

Givaudan[®]

ENGAGING
THE
SENSES



Sustainability Report 2013

Welcome to the Givaudan 2013 Sustainability Report

As our sustainability strategy matures and evolves, so too does the way in which we choose to communicate on our activities. Our aim is to provide a global snapshot of our approach, underpinned by the fine detail of KPI metrics.

This year we have broken with previous convention by creating a Sustainability Reporting Suite that includes the Sustainability Report itself, plus a Global Reporting Initiative (GRI) Technical Report. The latter follows the GRI 3.1 structure, which records detailed information about the Company, its materiality analysis, management approach and performance indicators. Our GRI Report is independently assured by Ernst & Young.

This Sustainability Report brings together many of Givaudan's sustainable activities across the organisation, undertaken in 2013. Though comprehensive, the information detailed in this document is not exhaustive of our sustainability efforts.

The Report comprises three distinct sections.

The introduction section includes an overview of our business, as well as framing our sustainable business model, our five-pillar Sustainability Programme, the bigger picture on our value chain, plus a Leadership Q&A.

The second section focuses on two of the most material sustainability issues, namely; Responsible Sourcing and Sustainable Innovation. Here we explore emerging trends, illustrating our response with case studies and a narrative on how we are proactive in both these areas.

Finally, we take a more detailed look at the progress made in 2013 in the performance section of the Report, which reflects the five pillars on which our strategy stands.

We hope you will find the initiatives and programmes outlined in our Sustainability Reporting Suite illuminating. The business, most notably our employees, have made great efforts in 2013 to take another major step forward on our journey to becoming not only the commercial leader in fragrances and flavours, but also the most sustainable company within the industry.



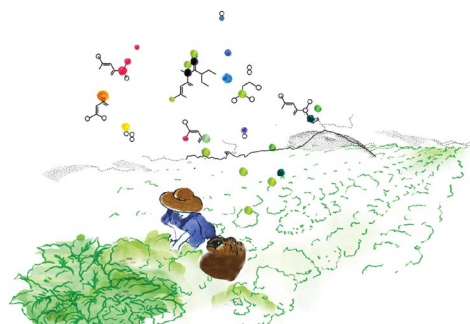
About this report



Our business

Givaudan is the world's leading fragrances and flavours company. Operational in 82 locations globally, our 9,331 employees are dedicated to pushing the boundaries of what's possible. Customers in many industries rely on our ability to innovate, advise and partner, helping them to find solutions and create products that make the world taste great and smell wonderful.

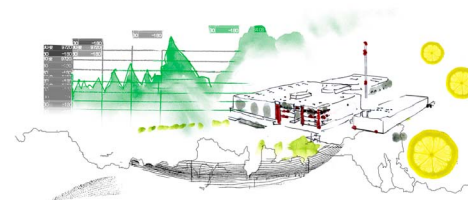
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Our view

Doing business in a sustainable manner is both a business imperative that drives profitability, and a responsible approach that considers our impacts on people and the planet. Our aim is to be 100% sustainable by design. This covers the spectrum of our activities, from sourcing ethically to innovating ingeniously. Our view is that profit and principles go hand in hand, each supporting the other.

- 12 **Sustainable Innovation:**
Meeting challenges, creating opportunities
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Creating benefit across the value chain



Our performance

Givaudan's sustainability cycle runs annually, culminating in the publication of our Sustainability Reporting Suite in March. Our five-pillar Sustainability Programme is now in its fifth year, and its performance is measured against KPIs informed by the United Nations Global Compact (UNGC) and the Global Reporting Initiative (GRI). For 2013, we have created a separate GRI Technical Report as a complement to this publication.

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For more information

Our GRI Report contains additional sustainability disclosures, adhering to application level B+. The content of the GRI Report has been independently assured by Ernst & Young.



See the GRI Report for full disclosure of performance

Our business

As the world's foremost fragrances and flavours company, we regard sustainability as a strategic imperative that helps us to improve lives, aid communities and drive our commercial objectives.

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Our sustainable business model

Givaudan has many aims, looking to satisfy our customers' needs and be commercially successful. In doing so we seek to develop a business that protects the environment, sources materials in a responsible and sustainable way, uses materials and energy efficiently, creates a safe environment for our employees, and advances the social and economic conditions of the communities in which we operate. Through innovating products that successfully combine performance and sustainability, we aim to enhance our competitiveness while operating a sustainable business model.

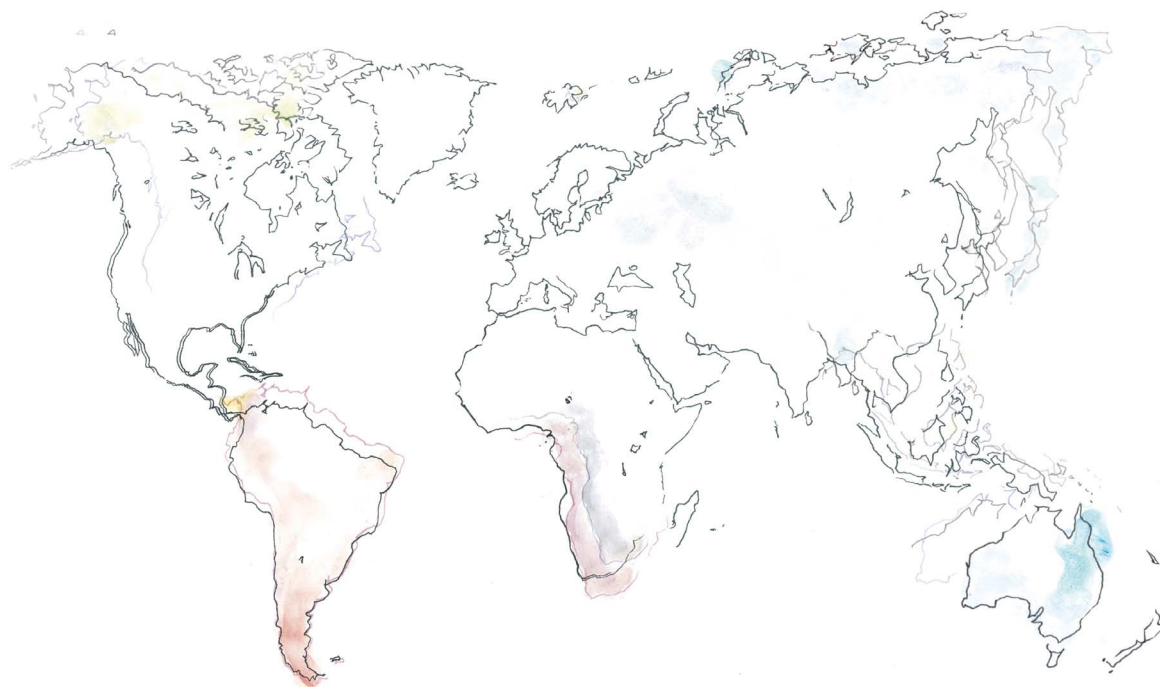
Creating products that customers use every day doesn't mean that we just think, or operate, from one day to the next. Givaudan has ambitious plans to ensure that we can add value for our customers, suppliers and other key stakeholders well into the future. That value includes a conscientious approach to helping safeguard the planet. And as the world's economies open up, we have ambitions to reach even more consumers – particularly in emerging markets.

This ambition raises some interesting questions. We all share a single planet, so how can we make more products using less energy and fewer natural resources? Are natural ingredients always better? And, as supply chains grow ever more complex, how can we help customers and consumers make more sustainable choices?



The answers are not always straightforward – far from it. We are tackling them head on. We realise that our direct operations represent a small but important part of our total impact. So it's vital that we consider the impacts of activities across our entire supply chain and work together with others across industries. As the largest fragrance and flavour business in the world, with more than 6,000 customers and over 2,000 raw material suppliers and a presence in 82 locations, we can make a huge difference.

We're making good progress. We've started to understand and measure the impacts of our products, from source to consumer. And we're partnering with customers and suppliers to create ever more efficient and healthier products, as well as goods that use natural resources sustainably. Thanks to these collaborations, we determine the most significant impacts, helping to make the entire industry more sustainable.



9,331

Employees

25%

Approximate market share

33

Manufacturing sites

82

Locations worldwide

“The need for business to take a sustainable approach has never been greater. The perfumers’ palette faces many pressures. Our future depends upon the actions that we take today. I am proud that we are able to take steps each year that improve our ways of working, inspire our suppliers and give consumers the confidence to continue to enjoy fragrance. We are on a journey to build the changes that will shape our future.”

Michael Carlos
President Fragrance Division











“Collaboration is a requirement when it comes to sustainability. No one can accomplish change by themselves. It is about developing practical solutions to common challenges. 2013 is another year in which we showed great progress and received recognition.”

Mauricio Graber
President Flavour Division

Our five-pillar Sustainability Programme

Givaudan's Sustainability Programme is built upon five pillars that inform and support all our sustainability initiatives and actions.

Our vision

 <h3>Procurement</h3> <p>We source materials in ways that preserve our environment, stimulate the development and well-being of communities and safeguard the efficient use of precious resources.</p> <p>Progress</p> <ul style="list-style-type: none"> • 100 suppliers have been audited, and 248 suppliers are now on Sedex • Continued to source certified sustainable Palm (Kernel) Oil and derivatives <p> For more information see page 35</p>	 <h3>Employees</h3> <p>We attract, develop and retain talented, creative professionals who feel passionate and proud of the work done in our Company and who are empowered to contribute to a sustainable society.</p> <ul style="list-style-type: none"> • The current percentage of female employees in Givaudan's senior leadership positions increased to 17.9% • Our LTI (Lost Time Injury) rate reduced by 57% against our 2009 baseline <p> For more information see page 37</p>	 <h3>Innovation & Development</h3> <p>Givaudan leads in creating consumer-preferred flavours and fragrances that are designed and developed in line with sustainability principles in order to satisfy current and future needs.</p> <ul style="list-style-type: none"> • Fragrance Division fully compliant with REACH and successfully completed required registrations • Surpassed our target to beat our forecast of CHF 100 million of incremental sales growth for Health and Wellness products <p> For more information see page 39</p>	 <h3>Operations</h3> <p>We continuously drive operational excellence without compromising the environment or the health and well-being of our employees and the communities in which we operate.</p> <p>Per tonne of product against 2009 baseline:</p> <ul style="list-style-type: none"> • 13.4% reduction in energy consumption • 6.4% reduction in municipal and groundwater use • 19.9% reduction in direct and indirect CO₂ emissions • Our total weight of incinerated and land-filled waste by type and disposal decreased by 14.4% <p> For more information see page 41</p>	 <h3>Customers & Markets</h3> <p>We actively engage with our customers to ensure that all of our products promote the health and well-being of people and preserve our planet. We do this by encouraging our business partners to support our goals throughout the complete lifecycle of their products.</p> <ul style="list-style-type: none"> • Partnership with Diptyque on sustainable ylang ylang • Partnership with AkzoNobel on sodium reduction solution <p> For more information see page 44</p>
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Materiality

Our strategy reflects the issues that we have identified as most important to our business and our stakeholders. In 2013, we revisited our materiality matrix, which maps out these issues.



See the GRI Report for more information on materiality

The bigger picture

Operating a business with a global reach brings environmental, social and economic consequences.

Working with over 2,000 raw material suppliers and servicing thousands of customers means that we have a responsibility to minimise impacts wherever possible – and not just at the point of production or delivery, but right across the lifecycle of the products we help to create.

Our objectives are to both understand and limit negative impacts. The following infographic reveals the areas in which the five pillars of our Sustainability Programme marries with our value chain.



Upstream risks and opportunities:

- Raw material price volatility and availability
- Fragile natural resources and environments
- Climate change and its affect on natural environments
 - Global supply chain complexity
 - Community prosperity and well-being

Downstream risks and opportunities:

- Customer cost control and demand for value
- Demand for products with reduced environmental lifecycle impacts
- Demand for healthy and natural products
- Remove social non-compliances from supply chain
- Increasing interest in product origin and traceability
- Growing consumer spend in developing and emerging markets

Leadership Q&A



Gilles Andrier
Chief Executive Officer

Givaudan’s sustainability strategy has wide-ranging consequences for the business, our stakeholders and society. Gilles Andrier and Joe Fabbri address some of the key issues that put our sustainability efforts in 2013 into perspective.

In terms of our overall performance, are we where we want to be in 2013?

Gilles Andrier: I’m very pleased with our progress and current position. Our sustainability approach is integral to the Company’s global business strategy, and in some areas we’re ahead of where we expected to be, especially in relation to our ambitious 2020 targets. For example, we’ve really developed our approach to Responsible Sourcing over the last few years. We’ve also made significant progress in terms of our eco-efficiency targets, which are recorded on the right side. I’d say the overall picture is very positive but there is room for improvement as we continue on our journey. For example, I would like to see further progress in some operational areas and in embedding sustainability requirements when designing new capital projects.

What would you say are the biggest achievements in 2013?

Joe Fabbri: Along with our own internal progress, a number of sustainability achievements have been translated through



Joe Fabbri
Global Head of Human Resources,
EHS and Chair of Sustainability

partnering with external entities such as the Carbon Disclosure Project (CDP), Sedex and AIM-PROGRESS. Our promotion to ‘A’ band, CDP’s latest Climate Performance Leadership Index recognition, is testament to our on-going eco-efficiency programme. Secondly, our success with Sedex registrations – 248 suppliers and counting – is a major achievement in driving Responsible Sourcing practices as far along the supply chain as possible. Finally, as a relatively new member of AIM-PROGRESS, the fact that one of our staff has been asked to become a member of the Leadership Team of this eminent organisation is truly something to be proud of. There are myriad achievements this year, but these three are very noteworthy.

To what degree has our sustainability progress in 2013 impacted on our commercial objectives?

