

ISBNPA 2024

Carbon Footprint Management Plan

By the Climate Action Committee

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One pager reporting the ISBNPA Greenhouse Gas Emissions in 2023

Item	Scope	Value	tCO2e	%
Subject 1 Annual Meeting				
1267 attendees	3	Travel	1715	92.73%
	3	Food and Beverage	8.70	0.47%
	3	AV and Venue	40.48	2.19%
	3	Accommodation	70.30	3.80%
Subject 2 IJBNPA	3		14.99	0.81%
Total			1849.52	100%

After conducting our analysis (March 4, 2024), we have determined that the total amount of carbon dioxide equivalent (CO2e) emissions was **1849.52 tCO2e**. This equates to an **average of approximately 1.46 tCO2e per ISBNPA member (1267)**. This is about 17.38% of the advanced economies' yearly average CO2e per capita (8.40 tCO2e).

- Travel // 113 g per km (Greenhouse Gas Protocol, 2024) // large countries average distance from two major cities, smaller countries, main city
- Accommodation // 14 Kg per night (Circular ecology, 2023) // average 4 nights
- Food and beverage // 4 meals, vegetarian, using 1.9t CO2e year per individual (Wilson, 2024) // previous version included the gala dinner and used the total USD as reference, 104.35 tCO2e
- AV and Venue // 110K AV// used [carbonfootprint.com - Carbon Footprint Calculator](https://carbonfootprint.com)
- IJBNPA // Calculated using the total number of published papers by Springer / Springer CO2e =0.10, multiplied by the 153 papers IJBNPA published

[Calculation Tools and Guidance | GHG Protocol](#)

See also the infographic available in this link

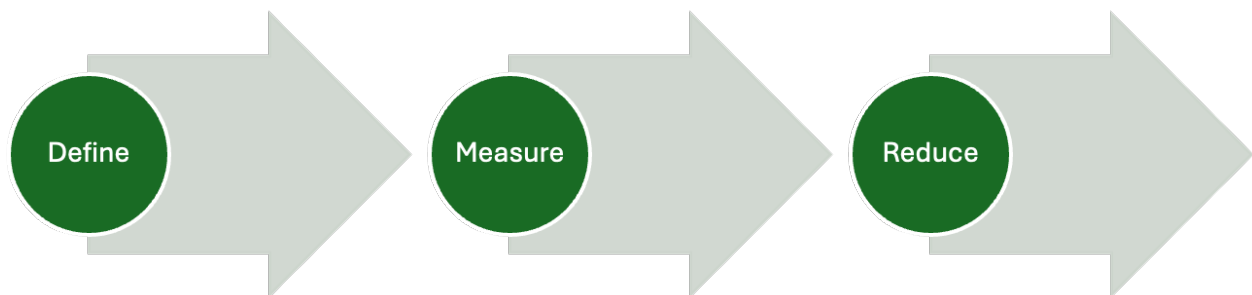
<https://isbnpa.org/strategicplan/growing-the-next-generation/isbnpa-carbon-footprint-report-2023/>

I. Introduction

A. Purpose of the Carbon Footprint Management Plan

(Declaration of Commitment)

ISBNPA is committed to promoting sustainability in behavioral nutrition and physical activity research-related practices. Our goal is to achieve carbon neutrality by the end of 2030. To achieve this goal, we have devised a three-step plan that involves defining our carbon footprint, measuring it accurately, and reducing it through various initiatives. Note that we do not plan to offset the remaining emissions because the current solutions do not ensure we will pursue an effective CO₂e mitigation.



In pursuit of this goal, the organization will continue allocating resources to audit the definition and measurement of carbon emissions related to research activities.

To ensure that research practices align with sustainable principles, ISBNPA will prioritize and facilitate efforts to reduce carbon emissions.

Finally, while ISBNPA is committed to this goal, we know that its accomplishment will only be possible if all ISBNPA community is equally committed to Define > Measure > Reduce locally, in their everyday research practices, at their research centers, universities, and other workplaces. Using JF Kennedy's famous speech, this plan's philosophy is based on the following sentences:

- a) Ask not ONLY what ISBNPA can do for you to manage our research-related carbon footprint and
- b) Ask ALSO what you can do to help ISBNPA manage our research-related carbon footprint

B. Overview of ISBNPA

Number of members, countries

As of December 31, 2023, ISBNPA has 1267 members from 53 countries. The vast majority of ISBNPA members (93%) are from high-income countries.

Mission and Vision

Our mission is:

We stimulate and promote innovative and impactful research in behavioral nutrition and physical activity to improve human and planetary health and well-being worldwide.

