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1 IAMLADP 2017: Climate Neutrality and Sustainability

1.1 Introduction

The International Annual Meeting on Language Arrangements, Documentation and Publications (IAMLADP) 2017, held in Bangkok from 19 to 21 June 2017, was supported by an initiative aimed at making meetings carbon neutral. The initiative was shouldered by a partnership between the Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Environment Programme (UNEP), with the long-term objective of ensuring wide application of the climate neutral methodology to all the ESCAP-led meetings.

In 2007, the United Nations Secretary-General Ban Ki-Moon called for a joint effort within the United Nations system to use energy more efficiently and eliminate wasteful practices. In taking this approach, the partnership follows a United Nations system-wide effort to reduce carbon footprint and ensure a focus on climate change and sustainable development, in line with the 2030 Agenda and the Paris Agreement frameworks. Accordingly, the efforts made by United Nations agencies, funds and programmes in recent years, as well as the 2017 initiative for IAMLADP, have been aimed at:

- Measuring and reporting the greenhouse gas emissions of each organization, using internationally accepted standards;
- Undertaking efforts to reduce these emissions and other environmental impacts from facilities and operations including travel;
- Moving towards climate neutrality by 2020.¹

This work followed the formula set in the *Sustainable Events Guide* by UNEP, which defines a sustainable event as a one that is “designed, organized and implemented in a way that minimizes potential negative impacts and leaves a beneficial legacy for the host community and all involved”.²

The initiative for IAMLADP 2017 has secured the carbon neutrality of the meeting by offsetting the emissions generated by all participants travelling to Bangkok to attend the meeting, as well as the carbon emissions produced by the participants in activities related to the event during their stay. It also advocates for an enhanced sustainable behaviour and sustainability awareness.

It is a crucial responsibility for the United Nations to sustain and advance the track started in 2007 to adopt more sustainable practices in its meetings to lead the pathway towards sustainable development, low greenhouse gas emissions and climate-resilient development.

¹ UNEP (2015). *Moving Towards a Climate Neutral UN*.

² UNEP, UNON, ICLEI and IAMLADP (2012). *Sustainable Events Guide*.

2 Climate Neutrality and Sustainability for Bangkok

2.1 Scope

In pursuit of climate neutrality, the event's carbon footprint and environmental impacts must be addressed and reported comprehensively with an eye towards accuracy and validity. The scope of the initiative covers a multitude of aspects, which can be classified in four main categories:

- **Conference Venue Operations:** Operations included reducing waste generation by implementing a paperless initiative, which entailed the provision of all documentation needed through online weblinks and/or on USB drives. Double-sided printed copies were only provided upon request. Additionally, reusable decorations such as posters, graphic displays and signage, and audiovisual equipment replaced printed material.
- **Food and Beverage/Catering Operations:** The Environment and Development Division, the Conference Management Unit and UNEP partnered with the United Nations Conference Centre (UNCC) caterer Sodexo to develop: a) an organic and locally sourced menu selection that utilized non-meat protein as much as possible; b) a system for monitoring, prevention and communication of pre- and post-consumer food waste; and c) environmentally-friendly food packaging, including eliminating disposable plastic.
- **Accommodation/Transportation:** Prior to the meeting, a list featuring Green Leaf certified hotels and hotels striving towards sustainability within walking distance to UNCC was circulated to the participants. Airline carriers offering the possibility to offset emissions were recommended, and choices including economy class, direct flights and less luggage were encouraged. For local transportation, public transport options were strongly recommended.
- **Carbon Accounting:** Carbon dioxide (CO₂) or its equivalent emissions were calculated for air and local travel, accommodation, conference venue, food and beverage/catering and associated food waste, mugs and badges. If primary data was unavailable, emissions were calculated based on historical averages/baselines.

2.2 Goals

Pursuing carbon neutrality for United Nations conferences is an essential condition towards improving the environmental sustainability of United Nations-related activities. The carbon neutral initiative implemented during IAMLADP 2017 aimed to move one step forward of this pathway by:

- Minimizing the carbon footprint of the event and improving its environmental sustainability;
- Developing a useful, transparent and verifiable reporting methodology for carbon neutral events to be shared with ESCAP divisions and other United Nations agencies in Bangkok;
- Setting an example of good practices to ensure wide application of the climate neutral methodology to all ESCAP-led meetings hosted at UNCC;
- Creating awareness about the environmental impacts of the United Nations activities, and specifically, of the United Nations conferences held at UNCC;
- Monitoring the carbon footprint and the environmental impacts of IAMLADP.