GA: Sustainability impacts our commercial performance in a number of ways. There is a direct relationship between Sustainable Innovation and new revenue opportunities. These result from increasing demand for products with Health and Wellness

Our KPIs

- Energy consumption: 20% reduction, per tonne of product, by 2020
- Water use: 15% reduction, per tonne of product, by 2020 (for municipal and groundwater)
- Direct and indirect CO₂ emissions: 25% reduction, per tonne of product, by 2020 (indirect relates to purchased energy and not energy used by others, i.e. our raw materials suppliers)
- Total weight of incinerated and land-filled waste by type and disposal: 15% reduction, per tonne of product, by 2020

Progress in 2013

- Per tonne of product against 2009 baseline:
 - 13.4% reduction in energy consumption
 - 6.4% reduction in municipal and groundwater use
 - 19.9% reduction in direct and indirect CO₂ emissions
 - Our total weight of incinerated and land-filled waste by type and disposal decreased by 14.4%

benefits, positive social impacts or improved environmental performance. Across the organisation, with progress on our eco-efficiency targets, we are avoiding additional operating costs in our manufacturing operations. These are tangibles, where we’re driving revenue and reducing energy, waste and water consumption. Through our efforts to secure the supply chain over the long term, we can also help to ensure quality and availability, which is a challenge in a volatile environment. Additionally, our employee engagement surveys show that

Leadership Q&A

people are proud to work for Givaudan and recognise that the Company is serious about sustainability. It's part of the Givaudan culture, and that also impacts positively on our performance.

To what degree are partnerships playing an increasing role in our efforts to be sustainable?

JF: There are really two aspects to this. As vocal members of associations such as the Natural Resources Stewardship Circle (NRSC), AIM-PROGRESS and the United Nations Global Compact (UNGC), where we abide by its sustainability principles, we are partnering within movements that make a real difference. However, we are also partnering commercially with our customers and suppliers for mutual benefit. It's clear that by aligning efforts we can achieve so much more than by acting alone.

How do our efforts in 2013 set us up for 2014?

GA: We want our employees and other stakeholders to recognise Givaudan as leaders in sustainability, so everything we do has to be concrete. That means looking critically at our end-to-end processes and communicating simply and clearly on what we're doing, and not being afraid to say how we could be better in certain areas. 2013 has seen us make significant strides as a sustainable business and employer, so this allows us to consolidate and build on these successes in 2014 with ever-greater confidence, which will be reflected in our employees' ability to act sustainably, with pride.

How would you evaluate our Green Teams' efforts this year?

JF: I'm excited to see that more and more sites are participating in the Green Team Awards. We're continuing to build a positive momentum, and have achieved many great things locally. Over time, I think we've seen a maturing of our Green Teams' approach, from purely behavioural responsibilities, such as encouraging our staff to conserve energy in the workplace, to a broader array of initiatives with a socially responsible dimension, like donation, volunteering and building a vegetable garden for the children's shelter in Soweto or the development of a unique Braille Trail in Mount Olive. Activities demonstrate creativity, but more importantly show how a mindset of sustainability is now widespread across the Company. Building on this, we're now developing a portfolio of areas that the Green Teams can consider in order to further drive value for the business. This will hopefully provide more structure and guidance on how to maximise their efforts.

Why has Givaudan decided to separate the GRI Report from the Sustainability Report in 2013?

GA: We've developed our reporting approach because we want to provide different stakeholders with the information they are most interested in, and in a format that suits their needs. The GRI Report details our performance and management approach, which will be of interest to socially responsible investors and analysts – especially since the

report has been independently assured by Ernst & Young. The Sustainability Report presents our activities in an engaging editorial style, focusing on two key issues – Responsible Sourcing and Sustainable Innovation. We believe this approach will appeal to customers, suppliers and our own people. Presenting the two documents as a 'reporting suite' gives stakeholders the choice to access content in a way that really meets their needs.

Why have we chosen to focus on Sustainable Innovation and Responsible Sourcing in the Sustainability Report?

JF: Sourcing and innovation are two of the five fundamental themes that make up our five-pillar sustainability strategy. Innovation is critical for Givaudan's on-going growth and success and the optimal way to support the business with innovation was to make it part of the Sustainability Programme. Sourcing is clearly one of the most significant areas of interest that our stakeholders talk to us about – especially our customers. We need to protect how we source our ingredients to ensure a secure supply from vibrant, healthy communities of producers. By focusing on these two issues we hope to demonstrate that Givaudan leads the industry and is at the forefront of the debate on how to overcome some of the obstacles facing the fragrances and flavours sector.

Our commitment to UNGC principles

Our Sustainability Report also acts as our UNGC annual Communication on Progress (COP). This is the third year running in which our Sustainability Report has met the GRI B+ Application Level and has been independently assured by Ernst & Young.

We would like to express our continued strong support for the UNGC. We will continue working to make the UNGC and its principles part of the strategy, culture and day-to-day operations of our Company and do the same in the areas covered by our sphere of influence. We support public accountability and transparency, and therefore commit to reporting on progress annually according to the UNGC COP policy.



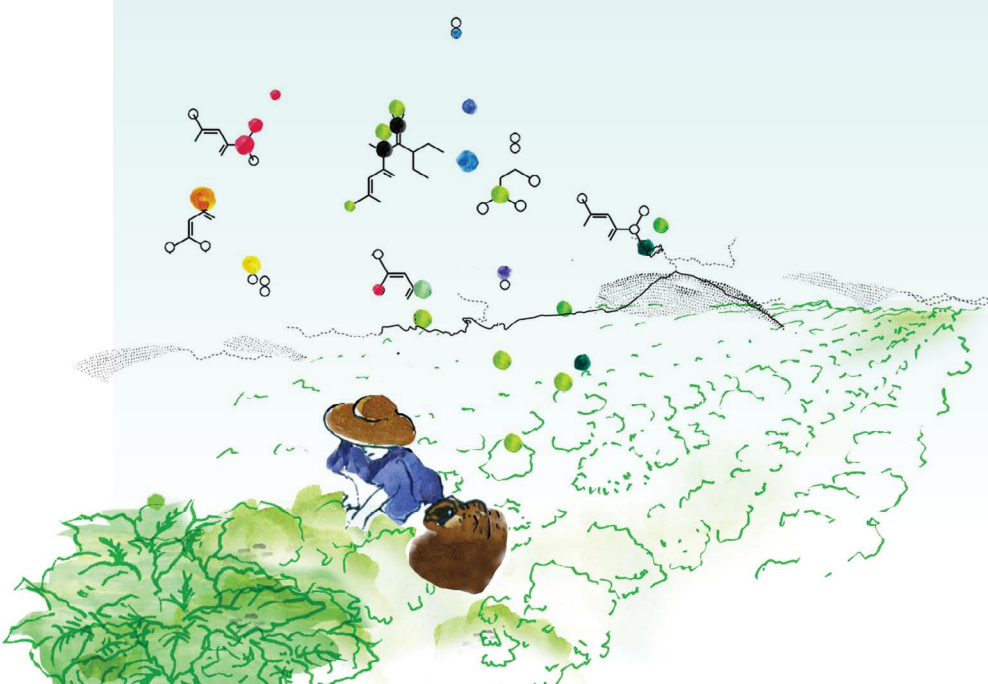
Gilles Andrier Chief Executive Officer



Joe Fabbri Global Head of Human Resources, EHS and Chair of Sustainability

Our view:

Exploring trends. Shaping futures.



↓ Sustainable Innovation

Meeting challenges, creating opportunities

Givaudan's passion for innovation defines us: from the chemistries and processes we apply to the technologies, tools and trends we create, and our ability to shift the debate on sustainable issues. Innovation opens up exciting new horizons, creating opportunities for our business and our customers.

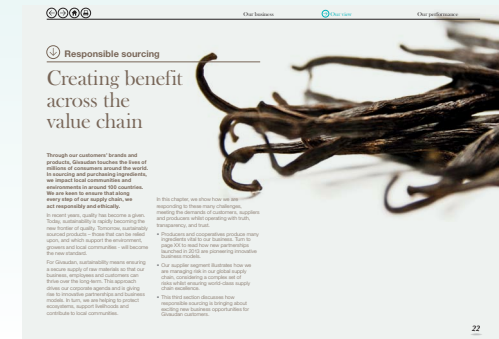


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↓ Responsible Sourcing

Sourcing responsibly to create benefit across the value chain

From our biggest customers to our smallest suppliers, creating value for all parties along the supply chain is our primary aim. Environmentally sustainable agriculture, fair wages, creative opportunities and stable communities: our commitments go far beyond simply improving the supply chain. We're seeking a more transparent, fairer way of trading globally.



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↓ Sustainable Innovation

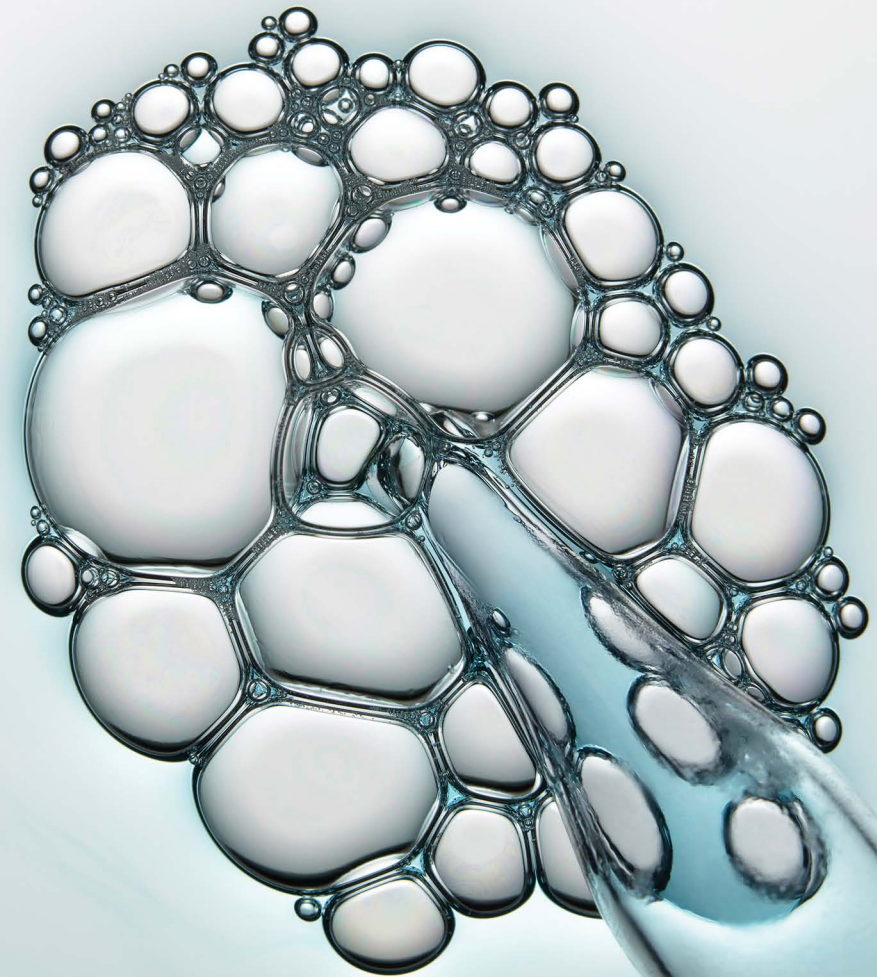
Meeting challenges, creating opportunities

Just a few years ago, companies' commitment to sustainability was clouded by the view that 'doing the right thing' was a barrier to performance and profitability. But the corporate perspective has shifted dramatically. Today, it is widely acknowledged that Sustainable Innovation is one of the key drivers of growth: creating smarter products and services is good for people, good for the planet and good for business.

As the world's foremost fragrances and flavours company, Givaudan has been instrumental in leading a sea change in sustainability within the industry. At the heart of our approach is the belief that innovation must not only respond to global trends such as resources scarcity, climate change and biodiversity loss, but also anticipate and influence change. Givaudan has the ambition and ability to shape the future within the fragrances and flavours industry.

In this section we look at how Givaudan innovated on many levels in 2013: from the scientific processes that our ingredients and brands are built on, to how we're doing 'more with less' through reduction, concentration and compaction. We also highlight our contribution to global trends in Health and Wellness. Finally, we illustrate how Givaudan collaborates with peers, industry bodies, governments and regulatory authorities to drive new and better harmonised standards.

Sustainable Innovation is a challenging topic. Givaudan's focus is to meet these challenges in the pursuit of opportunity.



↓ Sustainable Innovation

The science of scent and taste

Givaudan has a long track record of breaking new ground. Providing new, better, more ingenious ways to serve our customers is central to our philosophy of progression. Today, however, we are increasingly aware that innovation alone is not enough. We have to innovate for reasons that go beyond unique and superior product enhancements, aiming to develop solutions that are 100% sustainable by design. That is why innovation and development is a key pillar of our five-year strategy.

Givaudan's reputation is founded on our capabilities in research, science and technology. In fact, we invest more than any other industry player, and our research and development capacity is continuously expanding. Green Chemistry is one such area of activity that is reaping responsible rewards for Givaudan and our customers.

Greener is cleaner

Green Chemistry is nothing new. The term was coined in the 1980s, and came to prominence in the late 1990s. In recent years, however, Green Chemistry principles have underpinned efforts in the manufacturing industries to be more sustainable.

Minimising impacts, maximising resources

Chris Newman is leading the work in this area for the Fragrance Division. He explains the fundamentals of Green Chemistry, and how its principles are being applied in our ingredient design and manufacturing processes; "In simple terms, Green Chemistry looks at pollution prevention at a molecular level. We can identify ingredients that may be harmful to the environment at an early stage, and thus reduce, or even avoid, such substances. Our voluntary membership of the EPA Sustainable Futures Programme in the US, where we are now considered graduates of the initiative, is recognition of our efforts. Green Chemistry programmes also allow us to optimise the use of our own resources including energy and raw materials, while minimising waste."

