



Ricardo  
Energy & Environment

## Airport Carbon Footprint

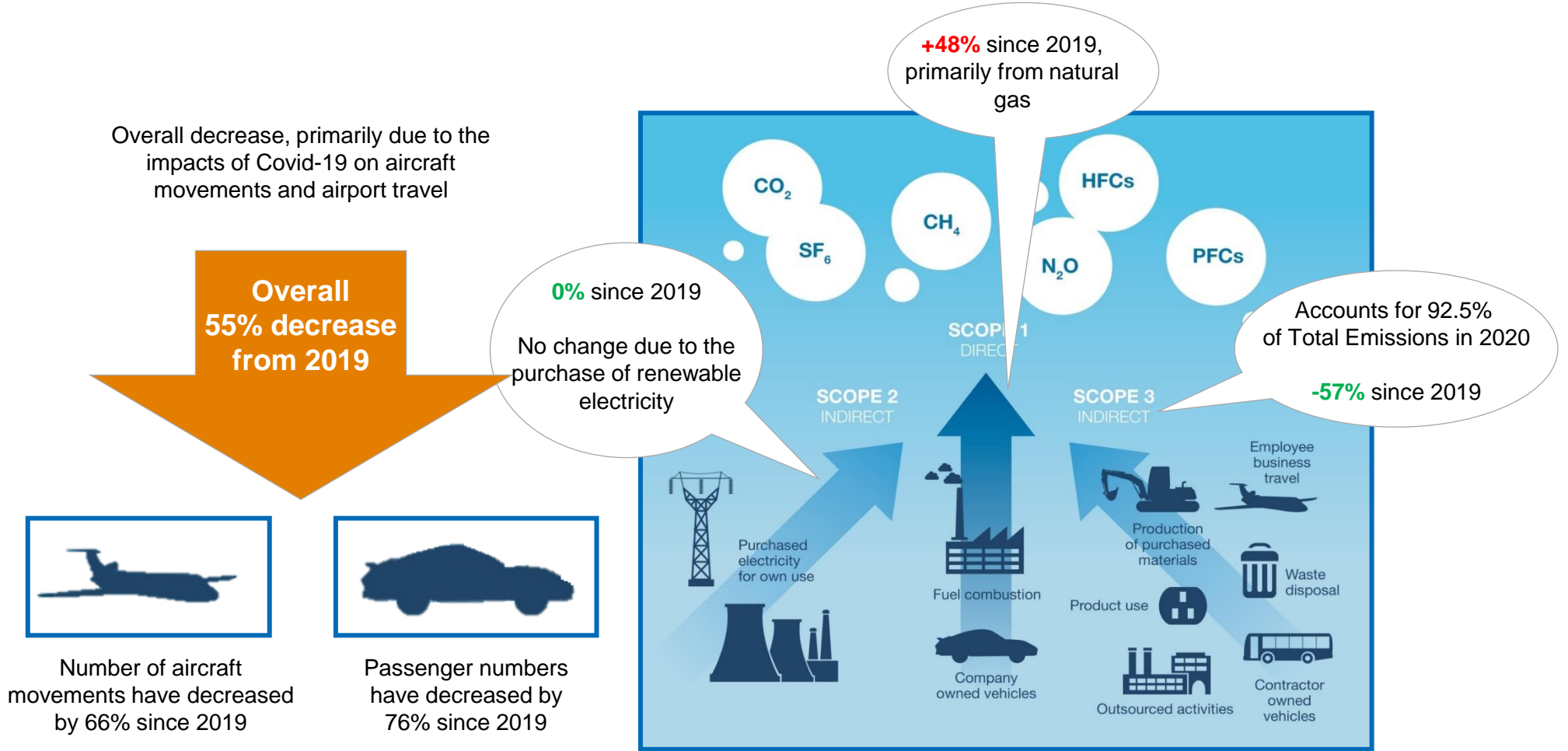
### 2020 Scope 1, 2 & 3 ED14694

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

Report for Edinburgh Airport Limited – Version 1

**Edinburgh Airport**  
*Where Scotland meets the world*

All Scope emissions = 53,349 tCO<sub>2</sub>e\*



\* Note that emissions figures shown in this report are calculated using the market-based methodology unless clearly indicated otherwise.

# Included Emissions Sources

The following emissions sources are included in the 2020 carbon footprint for Edinburgh Airport:

## Scope 1: Direct emissions:

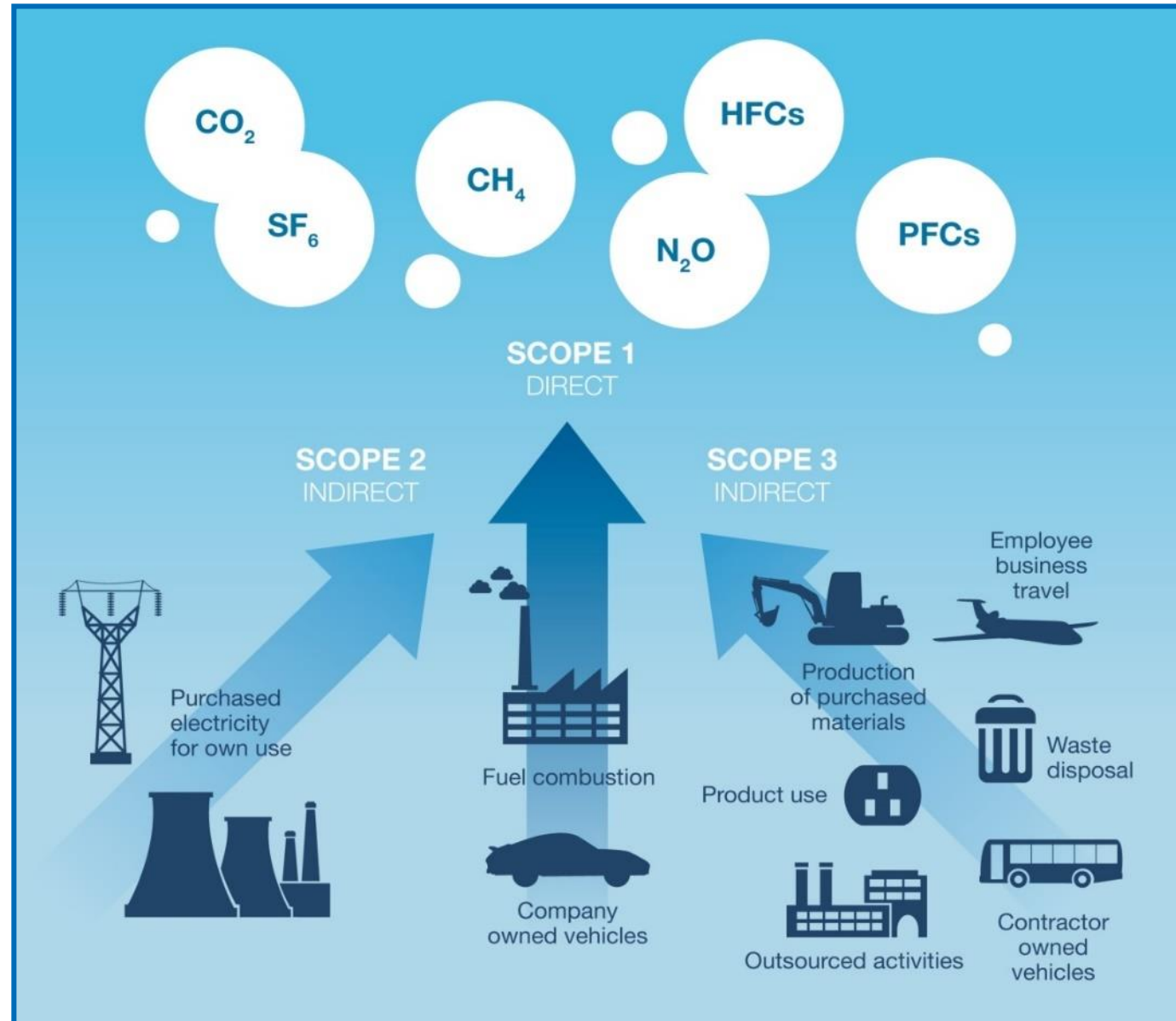
- Fuels burnt on site (boilers, generators, operational vehicles, fire training)
- Refrigerant gas losses
- Runway de-icer

