

# PATHWAYS TO POSITIVE

Firmenich

PERFORMANCE AND SUSTAINABILITY REPORT 2018

# PATHWAYS TO POSITIVE LIVING

Our front cover expresses our deep commitment to transparency and enabling sustainable lifestyles around the world.

We chose to highlight a gathering of urban people as they will play the greatest role in making sustainability mainstream, with more than 70% of the world's population expected to live in mega cities by 2030. Our Pathways to Positive strategy can only succeed if it is relevant and aspirational to them.

Around the world, we are seeing a paradigm shift towards good living, with people seeking more authentic experiences. We chose to symbolize this trend with this gathering around a vinyl record player, as it captures the essence and warmth of an authentic music experience, while also reflecting our circular thinking approach.

This visual also represents our creativity, the essence of everything we do.





WELCOME TO FIRMENICH

# CREATORS OF POSITIVE EMOTIONS TO ENHANCE WELLBEING, NATURALLY

At Firmenich, we are passionate about creating positive emotions to enhance wellbeing, naturally. This is our purpose and constant pursuit across our business. As a family-owned company since 1895, we care about leading our business forward for the good of our customers, colleagues and communities.

## CONTENTS

### OUR YEAR IN REVIEW

- 6 A Message from our Chairman and our CEO
- 8 2018 Milestones
- 9 Our Performance at a Glance
- 10 Research & Development
- 11 Perfumery & Ingredients
- 12 Flavors
- 13 Pathways to Positive
- 14 Our Materiality Matrix and Stakeholder Engagement

### AMPLIFYING GOVERNANCE

- 17 Leading in Integrity
- 18 Rethinking Sustainability Governance
- 19 Our Commitment to Human Rights
- 24 Delivering Product Safety and Quality

### ACCELERATING GROWTH

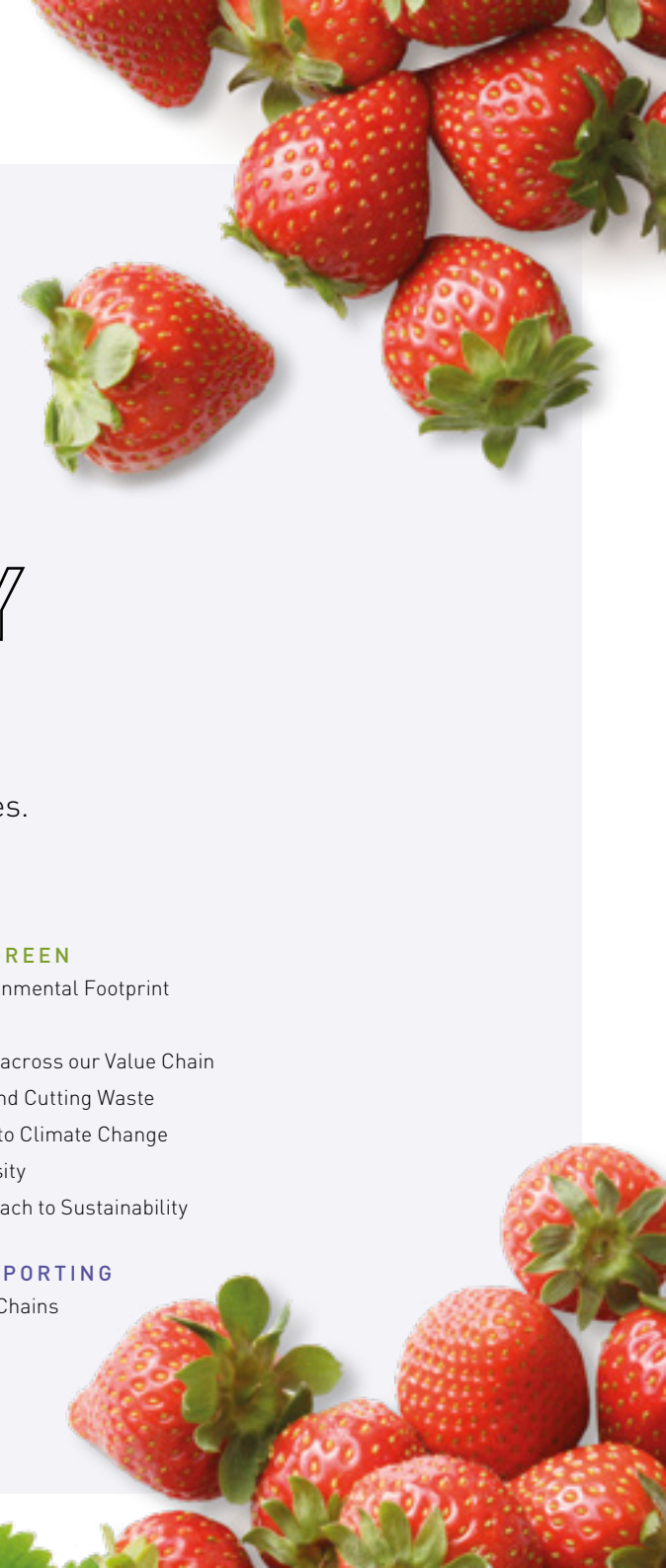
- 27 Pioneering in Taste and Nutrition
- 29 Building the Toilet Economy
- 31 Championing Responsible Sourcing
- 35 The Footprint of Fragrances
- 36 Shaping Sustainable Lifestyles

### FAST-TRACKING GREEN

- 39 Reducing our Environmental Footprint
- 40 CO<sub>2</sub> and Energy
- 42 Climate Leadership across our Value Chain
- 42 Conserving Water and Cutting Waste
- 44 Building Resilience to Climate Change
- 45 Protecting Biodiversity
- 46 Our Scientific Approach to Sustainability

### TRANSPARENT REPORTING

- 49 Sustainable Supply Chains
- 51 About our Reporting
- 51 External Verification





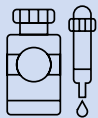


We bring moments of happiness to billions of consumers every day, through unique taste and smell experiences.

With creativity and innovation as our engine of growth, we apply our expertise to enhance wellbeing, from making healthier taste delicious all the way to accelerating access to hygiene for all. As nature is our greatest source of inspiration, as well as the origin of our most precious raw materials, we treat it with the utmost respect, in order to thrive today and tomorrow.

As the world's largest privately owned Fragrance and Flavor company, we are a business-to-business company spanning Perfumery & Ingredients, Flavors and Research. Headquartered in Switzerland and present across more than 100 markets, we employ close to 7,000 colleagues and operate 66 facilities around the world, including 31 manufacturing plants and four research and development (R&D) centers. Expanding our business reach, we secured five acquisitions this year. We also opened seven new facilities across the globe, from California to Thailand.

Taking our legacy into the future, sustainability is one of our "Firmenich Fundamentals" and lies at the heart of our strategy and business growth.



#1

PRIVATELY OWNED FRAGRANCE AND FLAVOR COMPANY



#1

IN FINE FRAGRANCE



#1

IN INGREDIENTS



CHF 3.7BN

IN NET SALES



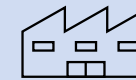
+9.6%

GROWTH (vs. FY17\*)



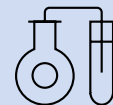
7,000

COLLEAGUES



31

MANUFACTURING PLANTS



4

R&D CENTERS

\* FY = Firmenich fiscal year.



# A MESSAGE FROM OUR CHAIRMAN AND OUR CEO

From left to right: Gilbert Ghostine, CEO and Patrick Firmenich, Chairman of the Board.



## A YEAR OF STRATEGIC CHOICES

In fiscal year 2018 ("FY18"), Firmenich reached CHF 3.7 billion revenues, recording dynamic growth across all our business units. We delivered solid market share gains in Perfumery and Flavors, while consolidating our Number 1 position in Fine Fragrance and Ingredients.

It was a year of strategic choices for us as our global environment faced many disruptions, driven by digitalization, changing consumer and customer expectations, industrial accidents among our suppliers, as well as environmental and geopolitical challenges. In this context, we strengthened our partnership with our customers with a sharp focus on innovation and value creation, while leading our business forward in a highly responsible way.

## STRATEGIC MARKET EXPANSION

We positioned ourselves as a key player in North America's fragrance middle market by acquiring Agilix Fragrances, a leading mid-sized perfumery company in the United States. To expand its footprint to the West Coast, we acquired Fragrance West in California, U.S., in July 2018.

To best support our strategic customers, as they accelerate their growth in sub-Saharan Africa, we bought Flavourome, an established flavors company in South Africa with manufacturing facilities.

Expanding our access to sustainable high-quality naturals, we acquired Natural Flavors, a pioneer in organic-certified flavors in the United States. We also took a strategic stake in Nelixia, a leading producer of natural ingredients in Central and South America.

Accelerating our speed-to-market, we opened seven new facilities worldwide, from a Global Perfumery Creative Center in Singapore to a Flavors innovation hub in California.

## WORLD-CLASS INNOVATION

With innovation as our engine of growth, we delivered a number of breakthroughs this year, from developing traceable solutions to pioneering in white biotechnology.

For instance, we established innovation hubs in Shanghai and Geneva to advance our research in botanical extraction, food fermentation and clean food technology processes. We also launched our third white biotechnology perfumery ingredient, a refined and highly environmentally friendly version of our iconic Z11, a warm, woody amber note.

FY18 was another year in which our creators were celebrated by our industry. Our Master Perfumer Olivier Cresp was distinguished by the Fragrance Foundation's Lifetime Achievement Award, while our Master Perfumer Tony Reichert was honored by the American Society of Perfumers' Lifetime Achievement Award at this year's World Perfumery Congress.

We also nominated two new Master Flavorists to join our global circle of leading creators. Bipin Khara is a pioneer in taste modulation with more than 20 years of Firmenich successes, particularly in Beverages; and Chun-yu Song is a savory specialist with an outstanding track record of over 16 years with Firmenich.

## OFFERING THE BEST OF NATURE SUSTAINABLY

We are committed to providing end-to-end traceability in a way that consumers can understand and trust, from the source of our ingredients and country of origin, all the way to our production processes.

In Flavors, we launched our Natural and Clean Label platform to develop a portfolio of the most authentic taste profiles, building on our Smart Protein and Organic Flavors Centers of Excellence.

In Perfumery & Ingredients, we significantly expanded our naturals' palette and created the industry's first fragrance sustainability measurement tool, the Firmenich EcoScent Compass™.



## REINFORCING OUR LEADERSHIP IN SUSTAINABILITY

Making progress against our ambitious environmental goals, we recorded top CDP rankings, with A in Climate and Water. With EcoVadis, we were among its top 1% of Gold-rated companies by achieving a score of 82/100. We also reached new milestones in renewable energy, with 78% of our global electricity coming from renewable sources today, and 100% in Europe and Switzerland.

We are proud that our perfumery palette is “REACH-ready,” as we successfully completed all REACH registration phases following a thorough ten-year process.

Fostering a workplace where all our colleagues can thrive around the world, we committed to becoming a 100% certified global gender equality employer by the end of calendar year 2018. To best identify and manage all human rights risks across our business and ecosystem, we launched our new Human Rights Policy Statement, in line with the UN Guiding Principles on Business and Human Rights.

Recognized publicly as a responsible business, we received the 2017 DuPont Sustainability Award, making us the first company in our industry to count three DuPont Awards. Among Swiss non-listed companies, we were also the leader in Digital Transparency for Sustainability in the annual independent ranking by Lundquist featured in *Bilanz* magazine.

Proud signatories of the United Nations (UN) Global Compact, we embed its ten principles and the UN’s Sustainable Development Goals across our business. Reflecting our continued commitment to the Global Compact, we were showcased as a leading company by its Swiss Network and celebrated at a UN event in Geneva. We are committed to making these global goals our business around the world, every day!

**“Committed to leading our industry in climate change mitigation, we set ourselves ambitious environmental goals, with the vision to become carbon neutral. Reaching CDP’s Supplier Climate and Water A Lists is testament that our actions are making a difference for our colleagues, our customers and the planet.”**

Patrick Firmenich, Chairman of the Board, Firmenich

**“In line with our Firmenich values, we consistently offer equal opportunities for all our colleagues to thrive. Building on our certification by the Swiss government as an Equal Pay Employer, I am proud to be making this benchmark our global standard as we are committed to becoming 100% gender-equality certified around the world in 2018. This is the right thing to do for society and for business!”**

Gilbert Ghostine, CEO, Firmenich

## TAKING OUR LEGACY FORWARD

We are very proud of how we lived up to our legacy in FY18, a year of many strategic achievements for Firmenich.

We owe our performance, first and foremost, to the trust of our customers, made possible by the passion and expertise of our people, creating positive value every day.

We thank you for your interest in our company and our sustainability journey and hope you will gain a real sense of the progress we are making through this report.

On behalf of the Board and Executive Committee, we sincerely thank all of Firmenich’s 7,000 colleagues for their efforts and successes, which you will read about in the pages that follow.

Warmest regards,

Patrick Firmenich  
Chairman of the Board,  
Firmenich

Gilbert Ghostine  
Chief Executive Officer,  
Firmenich



### Top – Board of Directors:

From left to right: Mr. Michel Firmenich, Mr. Richard Ridinger, Dr. Antoine Firmenich, Ms. Barbara Kux (Vice Chairman), Mr. Patrick Firmenich (Chairman of the Board), Ms. Karen Jones Easton, Dr. Ajai Puri, Mr. Pierre Bouchut and Mr. André Pometta.

### Bottom – Executive Team:

From left to right: Mr. Eric Nicolas (Chief Financial Officer, Corporate VP Strategy & Global Services), Ms. Mieke Van de Capelle (Chief Human Resources Officer), Mr. Bhavesh Shah (Chief Purchasing Officer), Ms. Jane Sinclair (General Counsel and Secretary of the Board), Mr. Gilbert Ghostine (CEO), Prof. Geneviève Berger (Chief Research Officer), Mr. Armand de Villoutreys (President Perfumery and Ingredients), Mr. Emmanuel Butstraen (President Flavors), Mr. Boet Brinkgreve (Chief Supply Chain Officer).

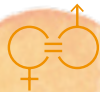
**PROUD SIGNATORIES OF THE UN GLOBAL COMPACT, WE EMBED ITS TEN PRINCIPLES AND THE UN’S SUSTAINABLE DEVELOPMENT GOALS ACROSS OUR BUSINESS.**





# OUR PATHWAYS TO POSITIVE 2018 MILESTONES

## AMPLIFYING GOVERNANCE



**COMMITTED TO BECOMING A 100% CERTIFIED GENDER EQUALITY EMPLOYER**

by end of 2018  
→ see page 20

**ECOVADIS 82/100 GOLD-RATED**

company  
→ see page 50



**51% IMPROVEMENT IN OUR TRC<sup>1</sup> RATE**

vs. our FY13 baseline  
→ see page 23



**PUBLISHED OUR FIRST HUMAN RIGHTS POLICY STATEMENT**

Human Rights Policy Statement  
→ see page 19

## ACCELERATING GROWTH



**SHOWCASED AT UN**

as leading Swiss company advancing the SDGs  
→ see page 13



**STRATEGIC STAKE IN NELIXIA**

to lead in Naturals in Central America  
→ see page 11



**LAUNCHED OUR NATURAL & CLEAN LABEL PLATFORM**

for authentic and traceable taste  
→ see page 27



**RELEASED ECOSCENT COMPASS™**

to measure a fragrance's sustainability profile  
→ see page 35

## FAST-TRACKING GREEN



**INVESTED IN THE SECOND LIVELIHOODS CARBON FUND**

to offset carbon emissions sustainably  
→ see page 44



**OPERATE WITH 78% RENEWABLE ELECTRICITY**

worldwide  
→ see page 41



**ON CDP'S A LIST** for Climate and Water

→ see page 42



**DUPONT GLOBAL SUSTAINABILITY AWARD**

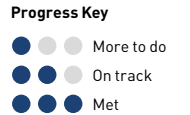
for our industry-leading Ingredients Sustainability Index  
→ see page 35

<sup>1</sup> Total Recordable Cases.





