NØIE

CARBON FOOTPRINT METHODOLOGY

PURPOSE

This document provides a detailed walkthrough of our methodology for calculating Nøie's carbon footprint in 2020. Here, you can read all about our approach, considerations, data collection methods, and limitations for all scopes of our calculations.

The document accompanies our Carbon Footprint Guide and our GHG Calculation Sheet. The GHG Calculation Sheet has been developed by The Footprint Firm. We partnered with The Footprint Firm to make our baseline calculations for 2020. Our calculations follow the Greenhouse Gas (GHG) Protocol, which covers all three scopes of our carbon footprint.

The global cosmetics and personal care industry is estimated to account for 0.5 - 5 % of global GHG emissions. That's a huge margin of error. To accommodate that, we need more data to understand exactly how much our industry is polluting and subsequently where we need to focus our emission reduction efforts.

As a result, we are making our guide, calculation sheet, and methodology fully available for you to explore and apply. We know these resources won't give you all the answers, but it serves as a starting point. We sincerely hope our actions and full transparency will inspire you to start making similar efforts and documenting those.

Please reach out to us on email footprint@noie.com if you have any questions or comments to this document.

CHARACTERISTICS OF OUR BUSINESS AND PRODUCTS

Nøie is a direct-to-consumer skincare and technology company. We're here to improve the quality of life for people with skin concerns by creating the world's best customised skincare. And we're here to do so the right way: With a truly caring approach towards each other, our community and the planet.

The following practices are important to our business:

- **We use a mix of organic and synthetic ingredients in our formulations to make our customised products and we prioritise organic ingredients**

- **All our products are manufactured locally in Denmark and we prefer European manufacturers for our packaging**

- **We use post-consumer recycled (PCR) materials to make our packaging and we work hard to increase the amount of PCR materials**

- **All our packaging is recyclable**

- **We only use FSC certified wood and paper materials to ensure responsible and sustainable sourcing**

We work to reduce our carbon footprint over time and hold ourselves accountable for the emissions we do have. We offset our carbon footprint of Nøie's entire supply chain through an internal carbon tax by investing in a diversified portfolio of offsetting projects through our partnership with <u>Klimate</u> and by following the guidelines laid out by <u>The Oxford Offsetting Principles</u>.

EXCLUDED CATEGORIES

The following categories in scope 3 of the GHG Protocol weren't relevant for Nøie:

- Scope 3.8: Upstream leased assets
- Scope 3.10: Downstream processing of sold products
- Scope 3.13: Downstream leased assets
- Scope 3.14: Downstream franchises
- Scope 3.15: Downstream investments

INCLUDED CATEGORIES

What follows next is a description of all scopes and categories that represent all of Nøie's business activities throughout our value chain. We have documented what data collection method and type of data we have used to arrive at the result in each category. We have also highlighted limitations, missing data, and other relevant information.

Our total carbon footprint for scope 1, 2, and 3 in 2020 was 210 tons of CO_2e.

Under each category, you can see how much it contributes to the results.

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SCOPE 1: DIRECT EMISSIONS FROM OPERATIONS THAT ARE OWNED OR CONTROLLED BY THE REPORTING COMPANY

Share of NØIE's carbon footprint: 0.63 tons CO$_2$e (0.30%)

Method: Activity-based

Nøie owns no company vehicles.

The direct emissions we have comes from operating our production facilities. Fuel oil is used to produce some of our products and to heat up the facilities.

We collected primary activity data from the production facility on how much fuel oil is used per kilo of product produced. We found the emission factor from <u>DEFRA conversion factors 2020</u>.

The calculation looks like this:

LITRES OF FUEL OIL X KILOS PRODUCED X EMISSION FACTOR = KG CO$_2$E

We also estimated our share of the storage space by looking at the total pallet capacity, estimating fuel oil use per day and calculating our total pallet-days (that's how many pallets we stored in 2020 multiplied by how many days they were stored) to arrive at our fuel consumption for heating up the storage space.

The calculation looks like this:

TOTAL PALLET CAPACITY X FUEL OIL USE PER DAY X TOTAL PALLET-DAYS X EMISSION FACTOR = KG CO$_2$E

SCOPE 2: INDIRECT EMISSIONS FROM THE GENERATION OF PURCHASED OR ACQUIRED ELECTRICITY, STEAM, HEATING, OR COOLING CONSUMED BY THE REPORTING COMPANY

Share of NØIE's carbon footprint: 3.97 tons CO$_2$e (1.89%)

Method: Activity-based

For scope 2, we included our office space, production facility, and distribution facility.

In 2020, we were part of a coworking community and our production and distribution center were also contracted by third parties, so we needed to calculate our share of the total capacity for each location.

At our office, we collected data from the coworking space of their total consumption of electricity and district heating and calculated our m^2 share of the building. We also included an estimation of our share of common areas to get as close to the actual picture of our consumption as possible.

