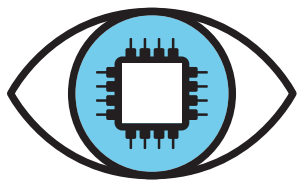# State of Sustainability Research on Corporate ESG Performance: The Electronics Industry

Prepared for the Global Electronics Council in support of EPEAT™ criteria development

July 2022

electronics
watch

Responsible public
procurement.
Rights of
electronics workers.

Electronics Watch is an independent monitoring organisation for public buyers. We help public sector organisations work together, and collaborate with civil society monitors in production regions, to protect the rights of workers in their electronics supply chains. Electronics Watch affiliated public buyers are in Australia, Austria, Belgium, Denmark, Germany, the Netherlands, Norway, Spain, Sweden, Switzerland, and the UK. Our monitoring partners work in Bolivia, China, Czechia, DR Congo, Hungary, India, Indonesia, Malaysia, Mexico, the Philippines, Poland, Taiwan, Thailand and Vietnam.

This report was prepared by Electronics Watch for the Global Electronics Council (GEC). GEC is a mission-driven non-profit that leverages large-scale purchasing power, both public and private sector, as a demand driver for more sustainable technology. GEC manages the EPEAT™ ecolabel, used by more purchasers of electronics than any other ecolabel worldwide to identify more sustainable electronic products. EPEAT establishes criteria that address priority sustainability impacts throughout the life cycle of the product, including criteria that incentivize climate change mitigation, sustainable use of resources, reduction of chemicals, and corporate social performance, which is the subject of this report. For more information, visit www.gec.org and www.epeat.net.

Contents

1. Introduction

It is a daunting task to assess the "state of sustainability" in the global electronics industry. By some estimates, this is the largest global industry if measured by employment.[1] ICT products are complex technological marvels that depend on supply chains that stretch across every continent with the possible exception of Antarctica. Upstream those supply chains become increasingly obscure and difficult to evaluate, and it is commonly acknowledged that risk increases with obscurity.

The good news is that the potential for change based on demand for an ecolabel with high standards is profound. Such a label could be an integral part of a public procurement strategy that allows governments at all levels to use their vast purchasing power to promote human rights and environmental responsibility throughout the supply chain. Public buyers in many countries have been able to promote supply chain transparency and better conditions in global supply chains, such as electronics, for several years already. Yet, we are only beginning to realise this potential of public procurement to drive improvements in supply chains.

With this analysis we seek to push this development a bit further by suggesting areas of sustainability criteria for the EPEAT™ ecolabel that best meet the needs of workers in the global electronics industry and address gaps in corporate Environmental, Social and Governance (ESG) performance.

We start with a general overview of risks in the global electronics supply chain from both a regional perspective and a supply chain perspective. This overview focuses on the most salient risks to worker rights and occupational health and safety. We then review the risks from two perspectives to be able to focus the analysis toward practical criteria for the EPEAT ecolabel. We seek to understand the risks from workers' perspective, defining their priorities as far as generalisation allows. We also view the risks through the prism of "core issues" and core rights that influence conditions in workplaces widely. Finally, the report stresses challenges for social auditors to detect and remedy these issues as the credibility of any label depends on robust standards and methods to verify that criteria are met.

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1 See, for example, https://www.ibisworld.com/global/industry–trends/biggest–industries–by–employment/.

This analysis results in a general strategy to mitigate impact in electronics supply chains focused on the core issues, supply chain transparency, standards for monitoring and reporting, and remediation. This strategy is the basis for the proposed areas of criteria development.

2. Methodology

The analysis of social risks in this report is based on Electronics Watch's worker–driven monitoring methodology.[2]

The primary purpose of worker–driven monitoring is to protect workers from rights violations and related harms. Workers can initiate an investigation through complaints. Organisations and independent researchers located near workers' communities lead the monitoring activities. They are trained and experienced in worker rights monitoring. They develop relations of trust with workers. They produce evidence–based findings based on diverse and complementary techniques, methods and sources. They have no material stake in the outcomes of investigations, and they operate independently of the industry they monitor to ensure there is no conflict of interest. Workers are informed of investigatory findings and involved in the development of plans to mitigate, prevent, and remedy harm as far as possible.

This report draws primarily upon factory–specific monitoring and regional fieldwork conducted by Electronics Watch and our monitoring partners in 12 manufacturing countries from 2016–2022. Monitoring partners are independent civil society organisations with experience and expertise in monitoring labour rights, occupational health and safety and environmental issues in the electronics industry. They are well positioned to understand the risks from workers' perspective. They work in China, Czechia, Hungary, India, Indonesia, Malaysia, Mexico, the Philippines, Poland, Taiwan, Thailand, and Vietnam. In this research we have used both qualitative methods, such as semi–structured interviews and focus group discussions, and quantitative methods, such as worker surveys and analysis of worker grievances posted publicly online. Review of secondary sources is also part of our methodology.

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2 For a comprehensive discussion of this methodology, see Electronics Watch Monitoring Methodology Guidance 1.0 (2020), available at: https://electronicswatch.org/electronics–watch–monitoring–methodology–guidance–1–0_2577562.pdf.

The supply chain perspective in this report is based on data from on–going monitoring of industry journals and academic research. We continuously document developments in electronics industry sectors to provide insights to our affiliated public buyers. Our expertise stems from over two decades of experience in researching and engaging the electronics industry. Finally, our recommendations for criteria development are based on review of public procurement objectives, standards and criteria in several countries and on different levels of government. We draw especially on our experience with public buyers affiliated to Electronics Watch.[3]

Nevertheless, we are keenly aware that there will be gaps in any analysis as challenging as a sustainability assessment of the global electronics industry. We have tried to adapt a worker–centerd perspective for our analysis and hope that it will contribute to meaningful new criteria for the EPEAT ecolabel.

3. Public Procurement Drivers

Human rights abuses in public procurement supply chains are by now widely documented, and the obligation for states[4] to use public procurement as a driver for human rights is becoming clear.

The United Nations Guiding Principles on Business and Human Rights (2011) specifically address procurement activities and recommend that "States should promote respect for human rights by business enterprises with which they conduct commercial transactions" (UNGP No. 6). Several National Action Plans on Business and Human Rights address the role of public procurement (e.g., Germany, Italy, Switzerland, the United Kingdom, and the United States). Sustainable Development Goal 12.7 calls for sustainable public procurement. Directive 2014/24/ EU on public procurement allows social and environmental criteria and European Commission procurement policy now recommends greater use of innovative, green and social criteria.[5] The OECD recommends linking public procurement to responsible business conduct.[6]

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3 Affiliates are listed here: https://electronicswatch.org/en/affiliates_2221327

4 In this report "states" refer to national governments, rather than regional or subnational governments, as the term is used in the United States.

5 European Commission, "Public procurement strategy," available at https://ec.europa.eu/growth/single–market/public–procurement/strategy_en.

6 OECD, "Responsible business conduct in public procurement," June 2017, available at https://mneguidelines.oecd.org/Responsible–business–conduct–in–government–procurement–practices.pdf.

Public buyers, policy makers, trade unions, civil society, and companies are increasingly familiar with the concept of "due diligence" in relation to business and human rights. France, Germany, and Norway have adopted human rights due diligence legislation, while it is under consideration in Austria, Belgium, Finland, Luxemburg, the Netherlands, and Spain, and promoted by civil society in many other countries.[7] The European Commission has recently proposed a directive for corporate sustainability due diligence.[8] These developments heighten public buyer interest in ensuring human rights and environmental due diligence in their supply chains and in an ecolabel that can provide some assurance of due diligence.

Public buyers are also increasingly concerned with forced labour in global supply chains. Almost 90 states have endorsed the United Nations Call to Action to end forced labour, modern slavery, human trafficking, and the worst forms of child labour by 2030.[9] The UK, the US, Canada, Australia and New Zealand have launched a set of principles to tackle modern slavery in global supply chains. These states have committed to use the vast purchasing power of their public sectors to demand higher ethical standards in their supply chains and eliminate modern slavery.[10]

The UK Modern Slavery Act (2015), though not binding on public organisations, has also prompted a range of public entities to undertake forced labour risk assessments in their supply chains. The UK Home Office, for example, publishes annual Modern Slavery Statements. Meanwhile, the Australian Modern Slavery Act (2018) is binding on public organisations, prompting public buyers in a variety of organisations to examine their supply chains for forced labour risks. Similarly, rules in the US Federal Acquisition Regulation (FAR) strengthen protections against trafficking of persons in federal contracts and require federal contractors to ensure that their entire supply chain is free from human trafficking and forced labour and to maintain compliance plans. From this perspective, a label should be

7 ECCJ, Map: Corporate accountability legislative progress in Europe, https://corporatejustice.org/publications/map–corporate–accountability–legislative–progress–in–europe/.

8 European Commission, "Proposal for a Directive on corporate sustainability due diligence," available at https://ec.europa.eu/info/publications/proposal–directive–corporate–sustainable–due–diligence–and–annex_en.

9 This Call to Action1 was launched on the 19th September 2017 during the 72nd Meeting of the UN General Assembly. For signatories, see: https://www.gov.uk/government/publications/a-call-to-action-to-end-forced-labour-modern-slavery-and-human-trafficking

10 "Principles to Guide Government Action to Combat Human Trafficking in Global Supply Chains," 2018, available at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/872438/Principles_to_Guide_Government_Action_to_Combat_Human_Trafficking_in_Global_Supply_Chains.pdf.

able to guarantee strong due diligence to investigate, mitigate, prevent and remedy forced labour in supply chains. The analysis of social risks in Section 4 emphasizes risks to freedom of employment.

The climate crisis is another major driver for public procurement. In recent years national and international policies on climate change and human rights and environmental due diligence have increasingly included public procurement as an essential instrument in the "smart mix toolbox." Initiatives like the EU Green Deal include public procurement as an essential and central instrument to support the strategic goal of CO_2 reduction. The EU Clean Vehicle Directive, which sets ambitious national targets for the share of procured low–emission and zero–emission vehicles, will focus public buyers on these vehicles and the associated battery supply chains, which are dependent on minerals such as lithium, cobalt, and nickel. Conditions in the mining sector are therefore also increasingly likely to be in the focus of public procurement.

These developments in concert will only increase the transformative potential of public procurement to protect human rights, safeguard environments and accelerate sustainable development in coming years.

4. Social Risks

4.1. Introduction

The global electronics industry is one of the largest in the global economy by employment with an estimated 18 million workers.[11] Consumer electronics markets are expected to grow at a rapid rate over the coming decade, reaching US$ 1.23 trillion in sales by the end of 2031 according to one report.[12] According to a business intelligence source, China will remain the dominant global electronics manufacturer, producing 50% of global electronics in value terms in 2025. Southeast Asia, especially the Philippines, Malaysia, Indonesia, Thailand, and Vietnam, are also important. Taiwan is especially important for production of components, such as semiconductors.

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11 See, for example, https://www.ibisworld.com/global/industry–trends/biggest–industries–by–employment/.

12 See, Consumer Electronics Market, available at:
   https://www.persistencemarketresearch.com/market–research/consumer–electronics–market.asp.

India is seeking to establish itself as an electronics production hub. In Europe, Poland has strong potential for growth.[13]

There is risk of worker rights violations in all these regions.

The ILO estimates that 24.9 million people are forced to work worldwide. Almost one of every four victims of forced labour is a migrant worker, and 15% work in manufacturing.[14] The risks include countries with significant electronics industries. The U.S. State Department's Trafficking in Persons Report ranks countries based on their government's efforts to meet the minimum Trafficking Victims Protection Act standards. In 2021, the Trafficking in Persons Report ranked China and Malaysia in Tier 3, the highest risk.[15]

The 2021 ITUC Global Rights Index focuses on abuses of the right to strike, the right to establish and join a trade union, the right to trade union activities, civil liberties, and the right to free speech and assembly. Among major electronics production countries listed above, six (China, India, Indonesia, Malaysia, the Philippines, and Thailand) received the second to worst rating, "no guarantee of rights," and two (Hungary and Vietnam) the third worst rating, "systematic violation of rights."[16]

The ILO also tracks work–related accidents and illnesses globally. While industries such as construction and agriculture are particularly high risk, the ILO emphasizes the risk of hazardous substances, estimated to cause more than 600,000 deaths a year. The former United Nations Special Rapporteur on human rights and hazardous substances and wastes, Baskut Tuncak, also highlights the risks of hazardous substances, including worker exposure to toxic chemicals.[17] This has long been an issue in the electronics industry.

13 EuroMonitor International, "Top 10 countries to drive Global Electronics Production over 2017–2015," January 2018, available at:
https://www.euromonitor.com/top–10–countries–to–drive–global–electronics–production–over–2017–2025/report.

14 https://www.ilo.org/global/about–the–ilo/newsroom/news/WCMS_574717/lang––en/index.htm.

15 https://www.state.gov/wp–content/uploads/2021/09/TIPR–GPA–upload–07222021.pdf.

