ATEA SUSTAINABILITY FOCUS

March 2023

Time for climate accountability

Nordic IT buyers stress accountability

Climate accountability - from targets and talk to action and advancement

THE ATEA SUSTAINABILITY FOCUS Advisory Board meeting in November of last year took place in the backdrop of the ongoing climate negotiations at COP27 in Egypt. The urgency to act had never been more heartfelt, yet there was a notion that the world was about to abandon the 1.5-degree target.

Speaking on behalf of the Nordic market, the Advisory Board does not want to see the IT sector take that route. They want to see an industry that delivers on its commitments and demonstrates progress. Therefore, this report is about climate accountability. To the buyers, this means:

Setting and delivering on 1.5-degree and net-zero aligned targets without delay, aligning portfolios and using corporate influence to amplify the climate transformation of society.

Accountability for the whole climate transition. Brands need to consider their entire climate impact, not outsource the challenges on their suppliers.

Access to, and harmonization of, data to visualize the footprint on sector, product, and individual buyer level. Alignment around how data should be framed to drive change.

An expectation of brands to use the transition to <u>do good rather than to just</u> <u>limit risks, to act as enablers for local</u> communities and an overall just transition.

In this year's ASF dialogue, Nordic IT buyers clearly demonstrated that they

Read more about how Nordic IT buyers value sustainability in the section "The dialogue" on page 6.



Atea Sustainability Focus provides the IT industry with valuable insights of the expectations and preferences of the Nordic market as well as recommendations on how to address urgent sustainability issues. The recommendations are crafted by the ASF Advisory Board consisting of representatives from leading Nordic public and private companies with a background in IT, sustainability or purchasing

Read more about the state of transparency in the section "Industry analysis" on page 9.

See the recommendations in the section "Preamble and Recommendations" on page 14.

¹ (ITU-T L.1470) and main Net Zero initiatives (Race to Zero, SBTi, ITU, ISO etc) want access to better data to measure their <u>carbon footprint from IT</u> – and that they have a hard time getting it.

In that sense, climate accountability is a question about transparency. The report investigates the concept of transparency from different angles, how the concept has evolved and how it relates to greenwashing.

There is an abundance of information produced by the industry, yet a shortage of what buyers consider to be relevant information. This paradox leads to buyers asking for more, which increases the administrative burden for suppliers who then may be forced to increase the volume of unfiltered information. Safe spaces for dialogue, common standards and thirdparty verifications may be some of the solutions. The analysis also brings up the fact that transparency should be applied both ways - more transparency from IT buyers on how sustainability is weighted in their purchases can propel suppliers' investments in more sustainable practices and products.

To accelerate and show progress on the science-based climate trajectory for the industry¹ is a non-negotiable for Nordic buyers. They see themselves as part of the solution, but for this to happen, all actors in the value chain must contribute, which is why the recommendations in this report target the industry as a collective, individual brands as well as the IT buyers.

Without accountability, no net zero.

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When walk and talk go hand in hand

THE PURPOSE OF Atea Sustainability Focus (ASF) is to accelerate the sustainable transformation of the IT sector, using the mature Nordic market as leverage. The idea is as simple as it is brilliant:

Amplifies influence

The initiative allows Nordic ITbuying organizations to influence the sustainable development of an entire industry in a way that would be impossible singlehandedly. Many voices speak louder than one.

Low thresholds

All buyers have to do to exercise their influence is to provide information on their current and future priorities of sustainability in IT procurement – through a survey or other forms of dialogue.

A compass for the future You don't skate to where the puck is. You skate to where it is going to be. This ice-hockey analogy was once used by Deborah Albers, Vice President at the Responsible Business Alliance, to describe the value of the ASF process. Intelligence from one of the most progressive markets in the world becomes a valuable compass that points out the direction of the sustainable transformation of the industry.

The intelligence provided by the Nordic buyers annually is processed into recommended actions by a group of leading buyers, the ASF Advisory Board, and summarized in the ASF report – that you are now reading. The response from the industry confirms that the ASF modus operandi is not only smart but also powerful. Previous ASF reports have spawned new tools for increased transparency as well as several initiatives and measures around climate and circularity. You can read more in the section Communication on progress, but one outcome I would like to highlight is the ASF roadmap for a net-zero and circular IT sector by 2050. The idea of a roadmap was first mentioned in the 2019 report Circular Economy, where the Advisory Board urged the industry to produce one. In the 2021 report Faster, together! the recommendation was relaunched, but now the Advisory Board decided to get involved. They invited industry representatives to a series of roundtables which has resulted in a roadmap outlining a number of actions that hopefully will be ready for implementation during the second half of 2023.

More talk, more walk

The roadmap is a result of Nordic buyers realizing that they need to engage more actively in the sustainable transformation. Sharing intelligence and issuing recommendations is effective, but if those messages are also implemented as requirements and measures in procurement - the impact is of a whole other magnitude. For this reason, the Advisory Board has invited other Nordic buyers to the network Leadership for Change where members have vowed to weigh sustainability into their IT purchases. The network now convenes 20+ organizations and is steadily growing.



Camilla Cederquist Manager Atea Sustainability Focus

Action and accountability

Through the ASF and the Leadership for Change the Nordic buyers continue to challenge the IT industry – and themselves – to push the bar on sustainability. This year, they take a stand for climate accountability.

With the in many ways disappointing COP27 as a backdrop to the Advisory Board meeting, there was a lot of frustration in the room, which resulted in a wish for more verifiable progress. The board felt that it is time for brands to take full responsibility for the climate impact of their business – by putting focus where it matters the most and to be transparent about the effects.

Walk and talk must go hand in hand. For the industry this means to make (climate) progress and demonstrate how, while the buyers need to communicate expectations that are followed up with procurement policies. That's the ASF recipe for success.

CAMILLA CEDERQUIST Manager Atea Sustainability Focus

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Walk and talk must go hand in hand. For the industry going forward this means to make (climate) progress and demonstrate how.

Nordic IT buyers: We want data

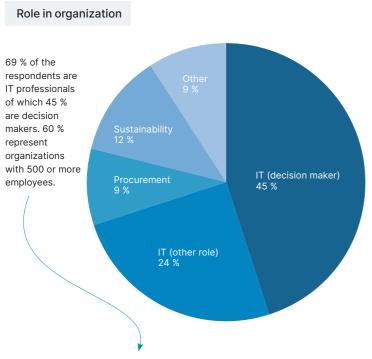
THE FOUNDATION FOR the ASF initiative is the continuous dialogue with Nordic IT-buying organizations, which mainly consists of an online survey but also discussions within the network Leadership for Change. One of the main findings for 2022 was the increasing expectations on the industry to provide data on the carbon footprint of buyers' purchased goods and services.

Disclaimer: The survey was distributed through Atea's channels across the Nordics and open to anyone to respond to. Therefore, the results more likely reflect the views of sustainability engaged organizations than the views of a random selection.

About the survey

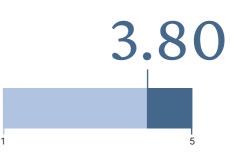
The purpose of the survey is to identify urgent sustainability areas that the IT industry and IT-buying organizations need to address, based on the priorities of the Nordic market. Respondents were asked to specify their current priority of specific sustainability areas/criteria when purchasing IT products and solutions. The list covered both social and environmental criteria, as well as criteria that can be placed on manufacturers and products respectively. Respondents were then asked to specify their assumed future priority of the same criteria, and finally disclose how hard these criteria are to implement.

The survey had 493 respondents from Sweden, Norway, Denmark, Finland, and Estonia. ■



My organization's priority of IT sustainability?

On a scale of 1–5, the priority of IT sustainability in the own organization is on average ranked 3,8.



About 50/50 division of public vs private organizations.

Results

- All of the sustainability criteria included in the survey will be prioritized more in the future compared to today.
- There is a clear signal around carbon footprint data. It is the area with the biggest gap between current and future priority. It is also one of the areas that buyers will prioritize the most in the future, but also one they find quite hard to implement.
- This means buyers will increase their demands around transparency and require robust and comparable data – something respondents have claimed to be one of the main obstacles to sustainable IT in every ASF dialogue since 2019.
- The criteria with the largest gaps between current and future priorities are different from those that buyers will prioritize the most going forward.
 This means that there are emerging issues for the industry to keep an eye on, while current priorities will remain important.
- As seen in previous surveys, topics related to human rights and working conditions are outshadowed by environmental/ climate issues. Strictly supplychain related alternatives currently rank low but are included in some of the areas that will be most prioritized in the future.

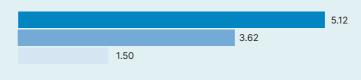
Top three gaps

On a scale of 1–7, the three biggest gaps between current and future priorities are:

1. The manufacturer can provide data on the carbon footprint of purchased goods and services



2. The manufacturer is a member of the Responsible Business Alliance



3. The manufacturer has a Science-Based Target or equivalent



Requirements on manufacturers to provide data on the carbon footprint reflect the increased interest from – and pressure on – organizations to report on their scope 3 emissions. Increased visibility of the scope 3 emissions will likely trigger measures to abate them, meaning this can be a real game changer.

Top future priorities

- 1. Requirements and measures related to endof-life handling (recovery, traceability)
- 2. Energy-efficient products and solutions
- 3. The product has an ecolabel, such as TCO Certified and Epeat, and...

...requirements with the ambition to extend the lifespan of products (such as longer warranties and upgrading possibilities)

Unlike criteria with the biggest gaps, top future priorities focus on the product rather than the manufacturer. The fact that requirements around end-of-life handling top the list indicate an increasing awareness of downstream sustainability and its impact on the carbon footprint. There might also be a social dimension here, a wish to secure that old IT is not illegally exported to developing countries. The criteria with the biggest gap between current and future priorities – the manufacturer can provide data on the carbon footprint of purchased goods and services – is number five on the list.

Hardest to implement

- 1. Responsible sourcing of minerals
- 2. Requirements with the ambition to extend the lifespan of IT products
- 3. Reducing the use of harmful chemicals

Both responsible sourcing of minerals and reducing the use of harmful chemicals are challenges that have been accompanying the IT industry for a long time. Buyers clearly do not believe they have the tools needed to bring about change in these areas. Requirements around extending lifespan, however, seem like a new challenge. It is in itself an area that holds many criteria, and buyers are probably trying their way. Worth noting is that buyers find all social criteria on the list hard to implement.

Obstacles remain the same

- 1. We lack time and resources to follow up on requirements
- 2. It is hard to measure the effects of actions taken
- 3. It is difficult to get information about, and to compare, the sustainability performance of manufacturers and products

Since 2017, buyers' obstacles for contributing to more sustainable IT have been the same.

Strategy most important

- 1. Implement a strategy for sustainable IT
- 2. Collaborate with other IT buyers to influence the industry's sustainability work
- 3. Buy eco-labeled products

When asked what the most important thing is that they can do to contribute to more sustainable IT, respondents picked alternatives that are quite comprehensive. One explanation for this can be the high number of IT decision makers among the respondents, since they need to have a helicopter view. At the bottom of the list, we find "Increase transparency around how we prioritize sustainability in the tendering process", "Product-as-a-Service" and "Buy reused products". The transparency alternative was new in this year's survey and was included since industry representatives believe this to be a key driver for sustainable action. This view is not (yet?) shared by buyers.

