Operations with impact

In 2020 we worked to positively impact our production and supply chain activities – from reducing transport emissions to investing in the circular economy. By 2030, our ambition is to have positive contributions from our operations and supply chain.

Our goals

- → 55% CO_2e reduction from our own operations
- → 50% CO_2e reduction from third-party logistics
- → 75% repurposed waste
- → 100% sourcing aligned with our Responsible Sourcing Strategy

+ Our environmental footprint in 2020
p. 56

+ Increased reuse and waste reduction on smaller sites
p. 60

+ Driving sustainability through our supply chain
p. 62

+ Recognizing sustainability improvements in our supply chain
p. 65

+ It’s all about the small steps
p. 67

+ Sustainability Award
p. 70

Our approach

GRI 103/302
GRI 103/305
GRI 103/306

What	How
Our sites aim for carbon neutral business activities.	+ Source renewable energy for our production activities. + Implement energy efficiency programs. + Promote innovative initiatives to minimize the carbon emissions from travel. + Reduce VOC emissions significantly.
Our operations endorse the principles of circular economy: resources are conserved and repurposed.	+ Strive to eliminate waste. + Reduce to zero the amount of waste sent to landfill. + Repurpose (reuse or recycle) our waste. + Water used as a raw material will be conserved and responsibly sourced. + Implement a comprehensive wastewater management system.
Our supply chain partners globally operate on the basis of the same corporate social responsibility standards as Beckers.	+ All regular suppliers sign our Supplier Code of Conduct. + All key raw material suppliers are regularly monitored by an independent CSR rating institute. + Selected critical suppliers have successfully passed our audit on their operations and supply chain. + Third parties commit to a significant reduction of CO_2.

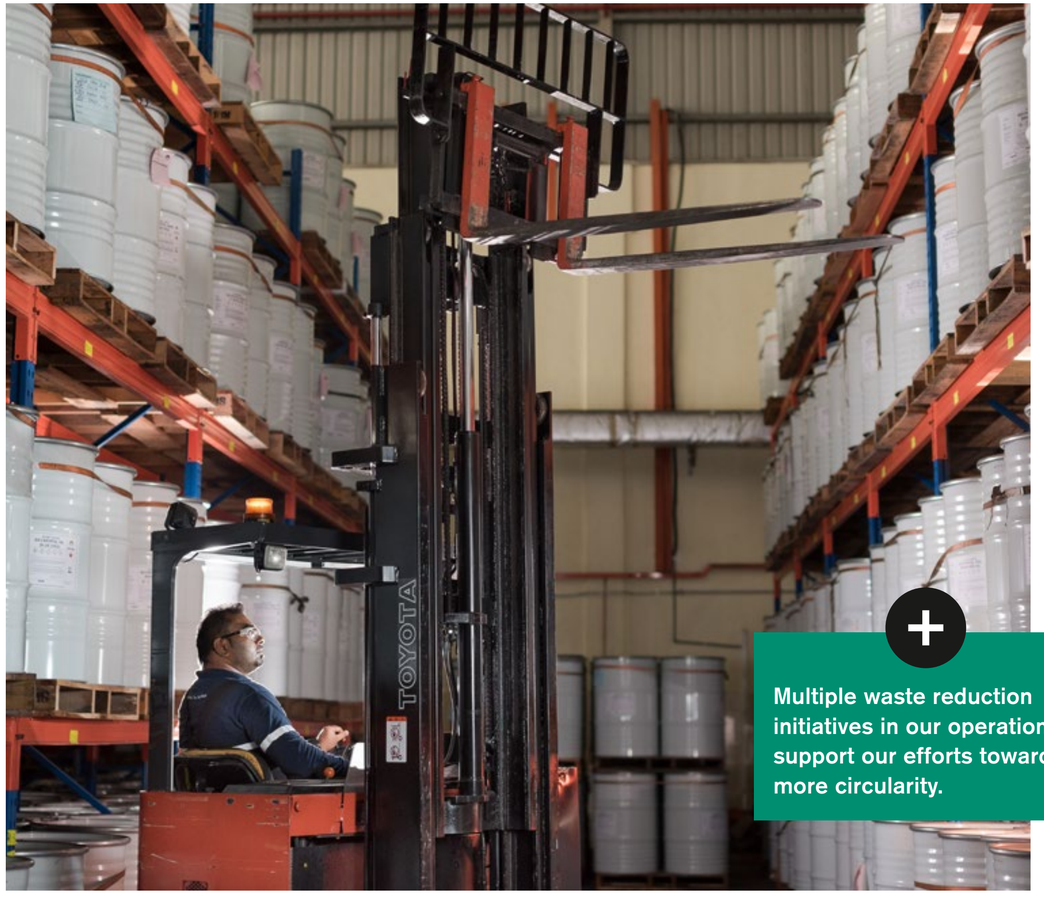
Our long-term ambition is to grow our business while reducing our environmental impact. To track and encourage progress towards this goal, we set annual targets for energy use, VOC emissions and waste. Our latest results illustrate the progress we are making in this journey. On the following pages, we will look at our environmental key performance indicators, the impact the changes in business operations had on those indicators, and how they were influenced by other environmental factors as well as our site initiatives.

