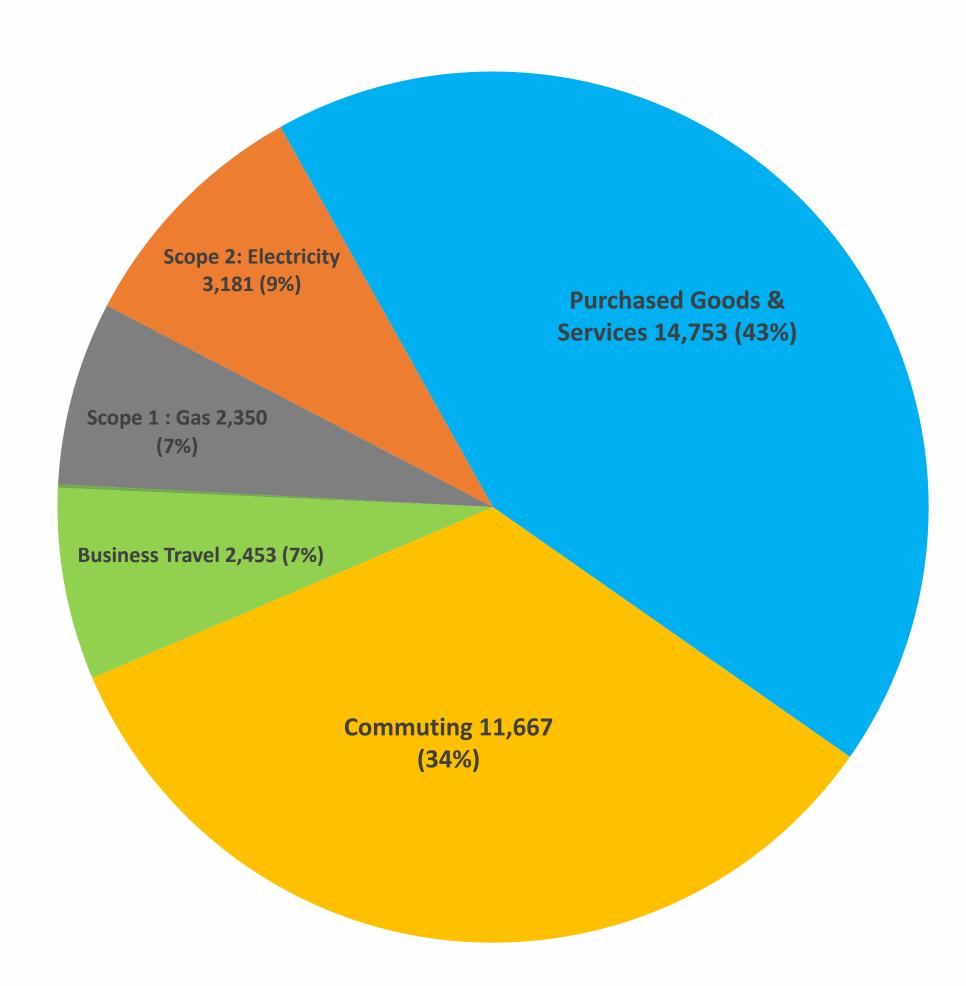


Carbon Footprint 2024



University of Galway.ie

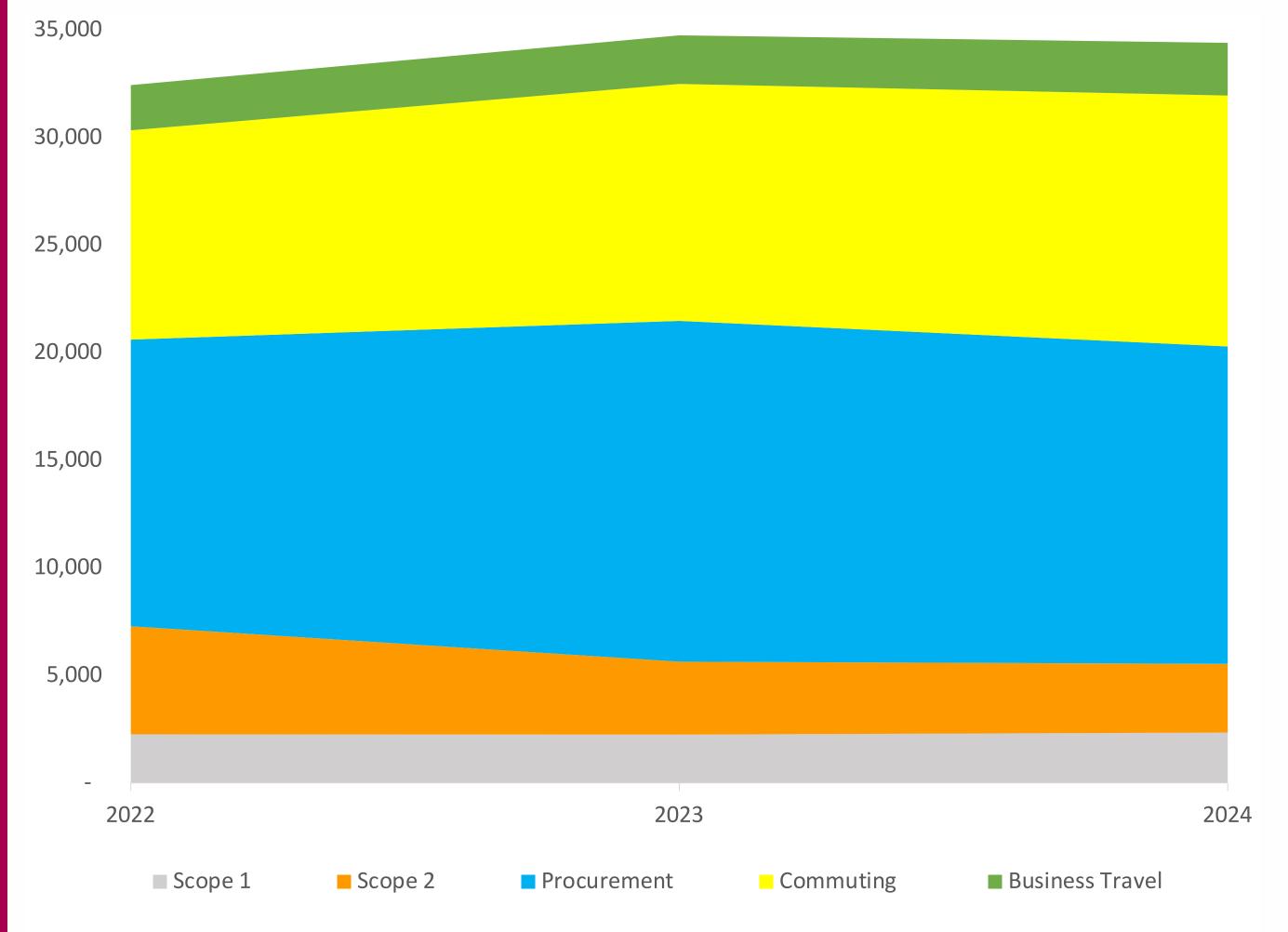
2024 Emissions Categories in Tonnes of CO2e



Highlights

- Total emissions for 2024 are 34,448 tCO2e which is consistent with 2023 levels of 34,793 tCO2e.
- Scope 3 emissions account for 84% of the University's 2024 carbon footprint.
- Purchased goods and services (14,753) and commuting of student and staff to/from the campus (11,667) accounted for 77% of the University's emissions during 2024.
- Use of natural gas imports contribute to 92% of scope 1 emissions
- Import of electricity accounts for 100% of scope 2 emissions.
- 78% of the emissions from 2024 business travel relate to flights.
- Waste & Water (not shown in the chart) totals 43 tCO2e for 2024.

Emissions Categories 2022-2024 (in Tonnes CO2e)



Highlights

- For the period 2022-2024 Procurement of Goods and Services is the largest contributor to the University's carbon footprint at 43,918 tonnes CO2e.
- Emissions from commuting of staff and students have increased over the last 3 years primarily because students are having to travel further distances to/from the campus.
- Scope 1 emissions, mostly natural gas for heating, have increased slightly in 2024 primarily due to colder temperatures.
- Scope 2 emissions (Electricity) have fallen since 2022 due to increased use of renewable energy such as Solar PV.
- Waste & Water which is not shown on the chart totals 125 tonnes CO2e for 2022-2024

