°CICERO Shades of Green

Godsinlösen Nordic AB
Shades of Green assessment

February 10th, 2022

Sector: Repair and re-use services

Region: Nordics

Godsinlösen Nordic AB ("GIAB") provides repair and refurbishment services. Building on its software GIAB Circular Platform, the company repairs, refurbishes and manages a wide range of products for insurance companies, e-commerce players and office management, re-selling the products through own or third-party channels. Its primary market is Sweden, but it also has operations in the other Nordic countries.

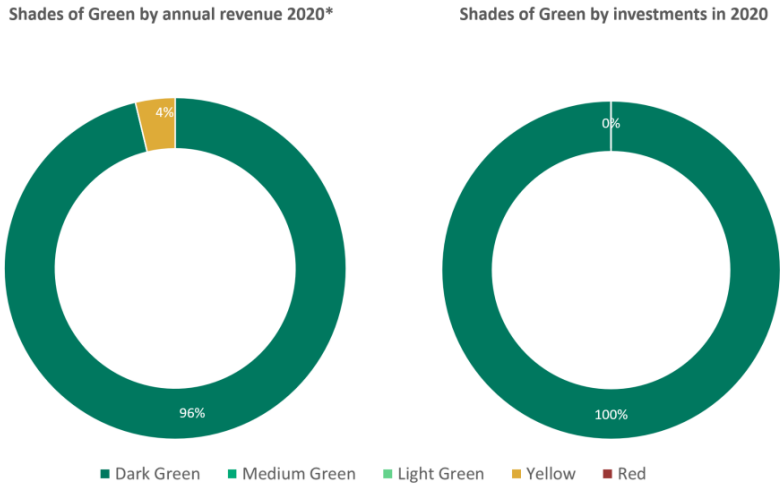


Figure 1: GIAB revenue and investment by Shade of Green[2] Note that operating expenditures have received shading in the same shares as revenues.

96% of both revenues and operating costs, and 100% of capital expenditures are shaded Dark Green, while a minor share of revenues and opex receives a Yellow shading. The sum of OPEX and CAPEX allocated a Shade of Green is 96%. Reducing resource use is key in a low carbon future. The extraction and processing of new resources are estimated to account for some 50% of global greenhouse gases, in addition to other environmental impacts. GIAB's repair and re-use services prolong products' lifetime, preventing waste and potentially contributing to avoiding new production. While waste prevention is at the top of the waste hierarchy, preparing for re-use is second. For most products handled by GIAB, the major GHG emissions occur during production.

Dark Green is assigned to repair and refurbish activities in the Circular Insurance, Circular Office and Re:commerce business areas. Circular Insurance is an innovative claims settlement process, where GIAB has worked with insurance companies to change business practices. Instead of a cash payment in case of a damage phone, the insurer's clients are given a repaired phone. The solution provided by GIAB contributes to prolong these products' lifetime, which is part of a 2050 low carbon future. Dark Green is allocated to 83.2% of Re:commerce revenues, reflecting the share of products handled that are repaired, refurbished or recycled. GIAB offers

Nasdaq Green Designation[1]

CICERO Green assesses that GIAB meets the requirements for Nasdaq Green Equity Designation set out in the Nasdaq Green Equity Principles.

[1] CICERO Shades of Green is an approved reviewer to assess alignment with the Nasdaq Green Equity Principles, Nasdaq.com/Solutions/Nasdaq-Nordic-Green-Designations

[2] For the purpose of this assessment, revenue and turnover are used interchangeably, as are operating costs and OPEX, investments and CAPEX.

a one-stop for e-commerce companies, where it handles all returns, including reclamations, logistic damages and warranties. The company's calculations on avoided emissions resulting from its services have not been verified by a third party, and the assumption that one repaired product directly replaces new production may lead to overestimation of impacts.

A Yellow shade is given to 16.8% of the revenues from the Re:commerce area, reflecting the share of products that are simple returns. These are new products that GIAB resells, where the environmental benefits are uncertain. Some research indicates that e-commerce companies tend to transport such items over long distances for repackaging/reprocessing, while GIAB only transports items within the Nordics. However, there is currently not enough evidence to assign a green shading to these revenues and there is no scientific consensus that online shopping in itself has a low environmental impact.

While the vast majority of GIAB's activities are part of the 2050-solution, there are pitfalls associated with re-use. By offering companies and individuals an attractive solution for re-selling used products, the overall consumption of new products may not necessarily decrease. This will depend on consumer behaviour, which is outside of the scope of GIAB's activities. In addition, while emissions from the necessary transport for the repairs are currently small compared to the production of the products themselves, these emissions still need to be managed. It is positive that GIAB has transitioned to waste based biofuel for own vehicles, and we encourage the company to engage with its third-party transport providers on moving to low carbon vehicles.

The electronics sector is often linked to high social risks, in particular regarding workers' rights. The current providers of reconditioning services to GIAB operate in European countries which generally do not represent an increased social risk. We would however recommend that the company further strengthens its work on social issues through a continuous mapping of risks and publishing its policies and codes of conduct. It should be stressed that GIAB generally has an active social agenda and, through its cooperation with the Swedish company Samhall, provides work for people usually left out of the labour market.

GIAB appears to mainly fulfill the minimum social safeguards of the EU taxonomy, while the criteria for repair services are yet to be determined. Our preliminary assessment against the suggested criteria for substantial contribution to a circular economy and DNSH for the activity "provision of repair and related services" indicates likely alignment, but it is not possible to conclude on the share of aligned revenues, opex and capex.

GIAB reports yearly on sustainability targets and progress, but the company should standardize its reporting to communicate more clearly to investors. The reporting on KPIs would be more transparent if it included more information on methodologies. Responsibility for sustainability is clearly assigned and senior management is involved. We encourage GIAB to set long term climate targets. The company shows some awareness of physical and transition climate risks, but does not report according to TCFD.

Figure 1: CICERO Green views GIAB's governance structure and practice to be Good.

Table 1: Sector specific metrics

	Share of reused goods[3]	Scope 1-3 GHG emissions	Avoided emissions (t CO_2e)
2020	85%	408	2,893
2019	76%	360	4,286
2018	76%	284	3,381

[3] Within the Re:commerce area, this is the share of products that need repair that are, through repair/refurbishment made ready for re-use. The remainder is recycled.

°CICERO Shades of Green

Contents

1 Godsinlösen Nordic AB's sustainability management

Company description

Godsinlösen Nordic AB is a Swedish company whose core activity is to develop, implement and scale up business models based on extending products' lifetime. The company's proprietary software GIAB Circular Platform forms the basis for its operations, as this platform is necessary to enable repair of products on a large scale through data collection and traceability. GIAB collects goods, makes their inventories, repairs or reconditions them and resells either through its own or third-party channels (see Figure 2).

