



GREENHOUSE GAS EMISSIONS REPORT 2022



Photo: South Africa team mountain biking in Stellenbosch

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1 SUMMARY

At Axess Group, we are passionate about stopping climate change. To be true to our “outdoor values”, we are obliged to make a difference. We also recognise that addressing climate change is crucial to maintain our competitiveness and to remain an attractive employer in the future. To this end, we take responsibility for our greenhouse gas (GHG) emissions through our entire value chain, and report them according to the Greenhouse Gas Protocol (World Resources Institute & World Business Council for Sustainable Development, 2011). Nevertheless, we understand that this alone is not enough. We also have the opportunity and responsibility to help our clients reduce their GHG emissions. We believe that through this dual approach, we can make a significant difference.

At Axess, we acknowledge that the oil and gas industry is a major contributor to climate change. However, we remain committed to working strategically in this sector due to the presence of many key clients and our potential to help them reduce their emissions through our products and solutions. Simultaneously, we are actively transforming our business by expanding into new markets. By 2025, we plan to have 25% of our operational activities outside of oil and gas. Our goal is to leverage our market position to become a leading provider of low-emission solutions applicable across all sectors.

In 2018, the Axess Climate Roadmap was established with goals for how we can reduce our own GHG emissions and what we can do to help our clients reduce theirs. This report documents the specific results from the systematic work with the roadmap, with 2017 as a base year.

Our “footprint” refers to the GHG emissions from our operations, while our “handprint” refers to our contribution to reduce our clients' GHG emissions. Our goal is to minimise our carbon footprint, while maximising our handprint. They are approached separately and not summarised.

- The reporting covers all global activities in Axess Group.
- It reports on our carbon footprint according to the GHG Protocol Scope 1, 2 and 3 (Greenhouse Gas Protocol, 2011).
- It reports on our contribution to our clients' footprint reduction, according to the Carbon Handprint Guide (Pajula et al., 2021).
- It describes the distributed reduction goals and the reduction strategies for subsequent years.

To evaluate our contribution, we aim for Green Growth, which means that our value creation must ensure that natural assets continue to provide the resources and environmental services to future generations. The method we use to measure and determine minimum target ambitions relative to the growth of the business is GEVA. GEVA is defined as Greenhouse gas Emissions per Value Added, and the unit is tCO₂e/MNOK. We define added value as EBITDA + payroll + COGS. All reduction targets are relative to the base year 2017.

Continuous reporting on emissions, reduction strategies, and performance is a crucial aspect of our work, and we aim to publish a GHG report annually. In 2022, we improved our reporting by enhancing data quality and adopting a more systematic and partly automated data collection approach. We will continue to improve the quality and insights of our reporting over time.

Footprint

Our footprint refers to the GHG emissions from our own operations. The absolute value was 4800 tCO₂e in 2017 and 8200 tCO₂e in 2022.

Our footprint reduction target for 2025 is divided into three activity areas:

- "Services" refer to our onshore and offshore mobilisations as well as all other activities related to them.
- "Products" include our mechanical products, such as the Alpa Winch and custom lifting solutions.
- "Office" refers to our support activities, including office facilities, sales, and administration.

For each activity area, we have defined one or more focus areas, resulting in a total of six focus areas:

Activity area	Status 2022	Reduction target 2025	6 focus areas	Strategies
Services	-38%	-60%	Mobilisation	Local people, local warehouses, task bundle, digital solutions.
			Purchased equipment	Work with suppliers, reuse equipment.
Products	-61%	-30%	Steel production and product transport	Recycled steel, work with suppliers, local suppliers, reuse of products, circular economy, leasing models.
Office	-53%	-60%	IT consumption	Reuse and recycle IT hardware, optimise data storage.
			Business travel	Teams meetings, longer stays and bundle activities.
			Commuting	Motivate and facilitate biking, walking and public transport.

Regarding Services, we need to make a greater effort to reach our goal for 2025. For Office, we are on track to achieve our goal for 2025. With respect to Products, we have made great progress this year, but this result is impacted by several external factors. Although we have better data for Products this year, it is crucial that we thoroughly analyse the data and the contributing factors to gain a better understanding of the efforts that will be required moving forward. Moreover, we should anticipate an increase in emissions when we take into account factors such as end-of-life and use of leased assets.



Handprint

Our handprint refers to the reduction of our clients' carbon footprint through our solutions. To achieve this, we have identified three focus areas for handprint solutions:

- IMR vessels: Reducing the need for costly and fuel-consuming Inspection, Maintenance and Repair (IMR) vessels. Current solutions include caisson replacement and thruster replacement.
- Flaring: Avoiding the need for flaring due to production shutdowns. Our current solution is the Alpa Winch.
- Service efficiency: Reducing mobilisations of personnel and equipment. Current solutions include TRIM, Bridge, eDROPS, AxEye, condition monitoring, drone inspection and robot crawler inspection.

In addition, there is a fourth handprint solution that is under development:

- Steel production: Reducing the production of steel through optimising designs, reusing products and extending lifetime of products and installations.

We have established targets for our identified focus areas, which collectively contribute to our handprint target for 2025:

Focus area	Base year 2017 (tCO ₂ e)	Status 2020 (tCO ₂ e)	Status 2022 (tCO ₂ e)	Status 2022 (tCO ₂ e/MNOK)	Target 2025 (tCO ₂ e/MNOK)
IMR vessel	1 700	570	0	0	10
Flaring	-	12 000	12 500	12	50
Service efficiency	-	44,1	66	0,1	5
Total	1 700	12,600	12 566	12,1	65



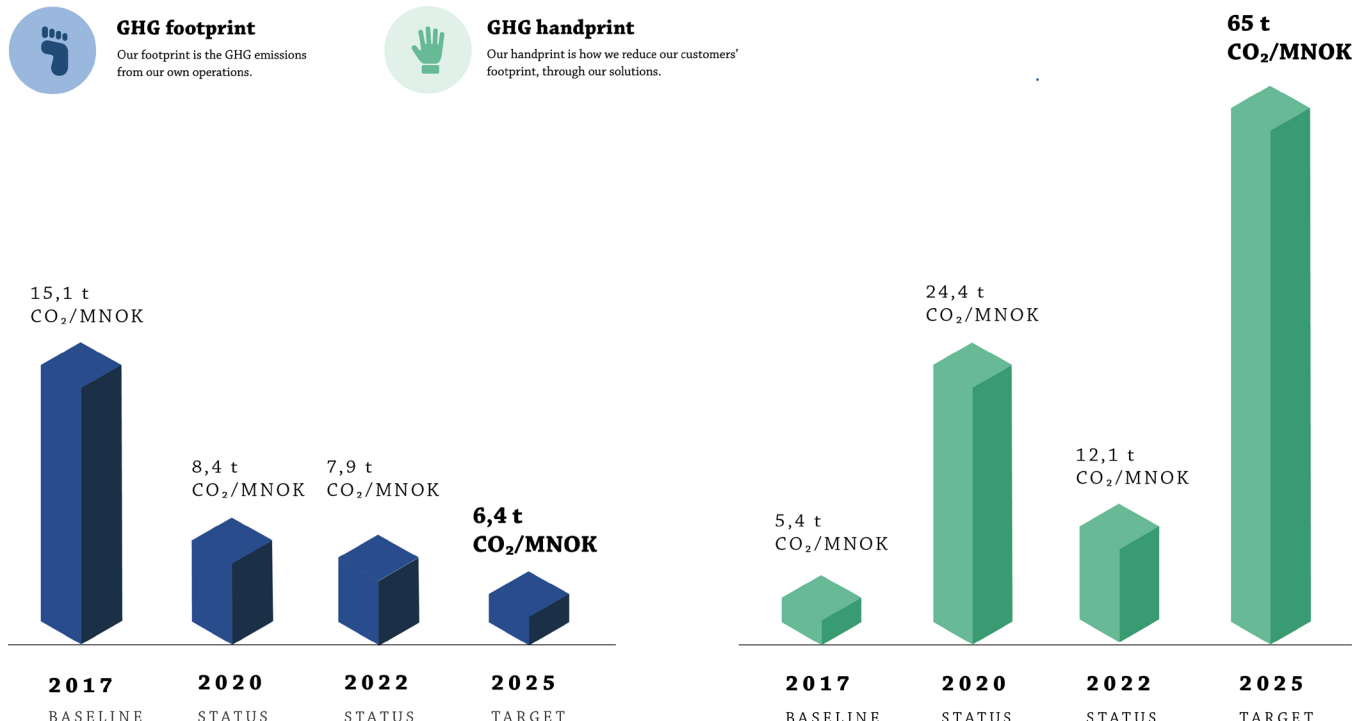
GHG footprint

Our footprint is the GHG emissions from our own operations.



GHG handprint

Our handprint is how we reduce our customers' footprint, through our solutions.



2 INTRODUCTION

2.1 About this report

Climate change is one of the greatest threats of our time. In 2018, we established our Climate Roadmap with goals for how we can reduce our own GHG emissions and what we can do to help our clients reduce theirs. This report documents the systematic work with the Axess Climate Roadmap, with 2017 as a base year.

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Continuous reporting on emissions, reduction strategies, and performance is a crucial aspect of our work, and we aim to publish a GHG report annually. In 2022, we improved our reporting by enhancing data quality and adopting a more systematic and partly automated data collection approach. We will continue to improve the quality and insights of our reporting over time.

This year, we achieved a significant milestone by systematically collecting data from all our global entities, improving the data quality and our understanding of our own emissions. Our GHG report is now highly anticipated by management and our board of directors.

The GHG emission report is one component of the company's sustainability reporting. A correction has been made to the 2022 report. The emissions for Finance and Miscellaneous for the Office category were miscalculated for 2017 and 2020, and this has been rectified in the current report. As a result, the numbers for Office and total emissions are not exactly the same as in the previous report. Please refer to Appendix C for further details.

2.2 Footprint definition and framework

Footprint definition

Carbon footprint is a measure of the amount of carbon dioxide that is produced by the activities of a person or company.

(Source: Oxford Learner's Dictionaries)

Our footprint is the GHG emissions from our own operations. Axess reports on its carbon footprint according to the GHG Protocol Scope 3, including 10 of 15 categories in the value chain.

Footprint framework

GHG Protocol supplies the world's most widely used greenhouse gas accounting standards. The standards are designed to provide a framework for businesses, governments, and other entities to measure and report their greenhouse gas emissions in ways that support their missions, potential and goals.

(Source: Greenhouse Gas Protocol)

Axess reports according to the GHG Protocol Standard Scope 1, Scope 2 and Corporate Value Chain, Scope 3. Scope 1 is the direct emissions from owned facilities and vehicles. Scope 2 is the indirect emissions from purchased electricity in owned facilities. According to the standard, we report on all relevant scopes and categories. For Axess today, this means we report on 10 of 15 categories in scope 3. Since Axess leases all assets, such as buildings and vehicles, and do not own or control any industrial production on its own, our scope 1 and 2 emissions are zero and thus not further reported on.

The Scope 3 categories relevant for Axess are:

- C1: Purchased goods and services - Equipment, steel production and miscellaneous.
- C4: Upstream transportation - Transport of purchased goods.
- C5: Waste generated in operations.
- C6: Business travel - Flights and hotels.
- C7: Employee commuting - Employees travelling from home to the office and back.
- C8: Leased assets - Electricity used in office facilities and fuel consumption for leased vehicles.
- C9: Downstream transportation - Mobilisation and transportation of equipment (from Axess to clients' sites).
- C11: Use of sold products – Emissions from the operation of Axess' products.
- C12: End-of-life treatment of sold products – Disposal of Axess' products.
- C13: Downstream leased assets – Emissions from the operation of leased Axess' products.

For details, refer to appendix A.

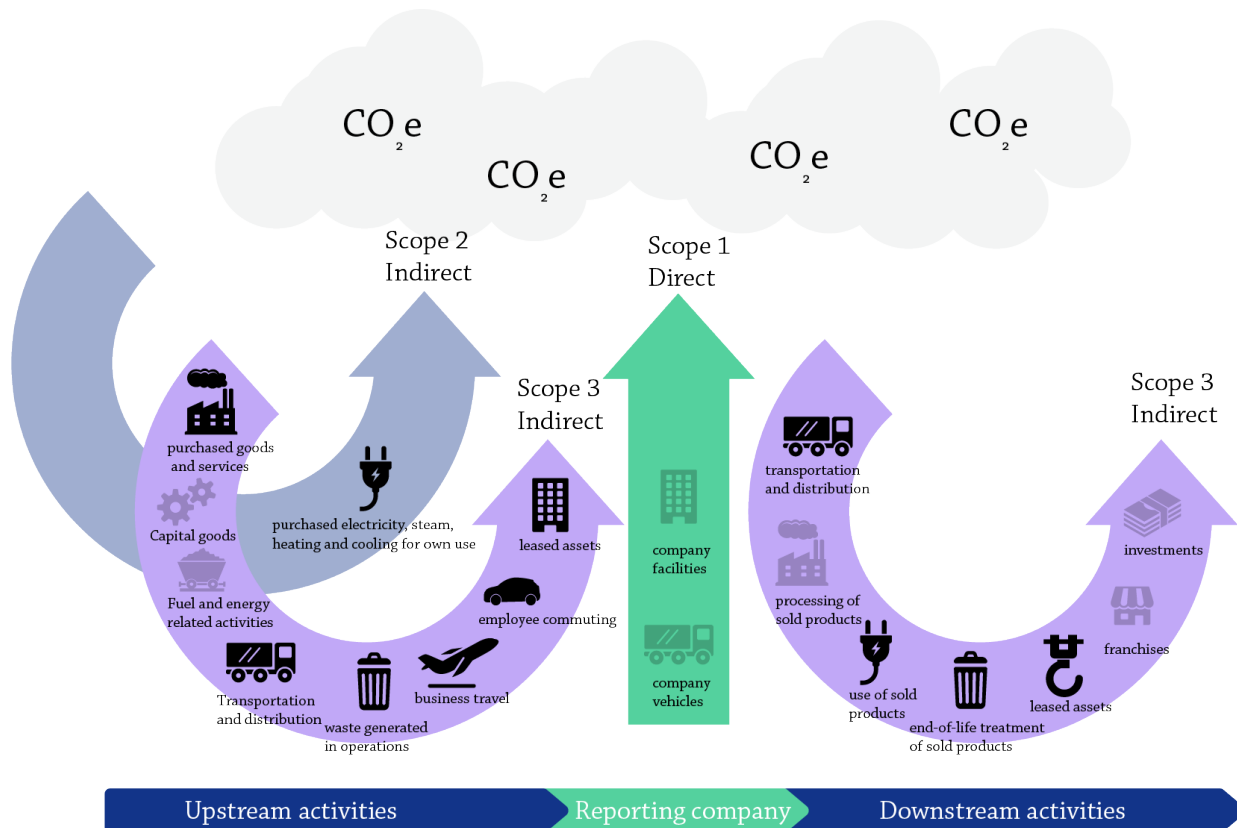


Fig. 2. The three scopes and 15 categories in the GHG Protocol Corporate Value Chain standard. 10 of 15 categories which are relevant to Axess are represented by the icons in black. (Source: Greenhouse Gas Protocol, 2011)

2.3 Handprint definition and framework

Handprint definition

A handprint refers to the beneficial environmental impacts that organisations can achieve and communicate by offering products and services that reduce the footprints of clients. A carbon handprint is the reduction of the carbon footprint of others.