# OUR PERFORMANCE AT A GLANCE



## GOVERNANCE

## GROWTH

## GREEN

| 2020 GOAL  | FY18 PROGRESS   |
|--|---|
|  <p>Maintain a best-in-class legal compliance program</p>   | <p>● ● ● <b>Continued to promote our culture of ethics and legal compliance</b> through our human rights and biodiversity governance and policies</p> |
|  <p>Certify all Firmenich sites for gender pay equality</p> | <p>● ● ● <b>Commitment to become 100% certified gender-equality employer</b> by end of calendar year 2018</p>   |
|  <p>Further improve our excellent product quality</p>     | <p>● ● ● Achieved a Customer Quality Index (CQI) of <b>less than one product defect per 1,000 sales order lines</b></p>                               |

| 2020 GOAL  | FY18 PROGRESS   |
|--|---|
|  <p>Improve quality of life through nutrition, hygiene and sanitation</p>             | <p>● ● ● Launched <b>TastePRINT™</b> and <b>Protein Shield Flavors</b><br/>Invested in <b>mobile toilets</b> for women and girls in Pune, India</p> |
|  <p>Develop sustainability projects with 50 customers globally</p>                    | <p>● ● ● Developed projects with over <b>100 customers</b> ranging from multinationals to smaller companies covering perfumery and flavors</p>      |
|  <p>Build 40 responsible sourcing projects with smallholder farming communities</p> | <p>● ● ● <b>27 Deep Roots projects</b> implemented</p>  |

| 2020 GOAL  | FY18 PROGRESS  |
|--|--|
|  <p>Reduce absolute Scope 1 and 2 CO<sub>2</sub> emissions by 20%</p>               | <p>● ● ● <b>12.1%</b> vs. FY15</p>                                       |
|  <p>Obtain 100% electricity for Level 1 sites from renewable sources or offsets</p> | <p>● ● ● <b>78%</b> of electricity from renewable sources or offsets</p> |
|  <p>Ensure all of our manufacturing sites can claim zero waste to landfill</p>      | <p>● ● ● <b>41% reduction</b> in waste to landfill vs. FY15</p>          |





## BUSINESS HIGHLIGHTS

# RESEARCH & DEVELOPMENT

Mastering the full continuum of Taste and Smell innovation, we put our science to work to shape superior consumer experiences: from our ingredients, our technologies and our creation processes, all the way to understanding human perception. Our multidisciplinary team of researchers, perfumers, flavorists and application experts are all committed to advancing sustainable science with green chemistry principles at the core.

## FY18 HIGHLIGHTS

- **Pioneered in white biotechnology ingredients** – we launched our third fermentation-based perfumery ingredient, a refined and highly environmentally friendly variant of our iconic Z11, a powerful, elegant, woody and amber note.
- **Advanced our commitment to degradability** – our research teams continued to investigate the different degradation pathways of our ingredients in the environment.
- **Contributed to shaping new regulations and analytical methods** – Firmenich scientists engaged in technical committees across a range of regulatory bodies and industry associations.
- **Deployed green chemistry approaches** – we significantly improved the environmental profile of signature floral and sandalwood perfumery notes.
- **Implemented a cutting-edge online monitoring technology based on Fourier Transform Near-Infrared (FT-NIR) instrumentation** – allowing us to follow and optimize chemical processes in real time.





## BUSINESS HIGHLIGHTS

# PERFUMERY & INGREDIENTS

Our Perfumery & Ingredients business achieved strong organic growth, thanks to its deep customer intimacy, superior creativity and leadership in technology innovation. In the second half of the year, the industry faced significant disruptions in the supply of key fragrance ingredients combined with general cost inflation. Firmenich engaged quickly with key suppliers and customers to ensure continued supply.



## FY18 HIGHLIGHTS

- Led the acquisitions of Agilex Fragrances, followed by Fragrance West in July 2018.**  
 With Agilex, we significantly increased our market share with small- and mid-sized customers in North America. We then expanded its capacities with Fragrance West in California. This makes us the only Fragrance company to serve the middle-market in the United States, with manufacturing capabilities on both the East and West Coast.
- Embedded our Naturals and Sustainability capabilities in fragrance creation** to address growing consumer aspirations for more sustainable lifestyles, as well as responsible and traceable products. We launched EcoScent Compass™, the industry's first tool to holistically measure a fragrance's sustainability footprint, from its intrinsic green properties to its environmental and social impact.
- Committed to sourcing the most responsible natural ingredients**, we took a strategic equity stake in Nelixia, a leading producer of essential oils across Central and South America and renowned for some of the best cardamom oil in the world.
- Launched our 2018 Sharing Innovation Ingredient Collection** – including Z11, our third pioneering white biotechnology perfumery ingredient; two groundbreaking synthetics, Hivernal® Neo and Norlimbanol® Dextro; and two iconic naturals, Oud Assafi™ (also known as Oud Assam) and Rose Centifolia Pays Absolute.
- Strengthened our innovation with cutting-edge and eco-friendly delivery technologies** for Laundry and Body Care products, new malodor control technologies and the expansion of our capabilities in cooling and freshness modulators with Senomyx.
- Celebrated for our world-class creativity**, our Master Perfumer Olivier Cresp was honored by this year's Fragrance Foundation Lifetime Achievement Award, while our Master Perfumer Tony Reichert received the 2018 Lifetime Achievement Award from the American Society of Perfumers.
- Industry-leading 22 Fifi awards globally**, making Firmenich the most celebrated Fragrance company in the industry this year. Gucci Bloom, by our Master Perfumer Alberto Morillas, received four distinctions, including "Women's Prestige" at the US Awards, "Best Feminine Olfactive Creation" in Italy, "Best Feminine Luxury Fragrance of the Year" in Spain and "My Favourite Perfume of the Year" at the Arabia Awards. Givenchy Gentleman, by our Master Perfumers Nathalie Lorson and Olivier Cresp, was awarded the Fifi d'Or for a Masculine Prestige Fragrance in Paris.
- Investing in our future**, we opened our Global Perfumery Creative Center in Singapore and inaugurated new facilities in Spain and Korea.







## BUSINESS HIGHLIGHTS

# FLAVORS

Our Flavors business grew around the world as we advanced our programs in Taste, Nutrition, Naturals and Clean Label to delight consumers. We are passionate about mastering taste across all its dimensions in the most traceable and authentic way. That's why we are at the source of the best quality of natural ingredients, and create unique experiences that consumers love, trust and understand.

### OUR 2018 FLAVOR OF THE YEAR

We announced fig as our 2018 Flavor of the Year based on its growing worldwide appeal. Fig is a feel-good flavor long touted for its culinary uses as well as numerous health benefits.

The fruits are lusciously sugary with a texture that combines chewiness, smoothness and crunchiness. As consumers look to replace processed sugar with alternative sweeteners, fig has become a go-to substitute that is here to stay.



## FY18 HIGHLIGHTS

- **Completed two strategic acquisitions** – Natural Flavors and Flavourome – enabling us to strengthen our position and meet the pace of change within the food and beverage industry. U.S.-headquartered Natural Flavors is one of the pioneers in organic certified flavors, enabling us to offer an extensive palette of natural and organic-certified solutions. Flavourome is a South African-based Flavors company, providing us with a local manufacturing presence to best support our customers' accelerated growth across sub-Saharan Africa.
- **Advanced our position in Savory** with the opening of a new culinary discovery center in Bangkok, Thailand, as well as a Center of Excellence for green protein in Vienna, Austria. We also launched Culinary Anthropology, a new and proprietary "design thinking" approach to create innovative Savory solutions.
- **Building on our long-standing presence in California**, we expanded our business on the West Coast to offer our customers tailored taste and nutrition solutions, including a unique range of organic offerings. Enhancing our creation and innovation capabilities, this new hub delivers rapid prototyping for high speed-to-market with dedicated labs and plant facilities.
- **Made healthier taste delicious with TastePRINT™**, a new, cleaner-tasting natural sweetener solution that contributes to responsible nutrition by enabling our customers to reduce up to 100% of added sugar naturally.
- **Achieved increased sales globally** and across all three business segments: Beverages, Sweet Goods and Savory.
- **Continued to perform strongly across Beverages**, including special soft drinks and hot drinks, with sustained demand for fruity tonalities and brown notes.
- **Delivered growth in Sweet Goods** led by Bakery & Cereal, Dietary & Nutrition and Dairy. We remain the preferred choice thanks to our extensive experience and knowledge in brown notes, vanilla and mint flavors.
- **Saw solid global growth in the Savory market**, consolidating our position as our customers' partner of choice in protein, noodles and soups, as well as in the food service channel.





## OUR SUSTAINABILITY STRATEGY

# PATHWAYS TO POSITIVE

Cutting across our three businesses and focused on responsible growth, our 2020 Pathways to Positive strategy has guided our business over recent years. Encompassing good governance, innovation and the natural world, our strategy incorporates all of these material concerns into our business, as reflected in the structure and content of this report.

Just as our business is rooted in a long heritage, so is our commitment to sustainable development. Having signed the International Chamber of Commerce Business Charter on Sustainable Development 27 years ago, we have now reached an interesting turning point in the evolution of our Pathways to Positive sustainability strategy, which covers the period from 2015 to 2020.

We believe that the spirit of our strategy has grown in relevance over time, alongside increasing public awareness of sustainability issues. The Sustainable Development Goals (SDGs) adopted by the United Nations in September 2015 have also created a new momentum, leading us to strengthen our approach. The idea that sustainability is a journey towards improvement and learning is at the heart of everything we do as we seek to add value to society and the environment.

As a responsible business, we are committed to using our innovation to address some of the most pressing challenges of our time. While SDG 17 (Partnerships for the Goals) underpins our whole approach, we have a specific focus on SDG 6 (Clean Water and Sanitation) and SDG 12 (Responsible Consumption and Production). These are areas where we believe we can make a difference. Added to this conviction is a sense of urgency as we seek to fast-track sustainability across the company. This has led us this year to streamline our strategic framework in order to achieve business transformation more efficiently.

Our Pathways to Positive 2020 goals remain but we have reorganized them around three pillars – **Governance, Growth and Green – our 3Gs**. This simplified framework provides a strong basis for action, engagement and reporting and makes our sustainability work more accessible to our colleagues. As we start integrating the results of our new materiality analysis and matrix, **our 3Gs** framework helps us refine the priorities identified through that process and enables strong integration with our company's purpose.



## CHAMPIONING THE UN GLOBAL COMPACT

A signatory of the United Nations Global Compact since 2008, Firmenich actively embeds the UN's Ten Principles and SDGs across our business. This year, Firmenich was featured as a champion of the UN Global Compact in a movie produced by the organization's Swiss Network, showcasing pioneering Swiss companies advancing its Principles and SDGs – alongside Nestlé Waters, Bank J. Safra Sarasin and Caran d'Ache. Launched at the United Nations Office in Geneva in June 2018, this movie is going on tour across Switzerland to raise awareness among multinationals and smaller enterprises on how sustainable business is smart business.



**WATCH THE UN GLOBAL COMPACT  
"TOUR DE SUISSE" MOVIE**

[www.globalcompact.ch](http://www.globalcompact.ch)



# OUR MATERIALITY MATRIX AND STAKEHOLDER ENGAGEMENT

An evolving business landscape and trends have prompted us to update our materiality analysis and conduct a full review of our sustainability priorities.

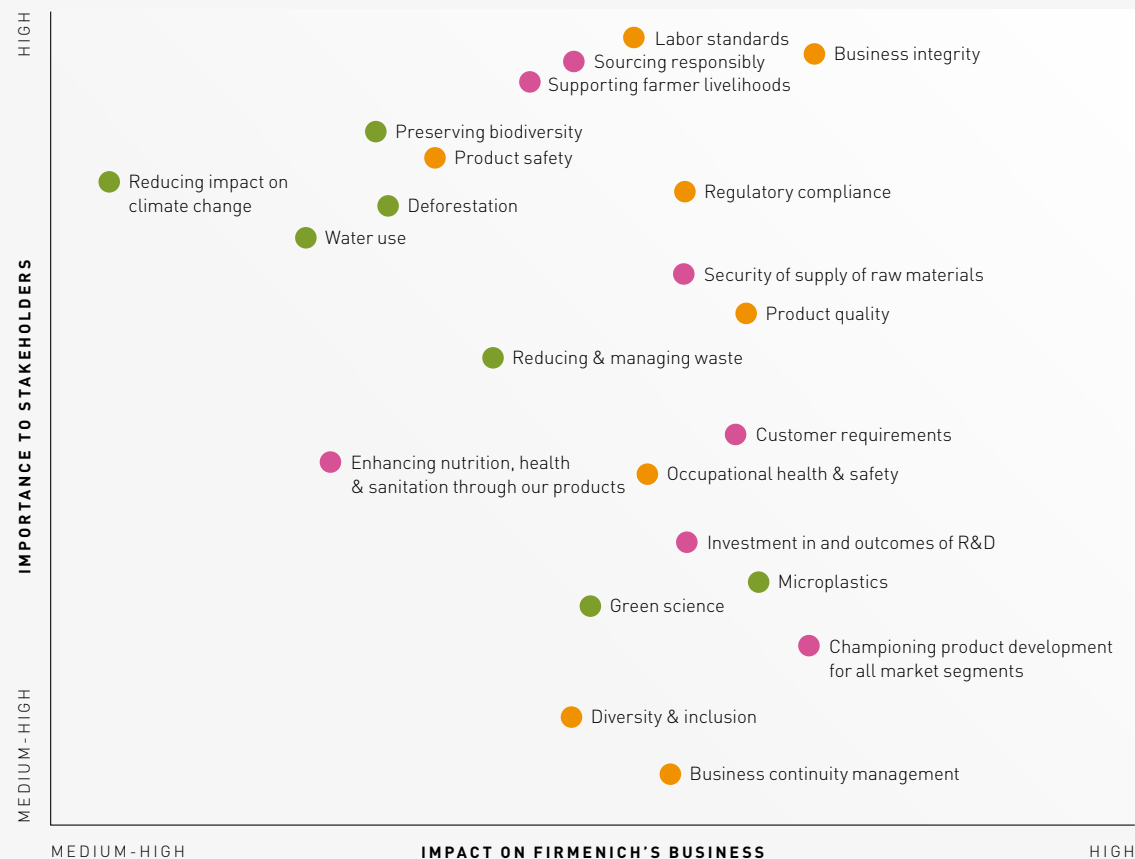
This assessment captured feedback from across our business via interviews and questionnaires. Stakeholder engagement was key and we also reached out to customers and partners to understand their insights. Beyond informing the content of this report, the outcomes of the materiality assessment are used to refine our sustainability strategy, redefine our targets beyond 2020 and ultimately ensure the integration of high-priority sustainability and corporate risks.

A summary of this process, including an overview of stakeholders engaged and key topics and concerns, is available in our materiality report at [www.firmenich.com](http://www.firmenich.com). Our Performance and Sustainability Report covers high material issues. Issues rated medium and low are not necessarily covered in this report; we will closely monitor these in the coming years. Newly identified issues will be integrated moving forward.

## STAKEHOLDERS

Our key stakeholders include shareholders, colleagues, customers, suppliers, industry associations, non-governmental organizations (NGOs), governmental institutions and academics. We engage through different channels, including meetings, workshops, social media and conferences.

Regular engagement is instrumental to deliver on our sustainability strategy and achieve our objectives. While we engage with our customers to fully understand and respond to their needs, we also engage with our suppliers to ensure that sustainability is cascaded down our supply chain and we engage with industry associations around the evolving regulatory landscape. We also value engagement with NGOs, as some of our activities and challenges require specific and local expertise.



|     |      |
|-----|------|
|     | HIGH |
| LOW |      |

## OUR MATERIAL ISSUES

- AMPLIFYING GOVERNANCE
- ACCELERATING GROWTH
- FAST-TRACKING GREEN



# AMPLIFYING GOVERNANCE

## GOING BEYOND COMPLIANCE

A key pillar of our Pathways to Positive strategy is governance, as leading with integrity and respecting human rights are central to our long-term success. This is why we hold ourselves accountable to the highest standards of corporate governance, continually reviewing our systems to operate in line with best practices and supporting our colleagues to be true to the Firmenich Fundamentals that we all share.

### IN THIS SECTION

- 17 Leading in Integrity
- 18 Rethinking Sustainability Governance
- 19 Our Commitment to Human Rights
- 24 Delivering Product Safety and Quality

### OUR CONTRIBUTION TO THE SDGs





# WHAT OUR PARTNERS SAY...

“Gender equality is not about numbers, it’s about serving your customers better! Research shows that when women and men work together in a balanced environment, they produce far better and more innovative output. Firmenich has put a stake in the ground, taking a leadership role in the industry, by going after 100% gender equality in their workplace.”

