




Progress beyond

SOLVAY
TODAY

2021


Essential and Stronger

↑ Our SolvaLite™ composites are up to 40% lighter than metal, allowing manufacturers to create lighter and more energy-efficient vehicles that contribute to reducing CO₂ emissions.



Solvay's Udel® PSU is a polymer used in a variety of membrane filtration applications, such as renal dialysis, water treatment, and bioprocessing. An estimated 3 million people worldwide are being treated with hemodialysis membranes made from our products.

**We bond
people, ideas
and elements
to reinvent
progress**



Key figures
2020

NET SALES

€8.9_{bn}

EMPLOYEES

+23,000

COUNTRIES

64

INDUSTRIAL
SITES

110

MAJOR RESEARCH
& INNOVATION
CENTERS

20

We are a science company whose technologies bring benefits to many aspects of daily life. Our innovative solutions contribute to safer, cleaner, and more sustainable products found in homes, food and consumer goods, planes, cars, batteries, smart devices, health care applications, water and air purification systems.

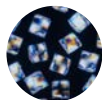
Our Group seeks to create sustainable shared value for all, notably through its Solvay One Planet plan crafted around three pillars: protecting the climate, preserving resources and fostering better life. Founded in 1863, Solvay today ranks among the world's top three companies for the vast majority of its activities.

OUR BUSINESSES



MATERIALS 31% of Group EBITDA

Our unique portfolio of high-performance polymers and composite technologies is primarily used in sustainable mobility applications to reduce weight, improving CO₂ efficiency. Our materials also serve Healthcare and Electronics.



CHEMICALS 42% of Group EBITDA

Our businesses are world-leaders in essential chemicals to daily life. These chemical intermediates are used in a broad range of applications from energy-efficient tires to triple-glazed windows, bio-sourced solvents for homecare and building, or safe packaging for food and pharmaceuticals.



SOLUTIONS 27% of Group EBITDA

Thanks to our unique formulation and application expertise, we provide customized specialty formulations that minimize environmental impact, in end-markets like agriculture, fragrances and flavors, personal and home care, mining and electronics.

SOLVAY AROUND THE WORLD

% of Group net sales

24% Employees
39 Industrial sites
7 Major R&I centers

28%
NORTH AMERICA

10% Employees
7 Industrial sites
1 Major R&I center

11%
LATIN AMERICA

18% Employees
24 Industrial sites
4 Major R&I centers

32%
ASIA & RoW*

* Rest of the World

48% Employees
40 Industrial sites
8 Major R&I centers

29%
EUROPE

↑ Solvay's Aquivion® technology is key for electrical storage and conversion devices such as fuel cells.

“2020 was the year we unveiled our Company Purpose... and literally just a few weeks after our inspiring inauguration, the tidal wave of coronavirus submerged the world.

With today's hindsight, I embrace this concomitance gratefully, because the outbreak and its consequences – albeit dramatic – allowed us to live our Purpose in full: “We bond people, ideas and elements to reinvent progress” was our beacon, our North Star.

We demonstrated that we were essential to the world and we actually capitalized on the crisis, accelerating reforms to unleash our company's full potential.

Today, I can proudly assert that we have emerged stronger.

Ilham Kadri
Chief Executive Officer, Solvay



SOLVAY'S PEOPLE AND BUSINESSES



"It's all about putting the customer at the center of what you do, finding shared value with them, being transparent when news is both good and bad, and developing trust."

James Lighthill,
Regional Sales Leader, Transportation

No one can talk about Solvay's businesses like its people.

This year again, despite unprecedented headwinds, our common focus was on bonding with our customers and going that extra mile to create the successful relationships that help us all progress beyond. This is what some of our people had to say about working with a customer-obsessed mindset.

"Zero-emission flight is the next big challenge in aviation. Getting to zero-emission will require clean propulsion. We see several of our customers, whether they be established aircraft manufacturers or new ventures in Urban Air Mobility, stepping up their efforts in this area. With our electrification, battery, and hydrogen solutions, we believe we are well-positioned to support our aerospace customers in this area."