3 Methodology

To appreciate the carbon impact of IAMLADP 2017, the initiative involved the development of a methodology featuring carbon accounting on various fronts, including: transportation to and within Bangkok, accommodation, conference venue, food and food waste, paper and plastic use, and waste-related emissions. Note that a share of the event-related emissions extends beyond the reach of this research. For example, the report doesn't cover emissions derived from the individual purchases of participants. Additionally, other calculated emissions have been omitted due to the lack of reliable data and/or CO₂ equivalency equations (e.g. water use and USBs).

3.1 Coverage and Boundaries

The Greenhouse Gas (GHG) emissions inventory calculation principles applied are based on the GHG Protocol.³ For this report, organizational boundaries were selected under the operational control of ESCAP. The boundaries of the inventory, which determine the coverage and the extent of carbon accounting, were defined in accordance with the United Nations system's carbon accounting methodology,⁴ which confines them to facility operations and travel.

The United Nations system GHG inventory sets the following emission sources as minimum:

- Emissions deriving from transport (air, rail and road travel);
- Energy used for onsite electricity generation, steam, and hot water; energy used for cooking facilities; and energy purchased from utilities providers;
- Fugitive emissions.

3.2 Data Collection and Analysis

The accuracy of the calculations of CO₂ associated with this meeting is highly dependent upon the participants' self-reported information. A data collection survey was sent to all confirmed participants to report the following:

- Identification (full name and affiliation);
- Travel details (means of transport, departing and arriving points, connecting airports and travel class);
- Accommodation (number of nights of stay, name of the hotel and neighbourhood);
- Diet and food behaviours (omnivore, vegetarian or vegan).

To ensure a higher rate of response, extra conference staff and young student volunteers from local universities were deployed at central registration points and during coffee breaks to help participants fill out the questionnaire. The excellent and well-organized endeavour resulted in a ~97 per cent rate of response.

Conference venue-related and catering operations data was collected in liaison and partnership with their responsible units within UNCC.

³ For more information, see: <http://www.ghgprotocol.org/about-us>.

⁴ UNEP (2009). *Moving Towards a Climate Neutral UN: The UN system's footprint and efforts to reduce it*.

Data analysis was carried out using existing known CO₂ equivalency equations and statistical models. Identified data gaps were addressed using clearly defined methodological assumptions, and alternates/proxies are discussed under each individual section. GHG emissions have not been reported separately for each GHG type, but, if needed, they were aggregated as CO₂ equivalents (CO_{2e}).

A post-meeting survey was also circulated to receive feedback on the climate neutral meetings initiative. The response rate was rather low, with only ~2 per cent of participants providing answers.

4 Carbon Accounting Results

4.1 Transport Emissions

4.1.1 Air Travel

Participants provided information on their business travel itinerary to and from Bangkok. International flights were the preferred mode of transportation for participants. For attendees coming to UNCC from within Bangkok and Thailand, emissions related to their journeys were accounted as local travel.

Through the online survey, participants were requested to report on their means of transport, travel itinerary and class of travel. The official International Civil Aviation Organization calculator⁵ was used to calculate the carbon footprints of all the travel segments. The methodology developed by the Organization employs a distance-based approach to measure individual emissions.

There were 105 participants of IAMLADP 2017, including organizers, of which 102 provided their travel details. Accurate information exists therefore for 97 per cent of attendees. For incomplete surveys, educated guesses and assumption were made with respect to their point of departure and class of flight. As many participants arrived from Europe, business class was selected as preferred. The location of the representing organization's headquarters was assigned as departure city airport. Whenever other participants travelling from the same location had filled out the questionnaire and disclosed their travel itinerary, this was taken as reference for the missing data.

Approximately 70 flight legs were undertaken, and 66 per cent of all flights taken were in business class. The 105 passengers created a total amount of 78.90 tCO_{2e}.

