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This paper attempts to contribute in the field of Sustainable Procurement by exploring exemplary practices in Supplier Management and increasing role of stakeholders to drive Sustainability in Procurement.

The paper aims at understanding the integration of sustainability in procurement strategy adopted by Covestro and practices followed to drive Sustainability in Supplier Management. It highlights notable trends and brings recommendations which are inspired by research and Covestro's procurement case study. These can be leveraged across any procurement function for embedding sustainability in the procurement process.

This Green paper has been written by Vaishali Baid – German Chancellor Fellow 2018 for tomorrow's leader and co-authored by Prof. Dr. Elisabeth Fröhlich, (President of Cologne Business School, and Professor of Strategic Supply Management) with additional insights provided by Covestro AG ("Covestro").

For this paper, a review of grey literature and academic work was conducted. The author also interacted with Covestro Procurement team for the purpose of the case study. Special thanks to Rocío de la Cruz García and other category teams from Covestro for sharing their insights on the topic of Sustainable Procurement.

ABOUT THE AUTHORS



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Prior to that, she has worked with various multi-national

companies in the field of Procurement and has 8+ years of work experience. She is a Biotechnology engineer with a Business Administration degree. Along with her professional responsibilities, she is also pursuing a Doctor of Business Administration (practitioner) in Sustainable Procurement and Supplier Collaboration from Australia.

Hailing from India, with an international mindset, she has worked on various projects with stakeholders from across the globe to bring a transformation in Procurement. Her She has studied business administration and completed her research interests are Sustainable Procurement, specifically Integrating Sustainability in Procurement Strategy, Supplier files in Procurement". Engagement and Collaboration to name a few.



Elisabeth Fröhlich has been a professor at the Cologne Business School since 2007 and is responsible for the field of strategic procurement management. Since 1 May 2013, she has managed the Cologne Business School in her function as President.

She is a board member of several scientific organizations and is also the spokesperson

for various communities. She is serving as the business ambassador for the city of Cologne.

Her current research focuses on sustainable supply chain management and green procurement, along with various other topics in education. She has published several books and articles on the above-mentioned topics and provides support to a number of journals as an external reviewer.

habilitation on the subject of "Modelling Requirement Pro-

ACKNOWLEDGEMENT



Rocío de la Cruz García is a senior manager with 12 years of professional experience in the field of sustainability. She has worked in auditing, consulting and the pharmaceutical and chemical industry and has gained extensive international experience.

In her current role, she oversees all sustainability-related activities at Covestro's procurement department globally. She is responsible for the integration of sustainability in sourcing processes and the development of sustainability targets. Moreover, she is leading procurement's contribution to Human Rights and drives Circular Economy activities. She is also co-Chair in the Governance and Partnerships Work Stream of the Together for Sustainability Initiative.

She holds a bachelor's degree in Environmental Sciences and a master's degree in Sustainable Development and Corporate Responsibility. She is currently pursuing a Global Executive MBA at INSEAD.

CBS INTERNATIONAL BUSINESS SCHOOL

Anyone who wants to help people to make progress in the ambitious shaping of their future must act far-sightedly themselves and dare to break new ground. In 2020, we made an important change and created a common brand umbrella under which our two successful locations in Cologne and Mainz and our new campus in Potsdam can grow closer together. In the future, we will be united as CBS International Business School to sharpen our profile in the national and international university landscape and continue our role as a pioneer and market leader.

Our pioneering spirit was already awakened when we were founded in 1993 - as one of the first universities in Germany to offer six-semester bachelor's programmes based on the American model. Five years later, we led the way in the internationalisation of the German higher education system as the first accredited business studies bachelor's model. Today, 1,600 students from over 75 nations enliven our campuses and benefit from a network of around 120 partner universities around the globe. Our brand merger now represents a further important step towards our future, socially relevant goals: As an international university with roots in the Rhineland, we want to develop our students from all over the world into experienced and responsible decision-makers.



ALEXANDER VON HUMBOLDT FOUNDATION

Alexander von Humboldt Stiftung's statutory mission is to promote science and research as well as intercultural understanding. The Humboldt Stiftung is funded by the Federal Foreign Office, the Federal Ministry of Education and Research, the Federal Ministry for Economic Cooperation and Development, as well as other national and international partners. The Chancellor of the Federal Republic of Germany is the patron of this fellowship programme. The Alexander von Humboldt Stiftung's German Chancellor Fellowship Programme is targeted for scholars from the United States, the Russian Federation, the People's Republic of China, Brazil and India who have an international outlook and initial leadership experience.





SECTION I

Executive Summary and Inspiration for the Green Paper

EXECUTIVE SUMMARY

Procurement goes through endless changes as Chief Procurement Officers (CPOs) continue to deliver bottom-line savings – while increasingly focusing on value creation for the organization. But the biggest question in these times is how can Procurement align with Sustainability Goals?

For a successful sustainable procurement setup, the collaboration between internal stake-holders and suppliers is indispensable. Focusing internally within the organization is an important first step involving procurement personnel, category leads and supply chain teams. Externally, the organization uses its advocacy of sustainable procurement to build awareness, with the aim of onboarding the suppliers on to the business agenda.

At the granular level, procurement functions leverage a broad range of policies and tools like supplier codes of conduct, audits and assessment that guide procurement strategies and selection of suppliers. This approach increases the focus on collaboration – both internally, so that every personnel within the organization is working towards the same goals, and externally throughout the supply chain ecosystem.

Sustainability continues to be a key driver of the procurement processes, with greater prominence on CPOs to put sustainable procurement on the agenda of every team and within the whole procurement strategy, apart from cost reduction. The journey — from setting up a dedicated Sustainable Procurement team, to driving the agenda, to Category strategies and finally towards Supplier engagement — is driven by developing and executing a thoughtful and effective Sustainability strategy. That is where the real challenge lies.

This Green Paper discusses how Covestro Procurement has a forward-looking, robust, Sustainable Procurement framework, focusing on Sustainable Supplier Management to tackle the biggest challenges of today.

WHAT INSPIRED THIS STUDY?

