A picture containing text, map, water, aqua

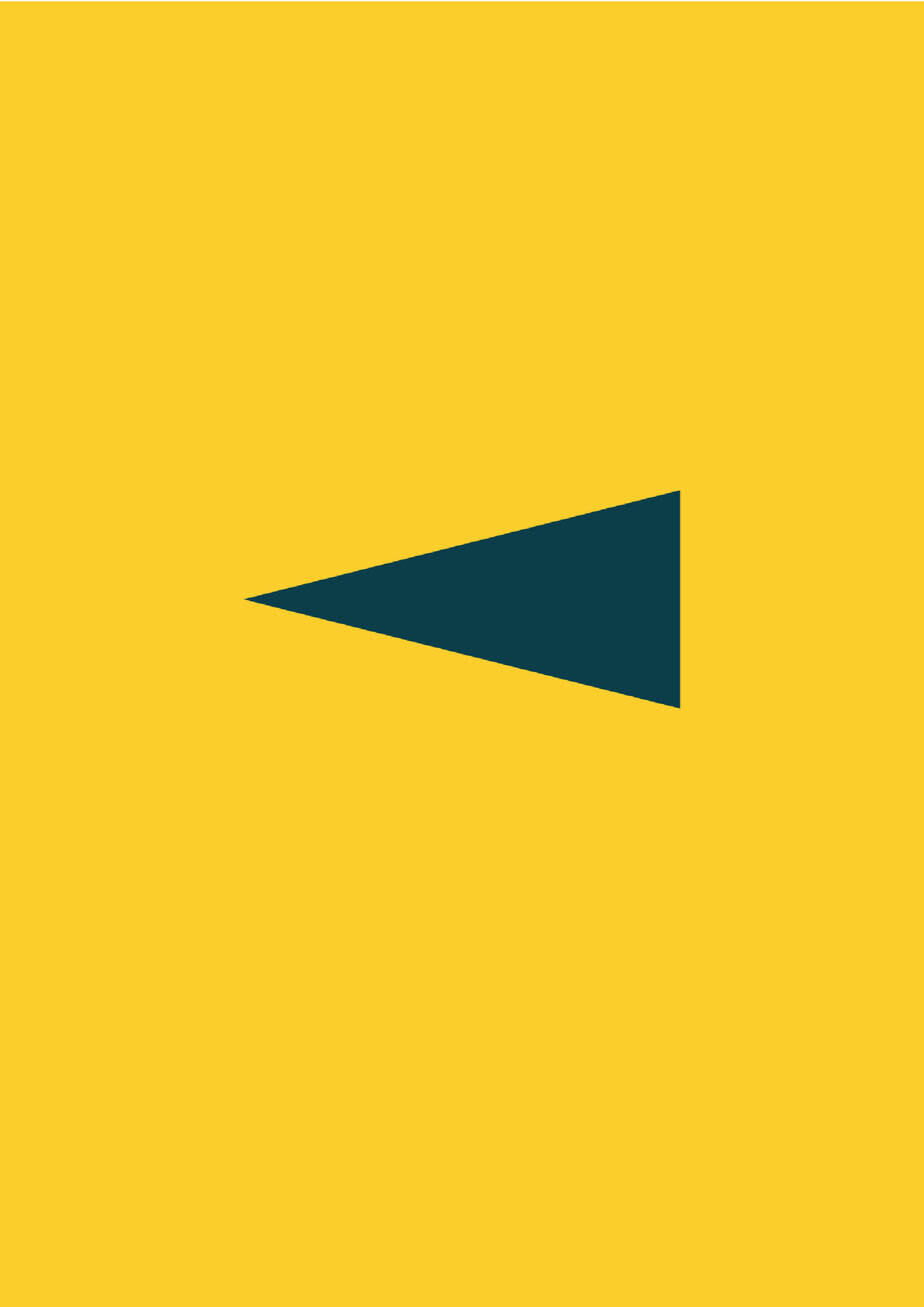
Description automatically generated

**Guidelines to monitor the environmental footprint of the**

**Partnership**

Sustainable Blue Economy Partnership

Milestone [72]