## Scope 2: Indirect emissions:

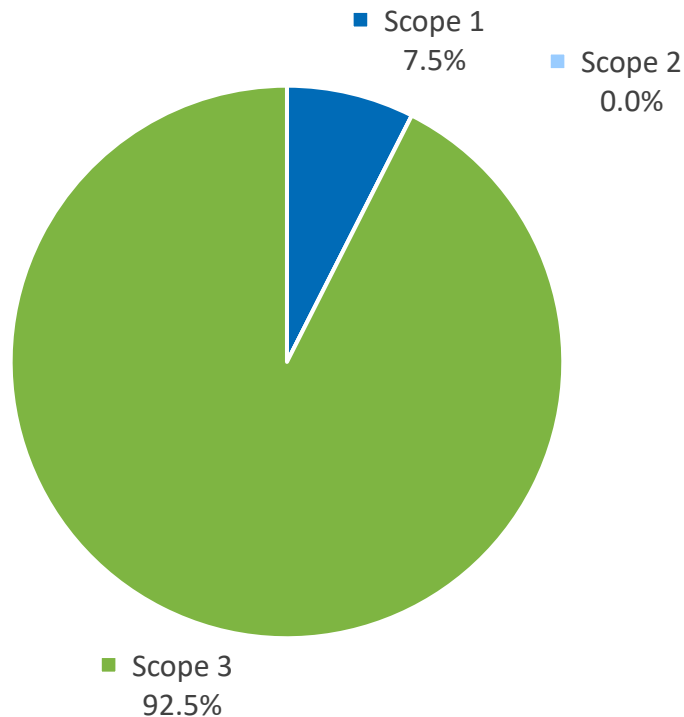
- Purchased electricity

## Scope 3: Indirect emissions:

- 3<sup>rd</sup> party operational vehicle fuels
- Tenant energy
- Aircraft LTO cycle, APU usage and engine testing
- Business travel
- Water supply and wastewater treatment
- Staff commute
- Passenger surface access
- Waste (disposal of materials)
- Runway de-icer



# Key Stats - Carbon Emissions by Scope 2020



	Total 2020 emissions (tCO <sub>2</sub> e)	% of total emissions
Scope 1	3,980	7.5%
Scope 2	0	0.0%
Scope 3	49,354	92.5%
Outside of Scope	15	0.0%
<b>Total</b>	<b>53,349</b>	<b>100.0%</b>

### Scope 1:

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

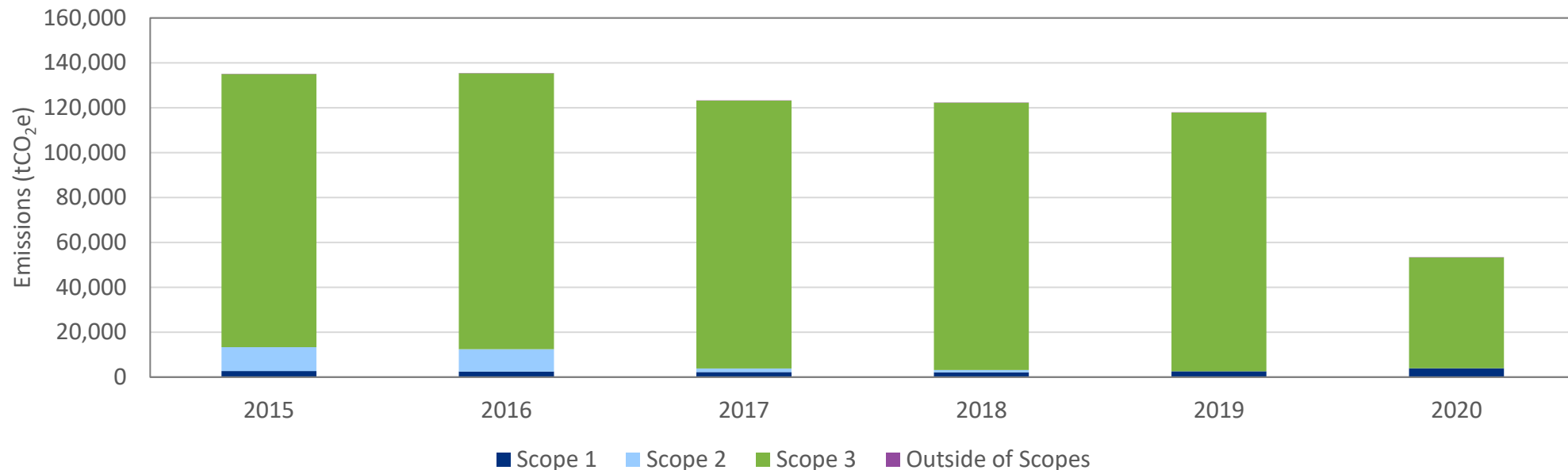
### Scope 2:

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:

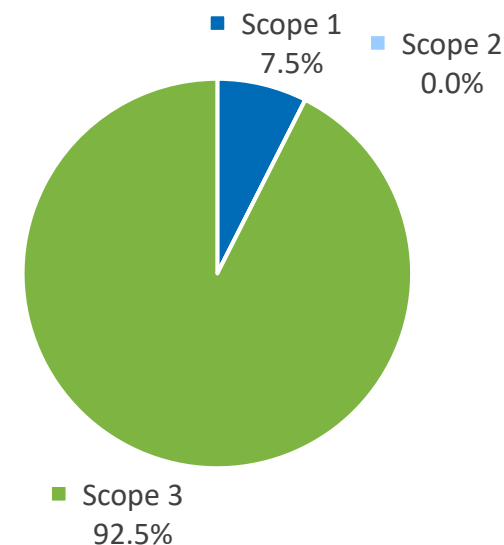
Emissions arising as a direct consequence of the use of goods or services provided by the company. For Edinburgh Airport this would be the operation of the airport. Sources include aircraft movements, passenger and staff travel to the airport, airside activities, waste disposal, water and business travel.

# Key Stats - All Scopes Summary



	Total 2020 emissions (tCO <sub>2</sub> e)	% of total emissions
Scope 1	3,980	7.5%
Scope 2	0	0.0%
Scope 3	49,354	92.5%
Outside of Scope	15	0.0%
<b>Total</b>	<b>53,349</b>	<b>100.0%</b>

Scope 3 emissions are currently the largest contributor to Edinburgh Airport's carbon footprint. The majority of which are from aircraft activities and passenger access to the airport.