Reporting Methodology

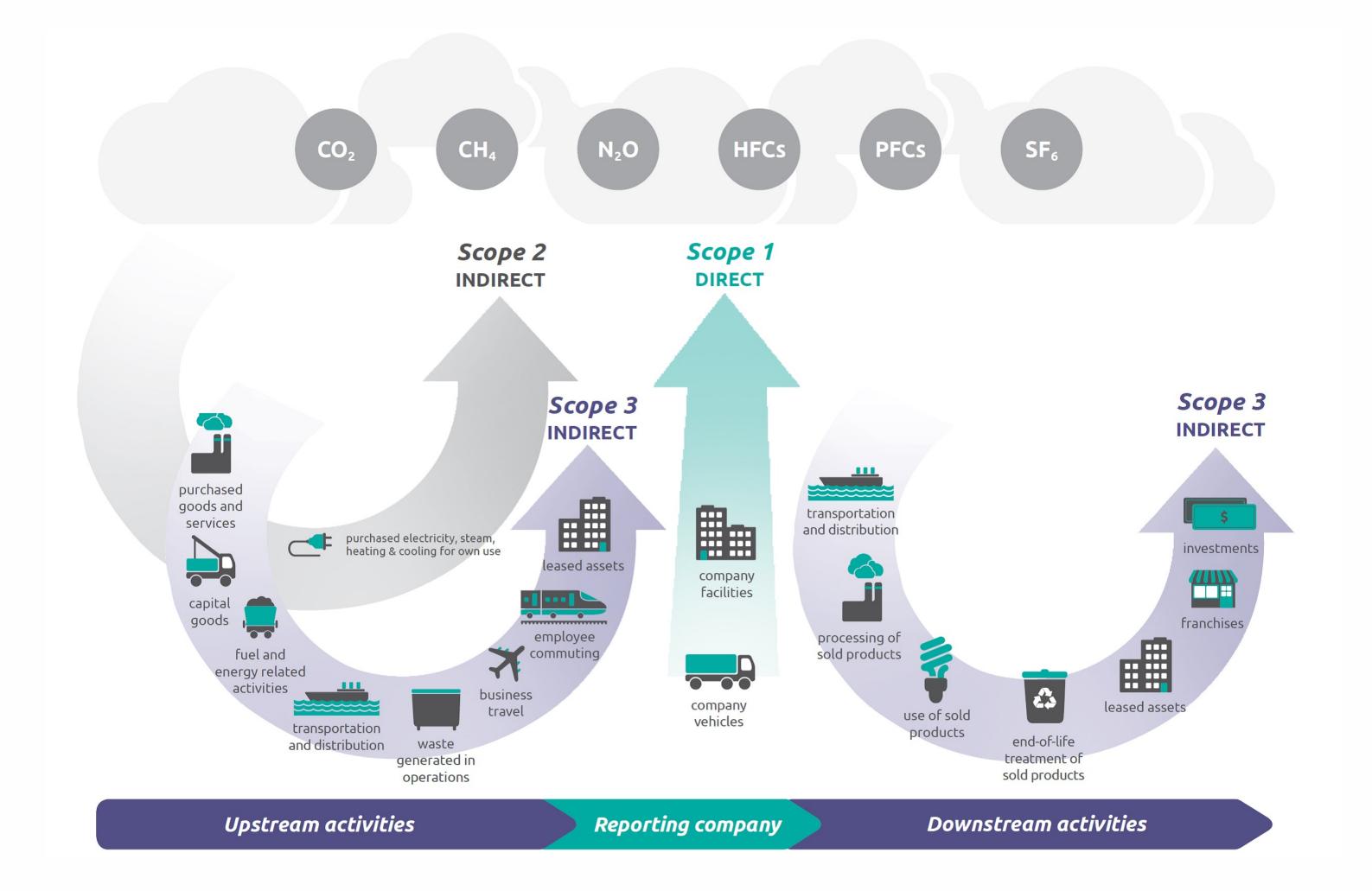
The Greenhouse Gas Protocol Corporate Standard methodology has been used and the 2024 Carbon Footprint report builds on the work of Professor Jamie Goggins and Dr. Thomas Adams (see here for the previous carbon footprint report).

The 2024 carbon footprint incorporates Scopes 1, 2 and 3 emissions (i.e. direct and indirect emissions - see diagram on next page). It reports the University's emissions for the calendar year of 2024.

Data Sources

- Scope 1 & 2 (mostly buildings) comes from the SEAI Monitoring & Reporting tool.
- Scope 3 Purchased Goods & Services emissions are based on a purchase order report taken from the Agresso system
 for January to December 2024 and extrapolated from 80% of spend. EXIOBASE UK emissions factors which are an
 internationally recognised standard are applied to spend categories. Purchased goods & services include emissions
 from building construction and refurbishments.
- Scope 3 Commuting Data is taken directly from the Travel Survey 2025 which was distributed to students and staff.
- Scope 3 Business Travel is calculated from data provided from the University's travel provider (Club Travel) and Travel and Expense claims from the Agresso system.
- Scope 3 Waste & Water is provided by Building & Estates data and emissions are calculated using UK emissions factors.

