

CARBON-NEUTRAL UNIVERSITY  
OF HELSINKI BY 2030

# ROADMAP



UNIVERSITY OF HELSINKI



YOP





# CONTENT

Climate vision of the University of Helsinki	3
Carbon footprint	4
Plan to reduce carbon emissions	5
Path to carbon neutrality	6
Emission reduction measures:	
Carbon-neutral facilities	7
Sustainable procurement	8
Low-emission transport	9
Sustainable eating habits	10
Research and teaching	11
Coordination and monitoring of climate action	12
Links	13

# CLIMATE VISION OF THE UNIVERSITY OF HELSINKI

The University of Helsinki will be carbon neutral by 2030. We are committed to responding to the global climate crisis in all our operations. Our climate action is founded on our shared values of truth, Bildung, freedom and inclusivity.

## TRUTH

All climate action stems from research-based knowledge. In our climate efforts, genuine impact is key. We examine and consider any conflicts in our climate action with other important goals, such as the promotion of biodiversity and the sustainable use of natural resources.

## BILDUNG

We are committed to identifying solutions to global problems. We will serve as a pioneer and leader in creating new knowledge and preconditions for mitigating climate change and biodiversity loss through our research and teaching.

## FREEDOM

We openly and boldly develop our calculation models, reporting and measures. We carry out extensive collaboration to achieve the climate goals on the local, national and international levels.

## INCLUSIVITY

Our entire community contributes to climate action. We travel, eat and consume in the most sustainable and low-carbon ways possible, keeping in mind the planetary boundaries and moderation.

# CARBON FOOTPRINT

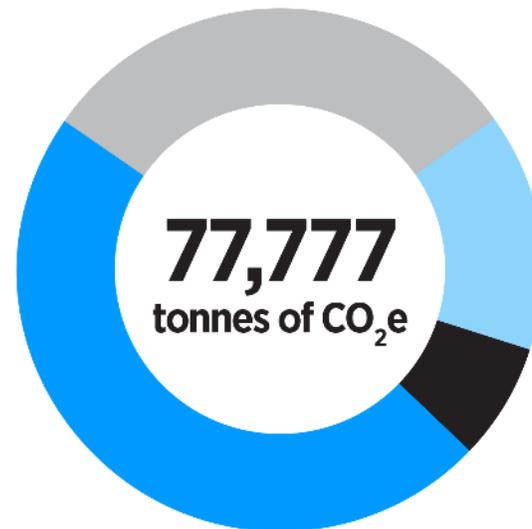
In 2019, the carbon footprint of the University of Helsinki was **77,777** tonnes of CO<sub>2</sub>e. Emissions are classified according to both the Greenhouse Gas Protocol (GHG) and categories of actions to be taken. Emissions are calculated annually.

**The University's carbon footprint as presented in accordance with the GHG Protocol.** Because the COVID-19 pandemic disrupted operations in 2020 and 2021, the year 2019 was selected as the period of analysis.



- **Scope 1 1,593 tonnes of CO<sub>2</sub>e**  
Direct emissions by the University, such as emissions from University-owned vehicles and energy production.
- **Scope 2 31,269 tonnes of CO<sub>2</sub>e**  
Emissions from purchased electricity. In this category, the biggest factors are production emissions from electricity and district heating.
- **Scope 3 44,815 tonnes of CO<sub>2</sub>e**  
Emissions generated in the value chain other than those related to energy, including travel, procurement, food and facility maintenance.

**The University's emissions divided into operative categories:** Facilities, Procurement, Transport and Food. Total emissions can be presented as 1.96 tonnes of CO<sub>2</sub>e per person, 172 kg per 1 m<sup>2</sup> of floor space or 115 kg per €1,000 of University turnover (€676.6 million)



- Facilities 48%
- Procurement 30%
- Transport 15%
- Food 7%

# PLAN TO REDUCE CARBON EMISSIONS

We have split our climate action into five categories, of which the first four include direct emission reductions and the fifth includes positive climate effects.