16 International Trade Union Confederation, "2021 ITUC Global Rights Index," available at
https://files.mutualcdn.com/ituc/files/ITUC_GlobalRightsIndex_2021_EN_Final.pdf.

17 Baskut Tuncak, Opening Remarks, 24th October 2019, United Nations Special Rapporteur on human rights and hazardous substances and wastes, 42nd Session of the U.N. Human Rights Council. See also, U.N. Human Rights Council, "Principles on human rights and the protection of workers from exposure to toxic substances," September 2019, available at https://undocs.org/pdf?symbol=en/A/HRC/42/41.

4.2. Labour

4.2.1. Freedom of Association and the Right to Collective Bargaining

Freedom of association is a basic human right. Everyone is free to organise and to form and participate in groups, either formally or informally. Workers and employers are free to form and join organisations of their own choosing. Combined with freedom of association, the right to collective bargaining ensures that employers and workers have an equal voice in negotiations and that the outcome is fair and equitable. These rights were guaranteed in two fundamental ILO conventions shortly after World War II. They are the Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) and the Right to Organise and Collective Bargaining Convention, 1949 (No. 98). Concurrently, the United Nations adopted The Universal Declaration of Human Rights as a common standard of achievements for all peoples and all nations, including "the right to form and to join trade unions" (Article 23).

In the electronics industry, a small minority of workers are members of independent, democratic trade unions. Fewer still benefit from collective bargaining agreements. Without access to both, it is more difficult for workers to defend themselves against work–place abuses, protect their health and safety, and strive for decent working conditions.

Common violations of the freedom of association and the right to collective bargaining include:

- **Anti–union discrimination**

These are acts intended to make the employment of a worker subject to the condition of not joining a union or giving up trade union membership. Anti-union discrimination also includes discrimination against a worker by reason of union membership or because of participation in union activities outside working hours or, with the consent of the employer, within working hours. Examples that may constitute anti–union discrimination include black–listing, firing, demotions, transfers, non–provision of bonuses, repeated renewals of short, temporary or fixed–term contracts.

For example, in the Philippines, the harassment, intimidation, and extrajudicial killing of union members with impunity sends a chilling message to all workers. This violence undermines the fundamental

right to freedom of association and collective bargaining. Workers commonly report that they believe unions are not allowed in their companies. More widely, in electronics production regions, workers reportedly fear job termination if they form or join unions.

■ **Interference with trade union activities**

Workers' organisations should be completely independent of employers and their organisations in exercising their functions. Interference are acts intended to: promote the establishment of a trade union under the domination of the employer (so called, yellow unions that negotiate protection contracts); and support trade unions by financial means, with the object of placing such organisation under control. In China, the All China Federation of Trade Unions (ACFTU) is not independent, but an organ of the state.

■ **Lack of access to trade union representatives**

When companies are in Special Economic Zones there may be an unwritten "no union, no strike" policy, enforced by both the state and the private sector. In the Philippines, for example, trade union representatives have virtually no access to workers inside the zones as only employees are allowed entry except when outsiders have an official appointment or business with the zone authority.

Challenge for social auditors

Without prompting by public reporting on strikes or worker protests, it is uncommon that social auditors seek to interview workers to discuss their experience with organising or unionizing. It is also uncommon for auditors to identify and interview union representatives to discuss their experiences and verify the non–existence of anti–union discrimination and interference with trade union activities.

Social auditors usually do not report whether existing unions were imposed by the government or the employer with the intent to limit employees' rights even in countries where this is the norm. They also typically focus on the level of single enterprises without recording indicators of repression in the wider environment, occurring outside of the enterprise, even when this repression directly

influences workers of the enterprise concerned. They rarely consider censorship and other forms of repression of speech and freedom of the press, even when evidence suggests that this repression is sometimes designed to repress the right to freedom of association.

Addressing these gaps would serve to distinguish different degrees and types of infringements of the right to freedom of association. This would support discussion of appropriate responses to the issues uncovered.

4.2.2. Forced Labour

The ILO defines forced labour as: "All work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself (sic) voluntarily" (Convention No. 29, Article 2). This includes labour that is provided under the "menace of any penalty," which can include economic sanctions as well as loss of rights or privileges. It also includes labour which is not provided voluntarily because it is induced by deceit or false promises or because of restrictions on the freedom of movement. In short, when workers would suffer a penalty for not working or when they are entrapped in any way their labour is forced.

Examples of forced labour include:

■ **Forced overtime**

Forced overtime is forced labour when:
- An employee is compelled to work hours beyond legal limits by threatening to terminate employment, eliminate overtime hours, or other sanctions, or;
- An employee is required to work overtime to make a legally mandated minimum wage.

Excessive working hours are endemic in the electronics industry. Indeed, the industry maximum for working hours – 60 hours per week

including overtime[18] – is itself out of compliance with legal norms in many countries, including China. The Code also allows for exceptions in emergency or unusual situations. However, the ILO Committee of Experts has explained that the imposition of overtime does not in itself constitute forced labour under the Forced Labour Convention (No. 29). There are two circumstances in which overtime is forced labour. The first is if overtime work is required for an employee to make a legally mandated minimum wage. The second is if overtime is imposed "under the menace of a penalty," such as dismissal or poor job performance evaluations, and the overtime exceeds the limits permitted by national legislation or collective agreements.[19] This second circumstance is relevant in the electronics industry.

Challenge for social auditors

In the context of workers' desire for gross income and the diversity in workers' receptiveness to overtime limits, the right to refuse overtime is often overlooked in social audits. While audits commonly include a review of working schedules and hours, there is seldom any effort to consider the frequency of employees' requests for time off, when and how often they are denied and how this might reflect violations of the core right to freedom of employment. When the right to refuse excessive overtime is not respected, workers cannot discuss with their employers the conditions under which they will agree to overtime. It also deprives workers of the possibility of seeking relief from longer term stress when they feel pushed beyond their limits.

■ **Forced student internships**

In 2007, the Chinese government publicized new requirements for students from technical schools to complete internships on "the front line of production." By 2010, the government described one of the

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18 See, Code of Conduct of the Responsible Business Association, available at:
https://www.responsiblebusiness.org/code–of–conduct/.

19 ILO, "General Survey concerning the Forced Labour Convention, 1930 (No. 29), and the Abolition of Forced Labour Convention, 1957 (No. 105)", Geneva, 2007
https://www.ilo.org/wcmsp5/groups/public/–––ed_norm/–––relconf/documents/meetingdocument/wcms_089199.pdf.

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objectives of this system to be "resolving some domestic regions' problem with the short supply of skilled workers," even directing schools to consider the needs of "enterprises in urgent need of skilled workers" in the design of internships.

Workers' story

Three interviewees were young, second year computer students from a technical school in Hebei. They arrived together with approximately 1,000 of their peers and were expected to work three or four months. They were compelled to complete the internships and work 60 hours or more per week or their schools would not give them their school degree.

Well–designed internships offer the possibility of supporting students' development of skills, helping them secure better employment once they finish their degrees or qualifications. But the requirement for schools to send students to internships and to consider enterprise needs when deciding where to send students contributed to pressures that corrupted the system.

Students often do not have a choice over when and where to intern, and the internship is often not related to their studies. Still, the students must undertake the internships, or they will not receive their educational diplomas. They are forced to work sometimes mind–numbingly long hours in difficult conditions, often performing repetitive motions which neither require nor build skills to improve students' future employment. In this case, student internships may be forced labour, that is "work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself (sic) voluntarily" (ILO Convention No. 29). The ILO has explained that "menace of penalty" includes various forms of coercion, such as physical violence, psychological coercion, and the loss of rights or privileges.[20] The prospective loss of an educational diploma, necessary to obtain jobs and a decent livelihood, is an example of a "menace of penalty."

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20 ILO, "Giving Globalization a Human Face," 2012, International Labour Conference101/III/1B, available at:https://www.ilo. org/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_174846.pdf, at paragraph 270.

■ **Restrictions of the right to resign**

According to the Labour Contract Law in China, employees have the right to unilaterally terminate a labour contract without reason if the employer is given a 30–day written notice or a three–day notice in case of probational employment. Despite these legal provisions, workers often must overcome a host of obstacles before they can leave the factory.

During busy times, factories try to maintain production capacity and lower the cost of recruitment by preventing employees from resigning.[21] Workers report that their factories use a queuing system or waiting lists to control worker turnover. They may also have an internal resignation limit such as, three workers per month and team. Managers refuse to process resignation requests outside these limits.

A common method to prevent workers from resigning is to withhold employees' final month of wages, so that employees must forfeit a non–negligible amount of money if they resign without management's permission. Less common methods include refusing to give workers the proper documents to record the end of their employment which workers may need to transition their pension and other social security benefits to a new employer. The result is that some workers are penalized for exercising their legal right to resign while others keep working against their will.

■ **Deception about wages and benefits**

Factories use labour agencies to obtain low-cost labour or scale up quickly during periods of high production. Agencies function as referral companies, introducing workers to job opportunities, but also as the employers. Agency recruitment is sometimes largely unsupervised, which opens the doors for unscrupulous agents to deceive workers and lure them into employment. Workers frequently report that they were not told the truth about pay and working conditions. For example, in China workers reported:

- The dispatch agency seizing workers' signed contracts and never returning them. Instead, workers learned at the factory that their hourly wage was 3 RMB less than promised.

- Workers being promised signing bonuses for every 30 days spent on the job, which never materialised.

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21 The electronics industry experiences regular seasonal production peaks. Especially in preparation of for Christmas business electronics factories run at full capacity worldwide.

- The dispatch agency promising to register workers for social security contributions, but not doing so.

- The dispatch agency promising lunch and dinner breaks of one hour, rather than the actual 30 minutes.

Deception can violate free employment standards, either because workers would not have entered the factory if they were informed about the real conditions or because the costs and consequences of leaving once the real conditions are revealed are prohibitively high.

■ **Debt bondage**

In Malaysia the exploitation of migrant workers "should be considered a scandal," according to the United Nations Special Rapporteur on extreme poverty and human rights.[22] There are more than two million documented foreign migrant workers and perhaps an equal number of undocumented workers. In electronics they often work in tier two or three in semiconductor and computer peripherals suppliers that are audited less frequently than tier one suppliers.

Workers' story

Irene from Indonesia arrived in Malaysia when she was 19 years old to work in a biscuit factory but was placed in an apparel factory. She fled that factory because of long hours in stifling heat and an abusive manager. Because the law does not allow her to change employers, she became "irregular" but found a job in a third–tier electronics factory, applying coating to microchips. Her new employer, an employment agency, operated illegally without a license to employ foreign workers. He insisted she sign a release 'consenting' to the confiscation of her passport. She had access to her passport only against a deposit of €400 or nearly twice her gross monthly salary. Irene worked 12h alternating day and night shifts, more than 100 hours of overtime each month, with only a day off every other week. Her employer deducted almost half her salary every month. The deductions supposedly covered the cost to keep her

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22 United Nations Office of the High Commissioner, Statement by Professor Philip Alston, United Nations Special Rapporteur on extreme poverty and human rights, on his visit to Malaysia, 13–23 August 2019.

> off the blacklist after she ran away from her first employer, and government fees to get her regular immigration status reinstated. She had not received any salary for two months when Electronics Watch met her and was visibly scared her employer would find out about her meeting with us.

These workers are in debt, irregular, scared of speaking up out of fear of being jailed and deported. They take loans at high interest rates to pay illegal or excessive fees to recruiters and arrive at work in debt. Their wages are so low they work long hours of overtime to pay off their debt and survive, and remit home a much smaller amount than promised. They may be cheated of wages from unscrupulous employment agents who confiscate their identity documents. Fear of losing their jobs and being deported and blacklisted effectively keeps them silent. They are trapped in low–wage, abusive conditions, without the freedom to return home to their families, obtain alternative employment, or speak up against poor treatment.

According to the Special Rapporteur on contemporary forms of slavery, debt bondage is a key form of contemporary slavery across the world. Debt bondage can also be classified as forced labour under the ILO Forced Labour Convention (No. 29).[23]

In 2014, the research and social auditing organisation, Verité, estimated that more than 90% of all foreign migrant electronics workers paid recruitment fees to get their jobs, and at least half of them were paying off debts for the first half of their job contracts.[24]

These conditions are not unique to Malaysia. For example, in Taiwan migrant workers report the following forced labour risk factors related to the recruitment process:

• Excessive placement fees.

• Monthly "service fees" to their Taiwanese brokers while working in Taiwan.

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23 See, "Special Rapporteur on contemporary forms of slavery, including its causes and consequences," available at: https://www.ohchr.org/en/issues/slavery/srslavery/pages/srslaveryindex.aspx.

24 Verité, 2014, "Forced Labor in the Production of Electronics Goods in Malaysia: A Comprehensive Study of Scope and Characteristics," available at: https://www.verite.org/wp–content/uploads/2016/11/VeriteForcedLaborMalaysianElectronics2014.pdf.

- Personal identification documents withheld.

