ICTA-UAB Responsible Travel Strategy

ICTA Institut de Ciència i Tecnologia Ambientals-UAB

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RESPONSIBLE TRAVEL STRATEGY

International scientific and policy efforts, such as the latest Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), the United Nations Paris Climate Agreement and the Sustainable Development Goals (SDG, e.g., goals 11, 13), stress the importance of limiting the rise of global average temperature below 1.5°C above pre-industrial levels to avoid dangerous climate change [1]. This ambitious goal would require drastic **reductions in global Greenhouse Gas (GHG) emissions** and concerted efforts by governments, economic sectors, and social actors across scales of governance. Efforts to reduce carbon emissions should be primarily pursued and undertaken by the countries that have contributed the most to GHG emissions.

In recent years, the **Universitat Autònoma de Barcelona (UAB)** has been committed to confront the global climate change challenge by adopting or endorsing several strategies and action plans. The UAB's 2018-2022 **Plan for a Healthy and Sustainable Campus** includes measures aimed at promoting energy efficiency in buildings and laboratories, and the expansion of renewable energy installations (biomass, solar, geothermal). As a result, since 2012, the university's GHG emissions, including those derived from energy consumption, waste collection and treatment, and its staff's daily commuting and work-related travel have been diminishing [2]. In May 2019, the university's governing Council, following an initiative promoted by students and staff, also endorsed **the declaration of the state of climate emergency** [3]. The UAB has been promoting the adoption of a Responsible and Sustainable Mobility strategy among the largest university network in Spain (www.crue.org).

ICTA-UAB is strongly determined to contribute towards UAB's efforts to reduce GHG emissions in the coming years. We plan to take decisive action towards the reduction of the GHG emissions related to our staff and students' daily commuting as well as national and international research travel. With this goal in mind, we present below a set of best practices aimed at reducing GHG emissions and fostering behavioral change. Overall, the guidelines encourage us:

- To think about choosing the least GHG impactful modes of transport in journeys related to academic praxis
- To consider the GHG emissions of our research projects, by for example incorporating an emission budget during project design and managing it in parallel to the economic budget during implementation;
- To consider online options for travel-free meetings (e.g., interactions with the scientific community and stakeholders), science communication and dissemination of scientific results.

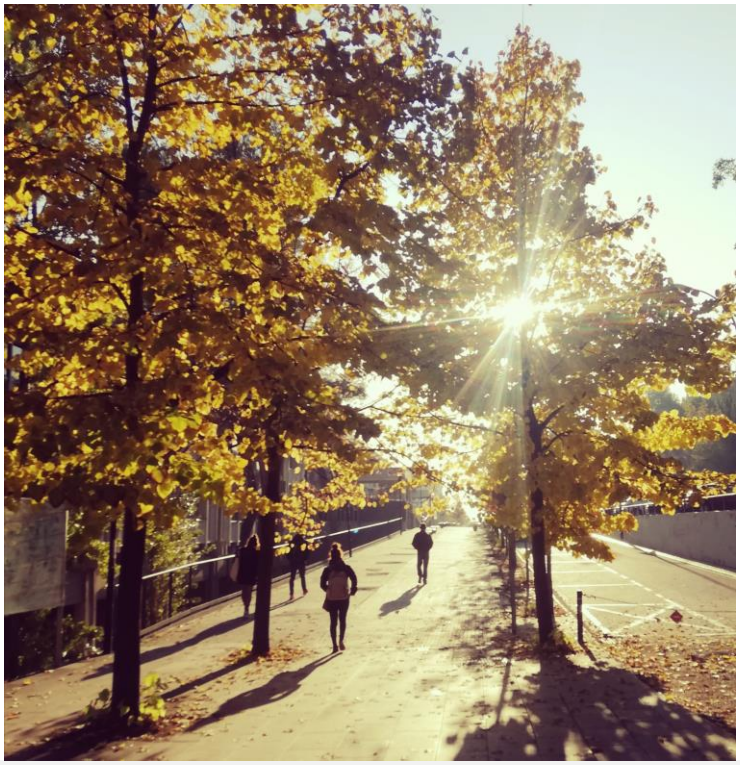
BEST PRACTICE 1: RESPONSIBLE COMMUTING

ICTA-UAB staff are encouraged to reduce the GHG footprint of daily commuting by choosing the most sustainable mode of transportation and itinerary from home to the University campus and vice versa.