Thomas van Houtte,
Key Account Manager, Aerospace



SOLVAY'S PEOPLE AND BUSINESSES



"Customers can lead a sustainable future as a market leader in the IT industry through Solvay's innovative products and technologies. Solvay has invested in a center of excellence in the semiconductor and 5G field close to our customers for tailor-made service supporting their innovative product development."

Harry Kim,
Key Account Manager, Electronics



"It's about having a deep understanding of our customers' needs, cultivating trust, and working together as one team to create win-win solutions. 2020 was an extraordinary year of reinforcing partnerships with our key customers."

Soline de Cayeux,
Key Account Manager, Transportation



"We are deeply bonding with one of our key customers in the automotive industry at all possible levels. The offering of Solvay in hydrogen, fuel cells and our efforts in sustainability are key drivers to grow together the business for future mobility."

Johan Billiet,
Key Account Manager, Transportation

SOLVAY ONE PLANET SUSTAINABILITY GOALS: Our 2020 achievements

The [Solvay One Planet](#) sustainability roadmap outlines ten ambitious targets for 2030 in three areas:

[Climate](#), [Resources](#) and [Better life](#). Amid the Covid-19 crisis, these priorities are more relevant than ever.



FIGHTING AGAINST CLIMATE CHANGE

Excluding the impact of the pandemic, we reduced our emissions structurally by 8% since 2018, about twice the annual average dictated by the Paris Agreement, and committed to going further by helping our suppliers and customers decrease their own climate impact.

In 2020, we completed or committed 28 renewable energy and emission reductions projects equivalent to taking 1 million cars off the road. Our soda ash plant in Rheinberg, Germany, for example, is switching its energy production from coal to biomass using recycled wood chips.

As a participant in Apple's Clean Energy Program, we commit to using 100% clean energy to manufacture its products. In the United States, with more than 250,000 solar panels, Solvay is among the top 10 companies with the largest installed solar capacity.



PROTECTING NATURAL RESOURCES

In 2020, 52% of Solvay's sales were already generated by sustainable solutions.

Because it enables the use of waste and renewable or bio-based products as raw materials, chemistry is the key to the circular economy. We aim to double our revenues based on renewable or recycled re-

sources by 2030. We believe that circularity will create economic growth and new jobs while protecting the environment.

To answer consumer demand for better quality, bio-based food ingredients, Solvay, the leading producer of vanillin, has developed an entirely natural grade. Rhovanil® Natural CW is produced from bio-waste, namely non-GMO rice bran oil, and serves as an efficient alternative to the increasing demand for vanilla extract.

SOLVAY ONE PLANET SUSTAINABILITY GOALS: Our 2020 achievements



IMPROVING QUALITY OF LIFE FOR OUR EMPLOYEES AND SOCIETY

Our products are used to improve the health of millions of people. They serve to manufacture dialysis membranes with excellent biocompatibility. Solvay is also one of the few companies in the world capable of manufacturing a key ingredient for Covid-19 PCR

tests. Our Solvair® purifies the air we breathe: it helps the clean exhaust fumes of industrial and waste management facilities.

In terms of improving the quality of life of our employees, we have been doing a lot. To help them face the impacts of the crisis, we implemented a set of measures, including paid medical leave, and created the Solvay Solidarity Fund. In 2020, we made mobile working the Group's global standard.

“Safety is essential to us. In 2020, fewer colleagues sustained an injury than ever before. This was Solvay’s third year in a row without a work-related fatality - the longest fatality-free period since the 1990s.”

James Daly,
Group Hygiene, Safety and Environment Director

SOLVAY ONE PLANET: We walk the talk!

We have ten bold objectives to reduce our global impact by 2030, but how do we walk the talk?

Find out how Solvay people everywhere are using their ingenuity and spirit of innovation to come up with solutions.

The Spinetta site launched several successful initiatives to recycle its waste, including branding and selling them.

"Few companies can sustainably use the chemistry they produce to reduce their environmental footprint. This will be Solvay's challenge to prove that the innovation that drives our processes also drives our sustainability commitment."



Emilia Buffa,
Manufacturing
Excellence Manager,
Spinetta, Italy

The Paulinia site reduced its fresh-water intake by 24% over six years, an example of an action requiring no investment.

"All economic activity impacts the planet, so to have conscious and responsibility is highly needed. I'm proud to see it at Solvay as a value. This motivates us to continue with our work."