The current business environment has become synonymous to VUCA and is having a deep impact on supply chains and procurement. Procurement is at the epicentre of an organization and its upstream supply chain in driving sustainability agenda and to disseminate the triple bottom line (TBL) objectives along with the suppliers. That's a huge opportunity for procurement to leverage this as a business advantage.

The growing interest in sustainability coupled with managing a global supplier base has made the supply chain quite complex. More recently, the procurement function of the organizations has instigated focusing on sustainability along with other criteria such as cost efficiency, lead time, flexibility and risk management.

Yet, in a world where organizational reputation is of growing importance and with an influx of incidents at suppliers' sites regulators, consumers and non-governmental organizations (NGOs) have raised concerns and called for sustainability in procurement and overall supply chain. At the other end of the spectrum, consumers are becoming more aware of environmental and social concerns and are asking for better products. With increasing visibility, the need for embedding sustainable practices into business is clear.

Over the past decades, governments around the globe have become increasingly conscious of the adverse impact procurement activities can have on the environment and society. As a result, they are adopting sustainable procurement practices, facilitated by legal amendments and policy guidelines. Even the key international organizations have recognized procurement as a means of changing the unsustainable patterns of consumption and production.

Lack of awareness can be one of the major challenges, both in terms of processes and outcomes. Unless suppliers and partners are made aware of sustainability and its impact on the supply chain, they will not be so willing to adopt sustainable practices and would consider these practices as purely cost escalation activities.

^{*}VUCA - Acronym for volatility, uncertainty, complexity, and ambiguity



SECTION II

Overview and journey of Sustainable Procurement

SUSTAINABILITY - A DRIVER FOR GROWTH

Global megatrends such as: climate change, changing demographics and population growth, urbanization, globalization and rapid technological change mean that it is impossible for current economic models to remain stable or continue to grow without radical, adaptive changes. Businesses face new and emerging risks related to environmental, social and governance (ESG) issues, meaning they must look beyond financial performance and consider wider performance, resilience and risk profiles. To succeed, businesses ultimately need to make a transition into more sustainable and circular models.

"

The question is how we can rethink capitalism so that the idea of a "Green Economy" becomes evident. So far, the focus has been on breaking down complex problems into small, solvable parts to find solutions to these simple subproblems - known as the mechanistic worldview. Adam Smith, the so-called 'invisible hand' as the leading principle of his free market economy leads to the best possible allocation of resources and the highest possible level of prosperity in a society. But his idea of the 'invisible hand' is based on the theory of moral sentiments, which means that this particular mechanism only works in an economic environment characterized by 'sympathy' and 'empathy.' Since this 'moral context' does not exist in our time, governments are expected to counteract the market malfunctioning, which unfortunately leads to ineffectiveness and waste of resources. A new paradigm is needed - the holistic worldview. It "recognizes that the proper functioning of complex wholes (like an economy) cannot be understood without understanding the ongoing, dynamic relationship among parts that give rise to greater 'wholes'" (Fullerton, 2015, P.8). The whole economic system can only be understood if one grasps the relationship between all of the parts. Applied to our business context, managers who look at the economy in isolation from society and the biosphere ignore the damage that their behavior might have on other parts of society and the environment. In order to avoid the previously discussed problems sustainable procurement has to redefine its focus to contribute to this new vision of the economic word - even more pressing in times of COVID 19 (Fröhlich & Kul 2020).

Prof. Dr. habil. Elisabeth Fröhlich

BUSINESS DRIVERS - A STARTING POINT

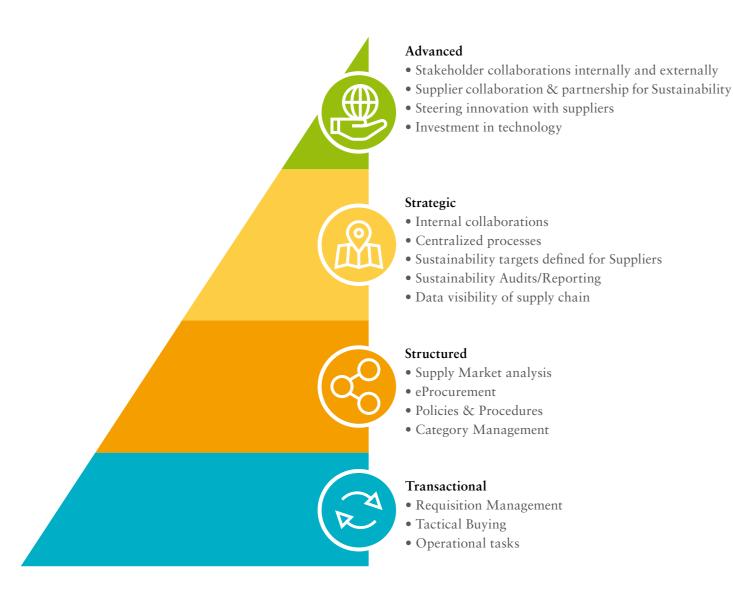
Understanding what is driving the organization to pursue sustainability initiatives in the first place is an important first step in gaining management buy-in to sustainable procurement. Every organization has a unique combination of reasons for undertaking sustainable business practices which depend on the type of organization, the context in which they operate and their degree of ambition.

Establishing how sustainability can deliver benefits and then determining which sustainability issues (commonly called impacts) are relevant to the organization is the key. This helps determine how a supply chain can play its part and a supporting business case and aligned sustainable procurement policy along with strategy can then be developed.



THE JOURNEY OF PROCUREMENT

Traditionally purchasing organizations have focused on cost containment, where suppliers are squeezed for price reductions and policies are implemented to restrain "maverick" spending. The maturity of the procurement function has an important role to play in innovation. As a procurement function matures, the level of cross-functional collaboration increases, its global reach of the constantly evolving supply market improves and the vision of sustainable trends and suppliers develops.¹



STARTUP KIT: STEPS TO INITIATE SUSTAINABLE PROCUREMENT

Sustainable procurement contributes to the achievement of overall organizational sustainability objectives and goals. It involves the sustainability aspects related to the goods or services and to the suppliers along the supply chains.²

The following basic question is a startup kit for an organization when it decides to commence its journey into sustainable procurement.