As a chemical industry manufacturer, energy efficiency and CO_2 footprint are two of our key sustainability topics. To support sustainable development globally, we need to drive energy efficiency across our operations and the transportation of our goods, and we need to use energy from renewable sources wherever possible. In addition, some coatings include volatile organic compounds (VOCs). These not only have a significant impact on the climate, but they may also have an impact on health. We have therefore set targets for reducing greenhouse gases and VOC emissions. Finally, we also have ambitious targets to reduce the amount of waste from our operations and we are seeking ways to eliminate or repurpose waste wherever we can.

UN Sustainable Development Goals

“Operations with impact is an important pillar of our 2030 Sustainability Strategy. Everyone at Beckers must understand how they can contribute to becoming carbon neutral and make progress towards circularity.”

Ridzuan Abdullah I Operations Director Asia & Middle East



Multiple waste reduction initiatives in our operations support our efforts towards more circularity.

TRACKING OUR PROGRESS

Our environmental footprint in 2020

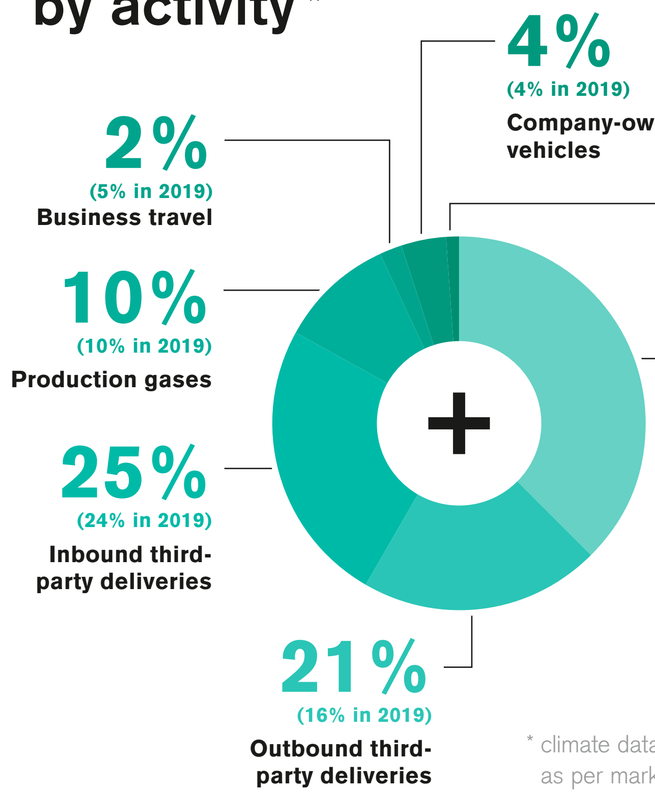
We aim to grow our business while reducing our environmental impact.

GRI 103/305

In 2020 the spread of Covid-19 severely impacted businesses around the globe. At Beckers, we followed recommendations and regulations in each of the regions in which we operate and had to slow down or even suspend business activities for a time. As a result, our production decreased from 170,000 tons in 2019 to 158,000 tons in 2020 – a reduction of 8%. In 2020, we had 25 sites to monitor, including our head office in Berlin. **It's all about the small steps**

Despite the difficulties associated with the pandemic in 2020, toward the end of the year we were largely successful in restoring production to pre-Covid levels. However, the impact of Covid has been far reaching. It influenced business activities in a direct and indirect manner, causing loss of efficiency and spikes in performance indicators in 2020. In the analysis over the following pages, we look in detail at our environmental KPIs: climate and VOCs, energy and waste. In terms of energy, we look not only at efficiencies but also at the source and provide figures demonstrating the extent to which we have been able to move away from fossil-based to renewable energy in our core and ancillary business activities.

