

Towards the decarbonisation plan of Politecnico di Torino

Update on the emissions
quantification of PoliTo Campus

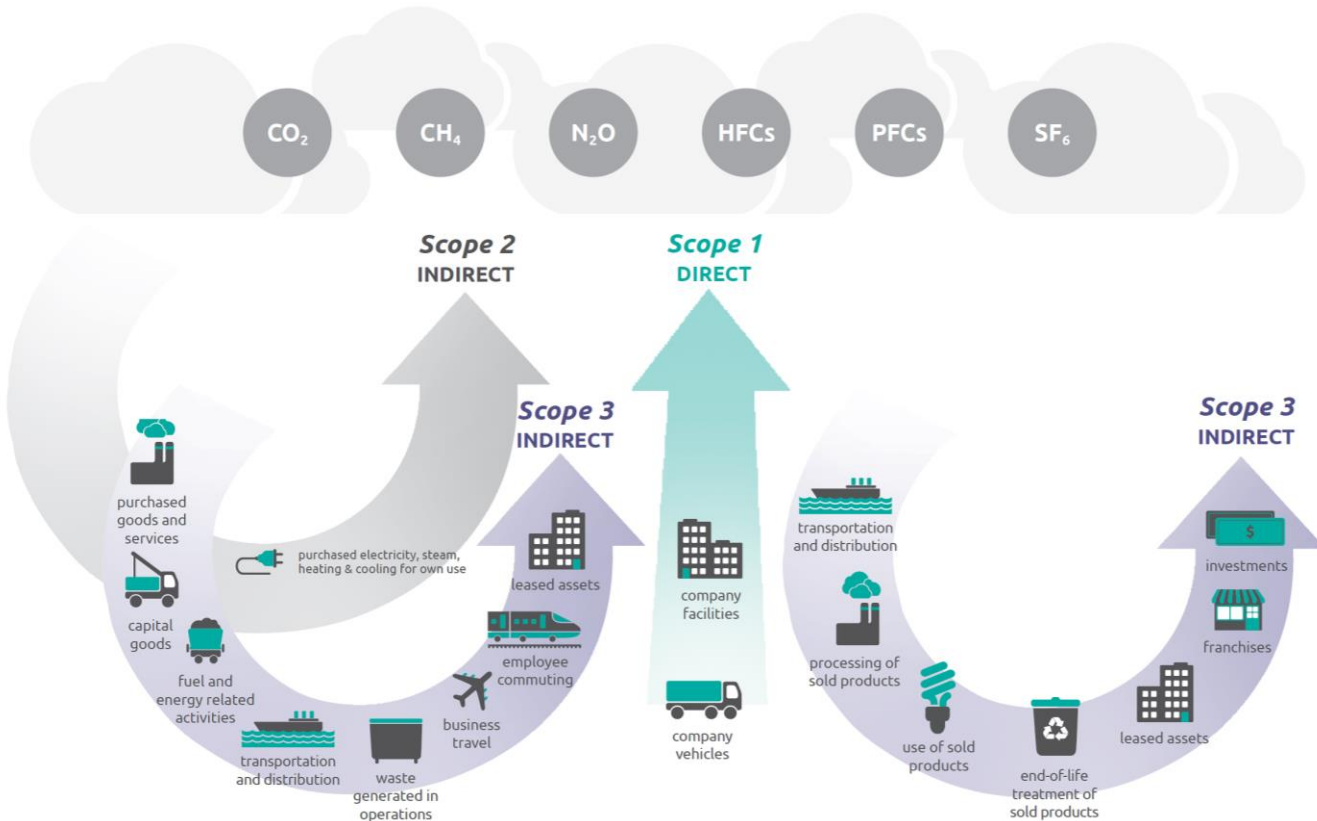
May 31st, 2024



**Politecnico
di Torino**

GHG emissions quantification

GHG protocol and action fields



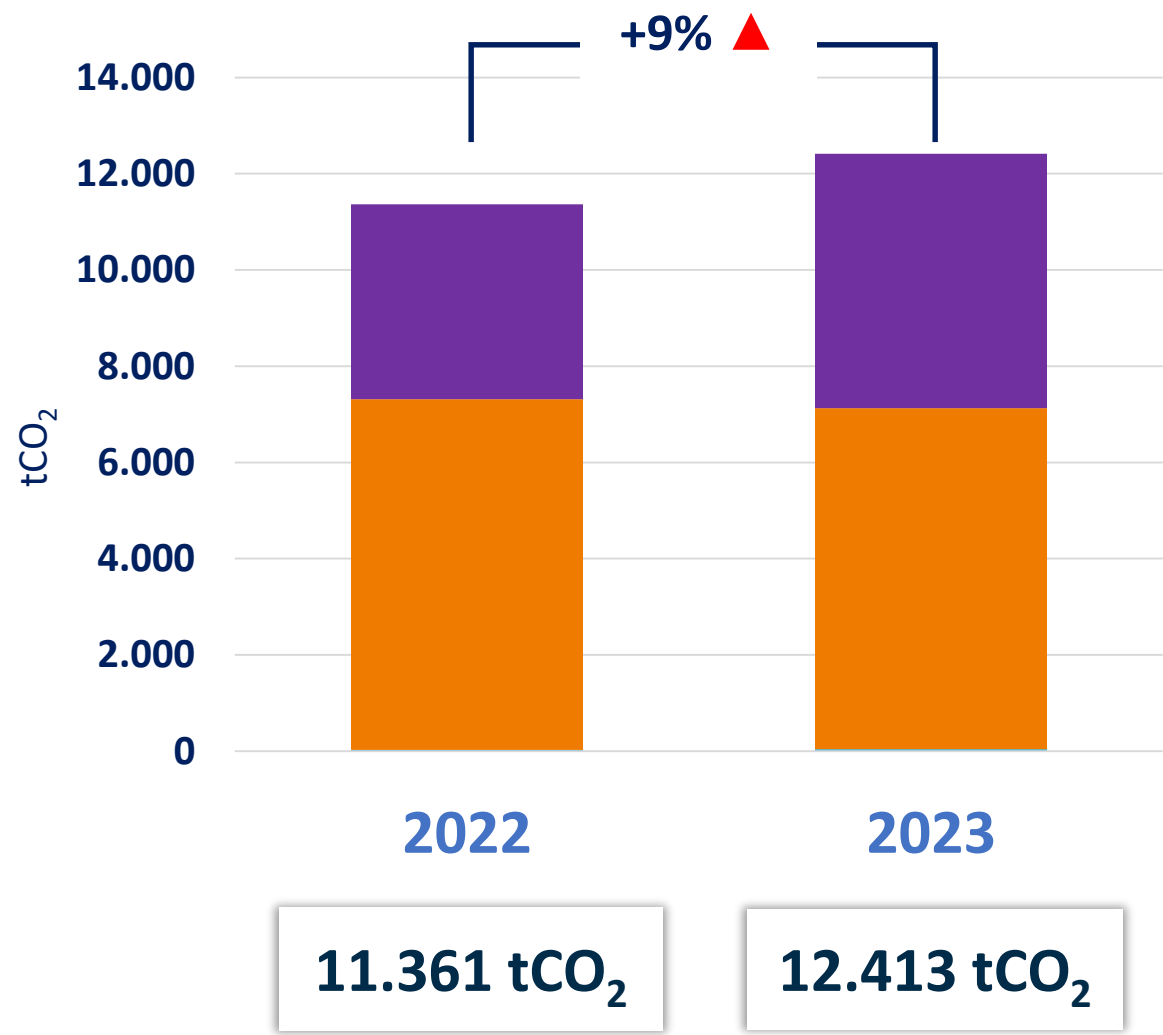
* Figure from <https://www.epa.gov/climateleadership/scope-1-and-scope-2-inventory-guidance>

The “**GHG Protocol Corporate Accounting and Reporting Standard (2004)**” protocol (<https://ghgprotocol.org/corporate-standard>) establishes a standardised methodology to quantify GHG emissions.

