

Helvar

SUSTAINABILITY REPORT
2023

Table of Contents

A word from Helvar’s CEO	3
General disclosures	4
Double materiality assessment	11
Short summary of other sustainability topics	24
Material topics and disclosures	26
Climate change	26
Resource use and circular economy	33
Own workforce	35
Workers in value chain	40
Business conduct	41
Appendix	44
<i>Table 1: Elements of due diligence</i>	7
<i>Table 2: Data types used in the report</i>	8
<i>Table 3: Assessment criteria of the severity for the social impacts</i>	14
<i>Table 4: Assessment criteria of the severity for the environmental impacts</i>	15
<i>Table 5: Helvar stakeholders and stakeholder engagement methods</i>	16
<i>Table 6: Targets related to climate change mitigation and adaptation</i>	28
<i>Table 7: Actions and respective reductions in emissions</i>	28
<i>Table 8: Energy consumption and mix</i>	29
<i>Table 9: Energy intensity per net revenue</i>	29
<i>Table 10: Gross Scope 1, 2, 3 and Total GHG emissions</i>	30
<i>Table 11: Potential financial effects from material physical and transition risks and potential climate-related opportunities</i>	31
<i>Table 12: Resource use and material consumption</i>	34
<i>Table 13: Products and materials outflows: Products and services designed after circular principles</i>	34
<i>Table 14: Products and materials outflows: Waste</i>	34
<i>Table 15: Disclosures S1-6 to S1-17</i>	39
<i>Table 16: Double materiality assessment results</i>	44
<i>Figure 1: Actions for Scope 1 and 2</i>	26
<i>Figure 2: Selected material standards</i>	45



A word from Helvar’s CEO

As Helvar embarks on another year of innovation and growth, we proudly present our second sustainability report— a testament to our Brighter Spaces mission and the pursuit of healthier and greener spaces around the world. Building on over 100 years of history, our family-owned technology company continues to expand its horizons, improving indoor conditions, wellbeing and energy efficiency for thousands of customers through intelligent solutions.

2023 marked a significant leap on our journey, highlighted by dozens of new partners, a growing team of experts around the world, and the introduction of a state-of-the-art new offering. With Helvar Senses, we can now go beyond the traditional impact areas of lighting, helping building stakeholders to save even more energy and improve wellbeing through smart analysis of indoor environmental conditions such as air quality, temperature, humidity and more.

This second report underscores our commitment to sustainability by following the newly published European Corporate Sustainability Reporting Directive (CSRD) and thereby taking a more comprehensive look into our operations and endeavours. Over the past year we’ve continued to make progress in reducing our ecological footprint, but we remain aware that our journey is far from complete. Our carbon handprint – the positive impact of our solutions on the world – also continues to be a core company focus and a powerful source of motivation for Helvar to help mitigate the effects of the global climate crisis.

Looking ahead, Helvar is committed to investing strongly in technologies that can drive positive change in the built environment, as well as improving the impact of our own operations. As we navigate the challenges and opportunities of the future, our vision is clear: to foster a world where our solutions shape indoor spaces that are both intelligent and energy-efficient, spaces that enhance wellbeing and have a positive social impact while ultimately contributing to a better future for all.

General disclosures

General basis for preparation of the sustainability statements

(BP-1)
(BP-2) The sustainability statements in this report have been prepared on a consolidated basis for Helvar Oy Ab and all its subsidiaries. This consolidation is the same as for Helvar Oy Ab's financial statements. Although all Helvar Oy Ab subsidiaries are included in the scope of reporting, they are excluded from some metrics due to the unavailability of data. The reporting is extended to the upstream value chain to the extent that is required for reporting on material impacts, risks, and opportunities in accordance with the European Sustainability Reporting Standard (ESRS) 1 part 5.1. This means reporting on the outcome of sustainability due diligence processes, outcome of the materiality assessment and including specific information required by the topical ESRS. Helvar has not omitted any specific pieces of information corresponding to intellectual property, know-how or the results of innovation, but some business-sensitive information was decided to be omitted. Helvar has not deviated from the time horizons defined in ESRS 1.

Value chain estimations have been used for some of the metrics, mostly for those in ESRS E1: Climate change. In this case, sector- and country-average data has been used. For some of the metrics, this type of data is the most accurate data that is available. The metrics and estimations used are documented in the Appendix. Changes to metrics from the last report have mostly to do with updates of the estimations and emission factors, as the sector- and country-average data has been updated and reporting accuracy has been improved. Helvar is currently not planning on changing the emission factors used. Metrics that may contain significant estimation or outcome uncertainties include E5 recycled content metrics and GHG calculation. This uncertainty results from a lack of specific information and specific emission factors, however, the level of accuracy has nonetheless been deemed acceptable. To improve accuracy in the future, more information will be collected from suppliers and own systems will be updated to improve the coverage of GHG calculations. Helvar takes precautionary steps in reporting and, when information is not available, takes the most conservative approach, meaning that things are assumed to take the least environmentally friendly outcome unless can be proven otherwise.



A significant change compared to the previous report (Sustainability report 2022) relates to the core framework being used for reporting. The previous sustainability report was compiled and written with reference to Global Reporting Initiative standards. The report for year 2023 follows the newly published European Sustainability Reporting Standards, meant for reporting under the Corporate Sustainability Reporting Directive. Helvar's ultimate parent company, Helvar Merca, will face the reporting obligations for the financial year 2025 with a report due in 2026, but Helvar has already started developing reporting capabilities and this sustainability report is the first proof of reporting readiness.

As a result of the change in reporting standards, there are a few significant changes to the sustainability topics chosen for reporting, reporting metrics and their accuracy respectively (the latter of which has improved). As a whole, this year's report is more comprehensive, accurate and complete. The Appendix details more specific changes as well as assumptions and methodologies used to compile, calculate and derive metrics and datapoints for reporting.



Governance and the role of the administrative-, management- and supervisory body

(GOV-1)
(GOV-2)

The highest governance body at Helvar is the Board of Directors (BoD), which is composed of four independent board members and two members of the owner-family. There are 6 full members with a gender ratio of women and men being 1:5 respectively. Other participants in board meetings are the CEO, CFO, and a board observer. The board observer is the next-generation representative of the Owner Family. The members of the board have experience from various industries, including the building industry, building automation, luminaire manufacturing and high technology industries. The board is responsible for oversight of the sustainability-related impacts, risks and opportunities, developing targets for sustainable development, and approving the related strategies and policies. The process is scheduled around the annual timing of the strategy process.

The board focuses on overarching targets, while management focuses on the more detailed targets and their achievement. To ensure compliance with newly adopted sustainability-related legislations and requirements, the board responsibilities have been extended and in the next reporting cycle the BoD will review and approve both the results of the double materiality assessment and the final version of the sustainability report itself. Performance is monitored through the Objectives and Key Results (OKR) methodology, which involves setting significant objectives with targeted and future-oriented key results, cascading to teams and individuals. Helvar's key activities and their outcomes are regularly measured and reported to the board by management 6 times a year. The management provides the BoD with additional sustainability-related information where needed for decision-making. Management is also responsible for conducting the double materiality assessment, which includes identification and assessment of impacts on people and environment, and sustainability-related risks and opportunities.

The identification and assessment of material risks, opportunities and impacts is the responsibility of the management and is steered by the Sustainability Engineer. The management of material impacts, risks and opportunities are the responsibility of the management in accordance with Helvar's Environmental Management System (ISO 14001). The leadership team participates in environmental and quality management system audit reviews twice a year and runs through the audit findings and improvement actions presented by the Quality Engineer. Reporting to the BoD is carried out annually on the basis of OKRs and the company's annual clock, and the operative success and the most central Key Performance Indicators are typically included in every BoD meeting. No other dedicated controls or procedures are applied to the management of material impacts, risks and opportunities.



Integration of sustainability-related performance in incentive schemes

(GOV-3)

Sustainability has been integrated into Helvar's non-sales Incentive program as a part of Helvar's on-going work to integrate sustainability into all actions. Helvar's 2023 sustainability bonus had the environment as a key focus and aimed to deliver a minimum of 15 actions per year to improve the company's carbon handprint or the carbon footprint of company solutions. Carbon handprint refers to the energy savings achieved with Helvar solutions, and thus the carbon emissions that have been avoided. The sustainability actions could be related to inventions, new proof of concepts, new sustainability-related features in products or solutions, and CSRD reporting readiness actions. The weight of the sustainability bonus is 10% of the total remuneration. The sustainability-related performance metrics are not considered as performance benchmarks or included in the remuneration policies separately. The incentive scheme is approved by the BoD, based on proposals made by the management. The incentive scheme does not consider greenhouse gas emission reduction targets.

Statement on sustainability due diligence

(GOV-4)

Due diligence is implemented in many ways and related disclosures can be found in the table below.

The elements of due diligence	Paragraphs in the sustainability statements
Embedding due diligence in governance, strategy and business model	ESRS 2 GOV-2, GOV 3, SBM-3
Engaging with affected stakeholders in all key steps of the due diligence	ESRS 2 GOV-2, SBM-2, IRO-1, DC-P, Topical ESRS
Identifying and assessing adverse impacts	ESRS 2 DC-A, Topical ESRS
Tracking and communicating the effectiveness of these efforts	ESRS 2 DC-M, DC-T

Table 1: Elements of due diligence

Risk management and internal controls over sustainability reporting

(GOV-5) Helvar is in the process of establishing internal control processes to ensure completeness and integrity of the data, accuracy of estimation results, availability of the value chain data and timing of the availability of information. Although the report is compiled by a team of Helvar employees that each oversee the quality and completeness of reporting, there are still gaps to be closed through further development. Helvar has identified most significant risks related to reporting process.

The key sustainability metrics are reported to the Board of Directors annually. Currently, the main risk associated with sustainability reporting is the risk of inaccuracy or false information being reported. The risk of inaccuracies has been assessed on a scale 1-3 (1 = poor quality, 3 = good quality) as in Table 2. Most of the metrics are assessed to be of adequate (=2) or good quality (=3), as they come from reliable sources based on actual data and correspond to the current standards of reporting. In future, the sustainability report will undergo limited assurance to ensure quality and accuracy of data.

