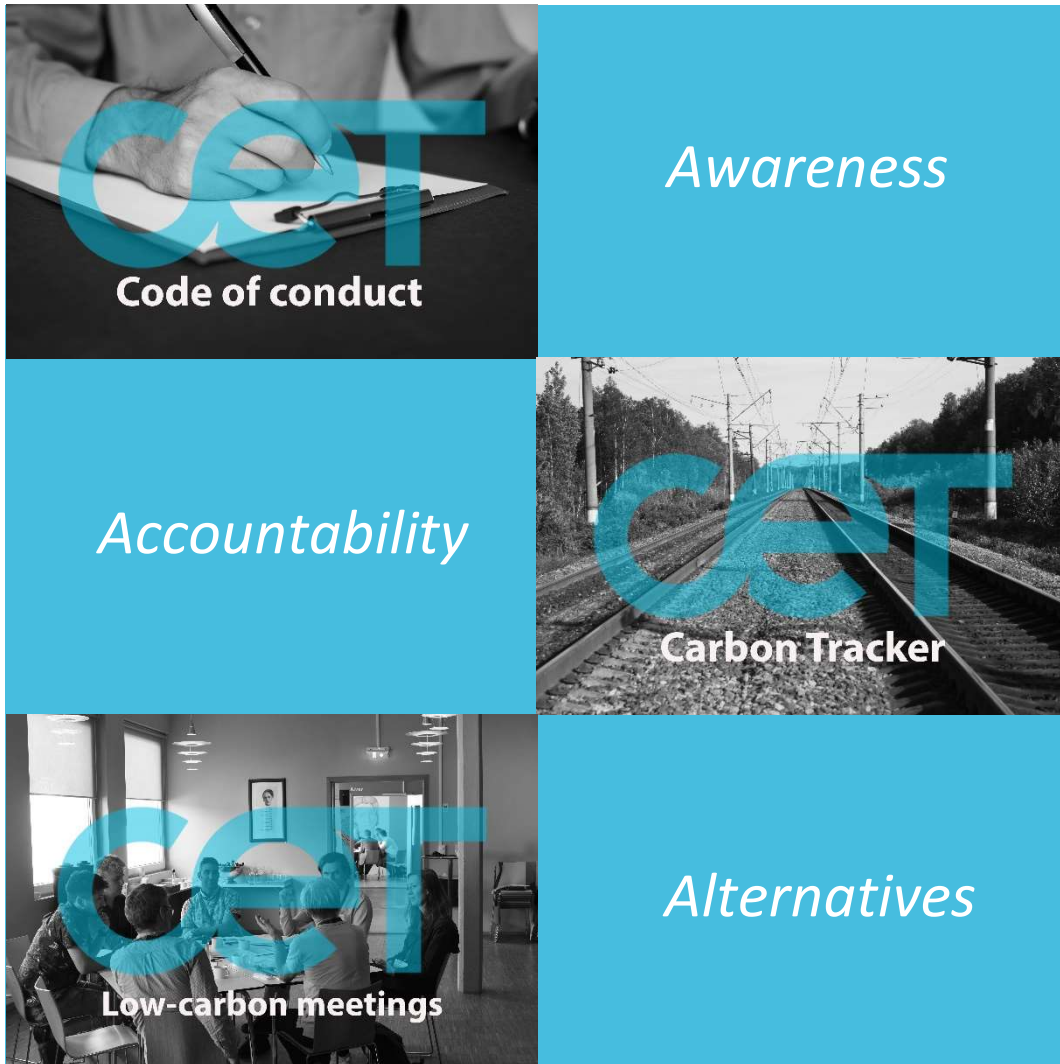


CET Low-carbon Travel Policy



A visible culture

Executive summary

Steering away from catastrophic climate change calls for rapid and deep decarbonization. In the CET Low-carbon Travel Policy, we bring this focus to our own practice of doing research.

The **purpose** of the CET Low-carbon Travel Policy is to reduce climate gas emissions from CET activities in accordance with UiB's climate targets, and inspire similar efforts outside CET. In pursuing this goal, we hope to mobilize:

- **Awareness** of climate gas emission targets and own emissions among researchers;
- **Alternatives** for climate-friendly ways of organizing, conducting and meriting research;
- **Accountability** through measurements, setting targets, and being transparent;
- **A visible culture** that stimulates and supports low emission actions created.

