



# Solvay Overview for Investors

---

March 2023

This presentation may contain forward-looking information. Forward-looking statements describe expectations, plans, strategies, goals, future events or intentions. The achievement of forward-looking statements contained in this presentation is subject to risks and uncertainties relating to a number of factors, including general economic factors, interest rate and foreign currency exchange rate fluctuations, changing market conditions, product competition, the nature of product development, impact of acquisitions and divestitures, restructurings, products withdrawals, regulatory approval processes, all-in scenario of R&D projects and other unusual items. Consequently, actual results or future events may differ materially from those expressed or implied by such forward-looking statements.

Should known or unknown risks or uncertainties materialize, or should our assumptions prove inaccurate, actual results could vary materially from those anticipated. The Company undertakes no obligation to publicly update or revise any forward-looking statements.

This document does not constitute an offer to sell, or the solicitation of an offer to subscribe for or buy, any securities.

# Solvay Today



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.



2022 figures

# A worldwide network of researchers connected to academic partners



12 major R&I centers

2,030 employees

€349m R&I spend

147 Patent applications

13% New sales ratio\*\*

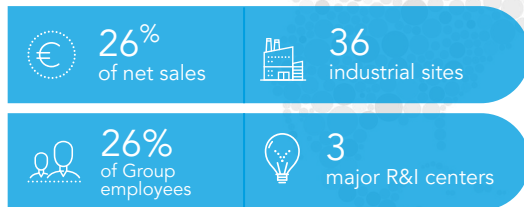


# A balanced presence to better serve our customers

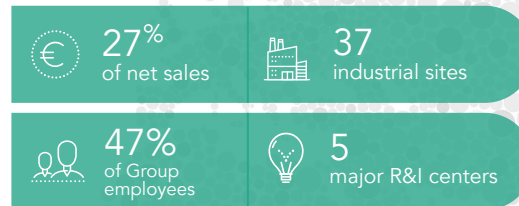
2022 figures



## NORTH AMERICA



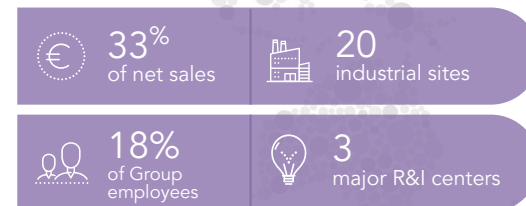
## EUROPE



## LATIN AMERICA



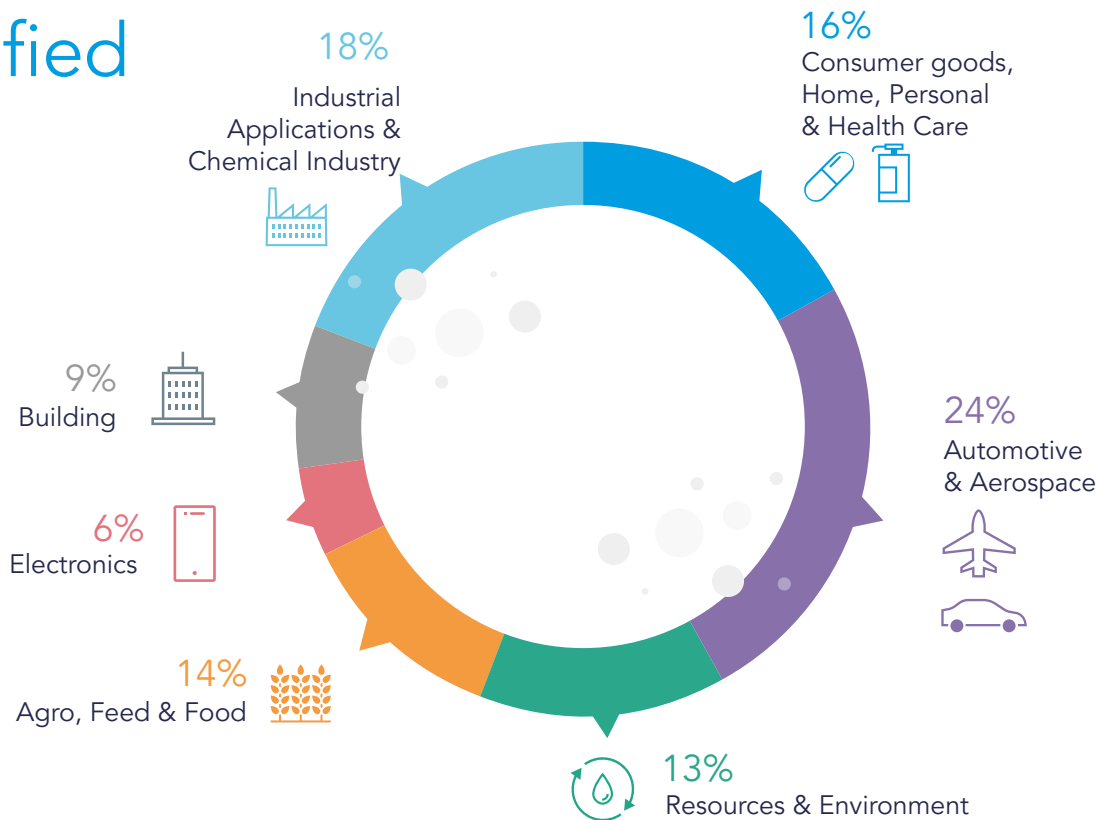
## ASIA PACIFIC & Rest of the world\*



\*includes Middle-East and Africa

# We provide solutions to diversified markets

In % of Group sales



**TOP 3**  
Market position  
in ~ 90% of  
portfolio



**55%**  
Net sales  
