Greenhouse Gas Emissions Verification Report

Hilton Inc.

Prepared by
Processing Sustainability, LLC
on behalf of
DEKRA Certification, Inc. 1120 Welch Rd. Suite 210
North Wales, PA 19454
3/27/2018

Verification (Tier II) of Hilton Inc.'s
Greenhouse Gas Emissions Inventory for 2016
Reported to The Carbon Disclosure project

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Final Report

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Verification Report Date:
April 27, 2018

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1. Verification Summary

Reporter Name:	Hilton Inc.
Verification Body Name	DEKRA Certification, Inc.
Verification Body Contact	Maxime Verstraete
Lead Verifier	Justin Dunning
Supporting Verifier	Steve Dunning
Senior Reviewer	Zed Bates
Reporting Year	2016
Reporting Scheme	Carbon Disclosure Project
Geographical Scope of Verification	Worldwide
Scope	Scope1 – Direct Emissions; Scope 2 – Indirect Emissions; Scope 3 - Franchised Hotel Emissions; year-on-year changes Scope 1 emissions; year-on-year changes Scope 2 emissions; year-on-year changes Scope 3 emissions; Emissions Intensity; Water use, Waste production
Boundaries	Operational control
Standards Used	The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (revised) Environmental Resources Trust Corporate Greenhouse Gas Verification Guideline 12-2004.pdf IPCC Second Assessment Report (SAR - 100 year)
Objectives	An evaluation of the following: • The GHG inventory of GHG emissions and removals • The organization's GHG related controls.
Criteria	The verification criteria are established in Environmental Resources Trust Corporate Greenhouse Gas Verification Guideline – Tier II. The verification criteria requires emissions reports to contain no material misstatements, which are defined as any error or combination or errors which add up to more than 5 percent of the total combined emissions from Scope 1 (direct) and Scope 2 (indirect).
Level of Assurance	Limited Assurance
Verification Findings	Verified

2. Introduction

DEKRA Certification, Inc. (DCI) has performed a greenhouse gas emissions verification for Hilton Inc (Hilton) for their calendar year 2016 emissions report submitted to the Carbon Disclosure Project. The inventory was prepared by Maxime Verstraete from Hilton with the assistance of Valerie Bryan of DNV GL Energy & Sustainability (DNV GL). DCI performed the verification in accordance with the Environmental Resources Trust Corporate Greenhouse Gas Verification Guideline (The Guideline) – Tier II level.

In addition to verifying greenhouse gas emisisons, DCI also validated the claims in LightStay relating to water consumption and waste production that are aso included in reporting to the Carbon Disclsure Project and the Dow Jones Sustainability Index.

This report is a summary of DCI's findings.

2.1 Relationship between Hilton and DCI

DEKRA Certification Inc. is a Management System Certification Company that has provided ISO 9001 and 14001 certification services to Hilton since 2010. Beginning in 2008, DCI (then operating as KEMA Registered Quality, Inc.) provided independent validation services to Hilton for their LightStay Program.

DCI's relationship with Hilton has always been that of an independent verifier/certification body. DCI has not provided consulting service to Hilton relating to any management system or greenhouse gas reporting. For this reason, DCI believes it possesses the independence and impartiality necessary to provide greenhouse gas verification services. DCI has verified Hilton's CDP submittal ofr the emissions years 2013, 2014 and 2015.

2.2 Scope

Per Hilton's request and requirements, DEKRA Certification, Inc carried out the verification according to the Tier II methodology. The Tier II methodology calls for a systematic application of verification procedures by knowledgeable reviewers for evaluating and reviewing a subset of reported data, calculations, and GHG management systems. The verification involved a thorough review of calculations and methodologies used to generate the 2016 GHG inventory report. Sample GHG documentation was examined and key facility-specific estimates were reviewed. DCI visited and reviewed data for 55 Hilton properties to ensure a representative subset of key sources was verified. The Tier II approach is intended to provide a level of assurance and credibility to meet the needs associated with voluntary non-financial public reporting.

DCI also conducted a validation of LightSaty data pertaining to water usage and waste production. This validation was conducted through a systemic application of auditing procedures including review of meter reads and billing data.

3. Discussion of the Data

Hilton has selected Emissions Year 2015 as its Base year and DCI completed verification of that data

in 2016.

As part of the 2016 Emissions Inventory, Hilton reported data from 673 Hotels over which they have operational control (either as owner or manager), corporate sites across the globe, mobile emissions associated with Hilton employee travel, and fugitive emissions. Properties that were not in operation for the entire year had their emissions prorated. The hotels are divided into four regions: Americas; Europe, Middle East and Africa; and Asia Pacific. The Hotels report their emissions through an on-line tool: LightStay. This data was analyzed centrally and both direct (scope 1) and indirect (scope 2) emissions. Additionally, emissions from franchised hotel operations are reported as scope 3.

