

Sustainability in Action: Interviews with Experts

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To round off our guide to achieving sustainability in procurement we have compiled some of the interviews that were conducted during the writing of this book, which demonstrate what sustainability in procurement looks like in the real world, in a variety of industries.

From battery developers to audiology to shipping giants and more, the interviews present a selection of different approaches to sustainability, company-wide and for procurement specifically. The common thread throughout is the notion of the importance of sustainability in procurement. Having now read our guide, use these interviews as inspiration to take action, embed sustainability in your procurement function, and turn ambitions into impact.

Peter Carlsson, Co-founder and Chief Executive Officer of Northvolt
Nils Eichberger, Vice President of Procurement, LBBW (Landesbank Baden-Württemberg)
Sakuto Goda, Principal, Nomura Research Institute
Nina Göntgen-Voss, Director Sustainability, Forto
Fredrik Gustafsson, Senior Manager of Sustainability Transformation, Cordial
Thomas Janvier, Vice President of Procurement, INNIO
Simon Juul Toft, Lead Specialist—Green Procurement, Ørsted
Henrik Larsen, Chief Procurement Officer, A. P. Møller-Mærsk
Chaojun Li, Global Head of Sustainability, WS Audiology
Dr María Mendiluce, Chief Executive Officer, We Mean Business Coalition
Markus Strangmueller, Corporate Development & Sustainability Manager, Siemens
Thomas Udesen, Chief Procurement Officer, Bayer and Co-Founder, Sustainable Procurement Pledge

8.1 Peter Carlsson, Co-Founder and Chief Executive Officer, Northvolt

The future supply chain is going to require more partnerships as well as transparency.

About Northvolt

Northvolt AB is a Swedish battery developer and manufacturer, specializing in lithium-ion technology for electric vehicles. Its mission is to build the greenest battery in the world with a minimal carbon footprint and the highest ambitions for recycling to enable the European transition to renewable energy.

About Peter Carlsson

Peter Carlsson is the CEO and founder of Northvolt. He left the position as CPO and Head of Supply Chain at Tesla Motors in the end of 2015 to become an entrepreneur, advisor, and angel investor. In 2016, Peter founded Northvolt with the mission to build Europe's largest lithium-ion battery factory.

Before joining Tesla, Peter was the CPO for NXP (former Philips Semiconductors) responsible for purchasing and outsourcing. Located in Singapore, he was a country manager for Singapore, Malaysia, and Philippines. Before starting at NXP, Peter was CPO at Sony Ericsson since 2005. Peter had a total of 13 years' experience from different roles with Ericsson and Sony Ericsson. He has a master's degree with specialization in production and quality control at Luleå Technical University in Sweden.

Sustainability in Action

You had a high-impact job at Tesla, orchestrating its whole supply chain. Why did you start Northvolt? What was the trigger point?

I left Tesla at end of 2015 but did not really plan to start a company. I wanted a break and started to invest in start-ups, both in Silicon Valley and Europe, and I joined a number of boards.

Then I realized two things. First, it is much more fun to build something on your own, instead of just giving advice. After talking with a few people and looking at Europe I was then contacted by Business Sweden with the question "What would it take to get Tesla to build a battery factory in Sweden?" Then I looked at the material and realized that some education is required in Europe to get the facts straight for a battery business in Sweden.

The second thing I realized is that investors were open to this idea. We agreed to do a concept study about building a battery factory in Europe.

There were two other factors that made this idea appealing. First, there's tremendous pressure to reduce carbon emissions, especially in the power generation and auto industries. We put together a small group of four people in Silicon Valley. Intrigued by the idea, we started to travel and meet stakeholders in Asia and Europe to see if it was feasible to start a battery factory in Europe. The more time we spent on this, the more we recognized that there is a big need.

We realized that the supply chain for batteries is very fragmented with players that do not fully disclose how energy-intensive battery manufacturing is. When you look at the supply chain, seeing it from the perspective of mining and raw materials processing, you quickly realize that making cells is incredibly energy intensive. If you took a vertical integration approach, you could change the game. For example, if you responsibly source a battery's "active material" (the chemically active components of the two electrodes of a cell and the electrolyte between them, including nickel, manganese, cobalt, and aluminum), and put it into an energy grid based on renewable and low-cost energy, then you could compete with low-cost labor countries.

What finally convinced you to start a battery business?

After 6 months of this pre-investigation, this was a bit too interesting not to try. A little bit too important not to try. Even though battery manufacturing is very capital-intensive . . . you need to go big or should not even try.

Did you find investors who shared your enthusiasm for battery manufacturing in Europe?

Yes, we went out to investors, raised \$15m, recruited 25 people, and put the shovel in the ground within 18 months. Since then, assumptions have changed, but the fundamentals have stayed the same. We underestimated how many people we needed, how much funding . . . but that is what you do when you start-up a company.

Were you worried about the Asian battery giants?

In the beginning, we thought the best way to start this was to form a tech partnership with one of the big players. We spent a lot of time thinking this through but eventually recognized we could spend years, and secondly, recognized how different the cultures are. At some point we skipped the idea of having one big partner in favor of having many and building a strong team ourselves. This has worked out. Now we have a number of key partners in the equipment, construction, energy, and transportation sectors. There are also a number of companies that are willing to co-locate where we build.

The EU had been clear that as part of building up the European industry in step one, they want to build sustainable batteries and have a green battery label. The EU wants to create a framework for green certification and customs tariffs and taxes on the CO₂ of the product. This is all under discussion. The timeframe for a potential labeling is around 2023.

The fact that the EU is driving this has pushed competition and raw material suppliers to look more actively at the EU and invest here.

What you have done is impressive and you could easily be described as a role model for other companies wanting to make a green transformation. What is the secret behind getting Northvolt started?

We managed to build a strong case around the pilot plant. We went out to 10 companies, all potential customers, and offered them the chance to participate or invest in some type of partnership. Almost all were excited about the idea and the opportunity to build up this competence in Europe. Then we entered the corporate world of governance and processes and of course, what we thought would be a much faster process, turned out to be substantially slower.

Would you agree that within companies there needs to be more alignment between procurement, R&D, manufacturing and possibly even the M&A departments, that companies should adopt more start-up-like behavior?

Getting started took much longer than we thought. At first, we had more individual projects, but then had our first customer with ABB, then Vestas, then Scania and from these got the proceeds we needed to invest the 250 million euros on the pilot plant in Västerås.

Everyone was very positive about the new angle in the industry. Most people were unaware how energy intensive this industry would be. If you build up a plant with coal-based energy, the problem is only pushed to another place.

There were two other things that might not have been on our radar when we first started but turned out to be highly beneficial:

First, when we decided to do the vertical integration of active materials, suddenly, instead of having a fragmented supply chain, Northvolt could combine the sourcing of those materials with its direct requirements to specific mines and get clear transparency down to the mining level.

Second, building up a whole new industry in a sustainable way attracted a lot of talent and specialists from around the globe. People want to be part of creating something new and creating impact. For younger engineers specifically, the paycheck alone was not sufficient motivation but seeing the impact they could have made them join.

You have highlighted two important ingredients for building a sustainable company: transparency and collaboration in the wider ecosystem. What is your experience of the general commitment to sustainability in European countries?

There are very few companies that are transparent about their carbon footprint. They produce nice reports, but does everyone fully understand what impact they have?

Some KPIs are important: cost per kwh, quality, capacity ... but so is sustainability. When we first started to talk about this, no one listened. Four years later, it has finally become important for companies and also for German customers. In my experience, it is best not to start with compromises—if you cannot build a factory under similar CO₂ conditions as in Sweden, do not build a second factory in a country with a high CO₂ energy mix.

Is it fair to say that Northvolt is a pioneer in that it is nudging the political arena for Europe to be part of a growing industry and building sustainable prosperity?

When we started to look at Europe, we talked with industry professionals, and knowing that they demand just-in-time concepts, there would have to be regionalization. We knew there was a case for building up capacities right here. We made the European Commission aware of the fact that Europe would have its own ecosystem, and that this would have a huge impact on R&D, equipment, component supply development, universities, and that the impact on the economy would be so much bigger if they were to support this. The European Battery Alliance was created out of this in 2017 and now has 500 member companies.

Are you happy with the support of the Commission?

In the beginning the European Investment Bank (the bank of the European Union) provided financing, which was great. More recently this has become less of an issue because investors are reallocating their portfolios towards the green transition.

Now the focus is on the supply chain and how to build the competencies in R&D, manufacturing, and so on in a short period of time. There are some important topics that we are working on together with the EC and its European members.

To produce truly green batteries, we need to manufacture them using renewable resources, such as hydro power, combined with a low carbon footprint around.

We are looking to find cobalt from non-Congo sources, and this could mean new ways of working with the raw materials and minerals.

Again, to reduce the overall carbon footprint, we should build strong supply chains within Europe. Developing European machine builders in equipment making is also important for strategic competitiveness.

And let us not forget about recycling and the circular economy. These are vital parts of green manufacturing.

All these topics are under discussion.

How do you embed circular thinking into the organization, the design team, R&D, and throughout the entire company?

Recycling is an important part of green manufacturing and it directly benefits production too, because it means that the raw materials we need for new cells can be replaced with recycled materials.

We will use more and more batteries in Europe in the coming years so we have to build an infrastructure to recycle them. We will need effective recycling technologies, a distributed ecosystem of recycling capacities, and supportive European policy. Up to 90% of a battery can be recycled, and up to 95% of the nickel, manganese, and cobalt used to make batteries can be reused. But to do this we have to have the recycling technology first for handling batteries, then dismantling, and then recovering materials that can be reused. Chinese and South Korean companies are leading the way on this, but if we want a green battery supply chain in Europe and circular manufacturing, we have to get better at doing this as well.

Northvolt is now in the tough phase of implementation, industrialization of the product, and preparing the plants for day-to-day manufacturing. How do you motivate your team during this busy period?

I do not deny that building a new industry is not a nine-to-five job. It is tough, but we are working transparently when it comes to challenges and wins alike. It is very important to celebrate the wins.

We also do a lot to build a strong culture. We have got people from all over the world working here, and that means different leadership and different approaches to resolving problems. Having a homogenous workforce might mean getting things done quicker, but for long-term success try to build a diverse culture in all its aspects. Leadership, organizational culture, what defines us, these all play a huge role, and you have to spend time on it.

From day one we took the decision to make every employee a shareholder. It is a way of letting people know that they are genuinely appreciated. That way, their competence is valued as much as capital, which seems to be a general trend. There is a lot of capital if you know where to look, but competence is much scarcer.

What is your final advice to the procurement organizations where sustainability is concerned?

The future supply chain is going to require more partnerships as well as transparency. Data sharing is going to be a key enabler for long-term competitiveness. Hardware and software will both be important. People will have to develop the ability to learn from data to design better in the first place and enhance products out in the field. This will involve the entire supply chain and procurement must orchestrate this transformation.

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

Find fun in the subject. It's very meaningful [...] the most important thing is to understand sustainability within the overall context of the business.

About LBBW

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

About Nils Eichberger

Nils is an experienced Vice President of Procurement with a demonstrated history of working in the banking industry. His areas of expertise lie in negotiation, IT strategy, strategic sourcing, management, and risk management. He is also passionate about digitalization, climate protection, sustainability, and employee experience. As an EVP at LBBW he is currently responsible for Group Procurement and Security.

