Due diligence guidance for the technology industry

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Due diligence guidance for the technology industry

This is an industry-specific complement to the online toolbox due diligence. It was developed as part of a learning network supply chain due diligence in the technology industry that was facilitated by HIVA-KU Leuven and Sustenuto on behalf of Agoria, and was supported by the Federal Institute for Sustainable Development (FIDO).

Like other sectors, the technology industry is coming under increasing pressure to pay attention to human and environmental risks. Societal attention is no longer limited to risks within your company, but focuses on risks throughout the supply chain, which could include things like conflict minerals, working conditions in Chinese and Vietnamese factories, or the millions of tonnes of e-waste that are exported to developing countries every year.

Both at the level of Member States (France, Germany) and at the level of the European Union, there is a clear push for mandatory due diligence, which obliges companies to take action vis-à-vis risks in their value chain. But even if you are not facing legal obligations, chances are that you are already-, or will be, facing questions and expectations from clients, the government (as a public buyer), investors or financial institutions.

What is due diligence?

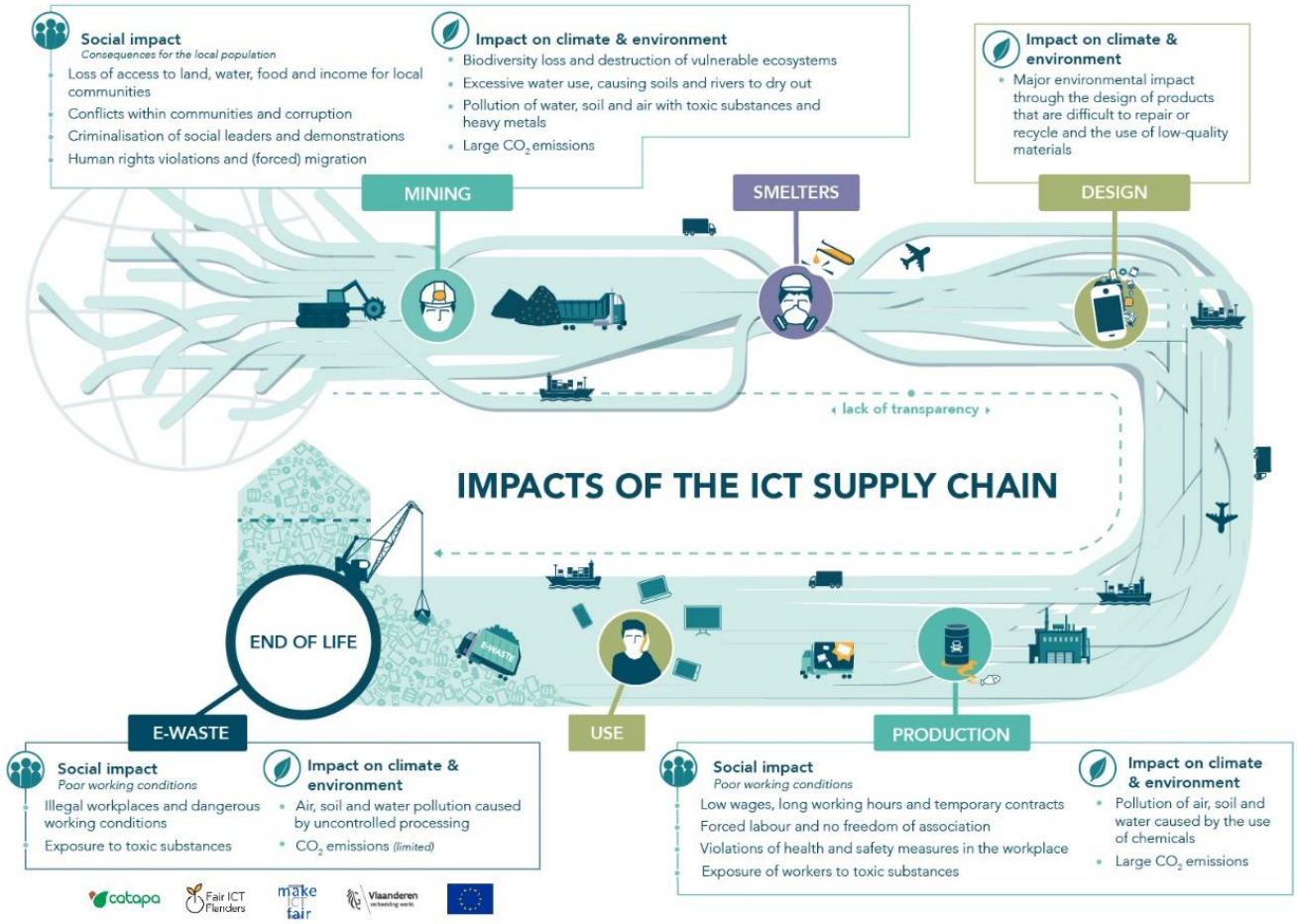
According to the UN Guiding Principles on Business and Human Rights (the centerpiece of international 'business and human rights' regulation) due diligence comprises a set of processes to identify risks, mitigate risks, and report on the approach taken. In essence, due diligence encompasses three dimensions, which form the common thread of the online manual, and thus of this guidance document.