A key feature of the emissions inventory was how Hilton dealt with hotels with incomplete or inaccurate data. Hilton is a large global company, and human error does occur in the manual data entry of monthly energy consumption. Using LightStay alerts and other analytical tools, Hilton and DNV GL clean the data to avoid including sites that may have entered inaccurate data, which could potentially skew the aggregate results. Through data extrapolation, Hilton has included estimated emissions for these properties in its reported Scope 1 and 2 emissions, based on the Region's average emissions intensity multiplied by the excluded building area (m2/ft2). For primary data, 546 of 673 hotels were deemed to have complete and accurate energy and emissions data for the 12 months ending December 31, 2016. Excluding 82 newly built or converted hotels, the owned and managed data completion rate is 95% of total hotel building area.

Lastly, the emissions factors used for the reporting data were all based on the eGRID region for US properties and the national average for other properties. This is in accordance with the GHG Reporting Protocol, even though there can be significant variation of emissions factors among regions within a country.

4. Selection of Facilities

A Tier II verification requires field level facility audits. The Guideline identifies four main steps for identifying the number and nature of the facilities to be visited.

4.1 Company Profile Analysis

The company profile analysis identifies the key verification parameters that have the potential to cause a material misstatement on the overall quality of the inventory. Key verification parameters are defined as:

- Emission source
- Data management system
- Management system
- Business units or activities. (optional)

4.2 Rank Order of Facilities

The top 78 facilities comprise 50% of the total emissions and the top 50 facilities account for 39% of emissions.

4.3 Facilities Categorized by Key Parameters

Electricity and Natural Gas contribute 85% of the total energy use, and no other parameter covers more

than 5%. All Hilton hotels report through the LightStay system and, all Hilton managed and franchised Facilities are ISO 9001 and 14001 certified. The GHG Data Management System and Management System of the sites are identical.

For the purposes of this verification, all Hilton Properties are considered homogeneous.

4.4 Site Visits

55 site visits are listed in Table 1, which represent 9% of reported emissions. These sites were visited as part of DCI's Re-certification of Hilton's ISO 9001, 14001, and 50001 certifications. During these site visits, trained DCI auditors validated the consumption data entered into the Lightstay system by reviewing utility bills and direct meter readings.

Table 1:

DT - Lisbon, Portugal
DT - Melbourne-Flinders Street, Australia
DT - Pune Chinchwad, India
EMB - Dorado del Mar Beach Resort, Puerto Rico
HGI - Fuzhou Cangshan, China
Hilton - Budapest City, Hungary
Hilton - Dublin Airport, Ireland
Hilton - Frankfurt Airport, Germany
Hilton - Foshan, China
Hilton - Malta, Malta
Hilton - Paris Opera, France
WA - Arizona Biltmore Hotel
H2 - Anchorage/Midtown, AK
HOME - Anchorage, AK
H2 - Huntsville/Research Park Area, AL
Hilton - San Diego Gas Lamp Quarter, CA
Hilton - San Francisco Union Square, CA
H2 - Denver West - Federal Center, CO
Hilton - Fort Collins, CO
HOME - Colorado Springs Airport, CO
HOME - Colorado Springs-North, CO
Curio - Madison, CT
Hilton - Hilton McLean
Hilton - Orlando-Bonnet Creek Resort, FL
Hilton - TAMPA-AIRPORT/WESTSHORE, FL
DT - Atlanta-Galleria, GA
DT - Atlanta NE/Northlake, GA

EMB - Savannah, GA
HGI - West Des Moines, IA
HOME - West Des Moines/SW-Mall Area, IA
Hamp - Coeur d' Alene, ID
Dt - Chicago/theWit - a Doubletree Hotel, IL
HAMP - Metairie, LA
Curio - Amway Grand Plaza, Grand Rapids, MI
HAMP - Branson On the Strip, MO
HAMP - Branson/Branson Hills, MO
HAMP - Kalispell, MT
DT - Mahwah, NJ
EMB - Portland-Airport, OR
EMB - Pittsburgh - Downtown, PA
HOME - Philadelphia/Great Valley, PA
EMB - Montreal, Quebec, Canada
Hilton - Quebec, Canada
HAMP - Charlston Hisoric Distric
HGI - Hilton Head Island, SC
EMB - San Antonio Riverwalk-Downtown, TX
Hilton - Alexandria-Mark Center, VA
Hilton - Alexandria-Old Town, VA
Curio - Hotel Roanoke & Conference Center,Curio
HGI - Spokane Airport, WA
HAMP - Green Bay Downtown, WI
HGI - Green Bay, WI
CI - Xiamen,China
Canopy - Reykjavik City Centre, Iceland
HLT Prague Old Town, Czech Republic
HLT Waikoloa Village, HI
HLT San Diego Bayfront, CA
HLT Vilamoura, Portugal
HOME2 Pittsburgh - McCandless, PA
HOME Wallingford - Meriden, CT
HOME Portland, ME
HGV - South Beach at McAlpin

5. Boundary Verification

Hilton has set its organizational boundary as operational control and has included all owned and managed hotels in its Scope 1 and 2 reporting scope, with emissions from franchised hotel operations reported under Scope 3. . This was verified through interviews with interviews with the inventory manager. The establishment of the organizational boundary is in conformance with the GHG Protocol.