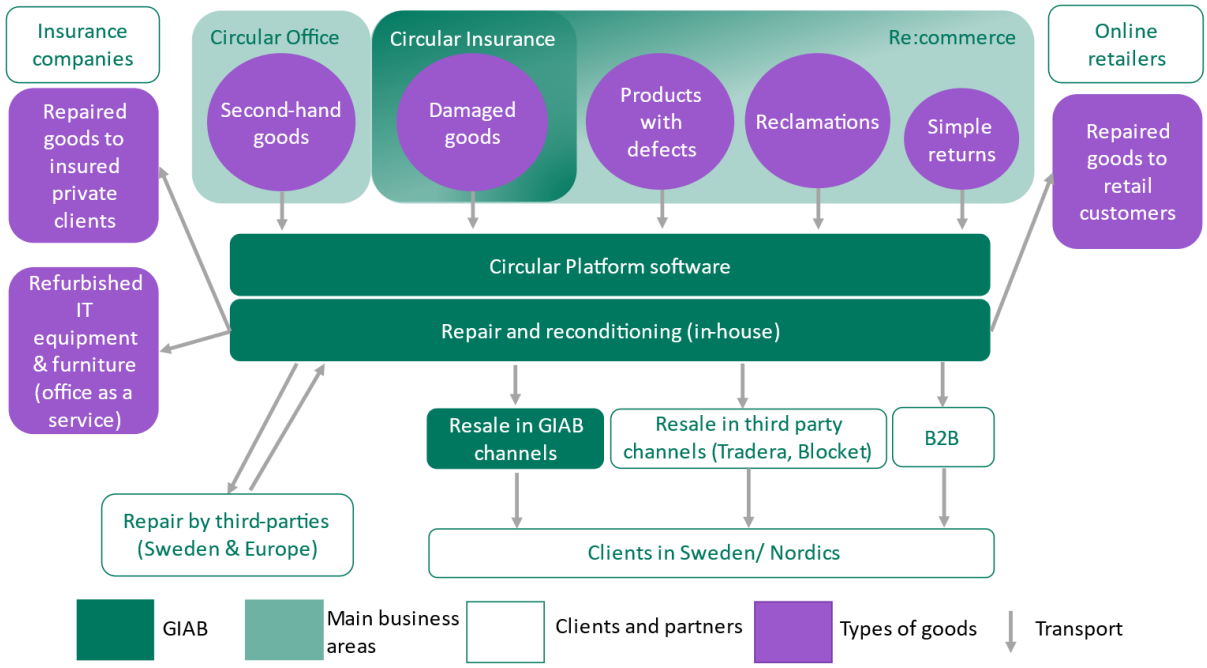


Figure 2: Simplified illustration of GIAB's business model

GIAB's own channels are both online and a physical outlet. Operations may be divided in four business areas:

- **Circular Insurance.** This is a circular claims settlement process for insurance companies, who are GIAB's clients. GIAB receives the insured product, verifies its condition and repairs it. This process covers many product types, but the largest one is mobile phones, followed by bicycles. Other large product groups are tablets and smartwatches. For smartphones, the insurer's private client receives a repaired phone of a model identical to the damaged one. In exceptional cases, a new mobile phone is provided due to e.g. that the model does not exist anymore.
- **Re:Commerce.** GIAB provides a "one-stop-shop" for online retailers, where GIAB handles all aftermarket, namely all returns, reclamations, logistic damages, warranty issues, customer service and sales of the reused items. GIAB inspects, sorts, and if needed repairs and reconditions products to place them on the market again, or in case of warranty, returns them to the consumer. To cater for a very broad

plethora of items GIAB repairs items both inhouse and through a network of partners. Around 8% of products are sent to partners for repair. Items are re-sold through a network of marketplaces and partners, GIAB's own digital channels[4] and a physical outlet. Within this business area, some 16.8% are simple returns of new products[5], where GIAB places these new products on the market.

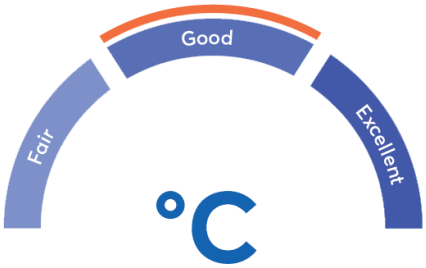
- **Circular Office.** This area includes both IT equipment and furniture, leased and rented to companies ("office as a service"), while GIAB also buys back such items from companies for further re-use and sale. GIAB ensures the necessary repair and data deletion allowing for further use of the IT equipment.
- **GIAB Consulting.** Advisory to other companies on developing circular and sustainable business models, for example to IKEA.

Annual turnover in 2020 was SEK 202m, a 16% increase compared to 2019, and the company has just below 100 employees. The company's strategy over the last year has a stronger focus on its own e-commerce channel "Returhuset" and reducing the size of GIAB's physical warehouse.

Governance Assessment

Sustainability is integrated in GIAB's business strategy, which focuses on extending products' lifetime. The company has a dedicated sustainability role and a governance structure for sustainability that involves senior management. The sustainability policy is communicated in the yearly sustainability report, together with progress on yearly environmental and social targets. The company has no long-term climate target, but views itself as climate positive, therefore considers that it already has reached net zero. The governance structure for sustainability is soon to be reorganised and a more elaborate sustainability policy and implementation guidelines will be developed. GIAB has some awareness of climate risk, both physical and transition risks, but does not report according to the TCFD.

The sustainability reporting could be more standardized, providing more data on GHG emissions as well as more transparency on methodologies and assumptions used to calculate key performance indicators (share of re-used items, waste and emissions avoided). We encourage GIAB to report in line with one of the existing standards for sustainability reporting.



GIAB is aware of the social risks in its supply chain, and manages those through its code of conduct, supplier policy as well as dialogue and inspections.

Assessing these elements, CICERO green concludes that GIAB is getting a more than satisfactory score on all governance elements and is therefore given an overall governance score of **Good**.

[4] *www.returhuset.se/dk/fi/no*
[5] GIAB has informed us that this includes simple returns as well as new products it sometimes purchases to sell in its warehouse.

Sector risk exposure

The below text box highlights some key risks for GIAB's operations. See Appendix 2 for additional background on circular economy.

Physical climate risks. GIAB's logistics and supply chain are exposed to physical climate risks. For operations in Sweden, extreme precipitation and flooding are likely the most prominent risk, but detailed location-based analysis should be conducted. The company's supply chain in Europe is likely exposed to disruptions from extreme weather, mainly though transportation routes.