Nadia Younes,  
Chief Innovation Officer, EDGE Strategy

EDGE is the leading global assessment methodology and business certification standard for gender equality. [www.edge-cert.org](http://www.edge-cert.org)



## SECTION HIGHLIGHTS

### ACTING ON HUMAN RIGHTS

Identifying salient issues and developing our Human Rights Policy Statement

→ See page 19

### FOSTERING DIVERSITY

Creating a workplace where everyone is valued and supported to thrive

→ See page 20

# PROGRESS AGAINST OUR 2020 GOVERNANCE GOALS

### Progress Key

- ● ● More to do
- ● ● On track
- ● ● Met

| 2020 GOAL  | FY18 PROGRESS   |
|--|---|
| Maintain a best-in-class legal compliance program  | ● ● ● <b>Continued to promote our culture of ethics and legal compliance</b> through the development of our human rights governance, our redeveloped Gift and Entertainment policy and the launch of our Whistleblowing hotline |
| Audit and validate human rights across the Firmenich value chain   | ● ● ● <b>Identified Firmenich’s salient human rights issues</b> and published a Human Rights Policy Statement   |
| Formalize a program to further integrate people with disabilities throughout our business  | ● ● ● <b>Employed 30 visually impaired panelists</b> out of a total of 100 sensory panelists around the world   |
| Certify all Firmenich sites for gender pay equality  | ● ● ● <b>Commitment to become 100% certified gender equality employer</b> by end of 2018 calendar year  |
| Create a Firmenich Sustainability Academy to train 100% of our workforce on social and environmental topics                      | ● ● ● <b>Launched Firmenich Connect</b> and delivered face-to-face sustainability training to over 984 colleagues   |
| Extend our apprenticeship program to all geographic regions  | ● ● ● <b>Extending apprenticeship program to the United States</b> after Switzerland, our two largest campuses, representing 40% of our employee-base   |
| Sustain and further improve our industry-leading safety performance by maintaining a total recordable case (TRC) rate below 0.25 | ● ● ● <b>Improved our safety performance 51%</b> vs. our fiscal year 2013 baseline and reached a TRC rate of 0.21   |
| Further improve our excellent product quality  | ● ● ● <b>Achieved a Customer Quality Index (CQI) of less than one product defect per 1,000 sales order line</b>   |
| Lead the industry in the operationalization of the Nagoya Protocol   | ● ● ● <b>Hired full-time biodiversity expert</b> , sitting within the Legal & Compliance Division, with responsibility to continue to drive compliance with the Nagoya Protocol internally                                      |





# LEADING IN INTEGRITY

Doing business the right way is firmly engrained in our culture. Taking a holistic view of business ethics, our commitment cuts across five critical and interdependent dimensions.

### Leadership

The Firmenich Fundamentals are key to embedding our belief that "There is no right way to do the wrong thing." This message is endorsed by our Chairman and championed by our CEO, ensuring Firmenich's commitment to compliance is non-negotiable, visible and active. A global Ethics Committee, including our CEO, CFO, CHRO and General Counsel, oversees our overall governance. It is supported by a network of regional committees that ensure our business ethics are cascaded across all the regions in which we operate.

### Oversight

In 2017, we launched the Firmenich Hotline, an independently operated channel whereby any concerns or potential non-compliances can be raised confidentially. We also embedded a user-friendly Gifts and Entertainment portal within our travel and expenses system, providing full transparency on trends and behaviors worldwide.

### Risk Assessment

Our focus is on understanding what our highest overall enterprise risks are and taking steps to mitigate them. A Risk Committee oversees risk assessment, identification and remediation across products, services, customers, entities, geographic locations, opportunities, partnerships and transactions. Risks deemed to be significant are prioritized and resources are allocated accordingly.



### Standards and Controls

Our Code of Ethics and Business Conduct was updated in 2018 to reflect a range of improvements. For instance, we launched an improved Gifts and Entertainment Policy, accompanied by practical guidance and a tailored online training issued to all colleagues. Our Global Anti-Corruption Policy and Antitrust Compliance Policy are also key standards on how we conduct business the right way.

### Training and Communication

Making business ethics "business as usual" for all our colleagues, we are defining a mandatory training curriculum including online and tracked certification for key policies and subjects. Every new employee receives online Anti-Corruption and Bribery training and all colleagues worldwide received online Anti-Bribery training in August 2017. Our Code of Ethics and Business Conduct, incorporating our Anti-Corruption Policy, is communicated to all our business partners for their alignment. Both documents are available on our Firmenich website.

# RETHINKING SUSTAINABILITY GOVERNANCE

This year, we further reinforced leadership, ownership and management of sustainability issues by creating new roles and revising our sustainability governance structure.

Reflecting the importance we place in people, culture and values, in FY18 we transferred responsibility for sustainability to our Chief Human Resources Officer, who is a member of the Executive Team, reporting annually to the Board on our corporate sustainability strategy and performance. One member of the Board has specific oversight of the sustainability strategy and its program activities.

Following this change, we also created a new role, Vice President, Global Head of Sustainability, with a mandate to spearhead the development of a new sustainability strategy, oversee current and future activities and maintain Firmenich's thought leadership in this area. The Global Head of Sustainability reports to the Chief Human Resources Officer. In support of the Global Head of Sustainability, we also created two further positions.

**“Firmenich is one of the few companies to have an impact in almost every home on the planet. In our joint Senses and Sensibilities Project, we work with underprivileged youth from the Mahindra Pride schools to access first-hand insights into their lifestyles at the base of the pyramid. Firmenich is an incredibly strategic partner for us to communicate their demands, wishes and misses to big companies and to translate them into business opportunities.”**

**Manoj Kumar,  
CEO, Naandi Foundation**



From left to right: Gib Bulloch, Author; Cheryl Hicks, Executive Director, Toilet Board Coalition; Erin McCusker, Senior Program Officer, Bill & Melinda Gates Foundation; Manoj Kumar, CEO, Naandi Foundation; Peggy Herrmann-Ljubcic, Head of Program, Terre des Hommes; Grégory Simonnin, Senior Sustainability Consultant, Quantis; Dr. Bérangère Magarinos-Ruchat, VP Global Head of Sustainability, Firmenich; Tony Bruggink, Program Director, IDH The Sustainable Trade Initiative; Alison Cairns, Project Director, World Business Council for Sustainable Development; Rik Kutsch Logenja, Executive Director, Union for Ethical BioTrade; Benjamin Firmenich, Partner, Impact Finance; Nicolas Dussert, Senior Sales Manager, EcoVadis; Alia Poonwala, Senior Project Manager, Global Alliance for Improved Nutrition; Inès Burrus, Ph.D. Candidate, HEC Lausanne.

## OUR GLOBAL SUSTAINABILITY EXCHANGE

A Sustainability Council was previously established to advise us on our sustainability strategy and activities. In light of the fast-paced environment the company operates in today, the Sustainability Council has evolved into an inclusive and dynamic network of partners and colleagues: the Global Sustainability Exchange. This is an important platform for exchanging expertise, experience and insights by connecting different functions and gathering communities of practice. The objective is to grow these activities into impactful projects that generate opportunities for Firmenich, its partners and society at large.

In May 2018, over 60 partners and champions convened in Geneva to look at end-to-end sustainability, from the source to the consumer. Participants joined panels and roundtables to discuss sustainability issues and solutions across three market segments: sustainable luxury, mass

market and low-income consumers. In addition to getting concrete recommendations from partners on how Firmenich can improve its management of material issues such as responsible sourcing or diversity and inclusion, partners met with our CEO, Gilbert Ghostine, and our sustainability champions to share their feedback and expectations. We will continue engaging with colleagues and partners to build on the insights from this event.



**DISCOVER WHAT OUR PARTNERS SAY AT**

[www.firmenich.com/sustainability](http://www.firmenich.com/sustainability)



# OUR COMMITMENT TO HUMAN RIGHTS

People are at the heart of Firmenich’s success and at the core of our values. As a responsible company, we respect international human rights standards and are working to assess our impact through our own operations and our business relationships – as an employer, as a purchaser of raw materials and as a member of the communities where we operate.

The world has seen a surge in legislation around human rights – from California’s Transparency in Supply Chains Act and the UK’s Modern Slavery Act to the recent French corporate duty of vigilance law. In Firmenich’s home country of Switzerland, the Responsible Business Initiative has called for Swiss-based multinational companies to undertake human rights and environmental due diligence. We welcome these developments and see them as opportunities to collaborate, formalize and structure our approach in line with global best practice.



**THIS YEAR, WE PUBLISHED OUR FIRST HUMAN RIGHTS POLICY STATEMENT TO OUTLINE OUR POSITION AND ACTIONS.**

## IDENTIFYING OUR SALIENT ISSUES

At the start of 2018, we organized a workshop alongside Shift, the leading center of expertise in human rights, to identify our salient issues. Employee representatives from different functions participated in constructive discussions on a number of topics, ultimately leading to the formation of a **Human Rights Committee**, led by our Chief Human Resources Officer.

The first task of the Committee was to issue a **Human Rights Policy Statement** to outline our position and actions, both in our own operations and in our business relationships. In parallel, as part of our materiality assessment, we engaged with external and internal stakeholders to review issues and provide feedback.

The Statement, together with our salient issues, constitutes a robust foundation upon which we are shaping our human rights strategy, focusing our actions and developing new goals and targets beyond 2020. While we are still refining our strategy, next steps include developing training and operationalizing human rights across the business. We are also committed to engaging with rights holders of our salient issues to improve our understanding of those issues and define clear action plans.

Some of our salient issues have also been identified as key priorities in our materiality analysis, including labor standards (see page 20), diversity and inclusion (see page 20), and health and safety (see page 23).







## EMBRACING FAIR LABOR PRACTICES

Fair and just labor practices are the foundation of our business. We follow high labor standards and foster an environment in which each colleague is empowered and encouraged to grow. Our aim is to help our people build rewarding careers with Firmenich and to shape a successful future for themselves and our company.

### TOWARDS 100% GENDER EQUALITY CERTIFICATION

On International Women’s Day 2018, we proudly announced our commitment to becoming a 100% certified gender equality employer by the end of calendar year 2018, working with leading global assessment firm EDGE Strategy. Going beyond gender pay parity, this certification covers compensation, recruitment, promotion, leadership training, mentoring and flexible working. A survey to assess employee perceptions of gender experiences at Firmenich in 11 countries will help us further embed this work and set appropriate benchmarks going forward.

“By being certified as a 100% gender equality employer, we are reaching our next level of excellence, going far beyond equal pay, with clear benchmarks to measure our success transparently.”

Mieke Van de Capelle,  
Chief Human Resources Officer, Firmenich

### FIRMENICH SOCIAL ACCOUNTABILITY STANDARD

The Firmenich Social Accountability Standard requires compliance with national laws, the International Labour Organization (ILO) Conventions and Recommendations and the United Nations Universal Declaration of Human Rights in critical areas of employment and human rights. In addition to applying the Social Accountability Standard in all Firmenich affiliates, we also included a Supplier Social Accountability Program within the Standard.

“As CPO, it is my responsibility to ensure that my teams engage with our suppliers and subcontractors to advance our sustainability objectives. That’s why all our suppliers must comply with our standards and policies or commit to equivalent ones as well as to providing evidence that these standards are met.”

Bhavesh Shah,  
Chief Purchasing Officer, Firmenich

### A CULTURE OF INCLUSION AND DIVERSITY

Firmenich’s creativity and success relies on a rich diversity of talent. That’s why our **commitment to become a 100% certified gender equality employer** is so important. A diverse workforce helps us innovate to meet the needs of our evolving customer base and deliver our business objectives.

Our **Diversity and Inclusion Policy** outlines our commitment to fostering a culture where all our colleagues can thrive and are treated with fairness, equality and respect. Cutting across recruitment and compensation, training and performance, our policy sets the standard for an equal opportunities working environment, and reinforces our commitment to providing competitive, sustainable and inclusive benefits.

We have reviewed all our employee benefits and policies in our top ten countries and have mandated that all must be inclusive, providing the same benefits in each country to men and women regardless of age, sexual orientation, gender, marital status, ethnic background, religion or physical ability (where legally possible). Over the next six months, we will expand our review to all countries. We are currently developing a specific diversity and inclusion training for our recruitment teams.

INDUSTRY-LEADING FEMALE REPRESENTATION ON OUR EXECUTIVE COMMITTEE\*

ARE WOMEN  
(40% OF STAFF ARE WOMEN)

\* Our Executive Committee includes seven nationalities.







## EMBRACING FAIR LABOR PRACTICES CONTINUED

### DIVERSITY AND INCLUSION IN PRACTICE

Blind and visually impaired panelists make a valuable contribution to our flavors and fragrances testing. Over the past years, we have hired and trained 30 blind and visually impaired "sensory panelists" – almost a third of all those who take part in our panels. Following successful pilots in Mexico and the UK, we expanded the program to Geneva, Mumbai and Singapore this year. In May 2018, we were honored in Singapore with an International Business Award for our **pioneering program to integrate visually impaired professionals across sensory panels.**

## INVOLVING AND ENGAGING PEOPLE

In 2018, our workforce numbered close to 7,000 colleagues. We hired 837 new employees and our turnover<sup>2</sup> rate was 10.4%. 27% of employees are covered by collective bargaining agreements.

It is critical for us to engage with all our colleagues in a constant dialogue to help us improve our working environment. Complementing our biannual employee engagement survey "Tell Us How You Feel," we conduct annual "Pulse" surveys. Colleagues are asked to comment on their work satisfaction, environment and relationships with managers and co-workers.

With a record participation of more than 87%, we achieved top-tier performance with a score of 7.1 out of 10, reflecting our strong One Firmenich team spirit and our confidence in our capacity to achieve our 2020 strategic objectives. Our leaders were recognized for setting clear expectations and promoting collaboration.

## "I AM FIRMENICH"

Bringing to life the world-class creativity, expertise and passion of our colleagues, "I Am Firmenich" is our recruitment campaign featuring video testimonials of our people. Offering a true window into our diverse expertise, during the year we unveiled a range of videos showcasing the varied paths available to new recruits.



**WATCH THE "I AM FIRMENICH" VIDEOS**

[www.firmenich.careers](http://www.firmenich.careers)

## DEVELOPING OUR PEOPLE

We continually invest in our people through our global training program. In FY18, we trained more than 400 Firmenich leaders on inspirational and inclusive leadership, preparing them to drive the next era of growth across the company.

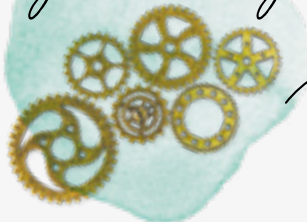
Advancing a **culture of continuous learning**, this year, for the first time, we distributed 1,800 LinkedIn Learning licenses. Offering unlimited access to a library of 11,000 high-quality instructional video tutorials across a broad range of subjects, LinkedIn Learning provides anytime, anywhere access in six languages.

## EXCELLENCE IN PEOPLE AND SKILLS DEVELOPMENT

In FY17, we were selected out of 11 major Singapore companies to win the SwissCham Singapore Excellence in People and Skills Development Award. It celebrates how we attract and develop talent through skills training, university partnerships and engaging with Singapore society.

WHEN EQUALITY THRIVES,

*business gets stronger*



**BUSINESSES PERFORM AND INNOVATE BETTER WITH DIVERSE TEAMS**

AT FIRMENICH, WE ARE FOSTERING

*an inclusive workplace*



**WHERE DIFFERENT BACKGROUNDS COME TOGETHER TO MAKE A WHOLE THAT IS GREATER THAN ITS PARTS**

**THIS IS A PLACE WHERE ALL VOICES ARE HEARD SO INNOVATION CAN THRIVE**

**IT'S THE BEAUTY OF DIFFERENCE**

<sup>2</sup> Includes all termination types (e.g. resignations, dismissals and retirements).

## EMPOWERING OUR COLLEAGUES FOR SUSTAINABILITY

To strengthen our sense of individual and collective responsibility and bring to life our Fundamentals, we offer our colleagues opportunities to get involved in our communities. Our Firmenich 4 Society program is an annual recognition program rewarding colleagues with the opportunity to directly contribute to sustainability and community efforts.