The challenging link between transparency and sustainability performance

ACCORDING TO THE ASF dialogue, transparency is resurfacing as a main topic for Nordic IT buyers. IT buyers who want to make decisions based on sustainability criteria, whether they are purchasing a product or choosing a supplier to do business with, seem to be struggling to:

- a) access reliable information about the sustainability performance of a product and/or a supplier;
- b) know what information is material, and
- c) compare information on different suppliers/products

Buyers are under increased pressure to ensure compliance with social and environmental criteria. This is due both to stricter legislation and higher demands from politicians and investors. The expectations have grown much faster than the capacity to meet them¹.

Relevance and reliability are key

Generally, transparency refers to the provision of relevant, reliable, and timely information about company activities for external stakeholders². It does not necessarily translate to companies disclosing the origins of every part of the production for its customers. Research points out that high levels of disclosure do not necessarily equate optimal transparency³. Rather it is about disclosing achievements as well as risks, for example whether a specific component has origins from an area with high risk of geopolitical conflict⁴, or being able to provide accurate data around carbon footprint. Transparency in the IT industry is challenging. Supply chains are extremely complex, and competitiveness, trade secrets, and fear that sensitive information can spread beyond the control of the disclosing party might hamper the ability of companies to disclose information. Still, the amount of information published is overwhelming. As an example, between 2019 and 2022 the average amount of pages in sustainability reports by members of the WBCSD increased by 56 pages⁵. Even professional buyers lack time and/ or knowledge to manage and filter the information presented.

Greenwashing

As companies face external scrutiny and pressure to prioritize their social and environmental sustainability, the topic of greenwashing becomes more prevalent. Greenwashing could be defined as "the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service"6. According to some research, this occurs both intentionally and unintentionally. Perpetrators of intentional greenwashing incorporate a green marketing strategy for competitive purposes while not living up to or exaggerating their claims. Unintentional greenwashing may involve companies making unsubstantiated claims, perhaps due to lack of knowledge about the complete impact of their activities in the supply chain as measuring sustainability is complicated, or emphasizing smaller achievements instead of disclosing challenges the company is facing⁷.

¹Björn Claeson; Director of Electronics Watch. Interview, 2022-10-28

- ²Belen Fernandez-Feijoo, Silvia Romero and Silvia Ruiz. Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework. Journal of Business Ethics. Vol. 122, 2014: 53–63.
- ³Fernandez-Feijoo, Romero and Ruiz, Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework, 53-63. 2014.
- ⁴ Kristin Tallbo; Sustainability strategist at Adda. Interview. 2022-10-14.
- ⁵WBCSD. Reporting matters. 10th Anniversary Edition. 2022.
- ^e Szerena Szabo, Jane Webster. Perceived Greenwashing: The Effects of Green Marketing on Environmental and Product Perceptions. Journal of Business Ethics. Vol 4, No 17, 2021: 719-739. https://link.springer. com/content/pdf/10.1007/ s10551-020-04461-0.odf
- ⁷Worldfavor. 2022. How to address and avoid unintentional greenwashing. Blog. worldfavor.com. https://blog. worldfavor.com/how-to-address-and-avoid-unintentional-greenwashing. (Accessed 2022-10-18).



Self-reporting increases risk for bias

The voluntary approach to sustainability reporting impacts transparency as it increases the risk for bias. Companies tend to interpret indicators and parameters to best facilitate their own reputation. For instance, companies that have lower emissions have a higher tendency to disclose their carbon footprint⁸.

External, independent verification as well as properly articulated rules could prevent the risk of greenwashing (misleading environmental data)9 and bluewashing (misleading data about social practices)¹⁰. Today's reports are often independently verified¹¹; however, sustainability frameworks and indicators are applied selectively. Companies can still choose what results to disclose, and different standards are adopted when measuring sustainability performance. The European Commission states that there are currently more than 80 different reporting initiatives for measuring carbon emissions alone¹².

Lack of standards hampers comparability

Comparability remains especially challenging, whether it is about comparing companies' due diligence efforts and impacts or the carbon footprint of specific products¹³. Current research identifies a lack of a standardized framework to measure sustainability performance^{14, 15}. This results in companies using a diverse range of frameworks which makes it difficult for stakeholders and customers to compare sustainability performance across companies and identify material information.

Today, there is no common methodology that enables comparisons of product carbon footprints. Several of the largest IT companies use the Product Attribute to Impact Algorithm (PAIA); however, PAIA results are usually communicated as a range and can only provide a reasonable estimate¹⁶. Comparisons require significant technical expertise¹⁷.

Reporting in the IT industry – a closer look

A review of sustainability reports from selected companies in the IT industry (all members of the Responsible Business Alliance) indicate that the companies with the longest reports do not necessarily come across as more transparent. Rather it is the ones that:

- 1. have a more straightforward communication
- 2. adopt an objective stance on goals, strategies, and risks, as well as progress in relation to their goals
- clearly declare what standards and frameworks they apply to their reporting

See the review on page 27 in the appendix, available in the digital version.

- ⁸ Lashitew. Corporate uptake of the Sustainable Development Goals: Mere greenwashing or an advent of institutional change?. 2021
- ⁹ Enholm, Sören; CEO of TCO Development. Interview. 2022-10-13
- ¹⁰ TCO Certified. Navigating the Sustainable IT Revolution. 2021.
- ¹¹ WBCSD. Reporting matters. 10th Anniversary Edition. 2022
- ¹² European Commission. 2020. Inception Impact Assessment: Legislative proposal on substantiating green claims. https://ec.europa.eu/ environment/eussd/smgp/initiative_on_green_claims.htm.
- ¹³Jessica Wolfrom. Companies bet carbon labels can help the climate. Will consumers catch on?. Washington Post. 2021-07-21.https://www. washingtonpost.com/climate-solutions/2021/06/17/ carbon-footprint-emissions-label/
- ¹⁴Lashitew. Corporate uptake of the Sustainable Development Goals: Mere greenwashing or an advent of institutional change?. 2021
- ¹⁵ WBCSD. Reporting Matters.10th Anniversary Edition. 2022
- ¹⁶ MIT Materials Systems Laboratory. Intended Uses and Limitations of the PAIA Model. 2019. https://p1-ofp. static.pub/ShareResource/ social_responsibility/ PAIA_Intended_Use/PAIA_ Intended_Use.pdf
- ¹⁷ Didier, Cayrac; Head of SustainabilityforEurope,Middle East and Africa Markets at HP, Interview, 2022-10-17

Can legislation make it easier for buyers?

The European Parliamentary Research Service and civil society, among others, have highlighted the insufficiency of the voluntary approach to sustainability disclosure that occurs on an international scale.

National governments, not least in Norway, France, and Germany, appear to have come to the same conclusion, adopting legally binding regulations concerning companies' due diligence across the whole supply chain.

At global or European level, several different pieces of transparency-related legislations are being introduced or are on the verge of implementation. Examples of these are

- The Binding Treaty on Business and Human Rights, which infers that not only states, but companies themselves, are responsible to ensure that company activities even outside their own territory does not violate human rights¹⁸;
- The Directive on Corporate Sustainability Due Diligence (CSDD)¹⁹, awaiting approval, which suggests that companies must integrate due diligence into policies, identify, mitigate, prevent, and monitor human rights and environmental impacts, and also publicly communicate this²⁰.
- The proposed EU legislation on "substantiating green claims". The legislation targets greenwashing, stating that "In order to not mislead, environmental claims should be presented in a clear, specific and unambiguous and accurate manner."²¹

As legislative definitions of different aspects of sustainability become more rigorous, the room for interpretation decreases, ensuring that compliers operate within an externally verified framework.

Can more transparency from buyers drive sustainable change?

Legislative changes expand the interdependent relationship between buyers and suppliers, as transparency from suppliers become critical for the buyers to exercise their duty of compliance. In an interdependent relationship, demand for transparency from buyers is complemented by demand for transparency from suppliers.

Customers can propel more meaningful disclosure and better sustainability outcomes by being transparent around how they weigh social and environmental criteria in their procurement processes. If companies perceive that sustainability demands are not valued in procurement decisions, they may have less of an incentive for being open and material in their disclosure.

Some buyers recognize that they should view themselves as being part of the supply chain and reflect upon what responsibilities that entails²². If transparency is important, then perhaps brands that are transparent should be premiered, or procurers should even be prepared to opt out of products and suppliers that do not meet the transparency criteria²³. This relates to what the industry perceives as "the elephant in the room", the lack of recognition that sustainability (including transparency) may have a cost²⁴.

- ¹⁸ Zamfir. Towards a binding international treaty on business and human rights. European Parliament Research Service. 2018.
- ¹⁹ Bernaz, Mandatory Human Rights and Environmental Due Diligence: Trends and Lessons from Europe.
- ²⁰ European Commission. February 2022. Just and sustainable economy: Commission lays down rules for companies to respect human rights and environment in global value chains. https:// ec.europa.eu/commission/ presscorner/detail/en/ ip_22_1145. Ec.europa.eu. (Accessed 2022-10-23)
- ²¹ European Commission. July 2020. Inception Impact Assessment: Legislative proposal on substantiating green claims, p. 1.
- 22 Tallbo, Interview, 22-10-14
- ²³ Tallbo, Interview, 22-10-14
 ²⁴ Cavrac, Interview, 22-10-17

More can be done to make sustainable practice a competitive advantage²⁵. Norway has set forth an action plan to increase the proportion of green public procurements and green innovation in the public sector²⁶. The new law infers that when it is relevant to use sustainability criteria, public procurers should give them a weight of at least 30 percent. The idea is that, apart from attempting to achieve sustainable development goals, authorities can influence the market and spur green development and innovation. Experts argue that the exact weight can vary depending on the specific context of each procurement. The most important part is to make sustainability a main driver.

Intelligent technology for increased transparency

Software solutions are on the rise for monitoring and creating intelligent global supply chains. Through the simplification of data collection, organizations can increase visibility of the supply chain, and there are several examples of how global industries are employing innovative methods to detect risks and increase traceability.

Today, these tools are not widely deployed in the IT industry, while for example the textile industry is believed to have come further²⁷. One reason can be the scope and complexity which challenges the ability of getting reliable data into the system, but the IT industry could gather inspiration from other industries to develop and utilize innovative methods to ease transparency.

Going forward

1. Make room for better dialogue

A key ingredient for transparency is trust. Lack of trust increases the need for control, and more control means more resources are allocated on follow ups, audits, and specific reporting.

If the industry manages to build trust with the buyers by proactively defining frameworks, disclosing risks and communicating clearly, it could minimize skepticism from the buyer side.

