

Integrating ESG into Supplier Risk Management

Navigating environmental, social and governance challenges in complex supply chains to improve business resilience



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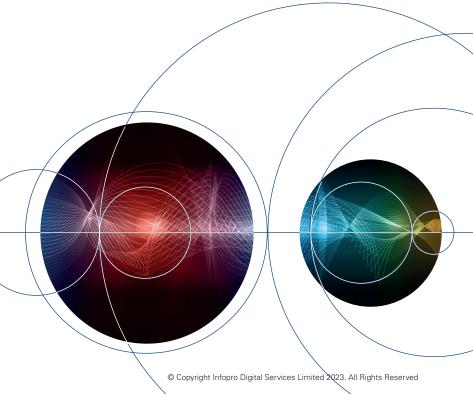
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1. Introduction and overview

Companies in Europe face mounting pressure to incorporate and integrate environmental, social, and governance (ESG) principles and initiatives into their supply-chain risk management. Over the past two decades, the notion of ESG as a vital component of risk management has become more prominent, following increased demand from customers, investors, employees and regulators. By understanding ESG-related disruptions within their supply chains and ecosystems, businesses can anticipate challenges and adapt swiftly, bolstering their resilience. But for many companies, achieving this goal is a challenge.

This report, a collaboration between Chartis and Dun & Bradstreet:

- Evaluates the current adoption of ESG risk management in European supply chains.
- Summarises the best practices of those companies that have successfully achieved it.

The research is based on a series of interviews conducted with leading ESG supply chain professionals from European industrial and manufacturing businesses.

With this report, companies that want to incorporate ESG and sustainability into their supplier risk management processes can:

- Understand how ESG concerns affect procurement and supply chain risk management.
- Identify strategies to future-proof their supply chains by adopting effective sustainability practices and managing ESG risk.

The report also contains selected case studies based on the research, which explain, using practical examples, how specific companies are dealing with their challenges. These can be found in chapter 6.

Key findings

General

- Companies are being strongly encouraged (and in some cases required) to integrate ESG risk measurement and mitigation efforts into their supply chain management. Pressure is coming from regulators and external and internal stakeholders (customers, investors and employees).
- When assessing their enterprise and supply chain risk, companies must address supply chain due diligence and ESG factors (such as greenhouse gas [GHG] emissions, physical climate risk, labour and human rights violations and governance and regulatory failures). The negative impacts of these factors can result in operational disruption, regulatory enforcements and lawsuits.
- · Businesses are adopting third-party data and analytics solutions to help them in several areas, including enhancing the visibility of their supply chains and performing social due diligence.
- Following recent advances in natural language processing (NLP) and machine learning (ML) technologies, Al-enabled entity management and analytics platforms can now solve complex data issues. This can help to improve supply chain traceability, transparency and mapping.
- Companies are pooling their insights on how to encourage suppliers to engage with their ESG risk management.

The challenges

- Many companies are just beginning to implement due diligence for their supply chains. Most have not attempted to map their supply chain beyond the first tier (direct suppliers), creating a lack of visibility.
- Existing workflows struggle to analyse different climate pathways and scenarios to inform companies' decarbonisation strategies. Firms must also improve their forward-looking scenario capabilities to understand how they can achieve net zero and other climate targets. They must also adhere to responsible business principles and comply with relevant regulations.
- · Identifying and collecting the right data to support and augment supply chain ESG workflows is a highly complex task - one that cannot be done completely in-house.



Conclusion

- To help them mitigate ESG risk, companies must nurture a diverse range of supplier relationships, and onboard alternative ESG-savvy suppliers. In some cases, nearshoring – shipping from neighbouring countries - can also improve a firm's ESG risk profile. Too much concentration can create significant ESG risk if suppliers are caught up in controversies or adverse incidents.
- ESG professionals want to stay abreast of the latest developments in supplier sourcing and their impact on companies' ESG profiles. They are looking to model climate scenarios and Scope 3 decarbonisation opportunities, and identify which products should be prioritised for direct sourcing or joint ventures.

Research approach and methodology

In 2023, Chartis Research interviewed 11 managers and senior managers from medium-sized and large businesses operating in Europe (see Table 1).

- The interviewees worked in industries including energy, automotive, chemical and industrial materials engineering, as well as other manufacturing sectors (note that services and software providers were excluded).
- Interviewees were supply chain professionals (compliance managers and procurement leaders) and sustainability professionals (ESG managers, sustainability leaders and human rights specialists).