- Illegal "transfer fees" charged by the broker.

- **Restrictions on freedom of movement**

In 2020, in the context of the COVID–19 pandemic, many employers have restricted migrant workers' freedom of movement. In Taiwan, employers prohibited migrant workers from leaving their dorm or factory even though there was never a national or local lockdown ordered by the government. Most companies, including the electronics companies, announced a total ban on the movement of the migrant workers and demanded all migrant workers who lived outside to move back to centralized dorms. Many migrant workers complained that their living conditions became even worse because there were more people crowded into the same rooms.

4.2.3. Discrimination

The ILO defines discrimination in employment and occupation as any "distinction, exclusion or preference … which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation" (Convention No. 111). Discrimination may occur before hiring, on the job or upon leaving. It does not have to be intentional. It can be direct or indirect. Indirect discrimination refers to situations, measures or practices that are apparently neutral but which in fact result in unequal treatment of persons with certain characteristics.

> **Report from the field**
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> Most workers interviewed in Vietnam said that recruitment practices were favourable to women. One worker stated: "The company posts its job advertisement publicly on its website and at the front gates with the requirement of age from 18 to 40 years old and priority for women." … One worker explained that the company prefers women because "women are hard–working and meticulous, while men often make trouble and fight others. Women can work under pressure from management; they are more obedient than men."

According to Convention No. 111, the basis for discrimination is race, colour, sex (including sexual harassment), religion, political opinion, national extraction (including linguistic minorities), and social origin. However, other ILO instruments add prohibitions against discrimination based on HIV/AIDS, age, disability, family responsibilities, sexual orientation, and trade union membership or activities.

In the electronics industry, discrimination based on sex, national extraction, age, and trade union membership are particular risk factors.

For example, in Vietnam electronics firms prefer to recruit female workers for rank–and–file work but very few women are appointed to managerial positions. Some companies have a policy of "six–month contracts" for female workers to reduce enterprises' obligation with pregnant female workers. Female electronics workers typically earn less than their male counterparts in all wage components. Workers also report pregnancy tests as a condition of hiring. Older workers, mostly women, face the risk of being dismissed and replaced by younger and lower–paid workers.

Challenge for social auditors

Workers who face discrimination in employment will not meet social auditors if they are not actually employed and the auditors do not seek to identify those excluded from employment. Review of suppliers' public recruitment notices can help to identify explicit forms of discrimination in hiring. But this kind of review is not common in social audits. More deliberate monitoring of the composition of suppliers' workforces, supplemented by interviews with employees, is likely the best method to improve the visibility of and effective responses to this issue.

4.2.4. Working Hours

In 1919, the very first ILO convention, the Hours of Work (Industry) Convention, set a maximum of an eight–hour working day and a 48–hour working week. More than a century later, limits on working hours and overtime work differ widely from country to country. In the electronics industry, periodic excessive overtime is endemic.

While companies commonly resort to overtime spikes during high production periods and workers, too, often welcome long hours when they receive overtime premiums, enforcement of limits on working hours is nonetheless important. In extreme conditions, workers die from overwork, sometimes suddenly, and often without knowing the risks that extreme forms of overtime posed to them. These risks are especially acute when workers are exposed to toxic chemicals without adequate industrial hygiene controls. Excessive overtime is also linked to heightened risk of work injuries as tired workers are more likely to make mistakes, or skip safety measures, especially at end of shifts, when they are eager to return home.

4.2.5. Workplace Violence and Harassment

The latest ILO Convention, Convention 190, the Violence and Harassment Convention (2019), defines violence and harassment as: "unacceptable behaviours and practices, or threats thereof, whether a single occurrence or repeated, that aim at, result in, or are likely to result in physical, psychological, sexual or economic harm, and includes gender–based violence and harassment." This includes gender–based violence and harassment, "violence and harassment directed at persons because of their sex or gender or affecting persons of a particular sex or gender disproportionately and includes sexual harassment."

Thus, violence and harassment can be an action or just a threat of action; a single occurrence or repeated; aimed at, resulting in, or just likely to result in harm of a physical, psychological, sexual or economic nature.

By this definition, workplace violence and harassment are common in the electronics industry. Workers report verbal abuse and tensions with supervisors across all regions of production. For example, migrant workers in Central and Eastern Europe often report harassment and discrimination based on their national extraction and ethnicity, while in China we see reports of physical violence because of tensions on the shopfloor. While only a minority of employees directly suffer more serious forms of harassment, workers also report sexual harassment and abuse.

Workplace violence and harassment are likely underreported. For example, review of Chinese hotlines' records includes numerous reports of workers voicing concern over their supervisors' rudeness

and disrespect. However, fear of reprisals silences the workers most in need of support. Those who believe their supervisors will punish them for reporting abuse will not identify themselves and will refuse outside support in order not to risk their jobs. Thus, non–reporting of violence and harassment should not be seen as evidence of their absence without understanding the methods used to identify this issue.

4.3. Occupational Health and Safety

4.3.1 Toxic Chemicals

Researchers and civil society organisations in countries where electronics manufacturing takes place have reported on worker exposure to toxic chemicals since the 1980s. For example, in California, the Silicon Valley Toxics Coalition gained national recognition when it exposed the large–scale contamination of the water table throughout Silicon Valley and a high occurrence of chemically induced industrial illness in electronics companies, undermining the image of a clean industry.[25]
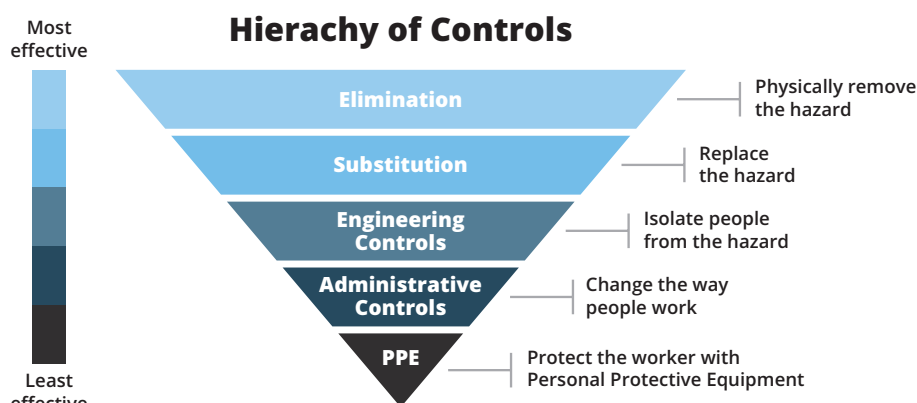
Still today, the electronic industry uses thousands of chemicals in the materials and component manufacturing and assembling of products. These chemicals may be explosive, toxic or corrosive, and affect the skin, respiratory system, reproductive system, and central nervous system.[26] Some should not be used at all, while others should only be used with extensive industrial hygiene measures to protect workers and the environment. Unfortunately, such measures are sometimes lacking. Workers are then potentially exposed to toxic substances and their vapours, which can cause illness and even death.[27]

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25 See, for example, Lécuyer, Christophe. "From Clean Rooms to Dirty Water: Labor, Semiconductor Firms, and the Struggle over Pollution and Workplace Hazards in Silicon Valley." Information & Culture, vol. 52, no. 3, University of Texas Press, 2017, pp. 304–33, available at: http://www.jstor.org/stable/44667560.

26 For a detailed discussion of chemical use in the electronics sector, see the "GEC State of Sustainability Research for Chemicals of Concern," available at:
https://globalelectronicscouncil.org/state–of–sustainability–research–chemicals–of–concern/

27 In the electronics industry it is difficult for workers to prove that exposure to certain chemicals in the workplace cause them harm. The human toll of semiconductor manufacturing, for example, is known since at least the early 1980s. Scientists have linked miscarriages to twice the expected rate, various aggressive forms of cancer and other lethal diseases with semiconductor factories in the US, UK, South Korea, Taiwan, and Japan. Chemicals that were banned in the United States 25 years ago are still being used in Asian semiconductor factories today. This is affecting not only the workers on the shop floor but also their children. It has taken workers years to get their illnesses recognized as work-related and to receive compensation. See: Schenker, M. B. 1992. "Epidemiologic Study of Reproductive and Other Health Effects among Workers Employed in the Manufacture of Semiconductors." Final Report. Semiconductor Industry Association, December; Schenker, M. B., E. B. Gold, J. J. Beaumont, B. Eskenazi, S. K. Hammond, B. L. Lasley, et al. 1995. "Association of Spontaneous Abortion and Other Reproductive Effects with Work in the Semiconductor Industry," American Journal of Industrial Medicine 28:639–59; Elliott, R. C., J. R. Jones, D. M. McElvenny, et al. 1999. "Spontaneous Abortion in the British Semiconductor Industry: An HSE Investigation," American Journal of Industrial Medicine 36:557–72; Comment in American Journal of Industrial Medicine 36:584–586. Baskut Tuncak, Opening Remarks, 24th October 2019, United Nations Special Rapporteur on human rights and hazardous substances and wastes, 42nd Session of the U.N. Human Rights Council.

Companies should use the Hierarchy of Controls to protect worker health in high risk facilities. The control methods at the top of the hierarchy are more effective and protective than those at the bottom.

Hierachy of Controls

Most effective

Elimination	Physically remove the hazard
Substitution	Replace the hazard
Engineering Controls	Isolate people from the hazard
Administrative Controls	Change the way people work
PPE	Protect the worker with Personal Protective Equipment

Least effective

Thus, whenever possible, companies should identify and eliminate those chemicals that pose the highest risk to workers because of their toxicity, the dosage used, and the duration of worker exposure. For some of these chemicals safer alternatives already exist. When there are no safer alternatives, companies should implement consistent and effective industrial hygiene control measures. Following this hierarchy leads to the implementation of safer systems, where the risk of illness is substantially reduced. However, employers often do not follow the hierarchy of controls because the methods at the top may be more expensive than those at the bottom. Some employers rely on the least effective control measures – personal protective equipment – in lieu of more effective controls higher on the hierarchy, such as elimination, substitution, or the use of engineering controls.

It is also important to recognize that workers have the right to know about the effects of exposure to chemicals and the right to protect themselves from exposure at work.[28] Thus, measures that promote workers' own ability to advocate for their own safety are vital. Effective unions or occupational health and safety committees that demand a safe work environment can be instrumental in protecting workers' health.

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28 ILO conventions recognize several aspects of worker's (and their representative's) right to know, as well as of the duties of States and the responsibilities of employers and businesses, including chemical suppliers. For example, concerned workers and their representatives have the right to "information on the identity of chemicals used at work, the hazardous properties of such chemicals, precautionary measures, education and training" according to the ILO Chemicals Convention, art. 18 (3) (a). See also, for example, "Principle 8 – Every worker has the right to know, including to know their rights" in Principles on human rights and the protection of workers from exposure to toxic substances, Report of the Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes (2019), available at: https://www.ohchr.org/EN/Issues/Environment/SRToxicsandhumanrights/Pages/PrincipalsProtectionofWorkers.aspx. Similarly, the American Public Health Association, states: "Right-to-know is a key chemical safety principle. Workers have a need and right to know about the identities and hazards of chemicals they are exposed to when working. Community residents have a right to know about chemicals they may be exposed to from manufacturing facilities, water, food, products, and wastes." American Public Health Association, "Improving Occupational and Environmental Health in the Global Electronics Industry" (2012), https://apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2014/07/21/08/43/improving-occupational-andenvironmental-health-in-the-global-electronics-industry.

4.3.2. Deception about Toxic Chemicals

Even though workers are exposed to toxic substances they often do not receive the information they need to protect themselves. The UN Special Rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes, has argued that this lack of vital information creates risk of forced labour. The Special Rapporteur states: "[…] comprehensive information regarding the intrinsic health hazards of the vast majority of industrial chemicals continues to be absent, including their ability to cause cancer, to be mutagenic or to be toxic for reproduction." The lack of this information, "is tantamount to deception and deception of workers is a category of exploitation, which can constitute forced or compulsory labour."[29]

4.3.3. Worker Wellness and the Risk of Suicide

A study by Electronics Watch and the Economic Rights Institute suggests that the phenomenon of suicide incidents among employees in the electronics sector in China is not connected only to specific companies and that employment conditions sometimes contribute to suicide incidents.[30] The study postulates two cycles of influence:

Stress and Coercion Cycle: Production pressure and high paced repetitive work enforced through fines, managers shouting, and other coercive methods create a high stress work environment, especially acute when workers are denied time off or denied the right to resign so suppliers can meet production demands. Tensions increase when employees see income differences that they do not believe are based on merit. Tensions can erupt in conflicts between workers, supervisors and security personnel. Stress, tension, and conflicts are tied to employee depression and the risk of suicide.

Illicit Recruitment and Flexibility Cycle: Flexible production demand can result in pressures on factories to maintain a flexible employee pool, overreliance on outside recruiters and short–term employment. Recruiters entice workers with promises of bonuses

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29 Baskut Tuncak, Opening Remarks, 24th October 2019, United Nations Special Rapporteur on human rights and hazardous substances and wastes, 42nd Session of the U.N. Human Rights Council.

