



Sourcing & operations

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From sourcing to supply

Driving excellence through procurement and sourcing practices















Value creation comes from strong internal and external collaboration. We seek to maximise value with our suppliers of materials and services to create a differentiating and profitable business.

With an annual spend of around CHF 3.0 billion in raw materials and indirect materials and services, procurement is a strategic value creator that impacts Givaudan's responsible and shared growth.

Procurement's role is to ensure the continuous supply of purchased materials and services at the most competitive and predictable cost, while ensuring optimal quality. The teams aim to be trusted advisors, involved in the Company's markets and capable of adapting to rapidly changing environments. A procurement business partner liaises with each division to optimise the sourcing processes in line with business requirements and within given constraints.

Raw Materials (RM)

Our RM team is responsible for purchasing all our raw materials globally – whether synthetics or naturals – to produce our flavours and fragrances. In order to increase our geographical footprint and spend control over time, we have integrated the locally sourced raw material activities into the global RM procurement function. This integration, in line with the GBS roll-out schedule, has been fully executed in Europe, the Middle East and Africa, and in North America Flavours.

Further changes are the expansion of our global RM category management team to increase our sourcing coverage to the entire raw material portfolio, and the transfer of 'purchase to

Procurement by numbers



We manage CHF **3.0** billion spend per year



Raw Materials

We source > 10,000 different raw materials in >100 countries



Supplier Management

3,000 raw material suppliers

~12,000 Indirect Materials and Services



Contract Management

We manage > 25,000 contracts

Materials used by weight



Disclosure 301-1

pay' transactional activities to the GBS centres. The GBS organisation delivers enhanced support and market insight to the global procurement team.

Events that could threaten the supply of raw materials are risks we must manage daily. If we do not receive the goods we need for our manufacturing processes, we cannot supply our customers, so risk management is as important as buying at the right price. We are limiting our exposure to raw material supply risks by adopting different approaches, which include reducing our dependency on single-source suppliers and strengthening our risk management governance, reassessing certain geographical risks.

We believe that our raw materials should be produced in a way that respects people and the environment. We work in partnership with local producers and suppliers to transform the way we source and create new value to be shared by all. This is the essence of the Givaudan 'Sourcing for Shared Value'.

Management Approach (103 - 2, 103 - 3): Topic 301, pages 62 - 63

Indirect materials and services (IM&S)

The IM&S team engages with internal customers at all sites to understand their business needs. This is a key element to success. Close collaboration at the early stage is fundamental in determining the right focus on strategic initiatives, negotiations and supplier management.

The allocation of resources between global, regional and local teams has been optimised in response to the latest developments in our supply markets as well as within the Company. As a result, we have introduced regional category management in all regions. These changes bring an increased focus on strategic procurement activities at a regional and global level while still having site proximity. With this approach, we will strengthen our internal business connections while providing the best geographical distribution of buying power.

The latest purchasing support unit has been established in Kuala Lumpur, Malaysia, at the new Givaudan Business Centre for the Asia Pacific region, which opened in late 2017. By bringing in-house our outsourced support centres in Europe as well as

North America, all vendor-related transactional activities are now processed within GBS for all regions. These moves allow our procurement organisation to focus on value creation through more efficient and strategic sourcing activities.

In addition to the focus on the right materials and services at the right cost, the IM&S team delivers benefits beyond cost and cash. Our IM&S organisation is embracing a continuous improvement mindset and methodology in its daily business in all regions. With an ever-changing environment, managing supply risks has also become a focus area.

Procurement innovation

We have a well-established innovation team in procurement that works closely with category managers to foster supplierenabled innovation and generate new business opportunities.

Together with the Science & Technology organisation, we have built a project pipeline of supplier-enabled innovation opportunities, presenting a busy agenda with a high potential for differentiation. The team responsible for this pipeline of innovation keeps abreast of new technologies and works to align the needs of the business with the capabilities of the supplier base.

Our suppliers have many innovative ideas and we are keen to capitalise on the opportunities they may have for mutual benefit. To read more about accelerating the creation of mutual value through supplier-enabled innovation, see the chapter on our innovative capabilities.

Q page 48, A culture of innovation

Sourcing for Shared Value

Sourcing for Shared Value covers all the different sustainability practices in procurement. We embed a sustainability purpose in all our sourcing activities and have a comprehensive approach that builds on and further strengthens the long-term commitment to sustainable procurement practices based on the principles of Responsible Sourcing, Sourcing at Origin and Communities at Source:

Our **Responsible Sourcing** programme drives compliance and continuous improvements in the way that products are produced. It encourages suppliers to achieve high standards in health and safety, and in social, environmental and business integrity as included in our Responsible Sourcing policy.