Data type	Data source	Data provider	Accuracy (1-3)
Energy consumption	Energy consumption given by electricity provider or read from own consumption meters. From Helvar's Environmental Management System (EMS).	Internal and external	3
Energy mix	Based on residual mixes of given countries.	External	3
Waste generation	Based on actual billed amounts of waste collected and treated. From Helvar's EMS.	External	3
Material use, total	Based on sold products, their respective weights. Covers 90% percent of sold products.	Internal	2
Material use, renewable	Based on sold products and the amount of renewable packaging materials per product.	Internal	2
Material use, non-renewable	Based on sold products, with renewable packaging materials excluded.	Internal	2
Material use, recycled content	Based on sold products, and only the known recycled content (no national or regional averages on recycled content used for materials where the recycled content is unknown, assumed to be 100% virgin, e.g. average amount of recycled cardboard in packaging based on national statistics)	Internal and external	2
GHG emissions	Based on real data, such as amount of energy, goods and purchasing value of goods and services. Emission factors obtained from multiple sources (such as Defra and Ecoinvent). In most categories the coverage is at least 90%.	Internal and external	2
Metrics on own employees	Generated from internal HR systems.	Internal	3

Table 2: Data types used in the report

Market position, strategy, business model and value chain

(SBM-1) Helvar provides continuous energy savings, wellbeing, and insights for smart buildings with lighting control (LC) and sensing solutions. Helvar delivers solutions and services throughout the building lifecycle in selected geographies, those being Nordics, UK, Central Europe, Eastern Europe, Middle East, APAC and others. Helvar monetises through contractors, system integrators, facilities management companies (FMs), wholesalers, value-added resellers (VARs) and luminaire manufacturers. Helvar markets and sells to specifiers, property owners, developers, and tenants. In addition, Helvar produces LED drivers and electronic ballast products for luminaire manufacturers in Europe and the Middle East, as well as other selected international markets. Helvar's solutions and products are fundamentally connected to the company's material impacts, most importantly to the positive environmental impacts they can achieve through saving energy, but also to the negative impacts from the environmental footprint of electronics manufacturing to possible human rights risks, especially beyond the first-tier value chain.

Helvar's business models are solution sales to contractors, components to luminaire manufacturers and wholesalers and (digital) services through subscription contracts to building operators. The contracts are typically 1-3 year contracts. Helvar's upstream value chain's most important suppliers are subcontractors (Tier 1) and electronic component and mechanical component suppliers (Tier 2). Most of the manufacturing happens through Electronic Manufacturing Service providers. Helvar cooperates actively with its subcontractors. The offering is developed with highly talented employees and subcontractors. Helvar's downstream value chain utilizes two routes to market: direct sales and partner channel sales. Both routes offer system solutions, components and services designed and developed with third party products & production.

The key sustainability topics that Helvar is pursuing in its strategy are related to its handprint and people. Handprint refers to the positive impact that Helvar's lighting control solutions have, i.e. energy savings and GHG emission reductions. People refers to the wellbeing and engagement of end-users and Helvar employees. Helvar's goal is a significant annual increase for its handprint (through sold products), and to achieve an engagement score of 4.5/5 for Helvar people in Helvar's own Powered by People survey by 2025. In addition, GHG emission reductions among all scopes, ESG work among partners and vendors, circular economy, and stronger ESG communications are a key part of the strategy's ESG focus. While some targets and approaches to material sustainability topics are still under development, Helvar is on a good path.

The more Helvar is able to sell its products and grow its market position, the more handprint is created. There is thus a direct relation between Helvar's market position

and sustainability goals. Lighting standards reinforce the need for saving energy by defining varying illuminance levels for different tasks and needs. Without lighting control, significant amounts of energy would be wasted. With just daylight harvesting and occupancy detecting features, one can save in many cases more than 50% of lighting energy usage. Even in countries where a significant part of the energy mix comes from renewable or nuclear sources (such as in Finland), a luminaire's carbon handprint is five times bigger than its footprint, when the luminaire is equipped with a dimmable driver and controlled with proper lighting control. The total Helvar handprint is significantly bigger than the Helvar footprint, which is why maximizing carbon handprint is a key company target.

Helvar is also expanding its geographical reach constantly, hence ensuring availability of sustainable solutions further. At the same time, EBIT targets drive for a lower material, production and logistic cost by increasing efficiency, which is closely tied to also optimizing carbon footprint in relation to sales. The elements of the strategy that are related to sustainability are:

1. Growth
2. Resilience
3. ESG focus – i.e. sustainability is integrated into everything that Helvar does (awareness, training, considerations around solution design)

Helvar's solution offering strongly supports its goal to increase its handprint and to help customers and end-users to lower environmental impacts of lighting. Key solutions of Helvar's offering are:

- Lighting control solutions (all solutions)
- Helvar Insights – Energy management service – monitoring & optimising energy consumption of lighting systems at buildings
- Helvar Senses – Occupancy and Indoor air quality sensing – interacting with HVAC – optimizing energy consumption (and comfort/wellbeing of people)

Helvar has also planned several sustainability-related projects to be put in place:

- 'Emission calculator' for customers to understand solution impact
- Supply chain optimization (production & warehouse locations)
- Increase of quantity of green invention and productizations

One key focus area is the green invention productisation in Helvar's portfolio. It is pursued by an incentive scheme that rewards employees for inventions that contribute positively to the carbon handprint or footprint.

Double materiality assessment

Description of processes to identify and assess material impacts, risks and opportunities

(IRO-1) The double materiality assessment includes the impacts of Helvar's operations, the impacts that Helvar has contributed to, and the impacts that Helvar is directly linked to through its business relationships. The main process of identifying and assessing material impacts, risks and opportunities is steered by the Sustainability engineer, who cooperates with:

- Quality and Environmental Managers,
- Product Managers,
- The Head of HR,
- The CEO, the CFO, and the Head of Strategy and Business Development
- The Chief Future Illuminator.

The process starts with the identification of impacts, risks and opportunities in environmental, social and governance areas. The identification is based on information and data from available from Helvar's environmental management system, business management system, internal systems (such as HR system), external reports and data, and lifecycle analyses. After they are identified, their severity, likelihood and financial effects are assessed. After assessment, criteria are set for materiality, the results are analysed by the Sustainability Engineer, and the selection of material topics is reviewed and approved by management. The severity is assessed on scope, scale and irremediable character, of which scale and irremediable character are thought to be so closely interrelated that they are considered together. The severity of the impacts is assessed qualitatively. The financial risks and opportunities are assessed quantitatively, and the size of the financial effect is announced as either change in EBIT or change in net operative costs, both of which are then converted into a risk score ranking with a scale of 1-5. In both cases, the impact, financial risk or opportunity is considered material if it is ranked moderately severe or higher.



Processes to identify and assess material environmental impacts, risks and opportunities

(E1 IRO-1) Lifecycle assessments, material declarations and earlier reporting metrics were used to identify and assess material impacts, risks and opportunities related to resource use and circular economy. In addition, knowledge, experience and materials from circular economy workshops held in 2022 were used to assess financial risks and opportunities related to circular economy. The connection between circular product design and business models and the financial risks and opportunities was determined to be direct. No consultations were conducted in 2023 related to resource use and circular economy. Consultations have been conducted in earlier years with some Helvar stakeholders in the downstream value chain.

Helvar's impact on climate change is based on Helvar's corporate carbon footprint and lifecycle assessment-based product footprints that have been calculated. In the lifecycle assessment-studies, the whole value chain related to Helvar's products was assessed, and significance of different lifecycle stages and parts of value chain were studied. These results helped in prioritisation of lifecycle stages, industrial sectors and resource flows. In addition, Helvar's corporate carbon footprint gives a screening into most important areas of activity when it comes to greenhouse gas emissions. The assessment of climate impacts was based on quantitative results of the lifecycle assessments, typical emissions in the industry, and the contribution of the sector to climate change in general.

In identifying and studying physical risks, Helvar's dependencies on natural resources and carbon intensive semiconductor production were assessed. Identification was based on Lifecycle assessment studies and climate disclosures by large electronic components manufacturers. The linkage to business activities had already been traced in lifecycle assessments. Helvar's own assets were evaluated for climate-related hazards based on geography, likelihood, type of risks and intensity of risk per asset and evaluated to be non-material. Helvar's value chain has been assessed to be at risk of being affected due to high dependencies of natural resources and long, complex supply chains through areas that are likely going to be affected by climate change. The risks were assessed on short-, mid-term and long-term time horizons based on climate change targets.

The transition risks and opportunities were not considered for Helvar's assets but were considered for business activities, and the financial effects and likelihood of the risks and opportunities were evaluated. The transition events were based on both the *Intergovernmental Panel on Climate Change (IPCC) AR6* report and the *International Energy Agency's (IEA) Net Zero Emissions by 2050* report.

The scenarios used to evaluate risks and opportunities were the Net zero 2050 scenario, and RCP2.5, RCP4.5, and RCP8.5. These are considered to be aligned with the state-of-the-art scientific research. The scenarios provide a wide range of ambition and alternatives, which can reasonably be believed to cover all the plausible risks and uncertainties, and also consider key forces, drivers and challenges that Helvar may face.

The Net zero 2050 scenario was constructed on a high level, and Task Force of Climate-related Disclosures' (TCFD) examples of risks and opportunities were used as a basis. Since there are lots of changing variables, the risks and opportunities were identified on the basis of changing the electricity mix and requirements for low carbon buildings. For physical risks, the scenarios were able to dig deeper due to the level of details provided by the IPCC scenarios for the national level, and available information of assets and their geographical locations.

Helvar sees a significant opportunity in the area of energy during the transition period, which is based on the international and national GHG reduction targets and specific targets for the energy sector and building sector. This is an opportunity in the short-, mid- and long-term. Increasing compliance requirements and increased pricing of raw materials are legitimate risks for Helvar, although they can be managed and mitigated rather easily.

Transition risks were studied as part of the 1.5°C scenario, while physical risks were studied based on scenarios with different levels of overshoot from the 1.5°C scenario. The whole scope of Helvar business and activities was evaluated. The 1.5°C scenario considered the decarbonisation levels required in the energy- and building sectors, and the overall Paris-aligned reduction targets. The overshoot scenarios considered the physical risks in different levels of temperature increase and found that the risks intensify in direct proportion to the rise in temperature levels.



Use of material information and materiality assessment method

Since the global supply chain is incredibly long and complex, focus was centralised on areas to be at higher risk for severe impacts on people and environment. There were three aspects that were considered when prioritising suppliers and focus areas: geographical risk for adverse impacts, industry-typical risk for adverse impacts, and supplier-specific risk for adverse impacts. This consideration and prioritisation was informed by literature, studies and reports produced by international and national organisations, such as Organisation for Economic Co-operation and Development (OECD) and United Nations, as well information published by non-governmental organisations. These sources of information were especially valuable when studying the value chain, as there are not yet enough resources to pinpoint supplier-specific impacts in the upstream value chain, especially when it comes to primary raw materials and processing. Generalisations were made for mining and extraction activities for example, which are required to produce raw materials needed for electronic component manufacturing. Helvar's approach for collecting information and identifying impacts from subcontractors was more straightforward, as they had been already queried on sustainability matters and Helvar regularly engages with them.