Brands may fear that an open communication of risks may negatively affect their reputation, but the idea that buyers are part of the supply chain and have specific responsibilities indicates that it is possible to find common ground and safe spaces to share information. Also, the increased interdependency prompted by external pressure to report and visualize impact is likely to increase understanding between actors.

2. Focus on materiality for mutual benefits

Standardized frameworks and verification are the common denominators for creating a universal understanding of what information is material and to create a level playing field. In theory this would facilitate processes on both ends as companies know what and how to report and buyers can spend less time navigating and interpreting large volumes of information.

²⁵ Christian Tangene; Advisor Green Procurement at DFÖ. Interview. 2022-10-31

²⁶ Ministry of Trade, Industry and Fisheries (Norway, Norwegian: Nærings- og fiskeridepartementet). Smartere innkjøp - effektive og profesjonelle offentlige anskaffelser. [Meld. St. 22 (2018 – 2019) Melding til Stortinget]. (2019)

²⁷ Tallbo, Interview, 22-10-14

Upcoming legislation, where definitions of sustainability performance become more rigorous as well as industry wide efforts towards harmonization of reporting (for example RBA's *Practical Guide to Transparency in Procurement*) are welcome improvements that will help buyers in understanding what is both relevant and reliable, but more can be done in this area. Third-party validation can combat greenwashing but will most likely drive costs.

3. Reward transparency

Buyers sometimes reward suppliers that meet various sustainability criteria but rarely reward transparency in itself. Are buyers ready to refrain from certain suppliers that do not meet their transparency criteria or proactively choose brands that demonstrate higher levels of transparency? Would that help suppliers justify increased investments in transparency?

By openly communicating how they value sustainability in requests for tenders, buyers have a powerful tool to drive sustainable change as this provides a business case for brands to make necessary investments. ■



List of references can be found in the appendix available in the digital version of the report.

The crisis is here. So is the time for climate accountability.

While we are putting together these recommendations, the news is dominated by doomsday reports connected to the ongoing COP27 in Egypt. Perhaps the UN secretary general, António Guterres, summarized it best: "We are on a highway to climate hell". The urgency could not be more heartfelt. Neither can our message to all actors in the IT industry: It is time for climate accountability.

THE IT INDUSTRY must reduce its emissions by at least 45 percent 2020–2030 referring to established sector trajectories¹. There is no more time for incremental steps and low-hanging fruits, nor for ambition without implementation. We need to see actual emission reductions, covering the entire value chain. Even though staying within a 1.5-degree temperature rise seems increasingly challenging, the commitment to 1.5-degree pathways must remain or increase. Every tenth of a degree counts for limiting the negative impacts on ecosystems, society, and economies.

Climate accountability is essentially about transparency and delivering on commitments. While several actors in the IT industry show commitment, there is little sense of progress and impact. Greater transparency drives action and enables us as buyers to support the transition and to use our influence where it matters the most.

Climate accountability also improves our joint ability to embrace opportunities. How can we work together towards

1 (ITU-T L.1470) and main Net Zero initiatives (Race to Zero, SBTi, ITU, ISO etc) a net-zero society unless we know the effect of our actions? How can we ensure that the most responsible and forwardthinking actors are also the most successful? To us, the members of the Advisory Board, this means:

Setting and delivering on 1.5-degree and net-zero aligned targets without delay, aligning portfolios and using corporate influence to amplify the climate transformation of society

Accountability for the whole climate transition. Brands need to consider their entire climate impact, not outsource the challenges on their suppliers.

Access to, and harmonization of, data to visualize the footprint on sector, product, and individual buyer level. Alignment around how data should be framed to drive change.

An expectation of brands to use the transition to do good rather than to just limit risks, to act as enablers for local communities and an overall just transition. We see a great potential for the Responsible Business Alliance to become a focal point for climate action and accountability in the IT industry and its ecosystem, pushing compliance across the membership, leveraging the potential for cross-industry data but also in providing the tools necessary to raise ambitions, competences and, most importantly, results.

We, the Advisory Board, represent Nordic organizations that are frontrunners within sustainability, and through the Atea Sustainability Focus initiative we act as the voice of buyers. We recognize that we too have a responsibility for the climate impact of IT, and we hold ourselves accountable for reducing its footprint. We are also convinced that the monumental challenge posed by the climate crisis is best addressed through leveraging the strength of the buyer – brand–RBA axis that ASF enables.

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ASF Advisory Board 2023

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Henric Öberg, Supplier Manager, Tetra Pak

ASF Advisory Board therefore sees that the following is required by the industry, brands, and buyers to increase climate accountability in line with 1.5-degree and net-zero aligned targets:

Recommendations to the Responsible Business Allliance

- Promote harmonized and transparent reporting across all scopes and develop tools for this (for example maturity models and scope 3 reporting, code, and VAP criteria).
- Drive an internal culture of accountability in the membership by clearly assessing compliance.
- Drive external accountability by strengthening the membershiplevel criteria to support such compliance.
- Initiate and support local initiatives which aim to leverage the power of the collective to tackle decarbonization where the emissions actually take place, increasing awareness and bringing together multiple stakeholders.
- Acknowledge the impact of the climate crisis on human rights by aligning industry supply-chain sustainability practices with the UN Guiding Principles on Business and Human Rights (UNGPs), primarily through the full alignment of the RBA tools.
- Publish an annual report of the overall status of the industry on transitioning to net zero and – eventually – on members' 1.5-degree and net-zero goals and status.

Recommendations for brands

- Increase reporting quality by transparently reporting scope 3 emissions per category and the approach taken to derive each value. Scope 3 reporting will make the entire supply chain visible and internalize business-model choices.
- Move away from own reporting models and methods and engage with current efforts to standardize product declarations.
- Take responsibility for the full climate impact of operations by investing in local energy-transition initiatives and other capacitybuilding programs, supporting both the transition and compensating for environmental and social harm linked to climate.
- Aligning with the UNGPs, seek to prevent or address and mitigate adverse environmental and human rights impacts that are directly linked to brands' operations, products or services by their business relationships in locations where production takes place. Pay special attention to the communities which are hardest hit by the impacts of the climate crisis.

Recommendations for buyers

- Align with (or exceed) existing leading initiatives when setting requirements, in line with reducing emissions by at least 45 percent 2020–2030².
- Investigate, develop, and apply methods for rewarding suppliers' overall transition and progress

 adapted to the room for manoeuvre for private vs.
 public organizations.
- Expand climate accountability beyond the tendering process by:
 - Holding vendors accountable regarding their commitments through the duration of the contract by for example requirements on demonstrating progress.
 - Educating and involving internal stakeholders, such as contract managers.
- Make the climate footprint of IT visible by measuring scope 3 emissions related to the purchasing and end-of-life handling of IT products in order to steer action towards the most material areas and spur dialogue and innovation around better solutions and business models

 $^{^{\}rm 2}$ referring to the established ICT sector trajectories (ITU-T L.1470) and main Net Zero initiatives (Race to Zero, SBTi, ITU, ISO etc)

Prolonged lifespans require radical change

- but the industry takes vital steps

FOLLOWING UP ON how the ASF reports are processed by the Responsible Business Alliance (RBA), and the overall progress on the topics highlighted by the Nordic market, is integral to the ASF initiative.

Ever since the initiative was founded in 2017, the RBA has been the dedicated recipient of the report.

The commitment from the RBA has been a key component in ASF's ability to impact the IT industry. The coalition gathers the major IT manufacturers as well as many of their sub suppliers and is the most influential actor within the area of sustainable IT and corporate sustainability in global supply chains. Consequently, this fruitful relationship significantly increases the prospects for the recommendations to be realized.

According to the RBA¹, each report is processed for three to six months where it is connected to the high-level strategic agenda and the plans for the coming years. The content is then broken down to actual projects with the ambition to implement concepts that benefit as many members as possible.

In the 2021 report, *Faster, Together!*, the ASF Advisory Board argued that we need to radically extend the lifespan of IT products. While recognizing that this entails a major shift in business models and consumption patterns, the report pointed to several steps that can be taken immediately.

There are yet no signs of a radical shift, but there are still highlights that deserve a mention. The major brands keep breaking new ground in terms of circular design and keeping products in use. Examples are Dell Technologies' concept Luna, Apple's announcement about facilitating selfrepair, and the expanding efforts to increase reuse through for example Cisco Refresh and HPE Renewal.

Product lifetime extension has not historically been within the RBA's scope. Still, the coalition has put more and more focus on circular economy, not least by co-founding the Circular Electronics Partnership. So far, the RBA's focus has been on end-of-life processes where products are reclaimed, reused and recycled, to make sure the same high standards are applied in this phase as in the "traditional" supply chain – see statement below. However, the Advisory Board argues that the coalition could also play a role in developing standards around lifespans and guidelines around circular design.

Recognizing that lifetime extension also requires efforts from the whole value chain, the Advisory Board included recommendations to buyers. Here too we see increasing efforts. For example, more and more organizations work to increase the recovery of used products, as well as to challenge existing contract lengths and include reused products in their procurements – however from low levels. The ASF customer network Leadership for Change will soon publish their best practices on product lifetime extension which will serve as a useful tool for organizations looking to increase their efforts.

In conclusion, more can be done by all actors, but we do not yet see the move to new consumption models that focus on functionality. Buyers believe the industry



2022: Get more from less



2021: Faster, together!

Atea. RBA-chefen: Din röst är viktigare än någonsin för att få en hållbar it-bransch. 22-09-23. https:// www.atea.se/om-atea/ nyhetsrum/nyheter/2022/ rba-chefen-din-rost-ar-viktigare-an-nagonsin-for-att-fa en-hallbar-it-bransch/



can take an even greater responsibility, but the general sense is that the understanding is increasing and that important steps are taken. The ASF roadmap for a net-zero and circular IT sector by 2050 is a promising project where industry and Nordic buyers are collaborating to develop concrete actions that will be undertaken by buyers – the first of which are planned to be implemented during the second half of 2023.

Statement from the Responsible Business Alliance

2020: Closing the Loop



2019: Circular Economy



2018: Transparency

Following the theme of last year's ASF report, the Responsible Business Alliance (RBA) has gathered its members that are looking to "get more out of less." To many, this includes less waste going to landfills, less extraction of raw materials, and less emissions throughout a product's lifecycle. While the RBA has a critical role to play in advancing the industry, we recognize that no one organization can achieve this ambitious goal. As a governing partner in the Circular Electronics Partnership (CEP), we collaborate with leading organizations on actional improvements that aim to achieve a circular economy in the electronics industry by 2030. The RBA has focused its resources and efforts on the end-of-life and reclamation phases, while informing advancements of other circular efforts, in order to create a cohesive and cooperative industry wide effort.

Much of the industry's ambition to create a circular supply chain relies on the ability to collect, refurbish, reclaim, or recycle products at the end of their useful life. For decades, our members have been committed to due diligence for practices in their supply chains that ensure the rights of workers are respected and negative environmental impact is minimized. As they increasingly incorporate end-of-life processes into their "traditional" supply chain, these new suppliers must respect the same practices that members and stakeholders have established over decades.