This year, the overall winners of our Firmenich 4 Society awards were colleagues who were instrumental in the development of our blind and visually impaired sensory panels. One group of winners traveled to Pune, India, where they met with local partners to understand the challenges of sanitation and how education can contribute to social advancement. As well as seeing the work of Sara Plast, a social enterprise in recyclable and portable sanitation, and the Mahindra Pride School for underprivileged youths, the team appreciated first-hand how our breakthrough malodor counteracting technologies (see page 29) are improving lives in local communities.

A second group of award-winners visited a women's cooperative in Morocco to understand how orange flower water, a neroli by-product, can become a viable year-round income. The team worked with the entrepreneurs to explore how to scale the product, applying our scientific expertise.

### FIRMENICH COMMUNITY DAY

Our 13th Community Day saw more than 3,000 colleagues volunteer their time across 118 projects – our largest-ever campaign. Another step change this year was how we channeled key fundraising efforts to a single project: the Firmenich School in southern Haiti. We raised CHF 75,000 to complete repairs to toilets, gutters and water supplies following Hurricane Matthew, as well as to provide a nutritious daily snack and drink for all 650 students for the next 12 months. Having helped build the school to support vetiver farming families in 2012, we have continued to support it alongside the Firmenich Foundation.

**“I am proud to work for a company like Firmenich that values the voice of its young talents. We regularly have a seat at the table on key strategic projects and we are encouraged to embrace new technologies in our ways of working. Every day when I come into the office I truly feel that I have the possibility to make a difference, as a colleague and a citizen.”**

**Anne-Catherine Melnotte,  
Project Management Office & Change Management  
Director, Firmenich**

### INNOVATORS OF THE FUTURE

We're committed to finding and understanding the generation of creators, scientists, product developers, support staff and strategic leaders. With millennials already representing a third of our global workforce, we've set up Change Makers, a community inviting real-time online debate on talent development, as well as leading hackathons and design thinking workshops, to create a culture of ideation from within.

In FY18, we sent a delegation of six Change Makers to One Young World, a global leadership event for young people in business, NGOs and universities. During four days in Bogotá, Colombia, they joined around 1,300 peers from 190 countries to discuss global megatrends, including human rights, education and the environment.





## SAFETY AT WORK

**“We are proud of our track record in safety. Over the last year, we saw our LTC rate fall by 22% while our TRC rate remained unchanged. When measured against our rolling five-year FY13 baseline, our TRC and LTC rates fell by 51% and 50%.”**

Neil McFarlane, Senior Vice President Global QHSSE, Firmenich

### WORLD-CLASS SAFETY PERFORMANCE

**0.21 Total Recordable Cases (TRC)** [-51% vs. FY13 baseline]

**0.07 Lost Time Cases (LTC)** [-50% vs. FY13 baseline]

**24 manufacturing sites** with zero recordable injuries in FY18

**10 manufacturing sites** achieved greater than one million exposure hours injury free

**76 Lab Safety Champions trained** as part of our laboratory safety network

To maintain our momentum towards zero accidents and injuries, we invested CHF 27.7 million across our operations – including, for example, ventilation systems, fire and explosion protection, fall protection, ergonomics and chemical handling.

## FOCUS ON SECURITY

During the last year, we widened the scope of our Safety Roadmap to include security, to be overseen by a new Global Security Director. We also developed security codes and standards, improved traveler safety and security and overhauled our approach to crisis management. We are now exploring how we will integrate security technology into the design of new buildings and significant expansion projects, while at the same time aligning to EU General Data Protection Regulation (GDPR).

## OUTSTANDING SITE SAFETY

Our FY18 Global Awards for Health, Safety and Environment went to our Perfumery & Ingredients plant in Gujarat, India, which was recognized for its outstanding safety culture, as well as to our Global Flavor Supply Chain team, for demonstrating sustained and significant safety improvements over the last decade.

CHF 3.2 million

INVESTED IN OUR GLOBAL  
FIRE PROTECTION CAPITAL  
INVESTMENT PROGRAM

## FIRE PROTECTION

FY18 was the fifth year of our global fire protection capital investment program, which has been carried out to upgrade fire and flood protection at our factories to meet industry best practice standards. Significant progress was made this year, with CHF 3.2 million invested in Geneva, Switzerland; Louvain-la-Neuve, Belgium; Toluca, Mexico; Singapore; Princeton, U.S.; and Cileungsi, Indonesia. This brings the total invested to CHF 18.2 million over the life of the program. To date, half of the sites in the program have completed their projects, while the other half are well underway.

## SAFETY AUDITS

A team of specialists regularly audit our manufacturing sites for safety, quality and security. Audits involve a review of management systems against our mandatory principles and operational codes. Any corrective action plans are tracked by Firmenich at a regional and global level, with findings shared internally to continually raise the bar on site safety.

## WELLBEING

Our Occupational Health network includes health experts from within and outside our business, including doctors, toxicologists, industrial hygienists and regulatory affairs, as well as health, safety and environment specialists. The network coordinates global projects to improve how we assess and control wellbeing risks. It meets every quarter and now has its own website to share best practices and supporting materials.







# DELIVERING PRODUCT SAFETY AND QUALITY

Product safety and quality are critical for any business in our industry. Our customers and end consumers rely on us to deliver products that are safe and uphold the highest standards of quality. Each day in our labs, chemists and engineers are refining the quality, safety and sustainability of our ingredients, fragrances and flavors.

## MAINTAINING QUALITY EXCELLENCE AND SAFETY

Our newly completed corporate-wide LEAN project helps our global Quality Control Lab maintain the highest standards of quality while at the same time achieving a 50% overall reduction in sample processing cycle time, as well as a 38% increase in laboratory productivity. To help us comply with the Quality Control Lab Operational Blueprint, in FY18 we created a new role to oversee this area end to end. Specifically designed skills-training programs are being rolled out to raise the competencies of our Laboratory teams.

### QUALITY EXCELLENCE

**Over 99.9% Sales Order Lines** product defect-free  
**44% Improvement** in Customer Quality Index since 2014  
**350+ Internal Quality Assurance** and Integrated QHSSE (Quality, Health, Safety, Security, Environment) audits of Firmenich facilities  
**26 Quality Control Labs Performance Validated** through the Global Laboratory Proficiency Program  
**\$5.3 Million Capital Investment** in Plant Quality Insurance, Quality Control Laboratory equipment and upgrades

Knowing that food fraud costs the food industry between \$30 and \$40 billion a year globally, Firmenich stays committed more than ever to protecting its customers and global consumers. In FY18, our Food Protection strategy focused on strengthening our programs in the areas of food safety, food defense and food fraud. We created a governance team, further empowered our colleagues through four regional Food Protection networks, identified internal and external experts and established a globally shared database. We also deployed a new global raw material risk assessment tool to better understand product risks, including a food protection risk map for continuous improvement planning.

### FOOD PROTECTION: FOOD SAFETY, FOOD DEFENSE, FOOD FRAUD MITIGATION

**Zero Critical Remarks** on FSSC 22000 Food Safety System Certification audits  
**5 Quality Assurance & Food Safety Awards** in the past three years  
**37 Quality Assurance and Food Protection** improvement projects completed  
**Recognition of our pioneering approach in Food Defense Programs\***

\* External stakeholders' recognition.



## RESEARCHING THE IMPACT OF FRAGRANCES ON CONSUMERS

We are continuously deepening our knowledge of the use and effects of our products. With emerging concerns around the use of fragrances and air care products, we have collaborated with the Monell Chemical Senses Center in Philadelphia on a study looking at low level, continuous fragrance exposure. This work has generated a large amount of data that will help us better ascertain the safe use of fragrances, while better understanding consumer perceptions towards fragrance exposure.

## PROMOTING GREEN TOXICOLOGY AND SAFETY-BY-DESIGN

Our Toxicology and Scientific Services Group works closely with world-leading scientists to minimize risks and encourage the use of new and innovative techniques for safe and sustainable product development. By proactively using intelligent and predictive testing strategies, we can reduce our product time to market and regulatory burden while better addressing sustainability issues.

Over the last year, we focused on improving the assessment of non-animal alternative tests for higher tier genotoxicity testing and health risk assessment. Validation of our work on the Turkey Egg Genotoxicity Assay for flavor and fragrance materials was recently published in the journal *Food and Chemical Toxicology* and the method has been picked up for further investigation by the Research Institute of Fragrance Materials. We have also been successful in using data from our research program to support European regulatory activities – improving the understanding of how this specific assay and other in-vitro assays can be used in the registration and approval of new ingredients.



# ACCELERATING GROWTH

## IMPROVING LIVES THROUGH INNOVATION

Research is our engine of growth. We put it to work to make nutritious products taste delicious, tackle the global sanitation crisis and create the safest and most environmentally responsible ingredients. To support this vision, Firmenich invests 10% of its turnover annually in research – the largest proportion in our industry.<sup>3</sup>

### IN THIS SECTION

- 27 Pioneering in Taste and Nutrition
- 29 Building the Toilet Economy
- 31 Championing Responsible Sourcing
- 35 The Footprint of Fragrances
- 36 Shaping Sustainable Lifestyles

### OUR CONTRIBUTION TO THE SDGs



<sup>3</sup> Based on 2017 information.



## WHAT OUR PARTNERS SAY...

“We know that bad smell is one of the biggest barriers preventing people from using toilets. What stands out when working with Firmenich on malodor control is this feeling of a true partnership and common mission to use technology for good. Building on our shared values, Firmenich is exploring further collaboration, beyond sanitation, into other program areas of our Foundation.”

Erin McCusker,  
Senior Program Officer,  
Bill & Melinda Gates Foundation

Guided by the belief that every life has equal value, the Bill & Melinda Gates Foundation works to help all people lead healthy, productive lives.  
[www.gatesfoundation.org](http://www.gatesfoundation.org)



## PROGRESS AGAINST OUR 2020 GROWTH GOALS

**Progress Key**

- ● ● More to do
- ● ● On track
- ● ● Met

| 2020 GOAL  | FY18 PROGRESS  |
|--|--|
| Improve quality of life through nutrition, hygiene and sanitation                        | ● ● ● <b>Launched TastePRINT™ and Protein Shield Flavors</b><br><b>Invested in mobile toilets</b> for women and girls in Pune, India     |
| Deliver malodor control systems as home care products for base of the pyramid consumers  | ● ● ● <b>Started the commercialization phase</b>   |
| Demonstrate leadership in environmental assessment of our ingredients and technologies   | ● ● ● <b>EcoScent Compass™ designed, developed and launched</b> at World Perfumery Congress  |
| Collaborate with at least ten leading academic institutions on sustainability innovation | ● ● ● <b>Conducted collaborative research, teaching and mentoring</b> with ten leading academic institutions                             |
| Develop sustainability projects with 50 customers globally                               | ● ● ● <b>Developed projects with over 100 customers</b> ranging from multinationals to smaller companies, covering perfumery and flavors |
| Expand the innovative base of the pyramid consumer insight program to Africa             | ● ● ● <b>External funding allowing consumer insight</b> into several countries in Africa, including Kenya and South Africa               |
| Build 40 responsible sourcing projects with smallholder farming communities              | ● ● ● <b>27 Deep Roots projects implemented</b>  |
| Accelerate go-to-market through innovation partnerships                                  | ● ● ● <b>Developed in vitro assay</b> to assess bioaccumulation potential  |

### SECTION HIGHLIGHTS

#### MAKING HEALTHIER FOOD TASTE DELICIOUS

Answering the call for authentic, nutritious and traceable taste

→ See page 27

#### OUR CLEAN LABEL PLATFORM

Going further on end-to-end traceability

→ See page 27

#### SMART SANITATION: WHY SCENT MATTERS

Tackling the sanitation crisis and improving the toilet experience

→ See page 29





# PIONEERING IN TASTE AND NUTRITION

The food and beverage industry continues to experience rapid change, as consumers around the world demand products that are healthier and more nutritious, in addition to having ingredients that are recognizable and traceable. The call to action is clear: Help make good food for everyone to enjoy.

Using cutting-edge flavor technologies, we can make healthy food and drinks more appealing, reduce sugar and salt content and improve plant-based proteins. Based on current and future consumer preferences, Firmenich's innovation is focused on shaping great-tasting, nutritious, authentic and traceable food and beverage experiences.

## CLEAN LABEL PLATFORM FOR AUTHENTIC, NATURAL AND TRACEABLE TASTE EXPERIENCES

In a world of increasingly label-conscious consumers, this year we launched our Natural and Clean Label platform to **create food and beverage experiences that are great-tasting, natural and traceable**. Combining our mastery of taste and naturals with our world-class science and consumer understanding, this new platform enables us to create the most authentic taste profiles in full transparency. Our goal is to go far beyond the label to offer the authenticity, familiarity and transparency consumers expect. We have the ambition to provide end-to-end traceability in a format that consumers can understand and trust – from the source of the ingredients and country of origin all the way to the production process.

**“Traceability is an absolute priority for our industry and a topic that I am personally committed to. There are no half measures here – that’s why we are embracing technology and working with all our partners to shape the most transparent experience.”**

Patrick Firmenich, Chairman of the Board, Firmenich



## REFINING THE TASTE EXPERIENCE

As pioneers in taste modulation, Firmenich has created an established portfolio of technologies that can refine the taste experience, from the overall flavor to an individual sensation. Our deep expertise in taste across all its dimensions has allowed us to quickly **support our customers deliver more nutritious products** without sacrificing the delicious experience associated with their brands.

IN FY18, FIRMENICH SIGNED THE SUSTAINABLE JUICE COVENANT, JOINING FORCES WITH LEADING EUROPEAN BEVERAGE AND FOOD COMPANIES TO CREATE 100% SUSTAINABLE JUICE AND PUREE BY 2030.





## TASTEPRINT™ FLAVOR TECHNOLOGY

This year we launched TastePRINT™, a flavor technology that uses stevia, a natural sugar substitute. This technology can achieve up to **100% sugar removal naturally**, while creating the fantastic taste experience that drives consumer preference. TastePRINT™ Sweetener Solutions offer an optimized blend of flavors (modifiers, maskers, tonality) and non-nutritive sweeteners, making Firmenich a one-stop solution for our customers' sugar reduction needs.



### SUGAR REDUCTION WITH TASTEPRINT™ NATURAL SWEETENER SOLUTIONS

In 2018, we removed more than 150,000 tonnes of sugar from our customers' products, representing 420 billion calories.

## TAILORED SOLUTIONS FOR CONSUMERS WORLDWIDE

In FY18, we strengthened our expertise in taste with two new innovation hubs. **Our new California center** focuses on rapid prototyping supported by dedicated labs and a plant to offer tailored taste and nutrition solutions, including a unique range of organic offerings. In Bangkok, our **Culinary Discovery Center** brings together our chefs, flavorists and food technologists with customers to create nutritious food, appealing to Southeast Asian consumers.

## IMPROVING PLANT-BASED PROTEINS

With the global population predicted to reach more than nine billion by 2050, the rising consumption of animal-based proteins is not sustainable, yet many plant-based proteins are seen as a bland alternative to "the real thing."

Our scientists and chefs are helping bring more plant-based proteins to the mainstream by improving their flavor and authenticity of texture, as well as mouthfeel. Starting with pulses, grains and seeds, we have just completed an in-depth sensory and physical chemistry analysis of these proteins. Based on our promising results, we look forward to expanding our work across more plant-based protein alternatives.