A sustainability matter can become material for reporting through either its impact on people and environment, or through its financial effects on Helvar. Impact materiality is determined based on severity, and, in case of positive impacts, scale and scope. If the impact is potential, the likelihood is also considered.

Severity comprises of three dimensions: scale, scope and irremediable character. According to methodology from Tromp, D. (2016) *Assessing Business-Related Impacts on Human Rights. Indicators and Benchmarks in Standards and Practice*, scale and irremediable character are interrelated. The same approach was adopted at Helvar in the assessing of impacts on people and environment.

Severity	1 person	2-9 people	10-100 people	100-999 people	Over 1000 people
Not grave and/or easy to remediate	Not severe	Not severe	Not severe	Moderately severe	Moderately severe
Moderately grave and/or mostly remediable	Moderately severe	Moderately severe	Moderately severe	Severe	Extremely severe
Grave and/or significantly hard to remediate	Severe	Severe	Very severe	Very severe	Extremely severe
Very grave and/or irremediable	Very severe	Very severe	Extremely severe	Extremely severe	Extremely severe
Very grave and/or irremediable	Very severe	Very severe	Extremely severe	Extremely severe	Extremely severe

Table 3: Assessment criteria of the severity for the social impacts

Severity	Immediate environment	Immediate and close-by environment	Widely spread	Region-level scope	Beyond regional scope
Not grave and/or easy to remediate	Not severe	Not severe	Moderately severe	Moderately severe	Moderately severe
Moderately grave and/or mostly remediable	Moderately severe	Moderately severe	Moderately severe	Severe	Very severe
Grave and/or significantly hard to remediate	Severe	Severe	Very severe	Very severe	Extremely severe
Very grave and/or irremediable	Severe	Very severe	Extremely severe	Extremely severe	Extremely severe
Very grave and/or irremediable	Very severe	Very severe	Extremely severe	Extremely severe	Extremely severe

Table 4: Assessment criteria of the severity for the environmental impacts

Helvar does not prioritise sustainability-related risks in any certain way, but rather considers those the same as any other risk.

Interests and views of stakeholders

(SBM-2) Helvar has started to develop processes to engage with all relevant stakeholders, for the purpose of validating the results of impact identification and the assessment and selection of material topics. Where the stakeholders disagree with the results and selection of the material topics, the materiality assessment will be supplemented. Helvar's most relevant stakeholders are Helvar's customers, suppliers, workers in the value chain, and own workers. Helvar has engaged with its customers through a sustainability survey and engages regularly (engagement survey twice a year) with its own workers on impacts, risks and opportunities related to social sustainability in its own operations. To include workers in the value chain and to give them a chance to give feedback on the determination of material impacts, risks and opportunities related to their interests, Helvar is planning on improving its supplier audit processes to give the value chain workers a voice. Currently the interests and views of value chain workers are based on human and working rights risks in different industries and geographical areas, and to the output and agenda of non-governmental organisations that act as the worker representatives on global sustainability matters. When double materiality assessment processes are fully implemented in 2024, the BoD will be briefed about the engagement process and the results of the engagement in the dedicated meeting where the results of the materiality assessment are handled. Overall, the views and interests of stakeholders are aligned with Helvar's existing strategy and business model to a high degree.

Stakeholder	Engagement method
Customers	Sustainability survey
Suppliers	Audits
Workers in the value chain	Silent stakeholders; reports from representative non-governmental organisations informed the assessment about the impacts.
Own employees	Engagement surveys twice a year
Nature & future generations	Lifecycle assessments, reports from Intergovernmental Panel on Climate Change, United Nations, other non-governmental organisations

Table 5: Helvar stakeholders and stakeholder engagement methods

It is Helvar's understanding that its key stakeholders agree with the current selection of material topics. For the stakeholders in the downstream value chain, all sustainability topics were thought to be important, but, when asked to prioritise, the top 5 sustainability topics were energy, climate action, health and safety, resource use and circularity, and waste. These results are mostly closely related to Helvar's business model and were to be expected. Helvar's business model has always been aligned with these views. When the views and best interests of workers in the value chain were estimated, it was noted that whilst Helvar's first tier suppliers are all committed to human- and working rights, more oversight should be exercised in cooperation with the suppliers to ensure that due diligence requirements are being met. As a result, Helvar has started improving its due diligence processes and one part of that plan is to improve current supplier cooperation to better identify possible issues and engage with the workers. It is expected that the due diligence process would have advanced significantly by the next reporting cycle. Whilst this may consume more resources both at Helvar and at the suppliers' end, Helvar expects this to positively affect the relationship that Helvar has with the workers in the value chain and also with its downstream stakeholders.



Material impacts, risks and opportunities and their interaction with strategy and business model

(SBM-3) Helvar's material topics are climate change, pollution, resource use & circular economy, own workforce, workers in the value chain, and business conduct. The scope of the materiality assessment included all Helvar operations, all Helvar employees, Helvar's value chain entities and their workers.

The materials impacts that relate to Helvar's own operations are energy consumption, emissions, materials, waste from product manufacturing, and the wellbeing, health and safety of its workers, alongside governance issues such as anti-corruption. Material impacts in the whole value chain are much the same and related to electronic and mechanical component production, but also including human- and labour rights in the upstream value chain. Material impacts in the downstream value chain are positive: Helvar products can help save energy and reduce emissions from buildings, and optimised lighting can increase wellbeing of people in spaces it is utilised. The most significant negative impacts are mostly concentrated in the upstream value chain and positive ones in the downstream value chain.

Helvar has been well aware of these impacts, risks and opportunities already before, as they are strongly connected to Helvar's business strategy. To strengthen sustainability at Helvar, a separate sustainability strategy has been created to improve sustainability performance and to pursue material opportunities, especially those related to energy savings and climate impact. Helvar's material impacts are managed through the ISO 14001 environmental management system, HR (Human Resources) processes, and Helvar's engagement with suppliers.

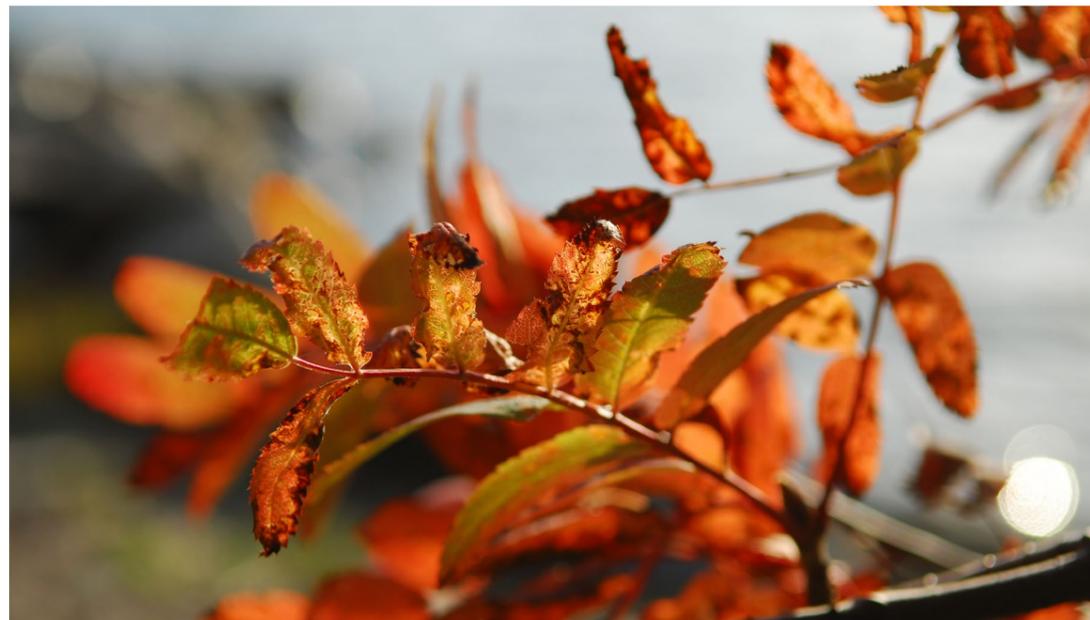
All identified material risks can potentially impact on Helvar's financial performance, although none have a significantly high likelihood of occurrence. Some important material risks related to the physical impacts in the upstream value chain have been mitigated along with the geopolitical risk mitigation. Identified material opportunities are what Helvar has already been pursuing, especially with the energy- and climate change transition topics. These opportunities are strongly concentrated on the downstream value chain and on the use of Helvar products, and are at the centre of Helvar's offering. The material risks and opportunities have not affected most recently reported financial performance, position or cash flows.

Helvar's capacity to address material impacts and risks was assessed to be good. The impacts from Helvar's own operations have long been prevented, mitigated and managed through Helvar's environmental management system (EMS) and HR practices. HR practices have been a strategic focus point already, and the EMS has been complimented with a climate transition plan and GHG reduction goals.

Climate change

(E1 SBM-3) Helvar studied the resilience of its business model in relation to transition risks and opportunities as well as physical risks and opportunities related to climate change. Transition risks were studied as part of the 1.5°C scenario, while physical risks were studied based on scenarios with different levels of overshoot from 1.5°C scenario from *Intergovernmental Panel on Climate Change, 2022: Climate Change 2022: Impacts, Adaptation and Vulnerability*. The whole scope of Helvar's business and activities were evaluated, including the value chain.

The 1.5°C scenario assumed, according to the AR6 report from the Intergovernmental Panel on Climate Change, that deep decarbonisation will occur in the electricity and building sector. The share of renewable electricity will increase fast and offer possibilities with consumption flexibility. More investments are expected to flow into the building sector to advance transition, which is expected to positively impact Helvar's business. It was also assumed that stakeholder interest into the embodied carbon and overall sustainability of the product portfolio might increase, and customers may set certain requirements for products. It was assumed likely that the transition will affect the cost of components to an extent. Helvar's current strategy and plans for the future were compared against the identified climate-related risks and opportunities in short-term (until 2025), mid-term (until 2030) - and long-term (until 2050) time horizons, aligned with global climate targets. All risks were qualitatively assessed, and three significant risks were evaluated quantitatively.



It was concluded that the 1.5°C scenario involves some risks, but also significant opportunities that Helvar has already included in its business planning and development of its offering. The overshoot scenarios involve a risk within the supply chain that significantly increases alongside the temperature increases. Helvar has formulated a backup plan for severe supply chain disruptions due to geopolitical risks, and the same plan can be used for the physical risks.