(Source: Pajula et al., 2021)

Axess strives to be the most sustainable alternative for our clients. Our “handprint” refers to the reduction of our clients’ GHG emissions through our solutions.

Handprint framework

We have utilised the Carbon Handprint Guide (Pajula et al., 2021), to measure and describe our contributions to reducing our clients' carbon footprint. These contributions are in addition to, but partly overlap with, the GHG protocol Scope 3 categories. The footprint and handprint will be approached separately and not summarised.

To determine the handprint, two calculations must be made:

- The carbon footprint resulting from Axess’ solutions.
- The carbon footprint from the industry standard, which is known as the baseline solution.

Baseline solutions must be regularly reviewed. To ensure that the baseline remains relevant, we established an internal quality control group with in-depth market insights. We will continue to openly communicate how we define the baseline and the calculated handprint.

The handprint, unlike the footprint, has no defined boundaries. We will calculate the handprint case by case, service by service, and present the annual impact in the annual report. We will continue to add new areas until the potential in our current portfolio is covered and update it with new innovations.

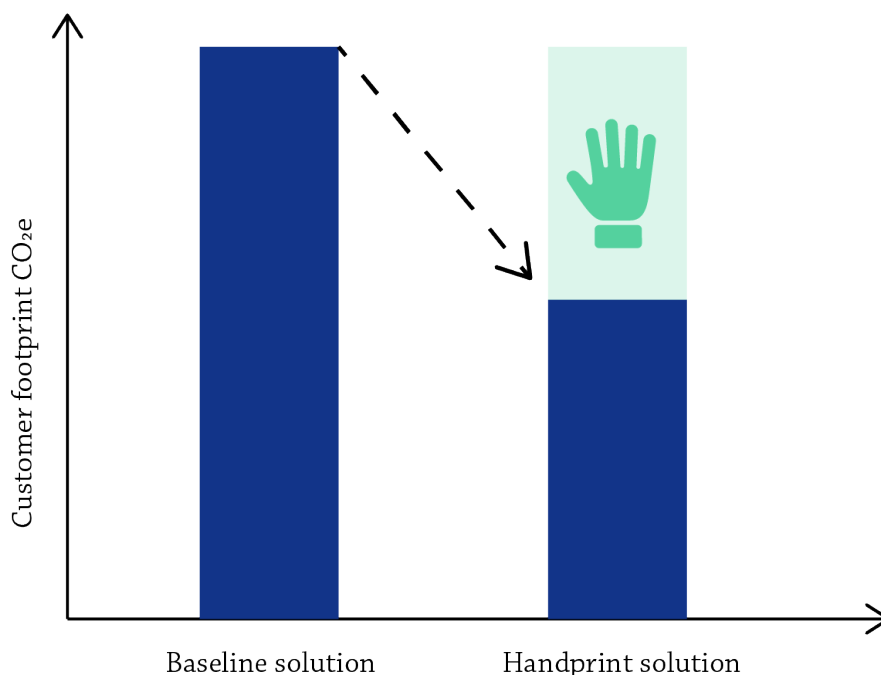


Fig. 3. The handprint is defined as the difference between the footprint from the industry standard/baseline solution and the footprint from the improved handprint solution. (Source: Pajula et al., 2021)

2.4 Base year 2017

We have chosen 2017 to be our base year, from which we define our reduction targets. As the Climate Roadmap project was established in Q2 2018, we collected the 2017 data in retrospect. 2017 was considered a normal year of operations for Axess. The business had just recovered from the oil price crash in 2014, and a new focus on resource efficiency arose.

Axess' key figures in 2017:

- Number of employees: 208
- Turnover: 431 MNOK

Axess' key figures in 2022:

- Number of employees: 588*
- Turnover: 1202 MNOK

* As reported directly by each entity and summarised

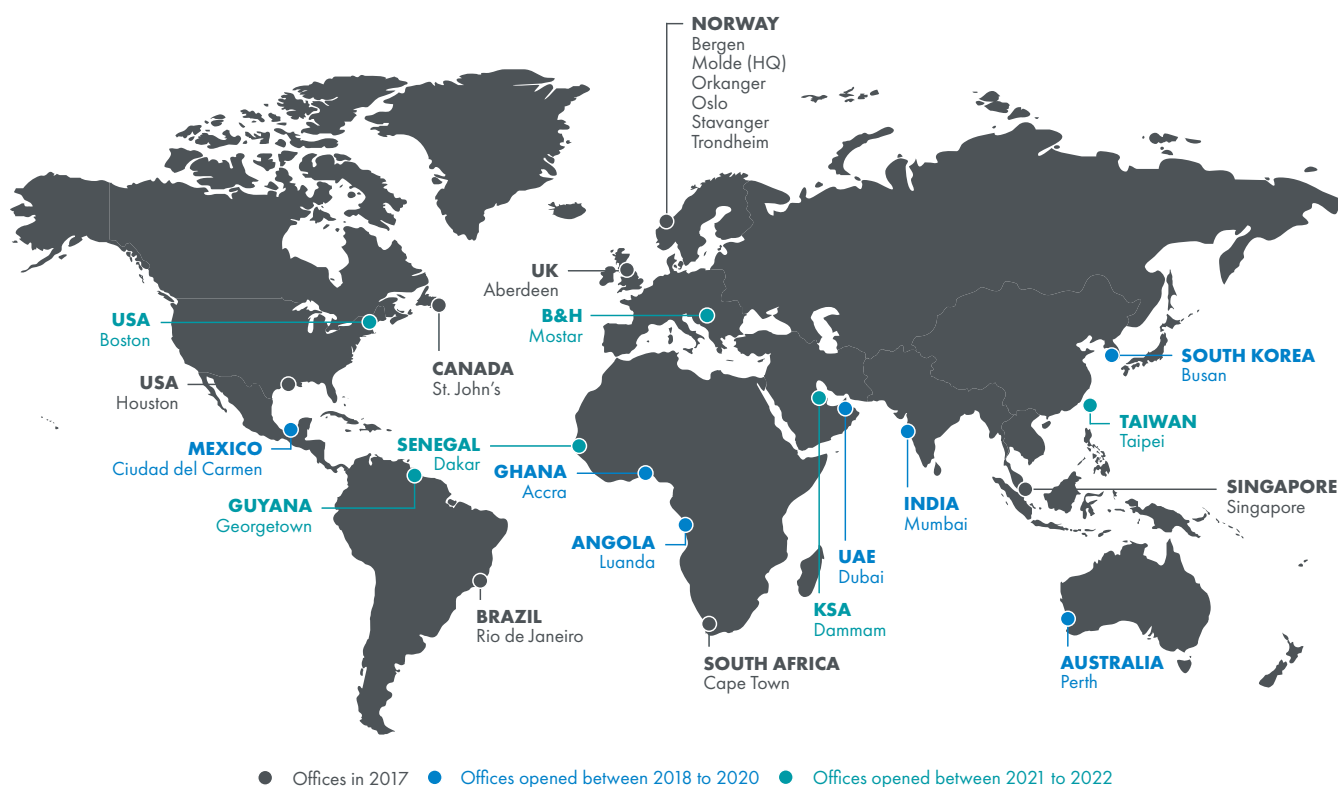


Fig. 4. Map with Axess Group's office locations

2.5 KPI - GEVA and Green Growth

We aim to improve the resource efficiency in our operations, which is why we use GHG emissions per value added (GEVA) as a key performance indicator (KPI) to measure our progress. Both the footprint and handprint have GEVA as the KPI, with the unit of tCO₂e/MNOK.

Resource efficiency means using the Earth's limited resources in a sustainable manner while minimising impacts on the environment. It allows us to create more with less and to deliver greater value with less input.

(Source: European Commission)

GEVA is calculated as GHG emissions divided by the value added (Randers, 2012). Usually there would be a linear correlation between business growth and increased emissions, but by adapting the GEVA approach, we can monitor that our GHG emissions per value creation decreases every year while our business grows. In other words, we commit to deliver more with less emissions, every year, through the GEVA approach. To ensure the right balance of GEVA, we aim for what is defined as “green growth” (OECD, 2012). This means a reduction in GEVA with at least 5% per year, based on the global reduction goal and the historic economic growth rate (Stoknes, 2019).

We define value added as EBITDA¹ + payroll + COGS². This definition encompasses not only the added value within the company, but also the employees and suppliers. Value creation is defined as EBITDA plus all salary and personnel costs, which reflects the value the company creates for employees and shareholders, before financial costs, depreciation, write-downs, taxes, etc (Stoknes, 2019). Since we use a high degree of hired personnel, our definition also includes the value created for our cost of sold goods and services when we include COGS.



¹ EBITDA – earnings before interest, tax, depreciation and amortisation

² COGS – cost of goods sold

3 FOOTPRINT REPORTING

3.1 Footprint in 2017 (base year)

Distribution of emissions per category in 2017

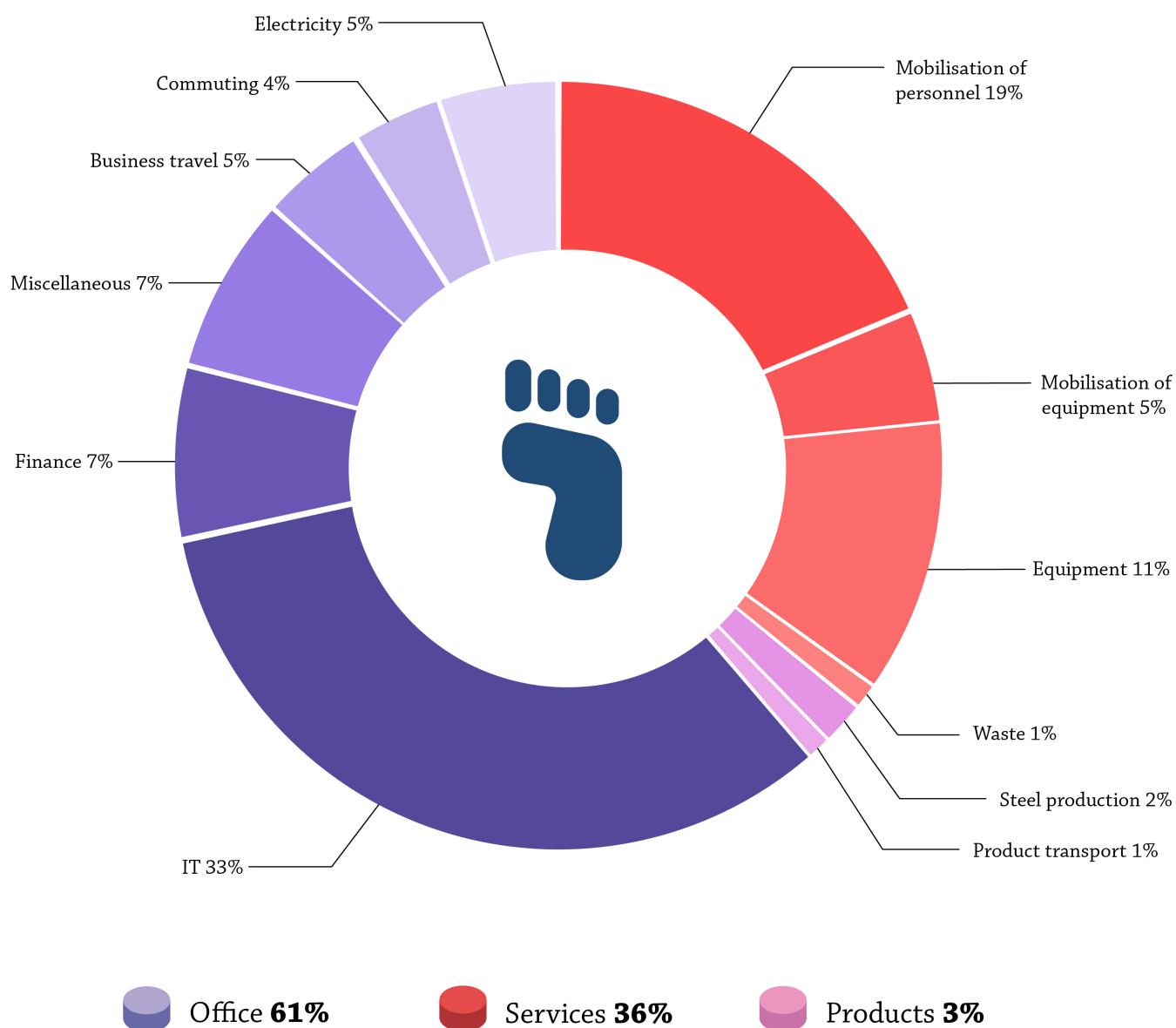


Fig. 5. Pie chart showing the distribution of Axess' footprint in 2017.

GHG emissions in 2017	tCO ₂ e	GEVA
Services	1724	5,4
Products	134	0,4
Office	2940	9,3
Total	4798	15,1

Activity Areas

We involve the entire organisation in the effort to reduce our carbon footprint and consider it relevant to everyone's work. To effectively communicate our strategies, status, and progress, we have divided Axess' total footprint into three activity areas, namely, Services, Products and Office, in accordance with the defined categories in the GHG protocol. This is further explained in Chapter 4.1 Footprint reduction targets.

Services

The services we provide include the mobilisation of personnel and equipment to locations, equipment used during service and waste produced.

Products

The products that we develop and sell include the materials used in production and the transportation of finished products from the suppliers who produce them to Axess' customers. This area will also include end-of-life treatment of sold products and downstream leased assets, which we aim to include in our reporting for 2023.

Office

The Office category consists of all support activities not directly related to what we deliver, such as electricity, finance, IT, training, marketing and communication, business travels and employee commuting.

Calculation methods for 2017

Data for 2017 was collected in several phases and there is a difference in the data quality and the calculation methods. Business travel, mobilisation of personnel and employee commuting were collected for 2017 and are of good quality. The rest of the categories were calculated in 2021 to complete the picture in accordance with the standard. Most of these categories were calculated using the account-based method, which is less accurate. This method is based on the annual account and the emission calculator provided by the GHG Protocol standard. The miscellaneous category is a mix of different purchased services, that we need to further examine to separate and identify. This is because the account data is not sorted with these categories in mind. In the following years, we worked on improving the quality and insight of the data, but for 2017, we used what we had.

A full overview of data information and calculation methods can be found in appendices B, C and D.