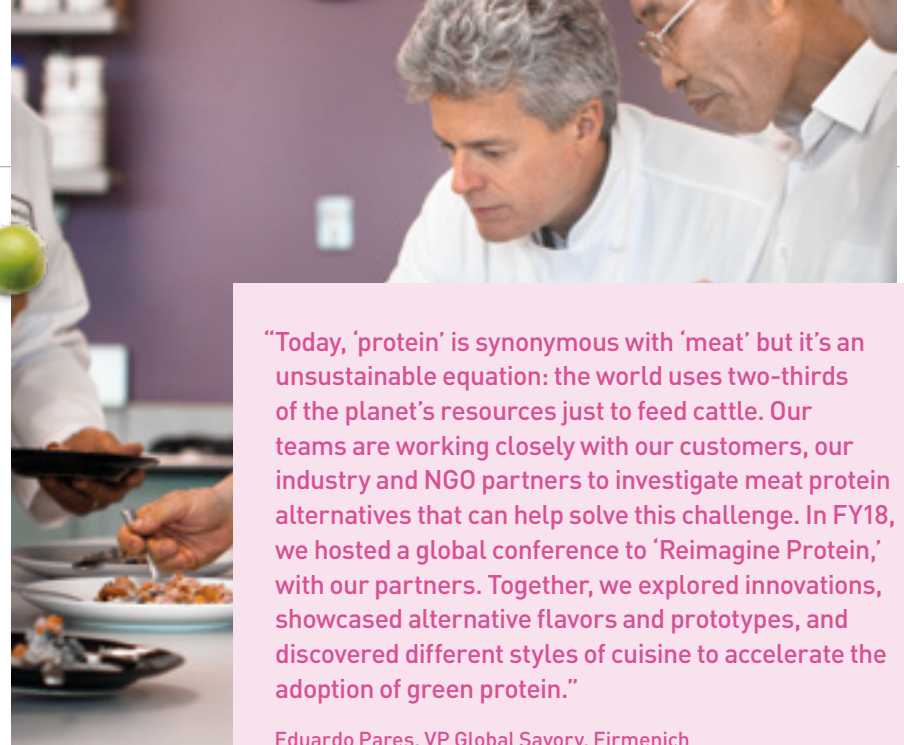
## ADVANCED NATURAL FLAVOR SOLUTIONS FOR HIGH-PROTEIN BEVERAGES

**Protein Shield Flavors** is a new line of natural flavor solutions addressing challenges associated with high-protein beverage products, such as bitter and astringent aftertastes. Combining key tonalities with our TasteGEM® technology, Protein Shield Flavors mask the impact protein can have on taste buds while enhancing the overall flavor profile and mouthfeel.

Well received by the industry, Protein Shield Flavors received the award for "Most Novel Food Ingredient" at the 7th Sports & Active Nutrition Summit in the Netherlands in June 2017.

## GLOBAL SAVORY CENTER OF EXCELLENCE FOR GREEN PROTEIN

Our new **Center of Excellence for Green Protein** – in Vienna, Austria – is designed to enable our customers to deliver sustainable protein solutions that taste great and offer a high nutritional profile. Bringing together flavorists and sensory and application experts, the center will work hand in hand with our customers to shape the future of proteins.



"Today, 'protein' is synonymous with 'meat' but it's an unsustainable equation: the world uses two-thirds of the planet's resources just to feed cattle. Our teams are working closely with our customers, our industry and NGO partners to investigate meat protein alternatives that can help solve this challenge. In FY18, we hosted a global conference to 'Reimagine Protein,' with our partners. Together, we explored innovations, showcased alternative flavors and prototypes, and discovered different styles of cuisine to accelerate the adoption of green protein."

Eduardo Pares, VP Global Savory, Firmenich

## ADVANCING THE CIRCULAR ECONOMY

We are exploring **innovative ways to transform waste** from the food industry and agriculture into new ingredients and flavors. In Brazil, we use cold extraction to recover volatiles from instant coffee production. In Brazil and in Florida, U.S., we're also transforming citrus-processing side streams into unique natural fractions.

At our seafood facility in Ålesund, Norway, **we convert seafood by-products** into flavorful, nutrient-rich powders, and are developing natural food ingredients derived from marine protein that are fully traceable and certified by the Marine Stewardship Council.

In Scotland, we partner with a farm that grows red berries for use in jams and purees. We collect flavor volatiles directly at source using our Naturome process, then transform these into a solvent-free soluble strawberry extract with fresh and buttery notes, as well as a raspberry extract rich in fruity nuances.

Currently, we are exploring ways to **upcycle food waste** through a partnership with local farmers in India tapping into their unsold tropical fruits. By using ripe fruits that are not suitable for sale, we can extract from a flavorful biomass while having a positive impact on farmers' revenues. These natural ingredients, gently processed for our Flavorists, create new consumer experiences that drive greater enjoyment sustainably.



# BUILDING THE TOILET ECONOMY

Through our malodor control technology developed in partnership with the Bill & Melinda Gates Foundation, we have entered a new territory, the toilet economy, conceptualized by the Toilet Board Coalition.

The Bill & Melinda Gates Foundation is working to reinvent toilets and improve the lives of 4.5 billion people who lack safely managed sanitation services. Malodor control is fundamental to improving this global crisis by helping the millions of people who are not using toilets today change their habits. As a leader in the science of smell with breakthrough malodor control technologies, we are committed to developing a brand new marketplace for innovation, entrepreneurship and investment that will help drive this change.

**MALODOR CONTROL IS FUNDAMENTAL TO IMPROVING THE GLOBAL SANITATION AND HYGIENE CRISIS BY HELPING THE MILLIONS OF PEOPLE WHO ARE NOT USING TOILETS TODAY CHANGE THEIR HABITS.**

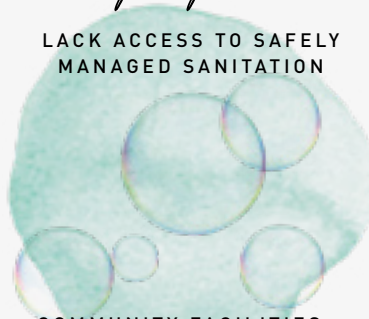
*Every year*



**800,000 CHILDREN DIE FROM HYGIENE-RELATED DISEASES**

*4.5 billion people*

**LACK ACCESS TO SAFELY MANAGED SANITATION**



**COMMUNITY FACILITIES MUST BE**

*appealing AND safe*

**BUT BAD SMELL PREVENTS THEIR USE**

## FRESH THINKING

**TO IMPROVE THE TOILET EXPERIENCE, FIRMENICH HAS CREATED BREAKTHROUGH MALODOR CONTROL TECHNOLOGIES USED IN HYGIENE PRODUCTS**

## PRODUCT INNOVATION: A YEAR OF FAST ACCELERATION

In FY18, we accelerated progress in taking our malodor control technologies and R&D work into a variety of consumer products. With our customers and partners, we have focused on **developing performing and affordable applications** that are able to transform the low-income consumer toilet experience. In the process, we have deepened our understanding of consumers' perception of malodor, as well as their preferences. To mainstream this important work, we have created a **One Firmenich Sanitation community** with colleagues from all disciplines to make sure that we deliver market products in the shortest possible time frame. The first products will be available to low-income consumers in the coming six months.

With the Bill & Melinda Gates Foundation, the Toilet Board Coalition and other global partners, we are **exploring ways to provide and sustain toilets** that are fit for purpose and meet people's needs. Alongside this work, the partnership is drawing on circular economy principles to valorize human waste as a resource that can help sustain agriculture, industries and communities. Another key component is the application of digital technology to benefit users and help ensure that facilities are efficiently operated and maintained.





## ADVOCACY AND ENGAGEMENT ON THE GLOBAL SANITATION CRISIS

A key focus of the Bill & Melinda Gates Foundation and Toilet Board Coalition is to raise global awareness of the sanitation movement – the challenges, the opportunities and the innovative technological solutions that can address people’s needs and build momentum for this developing market. Supporting this movement, Firmenich led a range of advocacy efforts this year, from the World Water Week to the World Economic Forum. They culminated with our CEO’s call to action to urgently tackle the sanitation crisis, which he delivered in Mexico at the annual meeting of the World Business Council for Sustainable Development (WBCSD).

## UN GLOBAL COMPACT SWITZERLAND MOVIE

Firmenich’s commitment to sanitation was celebrated in a movie produced by the United Nations Global Compact Swiss Network, which is going on tour across Switzerland.



**WATCH THE UN GLOBAL COMPACT MOVIE “TOUR DE SUISSE”**

[www.firmenich.com/sustainability](http://www.firmenich.com/sustainability)

## PUNE: THE WORLD’S FIRST SANITATION CITY

FY18 saw the first step towards the creation of the world’s first Smart Sanitation City. As part of an interdisciplinary collaboration, the Toilet Board Coalition and the Pune Municipal Corporation, in support of the Indian government’s Swachh Bharat and Smart Cities initiative, launched a Smart Sanitation program in Pune, India. Firmenich India was instrumental in shaping this program, which includes three main work streams: community toilets, with a focus on optimizing use at scale and changing behavior; waste management, resource recovery optimization; and digital technology.



**“Toilets that smell luxurious are not a luxury. At Firmenich, we are convinced that scent plays a central role in the toilet economy, encouraging the use of safe toilets for all. We are committed to being part of the solution.”**

**Dr. Bérange Magarinos-Ruchat,  
Global Head of Sustainability, Firmenich  
and Vice-Chair of the Toilet Board Coalition**



# CHAMPIONING RESPONSIBLE SOURCING

Our goal is as simple as it is ambitious: to offer our creators and customers the most innovative and comprehensive palette of natural ingredients, while operating the most traceable, ethical and sustainable value chain.

To achieve this, we lead a broad and deep presence at source, engaging in three types of partnerships with like-minded visionary organizations in the field:

### **Deep Roots – for the sustainable livelihoods of farming communities**

Working in multidisciplinary teams with critical experts to lead tailored programs supporting the sustainable livelihoods of smallholder farmer communities.

### **Naturals Together™ – for a privileged access to the best sources of naturals**

Partnering with the best natural producers in the world who share our values, we aim to shape the most high-quality, ethical, traceable and sustainable natural ingredients.

### **Naturals innovation – for refined and unique natural ingredients**

Crafting further our ingredients across our innovation platforms, we develop high-quality natural specialties to enrich our Flavorists' and Perfumers' palette.



## SUSTAINABLY SECURING THE BEST NATURAL INGREDIENTS TRACEABLE, ETHICAL, TRANSPARENT AND AUTHENTIC

SUPPORTING FARMING COMMUNITIES' SUSTAINABLE LIVELIHOODS THROUGH OUR



*Deep Roots*  
PROGRAM

PARTNERING WITH THE BEST PRODUCERS AT SOURCE THROUGH OUR



*Naturals Together™*  
PROGRAM

INGREDIENTS INNOVATION THROUGH OUR



*global network*  
OF NATURALS EXPERTISE CENTERS

THE MOST INNOVATIVE AND RESPONSIBLE PALETTE OF NATURAL INGREDIENTS



FOR OUR  
*creators, customers and consumers*





## INGREDIENTS INNOVATION – ADVANCING OUR EXCELLENCE IN NATURALS

In the cradle of perfumery, our **Naturals Center of Excellence in Grasse**, France, combines our leadership in innovation with sustainable sourcing. It processes nearly 1,000 tonnes of raw materials each year, sourced from all over the world – utilizing state-of-the-art technologies such as CO<sub>2</sub> extraction.

Our **Citrus Center of Excellence in Lakeland, Florida**, offers a unique portfolio of citrus notes. Its expertise is enhanced by regional creation capabilities in Geneva, São Paulo and Shanghai.

Expanding our reach, we entered three **strategic partnerships at source** to develop high-quality natural specialties: with Jasmine Concrete in Tamil Nadu, India; with Essex Laboratories in Oregon, U.S.; and with Nelixia, in Guatemala, Central America.

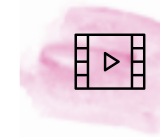
**“It is vital for us to ensure that the next generation of farmers continues to produce the most responsible ingredients for our creators’ palette. Today I am very proud that Firmenich is rolling out an inclusive business approach targeted at smallholder farmers across 40 supply chains. Started ten years ago, we are strongly committed to this ongoing journey.”**

**Sebastien Tissot,**  
VP Naturals Responsible Sourcing, Firmenich

## NATURALS TOGETHER™ – PARTNERING WITH PRODUCERS

**Suppliers at source** are critical to ensuring sustainable practices are implemented on the ground. Through our Naturals Together™ (NT) community, we build long-term partnerships with some of the world’s best natural producers.

Selected through extensive due diligence, we count 16 NT partners. Taking a **tailored approach**, we support and invest in their supply chains to ensure their high standards of compliance and inclusive practices.



### WATCH THE NATURALS TOGETHER™ VIDEOS

[www.firmenich.com/naturalstogether](http://www.firmenich.com/naturalstogether)

## DEEP ROOTS – SUPPORTING FARMING COMMUNITIES

With Deep Roots we support the sustainable livelihoods of our farming communities most at risk. Projects are selected against a **comprehensive assessment of 150 supply chains**, using more than 50 criteria covering economic, social, environmental, supply reliability and compliance aspects. We aim to make a positive impact on 100,000 direct beneficiaries through 40 projects by 2020. Today, we reach 68,000 beneficiaries through 27 projects, well on our way to meeting our objectives.

What’s unique about our approach is how many Firmenich colleagues are **physically present at source**, working with farmers, customers and NGOs to explore new business models and improve agricultural processes. A major focus for us is **driving inclusive business models** where we commit to purchasing a certain portion of the farmers’ harvest while securing fair prices.





## CHAMPIONING RESPONSIBLE SOURCING CONTINUED

### PARTNERING FOR SUSTAINABLE VANILLA IN MADAGASCAR

As one of the world’s largest buyers of vanilla, we support sustainable farmers’ livelihoods in Madagascar, where 80% of the global supply of natural vanilla is produced. With a presence in Madagascar since 2005, we have developed a privileged partnership with Authentic, a member of our Naturals Together™ program, and the Savanille cooperative, which represents more than 2,000 vanilla farmers across 38 villages. Working with the Savanille community and Authentic, we have:

- **Pre-paid all harvests** and guaranteed the purchase of their crops
- **Built 43 wells for drinking water**, impacting 12,500 family members
- **Established a local school** and in 2016 opened more classrooms, benefiting 500 additional children
- **Set up three plant nurseries** for crop diversification to increase farmers’ revenues
- **Added 12 pilot rice crops** to help combat deforestation
- **Built a medical dispensary**, serving 1,000 patients a year and supporting 200 births in 2017

We are currently building an agricultural training center for young adults to advance sustainable farming practices and develop the next generation of farmers.

With vanilla production in Madagascar currently going through a crisis, our CEO, Gilbert Ghostine, spent time with the Authentic Vanilla team in Madagascar to take stock of the situation first-hand and ensure the right support for our partners to keep on thriving.



“Vanilla is strategically important for Firmenich, as one of the world’s universal favorite tastes. As a family-owned company, we always take a long-term view, beyond the highs and lows. That’s why we are actively supporting our partners in Madagascar to overcome vanilla’s current crisis.”

Gilbert Ghostine, CEO, Firmenich



**WATCH HIGHLIGHTS OF OUR CEO’S TRIP TO MADAGASCAR**

[www.firmenich.com/sustainability](http://www.firmenich.com/sustainability)

### A BETTER DEAL FOR CARDAMOM GROWERS OF GUATEMALA

In the Cerro San Gil region of Guatemala, deforestation and long supply chains are having a negative effect on cardamom growers. With Nelixia, our strategic partner, and the NGO Fundaeco, we have streamlined the supply chain to ensure growers receive a higher and more stable price. With this direct sourcing model, Firmenich has established the traceability of its cardamom oil. Additionally, we have built a drying facility in the farming community to offer another source of income. Along with our partner Livelihoods Fund, we are also helping to preserve the local native forest and reforest the area in a large-scale agroforestry project.





# SEE OUR FAMILY OF FIRMENICH NATURALS PARTNERS

## Our Naturals Together™ and Deep Roots Partners

### KEY

- ✦ CENTERS OF EXCELLENCE
- JOINT VENTURES
- NATURALS TOGETHER™ PARTNERS
- DEEP ROOTS PROGRAMS

16  
NATURALS TOGETHER™  
PARTNERS

9  
NGO PARTNERS

27  
RESPONSIBLE  
SOURCING PROJECTS

68,000  
DEEP ROOTS  
2020 BENEFICIARIES

ESSEX LABS MINT  
FIRMENICH LAKELAND  
CITRUS  
VETIVER  
NELIXIA  
CARDAMOM  
PATCHOULI  
STYRAX  
PERU BALSAM

LAVANDIN/LAVENDER  
FIRMENICH GRASSE  
CITRUS  
ORANGE FLOWER  
ROSE  
ROSE  
JASMINE

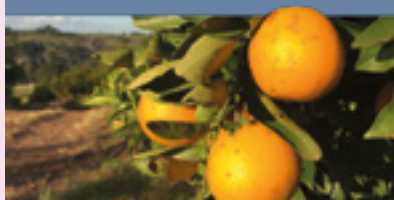
**Morocco**  
Women entrepreneurship for orange flower harvesters, in partnership with INGO CARE International.