Table 1: Interviewees – anonymised demographic information

| Industry sector | Location | Role | Number of employees |
|------------------------|----------------|------------------------------------|---------------------|
| Speciality chemicals | Germany | Business-line ESG lead | 2,500-5,000 |
| Medical devices | Denmark | ESG lead | 1,000-2,500 |
| Agriculture | Switzerland | Human rights specialist | 25,000-50,000 |
| Materials | Austria | Compliance and ESG manager | 5,000-10,000 |
| Pharmaceuticals | Poland | Compliance and ESG head | 500-1,000 |
| Automotive | Germany | ESG manager | 1,000-2,500 |
| Materials | Norway | ESG manager | 5,000-10,000 |
| Beverages | Belgium | Sustainable procurement head | 100,000-200,000 |
| Metals and industrials | Germany | Sustainability transformation lead | 100,000-200,000 |
| Pharmaceuticals | Czech Republic | ESG program manager | 100,000-200,000 |
| Public sector | Sweden | ESG lead | 10,000-20,000 |

Source: Chartis Research



Interview questions

Chartis discussed the following topics with respondents across the range of interviews we conducted:

- How complex is your supply chain?
- Which factors contribute most to the complexity of your supply chain?
- Do you think that ESG risks may affect your company's business resilience?
- How have ESG regulatory requirements impacted the management of your supply chain?
- What actions does your company take to identify and manage the ESG-related reputational, regulatory and physical risks associated with suppliers?
- What are the main benefits of having ESG concerns incorporated into your supply chain management?
- What challenges do you have in this area?

- How have recent events (COVID-19 pandemic, Russia's invasion of Ukraine) shifted your ESG priorities?
- How has the macroeconomic outlook impacted your ESG initiatives?
- Have you considered relocating your supply chain to your domestic market?
- What do you think the future of ESG risk management looks like?

Chartis also carried out supplementary research and analysis of the technology landscape. This provided additional insight into the factors affecting European firms' adoption of supply-chain ESG. These factors included stakeholder pressures, regulatory requirements, risk management frameworks and technology use cases.



2. Context: what's driving ESG into supply chain risk management?

Initially, according to our interviewees, much ESG adoption grew out of internal company initiatives focused on managing the firm's environmental footprint, employee experience and regulatory compliance. Now, however, pressure from external stakeholders is propelling companies to incorporate ESG concerns into their supply chain management activities.

Pressure from stakeholders

Our research identified three groups of stakeholders that are exerting pressure on companies: customers, investors and employees.

Customers: powerful agents of change

Contrary to our expectations, when we asked interviewees who was driving their adoption of supply chain ESG risk management, the most frequent answer was business-to-business (B2B) customers. These individuals expect their suppliers to report accurately on their GHG emissions, human rights risks, and due diligence practices. Customers rely on this information to accurately assess their own ESG risks, meet their due diligence requirements and achieve ethical benchmarks.

In the long term, B2B customers want to improve their sustainability by ensuring they procure goods from ESG-savvy suppliers. For decarbonisation in particular, many firms view this strategy as a more direct approach, rather than changing their products or operations.

In many instances, pressure to make these ESGrelated demands is coming from end consumers, as environmental and social factors become increasingly important to them. Ultimately, this can encourage businesses to maintain sustainable supply chains to avoid losing market share.

Investors: disclosure and performance are vital

In the EU, investors play an important role in promoting sustainability reporting and due diligence requirements. Mostly they want accurate ESG data from companies, especially on Scope 3 emissions. But they also want better ESG risk management practices, to

support more comprehensive portfolio analyses. Investors incorporate ESG concerns into their investment decisions in a variety of ways. These include designing funds that can be marketed as sustainable investments (by leveraging the standards in Articles 8 and 9 of the EU's Sustainable Finance Disclosure Regulation [SFDR], for example, as described in Appendix A), and by incorporating ESG factors to reduce investment risk or achieve outperformance.

Many investors also have a regulatory imperative, and face extensive ESG reporting requirements - and this can influence how they engage with companies. Many adhere to sustainability frameworks such as the UN Principles for Responsible Investment, for example, while the SFDR requires investors above a certain size to disclose their portfolio's performance along a range of prescribed ESG data points. Beyond reporting requirements, sustainable finance products are regulated under the EU Taxonomy for Sustainable Finance, while the Green New Deal can provide financing for various types of sustainable investment.

Employees: agitating for change

Several interviewees highlighted the pivotal role that employees play in raising senior managers' awareness of ESG risks. Employees can also encourage firms to invest in establishing supply chain ESG programs. Younger workers in particular have lobbied their companies to demonstrate ethical behaviour and support environmental and social goals. Smart companies have recognised that sustainability is important not only to meet the expectations of external stakeholders, but also to enhance their reputations as employers.

Some interviewees cited corporate citizenship as a factor in encouraging them to integrate ESG due diligence into supply chains. This was especially true for healthcare firms, which felt a particular responsibility toward patients and society at large. For other interviewees, philanthropic investment was intertwined with their efforts to improve their suppliers' risk profiles. For them, addressing supply chain issues ultimately helps to enhance the lives of workers and their families worldwide.



Pressure from regulators

ESG-related regulations: mandating action on sustainability

The EU's stance on sustainability and ESG requirements for European corporates has become increasingly prescriptive in recent years. Many of our interviewees cited regulation, specifically the Corporate Sustainability Reporting Directive (CSRD), as a primary driver for adopting ESG accounting. Although the CSRD focuses on companies themselves, the interviewees did cite an influence on aspects of the supply chain (such as suppliers' human rights records).1

Commodities producers and traders are also ramping up their climate-data gathering and reporting efforts in anticipation of the EU's Carbon Border Adjustment Mechanism (CBAM), which takes effect in 2026. This will require firms to purchase EU Emissions Trading System (ETS) certificates when importing carbon-intensive commodities including cement, iron, steel, aluminum, fertiliser, electricity and hydrogen. With the transitional-phase rollout due in October 2023, firms are scrambling to put traceability procedures in place for their supply chain emissions.

