

# Net Zero Hospitality Roadmap

Helping the hospitality sector transition  
to a greener future



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Climate change, biodiversity loss and environmental degradation pose an existential threat to our planet. To mitigate the most severe impacts of climate change, we must strive to prevent global warming beyond 1.5°C. This can be achieved by reducing greenhouse gas (GHG) emissions across all sectors of the economy by 2030 and reaching a state of Net Zero emissions by no later than 2050. Embraced by both the private and public sectors, and championed by investors, achieving Net Zero has become an increasingly important business need that is continuously growing and evolving.

To achieve the goal of Net Zero emissions by 2050, decisive action is required immediately, and significant progress is already underway in this field. Various tools and methodologies have been developed to measure and reduce emissions, specifically tailored to support hospitality businesses on their path to Net Zero. Additionally, numerous global, regional, and local initiatives encourage collaboration and knowledge sharing, benefiting not only hotels but also the food, drink, and entertainment sectors. These initiatives demonstrate that the shift toward measuring and reducing emissions is already underway. Nevertheless, substantial work and support are still necessary to accelerate the pace of change.

The transition to Net Zero emissions can present challenges for Small and Medium Enterprises (SMEs), primarily due to a lack of knowledge, expertise, funding, time, and competing business priorities. However, it also brings numerous opportunities, such as meeting the rising demands of consumers, enhancing reputation, exploring new revenue streams, and improving overall performance.

HOTREC, the umbrella association representing the hospitality sector in Europe, is committed to supporting the industry's transition to Net Zero. Recognizing the challenges and opportunities that arise from this transition for European SMEs, HOTREC has commissioned TOPOSOPHY Ltd to develop a Net Zero Hospitality Roadmap report. The report's purpose is to make the case for an accelerated response from the hospitality industry to the climate emergency. It provides an analysis of the challenges, opportunities, and available support for SMEs as they strive to achieve Net Zero emissions.

The methodologies, tools, initiatives, and case studies included in the report have been selected based on their accessibility, practicality, and applicability to the hospitality sector SMEs. The recommendations provided for both HOTREC members and SMEs are structured around three themes: Climate Awareness, Education and Communication, Supporting Measurement and Decarbonization, and Advocacy and Collaboration.

By embracing the challenges, seizing the opportunities, and leveraging the available support, the hospitality sector has the potential to play a vital role in the collective effort to achieve a sustainable and Net Zero future, safeguarding our planet for generations to come.



*The hospitality sector stands united to reach the global climate goals. Investments done today will mean lower energy costs, healthier environment, and improved resilience in the future. We hope this report will help the sector navigate its way to Net Zero.*

*We are fully aware that the sector is facing a roller coaster: the impact of the ongoing war; inflation; high interest rates; and COVID recovery. We call on the support of the EU and national governments to help the sector in this journey towards a greener future*

**Alexander Vassilikos**  
HOTREC President



*Decarbonising agriculture, food, and other crucial elements of the hospitality sector's supply chains will involve close collaboration with our suppliers, partners, other sectors, and customers. It won't be easy, but our businesses, and indeed our lives, depend on it.<sup>1</sup>*

Mark Chapman, CEO Zero Carbon Forum, 2022

Climate change, biodiversity loss and environmental degradation are existential threats. HOTREC, the umbrella association representing the hospitality sector in Europe, is committed to contributing to the sustainable economic development objectives set out by the United Nation Sustainable Development Goals (SDGs) and the 2030 Agenda for Sustainable Development.

The European Green Deal aims to transform the EU into a modern, resource-efficient and competitive economy, able to reduce net greenhouse gas emissions by at least 55% by 2030 and to Net Zero by 2050 compared to 1990 levels. In December 2022, the EU Competitiveness Council approved the [European Agenda for Tourism 2030](#) with a programme of actions to make the European tourism ecosystem greener, more digital, more resilient and inclusive. Reducing environmental footprint and providing support for SMEs to engage in environmentally friendly practices are one of the key goals. The Agenda is based on the EU Commission's [Transition Pathway for Tourism](#) for the more sustainable sector in the future.

To accelerate climate action in tourism, a global framework - [the Glasgow Declaration on Climate Action in Tourism](#) - was launched at the UN Climate Change Conference (COP26) in November 2021, and has been endorsed by the UN World Tourism Organisation (UNWTO), the UN Environment Programme, the EU and many others. It is a voluntary commitment that any tourism stakeholder can sign to start or continue their journey to Net Zero, with a comprehensive and constantly growing [repository of tools and resources](#) to support the Signatories in implementing their commitments.

## The five pathways of the Glasgow Declaration

**Measure:**  
*Measure and disclose all travel-and tourism-related emissions*

**Decarbonise:**  
*Set and deliver targets aligned with climate science to accelerate tourism's decarbonisation*

**Regenerate:**  
*Help visitors and communities experience better balance with nature*

**Collaborate:**  
*Work together to ensure our plans are as effective and co-ordinated as possible*

**Finance:**  
*Ensure resources and capacity are sufficient to meet objectives set out in climate plans*



To achieve the goal of Net Zero emissions by 2050, we must act now. In response to the increasing legislative and market demands, numerous tools, methodologies, and collaborative initiatives have been developed to support SMEs in the hospitality sector on their journey to Net Zero.

The purpose of the research report is to make the case for accelerated response of the hospitality industry sector to the climate emergency by providing an analysis of the challenges, opportunities, and the available support on their journey to Net Zero emissions. This report provides a comprehensive summary of these resources in the following three sections: Progress to Date, Existing Support, and Recommendations.



*As the impacts of climate change unfold, the time for talk is over. The world needs action, and hospitality is stepping up to the plate.*

*Zero Carbon Forum, 2022*

### The report structure

- **Progress to Date:** an overview of the progress achieved by the hospitality sector to date in relation to the five pathways of the [Glasgow Declaration on Climate Action in Tourism](#) – measure, decarbonize, regenerate, collaborate and finance.
- **Existing Support:** a summary of the key methodologies, tools, and initiatives for hotels as well as for the food, drink, and entertainment sectors. This section also includes inspiring case studies that serve as examples and offer further guidance. The case studies have been collected from several HOTREC member organisations, extensive desk research for this report, and insights shared by the hospitality industry experts who were interviewed for this research:
  - [Eric Ricaurte](#), CEO and Founder, [Greenview](#);
  - [Simon Heppner](#), co-founder of the [Net Zero Now](#) and the [Sustainable Restaurants Association](#);
  - [José Juan Lorenzo](#), the managing director of [Tourism of the Canary Islands](#); and
  - [Agata Delmaczyńska](#), [Green Officer](#), [Hospitality Sustainability Consultant](#).
- **Recommendations** with practical steps to take on the journey to Net Zero

### Key guiding questions

- What are the primary areas of action that the industry takes?
- What existing support is available (tools, methodologies, industry-wide initiatives), and how can they assist the sector?
- What are the challenges associated with adaptation and implementation?
- What progress has been made so far?
- What steps are necessary to help accelerate climate action?



*The best time to go Net Zero was 20 years ago, the next best time is now.*

*Net Zero Now, September 2021*

# SECTION 1

## Net Zero and the Hospitality Industry:

### Progress to Date



*With changing customer expectations and regulations as well as rising production costs, small businesses will need to prioritize climate action to maintain a competitive advantage.*

*[SME Climate Hub, 2022](#)*

#### Net Zero: barriers and challenges

There has been increasing market and regulatory pressure for businesses to take climate action and to reach Net Zero much more quickly than their government requirements. However, many SMEs do not have the resources to measure and manage their emissions accurately.

A [survey of nearly 200 SMEs](#) by the UN-backed SME Climate Hub (Feb 2022) revealed that the top reasons small businesses cite for delaying climate action include a lack of skills and knowledge (63%), funding (48%) and time (40%). Other barriers identified in the research for this report include:

- Assumption that doing something small like recycling is enough.<sup>2</sup>
- Lack of standardised guidance on emissions reporting.<sup>3</sup>
- The availability of methodologies and tools in English only (a significant barrier for non-English speakers).
- A perception that it is hard to know where to start.

#### Net Zero: opportunities for SMEs in the hospitality sector

It is important to remember that although the global transition to Net Zero emissions brings new challenges and can seem complicated and daunting, it also brings many opportunities for hospitality businesses of all sizes.

- Having a Net Zero strategy safeguards brand reputation, meets customer and employee expectations, reduces climate-related risks.<sup>4</sup>
- Companies also have the opportunity to explore new revenue streams and commercial offerings, improve their business' performance, and stay ahead of incoming regulations.
- The potential for innovation and impact is significant, as hospitality businesses look to influence customer behaviour, decarbonise menus and promote diet shift, drive out food waste, adopt zero emissions logistics solutions, reduce water and energy use, and drive improvements in agriculture so food production becomes lower carbon and more sustainable.<sup>5</sup>

In the following section, you will find a short summary of the progress made under the five pathways of the [Glasgow Declaration on Climate Action in Tourism](#) – measure, decarbonize, regenerate, collaborate and finance.

The measure pathway of the Glasgow Declaration is explained as follows:

*“[As signatories we commit to] Measure and disclose all travel and tourism-related emissions. Ensure our methodologies and tools are aligned to UNFCCC-related (UN Framework Convention on Climate Change) guidelines on measurement, reporting and verification, and that they are transparent and accessible.”*

Reducing emissions starts with measurement, as **‘you can’t manage and reduce if you don’t measure’**. According to the UNWTO [report](#)<sup>6</sup> which provides an overview of the methodologies and tools for measurement of emissions in tourism, accommodation has the largest number of methodologies and tools designed for its needs, followed by tour operators, then destinations. Some of the most useful ones for the hospitality sector have been included in the report. However, the UNWTO Global Survey on Climate Action in Tourism (2022) also revealed that the vast majority of SMEs (which represent around 80% of the tourism enterprises) have not engaged at all with emissions measurement.

Over the next three years, the European Commission aims to develop a standardised Product Environmental Footprint (PEF) methodology for the hotel accommodations to enable the measurement of their environmental impacts.<sup>6</sup> The PEF is a multi-criteria measure of the environmental performance of a good or service throughout its life cycle. HOTREC is counting on the upcoming PEF methodology for accommodation to bring a harmonised, easy to use method for all companies to use. However, for the time being SMEs are advised to use the methodologies and tools described in this report while the PEF is being developed.