**COLOFON**

**Project full title:** A climate neutral, sustainable and productive blue economy Partnership

**Grant agreement no.:** 101086379

**Coordinator:** Ministero dell'università e della ricercar (MUR)  
**Milestone number:** 72  
**Milestone name:** Guidelines to monitor the environmental footprint of the Partnership

**Work Package no:** WP1  
**Work Package Title:** Partnership coordination and management

**Responsible:** MUR

**Authors:** Margherita Zorgno   
**Delivery date:**

Table of contents

[1.0 summary 4](#_Toc203743123)

[2.0 introduction 4](#_Toc203743124)

[3.0 ENVIRONMENTAL IMPACT reduction strategy guidelines 5](#_Toc203743125)

[3.1 Travel and mobility 5](#_Toc203743126)

[3.2 Events/meeting and catering 6](#_Toc203743127)

[3.3 Materials used 7](#_Toc203743128)

[3.4 Digital Communication 7](#_Toc203743129)

[4.0 monitoring tool, timeline and indicators 8](#_Toc203743130)

# summary

This milestone delivers internal sustainability guidelines aimed at minimizing the Partnership's operational environmental impact. It includes practical rules to reduce emissions, waste, and resource consumption. The guidelines cover four main areas: Travel and mobility; Events/meeting and catering; Materials used; Digital Communication.

The milestone also introduces a monitoring framework to create a baseline for carbon footprint internal tracking, to be able to delineate Key Performance Indicators (KPI) to be used for the 3rd cycle of the Partnership.

# introduction

Reducing greenhouse gas emissions is a key concern in the scientific community, yet research activities themselves such as meetings and conferences, can have a substantial environmental impact due to travel, catering, and event logistics. A recent study investigated the overall sustainability of an ongoing H2020 European project by examining the environmental burden produced by the group meetings. The study showed that in-person meetings are best for complex discussions, while online meetings work well for specific tasks. To reduce the impact of face-to-face meetings, strategies like optimised locations and carbon offsetting can be used. Blending virtual, in-person, or hybrid formats can lower emissions and costs, making them effective tools for international collaboration[[1]](#footnote-2).

The Sustainable Blue Economy Partnership is committed to climate neutrality and sustainability, and minimising the Partnership's operational environmental impact is crucial. This document introduces a framework of internal guidelines designed to reduce the environmental impact of the Partnership operational activities, and environmental footprint monitoring tools to track the footprint over the years and improve the reduction strategy. A monitoring system will be put in place from September 2025 and will serve as a baseline to delineate KPI to be used during the third cycle of the Partnership, that will help reducing the carbon footprint generated by operational activities of the Partnership. However, for practical reasons, the carbon footprint monitoring cannot be fully comprehensive, as a complete Life Cycle Analysis would require difficult-to-obtain data, such as travels details from all partners of the Partnership or detailed energy consumption of each partner (e.g. office space, software services). Therefore, only a few aspects will be covered by specific selected group, which are the most actively involved in the daily operations of the Partnership:

* carbon footprint related to travels from Executive Committee member, Secretariat and Brussels cellule
* digital communication carbon footprint related to emails sent by the Secretariat

On general aspects, Partnership partners are encouraged to integrate eco-friendly practices into their everyday operations, particularly when organising events and meetings. Minimising environmental impact during project implementation should not be seen simply as a requirement, but as a collective commitment by all partners to embrace sustainable practices throughout the Partnership’s duration and actively contribute to broader climate neutrality goals[[2]](#footnote-3).

# ENVIRONMENTAL IMPACT reduction strategy guidelines

The following guidelines are intended to help minimise the Partnership's operational environmental impact and support ongoing monitoring efforts. Whenever possible, Partnership partners are encouraged to implement as many of these simple actions as feasible. The guidelines will also be shared with co-funded projects to raise awareness and encourage consistent environmental practices.