At our production facility, we estimated electricity consumption (in kWh) per ml of product produced and multiplied that with our total ml of products produced in 2020 to arrive at our total electricity use. We also included electricity at the storage by calculating daily electricity use and multiplying that with our total pallet-days.

At our distribution center, we received numbers on total monthly heat and electricity consumption and calculated our m^2 and m^3 share of the total facility to arrive at our total consumption of heat and electricity.

The heating consumption was provided in cubic metres, so we had to convert it to MWh by using the conversion factor from this dataset.

SCOPE 3.1: UPSTREAM PURCHASED GOODS AND SERVICES

> **Share of NØIE's carbon footprint: 186.38 tons CO$_2$e (88.64%)**
>
> **Method: Activity-based and spend-based**

This category constitutes the majority of Nøie's emissions and we used different data collection methods to make the calculations, so we have divided it into sub-categories.

3.1.1 Packaging and ingredients

For all of our packaging and ingredients we used the activity-based method. We knew how many units and kilograms we had purchased down to the comma, so that part was easy.

For our cardboard and paper materials, we received either specific emissions data from the supplier or found applicable emission factors in the ecoinvent database.

For our plastic bottles, we couldn't receive data from our suppliers, so we relied on emission factors from **ecoinvent** entirely.

Our raw ingredients were a bit more tricky to deal with. We couldn't get emission factors from our suppliers on any of our ingredients. And through **ecoinvent**, we could only obtain emission factors on some of our ingredients.

Instead, we read through scientific papers to find and estimate emission factors based on literature and studies.

Because our ingredients are such an integral part of our business, we rated the data quality for each ingredient from "VERY GOOD" to "POOR". Only 32% of our ingredients got a "VERY GOOD" or "GOOD" rating while the remaining 68% got a "FAIR" or "POOR" rating for their data quality.

This calls for stronger collaboration in the supply chain and more data.

Rating of our ingredients:

- VERY GOOD = 21%
- GOOD = 11%
- FAIR = 36%
- POOR = 32%

We also weighed and accounted for the tertiary packaging (plastic and cardboard) used to: 1) transport our primary packaging and raw materials to our production facility and 2) transport final goods from our production facility to our distribution center.

3.1.2 Lunch meals

Based on Scarborough et al. (2014) we estimated kg CO_2e per meal for three types of meals: Vegetarian meal, fish meal and meat-based meal. We did so by using a daily average calorie intake of 2000 kcal and three daily average meals as functional units.

We then did an employee survey to get data on our team's dietary options to arrive at total meals for each option.

3.1.3 Hardware

We received activity-based data from our suppliers. Apple, for instance, provides numbers on carbon emissions for all their products. See an example here on the second page.

For hardware items where specific product data wasn't available, we calculated an emission factor per kilo of hardware of 65 kg CO_2e based on a paper on life cycle assessments of consumer electronics.

3.1.3 Other goods and services

For all other goods and services purchased, we applied the spend-based method.

We also included all of our advertising spends, and we're happy we did, because the results surprised us. It turns out that 28% of our total emissions in 2020 comes from digital ad services such as Facebook, Instagram, Google, and Snapchat. Few people are aware of the fact that digital ad spend leaves a footprint, but it does and in our case it's quite significant.

How did we arrive at the result? We calculated an emission factor per DKK spent by taking, for instance, Facebook's total emissions divided by their revenues (both numbers are publicly available) and then multiplied that with our total ad spend on Facebook.

For the remaining goods and services purchased, we categorised all items into categories that can be found in Defra's Table 13 where emission factors are available.

Examples of categories are: Information services, Legal services, and Paper and paper products. The numbers in this database are from 2011, so it's important to adjust the factors to 2020 numbers. See how this is done with the Spend-based calculator in our **GHG Calculation Sheet**.

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SCOPE 3.2: UPSTREAM CAPITAL GOODS

Share of NØIE's carbon footprint: 2.16 tons CO_2e (1.03%)

Method: Activity-based

Our capital expenditures are quite small. We only had a few capital goods investments in 2020. We applied the same emission factor, as for the hardware in category 3.1, where specific product emissions weren't available, and multiplied that with the weight of each capital goods.

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SCOPE 3.3: UPSTREAM FUEL- AND ENERGY-RELATED ACTIVITIES (NOT INCLUDED IN SCOPE 1 OR SCOPE 2)

Share of NØIE's carbon footprint: 1.25 tons CO_2e (0.59%)

Method: Activity-based

All the data needed for this category is the same as in Scope 1 and 2.

Scope 1 and 2 don't account for the extraction, production, transportation, and T&D losses[1] in the system, but category 3.3 does.

For upstream emissions from purchased fuels, electricity and energy, we used WTT (well-to-tank) emission factors from <u>DEFRA conversion factors 2020</u> and multiplied that with litres and kWh purchased, respectively.

