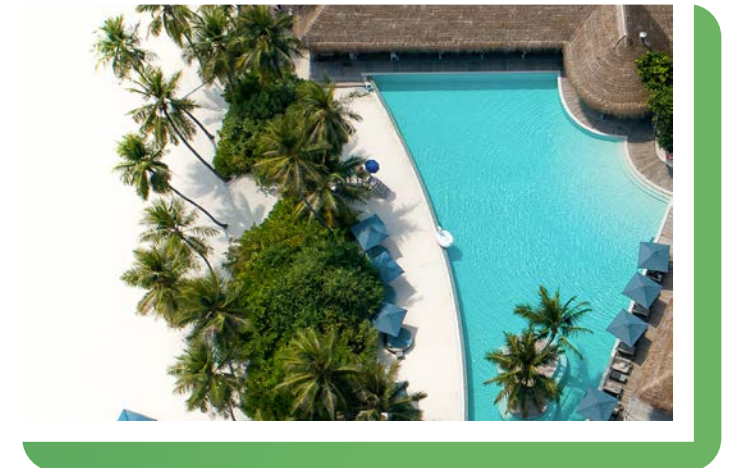
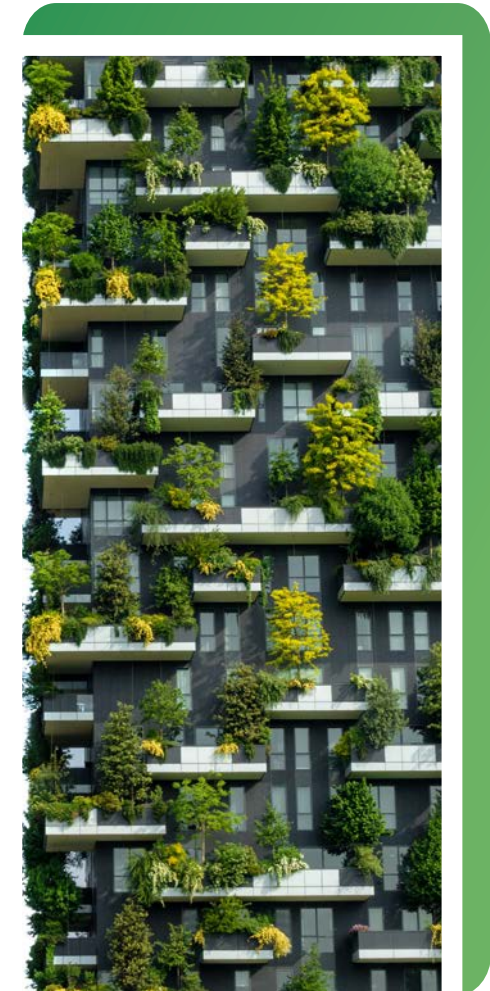


# NET ZERO METHODOLOGY FOR HOTELS

2<sup>ND</sup> EDITION • JUNE 2023

## APPENDIX N

### INDUSTRY TOOLS TO CALCULATE THE CARBON FOOTPRINT OF HOTELS



# APPENDIX N: INDUSTRY TOOLS TO CALCULATE THE CARBON FOOTPRINT OF HOTELS

The hotel industry has a long history of collaborative initiatives in order to address the challenges around carbon measurement and reporting, and three free to access tools are available for those wishing to measure, report and estimate the carbon emissions of hotels. This section gives an overview of each, as well as guidance on when and how to use them in the context of net zero.

## HOTEL CARBON MEASUREMENT INITIATIVE (HCMI)

The [Hotel Carbon Measurement Initiative \(HCMI\)](#) is a free methodology and tool for hotels to calculate the carbon footprint of hotel stays and meetings on their properties (applying a number of aspects from the GHG Protocol Standards). HCMI is the commonly accepted way to measure and compare Scope 1 and 2 GHG emissions of hotels. It includes emissions related to fuels burnt on site (e.g. in gas boilers and company vehicles) and electricity used on site. It also accounts for emissions related to any outsourced laundry and refrigerants (e.g. used in air conditioning). **Hotels can use HCMI free of charge to calculate their carbon footprint per occupied room and the carbon footprint of an area of meeting space per hour.** The methodology and tool are available for download from the [Sustainable Hospitality Alliance](#).

