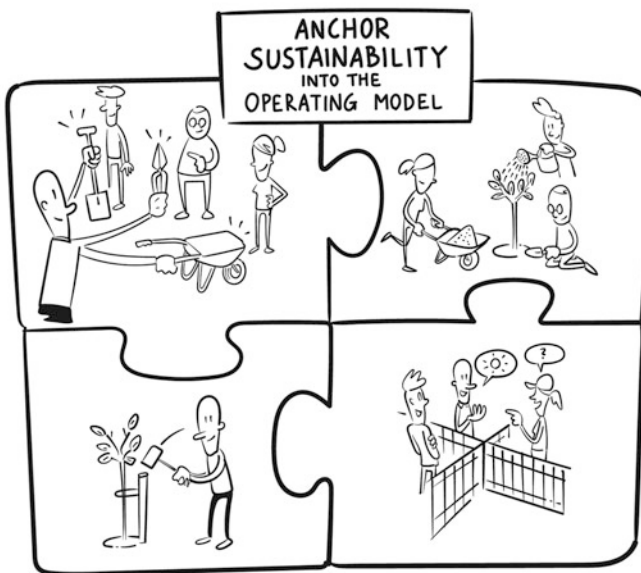


Anchor Sustainability into the Operating Model

4



4.1 Design Organization and Governance

Many companies have an idea of what they want to do but are missing the pieces in their operating model to truly integrate sustainability. In addition, sustainability makes innovative, new business models possible, especially in combination with digitalization.

Fredrik Gustafsson, Senior Manager of Sustainability Transformation, Cordial AB

Organization and Compliance

A significant element of an operating model deals with organizational considerations and governance.

While in the past, sustainability was not even represented as a separate department, or even as a dedicated role, it is now typically embedded in proximity to the CEO and covers the required reporting activities.

When it comes to procurement, many companies are concerned that they need to build up large departments to drive sustainability activities, monitor suppliers, create supply chain transparency, and ensure suppliers' contributions to carbon emission targets, but this is not necessarily the case. At the very beginning, joint-development of processes and experience exchanges of sustainability-related working practices across functions can be a good way to get the ball rolling. This approach has the added benefit of creating an internal network of subject-matter experts in different departments and ensures that the operating model in one function matches the company-wide setup. Establishing a working group can also help to ensure cross-functional buy-in, can be an effective means of implementing a sustainability strategy, and is a step to ensuring that targets are aligned. However, after this initial stage, responsibilities need to be spread across the procurement department, and especially the category managers, to integrate sustainability into all internal and external processes.

Sustainability in Action

Integration! Sustainability should be integrated into the operating model rather than something that comes 'on top,' which means that all departments need to be closely involved and take ownership of the various sustainability programs.

Chaojun Li, Global Head of Sustainability, WS Audiology

WS Audiology develops, manufactures, sells, and distributes hearing aids. WS Audiology's ambition as a global leader is to unlock human potential by making wonderful sound part of everyone's life.

Sustainability Roles within Procurement

As with all other tasks, it makes sense to create clear roles and define responsibilities for sustainability within procurement. Again, this does not necessarily mean hiring new people, but utilizing existing people who have the right expertise (and ideally enthusiasm for sustainability) to support their colleagues. What is commonly seen is that these *sustainability champions* are part of procurement's processes, methods, and tools team (or similar). The *sustainability champions* play major roles in developing a sustainable procurement strategy that balances environmental protection, social progress, and economic development along the supply chain with the needs of the company.

Sustainability in Action

There is a procurement team that mainly has the responsibility for CSR-related topics, such as ensuring that our suppliers and ourselves remain compliant with regards to working conditions, human rights, and other criteria. Company-wide sustainability work is driven by our Group Sustainability team and we're now investigating if a separate procurement sustainability competence center makes sense. In addition, we integrate sustainability practices into our overall procurement processes, meaning that each procurement role has responsibilities when it comes to sustainability.

Henrik Larsen, Chief Procurement Officer, A. P. Møller-Mærsk

A. P. Møller-Mærsk is an integrated container logistics company and member of the A.P. Møller Group. With a dedicated team of over 80,000 people, they enable global trade for a growing world.

Category Managers: The Front Line of Sustainability

It is the category managers who play key roles in making sure a procurement strategy is implemented. With their focus on strategic activities and their close connections with suppliers, category managers need to incorporate sustainability factors into the category strategies that support the overall procurement strategy. It is also category managers who typically own significant parts of supplier management processes and thus manage supplier relationships, something that is vital to ensuring that suppliers fulfill their legal obligations. This relationship is also important when it comes to engaging suppliers in joint sustainability activities.

Clearly, category managers need to be professionally trained so they are equipped to deal with the added responsibilities that sustainability adds to their roles. They do not need to be the experts on reporting standards or material substitutes, but they need to know enough to play an active role in ensuring suppliers' commitments and contributions. It is important for category managers to understand that while cost is always going to be a key factor it should certainly not be the only consideration when deciding between one supplier and another. There are "good" and "bad" costs. A supplier may have an outstanding sustainability record but may charge more than its competitors, making this extra cost in theory a "good" cost. A. P. Møller-Mærsk looks at it from a similar angle. Suppliers are selected based on the trade-off cost versus value. Value in ESG terms is not just the cost benefits associated with being sustainable—for example, the cost savings from efficiency inspired by sustainability—but other aspects too, like the value of circularity or positive societal impacts.

Sustainability in Action

It all starts with our cross-functional Sustainability Review Board, led by the Group Head of Sustainability, which sets the vision and drives the message. [...] So, there is a top-down effort to create awareness. In addition to these conscious efforts, INNIO is lucky that we generally attract people that are sustainability-conscious and intrinsically motivated to drive sustainability.

The Sustainability Review Board consists of leaders from different functions. I'm part of this panel for procurement and the board reports directly to the board of directors at INNIO. Each cross-functional member of the board cascades its messages and actions to their respective function. This also starts with the Sustainability Review Board. Their responsibility is to make the organization aware of regulations and general trends. In procurement, we arrange monthly training workshops and send out targeted communications to different roles to ensure that everyone has the knowledge they need.

