

# HCMI v2.0 How to guide

## Data input

### Tab 1. Hotel Details

Fill out the *Contact & Hotel Details* section.

Refer to the Definitions tab for description of terms marked with \*

CONTACT & HOTEL DETAILS			
1	Name	John Smith	
2	Job Title	Hotel Manager	
3	Reporting Year Ending*	December	2019
4	Name of Hotel	Hotel H	
5	Name of Hotel Group	H Collection	
6	Address	123 Park Lane	
7	City	Los Angeles	
8	Country	United States	
9	State/Province	California	
10	Zip/Postal Code	90079	Proceed to Question 11
11	Total area of guest rooms and corridors	4,080.00	
12	Total area of meeting facility space	1,360.00	
13	Total area of conditioned space*	8,000.00	
14	Unit of Measurement for the above areas*	Square meters	
15	Total number of guest rooms	180	
16	Total number of occupied rooms* for reporting year	50,000	

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Fill out the *Supplementary Questions* section.

If your answer is NO for all the supplementary questions, proceed to Tab 2. Energy Consumption.

If your answer is YES for any of the questions, you will also need to go to the tab(s) indicated.

SUPPLEMENTARY QUESTIONS			
1	Is your laundry outsourced?	Yes	Proceed to Tab A - Outsourced Laundry
2	Would you like to add refrigerant leakage fugitive emissions to your calculation?	Yes (manually add)	Proceed to Tab B - Refrigerants
3	Would you like to include fuel consumption of all vehicles and other equipment (such as landscaping equipment)?	Yes (manually add)	Please add into Tab 2. Energy Consumption
4	Do you have private space not accessible by guests?	Yes	Proceed to Question 4.a
4.a	Are you able to provide the energy consumption of the private space?	Yes	Please enter actual consumption into Tab 2 - Energy Consumption (Column I)

Note: If your answer is NO for all the supplementary questions, your carbon footprint is calculated automatically based on Tab 2. Energy Consumption

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## Tab 2. Energy Consumption

### Add energy consumption data

Input data for the default energy types: Purchased Electricity (Grid), Natural Gas, Fuel Oil 2.

Use the dropdown to select other energy types applicable to your hotel, including mobile fuels.

Use the dropdown to select the unit for each energy type.

Input the total consumption for each energy type.

If your hotel has a private space and you have the energy consumption of the space (e.g. sub-metered), input the private space consumption for the relevant energy type(s). Private space consumption will not be included in the calculations.

Use the dropdown to select whether Default or Manual emission factors (EFs) are to be used for each energy type. If Manual EFs are chosen, source and input the EFs manually.

Emissions from each energy type and total emissions from energy consumption will auto populate.

2.0 ENERGY CONSUMPTION*											
	Energy Type	Unit	Total Consumption	Private Space Consumption		Outsourced Laundry (kWh)	Total (kWh)	Default or Manual CO2e Emission Factors (EFs)*	Manual EFs (kg CO2e/kWh)	Default EFs (kg CO2e/kWh)	Emissions (kg CO2e)
				Actual	Estimated						
1	Purchased Electricity (Grid)	kWh	2,540,802.00	381,120.30		-	2,159,681.70	Default		0.20647	445,914.49
2	Natural Gas	MMBtu	14,356.00	2,153.40		-	3,576,042.58	Default		0.18124	648,135.00
3	Fuel Oil 2	L	657.00	98.55		-	5,966.55	Default		0.25320	1,510.76
4	Gasoline (Mobile)	L	1,000.00			-	9,677.65	Default		0.25104	2,429.48
5	Diesel (Mobile)	L	30,000.00			-	319,086.80	Default		0.25442	81,180.48
						-	-			-	-
						-	-			-	-
TOTAL (kWh)						-	6,070,455.28	TOTAL (kg CO2e)			1,179,170.20

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### Market-based Renewable Electricity Purchases

Indicate if you would like to input market-based renewable electricity purchased from supplier.

If your answer is NO, proceed to the other tabs.

If your answer is YES, proceed to enter the description of the market purchase and amount in kWh. The amount will be used to offset electricity purchased from the grid.

2.1 MARKET-BASED RENEWABLE ELECTRICITY PURCHASES*			
Would you like to input market-based renewable electricity purchased from supplier using renewable sources, in kWh (e.g. green electricity supplier, Renewable Energy Certificates, geothermal district heating)?		Yes	
Please enter the description of the market purchase and the amount in kWh in the table below			
	Description of Purchase	Amount (kWh)	Comments
1	Renewable Energy Certificate (RECs)	2,000,000.00	
TOTAL (kWh) - capped at 100% of Purchased Electricity (Grid) Consumption		2,000,000.00	

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## Tab A – Outsourced Laundry

*Proceed to Tab A - Outsourced Laundry if your hotel's laundry is outsourced.*

Use the dropdown to indicate whether your laundry contractor provides you with energy data.

If your answer is YES, proceed to update Section A.1.

- Use the dropdown to select relevant energy types. Purchased Electricity (Grid) is a default energy type.
- Ensure that the chosen energy types are also selected in Tab 2. Energy Consumption.
- Input the total consumption and unit for each energy type.

If your answer is NO, proceed to the next question and use the dropdown to indicate whether your hotel's laundry tonnage is known.

If your answer is YES, input your hotel's laundry tonnage and unit. Energy consumption from outsourced laundry will be estimated and reflected in Section A.3.