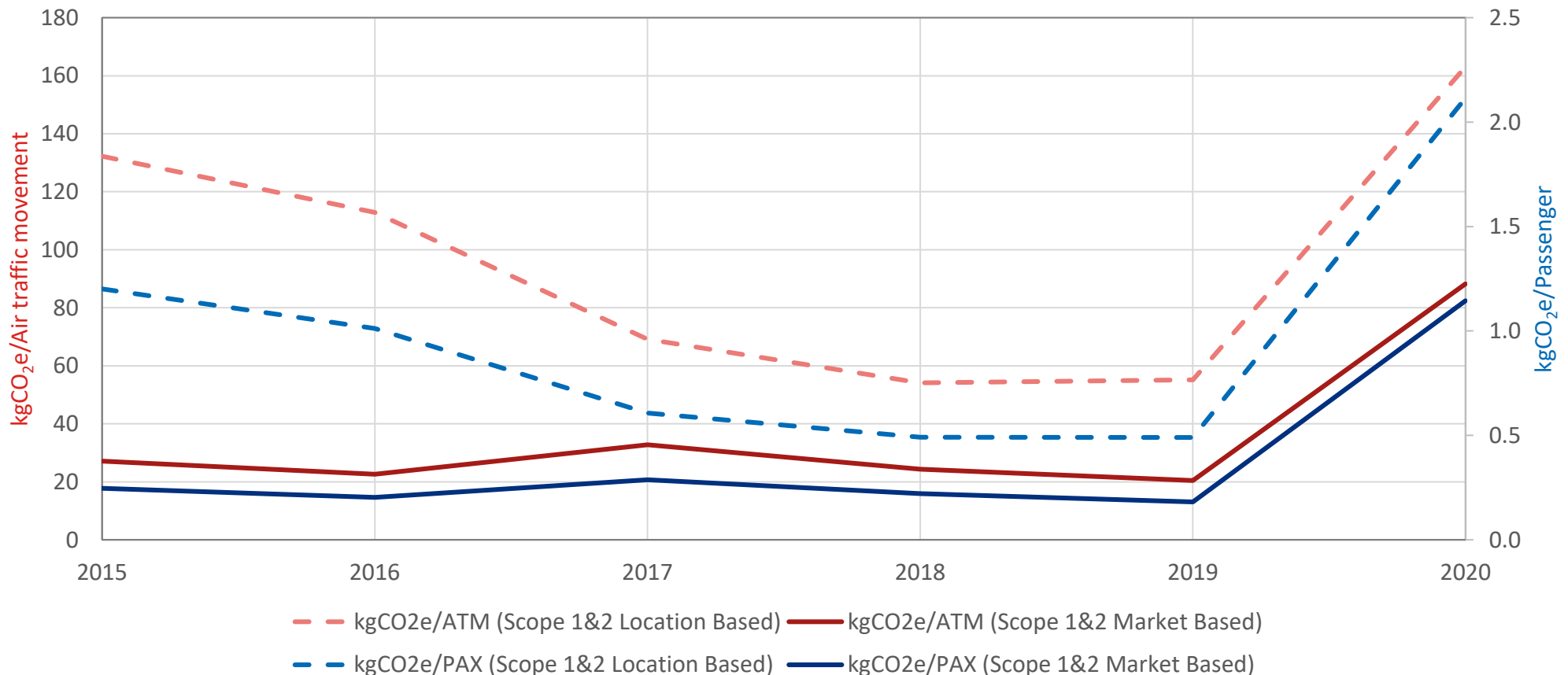


# Key Stats - Intensity Metrics comparison over time - 1



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

This chart shows intensity metrics for Scope 1&2 kgCO<sub>2</sub>e/PAX and kgCO<sub>2</sub>e/ATM for both location and market based reporting methodologies.



# Key Stats - Intensity Metrics comparison over time - 2



This chart shows intensity metrics for Scope 1&2 kgCO<sub>2</sub>e/passenger (PAX) and kgCO<sub>2</sub>e/air traffic movement (ATM) for both location and market based reporting methodologies.

	2015	2016	2017	2018	2019	2020
<b>ATM</b>	101,060	110,813	117,938	129,755	130,959	45,120
<b>PAX</b>	11,130,582	12,366,187	13,428,271	14,304,993	14,743,137	3,477,754
<b>% Change in ATM (year-on-year)</b>	N/A	9.7%	6.4%	10.0%	0.9%	-65.5%
<b>% Change in PAX (year-on-year)</b>	N/A	11.1%	8.6%	6.5%	3.1%	-76.4%
<b>Scope 1 &amp; 2 (tCO<sub>2</sub>e)</b> Location Based Scope 2 Tenant energy in Scope 3 in 2020	13,367	12,511	8,151	7,025	7,226	7,356
<b>kgCO<sub>2</sub>e/ATM</b>	132.3	112.9	69.1	54.1	55.2	163.0
<b>kgCO<sub>2</sub>e/PAX</b>	1.2	1.0	0.6	0.5	0.5	2.1
<b>Scope 1 &amp; 2 (tCO<sub>2</sub>e)</b> Market Based Scope 2 Tenant energy in Scope 3 in 2020	13,367	12,511	3,869	3,160	2,682	3,980
<b>kgCO<sub>2</sub>e/ATM*</b>	132.3	112.9	32.8	24.4	20.5	88.2
<b>kgCO<sub>2</sub>e/PAX*</b>	1.2	1.0	0.3	0.2	0.2	1.1

\* Note that for 2015-2017 no figures for the market based methodology are available, so the location method has been applied

# Table of Contents

- [Introduction](#)
- [Included Emissions Sources](#)
- [Key Stats - Carbon Emissions by Scope 2020](#)
- [Key Stats - All Scopes Summary](#)
- [Key Stats - Intensity Metric](#)
- [Background](#)
- [Carbon Emissions by Source and Activity 2020](#)
- [Scope 1 Emissions Sources](#)
- [Scope 2 Location and Market Based Emissions](#)
- [Comparison of Electricity Consumption and Carbon Emissions](#)
- [Scope 3 Emissions Sources](#)
- [Annual Emissions Trends](#)
- [Data Sources Review](#)
- [Recommendations](#)
- [Methodologies](#)
- [Location Based Emissions](#)



Edinburgh Airport is located at Ingliston, on the outskirts of Edinburgh, Scotland. It was the busiest airport in Scotland in 2019, operating 365 days per year serving 14.7 million passengers and handling around 131,000 aircraft movements. During 2020, Edinburgh Airport has been restricted in its ability to provide air travel to passengers, primarily as a result of Covid-19 restrictions. This has meant that the airport has had significantly reduced aircraft movements and passenger numbers (approximately 3.5 million). Edinburgh Airport currently employs 581 full time employees (FTE), many of whom typically commute to the airport by car or public transport. To continue operating in an environmentally responsible manner, it is important for the airport to monitor and manage all its emissions from all operations.

The calculation of the annual carbon footprint will help Edinburgh Airport understand the different areas which contribute to their overall carbon footprint and monitor changes on a yearly basis. This process will help identify improvement opportunities, which will ultimately reduce Edinburgh Airport's carbon footprint and associated costs. In addition, the success of any management strategies previously implemented can be evaluated. It is also a requirement of ACA accreditation to complete a carbon footprint and compare the scope 1 and 2 emissions to a three year rolling average.



# Carbon Emissions by Source and Activity 2020 - 1

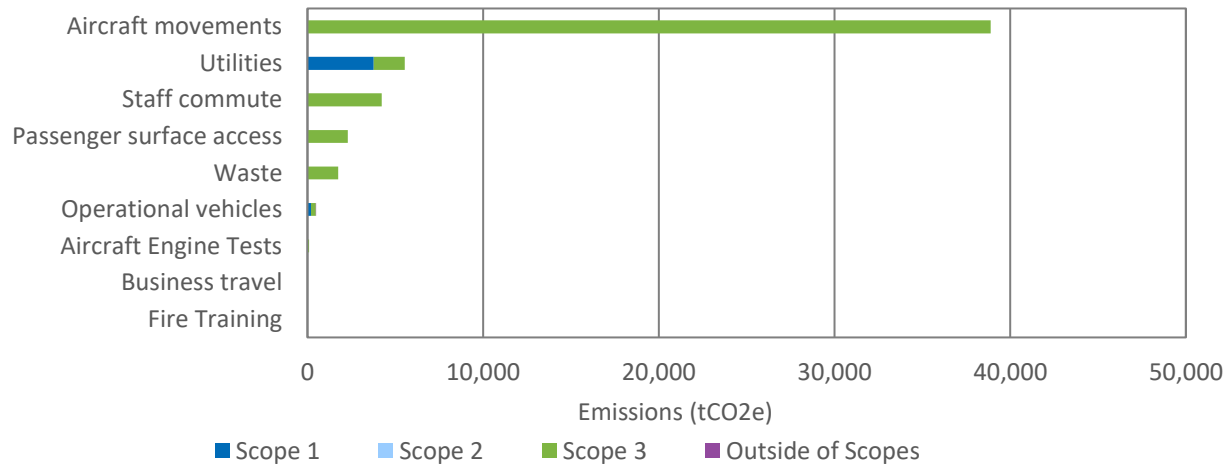


Market Based Emissions	Emissions (tCO <sub>2</sub> e)	% of Scope	% of Total Emissions
<b>Scope 1 – Total</b>	<b>3,980</b>	<b>100.00%</b>	<b>7.46%</b>
Airport natural gas	3,350	84.18%	6.28%
Airport de-icer	415	10.42%	0.78%
Airport operational vehicles	208	5.23%	0.39%
Refrigerants	6	0.16%	0.01%
Fire training	1	0.01%	0.00%
Business travel (fuel purchase)	0.02	0.00%	0.00%
<b>Scope 2 – Total</b>	<b>0.0</b>		<b>0.00%</b>
Airport electricity	0.0		0.00%
<b>Scope 3 - Total</b>	<b>49,354</b>	<b>100.00%</b>	<b>92.51%</b>
Aircraft movements	38,882	78.78%	72.88%
Passenger surface access	2,309	4.68%	4.33%
Staff commute	4,231	8.57%	7.93%
Waste	1,753	3.55%	3.29%
Electricity T&D	1,060	2.15%	1.99%
Third party de-icer	531	1.08%	0.99%
Third party operational vehicles	282	0.57%	0.53%
Water	112	0.23%	0.21%
Aircraft engine tests	101	0.20%	0.19%
Tenant natural gas	71	0.14%	0.13%
Business travel	24	0.05%	0.04%
Tenant electricity	0.0	0.00%	0.00%
<b>Outside of Scope - Total</b>	<b>15</b>	<b>100.00%</b>	<b>0.03%</b>
Operational vehicles (diesel)	12	79.47%	0.02%
Fire training (diesel and wood)	3	20.53%	0.01%
<b>Total</b>	<b>53,349</b>		<b>100.00%</b>