Sustainability in Action

What is your personal connection to the topic of sustainability?

I have two children and I am convinced that we all have a very personal responsibility to live in a resource-optimized or climate-positive way, since we only have one Earth. We have to be economical with what we have available to us. For many people there is also an opportunity to drive the issue forward in the companies we work for.

When did LBBW decide to really make an effort on sustainability? What triggered this decision?

This is actually intrinsically in LBBW's DNA. We first addressed the issue in 1991, 30 years ago, when we published what was then called the first environmental report in Germany. We are a company under public law, with the city and state as our sponsors, and I would like to say that we have the claim that we act sustainably as a company. For us, sustainability also means our responsibility as a bank and trust center.

For more than 4 years now it has been one of our four strategic directions and is defined through Scopes 1–3. Sustainable development is important to our company, which is why we have sustainable human resources development and look to recruit sustainability-minded people. Getting the right people means we will be successful in the long term.

When you talk about sustainability in LBBW, what scope do you consider?

At the moment ecological sustainability is very much in the public spotlight, at least in the daily press and beyond, so regulatory issues related to climate risks are now a definite concern for us just as they would be for all financial service providers. But we also take our social responsibilities seriously as well as the 17 SDGs

As LBBW, what is your leading framework? You mentioned the 17 targets.

Yes, we have everything, also a sustainability strategy. We have signed the Principles for Sustainable Investment, which are based on the UN's 17 goals. We have also started and joined several different initiatives.

Who oversees sustainability at LBBW? How would you describe the organizational setup?

We have a head of sustainability who reports directly to our CEO, who has overall responsibility for sustainability. In the end, it is a team sport, and everyone is responsible to some extent. We use different approaches to sustainability in our product portfolio. For example, we have sustainability investment products. To a certain extent we can control where funds flow through a process of supply and demand such as in companies that are subject to certain standards and thus promote sustainability.

We also have financing that is linked to sustainability KPIs of targets of the companies. In other words, the more sustainable the company's development, the more favorable their credit rating.

We also pay close attention to our own operational emissions. Everyone who works at LBBW is made aware that they can have a positive effect on the climate by doing or not doing certain things and they are incentivized to do so.

We had a sustainability fair more than 2 years ago. We managed to share and discuss about sustainability with 280 colleagues for a day: with fair booths, with external partners, but also, very importantly, with workshops, where colleagues could participate, where they could contribute their own ideas for the further development of the subject along these four lines of action, i.e. planet, credit, carbon footprint, and personnel. Naturally, this generated a lot of momentum, and we did a bit of advertising for the topics and acquired a lot from this, and then at some point it becomes a bit of a self-runner.

But we also use sustainability as an opportunity to expand our "business model." For example, we have developed a CO₂ dashboard for LBBW based on the demand and consumption information from purchasing, which lowers our CO₂ footprint throughout the organization. Every employee, every organizational unit has the opportunity to see and control their emissions. In the expansion, we now distribute the CO₂ targets for operational emissions in a balance score card.

How do you deal with sustainability when it comes to procurement?

This begins relatively globally at the supplier or partner level, where we have been working with a sustainability agreement for 10–15 years that simply includes certain criteria. We have a two-stage onboarding process and potential suppliers have to satisfy a minimum number of criteria. For example, there is 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.

Do you offer your suppliers any form of bonus if they are particularly sustainable?

No, not yet. But operating sustainably is simply mandatory if you want to work with us. However, we recently held discussions with our category managers about whether it makes sense to include a sustainability day, where we award suppliers who support our sustainability goals, or who, from our point of view, perform extraordinarily well. The idea is to promote what they are doing as an example to other companies in our community. We have had to sideline this idea for the moment because we are very busy with other activities, but to answer the question, there is no bonus.

Compliance with LBBW's sustainability requirements is audited. Do you use a tool to do this?

We can conduct audits but we are currently reorganizing ourselves in this respect because the large number of regulatory and compliance agreements are actually stressing out the entire organization.

The supply chain law is waiting for us. Of course, we are looking at this from a number of different angles. On the one hand, it directly affects us, and on the other hand, we are actually looking at it again under the heading of Beyond Banking to see to if it could become part of our business model in relation to the issue of trust. It is all about the inheritance of sustainability criteria along the supply chains. We are currently looking at whether it would be interesting to work with a customer in this area.

Do you have any tool in place specifically for sustainability?

Yes, we have. Our sustainability report, which deals with our carbon footprint, among other things. We have a solution that collects all the consumption data for the entire organization.

What tools do you use to get transparency into your supply chain and to ensure that LBBW's standards and requirements are met?

That is where we have just changed. We are doing this through our supplier management. In the meantime, we have joined Prospeum, a small start-up that I personally think has come up with a very clever idea and we are currently migrating our previous solution to it.

What are currently your biggest challenges?

What we keep looking at, and what we are concerned about in some areas, is World Savings Day. It is still the same as it used to be. It is still very classic. The kids come with their piggy banks and there are gifts. The whole topics of promotional gifts, marketing items, textiles are already topics that give me such a bit of a stomachache. We define requirements and certificates from the suppliers. Nevertheless, I look at it with concern, because at the end of the day, of course, I do not know whether what I am holding in my hand is sustainable or not. I have it on paper, but you never know.

What recommendations would you offer to other (procurement) organizations that are starting on the sustainability journey? What have been key success factors at LBBW?

Find fun in the subject. It is very meaningful. At least that is how I feel about it. Sustainability is a topic that procurement would sometimes want to push away and instead refer it to other departments such as compliance and outsourcing management. But sustainability should be seen more as an opportunity to develop beyond procurement into new business models. When someone is just starting out, I think the most important thing is to understand sustainability within the overall context of the business. This will show where the opportunities lie. At the end of the day, no company can ignore sustainability nowadays, so embrace it.

There are cost implications, of course, but ultimately it has a direct bearing on reputation and how the company is viewed in the market. There have been enough studies to show that future generations of employees will be very concerned about the sustainable impacts of the companies they work for and less concerned with fringe benefits such as company cars. They want meaning and purpose, and I think that is important here.

In an ideal situation, with the resources, money, and courage that you need, how do you see the LBBW's sustainability journey to 2030?

To me it is about developing things forward. New business models, how procurement behaves in the networking of suppliers with each other and their further development. I would like to see a strong community, where we drive sustainability forward together. There is already a lot of that in the form of platform exchanges, and pitches. That is the direction I am looking in. The other things are also important, you need that too. But we can still develop the world together with our suppliers and our customers.

8.3 Sakuto Goda, Principal, Nomura Research Institute

I hope that nobody is talking about sustainability then because it has become a matter of course, because it has become normal to everyone.

About NRI

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.

About Sakuto Goda

Sakuto Goda is an experienced principal consultant at the Nomura Research Institute based in Tokyo. With over 10 years of expertise in the areas of strategy and development he uses his experience and comprehension of industry trends to help customers develop strategy, support decision-making, and form and execute effective business measures.

Sustainability in action

What is your perspective on sustainability in Japan? What is the current status of the topic?

Sustainability has become prominent in Japan. Generally, one could say that the current movement related to sustainability came originally from Europe, but I can clearly see that it has become more and more important in Japan. Both in private and in business people are constantly talking about it. I often hear my family talking about sustainability and especially about waste reduction or waste management or CO₂ reduction. It is also a political topic and is therefore quite prominent on TV. It is interesting to see how fast the topic has emerged.

What is sustainability for you?

Currently, carbon neutrality is by far the biggest topic when it comes to sustainability—at least that is my personal view. The reason for that is quite simple. Prime Minister Suga, as well as the environment minister, announced quite ambitious reduction targets after they were appointed to office. In fact, the newly announced goal is to reduce emissions by 46 percent compared to 2013. Not surprisingly, carbon neutrality is currently the hottest topic in Japan.

Besides that, I would say that waste reduction is also one of the biggest topics. It gained importance through news about the problem of plastic waste in the oceans. Those images went viral very quickly. This has led to several changes in private life, like the fact that people have to pay for plastic bags in supermarkets.

Although CO₂ emissions reductions and waste management are the most prominent topics, I would define sustainability as being much broader than that. For me sustainability also comprises social aspects, water treatment, and labor rights, for example. However, in Japan, it seems that most people view sustainability as mostly concerned with the environment.

Do you see sustainability as a trend or something that will bring changes to Japanese society?

I would like to describe my opinion by using an example. A few months ago, I talked to my five-year-old son who is currently going to kindergarten, and he was talking about SDGs. He told me that he learned about SDGs in the kindergarten and wanted me to tell him about my personal opinion on this topic! The younger generation is

starting to focus on sustainability quite early. That is why I do not think that it is just a trend but something that will always be around us.

I also think that Japanese culture has always comprised at least some aspects of sustainability. We always had discussions about the concept of sustainability, although we might have called it something different, but in the end, it meant the same. In Japanese we use the word “Mottainai,” which basically describes the regrets we have for something that was lost or the waste produced by using something. I think that the word sustainability is now the chance to incorporate the meaning of the existing expressions into our daily lives—just in a different way.

But it is not only about the way people think. Sustainability has also changed the traditional way companies do business—or at least is about to do so. Japan is quite famous for its manufacturing industries and it is that sector that needs to further reduce waste or to rethink the traditional way resources are used. If they do not, these companies will be going out of business due to increased regulatory requirements or customers’ demands for sustainable alternatives in the future.

Do you see differences when looking at Japan compared to other Asian countries? If so, which ones are the front runners in sustainability?

It is difficult for me to give a detailed answer to that question. In fact, I think that all countries are facing similar issues when it comes to sustainability and that all countries need to act. I do not think that there is any country with a significant lead over others. It feels that we are all at the same point with equal problems and it is more a case of learning from each other.

Of course, I hope that Japan will become a frontrunner in terms of sustainability in the future as today’s concept of sustainability is already embedded into the Japanese way of living. That is why we need to make sure to leverage this asset and to develop new business models around it.

Do you see sustainability as a pressing topic among your customers?

Yes, over the past years, the number of sustainability-related enquiries has significantly increased—from multiple industries. Most of these enquiries ask for support with how to respond to the increasing demand for sustainability and how to react. Besides that, many companies want to leverage sustainability to develop new business models. As an example, companies that really want to optimize carbon emissions within the supply chain need transparency, optimized services, and new equipment. In other words, companies do not only want to react but to capitalize on new business opportunities.

Has it been more of a top-down engagement (coming from management) or a bottom-up (demanded from the employees) that has triggered the increased focus?

I would say that this depends on the type of company and the customers this company has. However, in most cases, I see the topic coming from the top and then going down. Sustainability is a relatively new topic in Japan and there is no concrete route for actions. Managers need to develop new action plans, define new

KPIs, and come up with new business opportunities. This cannot be promoted bottom-up. For that you need management that defines the way forward.

What are the main challenges they are experiencing and focus areas they are interested in?

As I said earlier, I think that uncertainty is one of the key challenges. There is no clear pathway leading to the right actions and there is a lack of solutions for all relevant sustainability problems. It is about finding solutions, developing new business opportunities, and leveraging what is out there to find your individual way through the sustainability jungle.

Besides that, I think that the economic factors of sustainable business are another key challenge. Today, sustainability is associated with relatively high costs, meaning that becoming sustainable, or developing new sustainable business models, requires huge investments. Most managers are looking for suitable ways to monetize new business models while keeping additional costs to the minimum. Some people think that customers are willing to pay more if products or services are sustainable. I think that this is only partially true and depends on the nature of the product. From what I see, people might be willing to pay a small surplus for sustainability, but in most cases this surplus does not fully mitigate the additional costs of offering the product or service. So, in the end, it is a business case for each company and each product that managers need to decide on.