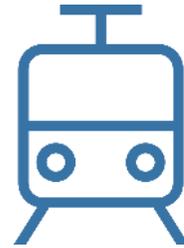
## CARBON-NEUTRAL FACILITIES

- Green transitions will occur in forms of energy.
- Energy consumption will be reduced.
- Facilities will be adaptable and their use efficient.



## SUSTAINABLE PROCUREMENT

- Procurement will be sustainable and carefully planned.
- Low-carbon operators will be favoured.
- The role of the circular economy and recycling will be increased.
- A culture of sharing will be strengthened.



## LOW-EMISSION TRANSPORT

- Air travel will be reduced and alternative forms of travel enabled.
- Commuting between home and University will generate the least carbon dioxide emissions possible.



## SUSTAINABLE EATING HABITS

- The lunchcafeterias operating on University premises will be supported in their efforts to reduce their carbon emissions.
- The University's catering services will be oriented towards plant-based food.

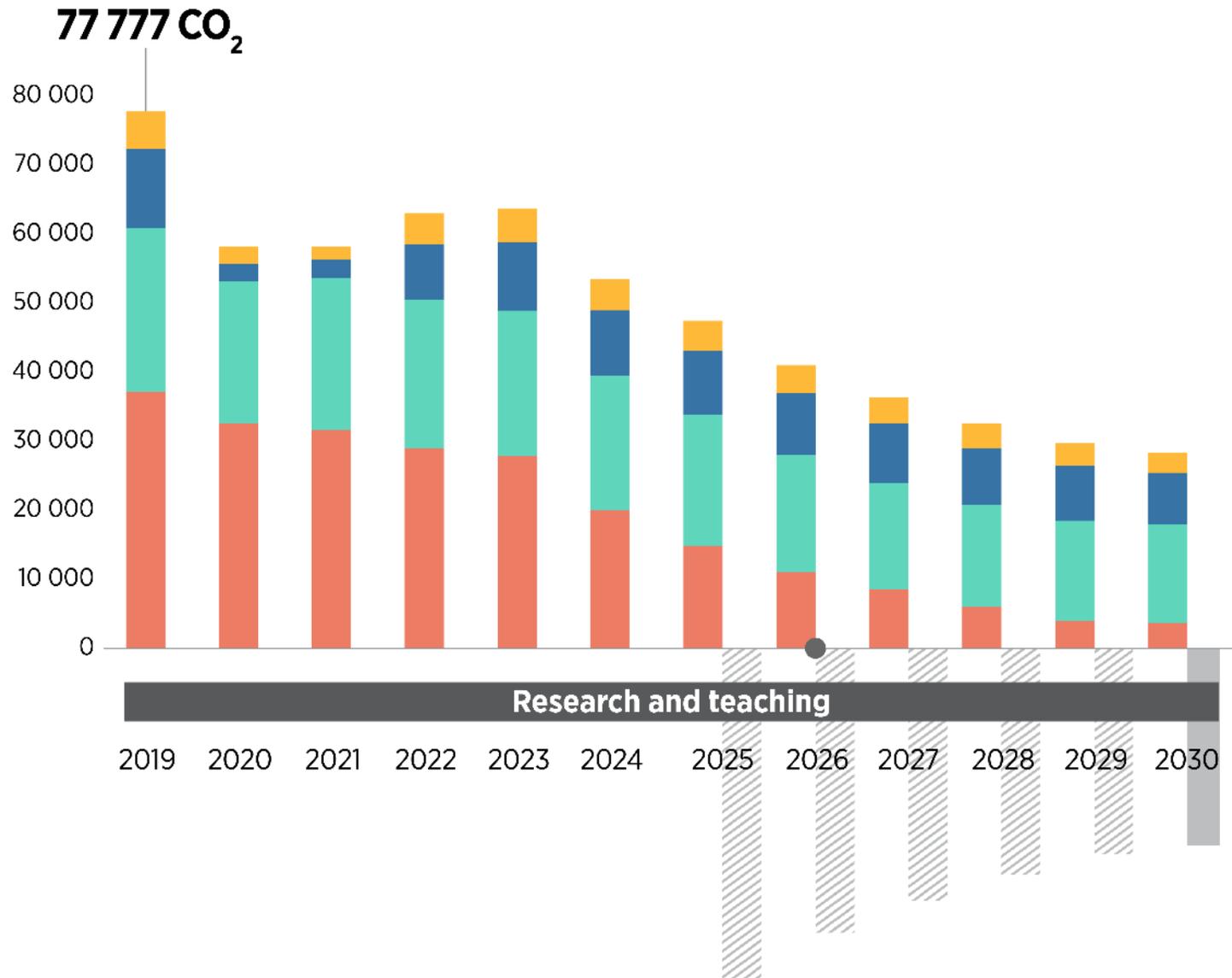


## THE UNIVERSITY AS A PROMOTER OF A CLIMATE-SMART FUTURE

- All efforts to achieve carbon neutrality must stem from research-based knowledge.