Transition risks. The EU's Circular Economy Action Plan (March 2020) sets out 35 actions aimed at transitioning the EU to a circular economy and includes initiatives along the entire life cycle of products. One of its six objectives is to focus on the sectors that use most resources and where the potential for circularity is high, which includes electronics and ICT. Several legislative proposals related to the action plan are underway. For GIAB, these regulatory changes first and foremost represent transition opportunities. Meanwhile, there could be a transition risk in that more durable goods will reduce the need for the repair services provided by GIAB. Products with increased repairability would on the other hand sustain the need for GIAB's services. Sweden's government has made a national strategy and an associated action plan on the transition to a circular economy in Sweden.

Environmental risks. In general, repair and reconditioning of electronic equipment features risks of negative local environmental impact in the case of replaced components not being treated in an appropriate manner. Special attention needs to be given to how specific components are handled, in particular for those containing hazardous substances.

Social risks. Electronics is generally a sector that is can be linked to high social risks; in particular with regard to workers' rights and health and safety in particular.

Sustainability Management

GIAB is in the process of developing a more elaborate sustainability policy and implementing a new governance structure. The company has yearly targets on some environmental indicators, provides sustainability data to its clients and the company is certified with ISO 14001 (environmental management). However, GIAB does not have any longer-term quantified climate goals and lacks some internal policies on how to reach its environmental targets. The company has informed us that the updated sustainability strategy will contain new goals and an implementation guide that describes how goals should be implemented across all parts of the organisations, responsibilities, and measurement of progress towards the goals.

Governance structure

The sustainability policy is the responsibility of the management team, while the Head of Sustainability is responsible for the formulation of the policy. GIAB's Head of Sustainability reports to the Chief Financial Officer, who in turn reports to the Chief Executive Officer. The management team at GIAB consist of these positions as well as responsible management for GIABs respective business areas.

GIAB is about to launch a Sustainability Advisory Board to ensure that there is a balance between both financial profitability as well as sustainability values on both a strategic and operative level. Responsible for the

Sustainability Advisory Board is the Head of Sustainability and consists of Head of Sustainability, CFO, CEO, manager of GIAB Consulting and senior sustainability advisor at GIAB. This new governance structure is expected to be implemented in the first quarter of 2022. In the new structure, the Sustainability Advisory Board and the management team will together be responsible for the sustainability policy.

Risk assessment

GIAB has performed a general analysis of the risks it is exposed to, as well as identified measures to mitigate those risks. The risk analysis is to be updated on an annual basis going forward. The risk assessment has to be approved by the management team. The latest risk analysis from 2021 identifies several operational and financial risks to the company, but no specific environmental or social risks were identified.

In 2020, GIAB performed a materiality analysis to identify which sustainability areas are those that should have the highest priority in the company. This analysis included ten ESG-related topics, such as "sustainable investments" or "high share of re-use". Three groups of stakeholders (employees, clients and society) had to rate the relative importance of those topics. The feedback from these groups served as a basis for the further development of GIAB's strategy, where the overall focus is re-use. The materiality analysis did not include an evaluation of the company's most salient environmental or social risks.

Reporting

The company reports on sustainability annually in a separate sustainability report, which includes whether yearly targets related to both social, environmental and governance performance are achieved. The company has informed us that the report is inspired by the Global Reporting Initiative's (GRI) framework. However, the report is not in line with any of the specific GRI standards.

The company does not follow the recommendations of the Task-force on Climate Related Financial Disclosures (TCFD), and the sustainability report does not disclose information on exposure to physical climate risk.

Key issues

GHG Emissions

GIAB has emissions inventory in place (see table 2), and most of its emissions are in scope 3 (external transportation, business trips and waste). The increase in overall emissions from 2019 to 2020 is due to revenue growth and related increased transport and waste, while scope 1 emissions fell. It should be noted that from 2020 data on transport distances became more accurate due to the installation of GPS devices in all own vehicles. In 2020, GIAB started to replace its own fossil fuel vehicles with low emissions alternatives (HVO[6]). The change was completed in 2021 and did not affect the decrease of emissions in scope 1 from 2019 to 2020. Meanwhile, scope 2 emissions associated with heating, cooling and electricity use at GIAB's premises increased due to growth in the number of premises. GIAB does not have any quantified medium- or long-term targets for its emissions, but has goals to transition to 100% fossil free transport and energy.

GIAB has a policy that all company owned vehicles shall be fossil free, to choose transport service providers with electric vehicles and to offer fossil free transport for deliveries from GIABs store "Returhuset". GIAB's own vehicles run on biofuels (HVO100), while it is in dialogue with its transport service providers on transitioning to cleaner modes of transportations. One of GIAB's transport service provider has a goal to be fossil free in 2030.

[6] Hydrogenated Vegetable Oil. Typical feedstocks for HVO are different types of residual and waste fats, oils and greases including used cooking oil (UCO) and crude tall oil (CTO) although pure vegetable oils can also be used.

Table 2: The table summarizes GIAB' GHG emissions and main emission reduction targets.

Emissions	Total (tons CO_2eq[7])	Scope 1	Scope 2	Scope 3
Main targets	Targets not set for GHG emissions directly, but for fossil free transport and energy, as well as emissions avoided and share of re-use (see table 3 and 5)			
2020	408	22	54	332
2019	360	75,7	34,31	250
Change 2019-2020	+ 13%	-71%	+57%	+33%
Main sources		Internal transportation and purchases	Heating, cooling and energy	External transportation, business trips and waste

Based on the assumption that a reused or refurbished product replaces a new product, GIAB has calculated the emissions avoided from avoiding the emissions resulting from the production of a new product. For the carbon footprint of different product types, it uses different sources, including a website[8] developed by a Spanish NGO for companies within the repair and social area[9].

In 2018 and 2019, GIAB had a target to be "climate positive", defined by the fact that scope 1-3 emissions would be lower than estimated avoided emissions. Due to GIAB's growth ambitions, it changed its yearly target for 2020 to a target in terms of increased emissions avoidance. Products sold by GIAB which are graded as "new" are not included in the calculations of avoided emissions, while transport emissions resulting from GIAB's operations are accounted. GIAB continues to view itself as "climate positive", i.e. that its revenues contribute to CO_2 savings larger than its emissions in scope 1, 2 and 3.

Table 3: Emissions avoided per year

Emissions (t CO2e)	Target	Emissions avoided/reduced (t CO_2e)
2018	GIAB shall be climate positive.	3381
2019	GIAB shall be climate positive.	4286
2020	Increase avoided CO_2-emissions with 20% from the year before.	2893

Energy

In 2020, the source of electricity for GIAB's operations was as shown in the table below. GIAB rents all its facilities from third parties and has a target to have only fossil free energy in the future.