The **target group** are initially CET affiliates, who are committed to “Conducting research with as little environmental and climatic footprint as possible”. Further, it is our intention that the policy can inspire research partners and be extended to broader research communities and organizations.

The policy offers several **measures and tools** to assist researchers in minimizing their climatic footprint:

- **CET Code of Conduct**, providing overall guidelines for low-carbon conduct of research;
- **CET Carbon Tracker**, a CO2 calculator to plan and keep track of emissions from own travels and meetings organized;
- **CET Low-carbon Meetings**, a checklist for planning and implementation of meetings with low-carbon footprint.

Aggregated data for CET emissions will be made public on an annual basis. The policy will be reviewed and revised annually by the CET Steering Committee.

Working group

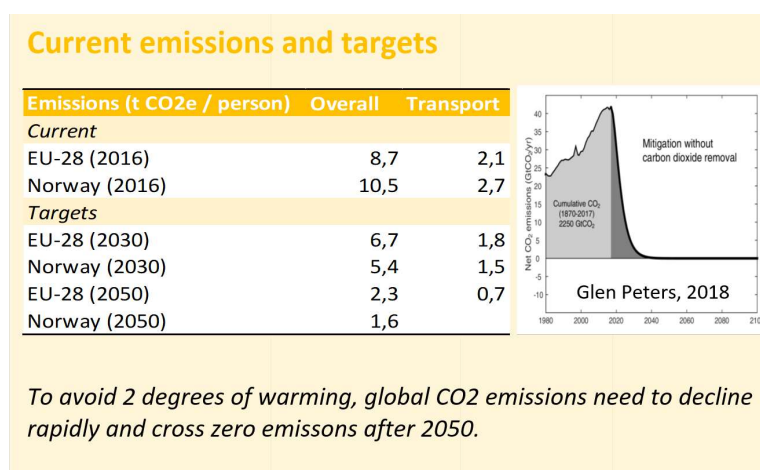
The CET Low-carbon Travel Policy has been developed by a working group at CET consisting of Kårstein Måseide (Research Coordinator), Stina Ellevseth Oseland (PhD candidate), Jakob Grandin (PhD candidate) and Jesse Schrage (PhD candidate), and has been discussed among researchers located at CET. The CET Carbon Tracker has been developed by Kårstein Måseide (Research Coordinator), in consultation with the working group.

Background

Steering away from catastrophic climate change calls for rapid and deep decarbonization. The University of Bergen accordingly has a target of becoming carbon neutral by 2030¹. The aim of CET is to produce actionable knowledge about how to achieve rapid transformation of society to meet the climate challenge. In our Travel Policy, we bring this focus to our own practice of doing research.²

Travelling has been deeply ingrained in academic life since the very beginning of the western university model.³ As scholars we travel to conferences, meetings, to do field work and to discuss our findings. Mobility is central to how research is organized, partnerships formed, and how individual academic careers unfold. This also gives academic researchers a place among the highest emitters. In Norway, transportation is the largest sector in terms of climate gas emissions, with highest climate impacts from aviation and cars.⁴

At CET, we recognize our share of the global greenhouse gas emissions, in particular from own air travel and the organization of conferences and meetings. If we are to take the university sector's contribution to the climate transformation seriously, we see no clear reasons to exempt the research community from the emission reduction targets applied elsewhere. On the contrary, we see opportunities in relating to our own practice as a laboratory on how to design sustainable organizations and work practices. Also, large carbon footprints may reduce the perceived credibility of us as researchers and the impact of our advice⁵. While meetings is sure to remain integral to our work, we also see opportunities in the use of virtual meetings, slower and low-carbon modes of travel as well as more stringent prioritization of travel needs.



A more comprehensive table of emissions and targets are given in Annex 4.

¹ At the SDG Conference Bergen 2018, Rector Dag Rune Olsen promised to make the University of Bergen climate neutral by 2030, <http://www.uib.no/en/node/114854/news-archive/201802>.

² This policy is inspired by and modified from the Tyndall Travel Strategy (see: <http://www.tyndall.ac.uk/travel-strategy>, http://www.tyndall.ac.uk/sites/default/files/tyndall_travel_strategy_2015_v1.pdf) and their underlying working paper (see: <http://tyndall.ac.uk/sites/default/files/twp161.pdf>).