What are the objectives of an organization and its procurement function to align with sustainability goals?

Different motives lead to different objectives for sustainable procurement activities. The CPO needs to imbibe the sustainability goals of the organization and establish how procurement connects with these operationally.

Does an organization know and has transparency in its Supply Chain?

To understand the cause, it is important to know which stage of the supply chain is most impacted. For instance, in textile retail business, 80% of the water is used in the production of raw materials. This ecological problem is therefore hardly solvable from a procurement point of view, as the influence on the raw material supplier is limited.

Does procurement have a roadmap on how to take its suppliers on this "sustainability journey"?

Sustainable supplier management is a crucial part of the sustainable procurement process. The establishment of a partnership-based supplier-buyer relationship, to access the expertise of the supplier, is crucial so that an organization will not lose the license to operate and in the process, a new business model will emerge.

In this paper, the significance and approach to sustainable supplier management from Covestro's perspective has been discussed.

1. Bearing Point (2013). Procurement innovation vital to growth.

^{2.} ISO20400 Sustainable Procurement Guidance 2017.

THE DRIVERS OF SUSTAINABLE PROCUREMENT

There are several incentives for businesses to engage in sustainable procurement. The drivers of a policy of Sustainable Procurement are usually a combination of the following three:

1. Risk Management

With the potential positive impact on corporate reputation and/or ability to mitigate any regulatory non-compliance, potential resource depletion or disruption of supply.

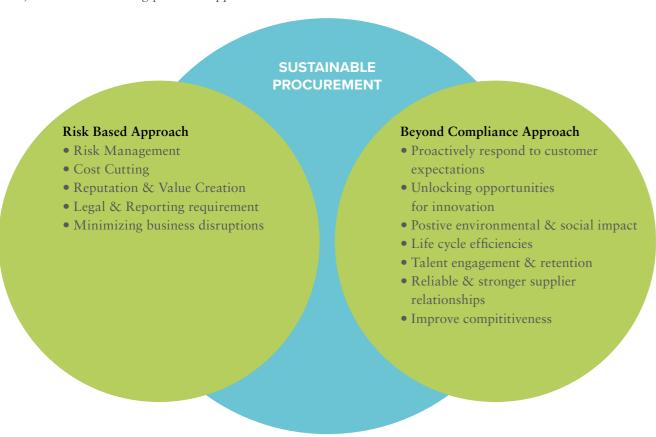
2. Cost Cutting

Via energy consumption reductions, reduction in the costs of recycling and packaging production.

3. Value Creation

Developing new green products and leveraging suppliers' environmental innovations. (Sustainable Procurement: A Crucial Lever to End the Crisis (HEC, 2009).³

Sustainable procurement can go a long way by supporting organizations to: reduce carbon footprints, create savings and be more socially efficient. Most of the Procurement businesses are locked into a risk-based approach and have not looked into the bigger picture beyond a compliance approach. This approach has a positive impact and helps to establish a competitive advantage. Additionally, sustainable procurement will allow the company to be at the forefront of tackling environmental concerns, as well as unlocking potential opportunities for innovation.



3. Business in the Community Ireland (2012). An Introduction to Sustainable Procurement.

SUSTAINABLE PROCUREMENT FRAMEWORK

The research⁴ suggests that the Sustainable Procurement maturity framework is closely correlated with the overall maturity of the sourcing and procurement function. This framework can be used as a standard for defining a medium-term action plan.

The recommended approach to implementing the framework is to systematically work through each of the five themes of: People; Policy, Strategy & Communications; Procurement Process; Engaging Suppliers; Measurements & Results from Levels 1 – 5 (Foundation, Embed, Practice, Enhance & Lead).

The framework has been categorized into five dimensions:

on the training & capacity building of staff regarding sustainable procurement. Training can be classroom-based, online, part of job-shadowing or desk training. and communicated All training must be regularly reviewed and revised.

PEOPLE concentrates POLICY, STRATEGY & COMMUNICA-TIONS focuses on ensuring that the policy is in line with the organizational objectives, is endorsed from the top well. The sustainable procurement strategy must encompass identification of risk, process integration, supplier engagement, measurement & marketing and must be linked to the organization's environmental management systems.

PROCUREMENT PROCESS concentrates on spend analysis, sustainability risk assessment, identifying the areas of priority and adopting whole-life cost analysis for high-impact contracts. Setting targets and KPIs on increased sustainability in conjunction with suppliers is recommended.

ENGAGING SUP-PLIERS focuses on supply chain mapping to work out the sustainability impacts of the organization's suppliers and their supply chains. Engagement must then be prioritized according to the spend, risk and high impact suppliers. Establishing mutual sustainability objectives is recommended, as is a reward/ incentive scheme for suppliers who really want to engage with the agenda.

MEASUREMENT & RESULTS recommends that a clear set of measures is applied to all the above and integrated into a balanced score card approach to reflect the input, output and impact.5

Recommendation

It is important to realize that One- size-rarely-fits-all. The framework needs to be adopted and tailored, based on: industry sector, maturity of the company, organization's objective, procurement size and capability of Procurement to adapt to these transformational changes.

- 4. Ecovadis (2017). Scaling Up Sustainable Procurement.
- 5. Business in the Community Ireland (2012). An Introduction to Sustainable Procurement.

