

Climate Change and Academia

Addressing the Carbon Footprint of Scholarly Conferences

Detailed Post-Event Report, with Recommendations from the Environmental Studies Association of Canada (ESAC) to all member associations of the Canadian Federation for the Humanities and Social Sciences (CFHSS)

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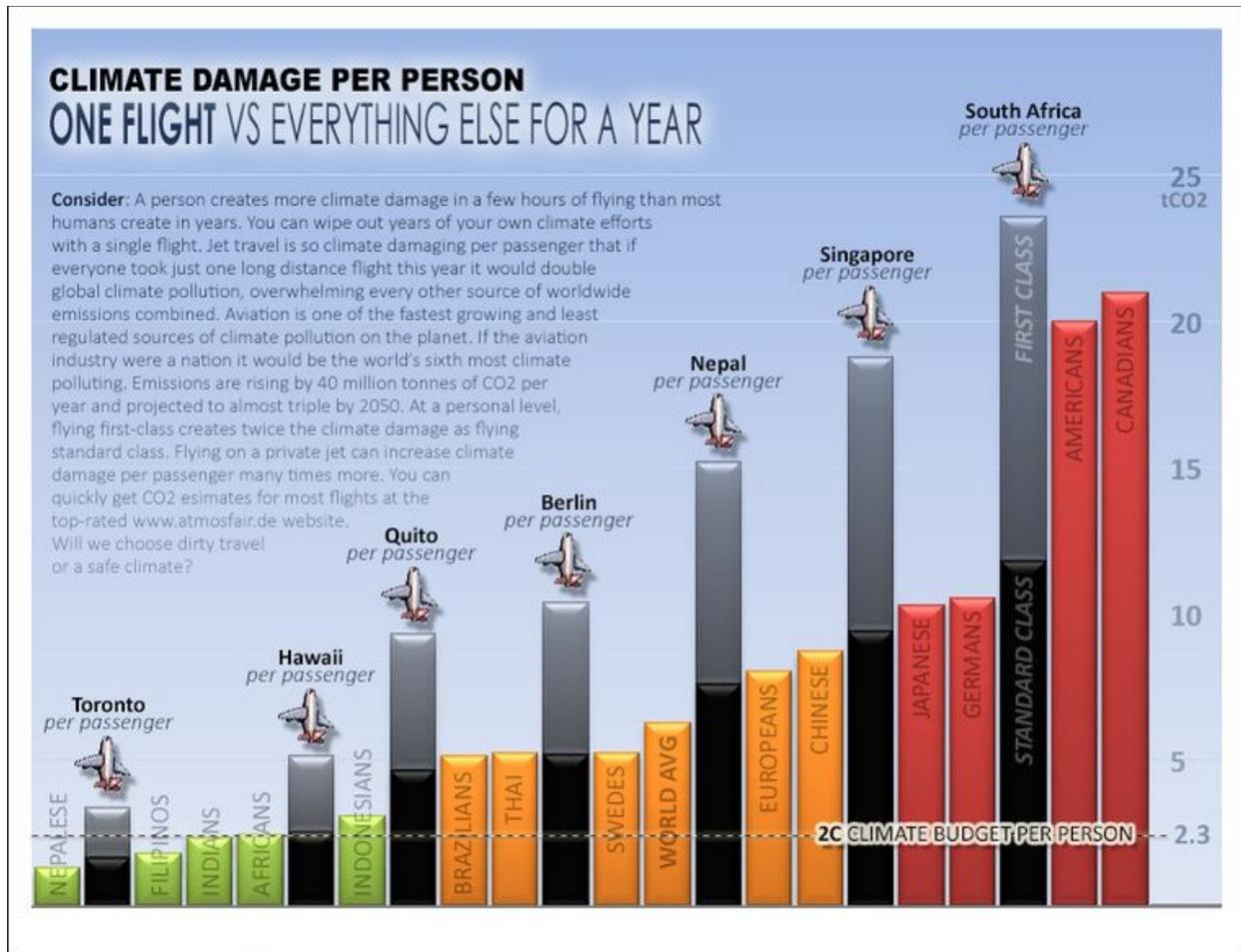
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Climate change is a severe global challenge requiring *urgent* responses from institutions, policymakers and individuals. A key obstacle we face as academics is that meeting face-to-face at scholarly conferences is a required part of the trade, and yet large national and international-scale academic conferences contribute significantly to anthropogenic emissions of greenhouse gases (GHGs), mostly due to fossil fuel-based transportation, but also in part due to emissions from additional consumption in the areas of food and accommodations.