³ Gärdebo, J. and Soldal, K. (eds.). *The Travelling Scientist's Itinerary*. Stockholm: KTH (2017).

⁴ Aamaas B. and Peters G.P. The climate impact of Norwegians' travel behavior. *Travel Behaviour and Society*, 6, 2017, 10-18.

⁵ Attari, SZ., Krantz, DH, and Weber, EU, Statements about climate researchers' carbon footprints affect their credibility and the impact of their advice. *Climate Change*, 138, 2016, 325-338.

Goal

The purpose of the CET Travel Policy is to reduce climate gas emissions from CET activities in accordance with UiB's climate targets, and inspire similar efforts outside CET. In pursuing this goal, we hope to mobilize:

- **Awareness** of climate gas emission targets and own emissions among researchers;
- **Alternatives** for climate-friendly ways of organizing, conducting and meriting research;
- **Accountability** through measurements, setting targets, and being transparent;
- **A visible culture** that stimulates and supports low emission actions created.

Target group

The strategy will initially apply to CET affiliates, who are committed to “Conducting research with as little environmental and climatic footprint as possible”, with an intention that it can inspire research partners and be extended to broader research communities and organizations. In particular, it could be expanded to support UiB's efforts to become carbon neutral by 2030 and be used in developing a climate budget for UiB.

Measures and tools

This policy offers several measures and tools to assist researchers in minimizing their climatic footprint.

- **CET Code of Conduct**, providing overall guidelines for low-carbon conduct of research;
- **CET Carbon Tracker**, a CO₂ calculator to plan and keep track of emissions from own travels and meetings organized;
- **CET Low-carbon Meetings**, a checklist for planning and implementation of meetings with low-carbon footprint.

They are designed to be:

- **Simple** - to understand and implement, to minimize additional workload in planning and reporting. They should be made easily available and reporting preferably integrated into existing systems (e.g. travel reimbursement forms etc.).
- **Self-guided** - Given the diversity of researchers and opinions on the usefulness of travelling, the policy is based on self-evaluation.

and are described in more detail in Annex 1-3 below.

Implementation

Initially, emphasis will be on raising *awareness* and providing incentives for low carbon *alternatives*. Over time, more emphasis will be on *accountability* through setting targets. An implementation plan should be developed where concrete measures are developed and described in more detail.

Monitoring & evaluation

As a pilot, CET affiliated researchers are invited to report their CO₂ emissions for own CET related/sponsored travels and meetings organized to the CET secretariat. Aggregated data for CET emissions will be made public on an annual basis. The policy will be reviewed and revised annually by the CET Steering Committee.

Annex 1: CET Code of Conduct



Researchers are encouraged to comply with the following code of conduct:

- 1) **Monitor and reduce.** I will keep track of the carbon emissions of my professional activities and set personal objectives to reduce them in line with or larger than UiB's carbon emissions commitments.
- 2) **Consider alternatives.** I will consider use of video conference and streaming to reduce travels. I will encourage meeting organizers to provide video / streaming of meetings. When I need to travel, I will use transportation options with the lowest possible emissions.
- 3) **Plan, prioritize and combine.** I will consider meetings attended based on least amount of carbon emissions. I will plan my travels well in advance to be able to prioritize between travels and combine several activities in the same location when possible. I will justify my travel considering the priority, location and purpose of the event, and the alternative options available.
- 4) **Reduce the footprint of events.** For activities that I organize, I will choose the location giving high priority to a low carbon footprint of travel of the participants, and I will encourage, incorporate and technically support online speakers and webcasts to reduce unnecessary travel.
- 5) **Support a low-carbon research culture.** I will work with my peers, organization/department and funders to value alternative metrics of success and encourage the promotion of low-carbon research as a realizable alternative to a high-carbon research career. I will resist my own FoMo (Fear of Missing Out) from not attending everything and work towards sensitizing others to the need of the research community to walk the talk on climate change.

Annex 2: CET Carbon Tracker



Many academics have high volumes of travels to conferences, meetings, field work etc., making travels a substantial component of their work-related climate gas emissions. At the same time, the planning of own travels and organization of meetings is largely controlled by the academics themselves. Hence, there is a potential to reduce emissions from own travels and the organization of meetings.

The CET Carbon Tracker estimates climate gas emissions (kg CO₂e) from:

- 1) Own travels (longer distance work travels by different modes of transportation), and
- 2) Meetings organized (plane travels by participants).