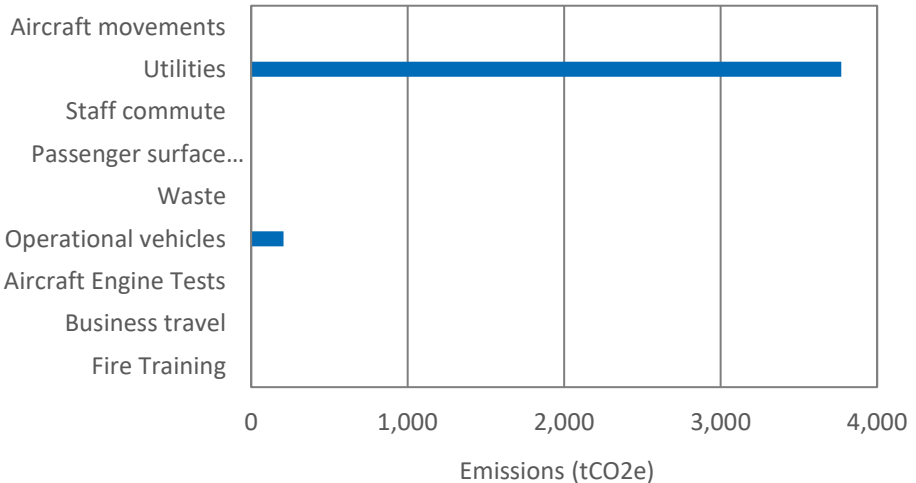
# Carbon Emissions by Source and Activity 2020 - 2



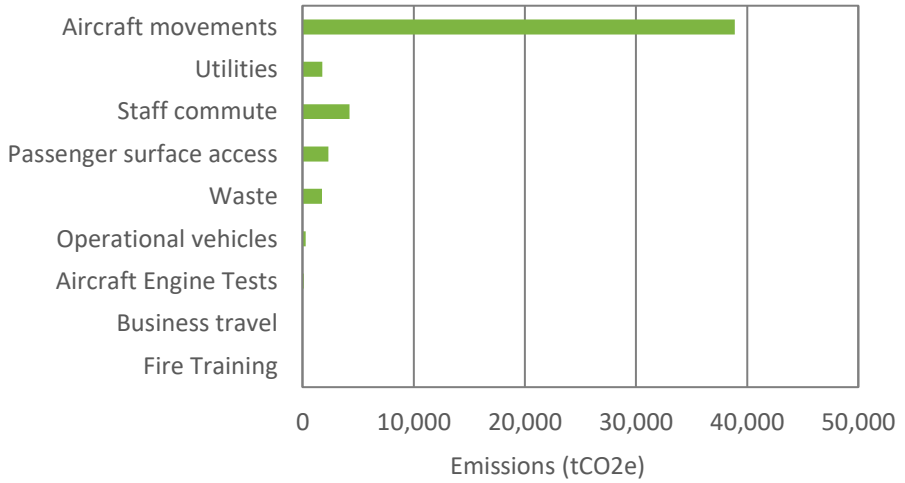
All Scopes carbon emissions split by source/activity



Scopes 1 and 2 carbon emissions split by source/activity



Scope 3 carbon emissions split by source/activity

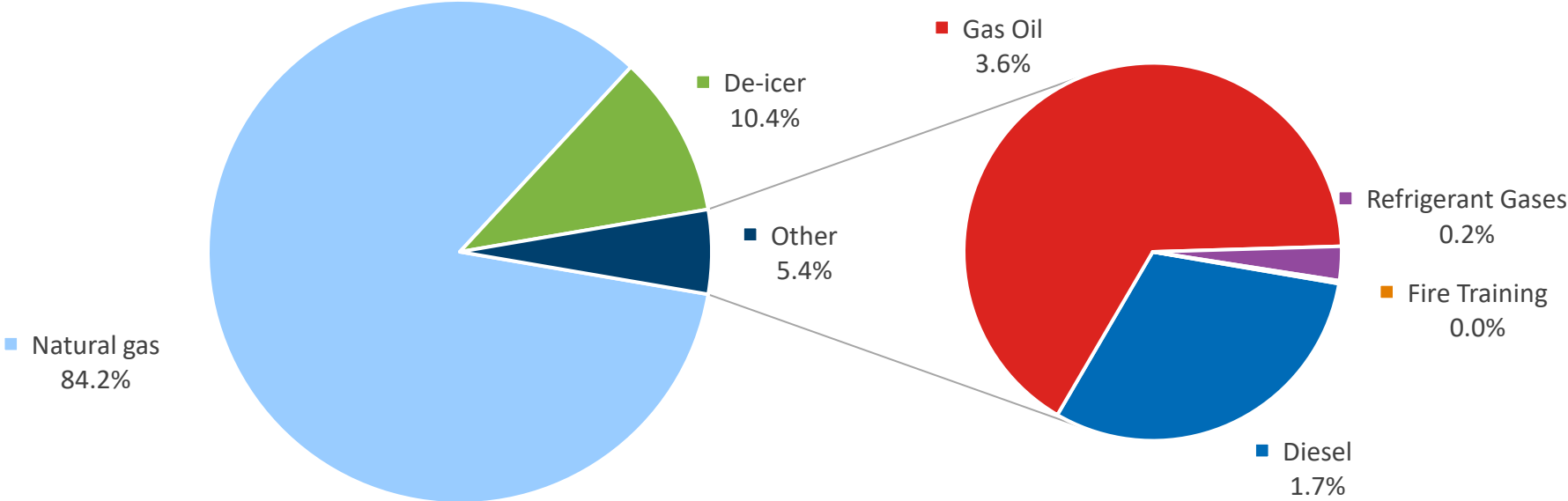


# Scope 1 Emissions Sources



**Scope 1 = 3,980 tCO<sub>2</sub>e (7.46% of Total)**

Scope 1 emissions are under the direct control of the airport.



# Scope 2: Location and Market Based Emissions



## Scope 2 = 0 tCO<sub>2</sub>e (0.0% of Total)

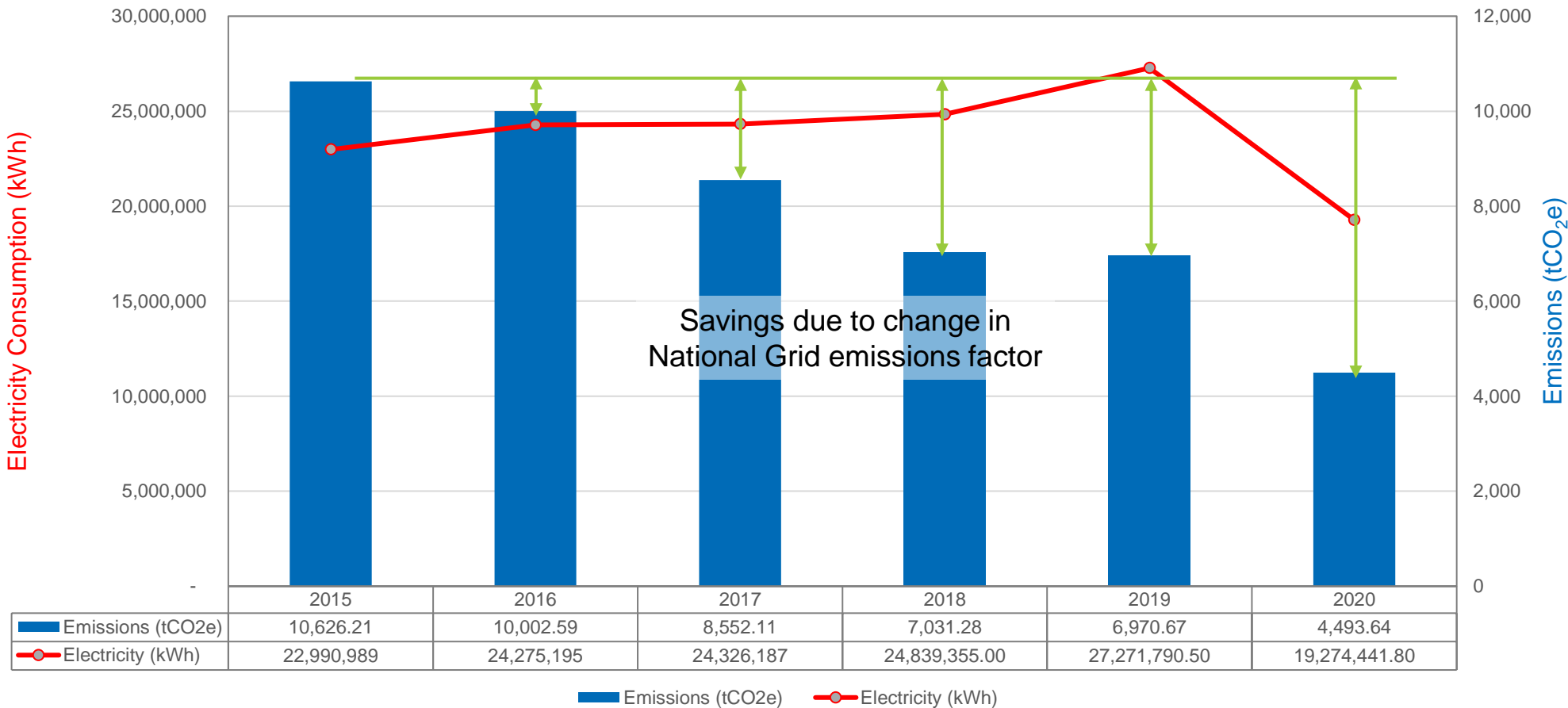
Scope 2 emissions relate to the electricity consumption at the airport. These can be calculated as:

- 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 Defra/DECC 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 EU are already required, by law, to disclose to consumers the fuel mix and GHG emissions associated with their portfolio or tariffs. This airport 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 <sub>2</sub> e)	Market-based (tCO <sub>2</sub> e)
Airport Electricity Emissions (Scope 2)	3,376	0

- Here, market-based emissions are zero because Edinburgh Airport purchased 100% green electricity from its energy suppliers. REGO certificates have been provided for electricity consumed between Jan-Mar 2020, and a supplier statement provided for the remainder of 2020 that indicates that the supply is 100% renewable and REGOs has also been provided.

# Comparison of Electricity Consumption and Carbon Emissions



The emissions in the figure above are the location based electricity emissions. There has been little deviation in total electrical consumption since 2015. As such, the majority of savings in emissions is due to the ongoing decarbonisation of the UK national grid.

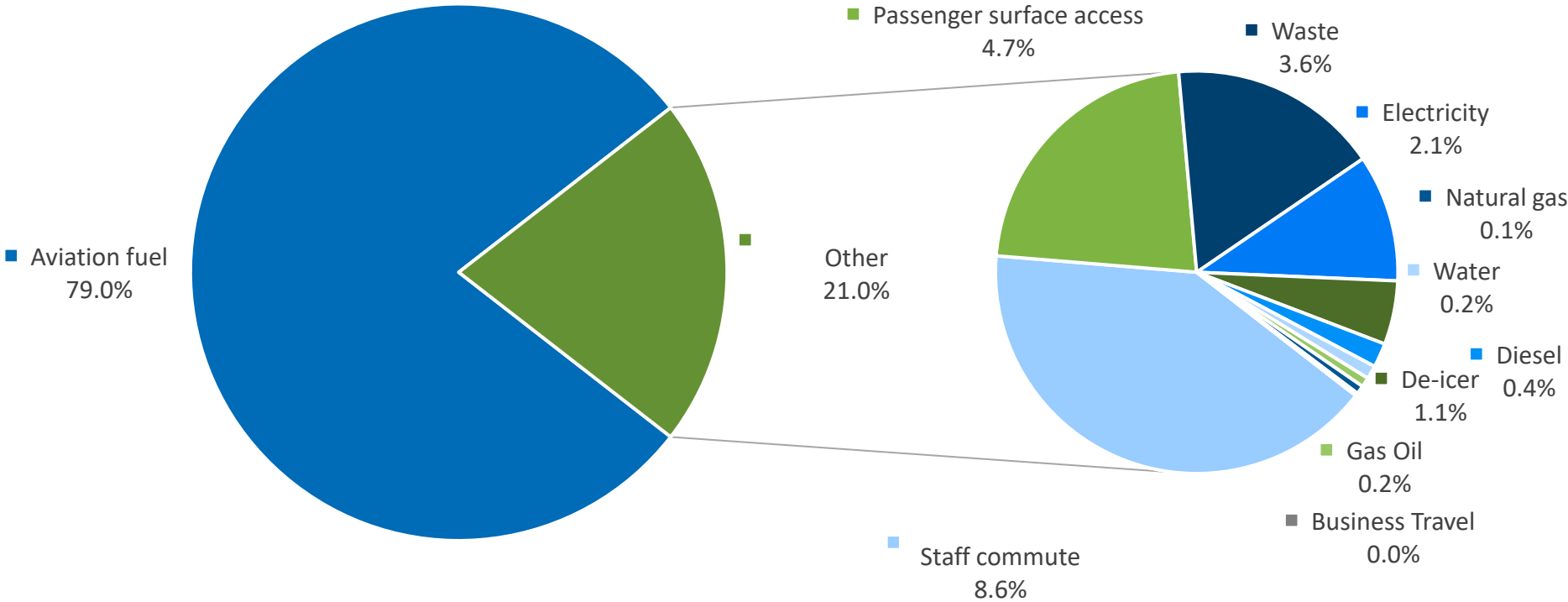
Note: to allow for better comparison to previous years, the figures for electricity emissions above include both airport (Scope 2) and tenant (Scope 3) electricity use. All figures exclude transmission and distribution (T&D) losses emissions.

# Scope 3 Emissions Sources

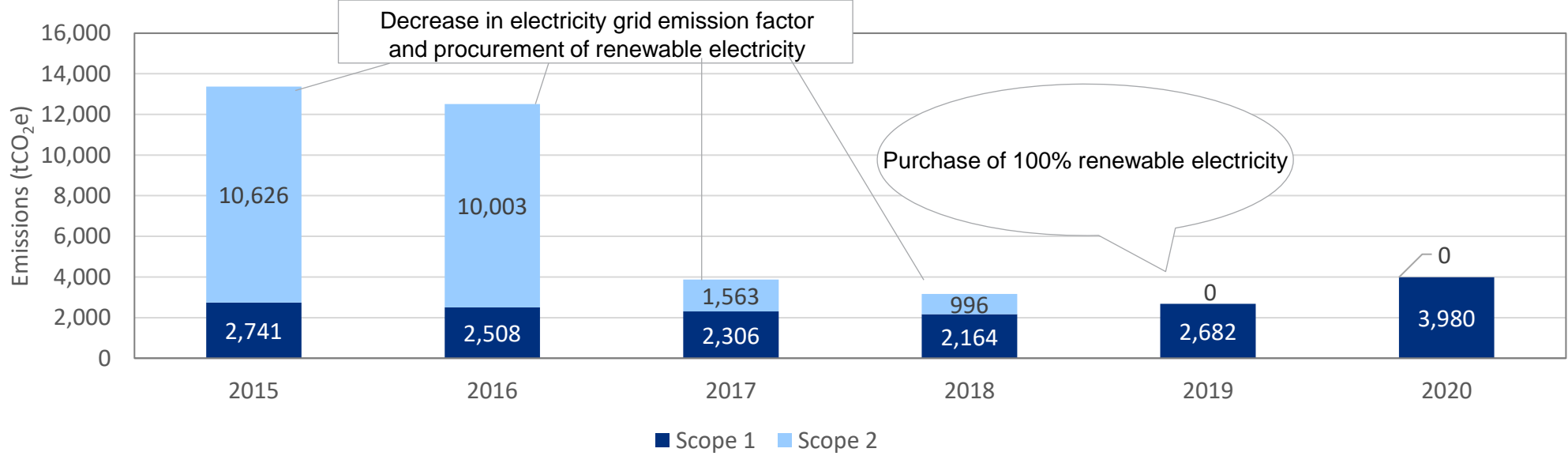
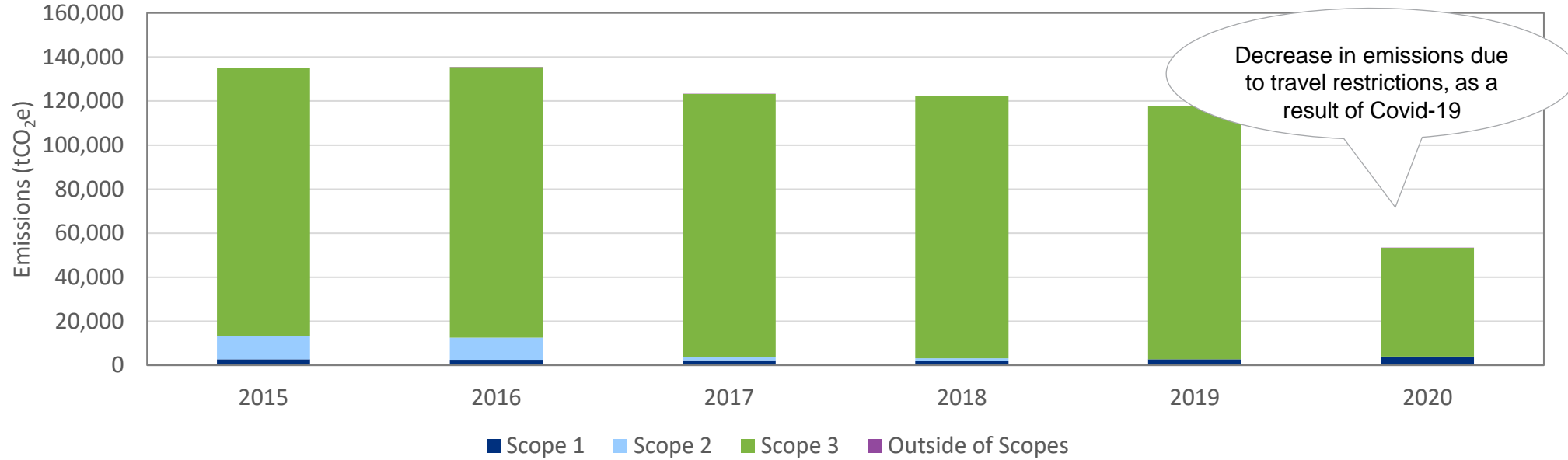