Helvar faces both financial transition and physical risks, which are evaluated on short-term (2025), medium-term (2030) and long-term (2050) time horizons. Helvar's own operations directly face mainly transition risks and opportunities, as physical risks are evaluated to be very minor in own premises. Possible consequences of climate-related physical impacts are likely to be increased energy demand from cooling and possible damages from flooding caused by heavy precipitation (raining). The Karkkila factory is located roughly 200-500 meters away from a near-by river, but is located significantly (over 20 meters) higher, which eliminates river flooding risks.

Physical risks in the supply chain are on the medium- and long-term time horizon. Electronic component production is in significant part located in South Asia, East Asia and South-East Asia. The Intergovernmental Panel on Climate Change (2022) in the *Climate Change 2022: Impacts, Adaptation and Vulnerability* report has identified flooding and sea level rise as large level risks with high evidence in the regions and has concluded that the physical risk level increases progressively with the temperature increase. Other risks in the regions are heatwaves in South Asia and East Asia, and droughts in South Asia. The tangible losses and damages caused by the regional key risks are estimated to be of medium magnitude in RCP2.5 and RCP4.5 scenarios, and of high magnitude in RCP8.5. The progress on climate change adaptation in the regions varies, meaning that certain regions will be more resilient to physical impacts than others. Most progress with climate adaptation can be seen in East Asia, where it is high in infrastructural and institutional levels. The progress is at medium level in South Asia and Southeast Asia. The key physical risks identified by five component manufacturers are extreme weather patterns, water scarcity and poor water quality. These physical risks could cause disruptions and delays in the supply chain or even shortages, which could impact Helvar's production and possibly increase costs. The potential risk is determined to have a medium likelihood and low impact.

It was concluded that Helvar's strategy and business model are sufficiently resilient, and that the challenges presented with the 1.5°C scenario have been well recognised and accounted for in Helvar's business model.

Resource use and circular economy

(E5 IRO-1) Helvar's impacts on resource use and circular economy are strongly tied to the electric components used to manufacture Helvar products. Electronic components require various materials to produce, and many of those are rare or even critical raw materials. In addition, the materials (which include ceramics, plastics and metals) are hard to fully separate at the End-of-Life stage, resulting in a substantial portion of materials being disposed of rather than recycled.

When hard-to-recycle, resource- and energy-intensive materials are used, it inevitably contributes to a higher demand for primary production. This means increased mining operations and materials production, which directly impacts not only the surrounding nature and communities of current mines but can also lead to new areas being exposed as new extraction sites are being opened.

Hence, longer product lifetimes and circular design choices are keys to mitigating these impacts. Helvar products already have long lifetimes (in many cases 10+ years) that can be further increased with monitoring and maintenance, which has a positive effect. Financial opportunities have been identified with circular business models, such as the competitive advantage of a circular offering and take-back schemes to upgrade old sites. Consequently, it has also been identified as a risk if circularity is not embedded fast enough.

Own workforce

(S1 IRO-1) The workers most subject to material impacts by Helvar's own operations are employees. The potential negative impacts of Helvar on its workforce stem from individual incidents involving employees. The identified issues have no connection to Helvar's strategy or business model. No actual negative impacts have been determined. The potential negative impacts that could affect the workforce are:

- Risk of occupational injuries and illnesses
- Discrimination & inequality

Both types of negative impacts have been assessed to be severe, but to have a low likelihood. No operations are at significant risks for compulsory labour or child labour. Helvar has concluded that in discrimination and inequality incidents, minorities are more likely to be affected. This is based on overall scientific consensus on which groups of people are more likely to be affected.

Many actual, positive impacts on Helvar's workforce have been identified as a result of activities that positively affect or could affect the Helvar employees. Those are:

- High wellbeing and social cohesion
- UK Living wage actions
- Workers' rights are ensured by following collective agreements
- Learning and development opportunities
- Employee biking benefit to support health and wellbeing

People topics are a key part of Helvar's Sustainability strategy, and key issues are tracked and communicated to the Board of Directors annually. The identified impacts inform the update process of the strategy and the goals and objectives for own employees are adjusted accordingly. There is no direct link to the business model, although Helvar operations and functioning are enabled by the employees. Part of Helvar's main strategy is to foster an Impact Culture to become an Employer of Choice by powerfully connecting strategy and execution & values and practices in order to attract and retain talent.

No material financial risks or opportunities were identified in relation to the material impacts on own employees, nor were any material impacts arising from environmental transition plans identified. None of Helvar's operations are at significant risk of forced or compulsory labour, or child labour.



Workers in the value chain

[S2 IRO-1] Using public information available, Helvar has identified several human rights and worker rights risks in the value chain that Helvar is directly linked to through supplier relationships beyond T1. Helvar considers it important to acknowledge these risks although it is extremely challenging to detect, confirm and act on them. Helvar has assessed the following severe potential impacts in the value chain:

- Forced labour and poor labour conditions
- Long overtime hours and illegal working hours
- Unsafe working conditions
- Inadequate wages.

All the aforementioned potential impacts are assessed to be from severe to extremely severe, and their likelihood is assessed to be moderate.

Helvar's Code of Conduct sets clear expectations to its suppliers and states Helvar's commitments. Helvar's Code requires all next tier (tier 1) suppliers to make a direct commitment to the RBA's Code of Conduct or at least equally binding principles.

Most adversely affected value chain workers in Helvar's value chain are so-called "silent stakeholders", i.e. workers that Helvar cannot directly connect with due to the length and complexity of the value chain. In general, these silent stakeholders are located close to primary production, such as mining and extraction activities. In this case Helvar has utilized public reports from Organisation for Economic Co-operation and Development, United Nations, and non-governmental organisations' on the conditions and rights of the workers. Issues like child labour and forced labour, being human rights violations, are automatically assigned the highest severity and deemed of irremediable character.



Business conduct

[G1 IRO-1] No actual negative or positive impacts have been detected or identified for the reporting year. However, potential business conduct related impacts were identified and assessed. The identified and assessed potential impacts were assessed for:

- Corruption at own operations and in the value chain,
- GDPR,
- Governance requirements,
- Cooperation with sanctioned entities, and
- Inadequate or fraudulent credit notes being issued and paid from company accounts.

The assessment of governance impacts was based on how much a negative impact would damage the transparency and trust of Helvar (scale, scope and irremediable character). The most likely areas of governance impacts were assessed based on the type of activity and amount of corresponding oversight and monitoring. The financial effects of any business conduct related risks were assessed as very severe. The likelihood of such risks actualising was assessed as low.



Short summary of other sustainability topics

Sustainability topics that have been excluded from reporting are Pollution, Water and marine resources, Biodiversity and ecosystems, Affected communities and Customers and End-users. While some impacts, risks and opportunities have been identified e.g. through linkage in the value chain, these topics were ultimately determined not material for reporting.

(E2 IRO-1)
(E3 IRO-1)
(E4 IRO-1)

The environmental topics determined as not material are closely inter-linked. Helvar's own operations do not cause any material pollution of air, water or soil, do not impact the biodiversity and ecosystems near to its operations, and do not impact or threaten the local water resources. While some substances used in Helvar's operations may contain substances of concern or substances of very high concern, the exposure to- and use of those substances is very low. Pollution, biodiversity, nature and water resources emerge as more significant topics in the value chain, especially beyond the direct Helvar suppliers. All Helvar's direct suppliers (tier 1 suppliers) are required to have an ISO 14001 certified environmental management system in order to limit environmental impacts and ensure adherence to local legislations. Significant impacts can be expected to occur in the upstream value chain and be most widespread at the raw material acquisition stages. A significant risk is identified if small-scale, artisanal mines are used to source the raw materials used to produce the components in Helvar products. However, as these impacts are not under the operational control of Helvar, they are excluded from the reporting as per *[Draft] EFRAG IG 2: Value chain implementation guidance (pp. 11-12)*. Helvar has no policies, action plans or targets related to the excluded topics.

(S3 IRO-1)

Helvar acknowledges that some upstream value chain actors can have adverse impacts on communities. They have been identified to most likely be end-point communities living or working around activities by actors that are directly linked to Helvar, and they may also be classified as indigenous communities. Some communities are likely affected along the value chain. These impacts are systematic in the extractives, mining and metals industries, and have been identified based on reports from non-governmental organisations and entities such as United Nations. Production of components used in Helvar products is dependent on the mining and metals industries. While the severity and systematic nature of community impacts in the mining and extractive sector can be deemed material, it is still unclear whether or not they should be included as part of Helvar's value chain.

(S3 S3-1)
-
(S3 S3-5)

Helvar has no policies, action plans or targets related to the affected communities, as Helvar is not able to investigate, track, measure and influence the value chain to that extent.

(S4 IRO-1)

Consumers and end-users is a topic where no adverse impacts were identified, nor were any material risks or opportunities. Helvar solutions improve the wellbeing of end-users through human-centric lighting, which is the most significant impact Helvar has, and also a financial opportunity that has been pursued for long. Helvar does not offer products that are inherently harmful to people or increase risks for chronic disease, nor does it offer services that could negatively impact rights to privacy, personal data protection, freedom of expression or non-discrimination. As Helvar products are not directly sold to consumers or end-users but to businesses, the standard S4: Consumers and End-users is not material.



Material topics and disclosures

Climate change

(E1-1) Helvar has made a commitment to climate targets that are aligned with limiting global warming to 1.5°C as decided in the Paris Agreement. Helvar’s objective is to reach carbon neutrality by 2050. The targets have been developed based on the Science Based Targets Initiative’s criteria, which serve the purpose of guiding companies in developing and setting climate targets that are compatible with limiting global warming to 1.5°C.

Helvar is aiming for a 42% reduction in scope 1 and 2 emissions by 2030 from its 2022 baseline, and will set a target for scope 3 emissions in 2024. The scope 3 reduction target will be set according to the Science Based Targets criteria.

Key actions to reduce scope 1 & 2 emissions include the use of renewable diesel, use of electric vehicles, and the purchase of renewable electricity and district heat, and will reduce the scope 1&2 emissions by over 95%. Helvar does not yet have a scope 3 target but has taken actions to reduce scope 3 emissions. For example waste is being constantly reduced and recycling rates are being improved. The decarbonisation levels for scope 1 and 2 are shown in the Figure 1 below. Helvar has already implemented the use of renewable diesel in Finland and expects the emissions to reduce by around 64 tonnes of CO₂e.