Figure 1: Three dimensions of due diligence

Understanding risk

Societal attention focuses primarily on a limited number of risks (e.g. child labour, emissions), products (e.g. precious metals), and sectors (e.g. arms industry). Yet risks in the technology industry are highly diverse, both as a consequence of the heterogeneity of the sector, and as a result of the sheer complexity of its supply chains. For instance, a typical supply chain of ICT-products (figure 2) consists of a long series of production processes and companies, and each of these companies and steps may involve serious risks for people and for the environment.

Figure 2: Risks in the ICT supply chain (source: Make ICT Fair)



While the focus usually lies on tangible products, services are not without risks. For instance, tasks like data management and customer relations have increasingly been outsourced to countries like India and the Philippines, which have a questionable reputation in the domain of labor rights. And while most attention goes to *global* supply

chains, significant risks can also exist within the EU. Think only of the situation with courier services, or of problems related to the illegal dumping of electronic waste.

Annex 1 provides a (non-exhaustive) list of key risks in the technology industry. In the excel file that accompanies the online manual, you can find references to other tools and resources that enable a more in-depth understanding of risks related to specific goods or services.

Yet to really understand risks, and to effectively mitigate these risks, you need to be aware of their root causes. In other words, what are the factors that lead to the emergence and persistence of risks for, say, exploitation, deforestation, or water pollution? Roughly speaking, three categories of 'root causes' can be distinguished.

Geography

The extraction of raw materials often takes place in countries with weak regulation or political instability. In addition to the well-known issue of 'conflict minerals' in Central Africa (tin, tantalum, tungsten, gold), the extraction of other minerals in other countries may also entail serious risks (e.g. nickel in the Philippines, rubber in Indonesia, fossil fuels in Angola). Likewise, labour- and energy-intensive processes further down the supply chain (e.g. processing of raw materials, production of electronic components, final assembly of technological products) often take place in countries with low wages and/or weak environmental legislation.

None of this means that the EU is free of risks: in addition to inconsistencies in EU legislation, there are important differences between Member States in the extent to which social and environmental legislation is enforced. For instance, Western European e-waste (which is commonly refused by countries outside the EU) is often dumped illegally in countries such as Poland or Romania[1].

Production process

High-risk activities tend to be those that make frequent use of unskilled labour. In many cases, these activities involve vulnerable groups like women, children, or migrant workers. Consider, for instance, the artisanal extraction of minerals like cobalt, gold, or tin; the production and assembly of electronic components; or the recycling of e-waste. The mining and processing of raw materials is also very energy-intensive, and may involve the use of harmful chemicals.