A third challenge is resource limitations. The sustainability concept is global. People talk about it on a global scale and try to develop concepts that have quite a broad scope. However, the implementation of these concepts requires local or regional action, meaning that each action has to be executed within one country, region, or factory. The challenge associated with that is the limitation of resources. To give you an example, in Japan there is insufficient land for solar energy or wind power, but people still ask for renewable energy sources. So, the question is, how do we do that? It is about a shift in resources, but if you are not rich in the required resources, it is very difficult to become truly sustainable.

Do you see digital tools as an enabler for positive change? If so, how are Japanese companies using the tools?

Definitely. Digital technology is for sure one of the key enablers for sustainability. However, technology alone is not 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 is not 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 prerequisite as an enabler of sustainability but is not the silver bullet to solve all the challenges.

What do you perceive as prerequisites (skills) to ensure that sustainability is successfully embedded within a company's operations?

Generally, I think the first required skill is a change of mindset. But this is mostly true for the older generations. Coming back to the example of my five-year-old son, I see the younger generation treating sustainability as a matter of course. It is the older generations where this mindset shift needs to take place. So, a five-year-old kid already knows about SDGs and wants to hear my personal opinion on it. This shows that it is simply a matter of time before that mindset shift will be visible.

I also perceive sustainability as a transformation, meaning that people require transformational skills such as being open minded and constantly looking for innovation opportunities. In the business context this means that managers need to educate and motivate employees, clearly define the need for action, and compensate peoples' efforts to become sustainable in an economical way. In the end, it goes hand-in-hand with the mindset shift—managers need to ensure that this mindset shift also takes place within their companies.

What advice do you give to your clients who do not know where to start when it comes to sustainability?

First, I would advise them to define where to start and to assess the scope. It is about understanding where a company can contribute, which products to focus on, where the biggest footprint is, which technologies can be leveraged, and what business opportunities to focus on. So, it is about generating transparency among existing processes and the goals that the company aims for.

Secondly, it is about mindset. Managers need to ensure that everyone is going in the same and correct direction. Goals and ambitions must be communicated openly, and the vision needs to be clear and understood by everyone.

Thirdly, it is about co-creation. Companies need to speak to their suppliers and outside stakeholders to define new ideas and bring them to life. It is 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.

Where do you see sustainability in 2030?

I hope that nobody is talking about sustainability then because it has become a matter of course, because it has become normal to everyone. This vision means that processes have been adopted and that new business models have been developed while existing models have been adopted according to the requirements of sustainability-related transformation.

However, I think that, in reality, we will see targets that were defined for 2030 will need to be adjusted over time. I am afraid that we will see companies and also countries, in let us say 2027, adjusting their targets. In the end, I think that it highly depends on the younger generation. They are more attuned to sustainability and will also be more aware of what it means. In the end, it will be about finding new technologies and leveraging the trend to do better than we are doing today. I really

hope that my vision for 2030 becomes reality and I put a lot of hope in the next generation.

8.4 Nina Göntgen-Voss, Director of Sustainability, Forto

We see ourselves as change agents for the logistics industry. We've already turned the industry upside down once by providing more transparency through digital solutions—even though people did not clearly express demand for what we're offering. The same thing could and will happen with sustainability.

About Forto

delivers a highly transparent, frictionless, and sustainable digital supply chain. Their platform addresses the entire process stream, supporting customers with greater visibility, insight, and control.

About Nina Göntgen-Voss

As a Director Sustainability, Nina Göntgen-Voss is responsible for Forto's strategic direction with regard to sustainability, which is an integral part of the company's vision and underpinned by numerous initiatives for and with employees, customers, and partners. After graduating from the EBS University of Business and Law as well as internships in start-ups and consulting, Nina joined Forto in May 2016 as one of the very first employees. Since then, she contributed substantially to building the company, working in various departments and leading several cross-functional projects and teams.

Sustainability in action

To what extent is sustainability part of your company agenda?

Sustainability is at the core of our company purpose: we are in business to create a more responsible society by fostering both sustainability and prosperity, which are closely interlinked.

We fundamentally believe that global trade is something good, especially if you consider how much wealth and prosperity stems from it. Different nations can participate in the global economy which enables all nations to increase their productivity—given that there is equal access to global trade. In Asia alone, more than a billion people have been lifted out of poverty due to global trade in the past decade. After the introduction of containers and “containerization” over 50 years ago, the

digital transformation of global trade is now the next major step. Therefore, we believe technology is a key driver for global prosperity.

At the same time, we also see that global logistics and global supply chains have a major impact on emissions. Cargo transports account for around 6–7% of global greenhouse gas emissions. It is our joint responsibility to make a difference and curb climate change. We must transform global supply chains in a sustainable way to secure the livelihood and prosperity of future generations. Therefore, sustainability is fundamentally anchored in our company's purpose and part of our daily business.

When did Forto decide to really make an effort on sustainability? What triggered this decision?

We started the business in 2016, full of energy and with a thousand topics to deal with at once, sustainability being one of them. Enabling a sustainable logistics industry is tough when you consider the different standards and regulations and its global scale. So instead of doing many things just partially right, we set our focus on digitalization in the beginning, and are now also putting full attention on the topic of sustainability.

As mentioned, cargo transportation accounts for 6–7% of global greenhouse gas emissions. Forto is part of this problem, but we can also be part of the solution and create significant positive impact. Most of all, we want to take important steps in the right direction and inspire others—both organizations and individuals—to join us on this journey.

When you talk about sustainability at Forto, which elements of sustainability do you consider?

Our sustainability understanding is constantly evolving. We started with the standard framework that includes Environment, Social, and Economic sustainability. By now, we understand that it is not just three separate pillars that have some intersection, but rather that the planet we live on with its conditions such as stable temperatures, nutrition, etc., is the basis for life in all its forms in colors. And social stability in turn enables economic systems with competition and profits to exist.

Due to the global climate emergency we are facing, we developed our sustainability strategy with a strong focus on the environment in mid-2020. However, environmental, social, and economic issues cannot be solved in separation. There is a reason why, in 2015, the United Nations defined 17 interlinked Sustainable Development Goals to achieve a better future for all people and the planet—including goals like zero hunger, no poverty, quality education, life on land, climate action, responsible consumption, and many more. To achieve a viable future for all people on a healthy planet we cannot leave any problem unattended. Therefore, we are planning to address problems beyond environmental issues as well—again starting with a strong focus first until we are able to diversify and extend our efforts.

Forto initiated the “Climate Action Group.” What is that?

Originally, our co-founder Ferry Heilemann triggered actions to build a more sustainable company and about 2 years ago his passion for sustainability led to the

formation of the Climate Action Group. It was founded to give everyone in the company the opportunity to join in and contribute towards sustainability at Forto. Since we deeply believe that doing the small things consistently can make a big difference, it started small. First ideas included reducing paper use, changing electricity providers, and rethinking office nutrition. Now, for example, we only offer organic vegetarian and vegan meals.

What does sustainability mean for the logistics industry?

Just a couple of months after we started our internal Climate Action Group, we participated in a panel discussion on sustainability in logistics. We shared our thoughts on how digitalization can support sustainability in logistics. The feedback from the audience was overwhelming and motivated us to bring our ideas to life.

We see ourselves as change agents for the logistics industry. We have already turned the industry upside down once by providing more transparency through digital solutions—even though people did not clearly express demand for what we are offering. The same thing could and will happen with sustainability.

What specific sustainability-related offers do you have for your customers?

We are seeing a very strong increase in our customers' interest in sustainability, and we appreciate them taking important steps by developing fully-fledged sustainability strategies. It brings great joy to everyone at Forto to support them on this journey and educate on why this topic is important—for all of us.

Our offer is derived from our sustainability strategy with strategic objectives related to emissions—we are working on achieving 100% climate-neutral operations both internally and service-related. A standard emissions strategy follows the sequence from generating transparency first, to then reducing emissions, and finally offsetting what cannot be reduced.

Since effective emissions reduction options are not available at scale within the logistics sector yet, the standard emissions strategy cannot be applied. As a transformational tech company in a hard-to-abate sector, we therefore chose to combine offsetting and transparency as a first step. Offsetting allows us to take immediate action with immediate impact while also starting conversations on sustainability with our customers. However, offsetting is only a stepping-stone, not a long-term solution. To achieve true change and reduce emissions we need technological and behavioral changes.

Forto's Unique Selling Point (USP) is that we give our customers control through transparency—initially, for logistics, but transparency is also a necessity on the path towards sustainability. Our offer currently includes transparency about the emissions generated by shipments, voluntary CO₂ compensations for all modes of transport, and carbon-neutral sea LCL shipments at no additional cost.

What have you achieved so far?

Initially, our offsetting product was not actively requested by our clients. We had to be the ones to start the conversation about sustainability. We listened, explained, educated, and discovered the problems and possible solutions together as a team.

We also trained our sales team on our offsetting offering and sustainability in the logistics industry. In the very beginning, we had a few cases where clients wanted to learn more about our sustainability offering but we could not communicate our messages clearly. Now, our sales staff are well informed about sustainability in logistics, everything we do as a company, what we offer at this moment in time, and what we plan to offer in the future.

Within one quarter after the official launch of our first sustainability product, 64% of our customers with committed sea freight volumes have joined in for our offsetting program, which translated into 38% of the related volume. In Q3, that number rose even higher to 50% of sea freight FCL volumes booked with offsetting. It was an astonishing success. We made a difference by being transparent and by explaining our goals and values. And we did all this while freight rates were increasing tenfold, there were shortages of capacities, and an overall increase of traffic on the oceans.

Keeping in mind that offsetting is just a first step towards sustainable logistics, we are committed to exploring greener transport modes. For example, 90% of our German-based Rail Pre- and On-Carriage intermodal volumes are transported using trains powered by renewable energy by default.

Awareness and motivation are key drivers to launching actions that can reduce emissions. What do you recommend to other companies that want to do something similar? What have been the key success factors at Forto?

Connect with others and meet people on an emotional level. Use pictures to transport your key message. Make use of the various trigger points. Everybody can be taken on a journey. You just have to find the right way to do it, and also listen to others and take in different perspectives, opinions, or concerns. Sustainability is a very complex topic, but we are all in the same boat—and we strongly believe in collaboration over competition to make businesses futureproof while enabling a viable future for all people and our planet.

What is Forto working on offering customers in the future?

We are planning to direct more effort to emissions reductions as part of our emissions strategy.

Since you cannot reduce what you cannot measure, we are currently working on finalizing our real-time emissions API in collaboration with our partner Planetly. This becomes the basis for visualizing emissions data across our platform, creating in-depth emissions reports, identifying emissions reduction potential and thereby enabling data-based sustainable decision-making.

To reduce emissions, we are in the process of launching pilot projects where biofuel is used as an alternative to fossil fuels. In the future we want to offer transport options with lower emissions by default with the eventual goal of zero emissions.

Moreover, we are currently looking into potential solutions linked to the Supply Chain Act. We keep a close eye on existing and upcoming regulations to be a knowledgeable and helpful partner to our clients. But we will not stop at what is

legally required. Our goals and our motivation go way beyond that and double down on our efforts to make supply chains fully sustainable.

