

Crown Holdings, Inc.

Verification Criteria: Carbon Disclosure Project (CDP) Guidelines

ISO 14065:2013 "Requirements for Greenhouse Gas Validation and Verification Bodies for use in Accreditation or Other Forms of Recognition"

Footprint Period: 2018 (1st January – 31st December inclusive)

Objectives: Lucideon CICS was contracted by Crown Holdings Inc. (the reporter) to undertake the actions necessary to provide limited assurance verification of their GHG emissions for submission to the Carbon Disclosure Project (CDP), reporting under operational management control criteria, for the period 1st January 2018 to 31st December 2018.

Scope of the Verification

The verification covers the period 1st January 2018 to 31st December 2018 inclusive associated with Crown Holdings Inc. global operations. Where assumptions have been made then these have been documented for transparency. The verification was conducted to a limited level of assurance and concludes that the GHG Report (Assertion) is materially correct.

Data and calculations selected for verification were based upon a risk assessment approach. The verification also included 'boundaries' completeness checks. Data in spreadsheets were also examined and specific sampling of data was conducted giving consideration to raw data sources. Emission factors were found to be based on best available information and were from robust and recognised sources. Signode Industrial Group Holdings was acquired by Crown Holdings Inc in Q2 2018 (estimated to represent of the order 25% Crown Holdings Inc current emissions). Signode was declared excluded on basis of partial year and limited data for 2018. The intention of the reporter is to include Signode in scope in 2019.

Verifiers Opinion

Based on the evidence provided and the samples selected for verification, it is the opinion of Lucideon that the Crown Holdings Inc. assertion covering the period 1st January 2018 to 31st December 2018 is materially correct and is a fair representation of the GHG data and information and was compiled in conformance with the verification criteria described above. The data and information supporting the GHG Assertion were historical in nature.

Verified Emissions 2018:

SCOPE	Subscope	tCO2e (Location Based)	% Scope (Location Based)	% Total (Location Based)	tCO2e (Market Based)
1	Diesel	5,646	0.98%	0.41%	5,646
1	Fuel Oil	10,683	1.85%	0.78%	10,683
1	LPG	66,617	11.55%	4.87%	66,617
1	Propane	3,271	0.57%	0.24%	3,271
1	Natural Gas	490,506	85.05%	35.87%	490,506
	Scope 1 Totals	576,724	100.00%	42.18%	576,724
2	Electric Power	790,581	100.00%	57.82%	790,581
2	Renewable Energy Credits (REC)	NA	NA	NA	-960
2	Renewable Power-Offsite	NA	NA	NA	-37,551
	Scope 2 Totals	790,581	100.00%	57.82%	752,070
All	Total	1,367,305	tCO2e	100.00%	1,328,794



Andrew Shepherd
Lead Auditor
30th July 2019



David Robinson
Independent Reviewer
30th July 2019