Supply chain

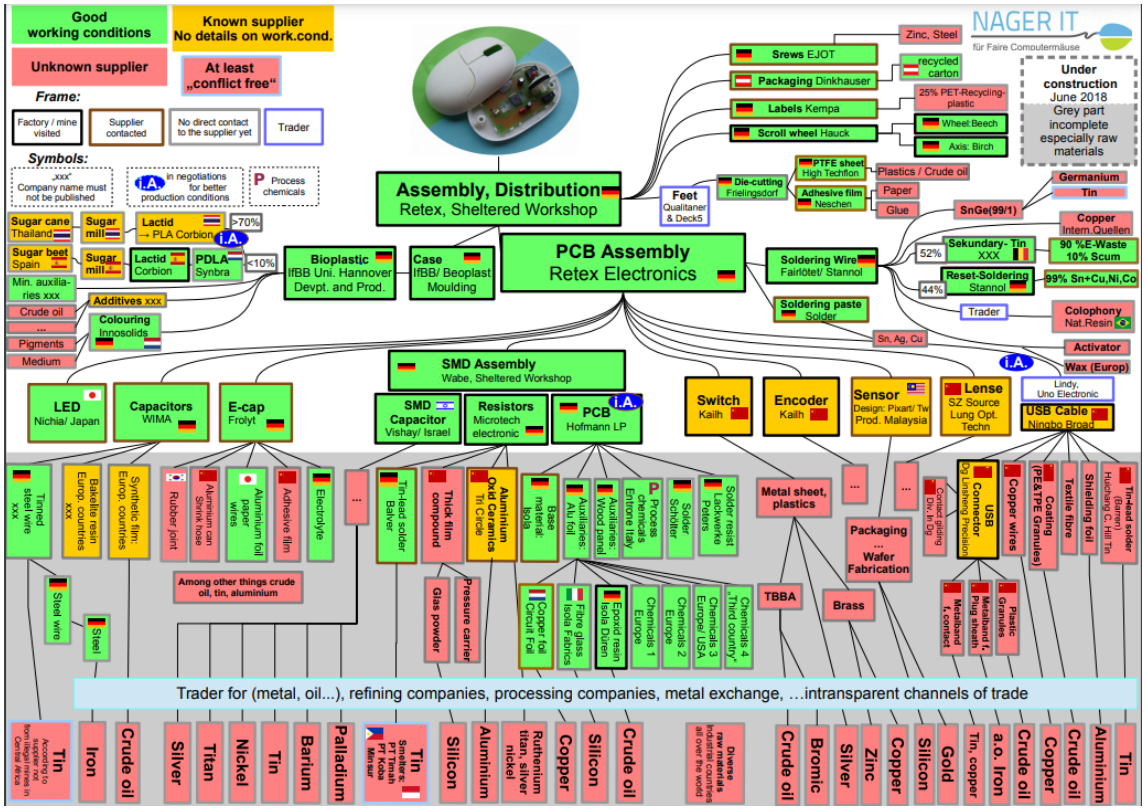
Technology supply chains tend to be more complex than in many other sectors. For instance, the production of a seemingly simple product like a computer mouse may involves hundreds of companies from dozens of countries (see Figure 3). While complex supply chains are not always more risky, they tend to be less transparent, thus creating opportunities for evading social and environmental regulation.

Risks can also arise from the dominant position of one or a few companies in the supply chain, which allows these companies to appropriate a large share of the added value, and to impose strict requirements on suppliers in terms of pricing or flexibility. To cope

[1] https://www.mo.be/nieuws/bestemming-roemeni-het-afvalparadijs-van-europa

with these pressures, suppliers may be tempted to delay investment in better working conditions or in environmentally friendly production, or to increase pressures on their own suppliers.

Figure 3: The supply chain of a computer mouse (source: Nagel IT)



Mitigating risk

The online manual describes various actions you can take as a company to deal with risks in supply chains, which may range from individual actions (e.g. a supplier dialogue) to participation in joint action, in the form of industry- or multi-stakeholder initiatives. A key message in the manual is that collaboration is at all times preferable to ‘disengagement’ from suppliers.

One step in the online manual involves inventorying existing industry- and multi-stakeholder initiatives. For each of these initiatives, you should also assess inclusiveness (are relevant stakeholders involved?), scope (which risks are addressed?), and monitoring mechanisms. To help you with this step, we have created an overview of existing initiatives in the technology industry in Annex 2.

Integrating due diligence

Finally, due diligence should be integrated into your company in a sustainable way. It is not enough to adopt formal policies (e.g. a code of conduct), but you should also strengthen internal due diligence capacity and integrate risk-based due diligence in your procurement policies. The online toolbox explains each of these elements in more detail. Below, we include a case study that details how one of the participants to the learning network kick-started due diligence processes within the company.

Case: JSR Micro

JSR Micro is a subsidiary of JSR Corporation, a multinational company that employs more than 9,000 people worldwide. A materials supply company, JSR Micro produces materials for medical, energy storage, electronic and optical applications. JSR has a tradition regarding social responsibility. It has been reporting on its CSR efforts at a global level since 2010, and within Belgium since 2015. Besides focusing on health and safety within the company, other stakeholders and the living environment, JSR uses ISO standards to manage quality, employee and environmental risks. The company also reports on its supply chain policies, and has already been audited several times on the basis of the Responsible Business Alliance code of conduct (see annex 2). JSR Micro considered implementing due diligence as a logical next step.