LEVERS	FOUNDATION LEVEL I	EMBED LEVEL II	PRACTICE LEVEL III	ENHANCE LEVEL IV	LEAD LEVEL V
People	 SP champion identified. Key Procurement staff training in SP. SP as part of key employee induction program. 	 All procurement staff received training in SP. Key Procurement staff received advanced training in SP. 	 Targeted refresher training on latest SP principles. Performance objectives and appraisal include SP factors. Incentive programme for SP. 	 SP included in competencies and selection criteria. SP included as part of induction programme. 	 Achievements are published and used to attract procurement professionals. Internal & external awards received for achievements. Best practices shared with other organizations.
Policy, Strategy & Communication	 Agree to Sustainability objectives for Procurement. SP policy in place. Communicate to key staff and key suppliers. 	 Review and enhance SP policy, in particular consider supplier engagement. Ensure it is part of wider Sustainable Development Strategy. Communicate to staff, suppliers and key stakeholders. 	• Augment the SP policy into strategy covering risk, process integration, supplier engagement, measurement and a review process.	• Review and enhance the SP strategy, in particular recognizing the potential of new technologies.	 Strategy is reviewed regularly, externally also by stakeholders. A detailed review to determine future priorities and a new strategy based on new trends and development.
Procurement Process	 Analysis undertaken and key Sustainability impacts identified. Key contracts with general Sustainability criteria. 	 Detailed analysis undertaken, key sustainability risks assessed and used for prioritization. Sustainability considered at an early stage in the procurement process of most contracts. 	 All contracts assessed for general Sustainability risks and management action identified. Risks managed throughout all stages of the procurement process. Targets to improve Sustainability are agreed with key suppliers. 	 Detailed Sustainability risks assessed for high impact contracts. Sustainability governance in place. A life cycle approach to cost/ impact assessment is applied. 	 Life cycle analysis has been undertaken for key commodity areas. Sustainability Key Performance indicators agreed with key suppliers. Best practices shared with other organizations.
Engaging Suppliers	• Key supplier spend analysis undertaken and high sustainability impact suppliers identified.	 Detailed supplier spend analysis undertaken. General programme of supplier engagement initiated. 	 Targeted supplier engagement programme in place, promoting continual Sustainability improvement. Two-way communication between supplier and Procurement. 	 Key suppliers targeted for intensive development. Sustainability audits and supply chain improvements in place. Management involvement in the supplier engagement programme. 	 Partnership with Suppliers to deliver organizations sustainable procurement strategy. Share best practices with peers and other organizations. Innovation discussion and providing sustainable solutions between suppliers and procurement team.
Measurements & Results	 Key Sustainability impacts of Procurement activity have been identified. Measures based on achieving all aspects of the Foundation level of framework in place. 	 Detailed appraisal of the Sustainability impacts of the procurement activity has been undertaken. Measures implemented to manage the identified high-risk impact areas. Foundation level framework implemented and delivered. 	• Sustainability measures refined to include specific procurement objectives.	 Measures are integrated into a balance score card approach reflecting both input and output. Comparison is made with peer organizations. Enhanced level framework in place. 	 Measures used to drive organizational sustainable development strategy direction. Progress formally benchmarked with peer organizations. Benefits from SP are clearly evidenced. Next steps and improvement proposal discussed based on results for achieving SP.

COLLABORATIVE APPROACH TO DRIVE SUSTAINABILITY

To be on leading-edge, Procurement functions must be collaborative. It should move beyond the traditional role of purchasing and deliver more strategic value. In this role, Procurement will need to increase its collaboration with business, suppliers, and other like-minded businesses. In one of the Kennedy School's reports on Partnerships for Sustainable Development, Nelson emphasizes that "effective partnership building, especially across sectors, requires new mindsets and skill sets on the part of individuals and new capabilities and incentives on the part of institutions".

I. Internal Collaboration

Collaboration with internal business units alone is inadequate to drive productivity and continuous savings. The organizations need to take on a cross functional approach which entails close collaboration with key stakeholders across business, R&D and other areas.

The internal and cross-functional collaboration, along with Sustainable Procurement, can also lead to an innovation process. Therefore, the involvement of procurement along with departments traditionally in charge of innovation, e.g. R&D and marketing departments, is the key to success. The procurement intelligence of the supply market, global trends and sourcing solutions, as well as its dyadic relationships and position with suppliers, are assets to share with the other internal stakeholders.⁶



6. Bearing Point (2013). Procurement innovation vital to growth.

II. Supplier Collaboration

Collaboration with suppliers is the key to achieve 100% Sustainability targets for Procurement. Procurement should collaborate with suppliers to achieve continuous improvement and capability building. They, along with suppliers, can influence their sub tier suppliers and subcontractors, and strengthen sustainability in their supply chain. Suppliers, in the long run, are partners for innovation for businesses.

To achieve Sustainable Procurement objectives, Procurement should move from a Supplier Relationship Management (SRM) to a Supplier Engagement model (SEM). SRM is performance focused and process oriented. But, moving to SEM goes a long way in enhancing the relationships between the organization and its suppliers. Apart from focusing on the processes, systems and the non-human elements of negotiation, it additionally focuses on the people. It will drive innovation and will support Procurement to spearhead the Sustainability agenda. This can also be an opportunity to evaluate potential partnerships together and jointly agree on collaboration where value can be generated.

SUPPLIER ENGAGEMENT MODEL

Exemplify

- Develop supplier capabilities for innovation & future prospects
- Involvement of suppliers in the new product development process
- Intensive information exchange with suppliers

Encourage

- Collaboration with suppliers in materials improvement
- Reward the Sustainability efforts of supplier's performance improvement
 - Support in implementation of corrective actions

Engage

- Evaluation of supplier's performance and feedback to suppliers
- Ongoing review for improvement
- Standardization of processes

Enable

- Expectations that suppliers maintain principles of sustainability
- Support in Procurement objective achievement
- Conduct Audits
- Implementation of training for suppliers

@Fröhlich & Steinbiß, 2018 Motivation Model

III. Industry Collaboration

The global business communities needs to work together on sustainability improvements and tackling the pressing issues of today. Collaborations with industry associations and cross-industry partnerships, focused on sustainability, can help suppliers meet industry's expectations by establishing a common set of industry guidelines about ethics, labor, health and safety, and the environment; by creating common assessment and audit tools; by having clear governance models and by offering opportunities for knowledge sharing and capacity building.



SECTION III

Covestro Case Study

Covestro is a world-leading polymers company. With their high-tech materials and application solutions the main segments served are the automotive, construction and electrical and electronics, as well as wood and furniture, sports and leisure industries. Covestro is head-quartered in Germany. The major sites are located in Germany, USA, Thailand and China, with state-of-the-art technology and application of the highest safety standards.