Furthermore, Green Chemistry approaches help Givaudan to address sourcing concerns. This may be in relation to finding synthetic alternatives, which when studied in detail can have a preferred eco-efficiency footprint, as is the case for menthol. Equally, it may relate to less predictable natural ingredients, where crop yields and product quality vary with climatic conditions, resulting in uncertainty of supply. Thanks to advances in bioscience, Givaudan is now able to take abundant, simple ingredients and produce molecules that can be otherwise difficult to obtain.

This helps stabilise the cost and supply of materials built upon Green Chemistry processes, with benefits for Givaudan and our customers.

Achieving greater transparency in 2013

Green Chemistry offers many possibilities then, addressing Givaudan's own environmental impact while enabling innovations that also drive customer opportunities. Chris details significant activities in 2013; "Last year we undertook a wide-ranging assessment of Givaudan's chemistries to establish baseline performance measures for our manufacturing processes. Green Chemistry principles are the framework for these activities. In 2013 we continued

our work and have achieved much greater insight on internal issues, such as materials consumption and waste generation at our sites."

"In terms of investment, 2013 saw the opening of a catalysis laboratory at our facility in Dübendorf, Switzerland. It means we now have the in-house capacity to identify new catalysts to greatly improve our chemistry processes, using less energy, for example. On a commercial level, we are engaging with key customers more closely, discussing their needs and relating them back to our Green Chemistry work."



Jalapeño* developments

Stabilising the supply of an essential ingredient

Givaudan has developed a viable technology that forms the basis of natural savoury ingredients widely used in the food and beverages industries.

This new technology provides aromatic qualities associated with the jalapeño and the green bell pepper. Gary Kleman, Senior Research Manager, and Vaughn Litteral, Research Scientist, oversaw its development. Created via a fermentation process based on Green Chemistry principles, the technology has enjoyed a successful first year of commercialisation, led by Erik Hassid, Product Manager Savoury.

Versatile applications

Guillaume Blancher, Benefit Platform Manager Science and Technology, Flavour Division, speaks of its applications; "This unique technology contributes to vegetable flavours, as well as for use in coffee flavouring. So it is very beneficial to the snacks and savoury business, but can also enhance beverage flavours. 2013 has seen the roll-out of this material by our technical community in Flavour Creation and Application, mainly in Europe and North America, where the use of naturals is expected to be the highest."

**Also referred to as Pyrika*



↓ Sustainable Innovation

Why smaller means smarter

Sometimes the innovation challenges we face are simply framed: produce better results with fewer ingredients, reduce packaging and transport logistics and shrink your carbon footprint across the board. Achieve this and take a giant leap towards being a more eco-efficient business, benefiting customers, consumers, and the world itself.

Of course, meeting these challenges is anything but simple. For Givaudan, however, 'doing more with less' is now a key driver in developing ingredients for our fragrances and flavours – so what may have once been the exception is now the norm. Our strategy is to reduce, compact or concentrate products, where possible, using innovative science to produce smaller, smarter solutions. This lessens our use of raw materials while retaining, even increasing, the quality of performance our customers expect.

Coffee anyone?

Today, there really isn't such a thing as 'a cup of coffee': certainly not if you're looking for a caffeine hit on the high street or at the shopping mall. In the many global retail coffeehouses that are now a regular part of daily life, you never ask for just a cup of coffee: more likely a *caffè latte macchiato*,

or a *mocha frappuccino lite*. The point is that coffee consumption has exploded in the last decade, in the home as well as out and about: think coffee capsules in the kitchen. The issue is that coffee is a natural resource whose supply struggles to keep pace with demand.

Givaudan's Coffee Solid Replacement Technology offers one solution in the area of instant coffee. TasteEssentials™ Coffee flavours replace coffee solids in instant drinks and enhance authentic coffee aromas.

Instant solutions

Sjors Peters, Givaudan Product Manager Beverages EAME, explains how we're helping to alleviate the bean supply burden; "Through our TasteEssentials™ Coffee Flavours Programme we're building solutions for single-serve instant coffee applications, which reduce the use of dry, soluble coffee solids. These provide our customers with multiple benefits, offering supply assurance, price stability and cost reductions, while delivering optimal flavour performance that maintains brand integrity. The last point is particularly important, as coffee consumers are very brand loyal, and demand specific balanced coffee profiles around sweetness, bitterness, acidity and aroma."

Givaudan's analytical research identifies the difference between brewed and instant coffee and Arabica and Robusta profiles. We discover unique compounds that deliver specific coffee characters, including compounds not normally associated with coffee. Additionally, Givaudan works with champion baristas: coffee experts who enable us to further hone the bean characteristics. This has allowed Givaudan

to build a comprehensive toolbox to achieve a wide range of authentic coffee flavours.

Sjors details how this work has resulted in specific solutions for coffee solids reduction; "We have developed two Coffee Solid Replacement flavour technologies: one for 3-in-1 coffee mixes and another for black coffee, as each application has specific requirements based on particle size and appearance. With this technology we can achieve significant reductions in coffee solids."

TasteEssentials™ Coffee Flavours Programme offers solutions for single-serve instant coffee applications, which reduce the use of dry, soluble coffee solids



Take a look at how we're reducing energy and water consumption with Powder Juice Drinks on page 40 of Innovation & Development in the Performance section of the Report.





Expert view

Beat Studinger

Givaudan Fragrances France



Consumers want less, so we do more

“Consumers in developed markets play a major role in demanding more environmentally sound products without compromising on price or performance. This makes its way down to Givaudan through retailers and our customers.

One answer to this demand, strongly advocated by retailers, is to move to more concentrated product formats, thus reducing the environmental footprint along the whole supply chain. For example, in the laundry segment, concentration, together with lower temperature washing, have become principle vectors for innovation. It’s a trend that Givaudan has seen over the last decade in mature markets and we are now increasingly looking to meet the same needs in emerging economies.

In 2011, Givaudan established a Fragrance Compaction programme. Building on our first experiences in the fabric care segment, we initiated this vast programme to look at innovative ways to design much more concentrated fragrances for all product categories. Using higher impact, higher value-added ingredients to deliver fragrance performance that also meets sustainability criteria we are able to offer an increased value proposition to customers. We want to accelerate this programme in the coming years to make our new creative approach the norm for future fragrance design.”

↓ Sustainable Innovation

Greater choices, healthier futures

Mention sustainability and thoughts often turn first to environmental challenges, like resources depletion and climate change. But the Health and Wellness of people, the stewards of our planet, is equally important. That is why it is increasingly the focus of governments and healthcare policymakers.

Health and Wellness is a comprehensive topic, covering people’s mental and physical well-being. One significant area of concern relates to the nutritional quality of the food that people eat, with excesses in fat, sugar and salt cited as requiring urgent attention. This has long been recognised in the West. But it is now identified as a problem elsewhere in the world, including Asia, the Middle East, Latin America and even Africa. Consequently, Health and Wellness issues have become key drivers in fundamentally shifting the direction of the global food industry.

It is beyond question that diet quality can be increased by reducing the consumption of calorie-dense foods, such as those high in fat, sugar and salt.

For Givaudan, and our customers, this presents huge challenges and exceptional opportunities. Givaudan takes a strategic approach to Health and Wellness, which is one of our five pillars of growth.

Product quality, price and taste will always be important to the consumer, but now the nutritional content of foods is a key factor too. We can help predominantly through creating flavours and taste sensations that lessen the reliance on salt, fat and sugar in our customers’ products. This in turn gives them new opportunities to diversify, opening up choice with ever-healthier options.

Leading in Latin America

Givaudan’s TasteSolutions™ programme enables our customers to achieve superior taste performance in their brands and products. TasteSolutions™ is a broad offering, with solutions in salt, sweetness, umami (the fifth taste along with sweet, sour, bitter and salty) and mouthfeel. As well as providing taste enhancements, Givaudan also delivers healthier options in these areas, utilising the industry’s most comprehensive taste ingredient palette.

In Latin America, we are now spearheading the growth strategy for Flavours with our TasteSolutions™ technologies. This strong brand, supported by an extensive global programme in taste research, provides customers with the quality assurance and confidence they require for the development of healthier products.

Julia Gaeta is Head of LATAM Flavours Communications. She explains why Givaudan chose to host a series of TasteSolutions™ customer seminars in 2013, in five countries across the region; “Health and Wellness issues are of increasing importance to many governments in Latin America. Diseases related to poor diet have increased dramatically in the last decade, across the continent. Now, new regulations are either in place or are planned, looking to legislate for reductions, and greater transparency, in fat, salt and sugar levels.”

Partnering with local nutritionists

Givaudan's theme for the 2013 seminar programme held in Argentina, Brazil, Chile, Colombia and Mexico addressed the evolution of non-communicable chronic diseases, such as obesity, heart disease, diabetes and hypertension, and their local impact. We partnered with recognised nutritionist doctors who are expert in their respective fields. Central to our message was how we can help to change one of the most important consumer barriers to healthier products, which is the perception of ‘low taste’ in reduced fat, salt and sugar products.

Julia points to the success of the seminars and how they demonstrate Givaudan's leadership in combatting local Health and Wellness issues; “This series of seminars was unique, and was welcomed by many of our customers. It illustrates how proactive we are in partnering across industries, leading the way in providing solutions to a major societal problem. Givaudan has a value proposition that helps the food and beverage industries in Latin America to create delighting healthy products.”

Making Ready-To-Drink teas an even healthier option

In North America, Ready-To-Drink (RTD) teas are gaining popularity, partly in response to busy lifestyles, but also as an alternative to sugar-rich carbonated drinks. Tea already has a very positive consumer perception as a health drink, rich in antioxidants that can help to protect the body against disease.

Amber Cartwright, Product Manager Beverages, North American Marketing, explains how Givaudan is enabling the NOAM beverages industry to harness RTD teas' exciting potential; “TasteEssentials™ Tea RTD Tea Review is a programme launched in 2013 that offers customers six areas of development, including TasteSolutions™ for Reduced Calorie Teas.”

Less calories, same great taste

With TasteSolutions™ for Reduced Calorie Teas customers can now develop products across the spectrum of consumer demand, with low-calorie, mid-calorie and no-calorie naturally sweetened teas that all focus on healthier lifestyle choices. We showcase our reduced calorie prototypes with and without TasteSolutions™ natural flavours so that customers can see the benefits our solutions bring.

Customers are fully engaging with the reduced-calorie tea offerings with products expected to be ready for consumers in 2014. Amber points to the key driver for take-up; “Consumers want reduced sugar teas, but they will not accept a poor taste experience. That's where we can help, because our TasteSolutions™ tools can deliver an increase in sweetness perception and a delicious taste experience without the negatives often associated with artificial high intensity sweeteners or natural stevia-based sweeteners.”

We're confident that Givaudan can be at the core of further building the RTD tea segment, for both health and taste reasons.



Bringing taste balance to stevia's natural sweetness

Stevia rebaudiana, commonly known as 'sweetleaf' or simply stevia, is a shrub plant in the sunflower family. As a source for sweeteners and sugar substitutes it displays exceptional properties: steviol glycoside has up to 300 times the sweetness of sugar, but extracts also have a bitter or liquorice-like aftertaste at high concentrations.

As a sugar substitute its obvious benefit is that it delivers fewer calories than sugar. Initially, its use in food and beverages was driven by niche 'health foods'. Today, however, stevia is fast outgrowing its niche brand status, making its way into more mainstream iconic soft drink brands.

"As part of our TasteSolutions™ Sweetness programme, Givaudan helps customers make stevia-based formulations taste closer to sugar." So says Janine van Kampen, Global Product Manager Taste Sweet; "Stevia provides opportunities to improve the quality of sweetness, mouthfeel and aroma profile with a natural product. Customers are increasingly using stevia to expand their offer in mid-calorie products, reducing sugar levels in 'regular' drinks, to help consumers lower their caloric intake."

Filling the gaps

Givaudan's sensory research has identified key taste 'gaps' for stevia versus sugar: these include delayed sweetness onset and lingering sweetness. Off-notes are also a key issue, depending on the quality of stevia used. Bitterness, metallic aftertastes and a liquorice note are all associated with stevia. With regards to mouthfeel, sugar adds body to products, and without it products can taste 'empty'. Finally, stevia can negatively alter the profile of characterising flavours, such as orange.

Janine comments on how TasteSolutions™ Sweetness addresses these shortfalls; "Our tools enhance, improve and balance sweetness profiles. We take a holistic approach in understanding specific taste gaps. This helps customers to design a complete solution through rebalancing characterising flavours, masking off-notes, and base optimisation."

Finally, Janine highlights the positive market response; "Givaudan has had excellent customer feedback on our stevia-based formulations, some commenting that our products are 'the best they've seen' in the industry. One customer has even increased their sugar reduction target thanks to our solutions."



Check out our partnership with AkzoNobel on sodium reduction, on page 45 of Customers & Markets in the Performance section of the report

"As part of our TasteSolutions™ Sweetness programme, Givaudan helps customers make stevia-based formulations taste closer to sugar."



↓ Sustainable Innovation

Going above and beyond

Givaudan's primary objectives are to operate as a profitable and sustainable business. In the realm of innovation our efforts support these goals. As an industry leader however, we innovate beyond our products, acting responsibly to push boundaries and advance standards. 'Giving back' is now central to Givaudan's philosophy of 'Going forward'. In this section we look at how our regulatory initiatives and voluntary actions demonstrate an obligation to go above and beyond compliance.