[7] CO_2e, carbon dioxide equivalent is a measurement term for greenhouse gas accounting.
[8] Calculadora CO2 (aeress.org)
[9] AERESS, Home - AERESS

Table 4: Energy Mix for the year 2020

Energy type	Amount	Percent
Renewable	130482 kWh	31%
Nuclear power	107194 kWh	26%
Fuel oil	180610 kWh	43%

Climate Resilience

GIAB is in the early stages of assessing its exposure to physical climate risk. It has selected two climate scenarios (one with business-as-usual high greenhouse gas emissions, and one with emissions developing in line with the goal of the Paris agreement). In the business-as-usual scenario, GIAB sees risks of damage to its buildings due to weather hazards, as well as risks of disruptions to GIAB's supply chain with potentially delayed deliveries. The company is renting most of its buildings/warehouses, so it is dependent on property owners on this issue.

Social issues in supply chain

The company's use of subcontractors to do the actual repair work seems to represent the most material social risk linked to the company's operations. Its code of conduct for suppliers includes provisions on human rights and labour rights and refers both to the OECD Guidelines for Multinational Enterprises and the UN Guiding Principles for Business and Human Rights. The code of conduct has been made public on the company's website and must be signed by subcontractors. These must also frequently guarantee that they work in adherence with the code of conduct.

The company has a continuous internal dialogue on social risks and conducts supplier assessments and related follow-ups of its key suppliers. Through this, the company strives towards full implementation of the Code of Conduct in its supply chain and compliance with the concrete requirements of the Code, and has set a target for this to be fully achieved in 2025.

Natural resources

Global demand for metals and minerals (such as copper, tellurium, lithium) that are used in electronics but also in clean energy technologies is high and is expected to grow further[10], while the mining sector related to the extraction of these has negative local environmental and climate impacts. By extending products' lifetime, GIAB is contributing to avoiding additional use of such natural resources and the associated impacts. GIAB estimates the tonnes of waste avoided from the extension of product lifetime based on the assumption that a repaired product directly replaces a new product, and assumes that the amount of waste resulting from the production of a new is avoided. In its calculations, it uses best estimates from a report by the Swedish Environmental Research Institute[11] (see "Background" in Appendix 2 for more background on the waste hierarchy, circular economy and life cycle analysis).

The shares of re-used products reported (in the sustainability report and below) show the share of those goods that needed repair, refurbishment or upgrade that were actually placed on the market again. The remaining items (e.g. 15% in 2020) were sent to recycling to a Swedish company or donated to charity, while valuable spare parts were kept by GIAB for future repairs. Products sold by GIAB which were considered as new, e.g. in its Re:commerce line of business, are not accounted for in the share of re-used products. According to the company, the share of re-

[10] Climate-Smart Mining: Minerals for Climate Action (worldbank.org)
[11] Avfallets fotavtryck och klimatkostnader för utvalda konsumtionsprodukter (ivl.se)

used products increased to 85% in 2020 compared to 76% in the two preceding years due to the company being more selective in which e-commerce companies it partners which, favouring those selling reparable items for which there is demand.

Table 5: Waste avoided and share of re-use

	Tonnes of waste potentially reused/avoided from extending, refurbish and re-use incoming products	**Target**	**Share of re-used products**
2018	7380	Recycling maximum 10% from all incoming goods (90% of all incoming goods shall be reused).	76%
2019	3757	Recycling maximum 10% from all incoming goods (90% of incoming products shall be reused).	76%
2020	3401	Increase the reuse rate at GIAB to 80%/year.	85%

Table 6: CICERO Green assessment of GIAB's management of key environmental issues

Key issue	**CICERO Green comments**
GHG emissions	✓ The majority of the items repaired and refurbished by GIAB are electronics, bicycles and IT equipment. For these products, the largest life cycle emissions most likely occur during production as these products are in sectors with high emissions per kg of product[12] (see Background). While specific numbers vary, for a new mobile phone (smartphone), an estimated 85% of the annual carbon footprint stem from production[13]. Avoiding the production of new such products through prolonging the lifetime of already existing products is positive for the climate and is part of the 2050 low carbon solution. The avoided emissions are, according to GIAB, in the range of 3,000 tonnes CO_2e, given the assumption that a repaired phone replaces a new one. However, assessing the specific amount of avoided emissions is a complex exercise and in particular there is uncertainty as to whether there actually is a one-to-one causational link between repairing one item and avoiding the production of a new one. Hence, GIAB's method of calculation may lead to overestimating impacts. Transparency on methodologies is therefore important. ✓ Overall, GIAB's scope 1 – 3 emissions are currently limited, but they will likely increase if its activities and revenues increase and should therefore be managed. We encourage the company to set time bound quantifiable targets for those emissions, and work systematically to reduce them.

[12] Carbon emissions embodied in product value chains and the role of Life Cycle Assessment in curbing them | Scientific Reports (nature.com)
[13] Smartphones are warming the planet far more than you think (anthropocenemagazine.org)