Companies in Europe face more immediate regulatory pressures. Regulators in Germany and Norway, for example, have implemented stringent regulations around supply chain sustainability and due diligence that are already in effect. The German Supply Chain Due Diligence Act and the Norwegian Transparency Act both require companies to:

- Establish a system to assess the risks posed by a given supplier or business partner.
- Document their due diligence processes.
- Report any findings that indicate adverse impacts.
- Take remedial action if necessary to prevent violations of human and labour rights.

If remediation fails, businesses must, as a last resort, terminate their commercial relationship with the affected supplier.

The Norwegian Transparency Act takes a comprehensive approach, requiring companies to conduct due diligence across the supply chain.

By contrast, the German Act only requires firms to take remedial action if they become aware of adverse incidents within the operations of indirect suppliers. It is unclear whether companies in Germany will benefit (from the regulators' perspective) if they exceed their requirements. Nevertheless, by regularly conducting risk assessments and due diligence across the entire supply chain, they can future-proof themselves for emerging regulations (such as the EU's Corporate Sustainability Due Diligence Directive [CSDDD]). Indeed, national regulators that have acted early, such as those in Germany and Norway, will ultimately have to align their regulations with EU requirements in any case.

As regulatory pressure increases – a trend we can expect to continue - companies will be affected both directly, by the regulations themselves, and indirectly, as suppliers of regulated entities. There are potential benefits too: safeguarding market share, being in a better position to seize sustainable business opportunities, and even gaining a competitive advantage. The sooner companies start to invest in ESG risk assessment, the faster they can enjoy the benefits. Avoiding it will not be an option.

For more information on the CSRD and other key regulations, see Appendix A.



3. How is ESG risk managed in the supply chain?

Managing risk in the supply chain

For companies producing and/or distributing physical products, supply chains come with several potential risks:

- Supplier risk (financial). The possibility that a supplier may be unable to continue servicing a company. This might be due to financial failure, difficulty in obtaining credit or a lack of liquidity.
- Supply risk (operational). The risk that a supplier cannot obtain the resources it needs to provide products or services to a company.
- Business operating risk. The risks associated with core operating processes (such as manufacturing, transportation, IT and production), as well as physical hazards and catastrophe risks.
- Strategic risk. Risks that threaten a firm's business model, including reputational risk that may impair its ability to operate.

When assessing the potential risk associated with suppliers, companies typically follow these steps:

- Perform due diligence to onboard and vet new suppliers. Companies assess the risks described above and evaluate the suitability of each entity in their supply chain.
- Assign a risk profile to a given supplier based on the due diligence data collected.
- · Conduct ongoing supply chain mapping to identify new vendors in the chain.
- Closely monitor and engage with higher-risk suppliers to address any issues.
- Assess their potential to respond to risk incidents by implementing technology solutions in the supply chain.

Once companies have identified and assessed the risks, they must determine an appropriate course of action. Typically, the procurement department is responsible for implementing systems and processes to mitigate supply chain risk. Some effective strategies for this include:

- Supplier choice. During their initial decisions about category purchasing, companies select suppliers with robust business continuity and enterprise risk protocols. By doing this, they can prevent risks from the outset.
- **Diversification**. Companies avoid becoming dependent on a single supplier, and ensure they have alternatives in case of disruption.
- Stockpiling. Companies ensure they have critical replacement parts and equipment.
- Pooling resources. Companies share backup resources with partners and/or competitors.
- Legal action. Companies ensure they have adequate protection with contracts that allow for flexibility with buyers or that favour backup suppliers.
- Maintenance agreement. Suppliers guarantee that equipment and infrastructure will be available as needed.
- Residual risk mitigation. Companies address risks that cannot be resolved directly by other approaches.

Managing ESG risk

To manage ESG and sustainability-related risks effectively, companies must first identify and assess their risk exposure. Within the ESG risk management framework, a sizeable proportion of a company's emissions, labour and human rights violations, and governance and regulatory failures come from the supply chain. For example:

- According to research cited by the EPA Center for Corporate Climate Leadership, 'supply chain emissions are, on average, 11.4 times higher than operational emissions, which equates to approximately 92% of an organisation's total GHG emissions.'
- The International Labour Organization (ILO) estimates that 28 million people currently labour under conditions of modern slavery. As this is about 1% of the global workforce in 2022, firms are likely to face a level of slavery-related risk in their supply chains.



Companies and their stakeholders are becoming more aware of how ESG risks influence and are affected by their businesses.² Alongside more traditional risks related to business continuity and delivery, firms must now also face the possibility of increased scrutiny from regulators, more reputational damage, declines in equity prices and loss of business because of ESG-related factors. Consequently, practices designed to detect these risks are merging with existing programs and controls for managing supply chain risk.

