



Progress beyond

Sustainability Booklet

Sustainable Shared Value for All

Presentation aiming at being updated regularly by SD or communication team members.

For any questions please contact
[Céline Monticelli](#)



Solvay Reinvents Progress

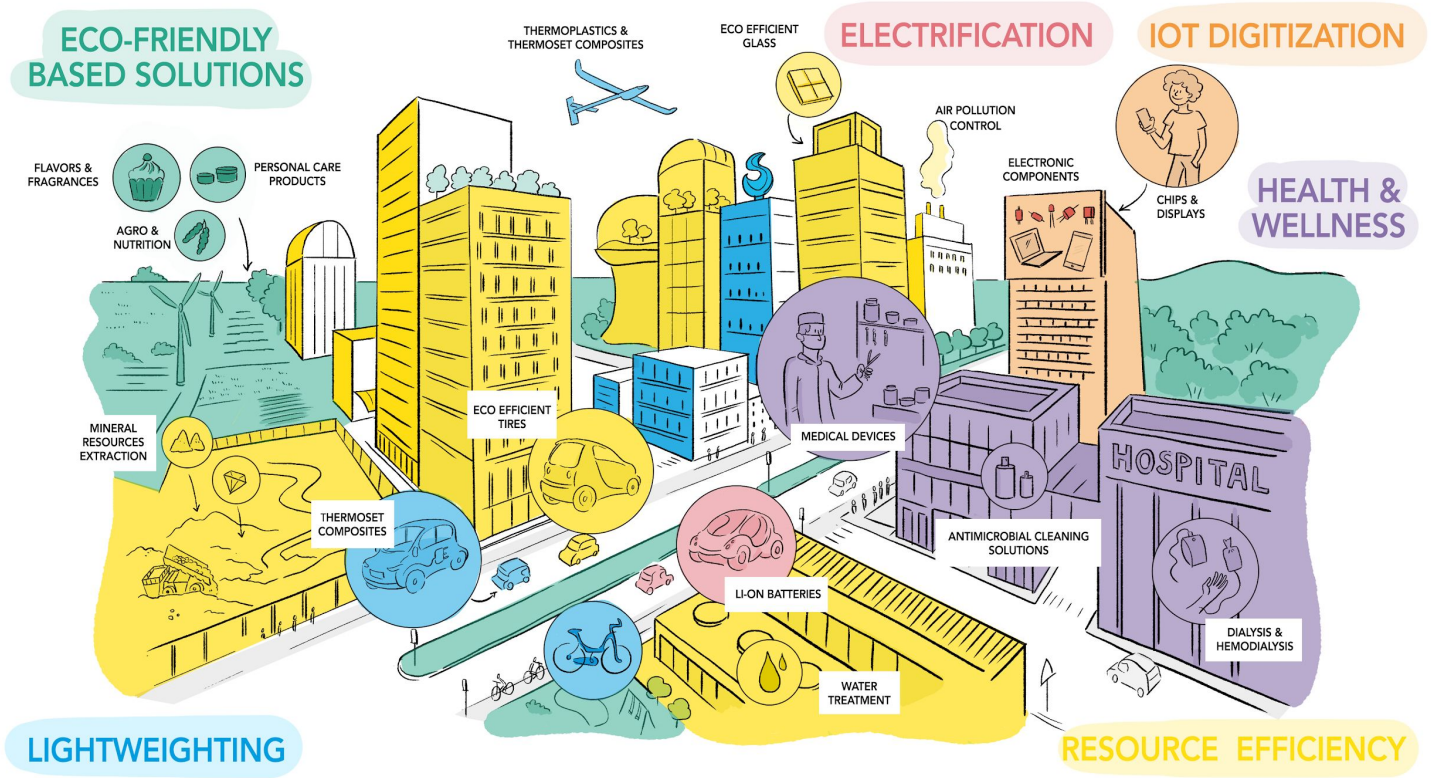


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Solvay One Planet broad and strong progress



	Target	2021	Progress versus 2018	Comment	2030 targets
CLIMATE	Align GHG emissions with Paris Agreement and SBTi	11Mt	-14% -11% structural	Above Paris Agreement	Reduce by 30% (-2.5%/yr)
	Phase out coal wherever renewable alternatives exist	27 (1 plant exiting coal)	-18% (petajoule)	Rheinberg in 2020, Dombasle in 2021, Devnya in 2022	Achieve 100%
	Reduce negative pressure on Biodiversity	-13%	-24%	Torrelavega Cuchia quarry restoration (CEFIC award), Paulinia's (WHC Gold Certification), Santa Lucia conservation area	Reduce by 30%
RESOURCES	Increase sustainable solutions, % of Group sales	53%	+3pp	Solef® PVDF, Addibond™, Actizone™, SOLVAir® Marine	Achieve 65%
	Increase circular economy, % of Group sales	5%	+1pp	Silica HDS, RhodiaSolv IRIS, Amodel Bios, Natural Vanillin, Augeo Green Solvent	More than double
	Reduce non-recoverable industrial waste	58 kt	-34%	45 projects initiated	Reduce by 30%
	Reduce intake of freshwater	315 Mm³	-5%	71 projects initiated	Reduce by 25%
BETTER LIFE	Safety with a zero accident policy (RIIR* indicator)	0.43	-16%	Action plan on globalizing near misses	Aim for zero
	Accelerate DEI, parity in mid & senior management	25%	+1.3pp	Launched Solvay One Dignity 9 goals	Achieve 50% by 2030
	Extend parental leave time	implemented	achieved	16 weeks policy open to all co-parents regardless of orientation since January 2021	16 weeks since 2021

* Reportable Injury and Illness Rate

2030 Solvay One Planet goals

10 ambitious objectives to reduce our global impact

2021 results
(progress vs Baseline
2018)



CLIMATE

Fight against
climate crisis



Align greenhouse gas emissions
with Paris Agreement & SBTi*
Reach Carbon neutrality
by 2040 excl. soda ash, by 2050 incl. soda ash

Reduce by 30%**

2021: 11Mt CO₂eq. (-11% structural)



Phase out
coal



Achieve 100%
2021: 27pj (-18%)

Reduce
pressure on
biodiversity¹



Reduce by 30%
2021: -13% (-24%)

RESOURCES

Embed
circular business



Increase sustainable
solutions
% of Group sales



Achieve 65% vs 50%
2021: 53%

Increase circular
economy²
% of Group sales



More than double
2021: 5%

Reduce non-
recoverable
industrial waste



Reduce by 30%
2021: 58kt (-34%)

Reduce intake
of freshwater



Reduce by 25%
2021: 315Mm³ (-5%)

BETTER LIFE

Improve
quality of life



Safety
(RIIR³ indicator)



Aim for zero
2021: 0.43 (-16%)

Inclusion &
Diversity
Parity in mid
& senior management



Achieve 50% by 2030
2021: 25%

Gender equality
Extend maternity
leave



**16 weeks for all
coparents
since January 2021**



+10 transversal programs delivering sustainable shared value for All

	2019	2020	2021
Strategy	New G.R.O.W. Strategy Launch of 2 strategic platforms Batteries & Thermoplastic Composites	Solvay Purpose Solvay One Planet 3 pillars - 10 external targets Climate Paris Accord alignment, SBTi commitment	Launch of the Green hydrogen platform Solvay One Planet New commitments Climate: Carbon neutrality (1+2), internal carbon price increase
Programs & Actions	Citizen day - Environment 94% engagement rate - 169 participating sites Partnerships Ellen MacArthur Foundation (2018 for 3 years) Solar Impulse Foundation	Solvay One Planet +100 sustainability network members - more than 70 initiatives (local & global) - 64 sustainable business solutions Citizen day - STEM education 4700 participants- 189k communities reached - 527 actions Launch of Solidarity Fund €15m - 2000 families supported Remote working as the Group's global standard 10K employee in mobile working during covid crisis Well being at work already 8 Pulse surveys to give the voice to our employees Partnerships - Renault Veolia, Mitsubishi	Solvay One Dignity 9 objectives - 150 women participating in "A Effect" mentoring program - 3 ERGs - Inclusion survey with self identification - SLT inclusion training Supplier Engagement Program Launched with 250+ executives from 130+ companies Workshops participation: 80 key Suppliers - 300 Peoples Star Factory - Next-Gen Solvay plants 5 Drivers including one on ESG - 2+B€ investment - 1+B€ value creation by 2030 - 100% of Solvay site engaged - 2 pilotes on going Citizen day - Biodiversity +14 750 participants - 20K€ raised for our associations protecting biodiversity - +121 participating sites Partnership - Wildlife habitat Council (WHC) - Ellen MacArthur Foundation (renewal for 3 years) - Origins - Bridgestone/Arlanxeo
Recognition	MSCI ESG RATINGS AA rating ISS ESG B rating Prime company ecovadis Top 1%	WBCSD Reporting Matters In the top 10 reports vigeo eiris #6 in the sector	CDP A- act4nature international Recognition on Biodiversity Member of Ethibel FTSE4Good Member of FTSE4Good



Climate Key Achievements



GHG reduction

-30% GHG emissions worldwide by 2030 (baseline 2018)



2020: -8% (structural)

We are constantly raising the bar:

Paris Agreement trend (Feb 2020) ... SBTi commitment (Oct 2020) ... now CARBON NEUTRALITY TARGET (scope 1&2, October 2021)

...coming soon scope 3 target (Q3 2022)

MAJOR PROJECTS :

- Rheinberg, Germany, to become the world's first soda ash plant by 2025 to use sustainable biomass derived from discarded wood chips, which will cut 4% of the Group's total emissions.
- Dombasle, France, to transition to primarily refuse-derived fuel as early as 2024, which will cut another 2% of the Group's total emissions.
 - US renewable electricity program, 2% of group emissions and ranked among TOP10 companies for installed solar capacity in the USA (year 20xx)



Coal phase out

100% coal phase out by 2030



2020: -18%

- 36 emissions reduction projects - representing 2.4 megatons of CO2 annually, equivalent to cutting emissions of 1.3 million carbon fuel vehicles each year.
- Transitioned three of its core U.S. businesses across 17 sites to 100% renewable electricity as of January 21
- Solvay in Apple's Supplier Clean Energy Program and has successfully transitioned its Apple-related operations to 100% green power.