## Barriers to measure

As a result of these barriers, the aforementioned [report](#) states (on p.6) that measurement landscape is still marked by a range of fragmented approaches:

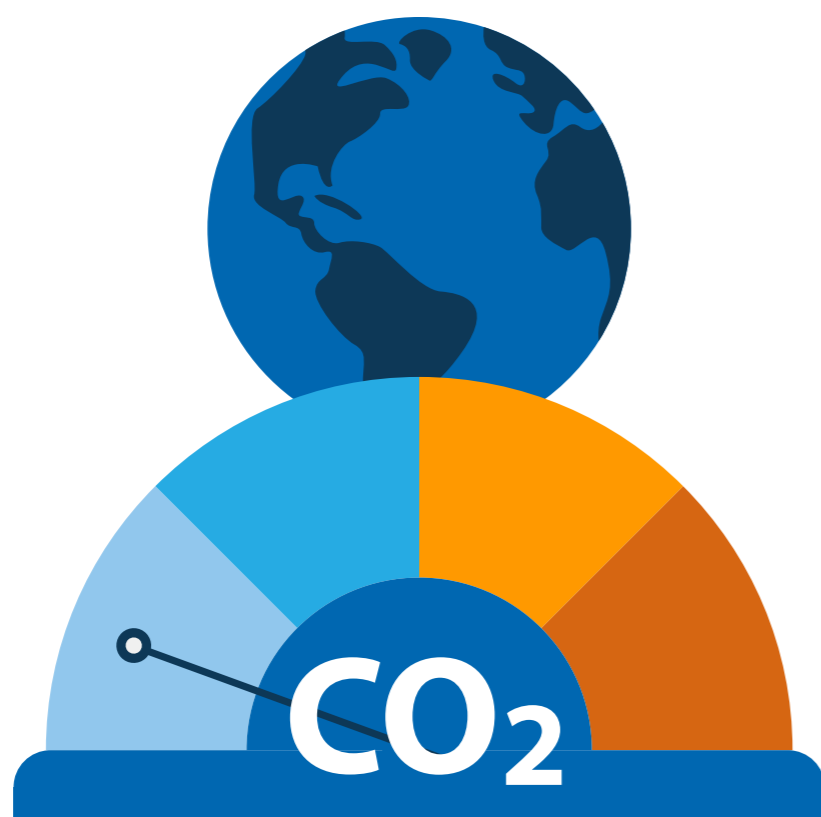
- There is little consensus over differing responsibilities and boundaries, or metrics used.
- The complexity in measuring the sector’s emissions results in the lack of understanding and confusion: what should be included? Where do the boundaries lie (what are the sources of emissions)? Are hotels responsible for the emissions from food consumed in hotels as well as for the transport of this same food?<sup>7</sup>
- The tourism value chain is complex, diverse and overlapping. The process of measurement is marked by an unfamiliar lexicon and set of principles.
- There is in general little technical capacity, and often limited enthusiasm, to undertake an endeavour that does not appear to offer immediate results in return.

## Carbon emissions measurement in the hospitality sector: Key Facts

- Some companies use consultants and certification companies, who offer no free tools, but deliver deeper support (particularly to measure Scope 3 emissions – indirect emissions linked to running your business, such as purchased good and services, staff commute, business travel – that are the hardest to calculate).
- According to the [Green Lodging Trends Report 2022](#), over 40% of all hotels measure carbon emissions<sup>8</sup>, and most measure at least on a quarterly basis. The proportion of full service hotels (72.3%) measuring carbon emissions is more than double of limited service hotels (34. 5%).<sup>9</sup>
- Economy (6.8%) and midscale (10.5%) hotels have the lowest prevalence rates for measuring carbon emissions.

**HOTREC members and measurement of carbon emissions:  
Key Findings (based on HOTREC internal survey on carbon footprint  
conducted in 2022) <sup>10</sup>**

- CO2 footprint measurement in the hospitality sector is very extensive, as several aspects need to be taken into account (e.g. mobility of guests /employees; own mobility; building emission; cleaning & laundry).
- The way the measurement of the environmental footprint is done varies from country to country: in some countries, companies are collecting the data; in other countries hotels use external service providers to do the calculations.
- Using different methodologies has generated measurement errors. Some members indicated that a national ready-to-use tool that would enable the establishments to measure the environmental footprint is necessary to harmonise the measurement.
- Northern European members (Iceland, Norway, and Sweden) are at the forefront of carbon footprint reduction in the hospitality sector, with companies in Iceland and Norway being nearly carbon-neutral and Swedish companies producing less than 5% of net greenhouse gas emissions compared to 1990 levels.





The decarbonise pathway of the Glasgow Declaration is explained as follows:

*“[As signatories we commit to] Set and deliver targets aligned with climate science to accelerate tourism’s decarbonisation. This includes transport, infrastructure, accommodation, activities, food & drink, and waste management. While offsetting may have a subsidiary role, it must be complementary to real reductions.”*

According to the [Global Hotel Decarbonisation Report](#), to stay within the 2-degree threshold set by the Paris Agreement, the hotel industry will need to cut carbon emissions by 66% by 2030 and 90% by 2050 (from a 2010 baseline). As mentioned in the introduction, there has been increasing market and regulatory pressure for businesses to take climate action and decarbonise before 2050.

Central to carbon reduction is the switch to renewable energy, and there are various ways that hotels and the food and drink sector can approach this, from installing onsite renewable plants to purchasing renewable electricity and acquiring renewable energy certificates (RECs). According to the [Green Lodging Trends Report 2022](#), these are currently not that common practices but are likely to be adopted more as they become more affordable and widely available.

## Decarbonisation and the hospitality sector: Key Facts

- A highly popular carbon reduction initiative across hotels is the promotion of sustainable transportation options by staff and guests (implemented by over 95% of hotels who participated in the Green Lodging Report Trends 2022 study), such as providing subsidised public transit passes; offering bicycle rental, shuttle buses, electric and/or hybrid vehicles for guest transfers and preferred parking for low emission vehicles).
- 65% of hotels plan and implement carbon reduction initiatives, for example, promoting sustainable transportation, reducing food waste and plastic, or switching to renewable energy.
- Nearly 30% of all hotels install electric vehicle charging stations on their property.
- Less than 25% of all hotels participating in the study generate renewable energy onsite. About one-fifth purchase renewable energy from the market, such as RECs, green tariffs, feed-in tariffs and power purchase agreements. Globally, 13.0% of hotels purchase all or part of their electricity from renewable sources.
- For restaurants, many targets focus on ‘operational’ emissions only: electricity, heat, and potentially transport emissions. However, as “it is incomprehensible to claim to be a Net Zero restaurant if your claim does not count the food on the table, the drink in the glass, or waste in the bin.”<sup>11</sup> It is essential for restaurants to include the climate impact of the full value chain when making commitments linked to Net Zero.
- There are several global and more regional collaborative initiatives for restaurants and other food providers to help them reduce the carbon footprint of menus, and that encourage consumers to choose more climate-friendly diets and purchase climate-friendly products. For example The Cool Food Pledge, One Planet Plate, Climate Friendly Diets, Carbon Free Dining (see p. 46-47 of the report).
- Ultimately, as stated in one of the methodologies for hotels, the technical aspects of Net Zero claims and approaches will be determined more specifically by industry and type of business model.<sup>12</sup>
- To achieve the goal of Net Zero emissions by 2050, we must act now. In response to the increasing legislative and market demands, numerous tools, methodologies, and collaborative initiatives have been developed to support the SMEs in the hospitality sector on their journey to Net Zero.

# REGENERATE

The regenerate pathway of the Glasgow Declaration is explained as follows:

*“[As signatories we commit to] Restore and protect ecosystems, supporting nature’s ability to draw down carbon, as well as safeguarding biodiversity, food security, and water supply.*

*As much of tourism is based in regions most immediately vulnerable to the impacts of climate change, ensure the sector can support affected and at-risk communities in resilience building, adaptation and disaster response*

*Help visitors and host communities experience better balance with nature.”*

Finding information about the hospitality sector’s initiatives under the ‘regenerate’ pathway has proven surprisingly difficult. Even when the sector cooperates with others to conserve biodiversity and support host communities, these efforts aren’t widely communicated. One of the interviewees for this report, the head of Turismo de Islas Canarias Jose Lorenzo Rodriguez said that having a Climate Action Plan structured around the five pathways of the Glasgow Declaration made it obvious that the “regenerate one is the weakest.”

One of the solutions suggested is to stay in contact with all science institutions and conservation organisations to learn what projects they are working on and assess the opportunities for collaboration as well as for joint funding options. Hotels, restaurants and destinations need to look beyond their usual stakeholders to form meaningful partnerships for regeneration. For this reason, HOTREC is part of the [MYRIAD-EU project](#), a research project to better understand how different climate-exaggerated catastrophes (e.g. droughts; floods; volcanos; storms) are interlinked and to anticipate how risks interact to prevent and mitigate natural disasters.

There are some interesting examples of cooperative initiatives by hotels and restaurants that aim to restore ecosystems and support vulnerable communities through partnerships with environmental organizations, collaboration with local food and other goods producers, support for educational programmes, and contributions to initiatives focused on ecosystem restoration and regeneration. Check Section A3 and B3 of this report for inspiration.



The collaborate pathway of the Glasgow Declaration is explained as follows:

*“[As signatories we commit to] Share evidence of risks and solutions with all stakeholders and our guests, and work together to ensure our plans are as effective and co-ordinated as possible.*

*Strengthen governance and capacity for action at all levels, including national and sub-national authorities, civil society, large companies and SMEs, vulnerable groups, local communities and visitors.”*

It is highly encouraging to witness the establishment of new collaborative initiatives that provide invaluable support to SMEs on their journey towards achieving Net Zero. Research demonstrates that businesses truly value the opportunity to network and share practical knowledge and hands-on experience that allows them to identify effective actions as well as learn from past challenges.

There are various opportunities for SMEs to meet other businesses and experts online to collaborate, and share insights and expertise through webinars, online conferences or SME-focused initiatives. For example, a UN-backed global initiative the [SME Climate Hub](#) offers free tools and resources (surveys, case studies, and articles) to enable SMEs to pledge to achieve Net Zero by 2050, and report progress annually. The online platform allows searching by sector and country, providing links to committed SMEs that can be contacted to share knowledge.

In the UK, the [Zero Carbon Forum](#) has committed to bring the hospitality sector together to achieve Net Zero by 2030 on members' own operations, and 2040 across the sector's supply chain. With defined roadmaps supported by peers, government, and sustainability experts, members collaborate to reach net-zero carbon footprints.

The examples provided in this report emphasise the importance of forging partnerships and coalitions that extend beyond the hospitality sector. Collaborations with nature conservation organisations, universities, technology providers, and companies from the energy/transport sectors, and are essential to facilitate a seamless transition to Net Zero.

## The Canary Islands, Spain:

### **“Journey to decarbonisation” collaborative initiative and platform**

The Tourism Destination Platform (PDTIC) is due to launch in Summer 2023, providing a standardised carbon calculator for SMEs to measure their footprint and assess progress in decarbonization.

Following a successful pilot in 2021 with 35 hospitality SMEs, the Platform will support all 2,500 tourism businesses on the islands in measuring emissions, setting objectives, and creating climate action plans. It will offer resources such as templates, regulations, and a decarbonisation glossary. Support for SMEs will be provided by the Sustainability Office of Turismo de Islas Canarias (TIC) as well as the local Business Associations (to be trained by TIC).

The platform will allow the TIC to monitor the local businesses' journey to Net Zero, suggest improvements, and collect and consolidate information on emissions from tourism activity in the Canary Islands as a whole. The project, in collaboration with a tech company Atos and the standard organisation ISO, is funded by the TIC until 2030.

The finance pathway of the Glasgow Declaration is explained as follows:

*“[As signatories we commit to] Ensure organisational resources and capacity are sufficient to meet objectives set out in climate plans, including the financing of training, research and implementation of effective fiscal and policy tools where appropriate to accelerate transition.”*

Lack of funding is one of the key barriers for SMEs on their Net Zero journey. [A survey of nearly 200 SMEs](#) (SME Climate Hub, 2022) showed that 50% of SMEs delay climate action due to a lack of funding, and approximately 70% need access to external funds to reduce their emissions faster or at all. However, only one-third of SMEs have been offered a financial incentive to reduce emissions.

More financial support for SMEs is needed from both the government and banks and big corporations. The University of Cambridge Institute for Sustainability Leadership (CISL) suggests that banks and major corporates, who finance and buy SMEs' products and services, are well equipped to support SMEs' Net Zero action, given their own Net Zero commitments. According to the CISL' [report](#) on the role of banks in financial innovation for SME Net Zero transition, it is essential for banks and buyers, with their commitments to Net Zero and resources, to play a key role in bridging the Net Zero financing gap by experimenting with incremental and radical innovations. The report emphasizes the need for more financial support for SMEs, not only from the government but also from banks and big corporations.