30 Electronics Watch and the Economic Rights Institute, The Link Between Employment Conditions and Suicide: A Study of the Electronics Sector in China, November 2018, available at: https://electronicswatch.org/the–link–between–employment–conditions–and–suicide–a–study–of–the–electronics–sector–in–china–november–2018_2549396.pdf.

and other benefits that they do not always keep. Employee distress over broken recruitment promises is linked to the risk of suicide.

4.3.4. Other Health and Safety Issues

Long working hours and lack of rest days take a toll on workers' health and safety. For example, in the Philippines electronics workers report a wide range of ailments they believe are associated with working conditions, from wounds and burns to eye strain and back pain.[31] The most common complaints include frequent headaches and urinary tract infections because of insufficient breaks and difficulty leaving the assembly lines for bathroom visits. Similar findings are reported by the Institute for Occupational Health and Safety Development (IOHSAD).[32] In China, workers who examine screens for blemishes under bright lights have reported that their eyesight declines within a short period of time. Sometimes, their only recourse is to resign from their jobs.

4.4. Local Community Risk

ICT hardware includes many minerals ranging from aluminium and copper to cobalt, gallium, germanium, indium, gold, lithium, magnesium, mica, nickel, rare earth elements, tantalum, tin, and tungsten to name just the main ones. The mining of these minerals has resulted in pollution of waterways, destruction of local habitats, and adverse health and safety impacts on local populations. Media is paying increasing attention to these issues as some of these minerals are also essential to the energy transition required to reduce carbon dioxide emissions.[33]

International instruments governing human rights and environmental due diligence require companies to have effective engagement with stakeholders such as workers and impacted communities to identify adverse impact in supply chains and develop remedy. Local legislation may require the consent of the indigenous communities before initiating mining activities. The United Nations Declaration

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31 Electronics Watch and the Center for Trade Union and Human Rights, Regional Risk Assessment: Semiconductor and Electronics Industry, Philippines, December 2016, available at: https://electronicswatch.org/en/regional–risk–assessment–semiconductor–and–electronics–industry–philippines–december–2016_2522068.pdf.

32 IOHSAD, "Survey on the Reproductive Health and Sexual Harassment Issues of Women Workers in the Philippine Electronics Sector," Reproductive health in Electronics Industry, Manila, Philippines, Asia Monitor Resource Centre, Hong Kong, 2016.

33 See for example, The Guardian, "Battery life, A series investigating the human rights implications of the electric car supply chain," available at: https://www.theguardian.com/global–development/series/battery–life.

on the Rights of Indigenous Peoples, adopted by the United Nations General Assembly in September 2007, requires states to "consult and cooperate in good faith with the indigenous peoples concerned... in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources." Similarly, the Aarhus Convention (1998) establishes the right to information for everyone and the right to participation for the affected public and environmental non–governmental organisations in environmental decision–making.

Thus, in effectively implementing stakeholder engagement with affected communities, suppliers will at the same time help to protect local habitats, floras, faunas, and human health.

4.5. Supply Chain Perspective

From a supply chain perspective risk is a function of business relations, the scope and efficacy of companies' due diligence, the strategic importance of the individual supplier, the specific mining or manufacturing operations and the capital or labour intensity of the specific supply chain tier. It also depends on the accessibility of the operation to social auditors, civil society organisations, and trade unions. In this section, we add this perspective to the risk factors discussed in the previous section.

In this section and elsewhere in this report, "tiers" refer to the closeness of a factory or facility to the brand company in a supply chain. Thus, tier one is commonly the factory that assembles the final product. However, workers at the assembly factory may be employed by an agency, which is then tier two. Component suppliers are commonly tier two, three or higher, but brand companies may also have a direct relationship (tier one) with certain strategic component suppliers.

4.5.1. Minerals

The risk of forced labour and severe human rights and environmental impacts are high in mining operations necessary for ICT hardware production.

Currently the attention of regulators, industry initiatives and civil society is on 3TG[34], cobalt[35], lithium and nickel. Child labour and forced labour are used in 3TG and cobalt[36] mining in the Democratic Republic of the Congo[37] and other countries. Occupational health and safety violations, extremely low wages and excessive working hours have been documented in many mines.

The leading due diligence guidance in this sector, the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas,[38] references only forced labour and the worst forms of child labour. Other than ILO Convention No. 182 on the Worst Forms of Child Labour no ILO Conventions are mentioned. This low standard increases risk to workers.

Reporting on rights violations in mining focuses on artisanal and small-scale mining (ASM). A new report shows that large-scale mines (LSM) of cobalt in Democratic Republic of the Congo use a high proportion of agency workers, which is a risk indicator of forced labour. The report documents excessive working hours, degrading treatment, violence, discrimination, racism, unsafe working conditions and a disregard for even basic health provisions.[39]

4.5.2. Backend Chip Manufacturing

Semiconductor back–end manufacturing[40] was the first part of the electronics industry that was globalised. US companies established the first overseas factories in Hong Kong, Malaysia, Taiwan and the Philippines in the 1960s and 1970s to lower the cost in this labour–intensive part of semiconductor manufacturing. Malaysia, Taiwan and China are still the main global locations for back–end manufacturing. Vietnam and Philippines are also locations for back–end manufacturing.

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34 Tantalum, tin, tungsten, and gold.

35 OECD, 2019, Interconnected supply chains: a comprehensive look at due diligence challenges and opportunities sourcing cobalt and copper from the Democratic Republic of the Congo, available at: https://mneguidelines.oecd. org/interconnected–supply–chains–a–comprehensive–look–at–due–diligence–challenges–and–opportunities– sourcing–cobalt–and–copper–from–the–drc.htm.

36 Amnesty International, 2016, "This Is What We Die For" Human Rights Abuses in The Democratic Republic, available at: https://www.amnesty.org/en/wp–content/uploads/2021/05/AFR6231832016ENGLISH.pdf.

37 DR Congo is a country very rich in minerals and one of the central suppliers of raw 3TG and cobalt.

38 The Guidance is available at: https://www.oecd.org/daf/inv/mne/OECD–Due–Diligence–Guidance–Minerals–Edition3.pdf.

39 RAID, 2021, "The Road to Ruin? Electric vehicles and workers' rights abuse," available at: https://www.raid–uk.org/sites/default/files/report_road_to_ruin_evs_cobalt_workers_nov_2021.pdf.

40 Frontend electronics manufacturing refers to the wafer fabrication and probing process, while backend manufacturing is where the wafer is cut, assembled, and packed into different packages.

Labour intensity remains relatively high in back–end factories with a high share of migrant workers. In Taiwan migrant workers face risk of forced labour in factories. There is a stark difference in the working conditions of migrant workers among different suppliers. In Malaysia migrant workers are generally at a higher risk of forced labour in the electronics industry. Danwatch[41] has documented forced labour in factories of direct suppliers to back–end manufacturing operations of European chip companies. Factories in China similarly rely on internal migrant workers to reduce cost.

While back–end manufacturing uses less chemicals than fabrication, workers in the operations are still exposed to a high number of toxic chemicals. A high share of these chemicals is covered by trade secrets making regulation challenging. Moreover, workers often do not know the chemicals they are using, do not understand the risks, and cannot take precautionary measures.

The COVID pandemic has made the high share of migrant workers in back–end manufacturing visible for the first time. Business news reported high infection rates among migrant workers in back–end manufacturing operations in Taiwan, Malaysia and Singapore.[42] The Financial Times also reported accounts of inhumane treatment of migrant workers, as they were forcefully confined to their dormitories, only being allowed to leave their dormitories for work.[43]

4.5.3. Front–end Chip Manufacturing

Front–end manufacturing has become one of the most capital intensive manufacturing globally with new leading–edge technology fabs requiring investments ranging beyond US$10 billion.[44] Most technicians employed in semiconductor fabrication plans (fabs) are well trained, thus lowering the risk of labour rights violations. The biggest worker rights issues in wafer fabs are linked to occupational

41 Nikolaj Houmann Mortensen, "Forced labour behind European electronics," 2019, available at: https://danwatch.dk/en/undersoegelse/forced–labour–behind–european–electronics/.

42 Kathrin Hille , Financial Times, June 8 2021, "Taiwan's Covid–19 outbreak spreads to chip companies," available at: https://www.ft.com/content/ce18b201–551c–4fb6–bd82–766e4d453dbc; Kana Inagaki and Steff Chavez, August 20 2021, "Chip shortage deepens supply problems at global carmakers," available at: https://www.ft.com/content/89bd676c–fc10–4a69–9b03–dc50ed3f441d.

43 Kathrin Hille and Kana Inagaki, Financial Times, June 22 2021, "Tech groups in Taiwan accused of locking up migrant workers," https://www.ft.com/content/4269650e–7660–4b80–b294–f81b4368784c; Ying–Yu Alicia Chen, Equal Times, July 30 2021, Taiwan's foreign factory workers face rights violations amid latest Covid outbreak, available at: https://www.equaltimes.org/taiwan–s–foreign–factory–workers?lang=en#.Ya4ply1XZTY.

44 Antonio Varas, Raj Varadarajan, Jimmy Goodrich, Falan Yinug. 2020. "Government Incentives and US Competitiveness in Semiconductor Manufacturing", Boston Consulting Group, available att: https://www.bcg.com/publications/2020/incentives–and–competitiveness–in–semiconductor–manufacturing.

health and safety as over 400 highly toxic and partly unregulated substances are used in the process.[45] However, wafer fabs are most often located in highly developed countries such as the USA, Europe, Japan, South Korea or Taiwan where the risk of serious labour rights violations is relatively low.

4.5.4. Plastics, Metal and Glass

Factories manufacturing plastics, metal and glass are located on lower levels of the supply chain – tier 2 and tier 3 – which are audited less often than tier 1 suppliers. The relative obscurity of these factories increases risk.

Additionally, many suppliers of plastic, metals and glass are smaller companies that neither have the financial resources nor the managerial systems in place to set up and facilitate employment systems to ensure compliance with labour rights standards. They rely on vulnerable workers, such as migrant workers and agency workers, desperate for employment and an income. Production of plastic, metal (especially sheet metal) and glass involve work that is dangerous due to heat, fumes and humidity.

Historically, plastic and metal suppliers have not been strategically important for electronics brands. This results in high levels of commodification and competition, lowering the importance of specific suppliers within supply chains and social audit schemes, increasing risk.

4.5.5. Assembly

Final assembly is the tier within supply chains that has gained most attention in academic research, civil society organisation reports and the media. Here the link between factory and brand can be made the easiest. Over the last four decades a system of contract manufacturing allows major brands to produce and sell goods without owning a single factory. Various models of contract manufacturing have evolved – from Electronic Manufacturing Services (EMS) to Original Design Manufacturing (ODM) and Joint Design Manufacturing (JDM) – along the scale of how much logistical and product design are performed

45 Kim, Sinju et al. (2018), "Chemical use in the semiconductor manufacturing industry," in: International Journal of Occupational and Environmental Health 24(1):1–10; Choi, Sangjun et al. (2018), Comprehensive Evaluation of Hazardous Chemical Exposure Control System at a Semiconductor Manufacturing Company in South Korea, in: International Journal of Environmental Research and Public Health 15(6), 1162

by the contracted company. Contract manufacturers operate under immense pressure within a highly flexible production system and with profit margins that rarely exceed 5%, while employing hundreds of thousands of workers globally.

Due to their visibility within the supply chain, final assembly factories have been under immense scrutiny both from industry–led social auditors and civil society organisations. Central issues such as low wage levels and excessive working hours have been reported regularly over the last two decades. Various forms of forced labour are a constant issue in the industry in different locations. Brand companies are more sensitive to issues found in final assembly factories than in lower tiers of their supply chains.

However, the high level of flexibility in the production system combined with the low profit margins of the contract manufacturers results in reliance on flexible labour – for example, agency workers, migrant workers, and student workers – which increases risk.

4.6. Worker Priorities

This section reviews risk from the workers' perspective, as far as it is possible to generalize. It is important to understand workers' own perspective to ensure compliance efforts focus on issues of importance to them, and do not result in unintended detrimental consequences.

This analysis is based primarily on Electronics Watch qualitative research, including semi–structured interviews with more than 1,000 workers in the electronics industry, and quantitative analysis of more than two million worker grievances (posted publicly online) at more than 100 electronics suppliers in China.

4.6.1. Precarious Work

Workers in countries as varied as India, the Czech Republic, Indonesia, and the Philippines often report that precarious work is at the top of the list of what they would like to change because it so profoundly impacts their wages, security, and health and safety. Flexible production in the electronics industry has resulted in flexible and precarious work arrangements, such as temporary, part–time, and contractual employment, along with irregular working hours, lack of job and social security, and increased health and safety risks.