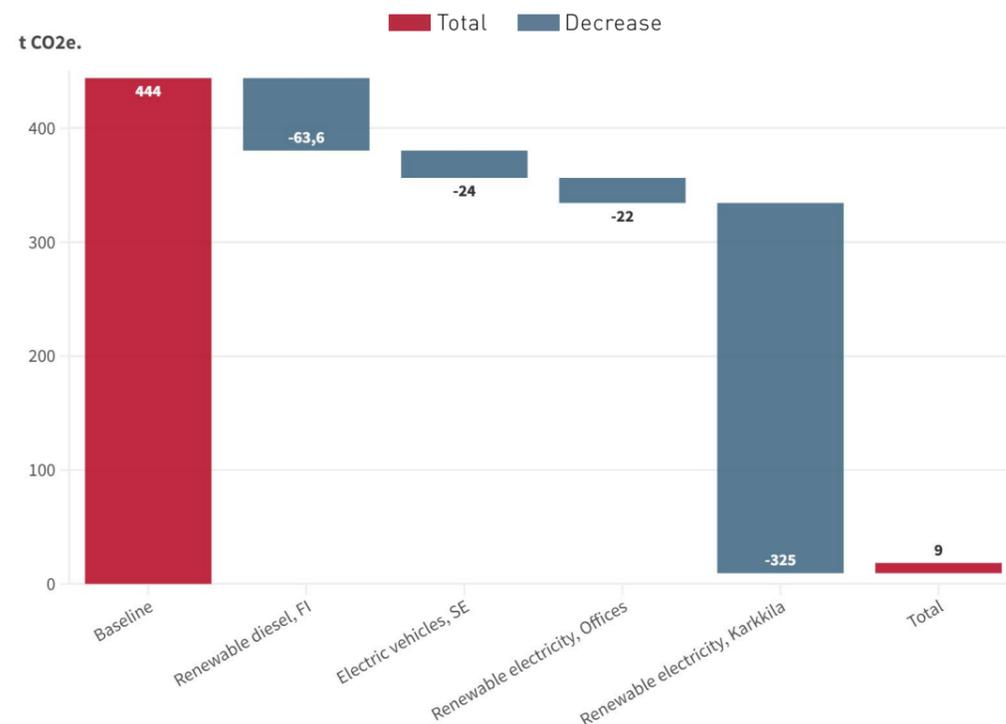


Figure 1: Actions for Scope 1 and 2

Helvar has evaluated that there are no key assets or products with locked-in GHG emissions that would jeopardise the achievement of emission reduction targets and drive transition risk.

Helvar’s key economic activities are aligned with the provisions of the Delegated Act (EU) 2021/2139 (EU taxonomy). Helvar’s product offering, such as presence and daylight controls for lighting systems, substantially contribute to mitigating the effects of climate change and comply with the “Do no significant harm” criteria. Helvar does not have requirements under the Taxonomy regulation. Helvar is not excluded from the EU Paris-aligned benchmarks.

(E1-2) The transition plan is a part of Helvar’s sustainability strategy, and energy savings through lighting control is the central element of Helvar’s offering. Helvar’s GHG emission reduction targets have been approved by the Board of Directors as a part of the Sustainability strategy approval process.

(E1-3) Helvar has not adopted any separate policies to identify, assess or manage its impacts or financial risks and opportunities related to climate change mitigation and adaptation. Helvar’s existing Quality and Environmental policy however addresses energy and guides the organisation to not only be energy efficient, but to produce energy efficient products as well. Helvar has already taken significant action to mitigate climate impacts. Helvar has been part of the energy efficiency agreement since 2007 and has an EES+ energy management system in place. In 2022, Helvar also implemented the use of renewable diesel for its vehicle fleet in Finland to curb emissions from mobile combustion. Renewable district heat has been used to warm the Karkkila premises since 2017, and some smaller energy efficiency actions are taken annually. In the coming years, Helvar aims to switch its vehicle fleet in Sweden into electric vehicles and to purchase 100% renewable electricity by 2030 latest.

Helvar is committed to setting a greenhouse gas reduction target to cover its Scope 3 emissions in 2024. The Scope 3 emissions target will be set according to the criteria set by Science Based Targets Initiative.

Helvar has not planned any adaptation actions when it comes to own assets but has a strategy in place for supply chain disruptions caused by climate-related physical risks materialising.

[E1-4] Helvar's target for scope 1 & 2 GHG emissions is to reduce them by at least 42% by 2030 (from 2022 levels). The aim for scope 3 emissions is to have a target in place by the next reporting cycle. By 2050 the target is to have net zero GHG emissions over all scopes. The targets are developed in accordance with Science Based Targets Initiative's criteria (Absolute Contraction Approach), although they have not been validated officially by the Science Based Targets Initiative.

The year 2022 was selected as a baseline, as it was assumed to be representative of typical yearly business activities. Earlier years cannot be assumed to be representative due to the Covid-19 pandemic and its impact on business.

Emission Scope	2022 Baseline	2030 Target	Reduction
SCOPE 1 & 2	444 t CO2e.	257 t CO2e.	42%

Table 6: Targets related to climate change mitigation and adaptation

Action	Absolute reduction (T CO2 EQ.)	Reduction as percentage
Renewable diesel (Finland)	64	-15%
Electric vehicles (Sweden)	24	-5%
Renewable electricity, offices (Finland, UK, Sweden)	22	-4%
Renewable electricity, Karkkila factory (Finland)	325	-74%

Table 7: Actions and respective reductions in emissions

Future developments are not considered to have a significant effect on the achievement of scope 1 & 2 targets. The targets do not imply such significant costs that sales volumes would greatly affect their achievement, and customer preferences and demands are not focused on scope 1 & 2 in a way that would hinder the achievement of the targets. If anything, customer pressure might become an accelerating factor in the future.

The targets cover company-wide scope 1 and 2 emissions of Helvar Oy Ab and all its subsidiaries, and include all relevant GHGs according to the GHG protocol Corporate Standard.

The scope 2 emissions are calculated based on a market-based accounting approach. Helvar has not purchased any carbon credits and thus has not counted them as emissions reductions towards the targets. Avoided emissions (Helvar's carbon handprint) are not counted towards emission reduction targets either as per SBTi-criteria C8-C12.

The targets cover an eight-year-period, which is in line with the 5–10-year timeframe given by SBTi. The base year chosen for the targets is 2022. The ambition is consistent with the required linear absolute reduction required to limit the global temperature increase to 1.5°C compared to pre-industrial times, and to achieve net-zero by 2050 latest based on SBTi-criteria C13-C16. Scope 3 targets will be set in 2024 according to the Science Based Targets criteria.

[E1-5] Table 8 shows the energy consumption and mix for 2022 and 2023. The following table shows the emissions for 2023.

Energy consumption and mix	2022 (MWh)	2023 (MWh)
From crude oil and petroleum products	137	91
Purchased electricity, heat, steam, cooling from non-renewables	1507	1464
Total sum of non-renewables	1603	1555
Fuel from renewables	0	39
Renewables electricity, heat, steam, cooling	1409	1416
Total renewables	1409	1419
Share of renewables	46%	47%
Total energy consumption	3024	3013

Table 8: Energy consumption and mix

Energy intensity per net revenue	2022	2023	Δ%
Total energy consumption from activities in high climate impact sectors per net revenue from activities in high climate impact sectors (MWh/Monetary unit)	45.2 MWh/M€	48,5 MWh/M€	+7%

Table 9: Energy intensity per net revenue

Table 11 shows Helvar’s scope 1, and 3 emissions, with scope 1 and 2 disaggregated by subsidiary and business unit. None of Helvar’s scope 1 or scope 2 emissions come from regulated emission trading schemes.

Scope 1	Total (t CO2e)	Percentage
Diesel	26	0.04 %
Finland premises	1	
Sweden premise	17	
Petrol (Gasoline)	7	0.01 %
Finland premises	0	
Sweden premises	7	
Scope 2	Total (t CO2e)	Percentage
Electricity consumption, marked based		1.4 %
Electricity, Karkkila	630	
Electricity, HQ	18	
Electricity, UK	16	
Electricity, Sweden	2	
Electricity consumption, location based		0.1 %
Electricity, Karkkila	53	
Electricity, HQ	1.5	
Electricity, UK	16	
Electricity, Sweden	0.2	
District heat consumption, location based (FI)	250	0.5 %
District heat consumption, market based (FI)	0	
Scope 3	Total (t CO2e)	Percentage
Purchased goods and services & capital goods	16 774	34,8 %
Fuel and energy related activity	49	0.1 %
Upstream transportation and distribution (W-t-W)	381	0.8 %
Waste	1	0.0 %
Business travel	217	0.4 %
Use of sold products	29 612	60.4 %
End-of-life of sold products	638	1.3 %

Table 10: Gross Scope 1, 2, 3 and Total GHG emissions

GHG intensity based on net revenue: 777 t CO2e/M€.

- (E1-6) Helvar has not purchased any carbon credits in 2023 and thus participated in no GHG removal or GHG mitigation projects financed through carbon credits. Helvar has not yet decided how residual emissions (5-10% of total emissions) will be neutralised in
- (E1-7) 2050. Helvar has not set a carbon pricing scheme.

(E1-9)

	Risks	Time horizon	Likelihood (1-5)	Impact (1-5)	Management approach
TRANSITION RISKS	Increased cost of components due to tighter regulation and cost of transitioning to lower emissions technology.	Short to Mid-term	4	3	Organisational agility, supplier relationship management, component redesign. Comparable components/substitutes specified for products. Effective communication to customers. Pricing according to costs.
	Imbalance between upgrading the existing portfolio and developing new products.	Short to Mid-term	3-4	3-4	Good business case portfolio management, strict analytics and decisions. Include and enhance ESG parameters in decision making.
	Customers requiring third-party certificates that require high effort and are costly.	Mid-term	4	4	Relying on standardised approaches. Clear communication to customers that voluntary certificates increase costs.
	Uncertainty in market signals and development.	Mid-term	3	3	Actively following the market and maintaining the ability to make fast decisions.
PHYSICAL RISKS	Water scarcity and poor water quality affecting the component production and quality.	Mid- and long-term	3-4	2	Redesign of the supply chain, focus on component manufacturers and replaceable components.
	Extreme weather patterns affecting the supply chain, causing e.g. disruptions.	Mid- and long-term	3-4	2	Redesign of the supply chain, focus on component manufacturers and replaceable components.
	Opportunities	Time horizon	Likelihood (1-5)	Impact (1-5)	Description / Explanation
TRANSITION OPPORTUNITIES	Smart buildings, consumption flexibility and frequency control	Short- and mid-term	4	4	Lighting is easy to control according to electricity availability and pricing.
	Use of supportive policy incentives in the lighting and/or building sector.	Short-term	2.5	5	Lighting control is an easy way to save energy.
	Increased stakeholder concern or negative stakeholder feedback increasing the awareness of energy savings.	Mid-term	3	4	Lighting control is an easy way to save energy.
	Lighting management taken to the next level.	Long-term	4	3	New solutions open more saving opportunities.

