



Progress beyond

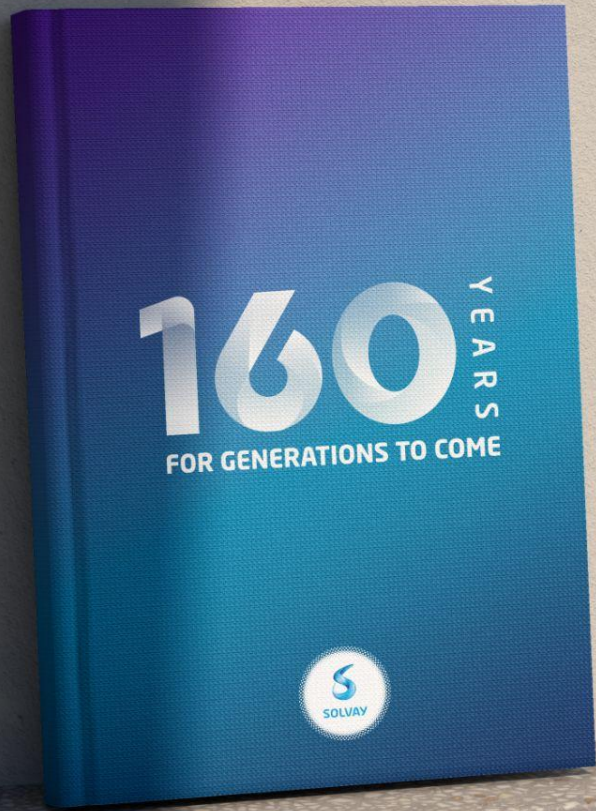
# For generations to come

Dr. Ilham Kadri  
CEO of Solvay

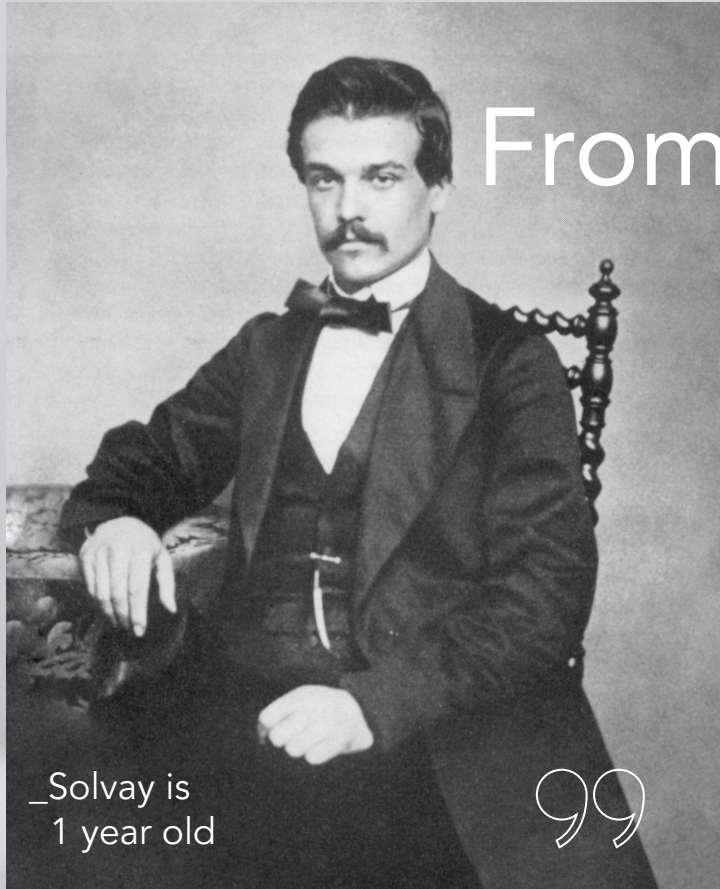
20  
23

\_Shareholders'  
Meeting  
MAY 09, 2023









From science  
will derive

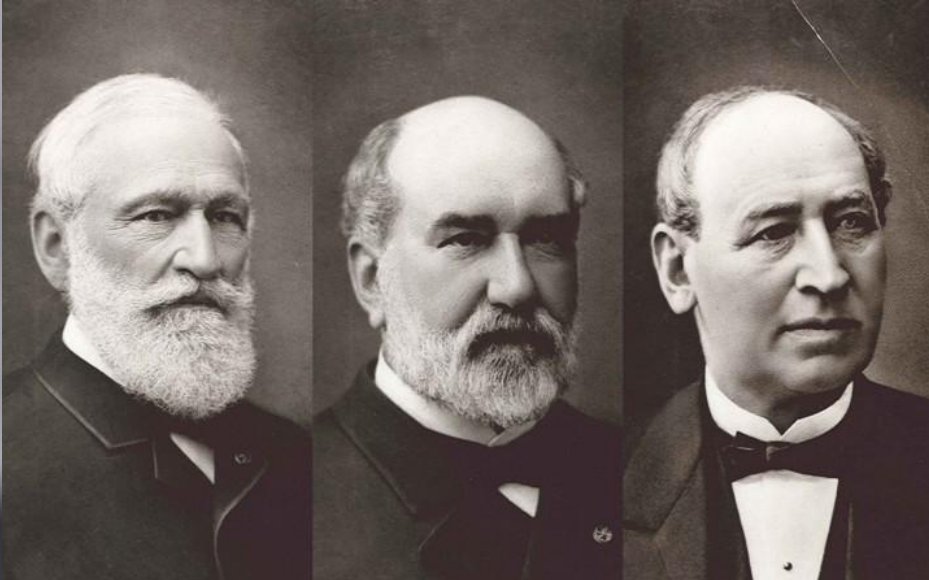
the progress  
of mankind

\_Solvay is  
