

# Greenhouse gas balance

GREEN OFFICE



Pädagogische Hochschule  
Ludwigsburg  
University of Education

## TOTAL EMISSIONS

Calendar Year 2023  
**8.519 t CO<sub>2</sub>e**

equivalent to 1.000 trips around the world by plane

Calendar Year 2024  
**8.095 t CO<sub>2</sub>e**

equivalent to 950 trips around the world by plane

### Methodology

#### Organizational Boundaries

These are GHG emissions that result from processes and things "whose provision is determined or arranged by the university as operator or owner" <sup>1</sup> → operational control approach

#### Operational Boundaries

**Scope 1**  
Direct GHG emissions

- Heating
- Fleet

**Scope 2**  
Electricity indirect GHG emissions

- Electricity
- Heating rented properties
- District heating

**Scope 3**  
other indirect GHG emissions

- Procurement & Capital Goods
- Upstream chain: heat, electricity, fleet vehicles
- Water/wastewater
- Waste
- Business trips
- Commuting

#### Time Boundaries

- Calendar Year 2023
- Calendar Year 2024

#### Materiality Assessment

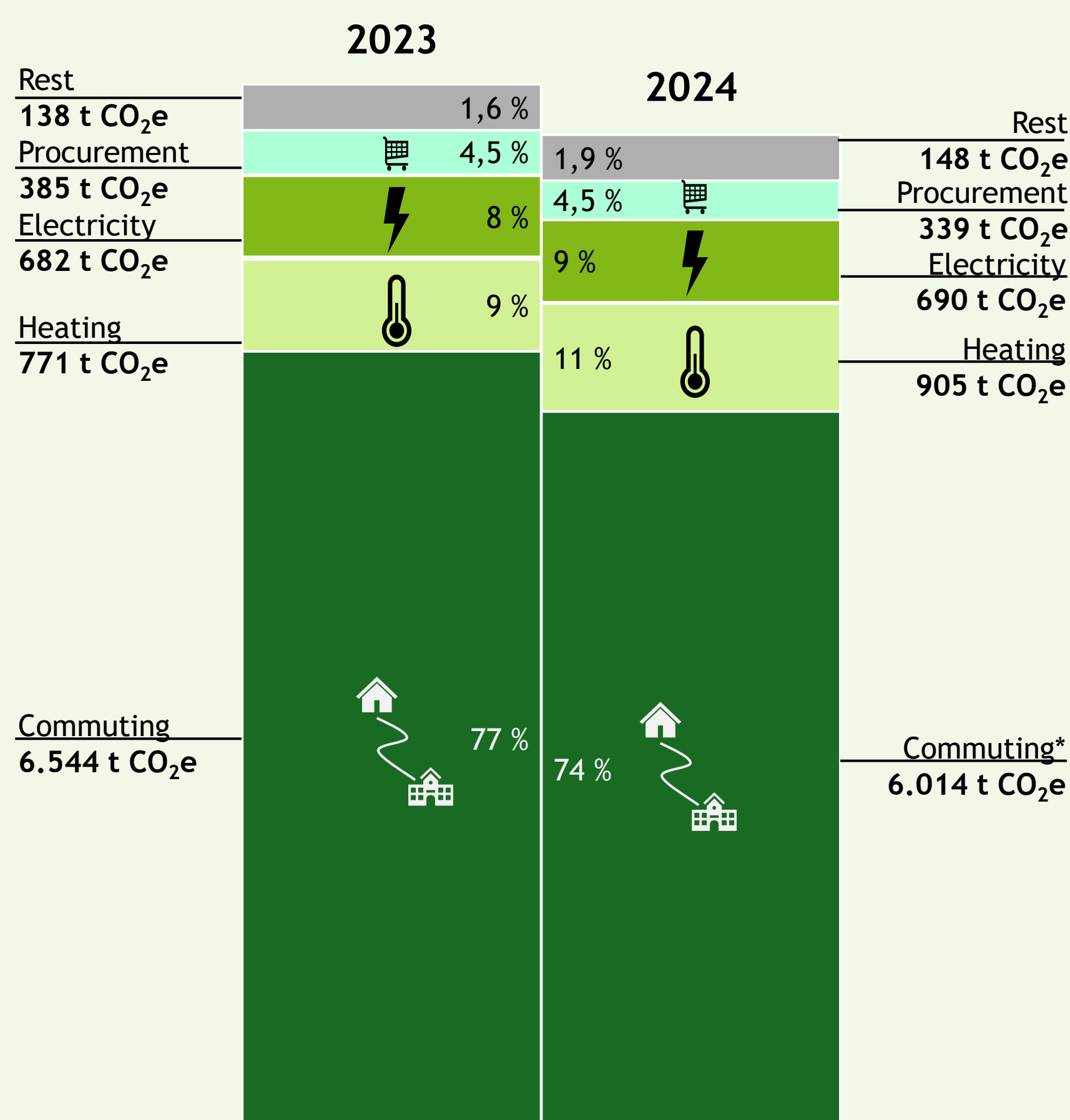
Materiality criteria

1. Scope of emissions
2. Degree of influence
3. Stakeholder Relevance
4. Opportunities & risks
5. Availability of data

#### Calculation

- Consumption data \* EF
- Activity data \* EF

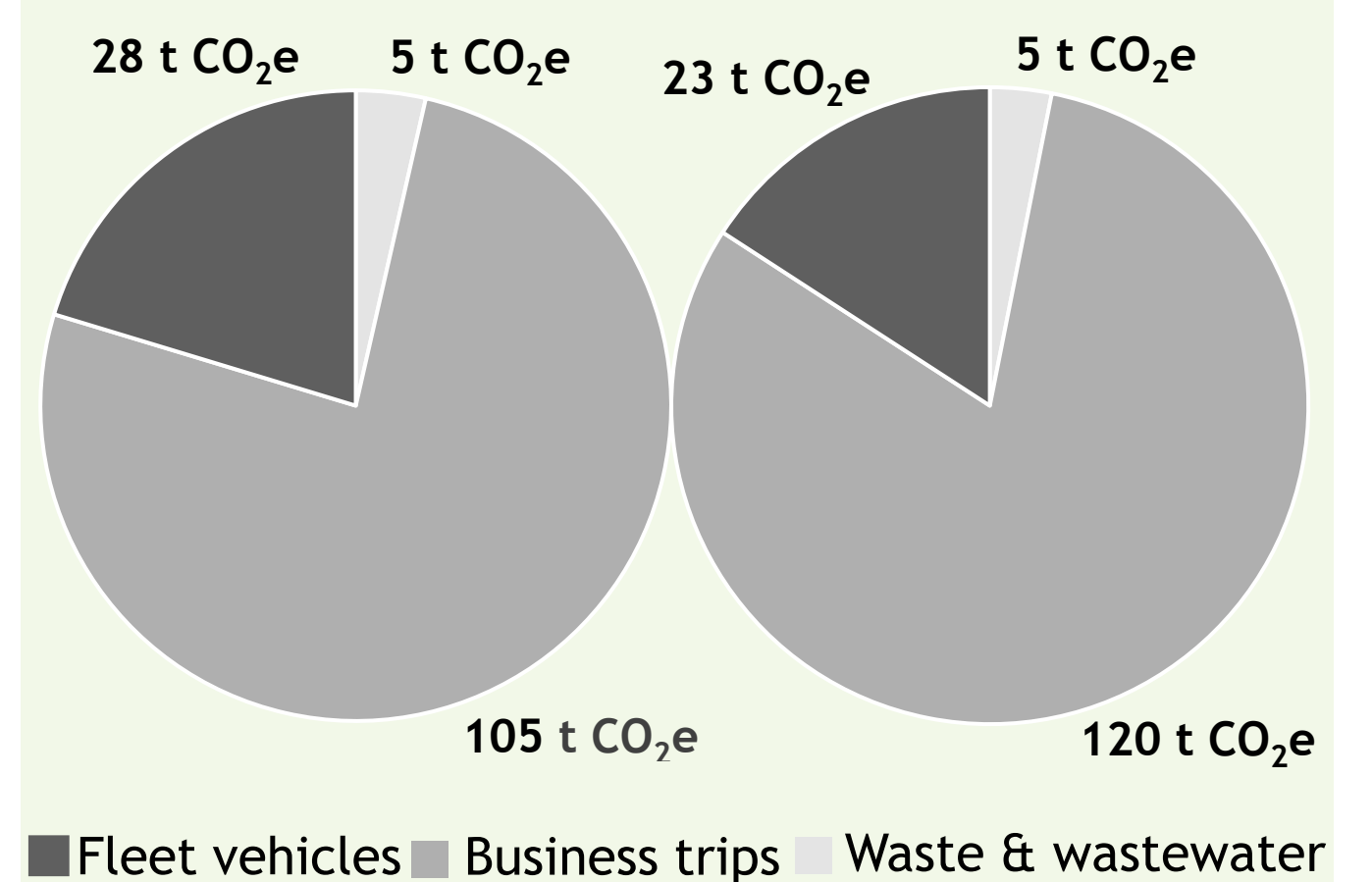
### How many greenhouse gas emissions are generated in the different sectors?