Throughout 2022, the RBA investigated this topic with our members and stakeholders, both through a series of workshops and in public at the RBA's annual conference, Responsible Business 2022. The message from the industry is clear: In order for a circular economy to succeed, it must respect human rights, provide decent working conditions, and account for its environmental impact. This includes any end-of-life processes, as well as sourcing of recycled and reclaimed materials in new or refurbished products.

The RBA's report, "The Business Case for Due Diligence in E-waste Recycling," outlines the findings from these discussions. Primarily, that the current markets for material processing and recycled materials present too high of an ESG risk for industry-wide adoption.

Throughout 2023, the RBA will continue to engage its members on this topic, along with our colleagues specializing in material sourcing at the Responsible Minerals Initiative (RMI), to find ways to provide the industry more options for fully assured circular supply chains and materials. The positive impacts achieved through a circular electronics economy, including lower carbon materials, longer lifespans for products, reduction in resource extraction and preservation of ecosystems in mining areas, and new and dignified work in emerging economies, has the potential to greatly change the fight against climate change, biodiversity loss, and labor inequality. We want to thank ASF for its efforts in organizing the industry around these topics, and we look forward to our continued collaboration.

ROB LEDERER, CEO The Responsible Business Alliance



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Dissecting transparency

- a comprehensive look at an evolving concept

Meaningful information, supply chain visibility and certified data are the hallmarks of ideal transparency. While the IT industry has grown increasingly aware of their global impact on environmental and social dimensions¹, there are still barriers to overcome and gaps that require investigation. Meaningful transparency requires third-party verification as well as an understanding of the complexity of supply chains and their environmental and social impact. Additionally, legislation and customer relationships serve as drivers for improving practices surrounding transparency. Major concerns include: How can the IT industry ensure proactive monitoring and visibility in their complex supply chains? How can legislation give leverage to sustainable practices? and How can the IT industry avoid greenwashing?

What is transparency?

The concept of transparency can be interpreted in numerous manners. Generally, it can refer to the provision of relevant, reliable, and timely information about company activities for external stakeholders². Some research emphasizes the information's comparability, communication, and dissemination of information as important factors for achieving transparency³.

Kristin Tallbo, Sustainability Strategist at Adda, central purchasing body for Swedish municipalities and regions, explains the risk of confusing the notion of transparency with the notion of traceability. In the Swedish public sector's recently updated contract terms for sustainable supply chains, developed by the National Agency for Public Procurement, Adda Central Purchasing Body and the Swedish Regions, transparency is not about companies disclosing the origins of every part of the production. Rather, it is about being able to disseminate the most important information. This could simply entail providing information about a specific component on request⁴.

Another element of transparency is openness, for example, disclosing if a specific component has origins from an area with high risk of geopolitical conflict⁵. Research points out that high levels of disclosure do not necessarily equate optimal transparency⁶. Transparency is rather achieved through independent verification of information⁷.

In conclusion, a general prerequisite for achieving transparency can be outlined – meaningfulness. The notion of meaningful transparency is for example mentioned consistently in Responsible Business Alliance's (RBA's) Practical Guide to Transparency in Procurement⁸, but what does it actually entail? Through the research done for this analysis, three general traits emerge:

1. Openness

The ability to provide information on demand and a willingness to disclose achievements as well as risks.

2. Contextualization

Providing information that is relevant to the purchaser, specified and standardized in a way that it can be comparable against the industry and sustainability indicators.

3. Third-party verification Essential to ensure that the reported information is valuable, truthful, and holistic. ¹ TCO Certified. Navigating the Sustainable IT Revolution. 2021.

- ² Belen Fernandez-Feijoo, Silvia Romero and Silvia Ruiz. Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework. Journal of Business Ethics. Vol. 122, 2014: 53-63.
- ³ Fernandez-Feijoo, Romero and Ruiz, Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework, 53-63.
- ⁴ Kristin Tallbo; Sustainability strategist at Adda. Interview. 2022-10-14.
- ⁵ Tallbo, Interview, 2022-10-14.
 ⁶ Fernandez-Feijoo, Romero and Ruiz, Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework, 53-63. 2014.
- ⁷ Fernandez-Feijoo, Romero and Ruiz, Effect of Stakeholders' Pressure on Transparency of Sustainability Reports within the GRI Framework, 53-63. 2014.
- ⁸ Responsible Business Alliance Practical Guide to Transparency in Procurement. 2019. https://www.responsiblebusiness.org/media/docs/ RBAPracticalGuideProcurement.pdf

Additionally, meaningful transparency plays a vital role in establishing trust between actors. By assuring that sustainability permeates all aspects of business – from practice to reporting – the need for controls and audits of brands' or suppliers' claims could be minimized. This relates back to the attribute of openness – a building block of trust is honesty⁹. Customers need reassurance from brands that all possible methods are being employed to ensure sustainable practices, and transparency communicates that, building trust in the early stages of the relationship¹⁰.

- ⁹ Didier Cayrac; Head of Sustainability for Europe, Middle East and Africa Markets at HP, Interview, 2022-10
- ¹⁰ Cayrac, Interview, 2022-10
- ¹¹ Björn Claeson; Director of Electronics Watch. Interview, 2022-10-28
- ¹² Claeson, Interview, 22-10-28
- ¹³ Claeson, Interview, 2022-10-28
- ¹⁴ Claeson, Interview, 2022-10-28
- ¹⁵ Szerena Szabo, Jane Webster. Perceived Greenwashing: The Effects of Green Marketing on Environmental and Product Perceptions. Journal of Business Ethics. Vol 4, No 17, 2021: 719-739. https://link.springer. com/content/pdf/10.1007/ s10551-020-04461-0.pdf
- ¹⁶ Worldfavor. 2022. How to address and avoid unintentional greenwashing. Blog. worldfavor.com. https://blog. worldfavor.com/how-to-address-and-avoid-unintentional-greenwashing. (Accessed 2022-10-18).
- ¹⁷ Sören Enholm; CEO of TCO Development. Interview 2022-10-13.
- ¹⁸ Addisu A. Lashitew. Corporate uptake of the Sustainable Development Goals: Mere greenwashing or an advent of institutional change?. Journal of International Business Policy. Vol 4, 2021: 184–200.
- ¹⁹ Enholm, Interview, 2022-10-13.
- ²⁰ Adda, The Church of Sweden and The Swedish Regions. State Imposed Forced Labor in China. Swedish Buyers' Monitoring of Electronics Supply Chain. 2021.

Björn Claeson, Director at Electronics Watch, observes that transparency may also resonate differently for different stakeholders depending on their role - as buyers or companies, for instance¹¹. The fluidness of the concept of transparency illuminates the need for a multi-stakeholder dialogue to build a trusting relationship between actors, stemming from a mutual discussion on expectations, needs and risks¹². An example of an unfruitful interaction is when public buyers might receive an abundance of information from companies that is not targeted specifically at their products and supply chains¹³. The industry might be unfamiliar with the buyer's motives for requesting the information, instead simply providing all the information they have, resulting in buyers' frustration. Similarly, buyers may lack knowledge of what the industry faces and how it might affect the ability to be transparent. To facilitate the process of transparency, there needs to be a common understanding. Trust should exist both in the provision of relevant information from the industry's side, and that buyers demand a sensible scope of information in harmony with regards to plausibility for the industry¹⁴.

Defining greenwashing

As companies face external scrutiny and pressure to prioritize their social and environmental sustainability, the topic of greenwashing becomes more prevalent. Greenwashing could be defined as "the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service"15. According to some research, this occurs both intentionally and unintentionally. Some companies, the perpetrators of intentional greenwashing, incorporate a green marketing strategy for competitive purposes while not living up to or exaggerating their claims. Other research also identifies unintentional greenwashing, meaning that companies make unsubstantiated claims, perhaps due to lack of knowledge about the complete impact of their activities in the supply chain as measuring sustainability is complicated, or emphasizing smaller achievements instead of disclosing challenges the company is facing¹⁶.

1. IT industry and supply chain

Nowadays, sustainability reporting and the consequent follow-up processes of environmental and social sustainability performance are commonplace¹⁷. For the IT industry, incorporating sustainability analysis into all corporate activities can be difficult as supply chains are complex, and the indirect effects of supply chains can be difficult to trace¹⁸. While techniques and concepts to measure environmental impact exists to some extent, ways of measuring the social dimension of sustainability are seemingly underdeveloped. Another dilemma is disclosing a proper amount of information without revealing company secrets¹⁹ or disregarding intellectual property legislation²⁰.

Transparency entails the provision of useful, specific, and manageable data. A pitfall of transparency lies in the overwhelming amount of information being published. Even professional buyers lack time and/or knowledge to manage the information presented, which counteracts the point of transparency²¹. Moreover, sustainability reporting and the interpretation of transparency varies within the IT industry, with some companies simply publishing unspecified lists of factories, while others actually pinpoint the components of certain products²².

Another noteworthy aspect is the bias in self-producing and reporting sustainability data. Naturally, companies interpret indicators and parameters to best facilitate their own reputation, at times operating in a technical gray zone. External, independent verification as well as properly articulated rules could prevent the risk of greenwashing (misleading environmental data)²³ and bluewashing (misleading data about social practices)²⁴.

1.1 External pressure and empowered customers

Kristin Tallbo provides an interesting insight on brands and due diligence: Traditionally, B2C (business to consumer) brands have experienced more scrutiny from media and customers, often resulting in increased transparency to satisfy these demands. B2B (business to business) brands have previously lacked the same incentive, since they garner less attention, according to Tallbo's personal experience of working with brands²⁵.

Alexandra Cech, Director of Responsible Sourcing at the Responsible Business Alliance, believes that the reputational risk has increased over the past ten years, following the rise of social media and increased public access to global news and information that has made the public more aware but also allowing allegations – credible or otherwise – to spread more quickly²⁶. This correlates with increased push also for B2B brands to improve transparency.

B2Cs' endeavours to improve transparency and sustainability is an example of how external pressure acts as a mechanism to transform practices. Following the logic of external pressure, buyers and procurers possess the power to leverage brands to improve sustainability performance, simultaneously prompting them to improve transparency to retain customer trust. For instance, Tallbo raises the example of a brand in the IT sector currently regarded as an exemplary practitioner of openness. This has not always been the case, rather, a result of a past scandal which led to immense pressure from the public sector to rework practices²⁷. Customers demanding credible information and visible supply chains could therefore spur companies' green transformation and commitment to sustainability. Transparency is not only a driver for positive impact on supply chains; but will also foster trusting relationships with customers and improve brand reputation²⁸.

Building on the topic of brand reputation, an element of transparency is disclosure, which might be a deterrent for the industry in terms of product competitiveness or trade secrets. Björn Claeson remarks that to his knowledge supply-chain transparency does not in itself result in a competitive disadvantage, an indication that there may be other factors contributing to some brands' unwillingness to disclose factories in their supply network²⁹. This heightens the importance of public buyer transparency requirements to ensure that companies that are more transparent are also more competitive³⁰. Transparency is not only a driver for positive impact on supply chains; but will also foster trusting relationships with customers and improve brand reputation.