4.6.2. Deceit in Recruitment

Electronics suppliers require flexibility to respond to the variation in productivity required of them. Suppliers commonly downsize to cut costs when business slows and recruit new employees quickly when business resumes. In some contexts, suppliers rely on offering bonuses and higher incomes to get new recruits more quickly through the door but will then sometimes resort to deceit to reduce their more expensive commitments.

While electronics employees work willingly (or out of necessity) for low incomes, they expect promises and commitments to be kept. When workers commit to jobs on the promise of bonuses or other entitlements, they find it more disturbing when employers or recruiters do not honour those commitments, possibly more so if they relocated to find the job. Therefore, contested entitlements often become the source of disputes in court in China. Incidents of employee suicide and suicide protests sometimes refer to the broken promises of recruiters.

4.6.3. Gross Income

It is no surprise that income is high on workers' lists of priorities. Low–income workers worry about their income being sufficient for their own and their household's needs. Migrant workers worry about securing enough income to remit money to their families in other provinces or countries. Even where conditions improve modestly, living conditions might be difficult enough that workers' aspirations will rise with improvements.

One could represent this concern with the concept of a living wage, i.e., the income needed to cover minimum necessities including food, shelter and child services and provide surplus income sufficient to permit a decent living. The concept implies some flexibility for workers' subjective and evolving sense of what a "decent" living is. A living wage is commonly defined to be the income from a full workweek without overtime. Thus a "living wage" that is only a limited improvement of the basic wages may not serve workers' interests without access to overtime.

Workers are typically pragmatic. If they do not believe it is likely to increase the basic wage sufficiently, they are more likely to struggle for more modest benefits and sufficient overtime to improve their

gross monthly income. For example, for migrant workers in Taiwan, the amount of overtime they can get is an important criterion for what they consider to be a "good job". A job with excessive overtime might be considered to be a "good job" because their gross income is higher, while a job with only limited overtime might be thought of as a "bad job" because their gross income is lower.

Thus, when the enforcement of restrictions on overtime is inconsistent, workers will sometimes choose to work for employers offering lower hourly incomes and more overtime versus employers who restrict overtime and thereby limit employees' gross income. This will pressure employers enforcing overtime restrictions to improve their income offer, possibly beyond minimum requirements, to ensure employee recruitment does not slow too much.

These pressures will likely be felt differently, depending on the structure of workers' households. Workers who live together with their spouse and children will more likely see the benefits of less overtime, spending more time with loved ones, and thus consider working less even when this limits gross income. Employers who recruit employees from more closely knit communities where employees expect to live in their own homes, together with their spouse and children, report more difficulties getting employees to work overtime. Migrants, living away from their spouse or children, often less connected even to longer term friendships, sometimes think of time off from work in terms of a missed opportunity. They might prioritize working longer hours in the short to medium term, forfeiting leisure now for the envisioned longer–term benefit of returning "home" with funds. The exception to this is younger, single employees. With fewer dependents, they feel less pressure to prioritize their gross income. And they will more likely prefer more leisure time to mingle with their peers, sometimes quite consciously with the intention of finding a spouse.

4.6.4. Overtime Premiums

Wherever overtime premiums substantially improve workers' gross income, they commonly become more receptive to overtime. They might more strongly welcome and even pursue overtime beyond legal limits. In the Chinese context, these pressures even appear in disputes over cost cutting efforts that shift weekend overtime,

for which the premium is 200%, to evening overtime during the workweek, when the required premium is only 150%. The higher overtime premiums rise, the more these pressures intensify.

The reverse is true too. With lower overtime premiums, employees commonly are more willing to reduce their hours once their desired gross income level is met. Similarly, employers who withhold overtime premiums that workers believe they are entitled to, or employers who push employees to work overtime without income will more likely see workers resisting or even protesting excessive overtime.

4.6.5. Freedom for Time Off and Leisure

While workers might prioritize gross income and welcome long hours paid with overtime premiums, this is not to suggest workers do not want any limits on their working hours.

While some workers are more receptive to long hours than others – for example, foreign migrant workers who live without their families and seek to maximise income or Chinese citizens from the countryside seeking jobs in cities – one of the more consistent themes is that workers tend to be adamant about their right to time off when they need it. In essence, this is workers' right to freedom of employment, which includes the right to refuse excessive overtime. When employers do not respect their right to time off when they need it, this becomes a priority issue for workers. When restrictions on right to leaves or right to refuse excessive overtime is enforced through withheld income, punitive fines or other forms of punishment, these too become priority issues.

4.6.6. Timely Disbursement of Income

Most workers in the electronics sector receive their income on time. But if the income is late, this immediately becomes a priority issue for workers. Foreign migrant workers and other vulnerable workers likely find it difficult to demand that payments be made on time. But even modest disruptions of the expected schedule of income disbursements sometimes lead to difficulties making ends meet and provoke disputes.

4.6.7. Withheld Income and the Freedom to Resign

In China, workers commonly discuss the benefits of one employer versus others depending on whether it is "difficult to resign." These concerns are linked to income that employers withhold from them.

It is common for employers to withhold the first payment for up to a month. A worker who starts in the beginning of one month may not get their first payment until the end of the following month. The employer withholds a portion of workers' income that is "owed" but not yet paid. Progressive employers might limit the sum they withhold from employees to one week's worth of income.

4.6.8. Punitive Fines

When workers risk fines (in the form of deductions to their income) even when they do not feel responsible for problematic conduct, this builds resentment even beyond the affected employees. When employers impose fines more widely, resentment is likely to build and intensify tensions with supervisors. Punitive fines seldom by themselves trigger more collective protests, but workers commonly discuss fines emotionally when they feel they were undeserved.

4.6.9. Differences in Income and Benefits Between Employees

Sensitivity to fines reflect workers' belief that income and benefits should be based on merit. This is often visible in worker criticisms of differences in the income received by different types of employees. Workers from different cultures and different work environments might view merit differently. But when the income and benefits offered by employers is inconsistent with worker notions of merit, it is often sufficient to trigger resentment, disputes and, in some contexts, strikes, even when the income and benefits of concern exceed legal requirements.

4.6.10. Dignity, Productivity and Short–term Employment

Workers' concerns over fines and income differences with peers is also tied to workers' desire for dignity in employment. Therefore, fines and income differences sometimes provoke responses whose intensity seems inconsistent with the sums involved.

Behind the concern for fines and income differences is workers' desire for employment that recognizes their contributions, recompenses effort and merit and does not punish workers without principles in which workers believe. Because supervisors and security personnel enforce enterprise rules it is no surprise that workers' desire for dignity is often expressed through comments on supervisors and security personnel. Workers resent employment that forces them to submit to supervisors or security personnel who shout or insult them.

More extreme conflicts over dignity likely stem from employers' dismissiveness of workers' concerns and a willingness to use violence to punish and discipline. Some evidence suggests that tension between workers and supervisors or security personnel is closely linked to productivity requirements and work intensity. The more suppliers feel pressured to respond to short term spikes in business and meet tight shipping timelines with downsized workforces designed to cut costs, the more pressure supervisors feel to extol more productivity out of the workers they supervise. Under these conditions, the intensity of work is likely to rise, discipline is likely to become stricter and shouting likely to become more common.

When employers respond to these production pressures while using short–term employment, they are less sensitive to the risk of workers resigning. Indeed, employers invested in short–term employment might expect and even prefer higher employee turnover. Disrespect is more likely to thrive in these conditions. With employee turnover high, the supplier will find it more difficult to identify the costs of employees resigning under pressure or protest of their employment conditions. Supervisors will sense that their productivity does not depend on preserving longer term, positive bonds with workers as they expect them to resign before too long. This dynamic spurs antagonistic methods of supervision.

5. Core Issues

To simplify and prioritize issues to address, we suggest focusing on issues that commonly influence working conditions widely. These issues include rights that are fundamental to workers' ability to strive for the improvement of their working conditions (see Annex). They also include employment conditions that can

cause or contribute to poor working conditions and a range of rights violations. This section discusses freedom of employment, freedom of association and the right to collective bargaining, discrimination, and flexible employment.

5.1. Freedom of Employment

Restrictions on freedom of employment prevent workers from pressuring employers to improve employment and working conditions through one of the simplest and direct methods possible, by exercising their right to stop working and seek better employment.

Two of the more persistent forms of forced labour include the withholding of modest sums owed to employees, which can be used to prevent workers from exercising their legal right to resign, and forced, excessive overtime. In the Chinese context, employers who withhold no income and always respect employees' choice to refuse overtime represent surprising exceptions that highlight how uncommon respect for freedom of employment is.

The more difficult employers find it to use coercion, the more they will feel pressure to develop positive incentives to keep workers in their jobs. Employers who do not develop these positive incentives, if prevented from exercising coercion, will struggle with employee retention and overtime. Through this cycle, freedom of employment incentivizes employers to be responsive to workers' choices. Where workers become conscious of these forces, they sometimes experiment with using their freedom to refuse work to convince employers to make other improvements.

Freedom of employment is, simply put, core to workers' rights. Ignoring even mild infringements of this core right directly undermines workers' rights and workers' role in protecting their rights.

5.2. Freedom of Association and the Right to Collective Bargaining

The freedom of association and the right to collective bargaining are "fundamental" in the terms of the ILO. They are fundamental human rights – irrespective of the level of development of the countries – because they are a precondition for other rights. These rights provide a necessary foundation for workers themselves to strive to improve their conditions at work. Quite simply, occupational health and safety,

wages and benefits, and conditions generally improve where there is genuine respect for freedom of association. In addition, the human rights and environmental due diligence process works better because there is a grievance process and workers can more easily join both investigations and the remediation process.

5.3. Discrimination in Hiring and Employment

The ILO has also established that freedom from discrimination is a fundamental human right and is essential for workers to choose their employment freely, to fully develop their potential and to reap economic rewards based on merit. Merit–based rewards is also a priority for workers. Combating discrimination is therefore an essential part of promoting decent work and has repercussions well beyond the workplace.

Electronics suppliers often restrict their hiring to new recruits with preferred traits with little or no direct connection to how employees perform on the job. Restrictive hiring common to electronics employers includes discrimination against:

- Men viewed to be less obedient.

- Women, depending on the likelihood they might wed or give birth while employed.

- Ethnicities viewed to be less obedient, less competent or less committed to work.

- Older employees viewed to be more interested in pensions.

There is often little recourse for victims, even less so for victims of unjustified hiring preferences. The victims find themselves excluded from employment. Workers who find themselves successfully hired seldom doubt their own fortune and consider its connection to the misfortune of others.

5.4. Flexible Employment

The electronics sector is known for the intensity of the spikes and troughs of its business cycle. New technologies, new product designs, consumer preferences and cost cutting forces combine to drive intense swings in the short–term productivity demands on suppliers.

When employers need flexibility, whether to cut costs or respond to the sudden influx of new business, they commonly impose excessive

overtime or hire employees for short periods of time and resist longer term commitments. They might even incentivize employees to choose short term employment over other employment options.

These means of flexible employment influence working conditions widely.

When workers expect little or no employment security, they lose interest in efforts to improve employment conditions. Heightened mobility in the workforce, with workers resigning and new recruits hired more quickly, undermines trust and a feeling of belonging among workers. All of this renders any type of worker organisation – whether a trade union or worker committee – more challenging.

When a supplier receives a new round of orders and needs to produce more, and do so quickly, one of their options is to intensify their existing employees' overtime. To the extent overtime is paid with a premium, employees might welcome these periods of overtime. But driven by the desire for income, workers may be more willing to risk the detrimental health impacts of excessive overtime.

To the extent employers limit overtime, they become less flexible to respond to short–term spikes in business with their existing workforce. They may be forced to use short–term employment to respond to and resolve the pressures of intense swings in the business cycle. This can result in poor employment security during slow periods, with detrimental consequences for workers' livelihoods.

Another risk of flexible employment is the undermining of occupational health and safety systems. When employee turnover is such that workers resign or get dismissed within months of beginning their job, it reduces their experience on the job. With less experience, the risk that workers will injure themselves when they commit errors on the job increases. When there are fewer longer serving workers to tell stories of their experiences, workers' collective memory shortens too. Commonly, supervisors become less interested to invest in training new employees more thoroughly when they expect them to resign quickly. This also heightens the risk of new employees' errors and injuries on the job.

Short–term employment also undermines the effectiveness of systems to identify the harmful effects of some jobs. Workers might

only become aware of this over longer periods of time. To the extent it limits workers' exposure to some risks, short–term employment might protect workers from some health and safety hazards. But, it does not always end it. It simply drives workers through repetitive cycles of short–term exposure, possibly for different employers. This heightens the difficulty for workers to monitor and understand the possible connection of their work to symptoms they experience. Even when workers believe their work is the source of problems they experience, short–term employment makes it difficult to identify the source of problems and hold the employer or employers accountable, where appropriate. The likelihood of short–term employees resigning when they experience problems, without reporting the issue to the employer, undermines even responsible employers' efforts to monitor and respond to evidence of health and safety hazards.

