

# **Climate Assessment**

## **Beckers Group 2014**

#### Summary

Beckers Group has carried out a comprehensive assessment of its carbon emissions for 2014, which documents information about the company's climate impact. The web-based tool Our Impacts was used, with support from the Swedish company U&We.





The assessment covers scope 1 and 2 and parts of scope 3, using the GHG (Green House Gas) Protocol guidelines.

#### **Carbon Emissions reported**

For **2014** Beckers group emissions was **53,564 tCO2e** compared with 2013's 57,393 tCO2e which represents a **reduction by 7%**.

It is worthwhile to notice that during the year the group production increased by almost 3 % and still the total carbon emissions decreased. This means that the decrease in carbon emissions per ton produced paint was 10 % from the 0,40 ton tCO2e reported in 2013 to the 2014 result 0.36 tCO2e.



#### Purpose & Background

The purpose of measuring climate data is to formulate a basis for action in order to reduce emissions and to provide a comparison with the base year emissions. A comparative analysis is a prerequisite to systematically work with reduction initiatives. The base year selected for climate assessment of Beckers' emission is 2013.

By working with the climate reporting the sites focus on their climate impact. We conclude that our biggest carbon emissions derive from energy use at sites and transportation to and from our production sites. These are the areas where we need to find solutions that decrease our carbon emissions. Already now we work with reduction of energy use and also production gases (VOC emissions) and achieved a reduction in both areas, thus reducing carbon emissions by over 2,200 tons.



To visualize the impact Beckers Group have on climate change, the unit of measurement, Carbon dioxide equivalent (CO2e), has to be tangible. As per US EPA findings, 1 ton CO2e emissions can be offset by 3,318 sq. mtrs of US forest land in one year.

To aid better comprehension, the emission of 1 ton CO2e was also equated to equivalent number of km driven by an average car (Fuel economy was assumed to be 9.1 km/litre), in accordance with EPA calculations. After calculating, it was found that 1 ton CO2e is emitted on driving an average car for 3,831 km.



### Results

Total emissions for Beckers Group during 2014 amounted to **53,564 tons of carbon dioxide equivalents (tCO<sub>2</sub>e)**, which is a decrease of 3,829 tCO<sub>2</sub>e, or almost 7%, compared to 2013. The results encompass emissions from 21 sites around the world, including the corporate office in Berlin.

By Activity	2014 tCO <sub>2</sub> e	Percentage of total
Premises	18,728	35%
Outbound third-party deliveries	14,021	26%
Inbound third-party deliveries	10,003	19%
Production gases	5,900	11%
Business Travel	3,061	6%
Company owned vehicles	1,388	3%
Waste	446	1%
Paper	18	0%
Total	53,564	

Table 0-1 Emission results 2014

The activities with the highest emissions are Premises (35% of total emission), Outbound Third-Party Deliveries (26%) and Inbound Third-Party Deliveries (19%).

Premises involve the total energy consumption and water usage on site. The system boundary for inbound and outbound third-party deliveries is the transportation by the last third party contractor from supplier to the sites, and transportation by the first third party contractor from site to customer, respectively.

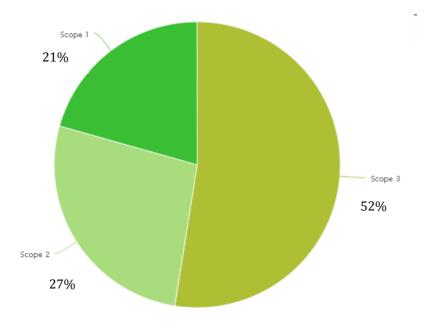


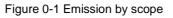
Major change in activities, over 2014, is depicted in Table 0-2. Inbound third party deliveries and Production gases (VOC emissions) achieved major reduction in 2014, while Premises contributed significantly to the reduced impact, at 1,308 tCO2e. Emissions due to Business travel increased in 2014, contributing 324 tCO2e.