**India**  
Innovative water harvesting systems to secure irrigation for jasmine growers in Tamil Nadu.

JASMINE CONCRETE  
JASMINE  
ELEM  
PATCHOULI  
CLOVE  
PATCHOULI VANILLA  
SANDALWOOD  
ACACIA GUMS  
VANILLA  
YLANG YLANG  
VANILLA  
VANILLA  
PINK PEPPER

**Comoros Islands**  
Women empowerment for ylang ylang pickers in partnership with local NGO.

**Brazil**  
Sustainable agriculture and inclusive business with smallholder orange cooperatives, in partnership with NGO Solidaridad.







# THE FOOTPRINT OF FRAGRANCES

In June 2018, at the World Perfumery Congress, we launched the EcoScent Compass™, which we consider to be the most holistic and robust fragrance sustainability measurement tool in our industry.

Firmenich developed EcoScent Compass™ based on globally recognized metrics and guidelines, encompassing the European Commission work on Product Environmental Footprint (PEF), the International Fragrance Association (IFRA)'s guidelines for Sustainable Fragrances, as well as WBCSD's social impact measurement for chemical products.

With EcoScent Compass™, Firmenich acts as a thought leader by proactively raising the bar in Fragrance sustainability measurement and improvement.

**“Aspiring to more sustainable lifestyles, consumers want to know what’s inside their products. We designed EcoScent Compass™ to enable our perfumers to fully embed sustainability in their creation process and offer a new level of transparency to our customers. Our ambition is for it to become an industry standard.”**

Armand de Villoutreys,  
President Perfumery & Ingredients, Firmenich

## ECOSCENT COMPASS™ ASSESSES EACH FRAGRANCE AGAINST THREE PILLARS

- 1** Its intrinsic **green properties**, linked to the nature of the ingredients chosen by our perfumers within each fragrance.
- 2** The environmental data from our Ingredient Index, which received the 2017 DuPont Sustainability Award, delivering an **environmental footprint score**.
- 3** A **social impact score**, calculated based on health, safety and labor standards at our manufacturing sites and across our supply chain, as well as livelihoods data from our Naturals Together™ and Deep Roots responsible sourcing programs.



66% OF PEOPLE ARE WILLING TO  
*pay more for sustainability*



TO BE PART OF THEIR FAVORITE PRODUCTS

CONSUMERS WANT TO KNOW THAT WHAT'S INSIDE IS  
*good for people AND THE PLANET*



THERE'S A GROWING NEED FOR  
*clear, meaningful information*



ABOUT INGREDIENTS

## TRANSPARENCY

WE'VE CREATED ECOSCENT COMPASS™ TO TELL THE STORY OF OUR FRAGRANCES IN A TRANSPARENT, USER-FRIENDLY WAY





# SHAPING SUSTAINABLE LIFESTYLES

Providing meaningful and transparent information plays an important role in satisfying the growing public interest for conscious consumption and responsible products. At the same time, we believe in actively helping to empower consumers and brands to achieve the aspiration to live in a more sustainable way.

Consumption impacts occur as people live their lives – whether it’s eating a meal or doing their shopping – and no company can create a sustainable lifestyle on its own. With this in mind, we are actively engaged in WBCSD’s Sustainable Lifestyle cluster, co-chaired by our CEO, Gilbert Ghostine, where we collaborate with like-minded companies to shape the future of sustainable foods, mobility and housing. This work is fundamental in **advancing the UN SDG 12, Responsible Production and Consumption**, because it aims to challenge today’s worldview of consumption and make sustainable lifestyles aspirational.

## THE GOOD LIFE 2.0

Companies involved with Firmenich in the WBCSD group have a shared vision that is guiding them towards systems transformation, unconventional collaborations and exciting innovation opportunities. The group has delivered important thought pieces, including the **Good Life 2.0 Playbook**. This innovative consumer insight study is designed to help companies transform their corporate narrative around sustainability with aspirational imagery and concepts. We activated its recommendations across our corporate positioning and with many of our customers and partners globally.

## THE ROLE OF POSITIVE EMOTIONS IN DRIVING SUSTAINABLE BEHAVIORS

In FY18, we worked with our partners and colleagues across the U.S., Latin America and Europe to identify how positive emotions may drive more sustainable behaviors. We also took part in one of **WBCSD’s projects**, which highlights people’s lifestyle aspirations in the short and medium term. A recent outcome of this work is the Future of Food “Lighthouse,” an inspiring vision that leads to a happier, healthier and more sustainable lifestyle, based on comprehensive research.

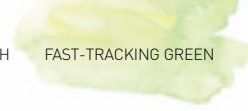
## TASTE AND SMELL FOR THE CONSCIOUS CONSUMER

Our **Conscious Consumer Insight program** brings together teams from across Firmenich to generate consumer data and build a clearer picture of consumer preferences and expectations in order to ultimately develop fragrances and flavors that meet their needs. This insight informs our creation and development processes and inspires our teams to responsibly develop the most appealing smell and taste solutions. This unique program offers customers a wide range of differentiated and relevant fragrance and flavor solutions meeting the needs of the increasing number of conscious consumers all around the world.

## REDEFINING LUXURY

Positive Luxury is being redefined in today’s volatile and complex world, based on the premise that what is rare is precious. Therefore, nature, water and space, with their growing scarcity, are becoming a luxury and should be treated as such. As our teams offer **tailor-made concepts to our customers** – whose brands are reinventing luxury every day – we believe in being part of shaping positive luxury, where sustainability is a source of creativity, rather than a limiting factor. In this context, we started collaborating this year with the new Paris School of Luxury and the Geneva HEAD (School of Art and Design) master’s program in luxury management. In both schools, Generation Y’s challenging views on luxury are an inspiration, helping us to shape a new era of positive luxury.





# FAST-TRACKING GREEN

## LEADING IN ENVIRONMENTAL MANAGEMENT

Conducting our business in a way that protects and promotes the environment is paramount for Firmenich. We uphold responsible environmental management at our facilities worldwide and strive to reach and maintain the highest standards of care. We demonstrate our strong commitment to minimizing the environmental impact of our business throughout the product life cycle.

### IN THIS SECTION

- 39 Reducing our Environmental Footprint
- 40 CO<sub>2</sub> and Energy
- 42 Climate Leadership across our Value Chain
- 42 Conserving Water and Cutting Waste
- 44 Building Resilience to Climate Change
- 45 Protecting Biodiversity
- 46 Our Scientific Approach to Sustainability

### OUR CONTRIBUTION TO THE SDGs





## WHAT OUR PARTNERS SAY...

“The collaboration between Firmenich and Quantis has been very fruitful over the past five years. Together, we have designed a methodology and tools to calculate the environmental footprint of Firmenich’s ingredients as well as the environmental and social impacts of its fragrances. This achievement marks an important step towards offering consumers the transparency they expect and deserve.”

Grégory Simonnin,  
Senior Sustainability Consultant,  
Quantis

Quantis guides top organizations to define, shape and implement smart environmental sustainability solutions.  
[www.quantis-intl.com](http://www.quantis-intl.com)



### SECTION HIGHLIGHTS

#### CLIMATE CONTROL

Powering ahead on CO<sub>2</sub> emission reduction, energy efficiency and renewables

→ See page 40

#### BIODIVERSITY AND THE INNOVATION PIPELINE

Aiming to protect and equitably share the benefits of nature

→ See page 45

## PROGRESS AGAINST OUR 2020 GREEN GOALS

### Progress Key

- ● ● More to do
- ● ● On track
- ● ● Met

| 2020 GOAL  | FY18 PROGRESS   |
|--|---|
| Be the first Flavor and Fragrance House with a transparent supply chain via CDP (formerly Carbon Disclosure Project) | ● ● ● <b>Asked 74 key suppliers</b> to report carbon and water impacts  |
| Reduce absolute Scope 1 and 2 CO <sub>2</sub> emissions by 20%*  | ● ● ● <b>12.1% in FY18</b> vs. FY15   |
| Obtain 100% of electricity for Level 1 sites from renewable sources or offsets                                       | ● ● ● <b>78% of electricity from renewable sources</b> or offsets   |
| Reduce the rate of water use in stressed areas by 25%*   | ● ● ● <b>5.6% reduction in FY18</b> vs. FY15  |
| Improve our waste efficiency rate by 15%*  | ● ● ● <b>3.8% in FY18</b> vs. FY15  |
| Ensure all of our manufacturing sites can claim zero waste to landfill   | ● ● ● <b>41% reduction in waste to landfill in FY18</b> vs. FY15  |
| Eliminate R22 from our global manufacturing refrigerant inventory  | ● ● ● <b>68 R22 units removed or upgraded</b> over 8 facilities   |
| Generate gold standard carbon credits through collaborative investments  | ● ● ● <b>Invested in a second Livelihoods Carbon Fund</b>   |
| Develop sustainable and cost-effective flavor and fragrance ingredients and technologies                             | ● ● ● <b>Invested in state-of-the-art technology</b> for real-time, online monitoring of chemical processes, greater energy efficiency and less waste |

\* In comparison with our fiscal year 2015 baseline.





# REDUCING OUR ENVIRONMENTAL FOOTPRINT

We are committed to leading the industry in environmental sustainability by minimizing our footprint and maximizing efficiency with ambitious reduction targets in energy consumption, greenhouse gas emissions, water and waste usage.



## OUR PERFORMANCE AT A GLANCE

In FY18, we continued our positive trajectory and improved on all of our six 2020 environmental targets, compared to our FY15 baseline. Although incremental year-on-year changes may be more difficult to achieve, we expect to achieve all of these targets by 2020.

| 2020 TARGET  | RESULTS IN FY18  | CHANGES IN FY18  | COMMENT   |
|--|--|--|---|
| Reduce absolute Scope 1 and 2 CO <sub>2</sub> emissions by 20%*                  | 128,295 tonnes (see note below)                        | ↓ 12.1% in FY18 vs. FY15<br>↓ 3.0% in FY18 vs. FY17      | On track  |
| Obtain 100% of electricity for Level 1 sites from renewable sources or offsets** | 78% of electricity from renewable sources              | 37% increase since FY15<br>17% increase from FY17        | On track  |
| Reduce the rate of water use in stressed areas by 25%*                           | 6.8 m <sup>3</sup> /tonne of production                | ↓ 5.6% in FY18 vs. FY15<br>↑ 1.5% in FY18 vs. FY17       | On track although our performance against FY17 remained relatively flat. We expect improvements in the following years. |
| Improve our waste efficiency rate by 15%*  | 32.5 kg/tonne of production                            | ↓ 3.8% in FY18 vs. FY15                                  | On track  |
| Ensure all of our manufacturing sites can claim zero waste to landfill           | 4.7% waste to landfill in our manufacturing facilities | 41% reduction in waste sent to landfill in FY18 vs. FY15 | On track  |
| Eliminate R22 from our global manufacturing refrigerant inventory                | The number of R22-free sites remains the same          | 68 R22 units removed or upgraded over 8 facilities       | On track  |

\* These results are in comparison with our fiscal year 2015 baseline.

\*\* A Level 1 site is any manufacturing site regardless of the number of employees or any other site (e.g. offices, labs) with more than 50 employees. Joint ventures and tolling operations are excluded.



*Climate change*



IS AFFECTING  
OUR WORLD

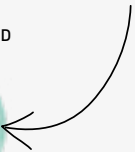


THE LAST FIVE YEARS  
HAVE BEEN MEASURED  
AS THE  
*warmest  
such period  
on record*



THE PARIS AGREEMENT  
COMMITS NATIONS TO KEEPING  
THE GLOBAL TEMPERATURE  
RISE BELOW 2 DEGREES  
AGAINST PRE-INDUSTRIAL  
LEVELS

FIRMENICH IS PLAYING  
ITS PART THROUGH CO<sub>2</sub>  
EMISSIONS REDUCTIONS AND



*increased efficiency*

## INNOVATING FOR GREEN

WE OPERATE WITH **78%** RENEWABLE  
ELECTRICITY AT ALL OUR LEVEL 1\*  
MANUFACTURING SITES, HEADING  
TOWARDS **100%**  
RENEWABLE ELECTRICITY

\* A Level 1 site is any manufacturing site regardless of the number of employees or any other site (e.g. offices, labs) with more than 50 employees. Joint ventures and tolling operations are excluded.

# CO<sub>2</sub> AND ENERGY

We are well on track with our 2020 goal to reduce our absolute Scope 1 and 2 CO<sub>2</sub> emissions<sup>4</sup> by 20% and to obtain 100% of electricity for Level 1 sites from renewable sources or offsets.

Pursuing our goal of obtaining 100% electricity for Level 1 sites from renewable sources or offsets by 2020, we made it to 78% this year, with all our European manufacturing sites already operating with 100% renewable electricity.

During the last year, we achieved a reduction in Scope 1 and 2 emissions of 3% compared to FY17 and 12.1% compared to our FY15 baseline.

## SCOPE 1 AND SCOPE 2 EMISSIONS (tCO<sub>2</sub>e)

|      |         |
|------|---------|
| FY15 | 146,010 |
| FY16 | 138,955 |
| FY17 | 132,307 |
| FY18 | 128,295 |

<sup>4</sup> As defined by the Greenhouse Gas Protocol: Scope 1 emissions are direct emissions from owned or controlled sources. Scope 2 emissions are indirect emissions from the generation of purchased energy.

**“Our significant improvements this year were achieved through investments in energy efficiency and renewable energy projects, as well as through the purchase of renewable energy and offsets.”**

Boet Brinkgreve,  
Chief Supply Chain Officer, Firmenich







## CO<sub>2</sub> AND ENERGY CONTINUED

### DEVELOPING OUR SCIENCE-BASED TARGETS

Our environmental targets are based on robust climate science, aligned with the scientific community's consensus that global warming must be stabilized at well below 2°C. With this in mind, in our second submission to the Science Based Targets Initiative in April 2018, we sought official validation of our methodology, in response to feedback on the ambition, boundaries and time frame of our targets shared the previous year. With our most recent submission, **we commit to reducing absolute Scope 1 and 2 CO<sub>2</sub> emissions by 39% by 2030** from a FY15 baseline. In addition, Firmenich commits to reducing absolute Scope 3 emissions from raw material suppliers by 20% by 2030 from a FY17 baseline.

### INCREASING RENEWABLE POWER

100% of our European manufacturing sites solely rely on renewable electricity and in FY18, **78% of our electricity worldwide came from renewable sources or offsets**. In FY18, our Anaheim and Lakeland, U.S. sites expanded their onsite solar energy capacity. In Dahej, India, a 10 KW wind-turbine generator was installed in FY18 and a third bank of solar panels will be installed and should be operational in FY19. Over the past two years, ten of our facilities signed renewable energy contracts. In countries where renewable energy is limited or unavailable, we look at other approaches, including carbon offsetting.

### RECOGNIZED FOR CONSERVING ENERGY

We were recognized by Ambition Négawatt, Geneva's leading energy provider's annual award, as one of the top five companies in Geneva that delivered the greatest energy reductions this year, as we cut our consumption by 1 GWh, enough electricity to power 335 households in Geneva for an entire year.



Solar panels on the rooftop of our Geneva, Switzerland site.

### ELIMINATING OZONE-DEPLETING REFRIGERANTS

The refrigerant gas R22 (a type of hydrochlorofluorocarbon) contributes to ozone depletion and the Montreal Protocol states that its use must be phased out by 2030. We aim to do this much sooner and eliminate R22 from our entire manufacturing process by 2020. During FY18, we replaced or upgraded 68 refrigeration units across eight locations. Even though the number of R22-free sites did not change in FY18, we are still on track towards our 2020 goal. As we install the new systems, we also aim to drive higher energy efficiency at these sites. Examples of actions include retiring large process chillers in Kunming, China, and in Lakeland, Florida, U.S., and replacing smaller heating, ventilation and air-conditioning units at several other sites.