generated by  
sustainable  
solutions

# Three agile business segments to G.R.O.W. with our customers



## MATERIALS

38% of Group EBITDA<sup>1</sup>

Our unique portfolio of high-performance polymers & composite technologies is primarily used in sustainable mobility applications to reduce weight, improving CO<sub>2</sub> efficiency. Our advanced materials also serve Healthcare and Electronics.

**GBU:** Specialty Polymers and Composite Materials

Lightweighting, Electrification, Expanding Healthcare, IOT/Digitalization, Resource efficiency

## CHEMICALS

35% of Group EBITDA<sup>1</sup>

Our businesses are world-leaders in essential chemicals to daily life. These chemical intermediates are used in a broad range of applications, serving end-markets like Food, Healthcare, Personal & Home care, Environment, Building and Industry.

**GBUs:** Soda Ash & Derivatives, Peroxides, Silica, Coatis

Resource efficiency, Expanding Healthcare

## SOLUTIONS

27% of Group EBITDA<sup>1</sup>

Thanks to our unique formulation and application expertise, we provide customized specialty formulations that minimize environmental impact, serving end-markets like Agro, Food, Consumer goods, Mining and Electronics.

**GBUs:** Novecare, Technology Solutions, Aroma Performance, Oil & Gas

IoT/Digitalization, Resource efficiency, Eco-friendly solutions

  
In line with  
global trends

<sup>1</sup>: excluding the contribution from corporate and business services

# Market segment & region annual figures



Region (% 2022 Net Sales)	Group	Materials	Chemicals	Solutions
Europe	27%	28%	34%	19%
North America	26%	30%	16%	32%
Latin America	14%	3%	25%	13%
Asia and rest of the world	33%	38%	25%	36%

End markets (% 2022 Net Sales)	Group	Materials	Chemicals	Solutions
Automotive & Aerospace	24%	51%	16%	9%
Industrial applications & Chemical industry	18%	8%	21%	22%
Consumers goods, Healthcare & HPC	16%	12%	21%	14%
Agro, Feed & Food	14%	3%	19%	19%
Resources & Environment	13%	6%	11%	21%
Building	9%	5%	12%	9%
Electronics	7%	14%	0%	6%