The starting point

JSR's supplier network includes manufacturers and distributors of raw materials, equipment and packaging materials. Some of the raw materials come from the parent company in Japan. In addition, logistics services and waste management, as well as a host of other services, also contribute significantly to JSR's operations.

Because materials suppliers often operate in high-tech business environments, they have to follow strict sector guidelines (e.g. the Environment, Health & Safety (EHS) regulations from the global sector organization SEMI). While such guidelines can reduce risks of serious human rights violations and environmental problems, they are often limited to production processes.

In addition, JSR asks its key suppliers to sign the Responsible Business Alliance (RBA) Code of Conduct, and to expect the same from their own suppliers. RBA members can have their suppliers audited through the RBA Validated Assessment Program (RBA VAP). JSR Micro itself is also being audited under this program. The 2020 audit found that JSR was largely compliant, but that some elements could be more explicitly integrated. RBA's main observations were that action was already taken at the global headquarters to assess key suppliers, but that no similar process existed yet for JSR's local supply chains in Belgium.

The strategy

Building on the need for a proprietary process to assess local supply chains, it was decided to initially focus on developing a methodology for supplier risk assessment. To gain more insight into suppliers' current practices and ambition, JSR sends them a questionnaire that closely matches that of the RBA. Based on the initial responses, JSR could already observe that it would not be obvious for smaller suppliers to sign the RBA Code of Conduct, let alone that they should effectively become RBA members. Hence, it was necessary for JSR to set up its own process to screen supplier risks, while aligning with the RBA process wherever possible. In doing so, JSR is

committed to discussing and identifying potential risks, and to assessing the extent to which their own suppliers are exposed to these risks.

In developing its system of supplier risk assessment, JSR Micro faced two key challenges. First, risks are often not located with direct suppliers, but further up the supply chain. Second, the rather complex combination of products and countries of origin needs to be made manageable. The following steps were followed:

- **Step 1: Categorization.** Products were divided into a dozen categories, based on similar risk profiles. This led to a discussion within JSR, which had two objectives: to develop an understanding of the nature of risks, and to identify which risks are potentially associated with JSR Micro's products or services. The discussion built on the RBA code of conduct.
- **Step 2: Risk analysis.** Many of JSR's supply chains are complex, so the risk analysis used a number of fairly crude indicators. Publicly available country risk scores were used as an indicator of geographical risks. Product risks were estimated through the use of several sources (see online manual). For the technology sector, this report by Drive Sustainability is highly recommended.
- **Step 3: supplier risk assessment.** Suppliers were asked to fill in a questionnaire that is largely based on the RBA code of conduct. The results of this questionnaire were then combined with a number of other parameters in a score sheet to assess company risk.
- **Step 4: integrate due diligence.** Since a number of processes were already in place at the start of the project, it was important to first take stock of these processes. A cross-departmental consultation was initiated. Supplier policies were strengthened based on suggestions from the RBA audit, and suppliers were informed accordingly. In addition, the further integration of human rights and environment into existing supplier audits, which for the time being focus on quality (although a limited number of essential criteria are also included in the area of safety and environment), is being considered. Finally, JSR is considering RBA membership. This would facilitate the audit process, but could also put smaller suppliers at a disadvantage due to the heavy administrative workload associated with this audit process.

What's next?

The pilot project succeeded in triggering reflections within JSR about risks. An initial risk assessment was carried out, and a number of basic processes were initiated to analyze if these risks actually 'materialize' in JSR's supply chain. Steps were also taken towards the further integration of due diligence into business operations.

At the same time, JSR's case shows that due diligence involves a multitude of parallel processes, and is a long-term project. Further actions will be required to obtain a more fine-grained understanding of risks; but also to effectively mitigate these risks. To make this possible, additional internal capacity building and some form of vertical integration of due diligence will be crucial.

Lessons learned

Based on the learning network and the pilot projects, some key lessons can be formulated, which may be useful for other companies that wish (or need) to carry out due diligence.