Carbon emissions by activity *



* climate data from 2019 and 2020 is as per market-based approach

22%
reduction of absolute CO_2 emissions from our own operations since 2013

Our 2020 climate impact

Overall our market-based emissions reduced by 8% in 2020 compared to 2019, from a total of 52,600 to 48,200 tons CO_2e. Reductions in our emissions from switching to renewable electricity in our premises – for example at our site in Dormagen, Germany – are most evident in our carbon footprint calculations. Another major contribution to reducing our emissions in 2020 came from business travel, which decreased by 58% compared to 2019 due to the pandemic.

GRI 103/302
GRI 103/305

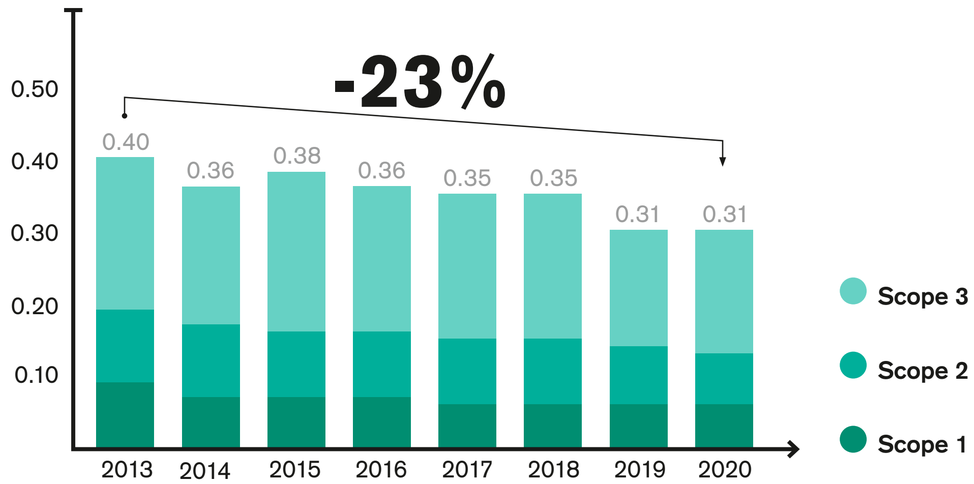
The only business activity where we saw an increase in emissions was outbound third-party deliveries. Here we cleared up some reporting discrepancies from 2019 reporting and adjusted the data collection method. The difference from 2019 to 2020 stems from this.

Emissions from inbound third-party deliveries decreased slightly in 2020. This was due to changes in the supply chain, for example, when sites moved to more local suppliers such as our sites in Malaysia, Vietnam and China. We also optimized systems to improve multimodal deliveries – for example, in Montbrison, France – and switched to sea deliveries – for example, at our site in Nagpur, India.

The Emission Factors (EF) we use to assess our climate impact are in the tool **Our Impacts**. These convert units of business activity into equivalent CO_2 amounts. The EFs are constantly updated based on new science and fluid factors such as grid electricity. They are provided by international agencies on climate change, such as the Intergovernmental Panel on Climate Change (IPCC). In line with our Recalculation Policy there is no need to recalculate the base year, since the changes to the emission factors in 2020 do not significantly impact the results.

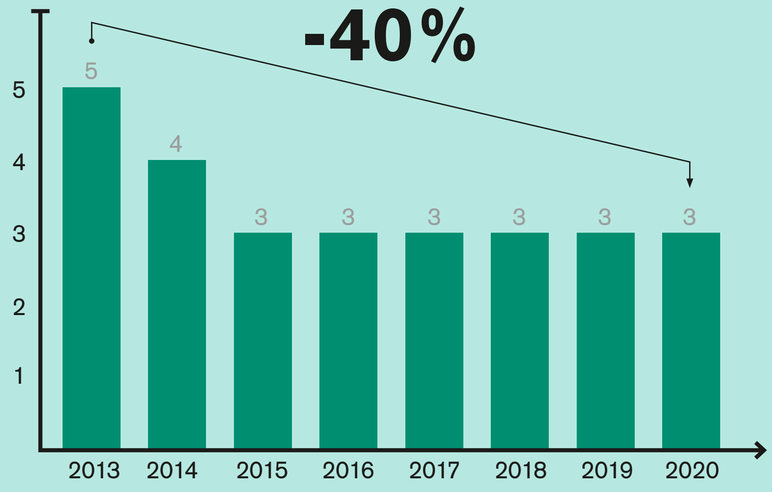
If you would like to know more about our climate impact, you will find our Climate Assessment Summary for 2020 on our website. For data on our climate and environmental impact, please see the GRI Report 2020. **GRI Report 2020**