## TOP 3

Market position  
in ~ 90% of  
portfolio



## 55%

Net sales  
generated by  
sustainable  
solutions

# Innovating through our Growth platforms



Battery  
Materials

Thermoplastic  
Composites

Green  
Hydrogen

Renewable  
Materials and  
Biotechnology

More than  
€10bn growth  
opportunity

# Our Battery Materials Platform: Innovating for cleaner mobility



## Leading the way in sustainable batteries

- ❖ We are a leading provider of advanced materials and solutions for Lithium-ion and next generation batteries
  - Our unique portfolio of technologies unlocks the full potential of battery cells
  - Our polymers and composite materials help the battery pack become lighter, more resistant, and safer
  - Investing in a pilot line in La Rochelle, France, the most advanced one in Europe, to boost battery innovation.
- ❖ Committed to providing responsible solutions, leveraging our expertise in metal recovery to enable battery recycling -- Partnership with Veolia and Renault



## Customer Centricity is top of mind

- ❖ Collaborative innovation through our dedicated transversal platform gathering all of the Group's technologies and expertise, providing one unique contact for customers
  - Solvay the "preferred partner" for a huge technological leap: developing the next generation of batteries by 2030, with the European Battery Alliance of major players across the entire value chain
- ❖ Global presence with local technical support to our customers in our Battery Application Development centers in Seoul (South Korea) and in Bollate (Italy)



€400bn

invested by OEMs in electrification over the next 10 years

Accelerate the development of better performing, affordable, sustainable batteries

~30%

amount of electric vehicles in global production by 2030



# Accelerating innovation in Thermoplastic Composites



A key enabler for demanding applications across industries



- 30 to 50% **lighter** than metals
- Tough, durable and **chemically resistant** material that meets structural needs in challenging environments
- Inherently more **recyclable** with options to be bio-based
- Thermoplastic composites (TPC) allow for shorter production cycle times, enabling **high-rate production** for composite parts

Why Solvay?



- End-to-end **innovation under one roof**: from molecules to composites
- The only player on the market with a **diversified portfolio** of specialty polymers and composite processing technologies to meet the needs of all applications
- We **co-innovate with customers**, from concept to commercial application, through our state-of-the-art application and product development centers in Brussels and Alpharetta.

Solvay is committed to fully industrialize TPC manufacturing to meet growing demand across industries, including emerging markets such as Urban Air Mobility



# Boosting the progress of a Green Hydrogen economy



## Focused on enabling materials for green hydrogen



- ❖ More cost-efficient Electrolyzers, a key enabler for shifting to green H<sub>2</sub>
  - Aquivion® ionomers for proton exchange membrane (PEM) electrolyzers
- ❖ Higher performing Fuel Cells for a zero-emission economy
  - Aquivion® product line for heavy-duty, long haul fleet PEM fuel cells
  - Advanced electrolytes solutions for solid-oxide fuel cells used in stationary, heat and power applications
  - Portfolio of high-performance materials for power trains
- ❖ Developing solutions for safe, effective storage and transportation of hydrogen

## We are committed to green hydrogen



- ❖ SteerCo Member of the [Hydrogen Council](#), a global CEO-led initiative that brings together leading companies with a united vision and long-term ambition for hydrogen to foster the clean energy transition
- ❖ A dedicated transversal platform gathering all of the Group's [hydrogen technologies and expertise](#), providing one unique contact point for customers
- ❖ Decades of experience in [producing and using hydrogen](#) for our own needs



**100+**  
GW of global green  
hydrogen production by 2030

Green hydrogen is a key lever for the decarbonization of hard-to-abate sectors such as transport and industry, helping the fight against global climate change

**Millions**  
of fuel cell electric  
vehicles by 2030



# Developing innovative and sustainable solutions using Renewable Materials and Biotechnology

Embedding circularity in our businesses



## Renewable Carbon

**OBJECTIVE:** significantly increase the **content of renewable carbon** in Solvay's product offerings

### DRIVERS:

- Development of more environmental-friendly, natural and circular products
- Establish alliances along the value-chain to secure access to raw materials and value

## Focus on the ORIGIN



## Biotechnology

**OBJECTIVE:** strengthen and expand our customer base through new growth businesses **enabled by biotechnology**

### DRIVERS:

- Develop new value propositions aligned with fast evolving consumer/customer expectations
- Focus on open innovation to address knowledge gaps and seize growth opportunities