### POWERED BY PEANUTS

At our manufacturing site in Dahej, India, the site's biomass steam boiler is generating steam from renewable agricultural waste, including peanut shells, powering manufacturing processes and reducing the use of natural gas and its associated emissions by 4,000 tonnes of CO<sub>2</sub> per year. This represents about 3% of our global CO<sub>2</sub> emissions.







# CLIMATE LEADERSHIP ACROSS OUR VALUE CHAIN

Firmenich has participated in the CDP Supply Chain Climate Change reporting program for nine years. For the fourth consecutive year, we were included in CDP's 2018 Supplier Climate A List, putting us in the top 2% of companies reporting globally through the program.

This builds on our A List CDP rating for Water and A- for Forests, reflecting our long-standing corporate leadership in proactively addressing climate change and environmental protection.

## LOOKING BEYOND OUR OPERATIONS: SCOPE 3 EMISSIONS

For the first time last year, we engaged our own suppliers through CDP by asking them to disclose their environmental impact in the Supply Chain programs. We were pleased with the first-year response rates of 59%, 61% and 44% in the Climate Change, Water and Forest Programs respectively. In the process, we learned that:

- 72% of our strategic suppliers report climate change risks
- 66% report emission reduction activities
- 55% had greenhouse gas (GHG) reduction targets (five of our key suppliers had science-based targets and seven had set goals for renewable energy)

We will continue to work with CDP and our strategic suppliers to reduce GHG emissions – and to conserve water across our supply chain – and will detail progress in our next report.



Our Scope 3 emissions account for 96% of our total footprint. We have set a science-based target for reducing Category 1 emissions (emissions from purchased goods and services), our most material source of Scope 3 emissions, by 20% by 2030 from a 2017 base year. The use of primary data obtained through our suppliers' annual CDP supply chain questionnaire allows us to further engage our suppliers around managing GHG emissions and establishing reduction targets. Since this is a newly established target, we will begin reporting progress in the coming years.

# CONSERVING WATER AND CUTTING WASTE

With increased water scarcity and rising populations, managing water and reducing waste have become fundamental parts of our environmental strategy.

In CDP's Water Security program, we were awarded a Leadership A position in FY18. In our industry activity group (Chemicals), we ranked sixth out of 91 companies, putting us in the top 10% of participating companies.

Firmenich is committed to the CEO Water Mandate, an initiative mobilizing business leaders to advance water stewardship, sanitation and the SDGs. In addition, this year our CEO, Gilbert Ghostine, signed the WBCSD's "CEO Guide to Water" to reinforce Firmenich's commitment and underline how vital water is for communities.

**"Water is a critical lever to scale up public health that business cannot ignore. That's why we're leveraging our science to increase access to sanitation for all, while reducing our water footprint in water-stressed areas by 25% by 2020."**

Gilbert Ghostine, CEO, Firmenich



## CONSERVING WATER AND CUTTING WASTE CONTINUED

### PROGRESSING TOWARDS OUR 2020 WATER TARGET

To reach our ambitious 2020 target, our key focus is on Firmenich manufacturing sites located in areas where water stress is higher, even though these areas rank as only moderately stressed on a global scale. We assess all manufacturing sites annually using the Aqueduct Water Risk Atlas and the WWF Water Risk Filter and we prioritize actions at the ten sites with the highest water risk. In FY18, our water consumption in these sites decreased by 5.6% compared to our FY15 baseline. Firmenich's overall water consumption remained relatively flat compared with FY17. We have a growing project pipeline and expect progress to accelerate by 2020.

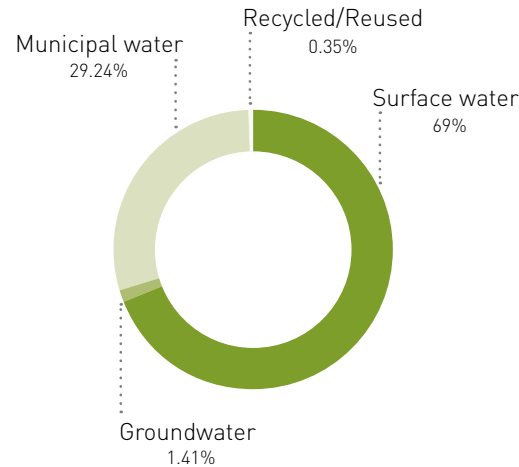
We continue to develop innovative water initiatives. As an example, our site in Anaheim, California, has joined the Sustainable Landscapes Project, a collaboration of the CEO Water Mandate and Pacific Institute. The site is looking at ways to mitigate the cycle of drought and floods through landscape design and management.

### WATER TREATMENT INNOVATION IN GENEVA, SWITZERLAND

Our La Plaine site in Geneva boasts two state-of-the-art water treatment plants; one for the needs of the manufacturing site, the other to serve our five neighboring communities on behalf of the government. Managed by an on-site environmental team, we are in close dialogue with the municipal council and our residential neighbors to offer safe and sustainable water to all. In FY18, the site treated 260,000 cubic meters of water, serving 3,000 local residents.



### % FY18 WATER INPUT



### WATER AND FORESTS

Deforestation is responsible for up to 15% of global GHG emissions. Moreover, healthy forests in watersheds can help with filtering water and meet the needs for clean freshwater. This provides all the more reason for investing in deforestation-free activities.

To support sustainable water supplies and foster a deforestation-free supply chain, Firmenich joined the CDP Forests program and scored an A- in 2017. At our Port Newark site in New Jersey, U.S., a team of 60 colleagues planted native shrubs and trees on a tidal bay adjacent to the Firmenich manufacturing site. A well-known biologist, who directs the restoration project, described this local initiative as "vital work that makes a real difference."

### DRIVING DOWN WASTE

As part of our 2020 target to improve our waste efficiency rate by 15%, we reduced our waste sent to landfill by 41% in FY18 (compared with FY15). This has been achieved through process efficiencies and changes, waste recycling and diverting waste streams to incineration for energy recapture.

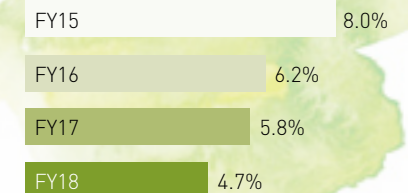
#### Reducing Hazardous Waste

In our Port Newark, U.S. manufacturing site, a thorough waste analysis helped us identify possible recycle and resale opportunities. The projects, anticipated to start in 2019, could achieve a 25% decrease in hazardous waste and the transformation of a former waste stream into a new, valuable resource. We will report on this initiative in future years.

#### Recycling Waste

In FY18, our manufacturing site in Princeton, U.S., recycled approximately 70% of the total waste generated at the facility. For example, empty drums, containers, pallets and cardboard from raw materials used in production are all locally recycled. Only 3% of our total waste goes to landfill and we are on our way to meet our 2020 goal of zero waste to landfill.

### ANNUAL PROGRESS OF % WASTE TO LANDFILL, GLOBALLY





# BUILDING RESILIENCE TO CLIMATE CHANGE

We work alongside partner companies, public institutions and NGOs to invest in Livelihoods Funds, a unique funding model for carbon resilience, supporting sustainable smallholder agriculture with thriving ecosystems and biodiversity.



Gilbert Ghostine, CEO, Firmenich in the Livelihoods Vanilla plantation in Madagascar. © Masy Andriantsoa/Livelihoods Funds

## LIVELIHOODS CARBON FUND

Established in 2011, the Livelihoods Funds attract investors from companies and institutions committed to sustainability. Firmenich has been an investor since the start, alongside eight other companies. The Livelihoods Carbon Fund leverages the carbon economy to finance sustainability projects designed to improve food security for rural communities and increase farmers' revenues. The fund provides upfront financing to project developers for large-scale implementation and long-term maintenance, with results-based payments for the risks they bear in the form of carbon credits.

### LIVELIHOODS FUNDS KEY GOALS

- **Improve lives** in farming communities
- **Drive down** carbon emissions
- **Encourage** sustainable farming
- **Safeguard** biodiversity and ecosystems

## BUILDING A RESILIENT VANILLA SUPPLY, MADAGASCAR

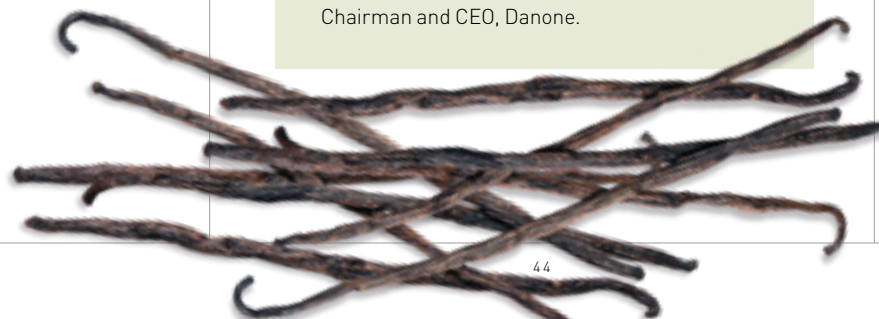
The Livelihoods Fund for Family Farming is investing in a large-scale vanilla project to tackle quality and traceable vanilla production alongside food security for farmers and biodiversity conservation. It seeks to reach 3,000 family farms, connecting them more directly to markets. The project will also tackle food security with a special focus on rice production, as well as crop diversification for a more balanced daily food intake for farmers. Our CEO, Gilbert Ghostine, went on a field trip this year to see first-hand the positive impact of this project, alongside Victoria Mars, Board Member, Mars Inc., and Emmanuel Faber, Chairman and CEO, Danone.

## LIVELIHOODS FUND FOR FAMILY FARMING

In 2015, Firmenich joined the Livelihoods Fund for Family Farming (L3F) alongside Danone, Mars and Veolia. L3F focuses on improving productivity, incomes and living conditions for smallholder farmers. With EUR 120 million in upfront financing and technical support, this fund seeks to convert 200,000 farms to sustainable farming practices by 2025, reaching five million people. From 2018, Livelihoods Second Carbon Fund will invest in ecosystem restoration, agroforestry and energy projects, mainly in developing countries.

**“Following the success of its first Carbon Fund, we are excited to be investing in Livelihoods’ second one. With a target impact investment of EUR 100 million, this fund aims to improve the lives of two million farmers and reduce carbon emissions by up to 25 million tonnes over a 20-year period.”**

Eric Nicolas, Chief Financial Officer,  
Corporate VP Strategy & Global Services, Firmenich







# PROTECTING BIODIVERSITY

Protecting biodiversity and those whose livelihoods depend on it is fundamental to our business, critical to our innovation pipeline and a core part of our natural sourcing programs.

Over the last ten years, biodiversity has become an important topic for consumers: 79% believe that companies have a moral obligation for assuring a positive impact on people and biodiversity (UEBT 2018 Biodiversity Barometer). We are receiving more and more requests from our customers about how we are handling biodiversity in our business and practices. We recognize that biodiversity underpins security of supply for our raw materials derived from natural resources. While we aim to protect biodiversity all along the supply chain, we are aware that our main responsibility in terms of impact on biodiversity is mostly related to our sourcing practices.

## RENEWED COMMITMENT TO BIODIVERSITY THROUGH THE UNION FOR ETHICAL BIOTRADE

Our Naturals Center of Excellence in Grasse has been recognized for its continuous efforts towards biodiversity, having been audited against the Ethical BioTrade Standard managed by the UEBT. The UEBT is the international reference for companies and their suppliers to set good sourcing practices with respect for people and biodiversity. We have committed to a 2020 action plan, outlining sourcing best practices that respect biodiversity and traditional knowledge, while also ensuring an equitable share of benefits with the farming communities.

## GOVERNANCE AND INTEGRATION

Committed to embedding biodiversity governance across our innovation pipeline, in March 2018 we created a biodiversity expert position to accelerate the integration of biodiversity principles and Nagoya Protocol-related projects. Empowered to drive change, this new leader will integrate biodiversity into our management approach and policy, support compliance and coordinate the work of our **cross-divisional Biodiversity Steering Committee**. She joins us with substantial experience, having worked at the Union for Ethical BioTrade (UEBT) and as a consultant in biodiversity management. Building on her broad expertise, we look forward to taking Firmenich's engagement to biodiversity to the next level.

Firmenich is committed to integrating the Nagoya Protocol's principles and requirements concerning access to biodiversity and the sharing of benefits associated with their use. In addition to the Biodiversity Steering Committee's ongoing governance, we are currently conducting in-depth

work at the regional level, with a special focus on Brazil and India.

To advance this work we have a regional expert in Brazil, known for its rich biodiversity, who is playing a critical role in shaping new and important policies in the country.

Another key development in FY18 was the **creation of Nagobase**, a database that allows the centralization and systematic tracking of all genetic resources entering Firmenich R&D and innovation, thereby considerably improving our previous processes. Together with divisional guidance principles and a governance system, Nagobase is a core tool that supports our due diligence processes.

In the next six months, we are preparing a global vision and action plan detailing how we foresee our continuous engagement towards biodiversity and the implications of implementing the Nagoya Protocol.



# OUR SCIENTIFIC APPROACH TO SUSTAINABILITY

Through our multidisciplinary scientific approach, we are developing breakthroughs that address key societal challenges, from nutrition and sanitation all the way to climate change. With sustainability as a priority, we are looking to create ingredients in better ways that support the circular economy and contribute to collective knowledge about the impact of chemicals in the environment.

## MASTERING OUR FULL SCIENTIFIC CONTINUUM FROM INGREDIENTS TO PERCEPTION

From shaping the richest palette of ingredients in the industry – cutting across natural, biotechnology and synthetic molecules – to creating unique sensorial experiences and understanding human perception, Firmenich uniquely masters the full continuum of the science of taste and smell.

Our holistic, multidisciplinary approach unites expertise in green chemistry, material and cognitive sciences with biotechnology and cellular biology to constantly push our innovation forward. Taking this approach one step further, we actively embrace green and sustainable science to minimize our environmental impact.



Anastas, P.T. and Warner, J.C. (1998). *Green Chemistry: Theory and Practice*. Oxford University Press: New York, p.30. By permission of Oxford University Press.

\* Methods that enable all materials used in the process to be incorporated in the final product, so avoiding waste on a molecular level.

\*\* The selection of catalytic reagents, as opposed to stoichiometric reagents, to increase selectivity, minimize waste and reduce reaction times and energy demands.



## OUR PASSION: ENHANCING CONSUMERS' WELLBEING

Inspired by nature, Firmenich scientists create thousands of potential new flavor and fragrance ingredients. Choosing among these potential molecules, Firmenich perfumers and flavorists create innovative, sustainable and game-changing fragrances and flavors that delight consumers, while driving competitiveness and advancing the green credentials of our existing portfolio.

### HIVERNAL® NEO – OUR LATEST BREAKTHROUGH IN SYNTHETIC FLORALS

In June 2018, Firmenich commercially launched the newest member of its unique Beyond Muguet collection of floral notes: Hivernal® Neo, with its clean, crisp green character and surprising cold effect. Compared to the initially developed process, the current one achieved a 3.7-fold increase in productivity and a 5.5-fold decrease in the e-factor.<sup>5</sup>



### PIONEERS IN WHITE BIOTECHNOLOGY INGREDIENTS

Building on the success of Clearwood® and Ambrox® Super, this year we further anchored our leadership in white biotechnology ingredients drawn from sustainable biomass sources with the launch of a bio-based version of our iconic Z11. This powerful, woody and amber note combines the best of our expertise in white biotechnology and green chemistry. This elegant and renewable ingredient offers stable quality combined with a reliable supply and an optimal sustainability profile.

### INVESTING IN WORLD-CLASS TECHNOLOGY

To deliver on the principles of Waste Prevention and Real-Time Analysis, we have invested in the latest Fourier Transform Near-Infrared (FT-NIR) spectroscopy technology. This cutting-edge technique enables us to monitor and optimize chemical processes faster and in real time, representing a significant step towards the factory of the future. We are applying FT-NIR to achieve improvements right across the board, in productivity, energy consumption and waste generation.

<sup>5</sup> Amount of waste generated per amount of product produced.





## CLEAN LABEL SOLUTIONS

Committed to natural and traceable experiences, we continue to advance our clean label solutions for Flavors, exploring botanical extraction, food fermentation and clean food technology processes. We have strengthened our focus in this area, with important innovation hubs in Shanghai and Geneva to drive this critical agenda forward.