For the best part of a decade, Givaudan's Fragrance Division has explored alternative methods to animal testing. Our efforts have borne fruit, not only for us, but the world at large, with the development of our KeratinoSens™ Assay, an invitro screen for the skin sensitisation potential of chemicals.

Andreas Natsch is Senior Research Fellow Bioscience, Fragrance Research Dübendorf. Andreas has been responsible for leading a team in developing the KeratinoSens™ Assay. He provides some background to its evolution; "We began working in this area in 2006. Initially, our explorations were driven internally. However, our customers, particularly those in the cosmetics industry,

also expressed the need for a solution in anticipation of the 7th Amendment of the EU Cosmetics Directive, which came into force in early 2013."

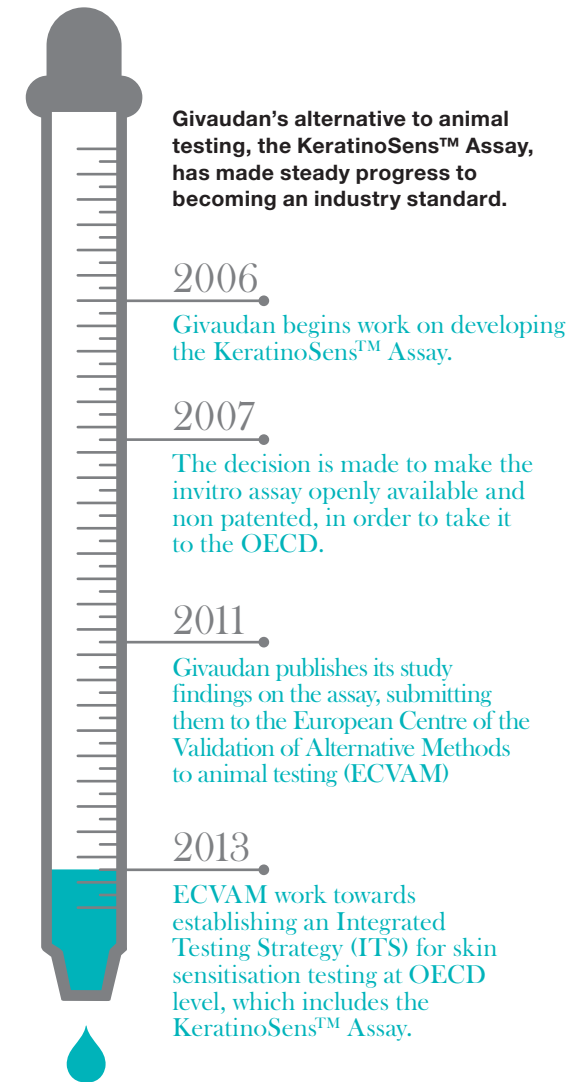
Sharing with the world

The decision was made to not make the KeratinoSens™ Assay proprietary to Givaudan. Andreas points to the rationale; "We decided that the invitro assay should be openly available, rather than be patented, so we could take it to the Organisation for Economic Co-operation and Development (OECD). The OECD's aim is to improve the economic and social well-being of people everywhere – a cause that we wished to contribute to."



One of the key challenges in developing regulatory-approved animal test alternatives is that they need to produce reliable results that can be replicated in laboratories other than those in which the tests were developed. The KeratinoSens™ Assay has now been shared and the results validated in independent laboratories, as well as in cosmetics and chemicals industries labs.

Andreas sums up in this way; "While the KeratinoSens™ Assay is a landmark piece of research for Givaudan, it is by no means our only effort to innovate for the better good. We live in an interconnected world, and that applies to businesses too. Openly sharing such developments will reap rewards for Givaudan, our customers, and the industry too."



Learn more of the progress made on the KeratinoSens™ Assay in 2013 on page 40 of Innovation & Development in the Performance section of the report.

At the heart of the debate

The European Partnership for Alternative Approaches to Animal Testing (EPAA) is a voluntary collaboration of entities, which includes the European Commission, trade associations, and companies from seven industry sectors.

Graham Ellis is the Head of Global Fragrance Toxicology and EAME Regulatory Affairs for Givaudan. Graham explains how the EPAA operates; “The EPAA acts as a focus for centrally coordinating activities on alternatives to animal testing in Europe. That makes it a natural fit with Givaudan’s commitment in this area. Members share knowledge and resources to quicken the development, validation and acceptance of alternative approaches to animal use in regulatory testing.”

Forming opinion with multiple-stakeholders

Graham points to the important fact that EPAA is not just a fragrances’ industry body; “The EPAA is a multi-stakeholder forum. So there are representatives from the EU commission, from NGOs, as well as sectors that include the chemicals, pharmaceutical and veterinary industries. Our involvement with the EPAA gives us a strong, credible voice on this issue, which means we can be instrumental to debate and developments in animal testing alternatives.”



↓ Sustainable Innovation

Safety matters first and foremost to our customers

Givaudan established a materiality matrix in 2011. This framework was created from dialogue with our customers and other stakeholders, and identifies the key sustainable themes that concern them. The matrix is annually reviewed, and consistently the issue of most concern relates to product safety and regulatory compliance. For more information concerning Givaudan’s materiality matrix, please refer to the GRI Technical Report, page 10.

Driving the future of change

In North America, the US Environmental Protection Agency (EPA) programme encourages industry to reduce impacts to the environment. By identifying potentially risky materials early in the development process, organisations are able to find safer substitutes and processes before submitting them to the EPA.

Greg Adamson, Senior Vice President, Global Regulatory Affairs and Product Safety Fragrances, details our involvement with the EPA; “Givaudan constantly seeks raw materials innovation. As such we have to demonstrate the safety of our materials in order to register them for commercial use globally. The EPA manages the chemical control law in the US, and our relationship with them stretches back over 40 years.”

“Product safety has always been fundamental to Givaudan.”

EPA graduation

The EPA's Sustainable Futures Programme is a voluntary initiative. In 2013, Givaudan was given graduate status from the programme, as recognition of our consistency in developing ingredients that meet and surpass the EPA's Sustainable Futures criteria.

On average, Givaudan Fragrances registers three materials a year with the EPA. Greg explains how our efforts within the EPA Sustainable Futures Programme illustrate our approach to safety; "Product safety has always been fundamental to Givaudan. As the regulatory environment changes, the business has to evolve to meet the demands of an increasing focus on sustainability. When we submit a material, the EPA normally has 90 days to review it. As a graduate of the programme, this period is halved to 45 days. This means that not only are we able to produce safer aroma chemicals more reliably, but receive assessment and approval more quickly too, which saves time and money."

Leading a dialogue with the agency

Does Greg consider that our involvement in the initiative contributes to Givaudan's ability to lead the debate on sustainable industry standards? "Absolutely. As a result of our graduation, EPA's view of Givaudan is that we are a highly responsible manufacturer. That has resulted in us engaging in a new dialogue with them to assess materials with more appropriate criteria based on sound scientific evidence: that will be a win-win for all parties. The broader chemical industry has now joined us in this, and we are leading in a fruitful dialogue on building knowledge with the agency. So we can act as a standard-bearer for improvement on a much broader playing field."

“As the regulatory environment changes, the business has to evolve to meet the demands of an increasing focus on sustainability.”



Expert view

Greg Adamson

Senior Vice President
Global Regulatory Affairs and Product Safety Fragrances

Opening up new opportunities

"The Regulatory Affairs and Product Safety organisation is a key pillar in Givaudan's overall Sustainable Innovation strategy. We're enabling the business to develop novel technologies that achieve commercial benefits and sustainable solutions.

For example, we are the only fragrance company to have a comprehensive internal biodegradability laboratory. This enables us to develop and run various methods applied to meeting different demands globally. So we can look at developing biodegradability criteria and test data for both new and existing ingredients.

It allows our customers to think differently about our materials, and helps Givaudan to market our solutions in a way that would otherwise not be possible.

Givaudan's strengths in Fragrances Regulatory Affairs and Product Safety ensure that we are well placed to be both a business and innovation partner to fragrance customers worldwide."



Find out more about our Gold Standard Regulatory Compliance Engine (RCE) on page 40 of Innovation & Development in the Performance section of the report.

↓ Responsible Sourcing

Creating benefit across the value chain

Through our customers' brands and products, Givaudan touches the lives of millions of consumers around the world. In sourcing and purchasing ingredients, we impact local communities and environments in around 100 countries. We are keen to ensure that along every step of our supply chain, we act responsibly and ethically.

In recent years, quality has become a given. Today, sustainability is rapidly becoming the new frontier of quality. Tomorrow, sustainably sourced products – those that can be relied upon, and which support the environment, growers and local communities – will become the new standard.

For Givaudan, sustainability means ensuring a secure supply of raw materials so that our business, employees and customers can thrive over the long-term. This approach drives our corporate agenda and is giving rise to innovative partnerships and business models. In turn, we are helping to protect ecosystems, support livelihoods and contribute to local communities.

In this chapter, we show how we are responding to these many challenges, meeting the demands of customers, suppliers and producers whilst operating with truth, transparency, and trust.

- Producers and cooperatives produce many ingredients vital to our business. Turn to page [23](#) to read how new partnerships launched in 2013 are pioneering innovative business models.
- Turn to page [25](#) to read how our supplier section illustrates how we are managing risk in our global supply chain, considering a complex set of risks whilst ensuring world-class supply chain excellence.
- The third section, starting on page [29](#), discusses how Responsible Sourcing is bringing about exciting new business opportunities for Givaudan customers.



↓ **Responsible Sourcing**

Deep-rooted partnerships provide fertile ground for change

Environmental and ethical best practices are embedded in Givaudan's sustainability strategy. However, enhancing and refining our supply chain happens not in the abstract but out in the field. Our partnerships with producers, plantations and cooperatives dig deep into local issues, co-creating elegant solutions and long-term livelihoods.

Mutual benefits

Givaudan purchases large amounts of naturally sourced ingredients, often from remote communities or fragile ecosystems. Farming these materials can have an impact both on local society and the environment. It is imperative that we work closely with the producers and cooperatives that grow these precious materials to ensure that they can sustain high-quality crops for years to come.

These ambitions are managed by the new Origination team, implemented this year (see below), and are based on mutually beneficial partnerships: Givaudan can rely on a fine quality crop and farmers can optimise yields and enjoy a more secure, stable income. Together, we can help adapt to climatic changes and ensure fragrance and flavours ingredients remain an attractive prospect for future generations.

Origination puts resources at source

Givaudan's Ethical Sourcing programme, the first in the industry and established in 2007, seeks to address and uphold key practices for our most strategic natural ingredients. In 2013, we added a new dimension to this programme by establishing a dedicated Origination procurement team to manage the sourcing of selected crops directly in countries of origin.

Origination, as defined by Stéphane Zwaans, Head of Origination is about being as close to the source as possible; "We are now deploying new teams on the ground in our primary production regions. They enable us to gather market intelligence to drive security of supply and innovation. It also gives us greater control over the quality and provenance of our unique fragrance and flavours materials."

The scheme introduces two new sourcing models: proprietary Collection Networks and Farming Partnerships. The former enables Givaudan to team up with local producers and collect raw materials at source. Farming Partnerships allow Givaudan to collaborate with plantation owners to develop and purchase unique and exclusive qualities of iconic ingredients. Both scenarios

are characterised by alliances with local suppliers and facilitate the supervision of the production process.

Stéphane outlines the mutually beneficial nature of the new set up; "On the one hand, our initiatives help Givaudan secure a sustainable supply of quality natural ingredients. On the other, our vested interest means we can bring about social improvements in these areas. For example, we are supporting education through building schools and integrating agrarian techniques into the curriculum. This helps to stall rural exodus by encouraging a new generation of growers."

He concludes; "This multi-faceted operation helps establish a virtuous circle of sustainability along our complex raw materials supply chains. We currently partner with various stakeholders including leading environmental agencies and clients eager to participate in our initiatives in order to strengthen their own sustainability efforts."

Our partnerships with producers, plantations and cooperatives dig deep into local issues, co-creating elegant solutions and long-term livelihoods.

Working on the ground to harvest unique opportunities

On the island of Borneo lies an sustainable patchouli plantation. Thanks to a newly installed processing unit, local plantation owners, supported by Givaudan Origination teams, are cultivating a patchouli crop of a very unique quality.

This is our new Farming Partnership, a long-term agreement signed with GaiaOne and Kebun Rimau SDN BHD. The family-run plantation has committed to partnering exclusively with Givaudan to develop sustainable, ecological plantations. They also distil patchouli, an iconic natural raw material used in fine fragrance and functional perfumery.

Commenting on the very special nature of this plantation, Laetitia Vuilleminot, Origination Business Partner, stated; “The Kebun Rimau team reflects Givaudan’s own aspirations for the future of the fragrance industry. The plantation is a wonderful example of the difference that vision can make to a business.”

Hervé Fretay, Speciality Ingredients, explains some of the benefits that Givaudan and customers can expect from this patchouli; “Here, Givaudan enjoys exclusivity over the supply and sourcing of this raw material, prized for its aroma and its substantivity. An advantage of the Farming Partnership is that Givaudan is

assured of exclusive quality. In collaboration with perfumers, the team at source is developing tailor-made production of this essential oil to maximise creative fragrance opportunities.”



Partner perspective

Nicholas Graham

CEO, GaiaOne

“We are pleased to see this project move forward as it represents everything that we believe in. Relationships such as the Givaudan/GaiaOne partnership are the future for natural fragrance products. We very much hope that this is the first of many sustainable and transparent projects we will jointly nurture.”



Find out more about our Vetiver initiative on page 36 of Procurement in the Performance section of this report

⬇️ **Responsible Sourcing**

Driving a positive chain reaction

Givaudan has a responsibility to deliver on quality, creativity and a responsible, ethical supply. But these needs depend on supplier collaboration and an awareness of any potential pitfalls. From natural disasters to crop diseases, ensuring a secure supply of materials for our business and our customers comes down to identifying and controlling risk.