Biodiversity preservation

-30% of negative pressure by 2030



2020: -12.5%

- Solvay's "Restoration and Ecological Plan of Cuchia Quarry" project wins this year's CEFIC award in the category Ecosystem preservation. This prestigious award is granted by the European Council of Chemical Industry Federations (CEFIC).
- New membership of the Wildlife Habitat Council (WHC) - Paulina site has been awarded a Gold Certificate by the Wildlife Habitat Council (WHC)
- Act for nature engagement 
- Active members of the CDC and Business4Biodiversity club for the development of the Global Biodiversity Score (GBS)



Sustainable solutions for customers



€1.7Bn solutions of sales reducing our customers overall climate impact*
In 2021

BUSINESS SOLUTIONS AVOIDED EMISSIONS AT CUSTOMERS FROM CURRENT SOLVAY SALES:

[Solef® PVDF by Solvay](#) : Solef® PVDF can help save up to 1.67Mt CO2 emissions over the course of a vehicle's useful lifetime

[Silica SW Premium Range](#) : Our Silica helps save 87kt of natural rubber over a vehicle's lifetime and around 16Mt CO2 emissions per year

[Cycom® by Solvay](#) : While in use, Cycom® can help reduce fuel consumption by up to 25% and CO2 emissions by up to 79Mt

[Halar® ECTFE](#) : Using Halar® ECTFE can lead to a 15% reduction in CO2 emissions as compared to traditional engines

[Addibond™ by Solvay](#) : Just 4g of Addibond™ can translate to an annual CO2 emissions saving of 300kg per car

[Max HT® by Solvay](#) : Max HT® reduces CO2 emissions by 13-92kg per ton of alumina produced and acid waste by 0.9-2.7kg

SODIUM CARBONATE IN DOUBLE GLAZING

Each ton CO2 emitted, during the manufacturing process of Sodium Carbonate enable to save 90 times more in its renovation double window glazing application

SOLVAY'S 14 [SOLAR IMPULSE](#) LABELED EFFICIENT SOLUTIONS, in line with its Solvay One Planet goals, provide sustainable solutions for batteries, exhaust gas treatments, semiconductor applications, thermoset composites developed for high volume automotive applications, rare-earth-based formulations, biostimulants for farming, wastewater adsorbents, amongst others, benefiting various industries such as water, energy, and agriculture.

CLIMATE

Resources Key Achievements



Increase circular economy

>2x share of products based on circularity in Group sales
2020: 5%, +1pp vs 2019



VALUE CREATION THROUGH CIRCULARITY

- Partnership with Renault & Veolia : Allowing the End-of-life Batteries to become again a source of materials
- Partnership Mitsubishi advanced materials: Developing new chemical recycling processes to close the loop for advanced materials
- Three-way partnership between industry leaders Bridgestone, ARLANXEO and Solvay: TechSyn, transformed from concept to reality in just 24 months, reduces overall fuel consumption and CO2 emissions, enhances tread mileage to extend a tyre's designed life and cuts raw material consumption in the long term.
- Solvay is one of the 12 strategic partner of Ellen MacArthur Foundation



CIRCULAR SOURCING:

Sustainable Guar, Silica biosourcing project, Rice wastes for regenerable vanilla and regenerable silica, Biobased Polymers

Increase sustainable solutions

65% share of sustainable solutions in Group sales vs 50%
2020: 52% of Group sales, 2pp vs 2018



Reduce non-recoverable industrial waste

- 30% non-recoverable industrial waste

2020: -27% vs 2018

- Systematic review of all the waste streams of our sites
- Implementation of the the Reduce - Reuse - Recycle Approach



Reduce intake of freshwater

- 25% freshwater intake

2020: -5%: vs 2018

- Global cooling tower optimization program starting with Europe and to be followed by Asia and North America.
- Embark the team & raise awareness through the organisation of site Water challenge



OTHER ACHIEVEMENTS:

Stop Office waste Employee initiative : become a paperless company.
Eliminate all single use plastics. Avoid 100% of food waste. 116 sites located in 28 countries 80% employees reached. 15 sites already single-use plastic FREE.

Sustainable solutions for customers



€3.7Bn of sales reducing world resources consumption* in 2021

[AgRHO® S-Boost™ by Solvay & A bio-based seed booster to fight worsening droughts](#) AgRHO® S-Boost™ boosts crop yield by around 3% and can decrease fertilizer use by 12%

[Rhovanil® Natural CW by Solvay](#) Rhovanil® Natural CW is made from 100% natural, vegetable-based raw materials

[Augeo® by Solvay](#) Three times less CO2 is produced in the creation of Augeo® solvents than of petrochemical solvents

[Bio Amni®](#) Sustainable textiles account for 30% of our global polyamide portfolio; we expect to reach 50% in the next three years

[Ilan® PVDC](#) We've proved our Ilan® PVDC bioriented film has the potential to be recycled without compromising its performance

[NOCOLOK®](#) Heat Exchangers (HEX) using Nocolok® Flux are 10% more energy efficient than mechanically assembled HEX

[Oxystrong®](#) Oxystrong® enables water reuse without generating any harmful organic by-products, helping to save water

[Fibrite® and Solbrite®](#)

[Mackaderm® LIA MB by Solvay](#)

[Mackadet® OPR2 by Solvay](#) Mackadet® OPR-2 is 100% biodegradable and derived from natural sources

[Texine](#)

RESOURCES



Better Life Key Achievements



Safety

Aim for zero accident

-26% in 2020, vs 2018 (MTAR3 indicator)



Women in mid & senior management levels

Achieve gender parity by 2030

24.6% in 2020, +1pp vs 2018

Solvay One Dignity program launched in 2021
9 objectives - Already 150 women following the
"A Effect" mentoring program - 3 ERGs created -
Inclusion survey with self identification - SLT
inclusion training



Extend maternity leave time and open it to co-parents

16 weeks regardless of gender
implemented in Jan. 2021



OTHER ACHIEVEMENTS:

- **Sustainable guar initiative (with L'oréal & Henkel)**
From 2015 to 2020: Cooperative creation to empower women farmers - ↗ 143% in revenues to guar farmers - 1,300 women trained on nutrition (kitchen gardens) - 1,500 women trained on menstrual hygiene
- **Creation of Solvay Solidarity Fund :**
Financial support provided to 2000 families
€15 million gathered (to support employees and communities facing Covid-19)
- **2021 European Responsible Care® Awards + Covid donation:** 1,000,000 bottles of disinfectant gel, 700,000 liters of hydrogen peroxide, 350,000 masks, 114,000 pieces of PPE, Materials for 6,700 reusable face shields
- **Enabled remote working as the Group's global standard:**
10K employees mobile working during covid crisis
- **Well being at work** - leveraging 8 Pulse survey to give the voice to our employees
- **Citizen day:**
2019 Environment - 94% engagement rate across 169 sites
2020 STEM education - 4700 participants - 189k communities reached - 527 actions
2021 Biodiversity - +14 750 participants - +121 participating sites - 20K€ raised for our associations protecting biodiversity
- **IndustriALL contract** to protecting social rights and balanced social dialogue around the world





BETTER LIFE

Sustainable solutions for customers

€3.2Bn of sales improving society's quality of life* in 2021



[1. Actizone™ by Solvay: disinfection that lasts - video](#)

[2. Actizone™ by Solvay: introducing a cleaner and safer future](#)

Actizone™ kills 99.9% of microorganisms immediately and provides 24-hour antimicrobial protection

[Udel® by Solvay](#) [Veradel® by Solvay](#)

Our products are used to treat 1.5 million open heart surgery patients per year and 3 million people with kidney failure

[Solvair® Marine by Solvay](#) or [Solvair® solutions by Solvay](#) Solvair® removes up to 99% of SO_x, HF and HCl emissions and improves customer energy efficiency ratios by over 65%

[Mackaderm® LIA by Solvay](#)

Mackaderm® LIA is a 100% plant-based and readily biodegradable alternative to silicone

[Disinfectant solutions to combat Covid-19](#)

Our solutions helped respond to the need for effective and sustainable disinfectants during the Covid-19 pandemic.

[Alve-One® by Solvay](#)

Alve-One® is mineral-based and made with 100% safe raw materials.



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2020: -20% (-8% structural)



We are constantly raising the bar :

ALIGN WITH PARIS AGREEMENT (Fev 2020) & SBTi commitment (oct 2020) scope 3 target (TBD mid2022)
CARBON NEUTRALITY TARGET (scope 1&2) (October 21)

- 36 emissions reduction projects - representing 2.4 megatons of CO2 annually, equivalent to cutting emissions of 1.3 million carbon fuel vehicles each year.
- Transitioned three of its core U.S. businesses across 17 sites to 100% renewable electricity as of January 21
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• Reduce intake of freshwater

- 25% freshwater intake
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Better Life Key Achievements



Safety

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(MTAR3 indicator)



Women in mid & senior management levels

Achieve gender parity by 2030

24.6% in 2020, +1pp vs 2018



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Appendix

- | | | |
|----|----------------------|-------------|
| 1. | Transversal Programs | slide 15-23 |
| 2. | Climate | slide 24-51 |
| 3. | Resources | slide 52-66 |
| 4. | Better Life | slide 67-88 |

Sustainability at the heart of our G.R.O.W strategy



WHY

Our Purpose

We bond people, ideas and elements to reinvent progress

Our Vision

Sustainable shared value for all

HOW

Our Strategy




**Solvay
One Planet**
Sustainability goals

Our Organization and Culture

A winning team and a common operating model to support a performance driven-culture


**Diversity, Equity,
Inclusion**
9 ambitious objectives and targets

WHAT

Our Solutions

We align and re-invent our technologies to customer and societal needs on markets to make a difference and a profit at the same time

Our People Ambition

The right chemistry to light-up our people and communities

Creation of 3 Growth Platforms for Solvay aligned with G.R.O.W. and Solvay One Planet



GLOBAL
TRENDS

Regulations driving CO2 reductions
Electrification / lightweighting
~



Leading the way to sustainable batteries of the future

- polymers and composite materials help the battery pack become lighter, more resistant, and safer
- leveraging our expertise in metal recovery to enable battery recycling -- Partnership with Veolia & Renault

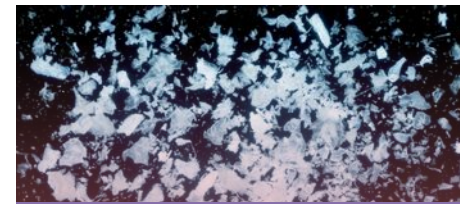
Regulations driving CO2 reductions
and zero emission mobility
Electrification / lightweighting



Accelerating innovation in Thermoplastic Composites

- 30 to 50% lighter than metals
- inherently more recyclable with options to be bio-based
- shorter production cycle times, enabling high-rate production for composite parts

Regulations driving CO2 reductions
and zero emission mobility
Electrification / lightweighting



Launching a Green Hydrogen Platform

- ambition to be a leading materials solutions provider for the hydrogen economy
- membranes & electrodes of PEM electrolyzers & fuel cells
- accelerate production and R&I

Addressable
market

>€25_{bn}

Battery Platform

Innovating for cleaner mobility



GLOBAL TRENDS

- Regulations driving CO₂ reductions
- Electrification / lightweighting
- ~20% CAGR growth in batteries (2018-2030)

VALUE PROPOSITION

- dedicated transversal platform providing one contact for customers
- technology leader for mission critical battery materials
- unique expertise in fluorine chemistry and advanced conductive materials
- a key role in enabling battery recycling, by leveraging our unique expertise in metal recovery
- collaborative innovation across the entire value chain for the next generation of batteries by 2030 with the European Battery Alliance
- dedicated Battery Application Development centers in Seoul and Italy

Solef® PVDF

Solvay is reinforcing its leadership in the lithium-ion battery market by increasing its capacity of high performance polymer Solef® PVDF by more than 50% between 2020 and 2022.