- ²¹ Enholm, Interview, 2022-10-13.
- ²² Tallbo, Interview, 2022-10-14.²³ Enholm, Interview, 2022-
- 10-13. ²⁴ TCO Certified. Navigating the
- ⁴ ICO Certified. Navigating the Sustainable IT Revolution. 2021.
- ²⁵ Tallbo, Interview, 2022-10-14.
 ²⁶ Alexandra Cech, Head of
- Responsible Sourcing at RBA, Interview 22-10-28
- 27 Tallbo, Interview, 2022-10-14
- ²⁸ CreativeSupplyGmbH. Why B2B companies should embrace transparency. Creative Supply. 2022. https://creativesupply.com/en/resources/ b2b-companies-should-embrace-transparency/ (Accessed 2022-10-24).
- ²⁹ Claeson, Interview, 22-10-29
- ³⁰ Claeson, Interview, 22-10-29

Tallbo says that procurers should view themselves as being part of the supply chain and reflect upon what responsibilities that entails.

- ³² Tallbo, Interview, 2022-10-14
- ³³ Didier, Cayrac; Head of Sustainability for Europe, Middle East and Africa Markets at HP, Interview, 2022-10-17
- ³⁴ Cech, Interview, 22-10-29
- ³⁵ Claeson, Interview, 22-10-29
- ³⁶ Tallbo, Interview, 22-10-14
- ³⁷ Tallbo, Interview, 22-10-14
- ³⁸ Cayrac, Interview, 2022-10-17
- ³⁹ Cayrac, Interview, 2022-10-17
 ⁴⁰ Cayrac, Interview, 22-10-17
- ⁴¹ Christian Tangene; Advisor Green Procurement at DFÖ. Interview. 2022-10-31.

The demand for transparency and the fulfillment of rigorous requirements poses an additional discrepancy. How strictly are, for instance, public buyers willing to enforce their demands if a non-compliance occurs? Do they simply boycott the brand, having to remove all the brand's products from their procurement as a result³¹? In most cases, public procurement bodies like Adda seek to collaborate with the supplier to resolve the non-compliance rather than terminating a contract based on a single incident -what Tallbo labels as moving away from a top-down approach with contract clauses, follow ups and potential consequences, to using strategic leverage and dialogue³². According to Didier Cayrac, Head of Sustainability for Europe, Middle East and Africa Markets at HP, transparency can be held back by the fear that sensitive information can spread beyond the control of the disclosing party, which could lead to backlashes when put out of context³³. Alexandra Cech says that we need to acknowledge that with greater due diligence and transparency there will be an increase in the identification of issues in the supply chain. According to her, there are valid concerns among some actors that there are risks associated with disclosing these issues and, therefore, there needs to be greater incentives to encourage transparency³⁴.

1.2 Responsibilities and options

According to Björn Claeson, there is a lack of trust between stakeholders and points to the need to find a safe and contained form for dialogue in order to bridge the gap between buyers' comprehension of the industry's reality and the industry's understanding of reasons behind buyers asking for information³⁵. Kristin Tallbo also emphasizes the need for dialogue and how influence can be exercised on different levels. As an example, horizontal collaboration with other buyers can enable conversations directly with the Responsible Business Alliance³⁶. Tallbo says that procurers should view themselves as being part of the supply chain and reflect upon what responsibilities that entails. If transparency is important, then perhaps brands that are transparent should be premiered, or procurers should even be prepared to opt out of products and suppliers that do not meet the transparency criteria³⁷. This relates to what Didier Cayrac calls "the elephant in the room", the lack of recognition that sustainability (including transparency) may have a cost. He says that some aspects of sustainability, including for example local refurbishing services, or, in the case of transparency, detailed reporting on sustainability benefits, can be viewed as a feature, such as a bigger hard drive or more memory³⁸.

1.3 Reversed transparency

Another perspective of transparency is how customers can propel sustainable development by being transparent around how they weigh social and environmental criteria in their procurement processes reversed transparency. Cayrac says that knowledge about how important sustainability is in the customer's decision process helps HP justify major investments³⁹. Claiming that sustainability is important but in the end just valueing price is also a form of greenwashing, according to Cayrac, while being open about the relative weight is a way for customers to proceed from words to concrete measures⁴⁰.

Christian Tangene, Advisor Green Procurement at The Norwegian Agency for Public and Financial Management (DFØ), notes that while suppliers acknowledge that the ambition of Nordic public procurers are high, they feel that more can be done to make sustainable practice a competitive advantage⁴¹.

³¹ Tallbo, Interview, 22-10-14

Norway has set forth an action plan based on a government white paper on how to increase the proportion of green public procurements and green innovation in the public sector⁴². This process follows the 2017 revision of the public procurement law. The new law infers that the public sector in Norway, when it is relevant to use sustainability criteria, should give them a weight of at least 30 percent. The idea is that, apart from attempting to achieve sustainable development goals, authorities can influence the market and spur green development and innovation.

According to Tangene, this recommendation should be regarded as a signal that sustainability should be given a considerable weight, rather than focusing on the specific number. However, depending on the specific context of each procurement, both a lower and higher weighting might be reasonable to make sustainability a main driver in the tender competition. The important part is to know the market well and understand the sustainability advantages that can be gained from the procurement in question⁴³. Didier Cayrac agrees that it is not the precise weighting that is most important but argues that ten percent is a bare minimum. Anything below that level is unlikely to move the needle44.

Both Cayrac and Tangene see room for improvement in the use of weighting as an instrument and the transparency around it. While Tangene says there is definitely a movement in the right direction, to which the 30-percent recommendation likely has contributed, a Norwegian public procurement survey found that procuring parties need to set clear goals including KPIs, and then set aside resources to facilitate competent action towards those KPIs^{45,46}. Cayrac says only a fraction of their customers currently are clear on how sustainability is weighted or how criteria are evaluated, which is to miss an opportunity to drive change as HP then has less information to inject into their decision-making processes⁴⁷.

According to Tangene, it is also possible to signal certain overarching goals to the market. As an example, Oslo municipality communicated that they wanted to procure zero-emission vehicles quite long before they inserted such demands in tenders⁴⁸.

2. Assessing sustainability

To be able to make informed decisions and verify sustainability criteria, buyers need:

- a) access to reliable information about the sustainability performance of a product or supplier,
- b) a way of knowing what information is material, and
- c) to be able to compare information from different suppliers/products

Public buyers are under pressure to ensure compliance with social and environmental criteria. Björn Claeson points out that the field has exploded in the last few years, and that the expectations have grown much faster than the capacity to meet them⁴⁹.

2.1 Information volumes are growing

Sustainability reporting is essential to drive transparency, according to a report by the World Business Council for Sustainable Development (WBCSD)⁵⁰. Reporting has the potential to drive internal change by identifying problem

- ⁴² Ministry of Trade, Industry and Fisheries [Norway, Norwegian: Nærings- og fiskeridepartementet]. Smartere innkjøp - effektive og profesjonelle offentlige anskaffelser. [Meld. St. 22 (2018 - 2019) Melding til Stortinget]. (2019)
- ⁴³ Tangene, Interview, 22-10-31
- 44 Cayrac, Interview, 22-10-17
- ⁴⁵ Tangene, Interview, 22-10-31
 ⁴⁶ Norwegian Agency for
- Public and Financial Management (DFØ) [Norwegian: Direktoratet for forvaltning og økonomistyring.] Hovedrapport: Anskaffelsesundersøkelsen. 2022.
- 47 Cayrac, Interview, 22-10-17
- ⁴⁸ Tangene, Interview, 22-10-31
- ⁴⁹ Claeson, Interview, 22-10-29. ⁵⁰ WBCSD. Reporting matters.
 - 10th Anniversary Edition. 2022.

For instance, WBCSD found that, since 2019, the average number of pages in their members' sustainability reports had grown from 109 to 165.

There are currently more than 80 different reporting initiatives only for measuring carbon emissions that are widely used. areas which aid the creation of strategies to accelerate sustainable performance. Moreover, companies are able to communicate their work in relation to sustainability goals to external stakeholders. WBCSD further concluded that companies anticipate regulatory changes in the near future and are preparing to conform to them by, for instance, prioritizing sustainability in parallel with financial performance.

So, what is the state of sustainability reporting in the IT sector? When assessing transparency in sustainability reports, one can conclude that an overwhelming amount of information is published. For instance, WBCSD found that, since 2019, the average number of pages in their members' sustainability reports had grown from 109 to 165⁵¹. Besides, reports are often self-authored, and the sustainability frameworks and indicators applied selectively. The sustainability monitoring forming the basis of the report is oftentimes conducted by an independent third party⁵²; however, companies can still choose what results to disclose. Companies might emphasize achievements, goals and strategies and place less attention on accounting for risks and areas of improvement. Moreover, companies seem to adopt different standards when measuring sustainability performance. The European Commission reports that there are currently more than 80 different reporting initiatives only for measuring carbon emissions that are widely used, making it difficult for consumers to compare sustainability data and making informed choices when purchasing IT53.

⁵¹ WBCSD. Reporting matters. 10th Anniversary Edition. 2022.

⁵² WBCSD. Reporting matters. 10th Anniversary Edition. 2022

2.2 Sustainability reporting in the IT industry – a comparison

A review of sustainability reports from the IT industry reflects previous findings (table 1). In the review we looked at two large well-established companies: A and B, and one slightly less well-established company: company C, as well as a social enterprise: company D. All companies are members of the Responsible Business Alliance. Company A, B and C are full members, and company D affiliate or supporter, a lower membership category. Full membership includes increased demands around publishing corporate responsibility data and demonstrating attainment to membership requirements.

The two larger companies' reports are more than 150 pages long, while the social enterprise is only a third of that length. The reports also differ in how sustainability results are communicated. For company A and B, the utilized reporting standards are only accessible in the annex list, and different ESG (Environmental, Social and Governance) reporting standards and frameworks are used. Company B adopts the GRI (Global Reporting Initiative) index, along with a number of other standards, while company A refers to other standards or utilizes ESG in other ways. Company A also choses to communicate sustainability performance through several topic-specific reports. Contrastingly, company C initiates its report by presenting the frameworks and standards used. Similarly, the social enterprise company D clearly displays what framework they have used, but also adopts another index, the Key Performance Indicators, that they have developed based on the UN Sustainable Development Goals. The diversity in the use of reporting standards and frameworks makes it difficult to compare sustainability performance across the companies, as there is no common reference point.

⁵³ European Commission. 2020. Inception Impact Assessment: Legislative proposal on substantiating green claims. https://ec.europa. eu/environment/eussd/smgp/initiative_on_green_claims.htm.