1) Build on existing processes and knowledge

A lot of companies already have practices in place that can play a role in due diligence processes. Examples include systems of supplier screening, systems to monitor product safety or quality, implicit attention to health and safety risks during supplier visits, etc. Often, however, these processes, and the corresponding expertise, are fragmented

across people and functions. Make sure to (1) take stock of existing processes and practices; and (2) work on horizontal and vertical integration (see point 2).

2) Integrating due diligence into the business requires a cross-cutting approach

Some horizontal integration across business functions is inevitable. Convening different profiles (e.g. buyers, legal/compliance, quality control, sustainability) can trigger a mutual learning process. Definitely consider vertical integration as well: involve management as much as possible, and make sure there is a clear commitment from the top.

3) A basic understanding of product risks is difficult, but essential

Companies tend to look primarily at risks at direct (tier-1) suppliers. Yet a lot of risks are further up the supply chain, at tier-2, tier-3, ... suppliers. To ensure that these risks receive sufficient attention, it is important to (1) analyze product risks throughout the chain; and (2) pay attention to how suppliers themselves deal with these risks. Importantly, a risk analysis of a supply chain is not the same as an exhaustive supply chain mapping.

4) Learning by doing

Due diligence is a process of continuous improvement. Companies can grow into due diligence by building up experience in risk identification and management, by establishing a broad consultation process with stakeholders, by seeking engagements from business relations, etc.

5) Due diligence as a strategic reflection on sustainability approach

Launching due diligence processes is an opportunity to critically review your existing sustainability approach. It allows you to take a step back, by considering the risks you face, and to better match your actions with these risks.

6) Take care of your suppliers

Well-meant actions to deal with risks at suppliers paradoxically result in an increased workload and costs for suppliers. A good example are audits, where suppliers are often expected to carry the cost. A supplier risk assessment can also put smaller suppliers at a disadvantage, as they struggle to meet the set criteria. It is therefore crucial to engage in dialogue with your suppliers, and to see how progress can be made together.

Annex 1: Overview of key risks

This (non-exhaustive) overview of key risks in the technology industry can get you started with the risk assessment in the section 'understanding risks' of the online manual.

Human rights

Child labour

In various steps of the supply chain, there is a risk for (hazardous) forms of child labour. The most widely cited example is the involvement of children in the artisanal mining of minerals such as cobalt or tin (e.g. Democratic Republic of Congo, Indonesia) but also, for instance, in the cultivation of natural rubber (e.g. Indonesia, Thailand)[2]. Risks for the involvement of minors also exist in the production of electronic components, and the assembly of electronic devices. It has repeatedly been demonstrated that large Chinese tech suppliers use underpaid and demanding student jobs[3]. Finally, in countries like Ghana and Pakistan, millions of children are involved in the informal and highly hazardous recycling of e-waste[4].

Forced labour

While forced labour is often confused with 'modern slavery', it encompasses a multitude of situations in which individuals experience coercion to work. These may include deception, restrictions on freedom of movement, (the threat of) physical or sexual violence, withholding of identity documents or wages, excessive overtime, and systems of debt bondage. Migrant workers are disproportionately at risk of becoming victims of forced labour[5]. In Malaysia (a major ICT-producer), migrants from countries like Bangladesh, Nepal, and Myanmar play a key role in the production of, among others, semiconductors and computer chips. A large proportion of these workers fall victim to practices like withholding identity documents or wages[6]. Concerns about forced labour also exist in the solar panel chain, and particularly in polysilicon production in China[7] .

Occupational health and safety

Occupational healty and safety risks exist throughout the technology chain. Mining remains one of the most dangerous forms of employment worldwide, and entails serious risks for respiratory disease (e.g. dust lung), hearing disorders, poisoning (e.g. cyanide, mercury), or the risk of collapse in underground mines. Although these risks exist in both large-scale and small-scale (artisanal) mining, the risk for accidents is clearly more outspoken in artisanal and small-scale mining[8]. Risks also exist in electronics manufacturing. For instance, Asian workers are exposed to toxic chemicals at various stages of the production process, which may lead to miscarriages and to various forms of cancer, among others[9] .