Table 11: Potential financial effects from material physical and transition risks and potential climate-related opportunities

The assets at material physical risk are component stocks at subcontractors. Those are covered by the same mitigation actions as assets at risk due to geopolitical events. The locations of the assets are in Malaysia and China. Risks exist but those have been mitigated by decentralizing production. Insurances cover the component stocks. If a physical risks would materialize and affect the subcontractors, the effect on Helvar is estimated to be minor.

No assets are at material transition risk over short-, medium- and long-term time horizons, thus no related transition risks have been addressed. There are no liabilities that must be recognised in financial statements. No business activities of Helvar are at material transition risk over the short-, medium- and long-term time horizons. Helvar has no customers operating coal, oil and gas-related activities. None of Helvar's assets, liabilities and net revenue are at material physical or transition risk. Helvar has estimated that the cost-savings achieved from energy efficiency actions taken in 2023 are around 14 000 euro annually.

Helvar's services are solutions for lowering the carbon footprint of lighting systems and thus, the building in which they are used. As sustainability stays also in the future top-of-mind with decision makers and stakeholders to the decision to purchase Helvar's solution, Helvar expects both the market size as well as our net revenue to increase over time.



Resource use and circular economy

(E5-1) Helvar has no existing policies to identify, assess, or manage resource use and circular economy related impacts, risks and opportunities. Helvar's Quality and Environmental policy does consider waste management. Helvar has dedicated resources into improving chemical compliance performance, waste management and packaging.

(E5-2) As packaging is the most short-living part of Helvar's product offering, a waste hierarchy is followed when making packaging decisions. Packaging materials are minimized, and renewable packaging materials are preferred. Exact waste treatment methods are presented for each packaging type used by Helvar in a separate Environmental Product Information document available from Helvar's website.

Chemical compliance is a key factor for the safety and circularity of Helvar's products, and Helvar strives to exceed the legislative requirements on local, national, and EU-wide levels. The current information on Substances of Very High Concern (SVHC) and SCIP registration status is available under helvar.com/quality-documents. All components are assessed for chemical compliance prior to approval and whenever changes occur. In addition, Helvar has invested into a software that automatically checks all the electronic components for the presence of restricted and SVHC substances.

(E5-3) Helvar offers waste treatment guidance for its products on its website. Electronics contain significant materials of valuable non-renewable resources, and Helvar strongly recommends its products to be taken into WEEE collection points at the EOL stage and to be recycled appropriately to recover the resources. Helvar has no targets related to resource use and circular economy.

(E5-4) The main resources used to produce Helvar products and services are lighting control products manufactured by subcontractors, electronic components, plastic casings, packaging materials (incl. plastic, paper, cardboard, wood), solder equipment and machinery, the factory building in Karkkila, transportation and distribution services, offices, IT equipment and services, warehouse and warehousing equipment, and office supplies.

The overall total weight of products and materials used to produce products and services during the reporting period are shown in table below. Use of materials is considered as resources purchased during 2023. The resources include electronic components, packaging, and products manufactured by subcontractors. The calculations are based on purchasing data, assigned product and component weights and packaging materials. The calculation covers 90% of the total purchasing value.

Type of materials	Resource use (% of total)
Renewable materials	7%
Reused or recycled products and materials (non-virgin)	6%
Total material consumption	100%

Table 12: Resource use and material consumption

(E5-5) Helvar products are designed for long lifetimes and reusability. Long lifetime is achieved by designing durable products that can easily be used for a decade. Reusability is another principle that guides the design: as spaces, and thus lighting, change according to the end-user and renovation needs, the lighting components manufactured by Helvar have been made to be easily reused to accommodate to the new requirements and needs of the space.

Circular principle	Product outflow (% of total)
Durability	100%
Reusability	100%

Table 13: Products and materials outflows: Products and services designed after circular principles

Waste type	Treatment	Amount (kg)
WEEE	Disposal	3610
Energy waste	Incineration	3890
Mixed waste	Incineration, disposal	9820
Plastics	Recycling	1000
Paperboard and cardboard	Recycling	6500
Paper	Recycling	3775
Wood	Reuse/Recycling	1200
Total		29 795

Table 14: Products and materials outflows: Waste

(E5-6) Helvar has identified opportunities in pursuing circular economy practices and implementing circular solutions in its portfolio. Likewise, it has been assessed as a material risk to not pursue circularity. The critical assumption behind the risks and opportunities is that circularity is seen as more and more important sustainability aspect and a competitive edge, and this assumption has been reinforced by circularity workshops conducted at Helvar in 2022. Being able to implement circular solutions and business models would increase the competitiveness of Helvar solutions.

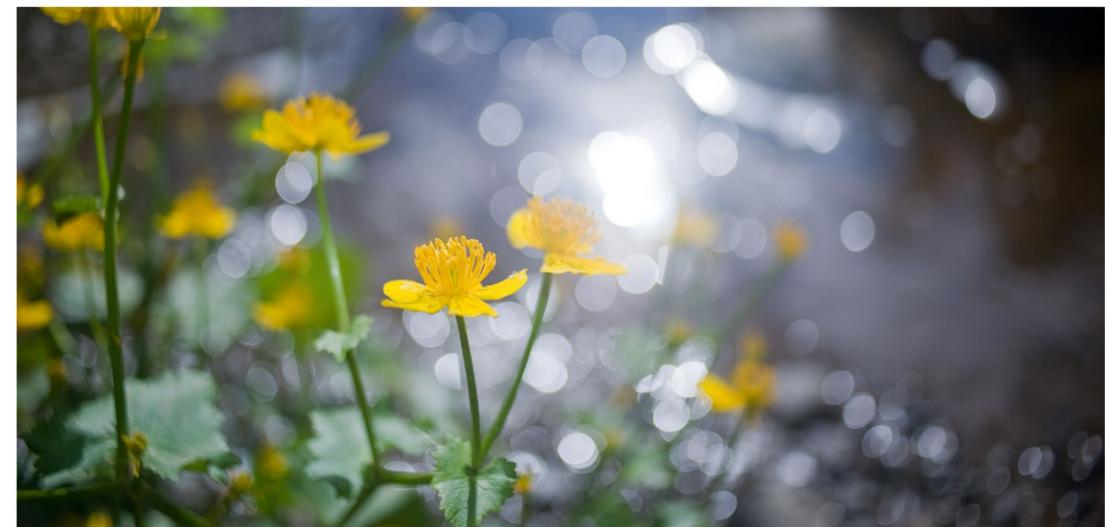
Own workforce

(S1-1) Helvar’s commitments related to its own workforce are expressed in Helvar’s Code of Conduct, which follow the standards set out in Responsible Business Alliance’s Code of Conduct. Helvar is committed to upholding human rights and working rights of all employees, to fair and equal treatment of all employees, to protecting the health and safety of employees and any contract labour, and to minimizing any adverse working conditions. Helvar recognises and respects the right of its employees’ freedom of association. The Code of Conduct strictly prohibits the use of child labour . (Helvar’s policies do not explicitly address human trafficking or forced- or compulsory labour.)

Helvar has multiple policies in place to manage, mitigate and prevent negative impacts and to increase the positive impacts. These include:

- An anti-harassment policy, implemented through an Equality and Non-discrimination plan (covering gender-based issues)
- A strict Health & Safety policy at UK premises
- Employee Handbooks, which function as policy, people practice and benefit documents, including but not limited to the following topics:
 - Working time and working model
 - Occupational health and safety
 - Insurances, business travel and benefits
 - Collective agreements & cooperation

(S1-1) & (S1-2) Helvar regularly cooperates between employees and their line leaders, and in between employer and employee representatives as determined in the Employee Handbooks. Helvar has no specific policy commitments related to inclusion and/or affirmative action for people from groups at particular risk of vulnerability in its own workforce.



The Equality and Non-discrimination plan sets out the procedure for employees and line leaders to prevent and act on harassment, inequality and discrimination cases. It is a specific procedure aimed at the elimination of discrimination and harassment, and promoting equal opportunities, diversity and inclusion. It is mostly focused on gender, age and ethnicity of the workforce and monitors those aspects respectively. The Anti-Harassment policy and the Equality and Non-discrimination plan both detail the engagement initiatives taken with own workers with regards to eliminating issues of inequality and harassment. In addition, the Employee Handbook specifically prohibits discrimination due to racial and ethnic origin, colour, sex, sexual orientation, gender identity, disability, age, religion, political opinion, national extraction or social origin, and any other forms of discrimination covered by EU regulation and national law.

Engagement with Helvar employees informs Helvar's approach, decisions and activities aimed at managing the actual and potential material impacts on its own workforce. Helvar engages in continuous dialogue directly with the workers' representatives. The dialogue meetings handle topics such as employee surveys, occupational health and wellbeing, skills development, workplace conduct and worker insurances. The dialogue meetings take place once in a tertial.

Employee surveys are also conducted regularly to measure employee satisfaction and wellbeing. Engagement feedback surveys are conducted twice a year and Non-discrimination and Gender Equality survey every second year. In addition, feedback is collected throughout various employment process steps, such as recruitment and onboarding.

The most senior role within Helvar to ensure that the engagement happens and that results inform Helvar's approach is the Head of HR.

Workers can raise concerns through their local HR representatives or through an internal whistle-blowing channel if needed. Workers' representatives are also available as contact points for workers to raise concerns. Specific complaint handling mechanisms exist for cases of harassment and discrimination. The existence of the channels to raise concerns are introduced to workers in the onboarding process. Any issues raised are tracked, monitored and addressed based on existing policies and guidelines, such as the whistle-blowing policy and employee handbook policies. The whistle-blowing policy protects the whistle-blower against retaliation.

[S1-3] When required to provide or contribute to remedy where needed, Helvar follows the local legislation and guidelines. Helvar has no grievance handling mechanisms except for the UK subsidiary, which has a formal grievance process documented in employee handbook. Occupational health and safety impacts are prevented and mitigated by Helvar's Health and Safety teams, that monitor and act on potential risks

[S1-4] and investigate occupational injury and illness cases. In addition, the workers are covered by a statutory accident insurance which covers occupational accidents and occupational diseases, and by a voluntary additional remote work insurance to cover the gaps that the statutory accident insurance leaves.