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SCOPE 3.4: UPSTREAM TRANSPORTATION AND DISTRIBUTION

Share of NØIE's carbon footprint: 8.31 tCO$_2$e (3.97%)

Method: Activity-based

In this category, we included all shipments of our packaging materials from the supplier to our production facility. We found emission factors per ton-kilometre (tkm)[2] from <u>DEFRA conversion factors 2020</u>. We then calculated tons purchased and the distance it had travelled (tkm) with truck, cargo plane, and cargo ship, respectively. We found the distances by using Google Maps, <u>https://sea-distances.org</u> and <u>https://www.distance.to</u>.

We didn't include upstream transportation of our raw ingredients from our suppliers to our production facility, as we were unable to obtain information on where exactly the ingredients are produced, extracted, and processed and thus shipped from.

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SCOPE 3.5: UPSTREAM WASTE GENERATED IN OPERATIONS

Share of NØIE's carbon footprint: 6.08 kg CO$_2$e (≈0.00%)

Method: Activity-based

Here, we accounted for waste from tertiary packaging (mainly cardboard and plastic) generated from our production facility and distribution center.

The tertiary packaging is used to transport our purchased goods (packaging and raw materials) to our production facility and to transport the final products to our distribution center. We found the corresponding emission factors per kg from <u>DEFRA conversion factors 2020</u>.

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[1] T&D losses represent electricity that is generated but doesn't reach intended customers.
[2] A unit of measure of freight transport which represents the transport of one tonne of goods by a given transport mode over a distance of one kilometre.

We also accounted for waste water generated at our production facility with a corresponding emission factor per litre sourced from DEFRA.

We didn't account for waste generated at our office as this was deemed negligible.

SCOPE 3.6: UPSTREAM BUSINESS TRAVEL

Share of NØIE's carbon footprint: 4.27 tons CO_2e (2.03%)

Method: Activity-based

Here we had a few flights in 2020 and we estimated the emissions using https://www. atmosfair.de/en/offset/flight.

Other means of transportation for business travel were taxis and car rentals. We calculated the distances for each transportation type and found the emission factors from DEFRA conversion factors 2020. We included both direct emissions and well-to-tank emissions.

We also had a few hotel stays in 2020 and sourced the corresponding emission factors per hotel night from DEFRA.

SCOPE 3.7: UPSTREAM EMPLOYEE COMMUTING

Share of NØIE's carbon footprint: 0.30 tons CO_2e (0.14%)

Method: Activity-based

Our office is located in the center of Copenhagen, so our employees travel mainly on bicycle or by metro, bus, and train.

We collected data from the employee survey. We asked how many days a week they were working from the office - and since 2020 was quite an unusual year due to COVID-19 - we also accounted for stretches of time when people were working from home. We asked about their means of transportation: Walking, bicycling, bus, metro, train and/or car.

We sourced emission factors from local transportation providers such as Movia, DSB, and The Copenhagen Metro.

SCOPE 3.9: DOWNSTREAM TRANSPORTATION AND DISTRIBUTION

Share of NØIE's carbon footprint: 2.06 tons CO_2e (0.98%)

Method: Activity-based

We're an online business selling direct-to-consumers in all corners of Europe, so downstream transportation is an inevitable and vital part of our business.

From our logistics partner, we get quarterly reports on our total tank-to-wheel (TTW) emissions.

Next, we calculated an average WTT/TTW ratio based on numbers from NGVA Europe to calculate well-to-tank (WTT) emissions.

In our case, WTT emissions were about 25% of TTW emissions.

SCOPE 3.11: DOWNSTREAM USE OF SOLD PRODUCTS

Share of NØIE's carbon footprint: 0.87 tons CO_2e (0.41%)

Method: Activity-based

Relevant product types for this category are typically goods that directly or indirectly consume energy or water or use other complementary products in conjunction with the sold product.

Our cleanser qualifies for this, as water and cotton pads are frequently used in conjunction with the cleanser.

To calculate the use of water and cotton pads, we collected data from a customer survey. We asked whether or not our customers use cotton pads and whether or not the cotton pads are organic. We also asked to give an estimate of how many cotton pads and how much water they used per cleanse and how many times per day they used the cleanser. We already know how often our customers reorder cleansers on average. By compiling all the data, we were able to calculate average usage of water and cotton pads per face cleanser sold.

Emission factors were obtained from a Life Cycle Assessment of Cotton and from the local

water supplier, HOFOR.

SCOPE 3.12: DOWNSTREAM END-OF-LIFE TREATMENT OF SOLD PRODUCTS

Share of NØIE's carbon footprint: 0.04 tons CO$_2$e (0.02%)

Method: Activity-based

For our last category, we aggregated how many kg of cardboard, paper, and plastic we had sold and delivered to our customers. We then found respective emission factors in DEFRA conversion factors 2020 for waste disposal to arrive at the total emissions.

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