Freedom of association

While freedom of association is guaranteed in most European technology companies, the technology industry (and certainly American companies) does not have a good track record[10]. In part, the weakness of unions can be explained by the widespread practices of outsourcing and sub-contracting. In China, which is by far the most important supplier of components and raw materials in the technology industry, there are

[2] https://drivesustainability.org/wp-content/uploads/2018/07/Material-Change_VF.pdf
[3] https://www.ft.com/content/5b2af247-46fa-45de-94e1-b669bb0c3164
[4] https://www.who.int/news/item/15-06-2021-soaring-e-waste-affects-the-health-of-millions-of-children-who-warns
[5] https://www.ilo.org/wcmsp5/groups/public/---ed_norm/---ipec/documents/publication/wcms_854733.pdf
[6] How the global electronics industry came to rely on forced labour and debt bondage - Danwatch
[7] Chinese Solar Companies Tied to Use of Forced Labour - The New York Times (nytimes.com)
[8] https://www.ilo.org/global/topics/safety-and-health-at-work/industries-sectors/WCMS_219026/lang--en/index.htm
[9] https://swedwatch.org/publication/ict-workers-should-not-be-exposed-to-hazardous-chemicals/
[10] https://www. washingtonpost.com/technology/2021/01/26/tech-unions-explainer/

serious restrictions on trade unions[11]. A lot of tech companies across the globe are also based in so-called 'Export Processing Zones', where exceptions to social and environmental legislation are possible[12] .

Discrimination

Vulnerable groups such as low-skilled workers, migrants, minors, and women are overrepresented in labour-intensive and repetitive jobs. For instance, to the extent that women are involved in artisanal mining, it is often in badly paid and repetitive jobs like crushing or washing ores, or services like prostitution or catering[13]. In countries like Vietnam and Thailand, women perform a lot of the belt work in factories, while their male colleagues have better-paid positions[14]. Migrants (particularly women), are also highly vulnerable to exploitation. Often recruited through middlemen, they become completely dependent on their employer.

Rights of local communities

The main risks to for local communities exist during the mining phase. Both large-scale and small-scale mining can have important negative impacts on local communities, like expropriation (forced or otherwise), negative environmental and health impacts (e.g. through deforestation or water pollution), political conflicts about the distribution of royalties, etc. In addition, it is important to consider possible opportunities for local communities, in the form of employment or royalties[15] .

Environment

Air quality

Air pollution is harmful to both human health and the natural environment. For instance, emissions of sulphur and nitrogen gases cause toxic compounds in our atmosphere like acids, ozone, and smog. These are harmful to health, lower agricultural yields, and can further weaken or even wipe out already fragile ecosystems. In addition, emissions and dispersion of particulate matter, metals and toxic organic compounds should also be considered in the technology sector.

Risks manifest themselves during the extraction, production, storage, and transportation phase. Examples from the extraction phase include the transport of bauxite in Malaysia[16] and the extraction of graphite for batteries in China[17]. Risks of transport- and energy-related nitrogen emissions (NO_x) occur throughout the value chain. For instance, the production, processing and transport of metals, wood and plastics are highly energy-intensive. Within Europe, the risks are highest in Eastern Europe, due to its large and ageing industrial metal- and chemical industry and the frequent use of brown coal. Overall, the greatest risks are in Central and South Asia[18].

Water quality and -availability

Water is used for a wide range of industrial applications, including dilution, steam generation, and cleaning and cooling of machinery. Water resources are also extracted as cooling water for power plants, and to discharge wastewater from industrial processes. Key risks relate to excessive water extraction, the disposal of inadequately treated water, and the spread of toxic waste due to local flooding during periods of intense rainfall. These risks are significantly amplified in regions with water scarcity. The United Nations therefore recommends treating water as a de facto scarce resource.[19]

[11] https://survey.ituc-csi.org/China.html?lang=en#tabs-2
[12] https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/publication/wcms_541524.pdf
[13] https://www.iisd.org/system/files/publications/igf-women-asm-challenges-opportunities-participation.pdf
[14] https://www.equaltimes.org/the-gender-gap-in-the-electronics?lang=en#.Y3IOjXbMI2w
[15] https://www.iied.org/sites/default/files/pdfs/migrate/G00901.pdf
[16] https://www.drivesustainability.org/about/release-of-the-material-change-report/
[17] https://www.washingtonpost.com/graphics/business/batteries/graphite-mining-pollution-in-china/
[18] https://www.iqair.com/world-most-polluted-cities/world-air-quality-report-2021-en.pdf
[19] https://www.unwater.org/water-facts/water-scarcity

During the resource extraction and processing phase, there are obvious risks. Mining is associated with the depletion and pollution of local groundwater resources through drainage of a variety of heavy metals. Similarly, large-scale pollution of rivers by PFAS and other hazardous chemicals as a consequence during of semiconductor production in Taiwan has been documented since 2009. Risks also exist further 'downstream'. Consider, for instance, the cooling and power supply of energy-intensive data centers[20].