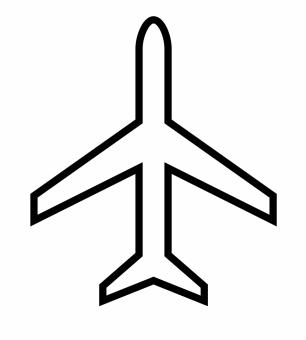
Direct and indirect emissions



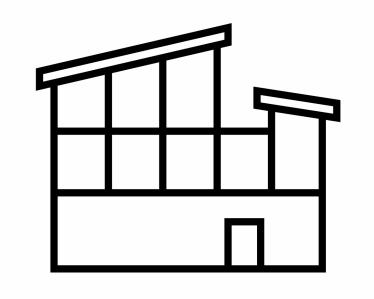
Source: GHG Protocol



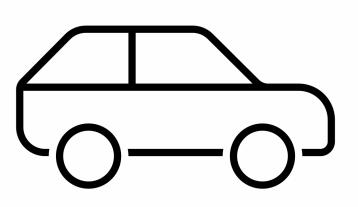
Equivalent of One Tonne of CO₂



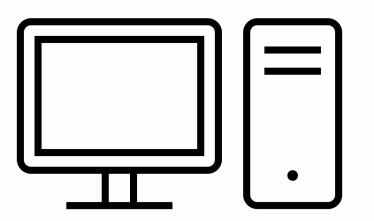
1 way economy flight Dublin to Chicago per passenger