Procurement is globally responsible for providing Covestro with materials and services on time, of the right quality and for the best total value. The task is to generate a competitive advantage by driving sustainable value creation through innovation, sourcing and commercial excellence. Covestro has 7 categories in Procurement to cater to their business needs.





BUILDING A BUSINESS CASE FOR SUSTAINABLE PROCUREMENT - COVESTRO

Various studies express that supply chain represents 50%-70% of the sustainability foot-print (including environmental, labor practices and ethics) of most of the major global companies. Demands around sustainability and transparency are growing and the supply chain is perhaps the largest risk but also the greatest lever of opportunity for becoming a more sustainable business.

Strategic principles in procurement



@Covestro

COVESTRO SUSTAINABLE PROCUREMENT JOURNEY

Taking a look at the last decade we can observe that there has been a significant improvement in the sustainability-related processes at procurement, the establishment of the topic in the department's culture and the level of awareness at different levels of the organization. We acknowledge that it is the key to understand the concerns and needs of our suppliers to facilitate the sustainability journey. To achieve this, we have conducted an internal sustainability workshop, bringing together the perspectives of our procurement experts and views of the respective suppliers they work and collaborate with, in different regions. The next step is to further develop an exchange of best practices with our suppliers, to understand their challenges and develop innovative solutions together. Every action will lead us closer to our objective, if it is done in collaboration with our suppliers. One good example of this is the Supplier Site Improvement Plan in China.

We strive to have all of our suppliers comply with our sustainability requirements by 2025. This is an ambitious target that is supported by annual internal targets that steer and help us to prioritize our activities. All our suppliers with recurrent annual spend exceeding EUR 100,000 will be monitored through assessments or audits to measure sustainability performance and trigger continuous improvement. Covestro aims to achieve this with the support of our team of experts that drive sustainability both centrally and in the regions. Besides, we have allocated resources in the procurement categories and in the countries that link to business sustainability objectives. Lastly, the efforts of our sourcing managers, to create a seamless communication network with the suppliers, are quintessential for the success of our sustainability efforts.

Digitalization will offer many opportunities for sustainability and therefore enable the further integration of sustainability into the sourcing process. We are continuously exploring these opportunities and further examples will be seen in the coming years. Procurement will continue to incorporate sustainability in the supply chain, for instance in the fields of supplier development, renewable energies, and circular economy.

Digitalisation in procurement leads to increased transparency, traceability, and accountability across the supply chain – which, in turn, helps to drive more efficient and sustainable organizations.

Rocío de la Cruz García Senior Project Manager Procurement Sustainability- Covestro

Takeaway

To transform a procurement function, it requires a deep dive into the current procurement operating model and processes and conducting a gap analysis to find areas of improvement. It is also imperative to implement a governance model, to provide a framework for Sustainable Procurement, creating accountability and proper communication of the results. To take this forward, procurement needs to enhance strategic sourcing and category management capabilities, to achieve sustainable savings and explore innovative sustainable solutions. A robust strategy to renegotiate contracts with additional sustainability clauses is required as well. Lastly, technology will play a major role in creating transparency and unfolding many more opportunities for Sustainable Procurement.

Recommendation

A clear roadmap and targets for Sustainable Procurement from the top management of the organization is critical to drive and bring focused commitment towards Sustainable Procurement initiatives. Ensuring that sustainable procurement is incorporated into performance management will help achieve cultural change. Sustainable procurement objectives and goals should be included, for example, in the following: collective and/or individual performance agreements and objectives; staff development reviews and evaluations; incentive plans or other reward and recognition arrangements (as defined in ISO 20400:2017). Lastly, appropriate guidelines and training can assist procurement professionals to achieve sustainability targets.

SUSTAINABILITY IN SUPPLIER MANAGEMENT

Sustainability in Supplier Management aims to ensure that the way an organization communicates with its suppliers is in line with environmental, social and ethical standards.

22

As a company, we are a citizen of the world and need to play an active role in living up to our society's sustainability requirements. Only in collaboration with our suppliers we can have meaningful positive impact on our planet and society.

Dirk Jan de With Covestro Chief Procurement Officer

By acting responsibly, in collaboration with suppliers, Covestro aims to minimize risks and create stable, long-term business relationships with their strategic and business partners. It is also an important strategic lever for Covestro in safeguarding both its global competitiveness and the supply of materials and services. For this reason, the company applies not just economic standards but also environmental, social and corporate governance standards in choosing new suppliers or in continuing its relationships with existing ones.

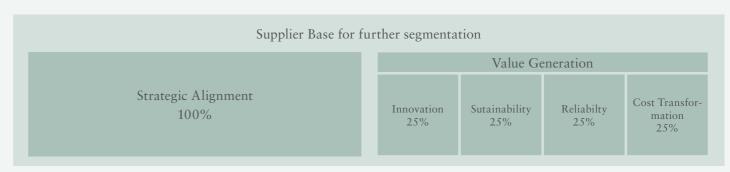
Supplier Sustainability Model for Covestro

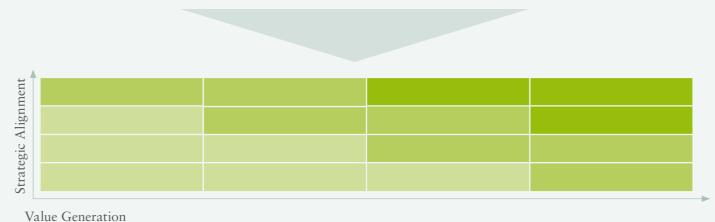


Supplier Selection Process

Supplier selection based on sustainability risk and spend

Procurement Categories





Value generation

This is a forward looking way to assess suppliers' contributions and potential to jointly generate value or avoid potential losses along with Covestro.

Strategic Alignment

This dimension reflects willingness and fit (e.g. similar mindset, objectives, etc.) of supplier to collaborate with Covestro.