(updated 2023-11-24 to include the reference to planetary health)

Our vision is:

ISBNPA is the leading international research community in behavioral nutrition and physical activity

Governance

The ISBNPA Executive Committee is the elected body that have general power to control and manage the affairs of the ISBNPA.

The Executive Committee shall have no more than 15 members. The number of officers will change every other year between: (a) Four officers – President-elect (serving a one year term), President (serving the second year of a two-year term), Secretary and Treasurer; (b) Three officers – President (serving the first year of a two-year term), Secretary and Treasurer.

The Members-at-Large will include a Student Representative and an Early Career Researcher Representative that will be elected for a two-year term. Members-at-Large will include at least one representative from each geographical region of the world. These regions are Africa, Asia, Europe, Oceania, **North America, and South America or the Caribbean.**

B.2. Subject

1. Annual Meeting

Hosted annually in different continents in a yearly rotation, the ISBNPA Annual Meetings attract a significant attendance of 800-1200 people. It is important to note that 70-80% of the attendees travel by airplane to the host country, which has a significant impact on the carbon footprint of the event.

2. IJBNPA

IJBNPA is a reputable journal owned by Springer BMC. The scientific procedures (e.g., editorial and peer-review) are managed by ISBNPA. IJBNPA has an average publication rate of 160-170 papers per year and around 1000 submissions annually.

3. Administrative activities

These include the following online meetings:

1. Weekly meetings with the officers
2. Monthly meetings with the Executive Committee
3. Bimonthly meetings with the other committees or to prepare the bids for/and annual meetings

In addition, an average of 1200 emails are answered each year.

4. Communication activities (e.g., website, social media, newsletters)

On average 40 newsletters are sent every year, via Constant Contact. They reach a list that can go from 10000 to 150, depending on the topic. Most newsletters are sent to about 3000 recipients.

Twitter: We currently have 7129 followers on twitter (an increase of 423 from this time last year) and we are publishing more than 1 tweet per day and reposting on average 1-2 tweets per day.

LinkedIn: LinkedIn has seen the strongest growth. We currently have 788 followers (an increase of 305 from this time last year). We are posting about 3-4 posts per week.

Instagram: Instagram is a real success during the conferences and followers usually increase during this time. We currently have 483 followers (an increase of 83 from this time last year) and around 100 people see the stories. We only publish posts about the webinars and the annual meetings.

Vimeo and YouTube: We moved away from using Vimeo (\pm 4000 Vimeo views during the first semester) and started using YouTube. The visualization numbers are still lower than with Vimeo, with about 1800 views per semester.

5. Dissemination activities (e.g. webinars, online conferences)

On average 25 online webinars are delivered via the ISBNPA zoom account, reaching out to about 50 attendees each.

II. Approach to Carbon Management

Commitment

ISBNPA is committed to reducing each member's average CO₂e by 50% until 2027 and to be carbon neutral by 2030.

ISBNPA will invest 10K USD per year to accomplish this goal.

Overview

ISBNPA will follow the Define -> Measure -> Reduce approach presented before, following a staggered approach to managing its CO₂e.

As of 2023 and until 2024, it will establish a rigorous greenhouse gas emission assessment method, reporting its results to our membership.

During this same period, and because the yearly conferences are already contracted, ISBNPA will engage mostly in replacing and reducing activities (following [Exploring corporate engagement with carbon management techniques | Emerald Insight](#)).

- Replacing activities involves working with service providers such as the venue, catering, AV, and hotels, contracting ones that are transparent about their CO₂e and that have lower emissions levels. Note that ISBNPA has been engaged in these replacing activities since 2019, for example, by finding new food and beverage providers, suggesting hotels that are aligned with these principles, and contracting venues that are CO₂e Zero focused.
- We are reducing activities, looking for online options to attend the annual meeting, and helping our members find lower-emissions travel solutions (via Sustainable Aviation Fuel—SAF or by traveling by EV-powered rail or bus).
- After 2026, we aim to engage in avoidance solutions. We will focus on travel-related emissions, representing more than 90% of ISBNPA’s carbon footprint.
- These avoidance solutions may incorporate reducing the number of meetings, offering online-only options, and working with airlines that only use SAFs.

We will evaluate our efforts and revise this management plan yearly, as new solutions may arise and be incorporated.

Methods

A. Methodology for Assessment

The methods used to assess our CO₂e were, in part, a result of engaging in the British Standards Institution courses and, in part, of contracting experts from Ontario Tech University to act as consulting experts.

As a result, ISBNPA used the following references to measure the subjects of its activities.

B. Gathering Data on Greenhouse Gas Emissions

The primary data source was derived from the ISBNPA's annual meeting registration dataset, which included the addresses provided by the meeting attendees during registration, allowing for the travel calculations.