3.2 Footprint in 2022

Distribution of emissions per category in 2022

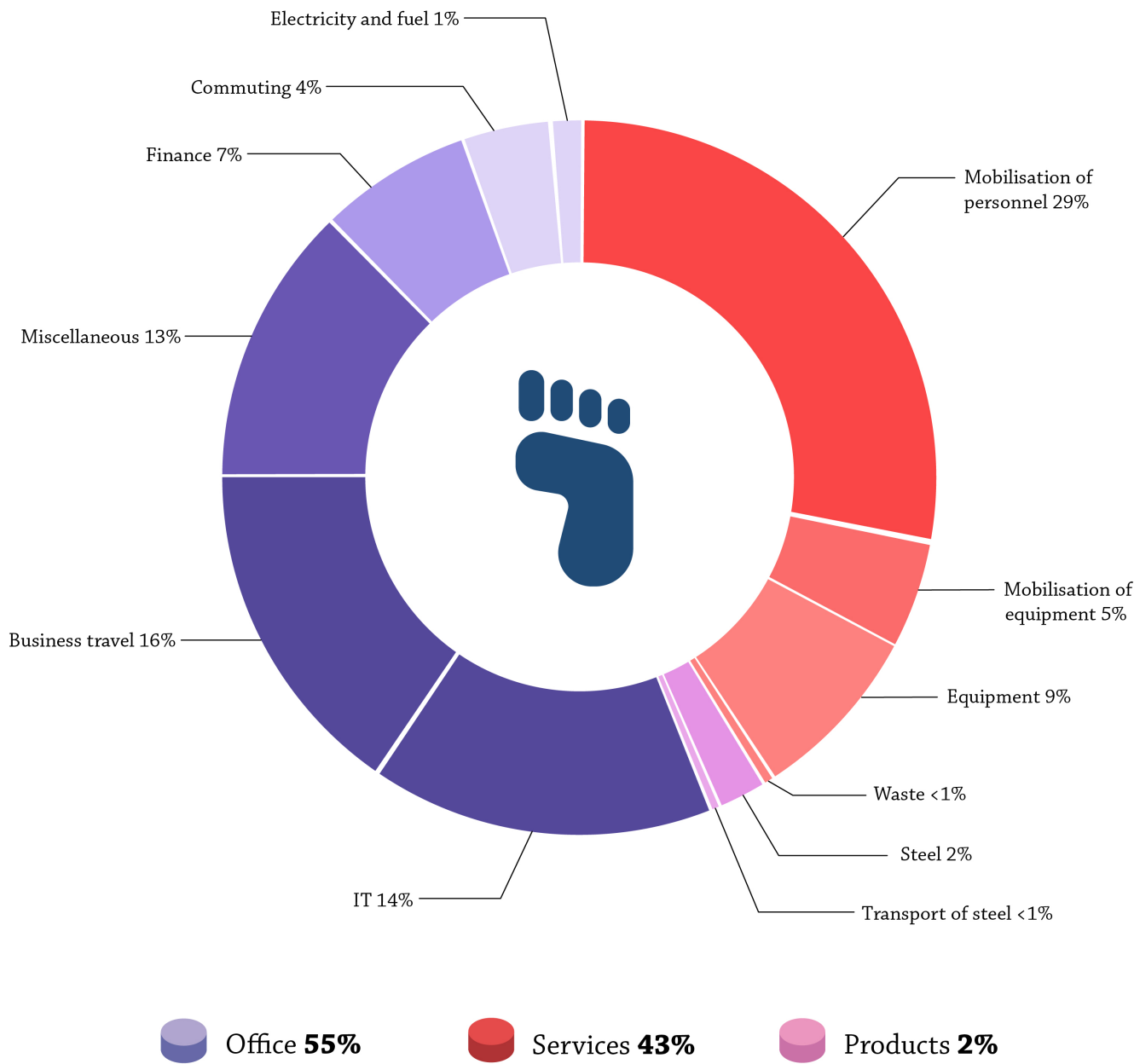


Fig. 6. Pie chart showing the distribution of Axess' footprint in 2022.

GHG emissions in 2022	tCO ₂ e	GEVA
Services	3528	3,4
Products	172	0,2
Office	4541	4,4
Total	8241	7,9

Calculation methods for 2022

The footprint for 2022 was calculated using the same principles as for 2017, but with better quality of data for several categories.

- Mobilisation of personnel was based on data from Horizon Planner in Norway and data from local travel agencies for many of our other entities. Where we could not get data from the travel agency, the emissions were calculated using Google flights.
- Mobilisation of equipment was based on the emission data provided by the suppliers in Norway and extrapolated for the rest of Axess relative to mobilisation of personnel.
- Business travel was based on local travel agencies or calculated using Google flights.
- In Norway, commuting data was collected using personal registration for Q4 and extrapolated for the year. Globally, we collected the average commuting data from most of our entities and extrapolated for the rest.
- IT hardware emissions were calculated exactly for hardware bought in Norway. The saved GHG emissions from returning goods in Norway was deducted. The average emission per product category was used to estimate the emissions for the number of items bought in other entities outside of Norway.
- IT software and cloud services are based on exact emissions from Microsoft 365 and Azure.
- Electricity was calculated with local factors for used kWh for all locations.
- Production of steel was calculated based on purchase orders and the weight of steel bought.
- Transport of steel was based on the emission data provided by the main supplier and an estimate of the amount of steel transported.
- Finance and Miscellaneous in category 1 "purchased goods" and Category 5 "waste from operations" are calculated using the spend-based method in the GHG Protocol Scope 3 evaluator. This tool is potentially outdated and we will evaluate if we will continue to use it for the coming reports.

A full overview of data information and calculation methods can be found in appendices B, C and D.

3.3 Progress from 2017 to 2022

From 2017 to 2022, GEVA is reduced by 48% for Axess Group. The GEVA from 2020 to 2022 is reduced by 6%. Considering that 2020 was a year marked by the COVID-19 pandemic and reduced travel activity, a reduction from 2020 to 2022 is a good result.

The distribution of emissions from our three activity areas changed slightly for 2022. Compared to earlier years, Services are taking a larger piece of the pie relative to Office and Products. The GEVA for Services is increasing, compared to earlier years, which means that a special focus on this will be required to reach our 2025 reduction goal for this focus area. It is also likely that the change in distribution is impacted by the higher quality of data this year. In 2017 and 2020, Office, and IT in particular, consisted of very conservative data. For Services, mobilisations in 2017 and 2020 were estimated based on an extrapolation of the activities in Norway, while this is based on actual data from all entities in 2022. This means that there could be a possibility that mobilisations outside of Norway caused more GHG emissions than what was estimated in 2017 and 2020.

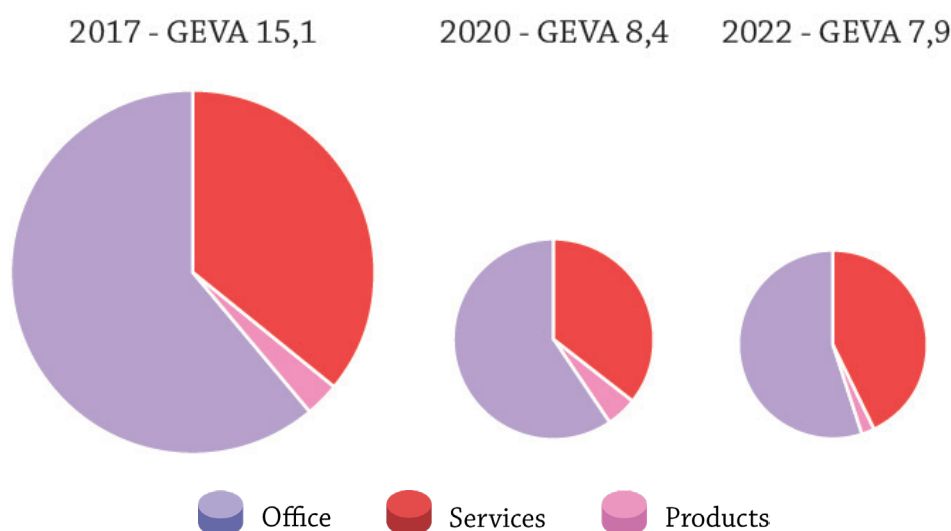


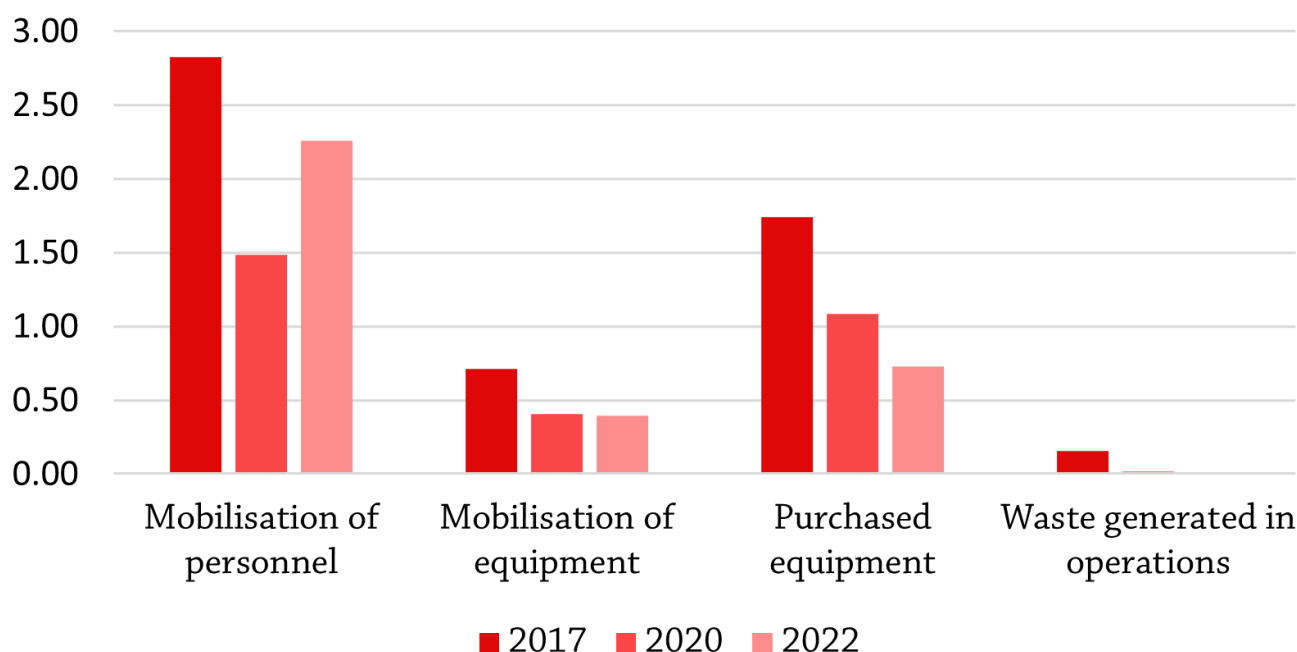
Fig. 7. Pie charts for 2017, 2020 and 2022. Difference in circle area reflects the reduction in GEVA, a 48% reduction from 2017 to 2022.

Development 2017-2022	2017	2020	2022	Absolute change (2017-2022)	Change (%)
Growth in business					
Employees	208	329	558	350	168%
Turnover (MNOK)	431	621	1202	771	179%
Value added (MNOK)	317	518	1042	725	229%
Footprint KPI (GEVA)					
Services (tCO ₂ e/MNOK)	5,4	3,0	3,4	2,0	-38%
Products (tCO ₂ e/MNOK)	0,4	0,4	0,2	0,3	-61%
Office (tCO ₂ e/MNOK)	9,3	5,0	4,4	4,9	-53%
Total (tCO ₂ e/MNOK)	15,1	8,4	7,9	7,2	-48%

3.4 Comments on progress per activity area

Services

Services - GEVA (tCO₂e/MNOK)



Mobilisations of personnel and equipment

We have focused on mobilisations since before 2017. After the oil crises in 2014, there was a market shift towards more efficient solutions, and we have significantly increased resource efficiency. The reduction of 38% appears reliable. Since 2020, we have increased activity and must continue our reduction strategies and collaborate with clients to reach the 60% reduction target by 2025.

Purchased equipment

Efficient equipment use has been a focus since 2017. More than one department has mentioned the consumption of both chemicals and textiles as a significant waste related to our activities. The reduction is a result of increased awareness and action in combination with a cost-focus.

Waste generated in operations

Waste has not been a special focus, and the data set is uncertain. The reduction could be a result of the focus on efficient equipment use, but we should get a better understanding of this as we continue our reduction efforts for 2023.

Products



Production and transportation

We see a drastic decrease in production and transportation of steel for 2022. However, the main explanation is not due to reduction in emissions. Emissions from production and transport are relatively small in comparison to the group’s emissions in other areas, meaning that the GEVA for these categories are highly affected by the increased value creation in other parts of the Group.

It is also worth noting that emissions in this category are highly dependent on the nature of the projects executed (and products sold) year by year, so the emissions will also change depending on that.

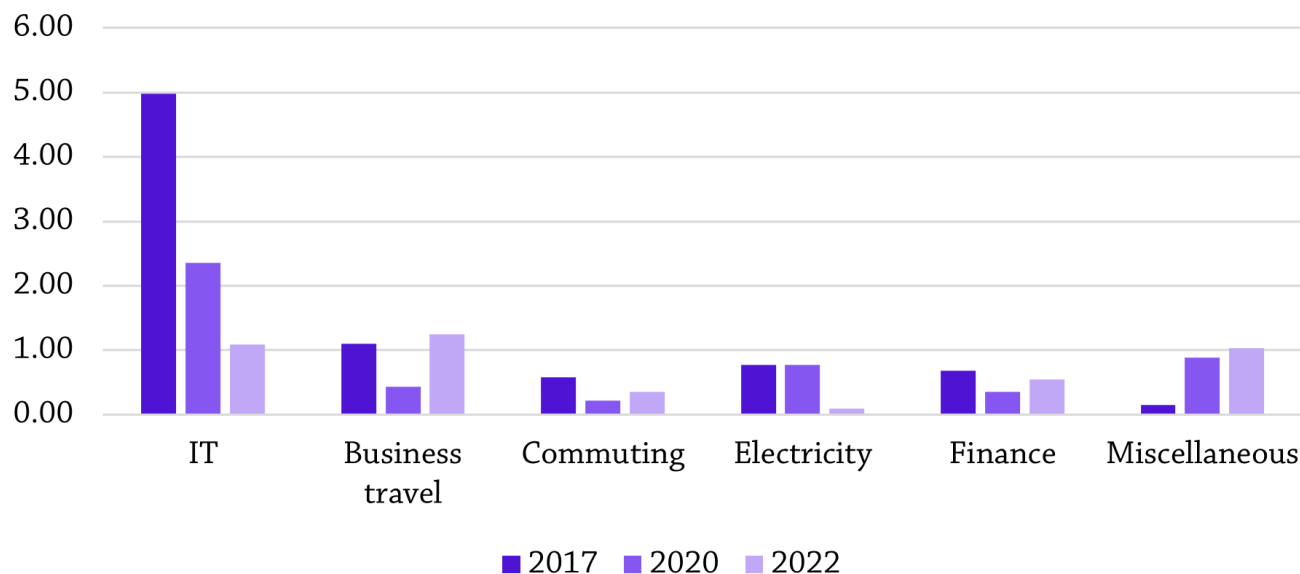
Another possible reason for the decrease is that data set for 2017 and 2020 was too conservative. For 2022, we have succeeded in collecting data of high quality, and the focus going forward should be how we can monitor these emissions and ensure actual reduction in emissions.

Unreported categories

There are three relevant categories we have not yet obtained data for, namely, use of sold products, end-of-life treatment of sold products and downstream leased assets. These are kept in the reports as relevant categories with no information for now. We have started to lease out winches and other steel constructions and our ambition is to increase this in the years to come.