An organization's carbon footprint has three components (scopes), in particular:

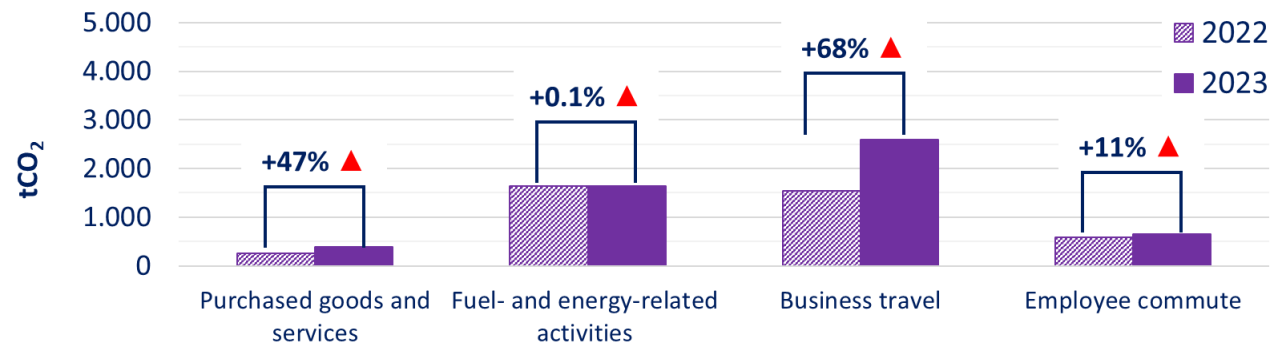
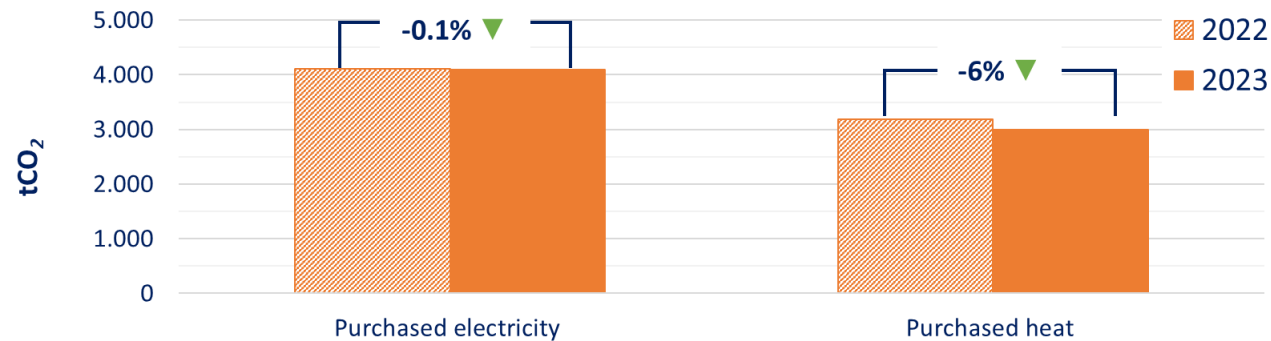
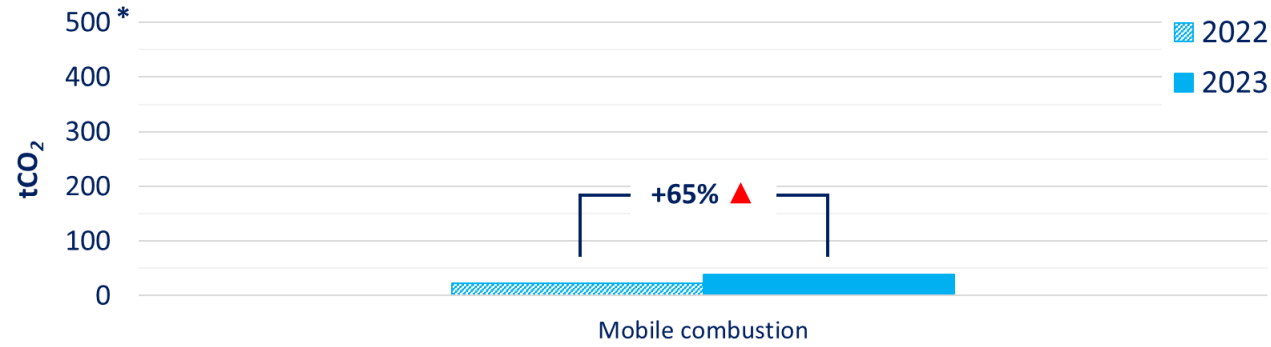
- **Scope 1** > direct GHG emissions that occur from sources that are controlled/owned by an organization;
- **Scope 2** > indirect GHG emissions emissions associated with the purchase of electricity, steam, heat, or cooling;
- **Scope 3** > emissions are the result of activities from assets not owned/controlled by the organization, but that it indirectly affects in its value chain.