The CET Carbon Tracker should be used in planning and prioritization of own travels and the organization of meetings. It also allows for setting emission targets, and should be used to keep track of total emissions. To ensure compliance and use, the model is by design made simple for easy data registration and analysis. The user registers time travelled by different modes of transportation, and the CET Carbon Tracker calculates and displays graphically CO₂e estimates for individual travels/meetings, and aggregated CO₂e emissions over time.

The CET Carbon tracker should assist the user in the following way to reduce emissions:

- Keep track of emissions, and set targets;
- Plan and prioritize;
- Consider alternatives. e.g.
 - video meetings,
 - fewer and longer stays,
 - combining meetings;
- Choose modes of travel with low carbon emissions:
 - For plane travels: always opt for economy fares. Avoid flying for shorter distance travels, and avoid stopovers on longer travels;
- Set emission targets and monitor compliance with these;

Annex 3: CET Low-carbon Meetings



Meetings with funders, affiliates or research project groups are integral to academic life. But while meeting physically provide a wide range of opportunities and benefits, events hosted by researchers and academic communities also comes with emissions, both due to travelling and serving of food. In order to assess and increase awareness of this aspect of academic life, a checklist for organizers of meetings is included here, and more specific calculations can be found in the CET Carbon Tracker.

Planning

- **Need**
 - Assess the need for having a meeting;
 - Consider alternatives (virtual meetings etc.).
- **Time and place**
 - Optimize location to minimize total travels;
 - Combine with other activities when possible.
- **Participants**
 - Assess the number of participants needed to be physically present;
 - Estimate total emissions from travels using *CET CO2 Tracker*.

Implementation

- **Travels**
 - Encourage / support climate-friendly travels (both long distance and local);
 - Register total emissions from travels using *CET CO2 tracker*.
- **Food**
 - Assess the need for serving food;
 - Avoid food waste through estimating amount and prevent no-show (e.g. through pre-registration with fees);
 - Order vegetarian food only;
 - Choose local and climate-friendly providers;
 - Avoid single-use items for serving.
- **Visibility & multiplying effect**
 - Spread low-carbon ideas in networks and for future meetings.

Annex 4: CO2 emissions and targets

Table 1			Overall emissions - current (2016)		Transport emissions - current (2016)			Sources	Comments
Region	Year	Population (Million)		Total (Mt CO2)	Per capita (t CO2)				
World	2016	7 444,2		36 182,6	4,8				Global carbon project
EU-28	2016	511,2		3 499,3	6,9				
Norway	2016	5,2		45,0	8,6				
				Total (Mt CO2e)	Per capita (t CO2e)		Total (Mt CO2e)	Per capita (t CO2e)	% of overall emissions
EU-28	2016	511,2		4 440,8	8,7		1 079,5	2,1	24,3
Norway	2016	5,2		54,7	10,5		14,4	2,7	26,2
			Source: World Bank						
Table 2			Overall emissions - targets (2030 and 2050)		Transport emissions - targets (2030 and 2050)			Sources	Comments
Region	Year	Population (Million)	Emission target	Total (Mt CO2e)	Per capita (t CO2e)	Emission target	Total (Mt CO2e)	Per capita (t CO2e)	% of overall emissions
EU-28	2030	514,9	40% reduction compared to 1990 level	3 431,7	6,7	8% increase compared to 1990 level	924,8	1,8	26,9
EU-28	2050	503,1	80% reduction compared to 1990 level	1 143,9	2,3	60% reduction compared to 1990 level	342,5	0,7	29,9
Norway	2030	5,9	40% reduction compared to 1990 level	31,4	5,4	35-40% reduction compared to 2005 level	8,8	1,5	28,2
Norway	2050	6,5	80-95% reduction compared to 1990 level	10,5	1,6	Tilnærmet utslippsfri/klimanøytral transport			
			Source: World Bank						
Table 3			Overall emissions - reference (1990)					Sources	Comments
Region	Year	Population (Million)		Total (Mt CO2e)	Per capita (t CO2e)		Total (Mt CO2e)	Per capita (t CO2e)	% of overall emissions
EU-28	1990	478,0		5 719,6	12,0		856,3	1,8	15,0
Norway	1990	4,2		52,3	12,3		10,9	2,6	20,8
Norway	2005	4,6		56,0	12,1		13,6	2,9	24,3
			Source: World Bank						