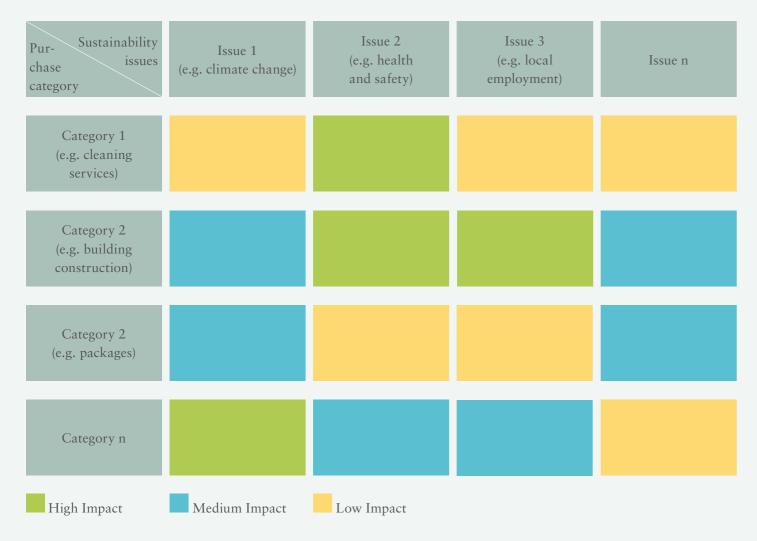
Strategic Suppliers

Key Suppliers

Base Suppliers

Recommendation

A sustainability issue approach can also be adopted (as defined in ISO 20400:2017) to identify top-priority categories, suppliers, contracts and organizational practices that influence procurement per sustainability issue and can direct the efforts in the right direction.



@ ISO 20400:2017

The overall supplier evaluation can also serve as a basis to allocate resources to appropriate suppliers for collaborating along with the strategic themes and engage together with internal stakeholders to jointly assess opportunities. This can also be an opportunity to evaluate potential partnerships and together agree on collaboration where value can be generated.

SUPPLIER ENGAGEMENT ACTIVITIES

Supplier Awareness Program
An initiative of covestro's china best practices

The purpose of the Supplier Site Improvement Plan is to improve HSE performance through awareness and knowledge. We explained the latest regulations from the Chinese government and Covestro's requirements on safety and compliance. We shared Covestro's programs and targets on sustainability with selected Chinese suppliers. We also wanted our suppliers to know that this was a joint effort aimed at establishing a long-term relationship for future business

Mimi Wen Head of Procurement Intermediates & Additives APAC

Supplier Diversity Program

growth.

A way forward in Supplier Engagement in Covestro North America

The program opens the door for small and diverse organizations that have an interest in doing business with Covestro. The Supplier Diversity Portal acts as a hub of supplier information, which Covestro will use when considering new vendors for a product or service.

Covestro's supplier diversity program paves the way by giving a platform to connect with smaller, historically disadvantaged firms that share our passion for sustainability and innovation.

Stacey Vigliotti

Head of business procurement services at Covestro LLC

Supplier Day

Covestro, in the past has also organized Supplier Days in Germany and in India, where the focus is on topics such as innovation, sustainability and risk management, and how the collaboration with suppliers can contribute to the overall Procurement objectives and lead to new ways for innovation. In China, supplier improvement and awareness events have been conducted to explain the latest regulations from the government and also Covestro's sustainability requirements.

INTERNAL COLLABORATION FOR SUSTAINABILITY

Successful Sustainable Procurement calls for internal stakeholder engagement and transparency

Any collaboration must make sense for all internal departments/functions involved, whether their primary interests are commercial, environmental, or social. It's important for a collaboration to set an aspirational goal that everyone agrees to and should be a win-win situation for all the parties involved, anchored by an innovative and exciting idea.

Covestro's Packaging Procurement Category Value Story Polyethylene (PE) Bag down-gauging and quality optimization

Background: Efforts to improve the quality of PE sacks led to a sustainable solution for

packaging, combined with the team motivation to source the most innovative

bags in terms of technology, cost, and sustainability.

Approach: In cooperation with suppliers the PE material for the production of the bag

was optimized. The new Polyethylene recipe allowed to down gauge the PE

bags from $160\mu m$ to $130\mu m$ with a much better performance.

Internal Collaboration

With the support of plants in Uerdigen, Antwerp, and Filago the project was implemented and, due to continuous coordinated efforts with plants, it resulted in PE bag design and improved processes in line with stakeholder expectations. Business Units also supported the project, which led to value generation in all strategic areas (cost, reliability, sustainability, and innovation). The Supply Chain Center reported a reduction in the number of complaints based on torn bags. The supplier played an important role in coming up with a sustainable solution, based on the support from the Covestro team in driving innovation and a higher degree of collaboration throughout the project.

Outcome

Cost: Annual savings increased

Reliability: Quality improvement (puncture resistance etc.)

Sustainability: PE consumption reduced by ca. 20 %; CO2 reduction of 205.675 kg yearly

Innovation: Change to performance specifications led to optimized PE recipes





Value created beyond expectations

This project actively supports the Operation Clean Sweep initiative from Plastics Europe and has contributed to Covestro's related Zero Pellet Loss program.



Through the collaborative approach, our product management team, supply chain centre, and plants along with external expertise were able to materialize the concept and were able to bring value proposition for Sustainability. It's important that throughout this journey of collaboration you are well connected with all key stakeholders with a clear objective, have regular communication, discuss the feedback and create relationships to implement success stories.

Lars Krenn Project Lead - PE Bags

INDUSTRY COLLABORATION: TOGETHER FOR SUSTAINABILITY (TFS)



The chemical industry sustainability initiative, Together for Sustainability (TfS) was founded by the Chief Procurement Officers of six multinational chemical companies. Covestro (in 2011 known as Bayer MaterialScience AG) was one of the founding companies of TfS. Within a short span TfS has now grown to 26 members.

TfS has developed and implemented a global supplier engagement program to assess, audit and improve sustainability sourcing practices within the supply chains of the industry. They collaborate to develop industry standards and engage with suppliers to improve social and environmental conditions of suppliers.

In the initiative, sustainability assessments and audit results of suppliers are exchanged through an IT platform. Sharing information with multiple customers reduces the number of double assessments and audits. It also significantly reduces time spent, resources used and overall costs. This enables both sourcing and supplying organizations to allocate resources more efficiently and to mutually improve sustainability standards in the global supply chains of the respective industries. TfS also focuses on capability building for suppliers through training courses and events. The initiative is integral to Covestro's commitment to sustainability in the supply chain.