Carbon emissions intensity,
ton CO_2e/ton product



471 (503 tons in 2019)
tons VOC emissions in 2020

VOC intensity,
kg/ton product



VOC intensity at same level

We continue to measure and target VOC emissions from all our production sites. Over the years, we have reduced our absolute emissions thanks to a combination of activities such as low-solvent cleaning systems, solvent recirculation and on-site distillation. The 8% decrease in production in 2020 meant that VOC emissions also fell. We also have installed a new VOC abatement system at our site in Guangzhou, China, which has a high capture efficiency. However, this reduction was offset by a shift in our product portfolio towards products that depend on more volatile raw materials, so that we remained at the same level of emissions per ton of product in 2020 as in 2019 on a global level. We are mitigating these effects with various initiatives. In Poland, for example, we introduced a direct pipe connection that reduces the raw materials' contact to the ambient atmosphere, resulting in lower fugitive emissions.

-13%
energy intensity since 2013

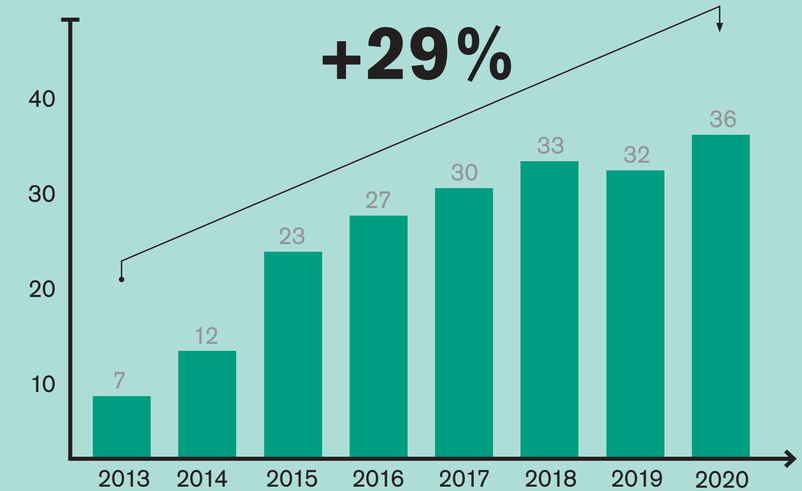
Total energy consumption decreases

The reduction in energy consumption in 2020 was not in line with the reduction in production. While production fell by 8% as a result of the pandemic, energy consumption decreased by only 4%. This is attributed to the increase in both electricity and non-electricity consumption required, for example, for ventilation, heating and air conditioning.

In addition, the installation of energy-intensive equipment such as the VOC abatement system in Guangzhou, China, and new chillers at our site in Vereeniging, South Africa had an impact on our overall energy consumption.

Mitigating against this, work-from-home practices at many sites, investment in an efficient air compressor in Chicago, USA, and proactive measures to reduce consumption during production down-time all helped to reduce energy consumption.

Renewable energy
in %



REPURPOSED WASTE

Increased reuse and waste reduction on smaller sites

Efficiency efforts and inventory activity impacted our waste results in 2020. We reduced waste by only 1%, compared to an 8% reduction in production.

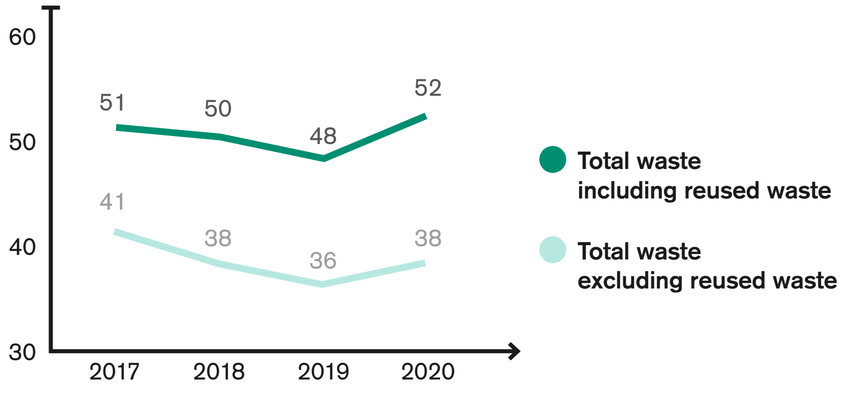
GRI 103/306

In 2020 we had solid waste reductions on our smaller sites. However, the relatively small reduction in total waste was due to major clearing activity at many sites to dispose of obsolete inventory, for example on a site where a new Enterprise Resource Planning system was introduced.