Circular batteries of the future

Solvay, Veolia and Renault are in an experimental phase, with the set up of a pre-industrial demo plant in France with the capability to extract and purify end-of-life EV battery metals.



Addressable
market

€500_m

Thermoplastic composites platform for aerospace, automotive and oil & gas



GLOBAL TRENDS

- Regulations driving CO₂ reductions and zero emission mobility
- Electrification / lightweighting

VALUE PROPOSITION

- we are the only player with this unique portfolio on the market, with a dedicated transversal platform
- collaborative innovation from concept to commercial application with 2 dedicated Development centers in the US and Belgium
- committed to fully industrializing TPC manufacturing to meet growing demand across industries, including emerging markets such as Urban Air Mobility

Joint research Lab

Early 2021, Solvay and Leonardo launched a joint research lab for TPC, a technology that meets many of the requirements for high rate high volume production in the aerospace industry.



"To be successful in a highly competitive industry like Aerospace, advanced manufacturing companies must rise to new standards of product quality, responsiveness to customers' needs, and processing flexibility. It is therefore fundamental to join efforts across the value chain and develop together high performance solutions, from material development to part manufacture."

Stefano G. Corvaglia, R&D/IP Manager-Engineering,
Leonardo Aerostructures

Through Solvay One Planet, we focus on areas where our innovation and sustainable solutions can have the biggest positive impact, directly and indirectly, in line with the ambition and requirements of the UN Sustainable development goals (SDGs).



2020 Solvay One Planet progress



		2018 baseline	2019	2020	Progress vs 2018	2030 targets
CLIMATE	Align GHG emissions with Paris Agreement and SBTi	12.6* Mt	12.0 Mt	10.1 Mt	-20% -8% structural	Reduce by 26% (-2%/yr)
	Phase out coal wherever renewable alternatives exist	33 PJ	32 PJ	27 PJ	-18%	Achieve 100%
	Reduce negative pressure on Biodiversity**	121.9	116.2	107	-12%	Reduce by 30%
RESOURCES	Increase sustainable solutions, % of Group sales	50%	53%	52%	+2pp	Achieve 65%
	Increase circular economy***, % of Group sales	NA	4%	5%	+1pp	More than double
	Reduce non-recoverable industrial waste	96 kt	96 kt	70 kt	-27%	Reduce by 30%
	Reduce intake of freshwater	330 Mm ³	327 Mm ³	313 Mm ³	-5%	Reduce by 25%
BETTER LIFE	Safety with a zero accident policy (MTAR indicator)	0.54	0.44	0.40	-26%	Aim for zero
	Accelerate inclusion & diversity, parity in mid & senior management	23.7%	24.3%	24.6%	+0.9pp	Achieve 50% by 2030
	Extend maternity leave time				✓	to 16 weeks and to all co-parents by 2021

* Restated from 12.3 Mt due to IFRS change in scope

** ReCiPe method for biodiversity impact assessment (under development)

*** Circular economy indicators have been adapted to align with the Circulytics® developed by the Ellen MacArthur Foundation.

Our Solvay Supplier engagement program: Building together with our Key Suppliers



Progress beyond

Our goal is to achieve common sustainability ambitions
with our suppliers and to create shared value for all

APRIL 22 - Inspiration Day *Solvay Supplier Days Kick-Off*



Inspire & raise
awareness

Replay of the event

JUNE 21-25 - Working Days *5 Workshops delivering on SOP objectives*



Share Experiences
& Best Practices

Q1-2022 - Engagement Day *Recognition of suppliers' efforts*



Recognise Collaborative
Projects & Practically Engage
with Suppliers

Attendees

250+ executives from
130+ companies
registered

Collaborative Platform

- 500 people on the Platform (Suppliers and Solvay)
- Share experiences, explore common challenges and propose collaborative ideas

Attendees

- 80 key Supplier participations to Workshops
- 300 People (Solvay + Supplier) attended workshops

Call for Action

- A [call for collaborative projects](#) was launched on July 1st
- [Concrete innovative project](#) to impact on Solvay One Planet
- Selection of [best proposals](#) will be [pitched to Solvay business executive](#) leaders.
- [Award ceremony](#) will be organised in Q1 of 2022

Every factory will be a Star Factory

Mapping >100 operations to our Solvay ONE Planet ambitions



Environmental Social Governance (ESG)

People
&
Capabilities

Digital &
Analytics /
Technology

This
will be
achieved by

❖ Steering performance with **one single integrated** roadmap with **incentive plans** linked to each site

❖ **Evolving our culture** towards a stronger focus on results

❖ Working as part of an **ecosystem** integrating other Solvay sites, partners, suppliers, clients, research and development capabilities, etc.

Star Factory makes our plants the backbone of the Next-Gen Solvay based on 4 pillars and 1 enabler



Environmental
Social
Governance
(ESG)



People &
Capabilities



Digital &
Analytics /
Technology



Operational
excellence
foundation



Engine
for renewal

Widely recognized ESG credentials



MSCI
ESG RATINGS

AA rating (2021)

ISS ESG

B rating
Prime company

ecovadis

Top 1%

WBCSD Reporting Matters

In the top 10 reports

vigeo **euris**

#5 in the sector

CDP

A-

act4nature
international

Recognition
on Biodiversity



Member of Ethibel



FTSE4Good

Member of FTSE4Good

"With Solvay One Planet, the company is sending a strong signal to the chemical industry and its value chain that the circular economy is happening - and that Solvay wants to lead the way."

Ellen MacArthur,
Founder of the Ellen
MacArthur Foundation

"Science and research play an important role to tackle the world's environmental and health challenges and I'm particularly happy that Solvay is leading the way."

Bertrand Piccard,
Chairman of the
Solar Impulse Foundation

CLIMATE

Solvay commits to carbon neutrality



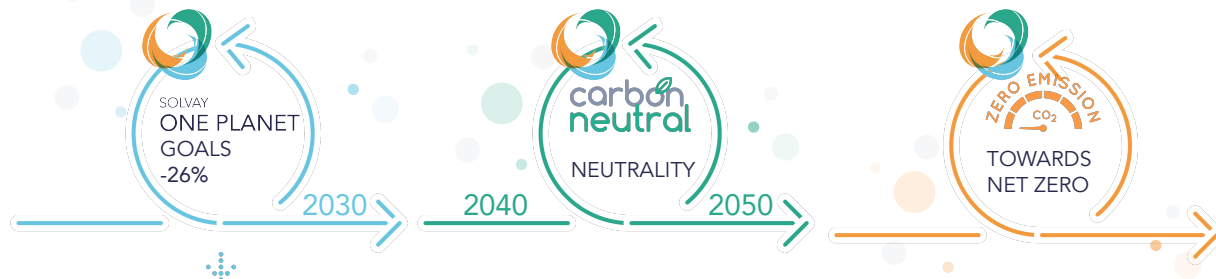
Solvay to invest:

✦ € 1 bn

For carbon neutrality of Soda Ash before 2050

✦ ≤ € 1 bn

For carbon neutrality of other businesses by 2040



36 EMISSION
REDUCTION PROJECTS
as of end 2021

=

1.3 MILLION CARS
off the road



Electrification
and clean
energy

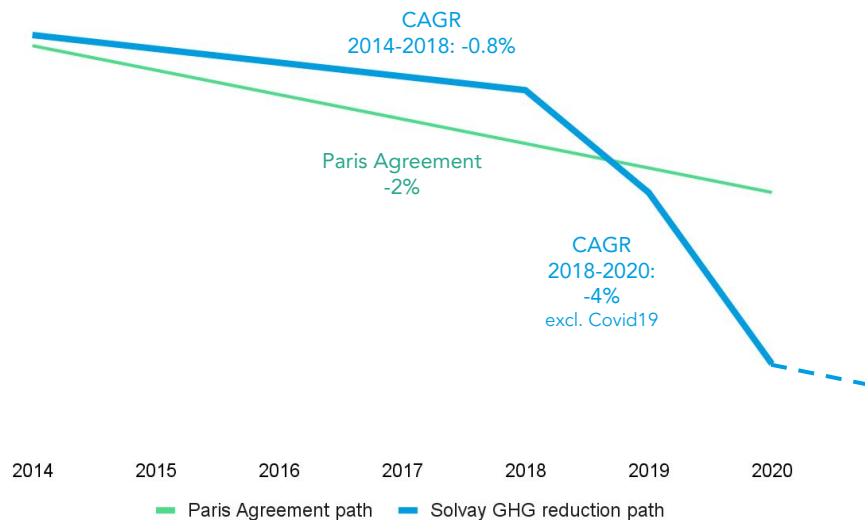
Process
innovation

Exiting
coal

Targeting carbon neutrality before 2050 (Scope 1+2)

- All businesses other than soda ash to achieve carbon neutrality by 2040 with an investment up to €1 billion
- Soda ash to complete carbon neutrality before 2050 with identified investments of approximately €1 billion by 2040
- Investments expected to generate compelling economic returns
- Upgrading GHG emissions reduction target to -30% by 2030 (-26% initially)