Benefits for companies:



Avoid double audits and assessments



Sharing of assessment and audit results with multiple customers on one platform



Engaging with customers on sustainability requirements and challenges



Lowering risks in relation to sustainability requirements

KEYDATA FROM THE SUSTAINABILITY ASSESSMENTS OF OUR SUPPLIERS	2017	2018	2019
Share of relevant purchasing value from suppliers meeting Covestro's sustainability criteria ^{1,2}	71%	80%	81%
Supplier assessments conducted in the reporting year ²	719	736	778
 of which through online assessments 	690	712	760
• of which through on-site assessments	29	24	18
Total supplier assessments conducted ²	1,349	1,584	1,638
 of which through online assessments 	1,215	1,400	1,478
• of which through on-site assessments	134	184	160
• supplier assessments meeting Covestro sustainability requirements	870	1,074	1,133

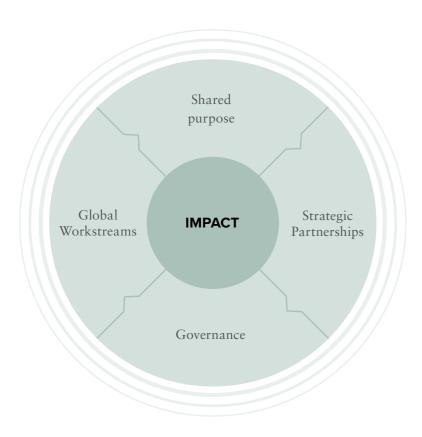
¹Only suppliers accounting for a repeat purchasing value exceeding 100,00 € per year are taken into account.

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²Online assessments (conducted by external, independent, TfS- accredited provider EcoVadis) and on-site audits (conducted by external, independent TfS-accredited auditors) of Covestro's suppliers, both initiated by Covestro and shared within the TfS iniative, are taken into account. Only assessments of our active suppliers that are no more than three years old are taken into account

TfS Impact:

- Shared purpose that brings like-minded companies together and enables value generation from the collaboration
- Governance that brings the direction, right resources and expertise to drive the purpose
- Global Workstreams it ensures appropriate coverage of topics and the collaboration efforts to support the strategic objectives
- Strategic Partnerships with chemical associations to drive sustainability performance in chemical supply chains



HALL OF FAME: SUSTAINABILITY



For its sustainability achievements, Covestro has been awarded the top score "Gold". Covestro was evaluated in the fields of environment, working conditions and social responsibility, as well as fair business practices and sustainable purchasing.



Covestro received special recognition for sustainable investments. This includes Covestro's strategy for: engaging with climate change, certified integrated management system, the measures for guaranteeing plant and transport safety and supply chain management in relation to labor laws, working conditions and environmental aspects.

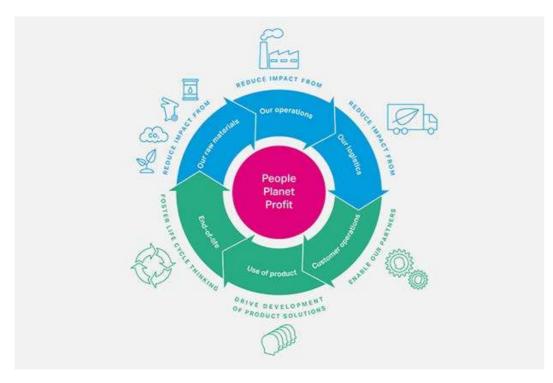


SUSTAINALYTICS Sustainalytics Covestro ranks 8th out of the 133 chemical companies evaluated by Sustainalytics (April 2019)



COVESTRO TOWARDS CIRCULAR ECONOMY

As part of their long-term program, Covestro plans to place a strong emphasis on Circular Economy and to be a creative force for the entire plastics industry. In particular, the company aims to use raw material from sustainable sources, such as waste, plants and CO², as much as possible in production. At the same time, it wants to develop new recycling technologies and cooperate with as many stakeholders as possible in all areas of the value chain in order to find the best solutions for Circular Economy. The company assumes that a circular-oriented economy will also lead to new business opportunities. New value creation paths and new business relationships, beyond the existing B2B business, are potential opportunities. One such example of this partnership with RWTH Aachen University is using CO\omega as a raw material in plastic production. At the international level, Covestro participates in the Alliance to End Plastic Waste (AEPW) network.



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SECTION IV

Conclusion: Takeaways for Sustainable Procurement 2.0

SUSTAINABILITY AS PART OF COVESTRO DNA (VISION FOR 2025)

FUNDAMENTALS

A stable reporting in place, full transparency on process governance and established clear and transparent communication chains.

SUPLLIER DEVELOPMENT

The performance of all strategic, key and critical suppliers is evaluated and tracked regularly. Supplier sustainability performance improvements are visible and actively develop the supplier.



PROCESS

Sustainability is an integral part of procurement processes. It is actively and jointly driven by both suppliers and Procurement employees.

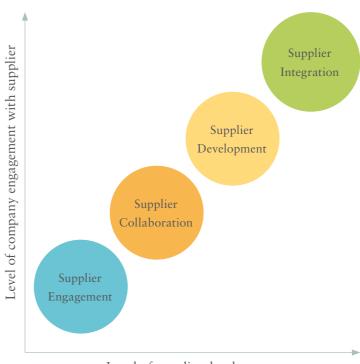
COLLABORATION FOR SETTING INDUSTRY STANDARDS

Covestro is a driving force in establishing one standardized set of criteria and practices for sustainability in the supply chain within all industries in which Covestro operates.

STRONGER SUPPLIER ENGAGEMENT LEADING WAY TO PROCUREMENT 2.0

The sustainability of an organization strongly depends on the relationship fostered with suppliers. Supplier development and engagement can play an important role in sustainability for the organization and for the supply chain. With the advent of supplier evaluation, the companies already have stepped the paddle of tackling the most pressing issues of today. However, to move from a reactive to a proactive approach in Sustainable Procurement, companies need to think about the next steps in Supplier Development.

