



# Green Conference Strategy

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Since its inception, the Secretariat of CologneMUN 2018 has planned on organising a so-called “Green Conference.” This plan goes further than most “carbon-neutral” conferences, as it includes the neutralisation of all potent Greenhouse Gases.

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# The Science

## The Greenhouse Gases

The emission of the following Greenhouse Gases (GHGs) are to be neutralized. Their Global Warming Potential (GWP) is developed by comparison to the damage of CO<sub>2</sub> on a 100-year period, as published by the [US Environmental Protection Agency](#). “Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of CO<sub>2</sub>.”

**Global warming potential (GWP) values relative to CO<sub>2</sub>**

Industrial designation or common name	Chemical formula	GWP values for 100-year time horizon		
		Second Assessment Report (SAR)	Fourth Assessment Report (AR4)	Fifth Assessment Report (AR5)
Carbon dioxide	CO <sub>2</sub>	1	1	1
Methane	CH <sub>4</sub>	21	25	28
Nitrous oxide	N <sub>2</sub> O	310	298	265

**Source: Greenhouse Gas Protocol “Global Warming Potential Values”**

### Carbon Dioxide (CO<sub>2</sub>, Kohlenstoffdioxid):

- GWP: 1
- Atmospheric abundance: thousands of years
- Sources: Energy (stationary), energy (transportation)

### Methane (CH<sub>4</sub>, Methan):

- GWP: 28–36
- Atmospheric abundance: one decade on average
- absorbs much more energy than CO<sub>2</sub>
- Sources: Energy (transportation), food and edibles, waste

### Nitrogen Dioxide (NO<sub>2</sub>, Stickstoffdioxid):

- GWP: 265–298
- Atmospheric abundance: more than 100 years on average

- Sources: Energy (transportation), food and edibles, cooling systems

### Fluorinated gases (F-gases, Fluorkohlenwasserstoffe):

- Chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), hydrochlorofluorocarbons (HCFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6)
- Do not appear in nature (as opposed to the other GHGs)
- GWPs for these gases can be in the thousands or tens of thousands
- Sources: Energy (transportation)

### The Sources<sup>1</sup>

#### Energy (stationary)

- Electricity
- Heating
- Train

→ CO<sub>2</sub>

#### Energy (transportation)

- City Train/Bus
- Car
- Train
- Plane

→ CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, Sulfur Dioxide (SO<sub>2</sub>, Schwefeldioxid; especially in shipping traffic), other Nitrogen Oxides (Stickoxide), Carbon monoxide (CO, Kohlenmonoxid), Particulates (Feinstaub)

#### Cooling systems:

→ N<sub>2</sub>O, other Nitrogen Oxides (Stickoxide)

#### Food and edibles:

- Meat
- Dairy products

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<sup>1</sup> Dubrikow, 2015.

- Vegetables
- Fruits

→ CH<sub>4</sub>, N<sub>2</sub>O

### Waste:

- Food
- Organic materials
- Water

→ CH<sub>4</sub>

### Major emission sources:

- travel to the host city
- local road transportation
- energy consumed by the event venue
- energy used through stays at local hotels or homes
- transportation of goods the event needs
- event organizer travel during planning and preparation (zB Team-Wochenende)
- energy consumed by the event office
- paper use and waste generation
- dietary needs of organizers and participants during conference and organizing meetings

### Reducing Emissions:

- Venue Selection
- Accommodation
- Transportation
- Procurement
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## Why do a Green Conference?:

- **Financial advantages:** Conserving energy, water, paper and other resources, reducing waste, purchasing local products and simply consuming less – all can result in money saved
- **Positive reputation and image:** sustainable event will raise its profile, attract participants and engage the media's attention. Partners and potential donors may also appreciate a sustainable conference.

- **Social benefits:** If planned and implemented carefully, the conference can provide benefits to the region by encouraging locals to purchase sustainable products (if enough media attention is given), creating more jobs, involving regional small and medium-sized enterprises and promoting better working conditions. It can also act as a catalyst for encouraging environmental and sustainable good practices, locally. However it should be asked, whether CologneMUN is big enough to have such an impact.
- **Raising awareness and inspiring change:** The conference provides an excellent opportunity to raise awareness among participants, staff, service providers and the local community on sustainability and sustainable events.
- **Living up to responsibilities:**
  - Environmental responsibilities: Low-emission transport and mobility, waste reduction, reuse and recycling, water and energy efficiency, exclusion of dangerous and hazardous substances and materials, green procurement, etc.
  - Economic responsibilities: Increased efficiency, sensible and transparent public procurement, quality of goods, boosting innovation, job creation, profitability, responsible accounting, sustainable growth, etc.

