

6.5. Accommodation

Accommodation is an indirect (Scope 3) emissions source. We obtained the emission factors for accommodation, see [table 33](#), directly from the Cornell Hotel Sustainability Benchmarking Index (CHSB) Tool.³³ The International Tourism Partnership (ITP) and Greenview produce the CHSB tool. The factors are in CO₂-e and are not available by gas type.

Table 33: Accommodation emission factors

Country	Unit	kgCO ₂ -e/unit
Argentina	Room per night	57.3
Australia	Room per night	65.1
Austria	Room per night	19.0
Belgium	Room per night	13.9
Brazil	Room per night	14.1
Canada	Room per night	19.6
Caribbean region	Room per night	64.0
Chile	Room per night	56.0
China	Room per night	72.3
China (Hong Kong)	Room per night	93.3
Colombia	Room per night	15.5
Costa Rica	Room per night	16.1
Czech Republic	Room per night	29.7
Egypt	Room per night	67.8
France	Room per night	6.6
Germany	Room per night	20.8
India	Room per night	103.1
Indonesia	Room per night	126.7
Ireland	Room per night	30.0
Italy	Room per night	24.9
Japan	Room per night	75.5
Jordan	Room per night	98.3
Malaysia	Room per night	92.6
Mexico	Room per night	30.3
Netherlands	Room per night	21.7
New Zealand	Room per night	12.3
Panama	Room per night	31.1
Poland	Room per night	53.8
Portugal	Room per night	19.2

³³ The Cornell Hotel Sustainability Benchmarking Index (CHSB) Tool can be accessed via:
<https://greenview.sg/chsb-index/>

Country	Unit	kgCO ₂ -e/unit
Qatar	Room per night	140.9
Russian Federation	Room per night	38.7
Saudi Arabia	Room per night	108.5
Singapore	Room per night	48.4
South Africa	Room per night	62.2
South Korea	Room per night	80.3
Spain	Room per night	23.5
Switzerland	Room per night	8.9
Thailand	Room per night	64.7
Turkey	Room per night	56.6
United Arab Emirates	Room per night	117.0
United Kingdom	Room per night	26.4
United States	Room per night	25.6
Vietnam	Room per night	63.5

6.5.1. GHG inventory development

To calculate emissions from accommodation during business trips, collect data on the number of nights and the country stayed in. Applying the equation in [section 2](#), this means:

Q = rooms per night

F = emission factors for the country stayed in from [table 33](#)

EXAMPLE CALCULATION

An organisation sends six people to a conference in Australia. They book three rooms for four nights.

Total CO₂-e emissions from the hotel stay = $3 \times 4 \times 65.1 = 781.2$ kg CO₂-e

Note: Numbers may not add due to rounding.

6.5.2. Assumptions, limitations and uncertainties

The CHSB Guidance document³⁴ outlines the limitations of the study and the dataset.

- It is skewed towards upmarket and chain hotels.
- Most of the dataset covers the United States.
- The results do not distinguish a property's amenities, for example swimming pools, spas or a laundry.
- The data have not been verified.
- District heating and cooling remain a challenge.

³⁴ Access the CHSB Guidance document via:
<https://scholarship.sha.cornell.edu/cgi/viewcontent.cgi?article=1255&context=chrbpubs>