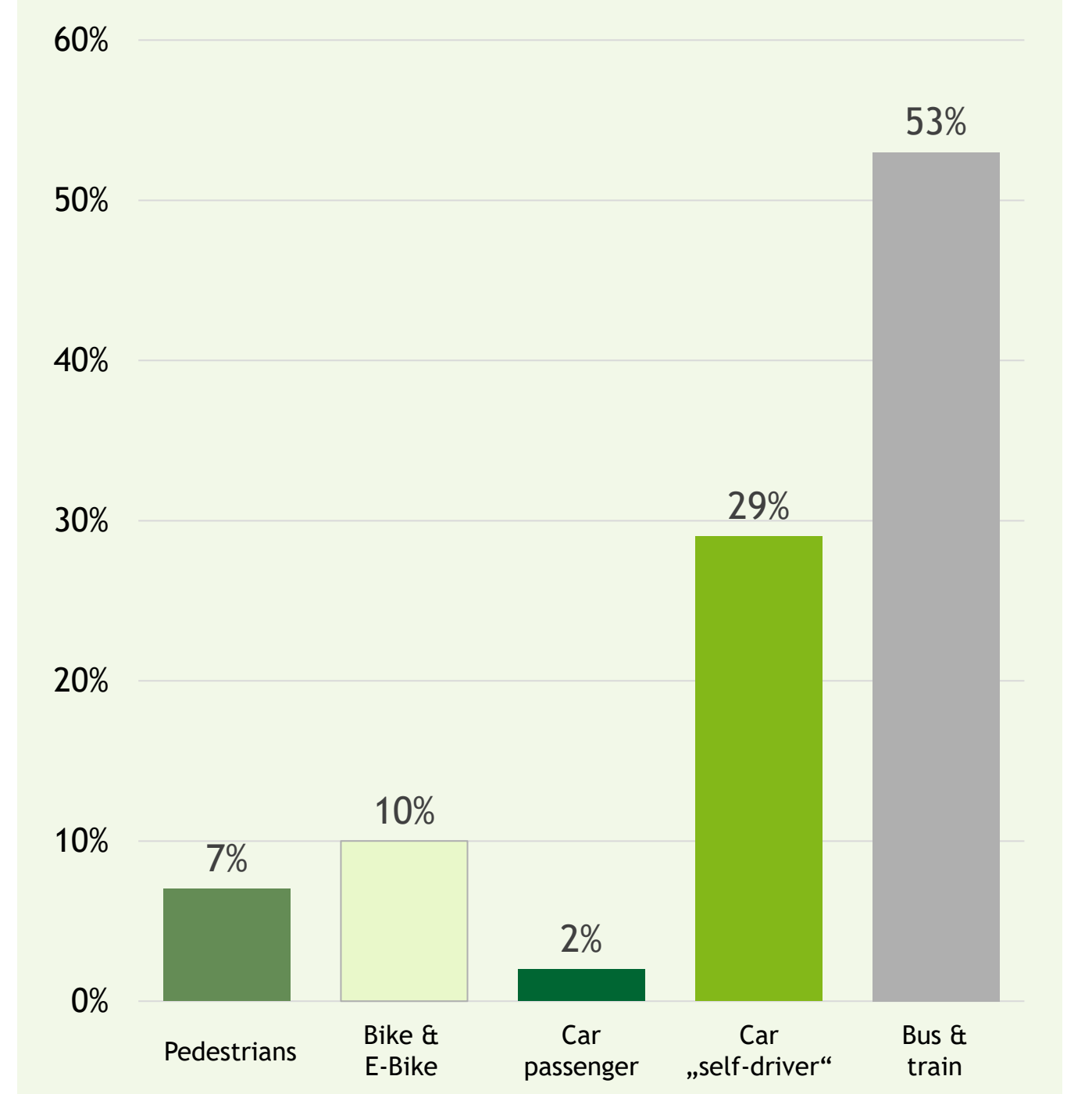
\*the decrease in commuter emissions results from a slight decrease in the number of university members and slightly lower emission factors.