Information regarding food, beverages, and accommodation costs was obtained from the same registration dataset.

Data pertaining to the IJBNPA was procured directly from its Editors-in-Chief.

Lastly, the organization's Executive Director collected information on ISBNPA's administrative activities.

C. Calculation of Carbon Footprint

We used several methods. Some of them are in the list below and others are in the scope table in the next section. When the resulting numbers were discrepant, we used the largest result.

Travel

Greenhouse Gas Protocol. (2024, 02 22). Calculation Tools and Guidance. Retrieved from Greenhouse Gas Protocol: <https://ghgprotocol.org/calculation-tools-and-guidance>

Food and Beverage

Wilson, L. (2024). The Carbon Foodprint of 5 Diets Compared . Retrieved from Shrink That Footprint: <https://shrinkthatfootprint.com/food-carbon-footprint-diet/>

Accommodation

Circular ecology. (2023). The Carbon Emissions of Staying in a Hotel. Retrieved from Circular ecology : <https://circularecology.com/news/the-carbon-emissions-of-staying-in-a-hotel>

Journal

No references, a new method was used.

The approach used to estimate CO₂e emissions associated with publishing the IJBNPA involves using Springer-BMC emissions data and scaling it by the number of papers published. This method provides a reliable estimate, if all Springer-BMC emissions originate solely from paper publishing activities.

AV

We used the information made available by the venue.

Venue

We used the information made available by the venue.

Scope

Scope 1 and 2 are those emissions that are owned or controlled by a company, whereas **scope 3** emissions are a consequence of the activities of the company but occur from sources not owned or controlled by it.

Subject	Scope	Geographic	Source	Time frame	Method
Annual Meeting - Travel	3	Global	Direct airplane flights	Yearly	Carbon Calculator Calculation Tools and Guidance GHG Protocol , attendance lists
Annual Meeting - Food and Beverage	3	Local	Indirect, food production	Yearly	Carbon Calculator carbonfootprint.com - Carbon Footprint Calculator , budgeted costs
Annual Meeting - AV and Venue	3	Local	Indirect, electricity	Yearly	Carbon Calculator carbonfootprint.com - Carbon Footprint Calculator , budgeted costs
Annual Meeting - Accommodation	3	Local	Indirect, electricity	Yearly	Carbon Calculator 14 kg per night Wilson, 2024, budgeted costs
IJBNPA - publication	3	Local	Indirect	Yearly	Used Springer BMC report to calculate the CO2e per paper published
Admin - online meetings, membership and email handling	1	Global	Indirect	Yearly	Carbon calculator, IT costs per year
Comms - social media, website, newsletters	1	Global	Indirect	Yearly	Carbon calculator, IT costs per year
Dissemination - webinar, online conferences	1	Global	Indirect	Yearly	Carbon calculator, IT costs per year

III. Setting Targets, Goals and Strategies to Achieve Them

We considered our primary source of emissions, related to the Annual Meeting, and our secondary source emissions, related to the IJBNPA. These are both Scope 3 emissions. Scope 1 emissions are residual.

The 2023 current calculations resulted in the following table.

Item	Scope	Value	tCO2e	%
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	3	Travel	1715	92.73%
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After conducting our analysis (March 4, 2024), we have determined that the total amount of carbon dioxide equivalent (CO2e) emissions was **1849.52 tCO2e**. This equates to an **average of approximately 1.46 tCO2e per attendee**. This is about 17.38% of the advanced economies' yearly average CO2e per capita (8.40 tCO2e).

Targets and Goals, Timeline and Opportunities for Emissions Reduction

We aim to reduce our emissions by 50% by 2027 and to become carbon neutral by 2030. Being “carbon neutral” refers to achieving a state where the amount of carbon dioxide (CO2) emissions that an entity (such as a person, company, or country) produces is equal to the amount it removes from the Earth’s atmosphere.

We understand that attaining carbon emissions neutrality for our annual meeting poses a significant challenge, particularly for our upcoming 2025 event in New Zealand. Given the increased travel distances involved, the associated emissions are likely to be considerably higher compared to meetings held in Europe or North America.

Some of the recommendations below will only be considered from 2026 as the locations for the ISBNPA annual meeting are contracted until then.

Travel Mitigation: Recommendations

1. Sustainable Aviation Fuel (SAF): Endeavor to collaborate with airlines that provide this option.
2. Additionally, we could potentially offer a lower registration fee to participants who opt to travel with SAFs.