8.5 Fredrik Gustafsson, Senior Manager of Sustainability Transformation, Cordial AB

Rules and regulations that match sustainability targets are crucial. It needs to be made more difficult not to contribute than it is to contribute to a more sustainable future.

About 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.

About Fredrik Gustafsson

Fredrik is currently a senior manager at Cordial AB where he helps his clients with sustainability transformation. He comes with broad experience in both consulting and the corporate sector where he has worked as head of sustainability for the international railway operator MTR Nordic and as a sustainability manager at the Swedish pension company Skandia. He also worked for more than a decade for Accenture as a management consultant with a focus on sustainability.

Sustainability in action

What is your focus at Cordial?

Our strong point is transformation and in particular helping clients get buy-in for their strategies within their organizations. 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, especially in combination with digitalization, makes innovative, new business models possible. Our long experience of working in this space, together with our razor focus on successful transformation, make us a prominent advisor in sustainability transformation.

Was there a trigger point or a certain time when Swedish companies started to ask more about sustainability?

The interest in sustainability has exploded in the past 2 years in Sweden. One of the big differences we are seeing is that today every business leader is talking about sustainability. Before, it was more often managed within a smaller team within the

company, but now most companies have understood that sustainability is a strategic question that requires top management attention.

In Sweden, Greta Thunberg has certainly had an impact when it comes to bringing these questions higher up the agenda, along with other sustainability “milestones” such as the Paris Agreement from 2015. The pandemic has played a role in speeding up the process, but at the same time the ball was already in motion. We could especially see this among consumers, where we, for example, noticed a reduction in air travel in Sweden already before 2020.

Would you say that a majority of companies are motivated by avoiding negative publicity and risks, or by the possibility of using sustainability as a competitive advantage?

We do not necessarily see that it is one or the other, and it definitely depends on which industry we are looking at. But overall, I would say that the current rules and regulations are not the driving forces of sustainability. Larger companies have much higher demands on sustainability than what is required by regulation. In the supply chain, for example, suppliers face tougher requirements on both disclosures and actual progress. One motivating factor is the fear of being left behind. There is a general understanding that sustainability is rising in importance and if you do not act swiftly, it is only a matter of time before you start losing your market share, or regulations catch up and your company becomes obsolete.

Pressure from consumers is also helping to push sustainability in B2C industries. When consumers make up their minds on what is good or bad, companies within that industry need to adapt quickly to stay relevant.

Has it been more of a top-down or bottom-up engagement that has triggered the increased focus on sustainability?

We can see that it is starting to become an integrated part of companies’ strategies so it is a top-down engagement. It is not possible to make a separate sustainability strategy, it needs to be an integral part of the overall business strategy.

Do you see that there is a stronger focus on the environmental part of sustainability and that the social and governance parts get less attention?

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.

Do you see a risk that sustainability work could become a desktop exercise rather than something with a lasting impact, especially related to the work of keeping track of the supply chain?

Most companies are not doing their own audits but instead rely on external parties to do this for them. But for industries that have traditionally been under scrutiny for sustainability, for example, the retail industry, their own commitment and controls are usually more detailed and go further into the tiers of the supply chain. This kind of transparency and traceability in the supply chain is something that will only gain in importance across all industries over the coming years.

Is there an equally strong focus on making use of digital tools to help increase the transparency and traceability in companies' supply chains in Sweden as there is in other parts of Europe?

Yes, there is definitely an increased focus on traceability and the wide range of digital tools available makes this easier. Technologies such as blockchain are used in more and more industries to improve the quality of this work. On the other hand, we also see an ongoing discussion on the attempts to reduce risks in the supply chain. That includes risks related to social aspects such as child labor and human rights issues, but also risks related to climate change.

Covid-19 was also an eye-opener for companies that had a high geographic concentration of suppliers. We are 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.

One example of this is the Swedish company Synsam that specializes in eye health and eye fashion. They recently decided to change their business model by bringing home their entire production of glasses from China to Sweden and consequently changed to more of a premium provider. At the same time, they became a provider that lives up to the highest sustainability standards, providing local employment in their main country of sale and gaining full control over their supply chain.

Do you see a need for skill enhancements within organizations to successfully go through the sustainability transformation?

Larger companies that have been focusing on sustainability for a longer time often already have a sustainability team and ambitious targets. For them, the real change and transformation is where they need to focus to accomplish these targets, and educating the organization is part of that. In some cases, the knowledge of how to get there might not even exist today, so that is why it is important to encourage innovation, collaboration, and new partnerships as ways of reaching the targets. In Sweden, there is a country-wide initiative called “fossil-free Sweden” that has developed roadmaps for different industries so that the actors within an industry can come together and work towards a common goal. One example is the journey towards fossil-free steel, which requires a joint effort from the steel supply chain together with energy companies who need to provide the industry with green energy.

Are there specific industries that are leading the way, or that you see will be moving fast in the coming years when it comes to sustainability?

The industries with the biggest emissions, such as the energy sector, are the ones that are moving fastest at the moment, and this will most likely continue in the coming years since they need a rapid shift to renewables. The same goes for industries like transportation and automotive where the entire business model is shifting from selling cars to mobility, and where there is a boom in innovation with hybrid and electric vehicles.

Where do you see sustainability in 2030?

I see that this is a movement that will continue to intensify over the next decade. The question is if it will move fast enough to reach the set targets for combatting climate change and other parts of the SDGs. To be successful, we simply cannot afford major disruptions. Risks in the shape of political conflicts and war have the potential to slow things down or even stop the positive progress that has now started. That is why I believe the 17 SDGs are a great framework for demonstrating the complexity of sustainability but also showing how all parts need to come together to ensure a sustainable future. If we look only at the rapid technological developments, the overall circumstances at companies, and their willingness to transform, we have a good foundation for achieving what is needed by 2030.

What would help speed things up further?

Rules and regulations that match sustainability targets are crucial. It needs to be made more difficult not to contribute than it is to contribute to a more sustainable future. There is also a need for more international measures. Sustainability goes across borders so international agreements and laws are needed, such as global taxes on CO₂. If this could be achieved, the transition would follow automatically.

Something that we tend to forget in discussions about sustainability is the “reduce” concept and how it has a big impact on the bottom line. There are lots of ongoing discussions about innovation and how to find new ways of doing the same things as before. The fact is, however, that any reduction of resources that we can achieve, be it energy usage, consumption, or by applying the circular economy, goes straight to the bottom line and will have an immediate positive impact on sustainability.

8.6 Thomas Janvier, Vice President of Procurement, INNIO

We don't see any contradiction between achieving our sustainability targets and generating savings. [...] Stop reading this book and get started today!

About 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. With the Jenbacher and Waukesha gas engines, INNIO helps to provide communities, industry, and the public access to sustainable, reliable, and economical power ranging from 200 kW to 10 MW. INNIO also provides lifecycle support and digital solutions to more than 53,000 delivered gas engines globally, through its service network in more than 100 countries. They deliver innovative technology driven by decarbonization, decentralization, and digitalization to help lead the way to a greener future. Headquartered in Jenbach, Austria, the business also has primary operations in Welland, Ontario, Canada, and Waukesha, Wisconsin, USA.

About Thomas Janvier

Thomas has been the Vice President of Procurement at INNIO since 2017. An engineer by education, Thomas spent most of his career working for GE in different locations across Europe and North America. His interest in sustainability started 15 years ago when he decided to change his career to something where he could better use his skillset to make a true impact. This landed him in the renewables sector within GE, and he has since then continued to work with sustainability both within procurement, and in his roles within operations where he got to apply lean and six sigma methodologies. With its core goals of maximizing value while minimizing waste, lean has a lot of commonalities with sustainability and is something that Thomas now applies in his role as head of procurement at INNIO.

Sustainability in Action

INNIO regards itself as “an important contributor to the sustainable and greener energy solutions of today and tomorrow.” How is sustainability anchored in the company?

Sustainability is embedded within every part of the company, starting with our products. As an example, we are currently collaborating with HanseWerk Natur in Hamburg to commission engines which can run on 100% green hydrogen. You can also clearly see it in the way we manage our production sites. Here in Jenbach where topics like recycling are given a high priority, the energy comes from renewable sources, such as renewable electricity, and we are installing solar panels on our roofs. It is also visible in the job roles and responsibilities; we have, for example, appointed a sustainability, risk, and compliance leader for the procurement organization and we have a senior leader responsible for diversity across the INNIO Group.

When did INNIO decide to really make an effort on sustainability? What triggered this decision?

There was no official start date, but it gained more traction when we became a stand-alone company in 2018. However, even before this, sustainability was high on our agenda through initiatives like our ISO certifications. In 2021, we received the EcoVadis silver medal rating,¹ and this is, of course, something we want to keep and improve on.

When you talk about sustainability in INNIO, what scope do you consider?

It covers all parts of ESG, including the full scope of the GRI standards and the 17 Sustainable Development Goals. We also conducted a materiality assessment that helped us focus on four pillars:

- *Products*—All engines should be ready to be powered by 100% climate-neutral gases by 2025, they should not emit any climate-relevant methane by 2030, and 100% of the materials used to manufacture the engines should be recycled, renewable, or reclaimed.
- *Environment*—Here greenhouse gases are the focus since other environmental aspects are already well established. The target is to have production sites reduce their GHG emissions by 50% by 2030 and we want our suppliers and distributors to commit to the same targets.
- *Employees*—We want diversity to increase by 25% by 2025, diversity and inclusion training should have been held for at least 70% of management annually, and employee engagement should reach 85% by 2025.
- *Society*—Here we will continue to support social initiatives and actively engage with our local communities.

What do you do to ensure a sustainability mindset throughout the organization?

We do not want to leave it to chance and think that the right people will come to us automatically and that people will be aware of our initiatives without it being communicated. 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. We also have announcements from our INNIO President and CEO and success stories related to sustainability that are communicated regularly. So, there is a top-down effort to create awareness. We got very positive feedback from both internal and external stakeholders and employees when we joined the UN Global Compact, this sends a strong message that we are ready to act now.

In addition to these conscious efforts, INNIO is lucky that we generally attract people that are sustainability-conscious and intrinsically motivated to drive sustainability. We believe that this ties back to the industry we are in and that our

¹Since the time of this writing, INNIO has achieved Gold rating with EcoVadis.

different facilities are located close to nature so people can work with a sustainability purpose and live their lives close to nature.

How does the sustainability review board work?

The Sustainability Review Board consists of leaders from different functions. I am 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.

How does your team keep on track of the latest developments?

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.

How are sustainability practices integrated within procurement?

Procurement plays a critical role in our sustainability work. We have created a roadmap of actions for procurement, including updating our code of conduct, CSR Guidelines, and other documents we use with our suppliers. We make sure that all parts are connected to the global agreements that we follow, and we have recently started collaborating with EcoVadis to further improve our practices.

As for other roles, there is a sustainability sourcing leader in the procurement team, but it cannot be a one-person-show. We are 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 is integrated within their work. This integration, and the integration within our existing processes, is something that we will implement this year. When we talk about supplier performance, the supplier quality engineers will be responsible for auditing the suppliers with regard to sustainability data—this comes naturally to them since they already have similar responsibilities for quality.

What roles do your strategic buyers play in your sustainability agenda?