GHG Reduction at constant scope



Our commitments

Paris Agreement

Feb 2020



Science-Based Targets initiative

Sep 2020



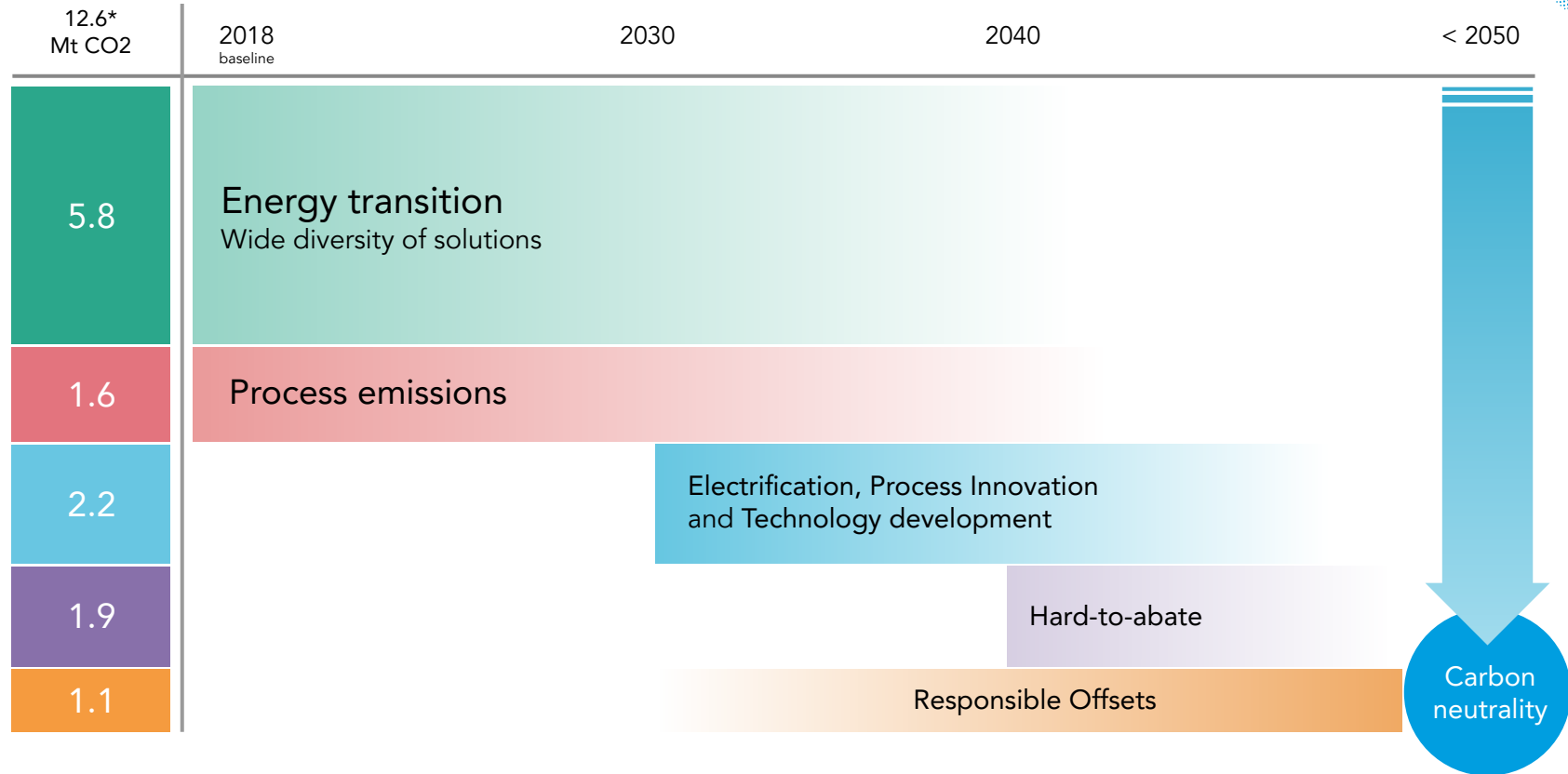
Carbon neutrality

(scope 1 and 2 GHG emissions)

Oct 2021



Solvay's path towards carbon neutrality



Diverse solutions around the world



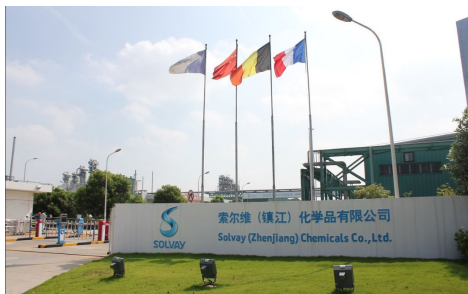
Solvay Jasper County Solar Farm



100% green electricity
3 businesses in US



From coal to sustainable biomass
Germany



Solar panels on rooftops
China



Wind and biomass
India



Biogas from agriculture
3 plants in France

36 emissions reduction projects to drive climate progress



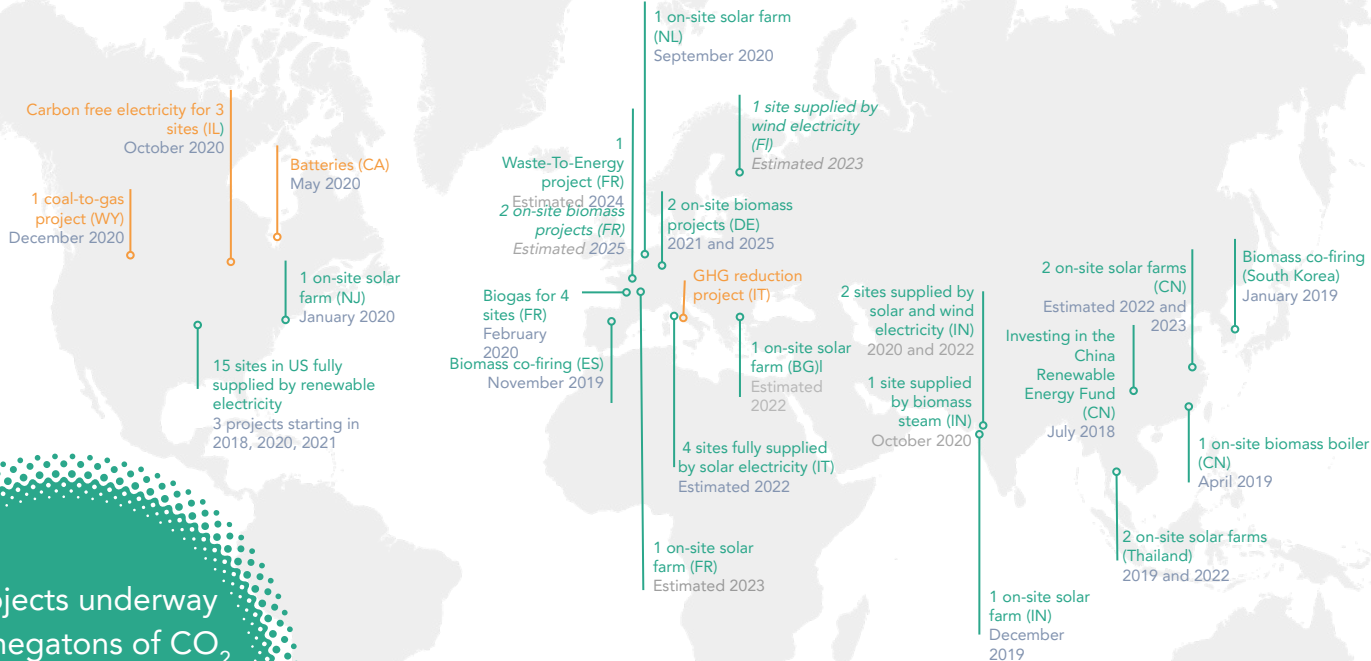
RENEWABLE ENERGY

solar, biomass, wind & biogas

OTHER

energy mix, industrial emissions

36 projects underway
= 2.4 megatons of CO₂
equivalent to cutting
emissions of 1.3 million
carbon fuel vehicles



Rheinberg exiting Coal

First biomass boiler in Solvay's history



Phasing out coal by 2025

First plant to exit coal since we launched our **Solvay One Planet** roadmap

Lowest emitting soda ash plant in the **world**



Dombasle exiting Coal (France)



Phasing out by 2024

To produce Energy from **Refuse Derived Fuel** (RDF) made from wastes that cannot be recycled

Through Dombasle Energie, a **joint venture** with **Veolia**



-2% Group Total GHG emissions



An extraordinary space for biodiversity in the old Solvay quarry in Cuchía

Solvay's "Restoration and Ecological Plan of Cuchia Quarry" project wins this year's CEFIC award in the category "Ecosystem preservation". This prestigious award is granted by the European Council of Chemical Industry Federations (CEFIC), the European employer association of the chemical industry. This quarry has supplied Solvay in Torrelavega with limestone for almost 80 years - between 1927 and 2006 - and its restoration works have been carried out during the last 30 years when the quarry was still in operation.

Today, this is an area open to the public and full of new life: you can observe 169 species of birds, 19 mammals, 7 amphibians, 6 reptiles, 26 odonates of the insect group and 289 varieties of plants.

"At Solvay, we are proud of our past and thankful to those who initiated this project and had the vision to make this landscape recovery a priority. The best compensation for all this effort is the current condition of the quarry, an extraordinary natural space at the disposal of the community which allows us to showcase that sustainability is an integral part of Solvay's DNA", said Jorge Oliveira, Director of Solvay for Spain and Portugal



PAULINIA
Site

+40

bird species
living at the site



800
people

Production
& R&I site

When you think of a chemistry company, you usually imagine pipes all over the place. I was really shocked as I came by for an interview and the first thing I saw was a bunch of Ipês trees. The site was colorful and beautiful, I could even see groups of capybaras.

Isabela Zani

Sustainability & Innovation Analyst



Remediation projects in Chiprovtsi , Bulgaria



Preserving biodiversity in a previously active mine

The Chiprovtsi region in Bulgaria has been mined for gold, silver and lead for over 2,000 years. More recently, Solvay mined there for fluorspar. When this activity stopped in 2016, the mine was handed over to our Environmental Rehabilitation department to be safely closed down.

The most challenging part of this process was closing access points between the modern and ancient mines, accidentally made by the previous operator. It was agreed that instead of installing concrete walls to block these openings, the weight of which could cause the mine to collapse, we would install steel wire nets. The nets have openings wide enough to allow bats and small animals to go in and out, but are sturdy enough to keep people and large animals out. With the entrances closed, we handed the mining concession back to the Bulgarian authorities, confident it will remain safe.



Remediation projects in Mulhouse, France & Cuchia, Spain



Using innovative technology to significantly improve water quality in Mulhouse

Solvay's Mulhouse site, in France, operated under a number of different companies for over 130 years, producing chemicals used in the wool and cotton industries. The site was closed in 2007, but when Solvay inherited it in 2011 chemicals from past operations were found in the soil, which were affecting underground water sources.

To clean up the plant and restore the water quality, our first step was to implement hydraulic confinement, capturing all of the polluted water leaving the site in order to preserve the quality of the Mulhouse city drinking wells located further downstream. The pollutants were then removed from the water using an innovative technology known as thermal desorption, which involves heating the soil and collecting the chemical vapors. As a result of the project, the city of Mulhouse now enjoys much higher quality drinking water.

Creating an extraordinary space for biodiversity in an abandoned quarry

Solvay led a landscape recovery initiative in a former limestone quarry in Cuchia, Spain. The quarry supplied our soda ash plant in Torrelavega between 1923-2006. In collaboration with SEO Birdlife, the Spanish ornithology society, Solvay launched a vast biodiversity project covering 100 hectares. This included reducing the visual impact of our mining activity, restoring wetlands and replanting indigenous vegetation.

The site is now open to the public and full of life. At least 169 bird species can be observed, as well as 19 wild mammals and 26 species of the odonata order, such as dragonflies and damselflies. We continue to restore and protect biodiversity in Cuchia, including by fighting off pampas grass, which is threatening to outgrow and displace native plants, using completely natural methods, such as the introduction of livestock.