Occupational health and safety impacts are prevented and mitigated by Helvar's Health and Safety teams, that monitor and act on potential risks and investigate occupational injury and illness cases. The Health and Safety teams respond to negative actual and potential impacts according to local legislation. In addition, the workers are covered by a statutory accident insurance which covers occupational accidents and occupational diseases, and by a voluntary additional remote work insurance to cover the gaps that the statutory accident insurance leaves. An Early Support model is in place to detect issues threatening work ability and to find appropriate solutions. To ensure that the processes to manage and provide remedy to occupational illnesses and injuries are effective, Helvar closely follows the local legislations.

Helvar has an Anti-harassment policy in place and actively encourages and nurtures a culture where anyone can feel safe, accepted and treated fairly. An Early Support model is in place to detect issues threatening work ability and to find appropriate solutions.

To seek out and achieve higher wellbeing and social cohesion, Helvar organises social events and gatherings for employees at regular intervals. There social events and gatherings include Monthly breakfasts and Fun Squad events (social events organized by employees for other colleagues). In addition, company provides a broad selection of wellbeing benefits, such as a bike benefit, and culture and sports benefits. Wellbeing is surveyed annually.



To achieve desired results in skills development and learning, Helvar provides its employees flexibility as well as a range of benefits and possibilities for learning and self-development. Growth and performance dialogues are conducted on all sites three times a year to guide in identifying new areas of growth, expertise, skills, techniques and working methods. Helvar utilises a 70-20-10 learning and development model to best develop skills and knowledge at work. The 70-20-10 mix is based on the principle that 70% of learning come through on-the-job experience, 20% is development through learning from others and 10% is coursework and training through formal learning. Major investments have been made in recent years to provide access to e-books and learning platforms and to organize internal training, knowledge sharing opportunities and hackathons. Helvar employees are encouraged to use one hour per week on learning and developing new skills. In addition, Helvar cooperates with universities and universities of applied sciences to offer traineeships. (Helvar does not separately monitor skills development and learning or the effectiveness of its approach to support it.)

To ensure that Helvar's own practices do not cause or contribute to material negative impacts on own employees, engagement surveys allow employees to raise concerns and cooperation with employee representatives enables raising up any material issues.

Helvar has no time-bound and outcome-oriented targets related to the negative impacts on its own workforce, or related to the management of material risks and opportunities.



(S1-6)
-
(S1-17)

Reference	Disclosure
S1-6	<p>Headcount of the total number of employees, breakdown by permanent/temporary/non-guaranteed hours and by gender and country in which 50 or more employees.</p> <p>Total: 293, Permanent: 284, Temporary: 6 (2 UK, 4 Finland), Non-guaranteed hours: 3 (Finland) Location UK: 80 (69 male/11 female), Location Finland: 167 (114/53 female)</p>
S1-7	<p>Characteristics of non-employee workers.</p> <p>Total no. of non-employee workers: 13 Their common types and work performed: Business development and country-specific sales & marketing, Finance</p>
S1-8	<p>% of employees covered by collective bargaining agreements, % not covered, description of extent to which non-employee workers are affected by bargaining agreements.</p> <p>Finland: - 93% of Finnish employees are covered by collective agreements - Non-employee workers are covered by other collective bargaining agreement by their employer</p> <p>Helvar does not have collective bargaining agreements in other countries.</p> <p>a) the global percentage of employees covered at the establishment level by workers' representatives, reported at the country level for each EEA country in which the undertaking has significant employment; and: N/A</p> <p>(b) the existence of any agreement with its employees for representation by a European Works Council (EWC), an Societas Europaea (SE) Works Council, or an Societas Cooperativa Europaea (SCE) Works Council: N/A</p>
S1-9	<p>Gender distribution at top level management and age distribution of employees.</p> <p>Whole company: 18% female / 82% male (2/9)</p> <p>Average age: 44 Below 40: 35% 60 or above: 9%</p>
S1-10	Share of workforce that is paid adequate wage, in line with applicable benchmarks: 100%
S1-11	Employees covered by social protection in case of sickness, injury, unemployment, maternity leave, retirement & % of employees: 100%
S1-12	Percentage of persons with disabilities in the workforce: 0%
S1-13	% of employees participating in regular performance and career development reviews (breakdown by employee category and gender): 100%, approx. 20h per employee
S1-14	<p>Health and safety;</p> <p>% covered by health and safety management system: 100% No. of fatalities and work related accidents and ill health: Less than 6 (accidents) Number of days lost to work-related injuries and fatalities: Max. 3 days in total</p>
S1-15	Extent to (%) which employees are entitled to and make use of family-related leave, breakdown by gender: 100%
S1-17	Work-related incidents and complaints and severe human rights impacts and incidents within own workforce and related fines or sanctions: 0% / N/A

Table 15: Disclosures S1-6 to S1-17

Workers in value chain

- (S2-1) Helvar's Code of Conduct sets clear expectations for suppliers and states Helvar's commitments. Helvar's Code requires all next tier (tier 1) suppliers to make a direct commitment to the RBA's Code of Conduct or at least equally binding principles.
- (S2-2) Most adversely affected value chain workers in Helvar's value chain are so-called "silent stakeholder", i.e. workers that Helvar cannot directly connect with due to the length and complexity of the value chain. In general, these silent stakeholders are located close to primary production, such as mining and extraction activities. In this case Helvar has utilised public reports from Organisation for Economic Co-operation and Development, United Nations, and non-governmental organisations on the conditions and rights of the workers. Issues like child labour and forced labour, being human rights violations, are automatically assigned the highest severity and deemed of irremediable character.
- For Helvar's subcontractors the engagement has so far occurred mostly through the subcontractors' management, and Helvar is planning on cooperating with subcontractors to ensure that proper stakeholder engagement can be conducted. The subcontractors have been evaluated based on a sustainability survey, and Helvar will in the future further engage with the subcontractors to ensure that the appropriate management systems and approaches exist to identify, manage, prevent and remediate adverse impacts on subcontractors' workers. The subcontractors will be asked to substantiate their claims and commitments to human rights and worker rights.
- (S2-3) Helvar does not yet have any processes to remediate negative impacts in the value chain, nor has channels for value chain workers to raise concerns. Helvar is in the progress of developing such processes and channels as part of its due diligence program.
- (S2-4) Helvar does not accept child labour or forced labour and requires its direct suppliers to make a direct commitment to RBA's Code of Conduct, as well as to have ISO 45001 or OHSAS certification to ensure that the working environment is safe. Helvar has planned to start improving its human rights due diligence in 2024.
- (S2-5) Helvar has no targets related to managing negative impacts on value chain workers, or to advancing positive impacts. Nor has Helvar targets related to managing financial risks and opportunities related to value chain workers.

Business conduct

- (G1-1) In its Code of Conduct (CoC), Helvar has committed to zero tolerance for bribery and corruption, as well as to fair competition, ethical conduct and honouring contracts. Policies exist to guide central financial processes. Helvar's suppliers are required to commit to the CoC. Helvar's policies are consistent with the UN Convention against Corruption (2004).

Helvar is committed to investigating business conduct incidents promptly, independently, and objectively. Its own processes are audited regularly to ensure their effectiveness and identify any shortcomings, and regular trainings and discussions are held in relevant functions to promote good corporate culture and prevent misconduct. The trainings are held annually on a general level for partner channel and throughout partner events and they also highlight any new topics that have risen during the year. The trainings serve to remind the relevant functions about the importance and meaning of good business conduct and to revise the Helvar principles. Partner channel salespeople and partners are estimated to be at higher risk of business misconduct due to lower level of direct oversight and differences in business culture between regions and markets.

An internal whistle-blowing channel exists to report any misconduct, and Helvar is committed to investigating business conduct incidents promptly, independently, and objectively. Investigators are the CFO and Helvar Merca Group Chief Compliance Officer. Safeguards exist to protect the whistle-blower from retaliation and are described in the whistle-blowing policy and guidelines. Any business conduct incidents are reported to the Board of Directors in their annual Governance-themed meeting. The corporate culture promotes raising issues and investigating incidents early.

Helvar partners are also regularly trained on business conduct, where Helvar's principles are also revised. Helvar has also updated its overall terms of sales to specify that its products may not be sold to Russia due to the ongoing war in Ukraine.

Mechanisms for reporting and investigating concerns about unlawful behaviour or behaviour in contradiction of CoC depend on the way the behaviour is discovered. For concerns reported through the whistle-blowing channel, the process for reporting and investigation is defined in the whistle-blowing policy.

In cases where a concern is raised some other way, the first responsibility to react belongs to either the first line manager or one above. The line manager is expected to convey the concern forward to the relevant corporate functions, such as Human Resources and/or Finance, and the concerns are reported to the CEO, the Chairman of the Board and the owner's office. The investigation is handled by the CFO and, if needed, the Chief Compliance Officer of the owner's office (Helvar Merca). All cases and concerns are reported to the Board of Directors.

[G1-2] Helvar's Electronics Manufacturing Service suppliers (EMS suppliers) are thoroughly audited and asked to fulfil an ESG survey. They are required to make a direct commitment to RBA's Code of Conduct and to have ISO 14001, ISO 9001 and ISO 45001 or OHSAS certification. All subcontractors and manufacturers of buy-in products have been assessed with the ESG survey in 2022. During 2023, Helvar's suppliers and partners have been surveyed on human rights, labour, business code of conduct, environmental issues, health and safety, and management approaches. The ESG score is part of the criteria for supplier selection.

Helvar's supplier relationships are handled with dedicated resources towards EMS suppliers. Risk mitigation is primarily done by keeping regular operational meetings, reviewing/testing recovery processes and agile adjustments to shortages.

Helvar's strategy with respect to relationships with suppliers and sustainability focuses initially on securing supply, i.e. every strategic component in Helvar's offering needs to have multiple sources of supply. Helvar influences the sourcing executed by the manufacturers (EMS) by setting quality/availability (and the in the future sustainability) targets. Helvar is studying manufacturing opportunities and geographical locations to find greener alternatives and to shorten the transportation distances, especially for low volume products and products in a ramp-up phase. Doing that would impact Helvar's greenhouse gas emission levels positively.

Helvar does not have practices implemented to support vulnerable suppliers, since none of Helvar's direct suppliers have been identified as such, but cooperates with production suppliers to improve social and environmental performance.

[G1-3] All employees are trained on Helvar's Code of Conduct and ethical business issues during the onboarding process. The training is a general training in its nature, and it covers all the areas of the Code of Conduct and a questionnaire that tests and corrects the employees understanding of business conduct and covers all functions. The CoC training of own employees is not a recurring activity. Additional training is provided to relevant personnel when policies or processes are changed to ensure that the policy is accessible and that the personnel understands its implications. A themed audit is conducted every year for one of Helvar's processes (such as order to cash, purchase to pay and inventory), and a GDPR audit is conducted annually. A whistle blower channel is accessible to all employees who wish to report concerns about possible illegal activities or breaches of Helvar's Code of Conduct. Incidents are investigated by the Helvar CFO and the Helvar Merca Chief Compliance Officer and reported to the Board of Directors annually in a Governance-themed meeting.

