ECO DISHWARE
FROM FINLAND

Emission calculation 2023

02/2024

Emission Calculation of 2023

The emission calculation was made in February 2024. This calculation covers the company's accounting period from February 2023 until January 2024.

The calculation has been done by the company's employee Niina Myyry together with the company's CEO Arja Kaasinen. The calculation is part of the ELY Centre's joint procurement training called "With Emission Calculation Towards Carbon Neutrality". The training was implemented by Ktsh Oy Consultancy.

As a part of the training, there has been a consultant from Ktsh Oy consultancy to help the company in the process of calculation.

Earlier Emission Calculations

The company has been calculating their carbon footprint from the year 2022.

PRODUCT CARBON FOOTPRINT CALCULATION
Single packed Kupilka 21 cup and teaspoon

In the calculation conducted in 2018, the carbon footprint resulting from the production of Kareline material, Kupilka 21 cup and Kupilka teaspoon was 0 kg CO_2e. When considering emissions from packaging materials, alongside the production and transportation of raw materials, the result was 0.23 kg CO_2e. The calculation was carried out by LCA Consulting Oy.

Kupilka and Plasthill Oy want to be involved into building a sustainable and better tomorrow. This work often begins with an examination of one's own operations, and a starting point for this is to assess the current situation of company's emission and practices. This is followed by the goal setting, alongside the planning, scheduling and following the actions.

The emission calculation and following the results support setting, following and achieving the quality- and environmental goals stated in the company's quality- and environmental system.

The company's quality and environmental system is based on ISO 9001:2015 and ISO 14001:2015 standards. The emission calculation performed aligns with the requirements of the GHG Protocol. The system nor the emission calculation have not been audited by a third party, but this is set as a goal for the near future.

Why emission calculation?

In 2023 Plasthill Oy committed to the UNFCCC's Race to Zero initiative. The company is partnering with
SME CLIMATE HUB

Race to Zero is an international campaign launched by UNFCCC. This campaign brings non-state actors and encourages them to set the goals and take concrete actions to halve their emissions by 2030.

By committing to the initiative and the goals of SME Climate Hub, Plasthill Oy has committed to halving their own emissions by 2030. With this the company must start emission calculation by summer 2024.

Why emission calculation?

SME Climate Hub
COMMITTED
2023

KUPILKA

Plasthill oy is a proud member of **THE SME CLIMATE HUB**, a global initiative that empowers small to medium sized companies to take climate action and build more resilient businesses.

Through the SME Climate Hub, we commit to lowering our impact on the environment through authentic action. **By 2030, we will halve our emissions** and participate in the UN's Race to Zero campaign.

How?

The company's emission calculation is done with the calculation tool provided by the Central Chamber of Commerce. This calculation tool is based on the standards and guidelines of the GHG Protocol.

All the company's relevant actions are considered in the calculation, without excluding anything essential factors from the calculation. This means that the overall result of the calculation is reliable.

In calculation, the aim is to use primary data for every factor possible. If there is no primary data available, the valid and consistent estimate is used.