The programme is the blueprint for how we work with our partners and suppliers and drives compliance to high ethical standards in our supply chains. We audit our key first-tier suppliers against sustainability criteria and assess entire supply chains of our key raw materials of natural origin. We then work hand-in-hand with our suppliers to ensure that improvements in their supply chains are made where necessary.

We are committed to sourcing raw materials in a way that respects people and the environment. We work together with our partners and suppliers, to increase transparency in our supply chains and to improve their sustainability practices. We have created supply chain transparency for 32 of our raw material categories and 24 are being sourced in a responsible way.

Ultimately, we strive to be our customers' partner of choice and to meet Givaudan's values by building a portfolio of materials and services that are part of our Responsible Sourcing programme.

Sourcing at Origin initiatives secure the traceability, supply and quality of key natural ingredients in countries of origin by working directly with producers and suppliers while fostering local value creation. We have invested in direct collection networks and exclusive farming partnerships in China, Indonesia, and Madagascar, strengthening the local economic fabric in countries of origin and contributing to more stable incomes for thousands of smallholder producer families.

In Madagascar, for example, NATEMA (Natural Extracts Madagascar) is our processing plant that transforms clove leaf oil directly into derivatives used for our flavour and fragrance creations. Rather than export clove leaf oil for processing from Madagascar, the clove leaf is collected through a network of farmers supported by Givaudan. The joint venture is between Givaudan and Henri Fraise Fils, a longstanding business partner and well-established local company.

Our **Communities at Source** approach shows how we support smallholder producers and their communities in our raw material supply chains. We work together with local communities on projects and causes that benefit the communities where we work. We build partnerships with non-profit organisations and support local communities.

Many of our most precious natural ingredients come from places that are vulnerable to political, economic and natural upheavals. So we recognise that we have a role to play in helping producer communities build stable and secure lives. We run a range of projects, from building schools and health centres to providing training and advice; we partner with local communities in this way to work for a better tomorrow. We further support local producer communities through a variety of social and environmental projects, from working with farmers on reforestation in Indonesia to supporting schools in Madagascar, Laos, the Comoros islands and Haiti.

Many of these initiatives receive funding from the Givaudan Foundation, a not-for-profit organisation working in collaboration with NGOs, other local partners and the communities themselves. For example, patchouli is a key natural ingredient prized by perfumers for its powerful, earthy and long-lasting character. To secure the supply of this

precious natural ingredient, Givaudan has invested since 2013 in a collection network comprising hundreds of individual smallholder producers on the island of Sulawesi. The holistic approach to sourcing focuses on being present at the origin of the raw material, building strong relationships with smallholder producers and supporting them in developing their business in a sustainable way.

To further strengthen this collection network, Givaudan is collaborating with the international non-governmental organisation Swisscontact. With funding from the Givaudan Foundation, and in partnership with the producers, their families and local government, the team is working on a multi-year project. The goal is to improve the livelihoods of individual producer families while protecting precious natural resources. Training programmes are offered to patchouli producers and their families to promote environmentally friendly production methods, along with education on nutrition and household income management. To date, 927 households have received training on good agricultural practices and 276 operators on good distillation practices. The project will also involve the renovation of smallholder patchouli distillation units to improve energy efficiency and reduce firewood consumption.

- www.givaudan.com sustainability sourcing for shared value Our Sustainability Approach
- Management Approach (103 2): Topic 204, Disclosure 102 - 9, pages 62 - 64

Excellence in operations Driving customer success













Excellence in operations is the cornerstone of Givaudan's commitment to its customers.

Our commitment to customers

It is a commitment that drives a culture of agility, innovation and continuous improvement across all our 64 production sites around the world. Each day, our dedicated teams transform the original creations of our talented perfumers and flavourists into products that meet customer demands and changing consumer preferences along with increasingly stringent standards for quality, speed and agility.

Our expanding global footprint ensures that we are close to our customers and their markets, no matter where they are in the world. It enables us to source our precious natural ingredients in remote areas with a focus on quality and traceability, to bring value-added flavour solutions to market faster and to deliver our custom-designed perfume products with ever-shorter lead times.