6. Monitoring and Reporting

Criteria for an ecolabel must be verified. Verification commonly relies on social audits conducted by companies or industry groups. Therefore, the reliability of any label depends on the quality of the social auditing process of these organisations. The EPEAT ecolabel, for example, should itself set criteria for credible auditing. This section reviews common issues in the auditing process.

6.1. Background

Corporate Social Responsibility,[46] now sometimes referred to as Responsible Business Conduct (RBC), has been on the agenda of well-known brands and retail chains in several industries since at least the 1980s. While RBC involves a wide range of activities from policy creations to capacity building and from public relations to buyer networking, one function common to almost all RBC activities is monitoring the supply chain, usually referred to as social auditing.[47]

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46 For a broader definition of Social Responsibility, see ISO-26000:2010, the international standard on CSR and Sustainability; https://www.iso.org/files/live/sites/isoorg/files/store/en/PUB100258.pdf.

47 The term "audit" historically relates to financial auditing. Social audits are intended to improve an organization's social and ethical performance.

There are a variety of social audit schemes to monitor supply chains. They include:

- Internal audits undertaken by suppliers themselves, usually to comply with a buyer requirement or qualify for a certification standard.

- Buyers' or brands' audits implemented by the companies' own internal teams located in production countries.

- Third-party audits by global certification bodies, operating on behalf of brands and buyers.

- Business associations that serve their members' social accountability needs.

- Standard setting non-profit organisations that monitor their suppliers, and sometimes certify audited facilities.

- Independent consultancies, both for-profit and non-profit, that cover a range of RBC consultancy activities, including auditing.

- RBC rating platforms that set rating criteria and rank brands or suppliers.

Social auditing is itself a multibillion-dollar global industry where the key players are large global firms with thousands of employees and offices around the world, like the companies they audit. There is considerable variation among social auditors and methodologies. Some are more thorough and stringent than others. Evaluating the different schemes is beyond the scope of this report. However, it is worth highlighting at least three common critiques of social audits – even though they do not apply to all audits everywhere – that should be considered by any ecolabel:

- The lack of transparency when audit results are proprietary to the auditee and not shared with the affected workers.

- The lack of meaningful engagement with workers.

- The failure to detect and remedy rights violations.[48]

It is also important for an ecolabel to safeguard the integrity of the social audits underpinning claims of compliance to ensure there is no bribery at any stage of the audit process.

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48 For a recent in-depth critique of social audits, see LeBaron, Genivieve, "Combatting modern slavery: why labour governance is failing and what we can do about it," 2020, Polity Press.

In the electronics industry, a small group of companies founded the Responsible Business Alliance (RBA) in 2004 (then styled as the Electronics Industry Code of Conduct) to create an industry-wide standard on social, environmental and ethical issues in the industry supply chain. These companies sought to ensure suppliers were held to a common standard. Today the RBA is "the world's largest industry coalition dedicated to corporate social responsibility in global supply chains" with 400 members that have a combined annual revenue of greater than US$ 7.7 trillion.[49]

Electronics Watch works closely with the RBA to address compliance issues in our affiliates' supply chains.[50] The RBA approach has clear advantages, including: the possibility to combine leverage of buyers to influence suppliers; the possibility to improve management systems and obtain management buy-in for necessary changes; and the opportunity to address more issues in more supply chains as the organisation grows. The core of RBA system is its Code and Validated Assessment Program (VAP), under which companies can be recognized for correcting non-compliances. The RBA relies on approved audit firms to conduct the audits.[51] We have also seen an interest in experimenting with new approaches, including conducting interviews with workers both on-site and off-site; listening to workers through a new mobile phone application with survey, learning, and grievance functions; and discussing a broader remit for remediation, in line with new developments in human rights due diligence.

There is an opportunity for an ecolabel to reinforce positive developments. The following sections reviews other issues related to monitoring and enforcement that should be considered.

6.2. Selection of Monitoring Sites

In an industry with complex supply networks and a degree of opaqueness, some suppliers will be selected for monitoring while others receive less scrutiny. The RBA requires full or regular members to annually audit 100% of their own "high risk" production facilities, 50% of their "high risk" major direct suppliers, and 25%

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49 See, https://www.responsiblebusiness.org/about/rba/

50 Since 2021 this collaboration is governed under Terms of Engagement.
See, https://electronicswatch.org/en/electronics-watch-and-rba-sign-terms-of-engagement_2587028.

51 See, https://www.responsiblebusiness.org/vap/about-vap/

of their "high risk" major indirect suppliers.[52] Given outsourcing norms in the industry, the number of wholly owned production sites represents only a modest proportion of electronics suppliers. Member companies themselves determine whether a supplier is high risk based on a combination of self–assessment questionnaires, member companies' own methods and RBA methods. The integrity of this system depends on the degree of evidence that suppliers are required to present that they are mitigating risk appropriately and the internal support and resources available for member companies to follow up on risk in their supply chains.

Additional challenges to consider include:

- **Tiers, components and risk:** Industry monitoring is commonly stronger for "first tier" suppliers. Companies in general have less oversight and control of higher tier and non–strategic suppliers where risk of worker rights violations usually increases.

- **Consistent versus short term suppliers:** Industry monitoring is driven by the more consumer sensitive business clients of outsourced suppliers. These clients tend to focus monitoring on suppliers from whom they buy more consistently. Consistent business tends to support more effective interventions to rectify problems. But short–term suppliers often pose more serious risks of worker rights violations.

6.3. Beyond Spot Monitoring

The need to monitor the industry with limited resources forces every auditor into difficult choices to find their desired equilibrium between the depth of the monitoring methods used for one supplier, the number of suppliers monitored and the frequency of monitoring. This drives one of the core criticisms of social audits, that audits only amount to "spot checks" that misrepresent how conditions evolve over time, both for the better and the worse.

To support better monitoring, industry social auditors commonly invite interviewees to report their experiences to a telephone number provided to them during the interview. Audits are more effective

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52 In 2021 the requirement was to audit 33% of major high-risk direct suppliers and, in 2022, 10% of high-risk major indirect suppliers. A direct supplier produces components used in the production of goods. An indirect supplier provides products and services used to run the business.
See, https://www.responsiblebusiness.org/media/docs/RBAMemberCompliance.pdf.

to the extent auditors invest more resources to permit this kind of reporting outside the bounds of explicit interviews. On a modest level, this might involve auditors spending more time to urge interviewees to use auditors' own telephone numbers outside of the explicit interview. Less common but more effective, this might involve the roll–out of helplines, or more recently, the development of mobile telephone applications through which workers might report concerns in their own time. However, the effectiveness of these systems depends on investment to publicize them in workers' languages and build their credibility to workers. Helplines tend to be more effective when they involve and permit oversight by civil society groups with expertise and independence to build credibility with workers.

6.4. Worker Interviews

Industry norms recognize the need for worker interviews and define rules for the number of worker interviews required by monitors and how to conduct them.

Industry audits are nonetheless insufficient for the purpose of monitoring issues that workers perceive as sensitive or when they fear reprisals from the employer for reporting accurately on their conditions. Formal interviews are generally limited to 10 minutes.[53] While this could be sufficient for disclosures on an issue or two from employees willing to express themselves freely, it is impossible to use this time to build trust, identify workers willing to express themselves and cover the diversity of topics on which workers might have concerns.

Industry norms for worker interviews, in theory, require auditors to conduct a minimum of 50% of employee interviews one–on–one. But if auditors conduct 50% of one–on–one interviews and find them consistent with conditions reported by the employer, auditors have permission to conduct further employee interviews in group settings.[54] This approach reduces the likelihood of sensitive disclosures that may pertain to only a minority of workers.

Worker rights violations commonly influence only some employees, for example, harassment of women, coercion of students, or withheld income to punish resigning employees. The selection of interviewees

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53 See, https://www.responsiblebusiness.org/media/docs/AuditeePreparation.pdf.

54 See, https://www.responsiblebusiness.org/media/docs/AuditeePreparation.pdf.

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for a limited number of short, one–on–one interviews is not conducive to identifying the diversity of possible findings. The limited number of interviews conducted in more discrete one–on–one settings, under time pressure, risks not identifying employees willing to express themselves freely.

When auditors choose groups for onsite interviews, they likely do so without knowledge of who trusts whom in the workforce. Except where there is strong discontent felt widely within the workforce, workers in these settings will tend to presume that sensitive disclosures, and their source, might become known to the employer, since it is unlikely employees trust everyone else in the group. This is distinct from monitoring in the community where group interviews might be conducted with self–chosen groups of friends.

Methods for worker interviews should consider more effective methods to ensure:

- Enough interviews, sensitive to the diversity of worker experiences.

- Workers' trust and anonymity.

- Definition of issues prioritized for more explicit questions and recognition that short interviews of limited scope should not be mis–represented to be evidence of compliance.

- A selection of interviewees consistent with issues prioritized for monitoring.

6.5. Credible Evidence

Industry norms stress the need to verify findings through multiple sources. Corroborating evidence is critical to any monitoring methodology. But credibility of evidence does not depend on corroboration alone. The workplace is often a contested terrain, and the credibility of information from both workers and management should be evaluated with this in mind. For example, reports of sensitive issues from even one worker interviewee should often prompt renewed efforts to explore the issue and verify the credibility of interviewees who deny the issue. Positive testimonies might be truthful. But in most low–income employment settings, when workers express themselves in exclusively positive terms, it often suggests that auditors were not successful in developing sufficient trust with workers or that the workers might have been coached or coerced to not report conditions accurately.

7. Strategies

7.1. Drive Supply Chain Transparency

Supply chain transparency is the first step in an effective human rights and environmental due diligence system to investigate, mitigate, remedy and prevent harm to workers and communities in global supply chains. A product–based ecolabel depends on transparency of the product supply chain.

In procurement of ICT, leading public buyers today achieve visibility of tier one, the assembly locations, and some visibility of tier two, the component suppliers in their supply chains. For them, supply chain transparency is either a criterion in the tender process or a contract performance condition. Yet, the suppliers further up the supply chain – usually hidden from public view or the view of public buyers – are also those where there is greater risk of harm to workers and environments. One challenge, therefore, is to formulate criteria to shed light on factories further up the supply chain. One approach can be to focus on a specific sector, such as backend semiconductor manufacturing, a highly labour and energy–intensive process with a variety of occupational health and safety hazards. Because semiconductors are made primarily in Malaysia and Taiwan, which rely on foreign migrant workers, and in China, where there are also forced labour risks, this focus could also support a deeper immersion in sector–specific issues, such as occupational health and safety. This approach creates the opportunity to develop an area of specialization and drive impact where it is sorely needed.

The mineral supply chain also presents a challenge. The exploitation of minerals such as lithium, cobalt and nickel are expected to increase manifold over the next decade to fuel production of batteries necessary for the energy transition. The mining of these minerals often go hand in hand with abuses of both workers and surrounding environments. Yet, addressing social and environmental issues in mines is a challenging criterion for an ecolabel as it is difficult to connect specific mines to specific products. One starting point could be to call for label applicants to explain their plans to establish transparency in their minerals supply chain.

7.2. Improve Monitoring and Reporting

Previous sections have noted challenges for social auditors to monitor and report on common risks and core issues. Those challenges, in turn, present a challenge for ecolabels that rely on company social audits and reporting to ensure compliance with criteria. Moreover, auditing methods are not all equally effective in detecting infringements of workers' rights. Therefore, monitoring methods should be visible to EPEAT. Indicators to evaluate effective methods are also important.

7.2.1. Monitoring and Reporting on Core Issues

Auditors should have capacity to detect core issues and support remediation. The following sections suggest indicators of better monitoring and reporting on the core issues.

Freedom of employment

Effectiveness of criteria for freedom of employment depend on the capacity of monitors to:

- Detect and report on forced labour and distinguish between better and worse performing suppliers.

- Report on systemic approaches to systemic issues such as the coercion of students.

- Conduct worker interviews to understand how the withholding of income prevents employees from resigning freely. This could include interviewing former workers to learn about their experience in resigning or using hotlines where employees who wish to resign could report illicit methods to keep them from resigning.

- Address the issue of forced overtime in worker interviews and in reviewing records. For example, monitoring of working hours should include the review of records of the number of employees requesting time off, the proportion of these requests rejected, and cross–checking these indicators with worker interviews.

Freedom of association and the right to collective bargaining

The effectiveness of criteria to promote the freedom of association and the right to collective bargaining, or criteria to promote collective "worker influence" more generally in the workplace, depends on

supplier capacity to monitor and report on these issues. Monitors should be able to describe:

- How they talk with workers about freedom of association, as workers are often reluctant or fearful to talk about it.

- How they talk with managers about freedom of association, as managers may feel this is a topic that threatens their authority.

- The range of resources they review, such as external and internal documentary evidence, publicly available online media, and eyewitness accounts.

- What they review on site, such as freedom of movement in and around the facility, availability of facilities where workers can meet among themselves and with representatives, and use of security cameras or other monitoring devices in areas other than production.