Several EU countries run various funding schemes that aim to facilitate the transition to Net Zero. These schemes provide access to finance and address one of the key barriers for SMEs in their journey towards a greener future.

- **Malta: Sustainability improvements schemes** aimed at businesses to help them invest in energy efficient technologies and improve the sustainability of their operations more generally, for example [Investment Aid for Energy Efficiency Projects, Smart and Sustainable Investment Grant](#) for more efficient uses of resources), or [Energy Audit Scheme](#) that refund SMEs such as restaurants and hotels that undergo the energy audit.
- **Denmark: Fund for Plant-based Foods**, worth over EUR 90 million Fund aims to increase the availability of plant-based options for Danish consumers and to make Denmark a leader in plant-based food production.
- **Greece: Alpha Smart Hospitality** for financing energy efficiency upgrades and energy monitoring for hotels, and for access to advisory guidance and technical support to help them achieve energy efficiency.
- **Ireland: Grants to improve energy efficiency of buildings**, for example to [audit energy management systems](#) and carry out building retrofit projects to [increase energy efficiency and reduce carbon footprint](#), and [specific grants](#) for installation of heat pumps or biomass boilers.

# SECTION 2

## Net Zero and the Hospitality Industry:

### Existing Support

This section of the report provides a summary of the key methodologies, tools for hotels as well as for the food, drink and entertainment sectors, with a short explanation of **how to use** them and what **benefits** they provide. The methodologies establish approaches and frameworks guiding measurement of emissions, and the tools allow practitioners to measure emissions. Several examples of collaborative initiatives and best practices are also included for inspiration, knowledge sharing and future benchmarking.

HOTREC encourages its members as well as companies across Europe, including SMEs, to try these methodologies, tools, and initiatives to either start or accelerate their journey to Net Zero.

This chapter is divided into two sections, with several sub-sections explained under each section below.

- A. **Resources relevant for hotels + case studies**
- B. **Resources relevant for restaurants, bars, cafes and clubs) + case studies**

## A. HOTELS

Part A provides a summary of the key methodologies, tools, and collaborative for hotels, with a short explanation of how to use them and what benefits they provide. The structure is as follows:

- A1. **Net Zero methodologies and frameworks**
- A2. **Tools to calculate emissions**
- A3. **Initiatives by hotels to restore ecosystems and support vulnerable communities**
- A4. **Case studies**



*The renewable hotel room® at a climate-positive hotel Creative Hotel Luise, Erlangen, Germany / [Image source](#)*

## A1. Net Zero methodologies and frameworks

This section contains the most popular methodologies used by thousands of hotels across the world. These methodologies establish approaches and frameworks that guide businesses on starting and advancing their journey towards Net Zero. They provide an overview of the steps necessary to understand, measure, reduce, and at times offset emissions. Additionally, they offer guidance on effectively communicating these efforts and reporting on them.

The carbon measurement tools, explained under subsection A2, enable users to calculate their emissions. However, these tools do not offer the same level of guidance provided by the methodologies.

Please bear in mind that these methodologies are being revised and updated, and new versions of the methodologies might be available over time.

### Net Zero METHODOLOGY FOR HOTELS

'Net Zero Methodology for Hotels' (2021) developed by Greenview, with Tourism Declares, Pacific Asia Travel Association PATA, the Sustainable Hospitality Alliance and the World Travel and Tourism Council (WTTC), and various hotel, tourism, and climate change organisations, serves as a comprehensive guide for hotels, operators, and customers to embark on the Net Zero journey.

This methodology gives a very good overview of what needs to be done, the targets and milestones that should be set and what steps needs to be taken.



### How to use the methodology?

A very useful [Summary](#) of the methodology provides an overview of the key issues to be addressed when a hotel or hotel company is considering and then making Net Zero commitments. It is worth reading the Summary first for an initial understanding of the challenges and key issues for hotels which wish to make that commitment. Full discussion of each topic and details on how this methodology aligns with other Net Zero initiatives can be found in the full Methodology.

The Summary is divided into 5 sections, each of them providing specific guidance in the following areas to help set a Net Zero commitment:

- SECTION 1  
SETTING A BASELINE
- SECTION 2  
THE GHG BOUNDARIES OF A HOTEL
- SECTION 3  
HOTEL Net Zero PATHWAY FROM 2025 – 2050
- SECTION 4  
GHG EMISSIONS QUANTIFICATION AND REPORTING
- SECTION 5  
THE VALUE CHAIN EMISSIONS BOUNDARY OF A HOTEL STAY

### The benefits for hotels

The guidance provided by this methodology will help any hotel to:

- Set a baseline from which to pursue a Net Zero target (and answer relevant questions on how a baseline year should be selected, what targets to set, what metrics to use etc)
- Define emissions boundaries (the sources of emissions, what to measure, which entities are responsible for the different emissions, how should emission sources be prioritised etc)
- Establish milestones for achieving targets by 2025, 2030, 2035, 2040, and 2050
- Establishes performance and engagement goals
- Understand reporting requirements.
- Understand the principles for carbon offsetting in case it is impossible to reduce emissions



*Please see page 44 for the explanation of Scope 1, 2 and 2 emissions.*

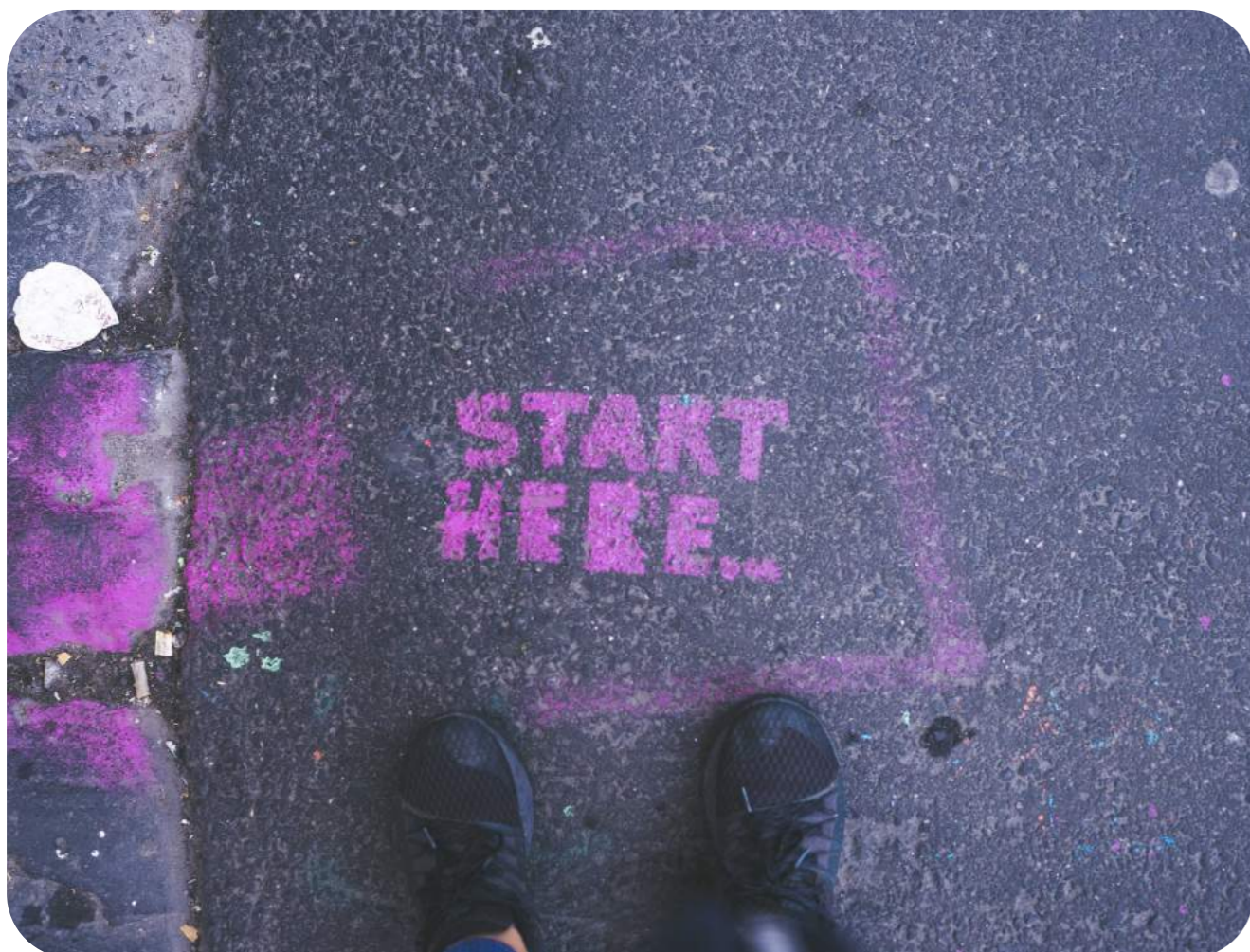
## THE PRACTICAL GUIDE TO GETTING STARTED

The “Practical Guide to Getting Started” to establishing a Net Zero pathway for hotels has been developed as part of the wider Net Zero Methodology for Hotels.

It is a simple step-by-step guide on how to get started with a Net Zero strategy: 15 necessary steps to:

- set up the project and obtain buy in
- identify and address Scope 1 (fuels burnt on site such as gas, fuel, mobile and refrigerants) and Scope 2 emissions (purchased electricity, purchased heating/cooling)
- identify, prioritise and address Scope 3 emissions (supply chain emissions)
- establish the processes and procedures necessary to develop and maintain the pathway; and
- commit and communicate.

Within some of the steps, variables are identified. These are key issues which need to be addressed and determined in relation to the specific needs of the company, its business model and geography.



## HOTEL SUSTAINABILITY BASICS INITIATIVE

[Hotel Sustainability Basics initiative](#) and its online [verification system](#) is a globally recognised and coordinated set of sustainability indicators that all hotels should implement as a minimum.

Freely available for any hotel company or property to adopt. They are intended as the first step of a progressive sustainability journey, that can then be expanded to follow more ambitious pathways (e.g. ‘Pathway to Positive Hospitality’ or the Global Sustainable Tourism Criteria).

### How to use it?

It consists of 12 criteria, grouped into three areas: Efficiency, Planet and People. Of the 12 criteria, hotels need to comply with 8 initially, while the others can be committed to and put in place within 3 years. The Hotel Sustainability Basics initiative can support any hotel in implementing sustainable practices and reducing their environmental impact.

<h3 style="margin: 0;">Efficiency</h3> <p style="margin: 0;">Robust approaches to measuring and reducing energy and water consumption, waste and carbon emissions.</p> <ol style="list-style-type: none"> <li>1. Measure &amp; Reduce Energy Use</li> <li>2. Measure &amp; Reduce Water Use</li> <li>3. Identify &amp; Reduce Waste</li> <li>4. Measure &amp; Reduce Carbon Emissions</li> </ol>	<h3 style="margin: 0;">Planet</h3> <p style="margin: 0;">Fundamental actions to protect the environment.</p> <ol style="list-style-type: none"> <li>5. Linen reuse program</li> <li>6. Green cleaning products</li> <li>7. Vegetarian options</li> <li>8. No plastic straws or stirrers</li> <li>9. No SUP water bottles</li> <li>10. Bulk amenity dispensers</li> </ol>	<h3 style="margin: 0;">People</h3> <p style="margin: 0;">Fundamental actions toward a positive contribution to the communities in which they are located.</p> <ol style="list-style-type: none"> <li>11. Community Benefit</li> <li>12. Reduce Inequalities</li> </ol>
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### The benefits for hotels:

Useful and easy-to-understand framework that can guide any hotel to start their sustainability journey and improve their performance. The 12 actions are fundamental to hotel sustainability.