John Vernieri, Head of Global Fragrance Operations at Givaudan, says the Company has always had a culture of continuous improvement: "We constantly aspire to do better for our customers. And history proves that we're pretty good at it - Givaudan has flourished for 250 years by constantly adapting. Today our global footprint offers a key competitive advantage by allowing us to be close to our customers and markets. It enables us to custom design our perfume products with increasingly short lead times."

Rudy Niquille, Head of Global Flavour Operations, has witnessed first-hand the sweeping transformations of technology and innovations such as SAP on operations. And regardless of the technology, he considers excellence in execution as critical to supporting customer demand for speed, agility and quality along with consumers' changing preferences. No matter what the process or technology, our focus is on satisfying our customers' requirements along with the increasingly demanding standards of our industry and our own commitments to safety, quality, service, cost and sustainability.

Givaudan Business Solutions (GBS) is the latest pioneering initiative in a continually evolving global operations performance. While integrating a range of core business solutions to bring agility, reduce complexity of our internal processes and focus entirely on delivering a superior customer experience, GBS also enables Givaudan to explore future-forward initiatives including robotics, digitalisation and the use of big data. The platform goes beyond transactional activities to streamline processes and integrate shared solutions serving operations in key crossfunctional areas such as supply chain, EHS and sustainability, and Continuous Improvement (CI) and engineering.

Since early 2018, GBS has centralised continuous improvement expertise across Givaudan's divisions and regions with a new CI Centre of Excellence (CoE). Its mission is to leverage knowledge and best practices across Flavours and Fragrances operations to optimally support management teams and sites with improvement programmes, deliver training and harmonise ways of working across Givaudan globally. Ultimately, the CI CoE will serve all of Givaudan and its customers in operations and beyond by continually improving performance, efficiency, product quality, with all these factors contributing to higher customer satisfaction.

Quality and continuous improvement in delivering with excellence

Our Flavour Division is focused on further evolving its strong quality foundation by engraining a culture of quality and continuous improvement. Visible progress has been made in our quality excellence development programmes through the deployment of structured assessments determining both the degree of maturity of our implemented processes and our collaborative, problem-solving capabilities.

To ensure the highest quality and food safety of our products, we have further strengthened our capabilities by increasing training in enhanced food safety and visibility of our food safety performance globally. We further progressed the integration of our recent acquisitions into Givaudan's quality and food safety systems.

We have also invested and applied latest hygienic design and food safety standards in our new facilities in India and China. Evidence of our efforts in continuous improvement can be seen in the good results of our own risk-based quality metrics across the value chain.

In partnering with customers, we have worked on ways of further improving our processes of exactly addressing customer requirements. We have refined our end to end product introduction processes with features that demonstrate a customer-centric mindset and agility.

Firstly, we assess the complexity of the formula before industrialisation, lowering supply and quality defects. Secondly, we assess the supply risk at an early stage, improving the preparedness for the first production at a site.

At Givaudan, we continue to reduce the number of supplier defects and quality risks through our global vendor audit programme, for which we have commissioned a new ingredient and vendor approval system. In enhancing our quality control capabilities to protect customers' brands, our sensory and analytical capabilities have been further standardised and strengthened.

Guaranteeing continuity of supply to our customers

Our Fragrance Division supplies about 23,000 exclusive fragrance references on a make-to-order basis with customer forecast accuracy that can vary from 25-50%. The ability to deliver on time and at 99% service and quality levels is one of our greatest strengths. Put simply, managing complexity at world-class levels is a core competency and a competitive advantage at Givaudan.

In the second half of 2017 and into 2018, the global fragrance industry faced an unforeseeable adverse event that created significant supply shortages on key strategic raw materials used to produce fragrances.

To help meet the challenges of these sorts of events, Givaudan has built a unique capability to manage a diverse portfolio of fragrances sold to customers around the world. This was achieved through a continued focus on system architecture, resulting in a platform that enables Procurement, Fragrance Ingredients management and Operations to see where ingredients are used in real time and provides the ability to make mass substitutions without endangering supply or product quality.

TESTIMONIAL _____

"Through one of the most disruptive supply environments we have seen in three decades, Givaudan did not have any meaningful supply disruption or consumer complaint about product quality. You were the only supplier in the industry for which this was the case and you should be uniquely proud of the people who manage your supply chain."

One of our customers, a large multinational, commenting on Givaudan's performance

As customers push the industry for more versatile ingredient sourcing alternatives and robust business continuity plans, our differentiating value as a partner was made clear by the confidence placed in us to help our customers through the most difficult times.