## Travel and mobility

Travel and mobility, especially air travel, are large contributors to carbon emissions in research and institutional operations. Airplanes emit 255 g CO₂ per passenger per km, compared to 41 g for trains and 104 g for cars. Short-haul flights emit the highest CO2 emissions per passenger-kilometre[[3]](#footnote-4). Below a list of recommendations for the Partnership partner:

* *Trains should be used for trips* ***under 600 km,*** *whenever possible, instead of flights.*
* *Flights should be avoided if the same journey is feasible by train within 6 hours.*
* *Public transport is encouraged for local travel. The use of private transport (e.g. taxis, Uber) should be minimised and, in case, prioritise/encourage the use of carpooling.*
* *Encourage 'multi-purpose' trips*

To find the best location for a meeting in terms of lowest impact, the following tool can be consulted: <https://applications.icao.int/IGMC/HOME/INDEX>.

## Events/meeting and catering

In-person meetings, even if most of the time more effective and pleasant, imply higher environmental impact than on-line ones. However, additional precautions can be considered to further reduce the impact of in-person meetings, for example, when selecting catering services, venues, and accommodation (travel-related measures have already been addressed above). Food production and consumption significantly influence greenhouse gas emissions, land use, and water resources. Animal-based foods (especially red meat and dairy) have GHG emissions up to 10–50 times higher than plant-based alternatives[[4]](#footnote-5). Local and seasonal foods reduce emissions from storage and long-distance transport, and, if purchased by small producers (especially if from organic production) help supporting small-scale and less impactful productions. The following recommendations should be followed when planning and organising events or meetings:

* *Prioritise virtual or hybrid meetings, when possible.*
* *Select venues and accommodations that hold recognised environmental certifications (e.g., Green Key, ISO 14001) or demonstrate clear, verifiable sustainability policies and practices. Also, the venues (and the accommodation) should have good access to the main public transport connections and town centre.*
* *Minimise energy consumption (excessive air conditioning or lighting). The use of natural light should be preferred. Video projector and other recording tools should be switched off during coffee and lunch breaks to avoid unnecessary energy consumption.*
* *Avoid, when possible, printed agendas or material and encourage the use of QR codes (for material used, see section below).*
* *Events should offer mainly plant-based, local, seasonal menus (if possible, from organic small-scale local producers). For products like sugar and coffee, the use of fair-trade labelled products should be preferred.*
* *Avoid single-use plastics, non-recyclable packaging and single-use products in general. If single-use cannot be avoided, prioritise low impact single-use materials[[5]](#footnote-6). Also, paper products used for catering should contain high recycled content and be totally or elementary chlorine-free (TCF or ECF).*
* *Provide tap water over bottled water, when possible. If bottled water cannot be avoided, bottles should be glass (or, in case glass is not available, aluminum should be preferred to plastic).*
* *Ensure proper planning of catering participants to avoid food waste. Catering services should also be selected based on their commitment to food waste reduction, favouring those that implement clear policies, such as partnerships with local charities or food recovery programs, to redistribute surplus food in a socially and environmentally responsible way.*
* *The venue (and the catering) must have proper waste segregation and recycling options on site.*
* *Participants should be given clear instructions on how to reach the venue, accommodation, or town centre from arrival points (e.g., airport, train station) using public transport or walking routes.*
* *In case public transport is unavailable, a shuttle service should be arranged, aiming to reduce the number of trips by grouping as many participants as possible.*

## Materials used

Printed material, disposable badges, or roll-up banners come with an energy, water, and material cost. Reducing material use and prioritising digital formats directly cuts emissions, saves resources, and aligns with circular economy goals. The following recommendations should be followed when producing material for all the activities of the Partnership.