- How they seek evidence of management being actively against these rights, such as dismissal of employees related to the use of these rights or written notices preventing union workers approaching the facility.

- How they seek to identify proactive steps to promote these rights. These steps can include worker committees with worker–elected representatives; worker–management dialogue with concrete and meaningful outcomes for workers; resources for workers to report rights violations; trainings on worker rights, including their right to form or join unions.

- How workers, worker representatives, and trade unions are involved in the monitoring process.

Flexible employment

The effectiveness of criteria related to flexible employment depends on auditors' capacity to monitor and report on the extent of flexible employment. This should include indicators such as the proportion of the workforce:

- Employed under six months.

- Hired through different recruitment models.

- Differences in the jobs and the benefits offered to employees hired through different recruitment models.

The reporting of these indicators should be sensitive to the expected ebb and flow of flexible employment. Employers routinely hire

employees more flexibly for only some months of the business cycle (e.g., hiring more employees through recruitment services to respond to short term business spikes or hiring more students through schools during the summer months). Reporting should specify when the business expects the use of flexible employment to spike. Workforce proportions should be reported for both the highest and lowest use of flexible employment. Monitoring of suppliers should be timed with sensitivity to the expected ebb and flow of flexible employment. Monitoring reports should also be interpreted with sensitivity to these movements. For example, interviews conducted when the business is in the low end of their cycle should not be used to verify low numbers of flexible employment in general.

Monitors should also be able to evaluate whether the incidence of infringements of workers' rights differs between longer term employees hired directly (who enjoy more employment security) and flexible employees. When suppliers report significant use of flexible employment, monitors should interview both direct and flexible employees and determine whether flexible employees run higher risks of rights violations, such as withheld income, fines and discrimination.

7.2.2. General Indicators of Better Monitoring and Reporting

Beyond "closed" monitoring systems

Unexpected monitoring, in the sense of monitoring outside the standard methodology, helps reduce risks by providing perspectives on issues that might be overlooked by the standard methodology.

One form of unexpected monitoring is monitoring conducted out of sync with the schedule of expected monitoring, without notifying suppliers (e.g., unannounced audits). There are of course limits to this kind of monitoring as well. Surprising suppliers with unexpected monitoring might result in key personnel or documents not being available to monitors. Suppliers might respond antagonistically to this kind of monitoring if they find it intrusive. Despite these limits, monitoring conducted without giving suppliers notice is useful for identifying issues that might be overlooked or hidden in suppliers' preparation for scheduled monitoring.

A second form of unexpected monitoring is monitoring conducted independently, by groups outside of the system. It is useful to

distinguish the responses of different systems to findings reported from the "outside." Closed monitoring systems ignore the findings of outside groups. Open systems will welcome and invite outside monitoring. They will seek out credible findings reported outside the system and seek to use those findings to refine the system's standard methods.

Indicators of better monitoring include those that suggest more open systems:

- The publishing of comprehensive lists of suppliers.
- Evidence of the degree of (in)consistency between findings within and outside the monitoring system.
- Evidence of the frequency and tone of discussion with outside groups.
- Evidence of the group improving monitoring methods in response to outside monitoring.

Explicit inquiries

The limited time available to auditors to explore a wide spectrum of issues commonly forces monitors to depend on open–ended questions to "check" for the existence of some issues. Open–ended questions can be ineffective to verify the non–existence of serious issues where the risk of underreporting is high.

One of the issues commonly left behind by wider spectrum monitoring is harassment. Victims of harassment tend to keep their experiences quiet, and they are even less likely to volunteer their experiences without prompting. However, when monitors sensitively but explicitly confront issues like harassment and violence, more workers will disclose these experiences. But this requires concerted, explicit and sometimes time–consuming methods.

Indicators of better monitoring include:

- The frequency and scope of periodic efforts to explore priority issues through more explicit inquiries into those issues.

Worker interviews

Interviews with workers offer one of the more direct methods to verify working and employment conditions. Workers' experience and interest in better conditions puts them in one of the best positions to contribute to monitoring.

Indicators of better monitoring include reports on:

- The number of worker interviews conducted, their proportion within the workforce, and the average duration of these interviews.

- The number of employees without management responsibilities interviewed and the proportion of the workforce they represent.

- The proportion of worker interviewees distinguished by key demographics, and the proportion of these workers in the wider workforce: women and men, different ethnicities or religions, different terms of employment (e.g., direct employees versus employees hired through outside recruiters or students) and different degrees of seniority (e.g., employees with under 12 months on the job versus more senior employees).

- Trust–building with workers both on site and off site, and efforts to protect workers against risks of reprisals.

- Efforts to collect testimonies from workers who are more likely to suffer from worker rights violations.

Reporting

The possibility of reprisals still risks silencing workers, especially when interviews are conducted within the work environment. Better reporting does not oversimplify conclusions when interviews do not indicate non–compliances. Reporting should include some scrutiny of non–findings. When interviewees refuse to reply to questions, deny well–known problems or problems verified by other interviewees or when interviewees report positive conditions which exceed industry norms, this should be noted. Inconsistencies between interviewees should also be noted. One interviewee reporting 80–hour workweeks should evoke doubts into the credibility of other interviewees reporting 40–hour workweeks, even if more workers reported the shorter workweek. Similarly, when one interviewee is willing to criticize the employer on some sensitive issue, this should strengthen the credibility of the interviewee's positive comments on other issues.

Indicators of better reporting include:

- Disclosure of the variety or complexity of worker testimonies, rather than representation of uniformity.

- Distinction between positive affirmations of compliance and non–responsiveness to questions or lack of evidence of non–compliances.

- Discussion of whether there is evidence for explicit management coaching and coercion of workers not to report non–compliances, or of worker intimidation and threats more generally.

- Distinctions between degrees of confidence in findings—for example, less confidence in conclusions if the workers most likely to experience some issues were not well represented among interviewees or were less responsive in interviews.

- Transparency of the source of evidence for conclusions. For example, whether student interviews are the source for conclusions about student rights, interviews with short–term employees are the source for conclusions about withholding of income, or interviews with workers exposed to certain health and safety hazards are the source for conclusions about those risks.

- Explanation of inconsistencies, if any, between findings of previous monitoring of the same supplier or current findings by other, independent sources.

- Explanation of evidence of improvements over time based on a root cause analysis.

7.3. Drive Meaningful Remediation and Remedy

Corrective action plans are often based on a limited view of the process and actions necessary to mitigate, prevent, and remedy harm to workers and the environment in supply chains. Therefore, ecolabel criteria should address both remediation (the process) and remedy (the outcome) in accordance with UN and OECD guidance on human rights due diligence.

The process (remediation) depends on stakeholder involvement to be effective. Stakeholders include the intended beneficiaries of the criteria, including workers and trade unions. It is important to formulate the requirement for stakeholder engagement precisely. For example, interviewing a selection of workers through an audit process does not meet the criteria of "meaningful stakeholder engagement" in the OECD Due Diligence Guidance for Responsible Business Conduct.[55]

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55 The Guidance states: "Meaningful stakeholder engagement is characterized by two–way communication and depends on the good faith of the participants on both sides. It is also responsive and on–going and includes in many cases engaging with relevant stakeholders before decisions have been made." The Guidance also notes that meaningful stakeholder engagement should be used both to identify adverse effects of an enterprise and to formulate remedy. OECD, 2018, "OECD Due Diligence Guidance for Responsible Business Conduct."

The remedy is not the same in all cases, but can include the following types of outcomes:[56]

- Compliance with international and domestic labour standards.

- Compensation to workers for harm – e.g., back wages, repayment of recruitment fees, medical care, or non–financial remedies such as apologies.

- Accountability – e.g., fines, penalties or other sanctions against those directly responsible for the harm.

- Prevention – measures based on a sound root cause analysis to prevent recurrence of harm.

8. Key Areas for Criteria Development

The following key areas for criteria development are based on the analysis in the previous sections of this report. In each area we propose the objectives of criteria and list a selection of best practices for illustration purposes. Best practices include examples from companies, public buyers, and other certifications. The best–practice examples are far from exhaustive.

8.1. Supply Chain Transparency

Objective: To promote transparency of factories where the product model is assembled, the main components of the model are made, and the mines that produce key minerals of the components.

Public buyers can only apply social and environmental criteria to the "subject-matter of contract," that is to the specific points of production that make the products or the components of the products they procure.[57] To satisfy public buyer criteria, an ecolabel must provide assurance with respect to specific points of production. This is not possible if those points are not disclosed.

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56 The UN Guiding Principles on Business and Human Rights states: "Remedy may include apologies, restitution, rehabilitation, financial or non–financial compensation and punitive sanctions (whether criminal or administrative, such as fines), as well as the prevention of harm through, for example, injunctions or guarantees of non–repetition." United Nations, 2011, "Guiding Principles on Business and Human Rights: Implementing the United Nations 'Protect, Respect and Remedy' Framework."

57 For example, the EU Public Procurement Directive states: "It is essential that award criteria or contract performance conditions concerning social aspects of the production process relate to the works, supplies or services to be provided under the contract" (DIRECTIVE 2014/23/EU).

Best practice: Several major ICT companies currently report the names and complete physical addresses where product models are assembled and some report where the main components are made to public buyers. This reporting is in response to optional award criteria or mandatory contract performance conditions.[58] The industry leader in supply chain transparency is the small mobile phone company, Fairphone, which has mapped and published all second–tier component suppliers, and many third and fourth–tier suppliers, including the product types manufactured by the suppliers.[59]

Major ICT companies trace their 3TG (tantalum, tin, tungsten, and gold) and cobalt smelters and/or refiners and track whether the smelters and refiners are conformant to a responsible sourcing validation programme. For example, more than 400 companies are members of the Responsible Mining Initiative which maintains the Responsible Minerals Assurance Process, which encourages companies to source responsibly from Conflict–Affected and High Risk Areas (CAHRA) and addresses risks associated with these regions in accordance with established due diligence standards.[60] Many public buyers also focus on risks in CAHRAs including conflict minerals.[61]

However, most companies do not yet link the ICT products they make to specific mines of 3TG, cobalt, or other significant minerals associated with labour rights and environmental risk. ICLEI – Local Governments for Sustainability and Electronics Watch have suggested that companies should be able to explain their plans to establish transparency for key minerals in their supply chains, including linking individual mines to the supply chains of product models.[62] The City of Haarlem in the Netherlands has sought to adopt this approach.[63]

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58 For example, the Region Stockholm applies the following requirements in some of its procurements of ICT products. (1) Mandatory requirement: "At the start of the contract, the supplier shall describe the supply chain for [product] by listing significant final assembly manufacturers included in the supply chain. The supplier shall provide information on significant final assembly units included in the supply chain for the [product], with company name, address to the manufacturing unit and country of manufacture. (2) Award criteria: The tenderer should describe the supply chain for offered [product(s)] by listing significant final assembly manufacturers and significant manufacturers of main components included in the supply chain of the [products]. At least one significant final assembly manufacturer and at least one significant manufacturer for the respective main components: [main components] must be specified per quoted type configuration." For additional information, contact the Swedish National Secretariat for Sustainable Public Procurement at: http://www.xn–-hllbarupphandling-8qb.se/om-oss/11-om-oss/95-nationella-kansliet.

59 The list of Fairphone suppliers is available at: https://www.fairphone.com/en/impact/source-map-transparency/

60 See, https://www.responsiblemineralsinitiative.org/.

61 For example, the National Desktop and Notebook Agreement of the UK Higher Education Sector states: "Purchasing conflict minerals directly or indirectly finances or benefits armed groups that are perpetrators of serious human rights abuses in the Democratic Republic of the Congo and other countries. Suppliers will be required through a number of questions relating to the management of the supply chain, demonstrate where potential risks exist and their means to minimize the inclusion of conflict minerals within their supply chain."

62 ICLEI—Local Governments for Sustainability and Electronics Watch, "How to procure fair ICT hardware: Criteria set for socially responsible public procurement," April 2020, available at: https://electronicswatch.org/how-to-procure-fair-ict_2585084.pdf.

8.2. Monitoring and Reporting

Objectives: (1) To establish methodological transparency.