## Focus on the TECHNOLOGY

## Biodegradability

**MAIN OBJECTIVE:** develop **biodegradable by design** technologies to manage the end-of-life of our products striving toward zero environmental pollution

### DRIVERS:

- Delivering safe and sustainable solutions to our customers
- Adapt to evolving regulatory landscape EU Green Deal, Chemicals Strategy for Sustainability (CSS)

## Focus on product END-OF-LIFE

# 2030 Solvay One Planet goals



## CLIMATE

- Align greenhouse gas emissions with Paris Agreement
- Phase out coal solid fuels
- Reduce negative pressure on biodiversity

Reduce by 30% (-2%/y)  
Exit 5 plants  
30% reduction



## RESOURCES

- Increase Sustainable Solutions revenues
- Increase Circularity
- Reduce non-recoverable industrial waste
- Reduce intake of freshwater

Achieve 65% vs 50%  
More than double (10%)  
30% reduction  
25% reduction



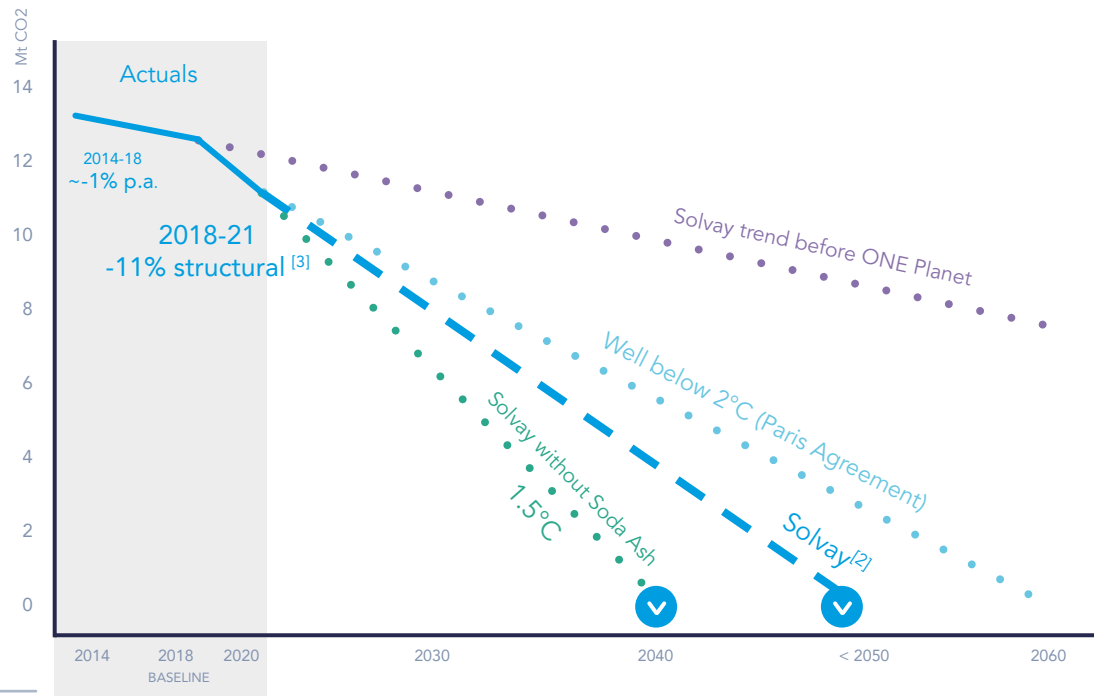
## BETTER LIFE

- Safety is a priority
- Accelerate Inclusion & Diversity
- Extend maternity leave and to all co-parents

Aim for zero accident  
Parity in 2035 vs 24%  
for mid & senior management  
16 weeks in 2021



# New carbon neutrality<sup>[1]</sup> ambition before 2050



[1] Scope 1+2 GHG emissions

[2] Visualization of the theoretical path to achieve Solway's GHG reduction targets vs public benchmarks. Annual fluctuations may differ.