This can be done, for example, by:

- Prioritizing public transport over private vehicles (e.g., choosing train and/or bus travel provided by local, regional and/or national railway/bus companies).
- Maximizing occupancy (including car-sharing / car-pooling) and choosing fuel efficient vehicles (e.g., electric cars, motorbikes, scooters) when private transportation is the most or only convenient option; and
- Adopting forms of active and healthy transportation (e.g., cycling, walking) whenever possible.

These set of practices related to commuting can also be followed when the researcher has reached a national or international destination for research-related activities.



BEST PRACTICE 2: RESPONSIBLE TRAVEL

Responsible travel refers here to a way of travelling that reduces the environmental impact of travel. Oftentimes, academic travelling is unavoidable (either for the execution of a project or for personal career development). When researchers need to travel, they are encouraged to consider the environmental impact of their trip, alongside other aspects such as economic cost, duration, and personal circumstances (e.g., health, disability, family care, safety issues). Financial resources and existing travel policies (e.g., specific requirements for the funding agency) may represent limitations to engage in responsible travel and should also be considered. Whilst acknowledging the specificities of project-, funding- or individual-related circumstances, ICTA-UAB research community is encouraged to engage in responsible travel by always considering the need to travel and the least impactful way of doing so (see "Decision making tree" next page).

RESPONSIBLE ACADEMIC TRAVEL can be fostered by:

Prioritizing remote over physical meetings, for example by:

- Working virtually in grant proposal preparatory meetings.
- Participating virtually in events that are not strategic for research or career development.
- Using online tools (e.g., knowledge sharing platforms, social media) for science communication and dissemination of scientific results.

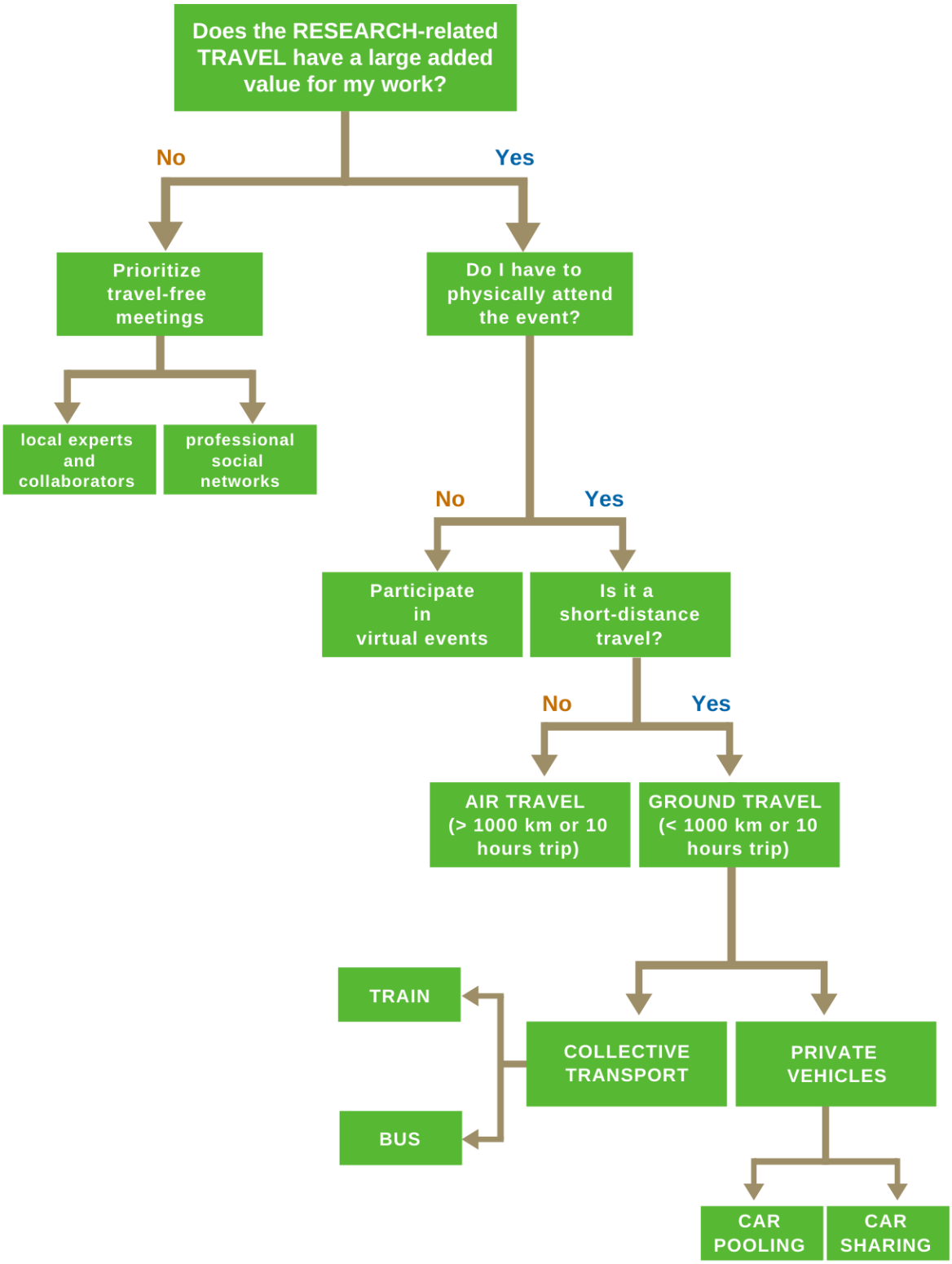
Reducing the overall number of research-related trips, for example by:

- Minimizing the number of researchers attending events requiring traveling.
- Combining multiple activities in a trip (e.g., attending a conference nearby a field site).

Selecting options that generate less carbon emissions, for example by:

- Prioritizing public over private transport (e.g., bus, train) for short-distances.
- Choosing ground over air travel for medium-distances (e.g., destinations located within a 1000 km-radius from the point of departure and/or involving less than 10 hours of travel time by ground).
- Choosing direct flights (e.g., avoiding flight layover) for long-distance travel.
- Selecting trips (i.e., companies and airplanes) with lower carbon emissions.

BEST PRACTICE 2:
DECISION MAKING TREE



BEST PRACTICE 3: accountability and transparency of CARBON EMISSIONS

ICTA-UAB staff are encouraged to be transparent and accountable for research-related carbon emissions. An actionable system that allows to report research-related carbon emissions should be put in place by the corresponding administration, and we are working towards that goal. This system should allow ICTA-UAB to monitor the effectiveness of the best practices over time.

In the meantime, ICTA-UAB staff can improve the transparency of carbon emissions by:

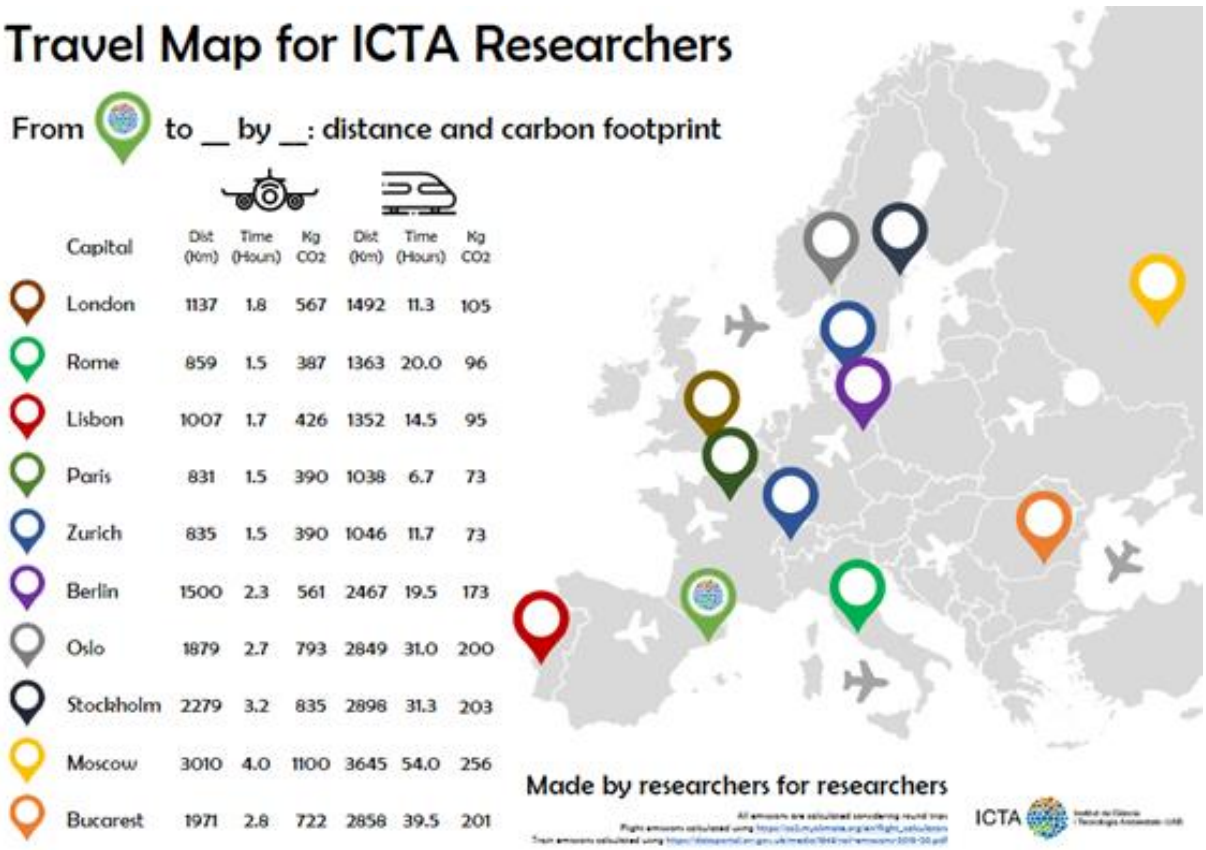
- Including calculations of carbon budget in proposal preparation
- Reporting research-related carbon emissions in project/institutional websites.
- Designing a strategy to offset research-related unavoidable GHG emissions.