Driving excellence across the supply chain

In 2018, we continued the implementation of our 2020 operational plan, aimed at bringing more agility to meet fast-changing customer needs while continuing to reduce our supply chain costs. The divisional supply chain functions worked closely together in the design and implementation of Givaudan Business Solution (GBS), the new organisational entity that works in partnership with the divisions to ensure end to end supply chain solutions.

In a context of strong sales and an adverse event with raw materials, both divisions continued to serve our customers by coping with challenging requirements and to work on further improving cost ratios while integrating recent acquisitions. The fully deployed SAP platform and the tools and processes developed by the supply chain excellence programme continue to provide a solid foundation for more advanced supply chain improvement opportunities.

The strong collaboration between the divisional supply chain organisations and procurement is resulting in valuable synergies in risk management, supplier inbound optimisation and transport costs transparency. Collaboration with sales teams and customers is vital in collecting reliable forecast information as part of the sales and operations process that is now a key pillar.

Agility and a customer-centric mindset are central themes to our supply chain journey. Our shared mission is to deliver superior value to our customers through agile, reliable service and continuity of supply at optimised cost and with minimal environmental impact.

Acting for our environment

We believe business has an important role to play in leading climate action as their operations have a direct effect on a global ecosystem that underpins human prosperity and quality of life. At Givaudan, we are determined to continue playing our part in leading the flavour and fragrance industry with actions that contribute to safeguarding the environment, and we are making good progress in our environmental performance.

To this end, we are committed to an ambitious climate action agenda across our operations and those of our suppliers. We assess every aspect of our activities and those of our suppliers to find opportunities to limit our environmental impact, from purchasing 100% renewable electricity to encouraging zero deforestation.

Targets



Green house gas emissions

Reduce absolute Scope 1 and 2 GHG emissions by 30% between 2015 and 2030. Reduce Scope 3 GHG emissions by 20% over the same time period.



Renewable electricity

100% renewable electricity by 2025.



Water

15% reduction, per tonne of product, by 2020 (use of municipal and groundwater; baseline 2009).



Waste

4% reduction in weight of incinerated and land-filled waste per tonne of product, year on year on average (baseline 2015).

Greenhouse gas emissions

Our targets to reduce greenhouse gas (GHG) emissions are approved by the Science Based Targets initiative and are aligned with the global effort to limit climate change.

The international Science Based Targets initiative works to support and promote corporate best practice in setting targets in alignment with the 2015 Paris Climate Change conference agreement. We have publicly committed to the initiative and believe this is a way of demonstrating our industry leadership in climate action and transition to a low-carbon economy.

As GHG emissions come from our own operations and from our value chain, we have set a 2030 target of reducing by 30% emissions generated by our production processes (Scope 1) and emissions produced from the electricity and steam we purchase (Scope 2) compared to 2015 levels. We also aim to reduce indirect emissions (Scope 3) by 20% compared to 2015 levels. Scope 3 emissions are all indirect upstream and downstream emissions (not included in Scope 2) that occur in the value chain, hence, we are engaging with our suppliers, for example, to reduce the carbon footprint of our purchased goods and services.

Our actions concerning **Scope 1** focus on reducing emissions from the combustion of fossil fuels consumed to produce heat and steam at our facilities as well as in the operation of our vehicles. We have in place a range of actions through which we can ensure that our targets are met, including site-specific goals, dedicated employee teams, and educational workshops.

All production sites have site eco-efficiency plans (SEEP), which set individual eco-efficiency targets to be achieved over a period of two to three years. This work is supported by Green Teams, cross-functional groups of volunteer employees at each site who identify additional eco-efficiency projects or seek to improve existing ones. The most successful of these projects are recognised by the Executive Committee each year and given an award. In addition, we organise energy saving workshops, which heighten employee awareness on ways to save electricity and on how we can improve performance in terms of emissions, water and waste, and have also had a significant impact on site performance and efficiency.

We have also implemented the 'Green Chapter' for capital expenditure project proposals. The Green Chapter must include an outline of the eco-efficiency aspects, a cost/benefit analysis and elements related to a 'price on carbon' concept of the proposed investment. The implementation of a Green Chapter is part of every major capital expenditure project. For example, our new Fragrance Creative Centre and compounding site in Singapore was designed to meet the highest environmental, health and safety standards and the Singapore Gold standard for Greenmark.