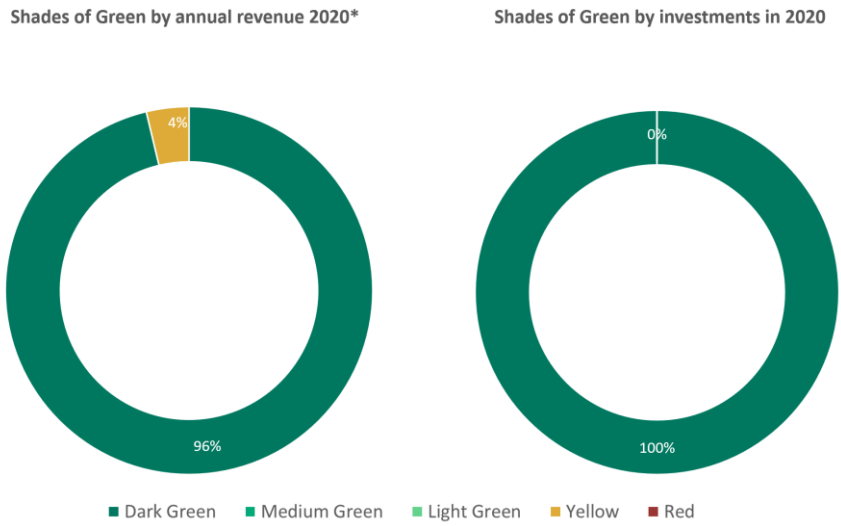
	✓ Scope 3 represents the largest source of emissions for GIAB. For transport, GIAB mostly relies on road transport (in the Nordics), while also using some air freight for transporting items to repair in Europe. From an emissions point of view, the most preferred option for freight transport is shipping and rail, while light trucks and air have the highest impact[14]. Growth in GIAB's activities is likely to cause increased emissions from third party transport providers. The company's efforts in its dialogue with transport service providers and in choosing those providing the most climate friendly solutions are important, and the company should strive to avoid airfreight.
Energy	✓ To move towards more renewable energy sources, GIAB has informed us that they will enter into dialogue with its property owners. It is positive from a climate perspective that GIAB's cloud service providers and data centres run on renewable energy. ✓ We encourage GIAB to also engage with its property owners on the potential for energy efficiency improvements at its facilities in order to limit its scope 2 emissions, while also raising the issue of the premises' exposure to physical climate change risk.
Climate resilience	✓ GIAB shows some awareness of its exposure to physical climate risk, which is positive. The company rents most of its facilities so is not in a position itself to implement adaptive measures for these, however, we encourage GIAB to begin a dialogue with the building owner on climate change resilience. ✓ We encourage the company to integrate exposure to climate risk, both physical and transition risk, in its annual risk assessment process.
Social issues in supply chain	✓ The company is aware of social risks related to its activities. The company describes that these are managed through its code of conduct, policy for suppliers (that must be accepted and signed by them) as well as dialogue and inspections. ✓ Due to significant social risks in parts of GIAB's supply chain, we encourage the company to further strengthen its monitoring of and strategies to mitigate those risks.
Natural resources	✓ GIAB's services extend the lifetime of products that not only have a significant carbon emissions, but also depend on materials and minerals that cause negative local environmental impacts, including pollution and impacts on biodiversity. Its activities are thus positive not only for limiting greenhouse gas emissions but also limit a wide range of negative environmental impacts. ✓ However, due to the uncertainty about the overall impact of re-use and possibly imperfect substitution of new products by repair, the calculations on avoided waste should be treated carefully. GIAB's assumption that one repaired product fully avoids the production of a new product may overestimate overall impacts, while its activities in isolation contribute to reduce the use of natural resources.

[14] Specific Climate Impact of Passenger and Freight Transport | Environmental Science & Technology (acs.org)

2 Assessment of Godsinlösen Nordic AB's revenues and investments

Shading of GIAB's revenue, operating expenses and investments

Its primary market is Sweden, but it also has operations in the other Nordic countries.



*Operating expenditures have received shading in the same shares as revenues.

Reducing resource use and prolonging the lifetime of products is needed in a low carbon future. To assess how GIAB's revenues, operating costs, and investments contribute to that future, we have considered the related activities' rank in the waste hierarchy and the emissions from the products' lifecycle. In the waste hierarchy (see Background), the most favoured option is waste prevention, followed by re-use, recycling and energy recovery, with the worst option being disposal (landfill). In general, research indicates that transport emissions are small compared to those stemming from the production phase of the products handled by GIAB[15] (see Background), but they still need to be managed. While prolonging products' lifetime in itself is in line with a low carbon future, there is uncertainty as to whether it contributes to overall lower production, but that is outside of the scope of GIAB's activities. We have also considered GIAB's Governance Score of Good and the company's sustainability management.

Both revenues and capex are predominantly shaded Dark Green, with 96% of revenues shaded Dark Green, while they also include a minor share of Yellow activities. The Yellow shade is allocated to activities where we consider that GIAB's activities do not contribute to reducing emissions, but rather prolongs existing business practices. GIAB does not have any activities with the Red shade, which is allocated to heavily emitting projects with high lock-in risks.

[15] See Figure 2 in Carbon emissions embodied in product value chains and the role of Life Cycle Assessment in curbing them | Scientific Reports (nature.com)

Dark Green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future. In GIAB's context, those are re-pair and re-use services, entailing potentially significant emission savings compared to the production of new goods. While all these activities are needed in the 2050 perspective, there is uncertainty about the size of the emissions and waste avoided. The Dark Green shading has been allocated to the following activities:

- ✓ The Circular Insurance line of business. The circular claims settlement process replaces a business practice where clients received cash payment when their phone was damaged, allowing them to either purchase a new phone or seek a repair alternative that might not be easily available. The most frequent repairs are damaged screens and malfunctioning batteries, while water damage is also a typical defect. Most of such easy repairs are performed by GIAB in Sweden (66% of cases). For more complex issues and in order to handle substantial volumes, some mobile phones are sent to other European countries (Ireland, Denmark and Slovenia) for repair and reconditioning in a factory. The circular insurance also covers other consumer products, mainly bicycles and other electronics. Research indicates that for computer, IT and telecom products, transport emissions are small compared to the emissions associated with the production of a new item[16]. For smartphones, the share of emissions from production is estimated to be in the range of 80% of life cycle emissions[17]. In addition, repair services are generally expensive and not always easily available, making GIAB's efforts to scale these up important in a climate and environmental perspective.
- ✓ The Circular Office business area. The focus of this area is prolonging the lifetime of furniture and IT equipment. For furniture, no emissions are associated with their use, meaning emissions from manufacture dominate their carbon footprint. For IT equipment, production emissions and use phase emissions are estimated to both represent 40% of life cycle emissions (see Background).
- ✓ 83.2% of the revenues from the Re:commerce business area. GIAB goes a long way to repair and refurbish items in order to place them on the market. Products sold via its own channels have a "condition grade" indicating what warranties apply, any defects and how the product compared to a new one. GIAB also sells products with minor cosmetic defects that do not affect functionality, being transparent about that to its customers and avoiding waste.
- ✓ GIAB consulting. The fact that GIAB uses its expertise to help other companies develop more circular business models is positive. While it is not possible to determine if these activities are fully in line with a low carbon future, these activities represent a minor share of revenues (1,4%) and are thus allocated the same Shade as the majority of revenues.

Yellow is allocated to activities that do not contribute to the transition to a low carbon future or with too little information to assess. The following activity has been allocated a Yellow shading:

- ✓ The handling of simple returns of new products for e-commerce companies, which GIAB re-sells. This activity has unclear environmental benefits. Some research suggests that such items might typically be shipped over longer distances[18], implying that GIAB's handling in the Nordics would reduce emissions associated with transport. However, there is currently not enough evidence to assign a green shading to GIAB's handling of these returned new products and there is no scientific consensus that online shopping in itself has a low environmental impact.

