Our Method of Climate Accounting

A summary on how we measure and report our greenhouse gas emissions

Climate accounting is the process of measuring and reporting the greenhouse gas emissions associated with our organization's activities. We use climate accounting to track our environmental performance, identify opportunities for improvement, and communicate our progress and commitments to our stakeholders from our base year - 2019, which was the year the Laerdal Board concluded on the goals.

Greenhouse gas (GHG) protocol

For calculating our emissions, we currently include all 3 scopes according to the GHG protocol. As for our scope 3 emissions, we include most of the 15 categories identified in the protocol, with a few exceptions. Ref the table below;

Scope	Up/Downstream	Nr	Emissions categories	Reported by Laerdal in the following category
1	Upstream		Direct fuel	Scope 1
2	Upstream		Indirect electricity	Scope 2
3	Upstream	1a	Purchased goods and services, production related	Products
3	Upstream	1b	Purchased goods and services, non-production related	Operations
3	Upstream	2	Capital goods	Operations
3	Upstream	3	Fuel and Energy related activities	Included in Scope 1 and 2
3	Upstream	4	Upstream transport and distribution	Logistics
3	Upstream	5	Waste generated in operations	Operations
3	Upstream	6	Business travel	Travel
3	Upstream	7	Employee commuting	Not yet included due to lack of data
3	Upstream	8	Upstream leased assets	Operations
3	Downstream	9	Downstream transport and distributions	Logistics
3	Downstream	10	Processing of sold products	Not applicable
3	Downstream	11	Use of sold products	Not yet included due to lack of data
3	Downstream	12	End-of-life treatment of sold products	Not yet included due to lack of data
3	Downstream	13	Downstream leased assets	Not yet included due to lack of data
3	Downstream	14	Franchises	Not applicable
3	Downstream	15	Investments	Not applicable

Summarized, we are reporting on emission from cradle to customer site. We do so because we within these areas are in better control of the data and capable to measure properly. For the others, they are either not applicable for Laerdal or we presently do not have sufficient data. We are continuously considering how we can improve and expand what we measure and report on.

Data Sources

To calculate our emissions, we need reliable and comprehensive data on the emissions intensity of the products, services, and sectors that we use or produce. We use four data sources in our climate accounting: primary data from supplier-specific data and secondary data from the databases of Ecoinvent, UK government, and Figaro.

- Supplier-specific data: When they are available, we generally trust and use emission factors provided by our suppliers for the components, products, and finished goods that we purchase. We assume that our suppliers have the best knowledge and data on their own production processes and supply chains, and that they follow the relevant standards and guidelines for reporting their emissions. We also verify the plausibility and consistency of the emission factors provided by our suppliers, by comparing them with other sources and benchmarks.
- Ecoinvent data: For the intermediate components and products that we do not have reliable supplier-specific data for, we use Ecoinvent data to estimate their emissions. Ecoinvent is a global database of life cycle inventory data for various products and services. We use the most recent and relevant version of Ecoinvent for our purposes, and this report is based on the 2023 version of the database.
- UK government data: The UK government provides conversion factors for company reporting of greenhouse gas emissions. Currently, we use the scope 3 emissions factors for business travel. These factors are updated yearly.
- Figaro tables: They are the full international and global accounts for research in input-output analysis. The tables represent the EU inter-country supply, use, and input-output tables (IC-SUIOT) and they utilize official EU data with complementary information on the main non-EU trading partners. This data is used for our spend-based calculations.

Presently we have supplier documentation only on a fraction of our components and products. Therefore, we use secondary data, mainly emission factors, from Ecoinvent, while spend-based emission factors from Figaro are used when no adequate emission factor could be identified in the ecoinvent database. We are working to improve the data coverage and quality in the future, by collaborating with our suppliers and requesting more information and documentation on environmental impacts for their components and products.

Methodologies

Besides choosing a data source, we are using two methods for allocating the emissions data to our organization's activities. We use: activity based and spend based.

- Activity based: This methodology uses the physical data of the products and services that we use or produce, such as the quantities and units, to estimate the emissions associated with them. For example, if we consume 100 kWh of electricity, we multiply that by the emission factor of electricity in the relevant region and get the emissions from our electricity consumption. This methodology is more accurate and precise, as it reflects the actual consumption and emissions of the products and services. However, it also requires more data collection and analysis, as we need to measure and record the physical quantities and units of the products and services that

we use or produce. It also requires there to be physical emission factors available that are representative and of adequate quality.

- Spend based: This is the method where the emissions are calculated based on financial expenditures. We utilize the Figaro tables for our spend-based calculations. Figaro is a tool developed by Eurostat and the European Commission to allow for statistical analysis of the increased globalized value chains. By linking and combining national accounts and other data into the Figaro database, Figaro can be used to see the links between economic growth and trade flows interconnected in the global value chains, as well as the carbon emissions embodied in these chains.

We are taking significant steps to reduce our reliance on spend-based to an activity-based methodology, where possible, to improve the accuracy and precision of our climate accounting. On products and components, we made significant steps forward in the 2023 reporting by having 8000 products and components weighted, included emission factor, and registered based on country of origin.

Uncertainty Analysis

We acknowledge that our emission calculations have some uncertainty, due to the data gaps, the model assumptions, the parameter variability, and the methodological choices. We include this to communicate the way we have worked with our climate accounting for 2023 to visualize the method, robustness, and sensitivity of our conclusions.

One of the main sources of uncertainty is our emission calculations. There is a deficit of supplier-specific data for many components, products, and finished goods. As explained above, we use secondary data to estimate the emissions of the components without supplier-specific data, based on their share of the total mass or cost of the product.

We have an action plan in place to request and collect as much supplier-specific data and documentation to improve our emission calculations.

This approach assumes that the components without supplier-specific data have similar emission profiles as the components with supplier data, which may not be true. Moreover, Ecoinvent data may not reflect the specific geographic and temporal conditions of the production and use of the components, as Ecoinvent uses generic or average data for different regions and time periods.

We have considered alternative solutions to reduce the uncertainty from the data gaps, such as using another system similar to Ecoinvent that can provide more comprehensive and reliable life cycle inventory data within given geographies and product categories or using generic emission factors from Ecoinvent or other databases for the finished goods, based on their product category and region of origin. However, we have decided to stick with our current approach, as we believe that it provides a reasonable balance between accuracy and feasibility. It also allows us to be transparent and accountable for our calculations and our results, and to communicate them clearly to the readers of our sustainability report.

We have tested and validated our method of climate accounting with external experts and consultants, and they agree with our conclusion. They argue that consistency and control on method is more important than adding another complicating factor. Staying with what we do, will make it simpler to revert and to make future updates easier and more methodologically sound in future reports.