The complexity of Givaudan’s supply chain cannot be underestimated. We purchase 10,000 raw materials from over 2,000 raw material suppliers, globally. These include large factories in developed countries to small plantations in remote areas. Givaudan suppliers are categorised and assessed for their potential risk – the extent to which they have opportunities to introduce positive changes in their system. These risks include supply, health and safety challenges, Human Rights, political instability or risk related to weather, which could destroy a key crop and weaken a community.

It is the role of Givaudan’s Procurement department to monitor all these variables. Aisha Qureshi, Procurement Sustainability Manager, describes the risk assessment and supplier process; “Givaudan sources from three types of raw materials suppliers (Synthetics, Natural Commodities and Natural

Specialties), which cover natural commodities and high-value speciality ingredients. Some of these raw materials, such as mint, orange, or citrus, come with sourcing challenges. Still others, such as spices, vanilla or ylang ylang, can be in scarce supply. All our suppliers, whether for synthetics or natural ingredients, are asked to adhere to standards set out by Sedex, the Supplier Ethical Data Exchange. In addition, suppliers that provide our business-critical natural ingredients are covered by our own Ethical Sourcing programme.”

Givaudan’s Ethical Sourcing programme addresses both social compliance and supply risk, and covers materials with a strategic role in our supply chain. Supply chain solutions for these materials are tailored by region but also encompass the four key pillars of Labour Standards, Health and Safety, Environment and Business Integrity. If these suppliers

are not already Sedex members, they can achieve fair trade or organic certification.

In 2013, Givaudan took its ethical sourcing commitment to new levels by establishing Origination teams within its Procurement department. Origination is particularly focused on alleviating supply risk.

Aisha goes on to explain how each supplier type is assigned a different category of risk; “Depending on how much we purchase, we have different level of leverage. We bear this in mind, whilst also recognising that each supplier carries a different risk, so we tailor our strategy to cover these risks.”

Supplier selection and risk

Givaudan suppliers are categorised and assessed for their potential risk – the extent to which they have opportunities to introduce positive changes in their system. These risks include supply, health and safety challenges, Human Rights, political instability or risk related to weather, which could destroy a key crop and cripple a community.



Engaging across the supply chain with AIM-PROGRESS

AIM-PROGRESS is a global group that brings together Fast Moving Consumer Goods and manufacturing companies who cast aside competition and join forces in the name of Responsible Sourcing. Givaudan's position is unique within this forum, as we are the only representative from the fragrance and flavour industry.

Offering valuable resources on how to apply and share Responsible Sourcing principles, AIM-PROGRESS provides a framework for multinationals to help their suppliers become compliant to key social principles of Labour Standards, Health and Safety, Environment and Business Integrity. Suppliers complete an audit in compliance with member-agreed Responsible Sourcing principles. Having successfully completed one audit, suppliers can approach other customers within the group, under a 'Mutual Recognition' programme.

Givaudan has quickly asserted its status within AIM-PROGRESS. During 2013, Givaudan led the Supplier Capability Workstream.

In 2014 we have been invited to join the AIM-PROGRESS Leadership Team. Responsibilities will include assessing governance structures, tabling key issues, aligning supply chain processes with trade and anti-competitor laws, and recommending strategies. This role pays testament to our involvement thus far and will enable Givaudan to contribute to the long-term outcomes of this influential global body.

Doing business in emerging markets

As Givaudan's business grows in developing markets such as China and India, Responsible Sourcing is extending into regions where, in some cases, these practices may be relatively new. AIM-PROGRESS provides a convenient platform to bring these issues to the fore. Pascal Becker, Global Sustainability Manager explains; "We welcome the opportunity to catalyse change in developing regions. We can help our suppliers adhere to our social compliance framework, which goes well beyond national legislation. Supplier Capability Workshops offer the chance to learn about Responsible Sourcing practices; 2012 saw the first such conference in Singapore, sponsored by Givaudan. Several similar events targeting suppliers are planned for 2014, and this includes China."



View from the field

Jürgen Nelis
Chief Procurement Officer

Driving change through dialogue

"A good example of our ability to drive change through supplier dialogue is seen in an initiative brought to life in 2013. One of our European suppliers, Biolandes, is a major producer of Cistus Labdanum gum, used in perfumery. For many years this odourant resin was extracted according to time-honoured methods, by Cistus harvesters.

When industrialised, the extraction process can be fraught with bad practices. Givaudan worked with Biolandes to set up a new Labdanum Gum extraction unit in Andalusia, Southern Spain, close to the Cistus Labdanum harvest area. Compared to traditional techniques, the new process significantly reduces the environmental impact of how this resin is produced, there is less manipulation of 'risky' products, and residual waters are reprocessed before being released.

This collaboration with Biolandes helps to modernise a traditional supply chain and ensure its long-term sustainability for the entire industry. We are the first company to make purchases using this new method. Although we're currently paying more for these environmentally-friendly products, there's less cost to the planet."



Enhancing our traceability capability

Many of our customers wish to know the full details of Givaudan's supply chain: not just where an ingredient was manufactured or purchased, but right back to where a material was sourced or raised. This process, known as traceability, includes tracking, tracing, and predicting the location of a batch, its sub-components and raw materials throughout the supply chain.

Givaudan strives to balance customer demands with what we can currently provide in terms of sourcing and provenance data. This is outlined in our recently drafted Traceability Statement; "The assurance of the safety and authenticity of our flavours relies on the ability of Givaudan, as a producer, to trace the vendor provenance of, and to identify the destination of foodstuffs used in their production. This means that the traceability of any ingredient incorporated into our products at all stages of our production, processing and distribution must be established, together with the identity of businesses to which our products have been supplied. We make this information available to national authorities on demand."

Our traceability activity has been on-going since 2010. Givaudan is concerned with both operational and sustainable traceability: the first is based on food law, and the second, which we are currently expanding upon, is on 'farm to fork' principle.

As a supplier of flavour ingredients, we are keen to provide traceability data for both animal- and crop-based products for product families selected according to three criteria: sensitivity, customer needs and our ability to make a difference in the supply chain.

In 2013, we ran a traceability workshop with a key customer who was invited to share their requirements and, in turn, they learned about Givaudan's own challenges. In the same year, we established a dedicated cross-functional traceability team encompassing the Quality, Regulatory, Sustainability and Procurement departments.

Maro van Andel, Sustainability Manager Flavours, explains the importance of the traceability team; "We wish to establish a systemic approach to traceability, prioritise our actions and proactively reduce risk. Our aim is to be able to collate information in a structured way to ensure fast response times to crises or to customer concerns."

Maro goes on to explain why traceability is so important to Givaudan; "Givaudan doesn't just sell a flavour, we also offer a quality management service behind everything we do. As the industry leader, we must demonstrate the best possible quality management, regulatory and sustainability processes as part of our service."

He concludes; "Everyone benefits from traceability: it not only improves food safety but enhances purchasing and quality, as we can ensure that we source and receive the best quality. Our new Traceability Project means that all information will be shared across departments via tools that everyone will be able to access."



Creating an exceptional end-to-end supply chain with raw material sourcing risk management

At Givaudan, raw materials sourcing risk is a cross-functional consideration. Identifying and mitigating risk is integral to securing supply and satisfying customer needs.

Underpinning this risk assessment activity is the Raw Material Risk Management system, based on a concept partially developed by economist Peter Kraljic and by Jan Willem Ederveen, former CEO of Purspective B.V. The system is initially designed to optimise supply security.

A snapshot of global sourcing

Johannes Rogaar, Global Head of Procurement Excellence explains; “The Raw Material Risk Management system is a procurement portfolio matrix that has four ‘arms’ or quadrants, like a windmill. By inputting criteria such as risk, spend, and supplier turnover, we gain a quick, high-level overview of our global sourcing situation.”

Johannes describes the various categories of risk that Givaudan takes into account, which are rated by Procurement Category Managers and Site Buyers; “Risk can, for example, relate to crop, market, geopolitical or logistic factors. Our sourcing risk management tool is used globally; it enables us to visualise and rank our sourcing risk in a consolidated way. We take into account the business impact of the raw materials by including the spread of these in the manufacturing of finished products.”

Improved transparency means better business solutions

Johannes continues; “This means we’re able to quickly spot raw materials at global and local level that may need extra attention. By highlighting these raw materials at Sales & Operations Planning meetings, we can improve transparency and determine the best business solutions in cases where we don’t already perform adequate risk reduction activities. The solutions could include strategic stocks, alternate vendor development or make/buy options.”

“The Risk Management system offers a structured way of indicating where our sourcing risks lie. This improves our ability to improve effectiveness by helping us achieve world-class excellence in our end-to-end supply chain.”



↓ Responsible Sourcing

How sustainable sourcing brings benefits to brands

We work hard to please people around the world through the fragrances and flavours we create for global and local brands. Yet consumers want more. From the cosmetics in their cabinet to the food on their plate, people are questioning the extent to which their purchases sustain, not drain, world resources. A product no longer ends with a great smell or a good taste – consumers, and our customers, want to know the rest of the story. Responsible Sourcing can offer a happy ending.

We help customers maintain consumer trust and uphold the integrity of their brands. Our customers do not have direct access to their entire supply chain, so we must answer questions such as: where do our materials come from? How are they grown? Can we rely on them over the long term? Are we helping or hindering local economies?

Connecting customers to the supply chain

Applying and complying with Responsible Sourcing principles is no longer seen as a costly burden. Organisations know they need to take responsibility for their actions; 'opting out' of ethical is simply not an option. Customers are becoming more aware of the opportunities that lie within sustainability initiatives, and this is where Givaudan plays a key part.

By applying Responsible Sourcing best practice within our supply chain, we implement processes based on quality, ecology, community and traceability. The land is cared for, the crop is better managed and workers are paid more fairly. In some cases, these high standards bring about superior quality – to the extent that customers are inspired to create a new product or collection that showcases this ingredient. French fine fragrance brand Diptyque did just this. Read on to see how our perfumers were able to 'rediscover' ylang ylang and celebrate this ingredient within a new collection.

The value of a virtuous circle

On the island of Mohéli in the Comoros archipelago, Givaudan has worked with a local producer with many generations, experience of producing and exporting aromatic plants from the Comoros to improve the quality of the prized ylang ylang essential oil. The harvest of these fragile blooms is closely overseen. By implementing best practices and offering technical support to local growers, the resulting quality, according to Givaudan Senior Perfumer Olivier Pescheux, is impressive.

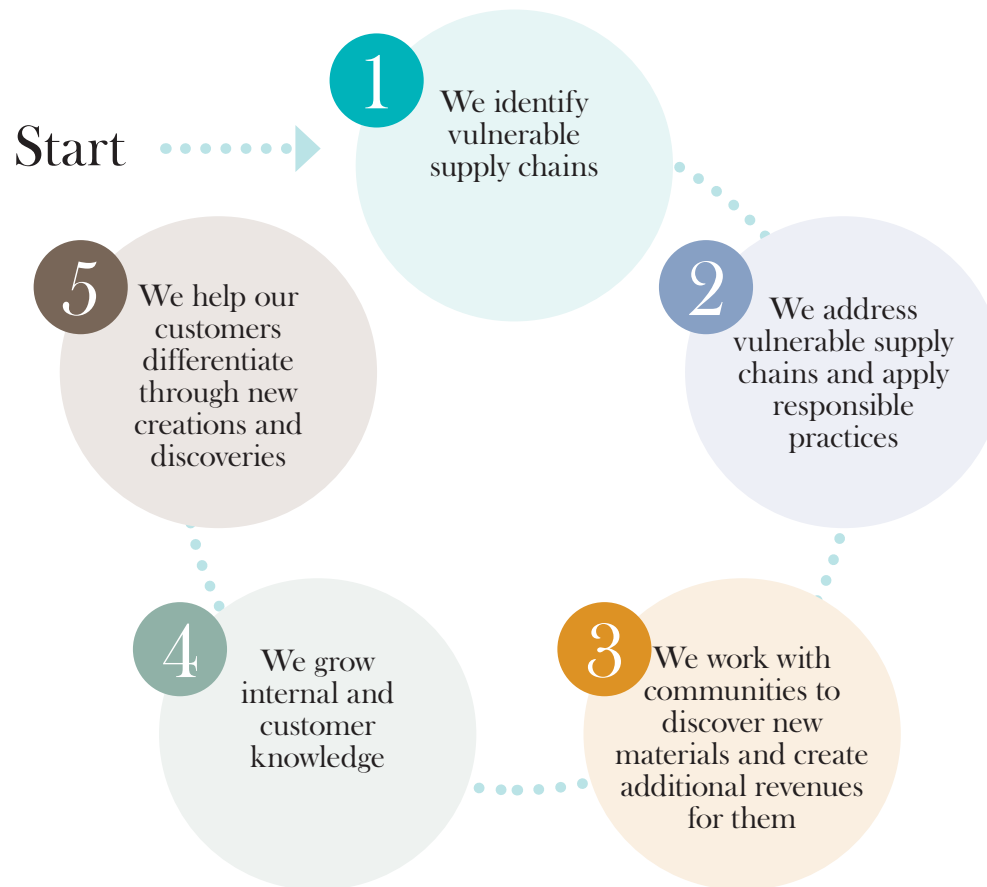
Diptyque was inspired by these beautiful-quality blossoms to create a new fragrance. Eau Mohéli was launched in 2013 and contains generous quantities of pure ylang ylang essential oil. Developed by Olivier Pescheux, this is the first time that the floral has been showcased in this way by Givaudan.

