



CALCULO DE HUELLA HIDRICA HOSTAL LA CUEVA APLICACIÓN SUSTAINABLE HOSPITALITY ALLIANCE

1. INSTRUCCIONES


Introduction
<p>The Hotel Water Measurement Initiative (HwMI) is a methodology to calculate the amount of water used per occupied room (and per guest night, where data are available) and per area of meeting space per hour. This methodology and calculation tool was developed by ITP and its Working Group, supported by KPMG, to enable hotel companies and individual properties to measure and report on water withdrawal in a consistent way.</p> <p>This calculation tool should be used in connection with the Hotel Water Measurement Initiative Methodology which can be obtained from the ITP website.</p>
Methodology
What data are needed
<ol style="list-style-type: none">Area data (square meters or square footage) for:<ul style="list-style-type: none">- Guest rooms;- Meeting space;- Total space.Metered municipal waterOutsourced laundry (water use data from supplier or tonnage/annum).Unmetered ground or surface water sources (i.e. sanitation and grounds maintenance).Unmetered municipal waterOn-site desalinated water (freshwater output from the process)District chilled water
Who it's designed for
<p>The tool is designed to be applied by any hotel anywhere in the world. The methodology has been designed in partnership with major hotel groups; however, it applies to individual hotels, large and small, regardless of the facilities offered.</p>
What it will tell you
<p>Total water footprint for the hotel for the specified reporting year, water footprint per occupied room, per guest night (where data available) and per area of meeting space per hour. If requested, the total water footprint for a specific client's hotel use, event or meeting can also be calculated.</p>
How the information should be used
<p>For hotels to use in support of Requests for Proposals (RFPs), as well as corporate reporting. Measuring water use consistently will help hotels to understand their water use with a view to reducing consumption.</p>