The decrease in waste we saw on some of our smaller sites can be attributed to them starting to produce more locally. Therefore, for example, less packaging material was used.

Waste intensity,

kg/ton product



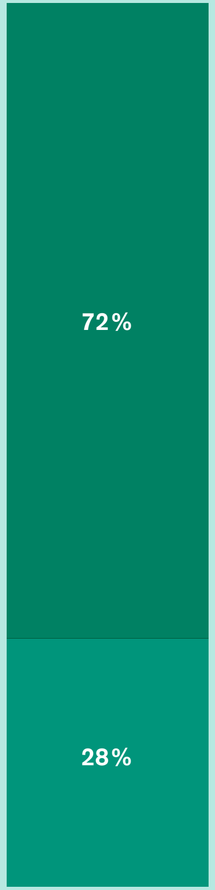
Total weight of waste

Hazardous
5,870 tons

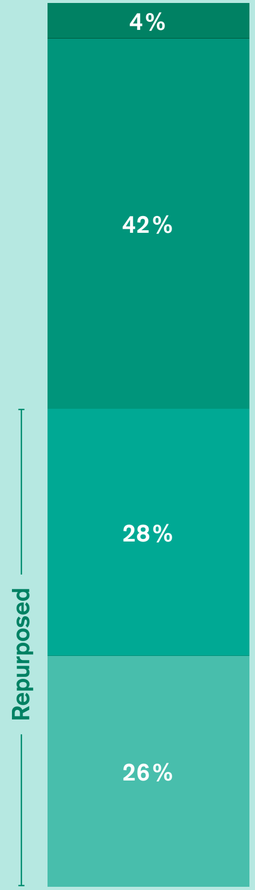
Waste from chemicals or contaminated by chemicals that have a risk to human health or environment as per regulations in country of operation.

Non-Hazardous
2,244 tons

Domestic waste and certain industrial waste that is not considered a risk to human health and environment as per regulations in country of operation.



by type



by disposal method

Landfilled
301 tons

Disposal by dumping waste in government-designated areas.

Incinerated
3,459 tons of which 2,682 tons was with heat recovery

Combustion of waste with the possibility to recover energy from heat generated.

Recycled
2,245 tons

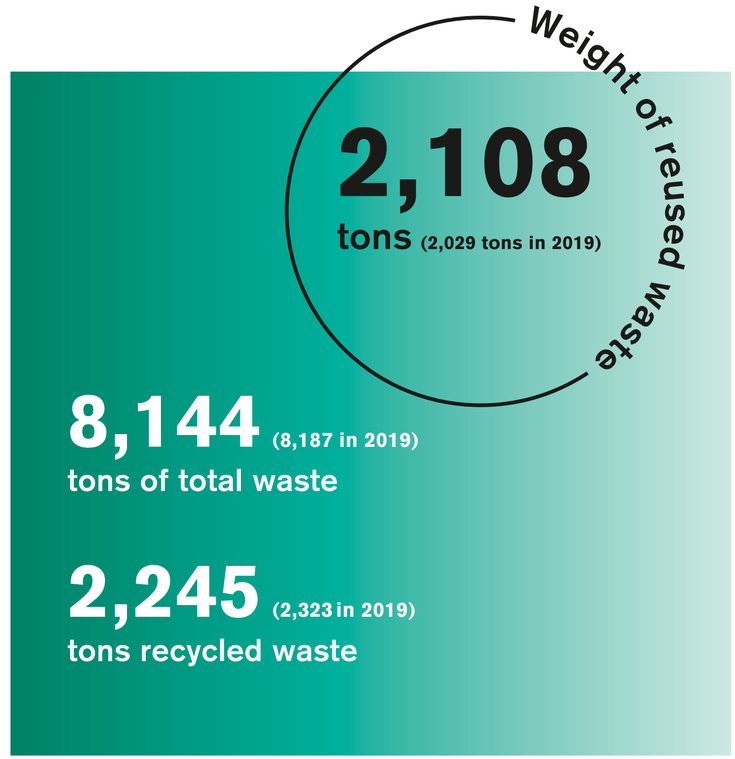
Used materials that are broken down to make raw materials for manufacturing of new products.

Reused
2,108 tons

Materials reused in the market without major re-manufacturing processes to alter them.