BEST PRACTICE 4:
PROMOTE RESPONSIBLE TRAVEL

ICTA-UAB staff will further foster responsible travel through a range of informative and coordination actions that stimulate changes in the academic working culture so that the carbon footprint of the academic community is meaningfully reduced.

These include, for example:

- Organizing/participating in public debates on responsible travel within ICTA-UAB and beyond.
- Sharing materials that facilitate responsible travel (e.g., Carbon footprint of the main EU destinations, reported below).
- Willingly providing the needed information to monitoring the impact of research-travel.
- Considering travel impact when evaluating research-related proposals.
- Coordinating the work with other relevant agents (i.e., sustainability office at UAB, similar organizations) to increase the impact of our actions.



Capital	Dist (Km)	Time (Hour)	Kg CO2	Dist (Km)	Time (Hour)	Kg CO2
London	1137	1.8	567	1492	11.3	105
Rome	859	1.5	387	1363	20.0	96
Lisbon	1007	1.7	426	1352	14.5	95
Paris	831	1.5	390	1038	6.7	73
Zurich	835	1.5	390	1046	11.7	73
Berlin	1500	2.3	561	2467	19.5	173
Oslo	1879	2.7	793	2849	31.0	200
Stockholm	2279	3.2	835	2898	31.3	203
Moscow	3010	4.0	1100	3645	54.0	256
Bucarest	1971	2.8	722	2858	39.5	201

REFERENCES

1. IPCC, 2018: Summary for Policymakers.
Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate.
2. La petjada de carboni a la UAB
3. La UAB declara l'estat d'emergència climática

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