**Scope 3 = 49,354 tCO<sub>2</sub>e (92.5% of Total)**

Unlike Scope 1 and Scope 2 emissions, emissions categorised as Scope 3 are not generally under the direct control of the airport.



# 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 <sub>2</sub> e)	2016 emissions (tCO <sub>2</sub> e)	2017 emissions (tCO <sub>2</sub> e)	2018 emissions (tCO <sub>2</sub> e)	2019 emissions (tCO <sub>2</sub> e)	2020 emissions (tCO <sub>2</sub> e)
Scope 1	2,741	2,508	2,306	2,164	2,682	3,980
Scope 2	10,626	10,003	1,563	996	0	0
Scopes 1 and 2	13,367	12,511	3,869	3,160	2,682	3,980
Scope 3	121,668	122,850	119,304	119,039	115,110	49,354
Outside of Scope	3	3	3	14	21	15
<b>Total emissions</b>	<b>135,038</b>	<b>135,364</b>	<b>123,176</b>	<b>122,213</b>	<b>117,813</b>	<b>53,349</b>

Scope 1 % y-o-y change	N/A	-8%	-8%	-6%	24%	48%
Scope 2 % y-o-y change	N/A	-6%	-84%	-36%	-100%	N/A
Scope 1 & 2 % y-o-y change	N/A	-6%	-69%	-18%	-15%	48%
Scope 3 % y-o-y change	N/A	1%	-3%	0%	-3%	-57%
Outside of Scope	N/A	-20%	21%	305%	56%	-31%
<b>Total % y-o-y change</b>	<b>N/A</b>	<b>0%</b>	<b>-9%</b>	<b>-1%</b>	<b>-4%</b>	<b>-55%</b>

\* In 2017 tenant energy is moved to Scope 3.

\*\* In 2019 electricity is purchased from 100% renewable energy.

# Annual Emissions Trends - 3



Market Based Emissions (tCO2e)	2015	2016	2017	2018	2019	2020
<b>Scope 1 – Total</b>	<b>2,741</b>	<b>2,508</b>	<b>2,306</b>	<b>2,164</b>	<b>2,682</b>	<b>3,980</b>
Airport natural gas	2,056	1,849	1,817	1,607	2,104	3,350
Airport de-icer						415
Airport operational vehicles	318	376	427	439	534	208
Refrigerants	364	282	60	100	30	6
Fire training	2	2	2	17	2	1
Gas oil					12	0
Business travel (fuel purchase)				1.43	0.08	0.02
<b>Scope 2 – Total</b>	<b>10,626</b>	<b>10,003</b>	<b>1,563</b>	<b>996</b>	<b>0</b>	<b>0</b>
Airport electricity	10,626	10,003	1,563	996	0	0
<b>Scope 3 - Total</b>	<b>121,668</b>	<b>122,850</b>	<b>119,304</b>	<b>119,039</b>	<b>115,110</b>	<b>49,354</b>
Aircraft movements	102,344	102,094	96,428	98,822	89,034	38,882
Passenger surface access	12,537	13,634	14,599	13,197	13,042	2,309
Staff commute	560	619	631	544	6,679	4,231
Waste	3,522	3,703	4,188	3,008	3,328	1,753
Electricity T&D & WTT (Gen, T&D)	2,592	2,543	2,291	1,731	1,647	1,060
Third party de-icer						531
Third party operational vehicles				914	755	282
Water	59	63	178	184	233	112
Aircraft engine tests	54	194	124	84	83	101
Tenant natural gas			142	82	181	71
Business travel				28	129	24
Tenant electricity			724	445	0	0
<b>Outside of Scope - Total</b>	<b>3</b>	<b>3</b>	<b>14</b>	<b>14</b>	<b>21</b>	<b>15</b>
Operational vehicles (diesel)	3	3	3	14	21	12
Fire training (diesel and wood)	0.03	0.02	0.00	0.00	0.02	3
<b>Total</b>	<b>135,038</b>	<b>135,364</b>	<b>122,213</b>	<b>122,213</b>	<b>117,813</b>	<b>53,349</b>

# Annual Emissions Trends - 4

Emissions sources with largest changes from 2019:

- Natural gas (Scope 1) emissions **increased** by 50%.
- Fire training emissions **increased** by 57%, primarily as a result of the use of wood (Outside of Scope).

Emissions sources with largest changes from 2019, as a result of restrictions from Covid-19:

- Aircraft movements (Scope 3) emissions **reduced** by 56%.
- Passenger surface access (Scope 3) emissions **reduced** by 82%.
- Operational vehicles (Scope 1 and 3) emissions **reduced** by 62%.
- Waste emissions (Scope 3) emissions **reduced** by 47%.
- Staff commute (Scope 3) emissions **reduced** by 37%.
- Business travel (Scope 3) emissions **reduced** by 81%.



Ed Bovill

[ed.bovill@ricardo.com](mailto:ed.bovill@ricardo.com)

## ED14694

This report is the Copyright of Edinburgh Airport Limited. It has been prepared by Ricardo Energy & Environment, a trading name of Ricardo-AEA Ltd, under contract to customer name dated 01/12/2020. The contents of this report may not be reproduced in whole or in part, nor passed to any organisation or person without the specific prior written permission of Edinburgh Airport Limited. Ricardo Energy & Environment accepts no liability whatsoever to any third party for any loss or damage arising from any interpretation or use of the information contained in this report, or reliance on any views expressed therein.

# Methodologies

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.

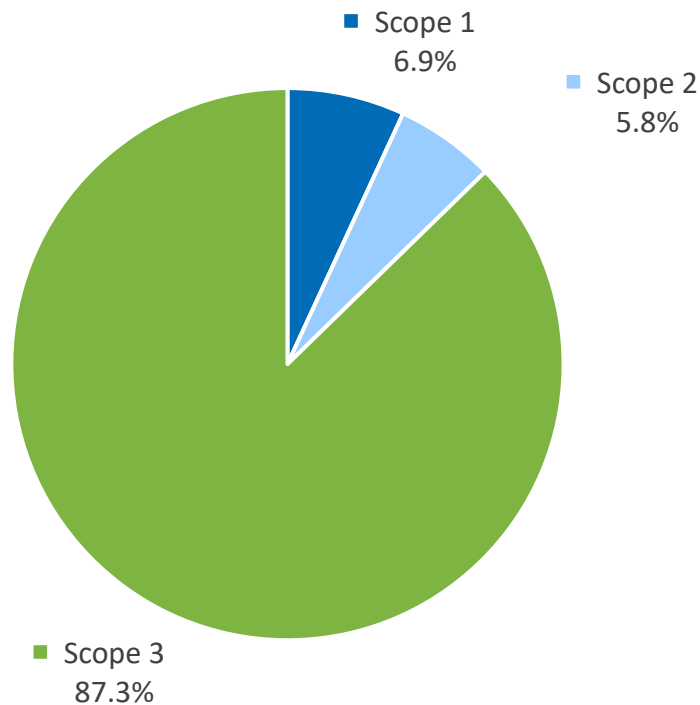
**Scope 1 emissions** are defined as direct GHG emissions arising from sources that are owned or controlled by the company. The emissions result from activities that the company can have direct influence on through its actions. Airports' emissions that are included are: natural gas use, company owned 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. The airport 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** are defined as those arising as an indirect consequence of the use of goods or services provided by the company. The airport does have some influence over Scope 3 emissions but the activities are not under its control. Sources included by the airport include aircraft (all aircraft movements up to a height of 1,000m above aerodrome level), employees commuting to the airport, passenger surface access to the airport, airside vehicle activities by third party operators, waste disposal, water (supply and treatment), airport business travel and engine testing.