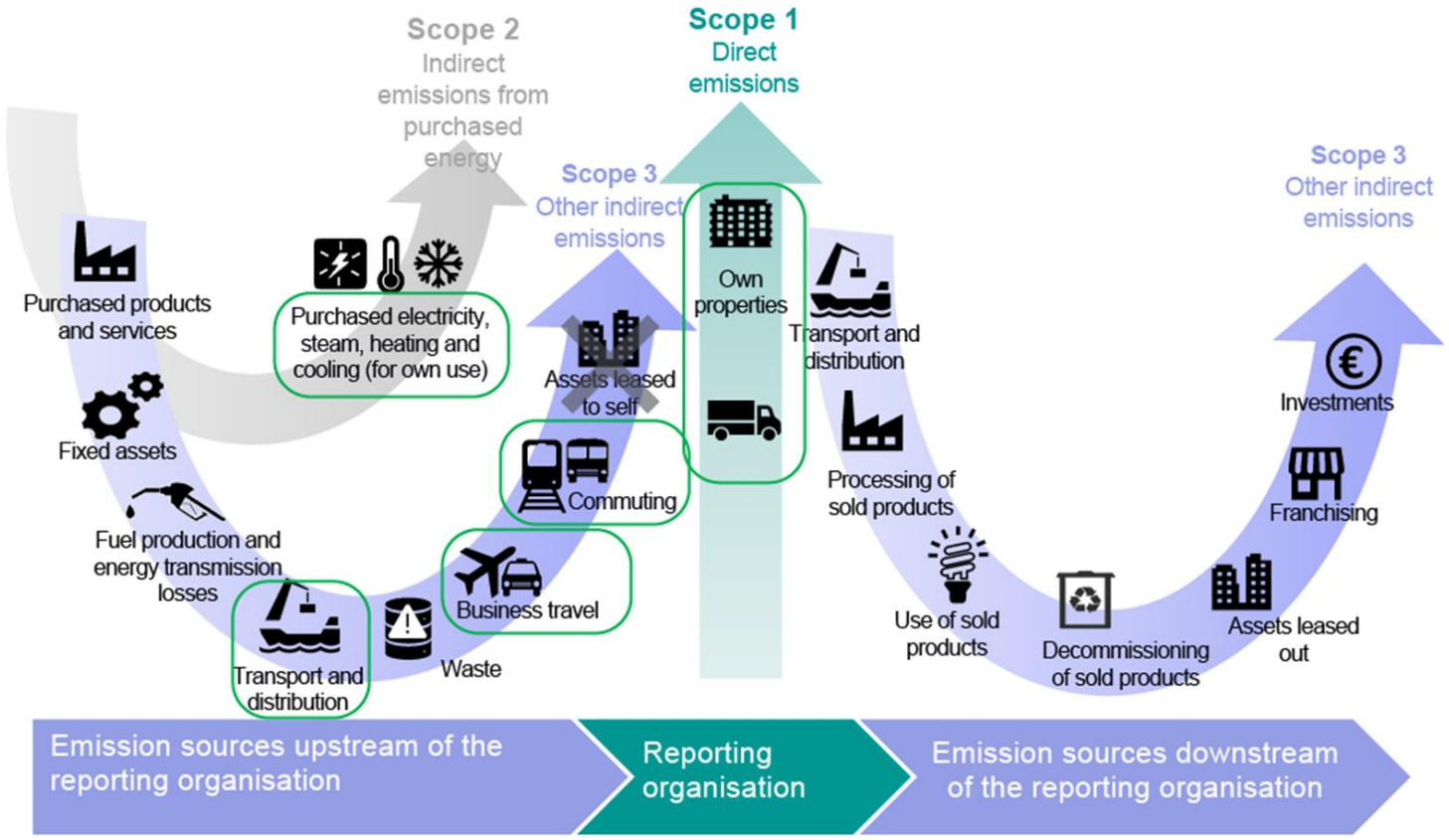

Image source: https://kauppakamari.fi/en/services/climate-commitment/how-to-apply-for-the-climate-commitment/

THE FACTORS CONSIDERED

The factors marked with green are considered in the calculation according to the instructions by The Finland Chamber of Commerce.

SCOPE 1 Direct emissions caused by own actions
Own vehicles and fuels, refrigerants, other direct emissions

SCOPE 2 Purchased energy
Purchased electricity, heating, steam, cooling

SCOPE 3 Other indirect emissions
Logistics, commuting, business travel



What is considered in the calculation?

Emissions according to the Scope 1 & 2 where in 2023

3,05 tCO_2e

Carbon handprint formed by the amount of sold solar energy

-3,20 tCO_2e

Scope 1 & 2

How is this possible?

SCOPE 1 Direct emissions caused by own actions
One car in the use of the company (diesel)
Hall heaters are used for extra heating when needed (gasoline)

SCOPE 2 Purchased energy
All electricity used is EKOenergy ecolabelled renewable energy
Premises are mainly heated with waste heat recovered from manufacturing process

Carbon handprint
The surplus solar electricity produced by the company's solar panels is sold. This is given a negative value in the calculation as it is considered as an emission decreasing action, i.e., as a carbon handprint

The surplus solar energy produced by the company's own solar panels, and selling it compensates the carbon footprint caused by the company's fuel consumption

Emissions according to the Scope 3 in 2023

30,68 tCO_2e

Scope 3

What was considered in the calculation?

LOGISTICS
12,56 tCO_2e

The calculation is partly based on an evaluation as there is no emission report available from all the logistic services used

BUSINESS TRAVEL
4,92 tCO_2e

The emissions caused by business travel are calculated according to the kilometers invoiced

The flights compensated during the purchasing process are not considered in the calculation.