3. Explore lower CO₂e travel methods for attendees, such as:
 - Passenger Ferry
 - Rail (preferably Electric or Hydrogen-powered)
 - Bus (preferably Electric or Hydrogen-powered)
 - Electric Vehicle (EV) car
4. Promote virtual attendance for attendees with the highest emissions.
5. Consider geographically locating the conference to minimize distances and emissions.
6. Explore the possibility of hosting regional conferences to reduce travel-related emissions.

We might encourage our colleagues to collaborate with their universities to offset the CO₂e costs associated with flights. We could offer a discounted registration to those who do so.

Hotel Mitigation: Recommendation

After 2026, selecting a host country, region, and city with low-carbon energy for buildings and local transport will help find sustainable lodgings. Consider seeking hotels that have implemented measures to reduce carbon emissions. Prioritize accommodations that disclose their emissions per night, enabling informed decision-making toward more sustainable lodging options.

Food and Beverage Mitigation: Recommendation

After 2026, consider a host country and region with a sustainable agricultural sector. Explore sourcing options from local vegan suppliers who employ low-carbon practices, such as no-till farming, to minimize the carbon footprint associated with food and beverage procurement.

Venue Mitigation: Recommendations

Host countries, regions, and cities with low-carbon energy available will increase the likelihood of locating a low-emission venue. Consider selecting conference facilities that have implemented measures aimed at reducing carbon emissions. It is advisable to inquire about their emissions per CO₂e/m²/a (carbon dioxide equivalent per square meter per annum) as part of the selection process, ensuring alignment with sustainability objectives.

IJBNPA Mitigation: Recommendations

In 2024, work with Springer to see if they plan to be carbon neutral in 2025.

Is Scope 3 relevant for an academic society, and what would it include?

Yes, Scope 3 is indeed relevant as it is probable that the majority of emissions originating from an academic society fall within this category. Excluding Scope 3 emissions would lead to an underestimation of the actual impact of academic societies' actions and activities on the climate.

Does research related to nutrition and physical activity contribute to "carbon offsets"?

No, carbon offsets typically involve the anthropogenic removal of greenhouse gases to achieve a neutral or net zero state. However, research in nutrition and physical activity has the potential to significantly mitigate greenhouse gas emissions.

Does travel for vacation with the conference act as an offset?

No, however, it is advisable to minimize additional emissions associated with secondary trips.

IV. Implementation Plan

A. Assigning Responsibilities

The Climate Action Committee has the mandate to execute the aforementioned plan, with the Executive Director providing them with essential support. The task of collecting data for the report will fall under the purview of both, the Executive Director and the secretariat of the annual meeting. Furthermore, an external group may conduct an audit of the final report.

B. Defining Timeframes

This report and plan must be reviewed annually and shared with the ISBNPA community by March.

The data collection for the annual meeting should be completed by July every year.

The data collection for IJBNPA and administration ought to be finished by the end of each year.

If an audit is required, it should be requested by November each year.

C. Identifying Resources Required

The dataset for the Annual Meeting registration is crucial in estimating the emissions from travel, food and beverage, and accommodation.

The emissions report from Springer Nature, along with the IJBNPA annual report, will be

used to calculate the IJBNPA-related emissions.

The Executive Director's annual report will be used to estimate administrative emissions. Building Beyond Carbon, colleagues from Ontario Tech, may be considered for external audits.

V Monitoring, Reporting and Verification

A Establishing a Monitoring System

This system is now in place.

We are using the annual meeting registration dataset, the Springer Nature reports and the Executive Director report to monitor our emissions.

B Verification Process for Emissions Reductions

We use the latest emissions calculators and the data is based on member-provided addresses or external reports from Springer Nature. At present, we do not anticipate any method for verifying this data.

C Reporting Processes

An annual report will be posted on www.isbnpa.org in late March, and an infographic summarizing the results will be shared on ISBNPA social media in early April.

VII Conclusion

The above represents the inaugural ISBNPA Carbon Footprint Management Plan, a product of our Climate Action Strategic Plan Initiative and led by the Climate Action Committee.

This is our first venture into the "define>measure>reduce" approach, with an emphasis on establishing the initial two steps. We have successfully defined and quantified our greenhouse gas emissions and developed methodologies to bolster future carbon footprint management plans.

To ensure their credibility, all these procedures were audited by an external body.

ISBNPA is steadfast in its commitment to cut CO₂e emissions by 50% by 2027, ultimately aiming to achieve carbon neutrality by 2030. This plan lays out a clear timeline, strategic measures, and necessary resources to reach this ambitious goal.

VIII References

World Resources Institute & World Business Council for Sustainable Development. (n.d.). *Greenhouse Gas Protocol*. Retrieved April 30, 2024, from <https://ghgprotocol.org/standards>