

IChemE Net Zero Baseline Emissions Report 2019-2020

This report provides the emissions calculations for IChemE in 2019 and 2020 and relevant progress towards IChemE's commitment to net zero by 2025.

IChemE's commitment to net zero by 2025

In November 2020, IChemE set out its [position statement on climate change](#) which included commitments to develop plans to achieve net zero emissions from its own operations globally by 2025 and to report progress against this target on an annual basis.

Baseline emissions 2019

The table below summarises IChemE's greenhouse gas (GHG) emissions in 2019.

Table 1. Annual emissions by facility (2019)

Name of facility	Annual energy consumption (GJ)	Scope 1 and 2 emissions* (tCO ₂ e)*	Emissions intensity ratio (kgCO ₂ e /m ²)***
Davis Building, Rugby	1,418.4	49.9	24
Birdcage Walk, London	~ 37.9	~ 2.7	~ 128
1A Manor Road, Rugby	6.1	~ 0.2	~ 1
Kuala Lumpur	39.6	7.1	64
Melbourne	26.9	7.6	61
Total	1,529	67.5	Weighted average: 56

NB: Due to rounding, some totals may not correspond with the sum of the separate figures.

Table 2. Annual emissions by country (2019)

Country	Annual energy consumption (GJ)	Scope 1 and 2 emissions (tCO ₂ e)	Emissions intensity ratio (tCO ₂ e/m ²)
United Kingdom	1,462.5	52.8	23
Malaysia	39.6	7.1	64
Australia	26.9	7.6	61

*Greenhouse gas emissions are divided into three categories. Scope one emissions are direct emissions from owned or controlled sources. Scope two emissions are indirect emissions from the generation of purchased/acquired electricity, heating and cooling. Scope three emissions are the indirect greenhouse gas emissions from sources not directly owned or controlled by an organisation.

**tonnes (t) of carbon dioxide (CO₂) equivalent (e)

***kilograms (kg) of carbon dioxide (CO₂) equivalent (e)

Total	1,529	67.5	Weighted average: 50
--------------	--------------	-------------	-----------------------------

NB: Due to rounding, some totals may not correspond with the sum of the separate figures.

Table 3. Emissions intensity per full-time equivalent (FTE) employee (n = 89) as reported in Annual Financial Statement 2019

Total annual energy per FTE (GJ / FTE)	2019 Emissions per FTE (kgCO₂e / FTE)
17.2	758

Emissions 2020

In 2020, the Covid-19 pandemic had a unique and profound impact on operations. The emissions from office buildings was significantly lower due to homeworking which was implemented in line with local government guidelines.

The 2020 emissions represent a 41% reduction in energy use and 45% reduction in GHG emissions against the baseline year (2019).

Table 4. Annual emissions by facility (2020)

Name of facility	Annual energy consumption (GJ)	Scope 1 and 2 emissions* (tCO₂e)**	Emissions intensity ratio (kgCO₂e/m²)***
Davis Building, Rugby	828	27.7	13
Birdcage Walk, London	~ 37.9	~ 2.5	~ 117
1A Manor Road, Rugby	6.0	~ 0.2	~ 1
Kuala Lumpur	22.2	4.0	36
Melbourne	10.3	2.8	23
Total	905	37.1	Weighted average: 38

NB: Due to rounding, some totals may not correspond with the sum of the separate figures.

Table 5. Annual emissions by country (2020)

Country	Annual energy consumption (GJ)	Scope 1 and 2 emissions* (tCO₂e)**	Emissions intensity ratio (tCO₂e/m²)***
United Kingdom	872	30.3	13

*Greenhouse gas emissions are divided into three categories. Scope one emissions are direct emissions from owned or controlled sources. Scope two emissions are indirect emissions from the generation of purchased/acquired electricity, heating and cooling. Scope three emissions are the indirect greenhouse gas emissions from sources not directly owned or controlled by an organisation.

**tonnes (t) of carbon dioxide (CO₂) equivalent (e)

***kilograms (kg) of carbon dioxide (CO₂) equivalent (e)

Malaysia	22	4.0	36
Australia	10	2.8	23
Total	905	37.1	Weighted average: 24

NB: Due to rounding, some totals may not correspond with the sum of the separate figures.

Table 6. Annual emissions intensity per full-time equivalent (FTE) employee (n = 86) as reported in Annual Financial Statement 2020

Total annual energy per FTE (GJ / FTE)	Emissions per FTE (kgCO ₂ e / FTE)
10.5	431

Next steps

In 2021, the objective was to determine the 2019 and 2020 emissions. These lay the foundations for the next steps which will involve assessment of owned and leased offices, options to reduce emissions and recommendations for future good practice.

**Greenhouse gas emissions are divided into three categories. Scope one emissions are direct emissions from owned or controlled sources. Scope two emissions are indirect emissions from the generation of purchased/acquired electricity, heating and cooling. Scope three emissions are the indirect greenhouse gas emissions from sources not directly owned or controlled by an organisation.*

***tonnes (t) of carbon dioxide (CO₂) equivalent (e)*

****kilograms (kg) of carbon dioxide (CO₂) equivalent (e)*