- We will investigate, teach and share climate-related knowledge throughout society.

COORDINATION AND MONITORING

# PATH TO CARBON NEUTRALITY



With the emission reduction measures outlined in the roadmap, we will reduce our carbon footprint by two-thirds by 2030. We are also constantly looking for new reduction targets to further increase our ambition. For the remaining climate emissions, we will look at internal and external compensation models and different types of carbon sinks to achieve carbon neutrality.

- Food
- Travel
- Procurement
- Facilities
- ▨ Review of compensations
- Compensation
- Review point for progress towards the emission reduction target



**48 %**  
OF TOTAL  
EMISSIONS

# EMISSION REDUCTION MEASURES

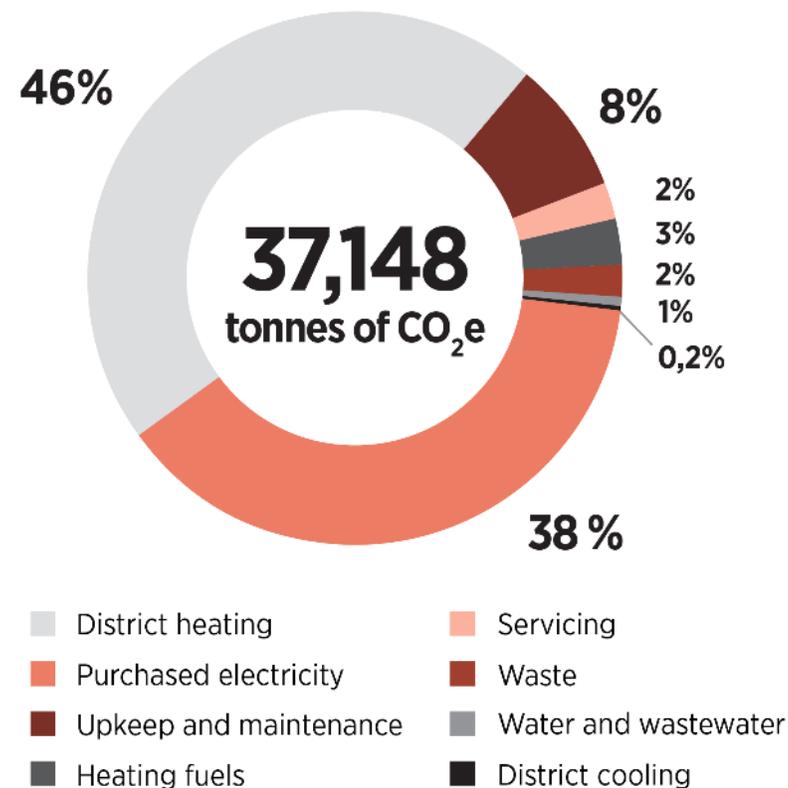
## CARBON-NEUTRAL FACILITIES

48% of the University of Helsinki's carbon footprint is generated by facility emissions. The impact of the green transition on reducing the University's carbon footprint is extremely significant. In a community of 40,000 people, even small measures taken by individuals affect the reduction of energy consumption.