Consider the recently-produced chart by Barry Saxifrage (below), showing the climatic impact of *a single round-trip flight* from Vancouver to select cities as compared to the average GHG footprint of various nationalities - just one economy-fare round trip flight between Toronto and Vancouver burns up nearly 75% of the allowable annual 2C climate budget per person!

The Environmental Studies Association of Canada is thus calling for urgent change to the common practices associated with academic conferences in this country, with particular attention to opening constructive dialogue on how we can collectively reduce the carbon footprint of the Annual Congress of the Canadian Federation of the Humanities and Social Sciences (hereafter 'Congress').

To that end, in May 2018 ESAC held a special interdisciplinary roundtable discussion (in conjunction with the Canadian Society for Digital Humanities) on the topic of how to [address and reduce the carbon footprint of scholarly conferences](#). This session was part of a broader and quickly growing 'movement' of academics around the world who have begun to address this problem (see Appendix A for a list of additional resources). After four short presentations we held a workshop with three break-out groups to brainstorm ideas for our associations and for scholars alike to take back to their host institutions, putting the carbon footprint of scholarly conferences on the academic agenda (See brainstorming notes in Appendix B). A link to video-recordings of this roundtable will be posted on [ESAC's YouTube Channel](#).



ABOUT THIS CHART: Dark flight bars = CO₂-equivalent warming per passenger for a round-trip flight from Vancouver BC, Canada. Black is for standard class. Dark grey is additional emissions caused by a first class seat. Data from www.atmosfair.de flight calculator. Coloured nation bars = annual per capita climate pollution for various nations. Data from CAIT includes all GHGs except international aviation and shipping. 2C CLIMATE BUDGET per person per year = 2.3 tCO₂ per-capita per year = total remaining climate pollution humanity can emit by 2050 and stay below 2°C of global warming divided by global population and 40 years. Source: Atmosfair.de. This is for everything. The 2C Travel Budget per person is much less than this. Chart by Barry Saxifrage at VisualCarbon.org and NationalObserver.com. Jan 2018

Chart by Barry Saxifrage, January 2018 (CC BY 4.0).

From this workshop, ESAC has prepared **two short lists of recommendations**: One is a list of recommendations for fellow member associations of the CFHSS. ESAC plans to experiment with these recommendations in 2018-19 as a *preliminary step* towards reducing its organizational carbon footprint, and the association strongly encourages other CFHSS member associations to consider similar measures befitting their specific organizational needs.

The second list of recommendations is aimed specifically at the CFHSS and hosts of Congress. ESAC strongly encourages the CFHSS and the University of British Columbia (host of Congress 2019) to implement these recommendations as a *preliminary step* towards reducing the carbon footprint of this conference. For any readers wanting to know what steps can be taken at an institutional (university) level, we recommend Seth Wynes and Simon Donner's recently published White Paper written for the Pacific Institute for Climate Solutions, available [here](#).

Of course, *much more needs to be done*; the actions taken by individual scholars and associations must be complemented by broader changes at the level of regulation, investment and institutional practices. We see these steps and this initiative as just the very beginning of a period of change in the practices and norms of academic conferences which ultimately must occur if academia is going to play a role in *combating* climate change rather than exacerbating the problem.