The operational Boundary includes all CO2 emissions from the owned and managed hotels as well as an estimation of refrigerant emissions. Site visits have confirmed that the emissions activities from hotel operations are captured in the LightStay program. No evidence was noted that emissions activities occurring under control of Hilton staff was excluded from LightStay. The methodology for the operational boundary is clearly defined and is appropriate, and since all properties report through LightStay, is consistently applied. The establishment of the operational boundary is in conformance with the GHG Protocol.

6. Quantification Methods

Emissions for electricity and gas were calculated by multiplying activity data by emissions factors. This is in compliance with the GHG protocol. Emissions factors for U.S. hotels were taken from EGRID and the US. Department of Energy EIA website, which are appropriate sources. Quantification methods are clearly traceable from Hilton's reporting spreadsheet and are applied consistently across all sites. There was no site level calculation of emissions, all site emissions were calculated centrally.

Quantification was verified through interviews with the inventory manager, recalculation of data, and verification of activity data at site visits. All activity data reviewed was based on financial transaction meters.

7. QA Verification

DNV GL validates data received through the LightStay program removing sites with incomplete or incorrect data. These procedures were consistently applied.

Hilton's quality assurance process involved a detailed review of monthly energy consumption and costs for 2015-2016 (24 months), as well as key operating factors including occupancy and reported building size. Extensive data evaluation was conducted to establish complete, reliable datasets that accurately represent sustainability performance on an aggregate basis. DNV GL coordinated with Hilton Engineering Managers and Ei3 to complete corrections to monthly hotel inputs where inconsistency deemed to be the result of an input error or omission. Additionally, properties with a significant 2015-2016 variance (typically greater than 20% + or -), and/or those with monthly outliers that could not be reconciled, were excluded from the analytical dataset. Finally, a thorough review of emissions factors was conducted for each property to ensure accuracy in accordance with the stated methodology and global emissions factors.

For sites with incomplete or abnormal data, a data substitution is used. The CO2 values for the missing sites were based on the site's floor space. Past verifications have confirmed this as appropriate.

GHG emissions were recalculated based on master data from the Light Stay system. Independent recalculation returned results within 1% of the reported emissions.

Scope 1 and 2 Emissions - From LightStay Data			
Brand	Count	Fuels kBTU	kWh
Hampton - Complete	50	107,188,961	44,180,956
Hampton - Incomplete	12	25,725,351	10,603,429
Hampton - New Enrolled	11	11,790,786	4,859,905
HGI - Complete	30	141,926,604	49,688,925
HGI - Incomplete	2	9,461,774	3,312,595
HGI - New Erolled	17	40,212,538	14,078,529
Embassy - Complete	40	367,911,908	153,049,600
Embassy - Incomplete	6	55,186,786	22,957,440
Embassy - New Enrolled	0	-	-
Doubletree - Complete	81	909,229,230	324,265,229
Doubletree - Incomplete	6	67,350,313	24,019,647
Doubletree - New Enrolled	19	106,637,996	38,031,107
Homewood - Complete	18	42,979,764	19,569,994
Homewood - Incomplete	9	21,489,882	9,784,997
Homewood - New Enrolled	0	-	-
Hilton - Complete	287	5,776,258,423	2,006,875,565
Hilton - Incomplete	7	140,884,352	48,948,185
Hilton - New Enrolled	30	301,895,040	104,888,967
Conrad - Complete	20	490,848,847	215,957,013
Conrad - Incomplete	1	24,542,442	10,797,851
Conrad - New Enrolled	5	61,356,106	26,994,627
Waldorf - Complete	20	700,844,868	197,908,069
Waldorf - Incomplete	2	70,084,487	19,790,807
Waldorf - New Enrolled	0	-	-

Scope 1	
kBTU	9,473,806,457
mmBtu	9,473,806
kgCo2/mmBTU	53
Calculated MT CO2	502,680
Reported MT CO2	501,608
Discrepency	0.21%

Scope 2	
kWh	3,350,563,436
MWh	3,350,563
lbs CO2/MWh	1,232
Calculated MT CO2	1,872,061
Reported MT CO2	1,857,239
Discrepency	0.79%

8. Final Result

Based on the Tier II verification, DEKRA Certification, Inc. can provide Limited Assurance that Hilton's GHG inventory of Scope 1, 2, and 3 emissions was compiled, and for 2016 reported, in conformance with "The GHG Protocol."

DCI can provide reasonable assurance that reported water and waste amounts are accurate.