Helio Gabardo,
Process Manager,
Paulinia, Brazil

The Panoli site reduced its electric energy use by 30% since 2018, drastically decreasing emissions thanks to renewable energy initiatives.

"In everything I do, I will always look for a more sustainable way. My house is energy neutral, with solar panels, and I'm always looking for energy efficiencies."



Ashesh Mehta,
Technical Service
Manager, Panoli, India

WE INNOVATE FOR A BETTER PLANET

Solvay's Aquivion® technology is key for electrical storage and conversion devices such as fuel cells.

“Providing lightweighting solutions for the Solar Impulse plane gave the sense of purpose for our people to challenge themselves. We made the impossible possible to impact tomorrow's world.”

Richard Thommeret,
Innovation Communication &
Philanthropy Director

Innovation is at the core of our Purpose of providing solutions that contribute to building a more sustainable world.

In 2020, Solvay continued to innovate. Two of our latest innovations were aptly focused on fighting viruses: Actizone™, a cleaning solution that's unique on the market and destroys over 99.9% of microorganisms on surfaces for up to 24 hours, and Amni® Virus-Bac OFF, a polyamide fiber that "deactivates" viruses thanks to an anti-bacterial additive.

FOCUSING ON URGENT SUSTAINABILITY NEEDS

We embed sustainability and circularity from the start in our innovation projects to ensure our solutions meet customer expectations while helping to fight climate change, preserve natural resources or improve quality of life. Our innovation efforts focus on areas with urgent needs such as clean mobility, energy efficiency and the emerging green hydrogen economy.

The Solar Impulse Foundation awarded its Efficient Solutions label to twelve Solvay products that bring environmental and socio-economic benefits, and profitability. These include SolvaLite™, our composite materials for more energy-efficient vehicles, Solef® PVDF that improves the performance and the durability of EV batteries and Oxystrong®, an eco-friendly solution for municipal wastewater disinfection.

Solvay was one of the very first partners of the Solar Impulse plane which completed its ground-breaking world tour in 2016.

PROMOTING STEM EDUCATION: It's in our DNA!

True to the vision of our founder Ernest Solvay, we strongly believe in supporting the teaching of STEM (Science, technology, engineering, mathematics) and education in general. For [Citizen Day 2020](#), Solvay colleagues worldwide volunteered to share their expertise and know-how with local communities, translating that vision into concrete actions.

REACHING OUT TO COMMUNITIES EVERYWHERE

A total of 4,700 volunteers reached out to 190,000 students across local communities, schools and universities through virtual educational activities, living our Purpose and involving our most valuable resource: our people. For example, 270 volunteers from Solvay's site in Zhenjiang, China organized a webinar with 2,500 local primary school children, showing them how to purify water or make hand sanitizer smoother with guar.

A PLATFORM TO ENCOURAGE STEM EDUCATION

Citizen Day was also the occasion to further our collaboration with the NGO [greenlight for girls](#) (g4g). How? By creating the [Future Innovator's Library](#), an online platform packed with videos made by Solvay employees to support STEM education. To feed this library and inspire our people, we also launched an online resource portal, the IDEA-Station (Inspiration, Design, Education, Action!).

"I hope that the videos created by Solvay employees will be the spark that inspires many children to develop their scientific vocation."

Alberto Sancibrián,
Torrelavega, Spain

So-Jung Han, 9 years old, winner of
the Citizen Day painting contest in Korea.



SOLVAY, A CARING COMPANY

Caring for its people is part of Solvay's heritage. From the company's early days in the late 19th century, it was recognized for its extensive welfare programs, which continue to this day with initiatives such as Solvay Cares and the Solvay Solidarity Fund.

THE SOLVAY SOLIDARITY FUND

True to our Purpose of bonding people, ideas and elements to reinvent progress, in 2020, we launched the Solvay Solidarity Fund, created to support our employees through hardship caused by the Covid-19 pandemic. The Fund collected €15M from employees, management and shareholders to provide financial support for 1,600 families. And this extends beyond our employees: €100,000 were deployed to help guar farmers in Northern India, a key part of Solvay's extended workforce, and €100,000 to renovate a hospital in a Solvay community in Bulgaria.