As for other roles, there's a sustainability sourcing leader in the procurement team, [...] We're breaking down the actions to the different parts of procurement and ensuring that each person in the team knows what sustainability means to them and how it's integrated within their work. [...] When we talk about supplier performance, the supplier quality engineers will be responsible for auditing the suppliers with regards to sustainability data—this comes naturally to them since they already have similar responsibilities for quality.

Thomas Janvier, Vice President of Procurement, INNIO

INNIO is a leading provider of renewable gas, natural gas, and hydrogen-based solutions and services for power generation and gas compression at or near the point of use.

A good example of how this works comes from the automotive industry, where there is a dedicated procurement role that deals with sustainability without taking the responsibility away from category managers, while also ensuring close collaboration with the team that oversees overall company sustainability.

What Are Typical Tasks of the Overall Sustainability Team?

- Leading the work to carbon-neutral supply chains.
- Leading the work to increase circularity in materials.
- Leading the work to ensure that the supply chain is responsible and ethical at all levels and tiers, aiming for full transparency and traceability.
- Measuring, reporting, and providing a holistic view of climate action, circularity, and social responsibility in the supply chain.

What Are the Tasks of the Sustainability Champions Who Work in Procurement?

- Implement the sustainability strategy in the category teams.
- Make the sustainability agenda part of the sourcing decision-making process.
- Build sustainability solutions into the design and development phases.
- Investigate new ideas in the realms of renewable energy, materials, and responsible business in collaboration with the sustainability team (Fig. 4.1).

Mandate and Governance Bodies

A basic framework for cross-functional collaboration is key to align and drive defined targets in the individual functions and teams. Most companies have already

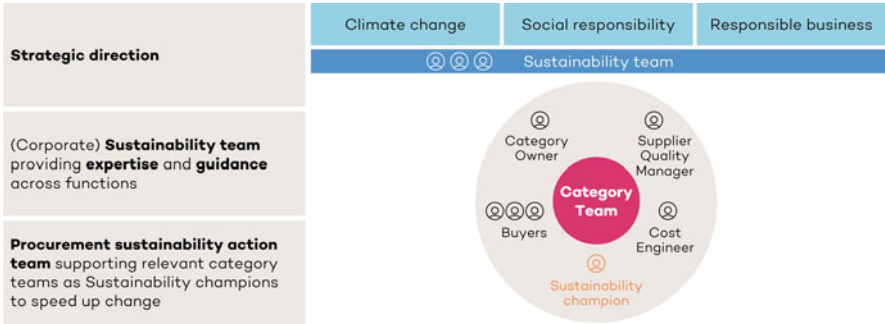


Fig. 4.1 How to embed sustainability in category teams

created sustainability or CSR boards. With procurement’s unique position and relationship, it has with supply chain partners, it should aim for a seat at the table for any company-wide forums where sustainability decisions are made.

While such corporate decision bodies approve strategic directions, investments, and budgets, monitor sustainability progress, and integrate sustainability targets in management compensation and incentive schemes, procurement needs to get clarity regarding its mandate. Typical questions that procurement teams come across include the “weight” of CSR-related topics in supplier selection and evaluation processes. What minimum requirements do suppliers need to fulfill? What are nice-to-haves and what are essential? What are the consequences of supplier non-compliance or a lack of improvement in specific areas?

Procurements need to have the mandate and internal voice to highlight any shortcomings from suppliers and to recommend suppliers based on criteria that stretch beyond savings and price.

Sustainability in Action

The corporate targets have been given to the units. Supply chain management has responsibility for reducing upstream scope three CO₂ emissions. They’re responsible for driving this target forward with suppliers and [...] with the individual business units and their procurement departments. Then we focus on changing attitudes to sustainability at corporate level. We’ve now established internal control requirements for governance where the CEOs are responsible for ensuring that sustainability-related opportunities and risks are implemented strategically and systematically in their business processes and decisions.

We have basically three different blocks. The first one is the governance owners, the next is the businesses, and the last is the countries. Governance owners must define policies, establish management systems, set targets, have KPIs, define long-term goals, and look at budgeting. They are responsible for [sustainability] in their area [...] across businesses and across countries. For sustainability, we have a sustainability board with a sustainability office above it for the group. The task

there is to specify the strategic direction of sustainability and to then operationalize it.

Our Sustainability Board is the second-highest committee we have in the Group [...] The CEOs of the businesses are represented. Then there are [...] country representatives [and] the heads of the corporate functions when relevant if they're not already covered by other representatives. [It is] the core committee for the strategic orientation of sustainability[...]Procurement is represented indirectly but attends the Sustainability Board at least once a year when special topics such as decarbonization are discussed.

We have probably about 60-70 people who are nominated sustainability managers in the organization. In the SCM department, there is a separate sustainability unit that takes care of supply chain due diligence law and decarbonization of the supply chain, for example. They are a separate team that defines the policies for the supply chain. They deal with supplier audits and how audits are carried out, what kind of approach is used, and so on.

Markus Strangmüller, Corporate Development & Sustainability Manager, Siemens.

Siemens is a technology company focused on industry, infrastructure, mobility, and healthcare, creating technologies and transforming the industries that form the backbone of economies.

4.2 Amend Processes and Decision-Making

Companies should include an internal carbon price that reflects its true costs. That will help them to make decisions that are sound. And it provides an internal price signal, so they don't make investments that are carbon intensive.

Dr Maria Mendiluce, Chief Executive Officer, We Mean Business Coalition

Procurement Processes

Sustainability practices and procurement activities are not separate or entirely distinct from each other. Existing process frameworks need adaptations of the core procurement processes rather than the addition of new processes.

This section looks at strategic and tactical procurement as well as supplier and risk management (Fig. 4.2).