2. DEFINICIONES

	
Definitions and assumptions	
Basic terms	
Reporting year	This should be a 12 month period defined by hotel management and generally in line with other reporting requirements.
Area	Area can be entered in square meters OR square feet, as long as this is consistent in all input data.
Guest room	Area accessed by guests of the hotel that is available for individuals to stay overnight for a set period.
Meeting room	Area of the hotel to hold meetings / events within the hotel
All other areas	Any other part of the hotel which is used by guests or staff as part of the service delivery, e.g. back of house, kitchens, pool, spa, lobby, etc.
Water withdrawal	It is recognised that there are differences in definitions for water use, consumption and withdrawal between leading water reporting bodies such as Global Reporting Initiative, CERES, World Resources Institute (WRI) and the Carbon Disclosure Project (CDP). For the purposes of this tool we have used CDP's definition of water withdrawal which is adapted from the Global Reporting Initiative (GRI) definition. The definition is provided below. The sum of all water drawn into the boundaries of the reporting organization from all sources (including surface water, groundwater, on-site desalinated water and municipal water supply) for any use over the course of the reporting period. Water withdrawals should include both water that was withdrawn directly by your company and water withdrawn through intermediaries (e.g. water utilities).
Water footprint	The total volume of freshwater used to produce the goods and services consumed by the individual or community or produced by the business. Source: www.waterfootprint.org .
Blue water	Water that has been sourced from surface or groundwater resources and is either evaporated, incorporated into a product or taken from one body of water and returned to another, or returned at a different time. Source: www.waterfootprint.org .
Green water	Water from precipitation that is stored in the root zone of the soil and evaporated, transpired or incorporated by plants. Source: www.waterfootprint.org .
Grey water	The amount of fresh water required to assimilate pollutants to meet specific water quality standards. Source: www.waterfootprint.org .
Apportionment between guest room use and all other uses	
	Water is used in guest rooms for shower/bath and toilet. Other uses of water in a hotel include that associated with pools, kitchens, back of house, public rest rooms etc. Research by the HCMI Water and Waste Sub-group and benchmark data from ITP's Environmental Management for Hotels Manual indicate that a significant amount of water is consumed within guest rooms i.e. shower, toilet. On the basis of this research, HWMI has applied the following split of water use between guest room use and all other uses: <ul style="list-style-type: none"> • Guest room use = one third (i.e. 1/3); and • All other uses = two thirds (i.e. 2/3).
Allocation of all other uses between guest rooms and meeting space	
	HWMI apportions water withdrawal from 'all other uses' between guest rooms and meeting space. In order to apportion water withdrawn by all other uses between guest rooms and meeting space, the Working Group agreed that floor space should be used as the basis of the calculation. This is due to a lack of data relating to the number of guests and meeting / event attendees that hoteliers are currently able to capture in their management systems.
Outsourced laundry	
	Water used for laundry can make up a significant portion of a hotel's overall water footprint. Laundry has been a very high profile item in hotels' environmental activities for years and most hotels encourage their guests to re-use towels during their stay. However, many hotels outsource some or all of their laundry activity. Water withdrawal from outsourced laundry operations should be included in a hotel's overall footprint in order to assist with the comparability of different hotels' overall footprints. Laundry undertaken internally is captured by the method. Water used by outsourced laundry should be included in the hotel's water footprint (see tab 5. Outsourced laundry for details on this calculation).
Unmetered sources (grounds/maintenance)	
	The HWMI Working Group agreed that where unmetered sources of ground and surface water are used, this is typically for sanitation operations and hotel grounds maintenance (i.e. plant watering). Unmetered sources should be included in the total water footprint where they represent more than 5% of the total water footprint. As these sources are unmetered, estimation techniques have been developed to calculate their contribution to the total water footprint. Water used by unmetered sources should be included in the hotel's water footprint (see tab 6. Unmetered sources).
Private spaces	
	Private space is areas which are not accessible to hotel guests or meeting attendees (e.g. private apartments, private clubs) and are not related to the hotel (e.g. the hotel leases a floor to a third party). Note back of house is not private space as is part of the hotel service delivery. If water use from such areas is included in the hotel's water bills, this should be excluded from the water calculations. This is calculated by either: <ul style="list-style-type: none"> • Subtracting sub-metered water used by private space (if all water used in the private areas are sub-metered); or • Subtracting a percentage of total water used based on area apportionment of private space to the total hotel floor area
Water saving initiatives	
	Where a hotel employs water saving initiatives (e.g. low flow fittings, linen reuse programmes, water recycling, harvesting rainwater), this is not accounted for separately; rather the size of the water footprint is likely to be lower compared to similar hotels where no water saving initiatives are implemented. For corporate reporting, narrative can be provided to support the water footprint and intensity metrics calculated using this tool to outline any water saving initiatives that are in place.
Water sources	
Metered water	Invoices or metered readings.
Unmetered ground or surface water	Measure through flow calculations or estimates/extrapolations.
Unmetered municipal	Request estimate from local authority or install a water flow meter.
Delivered water	Purchasing records.
On-site desalinated	Freshwater output from the desalination process
District chilled water	Invoices from the supplier. The make-up water used is excluded as this information is unlikely to be known by hotels.
Reporting boundaries	
Inclusions	All activities within the hotel premises (i.e. direct building uses and ancillary activities including restaurants, laundry, meeting spaces, concession shops, casinos, golf courses, spas, garden space, fitness centres, and back of house). Other inclusions: <ul style="list-style-type: none"> Metered municipal (mains) water Unmetered ground, surface and municipal water. Outsourced laundry; Water used in on-site waste water treatment owned or operated by the hotel; District chilled water; On-site desalinated water (freshwater output from the desalination process).
Exclusions	Water used in private space <ul style="list-style-type: none"> Water used by the activities of suppliers outside of the hotel's premises (except laundry facilities). The guests' travel to and from the hotel, employees' business travel. Embedded water in products and food purchased by the hotel. Water used in off-site facilities (that guests have access to) that the hotel does not operate (i.e. facilities are operated by a third party, such as an off-site gym). Water used in on-site staff accommodation. Water used at corporate offices. Municipal waste water treatment. Water used in shared facilities which benefit the hotel which contributes through a service charge (e.g. water fountain in a multi-purpose building). Recycled water. Harvested rainwater. Water discharges. Bottled water. Make-up water used in district chilled water process.