### Rest

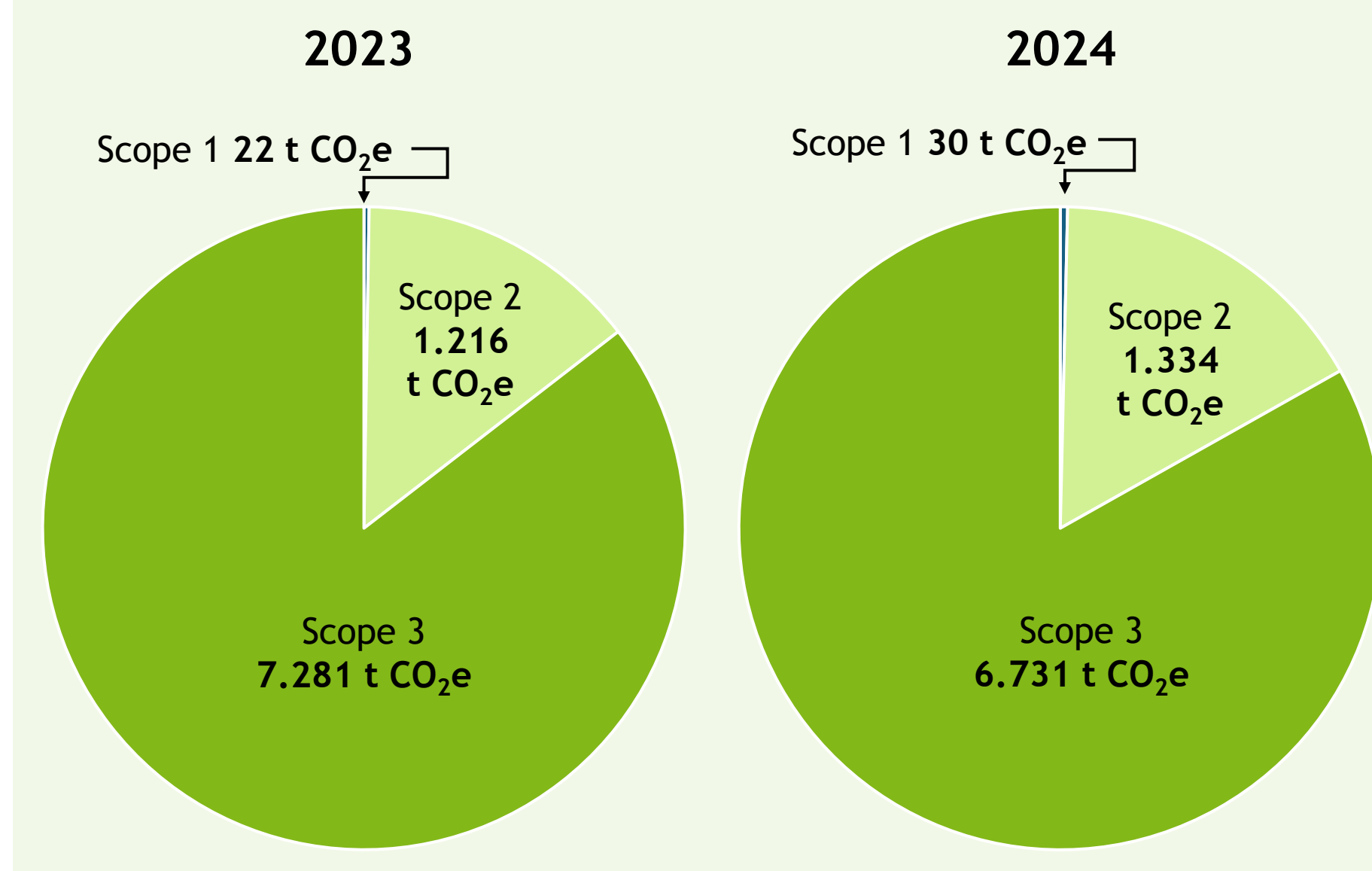
Composition of the 1,6 % remaining emissions 2023



