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# **FIRMENICH GLOBAL ENVIRONMENTAL POLICY**

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Firmenich understands global issues, our impact on them and their impact on us, our suppliers, our customers, and their consumers. We have a responsibility to tackle these challenges and have been leading real change since our first public environmental commitment to sustainable business, three decades ago. Our Global Environmental Policy, updated every year, outlines our approach, to reducing our impact, and driving meaningful changes.

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 policy, 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.

Firmenich is committed to the reducing and mitigating our impact on the environment by focusing on the following environmentally related material topics and setting ambitious 2020, 2030, and 2050 goals:

- **Reducing impact on climate change**
- **Water use**
- **Sourcing responsibly**
- **Reducing & managing waste**
- **Preserving biodiversity**
- **Deforestation**
- **Regulatory compliance, including Prevention of Local & Accidental Pollution**
- **Green Science**
- **Plastic & microplastics**

## REDUCING OUR IMPACT ON CLIMATE CHANGE: CUTTING GREENHOUSE GAS (GHG) EMISSIONS

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We have made a commitment to setting science-based targets (SBTs) to reduce GHG emissions. Emissions are considered science-based if they are in line with what climate science considers necessary to meet the goals of the Paris Agreement – to limit global warming to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C.

To reflect the most recent Intergovernmental Panel on Climate Change (IPCC)'s recommendations to limit global warming to 1.5°C, Firmenich updated our absolute Scope 1 and 2 CO<sub>2</sub> emissions reduction target to 55% by 2030 vs. 2017. This updated target complements our supply chain target to reduce Scope 3 emissions from purchased goods and services by 20% by 2030 vs. 2017.

To meet our Scope 1 and 2 CO<sub>2</sub> emissions reduction target, we are actively exploring renewable energy installations, along with pursuing energy and process efficiency around the world. Firmenich aims to obtain 100% of electricity for Level 1 sites from renewable sources or renewable energy credits (RECs) by 2020.

As our Scope 3 emissions account for 96% of our total footprint, we 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. As a CDP Supply Chain Program member, Firmenich engages key suppliers to reduce their emissions. Our 2030 goal is to have our top raw materials suppliers (representing 65-80% of our spend) participate in CDP. We also engage our supply chain towards our 2030 goal to have all of our key raw material suppliers set their own GHG emissions reduction.

Regarding our Scope 3 emissions linked to transportation of raw materials to our manufacturing sites, and finished products from our manufacturing sites to our clients, we thrive to choose the most environmentally friendly solutions. We collaborate with our purchasing teams, transportation suppliers, and customers to consolidate deliveries and ensure our shipments are as efficient as possible. We analyze emissions on a semi-annual basis, to assess our performance against our goal.

## WATER USE

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In 2008, Firmenich signed the Global Compact's CEO Water Mandate that commits us to work with others to find solutions to the impending global crisis over the availability of clean water. Since then, our focus has been on how we manage our water use. We conduct annual water stress analysis, evaluating water risks and water use for all manufacturing sites with the help of two water risk assessment tools: World Resource Institute's (WRI) Aqueduct Water Risk Atlas; and the World Wide Fund for Nature (WWF) Water Risk Filter. Using this water stress analysis, Firmenich intends to decrease rate of water use in water-stressed areas 25% by 2020, and continue engaging suppliers on their water use via CDP Supply Chain.

## RESPONSIBLE SOURCING

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We source raw and non-raw materials in many countries around the world, from thousands of suppliers, and have specific programs in place to manage the sustainability impacts related to these activities. At the very end of our value chain, we have built privileged business relationships with smallholder farmers and producers of naturals.

Our suppliers are requested to adhere to our Code of Conduct and our Social Accountability Standard in addition to filling out a questionnaire covering social and environmental topics. We also encourage suppliers to report on their environmental performance through the CDP supply chain program and set a 2030 goal to have all of our key raw material suppliers implement their own GHG emissions reduction.