[16] See Figure 2 in "Carbon emissions embodied in product value chains and the role of Life Cycle Assessment in curbing them": Figure 2 | Scientific Reports (nature.com)
[17] The carbon footprint of your phone – and how you can reduce it (reboxed.co)
[18] The Logistics of Online Clothing Returns in Sweden and How to Reduce its Environmental Impact (scirp.org)

In order to assign a Shade of Green to operating expenses, which include salaries and office rent, as well as the cost of transportation and purchase of materials[19], we relied on GIAB's allocation of these to their different business areas (for 2020). According to GIAB, some 73% of purchased goods relate to the Circular Insurance area, and 26% to Re:commerce. For personnel costs, some 49,5% are related to Re:commerce, while 29,4% are Circular Insurance, and the remaining relate to Circular Office and GIAB Consulting. For remaining general operational costs, such as rent, insurance and marketing costs, it was not feasible for the company to distribute costs between specific activities. For those, we thus assigned the average shade assigned to revenues, Dark Green. In addition to the information in the annual report, the company has provided detailed information on both operating expenses and capital expenditures. Overall, GIAB's capital expenditures are small and they include development costs for its e-commerce platform and return handling system, as well as workstations, storage, tools and machinery for repairs. None of the purchased equipment uses fossil fuels. All of these investments support GIAB's strategy to prolong products' lifetime and are necessary to provide for repair and re-use services at a large scale. We have thus allocated the Dark Green shade to all capital expenditures.

Investors should note that our assessment is based on data reported or estimated by the company and has not always been verified by a third party. We analyse revenue, operating costs and investments, however there is typically not an explicit link between sustainability and financial data[20]. Our shading often requires allocating line items in financial statements to projects or products, for this we rely on the company's internal allocation methods. In addition, there are numerous ways to estimate, measure, verify and report e.g. data on emissions, which may make direct comparisons between companies or regulatory criteria difficult and somewhat uncertain.

With these provisions, we find that 96% of revenues and operating expenses come from Dark Green activities and 4% from Yellow activities. For investments (here defined as the sum of capital expenditures and operating expenditures), we also find the same distribution between Dark Green and Yellow activities.

Nasdaq Green Designation

CICERO Green confirms that GIAB meets the requirements for Nasdaq Green Equity Designation set out in the Nasdaq Green Equity Principles.

In 2020, 96% of GIAB's turnover came from assets with some Shade of Green, exceeding the 50% threshold for green activities for company turnover. The sum of OPEX and CAPEX allocated a Shade of Green is 96%. This exceeds the 50 % threshold for investments, defined as the sum of CAPEX and OPEX. In 2020, GIAB had no turnover assessed shaded Red, meeting the threshold of less than 5% of the company's turnover being derived from fossil fuel activities.

In addition, this report provides transparency on alignment of the company's activities with the EU Taxonomy and transparency on the company's environmental targets and KPIs is provided.

Investors should note that the statements above are the results of CICERO Green's assessment. The awarding of the Green Designation to GIAB is subject to Nasdaq approval.

[19] In our assessment, both the cost of goods sold and operating costs such as rent and personnel costs are included in opex.
[20] Most accounting systems do typically not provide a break-down of revenue and investments by environmental impact, and the analysis may therefore include imprecisions and may not be directly comparable with figures in the annual reporting.

EU Taxonomy

There are currently no activities in the adopted delegated acts to the EU taxonomy that correspond to GIAB's activities. GIAB's official activity code in Sweden is the SNI-code (equivalent to NACE-code): "other retail with a wide range of goods", which is not included in the list of activities making a substantial contribution to climate change mitigation under the EU taxonomy[21]. Hence, it is at this stage not possible to assess its activities' alignment with any specific thresholds for substantial contribution to climate change mitigation and do no significant harm (DNSH) criteria. However, the minimum social safeguards in the taxonomy are the same for all activities, so CICERO Green has assessed alignment with those.

CICERO Green considers that GIAB mainly fulfils the minimum social safeguards of the EU Taxonomy. A description of our methodology is given in part 3.

Preparatory work has been done on the technical screening criteria to be set for activities substantially contributing to the transition to a circular economy, which is relevant for GIAB. In the following, we assess GIAB's activities against the thresholds suggested in the report from the technical working group of the platform on sustainable finance[22] for the activity "Provision of repair and maintenance services and of directly related activities" for the environmental objective "transition to a circular economy". This assessment does not constitute a taxonomy alignment assessment, and we will have to conduct a new taxonomy alignment assessment when the technical screening criteria for the transition to a circular economy have been adopted.

GIAB's provision of repair services within the areas Re:commerce and Circular Insurance, correspond to the activities listed as those that make a substantial contribution to the transition to a circular economy.

Based on the revenues from the different business areas as described above, CICERO Green assesses that 95% of GIAB's revenues fit to the definition of the activities "repair and maintenance services of products and systems" and "reverse logistics that supports repair or maintenance services qualified under this section" (referring to the section "provision of repair and maintenance services and of directly related activities"). The activities GIAB Consulting and the handling of simple returns are not seen as falling within the scope of these activities.

GIAB's services include repair and reconditioning of products, but not regular maintenance of products over time. In the report from the technical expert group on sustainable finance, the following DNSH criteria has been suggested for climate change mitigation:

- "Where repair and maintenance services are made on products for which the environmental impact of the manufacturing and end of life phase constitute less than 50% of the product's carbon footprint, a carbon footprint analysis shall be performed to prove life extension is as good as or better than product replacement.
- Lifecycle environmental impacts are calculated and compared using the Commission Recommendation 2013/179/EU or alternatively, ISO 14040 and 14044.
- Furniture, textiles, and small electronics do not have to apply this criterion."

The exemption of furniture, textiles and small electronics is based on the fact that small electronics have much higher embodied carbon emissions than their use phase emissions, while the textiles and furniture do not cause any emissions during use.

GIAB does not make any lifecycle analysis to assess whether repair makes sense, but mostly handles products where it nevertheless, according to the company, makes sense from an environmental point of view to prolong the

[21] taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf (europa.eu)
[22] Platform on Sustainable Finance - Technical Working Group - Annex: Full list of technical screening criteria August 2021 (europa.eu)

life of the product. A significant share of GIAB's revenues stem from repair of mobile phones, belonging to the small electronics category, which are thus likely aligned with the taxonomy DNSH for climate change mitigation. If it is possible to repair a product or not economically viable, GIAB strives to find a way to sell the product even with its defects or use the different functioning parts of the product as spare parts.

In the suggested technical criteria for activities making a substantial contribution to the transition to a circular economy, it is further suggested that analysis is done for the life cycle water impacts and life cycle pollution impacts, with the same thresholds and exceptions as for climate change mitigation.

Based on currently available data, GIAB cannot single out the revenue for different types of products. GIAB is operated as an entirety, meaning that data collection is not done on a business area level, but at the company level through the software Circular Platform. Hence, it is not possible to conclude on the share of revenues, opex and capex that appear to be aligned with the suggested DNSH criteria for climate change mitigation. Meanwhile, it appears likely that the repairs of furniture, textiles and small electronics would be taxonomy aligned based on the suggested criteria, and the revenues from other repairs not aligned with this DNSH as lifecycle environmental impacts are not calculated. These criteria are likely to be set in EU regulations during the course of 2022.