Office

Office - GEVA (tCO₂e/MNOK)



IT

IT was not a focus in 2017. For 2017 and 2020, emissions from IT were calculated based on the spend-based approach, while for 2022, our supplier has provided us with calculated GHG emissions for both hardware and software. Since it is a significant contributor to Axess carbon footprint, it has become one of the focus areas going forward. This category includes hardware, software, and cloud storage. We worked closely with our supplier, Atea, and their suppliers to get good data and apply reduction strategies. This is a likely cause of the reduction in emissions together with improved data quality. We also returned used IT equipment, which contributed to a reduction of our GHG emissions. Between 2017 and 2020, most of the reduction in this category was due to the migration of storage from servers to the cloud.

Business Travel

The significant reduction in business travel was due to the COVID-19 restrictions throughout most of 2020. In 2022, the activity level was back to normal, and we were not able to reduce this category.

Commuting

In 2022, we executed a commuting campaign in Norway, which had a positive effect. We saw a reduction and plan to expand the campaign for all of Axess in 2023. The reduction in 2020 was due to remote work during the pandemic.

Electricity

Electricity was calculated using local factor for emissions per kWh. In previous years, we used an average factor for all locations and extrapolated based on consumption in Norway, which may have made our calculations for 2017 and 2020 too conservative. The 2022 numbers show a more realistic picture.

Finance

The financial costs are not necessarily coherent with the growth of the company. The change is due in part to other financial income and other financial expenses. Finance is calculated based on annual accounts and we need to analyse this for better understanding.

Miscellaneous

This category includes several items such as marketing materials, courses and office supplies. It is a large part of the contribution for 2020 and 2022 and we will look into improving the calculation and understanding of this category for the next report.

4 FOOTPRINT STRATEGIES

4.1 Footprint reduction targets

The original reduction target set in 2018 was a 60% reduction by 2025. In 2021, we expanded the coverage of our GHG reporting and revised our targets accordingly. The Axess activity areas, namely, Services, Products and Office, are aligned with the GHG Protocol categories.

We have individual focus areas, and reduction targets for each activity are based on criteria such as size, reduction potential, and stakeholder/employee interests.

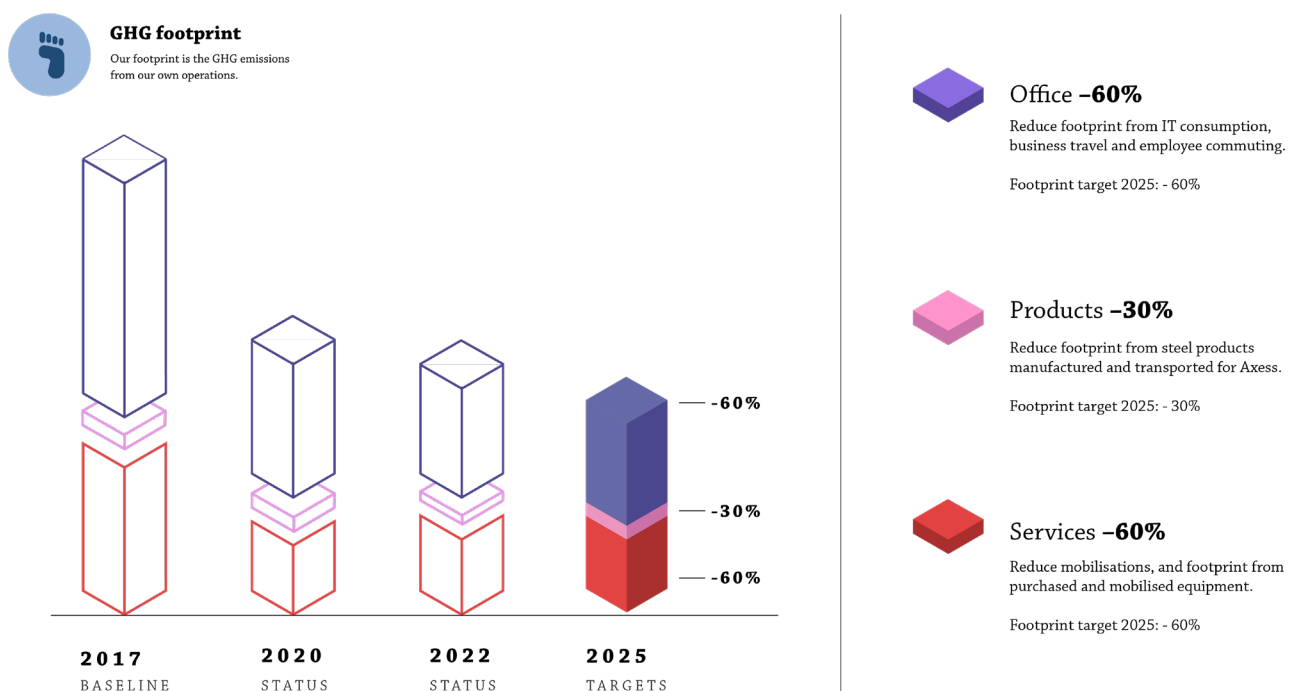


Fig. 8. Distribution of emissions from the three activity areas, and individual reduction targets.

Activity areas and reduction targets:

Services: 60% reduction target for 2025

This area covers our activities related to the field work we perform at our clients' sites, including inspection, quality control, lifting operations, installation and maintenance, and more. The main source of emissions is related to mobilisation of people and equipment for this work, where travel via planes and helicopters are the largest contributors.

Products: 30% reduction target for 2025

This area covers the products designed and delivered by Axess to our clients' sites. The production is performed by suppliers, which mainly includes steel constructions, hydraulics, electrical equipment and machinery. The emissions are primarily from the production and transport of these products. We believe that end-of-life treatment of sold products will have a significant effect on this metric.

Office: 60% reduction target for 2025

This area covers Axess' support activities, including office functions, sales, and management. The main sources of emissions come from business travel, the purchase of IT equipment and software, cloud storage, employee commuting, and electricity consumption.

4.2 Footprint reduction strategies

Footprint reduction approach

For each activity area, we analysed the categories and identified focus areas, based on the GHG emission calculations and workshops conducted with each department/entity in Axess during 2021. See Appendix F for the mapping of each department/entity. We will work on these focus areas, explore different reduction strategies and evaluate their impact year by year through the continuous mapping and reporting of GHG emissions.







The focus areas are prioritised based on criteria defined in the GHG Protocol and Axess' business strategy, where the most weighted criteria are:

- **Size:** Makes up a significant part of Axess' carbon footprint.
- **Influence:** Obvious potential for improvement, opportunities to stop wasting resources, or low-hanging fruits.
- **Risk:** Contributes to the company's risk exposure in terms of regulations, product, customer, and reputation.
- **Stakeholder:** Engagement and initiatives from employees, clients, and the public.

We will strive to improve the quality of our data and calculation methods. We will put the most effort into our focus areas and work on systematically collecting data. We will continue to report, gain understanding, and improve on all categories relevant to Axess.

Footprint focus areas

We have defined six focus areas for the next years. They are colour-coded according to the three activity areas; **Services**, **Products**, and **Office**.

Activity areas	Focus areas	Description	Reduction strategies to explore
Services	Mobilisations 	Reduce our travel and transport related to mobilisations of personnel and equipment. Streamline and digitalise our services.	Local people, local warehouses, task bundle, long stay, digital solutions.
	Purchased equipment 	Reduce our footprint from purchased equipment. Reuse and collaborate with suppliers.	Work with suppliers, ask for product footprint/EPD, reuse equipment.
Products	Production and transport 	Reduce footprint from steel products manufactured and transported to Axess. Reuse and recycle steel products.	Use recycled steel, work with suppliers, use local suppliers, reuse of products, circular economy, leasing models.
Office	IT Consumption 	Reduce our footprint from IT hardware and cloud storage. Collaborate with suppliers.	Reuse and recycle IT hardware, optimise data storage, reduce email attachments, IT campaign.
	Business travel 	Reduce our air travel related to business and sales meetings.	Teams meetings, stay longer/do more when we travel.
	Commuting 	Facilitate carbon-efficient transport to our offices.	Motivate and facilitate biking, walking and public transport. Expand the commuting campaign.

5 HANDPRINT REPORTING

5.1 Handprint focus areas

Axess has so far identified four focus areas for handprint solutions:

- IMR vessels: Innovative lifting solutions to avoid the use of IMR vessels.
- Flaring: Products and solutions that avoid production shutdown and flaring.
- Service efficiency: Products and solutions that reduce the need for mobilisation of personnel and equipment
- Steel production [NEW]: Reduce the production of steel by optimising designs, reusing products and extending the lifetime of products and installations.

IMR vessels

We offer innovative lifting solutions that avoid the use of Inspection, Maintenance and Repair (IMR) vessels. If clients report according to the GHG Protocol, the savings will relate to C1: purchased goods and services under scope 3.

Our current solution is the caisson replacement service, based on our unique method that eliminates the need for IMR vessels. A similar thruster replacement service is under development, and we are searching for a pilot case.

Handprint solutions:

- Caisson replacement - 240 tCO₂e /1 caisson
- Thruster replacement - 94 tCO₂e /1 thruster

For calculations, see appendix E.

Strategies:

- Increase our market share in thruster and caisson replacements, without the use of IMR vessels.
- Innovate new lifting solutions to avoid use of IMR vessels.

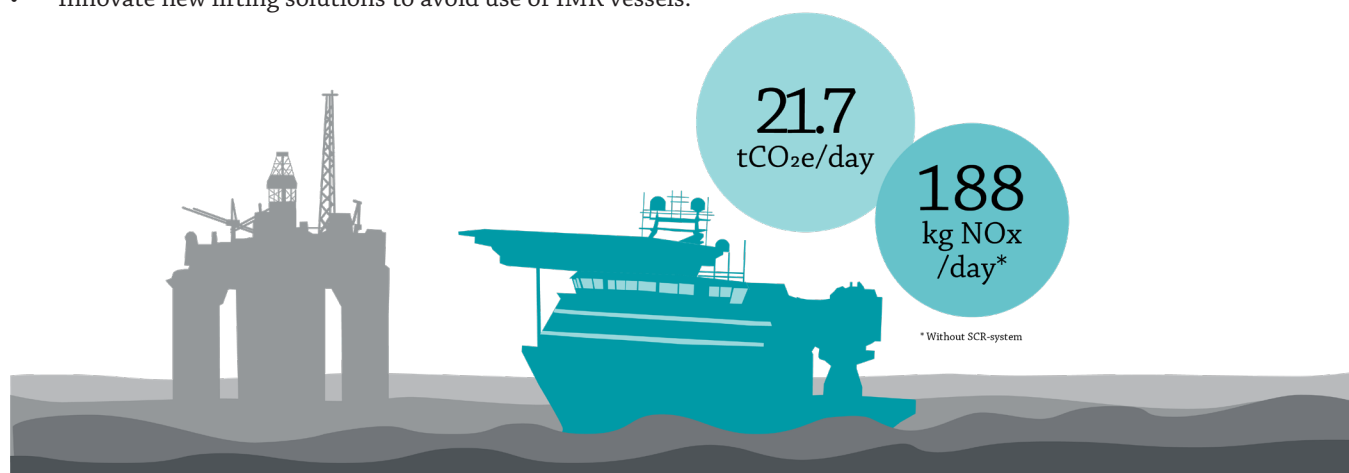


Fig. 9. A typical IMR vessel emits about 21,7 tCO₂e every day it is operating offshore.

Flaring

We offer products and solutions that avoid production shutdown and flaring. If clients report according to the GHG Protocol, the savings will relate to their Scope 1; direct emissions from owned/controlled operations.

One example is the redundant Alpa Winch, its reduction potential is 500 to 6000 tCO₂e per year depending on the installation.

Another example is the Alpa skidding frame with redundant hoists used on an installation in 2022. This solution allows the installation of Xmas trees in parallel with jackup operations. This is a new product from Axess Technologies, which is also suitable to use on process plants.

Handprint solutions:

- Alpa Winch - 500 to 6000 tCO₂e per year depending on the installation
- Alpa Hoists – not yet calculated

Strategies:

- Increase sales of Alpa Winch and other redundant lifting solutions
- Innovate on new ways to avoid flaring

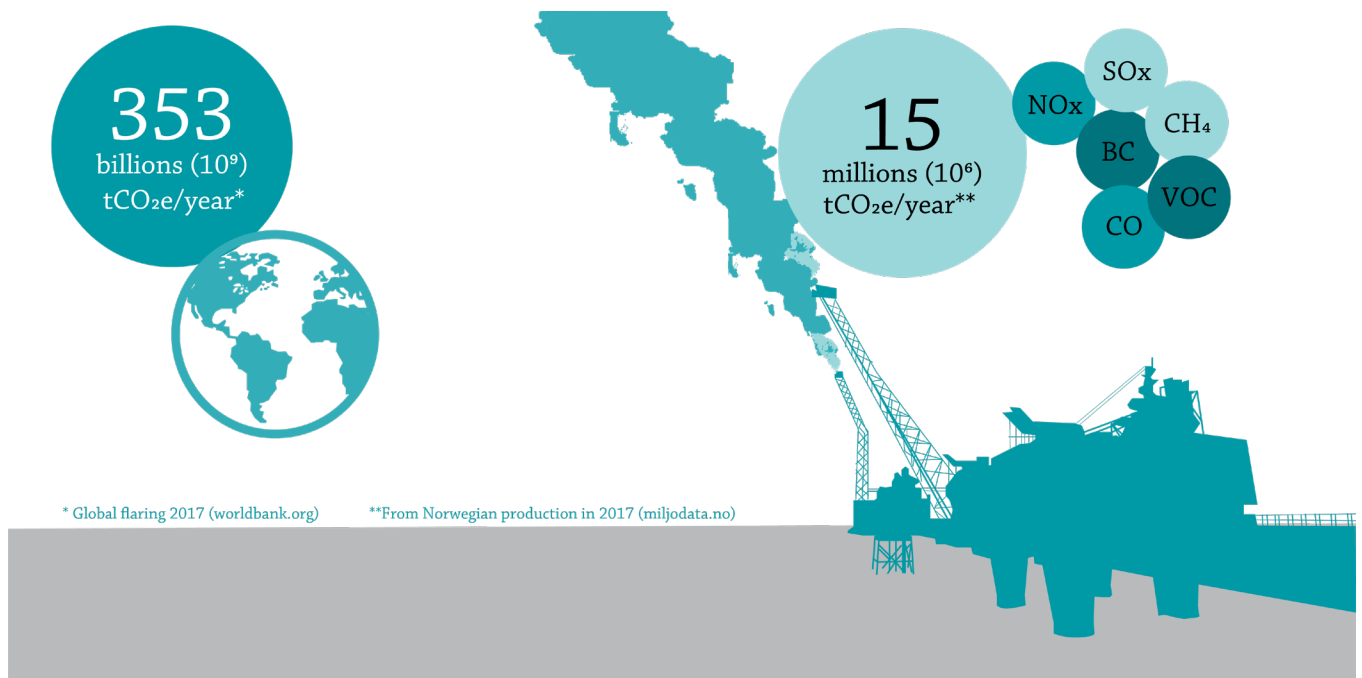


Fig. 10. Flaring in general is one of the major contributors to GHG emissions. The emissions from flaring worldwide are 353 10⁹ tCO₂e annually. (worldbank.org)

Service efficiency

We offer products and solutions that reduce the need for mobilisation of personnel and equipment. The effect overlaps with the Axess Scope 3, C9; Downstream Transportation. For offshore installations, the helicopter flight is provided by the client. The entire mobilisation footprint will affect their Scope 3, C1; purchased goods and services, and reduced emissions from own/controlled helicopters in Scope 1. In many cases, our solutions simplify the work scope to such a degree that our clients also save emissions on other parts of the scope (not delivered by Axess) that also become redundant, e.g., solutions that eliminates scaffolding.