Hervé Fretay, Speciality Ingredients, explains; "More and more customers are falling in love with our ylang ylang sustainability story, from fine fragrance houses to candle makers. With the guarantee of quality and a reliable supply, customers' creative opportunities are flourishing. The ylang ylang initiative illustrates Givaudan's 'virtuous circle' approach to ethical sourcing: we address an endangered supply chain and apply responsible practices. We then share this knowledge with perfumers and customers. They can share the success of our programmes and the resultant quality to achieve brand differentiation and bring exciting new fragrances to market."



The virtuous circle

A five-step cycle that builds value by addressing sustainability within the communities and customers that we partner with.



Sustainable? Renewable? Biodegradable? Answering customer concerns

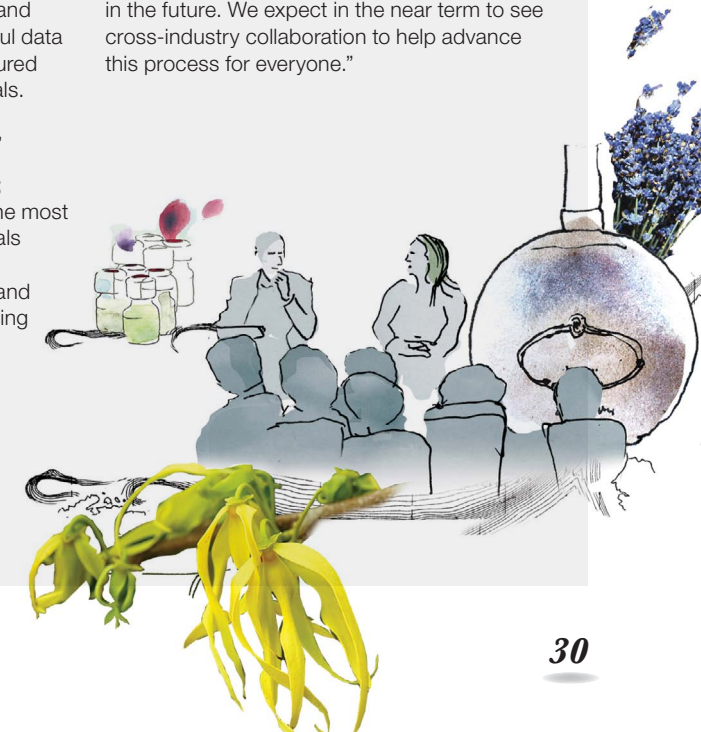
Just as consumers wish to know the provenance of a product, our customers want to identify the commercial, environmental and social impacts of the products we supply. They also want to know whether a material is biodegradable, natural or renewable, for example.

Givaudan is currently assessing ingredients in our fragrance palette to ascertain and improve the sustainability of our offering. This means studying the extent to which our ingredients have an impact on resources, the environment and mankind, considering complex, interrelated concerns such as ethical supply, pollution and biodiversity. We endeavour to identify criteria that are relevant for both natural and synthetic materials, and where meaningful data can be obtained for both own-manufactured ingredients as well as purchased materials.

Juliet Fairclough, Sustainability Manager, Fragrances, speaks of the challenges in assessing such a broad range of criteria; "This internal initiative seeks to identify the most relevant criteria for assessing our materials so we can benchmark and improve their sustainability. By listening to customers and other stakeholders, in addition to assessing

our business priorities, we are building a broader understanding of how best to measure the impact of our products. That's why it's important to adopt a holistic approach and not simply focus on a single criterion. This work has been on-going for several years and continued apace in 2013."

Juliet adds that this activity cannot be carried out in isolation; "Finding meaningful ways to determine the sustainability attributes of a product is challenging. From where, and how, we source our raw materials; how our ingredients are isolated or manufactured; their contribution to Givaudan's and our customers' products; and their potential impacts now and in the future. We expect in the near term to see cross-industry collaboration to help advance this process for everyone."



What we purchase

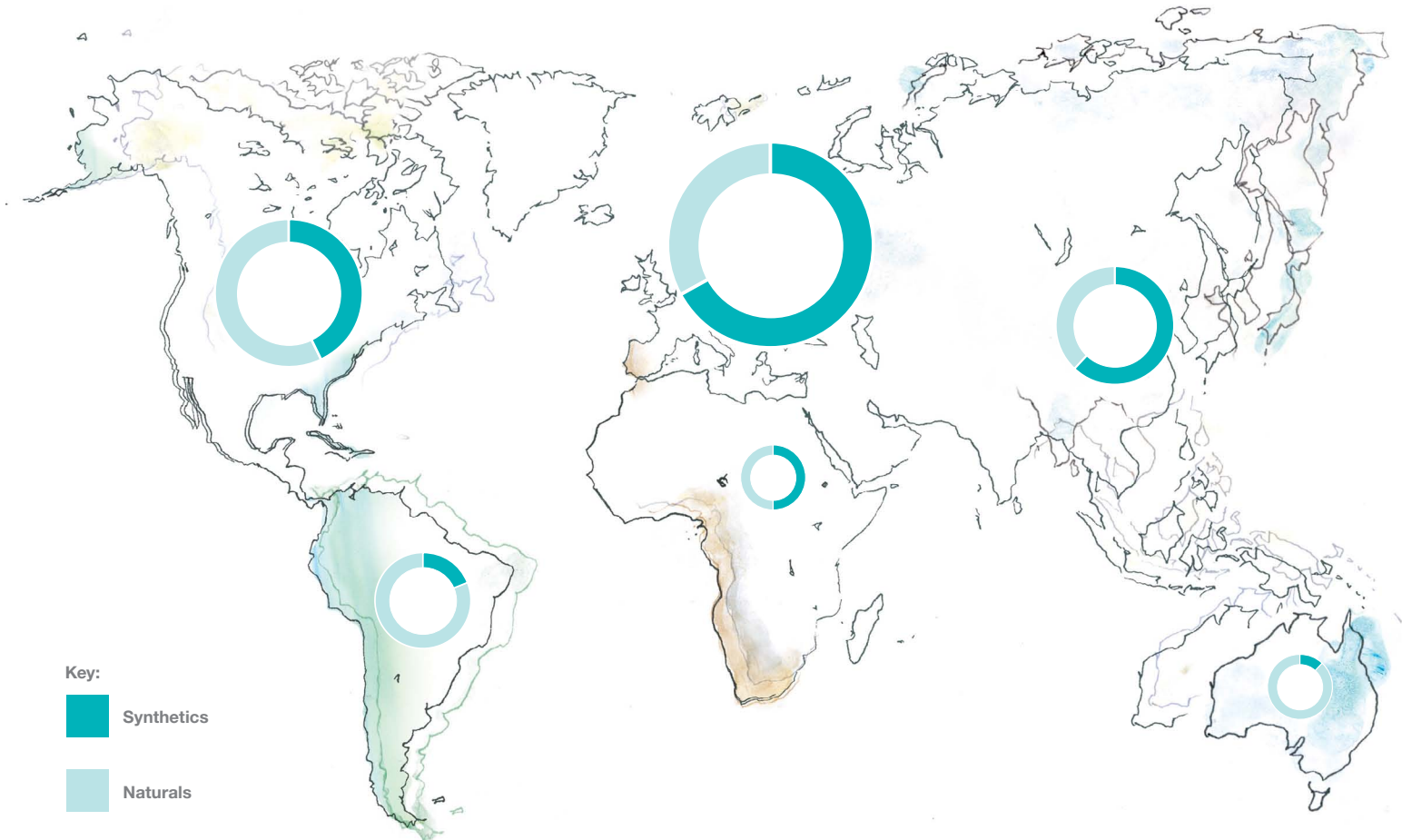
Exerting influence, effecting change

Givaudan is conscious that it is most efficient and impactful to focus Responsible Sourcing efforts in the areas where we can effect greatest change.

A case in point is the production of environmentally sensitive palm oil, where we only hold 0.01% of market share. Conscious of the many issues surrounding this crop, Givaudan is working with four associations concerned about palm oil production to help shape the debate on greater sourcing responsibility. These include the Roundtable on Sustainable Palm Oil (RSPO), the World Wide Fund for Nature (WWF), Alliance Française pour une Huile de Palme Durable, whilst also being a founding member of the National Resources Stewardship Circle (NRSC). Read next page 'Why palm oil is still a burning issue' for more information.

Givaudan also turns to industry partnerships to help speed up change in responsible supply chain practices. In 2013, our sustainable resourcing objectives were accelerated through AIM-PROGRESS, a dedicated Responsible Sourcing programme. This global industry forum groups together major manufacturing and Fast Moving Consumer Goods (FMCG) companies with a shared interest in promoting sourcing best practice. Everyone in this 37-member strong group can harness collective knowledge to help catalyse change. The AIM-PROGRESS platform also facilitates outreach to suppliers, providing valuable resources in the form of regional conferences.

Givaudan purchases more than 10,000 raw materials from more than 2,000 raw materials suppliers globally



Key:
 Synthetics
 Naturals



Turn to page [26](#) to find out more and discover why Givaudan has been invited to take a leadership role in AIM-PROGRESS for 2014

Why palm oil is still a burning issue

Palm oil frequently makes the headlines for its detrimental impact on environments and wildlife. Widely included in many foods and cosmetics, it is the primary source of cooking oil in Asia. With a booming population comes increased demand and a heavy ecological burden. Producers race to keep up. Closely following the World Wide Fund for Nature (WWF) guidelines and as an active member of the Roundtable on Sustainable Palm Oil, (RSPO), Givaudan takes sourcing of this contentious crop very seriously.

Givaudan aims to only buy palm oil and its derivatives with certifiable sustainable palm oil (CSPO) certification. Simply purchasing from RSPO growers is not enough – companies should be RSPO members to source sustainable palm. As an RSPO member, in 2013 Givaudan attended the RSPO conference in Berlin and completed the RSPO's Annual Communication of Progress.

Partnerships are key to driving change in palm oil practices. Within Europe, Givaudan is a member of the Alliance Française pour une Huile de Palme Durable. In addition, we bring the issue of palm oil into the spotlight as a founding member of the National Resources Stewardship Circle (NRSC). Here we call upon brands to make a positive impact on preserving biodiversity. Palm oil is a top agenda item for this group.

The demand for vegetable oils will only increase. Population and consumption patterns are growing all over the world. From a land-use perspective, palm fruits are the most sustainable feedstock for vegetable oil. A key challenge in the coming years will be to guarantee a supply

of palm oil from plantations that offer alternatives to deforestation. Moving away from palm is not the solution, rather supply chains need to work together to aim for a deforestation-free palm oil source.

Despite these efforts, sourcing sustainable palm or kernel oil remains complex. Maro van Anandel, Sustainability Manager Flavours, explains; "We only source tiny quantities of palm oil derivatives but strive to ensure that everything we source comes from the most trusted and sustainable source. The key challenges for sustainable oils from palm kernel derivatives is that they are mixed in with non-certified oil, at the mill or at ports. Like many other customers, Givaudan, is demanding 'segregated' (SG) Certifiable Sustainable Palm (Kernel) Oil (CSPKO), whereby truly sustainable oil is kept apart throughout the supply chain. Where this isn't available, we choose 'Mass Balance' (MB) oil, whereby certified palm oil is blended with non-certified oil (see page 33).



Givaudan has worked very hard to identify opportunities to source segregated crude palm oil derivatives, and will make our first 'MB' and 'SG'-certified purchases in Q1 2014."

Despite the challenges of responsibly sourcing this commodity, positive progress was made in 2013 as Maro states; "In 2011, Givaudan began purchasing RSPO-certified palm oil; in 2012 we achieved 100% certification based on GreenPalm certificates. In 2013, we continued to purchase certified palm oil derivatives and, just like in 2012, successfully completed an audit to verify our claims. Furthermore, in 2013 we completed WWF's bi-annual palm oil buyers' scorecard, achieving 11 out of a possible 12 points. This is significant as animal habitats are severely compromised by unregulated palm oil plantations; WWF is a key actor within the palm oil debate and this scorecard helps ensure that companies are sourcing from responsible growers."



Expert view

Maro van Anandel

Sustainability Manager, Flavours





"Many foods and cosmetics need a fat or oil to bind them together. Without fat in a cookie, you'd have a handful of crumbs. Palm oil is a viable alternative to animal fats, and all alternatives, such as coconut oil or soy, have their social and environmental issues, too. For the specific ingredients we use, there are not many substitutes available. Even WWF recognises that, when sourced properly, palm fruit can be a real driver for livelihoods and communities. The challenge lies with sourcing palm oil and its derivatives sustainably. By teaming up with the RSPO, WWF, Alliance Française pour une Huile de Palme Durable and NRSC, we can all harness the power of these organisations to really make a difference."

Sustainability of palm oil products

More and more stakeholders are demanding segregated sustainable palm oil, whereby truly sustainable palm oil is kept apart throughout the supply chain.

But even then, there is very little Palm (Kernel) Oil available. Another option is 'Mass Balance' (MB) oil, whereby companies along the supply chain mix certified palm oil with non-certified because they do not have the infrastructure to keep the two entirely separate.