If your answer is NO, your hotel's laundry tonnage will be estimated using the number of occupied rooms in Section A.2 and reflected in Section A.3.

A. Please complete this section if you outsourced your laundry			
1	Can you get your share of the energy consumption* from your laundry contractor for the reporting year?	No	Proceed to Question 2
2	Do you know your laundry tonnage*?	Yes	Proceed to Question 3. Fill in both Laundry Tonnage and Unit.
3	Please enter your laundry tonnage	<b>Laundry Tonnage</b> 347	<b>Unit</b> Metric Tonne
A.1 Energy Consumption from Outsourced Laundry			
	Energy Type	Total Consumption	Unit
A.2 Estimated Laundry Tonnage*			
A.3 Estimated Energy Consumption from Outsourced Laundry			
	Energy Type	Total Consumption	Unit
1	Estimated Consumption: Purchased Electricity (Grid)	62,460.00	kWh
2	Estimated Consumption: Natural Gas	541,320.00	kWh
3	Estimated Consumption: Fuel Oil 2	38,517.00	Litres
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### Tab B – Refrigerants

*Proceed to Tab B - Refrigerants if you would like to manually add refrigerant leakage fugitive emissions to the calculations.*

Use the dropdown to indicate if your hotel used any of the listed refrigerants.

If your answer is NO, your hotel's carbon footprint will be uplifted by 1% to account for fugitive emissions. Proceed to the other tabs.

If your answer is YES

- Input the amount of refrigerant used in your hotel in kg.
- Input the amount for all applicable refrigerants in both "Common refrigerants with high GWP" and "Other refrigerants" list.

The emissions from each refrigerant and the total emissions from refrigerants will auto populate.

B. Please complete this section if you would like to add refrigerant leakage fugitive emissions* to your calculation			
1	Is the refrigerant gas used in your systems one of the following: HCFC-22/R22 = chlorodifluoromethane, HFC-134a/R-134A, R-404A, or R-410A?	No	Your total carbon footprint will be uplifted by 1%. No further calculations are required
B.1 Amount of each refrigerant used in the reporting year (in kg)			
Common refrigerants with high GWP		Global Warming Potential (GWP) of refrigerant (kg CO <sub>2</sub> e)	CO <sub>2</sub> -equivalent emissions (tonne)
Other refrigerants		Global Warming Potential (GWP) of refrigerant (kg CO <sub>2</sub> e)	CO <sub>2</sub> -equivalent emissions (tonne)
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## Data output

### Tab 1. Results

The Results section will auto populate to output the following results

- Carbon footprint: Total for guestrooms and meeting space during the specified reporting year, per occupied room on a daily basis, per area of meeting space on an hourly basis, and per area on an annual basis
- Renewable energy & electricity: Total renewable energy and electricity used by the hotel, Total renewable electricity used by the hotel, Total renewable energy and electricity used by the hotel
- Greenhouse gas scopes: Scope 1, Scope 2 and partial Scope 3 emissions

RESULTS			
CARBON FOOTPRINT			
Total CO2e for reporting period	981.43	tCO2e	
Total Guestrooms Carbon Footprint	736.07	tCO2e	
Total Meetings Carbon Footprint	245.36	tCO2e	
Carbon footprint per occupied room on a daily basis	14.72	kgCO2e/occ room	
Carbon footprint per area of meeting space (1 sqm/sqft) on an hourly basis	0.049427	kgCO2e/sqm/hr	
Carbon footprint per sqm/sqft on an annual basis	180.41	kgCO2e/sqm/yr	
RENEWABLE ENERGY & ELECTRICITY			
TOTAL renewable energy and electricity used by the hotel (kWh)	2,000,000.00	kWh	
TOTAL renewable electricity used by the hotel (% of total electricity use) <i>Note: Onsite Renewable Energy (if applicable) is assumed to be electricity source</i>	90.00	%	
TOTAL renewable energy and electricity used by the hotel (% of total energy consumption)	28.23	%	
GREENHOUSE GAS SCOPES			
<i>*Based on data input into calculator only (no estimation for mobile fuel consumption &amp; refrigerants)</i>			
Scope 1	Fuels burnt on site e.g. gas, oil Mobile fuels and Refrigerants	733.26	tCO2e
Scope 2	Purchased electricity Purchased heating/cooling	32.97	tCO2e
Outsourced laundry Partial scope 3	<i>Please note that full Scope 3 figures should include other sources (e.g. supply chain emissions)</i>	215.21	tCO2e
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## Tab C – Client Report

Proceed to Client Report to produce a report for a specific client

Complete the Client Details section

- Add number of occupied rooms.
- Add meeting space and how long it was occupied for.

The results section will auto populate once all data input tabs and the client details have been completed.

CLIENT DETAILS			
1	Client Name	Client C	
2	Job title	Manager	
3	Reporting Year Ending <i>The most recent month within the defined 12-month reporting period</i>	December	2019
4	Total number of room nights	75	
5	Total area of meeting space occupied (sqm/sqft)	100	
6	Duration of meetings (Hours)	10	

RESULTS		
CARBON FOOTPRINT		
Client's Guestrooms Carbon Footprint	1,104.11	kgCO2e
Client's Meetings Carbon Footprint	49.43	kgCO2e
<b>Client's Total Carbon Footprint</b>	<b>1,153.54</b>	<b>kgCO2e</b>

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