# Location Based Emissions

# Key Stats - Carbon Emissions by Scope 2020



	Total 2020 emissions (tCO <sub>2</sub> e)	% of total emissions
Scope 1	3,980	6.9%
Scope 2	3,376	5.8%
Scope 3	50,472	87.3%
Outside of Scope	15	0.0%
<b>Total</b>	<b>57,842</b>	<b>100.0%</b>

### Scope 1:

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

### Scope 2:

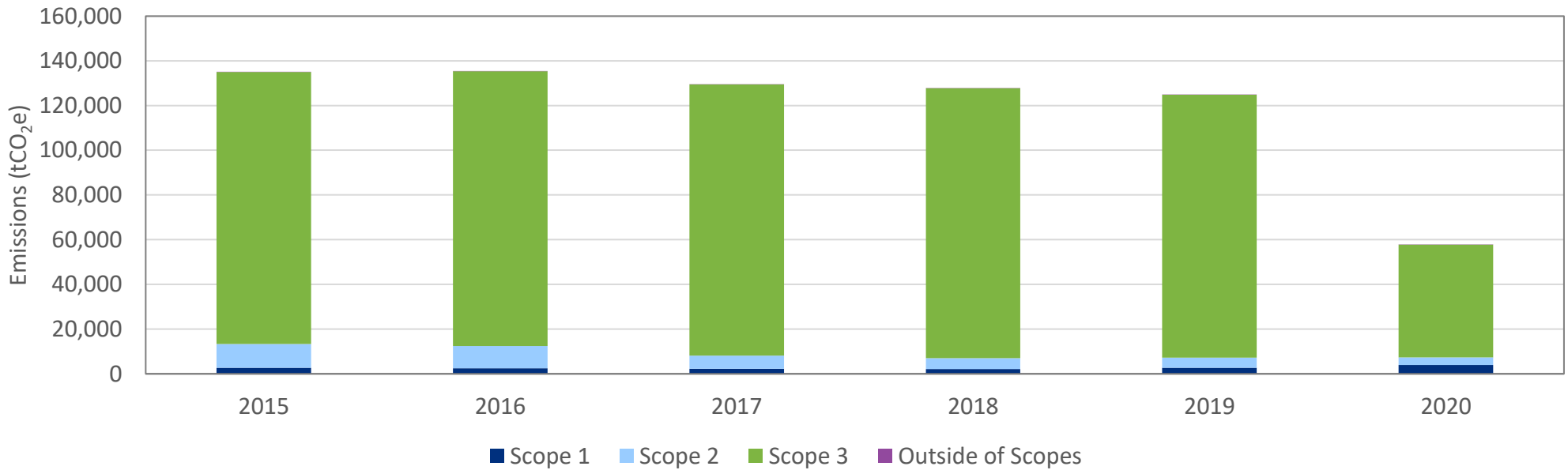
Emissions associated with the use of electricity imported from the grid or from a third party supplier of energy in the form of heat or electricity.

### Scope 3:

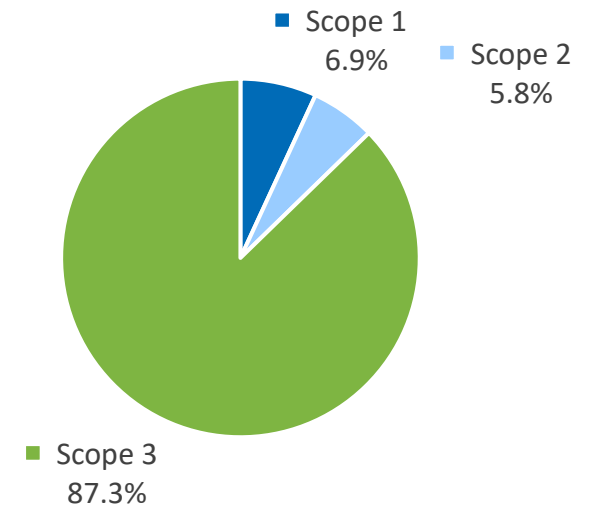
Emissions arising as a direct consequence of the use of goods or services provided by the company. For Edinburgh Airport this would be the operation of the airport. Sources include aircraft movements, passenger and staff travel to the airport, airside activities, waste disposal, water and business travel.



# Key Stats - All Scopes Summary



	Total 2020 emissions (tCO <sub>2</sub> e)	% of total emissions
Scope 1	3,980	6.9%
Scope 2	3,376	5.8%
Scope 3	50,472	87.3%
Outside of Scope	15	0.0%
<b>Total</b>	<b>57,842</b>	<b>100.0%</b>