The issue of 'double materiality'

Changing regulations, along with discussions in industry, have led to the view among some market participants that ESG issues now have 'double materiality' (see Figure 1), and comprise both:

- Financial materiality (factors that directly impact enterprise value).
- Impact materiality (factors that affect the broader array of stakeholders within and outside an organisation).

EU regulators in particular are homing in on double materiality. The Corporate Sustainability Reporting Directive (CSRD), for example, requires firms to report it, with implications for their supply chain ESG requirements.

Figure 1: ESG and 'double materiality'



Source: Chartis Research



Impact materiality

Outward **Environmental** and societal effect on stakeholders, society and shareholders

² See chapter 6 for case studies that explore some organisations' approaches to these issues.



4. Effective supply-chain risk management: uncertainties, challenges and best practices

Our interviews highlighted several issues for ESG professionals when integrating ESG concerns into supply chain risk management – and some best practices that are evolving to address them.

Uncertainties and challenges

ESG professionals are afraid of being left behind

A recurring theme throughout Chartis' interviews was the concern that companies may not be prepared for forthcoming regulations and the competitive pressures that could follow. Many interviewees, feeling that a major regulatory transformation is imminent, believe they must be ready to adapt. Several participants identified a 'regulatory floor' – a base level of minimum requirements for ESG risk management and disclosure in their supply chains (and elsewhere). They anticipate that this will continue to rise in the coming years, increasing the pressure on them to improve their ESG practices.

ESG professionals also have competitive concerns, worrying that they will be 'leapfrogged' by rival businesses. Many believe that decarbonisation could become as crucial to business and product strategies as cost is currently. One concern is that B2B customers may start to view GHG emissions as a critical variable in their purchasing decisions (to improve their own sustainability profiles), and that competitors with lower GHG-emitting products may win out. Some respondents remained sceptical about whether GHG data will be accurate enough to influence buyers' decision-making. Nevertheless, they believed that their companies must invest in lower-carbon products to remain competitive.

Supply chain visibility is a challenge

A key challenge for interviewees is accessing reliable ESG data across the entire supply chain. This issue is particularly acute in relation to:³

- Scope 3 emissions.
- Human rights due diligence.

- Exposure to water and nature risk (a particular concern of professionals in chemicals and materials firms).
- Sourcing from alternative suppliers.

These challenges were not limited to small suppliers – interviewees noted that Tier 1 and 2 suppliers can also lack data in some of these areas. This is a major challenge: large companies may have dozens or even thousands of Tier 1 and 2 suppliers, each of which has many more suppliers in turn. In this context, attempting to scale due-diligence efforts for sustainability becomes an almost insurmountable task.

Without comprehensive visibility of the supply chain, companies will struggle to obtain accurate Scope 3 emissions data. This is a pressing concern, as Scope 3 emissions reporting is central to various European regulations, particularly the CBAM. Under the CBAM, commodity traders importing raw materials might be forced to adopt drastically different logistics strategies. Companies' shipping routes can vary widely, which in turn affects the emissions footprint of raw materials imported into Europe (subject to allowances as part of the CBAM). Different materials will also have been sourced or produced in different ways – without proper visibility of the supply chain, the provenance of a given material may be unreliable or untrustworthy.

Best practices

Understand risk management in the supply chain

As emphasised by our interviewees, ESG managers want to understand the risks and opportunities in optimising the ESG profile of their supply chains. There are several ways to do this:

- Reviewing suppliers' sourcing practices and their impact on the company's ESG profile.
- Modeling climate scenarios and Scope 3 decarbonisation opportunities.
- Identifying which products to prioritise for direct sourcing or joint ventures.

³ See chapter 6 for case studies that explore some organisations' approaches to these issues.



Armed with this information, ESG professionals can develop a portfolio of strategies to align their companies with future sustainability requirements.

Improve ESG practices to enhance supply chain resilience

Some ESG professionals believe that by analysing and documenting the supply chain in greater detail, their company can perform its ESG duties more effectively and enhance the baseline efficiency of its supply chain and sourcing program.

One healthcare company hoping to meet ambitious service-level goals, for example, invested heavily in strengthening its supplier risk management function. With this investment, the company was able to fully prepare itself for another pandemic, with backup supplies and alternative suppliers. Like many others, this particular company was unprepared during the COVID-19 pandemic, and had to resort to improvisation to uphold its delivery agreements.

According to another interviewee, by making specific procurement decisions, such as switching to electric cars, their company could boost its resilience in the face of rising energy prices. And by accommodating Ukrainian employees following the Russian invasion, the company was able to operate without disruption. In fact, many interviewees felt that crises such as these emphasised the importance of ESG concerns and, rather than hindering their ESG initiatives, accelerated them.

Collaborate with partners to pool efforts and enhance engagement

According to several interviewees, industry consortia are helping their organisations to not only engage with their suppliers, but also conduct their broader sustainability transformations. As one interviewee noted, although their company is relatively small, by collaborating with other industry participants it can help to foster change in high-risk jurisdictions.