### HOW TO ACHIEVE OUR TARGET FOR 2030

- The electricity and district heating purchased by the University of Helsinki are carbon neutral.
- 10% of energy consumption is covered by independently produced renewable energy.
- Energy consumption has been reduced by 15%.
- Fossil heating fuels have been abandoned.
- The University complies with the principles and guidelines of sustainable construction.
- Total emission reduction target: 34,000 tonnes of CO<sub>2</sub>e (from 2019)

Carbon footprint of facilities in 2019





**30 %**  
OF TOTAL  
EMISSIONS

# EMISSION REDUCTION MEASURES

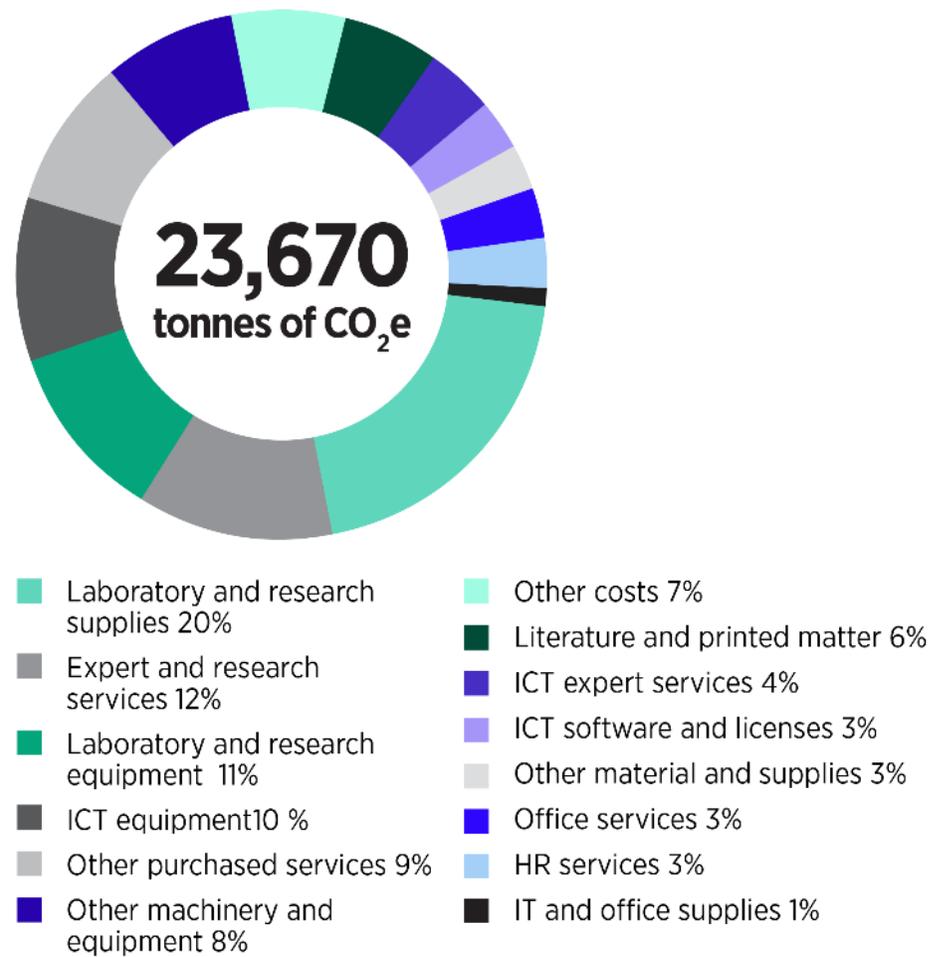
## SUSTAINABLE PROCUREMENT

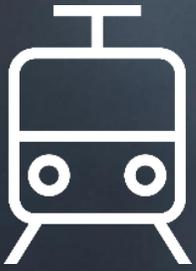
With annual procurement of approximately €150 million, the University of Helsinki is a significant buyer of public services and goods. Procurement must be as low-carbon as possible. Needs-tested consumption, recycling and the promotion of the circular economy must also be increased.