1 year old



\_E. Solvay





\_Guillaume Nélis, Eudore Pirmez, Valentin Lambert are Solvay's business angels

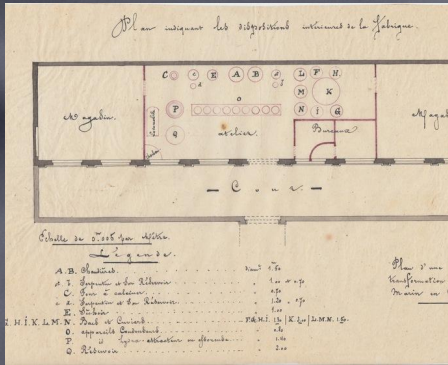


\_Alfred Solvay, co-founder

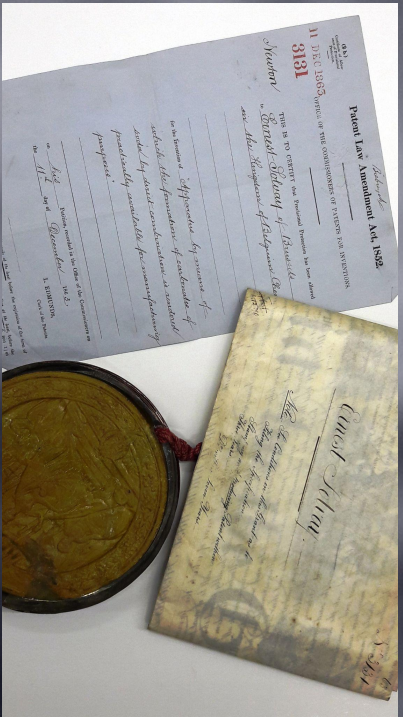
\_Solvay is 1 year old



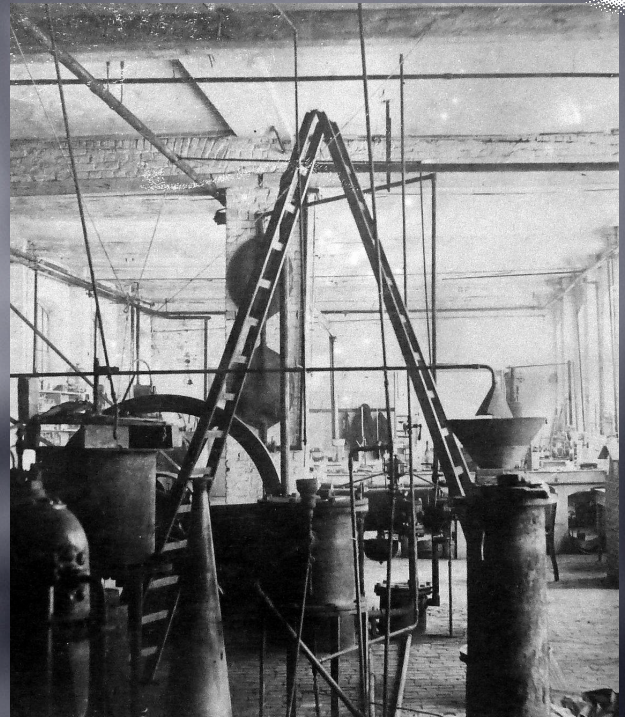
\_Schaerbeek  
pilot plant,  
Belgium,  
1861