Soil quality and land use

Soil pollution is often associated with the discharge - intentional or otherwise - of hazardous materials such as heavy metals, toxic gases and strong acids. It can also often be linked to raw material extraction (e.g. cobalt, lithium, magnesium and precious metals) and to (poor or incomplete) waste treatment and recycling. Industrial sites are often linked to historical pollution, which has never been addressed due to the cost and complexity of soil remediation.[21] Such sites pose a constant threat to local water resources, soil quality, and human health, due to their long-term dispersal of toxic substances via precipitation and wind.

Biodiversity

Biodiversity loss is accelerating: in the past 50 years, as many species of plants and animals have gone extinct worldwide as in the past 10 million years. The five main causes of biodiversity loss are land and coastal conversion, overexploitation, climate change, pollution, and invasive alien species. The global food system is the main cause of this trend. The impact on biodiversity of the technology industry varies. Key risks are related to geographic location (e.g. biodiversity hotspots); the use of raw materials with a large ecological footprint (e.g. textiles, aluminium), and over-use of biological resources (e.g. wood, rubber)[22] More broadly, rising demand for raw materials like bauxite (aluminium), iron, copper, coal, tin, lithium and rare earths, has led to a surge in mining activity, and associated risks for biodiversity loss. Consider, for instance, the spectacular expansion of nickel mines in hotspots like Indonesia and the Philippines.[23]

Waste

Poor waste management contributes to air pollution and climate change, and has direct impacts on biodiversity.[24] The wide variation in waste types and disposal routes makes it difficult to get a complete overview. However, one of the key risks for the technology industry is that of e-waste.[25] The short life cycles of B2C products have led to the rapid growth of e-waste. Serious risks occur when processing this waste, such as heavy metals and organic pollutants entering the food chain through coastal freshwater areas. Or the exposure of (often informal) workers to harmful substances like lead, mercury, nickel, brominated flame retardants and polycyclic aromatic hydrocarbons (PAHs).[26] A significant proportion of e-waste is exported to low- and middle-income countries, where regulations do not exist, or are inadequately enforced.[27] There is also a big difference in the quality of enforcement between countries within Europe. For instance, waste from Western Europe that is rejected by non-European countries still finds its way into Eastern Europe.

Greenhouse gas emissions

Greenhouse gas emissions cause increased heat storage in our atmosphere, which has a far-reaching impact on global climate patterns. This gives rise to a wide range of effects, from the melting of polar ice and the extinction of animal and plant species, to heat waves, floods, prolonged droughts and water shortages.[28] The technology industry is a major contributor to greenhouse gas emissions, not only through 'upstream' activities like mining, metal production, and component manufacturing, but also through emissions caused

[20] https://www.datacenterfrontier.com/special-reports/article/11428474/tackling-data-center-water-usage-challenges-amid-historic-droughts-wildfires
[21] https://www.fao.org/3/cb4894en/online/src/html/chapter-03-5.html
[22] https://www.cbd.int/doc/c/b23c/f96f/93d4a6e1f9d48a55f9e287a4/sbi-02-04-add4-en.pdf
[23] https://www.mining.com/nickel-the-mined-commodity-most-exposed-to-biodiversity-risks-report/
[24] https://www.cbd.int/doc/c/b23c/f96f/93d4a6e1f9d48a55f9e287a4/sbi-02-04-add4-en.pdf
[25] https://www.eea.europa.eu/publications/signals-2014/articles/waste-a-problem-or-a-resource
[26] https://www.who.int/news/item/15-06-2021-soaring-e-waste-affects-the-health-of-millions-of-children-who-warns
[27] https://www.unep.org/news-and-stories/press-release/illegally-traded-and-dumped-e-waste-worth-19-billion-annually-poses
[28] https://www.ipcc.ch/srccl/chapter/chapter-5/

by end products, notably vehicles and electronic devices. Iron and steel production alone contributes more than 7% to global greenhouse gas emissions[29], while ICT additionally contributes almost 3%[30]. Also in terms of climate impact, the ICT sector is considered one of the fastest growing sectors due to its high energy and cooling demand.