A whistle-blowing channel exists for workers to report any critical concerns. Guidelines exist to control the process and to protect the whistle-blower. In 2023, no critical concerns or corruption suspicions have been alerted, nor have any insufficiencies in actions to address them. All donations or sponsorships to other organisations require approval from the board of directors.

Partner managers are engaged with in every tertial to ensure good business conduct. All new terms of sales, practices and other relevant changes are then introduced.

[G1-4] Helvar has defined processes to detect, investigate and respond to misconduct, and those have been proven to work. There have been no confirmed incidents of bribery, no convictions or fines, and no public legal cases in the reporting year 2023.

[G1-5] Helvar does not participate in any lobbying activities, nor is it directly involved in politics, but is a member of the Technology Industries of Finland, an organisation that is involved in lobbying on behalf of Finnish technology industry companies. Some Helvarians are active in the politically inclined organisations and standard-setting organisations.

[G1-6] Helvar has a good track record of having paid its bills in due time, especially to SMEs.

There were no legal proceedings outstanding during reporting year 2023.



Appendix

Double materiality – Results

ESG Risk	Risks	Score
Increased cost and decreased availability of components due to tighter regulation and cost of transitioning to lower emissions technology.	Decreased gross margin (25% increase on purchase prices)	2.5
	Opportunity cost - using Resources for existing portfolio instead of new	3
	Inability to distribute and provide products (no components - supply chain not according to regulations)	2
	EOL of specific portfolio (some products not according to new regulations and EOL)	2.5
Customers requiring third-party certificates that require high effort and are costly.	Applying for certificates creates costs	1.5
	Redesign; process changes, component changes	3
	Dropping customers and decreasing sales (at max.)	4
Extreme weather patterns, such as droughts or floods, disrupting the supply chain	Loss of product availability, causing loss of business.	2.5
	Loss of component availability	3
Forced labour being discovered at T1 supplier in Malaysia (and actions taken by Helvar)	PR communication crisis, negative brand impact	1.5
	Loss of production during investigation period/improvement process (score assuming Helvar isn't able to manage the situation fast)	3
Sales partner discovered to have been involved in a corruption incident.	Communication, PR, negative brand impact	2

Table 16: Double materiality assessment results

Double materiality – Examples of external sources of information used to identify impacts in the value chain (list not comprehensive)

References for information and emission factors
World Benchmarking Alliance https://www.worldbenchmarkingalliance.org/
UNPRI, identifying human rights risks https://www.unpri.org/human-rights/how-to-identify-human-rights-risks-a-practical-guide-in-due-diligence/11457.article
Yahoo Finance, sustainability scores https://finance.yahoo.com/
IPCC climate change vulnerability https://www.ipcc.ch/report/ar6/wg2/
TCFD recommendations, https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf
CSR Risk Check tool by MVO Nederland https://www.mvorisicochecker.nl/en
OECD https://mneguidelines.oecd.org/oecd-due-diligence-guidance-in-the-electronics-sector.pdf
UN https://www.unepfi.org/humanrightstoolkit/mining.php

Double materiality – Selected material standards

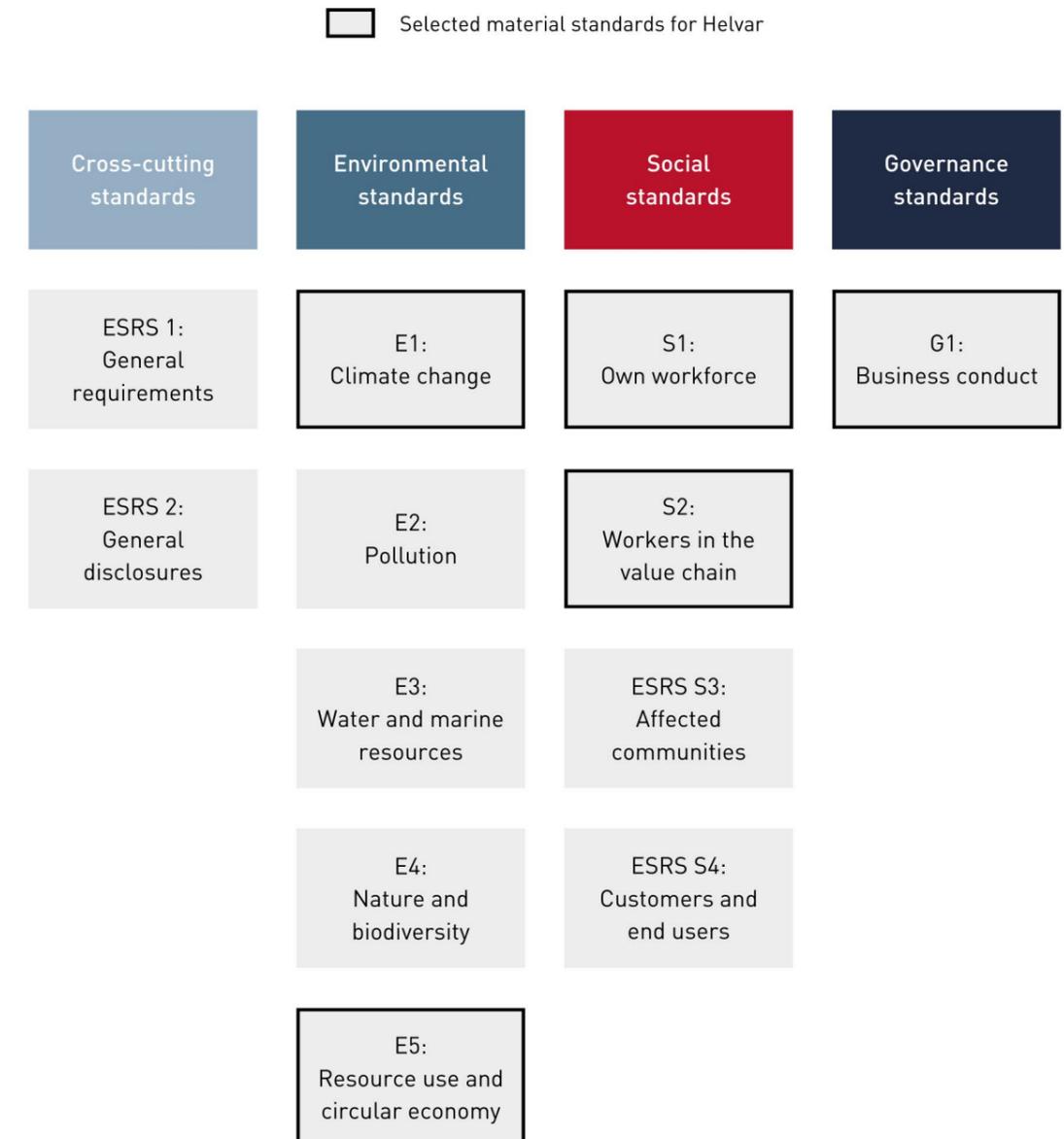


Figure 2: Selected material standards

References for information and emission factors

Climate change	
E1-5	Mileages tracked by employees, converted to an estimate for fuel consumption. Electricity consumption from electric readings and electricity bills. Heating consumption from heating provider.
E1-6 Scope 1	Mileages tracked by employees. Emissions factors from: Department for Environment, Food and Rural Affairs (Defra) 2022. UK Government GHG Conversion Factors for Company Reporting. "Passenger vehicles" https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2022
E1-6 Scope 2	Electricity consumption from electric readings and electricity bills. Heating consumption from heating provider. Emission factors from: Defra 2023 "UK electricity" Energiavirasto "Jäännösjakauma 2022 suomeksi" https://energiavirasto.fi/-/vuoden-2021-jaannosjakauma-on-julkaistu FinStat, "Electricity production, energy method" https://pxhopea2.stat.fi/sahkoiset_julkaisut/energia2021/html/suom0011.htm FinGrid "Emission coefficients of the Finnish electricity system" Table 2. https://www.fingrid.fi/sahkomarkkinat/sahkojarjestelman-tila/co2/ (weighed)
E1-6 Scope 3	Product footprints based on own LCAs, scaled for all products. Purchased component carbon footprints calculated using component weights and ecoinvent emission factors. Services calculated based on Exiobase 3.8. and purchasing value. Transportation emissions from CO2 reports and partly estimated based on known transportation routes. Business travel based on CO2 reports and exiobase factors on purchasing value. Use of sold products based on power consumption over 10 years of use and regional (Europe, Middle-East, Asia, Global) electricity market group emission factors from ecoinvent. Applies for products that are separately powered; e.g. drivers are excluded from the calculation as luminaire electricity consumption = driver electricity consumption. End of life emissions calculated based on sold products mass and emission factors for manual dismantling, shredding of waste electronics, and disposal of ceramics and plastics in electronics from ecoinvent. Emission factors: Defra 2023. Multiple emission factors used. Suomen ympäristökeskus SYKE: Y-HIILARI 2018 https://www.syke.fi/fi-FI/Tutkimus_kehittaminen/Kulutus_ja_tuotanto/Laskuri/YHiilari (Updated 2020) Ecoinvent 3.8 Exiobase 3.8 https://zenodo.org/record/5589597#.Y4cJnXZBw2w Finnish Energy, used to estimate distribution losses of district heat https://energia.fi/en/energy_sector_in_finland/energy_networks/district_heating_networks CEER 2020. 2nd CEER Report on Power Losses. Finland. transmission and distribution losses. https://www.ceer.eu/documents/104400/-/-/fd4178b4-ed00-6d06-5f4b-8b87d630b060 Paikallisvoima 2022. District Heating Emissions Calculator https://www.klpaastolaskuri.fi/ HSY Julia 2030 project, background document available at (2011) https://docplayer.fi/31647101-Julia-hanke-hsy-n-alueella-tuotettujen-kasiteltyjen-ja-hyodynnettyjen-jatelajien-khk-paastokertoimet-laskelmien-taustatietoa.html
Resource use and circular economy	
E5-4	Amount of purchased components and materials from own system data, covering 90% of the total purchasing value. Cardboard, paper and wooden pallets as renewable inflows. Average amount of recycled steel in drivers and known amounts in packaging as recycled inflows.
E5-5	All products are designed to last for a long time. Reusability based on whether sensor components can be reused without significant effort to do so if the space is e.g. renovated. Waste statistics are based on numbers provided by the waste management operator.
Own workforce	
S1-6 – S1-17	Metrics from HR master data.