# Academic conferences urgently need environmental policies

To the Editor — For nearly a decade, environmental scientists have deplored the paradox of needing to fly to conferences<sup>1-3</sup> and have increasingly called for sustainable conferencing<sup>4,5</sup>. Have conferences responded by reducing their environmental impact?

We assessed the environmentalimpact policies of 116 international and national academic conferences from 18 scientific disciplines in 31 countries (see Supplementary Information for further methods). Only five (4%) of the conferences offered carbon-offset options for participants, and only 11 (9%) advertised any action that reduced the meeting's environmental impact (Fig. 1a). Ecology and conservation was the only field that commonly advertised such actions (5/10 conferences). Other fields related to environmental science, including sustainability science and Earth science, lacked advertisements of actions taken to reduce environmental impacts (1/10 and 2/14 conferences, respectively, Fig. 1b). Although guidelines on how to organize carbon neutral events are available online, and reports of successful carbon neutral conferences

exist<sup>4-6</sup>, our study shows that these examples are exceptional.

What might explain this poor adoption of better environmental practices? Conferences are often organized by a small local committee of researchers. Most conference organizers we contacted had never thought about the environmental impact of their meeting. In fact, multiple organizers asked for guidance on how to reduce the impact of future events, showing that there is desire and opportunity for sustainable conferences. Although not all of the conferences in our sample have finished their 2017 meetings, we know of at least one annual meeting in our sample that promoted sustainability in 2016 but failed to advertise sustainable practices in 2017, probably because organizing committees change each year. Academic societies could facilitate consistent sustainable practices by developing clear policies and guidelines for organizing committees to follow.

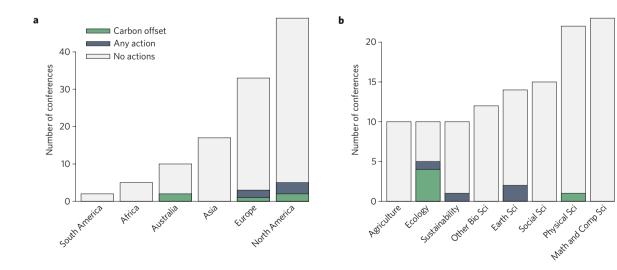
At a minimum, conferences should document and promote the actions they take to reduce environmental impacts, even if those actions are minimal. It is not just a matter of environmental protection, but also of awareness and transparency. We scientists should favour conferences with sustainability policies. If we demand this information, then conferences will provide it, and in doing so, be motivated to think about and develop new sustainable practices. A small investment by our academic societies, right now, has the opportunity to generate major positive environmental impacts and lead the route to global sustainability.

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**Fig. 1 | Frequency of advertised sustainable practices. a,b**, Conferences were classified as advertising no environmental actions, advertising any environmental action, or advertising a carbon-offset policy (by continent (**a**) and by research field (**b**)). The 18 scientific disciplines represented in the study have been classified into eight broader fields for display purposes (see Supplementary Information).

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### References

- Neterefrices 1. Grémillet, D. Nature 455, 1175–1175 (2008).
  2. Fox, H. E. et al. Front. Ecol. Environ. 7, 294–296 (2009).
  3. Avery-Gomm, S., Hammer, S. & Humphries, G. Science 352, 1404-1405 (2016).
- Bossdorf, O., Parepa, M. & Fischer, M. Trends Ecol. Evol. 25, 61 (2010).
- 5. Bankamp, D. & Seppelt, R. Environ. Model Softw. 46, 299–303 (2013).

6. Rosen, J. Nature 546, 565-567 (2017).

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## Competing interests

The authors declare no competing financial interests.

### Additional information

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