By Activity	2013 tCO <sub>2</sub> e	2014 tCO <sub>2</sub> e	Percentage change
Premises	20,036	18,728	-6.5%
Company owned vehicles	1,382	1,388	0.4%
Business Travel	2,737	3,061	11.8%
Inbound third-party deliveries	11,585	10,003	-13.7%
Outbound third-party deliveries	14,368	14,021	-2.4%
Paper	22	18	-15.1%
Waste	432	446	3.3%
Production gases	6,833	5,900	-13.7%
Total	57,393	53,564	-6.7%

Table 0-2 Comparative analysis of changes in activity

The emission distribution for Beckers Group by scope is outlined in Figure 0-1.





The **Emission Factors** of 2014 for various sources of emission have been analysed to track changes arising from technical improvements and calculation methods. The results of the analysis depict that, most emission factors show reduced values for Electricity, Road transports, Air travel and Rail travel. Note that, electricity



emission factors are country specific and the emission factor for electricity in the UK showed the only major rise by 11% due to higher usage of coal in national grid mix.

Sweden decreased the climate impact from electricity with over 80%, by choosing renewable energy, to hydro power.

To gauge the emission change over the year, with regards to the growth of the company, **Key performance indicators (KPIs)**, are adopted. The KPIs for 2014 include: products (volume produced in metric tons), full time employee (FTE) and total sales (KSEK).

The total KPI values for the Group is as illustrated in Table 0-3

FTE (Number)	1,788
Product (tons)	147,960
Sales (KSEK)	4,912,014

Table 0-3 Emission Intensity – KPI 2014

An analysis of the emissions per KPI compared to the base year is depicted in Table 0-4. The range of reported values by site per KPI for 2014, is also illustrated in the same table.

KPI	2013	2014	Lowest	Highest
Total tCO2e/FTE	32.6	29.9	5.1	53.7
Total tCO2e/turnover (MSEK)	12.5	10.9	6.2	19.7
Total tCO2e/ton product	0.40	0.36	0.19	1.50

Table 0-4 Annual emissions per KPI

Overall, 2014 climate impacts have reduced at group level compared to 2013 figures in all 3 KPIs.

Continuous improvement of data quality, data collection methods and reporting methods, have brought confidence and awareness in data of carbon emission among sites. The resulting carbon footprint thus better reflects the total emissions from Beckers Group and improves the possibility for comparisons between sites.



### **Participants**

Contact persons

- from Beckers Shaan Akerkar and Ingela Nordin
- from U&We Göran Wiklund, Katrin Dahlgren and Anna Larsson

Representatives from each business unit at Beckers have provided the emissions data.

Reporting sites:

Americas: Chicago and Fontana

**SAPME (South Asia Pacific Middle East):** Goa India, Kuala Lumpur Malaysia, Ho Chi Minh Vietnam, RAK UAE, Jakarta Indonesia and Dhaka Bangladesh

Greater China: Guangzhou, Shanghai and Tianjin

**Europe & Africa:** Headquarters in Berlin, Caleppio Italy, Dormagen Germany, Montbrison & Feignies France, Liverpool UK, Märsta Sweden, Tarnow Poland and Johannesburg South Africa and Lagos Nigeria.

## Methodology

Beckers use the GHG (Greenhouse Gas) protocol as guideline.

GHG Protocol divides greenhouse gases into three scopes:

- Scope 1 direct GHG emissions from sources that are owned by the company, for example, emissions from combustions in boilers, furnaces and vehicles.
- Scope 2 indirect GHG emissions from purchased electricity, heating/cooling or steam consumed by the company
- Scope 3 other indirect GHG emissions, which is an optional category.

We have decided to report on Scope 1 and 2 emissions and Scope 3 for Business Travel and inbound and outbound deliveries to and from our sites and the waste generated. Our scope 3 emissions can also emanate from upstream emissions for Scope 1 and 2 according to the tool used emission factors based on GHG protocol.