Our strategic buyers are the ones integrating sustainability clauses in our supplier contracts. We have some standard language regarding ESG in our general terms of purchase, but we believe in agreeing on individual targets based on what the material aspects of sustainability are for each specific supplier. The strategic buyers also work together with the sustainability manager to develop specific targets for their categories. In Indirect, for example, we identified energy efficiency levels for real estate and leased properties. For direct categories, we will partner with Engineering to reach 100% sustainable material inputs. We are currently setting the baseline for this and we will then agree on measures to take.

How do you engage with your suppliers to match your targets?

We have always been involved in responsible procurement topics such as human rights, conflict minerals, and REACH. In recent years, we have broadened the scope

to include, for example, recycling and CO₂ emissions. The engagement takes different forms, but one is that our supplier scorecards now have a sustainability section, so our suppliers must have a clear sustainability agenda in order to get full scores.

Do you go to tier1 of the supply chain or further when it comes to ensuring a sustainability agenda?

For high-risk categories such as conflict minerals we go all the way to the source, in this case the mine. That being said, our gateway for this information are the tier1 suppliers, since it is with them that we have a contractual relationship. They are the ones that need to take the commitments further down the tiers of the supply chain. We are also a member of Responsible Minerals Initiative.

What happens if a supplier does not fulfill their targets?

The supplier is less likely to be awarded new business. This is something we are just starting and are working on creating awareness, but in the future, we plan to set a minimum requirement on the score that they need to achieve to get new business, and possibly also to continue doing business with INNIO.

What contribution does EcoVadis make along your supply chain?

EcoVadis is our partner for rating our suppliers. We started with our largest and most strategic suppliers and will expand from there. We are also partnering with EcoVadis to measure our supply chain's carbon maturity and we will use them for ESG risk mapping along the supply chain in the future. We already have a silver rating and have received improvement opportunities that we are aiming to add to our action plan, so we will be able to move to a gold, or even platinum, rating in the future. This new action plan will be included in our sustainability report that will be published shortly².

Individual suppliers must pay a fee to EcoVadis to get rated, but they can use the rating for all sorts of purposes, including for other customers (not just INNIO). We have had pushbacks on this from some suppliers, but acceptance is increasing as more and more companies become aware of the benefits of this standardized rating.

What tools do you have in place to ensure your standards and requirements are being met along the supply chain?

On Conflict Minerals and REACH, we use a dedicated service provider that supports with tracking, gathering responses, and arranging corrective actions.

Can savings and sustainability targets go hand-in-hand?

We do not see any contradiction between achieving our sustainability targets and generating savings. This is mainly because sustainability in many cases means saving resources, which in the end also means saving money. Connecting back to

²INNIO's sustainability report has been published in Q4 2021.

the concept of lean—the reduction of waste is something that also goes hand-in-hand for both sustainability and savings.

What have been the key success factors for INNIO?

The personal commitment of key members in the company has played a key role. That is why it is important to communicate your plans clearly to get the buy-in you will need.

How do you see the topic of sustainability developing in the next 10 years?

I expect that we will continue to adjust and work with our current goals that stretch to 2030. Globally, we see that the world is already behind on where we need to be, so we need to continuously check if we are moving fast enough, and if not, move our efforts up a gear.

What would help you to accelerate your sustainability efforts?

Active dialog with our stakeholders is one of the ways, be it regulators, customers, shareholders, employees, or communities. We are there to deliver for our stakeholders so if they voice a need, we will listen. It is the same for procurement, which is the customer of our suppliers, and is therefore responsible for voicing the need for sustainable actions in the supply chain.

What is your recommendation to other procurement organizations about getting started with their own sustainability plan?

Stop reading this book and get started today! Another tip is to read up on the SDG Ambition Guide and the standards of GRI, and not just the ones that relate to procurement, but all of them. I also recommend that you talk to your CEO and CFO to get commitment and support for your journey.

The next step is to conduct a materiality assessment based on the SDGs to identify clear goals and possible conflicts of interest with other goals within your organization that would need to be addressed.

Finally, communicate, communicate, communicate to get buy-in and increase awareness.

8.7 Simon Juul Toft, Lead Specialist: Green Procurement, Ørsted

When asking the suppliers to go the extra mile, a collaborative approach is needed.

About 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.

About Simon Juul Toft

Simon is a Lead Specialist for Green Procurement at Ørsted and responsible for facilitating the decarbonization of Ørsted's supply chain (Scope 3) through supplier collaboration, innovation, and development. This is a role within the Ørsted procurement department that is tightly linked to the supplier relationship owners of the most strategic suppliers.

Sustainability in action

How is the sustainability work structured within Ørsted and procurement?

The main responsibility for the sustainability work within Ørsted lies with the Global Sustainability Department. Responsibility for supply chain decarbonization lies with the sustainability, HSE and procurement teams in unison whereas the actual execution of supplier decarbonization (i.e., meetings with the suppliers) lies with HSE and procurement.

We can see that decarbonization has a clear focus in your strategy, could you tell us a bit more about your considerations for this?

Ørsted has undergone a green transformation in the last decade. In the late 2000s, we were one of the most coal-intensive power generators in Europe with an expanding oil and gas production business. But we took a strategic decision to become a green energy company. To drive the transformation, we invested heavily in renewable energy, particularly offshore wind; exited our fossil fuel businesses, and formulated our vision of "creating a world that runs entirely on green energy." As such, sustainability and decarbonization have been at the core of this transformation and the development of the company as it looks today. We are now well on track to become carbon neutral in our energy generation and operations by 2025, so we are now focusing on the next frontier in our decarbonization journey, which is our supply chain. We aim to be carbon neutral across our entire footprint, including our supply chain, by 2040. Furthermore, we have science based targets in place to guide our journey towards 2040.

What targets do you have within procurement to support Ørsted's goal of becoming carbon neutral by 2040 for the entire supply chain?

Procurement's role is to focus on the Scope 3 impact, which includes the impact from the supply chain. For procurement, this means actively engaging with the

suppliers to ensure that they have roadmaps and plans in place that will lead to this goal, and that the category strategies also reflect this ambition.

Is sustainability a factor that is part of your category management work?

Decarbonization is integrated into the strategies of the different categories in Ørsted, as a means to steer the overall work and strategic direction. Our category managers are also starting to add other sustainability topics into their strategies.

How do you engage with your suppliers when it comes to sustainability?

At this point we see a collaborative approach as the best way to motivate our suppliers to join the same decarbonization journey as us. We are currently focusing on our strategic suppliers for the decarbonization initiative. Through these strategic suppliers we also work with our second-tier suppliers for key materials such as steel.

Decarbonizing the supply chain of renewable energy is complex and requires a significant amount of innovation and collaboration within the industry and across sectors as it is also tied to the decarbonization of other key sectors, including heavy manufacturing and heavy transportation. As such, the core of Ørsted's decarbonization program since its launch in 2020 is to promote collaboration across our base of strategic suppliers in the most CO₂ intensive categories towards our common goal. To succeed in this goal, all key actors in the industry must play their part.

How do you categorize and evaluate the supplier base with regard to sustainability?

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.

How do you support and develop your suppliers?

We use a structure of continuous and regular collaboration meetings, where we support our suppliers by sharing best practices and suggestions based on our observations and experiences.

Do you use any tool solutions to help you keep track of the supply chain with regard to sustainability topics?

We have a Responsible Business Partner Program that uses a tool developed internally, to track our supply chain with regard to social responsibilities.

Do you have issues with your supplier base not having targets as ambitious as yours?

We have reached a point where a large majority of our strategic suppliers are interested in supporting our ambitions. For most suppliers, it is evident that this

journey makes sense, and is the right thing to do. Furthermore, we see that suppliers often address this topic as a competitive differentiator. Most suppliers have therefore welcomed Ørsted's efforts and ambition to decarbonize the supply chain. However, we see that suppliers are at different levels of maturity when it comes to developing their own climate strategies.

What current issues are you facing with regard to sustainability and how will they be addressed?

The categories where we see the biggest challenges at the moment are steel and high-impact metals from high-risk countries. The risks in these supply chains are addressed by not only being active on a tier 1 level but going further into the supply chain and actively engaging sub-suppliers.

Another challenge is that we want to decarbonize our supply chain by 2040, 10 years ahead of what science requires. We are using a collaborative approach to drive this long-term change and to ensure that suppliers see decarbonization as a competitive differentiator.

Where do you see supply chain sustainability in 2030?

The relatability to some of the sustainability topics will certainly continue to grow within the next 10 years. Social aspects, such as child labor or fair working conditions, have always had a high degree of relatability whereas the environmental aspects have been more difficult to relate to. This is however changing as more and more people are witnessing for themselves the direct effects of climate change.

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

We look at sustainability criteria from a TVO (Total Value of Ownership) perspective—if the positive advantages outweigh the increased price, then it's a 'good cost'.

About 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.

About Henrik Larsen

Henrik Larsen started his career as a shipping trainee in Mærsk Line in Copenhagen, Denmark, in 1981. Later, various postings followed in San Francisco, USA, and later in Dubai as country manager for UAE and OMAN. In 2002, he returned to Europe,

where he continued his career in Hamburg, Germany, as Line Manager for Germany and Central Europe. In 2003, he began his career in Mærsk Procurement, where he was responsible for various functions before he was appointed Chief Procurement Officer in 2016.

Sustainability in action

Mærsk is very active when it comes to sustainability, with plenty of global initiatives and new teams and roles for sustainability (e.g., the decarbonization team). Was there a specific defining moment when it was decided to put sustainability on top of Mærsk's agenda?

Sustainability has always been on our agenda, but in recent years we began to integrate it into day-to-day business activities and involved local managers more rather than managing things from headquarters.

We have made our voice heard at a UN conference and in the International Maritime Organization assembly to call for joint action and level playing field when it comes to sustainability efforts since it requires massive investments to make the switch. The first step was the shift to scrubbers, which is a system to clean a large part of the emissions while still using regular oil-based fuel. This is something that can be retrofitted onto existing vessels. We are now at the next stage where we need to take more drastic actions and since we want to spearhead the sustainability transition within the shipping industry we have invested in eight new vessels that can be run on cleanly-made methanol. We have done this despite the fact that this fuel is not yet available, but we hope that our investment leads the way and will trigger actions to make the fuel available. We see this as a decision for the greater good—it is bigger than us at Mærsk, this is a decision for the industry.

The same reasoning applies to our decision to establish a research center, the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping. We are doing this together with partners from the industry and academic institutions to ensure that these topics get the attention they deserve while at the same time finding practical solutions since they are jointly developed with input from the business.

You evidently apply a holistic approach to sustainability with initiatives to improve the environmental, social, and governance parts. However, there seems to be a strong focus on decarbonization. Is this correct, and if so, is this the main focus now because you see that the other areas of sustainability already have enough attention or that you are already mature in those areas (e.g., anti-corruption, human rights, etc.)?

Not necessarily. We are in the middle of a strategic review of our sustainability approach to determine where we are, and this goes for all parts of the ESG. This review will also help to determine our ambition level and to set our targets for the coming years. This is being done for the entire company, including procurement of course.

For the environmental, social, and governance parts, our ambition level goes beyond being compliant. It might look like we put a lot of focus on the environmental part since that is what one can read about in the media, but the social and governance parts remain crucial for our way of working. In the industry and regions where we operate these have always been important topics and we will continue to focus on them as much as the environmental part.

What is procurement's role and how is procurement structured when it comes to sustainability?