Plan-to-Strategy or Category Management

Sustainability needs to become an integral part of strategic procurement and each category strategy and sustainability levers should be included for each category along the entire value chain. These could include designing-for-sustainability,

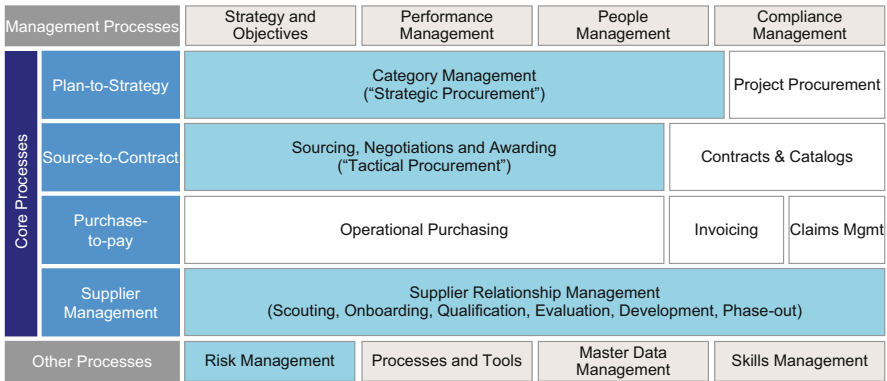


Fig. 4.2 Procurement process landscape—simplified (H&Z Management Consulting, 2021)

looking at ways to make existing products and services more sustainable, or looking for material substitutes to reduce the sustainability impacts and risks. Done well, meeting category sustainability goals will also deliver better value.

Source-to-Contract or Sourcing, Negotiation, and Awarding Process

There persist two unfortunate misconceptions in procurement circles that offers with a focus on sustainability are more expensive than their non-sustainable alternatives, and that procurement does not have the mandate to take decisions based on sustainability criteria. These misconceptions need to be corrected. There needs to be a change of mindset so that sustainability becomes one of the decision criteria when selecting suppliers. This means shifting the evaluation models of today to include sustainability topics and to quantify them so that they become part of the total cost. Sustainability should be taken into consideration not only at the beginning of the partnership with new suppliers, but also throughout the relationship. For instance, more and more companies are including sustainability criteria in RFP/RFx/tenders. An increasing number of companies also look at sustainability performance when implementing incentive or recognition programs, thus providing a positive incentive for suppliers to increase investment in sustainability initiatives (Ecovadis, 2021).

Potential suppliers need to be made aware that decisions will be taken based on sustainability at the negotiation and awarding phases. Negotiations are also the right time to look for alternative ideas and solutions that aim at improving sustainability parameters without impacting the price of the product or service. Suppliers should understand that they can be excluded if they do not match the agreed sustainability requirements. Any contract awarded needs to reflect this and include unambiguous, quantified measures and targets that the supplier is expected to fulfill.

Sustainability in Action

Criteria such as price will always be relevant. The way that we look at it though is good cost and bad cost. If there's something that costs more because it's driving the sustainability agenda forward, then we see this as a good cost. It doesn't mean that we're not discussing prices and that we're not adding arguments to our negotiations, but we look at it from the total cost of ownership and total value of ownership perspectives and calculate what possible positive advantages could come from the extra costs.

Henrik Larsen, Chief Procurement Officer, A. P. Møller-Mærsk

A. P. Møller-Mærsk is an integrated container logistics company and member of the A.P. Møller Group. With a dedicated team of over 80,000 people, they enable global trade for a growing world.

Sustainability in Action

Sustainability is part of the sourcing decision process, and this comes quite naturally since it's also part of our management targets. In many ways the discussion around sustainability follows the same pattern as the one that took place about quality a few decades ago—we're starting to develop more and more mature ways of calculating the total cost of ownership inclusive of sustainability and this will most likely only be stronger in the future. As the cost of CO₂ and other sustainability factors increase the business case for sustainable products and services will improve. We don't see a conflict between targets here but rather a complex problem that we're all working together to solve.

Excluding a supplier from the supplier pool for sustainability reasons is something that we can do but prefer not to. When Bayer walks out on a supplier it could mean that the employees of that company end up unemployed and there is nothing that guarantees that the supplier will improve for another customer. That's why we prefer working together with our suppliers to ensure that the requirements are met and that there are continuous improvements.

Thomas Udesen, Chief Procurement Officer, Bayer, and Co-founder of The Sustainable Procurement Pledge (SPP)

Bayer is a global enterprise with core competencies in the Life Science fields of health care and agriculture. SPP brings together Procurement professionals to ensure responsible supply chains.

Supplier Management

When managing suppliers, it is crucial to demonstrate leadership where sustainability is concerned. Companies that push responsibility for sustainability targets further down the supply chain tiers are rarely successful in the long run. In recent years, a rising number of multinational corporations have made it clear that they will only work with suppliers that stick to strict social and environmental standards. Typically, these MNCs expect their first-tier suppliers to comply with those standards, and they ask that those suppliers in turn ask for compliance from their suppliers, and so on, so sustainability standards cascade down the supply chain. It is a good idea, but it has been hard to realize in practice. A more hands-on approach is generally more effective, such as including lower-tier suppliers in the overall sustainability strategy and tasking someone within procurement with

extending the firm's sustainability program to first- and lower-tier suppliers (Villena & Gioia, 2021).

Supplier management is even more important when considering that as much as 90% of a company's environmental impacts occur along the supply chain (Quist & Drost, 2021). This is a very high percentage, but on the bright side, it opens up many opportunities for substantial reductions. The process of lowering this number starts at the beginning, by focusing on sustainability during the scouting phase for new suppliers.

In the classification phase, suppliers are prioritized based on a set of criteria. At this point, it is not only the current sustainability status that should be considered, but also the supplier's level of ambition. It can be a struggle to gain visibility into a supplier's performance, but there are an increasing number of digital tools and platforms available that make this process easier (see sect. 4.3 for more details).

The qualification process needs to be adjusted based on the classification. Some industries have started their own certifications for sustainability where individual companies can access and agree to approve suppliers that have been approved by the industry alliance. Together for Sustainability, a global chemical company initiative is a good example. The member companies of this multi-stakeholder initiative have jointly developed key stakeholder requirements, defined a supplier assessment questionnaire, and agreed that any individual member company would accept supplier rating results that came from an assessment by any other company within the alliance.

For high-risk suppliers, a pure tool-based or desktop-like qualification will most likely not be sufficient and in such cases procurement and their cross-functional partners need to form a personal relationship with the supplier and conduct actual visits to verify the situation on site.