Table 1

Type of Company	Number of pages in Sustainability Report	RBA membership	Reporting Standards	CO2 scope 3 declaration	Comment
A	128/85 (Environmen- tal Progress report & Environmental Social Governance report)	Full member	ESG-index, based on GRI, SASB, TCFD - accounted for in a separate document by clicking a link in the appendix of the Environmental Progress Report.	Yes	Less open about the risks and challenges they are facing and put most emphasis on goals and achievements.
В	118	Full member	GRI, UN Global Com- pact, SDGs, SASB, TCFD, Stakeholder Capitalism Met- rics - found in the appendix.	Yes	Less open about the risks and challenges they are facing and put most emphasis on goals and achievements.
С	124	Full member	GRI, SASB, UN Global Compact - stated in the introduction of the report	Yes, but not clearly	More transparent about the sustainability performance, dis- playing at what state they are in relation to achieving their goals and accounting for what had to be done to reach them
D	56	Affiliate/Supporter	Key Performance Indicators, based on the UN Sustainable Development Goals - disclosed in the introduction	No, only discloses how much carbon emissions they have avoided	By being more open about their risks and challenges, they come across as more transparent

For instance, companies that have lower emissions have a higher tendency to disclose their carbon footprint.

- ⁵⁴ Lashitew. Corporate uptake of the Sustainable Development Goals: Mere greenwashing or an advent of institutional change?. 2021
- ⁵⁵ WBCSD. Reporting Matters.10th Anniversary Edition. 2022
- ⁵⁶ William S. Laufer. Social Accountability and Corporate Greenwashing. Journal of Business Ethics. Vol. 42, 2003:253-261.
- ⁵⁷ Lashitew. Corporate uptake of the Sustainable Development Goals: Mere greenwashing or an advent of institutional change?. 2021
- ⁵⁸ Lashitew. Corporate uptake of the Sustainable Development Goals: Mere greenwashing or an advent of institutional change?. 2021
- ⁵⁹ Mathias Cöster, Gunnar Dahlin and Raine Isaksson. Are They Reporting the Right Thing and Are They Doing It Right?—A Measurement Maturity Grid for Evaluation of Sustainability. Nol. 12, no. 24, 2020: 10393. https://doi. org/10.3390/su122410393.

2.2.1 Challenges and progress

The two larger companies, A and B, appeared to be less open about the risks and challenges they are facing and put most emphasis on goals and achievements. Contrastingly, the somewhat less established company (C) appeared to be more transparent around the sustainability performance, displaying at what state they are in relation to achieving their goals and accounting for what had to be done to reach them. The social enterprise's report disclosed risks and challenges in an even more comprehensible manner. They made the customer aware of the complexity of the supply chain of IT products and discussed the risks that the industry encountered in a broader manner, however not discussing their own challenges and risks more specifically. The social enterprise also disclosed how COVID-19 has impacted their sustainability performance and the achievements of their goals negatively, coming across as more transparent.

Concludingly, the common denominator for companies that come across as more transparent in their sustainability reports are that they:

- 1. have a clearer and more straightforward communication,
- 2. appear to adopt a more objective stance on their results, and
- 3. initiate the report with a declaration of the applied frameworks and standards.

Moreover, they display their goals, strategies, and risks, as well as their progress in relation to their goals.

2.3 Lack of standardized framework

The review exposes the diversity of frameworks adopted to measure sustainability performance. This is also confirmed by

current research that identifies a lack of a standardized framework^{54, 55}. As mentioned earlier, measuring and reporting sustainability performances occurs on a voluntary basis. Many corporations have adopted voluntary sustainability reporting systems using the Environmental Social Governance (ESG) standard and the Sustainable Development Goals (SDGs), but these are insufficient as most of them are not verified by independent agencies⁵⁶. The lack of a standardized method for measuring and reporting sustainability makes it difficult for stakeholders and customers to compare sustainability performance across companies. The current voluntary approach poses the risk of companies only disclosing their sustainability performance when they perform well⁵⁷. For instance, companies that have lower emissions have a higher tendency to disclose their carbon footprint58.

The different standards in themselves are also criticized for lack of clearness as companies interpret the frameworks differently. According to the GRI (Global Reporting Initiative) standard, the entire value chain is subject to analysis, however, a study of 37 companies in Sweden adopting the GRI standard showed that only 20 percent included the entire value chain in their analysis⁵⁹. This suggests that companies find it difficult to interpret what should be included in the report and what shouldn't. The ESG indicators are also criticized for being insufficient as there is disunity in several aspects of how the indicators should be used in the assessment. For instance, there is uncertainty about what indicators should be used to measure certain attributes, as some companies focus more on codes of conduct and internal policies, while others focus on outcomes. The result of this is that companies tend to display favorable information when communicating sustainability achievements. Sören Enholm, CEO at TCO

Development, similarly explains that there is contextuality and biases in self-producing and reporting sustainability data⁶⁰. Naturally, companies interpret indicators and parameters to best facilitate their own reputation, operating in a technical gray zone. Enholm, therefore, stresses that external, independent verification and articulated rules could prevent the risk of greenwashing.

2.4 Third-party verifications and industry standards

Through the streamlining of social and environmental requirements, purchasers can access third-party verified information and compare them across brands. Much like one cannot place blind faith in self-declared claims of sustainability, purchasers need to choose appropriate verification to enable trust in the third-party verifiers. Ecolabels and certifications are examples of resourcesavvy tools which can aid purchasers in navigating complex information on supply chains. Ecolabels and certifications differ in scope, verification and accountability, and there are hundreds of them available. Some ecolabels accept self-declaration as a valid source of information, and some do not commit to the follow-up of certifications, while others have optional criteria for gaining their certification. For purchasers to be able to trust ecolabels or certifications, they must first assess the content. Ultimately, by choosing a robust ecolabel or certification with a development that mimics IT industry's fast pace, purchasers can alleviate their workload and increase their organization's resilience61.

Didier Cayrac believes that the principles of trusting the process, once the criteria are known, applies to relying on reputable ecolabels, and also on trusting industry coalitions such as the Responsible Business Alliance (RBA). Their audits follow industry standard, which according to him, means that follow-up and further verification is unnecessary, not to mention resourceconsuming⁶². However, Kristin Tallbo points out that there might be skepticism from buyers considering that the RBA represents the IT industry⁶³. Therefore, buyers need to balance the need to investigate compliance themselves, and place trust in tools or coalitions, using all resources available to achieve transparency.

2.5 Specific data a challenge

There is an increasing demand from customers of information on the carbon footprint on their specific purchased products⁶⁴. Data on the company's carbon footprint is often displayed in numbers per sector and level of production, including after-use, but it appears to be more difficult to acquire information about one specific product.

There is today no common methodology that enables comparisons. Several of the largest IT companies use the Product Attribute to Impact Algorithm (PAIA), a methodology developed by the MIT; however, PAIA results are usually communicated as a range and can only provide a reasonable estimate⁶⁵. Didier Cayrac believes that standardization in this area will take a while. In the meantime, transparency is key not only regarding the results but also regarding the methodology, Cayrac says, acknowledging that the situation requires technical expertise from the customers⁶⁶.

3. Legislation

3.1 Current legislation

In recent years, there have been debates about the lack of legislation regarding company accountability in sustainability reporting⁶⁷. Most countries have adopted legislation pertaining to corporate social

- ⁶⁴ Jessica Wolfrom. Companies bet carbon labels can help the climate. Will consumers catch on?. Washington Post. 2021-07-21. https://www. washingtonpost.com/climate-solutions/2021/06/17/ carbon-footprint-emissions-label/
- ⁶⁵ MIT Materials Systems Laboratory. Intended Uses and Limitations of the PAIA Model. 2019. https://p1-ofp. static.pub/ShareResource/ social_responsibility/ PAIA_Intended_Use/PAIA_ Intended Use off

66 Cayrac, Interview, 22-10-17

⁶⁷ Nadia Bernaz. Mandatory Human Rights and Environmental Due Diligence: Trends and Lessons from Europe. Wageningen Law Series LAW GROUP. Vol. 03, 2022.

⁶⁰ Enholm, Interview, 2022-10-13

⁶¹ TCO Certified. Navigating the Sustainable IT Revolution. 2021.

⁶² Cayrac, Interview, 2022-10-17

⁶³ Tallbo, Interview, 22-10-14

The absence of mandatory legislation is identified as an obstacle when striving for greater accountability and sustainable development.

- ⁶⁸ Barnali Choudhury. Balancing soft and hard laws for business and human rights. International and Comparative Law Quarterly. Vol. 67, no. 4, 2018:961-986. https://doi.org/10.1017/ S0020589318000155.
- ⁶⁹ Addisu Lashitew. Corporate uptake of the Sustainable Development Goals: Mere greenwashing or an advent of institutional change?. 2021.
- ⁷⁰ Ionel Zamfir. Towards a mandatory EU system of due diligence for supply chains. Briefing. PE 659.299. October 2022.
- ⁷¹ Bernaz, Mandatory Human Rights and Environmental Due Diligence: Trends and Lessons from Europe.
- ⁷² Bernaz, Mandatory Human Rights and Environmental Due Diligence: Trends and Lessons from Europe.

responsibility (CSR) on a domestic level, but legislation concerning company activities in other parts of the world is to some extent disregarded. As global industries mature in terms of their knowledge on CSR and the practices surrounding it, they should subsequently be prepared to handle legally binding regulations. The Norwegian Transparency Act and the German Supply Chain Due Diligence Act, explained below, are two examples of legislation pressurizing industries on transparency and accountability.

3.1.1 Soft law versus hard law

Another aspect is the soft law approach, involving non-legally binding treaties and directives, that are the current dominant mechanism to achieve accountability within the area of business and human rights⁶⁸, such as the UN Guiding Principles on Business and Human Rights. This approach mainly infers normative efforts and expectations setting standards of how companies are preferred to behave. Researchers shed light on the fact that soft laws are beneficial when one wants to gradually build up political consensus where opinions differ, and in areas where cooperation is important. One could consider this as highly relevant in the IT sector, where company operations are largely globalized. Hard law, on the other hand, produces a better force for compliance. This factor can prove useful where legal compliance is more difficult to detect; and where non-compliance has external impact, which can be highly relevant in the area of business and human rights. Thus, the absence of mandatory legislation is identified as an obstacle when striving for greater accountability and sustainable development.

3.1.2 Reporting directives and non-binding legislation

The measuring and reporting of sustainability performances in all company activities occur voluntarily on a more international and global scale. The European Parliamentary Research Service, and civil society, among others, have highlighted the insufficiency of this situation. On EU-level, companies are required to report audited financial information in accordance with the IFRS (International Financial Reporting Standards)/GAAP (Generally Accepted Accounting Principles) but there are no corresponding legal standards for reporting non-financial sustainability measures and performances, something current research has identified as a main challenge⁶⁹.

The EU Non-Financial Reporting Directive (NFDRO) has since 2018 required larger companies to report adopted policies that target respect for human rights, environmental protection, anti-corruption and bribery, treatment of employees, and social responsibility throughout the supply chain⁷⁰. However, the NFDRO is not legally binding and only requires companies to write a statement if they violate the directive⁷¹.