Procurement's main role is the link with the suppliers and making sure that we have the right suppliers that are properly vetted through the onboarding process. We are responsible for demonstrating to our customers that we are compliant and that we offer something more than our competitors.

Do we have complete transparency yet? No, but this is our ambition, and it needs to be our ambition. In the logistics industry we buy what we sell so we need to have a sustainable process and sustainable partners in the supply chain, especially since we want to be the market leader within our industry.

Does responsibility for sustainability practices lie mainly with a dedicated procurement team or is it integrated within other procurement roles in as well?

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

What was the trigger behind moving the responsible procurement team completely outside of the HQ to Mumbai?

We always had this team as a joint setup between our offices in Copenhagen and Mumbai. We found, however, that we had all the right competences needed to run this team in Mumbai and therefore made the switch. To me this should be location agnostic.

What are your targets within procurement to support the company's overall sustainability goals?

We do not yet have specific procurement targets for sustainability but we were working on that at the moment as part of our revised strategy. What we do know is that we want to have procurement-specific improvement measurements that can show our progress.

We can see that you mention digitalization as a driving factor behind your sustainability change and the offering you have towards your customers (through, e.g., TradeLens and Twill). Do you also use any tool solutions to help you keep track of the supply chain with regard to sustainability topics?

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 are currently running several pilots to determine the best way to gather data, how to analyze it, how to get the transparency that is so important, and then to ensure that everything is properly documented through the entire supply chain and onwards to our customers.

Is sustainability part of your category management work?

We are considering how to build sustainability within our category strategies, both to ensure compliance but as mentioned we want to go beyond that, so it is also about finding the best sustainability offering within each category.

Is sustainability part of your decision-making process?

We have started this process and are aiming for sustainability to become a qualifier from our suppliers. The hope is that it eventually becomes an add-on since we are selling this service to our customers.

Have you had to balance sustainability against other traditional decision criteria, or did this come naturally?

Criteria such as price will always be relevant. The way that we look at it though is “good cost” and “bad cost.” If there is something that costs more because it is driving the sustainability agenda forward, then we see this as a “good cost.” It does not mean that we are not discussing prices and that we are not adding arguments to our negotiations, but we look at it from a TCO (Total Cost of Ownership) and TVO (Total Value of Ownership) perspectives and calculate what possible positive advantages could come from the extra costs.

How do you support and improve the suppliers on their sustainability journeys?

We are working together with our suppliers to provide them with what we have learned from our sustainability journey. We do not always have “the golden answer” but where we have 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 are also happy to learn from our suppliers about how we can improve our own practices. These learnings do not 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.

What do you see as the biggest challenge when it comes to fully integrating sustainability within procurement at Mærsk?

One major challenge is how we can be sure that we really get what we need. We are reliant on external parties, tool providers, and our partners in the supply chain to provide us with information and data, but how can we be 100% sure that it is correct? The amount of time and resources that you need to invest also require careful consideration and planning.

Where do you see the topic of sustainability in 2030?

My hope is that it will be something that we talk less about because it will already be such a natural part of how we work and do business. This would mean that we have reached the tipping point where we are finally starting to go in the right direction globally.

What would speed things up?

We need joint agreements to speed up progress on sustainability. We are coming towards that now and there are fewer and fewer players in our industry that are “taking the easy way out.” The majority embrace sustainability and are willing to work towards a better future. No one can solve this alone.

8.9 Chaojun Li, Global Head of Sustainability, WS Audiology

Sustainability is one of the three drivers to deliver our ambition to become a clear industry leader.

About 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. wonderful.

About Chaojun Li

Chaojun is currently the Global Head of Sustainability at WS Audiology. Her experience of sustainability stretches over more than a decade. Before WS Audiology, she was a sustainability advisor at both the energy company Ørsted and the logistics company Mærsk.

Sustainability in Action

Can you describe what your role as Global Head of Sustainability at WS Audiology involves?

My team and I are responsible for driving sustainability within the organization as well as the value chain. We have two focus areas: integration and communication.

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.

Communication—It is also crucial that we communicate our sustainability efforts and performance to the relevant stakeholders and the general public. We communicate via our sustainability report, our website, social media, etc.

How is your team set up and how is it anchored within the organization?

We have three full-time staff and one working student. One person is in Singapore and the rest in Denmark. I report to the chief quality and regulatory affairs officer who reports to the CEO.

How do you ensure the anchoring of the strategy within the organization?

We started with a materiality assessment that involved discussions at Group management level from different functions to determine which topics that are important to WSA. Once we had decided on these topics, we then aligned with the team members one level below management and assigned program managers for specific initiatives. The teams below them in turn assigned activity managers who manage part of an initiative. We in the sustainability team are the overall owners of all initiatives—sustainability is one of the three drivers to deliver our ambition to become a clear industry leader.

The materiality assessment has also been passed on to five of our key suppliers since we depend on our supply chain to support our targets and to have similar ambitions themselves.

You have a decade of experience in different sustainability roles, what do you see has changed in relation to sustainable procurement?

What has changed dramatically is the general focus on sustainability. 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.

When did WS Audiology decide to get serious about sustainability? Was there a defining moment?

Sustainability has always been in the DNA of WSA and also the two companies that merged to become WSA. When our CEO, Eric Bernard, came on board in 2019,

decision is made that we want to manage sustainability in a more systematical way and disclose more what we do to the public.

You state that you are currently contributing to five of the 17 SDGs. Do you see a risk in “cherry-picking” what you contribute to rather than taking a holistic view?

We are focusing our attention where we can make a real impact. We base our reporting on GRI and SASB standards, which give us a very detailed reporting method for how we influence the company and society. While SDGs are designed at national level, an individual company can make a meaningful contribution to some of them.

How is the procurement team involved in sustainability?

Our procurement department take the lead in sustainable supply chain management. They make sure the Code of Conduct for Suppliers is signed by relevant suppliers. For high-risk suppliers, supplier Code of Conduct audits are conducted by third-party auditors.

We in the sustainability team work closely with procurement on supply chain decarbonization.

How is sustainability integrated into procurement other than the specific initiatives such as decarbonization?

We are working on systematically incorporating sustainability into the requirements for our suppliers. As an example, since 2021, we included sustainability requirements to suppliers that provide dummies. The product dummies are really our ambassadors. They are used in every store where our hearing aids are sold, and we ship around 1 million each year. We worked with our suppliers to make the dummies and the packaging of them more sustainable, including using recycled materials and reduced packaging.

How do you categorize and evaluate the supplier base with regard to sustainability?

We categorize suppliers based on spend, category, country, and type of product or service to identify those that are the highest risk. We then audit the high-risk suppliers every 2 years. We have conflict minerals and other high-risk metals in our supply chain and for these our suppliers need to inform us where the minerals and metals came from. In addition to standard audits, we have a process called Product-Related Environmental Protection (PREP) to ensure that there are no forbidden materials in the products, and that restricted materials stay within assigned limits. This special auditing process is run directly by the sustainability team.

Where do you see sustainability in 2030?

I believe that climate change will remain highly important over the next decade. By solving the challenge of climate change we will also cover many of the other

challenges related to environment, such as air pollution, overconsumption, deforestation, and biodiversity.

Human rights and especially human rights issues in the supply chain will also keep gaining traction.

8.10 Dr. María Mendiluce, Chief Executive Officer, We Mean Business Coalition

Procurement leaders need to be at the forefront in the struggle to reduce scope 3 emissions.

About the We Mean Business Coalition

We are a global non-profit Coalition working with the world's most influential businesses to take action on climate change. Together, we catalyze business and policy action to halve global emissions by 2030 in line with a 1.5 °C pathway.

We collaborate with a core group of seven business-focused climate non-profit organizations to accelerate the transition to a just and climate resilient net-zero economy. These founding partners help to deliver key initiatives and activities that are central to the success of the overall Coalition's bold objectives. Beyond this core group, we also collaborate with a wider network of organizations that help to realize our shared vision at speed and scale.

About Dr. María Mendiluce

María Mendiluce is the CEO of the We Mean Business Coalition and brings 25 years of experience working in business, international organizations, academia, and governments in sustainable development, energy, and climate action.

As chief executive of the Coalition, María is working to mainstream net zero in the business sector encompassing companies of all sizes and sectors. She sits on the Executive Board of The Science Based Targets initiative and has taken an active role in the founding of the Mission Possible Partnership, an initiative that develops decarbonization roadmaps for the high emitting sectors. María also co-founded the SME Climate Hub, a one-stop-shop for smaller companies to commit to net zero and work with the value chain on implementation.

Formerly Managing Director and Senior Management Team at WBCSD, María has a history of establishing transformative industry projects. These include the Alliance to End Plastic Waste which pledged \$1.5 billion to address plastic leakage to the environment; the Transforming Urban Mobility project to drive clean, safe, and efficient mobility for all and WBCSD's flagship Low Carbon Technology Partnership initiative which was recognized as a key contributor to the Paris Agreement.

She has also held senior positions at the Economic Bureau of the Spanish Prime Minister, in the CEO's office of Iberdrola and at the International Energy Agency. María has a Ph.D. in energy economics. She is a Commissioner on the Energy Transitions Commission, a Co-Chair of the Global Environment Outlook Business Advisory Board (UNEP), and she is a board member of the Centre for International Environmental Studies (CIES) in Geneva.

María was awarded the Spanish Climate Personality of the year in 2021 by The Climate Reality Project in Spain as part of the third edition of their Climate Leaders Awards. María has been listed as critical influencer on climate action by different media groups such as GreenBiz or Eddie. María is Spanish, has three kids, and lives in Geneva.

Sustainability in Action

Why do you think some countries are still subsidizing, or even worse, still investing in fossil fuels, especially coal?

I think we need to distinguish between the different fossil fuels. There are not many subsidies for coal, but some countries are still investing in it—the International Energy Agency notes that over the next 5 years more than 300 new coal-fired power plants are set to come online, mostly in emerging or developing economies. And coal remains deeply embedded in the power systems of many countries—for example, coal accounts for more than 60% of electricity generation in India, China, and Indonesia. However, many other countries have said they will stop using it and substitute it with renewables or gas.

At COP26, governments emphasized the importance of phasing down coal and removing fossil fuel subsidies, along with landmark agreements on the phasing out of coal, which shows real progress is underway. However, in order to be in line with the 1.5 °C pathway, coal-fired power generation must be phased out by 2030 for advanced economies, and by 2040 for other countries. Business expects coal-fired power to be phased out in order to keep the 1.5 °C target within reach and is investing in the clean energy transition.

I think it is interesting to see how China is doing given it is the world's largest energy consumer. There is still high demand for coal domestically, for its power and industrial sectors, and limited natural gas alternatives there. But China is also working on renewables and they are fast. Over the next 5 years, the IEA forecasts that China will increase its renewable electricity capacity by close to 800 GW, which for context, is roughly equivalent to the existing installed global capacity of solar PV (739 GW).

Renewables are more competitive than coal so we hope market forces will win out, but it needs time to make that transition happen. Coal has no place in the world.

Oil's place in the world is also diminishing as the uptake of electric vehicles accelerates. There will still be some used in aviation and shipping but eventually there will be alternative fuels in these sectors as well.

Although gas produces half of the emissions of oil it still produces emissions. Because of the current high energy prices people think they need to invest more in gas production, but we should actually be investing more in gas storage because the same storage facilities could be used for hydrogen in the future. Natural gas pipelines could also be repurposed to help transport hydrogen.

