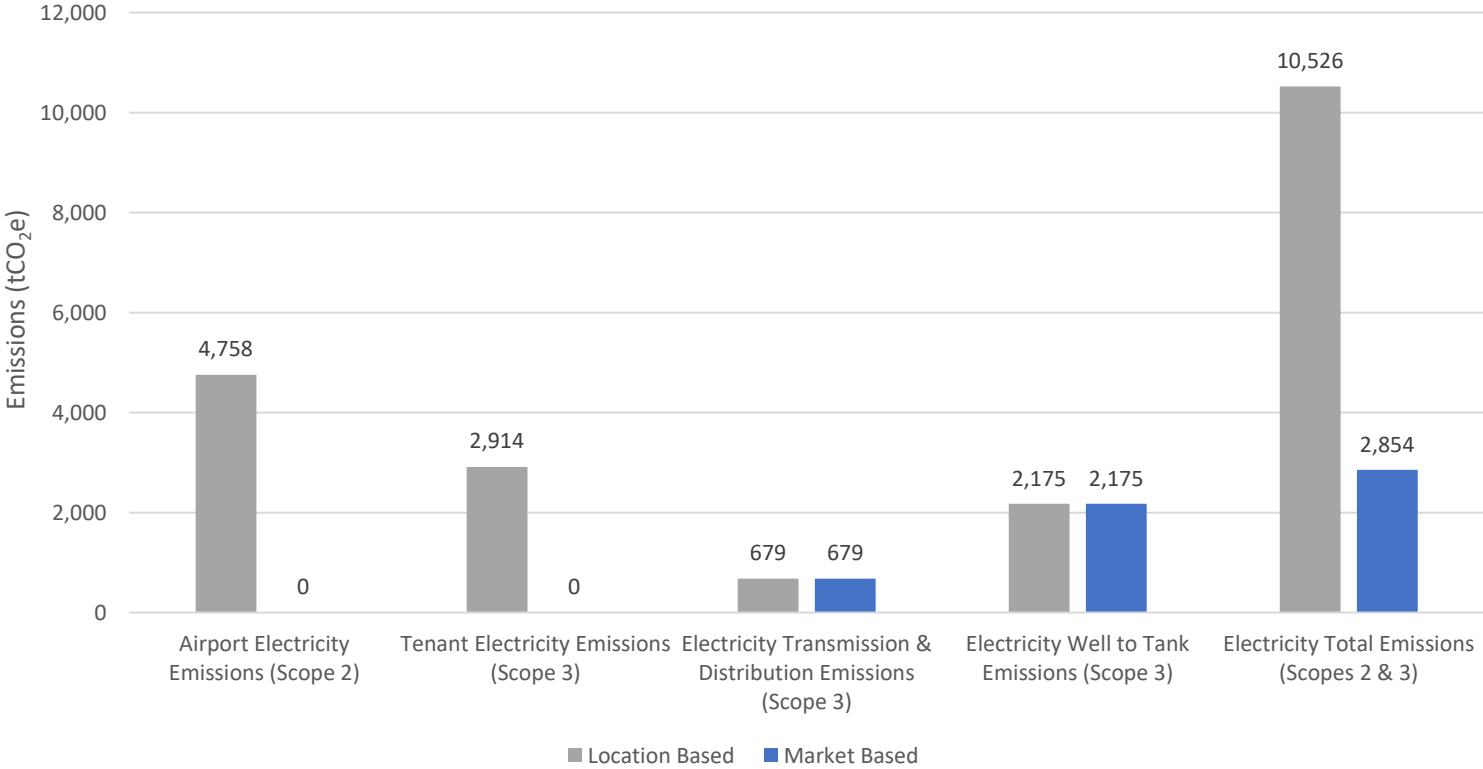
A supplier statement has been provided, which indicates that the supply is 100% renewable and REGOs will be available in mid-2022.

The weighted emission factor was provided as 0 gCO₂/kWh (or 0 kgCO₂/kWh). Multiplying the electricity consumption of 36,134,219 kWh by the emission factor of 0 kgCO₂/kWh calculates the emissions as 0 tCO₂e.

Location vs Market Electricity



Scope 2 and 3 emissions due to electricity consumption (airport and tenant), calculated using either the location or market based emissions factors.



Historical Emissions Trends – Location-based



The table below shows emissions figures where for all years, emissions are reported using the location based methodology and tenant energy is included in Scope 2 for 2015-17 and in Scope 3 from 2018-20.

Emissions by Scope	2015 emissions (tCO ₂ e)	2016 emissions (tCO ₂ e)	2017 emissions (tCO ₂ e)	2018 emissions (tCO ₂ e)	2019 emissions (tCO ₂ e)	2020 emissions (tCO ₂ e)	2021 emissions (tCO ₂ e)
Scope 1	5,129	5,091	4,924	5,208	4,626	4,574	4,800
Scope 2	22,550	20,269	17,252	7,926	6,604	4,797	4,758
Scopes 1 and 2	27,679	25,360	22,176	13,134	11,230	9,371	9,558
Scope 3	275,693	298,736	257,828	232,374	232,467	85,311	103,082
Outside of Scopes	48	36	32	28	12	19	17
Total emissions	303,419	324,132	280,037	245,535	243,709	94,702	112,656

% y-o-y change							
Scope 1	N/A	-1%	-3%	6%	-11%	-1%	5%
Scope 2	N/A	-10%	-15%	-54%	-17%	-27%	-1%
Scope 1 & 2	N/A	-8%	-13%	-41%	-14%	-17%	2%
Scope 3	N/A	8%	-14%	-10%	0%	-63%	21%
Outside of Scopes	N/A	-25%	-9%	-14%	-57%	60%	-10%
Total	N/A	7%	-14%	-12%	-1%	-61%	19%

Term	Definition
Air Traffic Movements (ATM)	Air traffic movements – an aircraft take-off or landing at an airport. For airport traffic purposes one arrival and one departure is counted as two movements.
Carbon dioxide equivalent (CO₂e)	The carbon dioxide equivalent (CO ₂ e) allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO ₂ . CO ₂ e is calculated by multiplying the emissions of each of the six greenhouse gases by its 100-year global warming potential (GWP).
Carbon footprint	A carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by a person, organisation, event or product. A carbon footprint is measured in tonnes of carbon dioxide equivalent (tCO ₂ e).
Transmission & Distribution Losses (T&D)	Transmission & Distribution Losses. Emissions relating to electrical losses within the UK National Grid.
Emission factor	An emissions factor is a representative value that attempts to relate the quantity of a pollutant released to the atmosphere with an activity associated with the release of that pollutant.
Greenhouse Gas (GHG)	Greenhouse gas – a gas in an atmosphere that absorbs and emits radiation within the thermal infrared range. This process is the fundamental cause of the greenhouse effect. The primary greenhouse gases in Earth's atmosphere are water vapour, carbon dioxide, methane, nitrous oxide, and ozone.
Outside of Scope	<p>All fuels with biogenic content (e.g. 'Diesel and petrol (average biofuel blend)') should have the 'Outside of Scope' emissions reported to ensure a complete picture of an organisations' emissions are created.</p> <p>The emissions are labelled 'Outside of Scope' because the Scope 1 impact of these fuels has been determined to be a net '0' (since the fuel source itself absorbs an equivalent amount of CO₂ during the growth phase as the that CO₂ is released through combustion).</p>
Passenger Surface Access (PAX)	Number of passengers
Well-to-tank (WTT)	Emissions related to the extraction, refining, and transportation of fossil fuels (includes those used to generate electricity).