

Guidelines for sustainable events

Introduction

The European Magnetic Association (EMA) is concerned with climate change. The association feels responsible for its own impact on climate change, and has decided to aim at reducing the carbon footprint of its events (conferences, schools...), and to foster the same for other events organized by the magnetism community, aiming at sustainable events. To do so, EMA is encouraging a series a measures for events organized by the EMA, such as JEMS and ESM, as well as those supported by a technical sponsorship. Addressing the carbon footprint issue is a compulsory item when making a bid for these events, including pre-event evaluation, measures to aim at keeping it under control, and post-event evaluation. Organizers of events not related to the EMA may freely get inspiration from these guidelines.

While the Officer for Carbon Footprint of EMA is the contact person for these guidelines, they are endorsed by EMA as a whole.

Recommendations

Organizers should focus on actions that can create immediate and practical gain. To do so, a series of measures must be considered to limit waste, the emission of greenhouse gas (GHG) induced by the event, and the use of resources on-site. This can be sought by identifying the sources of waste and emissions, proposing measures to address them, and monitoring the outcome for each event, as well as progress on the long run. Here are some examples of practical recommendations:

Example of methods to decrease the carbon footprint (MEAWW):

- Mobility Avoid unnecessary transportation, encourage the use of trains, car sharing and clustering (stream talks for remote participation)
- Energy- Be aware of your energy consumption (heating, air conditioning...)
- Awareness- Raise the awareness of the participants (explain your actions)
- Water- Be aware of water use
- Waste- be aware of waste management and recycling (consider no printed programme, reusable dishes, little food waste...)

Practical measures:

- The conference centre **must allow for remote participation** (LAN internet connection in the conference rooms, cameras...), to comply with the requirements of hybrid events decided at the General Council meeting in December 2020.
- Promote recycling and proper waste separation (waste must be collected in proper containers). The organizers should also ensure that all subcontractors follow the same rules.
- Transportation
 - Means to reach the conference site: Encourage low-emission transportation for participants attending on site (favour ground and shared means of transportation, and if flights cannot be



avoided, avoid multiple flights, e.g. by combining train/bus and plane). Encourage carsharing when possible.

- The means to commute to the conference site: The local venue must be reasonably central, for the sake of reducing commuting during the event. Provide bus cards or access to electrical vehicles to the participants to commute to the event.
- Practical organization
 - Reduce as much as possible the use of resources and energy onsite (responsible use of air conditioning avoid organizing events during hot seasons), avoid goodies, avoid printing the programme on paper (or ask a fee to print them on recycled paper), reduce the generation of plastic waste and promote recycling. For example, ask participants to bring their own reusable water bottle and a cup for coffee breaks.
 - Encourage vegetarian and local sustainable catering with EU or national labels (such as "Blauer Engel" or "AB" labels). If meat or fish cannot be avoided for cultural reasons, favour local sustainable producers.
- Fostering awareness
 - Consider the organization of social and societal interactions (such as round tables, public lectures) to promote sustainable science to the general public.
 - Consider and encourage carbon compensation (such as cleaning of public areas on-site, include carbon compensation for flights in the inscription fees).
- Encourage clustering events in case of remote participation
 - Remote participation in local hubs should be encouraged. This would foster local interaction and favour global online participation while keeping the carbon footprint to a minimum.

Annex – Normative considerations

All measures above derive from common sense. For information, the ISO14001 sets the guidelines for *Environmental management systems*. It has been established in 1996, modified in 2004 and 2015. The details of the norm can be found online:

https://www.iso.org/obp/ui/#iso:std:iso:14001:ed-3:v1:en

Several sources providing a summary of the norm are also available online on the site of the European commission or the United Nations Office of Nairobi (UNON). The method envisioned in the Norm ISO14001 is shown in Figure 1. It supposes three steps, which are decomposed as follows:

- The area of influence of the event organizers: the organizers must identify areas of influence where realistic goals could be established to reduce GHG or spare resources. Do not aim for something complicated, keep things simple.
- The communication of the policies to the participants: the goals must be communicated to stakeholders and participants to ensure that they are understood, thus promoting endorsement of the measured proposed. This can also contribute to the visibility of the event.



• **Reporting**: To enforce an improvement of the sustainability of the events on the long run, the organizers should monitor and report on the goals and targets under their area of influence. Weakness in improvements should be identified. Achievements and targets should be reported to the stakeholders, the participants, the subcontractors and the public.