The future is renewables and green hydrogen, and we need an infrastructure that supports them.

Interest in green hydrogen is growing given its versatility, but it is not yet cost-competitive. We need massive investment in infrastructure and innovation before it will be possible to transition to a world where hydrogen plays a major role. This includes investment in storage and transport as well as the ramping up of electrolyzer manufacturing capacity and the expansion of power infrastructure to meet demand. This should be the focus of governments.

The G20 represents approximately 90% of global GDP and almost 80% of global trade and greenhouse gas emissions. Should not these countries be cleaning up their acts and setting an example for the rest of the world to follow?

It is important to make a distinction here. There is agreement and consensus within the G7 on emissions targets, this is important given that the G7 accounts for a quarter of global energy related CO₂ emissions. However, within the G20 China and India are still using a lot of coal. So, there is push-back.

Domestically, coal is causing a lot of health problems in China at the same time as the supply chain is coming under pressure. As a major exporter, this is also a problem for China. Companies want to have sustainable supply chains and CO₂ is an increasingly important part of the procurement decisions. If China does not move these companies might switch to markets that can move. China needs to realize that investing in coal no longer makes sense. We are not there yet but we are going in the right direction.

A coalition of 778 companies, with revenue equivalent to the GDP of the UK, are calling on the G20 to end financing and development of new coal power plants and to phase out coal-fired power generation by 2030 for advanced economies, and by 2040 for other countries. Do they have the leverage to make this happens?

The G20 leaders have heard the clear calls from business on financing coal and providing climate finance and chosen to act to keep 1.5C within reach. Building from the G7 outcomes earlier this year, the whole G20 has now committed to end international coal financing by the end of 2021. G20 leaders have recognized the need to transform their energy systems in line with the Paris Agreement and agreed to help each other to do this though they stopped short of putting an explicit timeline on phasing out coal. Now this momentum needs to be backed up with action.

Many companies and countries have ambitious plans and have committed to net zero, but this requires a massive transformation that we are just starting now. When there are lots of companies in this transformation it makes it much easier because a

significant volume of emissions come from the supply chain and many companies have shared supply chains. So, a unified movement is a positive start because it will encourage everybody to achieve their targets. So, the question is: How can you mobilize companies and countries to be ambitious and take action? Tracking progress is now very important because when investors and ESG professionals look at who is performing better we have good metrics to track them. Then there is competition on, and this will accelerate the transformation to a zero-carbon economy.

One thing is very clear to me: in most cases, when it comes to companies publicizing their commitments and tracking their progress, they tend to outperform their own targets. We need much more of that. Unfortunately, the opposite is true of some countries. But if we could get countries working closely with their domestic companies to achieve their targets, we could move from a system that is voluntary to one where it is mandatory for businesses to be net zero and reduce emissions. We are not ready yet but in a few years, because things are getting tough with climate change, we will get there. This means that it is better for companies to get ahead of the game now before they are forced to later.

Is a carbon cap and price mechanism going to be the enabler we need? Are you pushing for that in your discussions?

I think carbon pricing is fantastic. I think renewables are competitive even without carbon pricing, but we need carbon pricing as it can help steer the type of investments made today, with implications for future emissions. We need to be efficient with how we use the energy even if the energy sources might be cheap. Because the resources are finite. A well-designed carbon price can provide some certainty to trigger investment in low carbon technologies or longer-lived/longer horizon infrastructure and RD&D (such as Carbon Capture, Utilization and Storage (CCUS), hydrogen, etc.).

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 do not make investments that are carbon intensive. A very interesting example is that cement companies are now included in the EU's Emissions Trading Scheme.³ And then suddenly, wow so many innovations! The industry made commitments and now say they can reduce emissions by 30–40% by 2030. This is something that would never have happened if there was not a financial incentive to cut back on emissions.

Do you think the carbon pricing will become an established part of the economy?

Carbon pricing is going to come in patchworks. But I think it has proven to be a very good instrument for companies to reduce their emissions and reduce prices. So yes, I definitely think that it will become a standard feature of the economy.

³EU Emissions Trading System: the world's first and biggest carbon market.

I also think that companies, boards, and CEOs and management teams will have CO₂ targets as part of their incentive and compensation schemes. This will be cascaded down through the organization so that procurement will have both an environmental cost and a financial incentive and they will optimize both. Once carbon pricing becomes part of the objectives of companies, they have to include it as part of their procurement strategy.

We are not there yet, but companies are going to reduce scope 1 and scope 2 emissions rapidly but they will struggle to reduce scope 3 emissions. Then they will look at procurement offices and ask, “what are you going to do about this?” Procurement leaders need to be at the forefront in the struggle to reduce scope 3 emissions—they need to know that this is coming so they should already get started.

How can procurement organizations and decision-making processes in companies support the race to zero? Are there any other recommendations you have for procurement and sustainability teams to help speed up decarbonization?

Between 50% and 95% of the emissions of large companies come from the supply chain. More than half of them come from the energy-intensive sectors—materials such as steel, cement, and transport such as trucking, aviation, shipping. Countries need to do something about this because their footprints depend on those companies making progress with their emissions. A solution could be the creation of demand clubs and there are some nice examples emerging, such as SteelZero.

Then there are the small and medium-sized enterprises that we have to think about. There, two things are needed. First, SMEs must be educated about the need to adopt sustainable business practices because of the benefits this will bring to them. They do not necessarily have the resources or time to do this themselves, so they have to be helped by the bigger companies they are supplying.

After this, sustainability needs to become a condition of doing business. Procurement can start setting up specific contractual requirements, such as disclosing sustainability-related data, that helps SMEs understand that sustainable business practices are manageable and that they can actually lead to cost savings, that sustainability can be a great opportunity. You start with a carrot and then you end with a stick. Then at some point, once you have around 20%–30% of your suppliers are on board, then you can make those things mandatory so that the rest will follow. And the rest could leapfrog because they can learn what other companies in the supply chain have done right.

So that is only your suppliers but then on how do you convince the big industries of the need to come together? For example, to meet the net-zero targets, the automotive industry needs zero emissions steel.

Industry needs to find a way to join forces and motivate suppliers to invest a large amount of money in zero emissions steel that will spread the premium over multiple players and make the investment much more attractive for everyone. In the end,

collaboration like this might be less expensive than offsetting or paying carbon penalties in the future.

I think procurement has an enormous responsibility to explore innovative ideas that will bring benefits to the company. Right now, the benefit is not very clear because there is no carbon pricing included. Ultimately, consumers are asking for reduced CO₂ footprints on products, so you will have to trickle this down to the supply chain and make it happen. That is the future.

8.11 Markus Strangmüller, Corporate Development and Sustainability Manager, Siemens

Overall, we see sustainability as a business opportunity [...] it's part of our strategy discussions.

About 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.

About Markus Strangmueller

Markus Strangmueller leads the Sustainability Strategy and Governance department within Siemens AG. He regards himself as a “Business Humanizer” and stands for purpose, trust, and legacy.

Sustainability in Action

What is your interest in sustainability?

Nature plays a huge role in my life. I have two children, which is why the next generation means a great deal to me. Overall, I believe it is important to get the right balance between “me” and “we,” between short term and long term, and between people, planet, and profit.

You have been responsible for sustainability at Siemens for more than 10 years already. How would you describe the journey and are there any notable milestones?

If you look at Siemens as a company, it has been very strongly characterized by sustainable and long-term development from the very beginning. Social responsibility was an important topic in the days of our founder, Werner von Siemens. In 1971,

we set up a department to look at environmental issues but over time social responsibility became the priority. In 2008, we started looking at supply chain management and sustainability and then in 2009, we opened a dedicated sustainability office. At that time, we defined and built a strong environmental portfolio. We set up a program with three pillars. Business opportunity is the first pillar because we have the advantage that our portfolio elements already contribute very broadly to the sustainable development. The second pillar is that if I want to address business opportunities, I naturally need to walk the talk. The third pillar was stakeholder engagement. We cannot do many of these things on our own, but together with others. The question then arises as to which topics we should work on with which stakeholders. There have been many different facets in various forms. We have always taken a broad view of all aspects of sustainability.

Many companies still view sustainability from a corporate point of view. Which responsibility or contribution do you see with the business units, divisions, or regions?

A good combination is needed because for certain topics you basically need a corporate decision. There are always discussions about how to make funding available for certain topics. But there are also discussions about how to integrate sustainability-related opportunities and risks as part of a product lifecycle management (PLM) process. This cannot be done centrally but must be done within the individual business unit.

To what extent is cross-functional cooperation about sustainability taking place?

At the moment, decarbonization is a very big issue, which is why we have defined quantitative targets that include targets for scope 1 and 2, as well as scope 3, including scope 3 upstream. But how do we achieve them? We collaborate with our suppliers so we are transparent and then see what can be done to reduce CO₂. One solution might be for a certain supplier to say that they could offer different materials. Our buyer has to talk to the PLM colleague to see how this would affect the design and influence the product.

Collaboration happens precisely at the process interfaces. But it is not a one-way street. We approach the PLM community and ask them to what extent they consider sustainability-related opportunities and risks in their process. It is not about defining every milestone, it is also about a change of mindset—we want to get our design and product teams actively thinking about sustainability and circularity within the framework of a journey. This includes potentially using different materials and that is where there is strong collaboration with SCM.

Are there any regular meetings between the SCM colleagues and procurement?

Each relevant unit has a sustainability manager. The sustainability managers are then in a community that we orchestrate. There are meetings between the governance owners only, or with only the countries or the businesses. On top of that, there are

topic-related, cross-functional sessions. Then, every 2 years, we usually have a sustainability manager summit.

How do you align and integrate the business units to contribute to the corporate goal of decarbonization or circularity?

The corporate targets have been given to the units. Supply chain management has responsibility for reducing upstream scope three CO₂ emissions. They are responsible for driving this target forward with suppliers and then driving it forward again with the individual business units and their procurement departments. Then we focus on changing attitudes to sustainability at corporate level. We have 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. What we then do is to tell them that there are a handful of questions in the SCM, PLM, or CRM processes that should be considered. Whether it is through milestones, whether it is through dialogs, or whether it is in the escalation process.

Mindset change is an important part of any transformation. Can you give me an example of how you approach this at Siemens?

For example, we organize workshops with PLM communities where the focus is on the questions of how sustainability and circular design can be built into the products. We also have a range of training and learning programs about the circular economy from basic to expert to advanced. Education around the topic is important, but then there is engagement followed by the practicalities of implementation. Education alone is not enough.

When it comes to procurement, are people told that they just have to implement sustainable practices or is there a dedicated staff position?

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 the control behind it, for the disclosure in their area. And that is again 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. The implementation then takes place in the businesses and in the countries.

Who is part of the Sustainability board and how strong are these two committees?

Our Sustainability Board, which is the second-highest committee we have in the Group, is chaired by Judith Wiese as Chief Sustainability Officer. The CEOs of the businesses are represented, so Smart Infrastructure, Digital Industries, Mobility, and our Portfolio Companies. Then there are four country representatives from the most important countries, but also from other countries where other requirements come

into play. Additionally, there are the heads of the corporate functions when relevant if they are not already covered by other representatives. That is the Sustainability Board, the core committee for the strategic orientation regarding sustainability. They meet four times a year and discuss these topics. Procurement is represented indirectly but attends the Sustainability Board at least once a year when special topics such as decarbonization are discussed.