Solvay and Wildlife Habitat Council Partner

OUR AMBITION IS TO BE A LEADER IN SUPPORTING THE BIODIVERSITY PLATFORM FOR BUSINESS



Biodiversity Strategy

UNDERSTAND & DEFINE

Strengthen the integration of biodiversity into our sustainability and business strategy by creating extraordinary intellect to take action.



Focal Area Actions

PLAN FOR IMPACT

Focus locally and identify the right actions and industry partners to drive and ensure a positive impact of our business

Priority for neglected topics



Employee Engagement

EMBARKING ALL

Act at home, work and in public spaces leading conservation projects contributing to biodiversity locally and in our value chains

Citizen's Day 2021



Integrated solutions

MANKIND & NATURE

Place our impact on biodiversity at the heart of our solution offering both for the climate and nature agenda - ensuring progress beyond

In 2021 Solvay announced its new membership with the Wildlife Habitat Council (WHC), a leader in taking bold action for biodiversity conservation through partnerships and education. WHC is recognized as the only international conservation NGO focused exclusively on the private sector. It provides a framework for voluntary conservation action on a wide variety of corporate lands.

SOLVAY's AMBITION

THROUGH THE COUNCIL'S CORPORATE MEMBERSHIP



Our Opportunity

Collaborative Impact on Business for Nature
Impact integrated into our value proposition

BIODIVERSITY STRATEGY Mission

**Mainstream biodiversity
across sectors with our
PARTNERS / SITES**

Conservation Stewardship Strategy Development

- Local and concrete
- Critical conservation needs
- Priority areas with key partners
- Certification at our sensitive sites

FOCAL AREA ACTION PLAN Vision

**Address direct drivers to
protect habitat and species**

Objectives and Our Path Forward

- Climate action work initiatives, stewardship activities
- Community centered impact projects
- Long lasting benefits

DELIVERING IMPACT Values

**Restoration and
Enhancement**

Progress, Recognition and Sharing

- Measurable positive impacts
- Employee and Stakeholder Engagement
- Transparency, Targeted Certifications



Membership synergies with 5 Global Strategic Accounts

Including Peers & Partners: Toyota, Denso, Bridgestone, Albemarle, Ashland, Chemours, DuPont, WR Grace, Bayer, Exelon Corp, Bayer, Arcelor Mittal, ExxonMobil

Act for nature

Asked Marie-Hélène:

https://docs.google.com/presentation/d/1mM4Yw_YxX2Dseoxud5gfEp4cBTMDZBi4hYA0l6QNSYc/edit#slide=id.geb180501b7_0_2387



Solvay's commitment on biodiversity has been approved by the Act4Nature International coalition, an initiative that encourages corporate action for the protection, enhancement and restoration of biodiversity. The recognition was given to a select group of 30 companies.

Act4Nature International's endorsement is due to Solvay's commitment to setting bold objectives to solve key environmental and societal challenges - and biodiversity in particular - through science and innovation.

<https://www.solvay.com/en/press-release/solvay-receives-recognition-on-biodiversity-commitments>

Climate SUSTAINABLE Solutions



The
customer
approach

Solutions



From Polluted to Clean Air



SOLVAir® for gas treatment
on land and vessels

Solvay is the leading enabler of Clean Mobility



LIGHTWEIGHTING

Mass saving
over aluminium
design



POWERTRAIN EFFICIENCY

Reduction in moment
of inertia resulting in
faster transient
response



ELECTRIFICATION

Improved
Energy Density
& Safety



GREEN & CLEAN TIRE TECHNOLOGIES

Less rolling resistance
Less fuel consumption



CIRCULAR CAR INITIATIVE

Recycle used cars parts:
Use less resources
Reduce wastes



Clean fuel



Aquivion® solutions

Automotive: cleaner and more efficient



GLOBAL TRENDS

- Regulations driving CO₂ reductions
- Fuel efficiency / lightweighting
- ~50% amount of electric or hybrid vehicles in global production by 2030

NET SALES

14%

We provide solutions for lightweighting, electrification, powertrain efficiency, green and clean technologies

VALUE PROPOSITION

- Broadest portfolio of advanced materials
- Deep customer relationships with strategic collaborations across OEMs
- Leveraging core competencies to integrate design, materials and processes

SolvaLite™ composites

40% lighter than metal, curing much faster than traditional composites. A step-change to more efficient, much faster production and enhanced cost effectiveness in high-volume production runs.



OPtals®

Material enabling compliance with ambitious emission Standards for automotive and hybrid engines and compatible with biofuels, which tend to generate slightly different types of pollutants.



Clean driving



Solef[®] PVDF
EV battery

The partner of choice for Urban Air Mobility



GLOBAL TRENDS

- Regulations driving zero emission mobility
- Delivery of essential services to remote rural locations to decongesting large metropolitan cities across the globe

4 segments identified

- Delivery (express delivery drones)
- Passenger (air Taxi)
- Cargo (heavy cargo)
- Mission Specific (surveillance, defense)

VALUE PROPOSITION

- established Aerospace composite materials supplier
- high rate, cost efficient Automotive manufacturing expertise
- leading innovator in processing technologies
- unrivalled portfolio of solutions and engineering support



Clean flying



Composite structures for
New Urban Mobility

Aerospace: lighter & more efficient



GLOBAL TRENDS

- Regulations driving CO₂ reductions
- Fuel efficiency / lightweighting
- <10 to 25% composites by weight on narrow-bodies
- Up to 50% composites by weight on wide-bodies

NET SALES

9%

We provide solutions for primary and secondary structures, interiors and galleys, engines, surface coatings, bonding and multifunctionality

VALUE PROPOSITION

- Broadest portfolio of materials and technology leadership (Thermoset & TPC, Leap engine...)
- Broad customer base with major global OEMs in US, Europe, China & Russia
- Long-term contracts on key civil & defense programs

CYCOM®

Material enabling much faster and cheaper manufacturing of large volumes of aircraft components. Composites make planes lighter which reduces fuel-consumption by 25% and CO₂ emissions by up to 15%.



Halar®

Material used for the new generation of LEAP engines, which reduces fuel consumption, CO₂ emissions, noise levels and engine maintenance costs.



Our sustainable solutions for Clean Mobility



Our composites enable lightweighting, which allows planes to be more fuel-efficient and less carbon-emittent.



44-65% less maintenance hours than aluminium
50% "CO₂ cut by 2050" enabler



<10 to 25% composites by weight on narrowbodies;
Up to 50% composites by weight on wide-bodies



Leap
Engine



-15%

Fuel consumption



-50%

NOx emissions
vs CAEP/6 standards



-15%

CO₂ emissions

Our sustainable solutions for Clean Mobility

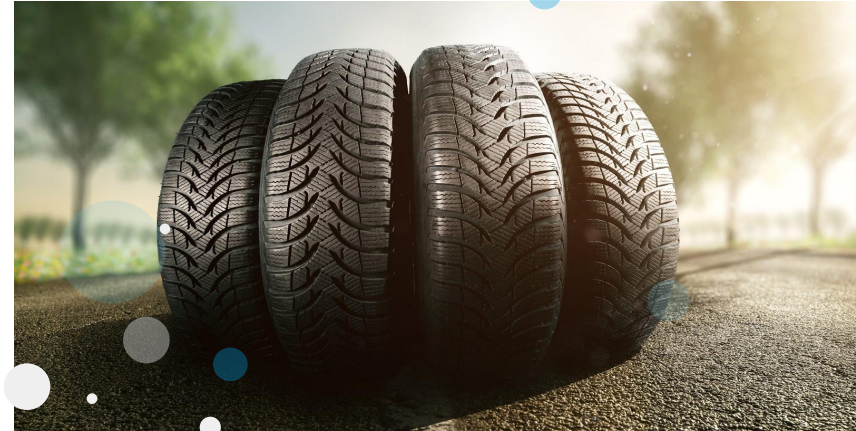


Silica Premium Range® for sustainable tires



Regulations driving CO₂ reductions

87 kt of natural rubber savings in use phase thanks extended lifespan of tires + 15%.



-7%

Fuel consumption



-7%

CO₂ emissions
/year



-16 Mt

CO₂ emissions
/year

Our sustainable solutions for Clean Mobility



Solef® PVDF for lithium-ion batteries



1.67 Mt CO₂/4 years of battery lifetime

~30% CAGR hybrid & electric vehicles in 10y

Move toward hybrid vehicles doubles Solvay's polymer content



Our sustainable solutions for Clean Mobility



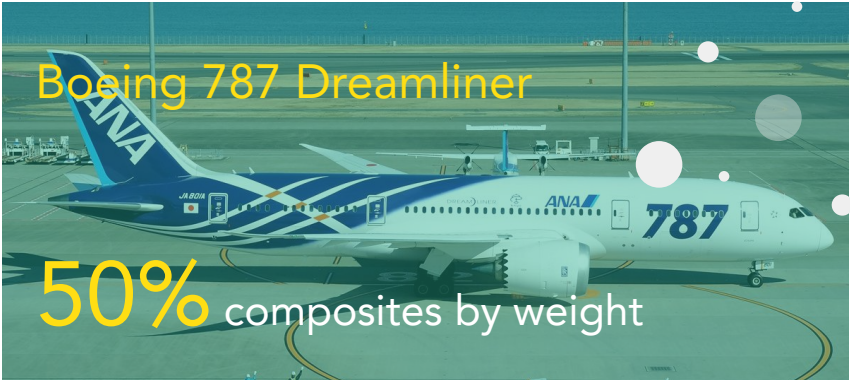
Through our CYCOM brand, Solvay enables lightweighting, which allows planes to be more fuel-efficient and less carbon-emittent.



10-20x faster manufacturing rates
enabling lower total cost of ownership



4.3% CAGR passenger traffic
10>50% composites by weight




+25%
Fuel efficiency


-600kt
Kerosene/year


-1.9Mt
CO2 eq/year

Resources



Protecting natural resources



€3.2bn of sales from solutions reducing world resources consumption



Bonding across value chains to enable circular business

Chemistry is key to enable circularity, a major growth opportunity for our business.

Key 2020 projects

- Partnering with Veolia and Renault to enable the production of circular electric vehicle (EV) batteries
- Partnering with Mitsubishi for recycling advanced materials by developing new chemical recycling processes



Increasing sustainable solutions in our portfolio to ensure faster growth

Our 10 year portfolio evolution towards more sustainable solutions, aligned with growth drivers, has demonstrated higher growth potential.