2018-19 Recommendations for ESAC (and other member associations of CFHSS):

1. **Allow a portion of the conference participants to participate digitally**, by submitting their papers through the abstract submission console and presenting their work using teleconferencing technology. The digital participants would appear on the conference program and be mixed in with live participants in different sessions. Participants should either be available to present their work live and field questions from the audience OR pre-record their presentations and submit the video file. Their participation fee would be reduced relative to the cost of regular participation, in part to reflect lower costs for catering, etc., but also to support their participation with reduced carbon footprint. Their fees would help cover the cost of the additional IT requirements (e.g. hiring a professional to coordinate digital presentations).
2. **Start collecting information and data on the travel-related carbon footprint of your association's annual meeting.** One of the questions on your abstract submission console could ask participants to note their likely carbon footprint by using the International Civil Aviation Organization (ICAO) flight carbon calculator, or another reputable carbon footprint tool. Keep tabs on this data to measure progress and change in your association's carbon footprint over time.
3. **Show leadership by demonstrating your commitment to addressing this problem**, and holding our CFHSS executive to account in terms of making sure it is providing climate-based guidelines and suggestions for the broader membership. It is our view that CFHSS should be providing the humanpower and resources necessary to support their members in addressing climate change.
4. **Offer up a rideshare webpage or service for regional transport.** Members could be offered a paid service (e.g. [Group Carpool](#)), or a Facebook group could be created and promoted early to those attending, allowing them to self-organize carpools. Ideally this would be integrated with a Congress-wide online rideshare board to benefit from the greater scale of participants.
5. **Host a designated remote conference hub** as part of your association's meeting at Congress. This smaller satellite conference would take place at the same time as the main conference, but at a remote location. It would have some of its own independent sessions (i.e. due to the time difference), but most sessions would be linked to the main

conference by livestreaming. That is, presentations and audience questions could come from either location. Interested participants who are located far away from a given year's Congress location might attend the satellite conference with a lower carbon footprint. This could also allow for more participation from regions that Congress does not regularly visit (e.g. Atlantic Canada). ESAC, for example, is investigating the possibility of hosting its Congress 2019 remote conference hub at the Memorial University of Newfoundland's Grenfell Campus in Corner Brook, NL.

2018-19 Recommendations for Congress Organizers (both the Federation and Host Institutions):

1. Require all Congress host bids to demonstrate their own climate and carbon-abatement plan as part of the bidding process, and include this within the adjudication of bids.
2. Require all Congress hosts to have/introduce extensive digital conferencing technology (with tech support) for participants to take part in Congress remotely.
3. Create a lower cost digital registration option for participants to present their work digitally (associations could individually decide if they want to make use of this feature) - and create increasing targets for digital participation for each consecutive Congress (e.g. 10% in 2020; 15% in 2021; etc.)..
4. Create a rideshare page on the 'Plan your trip' tab for regional participants to carpool to and from Congress. Congress can either make use of a paid service or create a Facebook group and promote it early to all attendees so they can self-organize carpools.
5. Require ALL Congress catering orders to be served with ZERO waste (no disposable plates or cups, straws, cutlery, etc.).
6. Promote on-campus accommodations or hotels within walking range to the conference site. Include free shuttle services (preferably using electric vehicles) between conference site and accommodations.
7. Re-orient travel subsidies programming for graduate students to reflect climate-smart travel (for instance, ask applicants to state what steps they are taking to mitigate their footprint, ie. ride sharing; taking the train (where demonstrably lower carbon than other means); economy fare; participating in multiple events; attending in a year when Congress is closer geographically, etc.).
8. Commission a report for the CFHSS on how it can halve the GHG footprint of Congress by a given date (say, 2025).

APPENDIX A - Additional Resources (with thanks to Cheryl Hall, University of South Florida)

Websites

- No Fly Climate Sci: <https://noflyclimatesci.org/>
- Flying Less: Reducing Academia's Carbon Footprint: <https://academicflyingblog.wordpress.com/>

Petitions

- Call on Universities and Professional Associations to Greatly Reduce Flying: https://www.change.org/p/universities-and-professional-associations-call-on-universities-and-professional-associations-to-greatly-reduce-flying?recruiter=294645973&utm_source=share_petition&utm_medium=copylink