[3] Excluding the impact from Covid reduced activities

[4] Against a 2018 baseline incorporating 90% of the Group total scope 3 GHG emissions activities

## OUR COMMITMENTS



Paris Agreement

2020



Carbon neutrality<sup>[1]</sup> before 2050

2021



-24% scope 3 GHG emissions by 2030<sup>[4]</sup>

2022



Targets submitted to SBTi

# Strong credentials:

Our performance is recognised



**MSCI**  
ESG RATINGS

A rating  
(scale AAA to CCC)



Reporting Matters  
In the top 10 reports

*act4*nature  
international

Recognition  
on Biodiversity

**ISS ESG** ▶

B- rating  
Prime company

**MOODY'S** | ESG Solutions

#6/39 in the sector



FTSE4Good

Member of FTSE4Good

**ecovadis**

Top 2%



A-  
Scale A to D

chemsec  
**CHEMSCORE**

C-  
Scale A+ to D-





# A radical transformation in just 3 years



G.R.O.W.



Sell of  
Polyamides



Solvay  
One Planet



New Code  
of Integrity



Growth platforms  
- EV Batteries  
- Thermoplastic  
- Green hydrogen  
- Renewable materials &  
biotechnology (2022)



Carbon  
neutrality



Investment  
€300m in Tavaux  
New PVDF JV with  
Orbio in NA



Investments:  
Solid state  
battery pilot unit  
Rare earths hub  
for magnets

2019

2020

2021

2022

New Exco  
with new  
mandate



New Purpose,  
values, best  
behaviors



Solidarity  
Fund



16 weeks  
co-parental  
leave



Solvay One  
Dignity



Employee  
share  
purchase plan



Soda Ash  
process 2.0



# A stronger and better company

	2024 G.R.O.W. Targets, set in Nov 2019	2022 Achievements	Improvement 2019-2022
Net sales	-	€13,426m	9.7% CAGR (organic)
Underlying EBITDA	Mid-single digit growth (annual average growth) ✓	€3,229m	12.1% CAGR (organic)
Margin	-	24.0%	+1.3pp
Costs savings	Exceed €350m annual run rate (raised to €500m) <sup>[1]</sup> ✓	€79m	€467m cumul.
FCF	-	€1,094m	+€3,506m cumul.
FCF Conversion	Exceed 30% <sup>[2]</sup> ✓	34%	+6.1pp
Working capital	Reduce WC/sales ratio by 2pp ✓	12%	-3.5pp
Cashout (interest payments & pension cash service)	Reduction by €75m (pensions >40, interests >35) ✓	€245m	-€204m
Underlying Net Debt	-	€3,591m	-€1,795m
Leverage	-	1.1x	-1.0x
Pensions liabilities	-	€1,057m	-€1,637m
ROCE	Exceed 11% ✓	16.0%	+7.9pp