In our efforts to reduce Scope 2 emissions, we are committed to ensure that all of the electricity we buy will come from renewable sources by 2025. The RE100 initiative to convert our entire electricity supply to fully renewable sources by this time is a fundamental element of our comprehensive plan for our Science Based Target.

As part of this plan, we are investigating various means of achieving this goal, including the possibility of investing directly into self-generation of renewable power, power purchase agreements or purchase of certificates. We are also introducing significant energy consumption reduction projects across our operations and making improvements through the investment and effort that goes into energy saving workshops and site eco-efficiency plans.

A specific innovative partnership was created in 2018 aiming at finding new sources of energy. Givaudan joined the consortium participating in HyCool, an innovative energy technology project funded by the European Union with the aim of developing cost-effective solutions using solar heat for industrial purposes. Our site in Sant Celoni, Spain, which is equipped with sophisticated technology for the production of fragrance ingredients with a strong focus on sustainability, was selected as the HyCool project test site for the chemical industry. For Givaudan, the project is a unique opportunity to work with leading innovation and technology experts to further advance its goal of 100% renewable electricity for its operations by 2025.

ENVIRONMENTAL STEWARDSHIP _

Givaudan is a signatory to the International Council of Chemical Associations Responsible Care Global Charter. As a signatory, Givaudan commits to drive continuous improvement and achieve excellence in environmental, health and safety performance.

Scope 3 GHG emissions are the biggest source of our Company's overall emissions and represent more than 80% of our whole footprint, with the category 'Purchased goods and services' being the most important one. It is clear that we need to address this and we are engaging with our suppliers to reduce the carbon footprint of our purchased goods and services.

In 2018, we participated for the second year in the CDP Supply Chain Programme, an effective supplier engagement initiative that asks our key suppliers to provide data on climate change. It is a platform that facilitates the data collection and engagement of suppliers. CDP's Climate Change Questionnaire asks suppliers to identify risks and opportunities associated with climate change, what their emissions are, details on their emissions management strategy such as targets, and actions to reduce emissions. All the data collected will help us create partnership with our suppliers to put in place collaborative measures to reduce our emissions, aligned and contributing to our Scope 3 Science Based Target. An example of action proposal by a supplier is GHG emissions reduction by changing the delivery volume and packing type for delivery to larger volumes.

Water and effluents

We strive to be an industry leader in the conservation and stewardship of water, an essential part of our manufacturing activities as well as in our entire value chain. We seek to consume and discharge this increasingly precious natural resource in a socially equitable, environmentally sustainable and economically beneficial manner.

Our Water Stewardship Programme ensures water risks are managed and monitored, and we are placing priority on places where challenges concerning water are expected. In these areas we carry out risk assessments to develop water mitigation action plans, including efficiency improvements and water reuse opportunities.

Water is a global challenge but a local issue. At the site level, we strive to achieve environmental protection that translates to environmental sustainability on a global basis. Effective water reduction programmes implemented at our production sites have enabled us to achieve our 2020 water reduction target three years in advance, and we are currently assessing a new target.

Givaudan also carries out corporate water risk assessments periodically that allow detailed identification of the water risks and a specific analysis related to the context at watershed level. This process applies for operations as well as the supply chain as they are the most material stages of our value chain in terms of water consumption. All Givaudan manufacturing facilities are included in the water risk assessment and our most important suppliers are annually evaluated through the SEDEX platform and SMETA audits to assess water risks in our supply chain.

In addition, a corporate water footprint based on ISO 14046 and using a metric-based methodology, has been undertaken to identify hot spots in terms of country and product, and a mitigation plan is under development. The project aimed to quantify the total water consumption of Givaudan's activities; consider the whole value chain from raw materials growth to a product's use and end-of-life; quantify the water scarcity footprint to highlight water consumption located in water stressed areas along the value chain; provide a detailed breakdown of the water footprint to identify main contributors; and identify water hotspots and physical water risks along the value chain to set priorities.

Materials and waste

We work to limit the impact of waste we produce through four approaches: reduce, reuse, recycle and recover. We are reducing the amount we create as a by-product of our processes. We then reuse where possible and recycle to move away from disposal in landfill or by incineration. Where waste is incinerated, we recapture the energy. Our target is to reduce incinerated and landfilled waste production per tonne of product by an average of 4% year on year against the 2015 baseline figure. We are working to meet this objective, and have made good progress as more than 70% of our waste is recycled.

- Q Our Sustainability Approach 2018 Sustainability Progress Review
- Management Approach (103 2): Topic 301, 302, 303, 305, 306, pages 67-69.