Based on the selection and contract performance from the source-to-contract process, the supplier will be measured based on their sustainability performance. The same process is used when it comes to quality issues, for example, when there needs to be a joint effort between the buying company and the supplier to continuously develop and improve sustainability practices.

Procurement and its business partners need to jointly develop clear guidelines about what is tolerable and what is not when it comes to sustainability performance. Typically, a supplier code of conduct describes these expectations. If a supplier does not perform and fails to improve and show ambition, the decision should be made to phase them out and introduce an alternative that does meet the requirements.

Sustainability in Action

We've been working with a sustainability agreement for 10-15 years that simply includes certain criteria. We have a two-stage on-boarding process and potential suppliers must satisfy a minimum number of criteria. For example, there's the sustainability agreement that partners have to commit to, which is also audited and, in case of doubt, leads to exclusion if it is violated. This is the basic level, and then we have category specific requirements, which is where we switch from supplier to category management. Individual products then go for certification to Blue Angel, the ecolabel of the Federal Government of

Germany. With consulting or professional services, we expect people to travel by train instead of by car or by plane. This is similar to what we ourselves expect of our employees and where we define requirements for products or services that we purchase.

Nils Eichberger, Vice President of Procurement, LBBW (Landesbank Baden-Württemberg)

LBBW is a Mittelstand-minded universal bank with deep roots in Baden-Württemberg; a partner for medium-sized companies, listed groups, institutional customers, savings banks, and retail customers.

Although responsibility for sustainability should, ideally, be shared along the entire supply chain, procurement still has overall responsibility to follow suppliers down to the n-tier to ensure compliance with sustainability standards. This is a major undertaking for procurement, but there are different approaches.

Innovative Pilot Project Drives Transparency along the Supply Chain

Daimler is increasingly focusing on procurement to clean up its supply chain. Together with Circulor, a start-up specializing in blockchain technology, Daimler is conducting a pilot project for transparency on CO₂ emissions in the cobalt supply chain as part of STARTUP AUTOBAHN. The project partners use blockchain technology to track the emissions of climate-relevant gases as well as the amount of secondary material along the complex supply chains of battery cell manufacturers. The data network also documents whether the Daimler sustainability requirements in terms of working conditions, human rights, environmental protection, safety, business ethics, and compliance are passed on throughout the entire supply chain. Daimler calls on its direct suppliers to comply with these standards and requirements, to carry the provisions into upstream value chains, and to monitor their compliance. Through these initiatives, Daimler is driving transparency in the supply chain beyond its direct contractual partners (Daimler, 2021).

Together for Sustainability: Creating Standards in Chemical Suppliers

At chemical giant Merck, Group Procurement is responsible for integrating sustainability requirements into the relevant stages of its sourcing and supplier management processes. It is a global organization with direct accountability and resources in procurement-relevant local subsidiaries. Its Center of Excellence for Supplier Security coordinates the relevant measures, such as updating its guidelines where necessary, examining processes, and coordinating participation in external initiatives (Merck, 2020). One notable initiative it uses to keep track of its suppliers and ensure compliance with the company's standards and values is its membership of *Together for Sustainability* (TfS) (TfS, 2021), a joint initiative and global network of 34 chemical companies that delivers the de facto global standard for environmental, social, and governance performance of chemical supply chains based on the UN

Global Compact. In addition to conducting its own sustainability audits of selected suppliers, Merck strongly encourages its suppliers to be assessed either on self-reported information or via audits using the TfS framework. This helps member companies to assess the environmental, labor, and human rights, ethical and sustainable procurement performance of their suppliers, and drive and deliver tangible, measurable improvements of their suppliers' as well as their own sustainability performance.

However, if it is done, the goal is to create a mindset change among suppliers so that they proactively participate in sustainability measures and develop their own ideas, as opposed to being merely compliant. Just as is the case for discussions about supplier-enabled innovations unrelated to sustainability, this requires relationships based on trust and win-win outcomes. Suppliers need to know that they will gain something by collaboration with buyers to get really good ideas. Generally speaking, the threat of losing business is normally not as effective as positive incentives.

Sustainability Risk Management

There are clear business benefits to be gained by adopting sustainable practices in procurement but at the same time sustainability introduces additional risks. Sustainability- or ESG-related risks are defined as “uncertain social, governance or environmental events or conditions that, if they occur, can cause significant negative impacts on the company,” (Ferma, 2021). Such risks could stem from climate change, water scarcity, disease, poor labor conditions, or new legislation to name a few.

The Supply Chain Act: Another Valuable Export from Germany?

The latter is particularly pertinent to European supply chain and procurement managers following the introduction in July 2021 of the German Supply Chain Act, the first time that the responsibility of German companies to respect human rights in global supply chains has been given a legal foundation (Soziales, 2021). The Act, which will come into effect in 2023, “places the enterprises covered by the scope of application under an obligation to exercise due regard for human rights and environment-related due diligence obligations in their supply chains. The obligations placed on an enterprise are graded according to its ability to exert influence, specifically in relation to its own business area, the actions of a contractual partner, and the actions of other (indirect) suppliers.”

The law means that German companies must either implement new, or adapt existing, risk management strategies to determine whether there is a risk that their own business activities or business activities in the supply chain violate human rights. At the time of writing this affected only German companies, but the EU authorities were paying careful attention with a view to introducing this to the entire bloc.

More generally, from a risk management perspective, accommodating sustainability does not mean re-inventing the wheel—sustainability risk management should use the same methodology as for other risks. It also means that identification and mitigation of sustainability risks along the supply chain are of paramount importance.

Selecting Suppliers Based on Risk

The size of a supply chain varies from organization to organization and from industry to industry, but it is not uncommon for the supply chain to be vast, with multiple layers of suppliers. From a procurement perspective, it is not feasible to perform a detailed risk assessment for each supplier. Supplier relationships play a key role here, but nevertheless it is also important to prioritize efforts that would be most effective in identifying the suppliers that are exposed to the highest level of sustainability risk.

Typical dimensions to identify potential sustainability risks include category aspects (including the nature of the product, material, or service being purchased) and supplier typology (including risks related to their geo-location, sources of raw materials and labor, historical performance).