## ENTERING UNCHARTERED TERRITORY: UNCOVERING BRAIN, NOSE AND TASTE INTERACTIONS

Having discovered breakthrough malodor counteracting technologies that eliminate the foul odor associated with toilets, today we are working with our customers to rapidly bring these solutions to market. Building on our deep legacy of research in cell biology, our teams are exploring new and exciting applications for these technologies.



## OTHER SIGNIFICANT ADVANCES

- Continuous improvements in the production of iconic ingredient families**  
Using catalytic chemical processes in the production of our rose ketone and sandalwood-type ingredients, we increased productivity while reducing waste.
- Plant oil-based surfactants**  
We have worked with customers on the shift from petrochemical-based to renewable surfactants from plant oils. In particular, we have applied our expertise to identify malodor components caused by the new surfactants and design technologies to remove or mask them.
- New ways to assess environmental impact**  
In partnership with the University of Bern and with the Swiss Federal Institute of Aquatic Science and Technology (EAWAG), we advanced our work on the measurement of bioaccumulation potential using a cell-based assay, with the aim of developing a cost-efficient, rapid and reliable method that avoids animal testing.
- Biodegradation**  
In line with regulatory requirements, all new and existing Firmenich fragrance ingredients are tested for biodegradation – the process by which micro-organisms break down chemicals. Going one step further, we consider biodegradability as one of the key criteria as we screen ingredients for potential market application. As part of our ongoing commitment to environmental protection, we are carrying out innovative research into photodegradation, a complementary environmental degradation pathway triggered by sunlight.

**“As we look to the future, research will continue to be an engine of growth for Firmenich. Driving a dynamic, eco-friendly innovation agenda, we will accelerate the discovery of game-changing ingredients and products to shape unique sensorial experiences that enhance nutrition and wellbeing while expanding our understanding of human perception.”**

**Prof. Geneviève Berger, Chief Research Officer, Firmenich**

## COMPLIANCE AND COLLABORATION

Firmenich engages widely, proactively and transparently to share expertise and build collective understanding. This includes ongoing participation in a range of expert committees at national and international level, as well as presentations and knowledge exchanges via industry and scientific symposiums. In 2018, we participated in the annual European meeting for the Society of Environmental Toxicology and Chemistry (SETAC), regrouping around 2,000 delegates. A new analytical method was developed to quantify 54 suspected allergens that have to be declared in consumer products, and published in a scientific journal.

## OUR PERFUMERY PALETTE IS REACH-READY!

Making our perfumery palette REACH\*-ready, we are proud that Firmenich successfully secured the use of its entire perfumery palette in the European Union, after a decade of thorough work. The REACH regulation entered into force in 2007, transferring the burden of proof to demonstrate the safety of chemical substances from regulatory authorities to individual companies who manufacture or import chemicals. The industry has had until 31 May 2018, to register by giving evidence showing safety and compliance and thus avoiding market exclusion and/or production restriction.

\* REACH is a major European chemical law, standing for Registration, Evaluation, Authorization and Restriction of Chemicals.



**“We successfully completed all REACH registration phases with over 500 ingredients registered, as a result of the enormous efforts of our industry-leading team of experts. A key outcome of this process is how we are aligned with our customers and suppliers to pursue relentlessly all aspects related to human health and the environment, and we will keep pushing for more breakthroughs in these areas.”**

**Jane Sinclair, General Counsel, Firmenich**



# TRANSPARENT REPORTING

## IN THIS SECTION

- 49 Sustainable Supply Chains
- 51 About our Reporting
- 51 External Verification

## SUSTAINABLE SUPPLY CHAINS

Much of the impact we have as a business lies beyond our own facilities, in complex supply chains that reach as far back as individual smallholder farmers and producers in remote locations of the world.

With a deep commitment to transparency, we take a systematic approach to assessing risk and managing compliance, supported by our membership of the Supplier Ethical Data Exchange (Sedex) and EcoVadis – both global platforms for empowering ethical supply chains and reducing corporate footprints. Our close collaboration with our independent supplier audit partner is also core to our strategy.

In FY18, we created a new role within Firmenich to foster coordination between Firmenich production sites reporting on their practices and commercial teams managing customer requests for information. We have also significantly improved colleague engagement in delivering data for audits and reporting. We did so by building internal awareness of sustainability as a holistic process in which everyone has a part to play.

### SEDEX

We have been a member of Sedex for eight years and we use this global platform both as a supplier and as a buyer. Additionally, we use Sedex risk assessment tools at our manufacturing sites. If assessments show any issues, we work together to solve them. We now have data on more than 430 suppliers' sites.



## ECOVADIS

EcoVadis ratings and scorecards help us to further scrutinize and support suppliers. The methodology is built on international responsibility standards covering 190 spend categories and 150 countries. We are rated as a Gold EcoVadis company, for the third consecutive year. Our score of 82/100 puts us in the leading pack of the top performers.

In FY18, we focused on how to maximize our benefits from the platform and on sharing our insights with others at the annual EcoVadis Sustain conference.

**OUR ECOVADIS GOLD SCORE OF 82/100  
BUILDS ON OUR PREVIOUS SCORE OF 75,  
POSITIONING US AS THE LEADER OF OUR  
INDUSTRY AND AMONG THE LEADING  
PACK IN THE TOP 1% OF THE 45,000  
GLOBAL SUPPLIERS ASSESSED.**



## CDP

Firmenich has participated in the CDP Supply Chain Climate Change reporting program for nine years. The supply chain program helps companies engage with their suppliers to tackle risks, take advantage of opportunities and ensure business continuity. For the fourth consecutive year, we were included in CDP's 2018 Supplier A List, putting us in the top 2% of companies reporting globally through the program. For more information, please see [page 42](#).

## AUDIT PROGRAMS

### Supplier site audits

Auditing of our supply chain adds to customer confidence in the integrity of our products, helps us reduce risks and avoids product recalls. In FY18, we launched our Supplier Audit Program to cover 233 active manufacturers. Those that we deem to be high risk are assessed by Firmenich's team of lead auditors in Quality, Health, Safety, Security and Environment (QHSSE) and Purchasing, while those considered to be a low/medium risk are referred directly to our supplier audit partner.

In FY18, we extended our collaboration with our audit partner to support a multi-year rolling program of around 163 audits across Latin America, North America, Europe and Asia. We also improved our internal audit planning processes with more regular meetings, supplier follow-up and escalation.

### Firmenich site audits

Over many years, we have been conducting Corporate Operational Assurance Reviews at our sites using a team of safety specialists. Manufacturing sites are visited on average every three years by a multidisciplinary team and in the last 18 months we have expanded these audits to cover quality and security. We can now measure and monitor the maturity of our affiliates' QHSSE management systems against our global mandatory management principles and operational codes.

From left to right: Dr. Béangère Magarinos-Ruchat, VP Global Head of Sustainability, Firmenich; Gilbert Ghostine, CEO, Firmenich; and Nicolas Dussert, Senior Sales Manager, EcoVadis.





# ABOUT OUR REPORTING

Our financial results and sustainability initiatives are reported on a fiscal year basis. In this report, all references to "FY18" relate to the 12 months ended June 30, 2018. This report has been prepared in accordance with the Global Reporting Initiatives (GRI) Standards: Core option. Since 2006, we have reported annually on our sustainability performance and activities. Our most recent report was published in 2017. This report and our previous reports have been fully assured by a third party in order to maintain a level of truthfulness and ensure that information, data and examples are exactly as implemented/observed/calculated, without embellishment. This level of assurance helps us make sure that we report only the facts and that we are protected from falsehoods and misinformation, whether intentional or unintentional. Our separate GRI Index, also assured by Société Générale de Surveillance (SGS), can be found on our website.

The boundaries of this report are based on the materiality analysis published in this report and available in a separate document. These boundaries cover the global operations of the Firmenich Group, including affiliates in 33 countries and both manufacturing and non-manufacturing locations.

In total, Firmenich owns and controls 31 manufacturing plants across 29 sites. For reporting purposes, the environmental data presented in this report covers 26 manufacturing sites. This number includes Agilix' manufacture acquired in FY17 but excludes two recent acquisitions completed at the end of this fiscal year, and a strategic sourcing partnership. This has led to the recalculations of some of the baseline data.

At times environmental data from previous years is updated, adjusted or corrected. Any changes in environmental data previously published below a 1% threshold are deemed not material unless it is found to be of sufficient importance to our management team, and in these cases the explanation for the variation will be detailed. For cases above 1% the variation will be detailed.

The workplace and HR data reported covers all operations owned or controlled by the group (including production sites, sales offices, laboratories, administrative office or combinations of such facilities). The employee data is reported for both fixed and temporary headcount, while new hires and terminations figures cover fix employees only. Data is sourced from SAP reports and HR Monthly Headcount files that were extracted in July. We made an assumption on the employee categories: Directors (CL 16+), Middle Managers (CL 14–15) and Rest of the Workforce (CL 11–13).

To highlight our performance, the previous year's data and rolling five-year data are included where relevant in this report. Some of this data may differ from figures reported in previous sustainability reports. These variations reflect improvements made in the calculation and consolidation methods, as well as changes made once more accurate data became available. Any changes in data reporting below a 5% threshold are deemed not material to this report unless they are found to be of sufficient importance to our management team; in these cases, the explanation for the variation will be detailed.

For any questions on the report, please contact [global.sustainability@firmenich.com](mailto:global.sustainability@firmenich.com)

# EXTERNAL VERIFICATION



SGS SA was commissioned by Firmenich to conduct an independent assurance of the Firmenich Performance and Sustainability Report 2018, the summary report, the materiality report and the GRI Index. The full assurance statement can be downloaded on our website at [www.firmenich.com/sustainability](http://www.firmenich.com/sustainability)

**SGS** ASSURANCE STATEMENT

SGS SOCIÉTÉ GÉNÉRALE DE SURVEILLANCE SA REPORT ON SUSTAINABILITY ACTIVITIES IN THE FIRMINICH PERFORMANCE AND SUSTAINABILITY REPORT FOR 2018

**NATURE AND SCOPE OF THE ASSURANCE/VERIFICATION**  
 SGS Société Générale de Surveillance SA was commissioned by Firmenich to conduct an independent assurance of the Firmenich Performance & Sustainability Report 2018, the Firmenich Performance and Sustainability Summary Report 2018 and the Firmenich Materiality Report 2018. The scope of the assurance, based on the SGS Sustainability Report Assurance methodology, included all text, and data in accompanying tables, contained in these reports, excluding the news on the Business Highlights for Flavors and Perfumery and ingredient (p. 9-11) including the statement #1 in fine fragrance and ingredients.

The information in the Firmenich Performance and Sustainability Report 2018 and its presentation are the responsibility of the directors and the management of Firmenich. SGS Société Générale de Surveillance SA has not been involved in the preparation of any of the material included in the Firmenich Performance and Sustainability Report 2018.

Our responsibility is to express an opinion on the text, data, graphs and statements within the scope of verification set out below with the intention to inform all Firmenich's stakeholders.

This report has been assured at a moderate level of scrutiny using our protocols for:

- evaluation of content veracity;
- evaluation of the report against the GRI Standards (current edition)

The assurance comprised a combination of pre-assurance research, interviews with relevant employees at the Headquarters in Geneva, documentation and record review. Data has been assured at corporate level; base data utilized in the calculation of the consolidated figures have not been assured.

Financial data drawn directly from independently audited financial accounts has not been checked back to source as part of the assurance process, including the statement #1 in fine fragrance.

**STATEMENT OF INDEPENDENCE AND COMPETENCE**  
 The SGS Group of companies is the world leader in inspection, testing and verification, operating in more than 140 countries and providing services including management systems and service certification, quality, environmental, social and ethical auditing and training, environmental, social and sustainability report assurance. SGS Société Générale de Surveillance SA confirms our independence from Firmenich, being free from bias and conflicts of interest with the organization, its subsidiaries and stakeholders.

The assurance team was assembled based on their knowledge, experience and qualifications for this assignment, and comprised auditors with Lead Quality, Environmental and Social Auditor and experience in the flavors and fragrance industry.

**VERIFICATION ASSURANCE OPINION**  
 On the basis of the methodology described and the verification work performed, we are satisfied that the information and data contained within Firmenich Performance and Sustainability Report 2018 is accurate, reliable and provides a fair and balanced representation of Firmenich sustainability activities in financial year ending 2018.

The assurance team is of the opinion that the Report can be used by the Reporting Organization's Stakeholders. We believe that the organization has chosen an appropriate level of assurance for this stage in their reporting.

**GLOBAL REPORTING INITIATIVE REPORTING GUIDELINES GRI Standard (current edition)**  
 In our opinion, the Firmenich Performance and Sustainability Report 2018 is presented in accordance with the core option for GRI Standards (current edition) and fulfills all the required content and quality criteria.

**Principles**  
 In our opinion, the content of the report adheres to the four GRI Report Content Principles of Materiality, Stakeholder Inclusiveness, Sustainability Context and Completeness, and to the six GRI Report Quality Principles of Balance, Comparability, Accuracy, Timeliness, Clarity and Reliability.

**General Standard Disclosures and Specific Standard Disclosures**  
 We are satisfied that the General Standard Disclosures and Specific Standard Disclosures on Aspects identified as Material have been addressed in line with the core requirements of GRI Standards (current edition).

**RECOMMENDATIONS**  
 Opportunities were identified for consideration in future reporting cycles to ensure continual improvement, including:

- Although reporting has begun to identify local issues, further reporting on the local issues could be improved to demonstrate an understanding of the difference between overarching and local issues. Future reporting would benefit from production of a less corporate based report to focus on the impact of material issues locally.
- Future reporting would benefit from reporting the challenges facing Firmenich in addressing its material aspects in a way that allows readers to appreciate the complexities of achieving goals without reducing the positive reporting on achievements.

Signed for and on behalf of SGS Société Générale de Surveillance SA - Geneva, September 2018

*[Signature]*

**Stéphane ROMBALDI**  
 SGS Société Générale de Surveillance SA  
 Certification & Business Enhancement

WWW.SGS.COM

# FIRMENICH

SINCE 1895, BECAUSE WE CARE

## CUSTOMERS



We fragrance and flavor our customers' products for our **mutual success**.

- Our customer intimacy is unique as we partner with our customers to transform their ambitions into reality.
- We anticipate consumers' desires continuously reinventing the world of taste and smell.
- We deliver value through innovative products and services, placing decision-making as close as possible to our customers.

## PEOPLE



Our people are the heart of our Company. They are recognized for their **passion, talent and commitment**.

- We strictly maintain the highest levels of personal integrity and ethical behavior.
- We value diversity and create an environment in which each colleague is empowered and encouraged to grow, enabling us to shape our future with confidence and imagination.
- We unite the finest talents and nurture an entrepreneurial team spirit to attain our strategic goals.

## CREATIVITY



Creativity is our **essence**.

- We create fragrances and flavors that inspire moments of pleasure and delight for consumers worldwide.
- We lead our industry in research and innovation, constantly driving incremental and breakthrough winning ideas and technologies.
- We apply our creativity to improve all parts of the business.

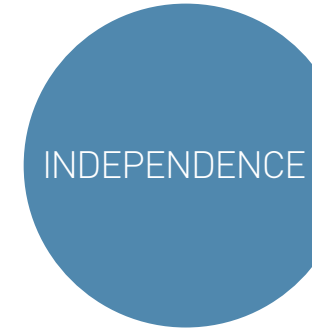
## SUSTAINABILITY



Our integrity and sense of individual and collective responsibility ensure our **long-term success**.

- We practice a sustainable business model for the wellbeing of present and future generations.
- We engage all our partners to build a responsible, sustainable and traceable value chain.
- We strictly comply with all regulatory requirements and strive to achieve the highest international standards on quality, safety and the environment.

## LEGACY



Our **independence** gives us the freedom to control our destiny.

- We are a family-owned company, committed to our independence.
- We take a long-term view of our business.
- We pursue a policy of financial strength, profitable growth and return on assets.

**FOR MORE INFORMATION, GO TO**

[www.firmenich.com/sustainability](http://www.firmenich.com/sustainability)

**AUDITED BECAUSE  
WE CARE, NATURALLY**

To contact us, please email  
[global.sustainability@firmenich.com](mailto:global.sustainability@firmenich.com)

[www.firmenich.com](http://www.firmenich.com)

**Firmenich**