The move towards more proactive strategies needs not only time and investment but also the willingness of leadership to focus on long-term benefits, which can mean taking short-term risks. Supplier development requires dedicated sources, full-proof planning and the willingness of participating companies to see the bigger picture of developing supplier capabilities leading to sustainable solutions.



Level of supplier development

SUPPLIER ENGAGEMENT	SUPPLIER COLLABORATION	SUPPLIER DEVELOPMENT	SUPPLIER INTEGRATION
Setting minimum standards or guidelines	Understand the significant issues to communicate to suppliers based on risk	Create a high-level understanding about sectors specific /company's sustainability objectives among suppliers	Suppliers considered an extension of the business
Focus on risk and compliance	Collaborate with suppliers to focus on assessment and audit approach	Supplier enabled to align sustainability requirements globally in all its manufacturing units	Transparency about performance — reporting metrics beyond number of audits to include outcomes
Implementation of Supplier code of conduct	Include site visits for discussions and improvement proposals	Mentoring programs for developing suppliers to elevate them to be innovative in their approach	Working with suppliers to build capacity and embed a culture of sustainability
Yearly review of supplier sustainability performance	Work with suppliers to identify areas for improvement and challenges	Leveraging on-site conferences with suppliers, podcasts and e-learning platforms to deliver training to suppliers on particular themes that require focus	Suppliers part of internal meetings to discuss solutions for sourcing requirements
	Setting governance structure, KPIs, next steps and timelines for improvement proposals	Assisting suppliers with investment proposals, support in implementation of sustainable solutions & sharing best practices	Suppliers leading the monitoring and visibility beyond Tier 1 suppliers
		Supplier Development Funds for Sustainability for medium & small size industries	Long term contracts as part of commitment to suppliers

BEYOND TIER 1 SUPPLIERS

To move towards Sustainable Procurement 2.0 and towards vision 2025, it's important to achieve visibility beyond Tier 1 suppliers, including suppliers based in developing countries. This challenge is aggravated by the steep number of sub tier suppliers in the supply chain, subcontractors, plus the multitude of ever evolving standards and policies.

A constant effort towards building collaboration across suppliers, industry and organizations, built on engagement, trust and enablement, are vital to managing risks. However, the application of artificial intelligence & technology solutions can help in finding the solution to this challenge and look beyond the Tier 1 suppliers and, thereby, lead to transparency for Procurement to make faster decisions.⁷



Level of Visibility

Building Sustainable Capabilities

To build a forward-looking team, organizations should have a robust approach towards assessing their current capabilities and identifying the skill gaps. The next generation of organizations needs to align and link its procurement academy to the newly developed sustainability trainings and technology (in the current situation, we have all witnessed the need for Digital solutions) to equip their current employees. It's important to realize that creating an environment to share best practices in sustainability plays an important role towards creating sustainable teams.

Targets and Indicators

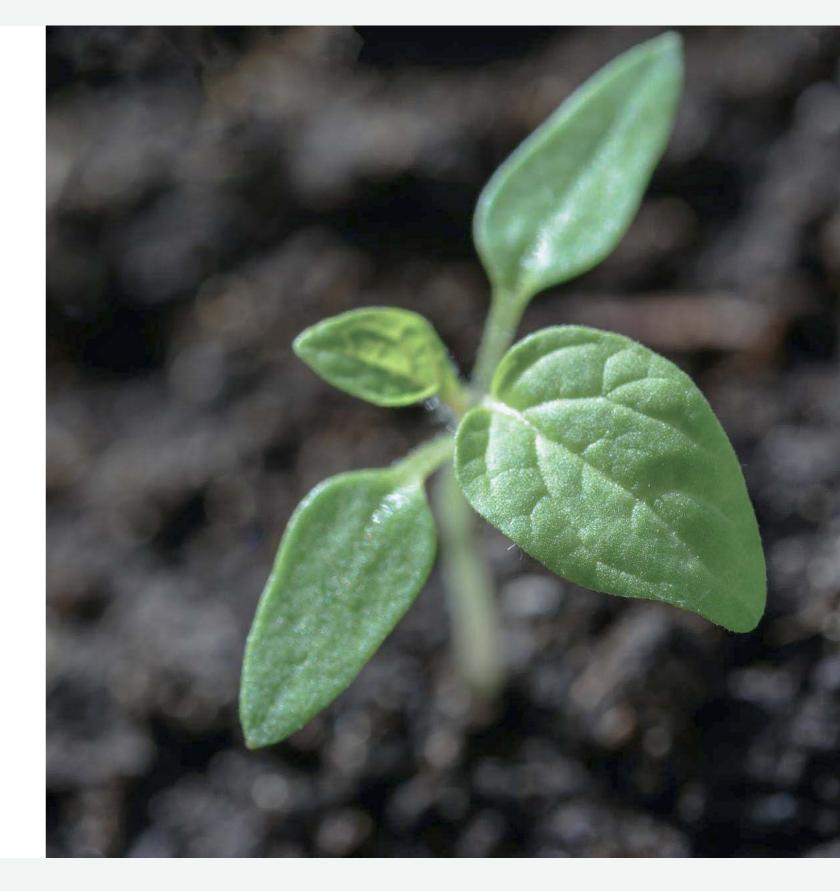
Setting targets and performance measures is essential for continuous improvement in the procurement process. It is imperative for senior management to have set targets and performance indicators for each year. Along with this, a monitoring mechanism is needed for tracing the progress each year and for creating improvement proposals.

^{7.} EY (2016). The state of sustainable supply chains.

What the future will look like?

Adversity can strike quickly and without notice, as obvious with the current pandemic. We have noticed things which can have unprecedented outcomes especially for Supply Chains, including Procurement. Just like it is not possible to prevent such a crisis, it is evident that such events can cause unforeseen disruptions. The only solution is in being prepared and making Sustainable Supplier Management a part of the Procurement regime to maintain a competitive advantage. Once the concrete Sustainable Procurement foundations have been laid, it takes agile and innovative procurement to keep costs low, whilst contributing to economic and environment balance.







APPENDIX

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