## A2. Tools to calculate emissions

The following tools have been designed particularly for hotels anywhere in the world to allow them to measure their carbon footprint. Additionally, there are several free carbon calculators available for all SMEs in the hospitality sector, including restaurants, bars and pubs. They are further explained on p. 45.

### HOTEL CARBON MEASUREMENT INITIATIVE (HCMI)

[Hotel Carbon Measurement Initiative](#) is a methodology and free tool launched in 2012 by the Sustainable Hospitality Alliance and the World Travel and Tourism Council (WTTC). HCMI is used by over 30,000 hotels worldwide, allowing them to measure and communicate their carbon impact. The tool is accessible to hotels of all types, even those without previous carbon reporting experience, all around the world.

#### HCMI enables a hotel to calculate:

- total carbon footprint
- carbon footprint per occupied room on a daily basis
- carbon footprint per area of meeting space on an hourly basis
- renewable energy and electricity as a portion of total consumption

#### How to use HCMI?

HCMI includes all energy used 'on site' (including fuels such as natural gas, oil and other fuels, purchased electricity, and mobile fuels from vehicles and other equipment) and emissions from refrigerants. It also includes, if applicable, carbon emissions from outsourced operations (e.g. laundry).

There are two categories of data needed to measure: the standing data (unlikely to change year by year) and the annual data which needs to be gathered every year. HCMI calculations should use 12 months of data, however if a hotel doesn't have the full 12 months, there are estimation techniques explained in the F&Qs of the methodology.

Once you have got the data you need, you can open up the HCMI excel tool, where on the first tab you will find an overview of the methodology and the tool, and on the second a 'how to use it' guide. This short instructional [video](#) explains how to use the tool.



Source: Sustainable Hospitality Alliance HCMI instructional video

#### The benefits for hotels:

Using HCMI tool helps hotels understand and calculate their total carbon footprint, benchmark performance, set measurable targets, and report on renewable energy and electricity consumption. It also enables hotels to report as part of their commitments to the Glasgow Declaration for Climate Action in Tourism.

This is a good tool to help any hotel get started and benchmark its performance. It is also supported by a 3-page '[Understanding your environmental performance](#)' factsheet on how to set a baseline, calculate key performance indicators and measure the hotel's environmental impacts.

“

*The most important thing is to get started. We need to start measuring our impact today, because in the end what gets measured gets managed*

*Kristian Rönn*  
CEO and co-founder of Normative, the official software provider for the SME Climate Hub.



### A3. Initiatives by hotels to restore ecosystems and support vulnerable communities

The following examples demonstrate how hotels can actively support biodiversity conservation initiatives as well as enhance the well-being of often disadvantaged communities. This can be achieved through partnerships with environmental organizations, collaboration with local food and other goods producers, support for educational programmes, and contributions to initiatives focused on ecosystem restoration and regeneration.

#### Poland: [Notera Hotel](#)

The hotel, situated in Poland's oldest nature reserve Tuchola Forest, offers guests the opportunity to actively contribute to environmental conservation by partnering with the [Let's Plant](#) community that has planted nearly 250,000 trees. Through a simple online process, guests can select and fund tree planting projects without leaving the premises. Personalised certificates are provided, detailing the extent of the forest established and the ecological benefits achieved. The hotel also cooperates with the local community by supporting local food producers.



Photo credit: Hotel Notera Spa

#### Germany: [Klima Hotels \(Climate Hotels\)](#) and [Klima Hotels Forest](#)

The Klima-Hotels are leaders in environmental and climate protection in Germany. The Klima-Hotels are Viabono-certified (government's climate efficiency certification) and have completed the CO<sub>2</sub> footprint in the best climate efficiency class A. They are also actively involved in biodiversity conservation. The Klima Hotels offset the unavoidable residual amount of CO<sub>2</sub> through their own Gold Standard certified [Klima-Hotels forest projects in Panama](#), on the former extensively used cattle pastures and fallow land.

The Klima Hotel Forest that is being created in Panama creates a habitat for native animal and plant species - so far 15 endangered animal species from the Red List have found a habitat again through reforestation. In addition, the local population benefits from long-term jobs, training and further education and thus from the improvement in living conditions. By August 2022, the trees that have been planted thanks to the Klima Hotels have already offsetted around 22,187.95 t of CO<sub>2</sub>. All Klima-Hotels can be found [here](#).



Roof terrace at Klima Hotel-certified Naturresort Schindelbruch, Südharz, Germany / [Image source](#)

### Portugal: [Six Senses Douro Valley](#)

Located in a UNESCO World Heritage Site, the hotel is committed to preserving its 3,500 botanical species and restoring a 10-acre woodland. It acts as a joint-custodian for the flora and fauna of a 500m stream crossing the property. The hotel supports APEGA, a local environmental NGO dedicated to protecting donkeys from extinction.

The hotel's Sustainability Fund (a percentage of revenue and 50% of Six Senses water sales) supports at-risk animals, a community forest, and underprivileged children, providing assistance to 270 local children and their families through counselling, education, and psychotherapy.

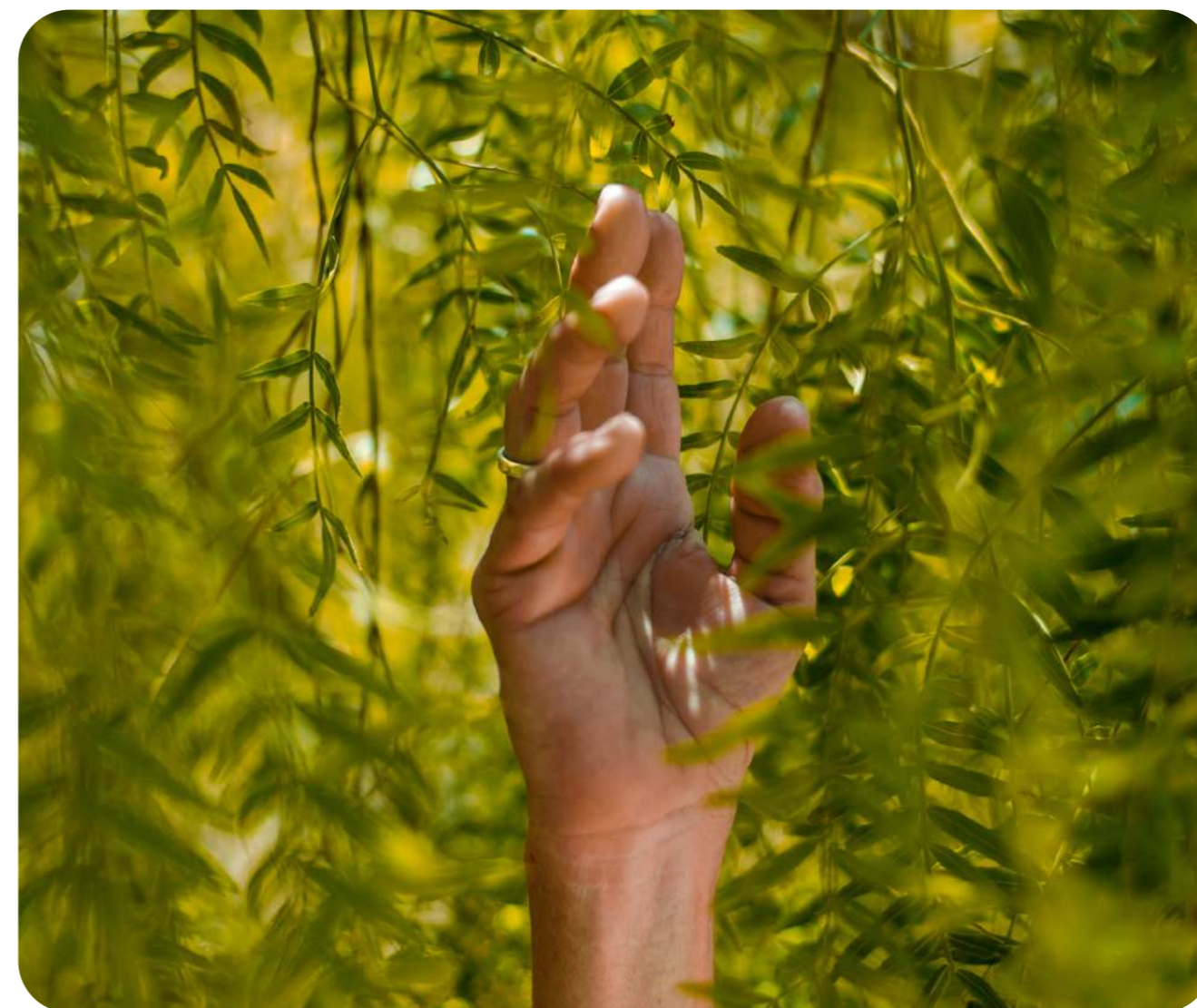


Photo credit: [SixSenses](#)

### Pan-European: [Quartz Inn Hotels](#)

The first European alliance of sustainable and independent hotels sharing the same sustainability values under a common brand, while keeping their authenticity and ownership. They prioritize sustainability by reducing energy, water, CO2 emissions, and waste production, aiming for more stringent sustainability targets, and emphasizing sustainability as part of the guest experience.

The chain plants trees for every new hotel and partner, allocating income for reforestation and preserving local cultures and the environment. Their [Quartz GrINN](#) sustainability programme includes the Quartz Grinn ecolabel for excellence in sustainability and environmental responsibility. Certified hotels uphold high environmental standards through documentation and audits based on the ecolabel's [12 criteria](#) resource management criteria.



## A4. Case Studies

The case studies included in the report have been selected based on their accessibility, practicality, and applicability to the hospitality sector SMEs. They have been collected from several HOTREC member organisations as well as through research undertaken for this report. They demonstrate the actions already taken by hotels on their journey to Net Zero, and by hotel associations to support their members on the journey.

### Upper Bavaria, Germany: [Berghotel Rehlegg](#)

The Berghotel Rehlegg is a member of HOTREC’s member IHA (The German Hotel Association). The hotel is the first climate-positive hotel in Upper Bavaria, and one of only nine Klima-Hotels in Germany that demonstrate the best climate efficiency class A for carbon footprint measurement and reduction, and guarantee their guests 100% carbon neutrality during their stay.

Nestled in the mountains and a UNESCO biosphere region, the family-run hotel offers picturesque mountain-view rooms, indoor and outdoor pools heated with their own solar thermal

system, and an eco-friendly Almwies’n SPA that uses the hotel’s own natural cosmetic products made according to strict ecological guidelines. The food menu is based on high-quality products that come almost exclusively from the region and from small farmers. Guests can hire an electric car and e-bikes. A private e-charging station with self-generated electricity is located on the property and the entire hotel is cleaned without the use of chemicals.



Photo credit: [Hotel Rehlegg](#)

### Ireland: [The Falls Hotel](#)

The Falls hotel started keeping records of monthly carbon emissions in 2016, measuring outputs from waste, water and energy. By the end of 2021, they achieved a significant reduction in carbon emissions, from over 700 tonnes to just 56 tonnes, offsetting the remaining emissions by planting trees on the property.

Key measures included the installation of tap aerators, energy-efficient lights, and smart sensors in bathrooms. They also installed a hydro-electric turbine in 2018 to meet 100% of their electricity needs, reducing dependency on carbon fuels. The hotel was certified carbon-neutral by GreenMark.ie through Green Hospitality Ireland in 2021, having reduced their carbon emissions by approximately 90% over a five-year period.