How many sustainability managers are there in your organization?

Probably about 60–70 people who are nominated. 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.

But that would also mean that the development departments in the individual divisions would then all have to make their contribution accordingly.

Change accordingly, of course. In a policy board like this, there is a central procurement department and then there are procurement departments in each business, in our case the Digital industries and Smart Infrastructure and Mobility. If they have issues, then of course they talk it through again with their function owners in the areas.

How are you getting prepared for the Supply Chain Act?

We have a task force made up from our legal department and people responsible for the supply chain and they are defining how the act will affect Siemens.

With the supply chain due diligence law, there are several issues that have to be taken into account. You also need a mindset that is aware of what is going on and why this is the case. Failing to keep up with the times is extremely risky and could threaten the existence of your business. There are more and more requirements, and the global community has agreed on the 2030 agenda but so far there is limited progress. That is why the EU is really pushing the pace on all the legislative issues because they see that if we do not step on the pedal now, we will never reach the 2030 targets.

What specific role does procurement play?

For me, procurement is one of many roles that plays a part in sustainability. We have two core targets regarding the supply chain: first, an ESG secured supply chain, and second, CO₂ reduction within the supply chain. These are essential to our long-term objectives. But decarbonization of our own operations is also important. Overall, we see sustainability as a business opportunity so it is part of our strategy discussions. It is also an important consideration with the PLM or the product designers because they aim to develop products that help society to decarbonize or move into the circular economy.

So, procurement has an important role to play in sustainability, but so do many other functions.

How does Siemens create transparency about scope 3 emissions data? Do you have your own system?

We have established a database with an external partner. From this we can derive which CO₂ emissions come from which material group and from which country. That was the first step to achieving CO₂ transparency. We buy steel from different countries and how does it fit together, what are the energy mixes there and how do we get that right? Additionally, 2 or 3 years ago we wrote to the 8000 or 9000 of the largest CO₂ emitting suppliers and had discussions with them about the extent to which they are already dealing with the issue and what measures they are taking. We created awareness in this first step.

We have now developed a carbon web assessment tool, which is being rolled to the various suppliers, in order to increase transparency and thus also to bring more actual data into the tooling so it can be adjusted. When the transparency is there, the next step is to have discussions around CO₂ emissions in the whole value chain so that we not only get a cost but also a carbon footprint for the products.

We have another project running in parallel internally right now to increase transparency in the supply chain. There are initial pilots for this in various areas. But that is now the journey that has been started. We said that we want to be CO₂ neutral in the supply chain by 2050 and we want to reduce 20% by 2030. But that is not just at the T1 level, you also have to go to T2 and T3 and talk to them again about what they can do there.

Which other topics do you see coming up besides decarbonization?

We have already included the topic of net-zero operations in our long-term incentive (LTI), which we announced as a target back in 2015. I would not be surprised if Scope 3 upstream was to be included in the near future, in 1- or 2-years' time.

We have made a strong start on the topic of ESG risks in general. In 2007, 2008, we introduced our code of conduct, which is also being successively developed. Operating globally, we have to comply with the United Nations Guiding Principles on Business and Human Rights and as well with the UN Global Compact. The next level is the business models of these ranking agencies that are now emerging. In large companies like ours, for example, a large percentage of our suppliers are also our customers on the other side. That is why, we have to look at how balanced we are going forward. This is a journey and not something we can solve overnight.

What would be your recommendations for a procurement officer?

The one issue we cannot avoid today is having a code of conduct. This at least covers the minimum requirements.

The second topic is certainly to go somewhere in the direction of CO₂ transparency because that will simply be indispensable. As a procurement officer, I would need to consider whether I need partnerships to address certain issues that I would struggle to address on my own.

If I have a code of conduct, then of course I have to consider what approach I will take to check that it is being adhered to, for example, using a risk-based approach, or

using a different approach such as self-assessment or external audits. I probably would not overcomplicate it at the beginning.

What is best practice for you?

There are already many in Germany. There are some that are now very active and really progressive in an environmental area. But I think there are already many medium-sized companies in Germany that are just starting out and do not have the resources behind them. But they still think that they have to do something for sustainability on the side. I hope that German SMEs will be able to think in this integrated way, because that is of course essential for the future.

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

Our ambition is to have equipped and empowered one million procurement professionals by 2030 so we have a lot of work and little time.

About Bayer and The Sustainable Procurement Pledge

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.

About Thomas Udesen

Thomas is the Chief Procurement Officer of Bayer and one of the co-founders of the Sustainable Procurement Pledge (SPP). At Bayer he leads the international procurement strategy with a budget of ~24 billion euros, where the guiding principle is sustainability. Aside from Bayer, Thomas Udesen co-founded the Sustainable Procurement Pledge in order to collaborate with other procurement leaders and drive supply chain sustainable change.

Sustainability in Action**When did Bayer decide to really step up the efforts on sustainability? Was there a defining moment?**

Bayer's conviction of inclusive growth and responsible business conduct has grown and evolved over several decades. We were one of the first companies to sign the principles of the UN Global Compact in 2000. Bayer was also a founding member of industry collaborations like Together for Sustainability (TfS) and Pharmaceutical

Supply Chain Initiative (PSCI). So, there was no defining moment—the awareness and the commitment are deep-rooted in the company, and the practices have developed and strengthened continuously over a long time.

In 2019, the sustainability strategy for the company was reinforced and given a further lift by the recruitment of Matthias Berninger as SVP for sustainability. This further strengthened the team as he brought a wealth of knowledge from his experiences with Mars and as a parliamentarian for the Green party in Germany.

Do you believe that the nature of your business meant you had to strengthen your focus on sustainability?

The focus comes from a strong commitment to sustainability. Bayer is a large company (100,000 employees and more than 50,000 suppliers) so there are occasions when some individuals and companies step outside the desired boundaries, but this is why we have our checks, controls, and our overall management system. Our sustainability practices have made it possible for us to react swiftly to these events and make further improvements.

How is your procurement department structured?

In 2016, Bayer went from a decentralized procurement setup to one integrated into a global organization, both for direct and indirect procurement. This meant a complete change of the operating model and the underlying processes for procurement. However, the focus on sustainability remained and we have continued to invest in this area and in innovation and people and culture.

What targets or goals within procurement support Bayer's sustainability targets?

Procurement is contributing to all of Bayer's company targets for sustainability. Scope 3 is a focus area, but procurement also contributes to Scope 1 and 2 reductions. We also have targets related to the overall inclusiveness and resilience of our supply chain, specifically how well we manage potential risks. We measure this by both the coverage rate but also on the ratings and improvement in ratings.

Inclusiveness is a big topic in the USA, and it is growing in importance in Europe. It is still at the initial stage in Asia but we are working hard on this so that it becomes equally relevant globally.

To ensure a resilient supply chain we also monitor based on the risk. There are some drugs we produce that are needed for human survival so we simply cannot accept any supply chain disruptions, which is why we monitor our supply chain in real-time down to the n-tier. A resilient supply chain is a sustainable one.

What systems or tools are you using to track the performance and risks in the supply chain?

We use EcoVadis for assessing the supply chain with regard to different sustainability parameters. We work with the CDP for tracking CO₂ and we monitor our supply chain in real time with DHL360 Resilience.

How do you engage with your suppliers when it comes to sustainability? It stated in your 2020 report that 670 suppliers had been evaluated—does this mean that the focus is on the most strategic suppliers?

The primary focus has been on strategic suppliers and those suppliers in either high-risk regions or those that provide high-risk products (e.g., products containing conflict minerals). We are continuously adding to this list, and at the same time we follow up with registered suppliers to ensure that they are making the improvements we agreed on.

Are there any problems stemming from the fact that your supplier base is not as far advanced as you are when it comes to sustainability?

Yes, this is a challenge. Many small and medium-sized enterprises that are further away from the end customer in the supply chain have not yet risen to the challenge and implemented sustainable practices and processes. It is important for us to keep stressing that this is not something that only larger corporations have to deal with, it needs to come from all tiers of the supply chain and from all companies regardless of size.

Is sustainability considered in your category management work? Is it part of your category strategies?

Sustainability is part of our category management work and consequently part of our category strategies. However, the level of maturity differs from category to category. In some cases the category has a very detailed roadmap for how they will contribute to the sustainability targets. In other cases, for example, when it would require us to completely rethink a product, we might not have the same level of detail.

Is it part of your sourcing decision process? Have you had to balance sustainability against other traditional criteria, or did this come naturally?

Sustainability is part of the sourcing decision process, and this comes quite naturally since it is 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 are starting to develop more and more mature ways of calculating the TCO including 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 do not see a conflict between targets here but rather a complex problem that we are 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 is why we prefer working together with our suppliers to ensure that the requirements are met and that there are continuous improvements.

Where do you see sustainability in 2030?

I remain optimistic and believe that we will have solved a lot of the issues we see today. My hope is that sustainability does not become too politicized because it is an issue that affects everyone. Within procurement, we also see room for new business models and collaborations with suppliers, such as joint contributions to sustainability initiatives.

What are the current sustainability challenges that you are facing and how will they be addressed?

There is a general challenge to connect the “holy trinity” of innovators, regulators, and the markets. We need innovators to ensure that we find solutions to the sustainability problems where we do not yet have a solution. At the same time, we need a market that is requesting these solutions and regulations that support them, levels the playing field, and ensures that the right behavior is rewarded. What we currently have with these three parts is a system that is broken. The innovators exist but are not always rewarded for solving the right issues. This also goes for procurement where we in some cases could be even more innovative in finding new solutions. The regulators on their side are not taking their role seriously enough and the market is not always ready to fulfill their part of the responsibility.

Behind all of this is a lack of change management. Everyone keeps saying that we need to do things differently and that what has been done in the past is no longer relevant for the future. For a lot of people this is a big undertaking, and most companies and societies are not investing enough in the people aspect of things so that the competence gap is closed.

Can you briefly say what SPP is (spp.earth)?

Founded in 2019, the Sustainable Procurement Pledge (SPP) is a pro-bono community of those committed to embedding sustainability into their procurement practices—and sharing the knowledge and tools to do so. Sustainable Procurement Pledge GmbH was registered as a charitable organization in Germany on July 1st, 2021.

We know from earlier discussions that your work with SPP came out of the 2019 big push for sustainability and the need to democratize knowledge for procurement practitioners to help them contribute. Have you seen a mindset shift since practitioners started to get more support and are now able to show more examples from their sustainability work within their companies?

Definitely. 75% of the ambassadors are now saying that they are able to make better decisions now.

You are now moving from organizing the movement to creating chapters and taking things from ideas to action—how will you measure success?

The current measures for success will remain, so the ambassadors’ satisfaction and their ability to make better decisions, and if they have the right knowledge available. Engagement, reach, and behavioral change will also be reviewed. Our ambition is to

have equipped and empowered one million procurement professionals by 2030 so we have a lot of work and little time.

What advice would you offer a practitioner who wants to start talking about sustainability within their procurement organization?

Do not get intimidated, do not lose hope, and *build your vocabulary*. We are our conversation—if we succeed to bring our point across in a convincing way with factual arguments the experience is that most managers will be open to listen and to take things further. Also, do not feel that you are alone. We all struggle with the challenge so make sure that you talk to your peers, build alliances, and do not reinvent the wheel. The African saying very much applies: “If you want to go fast, go alone but if you want to go far, go together”!

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