## REDUCING AND MANAGING WASTE

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A priority at Firmenich is to continually reduce waste and embrace circular models. As we continue to improve on how our waste streams are managed, we have focused on reducing the waste sent to landfill. Reducing waste at the source, finding ways in which waste could be recycled as well as opportunities to generate energy from waste.

Firmenich intends to increase our waste efficiency by 15% and ensure all of our manufacturing sites can claim zero waste-to-landfill by 2020.

## **PRESERVING BIODIVERSITY**

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Firmenich signed the Cancun Business and Biodiversity Pledge, alongside several customers at the COP13 Convention on Biological Diversity in Mexico. Through this pledge, Firmenich committed to nurturing biodiversity across their ecosystems and preserve it sustainably for the well-being of present and future generations.

Firmenich works with key organizations, such as Rainforest Alliance, as well as major NGOs to ensure the certification and transparency of its raw material sourcing practices. In 2014, Firmenich Grasse became a member of the Union for Ethical Biotrade (UEBT), a non-profit organization that promotes the “Sourcing with Respect” of natural ingredients and encourages sustainable business growth, local development and biodiversity conservation. Since joining, Firmenich Grasse has implemented their highest standards in biodiversity protection and their risk-based approach to strengthen sourcing practices in specific, prioritized value chains for the Firmenich naturals’ portfolio.

## **FIGHTING DEFORESTATION**

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Forests play a vital role in providing livelihoods for over one billion people. They also mitigate climate change by absorbing emitted carbon dioxide. Deforestation in tropical regions currently causes 8% of greenhouse gas emissions but could provide 23% of the climate mitigation needed by 2030. We are committed to fighting the urgent climate crisis, and preserving and restoring earth resources, including forests. We focus on driving transparency in our supply chain, and investing in reforestation initiatives.

## **REGULATORY COMPLIANCE, INCLUDING PREVENTION OF LOCAL & ACCIDENTAL POLLUTION**

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We will comply with all applicable laws, regulations and standards of the countries in which we operate, and the principles of the Responsible Care ® initiative and the Business Charter for Sustainable Development. We thrive to be a good neighbor, are transparent in our relations with local communities, and regulatory authorities are provided with relevant information to assist them in taking well-founded environmental decisions.

We commit to the prevention of pollution through the continuous study of our performance, and the identification of new opportunities for improvement. We focus on operational control and

source reduction, followed by recycling and proper waste management. Firmenich conducts its activities in a responsible manner and in compliance with all applicable laws and regulations.

## **GREEN SCIENCE: GREEN CHEMISTRY, WHITE BIOTECHNOLOGY & DESIGN FOR DEGRADATION**

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Firmenich invests 10% of our annual turnover in R&D and we pride ourselves on fostering a culture of innovation, which stems from our continued investment in research and development. We are recognized as a leader in the industry for our breakthrough science and innovation. As such, we plan to build on our innovation to reach the next level of scientific excellence and inspire and encourage the next generation of scientists. From creating safe, sustainable, and quality products to improving health and hygiene in developing countries, our scientists are essential to the success of our sustainability initiatives. Firmenich is committed to using biodegradable ingredients, strenuous toxicology standards, and green chemistry.

Where our raw materials are derived from synthetic processes, the use of green chemistry principles is an essential part of our process-development activities. We continue to invest in areas such as catalytic chemistry, both organo- and metallo-, in order to devise cleaner processes. To better manage our overall environmental impacts, we are developing a new metrics system to help our synthetic chemists make further improvements. Firmenich is dedicated to developing processes based on the “Principles of Green Chemistry”.

White biotechnology uses enzymatic or fermentation processes to make ingredients, as an alternative to chemical synthesis. This process allows Firmenich to make ingredients from renewable natural materials, such as CO<sub>2</sub>, glucose or fat, rather than petroleum. Firmenich’s work in biodegradation is changing the way we design new ingredients for the future. All new Firmenich fragrance ingredients are tested for biodegradation. Beyond regulatory requirements, we proactively subject all compounds with the potential to go to market to the same tests. We are committed to creating only biodegradable ingredients as part of our Green Gate strategy.