Apart from the EU directive, the UN Guiding Principles on Business and Human Rights (UNGP) is one of the most impactful and widely adopted used standards within CSR. In the UNGP, the human rights due diligence principle has been established since 2011, implying that companies are responsible for monitoring and communicating their impact⁷². Nonetheless, since it is not a treaty, it does not infer that companies have formal obligations or that consequences will follow if they violate the principle. Moreover, similar non-binding legislation are present on a national level, such as the UK Non-Slavery Act, but tends to adopt more sector-focused and thematic approaches.

3.1.3 Legally binding regulations

However, on a national level, some countries have adopted legally binding regulations concerning all company activities that can result in a lawsuit or financial penalties if it is regarded as insufficient. The French duty of vigilance law is an example of this. It requires companies that employ a workforce of more than 10,000 global workers and 5,000 domestic workers, to establish, publish and implement a vigilance plan that contains their environmental and human rights impact. It applies to the company's suppliers, subsidiaries and subcontractors located anywhere. Similar laws can be found in Germany: German Supply Chain Act, and in Norway: Norwegian Transparency Act. These legally binding regulations are regarded as more ambitious in their scope than voluntarily based approaches. In fact, general regulatory developments across the EU mark a renewed era of due diligence, where voluntary regulation and selfverification are passé.

The Norwegian Transparency Act, officially adopted by Norwegian Parliament in June 2021, paves way for a more comprehensive approach to due diligence than current regulation. First of all, it encompasses all tiers of the value chain, not only primary tiers as other European due diligence regulations. Secondly, the thresholds for companies subject to the law are more rigorous than those of the NFRD and the previously mentioned German Supply Chain Act, applying to companies with at least 50 full-time employees, in contrast to the 500-employee threshold in the German Supply Chain Act. Affected companies are required to report their due diligence proceedings by the 30th of June each year and are also obliged to provide information to anyone (general public, journalists, etcetera) about due diligence processes on request73,74. The Norwegian Transparency Act could therefore be an example of how legislation can foster transformation. By increasing the opportunities consumers and media possess to demand transparency on companies, it might incentivize them to work proactively to eliminate malpractice from their supply chains and sustainability reporting.

3.2 Upcoming legislation

The lack of mandatory legislation in the area of transparency, as well as varying approaches to, and adoption of, laws on due diligence in different countries, risk resulting in companies moving their company to where legislation suits their activities. A demand for new legislation has therefore emerged. Several different legislations are imminent and on the verge of implementation. With the holistic combination of legislation targeting different aspects of the supply chain and industry, organizations, companies, procurers, and consumers will garner legislative incentive to make more informed decisions. As legislative definitions of grievances such as forced labor become more rigorous, the room for interpretation decreases, ensuring that compliers operate within an externally verified humane framework. External pressure and the quest to maintain company reputation, while useful, lacks the same conviction as legislative pressure to comply with good practices of sustainability and transparency. Kristin Tallbo finds the upcoming legislation a promising incentive for companies to improve their accountability, as it forces companies to be transparent about their supply chains and origin of products75.

3.2.1 UN Treaty on Business and Human Rights

An example of upcoming legislation is the legally binding UN human rights treaty, *the Binding Treaty on Business and Human Rights*, which concerns transnational corporations and business enterprises in a broader sense⁷⁶. In late October 2021, the third draft was published, and the content of the treaty is still widely debated⁷⁷. The treaty was initially aimed solely at transnational corporations (TNC), but after critique from civil society and the EU, it now encompasses all businesses⁷⁸. Similar Chain Transparency Act: What Norway's New Due Diligence Law Means for Your Business and How EcoVadis Can Help. Ecovadis.com. 2022. Available at: https://resources. ecovadis.com/blog/norwegian-supply-chain-transparency-act-what-norways-new-due-diligence-lawmeans-for-your-businessand-how-ecovadis-can-help (Accessed: 2022-10-25).

73 Ecovadis, Norwegian Supply

- ⁷⁴ Forbrukertilsynet. The Transparency Act. Forbrukertilsynet.no. 2022. Available at: https://www.forbrukertilsynet. no/the-transparency-act (Accessed: 2022-10-25).
- 75 Tallbo, Interview, 22-10-14
- ⁷⁶ Markus Krajewski. Analysis of the Third Draft of the UN Treaty on Business and Human Rights, Brussels: CIDSE., 2021. https://www. misereor.de/fileadmin/ publikationen/study-on-UN-binding-treaty-2021.pdf (Accessed 2022-10-25).
- ⁷⁷ Business and Human Rights Resource Centre. Binding Treaty. Business-humanrights.org. https://www. business-humanrights.org/ en/big-issues/binding-treaty/. (Accessed 2022-10-25).
- ⁷⁸ Ionel Zamfir. Towards a binding international treaty on business and human rights. European Parliament Research Service. 2018. https://www.europarl. europa.eu/RegData/etudes/ BRIE/2018/620229/EPRS_ BRI(2018)620229_EN.pdf. (Accessed 2022-10-25).

- ⁷⁹ Zamfir. Towards a binding international treaty on business and human rights European Parliament Research Service. 2018.
- ⁸⁰ Zamfir. Towards a binding international treaty on business and human rights. European Parliament Research Service. 2018.
- ⁸¹ Bernaz, Mandatory Human Rights and Environmental Due Diligence: Trends and Lessons from Europe.
- ⁸² Worldfavor. June 2022. The EU's new corporate sustainability due diligence directive is approaching – are you ready?. https://blog.worldfavor. com/the-eus-new-corporate-sustainability-due-diligence-directive-is-approaching-are-you-ready. Blog. worldfavor.com. (Accessed 2022-10-23)
- European Commission. February 2022. Just and sustainable economy: Commission lays down rules for companies to respect human rights and environment in global value chains. https:// ec.europa.eu/commission/ presscorner/detail/en/ ip_22_1145_Ec.europa.eu. (Accessed 2022-10-23)
- ⁸⁴ Center for Strategic & International Studies. March 2022. European Union Releases Draft Mandatory Human Rights and Environmental Due Diligence Directive. Csis. org. https://www.csis.org/ analysis/european-union-releases-draft-mandatory-human-rights-and-environmental-due-diligence. (Accessed 2022-10-23).
- ⁸⁵ Center for Strategic & International Studies. March 2022. European Union Releases Draft Mandatory Human Rights and Environmental Due Diligence Directive.
- ⁸⁶ European Commission. July 2020. Inception Impact Assessment: Legislative proposal on substantiating green claims, p. 1.
- ⁸⁷ European Commission. July 2020. Inception Impact Assessment: Legislative proposal on substantiating green claims, p. 2
- ⁸⁸ Namporn Thanetsunthorn. The impact of national culture on corporate social responsibility: evidence from cross-regional comparison. Asian J Bus Ethics. Vol 4, no. 1, 2015: 35–56.
- ⁸⁹ Maria Minoja, Ulpiana Kocollari & Maddalena Cavicchioli. A global analysis of corporate social performance: The effects of cultural and geographic environments. International Journal of Cross Cultural Management. Vol. 22, no. 2, 2022: 327-347.

to what has been mentioned earlier, this treaty is crafted in response to the emerging need for mandatory universal legislation and is perceived as a complement to the soft laws. Increased economic globalization and extended value chains have created new challenges, motivating the need for such legislation, according to the European Parliament⁷⁹. The issue of transnational corporations taking advantage of looser regulations, and corruption, in some nation states in the Global South, have become prevalent and resulted in violations of human rights⁸⁰. The treaty infers that states, and companies themselves, are responsible to ensure that company activities even outside their own territory does not violate human rights.

3.2.2 Directive on Corporate Sustainability Due Diligence (CSDD)

In 2019, the European Commission investigated legislation, concluding that the voluntary approach is insufficient. The EU has now proposed a new mandatory human rights due diligence legislation, the Directive on Corporate Sustainability Due Diligence (CSDD)⁸¹. It is awaiting approval by the European Council and the European Parliament and will enter into force in a few years⁸². The new due diligence legislation concludes that companies must integrate due diligence into policies, identify, mitigate, prevent, and monitor human rights and environmental impacts, and also publicly communicate this⁸³. It is expected to apply to approximately 13,000 EU companies, and 4,000 non-EU companies⁸⁴. Companies that do not comply with this can face a compliance order or financial penalties depending on the extent of the company's turnover. Moreover, individuals and communities affected by the violations are eligible for financial compensation⁸⁵. To ensure that companies comply with the directive,

member states will be required to set up a civil liability regime as well as administrative penalties.

3.2.3 Substantiating green claims

As part of The European Action Plan on Circular Economy, the European Commission has proposed legislation on substantiating green claims. The legislation targets greenwashing, stating that "In order to not mislead, environmental claims should be presented in a clear, specific and unambiguous and accurate manner."86. It aims to address what they have identified as three key drivers for the issue: (1) the failure of the market to agree on a coherent method to measure environmental performance affecting the comparability of the data, (2) the failure of the EU to develop regulations to address this issue and (3) the failure of the provision of "[...] simplified, immediate and trustworthy information on environmental performance of products."87. The regulation infers that companies have to validate their green claims using the EU Product and Organisation Environmental Footprint methods. These methods aim to be more comprehensible, measuring environmental performance throughout the entire supply chain. The regulation is planned to be adopted this year.

4. Culture

4.1 CSR performance

The interpretation of what CSR infers varies according to context and the different value systems that prevail where companies operate⁸⁸. Cultural context affects CSR perceptions and attitudes of customers, managers, and employees⁸⁹. Norms and values are a part of cultural context and have been shown to affect company behaviors, CSR reporting, and the payoff of CSR⁹⁰. Research suggests that the current increase in internationalization within companies positively impacts CSR performance and disclosure⁹¹. However, cross-cultural differences still seem to impact CSR.

A study comparing business ethics between the countries Sweden, Australia and Canada concluded that the national culture of different countries has an impact on companies' business ethics and therefore also companies' CSR performance⁹².

Another study, comparing Eastern Asia and Europe, similarly found that companies' geographic location and national culture where companies operate affect CSR performance⁹³. This study used four indicators to determine national culture:

(1) a power distance index (PDI), which measures the degree to which less empowered citizens in a society accept an unequal distribution of power

(2) a measurement of individualism in societies, that is to which extent individuals primarily focus on themselves and the people in their immediate vicinity needs and interests, inferring that relationships between individuals are looser

(3) a measurement of masculinity, as masculine societies infer a greater focus on power, competitiveness, assertiveness, and achievement, whereas feminine societies values cooperation, quality of life, relationships, modesty and caring

(4) an uncertainty avoidance index (UAI) that measures to which extent peoples in societies accept ambiguity and uncertainty, such as if strict laws and regulations are preferred or not. The study concluded that more scarce CSR performances were associated with states that had high power distance and that were highly individualized and masculine, which was prevalent in Eastern Asian countries.

4.2 Levels of transparency

Moreover, different levels of transparency in different countries also set the scene for varying levels of corporate transparency⁹⁴. Several aspects can determine this, such as economic and cultural differences between countries, which lead to different tendencies in corporate transparency. Still, transparency also differs according to countries' laws/regulations, or because of the varying demands of media and society which affect the amount of information disclosed by companies⁹⁵.