3. RESULTADOS

Sustainable Hospitality Alliance		Key	
		 	To be completed by hotel
		 	No action
		 	See definition tab for guidance
Hotel information			
1 Name	HOSTAL LA CUEVAUX UEDA		
2 Job title	ADVISOR		
3 Reporting year end date*	31-May-23		
4 Name of hotel	HOSTAL LA CUEVA		
5 Name of hotel group	LICHTHIMARIO TOLLO		
6 Address	ALONSO DE ALVARADO 176, POTOSI/BAHIA, SAN MARTIN		
7 Country	PERU		
Results			
Water withdrawn			
Total water withdrawn (incl. water used for laundry and wet areas for guest room use)	2,480	Cubic meter (m ³)	
Total water withdrawn (excluding private space, if applicable)	2,299	Cubic meter (m ³)	
Guest room use (annual)	793	Cubic meter (m ³)	
Other use (annual)	1,504	Cubic meter (m ³)	
Guest room use			
Total guest room use (annual)	1,429	Cubic meter (m ³)	
Guest room use (as a proportion of the total)	77%	NA	
Meeting room use			
Total meeting room use (annual)	428	Cubic meter (m ³)	
Meeting room use (as a proportion of the total)	27%	NA	
TOTAL WATER USE FOR REPORTING YEAR	2,299	Cubic meter (m³)	
Intensity metrics			
Guest room			
Total water use per occupied room (per night)	8	Cubic meter (m ³)	
Total water use per guest (night)	8	Cubic meter (m ³)	
Meeting room			
Total water use per floor area of meeting space (hourly)	8	Cubic meter (m ³)	Square meter (m ²)
Total water for a specific client stay/event (if requested)			
Number of overnight for client	4,077	NA	
Floor area of meeting space requested by client	28	Square meter (m ²)	
Hours of client's meeting	2	NA	
Client's room water use	1,429	Cubic meter (m ³)	
Client's meeting water use	8	Cubic meter (m ³)	
Total client's water use	1,439	Cubic meter (m ³)	

4. DATOS BASICOS

Sustainable Hospitality Alliance		Key	
		 	To be completed by hotel
		 	No action
Step 1.A	Select the unit you report floor area in from the drop down menu. It should be noted that this unit will be used for all water used within this hotel.	Unit options	Square meter (m ²)
Step 1.B	Input the total floor area for each aspect of your hotel. The number entered is the total for the reporting period.		
Hotel floor areas			
Total floor area of the hotel	650		
Total floor area of guest rooms	400		
Total number of guest rooms	28		
Number of occupied guest rooms (annual)	4,077		
Total number of guests during reporting year (if available)	10,192		
Total floor area of meeting rooms	28		
Step 2.A	Select the unit you report water consumption in from the drop down menu. It should be noted that this unit will be used for all water sources reporting using this tool.	Unit options	Cubic meter (m ³)
Step 2.B	Input the total water use for each water source your hotel uses. The number entered is the total for the reporting period.		
Water sources			
Municipal (mains) water	1,200		
Unmetered municipal water	-		
Drilled water	1,000		
On-site desalinated water	-		
District chilled water	-		
On-site waste water treatment	-		
Supplementary questions			
Do you outsource your laundry?	No		
Do you have any untreated sources of water (i.e. ground/river/lake water)?	No		
Do you have any private spaces (i.e. areas which are not accessible to hotel guests and meeting attendees or not related to the hotel)?	Yes	If yes, go to 'Private spaces'	
If you have answered no to all these supplementary questions, you only need to complete this page (i.e. 4. Basic details). Your results will be calculated and displayed on tab '3. Results'.			