The emissions caused by long-distance train travelling is estimated to be 0 kg CO_2e. The number is tracked to see if there is growth in the usage of train.

COMMUTING
13,20 tCO_2e

The carbon footprint produced by the commuting is calculated by counting the average length of the commute of all employees using a car for the commute. The average distance is 35,8 km in day per employee. 11 employees out of 18 employees are using a car for commute in total.

Estimation of the results

SCOPE 1-2 CARBON FOOTPRINT

3,05 tCO_2e

SCOPE 3 CARBON FOOTPRINT

30,68 tCO_2e

OVERALL CARBON HANDPRINT

-3,20 tCO_2e

When considering the areas mentioned above, the emissions of the company are relatively small.

The largest emissions in the company are caused by the logistics and commuting, both of which are essential for productive business operations.

The carbon handprint is considered to be formed by surplus solar energy produced and sold. By selling this emission-free energy, a company enables another electricity consumer to reduce its own carbon footprint.

Estimation of the results

In all emissions calculations, uncertainties and sources of error may arise. The reasons for this include possible data gaps, accuracy of measurement methods, and assumptions made in the calculations. Variability in emission factors and delays in updates also contribute to inaccuracies in the calculations.

Kupilka and Plasthill Oy are committed to transparency and responsibility in all our operations, including the assessment of our environmental impact. For this reason, the company have evaluated the reliability and coverage of their emission calculation. The evaluation has focused on examining the methods used, the selected emission sources for calculation, and the impact of potential sources of error and uncertainties on the reliability of our calculations.

To minimize the sources of error and uncertainties, the most up-to-date and comprehensive information as possible in our calculations was used in the calculation. This involves selecting reliable data sources from Plasthill Oy's information systems, regular data updates, and transparency in the methods and assumptions used for the calculations. By using standardized emission accounting protocols and tools, we ensure that our emissions accounting adheres to internationally accepted practices.

The company have ensured that our emissions calculation covers all significant emissions resulting from their operations. This includes both direct and indirect emissions based on specific criteria, providing a comprehensive picture of the company's environmental impact. Based on their review, the company can confidently state that their emissions accounting is reliable and comprehensive, with no significant risks related to reliability, coverage, or other aspects.

The company's goal is to halve its emissions by 2030 in accordance with the Race to Zero campaign. The baseline for the reduction is the year 2023.

Reducing the Carbon Footprint

What can we do to improve?

FUEL
- The company's van switches to Neste My Diesel fuel
- Optimizing driving routes

LOGISTICS
- Investigating emission-free or lower-emission options offered by used logistics companies

COMMUTING
- Can the company encourage employees to carpool?
- In the summer of 2023, the company provided a bicycle benefit for electric bikes to employees. How could bicycle usage for commuting be further encouraged?

BUSINESS TRAVEL
- Can we increase domestic travel by train?
- Compensating for air travel emissions through purchases via airlines

Reducing the Carbon Footprint

A significant part of the company's emissions currently is caused by the logistics.

Many companies in the logistics industry have set themselves goals to reduce their emissions in near future. Lower emissions on the logistics would significantly affect the company's total emissions.

POSTI

- Posti is commited to reduce their own greenhouse gas emission to zero and achieve fossil-free transport by 2030. The goal is to achieve net-zero emissions by 2040.

https://www.posti.com/en/sustainability/environment/toward-emission-free-deliveries/

- Posti Green freight-additional service

https://www.posti.fi/en/delivering-with-care/success-of-companies/freightservices/green-freight/

MATKAHUOLTO

- The aim of Matkahuolto is to halve their emissions from their 2020 levels and be carbon neutral by 2030

https://www.matkahuolto.fi/sustainability/we-generate-positive-environmental-impacts

Compensation

Certain emission-producing activities, such as commuting and logistics, are necessary to ensure profitable business operations. Therefore, the company has decided to compensate the remaining, inevitable emissions, starting from 2024.

For the compensation, the company will choose a reliable and transparent service provider during the year 2024. The goal is to be able to provide support locally through compensation locally for e.g., to forest owners.

After compensation, the company's total emissions will be 0 kg CO_2e from 2024

Reducing the Carbon Footprint

The next calculation will be carried out in February 2025 for the preceding fiscal year.