Sustainability in Action

COVID-19 was also an eye-opener for companies that had a high geographic concentration of suppliers. We're now starting to see companies diversifying their supply chain locations and we might even be on the verge of companies starting to in-source vital parts of their production. Even if this is a decision that often means an increase in cost, many companies have realized that the market is more and more ready to pay for the increased certainty and reduced risk.

Fredrik Gustafsson, Senior Manager of Sustainability Transformation, Cordial AB

Cordial is a management consulting firm based in Stockholm, Sweden. Its main focus is strategy, transformation, and business development with sustainability as one of the key areas.

Getting the Right Balance

Managing sustainability risks is a balancing act that relies on developing a greater understanding of the supply chain and how products are produced, where materials come from, and the environmental and social impacts associated with these materials. In other words, assessing and dealing with risk requires greater transparency along the supply chain, something that is greatly assisted using digital technology. This is what the next section looks at.

Setting Standards

One key point to keep in mind is that it is important not to flood suppliers with sustainability-related requests when there are currently no standards in place. This can make it overwhelming for companies and supply chain participants to use these tools effectively since they may need to fill in sustainability information for several buyers. Each different documentation request could be so time consuming that there is little-or-no time to deal with the sustainability issues.

It would be helpful if tool providers set common standards so information can be shared with suppliers using different tools. Industry collaboration—such as Together for Sustainability—and even cross-industry collaboration, is needed to set these standards and give suppliers a chance to add valuable information without overwhelming them. However, until such standards are in place, digital sustainability tools definitely have a leading part to play in a procurement sustainability strategy.

4.3 Leverage Tools and Technologies

Technology isn't miraculously going to do that for you. You're going to have to tell the technology where to go.

Dr Nicholas Garrett, Co-founder and Chief Executive Officer, RCS Global Group

Sustainability Tools and Platforms

Just as digital tools have sparked a revolution in the way we work and do business, they are also becoming increasingly relevant in tackling sustainability challenges or creating opportunities from them. Digital tools and platforms are key enablers for sustainability. They are being used to collect and analyze data that helps to create greater transparency and shed more light on the state of sustainability within an organization and along its supply chain.

In late 2021, H&Z conducted a survey of more than 140 tool providers to get a deeper understanding of the products they offer, how they approach sustainability, and whether their solutions are designed for widespread use or aimed at specific sectors. The aims were to see what sort of functionalities the tools have and to understand how they can be applied to business functions such as supply chain management, procurement, operations, controlling, manufacturing, or logistics.

Key Findings: Sustainability Tools as an Enabler of Sustainability—A Market Analysis

- The market is strong and growing.
- A new wave of young and upcoming sustainability tool providers has entered the market in the past three-to-five years.
- Most solutions cover a broad range of industries and have no specific industry focus.
- The majority of solutions take a holistic approach towards sustainability, covering all three sustainability dimensions—environmental, social, and economic.
- However, a few tools have a clear focus on the environmental dimension of sustainability.

Sustainability in Action

Digital technology is for sure one of the key enablers for sustainability. However, technology alone isn't able to answer sustainability challenges, as most sustainability topics deal with physical challenges. Think about the concept of the circular economy where products and materials are re-entering the production process through recycling and upcycling with the aim of keeping them within this circle for as long as possible. So, in the end, digital technology isn't the full answer to sustainability challenges. It certainly paves the way as it helps to generate transparency, define your ecological footprint, or to track resources. So, I would say that digital technology should be a pre-requisite as an enabler of sustainability but isn't the silver bullet to solve all the challenges.

Sakuto Goda, Principal, Nomura Research Institute

Nomura Research Institute (NRI) is a leading consulting firm and systems integrator from Japan with expertise in the formulation of strategies, globalization of business operations and planning.

So Many Options Make Choosing Difficult

The sustainability solution market is still in the growth phase. A growing market means lots of choices. However, this could make it difficult to identify the right solution when a particular tool is needed to do a specific job within a certain industry. To make this task easier, the results of this survey were used to categorize the sustainability tool market in terms of the functionalities of the tools, and whether they are niche products or built for broad usage. All solution providers were clustered in a defined structure of categories. These categories have either a company-internal focus or an external focus.

Internally, companies are using digital tools to assess and reduce their environmental footprint, to monitor risks linked to sustainability, and to develop greener production processes. In general, the focus is on enterprise sustainability management, ESG analytics, and carbon and environmental footprint measurement.

Externally, digital sustainability tools are being used to assess environmental, social, and governance (ESG) performance among suppliers, with particular emphasis on supplier transparency, supply chain traceability, and supply chain risk monitoring.

The list below shows the broad categories of tools and what they are used for.

1. *Carbon and environmental footprint*: Measurement of environmental footprint at product or process levels, such as resource usage, carbon emissions, or other greenhouse gas emissions.
2. *Carbon footprint compensation and offsetting*: Reduction of environmental emissions impact by providing solutions in the form of offsetting and compensation projects.
3. *Supplier transparency and traceability*: Creation of product, material, or supplier transparency by aggregating supply chain data to assess the performance for predefined sustainability criteria in the respective dimensions to ensure sustainability standards and requirements.
4. *Supply chain risk monitoring*: Assessment of supply chain sustainability risks based on the integration of various data sources with the objective of identifying risks early and initiating counter measures.
5. *Enterprise sustainability management*: Data integration of, for example, internal processes and operations to assess and analyze internal sustainability performance using defined metrics as the basis to derive improvement measures.

There are many different solutions providers, which, on the one hand, is good, but on the other hand, the sheer number of choices creates confusion when trying to decide on the best option. The technology map below was created to add some clarity by allocating providers to each of the seven categories. The map is published together with Digital Procurement World (dpw.ai), the leading ecosystem for digital procurement (Fig. 4.3).

It is evident that there is no one-stop-shop that covers all functionalities, but most of the solutions are applicable to all industries. The survey highlighted the fact that even though some solutions are well established, there is no single solution that is distinctly different from its competitors and no single solution that technologically stands out from the others.