### HOW TO ACHIEVE OUR TARGET FOR 2030

- We use only suppliers committed to low-carbon operations for procurement.
- We are able to easily monitor the carbon footprint of all purchased products and services.
- Our procurement is sustainable and moderate. We have efficient recycling and circular economy models in place.
- We have a strong culture of sharing equipment.
- Total emission reduction target: 8,000 tonnes of CO<sub>2</sub>e

**Carbon footprint of procurement in 2019**





**15 %**  
OF TOTAL  
EMISSIONS

# EMISSION REDUCTION MEASURES

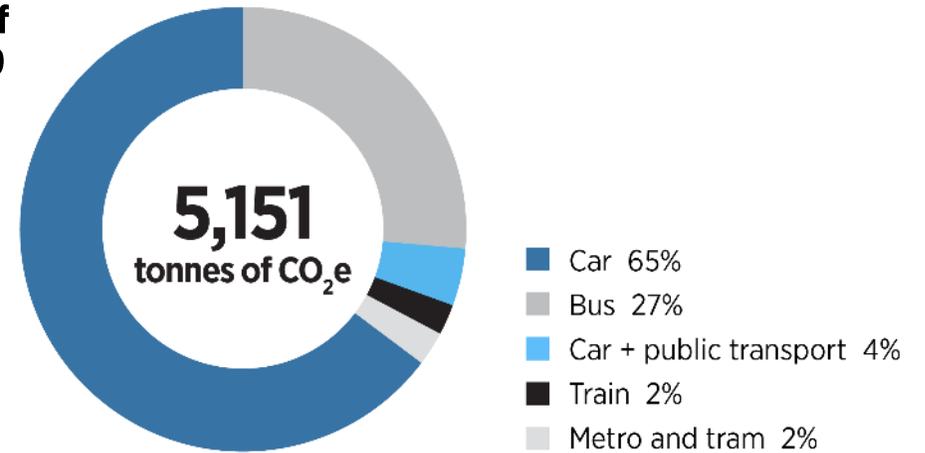
## LOW-EMISSION TRANSPORT

International activities and mobility are important for the University. However, unnecessary travel must be avoided, and travel must generate as little emissions as possible. This also applies to commuting. Digitalisation must be utilised as much as possible.

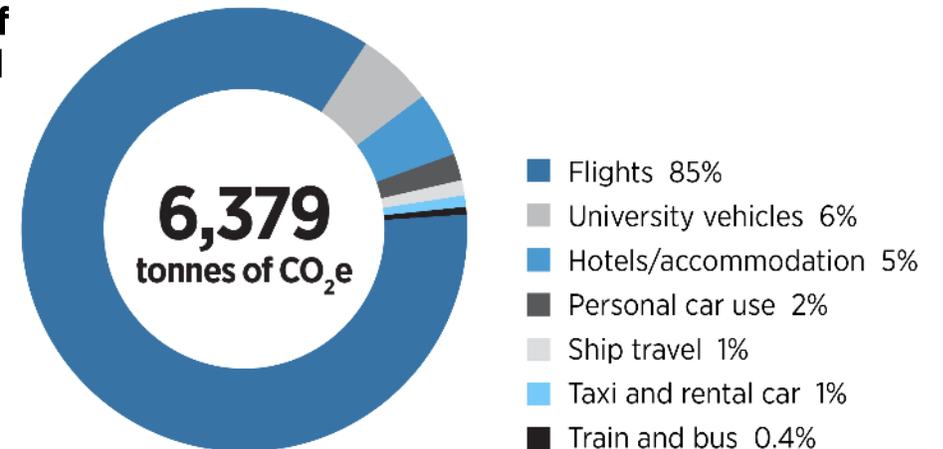
### HOW TO ACHIEVE OUR TARGET FOR 2030

- Air travel significantly reduced
- Comprehensive guidelines for low-carbon travel
- Carbon footprint of commuting 45% below 2019 level
- Total emission reduction target: 4,000 tonnes of CO<sub>2</sub>e