Consortia have already been formed in Industry sectors such as sugar and automotive production. These are encouraging businesses to pool their resources on supply chain due diligence, product certification and eco-labelling, and sustainable R&D.

Use data and technology to facilitate change

Many interviewees have explored the possibility of purchasing ESG data management and analytics solutions to address some of the challenges they face (notably supply chain visibility, emissions management and analysing climate scenarios). Firms can also use technology to supplement inperson audits.

Many interviewees, however, said they have yet to find solutions that meet their specific needs, although most are already integrating some data tools and vendor software. So far, compliance requirements do not require specific technology solutions. But companies that want to tackle their visibility issues with a risk-based approach will recognise that external data is necessary for an objective, 'outside-in' view of their direct and indirect suppliers.

Increasingly, even well-equipped due diligence teams are finding that pre-packaged data and analytics tools are vital to prevent them overlooking crucial risk attributes that could affect their decisionmaking. New, specialised data products can now provide firms with ESG-related information on their suppliers. Some of these incorporate end-to-end data analytics workflow solutions that are tailored to support companies' sustainability initiatives. Other solutions integrate cutting-edge NLP and ML technologies that can automate entity management and data analytics. Solutions that pair rich, manually curated datasets with NLP and ML tools have flourished in the areas of supply chain mapping and visibility, by detecting hard to find or hidden relationships between suppliers.

Products that incorporate ESG criteria in entity management and supplier discovery processes are also becoming more popular. These can help ESG professionals expedite existing due diligence on suppliers, and facilitate accurate first- and secondlevel reviews at scale - far beyond what would be possible using a manual approach. Once these tools are configured to companies' specific needs, they can also be deployed to help suppliers with their decarbonisation efforts, or in sourcing less carbon-intensive alternatives.



5. Conclusion: how to incorporate ESG risk management into the supply chain

Chartis' research reveals the following key takeaways for firms preparing to design supply chain ESG risk management programs.

- Disclosure and compliance are the first stages of a sound ESG management program for the supply chain. Firms are progressively developing more sophisticated ESG goals and supplier due diligence processes. With these, they can address risks and capture emerging business opportunities for products and services that are ESG-compliant.
- Integrating ESG into supply chain risk management is an ongoing process. Companies' internal ESG and sustainability initiatives are complex endeavours that can take many years. Having a surface-level view of ESG concerns is not enough. To manage ESG in the supply chain effectively, companies must become more broadly aware of sustainability risks in the supply chain. They must also concentrate on tailored risk assessments and management practices for specific ESG issues.
- . Full visibility of the supply chain is crucial to unlock ESG risk management. Effective ESG risk management starts with robust governance. Without it, firms will struggle to implement and advance comprehensive ESG programs across their supply chains. Comprehensive supply chain mapping is also essential to unlock the capabilities of ESG risk analytics.
- To meet their supply chain ESG requirements, companies must have third-party data and technology. Some firms may have enough inhouse expertise to initiate ESG risk management programs. But they should leverage emerging data and technology solutions to ensure that their risk management systems are robust and comprehensive. Moreover, by using entity management and analytics solutions that are designed to enhance supply chain visibility and monitoring, alongside tools that improve workflow and integrate external and unstructured data, they can expedite their due diligence efforts. This proactive approach allows them to make timely adjustments, secure alternative suppliers if necessary, and ensure the continuity and viability of their supply chains, even in challenging circumstances. This level of preparedness is essential for business resilience.



6. Case studies

Case study #1: A view on Scope 3

Company description

A German-based manufacturer of speciality chemicals and other related products. The firm is at the start of a Scope 3 emissions disclosure process, following requests from its customers that it disclose its GHG emissions profile. It is also considering whether GHG emissions will be a particular selling point for more commoditised product categories.

Challenges

- Data. The company currently conducts due diligence directly for suppliers whose materials constitute more than 1% of the products in which they are used. This amounts to about 10% of suppliers. Considering that 90% of suppliers are currently signed up to a code of conduct, it will take more time for the company to establish suitable relationships so it can obtain Scope 3 emissions data.
- Emissions calculations. The company uses a proprietary model to calculate GHG emissions, which leverages information from third-party emissions databases. However, emissions factors that apply to one supplier's activities may not be suitable for another, similar supplier. The emissions databases also have gaps when it comes to suppliers' logistics and raw materials - which are important parts of their overall emissions profiles. Furthermore, some suppliers aggregate their Scope 1 and 2 emissions data using different methodologies, making it difficult to compare firms.

Solutions

- Data. To understand the scale of the data collection exercise, the company:
 - o Identified all the raw materials used in its products.
 - o Created a consolidated, portfolio-wide view of the data.
 - Used this to triage its supplier engagements.
- Emissions calculations. The company may remunerate smaller vendors that provide it with the GHG emissions data it needs in the appropriate format.

Conclusion

A systematic approach to data collection and aggregation can help to streamline Scope 3 emissions projects. Data and technology solutions may also help firms, but they currently have gaps that companies will have to bridge.