The survey also revealed some limitations to the solutions. For example, many of them measure CO₂ but no other greenhouse gases. In addition, the measurement of emission footprints relies mainly on data from public sources but often the spread is significant as there is no standard procedure in place. This leads to discrepancies and makes comparisons difficult.

Sustainability in Action

Digitalization plays a big role in our sustainability work when it comes to retrieving the information that we need from the supply chain. There are a lot of solutions out there and we're currently running several pilots to determine the best way to gather data, how to

- Having a list of key requirements, it should be easier to identify the right tool and subsequently build on that.
- Single sign-on solutions are generally preferable, so users do not have to jump from one tool to another.
- Finally, some tools are used by only a small number of users within an organization, but if sustainability is to be a key part of an overall business strategy, they should be accessible by more people.

Setting Standards

One key point to keep in mind is that it is important not to flood suppliers with sustainability-related requests when there are currently no standards in place. This can make it overwhelming for companies and supply chain participants to use these tools effectively since they may need to fill in sustainability information for several buyers. The different documentation requests could be so time consuming that there is little-or-no time to deal with the actual sustainability issues.

It would be helpful if tool providers set common standards so information can be shared with suppliers using different tools. Industry collaboration, and even cross-industry collaboration, is needed to set these standards and give suppliers a chance to add valuable information without being overwhelmed by multiple requests from different sources.

Sustainability in Action

For decarbonization, our initial focus is on the suppliers that we have identified as strategic for Ørsted. For the evaluation, standardized measures are used to make it as easy as possible for the suppliers and avoid it becoming an administrative burden. We make use of the Carbon Disclosure Project (CDP) as a reporting tool. This means that the suppliers only need to answer the standardized questions once and can then share it with as many of their customers as they want.

Simon Juul Toft, Lead Specialist—Green Procurement, Ørsted

Ørsted, the world's most sustainable energy company, is recognized as a global leader on climate action and takes tangible action to create a world that runs entirely on green energy.

A Giant Leap in the Right Direction

Technology alone will not solve all the issues around supply chain sustainability that procurement is faced with, but it will go a long, long way to help. By utilizing the right digital tools or platforms, procurement's understanding of the supply chain and the suppliers in can be taken to a new level. From measuring carbon emissions and footprints, offsetting, risk monitoring, identifying suppliers that need the most attention, or analyzing internal sustainability performance, dedicated sustainability technology is most definitely part of the solution and a vital inclusion in a sustainability strategy.

Sustainability in Action

I think, the key difference in how we approached technology was, that we had a laser focus on data just because always, whenever you have sermons about how fantastic technology platforms are, you always have the little caveat at the end which says that obviously the technology is only as good as the data is.

Dr Nicholas Garrett, Co-founder and Chief Executive Officer, RCS Global group

RCS Global Group is a proven leader in data-driven ESG performance, responsible sourcing, and responsible mining assurance.

Practical Example of a Tool Landscape

Digital tools and platforms are an important means of simplifying processes and integrating sustainability into procurement processes. Understanding that not one tool fits all sustainability purposes, it is necessary to combine different solutions to cover the requirements for onboarding and monitoring the (sustainability) performance of suppliers. With most solutions providers offering software-as-a-service or cloud-based tools, integrating the via APIs in core procurement systems is possible. The supplier score can be displayed in the supplier dashboard of the core system, but for more information or deeper analysis a user might need to log-in into the respective tool.

In the example below, an initial screening of suppliers was done via the IntegrityNext platform as a precondition for onboarding. The IntegrityNext platform allows a number of ESG topics to be selected covering all relevant criteria, as well as inclusion and diversity. Existing suppliers are also asked to respond to the pre-built questionnaire. Then, using AI-based screening of news, website, and social media sources, IntegrityNext monitors the target suppliers and provides early warnings and risk alerts if and when necessary (Fig. 4.4).

For a deeper analysis of critical suppliers, the EcoVadis tool is used. EcoVadis allocates scores to suppliers using an evidence-based approach, where suppliers’ declarations are credited only when evidence is provided. In addition, ratings are

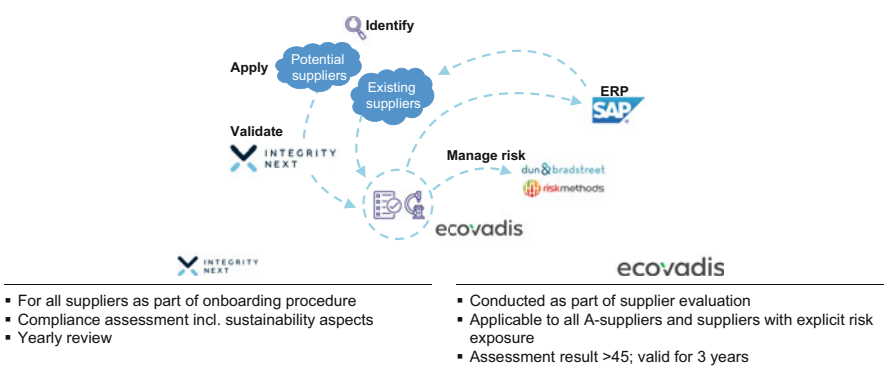


Fig. 4.4 Example tool landscape

based not only on the supporting documents provided by the suppliers, but also on informed opinions published by NGOs, trade unions, international organizations, local authorities, or other third-party organizations (such as auditors, CDP, or an external compliance database). The EcoVadis score can be regarded as a well-accepted standard.

Additional financial information on suppliers is sourced from platforms available from Dun & Bradstreet, a company that provides commercial data, analytics, and insights for businesses, or similar players such as CreditSafe. And finally, risk management is covered by RiskMethods to provide a comprehensive risk dashboard for the entire supply chain risk management lifecycle.

The example here does not include scope 3 emissions, those produced along the supply chain, but either of the tools mentioned here can support this, or additional tools could be added to the system landscape.

Ustainability in Action

I do believe that the other parts of sustainability also get attention, but the climate topic is for sure top of the agenda. Scope 1 and 2 have been measured by many companies for quite some time now but if you want to make a proper assessment of your Scope 3 within the framework of the GHG protocol it becomes much more complex and requires collaboration. Most companies need their suppliers to start the same journey as them, which is a massive undertaking. Since all companies, one way or another, are part of a bigger context in a supply chain, all companies need to make this their focus. Before processes and tools have been fully implemented to measure this, we will most likely continue to see a focus on the environment.