Key:

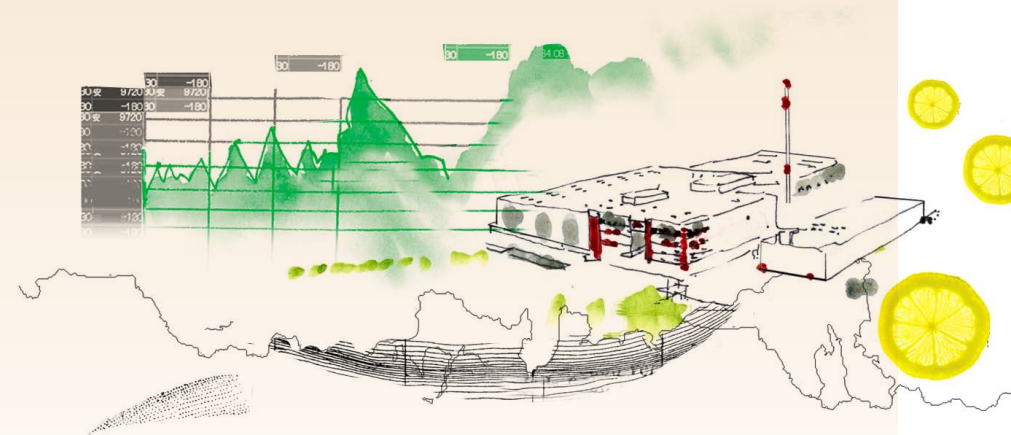
-  Palm trees/oil from RSPO-certified plantations
-  Palm trees/oil from conventional plantations
-  Palm monitored by GreenPalm
-  Traceable
-  Not traceable



Our performance

Our sustainability strategy is grounded in measurable and quantifiable KPIs, which enable us to annually record progress on our performance.

- 35 Procurement
- 37 Employees
- 39 Innovation & Development
- 41 Operations
- 44 Customers & Markets



Procurement

Our vision – we source materials in ways that preserve our environment, stimulate the development and well-being of communities and safeguard the efficient use of precious resources.



Our commitments

- Expanding our responsible sourcing initiatives ensures security of supply
- Working with our suppliers on sustainability throughout our value chains contributes to our customers increasing supply chain requirements
- Conducting regular reviews of our portfolio and implementing improvements through our ethical sourcing initiatives
- Gather information on the origin of our ingredients to contribute to regulatory requirements, food safety and issue management

What we said

- Communicate with all suppliers about procurement requirements relating to social responsibility
- Conduct audits with 200 of our top 400 suppliers by 2015; 200 of our top 400 suppliers to have joined the Sedex programme by 2015
- Identify and develop additional ethical sourcing initiatives
- Develop third-party certification projects for raw materials
- Build 14 schools in Madagascar by 2014

What we did

- Vendor Expectation document revised to reflect UNGC commitment and include the mention of high ethical and social standards regarding Human Rights, Labour Standards and Anti-Corruption
- 100 suppliers have been audited, and 248 suppliers are now on Sedex
- Farming partnership with GaiaOne and Kebun Rimau SDN BHD to develop sustainable patchouli plantation in Malaysia
- Continued support to a cooperative of three villages and a local distiller to grow and distil certified ESR vetiver
- 12 schools built in Madagascar since our programme began

Other key achievements:

- Evolution of partnership with AIM-PROGRESS from member in 2012 to workstream leader in 2013 to Leadership Team member as of January 2014
- Continued to source certified sustainable Palm (Kernel) Oil and derivatives
- Creation of a dedicated Origination team

Three-year performance



Procurement continued...

Givaudan awarded Nestlé's Responsible Sourcing prize

For four years, Givaudan has sourced organic, ethical vanilla from selected villages in Madagascar. Thanks to our strong local presence, we ensure complete supply chain transparency and product security.

By increasing the volume of ethical vanilla we source, we improve the sustainability of partner villages. Local growers receive premiums for quality, alternative revenue opportunities and social benefits. Some of these include learning about special rice cultivation techniques, resulting in greater food security for over 2,000 families.

Other social benefits aim to impact education in the region. We have financed the building or refurbishment of 12 local schools and involvement from the community has helped promote ownership of this programme. To date, 2,500 schoolchildren have benefited from this initiative. In 2013, after submitting details of these projects, Givaudan was awarded Nestlé's bi-annual Responsible Sourcing prize. We were among several entrants to be awarded a financial donation that will go towards extending a secondary school and two further schools in the area.

248 suppliers now with Sedex

Selected suppliers are requested to register with Sedex, a data-sharing platform. They can go on to complete the Sedex Members Ethical Trade Audit (SMETA). By adhering to Sedex, suppliers sign up to four key Responsible Sourcing pillars of Labour Standards, Business Integrity, Environment and Health and Safety. Non-compliance with these standards is not an option for Givaudan. One of the benefits of SMETA is that 'an audit for one is an audit for all'. Across the industry, this process, known as Mutual Recognition (MR), helps reduce supplier 'audit fatigue'.

In 2013, Givaudan exceeded its goals for supplier registrations set for 2015. Aisha Qureshi, Procurement Sustainability Manager explains; "This year we surpassed our 2015 objective of obtaining 200 priority suppliers register with Sedex. These suppliers were selected using risk criteria and category management feedback. They include strategic providers who potentially pose the greatest business risk."

Working with a new cooperative in Haiti

Vetiver, a type of grass with deep roots, produces an iconic essential oil used in perfumery. In Haiti, where some of the finest quality vetiver grows, Givaudan worked on a new Ethical Sourcing initiative with a cooperative from three local villages and a local distiller. Producers adhere to strict environmental criteria: the vetiver sourced is certified ESR Standard (Fairness, Solidarity, Responsibility) according to Ecocert standards, with the added benefit that the crop is organic.

Laetitia Vuilleminot, Origination Business Partner, explains this new Ethical Sourcing initiative; "Through close partnership with this cooperative, we secure vetiver supply and enhance quality as a result of improved farming and refining practices. By operating within a specific area, we are also assured of traceability. A symbiotic relationship between local actors and Givaudan teams marries time-honoured cultivation techniques with modern efficiencies."

Employees

Our vision – we attract, develop and retain talented, creative professionals who feel passionate and proud of the work done in our Company and who are empowered to contribute to a sustainable society.



Our commitments

- Engage employees in sustainability thinking and practices
- Reduce incidents by strengthening workplace environment, safety behaviour and awareness
- Implement local Green Teams to take local ownership of the Sustainability Programme and support local sustainability opportunities
- Embrace diversity throughout our organisation and create a diverse and inclusive workforce
- Work together with our local communities on projects and causes that benefit the communities where we work

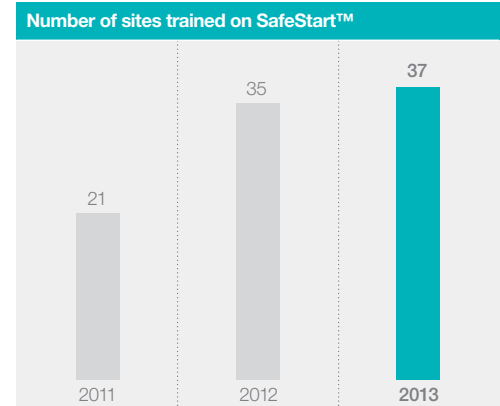
What we said

- Conduct 'Zero is Possible' behavioural safety programme
- 100% sites with Green Teams
- Lost Time Injury (LTI) rate below 0.1 by 2020
- Increase the representation of females in our senior leadership positions
- Build partnerships with non-profit organisations and work on charitable themes: Blindness, Family Nutrition and Supporting Local Communities

What we did

- SafeStart™, part of 'Zero is Possible' programme rolled out to two additional sites, 37 sites now trained
- Further embedded and supported Green Teams
- Our LTI rate reduced by 57% against our 2009 baseline
- The current percentage of female employees in Givaudan's senior leadership positions has increased to 17.9% in 2013, an improvement on last year's performance
- Continued support for charitable commitments

Three-year performance



Employees continued...

Advancing our occupational safety programme

Givaudan is committed to a 2020 milestone of less than one Lost Time Injury (LTI) per one thousand employees.

The roll-out of our SafeStart™ safety awareness training continued in 2013, with its implementation at our commercial sites. This initiative is part of our behavioural-based safety programme 'Zero is Possible'. Additionally, refresher sessions for those who have already received this training were held, and further safety leadership coaching continued throughout the year.

Leadership Board Green Team Award 2013

2013 marked the fourth annual Leadership Board Green Team Award. 21 entries were submitted in total, 15 for manufacturing sites and six for commercial sites. The Leadership Board chose two clear winners: Mexico City for their project 'Engaging the customers' (Commercial) and Mount Olive, New Jersey for 'The Braille Trail' (Manufacturing). Read about the Mexico City initiative in the 'Markets & Customers' section of the report.

Joe Fabbri, Head of Global Human Resources, EHS and Chair of Sustainability, commented on the winners; "With their innovative approach in dealing with sustainability issues, the Mount Olive and Mexico City Green Teams have demonstrated that sustainability is becoming part of the DNA of Givaudan. Well done to the winners, and to all our Green Teams, who are actively pointing the way to a more sustainable future for the Company."

A shelter for children in Soweto

As part of its charitable and giving commitments, Green Team South Africa has adopted the Carl Sithole Children's Home, in Soweto. The Home is a shelter for children aged 2-18 who are either orphaned, abandoned or have suffered abuse. Some of the children living there are HIV positive.

Givaudan and our staff donate food parcels and clothing to the Home on a yearly basis, in line with our corporate theme of Nutrition. The Green Team has now established a vegetable garden at the home in order to feed the children on an on-going and sustainable basis. The garden provides the children with fresh ingredients for nutritious meals, and a wealth of opportunities for learning.

Planting trees in the Andes

Givaudan Colombia has planted 700 trees in an effort to reforest eroded land covering nearly 10,000m² at the Ecological Park of Matarredonda, high up in the Andes Mountains. For Givaudan, the project benefits from giving both environmental and social returns.

Givaudan employees themselves donated 100 additional trees as well as taking a hands-on approach to help digging holes and planting the trees. We also invited Digerati, an NGO that empowers and promotes the rights of underprivileged youngsters, to aid with the planting, raising their awareness and commitment towards our shared world. 79 Givaudan employees and their families were involved in the project, planting 800 trees in total, which correlates to the capture of 9.17 tonnes of Carbon Equivalent.

On the trail of beauty in Mount Olive, New Jersey

Blindness is the corporate charitable theme for our Fragrance Division. Accordingly, our manufacturing site at Mount Olive, New Jersey, initiated and funded the development of a unique walking trail, called 'The Braille Trail', in collaboration with members of the Township of Mount Olive and the State of New Jersey. Givaudan employees actively participated in the trail's creation, which enhances the beauty of the environment, offering a multi-sensory experience to people with visual impairments.

The project is composed of a number of well-considered elements, including; a rope that the sight-impaired can follow as they enjoy the trail; and specific trail locations with plaques signed in Braille. The plaques display historical facts and provide information regarding the surrounding sights and sounds.

In terms of sustainability, minimal impact was made to the area's natural systems and wildlife, and the trail requires almost no maintenance.

Innovation & Development

Our vision – Givaudan leads in creating consumer-preferred flavours and fragrances that are designed and developed in line with sustainability principles in order to satisfy current and future needs.



Our commitments

Continue to supply products, which are safe for people and the environment

- Ensure Givaudan products are safe for people and the environment when used as intended
- Full regulatory compliance of all products
- Ensure our products are not persistent in the environment after their use
- Reduce animal testing and develop alternative test methods

Create superior products in a sustainable way

- Promote Health and Wellness through our products
- Do more with less, promoting innovative design based on concentrated quality and compacted fragrances

What we said

- Fragrance Division compliance with European REACH registration requirements, as they become applicable, in 2010, 2013 and 2018
- Flavour's Health and Wellness programme incremental sales target of CHF 100 million; incremental growth from 2009 to 2013

What we did

- Fragrance Division fully compliant with REACH and successfully completed required registrations
- Surpassed our target to beat our forecast of CHF 100 million of incremental sales growth for Health and Wellness products

Other key achievements:

- KeratinoSens™ Assay (an invitro method of testing for skin sensitisation) working towards becoming an industry standard as part of the ITS (Integrated Testing Strategy)

100%

Compliant with REACH regulations

Innovation & Development continued...

Regulatory Compliance Engine for Flavours

In 2012, Givaudan reported on the launch of its Regulatory Compliance Engine (RCE) for Fragrances. 2013 saw the technology extended to Flavours. While not necessarily the first such tool in the industry, Givaudan believes that we can claim the RCE as a gold standard tool: the benchmark by which the industry measures compliance technology.

David Tonucci, Head of Global Product Safety and Regulatory Affairs, Flavour Division explains what the RCE means for Givaudan and our customers; "The Flavours RCE enhances our capabilities at all levels, whether in local markets, for country regulations or regional requirements. It ensures that the products we sell are not only safe for consumption but are legally compliant, upholding our strict standards in meeting regulatory requirements. In addition, we can meet the extended requirements of NGO organisations that are looking at specific areas such as organic, GMO or religious dietary restrictions."

Reducing water and energy in Powder Juice Drinks

An innovation in production of Powder Juice Drink (PJD) flavours in 2013 now allows us to use less water, and less energy, in drying out powder citrus and other PJD flavours.

Clayton Strong, Beverages Marketing Asia, explains how this new technology lessens our environmental impacts; "Driving the demand for PJDs are emerging markets, where economy of scale is all important. This new technology now allows us to use less water and energy to produce the same quantities of PJDs. We've also developed double concentration emulsions. This means that we can achieve the same level of flavouring in reduced quantities. Consequently, less packaging and transport energy is required."

Steady progress on the KeratinoSens™ Assay

In 2011, we published study findings on the KeratinoSens™ Assay, submitting them to the European Centre of the Validation of Alternative Methods to animal testing (ECVAM). Since then steady progress has been made. In 2013, the KeratinoSens™ Assay, along with two other methods, was in the final stages of validation by ECVAM, and is now open for public comment, which will be reviewed in early 2014.

ECVAM are working towards establishing an Integrated Testing Strategy (ITS) for skin sensitisation testing at OECD level. The aim is to combine the three approaches as an alternative method to replace animal testing for regulatory purposes. This aligns with the 7th Amendment of the EU Cosmetics Directive, which now bans animal testing for cosmetic purposes.