Electricity consumption average household 2.5 months

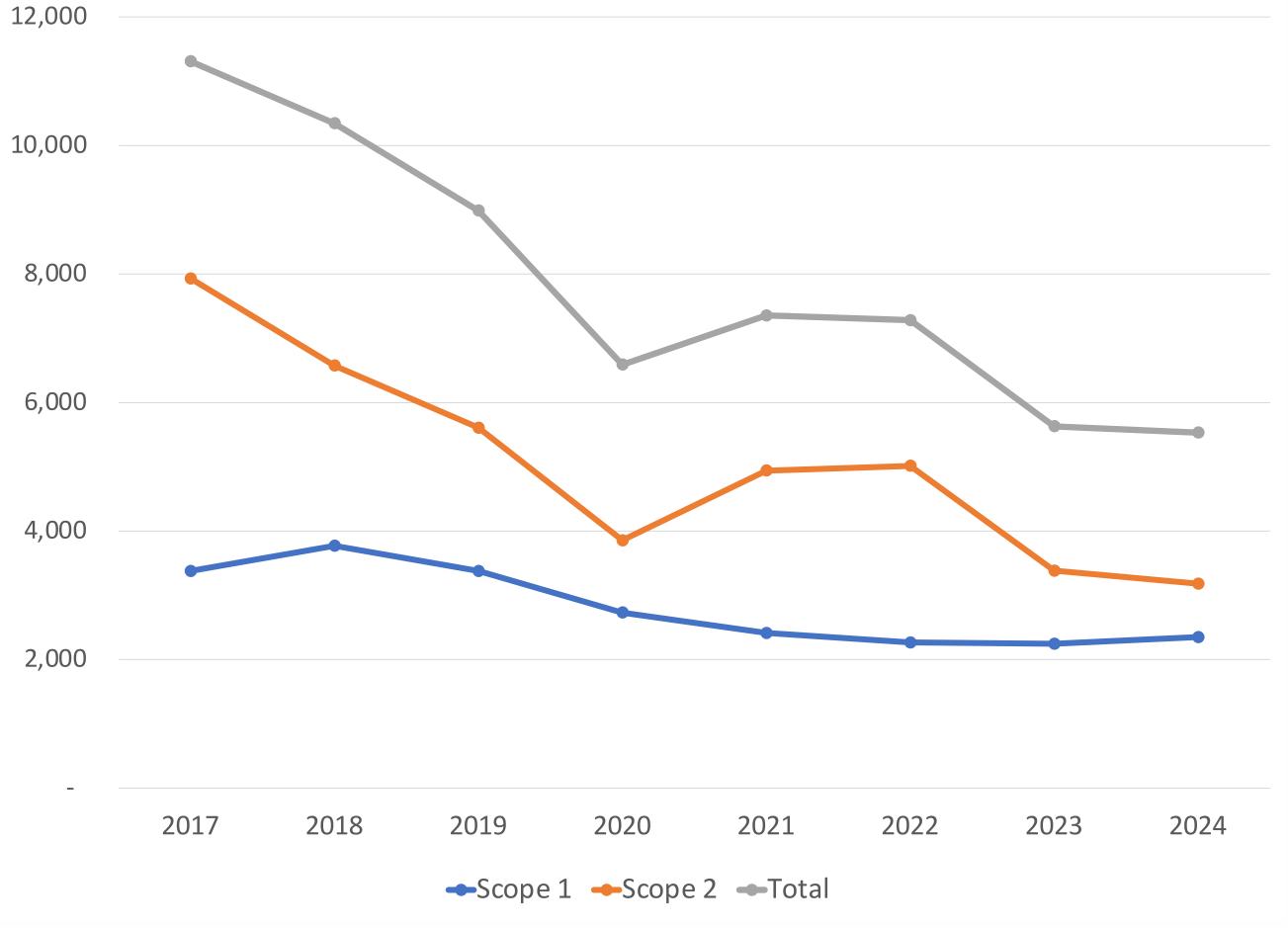


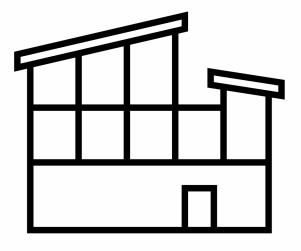
10 return car journeys from Galway to Dublin