Photo credit: [The Falls](#)

### Triglav National Park, Slovenia: [Hotel Bohinj](#)

In 2019-2021, Hotel Bohinj has undergone a thorough renovation process that prioritized sustainability and local design to match the mountainous environment around it. Enhancing the existing building instead of constructing a new one, using local timber sources and retaining the existing building materials of the old hotel, and using much less concrete has [reduced the carbon footprint](#) by up to 30%. Sustainable practices such as geo-probe heat pumps, convectors for floor heating, energy-conscious lighting, and furniture made from recycled plastic bottles were incorporated.

These efforts [“exceeded energy efficiency, ecological awareness, and natural resource protection standards”](#), leading to Hotel Bohinj being awarded the Ecolabel certificate for meeting stringent criteria on energy and water saving, waste reduction, environmental management, and sustainability communication to the guests. Hotel Bohinj is a member of HOTREC’s member TGZS (Tourism and Hospitality Chamber of Slovenia).



Photo credit: [Ziga Intihar](#)

## Italy: Supporting hotel guests to reduce energy and water consumption

HOTREC member Federalberghi, the leading business organization in Italy's tourism-accommodation sector, has created informative plaques to help hotel guests reduce electricity and water waste. The plaques provide tips such as closing windows when using air conditioning, adjusting room temperature to be close to the outdoor temperature, unplugging devices after charging, turning off lights and appliances when leaving the room, reusing towels, and shutting off taps when not in use.

Federalberghi has received recognition from the Italian Ministry for Tourism for developing these plaques. Furthermore, Federalberghi is working with the ENEA (the Italian Agency for new technologies, energy and sustainable economic development) to analyse the energy consumption in the hotel sector and identify new best practices in Italy.

**Risparmia energia. Salva l'ambiente.**  
*Save energy. Save the environment.*

**Molti ospiti che hanno soggiornato prima di te in questa stanza hanno scelto di aiutare l'ambiente usando alcuni semplici accorgimenti per evitare lo spreco di energia elettrica. Unisciti a loro!**  
*Many of the guests who stayed in this room before you chose to help the environment by taking a few simple steps to avoid wasting electricity. Follow their example!*

Non eccedere con l'aria condizionata, anche a tutela della tua salute. Regola la temperatura della stanza in modo che sia di qualche grado superiore o inferiore rispetto a quella esterna.  
*Don't exaggerate with the air conditioning; this will also safeguard your health. Adjust the temperature in your room so that it is only a few degrees above or below the temperature outside.*

Chiudi le finestre quando l'aria condizionata è in funzione.  
*Close the windows when the air conditioning is on.*





Scollega i dispositivi una volta terminata la ricarica. Non lasciare inseriti i caricatori nelle prese.  
*Disconnect your device once it has finished charging. Don't leave chargers plugged in.*

Uscendo dalla stanza ricorda di spegnere tutte le luci e gli apparecchi elettrici.  
*When you leave your room, remember to switch off all the lights and electrical appliances.*

Quando disponibile, utilizza la luce naturale.  
*Use natural light whenever possible.*

**In questo modo, contribuirai alla salvaguardia dell'ambiente con un uso responsabile di una delle risorse più preziose del nostro pianeta: l'energia. Grazie per la collaborazione!**  
*In this way you will be helping to safeguard the environment thanks to responsible use of one of our planet's most valuable resources: energy. Thank you for collaborating!*

  
**FEDERALBERGHI**  
WWW.FEDERALBERGHI.IT

  
**ItalyHOTELS**  
WWW.ITALYHOTELS.IT

Con il patrocinio di:

  
**MINISTERO DEL TURISMO**  
REPUBBLICA ITALIANA

Source: Federalberghi

## Austria: Online Guide to Energy Management in the Hotel and Catering Industry

In 2022, HOTREC member WKO developed an [Online Guide to Energy Management in the Hotel and Catering Industry](#) - a comprehensive overview of important immediate measures that can be implemented to achieve energy efficiency and sustainability goals. The guide encourages readers to become informed and inspired, conduct self-assessments of their energy usage, take advantage of consulting services, explore funding and financing opportunities, and ultimately realize their energy-saving plans.

WKO is also developing a 360° virtual reality experience that will provide a tour of a hospitality business where business owners can learn about sustainability measures (energy management, waste management, resource) in different areas (kitchen, restaurant, room/bathroom, heating, wellness, etc.)



# B. FOOD, DRINK AND ENTERTAINMENT

Part B provides a summary of the key methodologies, tools, and collaborative initiatives relevant for restaurants, bars, cafes and clubs, with a short explanation of how to use them and what benefits they provide. The structure is as follows:

- B1. Roadmaps and frameworks to achieve Net Zero**
- B2. Carbon measurement tools**
- B3. Collaborative initiatives for restaurants to reduce carbon footprint of menus**
- B4. Case study examples**

## B1. Roadmaps and frameworks to achieve Net Zero

The selected roadmaps outline the requirements and steps that food and drink sector businesses can undertake to reach their Net Zero targets. They provide guidance on how to accomplish these steps, along with an explanation of why these actions are important and how improvements can be made to expedite the transition to Net Zero.

**Net Zero Protocol for Restaurants** developed by Net Zero Now defines the requirements for each step of the journey to Net Zero for restaurants. The 'Going to Net Zero' section of the Protocol focuses on why and how to achieve Net Zero Now in five steps: **1. Calculate, 2. Mitigate, 3. Compensate, 4. Validate, 5. Communicate**

It also provides a detailed guidance for each of the steps, for example: Step 1 "Calculate" is divided into several subsections: How to report Greenhouse Gas (GHG) Emissions from Carbon Neutral & Net Zero Suppliers; Food, Drink and Consumables; Waste; Refrigeration; Cleaning Products and Chemicals; Deliveries; and Employee Commuting.

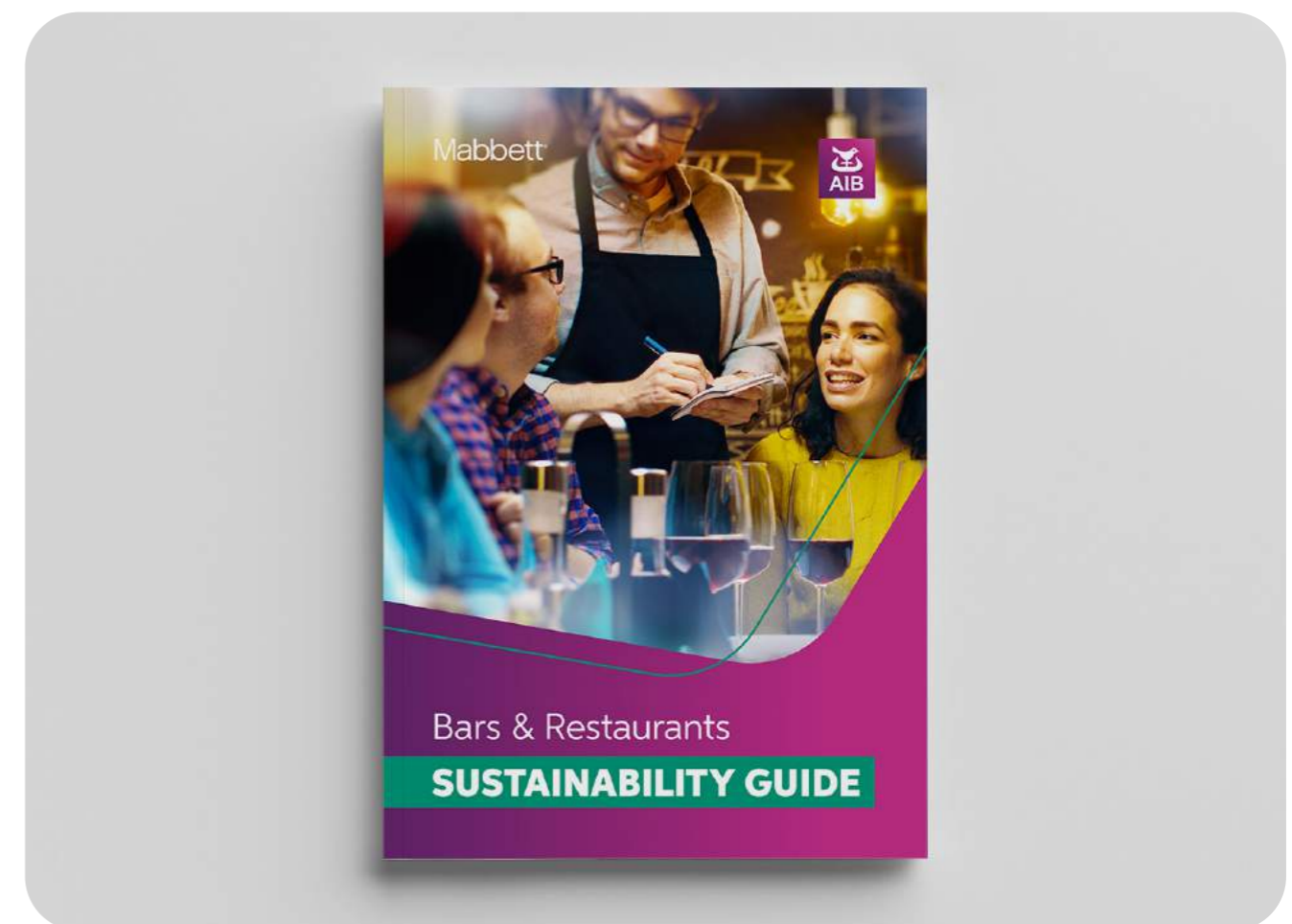
For businesses which have already calculated their emissions and need practical actions to reduce them across each of nine of the core operational themes of running a restaurant (e.g. transportation, electricity, water, purchased good and services), the Net Zero Climate Action Playbook for Restaurants provides an overview of the theme and why it's important, practical actions that can be taken, and case studies of best practice in the industry.

**Net Zero: The Guide for the Brewing and Hospitality Sector** (2021) developed by the Zero Carbon Forum

The roadmap outlines the steps each sector of hospitality can take to reach their Net Zero targets. This includes guidance on measuring the company's footprint, developing a strategy and collaborating within the sector.

**The Bars and Restaurants Sustainability Guide** (2022) developed by Allied Irish Banks for the Irish hospitality industry, looks at some key resource intensive areas in the bar & restaurant businesses, including: energy, waste, water, and social sustainability.

For each topic, it identifies common 'hot spot' issues and shares practical tips and ideas that could enhance the sustainability performance of the business. The Guide also contains a selection of case studies from the Irish hospitality industry, showing the financial and non-financial benefits of sustainability and climate actions taken by various pubs and restaurants.



## B2. Carbon measurement tools

The platform described below with the solutions for restaurants, bars and pubs has been designed to help them measure their carbon footprint and receive assistance from the platform providers, for a fee. Additionally, there are several free carbon calculators available for those who wish to do the calculations themselves. These calculators can be used by all SMEs in the hospitality sector and are further explained in the table below.

### Net Zero NOW (NZN) PLATFORM

An online platform that supports businesses from the food and drink sectors to calculate, reduce and compensate for their greenhouse gas emissions, and communicate their Net Zero achievements. The tools, advice and support is sector-specific: [Net Zero Now solutions for Restaurants](#) for [Net Zero Now solutions for pubs and bars](#).

As of June 2023, this service is available in Ireland, the UK and France, with plans to expand to other countries by 2024, so it is worth contacting the owners to find out if the service is available in other EU countries.