In 2022, the HCMI methodology and tool were updated and released as Version 2.0. The new version allows market-based purchases of renewable energy such as Renewable Electricity Certificates (RECs) to be incorporated into the final HCMI metrics, enabling reduction of the final carbon footprint metrics in closer alignment with the GHG Protocol Scope 2. Further enhancements are slated to be released in 2023 as Version 3.0

## CORNELL HOTEL SUSTAINABILITY BENCHMARKING INDEX (CHSB)

The Cornell Hotel Sustainability Benchmarking Index (CHSB) is an industry-led global data collection and benchmarking initiative, with data on energy, water and carbon emissions from over 20,000 hotels around the world, available free of charge. The public data set is available from the [Cornell Center for Hospitality Research](#) and contains average hotel performance for different types of hotels in different geographies, including HCMI benchmarks. CHSB provides a solution for companies and those buying business travel on their behalf, as well as those offering GHG calculations and offsetting, **to estimate in a robust way the carbon footprint of hotel stays and meeting space at scale.**

The datasets and emissions factors published in CHSB are used by a range of entities as a basis for industry guidance. This includes:

- [The Greenhouse Gas Protocol Quantis Scope 3 Evaluator](#)
- [UK Government Greenhouse Gas Guidance](#)
- [New Zealand Government Guide to Measuring Emissions](#)

## GREENVIEW HOTEL FOOTPRINTING TOOL

For those wishing to estimate the carbon footprint of a hotel stay or meeting in a particular location, the [Greenview Hotel Footprinting Tool](#) is a simple to use tool which will make the calculation instantly, using HCMI data from CHSB. A data template is also available so that companies can export data easily into their systems.

## SCENARIOS FOR USING HCMI, CHSB AND GREENVIEW HOTEL FOOTPRINTING TOOL

Table N provides guidance on how you can use the HCMI, CHSB and Greenview Hotel Footprinting Tool depending on who you are and what you would like to achieve.

▼ **Table N** Guidance on using HCMI, CHSB and Greenview Hotel Footprinting Tool

I AM A(N)...	I WOULD LIKE TO....	STEPS TO TAKE
Hotel operator	Calculate the carbon footprint of my portfolio and benchmark performance of individual properties	<ul style="list-style-type: none"> <li>■ Participate in the annual CHSB Index where the carbon footprint of each hotel will be calculated using the Hotel Carbon Measurement Initiative methodology (HCMI) and individual benchmarking reports provided</li> <li>■ HCMI data can be shared with corporate clients for RFP purposes or as part of their own Scope 3 business travel calculations</li> </ul>
Hotel operator or owner	Share the carbon footprint of individual hotels with entities wishing to build it into their own Scope 3 emissions calculations	<ul style="list-style-type: none"> <li>■ Measure the carbon footprint of the property using the HCMI methodology and share as necessary. For bulk calculations participation in CHSB is advised</li> </ul>
Hotel owner	Calculate the carbon footprint of my portfolio and benchmark performance of individual properties	<ul style="list-style-type: none"> <li>■ Participate in the annual CHSB Index where the carbon footprint of each hotel will be calculated using the Hotel Carbon Measurement Initiative methodology (HCMI) and individual benchmarking reports provide</li> <li>■ Participation can be direct, i.e., through submitting data for each hotel, or indirect, whereby hotel owners can access data for owned hotels already in the dataset</li> </ul>