[29] https://ourworldindata.org/emissions-by-sector
[30] https://www.sciencedaily.com/releases/2021/09/210910121715.htm

Annex 2: Overview of key initiatives in the technology industry

This overview of key initiatives in the technology industry can help you with the 'inventorying' exercise in the section on 'mitigating risk' in the online manual. It is primarily based on three sources. Wherever additional sources were consulted, please find the reference in footnote.

- *MSI Integrity (2020). Not fit for purpose: The Grand Experiment of Multi-Stakeholder Initiatives in Corporate Accountability, Human Rights and Global Governance. https://www.msi-integrity.org/not-fit-for-purpose/*
- *International Trade Centre. ITC standards map. https://standardsmap.org/*
- *Transnational Institute. Mapping MSI in Global Governance Database. https://www.tni.org/en/msidatabase*

Initiatives aimed at making supply chains more sustainable have emerged within various branches of the global mining and metals industry. The main examples are the Aluminium Stewardship Initiative and Responsible Steel. Both are multi-stakeholder initiatives, which link a set of standards to a certification system and programs to support members/companies.

- Different interest groups (industry, civil society, local communities) are represented, but in practice companies often remain dominant.
- Compliance with standards is verified by independent auditors.
- For more information: https://aluminium-stewardship.org/; https://www.responsiblesteel.org/

The Fair Cobalt Alliance is a multi-stakeholder initiative whose central goal is to sustainably integrate artisanal cobalt mining into companies' supply chains. It explicitly focuses on cooperation throughout the entire cobalt chain, from end consumers to smelters and local mining cooperatives. Strong efforts are made to implement projects to strengthen artisanal mining and maximize its positive impact on local communities.

- Both companies, civil society and local stakeholders are represented.
- For more information: https://www.faircobaltalliance.org/

Responsible Business Alliance (RBA) is undoubtedly the most important initiative in the technology industry. RBA was founded in 2004, by several major tech companies. Today, the alliance has more than 500 members, with a combined turnover of more than USD 7,700 billion. These members and their suppliers must adhere to the RBA code of conduct. In addition, RBA offers a wide range of training courses, and pays increasingly explicit attention to supporting due diligence processes. In addition to its more general program, the RBA, through the Responsible Minerals Initiative, offers a series of concrete tools to encourage and facilitate responsible mineral sourcing. Crucial to this is the Responsible Minerals Assurance Process (RMAP), which audits management processes of refineries and smelters to verify compliance with a set of due diligence standards.

- While RBA makes efforts to include other stakeholders in its governance model, in practice it is still mainly dominated by large companies.
- The RBA code of conduct is simple and accessible, covering key risks in the areas of environment, working conditions, and governance. At the same time, gaps remain, including in terms of compliance with international labour conventions.
- Members are expected to demonstrate that they comply with the RBA Code of Conduct. Various assessment tools are provided for this purpose. RMAP relies on independent auditors.
- **More information:** https://www.responsiblebusiness.org/; https://www.responsiblemineralsinitiative.org/

	Drive Sustainability is an initiative from the automotive industry. It supports its members in making their supply chain more sustainable through training and tools. Drive Sustainability carried out interesting work on risks associated with specific products and raw materials. In addition, it also aims to contribute to the adoption of global standards (e.g. UN Guiding Principles, OECD guidelines), mainly through self-assessment processes. • Drive Sustainability is unilaterally driven by industry. • Strong focus on self-assessments. • More information: https://www.drivesustainability.org/
	JAC cooperation is an initiative by major telecom operators to coordinate and strengthen their efforts in sustainable supply chains. Central to this initiative is the realisation of economies of scale through the sharing of audit results. • Fully industry-driven • Strong focus on third-party auditing • For more information: Joint Alliance for CSR (jac-initiative.com)
	The Dutch metal covenant is one of 11 sector covenants for international responsible business conduct. Within these covenants, different partners seek to work together to make their production chains more sustainable. Setting up and supporting due diligence processes, and concrete joint projects, are central to the covenant system. • The covenants are multi-stakeholder initiatives involving sector organisations, NGOs, trade unions, as well as the Dutch government. • Strong focus on human rights • Dutch government assumes the role of coordinator and regulator (through the SER), but in practice much depends on the individual efforts of companies. • For more information: https://www.imvoconvenanten.nl/nl/voedingsmiddelen