Invited to be part of the EPAA Management Group

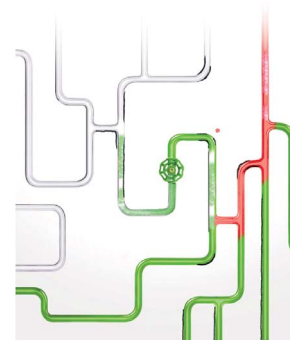
Graham Ellis, Head of Global Fragrance Toxicology and EAME Regulatory Affairs for Givaudan, explains the role we play as a member of the European Partnership for Alternative Approaches to Animal Testing (EPAA);

"We're relatively new to the EPAA, having just joined in 2013.

However, we have already been invited to be part of the Management Group, which works in collaboration with the EU Commission to set direction on animal testing issues. We are the only fragrances company involved at this level, which reflects our contribution to the issue with the KeratinoSens™ Assay."

Operations

Our vision – we continuously drive operational excellence without compromising the environment or the health and well-being of our employees and the communities in which we operate.



Our commitments	What we said	What we did	Three-year performance								
<ul style="list-style-type: none"> Improve eco-efficiency of factory manufacturing sites with a focus on greenhouse gas emissions, waste and water and reduce our overall footprint against a 2009 baseline focusing on eco-efficiency for energy, carbon emissions, incinerated and land-filled waste and municipal and groundwater Sustainable logistics offers opportunities to improve the efficiency through reduced fuel usage and therefore lower transport costs 	<p>Per tonne of product against 2009 baseline:</p> <ul style="list-style-type: none"> Energy consumption: 20% reduction, per tonne of product, by 2020 Water use: 15% reduction, per tonne of product, by 2020 (for municipal and groundwater) Direct and indirect CO₂ emissions: 25% reduction, per tonne of product, by 2020 (indirect relates to purchased energy and not energy used by others i.e. our raw materials suppliers) Total weight of incinerated and land-filled waste by type and disposal: 15% reduction, per tonne of product, by 2020 	<p>Per tonne of product against 2009 baseline:</p> <ul style="list-style-type: none"> 13.4% reduction in energy consumption 6.4% reduction in municipal and groundwater use 19.9% reduction in direct and indirect CO₂ emissions Our total weight of incinerated and land-filled waste by type and disposal decreased by 14.4% 	<p>Reductions in CO₂ emissions in percentage</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Reduction in CO₂ emissions (%)</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td>11.1</td> </tr> <tr> <td>2012</td> <td>16</td> </tr> <tr> <td>2013</td> <td>19.9</td> </tr> </tbody> </table>	Year	Reduction in CO ₂ emissions (%)	2011	11.1	2012	16	2013	19.9
Year	Reduction in CO ₂ emissions (%)										
2011	11.1										
2012	16										
2013	19.9										

Operations continued...

The improvement trend, which we have seen since the target setting in 2010, continued during 2013.

This can be deduced by comparing the figures on the previous page with the data at the end of 2012, which for energy, CO₂ emissions and waste were 3-4% lower. These advances are the result of efficiency improvements and some investments implemented by local Green Teams and local site engineering teams.

In 2013 the water indicator deteriorated. This was caused by more demanding cleaning requirements at some sites, as well as the commissioning of a new factory, which was carried out in parallel with the closing of the old factory it replaced.

Energy and CO₂ emissions

Site Energy Map in Ashford

At Givaudan, Ashford, England, a Site Energy Map was created, which visually identifies energy and water use at the facility. This information forms the basis for suggesting reduction initiatives. Neil Vincer, Site EHS Manager, Ashford, explains how the Energy Map works in providing clarity; "The map visually represents all of our utilities' consumption across the site. This includes the quarterly gas, steam, electricity and water use for each building. It also colour codes the buildings for EPC certificate energy grade and number, although this last aspect is an on-going initiative."

The map, which is updated each quarter, has already highlighted the need for additional utilities metering, as well as identifying differences between meter readings and billed data. It is also an invaluable tool when explaining energy use to external contacts and for raising energy awareness amongst staff.

Mexico changes from heavy fuel oil to natural gas

The Mexican manufacturing facility, Pedro Escobedo, has historically used heavy oil and diesel for steam generation and heating processes. In 2013, the decision was made to change over from traditional fossil fuels to natural gas to operate the steam boilers and heaters. Although a logistically complex project, the programme has brought about significant savings on cost, and has also reduced CO₂ emissions by 13% for the site.

Edmundo Antonio, Environmental, Health & Safety Manager, points to other benefits of the initiative; "Using natural gas is cleaner and eliminates fumes. So the new gas system is also helping the Pedro Escobedo site to maintain a good relationship with the local community and the authorities."

Mist moistening increases efficiency

Bio-filters in the manufacturing process are essential for minimising odour emissions, and require a high humidity environment, commonly achieved using steam. At Givaudan's Naarden facility, in the Netherlands, the local Green Team looked to convert the process from steam to a high-pressure water system based on developing a 'water fog'.

The new process incorporates a framework utilising spray nozzles attached to a high-pressure pump. Jan van den Berg, Product Manager Engineering, comments on the solution; "With the new nozzle system we create a very fine water mist, which dissolves in the air, achieving almost 100% humidity. Producing steam for moistening requires 300,000 Nm³ of natural gas per annum, so this is a significant saving on energy costs and carbon emissions."

Procurement initiatives on reducing carbon footprint

How we get from A to B reduces our C footprint

The Global Transport Project looks to consolidate transportation across the Company. Objectives include greater transparency on costs, optimising the transport network, while maintaining a high service level to our customers.

Consequently, there has been an increase in air, sea and road freight consolidation, especially between affiliates.

Anne Tayac, Fragrance Supply Chain Head, sponsors the initiative, and she comments; "Improving our transportation footprint is a major driver in creating a sustainable supply chain, decreasing costs and CO₂ emissions for both Givaudan and our customers in the process."

The 2013 carbon footprint of outbound transport decreased by 8%, despite a production volume increase of approximately 6%. The main contributor to this improvement came from less airfreight, which reduced by almost 20% compared to 2012.

Setting targets at our Fragrance sites

Site Eco-Efficiency Target Setting is an on-going initiative, which includes all Fragrance sites and Regional Operations teams.

Led by Koos Brandenburg, Head of Sustainability for Flavour and Fragrance Operations, 2013 saw the setting of site targets at a Global Operations meeting. Over 25 people will be involved in the project. Koos commented; "The target-setting process will hopefully raise awareness, at site level, of the need to reduce our environmental footprint, providing greater commitment to improving the eco-efficiency of Givaudan."

Operations continued...

Buying-in green energy

Givaudan Indirect Material & Services is driving an initiative to buy green energy that will meet our electricity needs and reduce our carbon footprint. Electricity accounts for 33% of the total energy used across the Group, but equates to 50% of our total CO₂ emissions.

Guidelines enable our purchasing teams to buy smarter and greener energy, moving away from electricity produced from traditional fossil fuels, like coal and oil, to natural gas and renewable energy sources. Highlights of the programme include Germany, which is 100% green energy efficient, the Netherlands with 25% green energy consumption, and Spain, which will use 100% green energy by 2014.

Waste

Improving on KPI commitments at Jaguaré, Brazil

At the Jaguaré site in Brazil, a multi-functional team undertook a KPI improvements initiative in 2013. The process began by looking at the site's energy consumption figures. Following a deep understanding of the consumption data a Site Eco Efficiency Plan (SEEP) was then created, outlining potential projects and studies regarding process improvements and waste disposal.

Project lead Charles Schiavinoto, Regional EHS Manager, LATAM points to some of the benefits of the KPIs improvement programme; "We have eliminated and avoided about CHF 100,000 in operational costs, through better solutions for waste disposal and partnership with new suppliers of environmental services. In doing so, we have vastly increased our knowledge on consumption and have created a strong working group between the Flavour and

Fragrance divisions. Jaguaré is today a much more eco-efficient site thanks to the team's efforts."

Energy, waste, and water reductions

The manufacturing facility at Jigani, Bangalore, India, is working towards 2020 reduction targets for energy (20%), water (15%) and waste (15%). Jigani has developed a new waste management system, based on the principal of waste-type pyramid segregation, which classifies waste into hazardous and non-hazardous materials. As a result, the site no longer uses landfills or incinerates waste and the absolute quantity of recycled waste decreased by 85 tonnes.

Safety

Breaking the paradigm in Brazil

At Givaudan's Jaguaré site, in São Paulo, Brazil, a cross-functional Green Team created a project to eliminate, or drastically reduce, ethanol usage for drying and deodorising equipment such as feed tanks, blenders, pumps and related equipment. Ethanol is very efficient, but it is also expensive and adds more risk and exposure to our employees as a flammable liquid. An additional benefit was the reduction of the Chemical Oxygen Demand (COD) in the effluent sent to the Waste Water Treatment Plant (WWTP).

Claudio Cherubim, Flavour Operations Director and project lead, commented on the initiative; "There was no significant monetary investment, just the time and expertise of our people. This successful initiative represents true paradigm breaking, whilst increasing safety, reducing our impact on the environment and being more cost-effective. It has stimulated our employees to constantly be looking at established processes in order to find opportunities for improvement."

Carbon Disclosure Project 'top performer' award

Givaudan has been promoted to A-band performer status in the Carbon Disclosure Project's (CDP's) latest Climate Performance Leadership Index. The assessment looked at our actions in 2013 that contributed to climate change mitigation as well as the quality and completeness of the Company's response. The disclosure score was 79/100.

Heini Menzi, EHS Director EAME, Flavours, who accepted the award, comments; "We are actively engaged in improving our footprint with ambitious 2020 targets. We measure and report emissions, which are audited independently, and strive for reductions through behaviour and technical improvements."

Customers & Markets

Our vision – we actively engage with our customers to ensure that all of our products promote the health and well-being of people and preserve our planet. We do this by encouraging our business partners to support our goals throughout the complete lifecycle of their products.



Our commitments

Foster customer partnerships to share responsibility through product lifecycle

- Engage with customers to develop new technologies for healthier and sustainable products

What we said

- Establish joint initiatives to further progress towards Givaudan sustainability targets and those of our partners

What we did

- Leading supplier capability building workstream at AIM-PROGRESS and received the invitation to become Leadership Team member as of 2014
- Partnership with Diptyque on sustainable ylang ylang
- Partnership with AkzoNobel on sodium reduction solution

Other key achievements:

- All Givaudan sites maintained Sedex Questionnaires and nine SMETA audits have been conducted
- Continued sponsorship of the Cosmetic Executive Women (CEW) Eco Beauty Award in the USA and UK to inspire sustainability action in the beauty industry
- External advocacy efforts, including speaking at British Society of Perfumers
- Gold Standard achieved for EcoVadis assessment
- Partnership with NRSC on the development of a supply chain of palm oil sustainable derivatives

40%

We partnered with AkzoNobel to create a one-to-one salt replacer for the meat industry reducing sodium by 40%

Customers & Markets continued...

Partnering in sustainable analyses

In 2013, Givaudan and a strategic supplier embarked on a programme to evaluate the sustainability attributes of a typical oral care flavour formulation. Both companies believe that any product, regardless of its provenance (organic, natural, natural identical etc.), has the potential to be more sustainable over time.

In the assessment the impact of more than ten oral care ingredients were reviewed. Givaudan and its partner have more than two decades of experience on evaluating environmental impacts, and a total of 11 impact categories were assessed. Analysed impact categories include greenhouse gas and water emissions, as well as land-use, energy-use and non-renewable resource-use.

Working with AkzoNobel on a world-first

In 2013, Givaudan partnered with AkzoNobel Salt Specialties, the world's leading vacuum salt producer. The initiative looked to match their salt delivery technology with our flavour expertise to create a one-to-one salt replacer for the processed meat industry.

The result was Suprasel® OneGrain® TS-M100, which looks, tastes, flows, blends and dissolves in the same way as regular salt but has reduced sodium levels of 40%. It also comes in an easy-to-use format, which aligns with industry requirements.

Sharing our experiences

Protecting the future of perfumery and the fragile ecosystems associated with this field requires multi-stakeholder collaboration.

Givaudan therefore often shares its findings with a wider audience. Leveraging external platforms helps the industry, brands, perfumers and raw materials suppliers to drive change.

Linda Harman, Fragrance Division PR/ Communications, explains some actions taken in 2013; "We contributed to "How the cosmetics industry is greening up", a book written by Amarjit Sahota of Organic Monitor, with a chapter on Ethical Sourcing. In it, we discuss the business case for ethical sourcing and outlined the beauty industry's sustainability challenges. In February 2013, we also spoke at a meeting of the British Society of Perfumers', debating whether ethical sourcing in perfumery is simply 'nice' or a 'necessity'."

EcoVadis awards gold to Givaudan

Givaudan regularly completes questionnaires to benchmark our sustainability practices. In 2013, in response to customer requests, we updated our EcoVadis assessment.

EcoVadis is a collaborative platform that enables companies to monitor sustainability performance. Encompassing 150 sectors, EcoVadis aims to improve companies' environmental and social practices by leveraging the influence of global supply chains. In October, Givaudan achieved Gold Standard, the highest Corporate Social Responsibility rating.



Engaging the customer in Mexico City

In Mexico City, the 'Engaging the Customer' programme was established in 2013. Objectives included expanding our local sustainability vision, raising awareness in a wider group of people, and communicating with customers on our sustainability strategy.

Activities within the programme were comprehensive and diverse. They included partnering with our customer, Jafra, to provide ecological awareness messaging to over 72,000

children. Jafra taught children how to make perfumes in a fun setting. Givaudan proposed that the children be taught the importance of saving water and given an explanation as to why Jafra uses biodegradable ingredients in their fragrances. At another event, National Reforestation Day saw over 70 people, including many Givaudan employees, plant over 1000 trees. One of our key customers, Colgate, also took part in the tree-planting, together with Givaudan.

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