Current solutions:

- Total Rig Integrity Manangement (TRIM) – reduce man-mobilisations
- eDROPS (Bridge) – reduce man-mobilisations
- Drone – bridge and hull inspection – reduced equipment transport
- Crawler tank inspection – reduced man-hours and improved HSE
- AxEye – AR glasses to facilitate remote operations – reduce man-mobilisations
- ALPA crane control system – remote monitoring of cranes – reduce man-mobilisations

Strategies:

- Calculate more client cases
- Establish KPI with clients to increase efficiency
- Innovate to increase efficiency

Steel production

Every ton of steel produced in 2018 emitted on average 1.85 tons of carbon dioxide, equating to about 8% of global CO₂e emissions. Axess aims to reduce steel production by optimising designs, reusing products and extending the lifetime of products and installations. This will reduce clients' footprint related to scope 3, C1; purchased goods and services. Some of the strategies will also improve Axess' scope 3, C1.

Handprint solutions:

- EMAG – cleaning and inspection of crane wire ropes to extend their lifetime
- Crane refurbishing – to extend the lifetime of (offshore) cranes and lifting appliances

Note that Axess provides a lot of maintenance services to improve or prolong lifetime of structures, but to report on this according to the Carbon Handprint Guide, it needs to be something quantifiably better for the environment than what other competitors are offering.

Strategies:

- Offer refurbishing and life extensions of steel structures as an alternative to replacement
- Extend the life of own products through leasing and buy-back contracts (also Axess' footprint)
- Optimise designs to reduce steel weight. (also Axess' footprint)
- Develop modular designs for return and reuse. (also Axess' footprint)

5.2 Handprint in 2017 (base year)

The caisson replacement without IMR vessel was the first handprint estimation in Axess' history and makes up the entire calculated handprint for 2017. For calculation, see appendix E.

Focus area	Operation	Handprint solution	Baseline solution	Handprint 2017 (tCO ₂ e)	Handprint 2017 (tCO ₂ e/MNOK)
IMR	Caisson replacement	Innovative lifting solution, replacing the IMR vessel	IMR vessel	1677	5,4

5.3 Handprint in 2022

We have estimated handprint solutions for three focus areas. New potential handprint solutions presented in appendix E need more investigations to be calculated. For the new focus area of steel production, we have no calculations so far. For more information and calculations, see appendix E.

In 2022, we have not performed any caisson or thruster replacements without the support of IMR vessels. We have performed one thruster replacement using the conventional method.

We had four Alpa Winches installed on different installations, saving our clients 12 500 tCO₂e through this handprint solution in 2022. One of the winches is now returned and in storage, waiting to be mobilised to a new client.

The TRIM solution for a major client is further improved by the introduction of AxEye, enabling remote operations and reduction of man-mobilisations.

The drone bridge inspection is a new case, with 24 bridges inspected in 2022. In addition, we have performed one crawler storage tank inspection, saving the client 200 to 250 man-hours and improving HSE and working conditions.

Focus area	Operation	Handprint solution	Baseline solution	Handprint 2022 (tCO ₂ e)	Handprint 2022 (tCO ₂ e/MNOK)
IMR	Caisson and thruster replacement	Innovative lifting solution, replacing the IMR vessel	IMR vessel	-	-
Flaring	Lifting over pressurised equipment	Alpa winch		12 500	12,0
Service efficiency	Rig integrity operations	TRIM	Singular services	47	0,05
Service efficiency	Bridge inspection	Drone inspection	Truck lift	19	0,02
Total				12 566	12,1

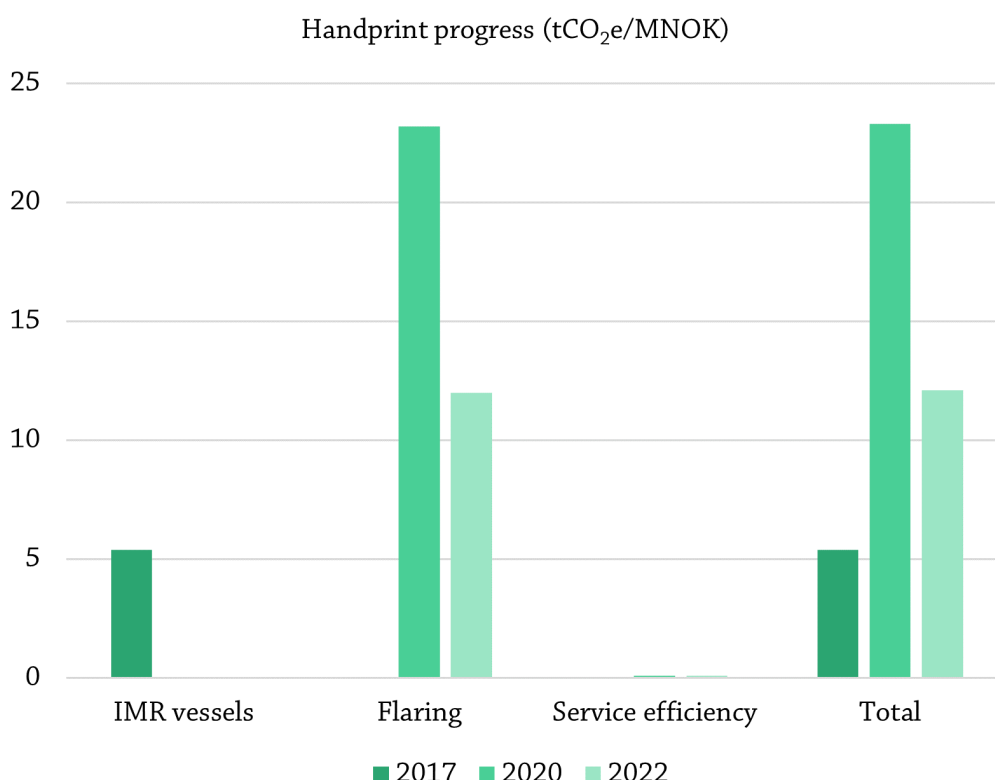
In addition to what is provided in this year's report, there is a significant number of initiatives that has not been possible to calculate yet. For 2023, there will be a focus towards quantifying Axess' positive impact to a greater extent.

5.4 Handprint progress from 2017 to 2022

The handprint of 2022 is not showing the desired progress. In absolute numbers, we have a small growth in the total handprint. However, due to our company's significant growth and our increased value added, the GEVA has decreased.

The size of the documented handprint is dependent on continuous innovation and new calculations.

- The IMR vessel contribution is dependent on the specific projects each year.
- In comparison, the Alpa Winch units will contribute with an annual handprint over their operating period.
- Service efficiency is currently based on only one client portfolio. The potential for capturing more of our positive impact here is dependent on systematic improvement and calculations in cooperation with more clients.



Development 2017-2022	2017	2020	2022	Absolute change (2017-2022)	Change 2017-2022 (%)
Growth in business					
Employees	208	329	558	350	168%
Turnover (MNOK)	431	621	1202	771	179%
Value added (MNOK)	317	518	1042	725	229%
Handprint KPI (GEVA)					
Total handprint	5,4	24,4	12,1	6,7	124%

Comments for progress per focus area

IMR vessels

2017: The pioneer caisson replacement project without the use of IMR vessels was the first handprint calculation in Axess. The innovative lifting method proved that we could manage advanced replacement procedures without the support of costly IMR vessels.

2020: The handprint related to IMR vessel for 2020 is zero. Based on the learnings from the caisson replacement project in 2017 we developed a method for replacing thrusters without the support of IMR vessels. This was falsely taken into account for the handprint of 2020, due to a misunderstanding. We still have not succeeded in recruiting the pilot client to demonstrate this method.

2022: We did not carry out any thruster or caisson replacements without the use of IMR vessels. We replaced one thruster with the traditional method. The outlook for 2023 is brighter, as we are preparing for new caisson replacement projects together with clients.

Flaring

2017: We had still not established this as a focus area, and the calculated handprint from reducing flaring was therefore zero.

2020: We had three Alpa Winches installed on different installations. In cooperation with a major client, we were able to calculate the annual reduction of flaring related to the operation of the winches.

2022: The same three winches remained in operation. In addition, a fourth winch was installed on another installation. The client has still not calculated the effect, but based on the existing estimates and knowledge about the properties of the specific installation, we have estimated the savings.

Service efficiency

2017: We had no calculation of handprint related to service efficiency.

2020: We established the first calculated handprint in dialogue with a major client. This is only one example of how we improve efficiency through TRIM contracts, remote services and digitalisation. The handprint is in reality larger, but we fail to prove it through data and calculations.

2022: We have an idea of how to calculate the effect of more TRIM contracts, through client KPIs, but we are not there yet. In addition to TRIM effects, we introduced a calculation of handprint from drone and crawler inspections.

6 HANDPRINT STRATEGIES

6.1 Handprint improvement approach

The handprint calculation for 2022 and the lack of improvement for GEVA demonstrates the need for us to focus on resource-efficient innovations as we continue to grow as a company. We must intensify our focus on continuous improvement in the coming year.

Additionally, we need to improve our communication and cooperation with clients to quantify the actual effect of service efficiency, which has not shown growth in the calculated handprint due to the lack of data.

The potential handprint is many times bigger than the footprint, which reinforces our motivation to innovate products and services. The handprint calculations will help us communicate with the market, become the preferred partner, and inspire others to follow.

To continuously improve our handprint, we need to work on three levels:

- Identifying new potential for improving our clients' carbon footprint and generating ideas for new solutions.
- Developing and implementing solutions and calculating effect with a pilot client. This includes calculating the footprint of baseline solutions to compare and quantify improvement.
- Scaling up by offering improved solutions to all customers to reach full potential of improvement.

The total handprint will be calculated annually by summarising the effect of all implemented handprint solutions.



6.2 Strategies for improvement within focus areas

IMR vessels

- Intensify communication and marketing of caisson and thruster replacement methods without the use of IMR vessels

Flaring

- Continue marketing and sales of the Alpa winch
- Product development based on redundant Alpa hoist
- Dialogue with clients, to motivate calculation of reduced emissions from flaring

Service efficiency

- Calculate more TRIM cases by engaging clients in dialogue. The handprint is without a doubt a lot larger than we are able to calculate right now.
- Establish KPI with clients to motivate service efficiency.
- Intensify sales and marketing of drone and crawler inspection
- Continue R&D, to develop more remote services
- Calculate effects from solutions such as eDROPS, AxEye and Alpa Crane Control System

Steel Production

- Offer prolonged lifetime as alternative to replacement when possible
- Look into possibilities for take back and reuse of transport and installation structures
- Focus on leasing and buy-back contracts
- Explore possibilities for modular and standardised designs to facilitate reuse of structures

6.3 Handprint targets

To further increase our handprint, we need to identify more focus areas and work systematically with innovations in close cooperation with clients.

We want to improve our handprint related to the growth of our business, hence we use the same KPI as for the footprint, GEVA. As the calculations show, the potential handprint varies over the focus areas. The effect of service efficiency can never compete with the reduction of flaring. Regardless, we want to improve in all areas, so we have defined individual handprint goals for each focus area.

The total handprint target for 2025 is 65 t/MNOK. Currently, we are not on track to meet this goal, but we believe we can meet the goal if we follow the strategies in Chapter 6.2 moving forward.

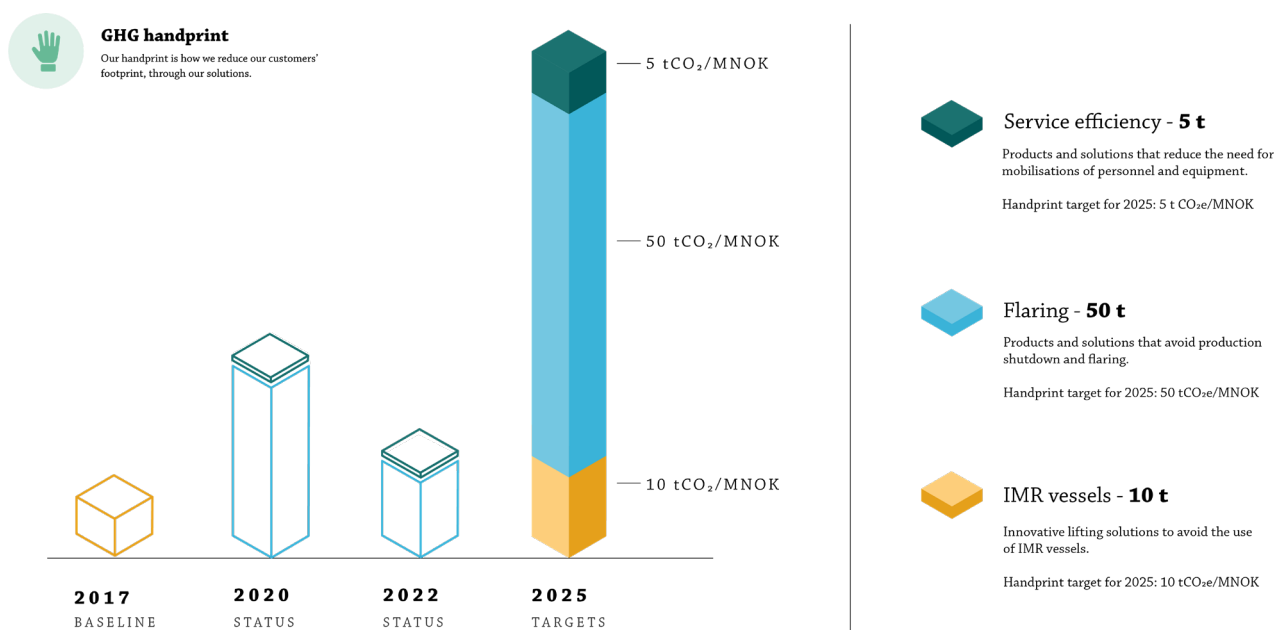


Fig. 11. Distribution of emissions from the three handprint focus areas, and individual reduction targets.

7 APPENDIX

A. Climate Roadmap history

The Axess Climate Roadmap initiative was launched in early 2018, with the main goal of reducing the most obvious source of GHG emissions, which was our extensive travel activity. These include client projects worldwide (mobilisation) and management activity in a global enterprise (business travel). We started by manually mapping the carbon footprint for 2017, but soon realised that we needed more efficient methods to collect and analyse data for regular monitoring.

Automated monitoring

In 2019, we began developing systems and tools for monitoring our carbon footprint, and we are continuously adjusting and improving them.