#### How to use it?

- 1 UPLOAD YOUR DATA TO THE PLATFORM**  
you will see the measurement of your carbon footprint in real time.
- 2 SUBMIT YOUR FOOTPRINT FOR VALIDATION**  
you will receive a detailed interactive report allowing you
- 3 CHECK OUT YOUR REPORT**  
and review your reduction actions to address those hotspots
- 4 SET A TARGET**  
to access to the Net Zero Now Certification
- 5 OBTAIN THE ZERO NOW CERTIFICATION**  
enabling you to celebrate your progress


There are several features available for SMEs such as the sector-specific carbon calculators, emissions reduction plan tailored to each business, access to certified offset initiatives to compensate for any unavoidable emissions, and impact reports:

### Platform features


The Net Zero Now platform includes all the tools you need to reach Net Zero. We provide you with a sector-specific carbon calculator, a tailored emissions reductions plan, access to accredited offsets and a registered certification allowing you to communicate your impact.




**Carbon Footprint Calculator**  
Calculate your full value-chain emissions in compliance with sector-specific guidelines.




**Climate Impact Report**  
Full breakdown of the precise source and scale of your emissions.




**Analysis & Reporting Tools**  
View your emissions by company, by site, or by activity.



**Benchmark of Performance**  
Compare your performance against the rest of your industry.



**Emissions Reduction Plan**  
Specific to your business and your sector, compliant with the Science Based Targets Initiative.

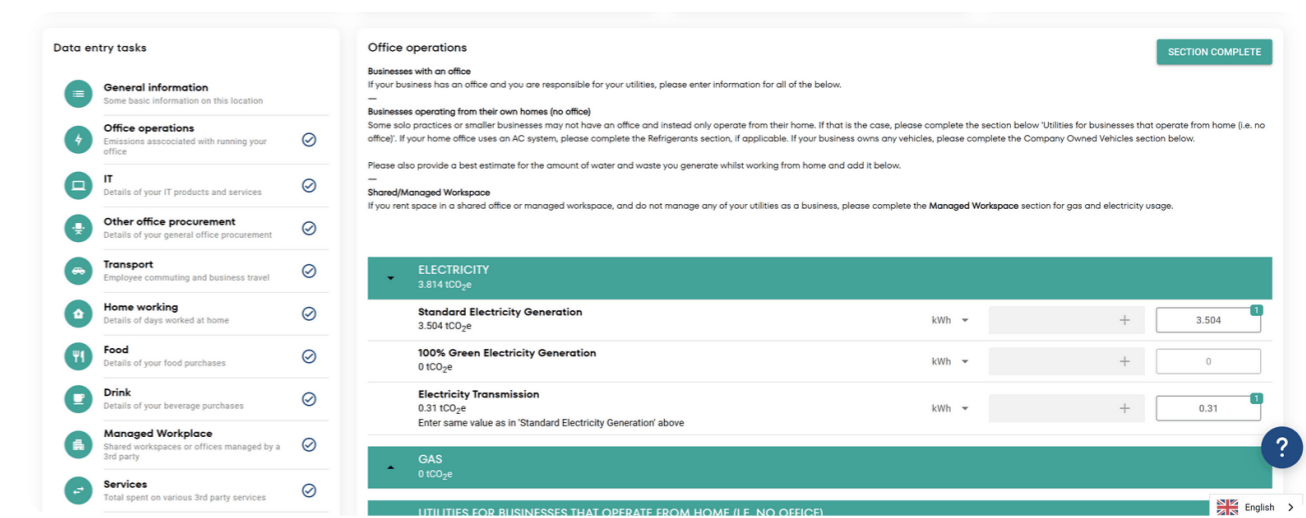


**Sector Specific Offsets**  
Access accredited offsets, based on the Oxford Principles, for unavoidable residual emissions.

Go Net Zero
Free Consultation

#### The benefits for SMEs:

- Restaurants, pubs, and bars can join the platform for a monthly fee of under 50 euros.
- By inputting their data (see Box 1) they can monitor their carbon footprint in real time. Once all data is uploaded, they can submit it for validation and receive detailed interactive reports.
- These interactive reports provided by the platform will help identify emissions hotspots and provide a tailored emissions reduction plan. Furthermore, SMEs can obtain the Net Zero Now Certification to celebrate their progress towards achieving Net Zero emissions.



## Additional carbon calculators for SMEs

The tools described on p. 45 can be used by any SME in the hospitality sector to measure emissions from company operations for the assets they operate (Scope 1 and Scope 2 emissions).



Source: [Visit Scotland](#)

## TOOLS FOR ALL SMEs

TOOL	DESCRIPTION	BENEFITS FOR SMEs
<a href="#">SME Carbon Footprint Calculator by the Carbon Trust</a>	Measures corporate emission footprint, including direct emissions from fuel and processes (Scope 1 emissions) and those emissions from purchased electricity (Scope 2 emissions).	It is a basic tool (not a complete evaluation of an organisational footprint) but includes selected emission sources common to the majority of SMEs, based on: <ul style="list-style-type: none"> <li>– Fuel and energy consumption</li> <li>– Top ups made to air conditioning units</li> </ul>
<a href="#">The Business Carbon Calculator</a>	Developed for SMEs in 2022 by Normative with support from Google.org and available for free through the <a href="#">SME Climate Hub</a> .	A quick, simple-to-use form helps SMEs measure their emissions and identify emission hotspots, establishing a baseline from which to take action through the suite of tools and incentives on the SME Climate Hub.
<a href="#">Zero Waste Scotland Emission Calculators</a>	Free tools to calculate the carbon emissions of: <ul style="list-style-type: none"> <li>– Office equipment</li> <li>– Work carried out by office-based contractors (e.g. consultants)</li> <li>– Commuting staff</li> </ul>	Useful tool to calculate emissions associates with running an office and a team (of staff and contractors). Each tool lists a set of necessary data you need to enter, e.g. laptop, chair, desk etc for the <a href="#">office equipment calculations</a>
<a href="#">Carbon Calculator for the Hospitality Industry</a>	Developed by the Zero Carbon Forum for the brewing and hospitality sectors	Helps the SMEs calculate and understand their carbon emissions, and shows practical ways to reduce them.

**B3.**  
**Collaborative initiatives for restaurants to reduce the carbon footprint of menus**

These are participatory initiatives that any restaurant in the world (except the last two examples that refer to particular countries) is encouraged to participate in. They aim to reduce the carbon emissions from the food and drink sector. They also raise awareness amongst chefs and consumers, and support customers in choosing foods that produce less carbon emissions.

**The Cool Food Pledge**

The Cool Food Pledge, led by the World Resources Institute, is a global initiative for restaurants to reduce their menu’s carbon footprint. Restaurants commit to actions like reducing meat and dairy, sourcing sustainable ingredients, and cutting food waste. Members follow a three-step approach: [Pledge](#), [Plan](#) and [Promote](#).

The target is a 25% reduction in greenhouse gas emissions from food by 2030 compared to a 2015 baseline. Guided by the expertise of the [WRI’s Better Buying Lab](#), the Cool Food team assists members in strategic planning to serve climate-friendly food while meeting dining-related goals.

**One Planet Plate worldwide restaurant campaign**

Any restaurant can join the global One Planet Plate campaign to reduce the climate impact of food and make a difference through their food choices. Chefs worldwide have the opportunity to showcase their contributions to a better food future and inspire diners and home-cooks by submitting their sustainable dish to be featured on the campaign’s website.

One Planet Plate provides its logo and additional information for the menu and social media. While there’s no set template, chefs must incorporate at least one of the following criteria: celebrating local ingredients, reducing food waste, emphasising plant-based options, sourcing sustainable seafood, or minimising carbon footprint.

**Climate Friendly Diets project and WRI’s Better Buying Lab**

The World Resources Institute (WRI) collaborates with restaurants, universities, hospitals, and others to establish dining environments that enable customers to choose climate-friendly, plant-rich foods. Through their Better Buying Lab, WRI uses [consumer behaviour research](#) and marketing strategy to research, test, and scale innovative approaches to increase consumption and boost the sales of plant-based menu options. To do so, the lab focuses on two strategies: creating a new language that appeals to non-vegetarian/vegan consumers and popularizing delicious, sustainable plant-based dishes as “power dishes” with wider distribution and awareness.

**France and UK: The Carbon Free Dining Initiative**

The Carbon Free Dining Certification programme, supported by the UN Environment Programme, enables restaurants and pubs to showcase their Corporate Social Responsibility at no cost. Through partnership with Lightspeed, certified businesses allow diners to plant fruit trees in the developing world, offsetting the environmental impact of their meal and addressing poverty. The programme has already planted hundreds of thousands of trees and aims for millions more.

Certified restaurants and their diners have already offset the environmental impact of over 500,000 meals, contributing to providing food, education, income, shelter, and livelihood support to impoverished communities. See some [examples](#) of Carbon Free Dining-certified pubs and restaurants.

**Austria: The “Klimateller” initiative (the Climate Plate)**

The Climate Plate, a ‘climate protection in the hotel kitchen’ initiative by the Austrian Ecolabel and the Austrian Hoteliers Association. It aims to raise awareness among the hotel industry on the topics of sustainable food and climate protection to provide incentives and information to design their food and beverage offer in a climate-friendly way, and to motivate their guests to adopt more sustainable eating.

With the Klimateller, vegetarian or vegan, organic, regional and seasonal delicacies become fixed starters in the hotel kitchen. The way to achieve this is through informing, motivating and convincing the chefs to use organic, meat-reduced and seasonal menus. Interested companies can take advantage of the subsidised consultations on the topic provided by the Ecolabel.



## B4. Case studies

The selection of case studies includes examples from restaurants, cafes, and nightclubs that have taken action to measure and reduce their carbon emissions. These establishments also prioritize local sourcing of goods and services, promote the zero waste philosophy, and effectively communicate these initiatives to customers, for example by providing CO2 emissions information on their menus to empower customers to make more responsible choices.

### FOOD AND DRINK:

#### Tallin, Estonia: [Fotografiska](#)

The philosophy of the kitchen at Fotografiska in Tallinn is zero waste – every part of every ingredient is used, and any leftovers composted in the restaurant’s garden within 24 hours. The philosophy is based on the idea of ‘Sustainable Pleasure’ where everything is reused or repurposed. Sour bread is brought to customers on plates made from baking trays of a former bread factory, cabbage paste (instead of butter) is served on a cut-out section of a wine bottle.

The restaurant was awarded a MICHELIN green star in 2022 for its commitment to sustainable gastronomy. The menu contains mainly vegetarian food made out of local and seasonal ingredients.

Fotografiska was one of Tallin’s 17 restaurants that recently participated in [Tallinn Restaurant Week 2023](#). Inspired by Tallinn’s title of the European Green Capital 2023, the restaurants were invited to offer more environmentally friendly options that met at least one of the criteria: the dish is plant-based only; the ingredients of the dish (both vegetable and meat) come from organic farming; the meat or fish come from Estonia or from the Estonian waters.



Photo credit: [andershusa](#)

#### Budapest, Hungary: [Onyx Műhely](#)

Onyx Műhely is the first restaurant in Hungary to create a comprehensive carbon calculation to understand the emissions from its operations, in partnership with ZeroKarbon that specialises in carbon calculations. During this process, the restaurant looked specifically at the carbon footprint of the menus served to their customers, and communicated this on the menu cards to influence more responsible choices.

During and after the Covid pandemic, the restaurant decided to focus more on climate adaptation and mitigation, and employed a dedicated Sustainability Manager who leads on seven key areas of their [Sustainability Strategy](#), including carbon footprint calculation, organic produce and local sourcing, energy efficiency, and waste reduction.

The restaurant prioritizes Hungarian organic ingredients, source all of them locally, and emphasize seasonality in the menus. It has also taken steps towards self-sustainability by establishing its own free-range chicken farm, and has plans for growing its own fruits and vegetables.

Sustainability is integrated into the restaurant’s built infrastructure, with all furniture made by Hungarian designers using eco-friendly methods and materials. The restaurant actively minimises food waste and avoid using plastic.