Selected books, articles, and blog posts

- Chris Watson, ed. Beyond Flying: Rethinking Air Travel in a Globally Connected World <http://www.greenbooks.co.uk/Book/468/Beyond-Flying.html>
- Barry Saxifrage, "The Real Cost of Air Travel: Flying, Jet-setting, & the Climate" <https://thegreenmama.com/real-cost-air-travel/> (reprinted in more accessible format from the Vancouver Observer)
- Jason Hickel, "In an era of climate change, our ethics code is clear: We need to end the AAA annual meeting" (and responses) <https://anthrodendum.org/2018/01/13/climate-change-ethics-code-end-aaa-annual-meeting/>
- Nves Dolsak and Aseem Prakash, "The Climate Change Hypocrisy Of Jet-Setting Academics" https://www.huffingtonpost.com/entry/opinion-dolsak-prakash-carbon-tax_us_5abe746ae4b055e50acd5c80
- Kevin Anderson, post on individual and collective action <http://kevinanderson.info/blog/a-succinct-account-of-my-view-on-individual-and-collective-action/>
- Sarah Myhre, "Should Climate Scientists Fly?" <https://blogs.scientificamerican.com/observations/should-climate-scientists-fly/>
- Catherine Grant, "Academic flying, climate change, and ethnomusicology: Personal reflections on a professional problem" https://www.academia.edu/36963299/Academic_flying_climate_change_and_ethnomusicology_Personal_reflections_on_a_professional_problem

Examples of virtual and/or "multi-hub" conferences

- Climate Change: Views from the Humanities: http://ehc.english.ucsb.edu/?page_id=12687
- Sustainable Research: Modelling Nearly Carbon-Neutral Practices in the 21st Century: <http://aroundtheworld.ualberta.ca/>

- Biennial Meeting of the Society for Cultural Anthropology:
<https://displacements.jhu.edu/displacements/>
- International Conference on Music Perception and Cognition:
<https://music-psychology-conference2018.uni-graz.at/en/about/>
- University of Alberta's Qual-World Virtual Conference
<https://www.ualberta.ca/international-institute-for-qualitative-methodology/conferences-workshops-and-events/qual-world-virtual-conference>
- Academy of Management Virtual Conferences
<https://aom.org/Meetings/AOM-Webinars/Virtual-Conferences.aspx>
- Canada International Conference on Education
<http://ciceducation.org/format/virtual-presentation/>
- EduTeach Conference <http://educationconference.info/virtual-presentations/>
- World Conference on Learning, Teaching and Educational Leadership
http://www.globalcenter.info/wclta/?page_id=26
- International Academic Conference of the Social Sciences
<http://socscienceconf.com/index.php?a=main&pid=33&lang=eng>
- The International Conferences ICT4S – ICT for Sustainability
www.ICT4S.org (not multi-hub, is virtual archive of Canadian topically related)
- AGU Chapman Climate Conference 2013, convenor Jame Byrne
<https://chapman.agu.org/climatescience/files/2013/05/Final-Program-5-23.pdf> and 2019:
<https://www.linkedin.com/pulse/agu-climate-solutions-conferences-building-change-james-byrne/> (not multi-hub, is virtual archive of topically related)

Ethics codes on professional travel

- Tyndall Centre for Climate Change Research: <http://www.tyndall.ac.uk/travel-strategy>

Information and resources on academic flying, virtual conferences, etc.

- Parke Wilde, FAQ in support of petition “Calling on Universities and Professional Associations to Greatly Reduce Flying”:
<https://docs.google.com/document/d/1URRRh4zMSpvtZY08F9-Rkbx0qkNNmfzIzqOlqZWKxkE/edit>
- A Nearly Carbon-Neutral Conference Model: White Paper/Practical Guide:
<https://hiltner.english.ucsb.edu/index.php/ncnc-guide/>
- University of Alberta's annual “Around the World Conference” 2013 - present, Toolkit with comparison of formats:
<http://aroundtheworld.ualberta.ca/wp-content/uploads/2018/05/E-Conferencing-Toolkit.pdf>
- University of Alberta, Concise technical guide to planning online conferences:
<http://aroundtheworld.ualberta.ca/wp-content/uploads/2018/04/ATW-Tech-Instructions.pdf>
- Tips on holding a virtual conference or virtual presentation option:
<https://drsaraheaton.wordpress.com/2012/02/16/9-tips-for-successfully-incorporating-virtual-presentations-into-your-conference/>