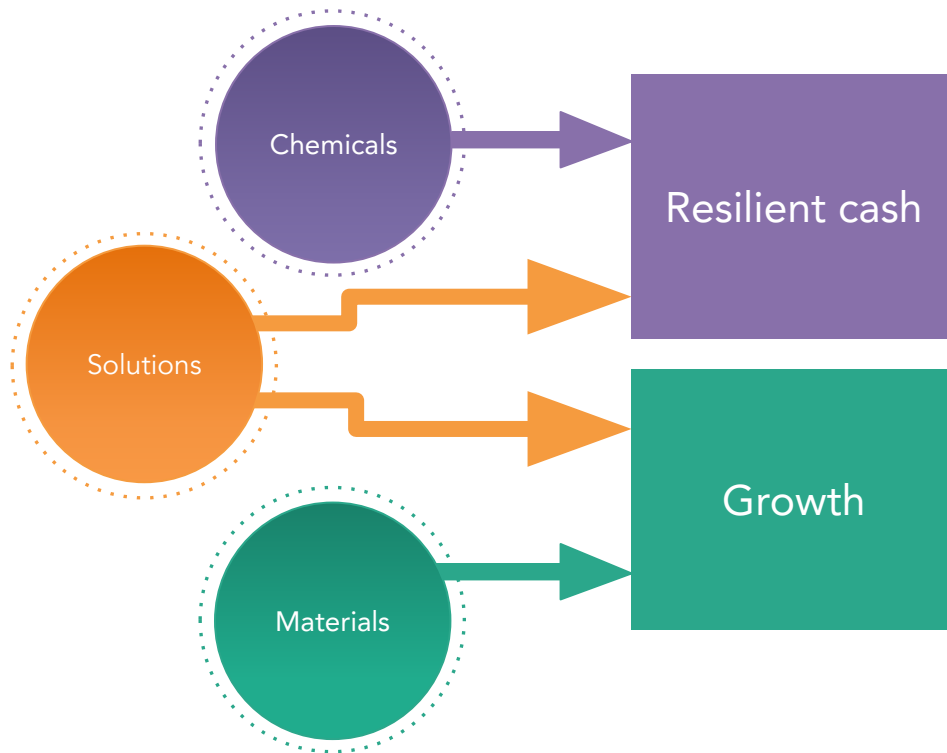


# We are now 'Fit'...

# ...and ready to change the game



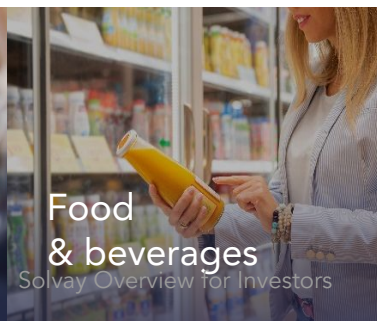
- Every business is delivering
- Solutions segment fully Optimized
- Strong financial foundation established
- Best-in-class business leaders
- Decisive, unified culture, with proven record in overcoming crises



## MARKET POSITION

Soda Ash & Derivatives	#1	Soda Ash (global) Bicarbonate (global)
Peroxides	#1	Hydrogen Peroxide (global)
Silica	#1	Silica for tires (global)
Others <i>(Coatis, Special Chem)</i>	#1	Coatis (Latin America) Rare earths for automotive catalysts (global)

€5.5bn  
2022 Net sales



# Specialty Co



## MARKET POSITION

MATERIALS	Specialty Polymers	#1	High-performance polymers; leading position in thermoplastic composites Growth platforms: Batteries, Thermoplastic composites, Green Hydrogen, Renewable materials & biotechnology
	Composites	#2 #1	Composites for civil aerospace Composites for defense
CONSUMER & RESOURCES	Novecare	#2	Specialty surfactants and polymers
	Aroma	#1	Flavors & Fragrances; Natural Vanillin
	Technology solutions Oil & Gas	#1	Mining reagents

€7.9bn  
2022 Net sales

Transportation  
Auto/Aero

Electronics

Agriculture  
Solvay Overview for Investors

Consumer

Healthcare

# Fundamentals of the two entities



	EssentialCo	SpecialtyCo
Fundamentals	Supply/demand, Lean	Product innovation to solve customer's needs
Commercial	Pricing discipline, contracting management, standard offering / one service model	Application-driven, differentiated customer approach & service
Innovation	Process innovation	Technology & customer-driven innovation
Operational model	Operational excellence Lean and resilient supply chain and SG&A, optimized for large volumes and low cost	Flexibility in asset configuration to serve variety of customer needs Made to order, more flexible
Capital structure	Prudent financial policy	Committed to a strong investment-grade rating
	 Maximize cash generation and enhance cost leadership Solvay Overview for Investors	 Achieve above market growth and strong returns

# 2023 opens a new chapter



# Why invest?

We aim to reshape the global chemical industry by delivering solutions that meet the world's sustainability challenges and provide critical solutions in fast-growth markets.

We focus on creating long-term value and we do so efficiently, which results in steady annual revenue and cash generation, a strong track record of continued shareholders distribution with a stable dividend, and one of the highest margins among our competitors. And above all, sustainable value creation is at the core of the way we conduct business.



Future growth potential  
fuelled by megatrends

.....



Customer partnerships  
drive innovation

.....



Global scale, diversity of  
products and end-markets,  
reliable infrastructure

.....



Key leadership positions

.....



Proven resilience  
through Crises



Bold ESG Ambition with  
Solvay ONE Planet