Energy efficiency is a priority, and environmentally friendly detergents are used. The restaurant regularly calculates its carbon footprint. Onyx Műhely also emphasises guest education on sustainable cooking and offers carbon offsetting options associated with their meals, and the menus include the list of sources of ingredients to make it more transparent to guests.



Photo credit: [designboom.com](#)

### Paris, France: [La Table de Colette](#)

The restaurant [claims](#) to be ‘the first French gourmet restaurant that is eco-responsible and carbon-free’, with tasty cuisine with respect for the planet’. It uses only local and seasonal ingredients, offering a variety of plant-based options. The products and producers are selected according to the criteria such as ‘respect for the seasons, irreproachable quality, and environmental awareness’.

The restaurant calculates the carbon footprint of their recipes with the eco-calculator of the Association ‘Good For The Climate.’ The carbon emissions of each of their tasting menus, one of which is always vegan, is clearly visible to customers.

All waste is reduced and recovered through sorting and composting. The restaurant exclusively uses renewable and low-consumption kitchen equipment. The emissions that can’t be reduced are offset by funding tree planting through the Ecotree company.

#### 3-COURSE LUNCH MENU ONLY

L'Essentiel de la Table de Colette served only at lunchtime. We also offer this menu in an exclusively vegetable version. Menu consuming less than 2750 grams of CO2, which is approximately half that of a traditional gourmet meal.



#### 5-COURSE MENU

The vegetable garden by the ocean this season. We also offer this menu in an exclusively vegetable version. Our main source of inspiration remains the vegetable garden, but not only... Menu consuming less than 1600 grams of CO2, or about four times less than a traditional gourmet meal.



#### 7-COURSE MENU

The vegetable garden and the farm by the ocean in this season. We also offer this menu in an exclusively vegetable version. Our main source of inspiration will remain the vegetable garden, but not only... a menu consuming less than 2200 grams of CO2, or around 3 times less than a traditional gourmet meal.

### Poreč, Croatia: [Život Café \(The Life Café\)](#)

The Life Café is the first vegan zero waste café opened in Poreč in the summer of 2022 by [Anamarija Prgomet](#), the creator of the [Zero Waste Croatia](#) initiative with the desire to inspire others to be more sustainable. Everything at Život is reusable – cups, straws, compost, coffee grounds, glass bottles. Cups, plates and other decorations have been made by Croatian creatives and local artists. Most of the furniture in this minimalistic café is wooden, the tables are stumps, and the price list is on wood, and the chair have been acquired through various ‘sharing is caring’ groups whose core value is circular economy.

The entire food and drink offer is exclusively local and come from [small local producers](#) and craftsmen from the Istria peninsula. The cafe proudly serves craft beer, blue gin or pastries for her coffee from family-owned businesses from Porec, reducing the carbon footprint to minimum.



Photo credit: [Marijana Kordić and Sebastian Vojvoda](#)

## NIGHTCLUBS:

### Berlin, Germany: [The Clubtopia project](#)

The [Clubtopia](#) is a project based in Berlin that works on sustainability and climate issues within Berlin's club scene. Clubtopia is a collaborative project of BUND, the Berlin Club Commission, and the Clubliebe association, funded by the Berlin senate for the environment, transport and climate protection (nearly €600,000; 2019-2023). The goal is to make Berlin's clubs more climate-friendly and sustainable through various free consultancy services and organising round tables together with sustainability and nightlife experts. They also publish [a Green Club Guide](#), a guideline for clubs to reorganise themselves when making the change to green.

The club [Schwuz](#) in Neukölln (Berlin) is one of the clubs that underwent an extensive reorganising in this regard. Schwuz first took part in the energy consultancy service five years ago. Although the operators of the club state that making the change was a "mountain that seemed insurmountable" in the beginning, it was broken down to smaller steps and today Schwuz has reduced its carbon footprint exponentially. It achieved this by installing LED lamps, urinals without flushes, aerators for the sinks, getting rid of the refrigerators that were not frequently used, separating the trash and changing their drink suppliers to a local one. Changing its electricity providers proved to be the change with the biggest impact. By switching to green electricity Schwuz saw a reduction over 90 per cent of its CO2 production.

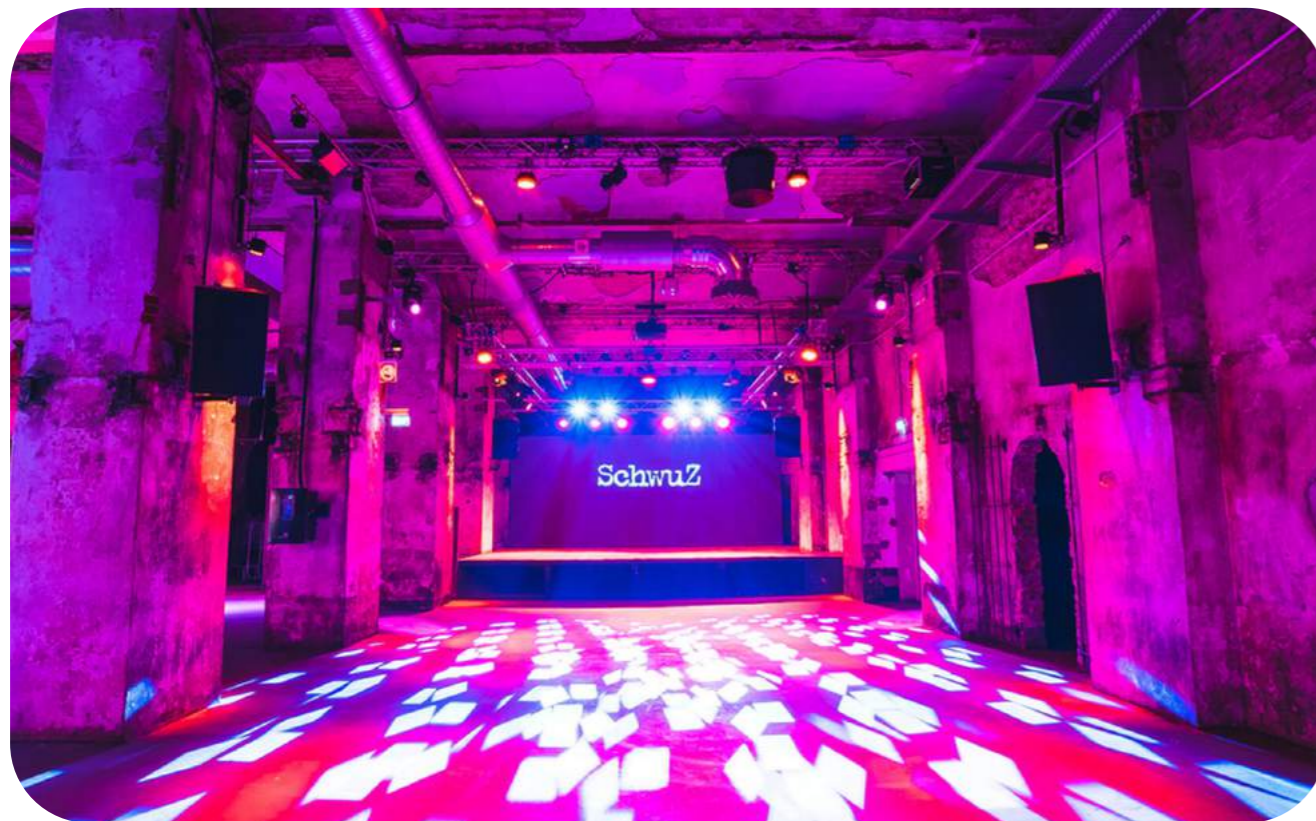


Photo credit: Schwuz

### Glasgow, Scotland: [SWG3](#)

A multi-purpose arts, music and cultural hub in Glasgow, [SWG3](#), is the first club in the world that harnesses the body heat of gig-goers and dancers to help power the venue and minimise its carbon footprint. Its renewable heating and cooling system BODYHEAT converts heat from dancing clubbers and staff into energy. The heat is piped via a carrier fluid to 200m boreholes that are charged like a thermal battery. The energy then travels back to the heat pumps, is upgraded to a suitable temperature and then travels back into SWG3.

The new system allowed the club to disconnect the venue's gas boilers, and reduce its carbon emissions by about 70 tonnes of CO2 every year. It's all part of the venue's plan to be carbon neutral by 2025. Despite the high costs of installation, the savings on bills could make the investment recoverable in about five years.

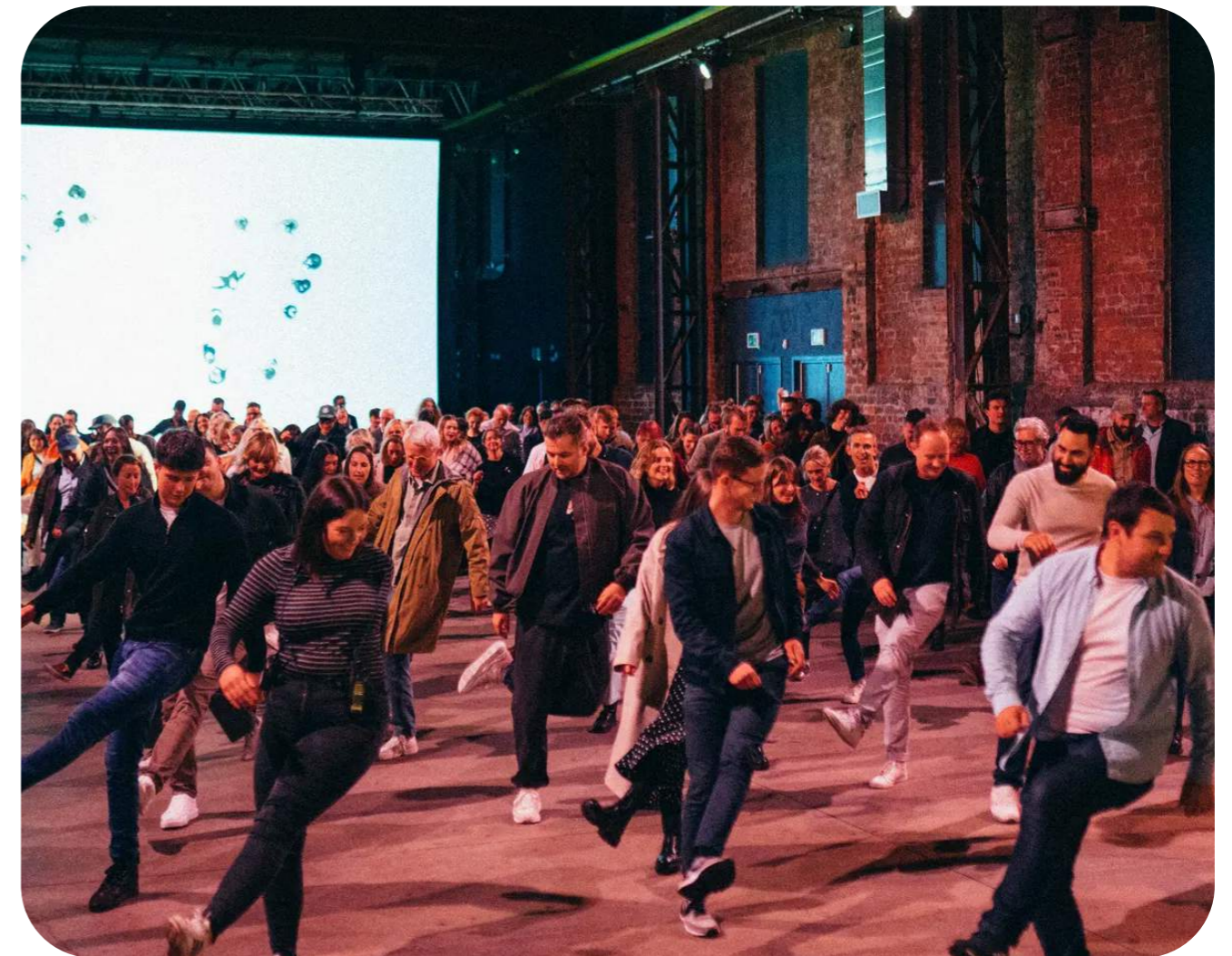


Photo credit: Schwuz

# SECTION 3

## Recommendations



The initiatives, methodologies, tools and the legislative and financial support for SMEs summarised in this report demonstrate that a shift towards measuring and reducing emissions is already happening. However, a significant amount of work and support is still needed to accelerate the change. To address the key barriers for the SMEs to take action (described on p. 11), the recommendations are structured around the following themes:

- A: Climate Awareness, Education and Communication**
- B: Supporting Measurement and Decarbonisation**
- C: Advocacy and Collaboration**

The recommended actions, to be taken over the next two-three years, aim to deliver the objectives under each of the Glasgow Declaration pathways by supporting the EU hospitality sector to:

- MEASURE** by providing guidance on the necessary steps to take for businesses to measure and disclose their tourism related emissions, and on the support available;
- DECARBONISE** by facilitating and supporting decarbonisation by all elements of the supply chain;
- REGENERATE** by providing guidance on how the sector can contribute to restoring and protecting biodiversity through education and training, communications to customers, and product development;
- COLLABORATE** by adopting a cross and inter-sectoral approach to share knowledge and experience in climate action;
- FINANCE** by supporting industry to access financial support from a variety of funding sources.

# HOTREC members

## A: Climate Awareness, Education and Communication

### 01. Support and promote training opportunities for the hospitality sector to increase understanding of risks and opportunities related to the climate emergency

- Engage with established carbon literacy training providers to explore how the available accredited training programmes can be adapted for the needs of your members.
- Work with regional Destination Management Organisations or Tourism Boards DMOs to develop a programme of climate-related workshops based on the needs of the SMEs (e.g. carbon measurement, low-cost decarbonisation solutions, resource efficiency best practice), with businesses presenting their best practice examples.
- Offer guidance and training to businesses on how to communicate with their customers and staff about the importance of climate action, biodiversity protection and responsible tourism practices.
- Signpost members to climate related webinars and other knowledge-sharing resources.

### 02. Promote best practice in sustainability and climate action

- Collect and promote best practice of national (and EU-wide) hospitality businesses to provide inspiration for innovation for your members
- Encourage members to use an ecolabel, that is third party verified, certified and frequently reviewed
- Encourage members to communicate their accreditation or certification that will demonstrate their commitment to social and environmental practices
- Provide opportunities for showcasing members' efforts to others, for example through a dedicated sustainability page on your website

### 03. Increase public awareness of the importance of sustainable tourism practices and encourage responsible travel behaviour among travellers

- Consider working with partners (e.g. DMOs or local government, and accommodation and food providers) on campaigns to promote responsible behaviour while on holiday, and encourage local hospitality businesses to participate. [Example of national practice: [‘Sustainable Summer in Donegal’](#) environmental campaign aimed at increasing awareness and information amongst holidaymakers & visitors, in cooperation with local accommodation and food providers].
- Explore the applicability of developing visitor incentives schemes rewarding visitors for making sustainable tourism choices (e.g. for staying longer, selecting low-carbon transport modes to get to accommodation, selecting low-carbon menus etc. Research the potential uptake from local providers [of national practice: [Insbruck’s Welcome Card](#) with benefits for tourists staying 2+ nights].
- Communicate your sustainability strategy and other initiatives for wider awareness raising.

## B: Supporting Measurement and Decarbonisation

01. Encourage and support the efforts of your members to measure and reduce their carbon footprint
  - Agree on a destination-wide carbon calculator for hospitality businesses and encourage its use across the industry to ensure a unified approach to carbon measurement (e.g. [Carbon Calculator for the Hospitality Industry](#) developed by the Zero Carbon Forum for the brewing and hospitality sectors, or a nation-wide carbon calculator for the tourism sector (if such calculator exists).
  - Create an online Net Zero Toolkit for the hospitality sector with a step-by-step guidance for SMEs to measure, reduce and reporting carbon emissions, communicate about it, and to create their own climate action plan). Promote it widely amongst your members (e.g. Visit Scotland [Visit Scotland online Create a Climate Action Plan](#)).
  - Measure the carbon footprint of your operations and of the events you organise (see case study examples in this report for inspiration).
  - Promote sustainable practices amongst members, e.g. encourage the use of sustainable and locally-sourced materials in the construction and maintenance of facilities; encourage working with local, sustainably-certified suppliers (food, transport); encourage investment in renewable energy and energy-efficient technology.
02. Create an online Climate Action Hub for the Hospitality Sector - a 'one-stop-shop' interactive platform with all the necessary resources and support to help SMEs measure and reduce emissions.
  - The Hub should allow SMEs to measure emissions using a standardised calculator (see p. 01 above), monitor their carbon footprint, and receive guidance on how to improve.
  - It should include links to specialist guidance, advice, funding opportunities, networking opportunities, and best practices examples for inspiration (e.g. Visit Scotland online [Create a Climate Action Plan](#)).
  - The Hub will require dedicated resources (human and financial) to run and provide ongoing support to SMEs. Should this not be possible, as an alternative identify existing resources and consider how you can support members in using them (e.g. [Net Zero Now](#) that helps SMEs identify emissions hotspots and provide a tailored emissions reduction plan).

03. Encourage members to participate in conservation-related carbon offsetting schemes, run by reliable partners (e.g. biodiversity or wildlife conservation organisations)
  - Research established carbon sequestration programmes with a track record of effective projects with a good proportion of funds going directly to project implementation on the ground (e.g. World Land Trust's [Carbon Balanced Programme](#); [Rewilding Europe Rewilding Climate Solutions Platform](#)), and offer guidance to your members based on the research. The United Nations [Carbon Offset Platform](#) provides a list of projects by project type, country and co-benefits.

## C: Advocacy and Collaboration

01. Observe the continuous developments in relevant EU legislation as well as legislation at the national level to keep the industry updated and prepared
  - Regularly monitor relevant announcements and communicate to members the impact of the new requirements and regulations that are likely to affect them.
02. Support members in sharing practical knowledge and best practice, both at national and EU-level
  - Create networking opportunities for the hospitality businesses (such as conferences, meetings, webinars), both online and offline, and encourage participation.
  - Identify international, national and regional organisations that are active in climate action. Monitor their social media announcements for climate-related webinars, workshops, online training opportunities, networking opportunities and conferences to signpost members to them.
03. Connect with other HOTREC members to exchange knowledge and share best practices amongst members to best support their own membership as well as the sector as a whole.
  - Share best practices of the national (and international) solutions to provide inspiration for innovation, during networking events, conferences, and other topical events.

# Recommendations for hospitality sector SMEs

## A: Climate Awareness, Education and Communication

01. Participate in carbon literacy training to understand and respond to the responsibilities and opportunities related to the climate emergency. Consider taking up any additional support (such as one-to-one advice) to help you start and progress.
02. Make use of the free specialist guidance, advice and online resources available (e.g. from the ones listed in this report). Follow social media announcements, newsletters and other communications of sustainable tourism/climate organisations that run climate-related webinars, workshops, free advice and trainings.
03. Make a short climate emergency pledge (e.g. on [Tourism Declares](#) or [Business Declares](#) platforms) or sign up for the Glasgow Declaration
04. Encourage your customers to behave responsibly while they stay at your hotel or eat at your restaurant. Provide simple guidance on how they can save resources, provide low-carbon menus and encourage customers to try them. Explore developing visitor incentives schemes rewarding visitors for making sustainable tourism choices (e.g. for staying longer, selecting low-carbon transport modes, choosing low carbon food etc.)
05. Communicate your sustainability and climate efforts and commitments to customers (e.g. the company's sustainability/climate mission, sustainability policy, goals, declarations and pledges, certifications etc).

## B: Supporting Measurement and Decarbonisation

01. Identify resources (e.g. appropriate apps and online tools/templates, suitable carbon calculators, or external carbon measurement companies) to help you measure and monitor your emissions. Check and try the platforms listed in this report, e.g. [Net Zero Now](#)). When/if a nation-wide methodology or platform exists, use it as your guidance.

02. If you haven't done so already, establish a baseline for measurement and start measuring you emissions in order to manage and reduce your carbon footprint.
03. Get involved in the national sustainability certification schemes and initiatives that will enable you to benchmark your performance against other businesses as well as will provide you with promotional opportunities.
04. Hotels are encouraged to participate in the annual global benchmarking survey [The Green Lodging Trends Report \(GLTR\)](#)
05. Explore partnerships with sustainable product developers who can supply you with environmentally-friendly and sustainable gear and equipment.
06. Where possible, use sustainable and locally-sourced materials in the construction and maintenance of your facilities and attractions. Ensure fair work conditions in the construction and maintenance.
07. Consider conducting [life cycle assessments](#) of your products and facilities to identify areas for improvement. This means evaluating the impacts that your products have on the environment over their lifetime (e.g. the energy and raw materials consumed, the emissions and wastes generated) and assess the options for reducing them.

## C: Advocacy and Collaboration

01. Participate in the knowledge sharing opportunities and networking opportunities (e.g. provided by your national association or a Tourism Board/DMO) with other hospitality businesses as well as with a wider group of tourism suppliers (food, transport, accommodation).
02. Engage with nature conservation organisations to participate in regeneration initiatives locally, or support conservation-related carbon offsetting schemes when carbon reduction is impossible. Choose organisations that have projects you would like to support to offset your carbon, for example contributions to rewilding, nature protection and restoration projects; reforestation projects; community support projects.
03. Work with local independent suppliers that can provide you with locally-sourced food and other local products included in your offer to customers.

# List of endnotes

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- 1 Net Zero: The Guide for the Brewing and Hospitality Sector. Zero Carbon Forum, 2022
- 2 Climate Action Playbook for Restaurants, Net Zero Now, 2022, p. 4
- 3 Financial Innovation for SME Net Zero transition: Role of Banks and Buyers. University of Cambridge Institute for Sustainability Leadership (CISL) and BSR (2023).
- 4 Net Zero: The Guide for the Brewing and Hospitality Sector, 2022, p. 17.
- 5 Net Zero Restaurants Protocol, Net Zero Now, Oct 2021
- 6 Climate Action in the Tourism Sector. An overview of methodologies and tools to measure greenhouse gas emissions (2022), The World Tourism Organization (UNWTO)
- 7 The Net Zero Methodology for Hotels (2021) explains the GHG (greenhouse gas) boundaries for hotels on p. 3-5
- 8 Data collected from about 27,000 hotels across 54 countries through a survey on The Greenview Portal, and bulk data set received from companies. The report assessed 75 best practices in the 2022 report.
- 9 Greenway (the report author) explained that full service hotel typically means a hotel with a good amount of meeting and function space with banquet/catering options, restaurants beyond just breakfast, and usually more onsite outlets/amenities.
- 10 2022 Survey of HOTREC members on carbon footprint and energy efficiency. 13 member associations from 12 European countries participated.
- 11 Net Zero Restaurants Protocol, Net Zero Now, Oct 2021, p. 7
- 12 Net Zero Methodology for Hotels, Greenway, 2021

The report was prepared by Toposophy in cooperation with HOTREC and was also based on information and comments received from HOTREC Member Associations.

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