Case study #2: Exploring human rights due diligence

Company description

A multinational agriculture business with trading operations for physical commodities. The company is in the process of conducting human-rights-related risk assessments across its supply chain. In certain locations this has involved direct sourcing of agricultural products from farmers in developing nations. In others, agricultural products need to be sourced from other traders or intermediaries in the supply chain.

Challenges

- Risk assessment. The company is acting following internal and external pressure to optimise its ESG risk assessments using, for example, social lifecycle assessments (S-LCAs). These are a relatively new way to standardise certain ESG risk factors and assess them along the supply chain. Some of the company's customers and partners are now requesting S-LCA submissions, requests that it has been unable to meet. The company's risk-assessment taxonomy and library are highly complex (S-LCAs in themselves can involve thousands of data points across geographies, issues and products). Because of this, the firm has been unable to make time to map the S-LCA methodology to existing risk tools and processes.
- Transparency. For this company, knowing precisely where its commodities originate from is an important driver of sustainability, and a competitive advantage.

Solutions

- Risk assessment. The company now has subscriptions for two ESG-focused supply chain risk-assessment tools. These provide a variety of indices and risk assessments across a wide range of jurisdictions, supply chain segments and product categories. Using them, the company has completed a series of country- and product-specific risk assessments for suppliers in the production and processing segments of its supply chain. It has also been able to conduct similar assessments of commodity suppliers on its trading roster.
- Transparency. The company uses several supplier-engagement tools that target different ESG criteria. These assess suppliers' pre-existing disclosures for relevant information, and enable engaging with suppliers on each relevant ESG risk. To mitigate supplier risk, the company considers each entity's spend on ESG issues and determines how it can encourage improvements. In addition, when evaluating its supply chain for a critical ingredient sourced in a particular developing nation, the firm found that switching from indirect to direct sourcing mitigated suppliers' risks around biodiversity and human rights. And by sourcing directly via a joint venture, the company was also able to improve its purchasing costs and drive competitive advantage in that particular supply chain. The company and its joint-venture partner then allocated a portion of the money saved to philanthropic efforts within the developing nation (building on the company's involvement in rural communities and the agricultural supply chain). This helped to mitigate some of the human-related risks (such as forced labour) associated with operating in that particular country and product category.

Conclusion

Third-party data and analytics solutions can help companies expedite ESG risk management in their supply chains. Moreover, switching from indirect to direct sourcing can improve the oversight and control that companies have over their supply chain risk management.



Case study #3: Sustainable procurement

Company description

A leading beverage company active in a wide variety of markets globally, with a mixture of domestic and international supply chains across its various brands.

Challenges

- Integrating sustainability with procurement. The company recently decided to make every procurement manager responsible for overseeing sustainability. As part of the procurement decision-making process, managers now have to consider sustainability factors alongside financial ones. As part of this process, the procurement leader we interviewed began to evaluate where quick wins could be achieved without significant cost. In this individual's portfolio, the quickest wins were in packaging and raw materials. Given this person's current technologyfocused role, however, more strategic thinking is required to drive value from sustainability across the business.
- Regulatory concerns. The firm is required to comply with regulatory standards at the countryand EU-wide levels.

Solutions

- Integrating sustainability with procurement. The company is using 'ecolabelling' databases to help with its sustainability assessments. These certify whether a particular product complies with a set of sustainability requirements. The procurement leader we interviewed may also purchase sustainability scores for suppliers from third-party vendors.
- Regulatory concerns. This company sees an opportunity to use scenario-pathway analysis to understand how certain business decisions - like buying a software package or building a data center - may affect its emissions footprint. This information has to be publicly reported under current and forthcoming regulations.

Conclusion

When companies are developing their sustainability strategies in response to regulation, forwardlooking data from scenario analyses may prove useful.



Case study #4: Carbon accounting challenges and opportunities

Company description

A German multinational industrials group. The firm is evaluating ways to improve its carbon accounting and reporting capabilities, and how it addresses governance risks.

Challenges

- Carbon accounting. The group has been conducting carbon-footprint analysis of its own products for some time. At the aggregated level, however, this data is patchy and opaque. This is a problem, given regulatory requirements for carbon emissions reporting - and in particular the EU's Carbon Border Adjustment Mechanism (CBAM), which requires companies to have a firm grasp of the emission profiles of imported goods.
- Scope 3 emissions. For this particular business, acquiring reliable Scope 3 data from metals mining companies and processing mills is a challenge.
- Governance risks. The business is exposed to ESG-related governance risks. These include the risk of regulatory sanctions if illicit materials flow into its supply chain.