**Conclusion:** By taking sustainability planning into consideration, the conference's hosts can minimise negative environmental impacts and leave behind a positive legacy by inspiring those involved to live more sustainably. A sustainable event balances responsibilities in several areas.

## Getting Started

### Management principles

- Environmental and social policies
- Management systems
- Action plans
- appropriate communication with staff and participants to encourage sustainable behaviour

In particular, the host country should not forget to:

- Prepare an action plan with clear **measurable objectives** (key performance indicators), responsibilities, deadlines and appropriate monitoring actions;
- **Allocate sufficient resources** (time, staff and funds) – remember, the long-term financial savings and more efficient use of resources may compensate for the initial investment

- Build a **core “sustainability team”** with staff

## Recommended measures:

- **Accessibility and inclusivity:** Consider the special needs of participants (e.g. access to and movement within the building and conference area, acoustics appropriate for hearing-aid users, Braille printing, etc.) → [Application Forms](#)
- **Accommodation:** A host conference can recommend hotels based on their sustainability performance and promote eco-certified hotels on the host country website or official accommodation website.
- **Alternatives to sustainable venues:** If a venue with sustainable features is not available, the host country should nevertheless work with venue management to reduce the ecological footprint of the venue. There are a number of easily applicable energy-efficiency measures that can contribute to reducing energy consumption, such as awareness-raising among conference participants, moderate use of air-conditioning/ heating/cooling equipment, energy-saving light bulbs, low-energy appliances and equipment, lighting timers, and sleep mode on equipment.
- **Catering/food and beverages:** The impact of food and drink consumed can vary greatly depending on what is offered (good choices include seasonal ingredients, a high proportion of vegetarian and vegan food, etc.), its origin (a good choice is items that are locally grown and produced), and how it is produced (good choices include food sourced from sustainable agriculture, Fair Trade products, etc.).
  - Ensure that the food is clearly labelled and that the sustainable reasoning behind it is clear.
  - Plan for a meat-reduced option, with vegetarian meal options available every day. With this one action, a host conference can achieve multiple sustainability goals, from reducing GHG emissions to improving participants’ health, animal protection and awareness-raising.
  - Ensure that the seafood served is from sustainable sources (e.g. use eco-labels such as the Maritime Stewardship Council to help choose products) and that it is not from endangered or threatened species (contributing to biodiversity goals).
  - Use tap water for drinking, ban plastic bottles and avoid individual containers in favour of bulk dispensers.
  - Fair Trade: Fair Trade is about empowering small-scale producers with limited market access. Purchasing Fair Trade products can be an important contribution to sustainable development and, in particular, to the United Nations SDGs. Purchasing considerable amounts of Fair Trade coffee, tea, juice or fruit can make a difference to many families

and the concrete positive impact can underline the positive outcomes of your sustainable event.

- **Energy efficiency:** The venue should be an energy-efficient building or have energy-reduction measures in place.
- **Gift policy:** Where participant gifts are absolutely necessary, make sure they are useful, reusable or make a valued souvenir. They should be produced using sustainable materials, such as organic or recycled long-lasting materials, and ideally locally sourced. Products from local social projects should be given preference. The sustainability of the product should be highlighted, for example by adding a note explaining the background of its production—participants will appreciate that the event is being organised sustainably.
- **Procurement:** It is important to include sustainable procurement considerations in all purchasing activities. Work with suppliers to help them make more sustainable choices. Choosing sustainably or environmentally certified providers (where feasible without compromising economic sustainability) can simplify the research and selection process. If no such providers are available, the hosts can still look for those who comply with environmental and social principles. If these are also difficult to find, work with the ones that can create solutions that reduce negative environmental and social impacts.
- **Basic Reporting:** Hosts may prefer a simple way to monitor their results. In this case, it is recommended to use the checklist from the UNEP Sustainable Events Guide (described in Chapter 13).
- **Shipments:** To minimize GHG emissions from shipments, consider a shipment allowance to limit all shipments to a maximum weight per Party, observer organization, side event organizer and/or exhibitor.
- **Side events and other meetings:**
  - **Materials:** Encourage exhibitors to minimize the amount of promotional material at the stands and to use material that is produced as sustainably as possible, giving strict guidelines regarding which and how much material is allowed.
  - **Energy efficiency:** Encourage exhibitors to avoid energy-intensive stands and unnecessary lighting, applying energy efficiency measures whenever possible.
  - **Waste:** A considerable amount of waste is generated at exhibits, including through the packaging of display materials and stand construction, as well as discarded materials and disposable carpets. Require exhibitors to follow strict waste-collection rules, connecting to local collection systems.
- **Local travel and transportation:** Participants should ideally travel within the host city to the conference venue by foot, bicycle or public transport.