Fredrik Gustafsson, Senior Manager of Sustainability Transformation, Cordial AB

Cordial is a management consulting firm based in Stockholm, Sweden. Its main focus is strategy, transformation, and business development with sustainability as one of the key areas.

It's Time to Make the Smart Choice

Digitalization is an essential component of any transformation, and this is certainly the case with sustainability. The market for sustainability-related digital tools and platforms is thriving and so, with some careful planning and an understanding of what they are needed for, the right tools are readily available.

4.4 Enhance Networks and Collaboration

We knew there was a case for building up battery capacities right here . . . The European Battery Alliance was created out of this in 2017 and now has 500 member companies.

Peter Carlsson, Co-founder and Chief Executive Officer, Northvolt

The challenges posed by sustainability represent a massive undertaking but there is no reason to do it alone. For companies that are starting from scratch, with no in-house expertise linked to sustainability, there are some readily available standards and guidelines produced by NGOs and intergovernmental organizations that would make a good starting point. There are several other types of collaboration that companies can harness to create synergies that could accelerate the transition to sustainable business, including those with industry-specific initiatives, suppliers, employees, and even activist groups. In these collaborations, there is vested interest in sustainability from all concerned so working together results in a win-win.

Sustainability in Action

It's about co-creation. Companies need to speak to their suppliers and outside stakeholders to define new ideas and bring them to life. It's about working together to see where sustainability can be leveraged and how new ideas can be developed together. One company on its own will most probably not be able to change society. However, by joining forces and through learning from each other, great ideas can be developed.

Sakuto Goda, Principal, Nomura Research Institute

Nomura Research Institute (NRI) is a leading consulting firm and systems integrator from Japan with expertise in the formulation of strategies, globalization of business operations and planning.

Standards and Guidelines: Pointing Businesses in the Right Direction

Sustainability is more in focus now than it has ever been so there are numerous standards and guidelines, mostly from intergovernmental institutions, that can prove valuable in providing a general overview of what is needed and advice on how to get there. For companies starting their sustainability transformation from scratch, they can be a good place to start. For instance, the OECD's Due Diligence Guidance for Responsible Business Conduct provides practical support, additional explanations, tips, and illustrative examples that "can help enterprises avoid and address adverse impacts related to workers, human rights, the environment, bribery, consumers and corporate governance that may be associated with their operations, supply chains and other business relationships," (OECD, 2018). Similarly, the United Nations Alliance for Sustainable Fashion is an initiative of various United Nations agencies and allied organizations designed to support coordination between UN bodies working in fashion and promoting projects and policies that ensure that the fashion value chain contributes to the achievement of the Sustainable Development Goals' targets.

Alliances Highlighting Overarching Trends

Several industries already have alliances or initiatives in place in which they collaborate on the main aspects of sustainability that relate to their specific

industries. The information ranges from generic to very detailed. For example, the Responsible Minerals' Initiative "provides companies with tools and resources to make sourcing decisions that improve regulatory compliance and support responsible sourcing of minerals from conflict-affected and high-risk areas" (RMI, 2022).

Some of these initiatives stretch across different industries and are politically driven to boost the speed and implementation of specific issues that affect all businesses, offering a myriad of information and potential solutions. A good example is Transform to Net Zero, of which A. P. Møller-Mærsk, one of the companies interviewed for this book, is a founding member. This cross-industry initiative was created with the intention of developing and delivering research, guidance, and implementable roadmaps to enable all businesses to achieve net-zero emissions.

Networking Platforms

The benefits of using networking platforms such as LinkedIn are clear and obvious, and this is exactly why they are widely used. More recently, SUSTAINX, a solution and networking platform solely dedicated to sustainability, was launched by H&Z Management Consulting and IntegrityNext to combine technology and sustainability expertise in support of companies on their transformation journeys. It facilitates cross-industry knowledge exchange and brings together those in need of solutions with those who offer them.

Sustainability in Action

It's the decade of action. It's time to learn from each other. It's time to leverage technology and make use of the solutions that are already out there. The world is full of great ideas and collaboration is our generation's lever to make the world become a better place. It is time to start sharing knowledge and technologies, and it is time to really start thinking outside the box. For both, collaboration and networking are key. So, let's stop talking about ambition levels and start translating them into actions.

Sven Steinert, Director, SUSTAINX GmbH

SUSTAINX is a web-based platform and community to enable companies' sustainability journey. It offers ready to use solutions and facilitates exchange across industries.

Suppliers: A Valuable Sustainability Resource within Easy Reach

Suppliers can also be a great source of knowledge and a valuable resource. Enterprises large and small have long realized that there are gains to be had from collaboration with suppliers and opportunities to drive synergies. These might come from joint initiatives on R&D, expanding business reach that is not possible alone, or working to optimize costs for the consumer. It is the same when it comes to sustainability. It is not possible to get an overview of a company's sustainability performance without understanding the practices of its suppliers. This is where collaboration with suppliers is key, because as well as bringing third parties and

internal sources together, data from suppliers is needed to get a complete understanding of how supplier performance can impact the supply chain. Collaboration is particularly important where high-risk suppliers have been identified and when it comes to industries and regions that are subject to different rules and regulations.

Sustainability in Action

We're working together with our suppliers to provide them with what we've learned from our sustainability journey. We don't always have 'the golden answer' but where we've gathered knowledge and experience, we share it with our partners in the supply chain so that the whole ecosystem around a certain process can improve. We see that as an important part of our role within the supply chain and it goes both ways—we're also happy to learn from our suppliers about how we can improve our own practices. These learnings don't only come from our suppliers. We learn equally as much from other partners in our ecosystem, such as partners in our procurement network of non-competing industries.

When we started to introduce sustainability in the supply chain 10 years ago it was still new to many suppliers and also to the internal procurement managers. However, with the enforcement of regulations, along with pushes from consumer and investor, sustainable supply chain becomes a must-have for all companies. Moreover, companies start to collaborate with suppliers on sustainability topics to find solutions to tackle pressing issues and go beyond just compliance.