Focus on repurposing of waste

At Beckers we aim for reused or recycled waste, which together is defined as repurposed waste. In 2020 we succeeded to move in the right direction and increased the total amount of repurposed waste. This was because several more of our sites have increased the amount of waste that is reused since some sites started to reuse packing material such as drums and Intermediate Bulk Containers.



CHAIN-UP

Driving sustainability through our supply chain

82% (78% in 2019)
of our total raw material purchase with suppliers assessed by EcoVadis

75% (68% in 2019)
of our total raw material purchase with suppliers approved for their CSR approach

Watch the ChainUp! video

At Beckers we take a holistic value chain approach to sustainability.

GRI 102 – 9

Our suppliers have a significant impact on our own performance, so it is important that we monitor and evaluate them too. Our goal is that, by 2030, 100% of our supply chain partners globally are aligned with our responsible sourcing strategy. We use a three-step process to monitor the social and environmental sustainability of all our suppliers and empower them to improve their performance.

Three-step process for responsible sourcing

Step 1: Sign and adhere to the Supplier Code of Conduct

We introduced our Supplier Code of Conduct in 2017. It is essential we have an effective way to manage our over 3,000 accredited suppliers that support us at different locations around the world. To do this, we use a new collaborative tool which helps our sites manage the process locally and monitor the status of every single supplier.

“More than 80% of Beckers’ global spend is in direct materials, meaning raw materials and packaging. Coating formulas are quite complex, typically using 10 – 15 components and all the raw materials come from the global chemical industry, mainly fine chemicals…”

Dr. Thomas Lüder | Global Director Procurement & Supply Chain Management

In 2020, 89% of our external global spend was covered by suppliers that have declared their adherence to our Supplier Code of Conduct. This code is now a fundamental part of how we communicate and collaborate with our suppliers.

Step 2: Conduct third-party assessments

We ask all our key suppliers to conduct EcoVadis assessments. EcoVadis is a global provider of sustainability ratings. Its ratings cover a broad range of non-financial management systems including environmental, labor and human rights, ethics, and sustainability procurement impacts. These are rated via in-depth assessments that require suppliers to provide proof for each of their claims. A supplier must score a minimum of 40 points in each of the four segments of the assessment to achieve the Beckers approval. Those who fail must work through a transparent corrective action plan towards a reassessment.

This process allows us to take our suppliers with us as we move our industry in the right direction. In 2020, our EcoVadis-assessed raw material suppliers covered 82% of our total raw material purchase value (up from 78% in 2019). Our approved suppliers’ purchase value was 75% (up from 68% in 2019). This is already is a substantial improvement: we originally targeted 75% for 2024.

Together with EcoVadis, Beckers published a case study to demonstrate how medium-sized companies can lead sustainable procurement. More details about the case study can be found on the EcoVadis website.

Step 3: Conduct in-house audits

We conduct our own in-house audits on selected key suppliers to verify their compliance with our Corporate Social Responsibility and quality expectations.

Read more about Beckers' EcoVadis case study

We select which suppliers to audit based on a risk assessment that includes factors such as geographic location, industry or sector, self-assessment results, length of relationship and previous performance. We work together with the audited supplier to improve quality control and sustainability performance. We share proposals for improvement and request action plans within a specific time period. This approach has brought about remarkable improvements.
Recognizing sustainability improvements in our supply chain

Unfortunately, due to the pandemic, we had to postpone the two audits scheduled for 2020 – and the situation is still difficult. Audits could not be carried out virtually as they involve onsite visits to inspect the supplier's process controls, including quality, sustainability, and continuous improvement.

In 2019, for the first time we have nominated a supplier that made major progress for the Beckers Supplier Award. In this article we introduce the winners for 2019 and 2020. Recognizing sustainability improvements in our supply chain

…We have quite a large number of suppliers, and the volume procured from each of them is sometimes small – this makes the process of implementing sustainability practices in the supply chain rather complex. Nonetheless we are making great progress."

Dr. Thomas Lüder | Global Director Procurement & Supply Chain Management

BECKERS SUPPLIER AWARD

Recognizing sustainability improvements in our supply chain

The Beckers Supplier Award honors suppliers for their efforts and commitment to improve the sustainability of their operations.

Beckers relies on raw materials developed, manufactured and delivered by our suppliers. Our upstream supply chain is a big part of our success and our environmental footprint. We want to inspire all our supply chain partners to work with us to create a positive impact on our industry globally. This is the inspiration for our annual Beckers Supplier Award.

