



10 East 38th Street, 11th Floor
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www.CarbonVerificationService.com

July 11, 2018

To the Management of Praxair, Inc.

Carbon Verification Service, LLC was engaged by Praxair, Inc. to provide assurance of its global 2017 Key Performance Indicators (KPI) and other social metrics. 2017 was the eighth consecutive year that Carbon Verification Service was retained by Praxair to verify its KPIs. Upon being retained, Carbon Verification Service conducted a conflict of interest review to insure that its review would be free of bias and would be done on an independent basis. Carbon Verification Service provides only verification and auditing services to its clients, including Praxair, to avoid conflict of interest concerns. Carbon Verification Service is not owned or operated by any other entity.

The objective of the verification was to provide limited assurance of the reported KPI values and to assess the accuracy, completeness, relevance, consistency and transparency of Praxair's information and assertions. Carbon Verification Service assessed conformance of Praxair's GHG emission inventory with The Greenhouse Gas Protocol. The verification protocol employed for verification of Praxair's 2017 GHG emissions was ISO 14064-3 (2006): Specification with guidance for the validation and verification of greenhouse gas assertions. Consensus protocols for the verification of the KPI metrics, other than GHG emissions, do not currently exist. Carbon Verification Service utilized the same verification principles prescribed by ISO 14064-3 to guide the verification of this data.

Carbon Verification Service, LLC reviewed selected quantitative KPIs. The verification was based on desk audits of data from 54 sites that were, as in past years, selected so as to be representative of Praxair's global geographies and businesses. Site selection criteria also included prior usage of energy and water. We did not review all information and supporting documentation associated with the KPIs for all of Praxair's global locations and facilities.

Praxair management is responsible for the reported KPIs and for the process of assembling the data upon which the reported KPI values are based.

Based upon the verification work performed from April through June 2018, there is no evidence that Praxair's KPI data assertions, which appear in the table below, are not materially correct and are not a fair representation of data and information and have not been prepared in accordance with accepted standards and practice.

For Carbon Verification Service, LLC

A handwritten signature in black ink, appearing to read "James J. Groome".

James J. Groome
President



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PRAXAIR'S ASSERTIONS

Praxair reported the following KPI values:

Metric	2017 Value	Units of Measure
GHG Emissions Scope 1	8,820,000	Metric Tons CO ₂ e
GHG Emissions Scope 2	12,836,000	Metric Tons CO ₂ e
Proportion of reported Scope 1 and 2 emissions verified	100	%
Year-over-Year Change - Scope 2 Emissions	-0.3	%
Electricity Consumption	25,400,000	MWh
Natural Gas Consumption	2,303,000	MWh
Diesel/Gas Oil	340,000	MWh
Steam	1,229,000	MWh
Distillate Fuel Oil #2	7,900	MWh
Total municipal water supplies	22,200,000	Cubic meters
Fresh surface water	316,200,000	Cubic meters
Fresh ground water	9,254,000	Cubic meters
Once-Through cooling water returned to the source of extraction at similar or higher quality	340,234,000	Cubic meters
Total net water consumption	67,405,000	Cubic meters
NO _x Emissions	1,550	Metric Tons
SO _x Emissions	105	Metric Tons
VOCs	460	Metric tons
Total (Solid + Hazardous) Waste Not Landfilled	127,012,000	Lbs. of (Solid + Hazardous) waste not landfilled
Chemical Oxygen Demand	949	Metric Tons
Employee Lost Time Injury Frequency Rate	0.058	Lost time injuries per 200,000 hours worked
Employee Lost Time Injury Frequency Rate	0.290	Lost time injuries per 1,000,000 hours worked
Occupational Illness Frequency Rate	0.009	Occupational Illness Cases per 200,000 hours worked
Occupational Illness Frequency Rate	0.046	Occupational Illness Cases per 1,000,000 hours worked
Contractor Lost Time Injury Frequency Rate	0.0	Lost time injuries per 200,000 hours worked
Contractor Lost Time Injury Frequency Rate	0.0	Lost time injuries per 1,000,000 hours worked
Tier 1 Process Safety Events	0.107	Number of Events per 1,000,000 hours worked
Tier 1 Process Safety Events	0.021	Number of Events per 200,000 hours worked
Community Engagement: cash raised or donated by employees and facilities.	621,000	USD