3 Terms and methodology

The aim of this analysis is to be a practical tool for investors, lenders and public authorities for understanding climate risk. CICERO Green encourages the client to make this assessment publicly available. If any part of the assessment is quoted, the full report must be made available. Our assessment, including on governance, is relevant for the reporting year covered by the analysis. This assessment is based on a review of documentation of the client's policies and processes, as well as information provided to us by the client during meetings, teleconferences and email correspondence. In our review we have relied on the correctness and completeness of the information made available to us by the company.

Shading corporate revenue and investments

Our view is that the green transformation must be financially sustainable to be lasting at the corporate level. We have therefore shaded the company's current revenue generating activities, as well as investments and operating expenses.

The approach is an adaptation of the CICERO Shades of Green methodology for the green bond market. The Shade of Green allocated to a green bond framework reflects how aligned the likely implementation of the framework is to a low carbon and climate resilient future, and we have rated investments and revenue streams in this assessment similarly. We allocate a shade of green to the revenue stream and investments according to how these streams reflect alignment of the underlying activities to a low carbon and climate resilient future and taking into account governance issues.

SHADES OF GREEN	EXAMPLES
Dark green is allocated to projects and solutions that correspond to the long-term vision of a low carbon and climate resilient future.	Solar energy projects
Medium green is allocated to projects and solutions that represent steps towards the long-term vision but are not quite there yet.	Green buildings with a high level of certification and energy efficiency
Light green is allocated to transition activities. These projects and solutions could have lower emissions, but do not by themselves represent or contribute to the long-term vision.	Substantially more efficient manufacturing of fossil fuel intensive materials
Yellow is allocated to projects and activities that do not contribute to transition. These activities could have some emissions and be exposed to climate risks. This category also includes activities with too little information to assess.	Efficiency in fossil fuel infrastructure
Red is allocated to projects and activities that have no role to play in a low-carbon and climate resilient future. These are heaviest emitting assets, with the most potential for lock-in of investments and risk of stranded assets.	New infrastructure for coal

In addition to shading from dark green to red, CICERO Shades of Green also includes a governance score to show the robustness of the environmental governance structure. When assessing the governance of the company, CICERO Green looks at five elements: 1) strategy, policies and governance structure; 2) lifecycle considerations including supply chain policies and environmental considerations towards customers; 3) the integration of climate considerations into their business and the handling of resilience issues; 4) the awareness of their social risks and the management of these; and 5) reporting. Based on these aspects, an overall grading is given on governance

strength falling into one of three classes: Fair, Good or Excellent. Please note this is not a substitute for a full evaluation of the governance of the issuing institution, and does not cover, e.g., corruption.

In March 2020, a technical expert group (TEG) proposed an EU taxonomy for sustainable finance that included a number of principles including "do-no-significant-harm (DNSH)-criteria" and safety thresholds for various types of activities[23]. In April 2021, EU published its delegated act to outline proposed criteria for climate mitigation and adaptation, which it was tasked to develop after the EU Taxonomy Regulation entered into law in July 2020. The mitigation criteria in the EU taxonomy includes specific thresholds for real estate sector activities relevant for the company[24].

Do-No-Significant-Harm criteria include measures such as ensuring resistance and resilience to extreme weather events, preventing excessive water consumption from inefficient water appliances, ensuring recycling and reuse of construction and demolition waste and limiting pollution and chemical contamination of the local environment, as well as restriction on the type of land used for construction (no arable or forested land).

CICERO Green has assessed potential alignment against the mitigation thresholds and the DNSH criteria in the delegated acts published in April 2021.

In order to qualify as a sustainable activity under the EU regulation 2020/852 certain minimum safeguards must be complied with. The safeguards entail alignment with the OECD Guidelines for Multinational Enterprises and UN Guiding Principles on Business and Human Rights, including the International Labour Organisation's ('ILO') declaration on Fundamental Rights and Principles at Work, the eight ILO core conventions and the International Bill of Human Rights. CICERO Green has completed a light touch assessment of the above social safeguards with a focus on human rights and labor rights risks[25]. We take the sectoral, regional and judicial context into account and, on the basis of information provided by the company, focus on the risks likely to be the most material social risk.

Our assessment of alignment against the EU Taxonomy is based on a desk review of the listed source documents against the Taxonomy Delegate Act and following our own shading methodology.

[23] Taxonomy: Final report of the Technical Expert Group on Sustainable Finance, March 2020. TEG final report on the EU taxonomy (europa.eu)
[24] taxonomy-regulation-delegated-act-2021-2800-annex-1_en.pdf (europa.eu)
[25] CICERO Green is in the process of further developing its assessment method to ensure that it encompasses the object and purpose of the minimum safeguards.

Appendix 1: Referenced documents list

Document Number	Document Name	Description
1	ÅR GIAB 2020	Annual report for the financial year 2020
2	GIAB Hållbarhetsrapport 2020	Latest sustainability report, including materiality analysis and sustainability strategy
3	Hållbarhetsrapport 1 - 8	Examples of sustainability reporting from GIAB to its clients.
4	Leverantörskörd	Code of conduct for suppliers, including specific signed examples
5	Godsinlösen Nordic ISO 9001, Godsinlösen Nordic ISO 14001	Quality and environmental management certifications
6	Riskanalys GIAB 2021	Latest risk analysis
7	Rutin Riskanalys	Describes the process and execution of the risk analysis.
8	Framtagning av mål	Sustainability targets and action plan
9	LCA Måleri, LCA, Sofa GIAB, LCA vitvaror	Life Cycle Analysis of selected products
10	GIAB Hållbarhetsrapport 2019	Sustainability report for 2019
11	Verksamhetspolicy	Overall environmental strategy
12	Väsentlighetsanalys	Materiality assessment
13	Klimatriskanalys	Preliminary analysis of exposure to climate risk in two different scenarios
14	Hållbarhetsdata GIAB	Calculations of saved carbon dioxide emissions from re-use of products offered by GIAB

Appendix 2: Background

The recovery, reuse and recycling of materials is important from both a resource use and a climate change perspective. The extraction and processing of new resources are responsible for some 50 percent of greenhouse gases[26]. GIAB operates against a backdrop of EU regulations and national strategies related to a circular economy. The EU's Circular Economy Action Plan[27] was launched in March 2020, following-up on the EU's Circular Economy Package from 2015.