Chaojun Li, Global Head of Sustainability, WS Audiology

WS Audiology develops, manufactures, sells, and distributes hearing aids. WS Audiology's ambition as a global leader is to unlock human potential by making wonderful sound part of everyone's life.

Sustainability Ambassadors Right under your Nose

There are undoubtedly many employees with a passion for sustainability who are just waiting to be officially empowered and unleashed. Such team members can and should be nurtured for the drive, energy, and ideas they can add to a sustainability transformation. They can also be magnets that will attract like-minded people to join the company, something that should not be underestimated given the desperate scramble to find the right talent that many companies face.

Activist Organizations: The Checks and Balances of Wrong-Doing

Corporations that come under scrutiny from one of numerous environmental or human rights activist organizations can be subjected to rather painful news headlines and worse. However, these organizations should not be dismissed as anti-business adversaries but viewed as knowledgeable protagonists and potentially valuable collaborators when it comes to creating a more sustainable business.

Sustainability in Action

Amnesty International and the likes are very good at keeping issues of societal concern in people's minds and we offer the practical solutions needed to support industry tackling the issues raised by the likes of Amnesty.

Huge credit to the advocacy organizations like Amnesty International or Human Rights Watch who help bring issues to the attention of the global consumer and regulators. They also acted very strategically by not purely pointing fingers at corporations, but also encouraging industry to engage. For example, the advocacy groups made it clear that they did not want industry to try and cut out specific geographies out of their supply chains, but rather they wanted industry to engage in processes on the ground and in the supply chain that would yield demonstrable improvement through collaboration and real effort.

Dr Nicholas Garrett, Co-founder and Chief Executive Officer, RCS Global Group

RCS is a proven leader in data-driven ESG performance, responsible sourcing, and responsible mining assurance.

The Icing on the Cake: Bringing Private Businesses and Non-profit Organizations Together to Boost Environmental and Societal Change

It is increasingly evident that collaboration is one of the keys for unlocking sustainability, with leaders from all sectors of society agreeing that solving environmental and social challenges requires unparalleled cooperation. Collaboration between different types of organizations, business and NGO and multi-sector partnerships for sustainability can produce previously unimagined solutions.

A good example of this is the long-term partnership between KLM Royal Dutch Airlines and the World Wildlife Fund for Nature (WWF) Netherlands, which promoted a market for aviation biofuels (Mousavi & Bossink, 2020).

Another successful partnership between Boehringer Ingelheim, a major international pharmaceutical manufacturer, and Ashoka, the world's largest network of social entrepreneurs and ranked as the world's fifth most impactful NGO of the world (NGO advisor 2021), was set up in 2010 to promote innovative solutions to challenging health problems. "By exploring the intersection of social entrepreneurship, employee talent development, and healthcare networks, the teams have co-designed win-win solutions, including increasing individuals' access to healthcare and community health issues, especially in underserved populations," (Boehringer Ingelheim, 2021). Now in its tenth year, this long-lasting partnership between Boehringer Ingelheim and Ashoka continues to create value while helping to create a fairer society. In November 2021, the partners organized a convention, Making More Health Together 2021, hosting 1400 participants online from across the academic, non-profit, industry, and political sectors to find more sustainable solutions for the most pressing healthcare issues of our time (Boehringer Ingelheim, 2021).

Sustainability in Action

We believe the companies that will thrive in the long run are those that integrate social and environmental stakes into their core business, and who understand that the best way to do so is through engaging with systems-changing social entrepreneurs.

We've worked and created partnerships with several very well-known companies who understand the value and importance of a culture of changemaking, including IKEA, Boehringer Ingelheim, Capgemini, Chanel, and others.

Oda Heister, Managing Director, Ashoka Germany

Ashoka identifies and supports the world's leading social entrepreneurs, learns from their innovations, and mobilizes a global network to build an "everyone a changemaker world".

Successful business and activist NGO partnerships such as these are undoubtedly why a 2018 survey found that 86% of corporate respondents and 88% of NGO respondents see the role of corporate–NGO partnerships growing in importance (Mizar, 2019). More recently, growing demand from investors and consumers for responsible and sustainable products and supply chains, underlined by new regulations, have been pushing the sustainability agenda to new heights to the point where this is no longer an option but a necessity.

The key to these collaborations is that both NGO and corporate further their own goals while jointly tackling some sustainability-related issues.

Partnering with NGOs: The Four Keys to Success

1. *Embrace difference—carefully.* Recognize and value the differences between your company and the NGO. After all, without those differences, there would be no reason to collaborate. Alternative perspectives can make collaboration uncomfortable at times, but this is exactly where their value lies—each party brings knowledge, expertise, and capabilities that complement the other's.
2. *Assign a champion and give them authority and decision-making ability.* Partnering with an NGO involves approaching business activities in a new way so assign a champion and give them the power to overcome obstacles and get things done. This also signals to the NGO that the company is taking the relationship seriously.
3. *Make NGO engagement part of the core business.* Partnerships should gradually be integrated into the responsibilities of business units and functions, rather than being maintained as a stand-alone enterprise. Partnerships are most successful when each participant leverages its core capabilities and contributes resources based on normal operations.
4. *Plan for the relationship to evolve over time.* External conditions, interests, and positions will change over time. These could mean that the partnership has reached an end, which is fine. Flexibility and responsiveness are key to how the relationship evolves. It makes sense to build this evolution into the initial agreement so that both sides expect that the relationship will require reassessment from time-to-time (Doh, 2020).

Not surprisingly, there are many useful resources to guide you through sustainability standards, sector-specific alliances and initiatives, and networking platforms. See appendix for a comprehensive list of these resources.

Anchor Sustainability into the Operating Model: Summary

Get clarity in roles and responsibilities but be pragmatic in order to make sustainability a team exercise across functional borders and with your suppliers. Change your decision-making process and argue and decide for the scenario that creates the best value to the company, beyond just a decision based on a price. You are not alone. Use the power of industry groups and set standards. Embed and combine best-of-breed solutions to get the most benefits for an efficient, future-proof process.

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