The result of calculation becomes more reliable by including more areas to the calculation. This is why the company aims to refine and expand the calculation in the future. In the next calculation, consideration will be given to waste, as well as to fuel production and energy transmission losses, in addition to the areas presented in this report

Future calculations

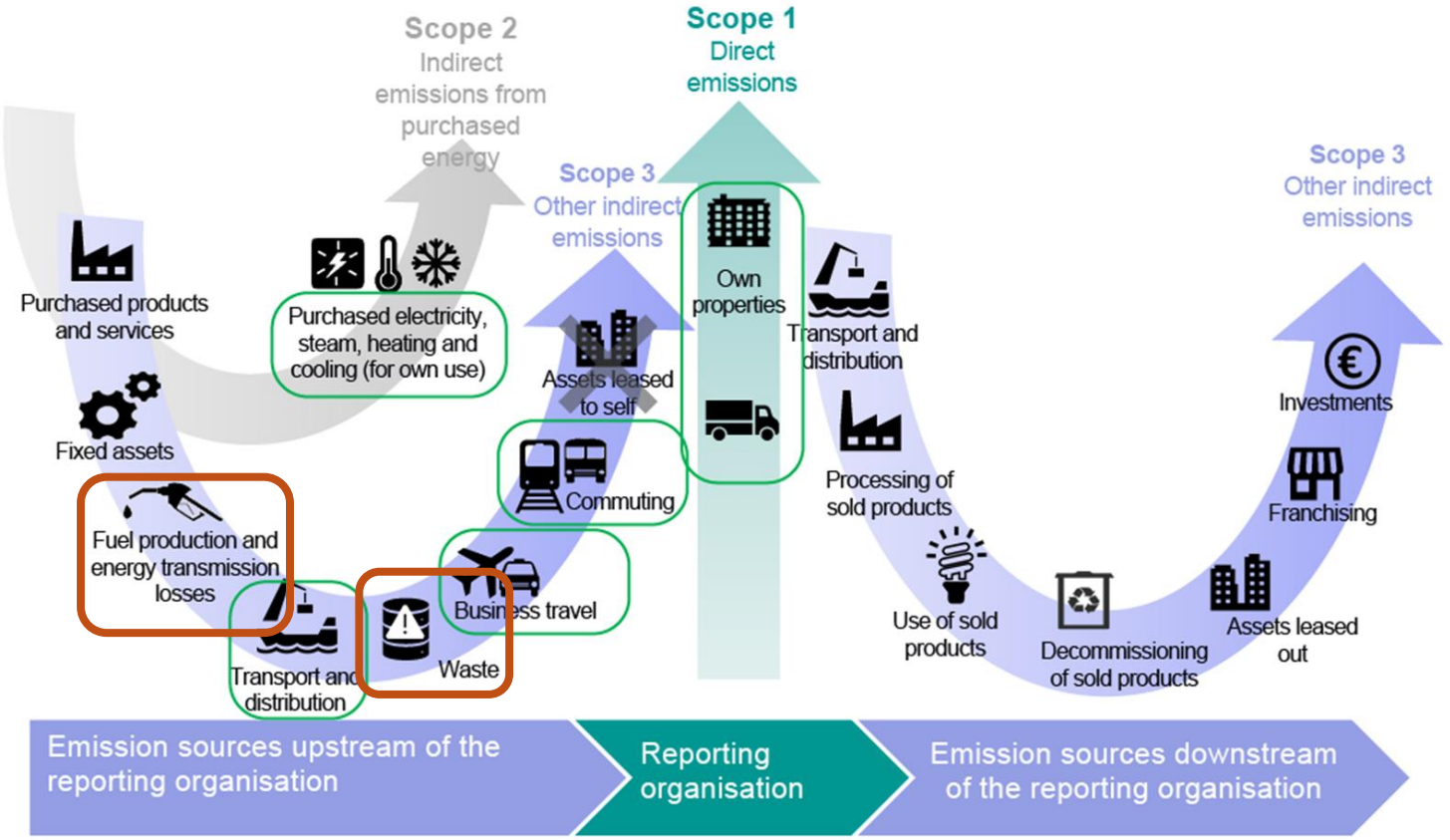

Image source: https://kauppakamari.fi/en/services/climate-commitment/how-to-apply-for-the-climate-commitment/

AREAS TO BE CONSIDERED IN FUTURE CALCULATIONS
For the 2024, emissions caused by the waste alongside fuel production and energy transmission losses will be considered.