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Verification of greenhouse gas assertions Hufvudstaden AB 2019

Used standard: SS-EN ISO 14064-3:2006

Reporting organization
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Introduction

2050 Consulting was commissioned by Hufvudstaden to provide independent third-party assurance over the content of their greenhouse gas (GHG) accounting and the energy consumption in facilities covering 1 January 2019 to 31 December 2019. Hufvudstaden needed an independent third-party assurance for their GRESB-reporting in 2020. The verification of Hufvudstaden's greenhouse gas assertions was performed according to the standard SS-EN ISO 14064-3:2006.

Hufvudstaden has been responsible for providing relevant climate-impact related data and the data for energy consumption. 2050 Consulting has assessed GHG data, energy consumption data, GHG information and information systems control in order to validate the reliability and completeness of GHG information and assertion.

No significant changes in the organization's GHG inventory have been made since the last reporting period.

Verification scope

Hufvudstaden's climate impact occurs in the company's properties situated in Gothenburg and Stockholm, Sweden. The impact includes car travel, own purchased energy sources for properties, energy consumption for heating and cooling, electricity use and leakage from entropy pumps.

Criteria

GHG Protocol: Corporate standard and ISO 14064-3.
GRI Guidelines for GHG accounting and reporting.

Level of assurance

Reasonable assurance engagement.

Types of GHG

CO_2 and HFCs.

Time period

January 1, 2019 - December 31, 2019

Verification techniques

- Interviews with Hufvudstaden employees responsible for collecting and compiling the data.
- Control of samples of the vouchers of used data.
- Control of all sources of used emission factors.
- Control of the calculations, key ratios and baseline scenario.

Hufvudstaden´s GHG disclosure 2019

The table below contains the following information:

- Year-over-year change in emissions (scope 1)
- Year-over-year change in emissions (scope 2)

Tons CO_2-eq		2019	2018	Change
Scope 1	**Total**	**255,7**	**265,0**	**-4%**
	Refrigerants	255,1	263,8	
	Cars	0,6	1,3	
Scope 2	**Total**	**1 039,5**	**1 367,7**	**-24%**
	Heating & Cooling	1 039,5	1 367,6	
	Electricity	0	0	
TOTAL	**Total**	**1 295,2**	**1 632,6**	**-21%**

Hufvudstaden has chosen to report normal year corrected heat consumption in the section Energy.

For the calculation of GHG´s though the actual heat consumption has been used in accordance with ISO 14064-3.

The energy consumption has been validated both regarding the actual consumption and the normal year corrected heat consumption.

The reason for the decrease of emissions is basically:

- The consumption of district heating was 12% smaller and the average emission factor for district heating was 13% lower than 2018. Those two factors contributed almost equally to the 24% decrease of emissions in scope 2.
- Leakage of refrigerants vary from year to year and was slightly smaller than 2018.
- The emissions from cars was about the half of the emissions in 2018.

Except for the decrease of consumption and emissions from district heating also the consumption of electricity and district cooling decreased.

Energy (MWh)	2019	2018	Change
Electricity	**37 627**	**39 705**	**-5%**
District heating	**16 539**	**18 796**	**-12%**
- whereof Stockholm	*11 250*	*12 733*	*-12%*
- whereof Gothenburg	*5 289*	*6 063*	*-13%*
District cooling	**5 331**	**7 007**	**-24%**
- whereof Stockholm	*2 664*	*3 791*	*-30%*
- whereof Gothenburg	*2 667*	*3 216*	*-17%*
TOTAL	**59 497**	**65 509**	**-9%**

Conclusion statement

Hufvudstaden has accounted for their GHG emissions in accordance with GHG protocol: Corporate standard, ISO 14064-3 and GRI reporting guidelines. Hufvudstaden has a proper control over the company's energy use in its buildings and the leakage of refrigerants. All relevant aspects of Hufvudstaden's activities are accounted for. 2050 Consulting has verified the calculations, samples of vouchers for the data and origin of used emission factors. Based on the verification process, the GHG assertions is materially correct and is a fair representation of the GHG data and information. With a reasonable assurance, the presented figures give a correct estimate of Hufvudstaden's GHG emissions in scope 1 and 2 and the energy consumption during 2019. The energy consumption data has been verified, both the actual consumption and normal year corrected heat consumption.

Stockholm, 27th of February 2020

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