Best practice: Leading ICT companies share full audit reports or detailed summary reports relating to specific product models with public buyers with due regard to rules of privacy and confidentiality. This transparency is sufficient to understand the methodology and whether the company has credible evidence for audit findings. In a recent extensive investigation, major public buyers in Sweden sought to establish whether ICT suppliers used credible methods to detect a specific type of state–imposed forced labour in China. They found a wide range of methodological transparency or lack of it: "Some brands referred to their modern slavery policy and RBA membership as proof of due diligence, while others provided factory addresses, audit reports and detailed accounts of steps taken.[64]

The EU Ecolabel for electronic displays requires applicants to use an audit process that includes extended consultation with at least two stakeholders from industry–independent organisations in the local area or region of the site being monitored, including independent and democratic trade unions, community organisations, or independent labour experts. The corporate social responsibility of the EU ecolabel applies to the final assembly of the product.[65]

The EU Ecolabel for electronic displays requires applicants to submit recent closure audit reports for the product model that must show: "i) findings in detail including the nature and level of evidence for the findings; ii) the name of the auditing organization; iii) the names of the two stakeholders – industry–independent organisations from the local areas around the plant site – who have been consulted; iv) a list of the issues that have been discussed with the stakeholders."[66]

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63 Haarlem's award criterion reads: "Tenderers should explain their plans for the next 3 years to establish transparency in their minerals supply chain, i.e. how they intend to link individual mines to the supply chains of specific products that form the subject matter of this contract as well as ensure that the labour and social standards set out in the call for tenders are respected." See, ICLEI—Local Governments for Sustainability and Electronics Watch, "Socially responsible public procurement of workspace hardware and mobile devices." December 20020, available at: https://electronicswatch.org/make–ict–fair–case–study–socially–responsible–public–procurement–of–workspace–hardware–and–mobile–devices–december–2020_2583559.pdf.

64 Adda, Sustainable Public Procurement, Svenska Kyrkan, "State Imposed Forced Labor in China. Swedish Buyers' Monitoring of Electronics Supply Chains," December 2021, available at: https://www.adda.se/contentassets/709146ed8bd24cb58412d8614db43995/state–imposed–forced–labor–in–china.pdf

65 European Commission, EU Ecolabel for electronic displays, available at: https://ec.europa.eu/environment/ecolabel/products–groups–and–criteria.html.

66 European Commission, EU Ecolabel for electronic displays, ibid.

8.3. Remedy and Remediation

Objective: To expand ICT company follow–up on non–conformances beyond corrective action to include remedy and remediation.

Best practice: In the area of foreign migrant worker recruitment fees and related costs there is a broad industry agreement that migrant workers must be reimbursed costs they incurred to obtain jobs to ensure they are not at risk for debt bondage and forced labour. This is a type of substantive remedy for rights violations.

The concepts of "remedy" and "remediation," as defined in the UN Guiding Principles on Business and Human Rights and the OECD Due Diligence Guidance for Responsible Business Conduct require both substantive and procedural remedy (see Section 7.3.). Procedural remedy is based on the idea of meaningful stakeholder engagement.

Consistent with this concept of "remedy" and "remediation," the EU Ecolabel for electronic displays requires the applicant to publish online aggregated results from audits, including: " (a) how many and how serious violations of each labour right and OHS standard; (b) strategy for remediation – where remediation includes prevention per UNGP concept; (c) assessment of root causes of persistent violations resulting from the stakeholder consultation (who was consulted, what issues were raised, how did this influence the corrective action plan)."[67]

Similarly, a framework agreement for mobile phones and tablets organised by Region Stockholm requires an explanation of how the brands work to prevent violations of worker rights in supply chains, indicating a focus beyond corrective action. Examples of preventive measures include "adjustments of procedures for pricing and order placements" and ensuring employers pay for the recruitment of migrant workers.

8.4. Freedom of Association

Objectives: (1) To promote conditions where workers can exercise their freedom of association and the right to collective bargaining without risk of reprisals. This includes non-interference with trade union activities, no anti-union discrimination, and appropriate access to workers for trade union representatives.

Best practice: The EU Ecolabel for electronic displays requires the applicant to "provide the name of an independent trade union or

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67 Ibid.

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other legitimate employee association, or describe committees, such as an occupational health and safety committee, that include worker representatives, including the number of workers (in non–supervisory positions) participating in such committees, how often the committees meet annually, and their main activities." Applicants must provide this information for each final product assembly plant for the model(s) to be ecolabelled.[68]

Region Stockholm has applied award criteria in ICT contracts to promote a stronger worker voice in their supply chains. In the case of one contract, the evidence of compliance includes "a description of how employees are organised, how the dialogue with management is conducted, and what proactive measures the employer takes to promote employees' organising and collective bargaining." In another, the criterion for worker voice were met if there was "one or more independent committees with employee representatives at significant final assembly units." The representatives must be "appointed by the employees" and the committee must have "ongoing dialogue with the company management on issues related to their working environment and working conditions."[69]

8.5. Living Wage

Objective: To promote remuneration for a standard work week by a worker in a particular place sufficient to afford a decent standard of living for the worker and her or his family.[70]

This objective can be reached by creating a living wage policy, identifying the gap between actual base wages and the living wage, and creating a roadmap to a living wage with a timeline and progress indicators.

Best practice: The SA8000 standard of Social Accountability International has included a living wage requirement from the start. The Global Living Wage Coalition has provided a living wage definition based on the "Anker methodology."

The EU Ecolabel for electronic displays requires applicants to submit proof of a living wage, or to provide "a step–by–step approach" which includes proof of compliance with applicable minimum wage laws; a gap analysis showing the difference between the base wage (without

68 Ibid.

69 For additional information, contact the Swedish National Secretariat for Sustainable Public Procurement at: http://www.xn-–hllbarupphandling–8qb.se/om–oss/11–om–oss/95–nationella–kansliet.

70 This formulation is lifted from the Global Living Wage Coalition. See, https://www.globallivingwage.org/about/anker-methodology/

overtime or bonuses) for a production worker and the living wage; a roadmap to a living wage with a timeline and progress indicators. The roadmap must show how the living wage level will be reached within 18–24 months depending on the size of the facility and the gap between current wages and the living wage.[71]

8.6. Occupational Health and Safety

Objectives: (1) To promote elimination of worker exposure to toxic chemicals in the production process. (2) To ensure workers have a right to know about the effects of exposure to chemicals, including credible access to information and education about the presence and exposure to chemicals in their workplace, the right to protect themselves from exposure at work, and the right to participate in the monitoring and evaluation of health risks in their own workplaces.

Best practice: The Clean Electronics Production Network (CEPN) is a multi–stakeholder network with the goal to "move toward zero exposure of workers to toxic chemicals in the electronics manufacturing process." Three CEPN members – Apple, Dell and HP – have recently joined CEPN's Toward Zero Exposure program, committing to accelerate existing efforts in chemical safety, including eliminating worker exposure to nine priority chemicals in key areas of their electronics supply chains.[72]

The Swiss public procurement consortium, Partenariat Achats Informatiques Romands (PAIR), addresses this issue in the tender process. They ask suppliers: "What efforts does your company make to reduce the use of potentially hazardous chemicals during the production of the material (such as benzene and n–hexane)?" Compliance indicators include: "The company has banned the use of certain potentially hazardous chemicals (such as benzene and n–hexane) and has a policy of substituting these potentially hazardous chemicals with safer alternatives."

Region Stockholm has included the following award criterion in tenders: "The tenderer should offer [product] from brand owners who can, in a chemical list, report which chemical products are used in the final assembly of tendered products."

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71 European Commission, EU Ecolabel for electronic displays, ibid.

72 See, http://www.centerforsustainabilitysolutions.org/clean–electronics#cepn–about.

Annex:
Domestic and International Labour Standards

Companies should always comply with domestic standards defined in applicable domestic labour law. Those laws are often comprehensive, detailed and tailored to local conditions. A good source for domestic standards is NATLEX, maintained by the International Labour Organization. This is a database of national labour, social security, and related human rights legislation with over 100,000 records covering 196 countries and over 160 territories and subdivisions.

Yet, domestic standards do not always provide the level of worker protection that international standards do. International labour standards are legal instruments developed by the International Labour Organization's three constituents together: governments, employers and workers. The conventions are legally binding when ratified by member states. Recommendations are non–binding guidelines. The ILO Governing Body has also identified ten "fundamental" conventions, considered fundamental to rights at work irrespective of a country's level of development. "These conventions provide a necessary framework from which to strive freely for the improvement of individual and collective conditions of work…" They include freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced or compulsory labour; the effective abolition of child labour; the elimination of discrimination in respect of employment and occupation; and occupational health and safety. The 1998 ILO Declaration on Fundamental Principles and Rights at Work commits all members states to respect and promote fundamental labour standards whether or not they have ratified the relevant conventions.

In the list below "C" denotes a convention, "R" a recommendation, and "*" a fundamental convention.

1. **Employment is freely chosen**
- *C029 – Forced Labour Convention, 1930
- *C105 – Abolition of Forced Labour Convention, 1957

2. Fair recruitment

- C097 – Migration for Employment Convention (Revised), 1949
- *C105 – Abolition of Forced Labour Convention
- *C111 – Discrimination (Employment and Occupation) Convention
- ILO Definition of Recruitment Fees and Related Costs

3. Freedom of association and the right to collective bargaining

- *C087 – Freedom of Association and Protection of the Right to Organise Convention, 1948
- *C098 – Right to Organise and Collective Bargaining Convention, 1949
- C135 – Workers' Representatives Convention, 1971
- R143 – Workers' Representatives Recommendation, 1971
- Article 23, Universal Declaration of Human Rights

4. No discrimination in employment

- *C100 – Equal Remuneration Convention, 1951
- *C111 – Discrimination (Employment and Occupation) Convention, 1958
- C183 – Maternity Protection Convention, 2000
- C102 – Social Security (Minimum Standards) Convention, 1952
- R090 – Equal Remuneration Recommendation, 1951

5. Violence–free work environment

- *C155 – Occupational Safety and Health Convention, 1981
- C190 – Violence and Harassment Convention, 2019
- R206 – Violence and Harassment Recommendation, 2019

6. No exploitation of child labour and young Employees

- *C138 – Minimum Age Convention, 1973
- *C182 – Worst Forms of Child Labour Convention, 1999
- Art. 32 UN Convention on the Rights of the Child

7. No excessive working hours

- C001 – Hours of Work (Industry) Convention, 1919

8. No abusive termination of employment

- C158 – Termination of Employment Convention, 1982

9. Legal wages

- C095 – Protection of Wages Convention, 1949
- C131 – Minimum Wage Fixing Convention, 1970
- C173 – Protection of Workers' Claims (Employer's Insolvency) Convention, 1992

10. Living wages

- Article 23, Universal Declaration of Human Rights

11. Occupational Health and Safety

- C115 – Radiation Protection Convention, 1960
- C119 – Guarding of Machinery Convention, 1963
- C120 – Hygiene (Commerce and Offices) Convention, 1964
- C136 – Benzene Convention, 1971
- C139 – Occupational Cancer Convention, 1974
- C148 – Working Environment (Air Pollution, Noise and Vibration) Convention, 1977
- *C155 – Occupational Safety and Health Convention, 1981
- C161 – Occupational Health Services Convention, 1985
- C170 – Chemicals Convention, 1990
- C174 – Prevention of Major Industrial Accidents Convention, 1993
- C183 – Maternity Protection Convention, 2000
- *C187 – Promotional Framework for Occupational Safety and Health Convention, 2006
- C190 – Violence and Harassment Convention, 2019

International Regulations, Standards, and Guidance on Human Rights and Environmental Due Diligence

This report refers to important developments in human rights and environmental due diligence. Due diligence is an ongoing ongoing risk management process by an organisation to identify, prevent, mitigate, remedy and account for how it addresses adverse human rights or environmental impacts in its supply chains. Key regulations, standards and guidance in this area include:

- UN Guiding Principle on Business and Human Rights (2011), adopted unanimously by the UN Human Rights Council to implement the United Nations "Protect, Respect and Remedy" Framework.

- ILO, Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy (2017), which establishes principles for states, companies and trade unions to maximize the positive contribution of multinational enterprises to economic and social progress and the realization of decent work for all; and to minimize and resolve the difficulties to which their various operations may give rise.

- OECD Guidelines for Multinational Enterprises (2011) and the OECD Due Diligence Guidelines for Responsible Business Conduct (2018), intended to be used in all sectors of the economy and by all companies to implement their due diligence responsibilities

- EU Regulation on Conflict Minerals (2021), which requires EU importers to comply with due diligence standards based on the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas (2011).

- The UK Modern Slavery Act (2015), Transparency in Supply Chains Provision, which requires commercial entities with a total annual turnover of £36 million or more to publish "Slavery and Human Trafficking Reports" about the steps they take to ensure that slavery and human trafficking are not taking place in any of its supply chains.

- Duty of Vigilance Law of France (2017), which establishes legally binding human rights due diligence, including a vigilance plan to identify risk and prevent violations of human rights and fundamental freedoms, health risks or environmental damage resulting directly or indirectly from the operations of companies, their subcontractors, and suppliers.

- The Australian Modern Slavery Act (2018), which requires entities based, or operating, in Australia, which have an annual revenue of more than $100 million, to report annually on the risks of modern slavery in their operations and supply chains, and actions to address those risks. The Commonwealth is itself required to report on behalf of non corporate Commonwealth entities.

- The Child Labour Due Diligence Law in the Netherlands (2019), which requires companies that deliver products or services to the Dutch market to conduct supply chain due diligence relating to child labour.

- The German Supply Chain Law (2021), which creates human rights and environmental due diligence requirements on large companies.

- The Norwegian Transparency Law (2021), which requires large and mid-size companies to conduct human rights and decent work due diligence throughout their entire global value chains.

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