**APPENDIX N**

**INDUSTRY TOOLS  
TO CALCULATE  
THE CARBON  
FOOTPRINT OF  
HOTELS**

I AM A(N)...	I WOULD LIKE TO....	STEPS TO TAKE
<b>Organization with business travel</b>	Calculate the carbon footprint of my hotel stays and meeting space usage for my organization's business travel (Scope 3 emissions) or in order to purchase carbon offsets for my organization	<ul style="list-style-type: none"> <li>Use the Greenview Hotel Footprinting Tool to find default metrics and calculate the footprint</li> <li>If you are seeking further granularity and adjustment needs based on the types and locations of hotels in your data set, refer to the CHSB index tool HCM1 Measure 1 which has more detailed segmentation and benchmark ranges</li> <li>If the size and geographic distribution of stays is large, contact Greenview for options to perform the multiple footprinting exercise or gain access to the bulk data output template</li> <li>Request that your hotel partners participate in CHSB, to grow and improve the dataset</li> </ul>
<b>Organization with business travel</b>	Calculate the carbon footprint of my hotel stays for specific hotels in which I am staying or have stayed	<ul style="list-style-type: none"> <li>Ensure you are clear on the rationale for needing a specific footprint for a hotel, if a default figure will suffice. If a default figure suffices, use the Greenview Hotel Footprinting Tool, or the CHSB Index tool HCM1 Measure 1 for more granularity and request that your hotel partners participate in CHSB</li> <li>If a specific figure is necessary, contact each hotel or hotel company directly to obtain the intensity figures specific to that company or hotel</li> </ul>
<b>Travel agency, tour operator, or meeting organizer that books hotels on behalf of others</b>	Calculate the carbon footprint of clients' bookings based on the location and segment of each booking (Scope 3 emissions), or offer a carbon offsetting option to clients based on the location and segment of each booking	<ul style="list-style-type: none"> <li>Use the Greenview Hotel Footprinting Tool to find default footprint metrics for each location</li> <li>If you are seeking further granularity and adjustment needs based on the types and locations of hotels in your data set, refer to the CHSB index tool HCM1 Measure 1 with more detailed segmentation and benchmark ranges</li> <li>If you are seeking further automation and calculation, contact Greenview to provide a bulk output data set of the Greenview Hotel Footprinting Tool that can be incorporated into your database/system</li> <li>Request that your hotel partners participate in CHSB, to grow and improve the dataset</li> </ul>

I AM A(N)...	I WOULD LIKE TO....	STEPS TO TAKE
<b>Travel agency, tour operator, or meeting organizer that books hotels on behalf of others</b>	Offer a carbon offsetting option to my clients based on the average footprint of bookings	<ul style="list-style-type: none"> <li>Do not attempt to arrive at a generic number in perpetuity or to estimate the hotel's intensity(ies) based on algorithm or extrapolation</li> <li>Use the Greenview Hotel Footprinting Tool or CHSB index HCM1 Measure 1 to calculate the total footprint of your bookings in one year, then derive the average for that year and apply that value. Update the exercise each year. For access to the Bulk Data Output Template please contact Greenview.</li> <li>Request that your hotel partners participate in CHSB, to grow and improve the dataset</li> </ul>
<b>Organization performing GHG emissions calculation for a client</b>	Calculate the carbon footprint of my clients' bookings based on the location and segment of each booking (Scope 3 emissions)	<ul style="list-style-type: none"> <li>Use the Greenview Hotel Footprinting Tool to find default footprint metrics for each location</li> <li>If you are seeking further granularity and adjustment needs based on the types and locations of hotels in your data set, refer to the CHSB index tool HCM1 Measure 1 with more detailed segmentation and benchmark ranges</li> </ul>
<b>Carbon offset provider</b>	Calculate the carbon footprint of my clients' bookings based on the location and segment of each booking (Scope 3 emissions)	<ul style="list-style-type: none"> <li>Use the Greenview Hotel Footprinting Tool to find default footprint metrics for each location</li> <li>If you are seeking further granularity and adjustment needs based on the types and locations of hotels, refer to the CHSB index tool HCM1 Measure 1 with more detailed segmentation and benchmark ranges</li> <li>If you are seeking further automation and calculation, contact Greenview to provide an output data set of the Greenview Hotel Footprinting Tool that can be incorporated into your database/system</li> </ul>
<b>DMO, hotel association, or destination-based sustainable tourism organization</b>	Calculate a baseline carbon intensity in order to offset the footprint of the destination	<ul style="list-style-type: none"> <li>Encourage or require hotels to participate in CHSB, to grow and improve the dataset</li> <li>Contact Greenview about streamlining data submission processes and fees for independents</li> <li>Utilize the Measure 2 Carbon per Room metric for the destination as the basis to quantify the footprint of the entire destination to offset based on destination room count</li> </ul>