Manufacture and transportation of 3 laptops

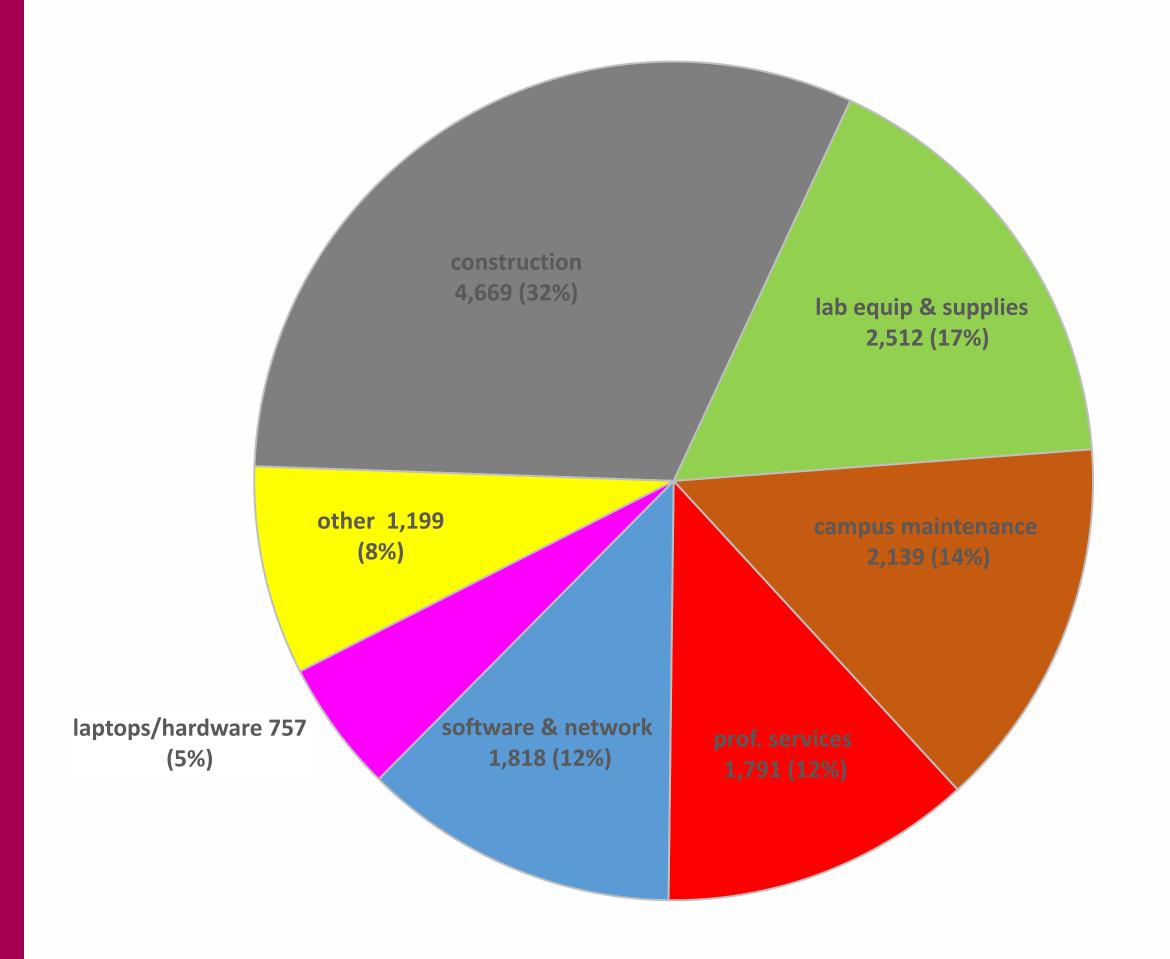
Scope 1 & 2 Emissions in tonnes CO₂e



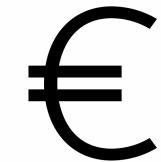


- Over 2017-2024 Scope 1 & 2 emissions have fallen from 11,308 tCO₂e in 2017 to 5,532 tCO₂e in 2024 a decrease of 51%.
- Fossil emissions (Scope 1) have decreased by 30%, while electricity emissions (Scope 2) have decreased by 60%

2024 Purchased Goods & Services: Emissions in tonnes of CO₂e



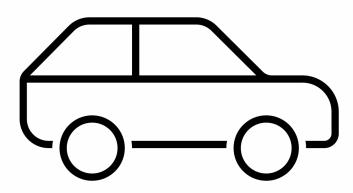
- Construction & Refurbishment of Buildings key items being refurbishment projects at Corrib Village,
 Chemistry, AIB, accessibility projects and construction of the New Learning Commons.
- Campus Maintenance relates to facility management services, repairs, minor works, cleaning, security services.
- Software & Network refers to software purchase, network services, IT consultants/projects.
- Other category includes education services such as training, agents for student recruitment and R&D services.

