DFGE

Institute for Energy, Ecology and Economy

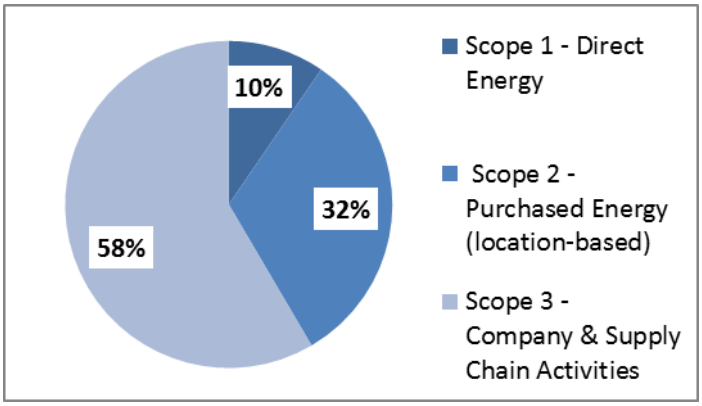
Executive Summary of Avnet's Carbon Footprint Analysis 2016

Summary Version, April 2016

Project Overview. The project was to update the global corporate carbon footprint for Avnet, Inc. for CY15. Avnet has been assessing its carbon footprint since 2009. Due to the preliminary work, it was possible to accelerate the process in data gathering and calculation. The data gathered included internal data from Avnet's different regions and business units, and scientific public sources. The calculation has been achieved by the holistic methodological TopDown[1] approach, based on experiences of DFGE and combined with mathematic methods following highly reliable estimates based on industry-proven algorithms.

Avnet's Carbon Footprint 2016. The Carbon Footprint for Avnet was calculated via a TopDown analysis. Focusing on the "sensitive analysis," the input data are based on confidential internal data, confirmed by former surveys for specific Avnet locations, included in Avnet publications and verified by published default values of comparable industries and standards considering the different balance boundaries. The estimated total Carbon Footprint for Avnet's international activities is 200,493 t CO2e (CY 2015):

Figure 0-1 Avnet's Carbon Footprint



Confidence Belt. Results are verified by an error analysis for statistical data, the "corrected standard deviation," including calculation of variants for the particular balance levels. This

[1] See also http://www.dfge.de/wp-content/uploads/2012/03/DFGE_CF_TopDown-Approach_Mar2012.pdf

leads to a bandwidth for each balance level that includes the real Carbon Footprint. Overall the evaluated bandwidth of 10% is considered good according to GreenHouse Gas Protocol[2], being between 5 to 15%.

Comparison with Avnet's CF 2015 (covering CY 2014). The actual study covers the calendar year 2015. Compared to the last year's study, Avnet's Carbon Footprint decreased from 210.2 kt to this year 200.5 kt CO_{2e}. Due to a better data collection for all major locations, including more granular data, a clear allocation on thermal energy and electricity emissions was possible. The commuting data was also updated with recent and more granular sources. The Carbon Footprint divides into the following balance levels indicating also the changes of the values compared to last year's study:

Changes in absolute values rounded to whole numbers Balance group	2016 (CY 2015) Results [1000t CO2eq]	2015 (CY 2014)	Change
Scope 1 - Energy	19,143	21,423	-11%
Scope 2 – Electricity	64,171	63,964	+0.3%
Scope 3 – Purchased Goods & Services	6,833	7,706	-11%
Scope 3 – Capital Goods	18,343	21,559	-15%
Scope 3 – Waste	7,094	7,600	-7%
Scope 3 – Business Travel	19,122	19,133	-0.1%
Scope 3 – Commuting	30,887	32,831	-6%
Scope 3 – Transportation	34,899	35,957	-3%
Total	**200,493**	**210,174**	**-5%**

Almost all emissions decreased in CY2015 compared to CY2014. This is the result of 1) Avnet's efforts in managing and reducing CO2 emissions, and 2) better data collection.

- Avnet has invested in renewable energy consumption, which enabled the company to reduce scope 1 emissions and maintain the level of scope 2 emissions despite an increase in electricity consumption.
- This year data collection features better data regarding employee headcount, areas and exact revenues, which are used in the TopDown approach to upscale the calculation. These figures are lower than the previous year, because of a slight decrease in sales and the real estate strategy. They also are lower because the data is more comprehensive whereas the previous year's results were based on estimates,

[2] See also: http://www.ghgprotocol.org/

such as employee headcount. More accurate data let to a bandwidth reduction from CY14 to CY15.

Avnet's Key factors. Following key factors (totals) show Avnet's evolution in the past 12 months and compares the results.

Figure	Value [CY15]	Value [CY14]	Unit	Change in %
Revenue	27.35	28.12	Billion USD	-3%
Employees	17,735.00	19,000.00	Number of employees, not FTE	-7%
Floor Area	7,397,809.00	8,800,000.00	sft	-16%
Emissions per unit of revenue	7.33	7.47	t CO2e/million USD	-1.9%
Emissions per employee	11.30	11.06	t CO2e/employee	+2.2%
Emissions per floor area	0.29	0.26	t CO2e/m²	+13.5%

Avnet again achieved a carbon footprint reduction. This demonstrates continuous improvement in efficiency and organization. However, the efforts in sustainability measures and initiatives should be continued and further developed.

All CO_2-Values are calculated in CO_2-equivalents CO_{2e}. The full and final results can be found in the extended report.

Munich/Germany, April 2016

The DFGE – Institute for Energy, Ecology and Economy provides consulting and auditing services to realize a Green Vision integrated in corporate business processes. Strategic advice on topics like technology, energy and emissions is expanded to business related and socio-economic aspects. Services range from consultancy in developing and managing customized analysis for testified Carbon footprint to validation of analysis methods and results for sustainable accuracy. As independent Institute DFGE's work is based on advanced scientific and research methods and institutionalized standards.

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