For instance, China has a weaker regulatory quality compared to Japan and the United States. The media and society do not urge companies to be transparent in the same way as in the US or Japan. An opacity index created by PwC (opacity is the opposite of corporate transparency) showed that China had the highest opacity with a score of 87, while Japan scored a 60 and the U.S. a 36. Although the opacity scores have varied over time, the ranking order among China, Japan, and U.S. has remained the same⁹⁶.

5. The future of transparency in the IT industry

Global industries are shifting toward a more illuminated understanding of supply chain grievances; and are employing innovative methods to counteract their negative social and environmental impact. New technology, such as isotope analysis, has been utilized in the textile industry to trace the geographic source of specific textile fibers⁹⁷. Unilever, a consumer goods

- ⁶⁰ Maria Minoja, Ulpiana Kocollari & Maddalena Cavicchioli. A global analysis of corporate social performance: The effects of cultural and geographic environments. International Journal of Cross Cultural Management. Vol. 22, no. 2, 2022: 327-347.
- ⁹¹ Farooq, Qamar, Yunhong Hao, and Xuan Liu. "Understanding corporate social responsibility with cross-cultural differences: A deeper look at religiosity." Corporate Social Responsibility and Environmental Management 26.4 (2019): 965-971.
- ⁹² Namporn Thanetsunthorn. The impact of national culture on corporate social responsibility: evidence from cross-regional comparison. Asian J Bus Ethics. Vol 4, no. 1, 2015: 35–56.
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- ⁹⁷ Professional Clothing Industry Association Worldwide. Can Isotopes Ease Textile Traceability Fears? pciaw. org. 2022. https://pciaw. org/can-isotopes-ease-textile-traceability-fears/. (Accessed 2022-10-26).

deals with a greater complexity but could gather inspiration from other industries to develop and utilize innovative methods to ease transparency.

The IT industry

Be Georgia Wilson. Unilever adopts crowdsourcing for palm oil transparency. Procurementmag.com. https://procurementmag. com/sustainable-sourcing/ unilever-adopts-crowdsourcing-for-palm-oil-transparency (Accessed 2022-10-25).

- 99 Tallbo, Interview, 2022-10-14
- ¹⁰⁰ Interos Inc. Resilience 2022. The Interos Annual Global Supply Chain Report. 2022.
- ¹⁰¹ Charlie Steer-Stephenson. How AI technology can boost sustainable procurement. Procurementmag.com. https://procurementmag. com/technology-and-ai/ how-ai-technology-can-boost-sustainable-procurement (Accessed 2022-10-25)
- ¹⁰² IHS Markit. The Intelligent Supply Chain. Annual supply chain insights global survey. 2021.
- ¹⁰³ Cech, Interview, 22-10-29
- ¹⁰⁴ Charlie Steer-Stephenson. How AI technology can boost sustainable procurement. Procurementmag.com.
- ¹⁰⁵ ADDA, State Imposed Forced Labor in China. Swedish Buyers' Monitoring of Electronics Supply Chain, 2021.
- ¹⁰⁶ ADDA, State Imposed Forced Labor in China. Swedish Buyers' Monitoring of Electronics Supply Chain, 2021.
- ¹⁰⁷ Stefan Brehm & Helena Magnusson. Workers' grievances from four Dell suppliers in China. 2017.
- ¹⁰⁸ Tallbo, Interview, 2022-10-14.
- ¹⁰⁹ Tallbo, Interview, 2022-10-14.
- ¹¹⁰ Stefan Brehm & Helena Magnusson. Workers' grievances from four Dell suppliers in China. 2017.

company, employs a digital crowdsourcing platform to trace their palm oil supply to ultimately avoid deforestation. By engaging local knowledge, they aim to make the entire supply chain visible, from the initial to final stages⁹⁸. Kristin Tallbo believes that, for instance, the textile industry has made greater progress than the IT industry with regards to transparency. The scope of the problem could be a reason for this - the textile industry deals with sourcing of raw materials, such as cotton, which concentrates the focus⁹⁹. The IT industry deals with a greater complexity but could gather inspiration from other industries to develop and utilize innovative methods to ease transparency.

5.1 Intelligent technology

Software solutions are on the rise for monitoring and creating intelligent global supply chains. Through the simplification of data collection, organizations can increase visibility of the supply chain and mitigate potential disruptions¹⁰⁰. Innovative technology such as artificial intelligence (AI) could propel supply chain transformations¹⁰¹ and consolidate compliance. A majority of respondents (1,495 out of 1,500) in a survey conducted by the software company Interos, replied that software implementation for supply chains is beneficial. More than 75 percent were planning to introduce intelligent software solutions to their supply chains within 12 months, while less than 20 percent already utilized intelligent technology¹⁰². Alexandra Cech at the **Responsible Business Alliance can** envision the integration of enhanced IT solutions across the industry but highlights the importance of having good quality data coming into the system¹⁰³. The founder of the procurement AI platform DeepSteam, Jack Macfarlane, believes in the continued development and demand for agile software, which facilitates supply chain relationships and

communication. Automating processes that are manual today, such as the prediction of risks, enables procurers to pour effort into strategizing and negotiating instead of wasting resources on using outdated methods¹⁰⁴.

5.2 Improved audit methods

A report from 2021 by Adda, The Church of Sweden and The Swedish Regions concluded that the IT industry lacked competency to identify and handle forced, state-imposed labor in China along the electronics supply chain¹⁰⁵. The situation illuminates how ill-adapted audit procedures and brands' current monitoring tools could risk overseeing new forms of grievances in the supply chain¹⁰⁶. Therefore, risk assessments and audits require proper tools to ensure reliability¹⁰⁷. Superficially assessing a situation in a factory according to predetermined or outdated audit processes is insufficient and hinders a holistic view of the working conditions¹⁰⁸. Kristin Tallbo mentions that software is a vital tool to aid companies supply chain visibility, but many seem to oversee what is already available. Tallbo exemplifies a method based on open data searches, which successfully provided information on transfers of groups at risk to factories in Eastern China as part of the government's so called poverty alleviation program¹⁰⁹. The method has been developed by the Swedish company Globalworks, which also owns the tool social@riskTM used to investigate factory conditions independent of auditors and without access to factories. Using openly available data on social media, social@riskTM gathers the experiences of factory workers. The data is then analyzed through algorithms and machine learning and enables the unfiltered experience of the workers to be unearthed. A key goal of social@riskTM is the identification of non-compliance at suppliers to ultimately generate proactive prevention, not only retroactive correction, as is standard today¹¹⁰.

Conclusion & areas for further discussion

Meaningful transparency

The concept of meaningful transparency is most often brought forward by the IT industry, but the notion in itself is most likely shared by the buyers. It suggests that complete openness is not desirable as it poses a too great of a challenge to buyers to assess large volumes of information, which, according to the industry, may lead to "misinterpretation and inaccurate assumptions of risk"¹¹¹. The discussion therefore should evolve not so much around the level of transparency but rather focus on the materiality of the information.

In an attempt to define meaningful transparency, this analysis lists three general traits: openness, contextualization and external verification. However, the analysis also shows that transparency is a fluid concept, deeply dependent on the role of the stakeholder and negotiated between involved parties. Buyers, brands, and consumers have different expectations on one another as well as dissimilar concerns for transparency.

Therefore, meaningful transparency likely requires the following:

1. Established trust

The key ingredient for transparency is trust. Lack of trust increases the need for control. More control means more resources are allocated on follow-ups, audits, and specific reporting. If the industry manages to build trust with the buyers by proactively communicating risks and deploying the use of all available resources to ensure compliance – it could minimize skepticism from the buyer side.

Brands may fear that an open communication of risks threatens to affect their reputation, competitive advantage, or relationships with buyers. At the same time, brands that have experienced increased scrutiny have managed to increase transparency without any visible negative consequences. Actors in the supply chain may resist transparency out of fear to be cut off if issues are found. On the other hand, there are examples of buyers who strive to collaborate with non-compliant suppliers in case of an incident, instead of terminating the contract.

This suggests that it is possible to find common ground, perhaps through the creation of a technology-enabled "safe space" where information can be shared.

2. Mutual understanding of cost

Buyers favor suppliers that meet different sustainability criteria but rarely reward transparency in itself. Are buyers ready to refrain from certain suppliers that do not meet their transparency criteria or proactively choose brands that demonstrate higher levels of transparency? Would that help suppliers justify increased investments in transparency?

Material information

Buyers need information about a company's or product's sustainability performance without putting an unrealistic administrative burden on their suppliers. In addition, there is an increasing demand for specific data around the carbon footprint of products and services for the buyer's own sustainability reporting and measuring. In both cases, common standards and methodologies are lacking, making comparisons difficult or even impossible. In the absence of standards suppliers may - intentionally or unintentionally - emphasize information that is favorable to them but not material to the procurement at hand, or downplay risks and challenges. The Responsible Business

¹¹ The Responsible Business Alliance, Practical Guide to Transparency in Procurement, 2019 Legislation may raise the bar, but voluntary incentives take it a step further, by raising the ceiling. Alliance calls for greater harmonization in its Practical Guide to Transparency in Procurement, but more can be done in this area. Third-party validation can combat greenwashing but that will most likely drive costs.

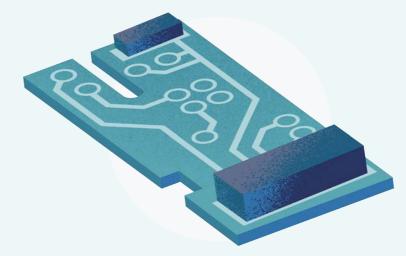
This relates to the difference between transparency and traceability, as pointed out by Kristin Tallbo¹¹². Full traceability for every situation is not possible or even advisable, but are there areas where traceability should be established? Sometimes buyers' call for traceability is a result of a lack of trust, but sometimes it signals a need for robust and specific data.

Voluntary practices and legislation

According to this analysis, a combination of soft law and hard law is needed to aggregate change of the state of transparency within the IT industry. The soft laws are a useful tool to change perceptions and norms regarding sustainability reporting and transparency, preparing industries to adapt to more sustainable corporate activities. In combination with incentives from the buyers, it could also infer an opportunity to make transparency a competitive advantage, fostering transformative innovation and truly prioritizing transparency and by extension also sustainability. Legislation may raise the bar, but voluntary incentives take it a step further, by raising the ceiling.

Transparency goes both ways

By openly communicating how they value sustainability in requests for tenders, buyers have a powerful tool to drive sustainable change as this provides a business case for brands to make necessary investments. However, this analysis shows that even though there are recommendations to put a weight on sustainability, such as in Norway, this is still in many ways an untapped opportunity. As touched upon by both Christian Tangene and Didier Cayrac, there needs to be more dialogue with the industry and capacity building for buyers around how to best utilize this tool, when to use it and how to design and deploy relevant methods for evaluating award criteria^{113, 114}.



¹¹² Tallbo, Interview, 2022-10-14
 ¹¹³ Tangene, Interview, 22-10-31
 ¹¹⁴ Cayrac, Interview, 22-10-17

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