Information on New Academic Funding Models for Conference Travel

- Expensive academic conferences give us old ideas and no new faces | The Guardian
<https://www.theguardian.com/higher-education-network/2017/aug/30/expensive-academic-conferences-give-us-old-ideas-and-no-new-faces>
- It's time to rethink academic conference funding | University Affairs Magazine
<https://www.universityaffairs.ca/opinion/speculative-diction/its-time-to-re-think-academic-conference-funding/>
- The Future of Research Conferences, According to The Experts
<https://www.exordo.com/blog/changing-face-research-conferences/>

APPENDIX B - Brainstorming Notes from the Workshop Session

Group A Brainstorming Notes (Topic: Association-Level Responses)

- Host ESAC at a smaller venue and encourage a smaller gig
- Alternate digital and live conferences
- Ask participants to come in person if they are based regionally, but to present digitally if they are based far away.
- Broadcast all sessions
- Use financial incentives (example cap and trade at the institutional level) or targeted subsidies to reward eco-behaviour.
- Use the Call for papers to inform, encourage and collect info about CO2 emissions
- Communications efforts (encourage investment in better conferencing communications technologies)
- ZERO waste conference!
- Set an emissions target for conference
- Lobby Congress and fellow associations for guidelines.
- Create option to present online at every conference
- Publish an appeal in A/J or other publication; perhaps in partnership with another association (CAG, etc.) calling for associations to address this urgent problem.
- Set-up In-house Carbon pricing for our organization
- Get Congress to track CO2 using their online platform
- ASK Congress to set up a rideshare platform on the transportation page
- Bringing in/emphasizing participation from low wage participants by using cheaper fee for digital submissions.
- Annual CO2 report for Congress that we put together after each conference to demonstrate that we're tracking this stuff.
- Use social cost of carbon to explain how much \$ we've saved in the long run.
- Hold a mid-year ESAC Conference
- Contact/lobby CAUT to see if they've started tackling this problem, or if they have put together climate-focused guidelines for academic travel.

Group B Brainstorming Notes (Topic: Digitization)

- there are a variety of video-chat platforms, and they vary by cost and quality
 - e.g. (low quality and low cost) Skype, Google Hangouts, Goto, Bluejeans, Zoom/Webex (high quality and high cost)
 - of course, the best and most expensive option is to have university IT staff set up the web conferencing and also be on hand to troubleshoot and/or record video
- web conferencing has challenges/costs (e.g. reliability, quality, licensing, bandwidth - especially for remote communities, recording)
 - but these costs are not strictly greater than those of traditional conferences

- e.g. missing a flight or having a car break down are actually more devastating
- so ultimately the costs are comparable, and this is a matter of shifting our expectations rather than accepting those costs as a downside
- what sorts of things *cannot* be replaced by digitization?
 - relationships are easiest to initiate in person
 - in situ learning and “spirit of place” matter
 - when we consider virtual “bodies” or “heads” (e.g. Edward Snowden’s “telepresence robot” at TED 2014), we actually *can* replace some of this
- work to avoid creation of two-tier system of conferences
 - i.e. we don’t want the web conferences to be considered the lower tier and have higher-income participants segregate to the in-person conferences
- web conferences must be carefully coordinated so that they are as productive as in-person conferences and do not sour people on the idea of virtual conferencing
 - consider the optimal number of participants
 - put in the same effort as an in-person conference
 - make sure presentations and discussions are well moderated
- in terms of the potential social impact of conferences, isn’t it most important to talk to people more locally? what about multiple local (perhaps simultaneous and virtually connected) conferences instead of the typical national-level scope?
- video documentation is a very flexible tool; it can be used as part of a virtual conference (i.e. everyone is expected to watch the video by the end of the week) or to archive a discussion for people who weren’t there
- in terms of incremental steps from ESAC...
 - annual meetings could alternate between in-person and digital
- more broadly, we also need to think about how to communicate about climate change
 - i.e. in the context of the resource sector?
 - use the concept and imagery around “carbon waste” and point out that we are trapping energy 60 times faster than we are using it