Solutions

- Carbon accounting. The business is offering to license its library of emissions factors to customers as required. This can help to provide the data needed to establish more accurate and standardised emissions models across the supply chain.
- Scope 3 emissions. Carbon-footprint analysis for products uses a standardised methodology that enables companies to assign discrete emissions profiles to specific batches of products. This business is now partnering with suppliers to ensure that these details are recorded and socialised across the supply chain. By doing this, it anticipates that - longer-term - it will be able to produce Scope 3 reports confidently and consistently, down to the individual product level if needed, to comply with regulatory and voluntary requirements. And by working with larger counterparties with more established carbon reporting practices, the company will also be able to fill gaps in its Scope 3 reporting.
- Governance risks. The company is looking to mitigate its governance risks by subjecting suppliers to rigorous due diligence, and ensuring that the origins of its raw materials are absolutely clear. In some cases, it will exclude undesirable counterparties and suppliers from its supply chain.

Conclusion

By using standardised processes to calculate suppliers' emissions and conduct due diligence, companies can optimise their ESG risk management.



Case study #5: Implementing ESG due diligence

Company description

A Swedish public agency. The organisation is adopting a new ESG due diligence program for more than 2,000 suppliers.

Challenges

- Complying with sanctions. The agency is required to adhere to a sanctions program introduced by the government following Russia's invasion of Ukraine. The program covers its entire supply chain.
- Data availability. Public ESG data and ratings for privately owned Swedish companies are limited. Because of this, the agency could conduct ESG due diligence on only 25% of its suppliers that were in scope.
- Prioritising ESG topics. The agency is required by the government to facilitate a more sustainable economy and society. But it is not clear which ESG topics it should manage first in pursuit of this goal.

Solutions

- Complying with sanctions. In 2022, the agency selected Dun & Bradstreet's (D&B) ESG portal to facilitate its ESG due diligence program. The portal provides insights into the agency's suppliers' ESG rankings, enabling it to meet its sanctions compliance obligations.
- Data availability. An April 2023 update to the ESG portal expanded the tool's dataset to more than 35 million public and private companies. The agency was then able to locate ESG rankings and data for all of its suppliers. This dataset also serves as a source of third-party validation for the ESG data that the agency acquires directly from its suppliers.
- Prioritising ESG topics. The abundance of ESG data that can be accessed via the D&B ESG portal allows the agency to identify trends across suppliers. The introduction of regulatory requirements, notably the EU's Corporate Sustainability Reporting Directive, will also standardise reporting on ESG practices and performance. This will help to clarify the most pressing sustainability issues that the agency's suppliers face.

Conclusion

Large ESG due diligence programs must have access to comprehensive and credible ESG data.



7. Appendix A: European ESG regulations in detail

The EU Corporate Sustainability Reporting Directive (CSRD)

The CSRD updates and enhances the Non-Financial Reporting Directive (NFRD) implemented in 2014. Its aim is to promote comprehensive sustainability reporting across the EU.

Key features

- CSRD compliance will be staged, and will be mandatory from early 2024.
- It will affect about 50,000 companies, including large firms that meet at least two of the following criteria: EUR 40 million in net turnover, EUR 20 million in assets, or 250 or more employees. Also in scope are non-EU companies with a net EU-wide turnover of more than EUR 150 million in the previous two financial years, with a branch in the EU that has turnover of at least EUR 40 million, or a subsidiary in the EU that meets two of the requirements for EU firms.
- Companies subject to the CSRD are required to disclose their sustainability targets, climate transition plans, value chains and 'key intangible resources'. They will have to disclose their climate transition plans to reflect whether their business model and strategy are compatible with the transition to a sustainable economy, limiting global warming to 1.5°C and achieving climate neutrality by 2050. They must also report the risk and opportunities arising from social and environmental issues and their own impacts on people and the environment.
- CSRD reporting must follow European Sustainability Reporting Standards (ESRS).

Draft EU Corporate Sustainability Due Diligence Directive (CS3D)

The European Commission has proposed an enhanced environmental and social due diligence duty for EU companies in high-impact sectors, as well as mandatory supply chain due diligence obligations for certain large non-EU companies.4 The legislation is likely to put more regulatory pressure on mid-size firms with respect to their sustainability requirements.

Key features

- Applies to EU companies in high-impact sectors and large non-EU companies with net EU-wide turnover of more than EUR 150 million in the financial year preceding the previous one.
- Non-EU companies with net EU-wide turnover of more than EUR 40 million must address adverse impacts on human rights and the environment that result from violations of international conventions.
- Large companies have additional climate change obligations. These include identifying, preventing and mitigating potential adverse impacts, and minimising or ending actual adverse impacts.
- · Companies must communicate publicly about their due diligence.
- Small and medium-sized enterprises are not directly affected, but lower thresholds for environmental and human rights violations apply in high-risk sectors.
- · Companies with an annual turnover of more than EUR 150 million must contribute to the emission reduction targets in the Paris Climate Agreement with a transformation plan. They must also comply with due diligence obligations.
- The European Commission will establish a European Network of Supervisory Authorities, and national supervisory authorities will verify their compliance.
- · Companies will not be liable for damages caused by adverse impacts that arise from the activities of indirect business partners.

⁴ As of September 2023, CS3D had passed through the European Parliament but was subject to further revision.



The EU Taxonomy for sustainable activities

The EU Taxonomy is a classification system that determines environmentally sustainable economic activities and sets disclosure obligations for large companies and financial market participants.