4.1.2 Local Travel

For the purposes of this report, local travel consists of commuting journeys to and from the main conference venue. Travelling within Bangkok or to other destinations is outside the boundaries of this analysis.

Local travel was divided according to:

- Car – Petrol/Diesel;
- Motorcycle – Petrol;
- Bus – Petrol/Diesel;
- Boat – Gasoline/Diesel.

IAMLADP 2017 participants stayed at different hotels throughout the city, and only 84 provided detailed information on the exact location or name of the hotel. For this reason, a proxy journey of 5 km from central Bangkok to ESCAP was created to calculate their carbon footprint. As ESCAP is situated in the historical part of Bangkok that is not served by any rail mass transit system, it is assumed that attendees who did not provide information on their mode of transport to the venue reached it by taxi, rather than by public transportation.

⁵Available online at: <https://www.icao.int/environmental-protection/CarbonOffset/Pages/default.aspx>.

Participants were encouraged to ride-share with others to minimize the amount of CO₂ produced per person.

The total footprint for inner-city travel during the three-day conference amounted to 502.75 kgCO_{2e}.

4.2 Accommodation

Participants were asked to disclose which hotel was ultimately selected as accommodation. Hotel's GHG emissions were calculated per accommodation nights. Homestay lodging, bed and breakfast, Airbnb and the like have been accounted as hotels. It is assumed that participants chose high-end business class hotels (four stars or higher). Emissions related to other kinds of private homestays are outside the scope of this study. The following formula was used:

$$\text{Total accommodation GHG emissions} = \text{Total number of accommodation nights} \times \text{average emission factor.}$$

The *total number of accommodation nights* is the sum of all participants' nights spent in Bangkok throughout the meeting. The *average emission factor* is calculated through the Hotel Footprint online tool,⁶ using the formula developed by the Hotel Carbon Measurement Initiative,⁷ which was applied as methodology. The Initiative calculates hotels' carbon footprint per occupied room on a daily basis, analysing general power consumption deriving from on-site activities (heating, air conditioning, lighting, meal preparation and general electricity consumption) and including only laundry operations among the outsourced ones. Methane (CH₄) and nitrous dioxide (NO₂) are reported in CO_{2e} using conversion factors advised in the GHG Protocol.

For the participants that did not participate in the online survey, four or five-star hotels located in central Bangkok were assumed as chosen accommodation.

A total of 315 overnight stays were calculated, accounting for a total amount of 10.98 tCO_{2e}.

4.3 Conference Venue

GHG emissions generated at the conference venue entailed purchased electricity consumed in-house during the event itself as well as emissions generated from the per-capita water consumption of meeting participants. For the purposes of valid accounting of conference-related carbon impacts, only participants' activities located within the UNCC were considered.

⁶ Available online at: <https://www.hotelfootprints.org/footprinting>.

⁷ The Hotel Carbon Measurement Initiative was developed in 2011 by the International Tourism Partnership and the World Travel & Tourism Council in partnership with KPMG and 23 global hotel companies.

Green Meetings Guide



GREEN MEETINGS GUIDE FOR PARTICIPANTS

OVERVIEW

Since adopting the United Nations Climate Neutral Strategy in 2007, the Economic Social Commission for Asia and the Pacific (ESCAP), has worked towards measuring and reducing the environmental footprint of its activities. To this end, Green House Gas (GHG) emissions generated by core operations have systematically been evaluated, monitored, ideally, offset. To accelerate towards comprehensive climate neutrality by 2020, ESCAP is committed to organizing and implementing sustainable environmentally-friendly and carbon-neutral meetings, taking United Nations Environment's definition of a sustainable event as a guiding principle:¹



"A sustainable event is one designed, organized and implemented in a way that minimizes potential negative impacts and leaves a beneficial legacy for the host community and all involved."



CLIMATE NEUTRALITY

ESCAP supports the integration of all sustainable development's dimensions (with particular focus on environmental and social) into the planning of United Nations meetings and events hosted on its premises. This is accomplished through various means; nevertheless, meeting such objectives, implies collective action for all involved stakeholders, including organizers and participants. Individual participants are strongly advised to adopt conscious behaviours and to follow the guidelines set forth below.