Encourage participants to do this by providing them with electronic maps, time tables and clear instructions, and ideally with complimentary public transport tickets. Shared transport (e.g. car-pooling or car-sharing) as well as referring to useful social projects in this field could be an option. Offer group pick-ups from hotels where public transport is not available.

- **Web-marketing and social media:** Use social networks, blogs or the hosts website to give visibility to your sustainability measures and create awareness among participants, encouraging them to introduce sustainability measures in their own offices and homes.

## Raising Awareness

Quiz: Eat Low Carbon Quiz - <http://www.eatlowcarbon.org/take-the-quiz/>

## Step 1: Measure

### General:

A Free, web-based tool from Greenhouse Gas Protocol and Quantis that makes it easier for companies to measure, report, and reduce emissions throughout their value chain.

GHG Protocol and Quantis - Scope 3 Evaluator:  
<http://www.ghgprotocol.org/scope-3-evaluator>

Point system: CO<sub>2</sub>e is used to describe the amount of greenhouse gases emitted throughout a product's entire life cycle. The word 'equivalent' is there because carbon dioxide (CO<sub>2</sub>) is only one of about eight greenhouse gases that contribute to climate change. Each greenhouse gas has a different effect on the Earth's atmosphere. In order to make comparisons simpler, scientists convert them all to a common denominator (CO<sub>2</sub>). (Source: Eat Low Carbon: <http://www.eatlowcarbon.org>)

BEF: Event Calculator: <https://store.b-e-f.org/event-calculator/>

**Air Travel:** Measuring the Carbon Footprint of the air travel by participants

ICAO - Carbon Emission Calculator:  
<https://www.icao.int/environmental-protection/CarbonOffset/Pages/default.aspx>

General: <https://www.carbonfootprint.com/calculator.aspx>

## Step 2: Reduce

- Apply environmental and social considerations in purchasing policy, buying locally produced products and emphasising a life-cycle analysis of all products (waste reduction, energy conservation, etc.).
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## Step 3: Offset

Stockholm Environment Institute, CORE - Comprehensive List of Offset Providers:  
<http://www.co2offsetresearch.org/consumer/Providers.html>

- purchase certified emission reduction credits, preferably from Clean Development Mechanism (CDM) projects registered in small island developing states

# Master Check-List

- Efforts are made to reduce conference-related emissions of greenhouse gases and support off-setting of unavoidable emissions;
- Procedures are implemented to reduce the consumption of water, energy, materials and other resources;
- Measures are in place to reduce the generation of waste and to reuse, recycle and/or repurpose unavoidable waste;
- When purchasing goods and services for the event, the environmental and social impacts of their lifecycle are included in the purchasing decision;
- Social and environmental principles are applied throughout the implementation of the event, to reduce damage to the environment and to ensure accessibility, inclusion and well-being of all participants and staff;
- Measures are taken to foster economic, social and environmental benefits for the local community, and minimise disruption;
- Efforts are made to increase awareness of, inform and involve relevant stakeholders, including participants, the workforce, local hosts, regional and national authorities, sponsors, civil society groups, NGOs, businesses and technical experts, in order to comply with and support the principles stated above;
- A reporting system is put in place that allows for the communication, assessment and evaluation of “sustainable event processes, initiatives and results.”



## Useful Links

- <http://www.davidsuzuki.org/what-you-can-do/reduce-your-carbon-footprint/how-to-host-a-sustainable-carbon-neutral-conference-or-other-event/>
- <http://lowemissions.solutions>
- <https://greenenergy.conferenceseries.com>

## References

United Nations Framework Convention on Climate Change: “How To COP - A handbook for hosting United Nations Climate Change Conferences.” Bonn, 2014.

United Nations Environmental Programme: “Sustainable Events Guide: Give your large event a small footprint.” Nairobi, 2012.

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