Key features

- The Taxonomy defines six environmental objectives; companies must align with at least one. They are climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems.
- It classifies economic activities based on four criteria:
 - Their contribution to one of the six environmental objectives.
 - Whether they do no significant harm to any of the six environmental objectives.
 - Whether there are minimum safeguards to avoid a negative social impact.
 - Whether there are technical screening criteria (TSC). TSC establish specific requirements and thresholds by which economic activities can be classified as sustainable.
- Large companies (with more than 500 employees) are required to disclose the proportion of their revenue, capital expenditures and operating expenditures associated with environmentally sustainable economic activities.

EU Sustainable Finance Disclosure Regulation (SFDR)

The SFDR came into effect in early 2022. It covers investment management funds, financial advisers and financial market participants.

Key features

- Aims to promote sustainable and responsible investments and discourage greenwashing.
- Reporting mandated under the EU's NFRD and CSRD.

- Regulatory Technical Standards (RTS) developed by European supervisory authorities set out how affected companies should present data on the ESG characteristics of their products.
- Product categories for sustainable investments are defined under Articles 6, 8 and 9. Products under Articles 8 and 9 have the most significant reporting requirements.
- The European ESG Template (EET) is a datainterchange format designed for investment managers, to simplify regulatory reporting and information sharing on ESG regulatory compliance.

ESG regulations in the UK

By July 2024, the Department for Business and Trade (DBT) aims to publish Sustainability Disclosure Standards (SDS) for the UK that set out corporate disclosures on the sustainability-related risks and opportunities that companies face.

Key features

- The SDS will be based on the International Financial Reporting Standards (IFRS) Foundation's Sustainability Disclosure Standards, issued by the International Sustainability Standards Board (ISSB).
- The ISSB published two standards in June 2023: IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information; and IFRS S2: Climate-related Disclosures. The UK government aims to make endorsement decisions on these standards by July 2024, after assessing the suitability of the standards for the UK.
- The ISSB will also take over the Task Force on Climate-related Financial Disclosures' (TCFD's) monitoring responsibilities from 2024. The UK was the first country to mandate this disclosure framework for its largest companies, starting in fiscal year 2022.
- In addition, HM Treasury has tasked a Transition Plan Taskforce (TPT) to develop a mandatory UK Disclosure Framework for Net Zero Transition Plans. This framework provides guidelines for companies to report on their transition to a netzero emissions and low-carbon economy. TPT is currently finalising the framework, following the conclusion of a public consultation period in February 2023.



German Supply Chain Due Diligence Act (LkSG)

This has been in effect for companies with 3,000+ employees since early 2023. It requires them to maintain due diligence in their individual supply chains on human rights and environmental protections. In 2024, the Act comes into effect for firms with fewer than 3,000 employees but more than 1,000.

Key features

- Introduces documentation and reporting on the fulfillment of due diligence obligations.
- Companies must:
 - o Integrate enhanced due diligence into their supply chain management. This includes implementing human rights-related risk management systems and in-house bodies responsible for human rights protection.
 - o Conduct human rights risk analyses and support basic human rights protection in business.
 - o Implement preventative measures in their business and across their supply chains, and conduct remedial action in the event of human rights violations.
 - o Establish complaints procedures, specifically around the identification of human rights violations.
 - o Implement due diligence measures for risks connected to indirect suppliers.
- The Act is enforced by the Federal Office of Economics and Export Control (BAFA), and potential injunctions or fines are based on the severity of violations. Fines can be the higher of EUR 8 million or 2% of a German company's sales.

Norwegian Transparency Act (Act on Corporate Social Responsibility in the Supply Chain)

The Norwegian Transparency Act, which focuses on corporate social responsibility in supply chains, requires certain companies to disclose information about their handling of human rights and working conditions.

Key features

- · Applies to companies that meet at least two of the following criteria: more than 50 employees, a turnover of NOK 70 million or a balance sheet of NOK 35 million.
- Based on the United Nations Guiding Principles on Business and Human Rights and the OECD Guidelines for Multinational Enterprises.
- Requires companies to undertake due diligence in accordance with the OECD Guidelines for Multinational Enterprises.
- Requires companies to disclose the due diligence they undertake.
- Requires companies to report, publicly and on request, information about any adverse impacts discovered through due diligence.
- Requires companies to assess and report on their suppliers' human rights and working conditions and address potentially negative impacts.
- · Companies' annual reporting should include a statement about the efforts they have made to implement the provisions of the Act.

8. Further reading



ESG Data and Scoring Solutions, 2023: Market Update



Model Risk Management: Validation Services and Tools, and Governance Solutions, 2023; **Market and Vendor Landscape**

Chartis



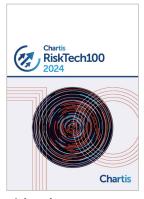
ESG Data Aggregators and Scorers, 2022: Market and Vendor Landscape



Regulatory Reporting Solutions, 2022: Market and Vendor Landscape



ESG Investment and Portfolio Analytics Solutions, 2022: Market and Vendor Landscape



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For all these reports, see www.chartis-research.com