CARBON ACCOUNTING

To understand the full carbon-impact of ESCAP meeting and conference operations, an ESCAP methodology has been developed to appreciate carbon accounting on various fronts, including: transportation to-/within-Bangkok, accommodation, conference venue, food and food-waste, paper, plastic, waste and teleconferencing-related emissions. The information will be compiled into a short report and be made visible to inform meeting-related policies to reduce carbon emissions wherever possible, but more importantly, it will inform emission offsetting efforts as related to the meetings.

EMISSION OFFSETTING

Despite efforts to significantly reduce emission load, certain carbon dioxed (CO_2) discharges are unavoidable. To mitigate unintended carbon effects, ESCAP has decided to offset event-related emissions to achieve climate neutrality. The methodology to calculate the emissions covers a multitude of topics, including: conference room operations; food, beverages and catering; accommodation; transportation to the venue; other operational accounting (food waste, energy usage, water usage).

Offsetting projects are located in developing countries that often cannot afford to reduce emissions on their own. Our contributions will help these projects to continue reducing emissions. In addition, many projects also contribute to sustainable development priorities such as education and health improvements in the communities that host them.



TRANSPORTATION

Despite air travel being the most carbon-intensive mode of transport, it is largely necessary. However, many factors influence the environmental footprint of a flight: class of travel; type of aircraft; number of empty seats; amount of luggage transported; etc. To reduce their environmental impact, travelers can make conscious choices, including the selection of the airline carrier, route and travel class.

Choosing one airline company over another can make a difference. Currently, there are carriers which offer the possibility to offset emissions, as well as those with a newer fleet (generally more fuel-efficient). Direct flights are favoured, as the majority of CO₂ is discharged during take-off and landing, accounting for one third to half of all emissions relating to the passenger's journey.

Flying economy class is less harmful to the environment. The World Bank has calculated that the carbon footprint of a business class traveler is three times higher than one travelling economy,² due largely to space occupancy. In business/first class sections, passengers have more space as seats are bigger, resulting in lower passenger density. Moreover, full capacity is rarely reached, especially compared to the economy class. Ergo, sacrificing some luxury pays off!

Travelling within Bangkok

Bangkok is a megacity with heavy traffic and humid, tropical climate conditions which do not encourage walking. Nevertheless, Bangkok has a modern and reliable public transportation system. While the Skytrain (BTS) and underground (MRT) rail system are convenient to navigate most shopping, entertainment and business areas; boats, tuk tuks and taxis are a good way to reach many historical sites as well as the United Nations Conference Center (UNCC), located in the ESCAP compound. Participants are encouraged to ride-share with others, minimizing the amount of CO₂ produced per person.



ACCOMMODATION

The hotel industry alone is responsible for one per cent of the total CO₂ global emissions.³ Participants are strongly advised to choose a Green Leaf certified hotel,⁴ or hotels that are striving towards social and environmental sustainability. A brief list of eco-friendly accommodations has been compiled and follows hereby. Proximity to the ESCAP compound has been taken into account, so as to reduce transportation, as well as efforts to minimize waste, energy and water consumption.

Amari Watergate Hotel
www.amari.com/watergate

Royal Princess Larn Luang
www.royalprincesslarnluang.com

Dusit Thani Hotel
www.dusit.com

Grand China Hotel
www.grandchina.com

Plaza Athenee
www.plazaatheneebangkok.com

Royal Orchid Sheraton
www.royalorchidsheraton.com

The Sukosol
www.sukosolhotels.com

VIE Hotel Bangkok
www.viehotelbangkok.com



FOOD AND DRINKS

Locally-sourced, seasonal and organic products

Carbon emissions associated with food are related to production and transport.⁵ In cooperation with Sodexo, ESCAP's in-house caterer, the food available throughout the UNCC is seasonal, locally produced, community-sourced and, as much as possible, organic. A labelling system displaying such descriptive information (i.e. locally-sourced, organic, vegan and vegetarian) has been introduced, especially to highlight the value of vegetarianism and veganism as carbon-friendly dining alternatives. Initiatives are being pursued to improve the menu's sustainability of the Thai Canteen, located on the ground floor of the Service Building.