* *Avoid printing; use digital documentation as standard.*
* *In events, use QR codes to allow participants to easily access and download relevant documents.*
* *If printing is required, choose sustainable and recycled materials. Short, clear, and concise publications should be prioritised over lengthy ones, and images should be minimised to reduce printing space.* *For electronic publications, a printer-friendly version should be provided, using fewer colours, more compact text, and fewer pages.*
* *Publications and promotional products should be produced where they are going to be distributed to minimise transportation distances.*
* *Reuse signage and promotional materials as much as possible.*
* *Avoid the use of disposable badges and useless gadgets*

## Digital Communication

Though intangible, digital activities like sending emails, storing files, and holding online meetings generate carbon emissions through data centres, networks, and user devices. According to estimates, a standard email emits ~0.3g CO₂., while an email with a large attachment or images can reach up to 10g CO₂[[6]](#footnote-7). Also, the extensive use of AI tools has raised concerns about their environmental impact. As AI systems advance, their reliance on larger datasets and greater computational power continues to increase, placing added strain on natural resources[[7]](#footnote-8). The recommendations below can help in lowering the impact in daily digital activities of the Partnership.

* *Avoid unnecessary emails, especially with large attachments or repeated CCs.*
* *Use links instead of attachments where possible (e.g., shared folders/cloud platforms) or, in case of the need of attachment, use compressed formats for documents/images to reduce file size.*
* *Limit the use of 'Reply All' unless necessary.*
* *Keep mailing lists current and well-managed, to reduce automatic traffic.*
* *Establish an email housekeeping routine: encourage periodic inbox cleanup and cloud file archiving.*
* *Email only those who need the information, avoid copying others unnecessarily.*
* *Subscribe only to news and mailing lists that are relevant to you and regularly unsubscribe from lists you no longer need.*
* *Try to avoid unnecessary use of AI tools (e.g. CHATGPT), when possible*
* *Save energy by turning off devices when not in use.*
* *Reduce unnecessary streaming.*
* *Disconnect more often, unplug your modem at night, turn off mobile notifications, and remove unused apps.*
* *Avoid storing duplicate files or outdated document versions that are no longer needed.*
* *When developing a website/page, the following link guidelines can be followed:* [*5 ways we used sustainable web design for our new website.*](https://bluewisemarine.ie/5-ways-we-used-sustainable-web-design-in-the-development-of-our-new-website/)

# monitoring tool, timeline and indicators

This milestone sets the foundation for a transparent, measurable, and continually improving internal sustainability framework for the Partnership. In order improve the Partnership actions toward a reduction of environmental footprint, a monitoring activity should be undertaken.

As a starting point, data will be collected from September 2025 to September 2026, to create a baseline, analyse trends in travel patterns, emissions over time to identify areas of improvement. The baseline data will be used to create some KPIs for the third cycle of the Partnership.

The monitoring will include:

* All Ex Comm members (including the Secretariat and the Brussels cellule) should calculate their travel impact using the following tool: <https://www.carbonfootprint.com/calculator.aspx>. An online recording file will be shared to tack track of the data.
* Secretariat will periodically monitor the number of emails sent and track related carbon footprints
* The Symposium Committee will maintain a checklist to document which environmental guidelines were followed and successfully implemented during the organisation of the symposium



[www.bluepartnership.eu](http://www.bluepartnership.eu)

1. Ihttps://doi.org/10.1007/s11625-023-01421-1 [↑](#footnote-ref-2)
2. 9.-Interreg-NEXT-MED\_Guide-for-greening-project-implementation\_14.01.2025.pdf [↑](#footnote-ref-3)
3. <https://doi.org/10.1016/j.trpro.2024.11.018> [↑](#footnote-ref-4)
4. [DOI: 10.1126/science.aaq0216](https://doi.org/10.1126/science.aaq0216) [↑](#footnote-ref-5)
5. Guide that can be consulted <https://greengoodsgallery.com/blog/sustainable-materials-list/> [↑](#footnote-ref-6)
6. <https://carbonliteracy.com/the-carbon-cost-of-an-email/> [↑](#footnote-ref-7)
7. <https://wedocs.unep.org/handle/20.500.11822/46288;jsessionid=D21251A482E58DF9592DE93DC8E5309D> [↑](#footnote-ref-8)