Our procurement team has worked closely with our suppliers to track and improve the sustainability of all the raw materials we use. We believe firmly this is the most effective way to achieve our sustainability goals. The process begins with an assessment followed by the creation of a road map of actions for improvement.

Close collaboration with suppliers is key to reaching our sustainability goals.

This is now an integral part of our supplier management process. We call it Chain Up!'. **Driving sustainability through our supply chain**

Together with EcoVadis, we have invited critical suppliers to carry out an online assessment of their sustainability management. The minimum standard we are looking for is 40 points in each of the four subcategories – environment, labor and human rights, ethics, and sustainable procurement. We have adopted the EcoVadis online assessment as a standard tool to evaluate our raw material suppliers and believe it could become a standard solution to improve sustainability across our industry. Indeed, many of our key partners are already using EcoVadis and have now reached the sustainability threshold that we have set.

We recognize how much work is required to reach this threshold. To acknowledge these efforts, we have established the Beckers Supplier Award. It is intended to show our appreciation to the supplier that has made the most progress.

We work with outstanding partners at Beckers and appreciate their efforts and commitment. We hope that more of our suppliers will join us in this journey in the coming year. The Beckers Supplier Award will be made on an annual basis and the winner announced in the Beckers Sustainability Report. The award underlines our belief that through collaboration and communication we can push sustainability standards across the industry.

Crest Resin – Beckers Supplier Award winner 2020

This year's winner is Crest Resin from India. Crest Resin is the leading supplier of resins to the coatings and related industries in India and the leading supplier of polyesters to Beckers in India. The company also plays an important role for the business in the Gulf region and in Bangladesh.

The winner was chosen in a poll of our purchasing managers at our annual global procurement meeting. The candidates included all suppliers who had succeeded in improving their EcoVadis score during the year and reached the minimum threshold required.

Crest Resin was selected by our team because it had proved itself in sustainability management and showed willingness to expand its business with Beckers through long-term thinking. It is the first local resin supplier to be approved through Ecovadis, making a significant step toward corporate social responsibility for India's chemical industry.

Yuanli – Beckers Supplier Award winner 2019

The 2019 winner was Yuanli Chemical Group, a China-based company with two production plants located in Weifang and Chongquing. They are market leader in the production and sales of chemicals. The main product is dibasic ester (MDBE) which accounts for 30% of the supplier's total production output, fatty alcohol (1,6 hexandiol – HDO) and plasticizers. Beckers has intensively worked with Yuanli on a regular basis over the past years for its global supply of dibasic ester and has observed many positive developments in risk management and sustainability. The supplier has constantly worked to achieve a Silver EcoVadis status.

Yuanli was selected because they have a formalized process in place to assess and document environmental risks. They also have specific measures to reduce energy consumption, commitments on the management of their labor and human rights practices as well as sustainable procurement policies on both supplier environmental and social practice.

POSITIVE CONTRIBUTIONS

It’s all about the small steps

It is our ambition to have positive contributions from our operations and supply chain by 2030 – that is the aim of our operations with impact stream.

At each of our sites, we aim for carbon neutral business activities and we endorse the principles of circular economy, which means resources are conserved and repurposed wherever possible. In addition, we aim for our supply chain partners globally to operate along the same corporate social responsibility standards as Beckers. **Our approach**

The way to achieve these ambitious aims is not through a single huge step, but through many small initiatives that work strategically towards our goals. In 2020, we had some key projects that positively impact our production and supply chain activities, from reducing transport emissions to investing in the circular economy.

“I want to have an impact on how we think, act and do business. We still have a lot to do, but I want to play an active role in how fast we get there.”

Monika Mazur | Environment, Quality and Management Systems Manager

Driving circular economy

GRI 103/306

It is increasingly clear that, if we are to meet our climate goals, our economy must shift from a linear model of production, consumption and disposal to a more circular model of use and reuse. But although this is now widely accepted, shifting to these new models is not without challenges and examples of success are still rare. Nevertheless, we understand the imperative and, in 2020, we made several key steps in this direction.

Repurposing waste

A good example for circular economy is the winner of the 2020 Sustainability Award for Operations with impact: our waste management initiative at our site in Beckers UAE. The local team collaborated with suppliers, customers and third parties to reuse drums and reduce waste. Meanwhile, our team in Nghe An, Vietnam initiated a project to reduce waste in the factory, focusing on plastic. Many plastic items used in daily operations were replaced with more sustainable alternatives, for example, water bottles, handwash bottles, washing powder containers, coffee supplies, and bags. Even the wrapping for drums is now a reusable hard cardboard alternative. Those are only two of the initiatives we have seen throughout Beckers trying to eliminate, reduce, reuse or recycle waste.