Key 2020 achievements

- 2 innovations to aid the fight against Covid-19
- 12 Solvay solutions labeled by the Solar Impulse Foundation



Discover those products
[Link](#)

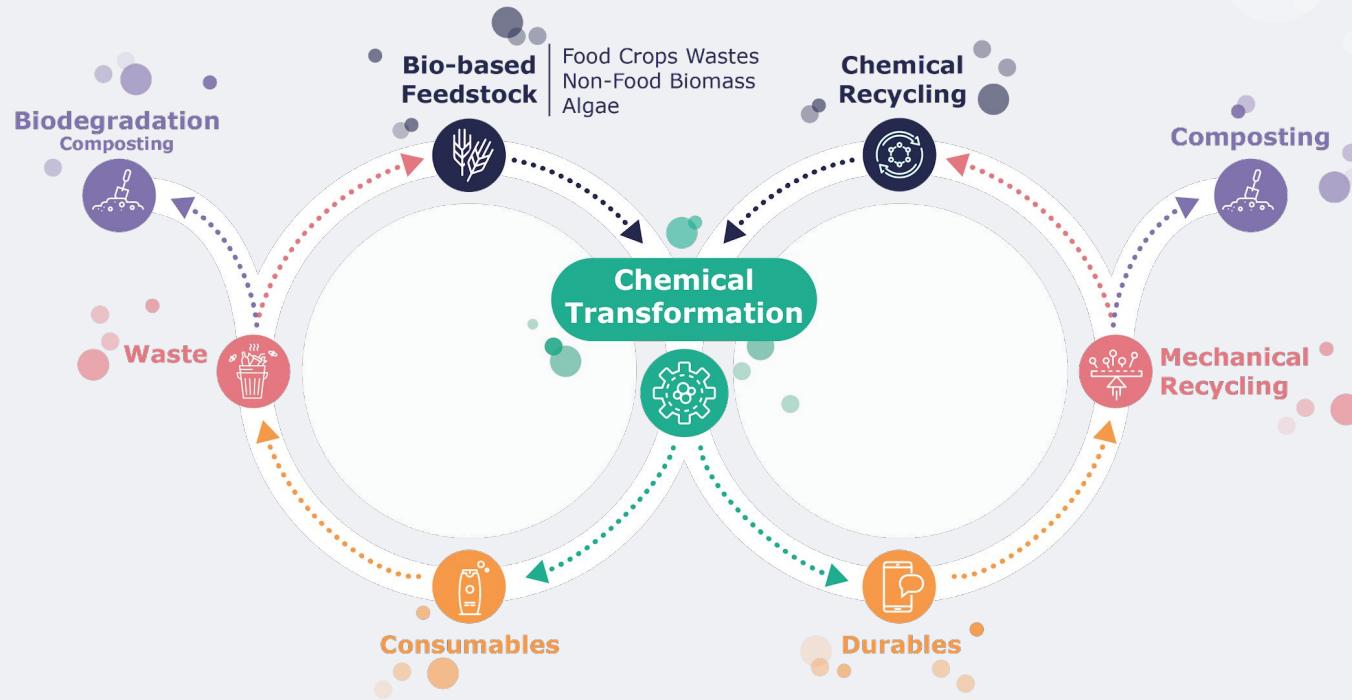
Actizone™ innovation

Killing 99.9% of microorganisms including coronaviruses for up to 24 hours

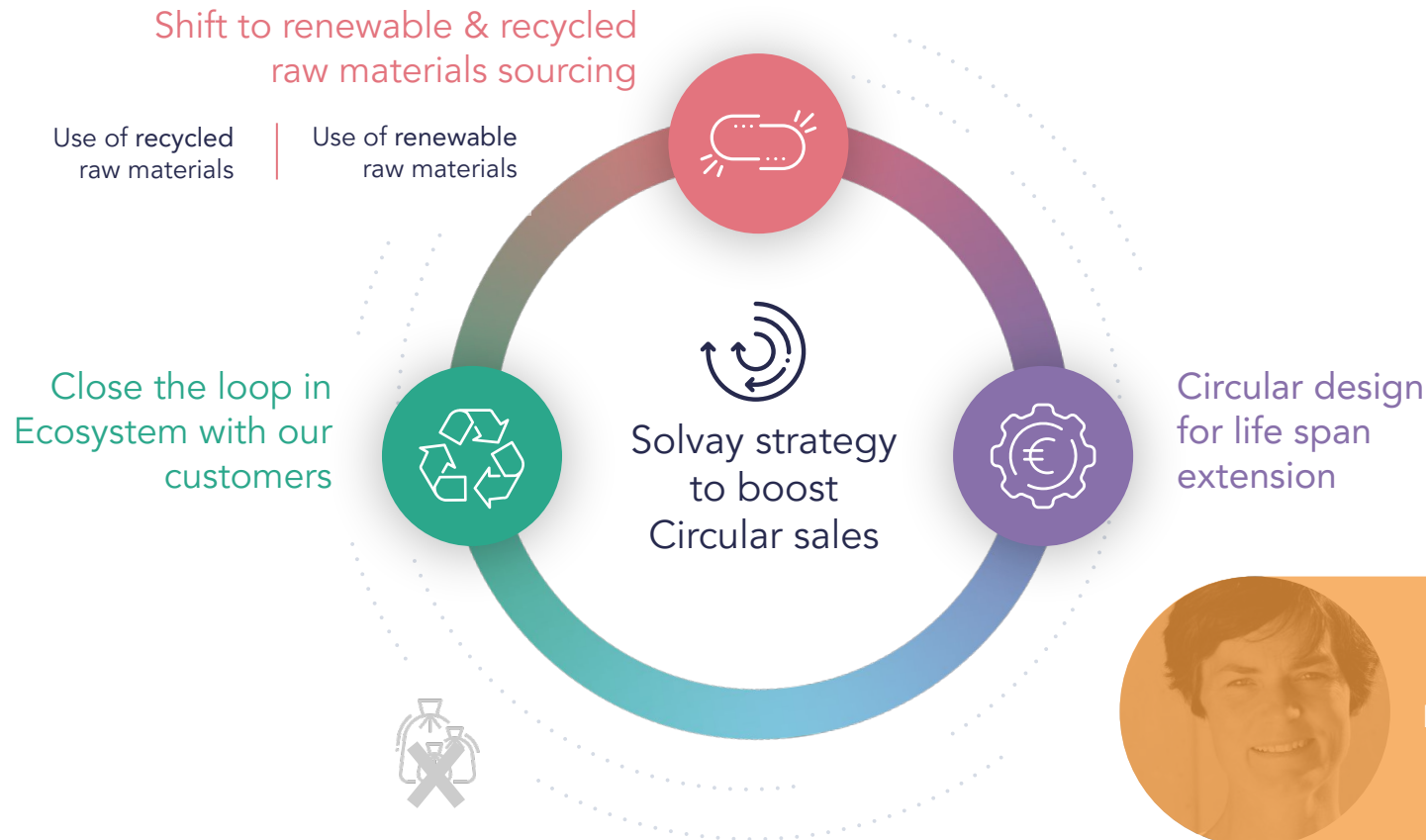
Commercialization in Q2 2021



Chemistry Circular Design



The future is circular. Not linear



Partnership
Ellen Mac Arthur
Foundation

We are building a circular Ecosystem



Waste as a
raw material



Natural Vanillin for F&F,
using rice husk
to produce
bio-based products

Partnership
along the
value chain



 **VEOLIA**

 **RENAULT**

Using End-of-life Batteries
as a source of metals and
materials

Partnership
with
customers



 **MITSUBISHI CHEMICAL
ADVANCED MATERIALS**

Using new chemical
recycling to regenerate/
close the loop in Materials

 **BRIDGESTONE**

TECHSYN tire
technology
platform

Biomass
to Energy



Using wood waste as a source
of energy: in Rheinberg plant
with biomass boilers:
190 kt CO₂/y Operation in Q2 2021

Example - Creating value through Circularity

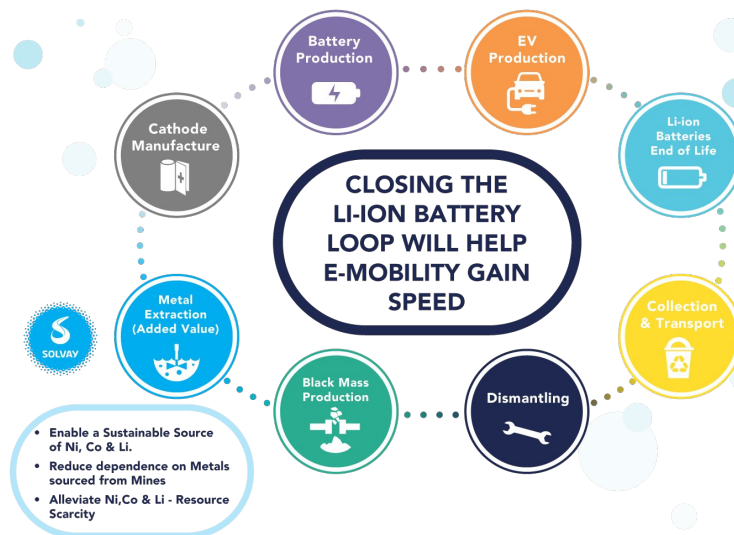


End-of-life Batteries
as a source of
materials

 **VEOLIA**

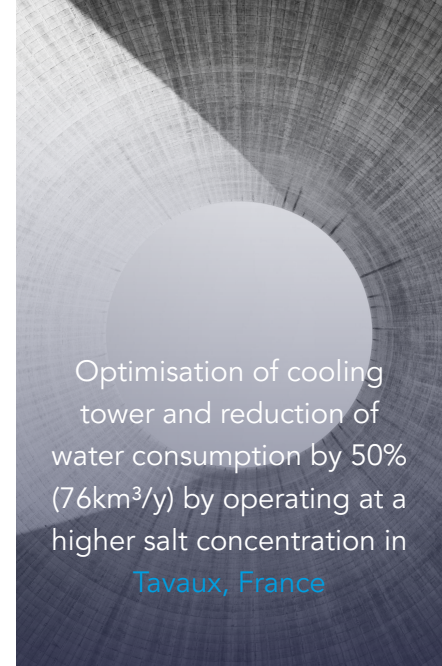
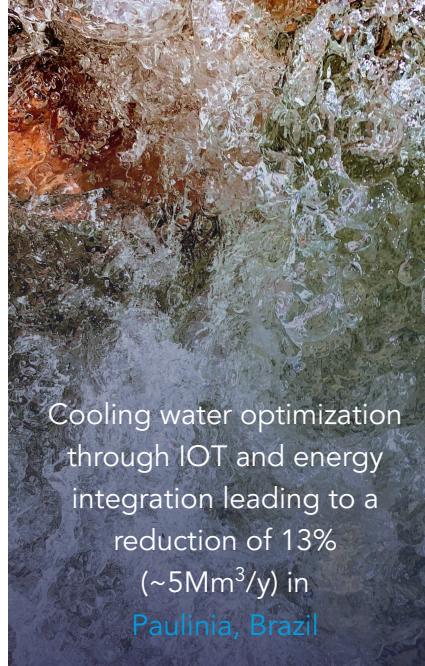


Producing long-lasting materials or help give a new life to products by developing new chemical recycling processes to close the loop



-5% freshwater intake over the past 2 years

Acting to reduce freshwater consumption in our sites globally



Devnya collaborative effort to reduce water consumption by 17% compared to 2019



Water scarcity is becoming a real issue. Due to insufficient rainfall in recent years, the volume of water in the lake that feeds Devnya plant was down by 50%, posing a real risk to production capacity in 2021. Devnya site manager engaged with his team to come up with ways to reduce water consumption by 17% in 2021 compared to 2019. This represents for 2021 5.3Mm³/y of freshwater saved.