### How do students and staff get to the PH? - Results of the 2023 Mobility Survey<sup>2</sup>



### How are greenhouse gas emissions distributed across the three scopes?



### Exkurs: GHG emissions cafeteria

	2023	2024
Meals with <b>meat</b>	37 t CO <sub>2</sub> e	32 t CO <sub>2</sub> e
Meals <b>vegetarian / vegan</b>	21 t CO <sub>2</sub> e	21 t CO <sub>2</sub> e
<b>GHG emissions total</b>	<b>58 t CO<sub>2</sub>e</b>	<b>53 t CO<sub>2</sub>e</b>

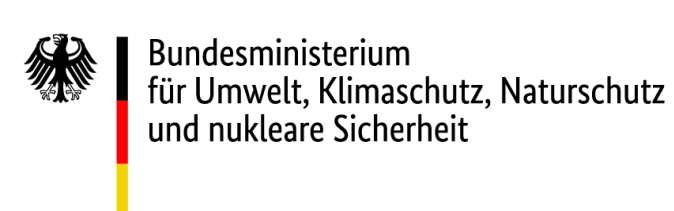
GHG emissions per meal with meat: 1,1 kg CO<sub>2</sub>e  
GHG emissions per meal vegetarian / vegan: 0,65 kg CO<sub>2</sub>e

Document development 04/2026 - Further information can be found in the PH LB's 2024 GHG Emissions Report  
EF = Emission factor ; THG = Greenhouse gas ; t CO<sub>2</sub>e = tons of CO<sub>2</sub> equivalents

<sup>1</sup> MWK. (2025). Richtlinie zur Bilanzierung der Treibhausgasemissionen der Hochschulen in Baden-Württemberg

<sup>2</sup> after login at <https://media.ph-ludwigsburg.de/downloadzentrum/objekte/1410720-Zwischenergebnisse-zur-Umsetzung-des-Mobilitaetskonzepts-und-Erkenntnisse-aus-der-Mobilitaetsbefragung-der-Studierenden-und-Mitarbeitenden-der-Hochschulen-PH-und-HVF-2023>

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