- Mobilisation: Integrated functions in our digital resource planner (Horizon Planner) to track the carbon footprint from mobilisations of personnel.
- Commuting: Integrated functions in our hourly system, Agresso, to track employees' mode of transportation.
- Business travel: Regular, automated reports from our travel agency (Berg Hansen)
- Preparing for communication with employees on SharePoint.

Choosing a standard

When we resumed work on GHG emissions in early 2021, we decided to use the GHG Protocol standard for our initiative. To align with the standard, we scanned our entire value chain, involving all entities worldwide. This resulted in a mapping of our complete carbon footprint and the establishment of extended reduction targets, as described in chapter 3.

Our first GHG emission report was completed in May 2022, using 2017 as the base year, with a status report for selected categories for 2020 and 2022. Due to COVID-19, 2020 was not a representative year since business was not as usual for Axess. Office employees stayed at home, and business travel was negligible.

We now intend to report all emissions in conformance with the GHG Protocol Corporate Standard annually. In Q1 2022, we revised the reduction goals and strategies based on these calculations.

The first footprint calculation

The first calculation of the 2017 carbon footprint was performed in 2018, before we adopted the GHG Protocol standard. However, we covered several categories, including C9 Downstream transportation (mobilisation and goods), C8 Leased assets (electricity), C7 commuting, C6 Business Travel (management and sales). The mobilisation of personnel represented the most significant contribution with 58%.

The total scan revealed a footprint of about 1600 tCO₂e. However, this is not the complete footprint according to the GHG Protocol Scope 3.

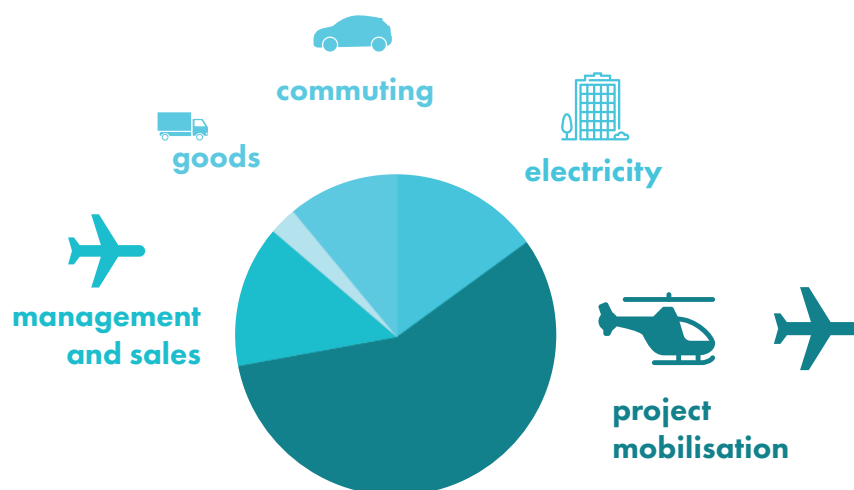


Fig. A.1. The pie chart shows the distribution of carbon footprint across the various categories included in the first round of emissions calculations in 2018.

The second footprint calculation – scope 3

In 2021, we decided to implement the GHG Protocol Scope 3, which provides a value chain perspective. The procedure involved performing a scan to identify significant sources of emissions. Based on this analysis, we identified appropriate focus areas and developed reduction strategies.

Rationale for selecting categories

We calculated the emissions for the remaining relevant categories, as described in chapter 3.2. We have specified subcategories for some categories, as they have different reduction strategies and tracking progress becomes easier by keeping them separate. Emissions were calculated using the Scope 3 Evaluator, utilising data from annual accounts, suppliers' invoices, and extrapolation.

The third and latest footprint calculation – scope 3

For the 2022 report, we kept the same categories and subcategories. This year, we improved the data quality and the engagement around the report throughout Axess Group. Some categories still rely on yearly accounts, but this year, we used data from each entity rather than extrapolating based on Norway.

B. Footprint reporting scopes

The figure below shows the three scopes in the GHG Protocol standard. Scope 3 has the value chain perspective with its 15 categories.

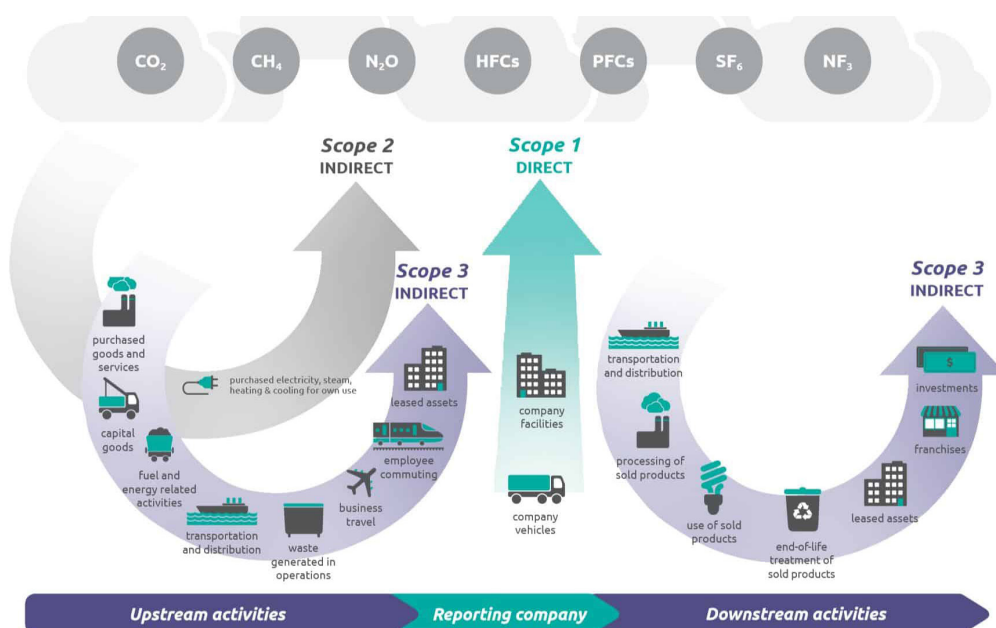


Fig. B.1. Overview of GHG Protocol scopes and emissions across the value chain. (Source: Greenhouse Gas Protocol, 2011)

Axess Scope 1 and 2

Scope 1 includes direct emissions from operations owned or controlled by the reporting company. Axess does not own any buildings or vehicles or control any operations, hence Scope 1 is not relevant.

Scope 2 includes emissions from purchased electricity for own combustions. Axess does not own any buildings or vehicles, hence Scope 2 is not relevant. Electricity used in leased facilities is accounted for in Scope 3 – Category 8: Upstream leased assets.

Axess Scope 3

Axess will report on all relevant categories in Scope 3 – indirect emissions in the company's value chain. We have used the GHG Protocol scope 3 evaluator to identify which categories have the most significant emissions. This will serve as the foundation upon which we will build our efforts to enhance data collection, define our focus areas and reduction strategies.

Relevant Scope 3 categories

C1: Purchased goods and services

Defined as emissions from extraction, production and shipping of products and services purchased by Axess, e.g., steel constructions, machine parts, IT, cloud services, project equipment.

C4: Upstream transportation and distribution

Transportation of purchased goods from suppliers to Axess.

C5: Waste generated in operation

Disposal and treatment of waste generated in Axess' operations. Project waste, typically ropes, slings, packaging. Office waste e.g., electronics, packaging, leftovers from lunch, etc.

C6: Business travel

Employees' engagement in business-related activities such as flights, and transportation to hotels and restaurants and meeting venues. Business travels are typically for Axess' sales and management meetings, project meetings, social events, visits, training, etc.

C7: Commuting

Transportation of employees between their homes and their worksites, in vehicles not operated by Axess. The typical Axess employee travels by personal car.

C8: Leased Assets

Emissions from operation of assets leased by Axess. Includes emissions from electricity used to operate offices and warehouses, and emissions from leased vehicles, running on electricity or fuel.

C9: Downstream transport and distribution

Transport of products and services sold by Axess. For work on offshore installations this includes transport of personnel from home to heliport with plane or car, and transport to installation by helicopter or boat. For work on land-based installations transport methods are typically leased cars or plane. Category also includes transport of equipment from warehouse to clients' sites.

C11: Use of sold products

Direct emissions from end use of products and services sold by Axess, over their expected lifetime. Typically sold products that consume electricity or fuel, such as the Alpa Winch.

C12: End-of-life treatment of sold products

Emissions from waste disposal and treatment of products sold by Axess at the end of their life. Typically, emissions from disposal of steel structures and winches, and energy used for recycling steel structures. Today, Axess has little control over end-of-life treatment. As Axess strategy represent a move from selling to leasing, this will change in the future.

C13: Downstream leased assets

Direct emissions from end use of Axess' products and services leased to clients in the reporting year. Typically leased products that consume electricity or fuel, such as the Alpa Winch.

Categories that are not relevant for our value chain, and excluded from the report:

- C2: Capital goods
- C3: Fuel- and energy related activities (not included in scope 1 or scope 2)
- C10: Processing of sold products
- C14: Franchises
- C15: Investments

C. Footprint - calculation methods

The footprint has been calculated in three sequences, in 2018 for 2017, in 2021 for 2020 and in 2023 for 2022.

The first sequence was calculated using different data sources, and not based on a standard. For the second sequence, we used the GHG Protocol Standard, and the calculation tool provided by this standard, using the spend-based method to do a brief scan. For the third sequence, we continued to use the GHG Protocol Standard and improved the calculation method on many categories, using supplier-specific method and hybrid method together with the spend-based method on less important categories. See Figure C.1.

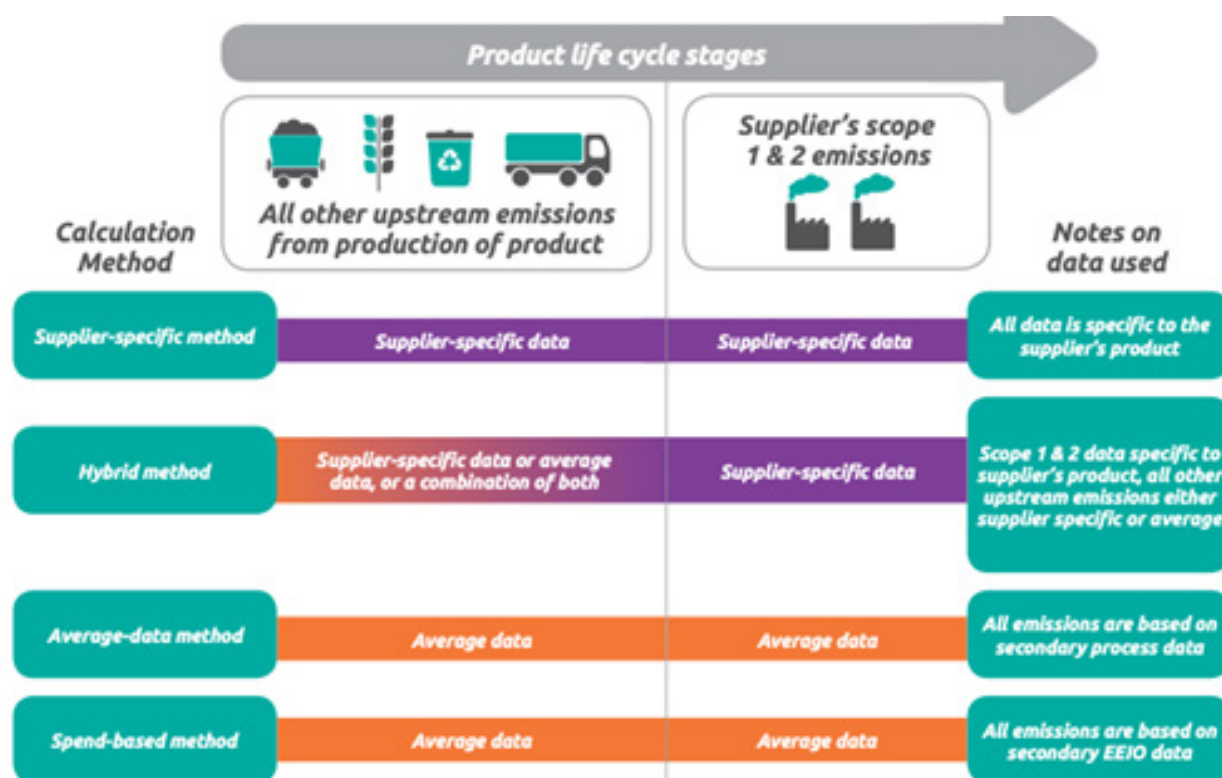


Fig. C.1. Overview of GHG Protocol Scope 3 calculation methods. (Source: Greenhouse Gas Protocol, 2011)

2017

In 2017, data was collected without basing it on a standard. Our extensive travel activity was what triggered us to look into our emissions. We saw a potential in more resource-efficient mobilisation of personnel. An identification of the main activities in the company led to the selected categories. Data was collected manually from suppliers accounting and data sets, software and questionnaires. This is specified per category below, for the following categories.

Mobilisation (C9 Downstream Transportation):

Our services require mobilisations of personnel to client installations for different projects. For Norway, this was calculated based on data from Horizon Planner and an online carbon footprint calculator. The other offices used excel to collect data.

Transportation of equipment (C9 Downstream Transportation):

Calculated based on accounts from transporters and DHL's online carbon calculator. These were the less complete datasets.

C6 Business travel:

The calculation was based on data from travel agencies for management and sales employees.

Electricity (Category 8 Upstream leased assets):

Power consumption was calculated based on electricity bills. To calculate electricity footprint, we have used the average emission factor for the OECD countries for all of our offices. Norwegian electricity has a much lower footprint, but as we operate in an international energy market, we find it fair to use the same factor for all. The large part of our electricity goes to heating and cooling of our office facilities.

C7 Commuting:

Employee commuting was calculated based on an employee survey and an online carbon emission calculator.

2020

In 2020, we aligned everything with the GHG Protocol standard. To make the data set more complete, we used the Scope 3 Evaluator to report on all relevant categories. This is a scan based on the spend-based method, meaning it gives a brief scan of the emissions.

2022

In 2022, we continued to report according to the GHG Protocol Standard. This year, we have good data quality on all focus areas, involving all entities and regions of Axess Group and suppliers. This has made it possible to use the “supplier-specific method” and “hybrid method” together for all our focus areas (and more), and the “spend-based method” only on the least important categories.

Base year emissions recalculation policy

We will evaluate what recalculation method we will use after we have collected and analysed data for 2023. For 2022, our policy is to acknowledge and specify that some of the reduction is due to improved data quality. We need to gain more experience to set a consistent recalculation policy. We might apply different recalculation methods for the categories that we prioritise and categories of less priority.

Corrections in calculations

During this year’s calculations, we discovered a mistake done in the last report. Finance had been calculated double; as a separate subcategory to Office and included in the Miscellaneous category. This was for both 2017 and 2020. This has been corrected for this report and GEVA for Office and total emissions are therefore not the exact same as in the previous report.