**Carbon footprint of commuting in 2019**



**Carbon footprint of work-related travel in 2019**





**7%**  
OF TOTAL  
EMISSIONS

# EMISSION REDUCTION MEASURES

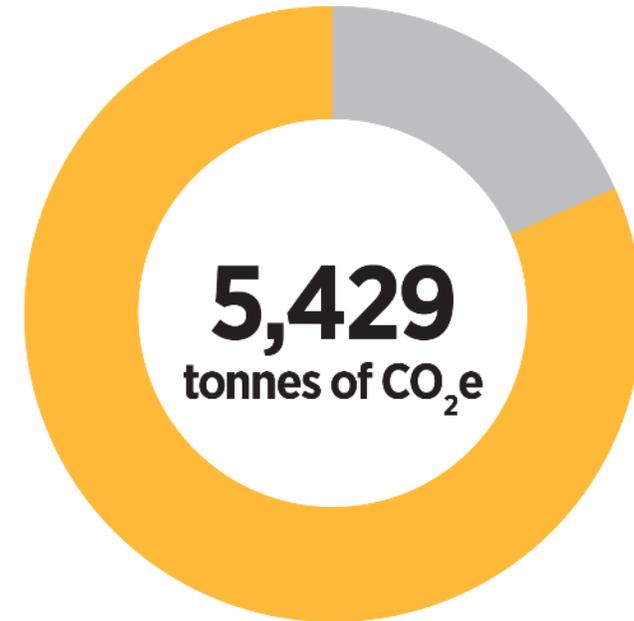
## SUSTAINABLE EATING HABITS

The University community must increasingly pay attention to the carbon footprint of its meals. In addition, the aim is to increase public awareness of the carbon footprint and sustainability of food.

### HOW TO ACHIEVE OUR TARGET FOR 2030

- The lunch cafeterias operating on our premises must have a transparent low-carbon and sustainability programme.
- The University's catering services are oriented towards plant-based food.
- Our food procurement employs strong sustainability and environmental criteria.
- Total emission reduction target: 2,500 tonnes of CO<sub>2</sub>e

### Carbon footprint of food in 2019



- Lunch cafeterias 82%
- University catering and food products 18%



# THE UNIVERSITY AS A PROMOTER OF A CLIMATE-SMART FUTURE

## Importance of the University as a producer of research-based knowledge and new skills

Every day, the University accumulates new knowledge, educates and trains specialists, and creates innovations that help, either directly or indirectly, to reduce emissions. Members of the University community must boldly defend the significance of research-based knowledge in their everyday activities and, more broadly, in societal decision-making.

### **The University has both the opportunity and duty to push significant change:**

- We conduct groundbreaking multidisciplinary climate research in Finland's largest scholarly community.
- We train future climate experts.
- We are a catalyst for research-based societal change.
- We create future climate innovations founded on research.
- We raise awareness of climate issues both within the university community and society as a whole.



# COORDINATION AND MONITORING OF CLIMATE ACTION

- To achieve the goals of the roadmap and actual emission reductions, we need a significant number of individual measures and projects.
- In planning, implementing and assessing these measures, particular attention will be paid to the interconnections between biodiversity loss, social justice and climate action.
- The University's carbon footprint is calculated annually, and the effects of measures are actively monitored and coordinated by the University's coordination group for climate action.
- Our ambitious goals will be achieved only through collaboration. At the heart of climate action is collaboration among the University community and with other parties active in society.

# READ MORE ABOUT THE CARBON NEUTRALITY, SUSTAINABILITY AND RESPONSIBILITY EFFORTS OF THE UNIVERSITY OF HELSINKI:

[Full version of the roadmap for a carbon-neutral University by 2030 \(In Finnish\)](#)

[Annexes to the roadmap \(In Finnish\)](#)

[Sustainability and responsibility on the University website](#)

[Sustainability and responsibility reports and plans](#)

[Helsinki Institute of Sustainability Science HELSUS](#)

[HY247 sustainability and responsibility reports \(in Finnish only\)](#)



UNIVERSITY OF HELSINKI