## **PRODUCT SAFETY, QUALITY & ENVIRONMENTAL IMPACT**

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Firmenich is committed to producing high quality and safe products. Our Global Regulatory Services continuously collaborate with academia to improve our knowledge of product safety

and strengthen our commitment to sustainability. Actively pursuing the replacement of animal testing, we are researching into new technologies to avoid testing on animals, while providing factual data on environmental assessment. We are proactive in investigating new approaches and publish our results for the scientific community, aiming at facilitating wider acceptance by the regulators of new alternative methods being developed.

With EcoScent Compass™, Firmenich acts as a thought leader by proactively raising the bar in Fragrance sustainability measurement and improvement. EcoScent Compass™ assesses each fragrance against three pillars: a social impact score, an environmental footprint score, and intrinsic green properties.

Firmenich further plans to improve our excellent product quality by 2020; to raise quality of life through nutrition, hygiene, and sanitation by 2020; and to develop sustainable and cost-effective flavor and fragrance ingredients and technologies by 2020.

## PLACTICS & MICROPLASTICS

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As a business-to-business company, we are well aware of the plastic debate and are committed to reducing plastic usage in our operations and supply chains while also supporting our customers through various initiatives. Our taste solutions, ingredients, and fragrances reach our customers in large industrial containers, made of metal or plastic. Sometimes, our taste or fragrance solutions are directly uploaded from our facilities to a trailer truck dedicated to transporting such goods, and then downloaded into a specific container at our customers' sites, achieving a seamless waste-free cycle. We calculated our plastic footprint and have worked with our suppliers and our Purchasing and Operations teams for more than five years to reduce our impact.

Regarding polymers, although fragrance encapsulates were never identified in aquatic litter and their release in the environment is minimal compared with microplastics as beads or synthetic fibers, we are committed to develop environmentally friendly solutions for this fragrance delivery system, aligned with the consumer requirements and new regulations that are currently under discussion. Over the past ten years, we have extensively worked on continuously improving our perfume encapsulates so as to deliver a better consumer benefit at reduced encapsulate dosage. For the future, we are committed to, and investing heavily in, the development of next generation biodegradable encapsulates systems that best balance consumers' demand with the challenging requirements of consumer goods while minimizing impact to the environment.

## **POLICY OWNERS & IMPLEMENTATION**

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Firmenich senior executives provide leadership and commitment in effective implementation of the environmental policy, and work to disseminate and integrate our Global Environmental Policy at all levels of the organization, in all of our facilities and our activities.

Additionally Firmenich is committed to using and maintaining an Environmental Management System, appropriate to our scale, nature, environmental impact, and products and services, and to ensure compliance with our commitments. We achieved a strategic goal to certify 25 of our manufacturing sites in full compliance with Environmental (ISO 14001) Management Systems Standards and will focus on continuous improvement.

## **POLICY SCOPE**

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The scope of the Environmental Policy is based on our 2018 materiality analysis. It encompasses all environmentally related issues considered to be significant for Firmenich or our stakeholders. The Environmental Policy covers the global operations of the Firmenich Group including all affiliates and all manufacturing and nonmanufacturing locations.

The environmental data publically reported, unless otherwise indicated, covers all level 1 operations owned or controlled by the group -- including production sites, sales offices, laboratories, administrative office or combinations of such facilities.

This policy is reviewed annually. Firmenich's Environmental group coordinates the policy and leads subsequent reviews and updates. We report against policy commitments in an annual basis, in our yearly sustainability report.

**The Global Environmental Policy was reviewed and approved by the following Firmenich representatives on November 12, 2019.**

**Jane Sinclair**  
General Counsel & Secretary of the Board

**Neil McFarlane**  
Senior Vice President Global QHS&E