EXTENDED MATERNITY LEAVE FOR ALL CO-PARENTS

To promote diversity and gender equality, in 2020 we increased our global maternity leave policy to 16 weeks and extended it to all co-parents employed by the company, regardless of gender, including parents who adopt. This is part of the Solvay Cares benefits package for our all 23,000 people around the world, which also covers Medical care, Disability and Life insurance.

SOLVAY
SOLIDARITY
FUND

€15M
COLLECTED

MATERNITY
LEAVE FOR ALL
CO-PARENTS

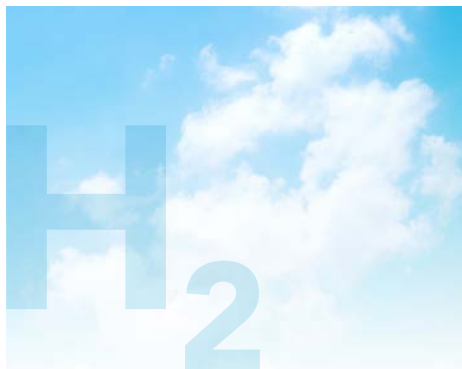
16
WEEKS

"It's more about providing emotional support, being present and participating during this challenging period. It means a great deal for my wife and son to count on me. Family is always an indispensable aspect of our life, and the paternity leave reinforces our bonding."

Bright Kusema, a research scientist based in Shanghai, about his experience as a father enjoying the benefits of the new paternity leave policy.



FAST FACTS //



SUPPORTING THE EMERGENCE OF THE HYDROGEN ECONOMY

Clean hydrogen is crucial in the transition towards a zero-carbon energy system. In 2020, we launched a Green Hydrogen platform, bringing together all the innovative material and chemical solutions we have to advance the hydrogen economy. It includes our new ion conducting polymer membrane technology Aquivion®, a key enabler for the proton exchange membrane (PEM) electrolyser and fuel cell markets, which is crucial for their performance and durability.

A BIO-BASED BOOSTER FOR MORE SUSTAINABLE AGRICULTURE

AgRHO® S-Boost™ is a biostimulant made with a 100% natural and renewable raw material: guar beans. Solvay sources its guar from smallholder farms in Northern India through the Sustainable Guar Initiative, a program run by NGO Technoserve and supported by Solvay, L'Oréal and Henkel. Our product enhances germination, strengthens the root development, ultimately increasing yield while decreasing the need for fertilizers, pesticides and irrigation.



3D PRINTING AGAINST THE COVID-19 PANDEMIC

Employees of Solvay's R&I team in Brussels worked on their own time to develop 3D-printed parts for the protection equipment of medical staff. Using some of Solvay's medical-grade polymers, they created an innovative mask with equivalent properties to the standard FFP2, with the added advantage of being reusable and sterilizable.

FAST FACTS //

PARTNERING FOR CIRCULAR BATTERIES

As part of our commitment to protecting natural resources and fighting climate change, we partnered with [Veolia and Renault](#) to create a consortium that will enable circularity in the production of batteries for electric vehicles. Solvay brings to the table solutions such as our unique refining process to optimize metal extraction and purification, enabling the reuse of these raw materials.



SUSTAINABLE SHAMPOO INGREDIENTS

Mackadet® OPR-2 is a new generation of naturally based, microplastic-free opacifier. Biodegradable, naturally derived, it provides a creamy white and soft appearance for body washes and shampoos. This innovative technology answers the consumer demand for pure, simple and renewable cosmetic formulations.

BONDING WITH BOEING AND LOCKHEED MARTIN

Our long-standing agreements with aerospace giants [Boeing](#) and [Lockheed Martin](#) were renewed in 2020. We provide Boeing with composites and adhesives for its commercial and defense programs, and our technologies are critical to advance its innovation in design and manufacturing. We are also Lockheed Martin's main supplier of high-performance materials for the U.S. Department of Defense's flagship program, the F-35.



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All together,
let's contribute
to fight Covid-19:

solvay.com/en/solvay-solidarity-fund

To learn more about Solvay in 2020, read
the online Integrated Report that provides
additional, interactive features.

reports.solvay.com/integrated-report/2020

Solvay SA Rue de Ransbeek, 310
1120 Brussels, Belgium - T: +32 2 264 2111

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