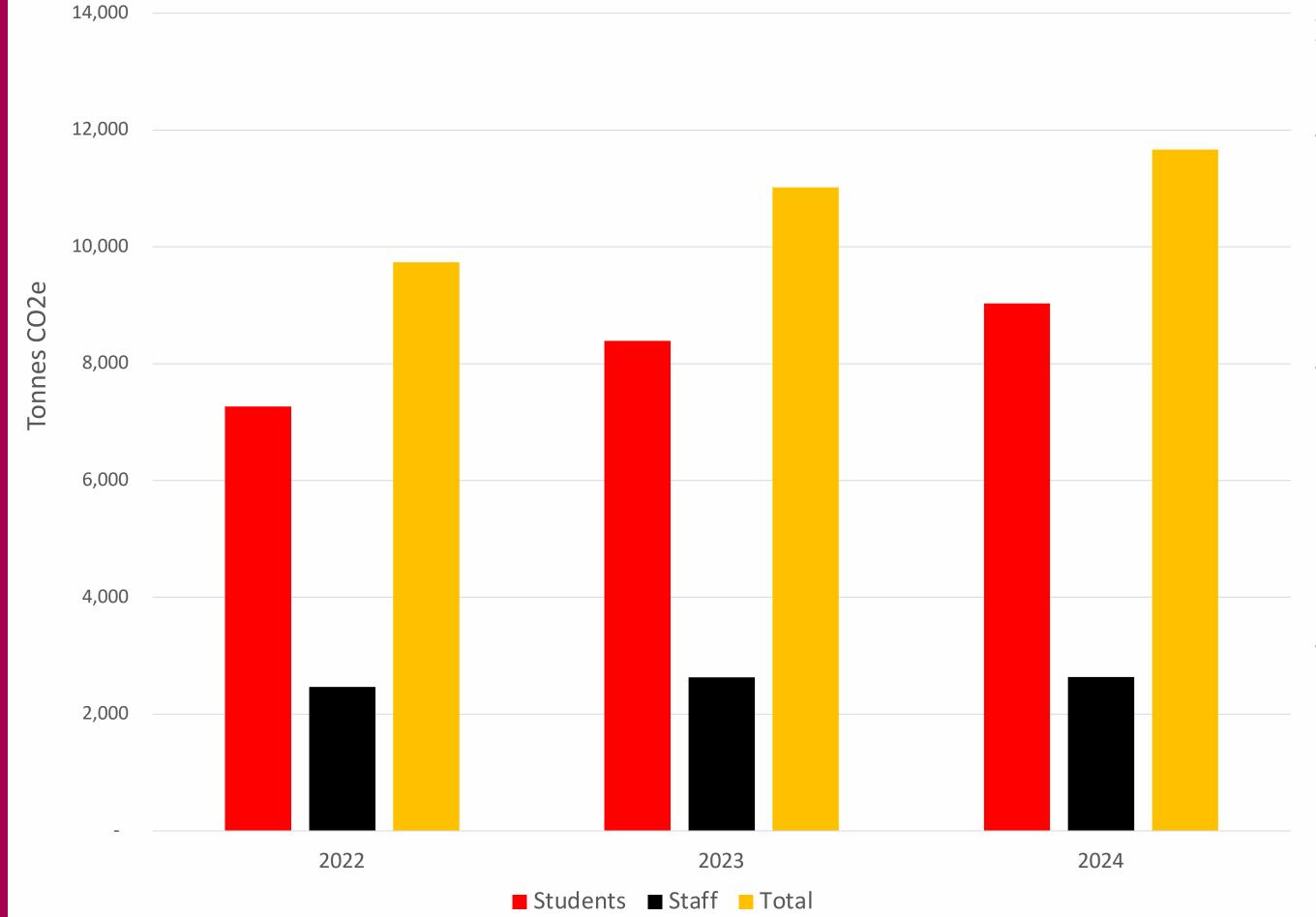


2022-2024 Purchased Goods & Services Emissions in tonnes CO₂e

Spend Category	2022	2023	2024	Total for 2022-24	3 yr Annual Average	2024 %	Total 2022-24 %
Construction & Refurb Buildings	2,578	5,719	4,669	12,996	4,322	31%	29%
Lab Equipment & Supplies	3,639	3,933	2,512	10,083	3,361	17%	23%
Campus Maintenance	2,008	1,795	2,139	5,942	1,981	14%	13%
Professional Services	1,537	1,437	1,791	4,764	1,588	12%	11%
Software & Network Services	1,379	1,153	1,818	4,351	1,450	12%	10%
Laptops & Computer equipment	1,221	763	757	2,741	914	5%	6%
Education Services	572	658	579	1,809	603	4%	4%
R&D services	292	306	532	1,131	377	4%	3%
Other	93	82	88	263	88	1%	1%
Total Procurement Emissions	13,320	15,845	14,886	44,050	14,683	100%	100%