# Carbon Emissions by Source and Activity 2020 - 1

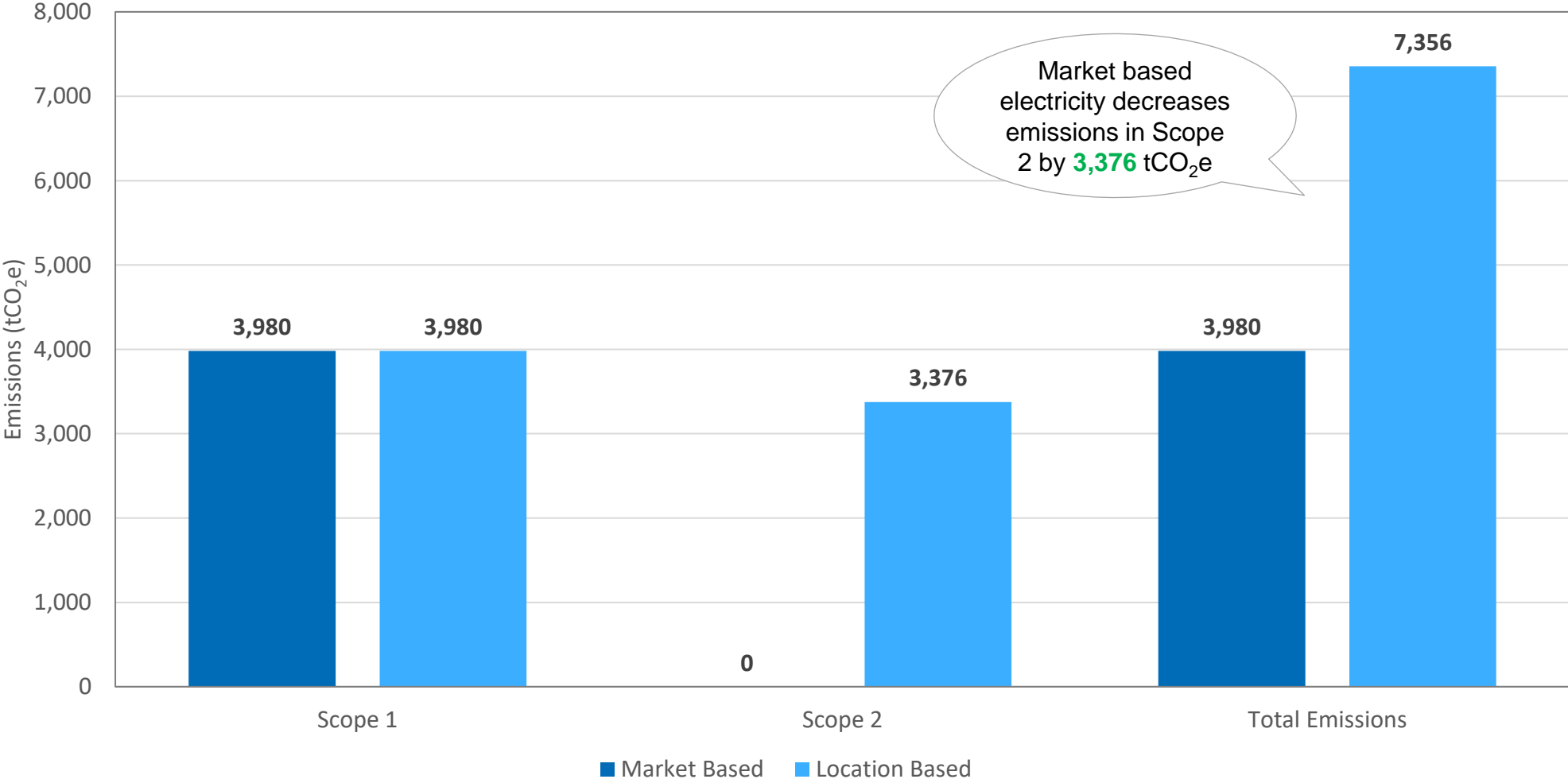


Location Based	Emissions (tCO <sub>2</sub> e)	% of Scope	% of Total Emissions
<b>Scope 1 – Total</b>	<b>3,980</b>	<b>100.00%</b>	<b>6.88%</b>
Airport natural gas	3,350	84.18%	5.79%
Airport de-icer	415	10.42%	0.72%
Airport operational vehicles	208	5.23%	0.36%
Refrigerants	6	0.16%	0.01%
Fire training	1	0.01%	0.00%
Business travel (fuel purchase)	0.02	0.00%	0.00%
<b>Scope 2 – Total</b>	<b>3,376.1</b>	<b>0.00%</b>	<b>5.84%</b>
Airport electricity	3,376.1		5.84%
<b>Scope 3 - Total</b>	<b>50,472</b>	<b>100.00%</b>	<b>87.26%</b>
Aircraft movements	38,882	77.04%	67.22%
Passenger surface access	2,309	4.57%	3.99%
Staff commute	4,231	8.38%	7.32%
Waste	1,753	3.47%	3.03%
Electricity T&D & WTT (Gen, T&D)	1,060	2.10%	1.83%
Third party de-icer	531	1.05%	0.92%
Third party operational vehicles	282	0.56%	0.49%
Water	112	0.22%	0.19%
Aircraft engine tests	101	0.20%	0.17%
Tenant natural gas	71	0.14%	0.12%
Business travel	24	0.05%	0.04%
Tenant electricity	1,117.5	2.21%	1.93%
<b>Outside of Scope - Total</b>	<b>15</b>	<b>100.00%</b>	<b>0.03%</b>
Operational vehicles (diesel)	12	79.47%	0.02%
Fire training (diesel and wood)	3	20.53%	0.01%
<b>Total</b>	<b>57,842</b>		<b>100.00%</b>

# Location vs Market Based Emissions 2020: All Scopes



Emissions totals by scope calculated using either the location or market based emissions factors. Tenant energy is included in Scope 3.



# Location Based Electricity Emissions Historical Comparison



To allow for a fair comparison to previous years, the figures for electricity emissions below include tenant electricity use (classified as Scope 3 in 2020 methodology).

	2017 (Location Based)	2018 (Location Based)	2018 (Market Based)	2019 (Location Based)	2019 (Market Based)	2020 (Location Based)	2020 (Market Based)
Electricity (Scope 2 and 3) kgCO <sub>2</sub> e/kWh <u>Airport (Scope 2) + Tenants (Scope 3)</u>	0.35156	0.28307	0.05800	0.25560	0	0.23314	0
Electricity T&D* losses (Scope 3) kgCO <sub>2</sub> e/kWh	0.03287	0.02413	0.02413	0.02170	0.02170	0.02005	0.02005
Electricity usage (kWh) total <u>Airport + Tenants</u>	24,326,187	24,839,355	24,839,355	27,271,791	27,271,791	19,274,442	19,274,442
Electricity (Scope 2 and 3) emissions tCO <sub>2</sub> e <u>Airport + Tenants</u>	8,552	7,031	1,441	6,971	0	4,494	0
Electricity T&D* losses + WTT (Gen, T&D) (Scope 3) emissions tCO <sub>2</sub> e	2,291	1,731	1,731	1,647	1,647	1,060	1,060
Total electricity (Scope 2 and 3) emissions tCO <sub>2</sub> e <u>Airport + Tenants</u>	10,843	8,762	3,172	8,617	1,647	5,554	1,060

\*T&D = transmission and distribution.

# 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 <sub>2</sub> e)	2016 emissions (tCO <sub>2</sub> e)	2017 emissions (tCO <sub>2</sub> e)	2018 emissions (tCO <sub>2</sub> e)	2019 emissions (tCO <sub>2</sub> e)	2020 emissions (tCO <sub>2</sub> e)
Scope 1	2,741	2,508	2,306	2,164	2,682	3,980
Scope 2	10,626	10,003	5,845	4,861	4,544	3,376
Scopes 1 and 2	13,367	12,511	8,151	7,025	7,226	7,356
Scope 3	121,608	122,850	121,287	120,765	117,536	50,472
Outside of Scope	3	3	3	14	21	15
<b>Total emissions</b>	<b>134,979</b>	<b>135,364</b>	<b>129,442</b>	<b>127,803</b>	<b>124,784</b>	<b>57,842</b>

Scope 1 % y-o-y change	N/A	-8%	-8%	-6%	24%	48%
Scope 2 % y-o-y change	N/A	-6%	-42%	-17%	-7%	-26%
Scope 1 & 2 % y-o-y change	N/A	-6%	-35%	-14%	3%	2%
Scope 3 % y-o-y change	N/A	1%	-1%	0%	-3%	-57%
Outside of Scope	N/A	-20%	21%	305%	56%	-31%
<b>Total % y-o-y change</b>	<b>N/A</b>	<b>0%</b>	<b>-4%</b>	<b>-1%</b>	<b>-2%</b>	<b>-54%</b>

\* In 2017 tenant energy is moved to Scope 3.

# Annual Emissions Trends - 3



Location Based Emissions (tCO2e)	2015	2016	2017	2018	2019	2020
<b>Scope 1 – Total</b>	<b>2,741</b>	<b>2,508</b>	<b>2,306</b>	<b>2,164</b>	<b>2,682</b>	<b>3,980</b>
Airport natural gas	2,056	1,849	1,817	1,607	2,104	3,350
Airport de-icer						415
Airport operational vehicles	318	376	427	439	534	208
Refrigerants	364	282	60	100	30	6
Fire training	2	2	2	17	2	1
Gas oil					12	0
Business travel (fuel purchase)				1.43	0.08	0.02
<b>Scope 2 – Total</b>	<b>10,626</b>	<b>10,003</b>	<b>5,845</b>	<b>4,861</b>	<b>4,544</b>	<b>3,376</b>
Airport electricity	10,626	10,003	5,845	4,861	4,544	3,376
<b>Scope 3 - Total</b>	<b>121,668</b>	<b>122,850</b>	<b>121,287</b>	<b>120,765</b>	<b>117,536</b>	<b>50,472</b>
Aircraft movements	102,344	102,094	96,428	98,822	89,034	38,882
Passenger surface access	12,537	13,634	14,599	13,197	13,042	2,309
Staff commute	560	619	631	544	6,679	4,231
Waste	3,522	3,703	4,188	3,008	3,328	1,753
Electricity T&D & WTT (Gen, T&D)	2,592	2,543	2,291	1,731	1,647	1,060
Third party de-icer						531
Third party operational vehicles				914	755	282
Water	59	63	178	184	233	112
Aircraft engine tests	54	194	124	84	83	101
Tenant natural gas			142	82	181	71
Business travel				28	129	24
Tenant electricity			2,707	2,170	2,426	1,118
<b>Outside of Scope - Total</b>	<b>3</b>	<b>3</b>	<b>3</b>	<b>14</b>	<b>21</b>	<b>15</b>
Operational vehicles (diesel)	3	3	3	14	21	12
Fire training (diesel and wood)	0.03	0.02	0.00	0.00	0.02	3.03
<b>Total</b>	<b>135,038</b>	<b>135,364</b>	<b>129,442</b>	<b>127,803</b>	<b>124,784</b>	<b>57,842</b>

Term	Definition
<b>Arisings</b>	Materials forming the secondary or waste products of industrial operations.
<b>ATM</b>	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.
<b>Carbon dioxide equivalent (CO<sub>2</sub>e)</b>	The carbon dioxide equivalent (CO <sub>2</sub> e) allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO <sub>2</sub> . CO <sub>2</sub> e is calculated by multiplying the emissions of each of the six greenhouse gases by its 100-year global warming potential (GWP).
<b>Carbon footprint</b>	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 <sub>2</sub> e).
<b>Emission factor</b>	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.
<b>GHG</b>	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.
<b>PAX</b>	Number of passengers.
<b>APU</b>	Auxiliary power unit.
<b>CAA</b>	Civil Aviation Authority