<https://www.solvay.com/en/article/reducing-water-consumption-bulgaria>

Cooling water optimization through IOT and energy integration project in Paulinia



In Paulinia, 78% of the site water intake is used for cooling systems purposes. This means that after using it, the site returns the water to the river with the same quality. However, Paulinia site is continuously working on water preservation and reduced its water intake through water cooling optimization.

First, Paulinia reduced water need on the process by avoiding subcooling on condensers, and it was done increasing the temperature on the top of distillation columns, sometimes monitoring it with thermal cameras. Second, Paulinia implemented several energy integration project, replacing freshwater by cold product flows to cool some hotflow products in heat exchanger. This projects resulted in a reduction of 13% on specific consumption of water intake (m³ of water intake/ton of product) from 2017 to 2019, corresponding to 5Mm³/y of freshwater saved.

Finding new ways to reduce water consumption in manufacturing at Tavaux site



Tavaux site is contributing to Solvay One Planet (SOP) Freshwater Intake target through the optimisation of cooling towers. Tavaux identified an opportunity to operate the cooling tower at a higher salt concentration, in order to significantly reduce the amount of freshwater needed. To allow this, the site had to come up with a new treatment for the water network. The ambition of this project is to reduce the consumption of fresh water fed to one of the cooling towers by 50%.



<https://www.solvay.com/en/article/new-way-to-reduce-water-use>

Implementation of Reduce Reuse Recycle approach to reduce our non-recoverable waste



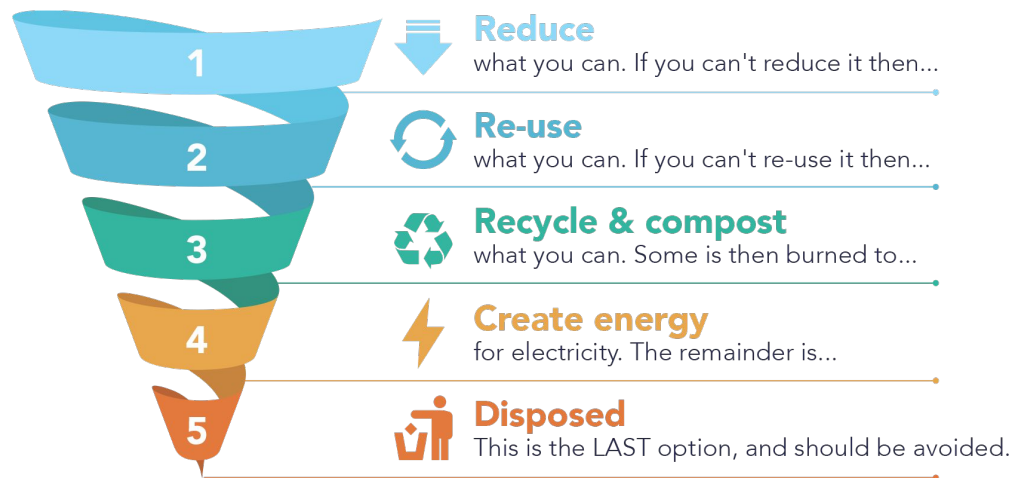
Prioritize the use of raw materials that generate less non-recoverable waste.

Work across GBUs to determine ways to reuse or valorize our own waste streams.

Select suppliers who also prioritize sustainability, in alignment with our ambitions.

Prioritize sustainability in our capital expenditure discussions.

Collaborate internally and externally to promote sustainability.



Reducing non-sustainable industrial waste in three years in Collonges, France



Solvay's Silica site in Collonges, France, which produces Silica for several market applications such as tires, oral care and feed, launched a waste valorization project in 2019, well underway today, with a three principles objective: to Reduce, Reuse and Recycle.

The site identified a way to increase its competitiveness while improving its environmental footprint. Last year, the team successfully reduced more than 60% of its non-sustainable industrial waste (NSIW) vs. 2019, and is now setting an even higher target raising the bar for 2022.



STOP office waste to go for green offices



28
countries

116
sites

80%
employees
reached



15 Sites

removed completely
single-use plastic from
the office
*self declared

Resources SUSTAINABLE Solutions



The
customer
approach

Solutions



Regenerative circular Vanillin From Rice husk to Cakes



Rhovani[®] Natural CW
for bio-sourced vanillin

Our sustainable circular solutions for Personal Care



Mackaderm® LIA (MB) is a natural-based hair moisturizing emollient closely imitating the properties of silicone.



Strong shift in consumer behaviors towards bio-based solutions



Organic shampoos to expand at 3.1% CAGR to 2025
Use of renewable raw materials from dedicated crops & scraps



Textured
hair care

~70%

Woman with
textured hair

1bn

Consumers

x3.5

Straight hair
average spend

Our sustainable solutions for Food / Agro



Rhovani[®] Natural CW is a natural based - 100% vegetable origin - alternative to natural vanillin.

AgRHO S-Boost is a biobased biostimulant for plant growth and increased yield.



Ensure global food security
Strong shift in consumer behaviors towards bio-based solutions for a better quality of food



Natural vanillin to grow >10% CAGR by 2024
Biostimulant market to grow >10% CAGR by 2024
Use of renewable raw materials from dedicated crops & scraps



Waste
valorisation

3%

Improvement
yield

-13%

fertilizer

Our sustainable solutions for Electronics



Kalix[®] HPPA is a bio-based high-performance polymer designed for electronic devices and components for medical equipment.



Interest in bio-materials
Miniaturization and optimization of performance



IoT sensors to grow >15% CAGR through 2023
Display capacity to grow at 4% CAGR through 2023
Digital platforms (servicising product portfolio ;
traceability & transparency in circular supply chains)



-4%

Environmental
footprint

25 -100%

Content
range

Our sustainable solutions for Industrial



SOLVAir® solutions for air emissions control that meet the demand of marine, industrial and municipal activities.



Ever-stricter regulations
Innovations for more efficient processes and more competitive products



+4% Growth in water treatment over the next 5 years



7million

People die from
air pollution/y

-99%

SO_x, HF and
HCl emissions



88%+

Energy
conversion

Better Life



Improving quality of life



€3.1bn of sales improving society's quality of life

Caring for communities

- Supplying innovative products to meet the world's new standards for cleanliness, air purification, healthcare
- Creating innovative products that support human health including two key antiviral products and a large number of personal protection equipment items
- Donations to help communities fight COVID

1,000,000 bottles of disinfectant gel
700,000 liters of hydrogen peroxide
350,000 masks
114,000 pieces of PPE
Materials for 6,700 reusable face shields

Caring for employees

- Created the Solvay Solidarity Fund to help employees adversely affected by the pandemic
- Enabled remote working as the Group's global standard
- Added pulse surveys that occur every six weeks to our many employee communications programs
- Strengthened talent pipeline with programs encouraging STEM-related careers and educational sessions



Discover the Future Innovator's Library
compiling STEM educational videos
made by Solvay employees
[Link](#)

Solidarity Fund

€12 m from Solvay's shareholders
€3 m from personal voluntary contributions from Solvay's CEO and the extended senior leadership team (15% salary cut), Chairman of the board (50% fees cut), Board and employees



The infographic features a central pink circle with the word 'PEOPLE'. Surrounding it are several circular and rectangular elements. Top left: A circular inset shows four business professionals in an office setting. Top right: A large image of three women in traditional Indian attire, one holding a plant. Bottom left: A circular inset shows a man holding a newborn baby. Bottom center: A circular inset shows two people in a small boat on a flooded street. Text bubbles in various colors (green, orange, blue, pink) contain specific statistics and program names. A quote from Deutsche Bank is in a white box at the bottom left, and a quote from BNP Paribas Fortis is in a white box at the bottom right. The background is a mix of light blue and white with decorative polka dots.

Solvay
One
Dignity

PEOPLE

Solvay
Sales
Academy

Blockchain
for GUAR
supply chain

7000
farmers

25%
women

Sustainable
GUAR
Initiative

36
villages

Solvay
Solidarity Fund
€15M in 2020
2000 families
supported

We see this as a coherent and socially responsible approach from Solvay management...

DEUTSCHE BANK

16 weeks
parental leave
for all co-parents
since January 2021

CEO asks shareholders to transfer one third of their final dividend to a solidarity fund for covid19. What a wonderful example of leadership, vision and stakeholder capitalism. Chapeau!

BNP PARIBASFORTIS

Dignity? Yes!

Actions launched



Diversity

Gender parity by 2030

First global index of Disability application

+7 Employee Resource Groups worldwide



Equity

Pay Equality Index in 2022

Shortlist for key roles of 50% of under represented groups

400 women following the "A Effect" Ambition Challenge cohort



Inclusion

Inclusion Index

1st Inclusive Leadership workshop

Speak up about non-inclusive behaviors



Solvay One Dignity 9 ambitious DEI objectives and targets by 2025



DIVERSITY	EQUITY	INCLUSION
1. Accelerate gender parity at all mid and senior levels Target: Achieve gender parity by 2030	4. Assess if there are undesired pay gaps and close them if there are any Target: Potential structural pay gaps and gender pay gaps are identified & a plan of action to close them is developed and implemented if needed	7. Build an inclusive employee experience Target: Set up an Inclusion Index and improve our score
2. Make our workplace optimal for people with disabilities Target: Set up a Solvay Disability Equality Index and improve our results	5. Ensure fair recruitment Target: All mid and senior-level (\$19 and up) job openings have a shortlist comprising 50% of underrepresented groups (including women)	8. Assessment & development program for Solvay leaders to grow and nurture an inclusive mindset Target: The GBU presidents and Heads of Functions have a DEI score for their GBUs or Functions and develop a plan to improve their score
3. Develop resource groups to encourage employees to bring their “whole self” to work Target: Set up diverse Employee Resource Groups (ERG) worldwide	6. Ensure equitable access to career opportunities and development Target: Set up mentor/mentee programs starting with underrepresented groups	9. Build a culture in which individuals feel empowered to speak out or speak up when they experience or witness non-inclusive behaviors* Target: All our employees feel safe to speak up or speak out when confronted with non-inclusive behaviors

(*) In line with our Code of Business Integrity



Key Initiatives



First inclusion survey with self identification

SLT Inclusion training

Solvay Parental Leave

Solvay's policy increases parental leave to 16 weeks and makes it available to any co-parent regardless of gender or sexual orientation; it also includes parents who adopt.