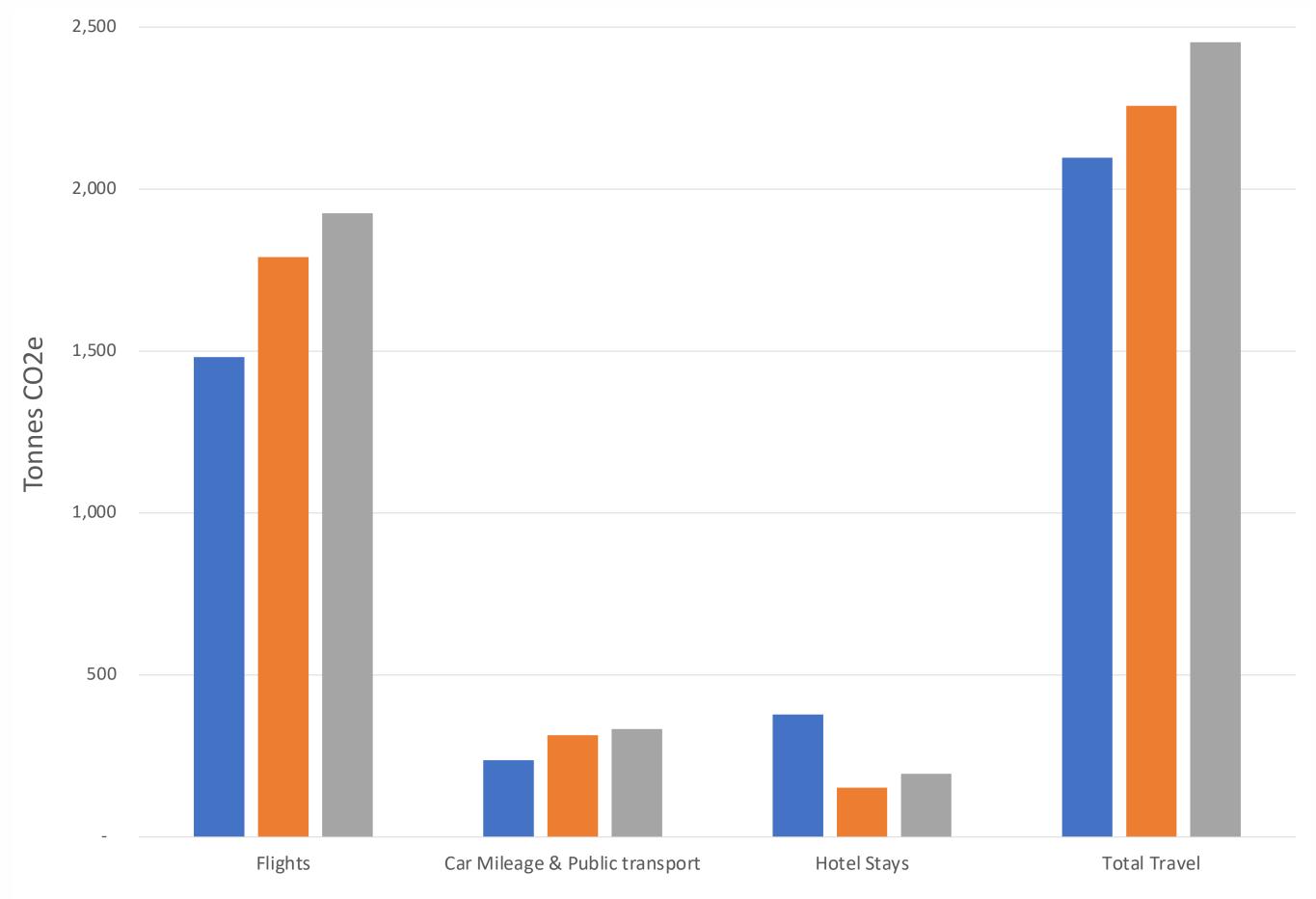
Commuting Students & Staff



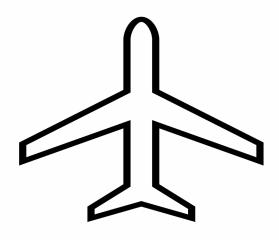


- Total 2024 commuting emissions by students and staff to/from the campus amount to 11,667 tCO₂e.
 This represents an increase of 20% since 2022 when commuting emissions were 9,735 tCO₂e.
- The main cause of this increase is the longer commute distances students are having to take.
 Emissions from student commuting have increased by 24% in 3 years from 7,269 tCO₂e in 2022 to 9,034 tCO₂e in 2024.
- 2022 commuting results are adjusted for the impact of Covid when travel to/from campus was partially reduced.

Business Travel

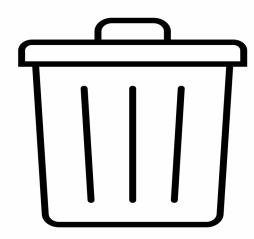


■ 2022 **■** 2023 **■** 2024



- Total business travel emissions for 2024
 were 2,453 tonnes CO2e. Flights account for 78% of these emissions (1,925 tCO₂e).
- For the 3 years 2022-2024 emissions from business flights total 5,197 tonnes CO₂e which represent 76% of travel emissions over this period. 72% of these emissions arise from long haul flights (3,746 tCO₂e).
- Other travel emissions for 2022-2024 relate to car mileage and public transport 884 tCO2e (13%) and hotel stays 726 tCO₂e (11%).

Waste & Water







- Waste: 791 tonnes of waste was generated on the campus during 2024 of which 374 tonnes was recyclable (47%).
- Water: water consumption in 2024 assumed to be static from 2023 at 68,747 m³

Next Steps

- Purchases of Goods & Services is the largest category of emissions contributing to 43% of the University emissions in 2024 (14.8 ktCO2e). Engagement with our largest suppliers to obtain supplier-based emissions data would result in more accurate carbon accounting. In addition, all procurement competitions and tenders to incorporate sufficient sustainability criteria.
- Commuting of students and staff to/from Campus is the second largest contributor to University emissions at 11.6 ktCO₂e in 2024. A Campus Travel Plan is currently in development in reduce these emissions.
- Proposals are being developed for a Carbon Budget System with a particular focus on reducing emissions from procurement and business travel.
- Further reductions to scope 1 & 2 emissions are included in the University 2025 Climate Action Roadmap.



To learn about our plans to reduce our carbon footprint, please visit www.universityofgalway.ie/sustainability