D. Footprint - data overview and calculations

Data information overview 2017

Scopes and categories	Specifications	Total emissions for Axxess Group (tCO ₂ e)	Description of the types and sources of data used to calculate emissions	Description of the data quality of reported emissions	Description of the methodologies, allocation methods, and assumptions used to calculate emissions	Emission factor used
Scope 1: Direct emissions from owned/ controlled operations		0	Axxess do not own any production facilities, buildings or vehicles.			
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling		0	Axxess do not own any production facilities, buildings or vehicles.			
Category 1: Purchased goods and services	Steel Production	90	Internal data systems	Fair	Hybrid method, estimating weight of end product to estimate steel purchased. Based on information of Alpa only, which stands for most of the steel production in Axxess.	Emission factor for steel 1.85 (global average from, World Steel Org, https://www.mckinsey.com/industries/metals-and-mining/our-insights/decarbonization-challenge-for-steel)
	Computers/ IT/ technology	1 579	Annual account	Fair	Spend based method. Extrapolated based on employees using data from Axxess Europe.	WIOD emission factors, Electrical and optical equipment, 0,82.
	Services (grouped)	552	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axxess Europe.	WIOD emission factors. Factors listed in calculations.
	Office/other (grouped)	579	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axxess Europe.	WIOD emission factors. Factors listed in calculations.
	Finance	248	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axxess Europe.	WIOD emission factors. Factors listed in calculations.
Category 4: Upstream transportation and distribution	Transport of steel mainly	44	Data from supplier	Fair	Fuel-based method. Own calculations based on own record and emission factors from DHL, as if and assuming that transport is done with them.	DHL Carbon Calculator https://dhl-carboncalculator.com/#/scenarios . Factors kgCO ₂ e/km differ between countries 0,0013 for Norway, 0,159 Brazil, 1,27 Singapore
Category 5: Waste generated in operations		50	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axxess Molde office	WIOD emission factors, 0,95 kgCO ₂ e/\$
Category 6: Business travel		351	Travel agency	Very good	Fuel-based method. CO ₂ emission account from travel agency Spend based method for hotel and restaurants. Based on Axxess Global.	Emission factors used by travel agency Berg Hansen for travel. WIOD emission factors, Hotels and restaurants, 0,56 kgCO ₂ e/\$
Category 7: Employee commuting		186	Automated and manual registration	Good	Fuel-based method. Own calculations based on global employee survey.	Emission factors from ‘Ducky’, a Norwegian company specialised in digital carbon footprint calculation. Simplified categories, e.g., same emission factor used for tram/short distance train/long distance train/bus to represent “public transport”. Factors listed in calculations.
Category 8: Upstream leased assets	Electricity used in leased facilities	245	Data from supplier	Good	Asset-specific method. Own calculations using electricity consumption per facility, based on electricity bill. Based on Axxess Global.	Based on average/flat emission factor for OECD 2013. E.g., Norway does not benefit from clean energy/hydropower. http://www.compareyourcountry.org/ (electricity data no longer available on this site)
Category 9: Downstream transportation and distribution	Mobilisation of personnel	896	Data from supplier and automated and manual registration	Good	Fuel-based method. Own calculations using data from Horizon planner (Norway) and manual registration in Excel (globally). Accounting for plane and helicopter travel only. Transport in vehicle and boat are small, and will not be registered in the coming years.	Emission factor helicopter: U.S. Energy Information Administration, https://www.eia.gov/environment/emissions/co2_vol_mass.php , 2,5 kgCO ₂ /litre. Simplification: Same flight distance for all mobilisations. Emission factor plane: Online, free carbon calculator https://www.carbonfootprint.com/calculator.aspx
	Equipment	226	Suppliers invoices	Fair	Spend based method. Extrapolated based on employees using data from Axxess Norway.	WIOD emission factors. Air transport 1,97, Inland transport 0,96
Category 11: Use of sold products		0	Internal data systems	Fair	The fuel consumption of the products in use are neglectable.	
Category 12: End-of-life treatment of sold products		0			Products have not reached end-of-life yet and have not been estimated.	
Category 13: Downstream leased assets		0	Internal data systems	Fair	The fuel consumption of the products in use are neglectable.	

Data information overview 2020

Scopes and categories	Specifications	Total emissions for Axess Group (tCO ₂ e)	Description of the types and sources of data used to calculate emissions	Description of the data quality of reported emissions	Description of the methodologies, allocation methods, and assumptions used to calculate emissions	Emission factor used
Scope 1: Direct emissions from owned/controlled operations		0	Axess do not own any production facilities, buildings or vehicles.			
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling		0	Axess do not own any production facilities, buildings or vehicles.			
Category 1: Purchased goods and services	Steel Production	149	Internal data systems	Fair	Hybrid method, estimating weight of end product to estimate steel purchased. Based on information of Alpa only, which stands for most of the steel production in Axess.	Emission factor for steel 1.85 (global average from, World Steel Org, https://www.mckinsey.com/industries/metals-and-mining/our-insights/decarbonization-challenge-for-steel)
	Computers/ IT/ technology	1222	Annual account	Fair	Spend based method. Extrapolated based on employees using data from Axess Europe. Reduced the CO ₂ emission with return and reuse service.	WIOD emission factors, Electrical and optical equipment, 0,82.
	Services (grouped)	561	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axess Europe.	WIOD emission factors. Factors listed in calculations.
	Office/other (grouped)	460	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axess Europe.	WIOD emission factors. Factors listed in calculations.
	Finance	192	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axess Europe.	WIOD emission factors. Factors listed in calculations.
Category 4: Upstream transportation and distribution	Transport of steel mainly	56	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Data from Alpa and using data from Europe to extrapolate based on Employees.	WIOD emission factors, Inland transportation 0,96 kgCO ₂ e/\$
Category 5: Waste generated in operations		8	Annual account	Poor	Spend based method, using the Scope 3 Evaluator. Extrapolated based on employees using data from Axess Europe.	WIOD emission factors, 0,95 kgCO ₂ e/\$
Category 6: Business travel		222	Travel agency	Poor	Using data from 2017 for CO ₂ /employee and extrapolating based on employees for 2020. Data for 2017 fuel-based method. CO ₂ emission account from travel agency Spend based method for hotel and restaurants. Based on Axess Global.	Emission factors used by travel agency Berg Hansen for travel. WIOD emission factors, Hotels and restaurants, 0,56 kgCO ₂ e/\$
Category 7: Employee commuting		114	Automated and manual registration	Fair	Using data from 2017 for CO ₂ /employee and extrapolating based on employees for 2020 and adjusted to 30% because of low activity large part of the year. Data for 2017 is done with fuel-based method. Own calculations based on global employee survey.	Emission factors from 'Ducky', a Norwegian company specialised in digital carbon footprint calculation. Simplified categories, e.g., same emission factor used for tram/short distance train/long distance train/bus to represent "public transport". Factors listed in calculations.
Category 8: Upstream leased assets	Electricity used in leased facilities	398	Data from supplier from previous year	Fair	Using data from 2017 for CO ₂ /employee and extrapolating based on employees for 2020. Data for 2017 is done with asset-specific method. Own calculations using electricity consumption per facility based on electricity bill. Based on Axess Global.	Based on average/flat emission factor for OECD 2013. E.g., Norway does not benefit from clean energy/hydropower http://www.compareyourcountry.org/ (electricity data no longer available on this site)
Category 9: Downstream transportation and distribution	Mobilisation of personnel	770	Data from supplier and automated registration	Fair	Fuel-based method. CO ₂ emission account from travel agency and own calculations. Own calculations using data from Horizon planner (Norway) and extrapolated based on employees.	Emission factor helicopter: U.S. Energy Information Administration, https://www.eia.gov/environment/emissions/co2_vol_mass.php , 2,5 kgCO ₂ /litre. Simplification: Same flight distance for all mobilisations. Emission factor plane: Online, free carbon calculator https://www.carbonfootprint.com/calculator.aspx
	Equipment	211	Suppliers invoices	Fair	Spend based method. Extrapolated based on employees using data from Axess Norway.	WIOD emission factors. Air transport 1,97, Inland transport 0,96
Category 11: Use of sold products		0	Internal data systems	Fair	The fuel consumption of the products in use are neglectable.	
Category 12: End-of-life treatment of sold products		0			Products have not reached end-of-life yet and have not been estimated.	
Category 13: Downstream leased assets		0	Internal data systems	Fair	The fuel consumption of the products in use are neglectable.	

Data information overview 2022

Scopes and categories	Specifications	Total emissions for Axess Group (tCO ₂ e)	Description of the types and sources of data used to calculate emissions	Description of the data quality of reported emissions	Description of the methodologies, allocation methods, and assumptions used to calculate emissions	Emission factor used
Scope 1: Direct emissions from owned/controlled operations	-	0	-	-	-	-
Scope 2: Indirect emissions from the use of purchased electricity, steam, heating, and cooling	-	0	-	-	-	-
Scope 3: Corporate Value Chain						
Category 1: Purchased goods and services	Steel	143	Internal data sytems, Agresso	Good	Hybrid method. Calculating kg of steel bought from suppliers with relevant secondary (e.g. industry average) emission factor.	EF for weight of steel 1.85 (global average from, World Steel Org, https://www.mckinsey.com/industries/metals-and-mining/our-insights/decarbonization-challenge-for-steel)
	IT - hardware	225	Data from supplier, Atea and Power BI	Good	Hybrid method. Exact emission provided by our supplier and their suppliers for Norway. Extrapolated average emission per product category for number of units bought in the rest of Group.	Provided by supplier, Atea and their suppliers.
	IT - hardware savings	-4	Supplier, Loop	Good	Withdrawing the saved CO ₂ from returning goods.	Provided by supplier, Atea and their suppliers.
	IT - software	914	Data from supplier, Atea and Power BI	Good	Supplier-specific method. Exact emission provided by our supplier and their suppliers on software services and solutions (Microsoft 365) and Cloud services from Azure for all of the Group.	Provided by suppliers, Atea, Microsoft 365 and Azure.
	Services (grouped) = Equipment	756	Purchase orders, Agresso, and yearly account	Poor	Spend-based method, using the Scope 3 Evaluator for Axess AS. Grouping equipment into metals, textiles and chemicals. Extrapolating emissions for the number of units bought in some entities. For the rest, the equipment emission is extrapolated based on Axess AS, as relative to the emission of plane mobilisation. Other equipment, categorised as machinery and textile services, are calculated using data from yearly accounts.	EF spend-based, (WIOD): Textile 1,11, Machinery 0,83, Chemicals 1,34
	Office/other (grouped) = Miscellaneous	1075	Yearly account	Poor	Spend-based method, using the Scope 3 Evaluator for Axess Group.	EF spend-based, (WIOD), using several sub-categories emission factors.
	Finance	567	Yearly account	Poor	Spend-based method, using the Scope 3 Evaluator for Axess AS and Technologies, and extrapolated based on employees for the rest of the Group.	EF spend-based, (WIOD), Financial Intermediation: 0,14
Category 4: Upstream transportation and distribution	Transport of steel	29	Data from supplier, SR Group being the largest	Good	Supplier-specific method. Exact emission provided by our suppliers for transport.	Provided by supplier, SR Group.
Category 5: Waste generated in operations		4	Yearly account	Poor	Spend-based method, using the Scope 3 Evaluator for entities registered in Norway, extrapolated relative to the emission of waste to the emission of facility for the rest of Group.	EF spend based, (WIOD), calculated that factor for waste must be 0,5.
Category 6: Business travel		1300	Travel agencies and yearly account	Good	Supplier-specific method, CO ₂ emission account from travel agencies. Spend-based method for hotel and resturants and outlays. Based on Axess Global.	Emission factors used by travel agency, Berg Hansen, Google flights for similar flights is used when CO ₂ data is not provided by the travel agency. WIOD emission factors, Hotels and restaurants, 0,56 kgCO ₂ e/\$
Category 7: Employee commuting	Transport from home to office, round trip	364	Agresso in Norway. Employee survey in the rest of the world.	Good	Hybrid method. Manual calculations based on personal registration in Norway for Q4 and extrapolated for the rest of the year. No registration counts as travel with fuel car. Commuting distance in Norway conservatively set to 10km each way. Global employee survey for average days in office, distance round trip home-office and transportation method.	Emission factors from 'Ducky', a Norwegian company specialising in digital carbon footprint calculation. Simplified categories, e.g., same emission factor used for tram/ short-distance train/long-distance train/bus to represent "public transport". Fra Ducky 2017: Fossil fuel car - 0,25kg/km, Electric vehicle - 0,120kg/km, Public transport - 0,075kg/km, Bike/Walk - 0kg/km

Category 8: Upstream leased assets	Electricity used in leased facilities and emissions from leased fuel vehicles	100	Data from supplier.	Good	Hybrid method. Own calculations using electricity consumption in kWh per facility for each office, based on the electricity bill. Using local emission factor to have a useful footprint for each region. Only extrapolated for offices in Molde, Trondheim, Oslo and Stavanger.	For electricity: EF per region, using local emission factor kg/ kWh for electricity, CARBON FOOTPRINT COUNTRY SPECIFIC ELECTRICITY GRID GREENHOUSE GAS EMISSION FACTORS Last Updated: March 2022. For vehicle, Ducky 2017: Fossil fuel car: 0,25 kg/km.
Category 9: Downstream transportation and distribution	Mobilisation of personnel	2354	Internal tool Horizon Planner, local travel agency or Google flights.	Good	Supplier-specific method for all regions, using internal tool Horizon Planner, local travel agency or calculated using Google flights.	Provided by calculation provided.
	Mobilisation of equipment	413	Data from suppliers, SR Group, Bring, Jetpak.	Fair	Supplier-specific method, emission data provided by the suppliers in Norway and extrapolated for the rest of Group relative to mobilisation of personnel. Covering transport by vehicle and air.	Provided by suppliers, SR Group, Bring, Jetpak.
Category 11: Use of sold products		0			No data collected for 2022. Expected to be neglectible.	
Category 12: End-of-life treatment of sold products		0			No data collected for 2022.	
Category 13: Downstream leased assets		0			No data collected for 2022.	

E. Handprint solutions

IMR vessel/Caisson replacement

The first handprint calculation was based on the caisson replacement project in 2017, which included advanced lifting operations without using costly and fuel-intensive IMR vessels. The IMR vessel was the baseline solution, and the new lifting solution is the handprint solution. The calculation was performed in close cooperation with our client. We were able to identify the baseline solution with the help of Ecoxy, a firm specialising in ship emissions, using information provided by the client.

Baseline solution footprint calculation:

- IMR vessel: 21,7 t/day x 80 days = 1700 tCO₂e
- Numbers of caissons to be replaced: 7
- Emissions per caisson: 243 tCO₂e

Axess handprint solution footprint calculation:

For this operation, we used lifting equipment that was specially designed for the task. The friction clamps lasted throughout the entire process of replacing seven caissons. Following the operation, the steel material was recycled using the client's system.

- Production of lifting solution (steel): 8,9 t steel x 1,85 tCO₂e/t = 16,5 tCO₂e
- Lifting wire: 3,1 t steel x 1,85 tCO₂e/t = 5,7 tCO₂e
- Transport Kristiansund Mongstad on truck: 13 t x 470 km x 52,7 gCO₂e/tkm (Transport & Environment, 2021) = 0,32 tCO₂e
- Total emissions for 7 caissons: 23 tCO₂e
- Emissions per caisson: 3,3 tCO₂e

Due to the high emissions related to the use of IMR vessels, the accuracy of the handprint solution footprint calculation is neglectable, but important to show that our solution also has a footprint.

