The Vision of a Green(er) Scientific Conference

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The success of Environmental Health Perspectives is connected to the careers of many members of the International Society of Environmental Epidemiology (ISEE), the International Society of Exposure Sciences (ISES), and the International Society of Indoor Air Quality and Climate (ISIAQ)—three societies that will hold, for the first time ever, a joint annual meeting in 2013. The conference, “Environment and Health—Bridging South, North, East and West” (http://www.ehbasel13.org/), will be hosted by the Swiss Tropical and Public Health Institute in Basel, Switzerland. Basel, located at the intersection of three countries on the borders of the Tropical and Public Health Institute in Basel, Switzerland. Basel, www.ehbasel13.org), will be hosted by the Swiss.

From the very beginning, the local organizing committee for the Basel conference had committees for the organization and scientific content of the meeting, as well as one for addressing environmental issues. The environment committee built on experiences and strategies from previous conferences, such as ISEE 2011 and 2012, and considered event guidelines, including information from the University of Basel (Lötscher et al. 2013) and the Swiss Federal Institute of Technology Zurich (Brunner and Elmer 2009). Obvious targets include the limitation of print material (with a printed program only upon request); the choice of regional, seasonal, and organically grown food; and reduced meat consumption. Indeed, the four lunch buffets will be vegetarian.

As simple as it sounds, it takes a lot of effort to implement such strategies because they are not yet standard (the “default”). Setting and promoting these new environmental strategies require multiple exchanges with all partners. For example, we asked caterers that all food served at the conference be seasonal, organic, and grown locally where possible (there are many organic producers in the area near Basel) and that those products not grown in Europe be traded fairly. How can it be that such requests remain “exotic,” while the default lunch buffet in Basel would include mangos shipped from Mexico or Brazil (organically grown upon request) and a glass of wine from Chile or Australia, which is offered at a lower price than wines from the Basel region? Why does the request to serve fair-trade coffee require the emptying of coffee machines because machines are “usually run with normal coffee”? What makes organic coffee so abnormal if it is produced and traded fairly and provides the growers a decent living without putting their health at risk from the use of pesticides (Maroni et al. 2006)?

Taken together, these footprints are very small compared with the greenhouse gases produced by participants traveling to Basel (Table 1). Based on the origins of the 1,400 current early registrations, attendees will travel a total of approximately 14 million km. Instead of printing programs only upon request; the choice of regional, seasonal, and organically grown food; and reduced meat consumption. Indeed, the four lunch buffets will be vegetarian.

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Taken together, these footprints are very small compared with the greenhouse gases produced by participants traveling to Basel (Table 1). Based on the origins of the 1,400 current early registrations, attendees will travel a total of approximately 14 million km. Instead
of asking participants to voluntarily compensate their CO₂ (carbon dioxide) footprints (> 1.5 tons per average participant), we decided to run a CO₂ neutral conference. By contracting South Pole Carbon (http://www.southpolecarbon.com), a firm committed to fighting climate change, the Basel conference committee chose two CO₂ compensation projects—one in Uganda (efficient cooking stoves) and one in China (energy from waste gas)—that aim to reduce CO₂ emissions and to improve the quality of life of the local population (ehbasel13.org 2013).

Compensation for the inevitable CO₂ footprint of the entire conference (Table 1) corresponds to approximately 20 Swiss francs per participant. We deliberately avoided itemizing these costs into the registration fees because the costs of the venue (~320 Swiss francs per participant), the food and coffee (a similar amount), and submission and review of abstracts are never itemized. CO₂ compensation should also be part of these standard costs. Of course, the prime objective must be reduction rather than mere compensation of the footprint. In this context, compensation does not buy indulgences, but rather results in an actual mass balance for CO₂ by means of projects that otherwise are unlikely to be realized.

We realize that there is still a long way to go to accomplish the "green" goals of a conference with the same certainty and standards used to pursue scientific and organizational targets. In the planning process, scientific uncertainties or lack of evidence created challenges for making the best environmentally sound decisions within a limited time frame. The "green club" of the local organizing committee researched many issues, but not all resulted in clear-cut guidance. For example, there was no final conclusion on the most sustainable solution for distributing drinking water in refillable bottles or cups. The committee explored several options for containers [PET (polyethylene terephthalate), bioplastics, aluminium, stainless steel, and glass], but evaluating all the materials with regard to recyclability, potential re-use after the conference, production, costs, and health aspects of the materials is complex. Most important, organizing conferences in a greener way could require changes in standard practices and resource allocations that may frustrate conference organizers, if not participants. For example, the society of scientists has not yet reached the stage where a printed program booklet could be entirely replaced by an electronic version. During the registration process, participants were asked to give their preference, and some two-thirds opted for electronic versions only.

What have we learned through planning the Basel conference? First and foremost, Basel already has "green defaults"; for example, 100% of the electric power in Basel originates from renewable energy (hydro, solar, and wind). Basel is a nuclear-free city. But we also made progress in pushing ourselves and others involved in organizing the conference. However, "green" and "sustainable" are as multifactorial, interdisciplinary, and complex as the topics that will be discussed at the conference. There is no simple recipe or "truth." Strategies for a green(er) conference need to become more evidence-based and cost-effective in order for green conferences to become the default. Although we are not there yet, what matters most is that we keep the vision of a green conference high on the agenda, on par with running a smooth and well-organized event for cutting-edge research. The authors declare they have no actual or potential competing financial interests.

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Table 1. Carbon footprint of Basel conference participants.

| Characteristic                  | Region/travel description | Estimate |
|--------------------------------|----------------------------|----------|
| Geographical region of origin (%) | Europe                    | 41       |
|                                 | North America             | 26       |
|                                 | Asia and Australasia      | 26       |
|                                 | South America             | 3        |
|                                 | Africa                    | 2        |
| Sum of travel distance (in 1,000 km) | Europe                    | 1,080    |
|                                 | Non-Europe                | 13,210   |
| Travel mode of participants (%) | Airplane                  | 81       |
|                                 | Train                     | 12       |
|                                 | Other                     | 7        |
| CO₂ footprint total (tons)²     |                           | 2,202    |
| Origin of footprint            | From/within Europe        | 8        |
| Air travel (%)                 | From non-European countries | 88     |
| Other types of travel (%)      |                           | 2        |
| Venue, catering, print material (%) |                         | 2        |

Estimates are based on the origin of the first 1,400 registrations (1 June 2013) and are expected to reflect approximately 90% of the final number of participants. Calculations done by South Pole Carbon (http://www.southpolecarbon.com/).

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