GHG emissions: 2022 vs 2023



	2022	2023	Δ%
SCOPE 3	4.047	5.288	+31% ▲
SCOPE 2	7.292	7.087	-3% ▼
SCOPE 1	23	38	+65% ▲

GHG emissions: 2022 vs 2023



SCOPE 1

Impact on TOTAL: +0,1% ▲

- Extension of the assessment to the overall Campus fleet (vehicles of the Administration and Departments)

**Graphic scale adapted to increase readability*

SCOPE 2

Impact on TOTAL: -1,8% ▼

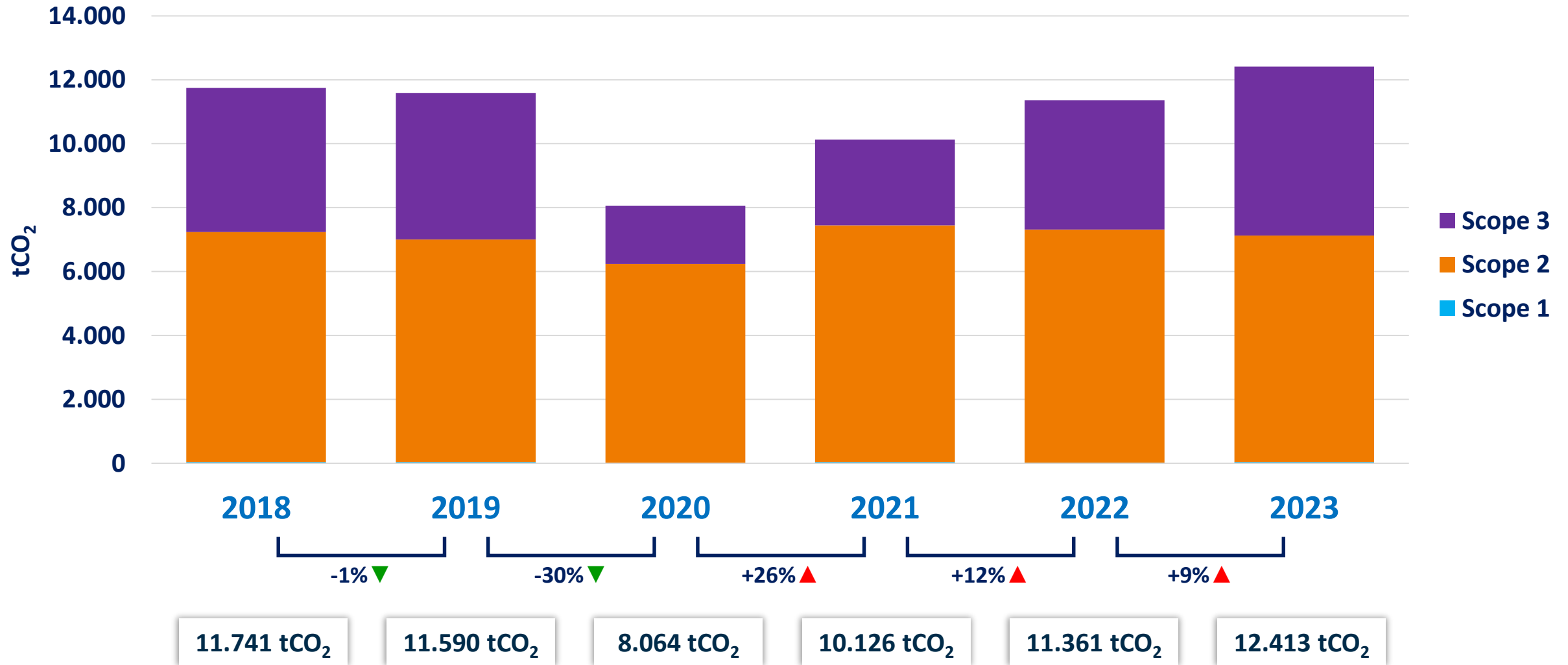
- **Actions on Energy and Climate Emergency issues**
- Scheduling of University closing-periods aimed at reducing energy consumption

SCOPE 3

Impact on TOTAL: +10,9% ▲

- **Significant growth in CO₂ produced by BUSINESS TRAVELS**, which turns out to be almost equivalent to that produced to heat the University

GHG emissions: from 2018 to 2023



GHG emissions: from 2018 to 2023