The waste hierarchy

The waste hierarchy, as defined in the EU Waste Framework Directive, is important in the EU's strategy. GIAB's repair and reconditioning services are among the most favoured options, as they contribute both to waste prevention and to re-use and extended life-time of goods.

Figure 1: Waste hierarchy, visualization by ISM Waste and Recycling[28]

Circular economy

Beyond the waste hierarchy, the circular economy features a more systemic change in material and energy flows, and in how goods are produced. There are several definitions of circular economy in research literature, but one mature definition is provided by Geissdoerfer et al. (2017): "a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing material and energy loops (see Figure 2). This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling". GIAB's repair activities prolong the lifetime of products, thereby contributing to the "slow" principle, while preventing the use of new raw material, thereby contributing to the "narrow" principle.

According to the Ellen MacArthur Foundation[29], there are three main principles of a circular economy: (1) preserving and enhancing natural capital by controlling stocks of non-renewable resources and balancing

[26] European Commission; Circular Economy Action Plan: For a cleaner and more competitive Europe.
[27] new_circular_economy_action_plan.pdf (europa.eu)
[28] What is the Waste Hierarchy? | ISM Waste & Recycling
[29] What is a circular economy? | Ellen MacArthur Foundation

renewable resource flows; (2) keeping products and materials in use at most in both biological and technical cycles; and (3) designing out wastes and negative environmental externalities such as pollution.

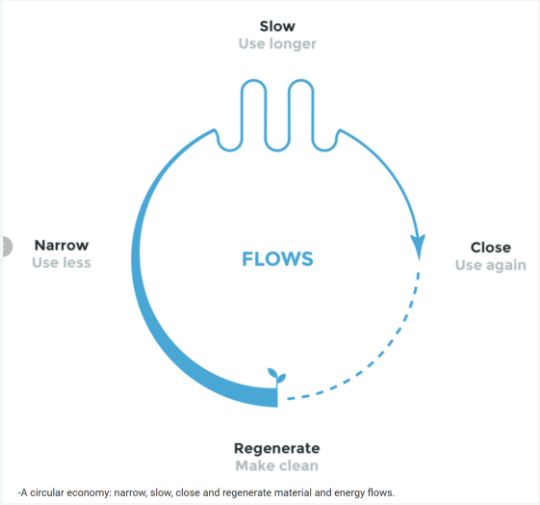


Figure 2: Visualisation of circular economy by Jan Konietzko

Life cycle assessments of products

Life cycle-based analyses (LCA) are considered crucial for identifying in which phase of products' lifetime the largest emissions occur in order to change supply chains towards lower greenhouse gas emissions[30]. This is a growing field of research, which seeks to determine the breakdown of embodied carbon emissions across all stages of a product's life, from the extraction of raw materials to manufacturing, as well as the use phase and end of life treatment, including also transport emissions. While such calculations are uncertain and thereby represent best estimates, they have a role to play in identifying where one should seek to reduce emissions.

The quantification of a product's life cycle carbon emissions, also referred to as product carbon footprinting[31], is a specific form of several carbon accounting methods. Carbon footprinting is limited to a product's climate impact, while wider LCA also quantify broader environmental impacts. In this context, "carbon" typically refers to the six commonly recognized greenhouse gases, which are aggregated into a single emission figure according to their relative global warming potentials. There are different standards and guidelines for calculating carbon footprints, and the suggested EU taxonomy technical criteria for the transition to a circular economy prescribe following the Commission Recommendation 2013/179/EU (on the use of common methods to measure and communicate the life cycle environmental performance of products and organisations) or alternatively, ISO 14040 and 14044.

[30] Carbon emissions embodied in product value chains and the role of Life Cycle Assessment in curbing them | Scientific Reports (nature.com)

[31] Weidema, B. P., Thrane, M., Christensen, P., Schmidt, J. & Lokke, S. Carbon footprint - A catalyst for life cycle assessment? *J. Ind. Ecol.* **12**, 3–6, https://doi.org/10.1111/j.1530-9290.2008.00005.x (2008).

The article reference above[32], which aggregates carbon footprint for 866 products from a database, shows a large variance across sectors. Regarding the breakdown across the value chain, the article indicates that 40% of impacts come from upstream activities and slightly more than 40% for downstream for the sector "computer, IT and telecom", while these shares are respectively 50% and below 40% for home durables, textiles and equipment. Within these broad categories, the distribution between the manufacturing phase emissions and use phase (emissions associated with electricity) is expected to vary greatly between specific products, for example between small consumer devices, and data centers and communication networks (using large amounts of electricity). For smart phones, calculations indicate that as much as 80% of life cycle emissions stem from the production phase[33].

There are several specific challenges in calculating the embodied emission from information and communication technology equipment, relating to disagreement across studies on the magnitude of impacts, lack of coverage on newer products and lack of transparency in studies, including due to confidentiality issues[34].

[32] Carbon emissions embodied in product value chains and the role of Life Cycle Assessment in curbing them | Scientific Reports (nature.com)
[33] The carbon footprint of your phone – and how you can reduce it (reboxed.co)
[34] *Comparing Embodied Greenhouse Gas Emissions of Modern Computing and Electronics Products*, Paul Teehan and Milind Kandlikar, 2013.

Appendix 3: About CICERO Shades of Green

CICERO Green is a subsidiary of the climate research institute CICERO. CICERO is Norway's foremost institute for interdisciplinary climate research. We deliver new insight that helps solve the climate challenge and strengthen international cooperation. CICERO has garnered attention for its work on the effects of manmade emissions on the climate and has played an active role in the UN's IPCC since 1995. CICERO staff provide quality control and methodological development for CICERO Green.

CICERO Green provides second opinions on institutions' frameworks and guidance for assessing and selecting eligible projects for green, sustainability and sustainability-linked bond investments. CICERO Green also provides Company Assessments, providing an assessment and shading of a company's revenues and investments as well as assessing the governance structure to indicate the greenness of a company. CICERO Green is internationally recognized as a leading provider of independent reviews of green bonds, since the market's inception in 2008. CICERO Green is independent of the entity issuing the bond, its directors, senior management and advisers, and is remunerated in a way that prevents any conflicts of interests arising as a result of the fee structure. CICERO Green operates independently from the financial sector and other stakeholders to preserve the unbiased nature and high quality of second opinions.

We work with both international and domestic issuers, drawing on the global expertise of the Expert Network on Second Opinions (ENSO). Led by CICERO Green, ENSO contributes expertise to the second opinions, and is comprised of a network of trusted, independent research institutions and reputable experts on climate change and other environmental issues, including the Basque Center for Climate Change (BC3), the Stockholm Environment Institute, the Institute of Energy, Environment and Economy at Tsinghua University and the International Institute for Sustainable Development (IISD).