Re-purposing steel drums significantly reduces emissions.

Drumming up the circular economy!

Drumming up

Reducing the use of packaging is a major topic in the circular economy. Our paint is mainly sold in steel drums. Manufacturing a new drum creates around 30kg of CO_2 emissions. We use hundreds of thousands of steel drums every year, adding up to a big carbon footprint. In 2019 we therefore introduced our reconditioned drum initiative together with the supplier DRUMDRUM in Belgium, which is now being rolled out to our sites in France and Germany.

In addition, our Beckers India team in Goa and Nagpur devised an efficient and sustainable way to reuse 2,000 drums that contained imported crosslinking resin. In the past, crosslinking resin imported from Changchun in Taiwan was delivered in close-mouth 200-liter barrels, which were disposed to scrap dealers after the material was used. As part of the sustainability project, the team explored the possibility of importing the resin in open-mouth drums, which are suitable for reuse. After successful negotiations with the supplier, the resin is now provided in open-mouth drums sealed with a ring and clamp arrangement. Once we have used the contents, the drums are cleaned thoroughly inside and out before being refilled with finished goods. In 2020, Beckers India reused 2,217 drums in total.

Key to these successes is that in all of these projects we have collaborated with other companies to make a real impact. We cannot do this alone.

Accelerating our move to more green electricity from the beginning of 2021.

Toward carbon neutral sites

GRI 103/305

We've got the (green) power!

Our site in Germany moved to green electricity in 2020 and the sites in France, United States and Poland have all signed contracts to move to green electricity during 2021. Where renewable-based power from the grid is available, this is an easy step to take. In countries where this is not so easy, we are looking into other solutions such as installing our own solar stations like the one we already have at our site in Malaysia.

Optimization of workshop heating

In France, our colleagues at our site in Feignies set out to reduce their gas consumption by 15%. The project was so successful that, as a result of the innovative measures they introduced, they were able to reduce consumption at their site by nearly 20%. They arranged for pipes to be insulated, put in a variable flow pump, and installed time controllers and programmable thermostatic valves so that office and locker areas can be heated separately and the workshop is no longer heated round the clock.

New VOC abatement system in China

Reducing volatile organic compounds (VOC) is key to achieving our aim of carbon neutrality for our sites. To do this, we use abatement systems – this means that wherever possible VOCs are combusted, recovered and refined, and air released to the atmosphere is purified. In line with the increasing standards of environmental protection in China, Beckers China installed a new VOC abatement system on the site in Guangzhou. The new system is based on RCO (regenerative catalytic oxidizer) technology. A molecular sieve is used instead of activated carbon absorption technology. This reduces the generation of hazardous waste by an estimated 106 tons per year. VOC capture on the shop floor was also optimized. Environmental regulations are getting stricter in China, but as a result of these efforts, we are ahead of the game.

EMPLOYEE ENGAGEMENT

Sustainability Award

The Beckers Sustainability Award in the category Operations with impact was assigned to Linto Varghese, Santosh Paudel, Najeeb Pareethu, Jagathish Gnanaprakasam, Jen oy and Alagu Karthik for their strategic initiative to eliminate, reduce and repurpose waste.

Linto Varghese, Santosh Paudel, Najeeb Pareethu, Jagathish Gnanaprakasam, Jen Joy and Alagu Karthik

Beckers UAE formed a strategic waste management team in 2019 to eliminate, reduce and repurpose waste at our site in Ras Al Khaimah. Among the activities carried out in 2020 was the disposal of hazardous waste through Gulf Cement; the repurposing and reuse of drums; the reduction of tissue paper waste; the reuse of cleaning solvents for washing; and the reuse, recycling and reduction of pallet usage. The jury liked the approach taken by the local team in RAK because they addressed waste management strategically and included local partners in different ways to repurpose waste that cannot be eliminated.

“We are immensely thankful for winning this award. We are very pleased and it is hard to convey that through words. This gives us more self-belief and even increases the dedication towards our work.”

Najeeb Pareethu | Operations Manager – Middle East

Reasoning of the jury

The team was awarded for their well-planned initiative to eliminate, reduce and repurpose waste. The team at Beckers UAE addressed waste management strategically, forged alliances with local partners to move towards circular processes and thus contributed to our goal of having 75% repurposed waste by 2030. Their team work, the close examination of every waste source and the process were exemplary.