IMR vessel/Thruster replacement

In 2020, in addition to the caisson replacement method, we calculated the handprint using a method similar to thruster replacement. For both solutions, the baseline is defined based on the traditional method, with estimated operating hours for an IMR vessel.

Baseline solution footprint calculation:

- IMR vessel: 21,7 t/day x 4,5 days/thruster = 100 t/thruster

Axess handprint solution footprint calculation:

The thrusters are replaced using an Axess-specific method, but with standard equipment, except for the subsea connectors. The winches used in the operation are reused and can last for 30 to 50 years. The wires must be changed between each replacement lift.

- Steel wire estimated weight: 3000 kg x 1,85 tCO₂e/t = 5,5 tCO₂e
- 3 steel subsea connectors, estimated weight: 300 kg x 1,85 tCO₂e/t = 0,55 tCO₂e
- Total emissions: 6 tCO₂e/thruster

Flaring

The Alfa Winch is a solution for lifting above pressurised equipment to avoid production shutdown and flaring. The baseline solution is therefore estimated emissions from the avoided flaring, related to the operation of the winch. The savings relate to clients' Scope 1; direct emissions from owned/controlled operations.

Baseline solution footprint calculation:

The baseline solution involves flaring. Carbon footprint savings were estimated by the client on three installations for 2020 and 2022, which are about 1200 to 6000 tCO₂e per year. The fourth winch was installed in 2021. The client has still not calculated the effect. The installation is young and had some operational challenges in 2022. Its production volume is lower than the other three. Based on this, we estimate the reduction to be about 500 tCO₂e per year.

Axess handprint solution footprint calculation:

- Production: 10 t steel x 1,85 tCO₂e/t = 18,5 tCO₂e
- Transport: 10 t/4 cbm on ship/truck 1800 km (Gdansk-Molde) = 0,3 tCO₂e (Truck shared with other shipments)
- Total emissions: 19 tCO₂e (negligible compared to flaring)

The flaring represents huge amounts of carbon emissions, and the footprint from the Alpa Winch is negligible in comparison. Axxess Technologies is offering a leasing model, meaning that the production footprint from the Alpa Winch will be shared between multiple clients over its lifetime. Hence the handprint equals the flaring emissions.

Service efficiency/TRIM, Bridge and digital solutions

TRIM stands for Total Rig Integrity Management. In collaboration with a major client, we have calculated the increased efficiency and reduced mobilisations. We used our own carbon footprint with the same client in 2016 as a baseline solution, which would likely need to be revised as our competitors have also increased their efficiency. We will look closer into this in the coming year. As of now, we have reduced the annual man-mobilisations from 22 to 15 between 2016 and 2020. For 2022, the number is still about 15 per rig, but the introduction of AxEye has enabled an additional 9 remote operations/reduced man-mobilisations for the same client. We achieved this through close dialogue with the client and a combination of solutions, TRIM and digital solutions such as Bridge, eDROPS and AxEye.

Footprint from one mobilisation from Houston:

- Estimated average flight distance from Houma - both ways: 600 km
- Helicopter CO₂e – emission: 315 kg

Baseline solution footprint calculation:

The baseline solution is singular requested projects from the client. In 2016, this led to 22 man-mobilisations per rig. Total emissions: 20 rigs x 22 mob/rig x 0,315 tCO₂e/mob = 138,6 tCO₂e

Axxess handprint solution footprint calculation for 2022:

20 rigs x 14,5 mob/rig x 0,32 tCO₂e/mob = 94,5 tCO₂e

(Additionally, 9 remote operations/reduced man-mobs in 2022 (AxEye) equals to 0,5 man-mobilisations per rig)

Service efficiency/bridge inspection using drones

Bridge inspections in Norway are traditionally performed with the assistance of a truck-lift, often stationed in the Oslo area, south of Norway. From our office in Orkanger in the middle of Norway, we serve the market in the regions of Trøndelag and Møre og Romsdal. This is the scenario for our calculations.

Baseline solution footprint calculation:

- Average transport distance for truck lift: 1000 km both ways
- Emissions from transport of truck-lift, based on report on CO₂ emissions from trucks in the EU (Ragon & Rodríguez, 2021) – 800 gCO₂e/km
- Total emissions: 0,8 tCO₂e/mobilisation

In addition, emissions from van transporting personnel from Orkanger, equals handprint solution footprint 0,042 tCO₂e/mobilisation.

Axxess handprint solution calculation:

- Average transport distance for personnel from Orkanger to bridge in Trøndelag/Møre og Romsdal: 300 km both ways
- Emissions from van transporting drone and personnel: 140 gCO₂e/km
- Total emissions: 0,042 tCO₂e/mobilisation

Service efficiency/crawler tank inspection

Storage tank inspections are traditionally performed manually, requiring scaffolding covering the tank surface. The operation is labour-intensive, to assemble and disassemble the scaffolding. The working conditions inside chemical tanks are also not optimal regarding HSE, and automation is preferable.

Baseline solution footprint calculation:

- Truck transport of scaffolding stored on location 0,5 – 1,0 km
- Emissions from transport with small truck – 500 g/km
- Emissions from personnel mobilisation transport equals bridge inspection: 0,042 tCO₂e/mobilisation
- Tank inspection represents 400 man-hours including scaffolding assembly/disassembly, for a tank with storage capacity of 35 000 m³

Axxess handprint solution footprint calculation:

- Emissions from personnel and crawler mobilisation transport equals bridge inspection: 0,042 tCO₂e/mobilisation
- Tank inspection with crawler represents 200 to 250 man-hours
- Total savings: 0,001 tCO₂e from scaffolding transport and 200 to 250 man-hours/tank inspection

Steel production/eMAG [NEW]

Axess offers to clean and inspect crane wire ropes to increase their lifetime. The replacement of wire ropes is time-consuming and involves substantial material waste. More data is required to calculate the handprint effect of this initiative.

Baseline solution footprint calculation:

The traditional solution is replacing the wire.

More research and data are required to do the calculation, and this is currently a work in progress.

Axess handprint solution footprint calculation:

Axess uses proven technologies to ensure rope integrity and justify the life extension.

- Emissions from man-mobilisations
- Emissions from the transport of equipment

Steel production/increased lifetime of cranes [NEW]

Axess offers to refurbish and prolong the lifetime of cranes and lifting appliances reaching their estimated lifetime. More data is required to calculate the handprint effect of this initiative.

Baseline solution footprint calculation:

The baseline solution is to scrap and replace the crane by the end of the expected lifetime.

- Dismantling of the crane
- Return transport of old crane
- Production of steel and construction of new crane
- Transport of new crane
- Mobilisation of personnel for dismantling and installation

Axess handprint solution footprint calculation:

- Production of steel and construction of new parts
- Transport of new parts
- Mobilisation of personnel for refurbishing

Handprint calculation 2017

In 2017, Axess changed caissons at an installation and contributed to a footprint reduction of about 1700 tCO₂e emissions for the client. This was the only quantified project/solution in 2017, as the calculation was a handprint-pilot for the base year calculation:

Operation	Handprint solution	Baseline solution	Handprint solution footprint (tCO ₂ e)	Baseline solution footprint (tCO ₂ e)	2017 CO ₂ e reduction (t)	GEVA 2017 CO ₂ e reduction (t/MNOK)
Caisson replacement	Innovative lifting solution	IMR vessel	23	1700	1677	5,4

Handprint calculation 2022

For 2022, we have expanded the handprint calculation with more products/projects. These are related to the currently three focus areas: IMR vessels, Flaring and Service Efficiency.

IMR vessels calculation 2022

We have no handprint operations in 2022 within this focus area. We have replaced one thruster, but the traditional way, with the support of an IMR vessel.

Operation	Handprint solution	Baseline solution	Handprint solution footprint (tCO ₂ e)	Baseline solution footprint (tCO ₂ e)	2022 CO ₂ e reduction (t)	GEVA 2022 CO ₂ e reduction (t/MNOK)
No handprint operations in 2022	Innovative lifting solution	IMR vessel	-	-	-	-

Flaring calculation 2022/Alpa Winch

Handprint solution	Baseline solution	Client	Installation	Calculation data	2022 CO ₂ e reduction (t)
Alpa Winch	Flaring	Client 1	Installation 1	Estimated by client	6000
Alpa Winch	Flaring	Client 1	Installation 2	Estimated by client	4800
Alpa Winch	Flaring	Client 1	Installation 3	Estimated by client	1200
Alpa Winch	Flaring	Client 2	Installation 4	Axess' rough estimate based on production volume	500
Sum					12 500

Service efficiency calculation 2022

Our effort in this area also affects our clients' footprint by reducing the impact of Scope 3, category 1; purchased goods and services.

Service efficiency/TRIM

Axess has performed 24 bridge inspections by drone and 1 crawler tank inspection in 2022. The tank inspection is small in terms of carbon emissions saved, but represents a great improvement in man-hours and HSE.

Handprint solution	Baseline solution	Client	Installation	Handprint solution footprint (tCO ₂ e)	Baseline solution footprint (tCO ₂ e)	2022 CO ₂ e reduction (t)
TRIM	Man-mobilisations in 2016	Major client	All their 20 rigs	91,7	138,6	46,9

Service efficiency/Drone and crawler inspection

Axess has performed 24 bridge inspections by drone and 1 crawler tank inspection in 2022. The tank inspection is small in terms of carbon emissions saved, but represents a great improvement in man-hours and HSE.

Handprint solution	Baseline solution	Installation	Handprint solution footprint (tCO₂e)	Baseline solution footprint (tCO₂e)	2022 CO₂e reduction (t)	Other benefits
Drone bridge inspection	Inspection with truck-lift	24 bridges	1,0	20,0	19,0	
Crawler tank inspection	Manual inspection involving scaffolding	1 storage tank	0,0042	0,0052	0,001	200-250 man-hours saved and improved HSE

F. Department focus areas and reduction strategies

The tables below show an overview of recognised sources of emissions by each department/entity. The tables are not yet complete, and we need to dig deeper to fill up the gaps. We will explore the ideas for strategies in the time to come. All content is based on workshops with each entity in Axess:

- Alpa: 2021.06.16
- Engineering: 2021.06.17
- AIM: 2021.06.25
- Renewables: 2021.08.27
- Warehouse: 2021.09.10
- Digital: 2021.09.15
- INSI: 2021.09.29
- Africa: 2021.09.28
- APAC: 2021.10.18
- Americas: 2021.10.19

Axess Services

Topic	GHG category	Axess Department	Reduction strategies	Data source	Potential	Priority
Mobilisation of personnel by plane and helicopter	<ul style="list-style-type: none"> C4 Upstream transportation C9 Downstream transportation 	<ul style="list-style-type: none"> All departments 	<ul style="list-style-type: none"> Use local people for production control Increase service efficiency Task-bundle, long stay (TRIM) Digital solutions (eDROPS, drones, AI) 	Horizon Planner/travel agency	<ul style="list-style-type: none"> High priority in Axess, in strategic focus since 2017. Further reduction means innovation within service efficiency and digitalisation 	Size
Mobilisation of equipment	<ul style="list-style-type: none"> C4 Upstream transportation C9 Downstream transportation 	<ul style="list-style-type: none"> All departments 	<ul style="list-style-type: none"> Local warehouses Local inspection of equipment in warehouses Optimised transport volume Store equipment on client installation 	Warehouse/ transporters		Size
Transportation of hired personnel	<ul style="list-style-type: none"> C1 Purchased goods and services 	<ul style="list-style-type: none"> AIM QC Africa Americas APAC 	<ul style="list-style-type: none"> Hired personnel on long assignments Use local suppliers for hired personnel Low-emission transport e.g., train instead of flight 	Horizon Planner/travel agency	Today not entirely managed by Axess, need to take more control	Size
Leased cars	<ul style="list-style-type: none"> C8 Upstream leased assets 	<ul style="list-style-type: none"> QC 	Lease electric cars	Insurance company		
Single-use equipment	<ul style="list-style-type: none"> C1 Purchased goods and services 		<ul style="list-style-type: none"> Sustainable products from local suppliers Avoid disposable products Reuse e.g., slings, coveralls 	Supplier invoice/GHG account		Influence
Equipment	<ul style="list-style-type: none"> C2 Capital goods 	<ul style="list-style-type: none"> Warehouse (All departments) 	<ul style="list-style-type: none"> Ask for EPD/carbon footprint of products Reuse e.g., clean coveralls, inspect lifting slings 	Supplier invoice/GHG account		Influence

Axess Products

Topic	GHG category	Axess Department	Reduction Strategies	Data source	Potential	Priority
<ul style="list-style-type: none"> Steel products and machinery 	C1 Purchased goods and services	<ul style="list-style-type: none"> Engineering Alpa 	<ul style="list-style-type: none"> Optimised construction/design Low-emission materials Reuse of products 	Supplier invoice/ material declaration	<ul style="list-style-type: none"> Estimated 10-20% reduction potential in low-carbon steel In addition to our other strategies, + future technologies and industry focus. 	Size
<ul style="list-style-type: none"> Transport of products 	C4 Upstream transportation and/or C9 Downstream transportation	<ul style="list-style-type: none"> Engineering Alpa 	<ul style="list-style-type: none"> Supplier location/transport distance Quality control at supplier (not in Molde) Transportation method Local suppliers/transport distance Optimised packaging/transport volume 	Transporter invoice		
<ul style="list-style-type: none"> Packaging, pallets 	C5 Waste generated in operation	<ul style="list-style-type: none"> Engineering Alpa 	<ul style="list-style-type: none"> Optimised packaging of sold products 	Supplier invoice		
<ul style="list-style-type: none"> Sold products energy consumption 	C11 Use of sold products	<ul style="list-style-type: none"> Alpa 	<ul style="list-style-type: none"> Electric power source 	Estimated running hours		
<ul style="list-style-type: none"> Single-use steel constructions Disposal of used steel constructions and engines 	C12 End of life treatment of sold products	<ul style="list-style-type: none"> Engineering Alpa 	<ul style="list-style-type: none"> Avoid single-use steel constructions Reuse or recycle material from products Product return service 	Estimated lifetime + material weight		Influence

Axess Operations

Topic	GHG category	Axess Department	Reduction Strategies	Data source	Potential	Priority
Business meetings (Reduce flights)	C6 Business Travel	<ul style="list-style-type: none"> All departments 	<ul style="list-style-type: none"> Teams Bundle meetings 	Travel agency	Size	
Commuting	C7 Commuting	<ul style="list-style-type: none"> All departments 	<ul style="list-style-type: none"> Home office policy Facilitate biking, walking, public transport Motivation campaign 	Agresso timesheet/ Excel log	Stakeholders	
Cloud services	C1 Purchased services	<ul style="list-style-type: none"> All departments 	<ul style="list-style-type: none"> Reduce CAD models storage Reduce e-mails 	Supplier invoice/GHG account		
IT e.g., computers and mobile phones	C1 Purchased products					
Electricity used in offices and warehouses	C8 Upstream leased assets	<ul style="list-style-type: none"> Americas 	<ul style="list-style-type: none"> Clean energy Save energy 	Supplier invoice/GHG account		
Office operation e.g., lunch and cleaning	C1 Purchased services					
Waste handling	C5 Waste from operation			Supplier invoice/GHG account		

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