"Family is a fundamental aspect of our lives and the paternity leave reinforces our bonding."

Dr. Bright Kusema
Research Scientist at E2P2L



ERGs and DEI Catalysts launched

Solvay ERGs are voluntary groups, run by and for employees who share a common background, interest, or concern. Their aim is to foster an inclusive and diverse work environment through grassroots communities that promote the professional and personal development of their members in the workplace.

3 new ERGs launched:
LGBTQ+, SAAEG, MARC*



A-Effect Mentoring Pilot & Ambition Challenge

The Ambition Challenge is a unique international training program that allows women to develop their full potential, better communicate their ambition, and boost their careers through contact with inspiring female professionals, managers, and leaders.

150 women in first "A Effect" Ambition Challenge cohort



STEM Promotion

Colleagues from across the Group have been engaged in programs to promote STEM education to young people and in particular to girls and underrepresented youth. Pictured above, our CEO Ilham Kadri is talking STEM, sustainability, diversity and inclusion with enthusiastic, smart young girls from the NGO Greenlight for Girls.

Citizen Day

3 year achievements



Progress beyond

2019

Environment

94% engagement rate

169 participating sites

1st edition

2020

STEM
education

4700 participants

189k communities reached

527 actions

2nd edition

2021

Biodiversity

+14 750 participants so far

20K€ raised for our associations
protecting biodiversity

+121 participating sites

3rd edition

2021 Citizen day on Biodiversity

Employees worldwide engaged in a variety of voluntary actions to help safeguard biodiversity



DID YOU KNOW?

Biodiversity is 1 of our Solvay One Planet targets

-30% Pressure on biodiversity by 2030

490 actions in 116 sites

13,000+ employees

5,500+ participants

from NGOs or local communities

€20,000 funds raised

for a selection of associations acting for biodiversity

2021 European Responsible Care® Awards

"Supporting health in COVID-19 times category"



The project "Supporting and transforming health & wellbeing in Covid times", submitted by Solvay to the CEFIC Responsible Care Awards, while not being selected as a winner, received a "Special Commendation" by the judges. The judges appreciated Solvay's entry for its global approach and the impressive actions carried out for creating a sustainable better life at work. The donation to local communities was also praised.

Living Our New Culture - Solvay One

❖ We stay connected

- Weekly Q&A sessions with Ilham Kadri
- #ConnectedCoffee ...
- Coaching sessions with a health professional

❖ Pulse Surveys

5.712
Responses
(76% of the target population)

19
Countries

35
Admin & Hybrid
Sites & R&I Centers

12
Languages



Rebounding from the crisis



Access to talent

Because a mobile workforce allows us to source and leverage the capabilities of talent wherever they are.

More satisfaction

Because we believe that mobile working, when properly supported, will meet our employees' needs, and will therefore bring more satisfaction and even better results through our people.



Stronger workforce

Because mobile working can help parents comfortably return to work, and permit caregivers and those with health conditions or disabilities to have the flexibility they need to manage their work-life balance.



Cost effective

Because the total occupancy rate will decrease in our facilities, bringing significant savings.



Lower environmental impact

Because teleworking offers another opportunity to rethink our mobility – meeting and travelling responsibly – thus contributing to the Solvay One Planet ambition to minimize our impact on the environment.

Better Life SUSTAINABLE Solutions



The
customer
approach

Solutions



Innovations that support a sustainable future!




Actizone™
Disinfection That Lasts

Home
& Personal Care

Unique and proprietary
technology for Long Lasting
Disinfecting Surface Cleaners




Aquivion®
PFSA

Hydrogen
& Clean Energy solution

Material in membranes
& electrodes of PEM
electrolysers & fuel cells




QUASAR

Sustainable
Agriculture

Additives for greenhouse plastic
film suitable to tune sunlight to
accelerate plant growth



Actizone™ innovation to aid the fight against Covid-19

Inspired by a need to find a solution for killing germs amid the Covid health emergency, Solvay quickly made launching **Actizone™** a top priority.

Actizone™ instantly destroys over 99.9% of microorganisms including coronaviruses for up to 24 hours.

Trapped in a protective film, **Actizone™** remains on surfaces releasing biocidal actives that instantly kill any germs introduced by fingertips or from aerosolization. **Actizone™** is a unique sanitary hygiene solution compared to the disinfectants currently on the market which clean surfaces but do not protect them for longer periods.



From Contaminated to Clean Water



Oxystrong®
Disinfecting municipal wastewater

The background image shows a large array of solar panels in the foreground, with a line of trees behind them. In the distance, a city skyline with several tall skyscrapers is visible under a cloudy sky. A large, light blue circular graphic is overlaid on the left side of the image, containing the text.

Enabling global Transition to Cleaner Energy

Electronics: beyond smartphones



GLOBAL TRENDS

- growing demand for hyper-connectivity, the rapid development of 5G and exponential growth of data
- +4% CAGR growth in display capacity through 2023
- +6% CAGR growth in semiconductors through 2022
- >15% CAGR growth in IoT sensors through 2023

NET SALES

7%

We provide solutions for semiconductors and other electronic components, new generation OLED and flexible displays, and smart devices.

VALUE PROPOSITION

- materials and solutions meeting superior cleanliness, excellent chemical stability and high heat tolerance
- Recognized expertise in high purity chemistry for the semi-conductor industry
- digital platforms (servicising product portfolio ; traceability & transparency in circular supply chains)

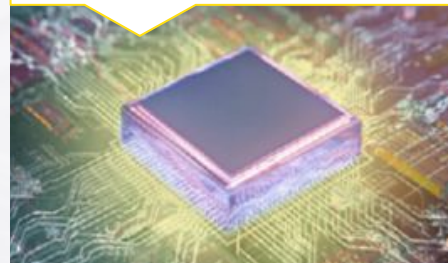
Xydar® LCP

The optimal material choice for 5G antenna substrates and housings due to its properties, such as outstanding strength at extreme temperatures, inherent flame retardant and resistance to virtually all chemicals.



Galden® PFPE

Those fluids are key component in power electronic cooling. Their unique compatibility with sensitive components and heat tolerance enables them to act as heat transfer liquids in extreme conditions.



Resources & Environment



GLOBAL TRENDS

- growing concerns over sustainability
- 50% consumers ready to pay more for a product designed to be reused or recycled
- +4% growth in water treatment over the next 5 years
- 6x increase of lithium supply by 2030

NET SALES

12%

We provide solutions for renewable energy production, water and air treatment, soil remediation and more efficient use of scarce resources.

VALUE PROPOSITION

- unique methodology to recover more enhanced value minerals
- broad range of solvent extractants for the purification and concentration of metals

Cyanex®

enables the production of high purity lithium salts in a matter of hours, rather than 12-18 months under conventional evaporation methods, thereby saving billions of liters of water.



Oxystrong®

is a sustainable solution for municipal wastewater disinfection. It removes pathogenic bacteria, viruses and protozoan parasites from treated wastewaters and decreases the risk of waterborne infections.



Consumer, Home, Personal & Health Care



GLOBAL TRENDS

- consumers want natural, vegan and eco friendly care products
- growing needs for developing countries and ageing population
- medical polymers market to grow >6% in the short-term
- medical implants market to grow 7% in the short-term

NET SALES

19%

We provide solutions for performant and eco-friendly care products, textiles and fibers, sports and leisure, medical equipment and devices, pharmaceuticals and solutions to fight Covid-19.

VALUE PROPOSITION

- World leader in thermoplastics (high performance membrane and high barrier polymers to package pharmaceuticals)
- Technology leadership for medical grade plastics for limited exposure applications, for biomaterials for long-term exposure applications, for 3D additive manufacturing compatibility
- We provide FMCG customers with a broad portfolio of innovative polymers and surfactants

Jaguar®

Innovative natural ingredients helping L'Oreal "nourish hungry hair" with their new line of hair-care products marketed in Europe. The line is created with 98% of the ingredients derived from natural origin (guar).



Interox® H₂O₂

Medical device, isolator and room decontamination must also be sterile to ensure safety and patient wellbeing. Interox® is a powerful disinfectant and offers the highest possible quality on the market.



Eco-friendly and healthier Agro, Feed & Food



GLOBAL TRENDS

- growing population requiring greater yields, more sustainability and better resource management
- >10% biostimulant market growth expected p.a. by 2025
- >10% growth in natural vanillin by 2024

NET SALES

13%

We provide solutions for crop protection, plant nutrition, seed and grain care, flavor, food ingredients, food packaging, equipment & digitization

VALUE PROPOSITION

- broad range of products and solutions to improve yield with more sustainable practices
- market reference for vanillin and natural vanillin solutions
- brand new portfolio of solutions for biopesticides to answer the unique technical challenges of formulating microorganisms
- pioneering automation and digital technology

AgRHO® S-Boost™

biostimulant for root development favoring water and nutrient uptake in the early growth stages, leading to healthier plants, secured yields and optimized use of water and agricultural inputs.



Rhovani® Natural CW

natural alternative to vanilla beans - from ferulic acid in non-GMO rice bran - offering both the vanillin note characteristic of vanilla and the advantage of a natural flavor labeling.



Longer-lasting and energy efficient buildings



GLOBAL TRENDS

- growing demand for longer lasting residential and commercial buildings that consume less energy

NET SALES

8%

We provide solutions for energy-efficient buildings, protection and safety, and resource efficiency.

VALUE PROPOSITION

- wide range of products and solutions for longer-lasting buildings that consume less energy, include safe water management and enhance their users' well-being

Cyasorb® Cynergy

Solutions for UV stabilization to prolong plastic-based construction materials life, so they can replace traditional materials, lowering end-product maintenance costs and enhancing sustainability profiles.



Alve-One®

Foaming solutions, based on 100% safe raw materials, help fulfil the industry's need to move towards a circular economy, while achieving specific properties needed for insulation, strength and lightweighting.



Industrial applications



GLOBAL TRENDS

- ever-stricter regulations
- constraints on resources, including requirements to reduce energy and water consumption

NET SALES

20%

We provide solutions for 3D printing, industrial & protective coatings, metal & surface treatment, industrial equipment and sustainable solution for road surfaces.

VALUE PROPOSITION

- products and solutions to modify and clean surface, improving performance of finished products and enhancing their shelf life
- specific polymer products that can replace metal in harsh conditions, suitable for highly demanding industrial equipment applications
- dedicated polymer grades used in cutting edge 3D printing technologies

Solef® PVDF AM

High-performance filaments for 3D-printing enabling the most demanding industries to 3D-print fully functional prototypes much faster than traditional manufacturing.



SOLVAir® Solutions

wide range of sodium based products, services, technologies and treatment systems for air emissions control that meet the demand of marine, industrial and municipal activities.



From Farm to Shower



Bio-based **guar** seeds
offer eco-friendly
hair care solutions



THANK YOU