Green week menu

At the International Canteen (located on the 1st floor), a sustainable menu will be served throughout the event. Food preparation gives preference to fish and vegetarian proteins over meat-based ones, as meat production not only takes more energy,⁶ but livestock also produces GHGs responsible for global warming.

Avoiding food waste

Approximately one third of the food produced globally for human consumption goes to waste,⁷ comprising of 3.3 Gtonnes of CO₂. In case of a catered side-event, please let us know if you have registered and won't be able to attend so food waste can be avoided. Attendees are also invited to ask for smaller size portions or to bring reusable food containers for leftovers. Biodegradable take away containers are made available in different sizes at the various cafeterias, however an extra 5 baht is requested to discourage over-use and over-reliance.

As part of Sodexo's Waste Watch Program, food waste generated at the consumer-side is digitally monitored, accounted for and displayed on daily basis, to better inform consumers of the consumption habits. Goals are created on a weekly basis to reduce the waste figures and improve collective accountability among all cafeteria users, including both employees and visitors. Currently, efforts are undertaken to strengthen Sodexo's Corporate Social Responsibility (CSR) commitment by working on integrating food waste produced during meal preparation (producer-side) into its calculations. Food waste factors heavily into carbon accounting so they can be appropriately off-set at the end.

Drinking water

Purified water dispensers are made available throughout the UNCC. Participants are therefore encouraged to bring their own reusable water bottles and refill them as much as they wish. If water bottles are needed, glass bottles recommended. Empty bottles, of either glass or plastic, shall be separated to facilitate recycling.

For certain events, attendees will be given a United Nations ceramic mug to purchase their drinks at the catering services available throughout the UNCC area. Ceramic mugs and thermos are also available for purchase at reasonable price at the UN souvenir shop located on the 1st floor of UNCC. For coffee breaks and receptions scheduled during the meetings, ceramic cups are made available by Sodexo.



CONFERENCE VENUE AND FACILITIES

Reducing waste generation

In order to improve resource efficiency as well as the amount of waste produced in connection with the event, promotional items and any distributed informational materials shall be confined to a minimum and whenever possible, made of sustainable raw material. Participants are warmly invited to embrace the 3 Rs (reduce, reuse and recycle) as guiding rules while purchasing or consuming goods during their stay in Bangkok. For certain meetings, USBs are distributed to distribute a large volume of ESCAP publications, knowledge products and reference material.

Paperless initiative

Printed documents is kept to a minimum. If printing is deemed necessary, eco-friendly ink and recycled paper will be made available. Double-sided printing is preferred, to limit the amount of paper utilized.

Attendees will be able to register online and download official documentation and other relevant reports from the event's website. Participants are urged to make use of electronic devices and to consider electronic access to documents before printing. A wireless internet connection is available through the entire UNCC and the agenda, schedule and concept notes for the meetings will be screened on various digital displays located in different areas of the Conference Centre.

Disposable plastic free

In order to reduce microplastic pollution and marine litter, the catering facilities throughout the UNCC will offer durable, reusable and non-plastic alternatives for food and drinks. As of June 1, 2017, Sodexo has committed to offer take away packaging, wrapping material, as well as water bottles made of plant base or other biodegradable materials. Moreover, to prevent waste generation, straws, napkins and plastic bags will be available on-demand, giving consumers the option to refrain from contributing to waste.

Participants are warmly invited to adopt this policy during their stay in Bangkok and beyond ESCAP premises. For instance, reusable shopping bags made of fabric shall be favoured to plastic ones. Unnecessary plastic food wrapping or plastic straws for drinks should also be limited, if not avoided.

Decorations

The majority of the displays employed across the UNCC are reusable. Posters, graphic displays and signage are made easy to update, to encourage repurpose or recycle.



SUPPORTING LOCAL COMMUNITIES

Participants are invited to purchase goods and souvenirs locally produced, to support to local businesses and commercial activities. Money going directly to local people through meals, souvenirs and the like means equal distribution of wealth and preservation of traditional culture.

HOW YOU ARE HELPING