\_Couillet site,  
Belgium  
1866



\_British patent,  
1863



\_First R&D Laboratory, Neufchateau  
street, Brussels, Belgium, 1880





\_Louis-Philippe Achery, first technical supervisor



\_Solvay is 11 years old



Arthur Brichaux, first hired chemist, 1874





\_Solvay is  
40 years old

\_Health care,  
Lukavac, Bosnia





\_Solvay Sport Balle Pelote field,  
Brussels, Belgium



\_Summer camp Ernest Solvay,  
Monfalcone, Italy



\_Elementary school Turda,  
Romania

\_Solvay is  
70 years old

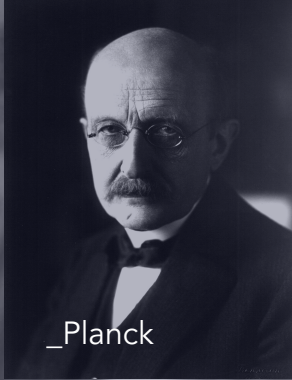




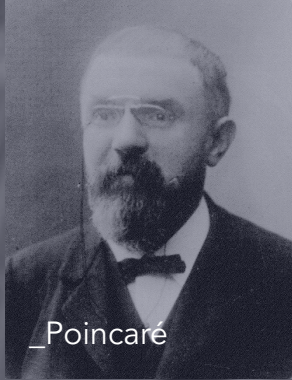
Albert Einstein,  
Marie Curie, Henri Poincaré,  
Martin Knudsen, Paul  
Langevin, Max Planck,  
Walther Nernst and Hendrik  
Lorentz... and Ernest Solvay

\_Solvay is  
48 years old

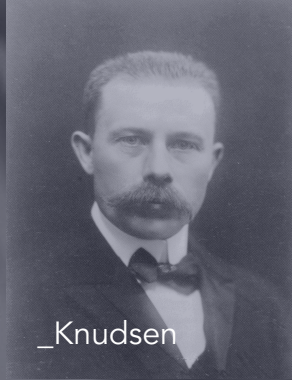




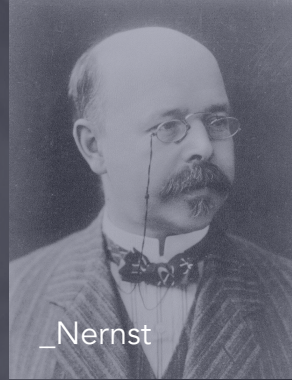
\_Planck



\_Poincaré



\_Knudsen



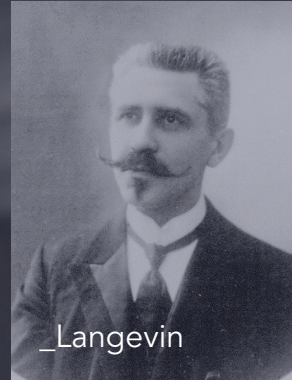
\_Nernst



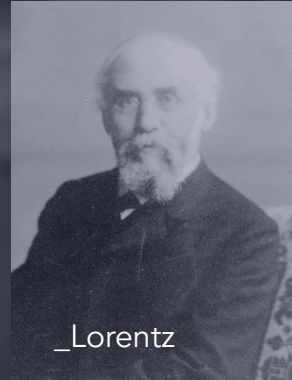
\_Einstein



\_Curie



\_Langevin



\_Lorentz



INSTITUT INTERNATIONAL DE PHYSIQUE SOLVAY  
 FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912



INSTITUTIONAL INSTITUTE OF PHYSICS AND CHEMISTRY  
 Founded by E. Solvay  
 XVIII Conference on Physics, The University of Texas at Austin, November 8, 1982



Xth Solvay Conference on Physics.  
 Topic : Quantum Optics.

Wednesday November 6 until Saturday November 9, 1991.



- 1. J. J. Condon
- 2. R. Feynman
- 3. R. F. Streater
- 4. R. J. Glauber
- 5. R. P. Feynman
- 6. R. J. Glauber
- 7. R. P. Feynman
- 8. R. J. Glauber
- 9. R. P. Feynman
- 10. R. J. Glauber
- 11. R. P. Feynman
- 12. R. J. Glauber
- 13. R. P. Feynman
- 14. R. J. Glauber
- 15. R. P. Feynman
- 16. R. J. Glauber
- 17. R. P. Feynman
- 18. R. J. Glauber
- 19. R. P. Feynman
- 20. R. J. Glauber
- 21. R. P. Feynman
- 22. R. J. Glauber
- 23. R. P. Feynman
- 24. R. J. Glauber
- 25. R. P. Feynman
- 26. R. J. Glauber
- 27. R. P. Feynman
- 28. R. J. Glauber
- 29. R. P. Feynman
- 30. R. J. Glauber
- 31. R. P. Feynman
- 32. R. J. Glauber
- 33. R. P. Feynman
- 34. R. J. Glauber
- 35. R. P. Feynman
- 36. R. J. Glauber
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- 39. R. P. Feynman
- 40. R. J. Glauber
- 41. R. P. Feynman
- 42. R. J. Glauber
- 43. R. P. Feynman
- 44. R. J. Glauber
- 45. R. P. Feynman
- 46. R. J. Glauber
- 47. R. P. Feynman
- 48. R. J. Glauber
- 49. R. P. Feynman
- 50. R. J. Glauber

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INSTITUTS INTERNATIONAUX FONDÉS  
 FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912

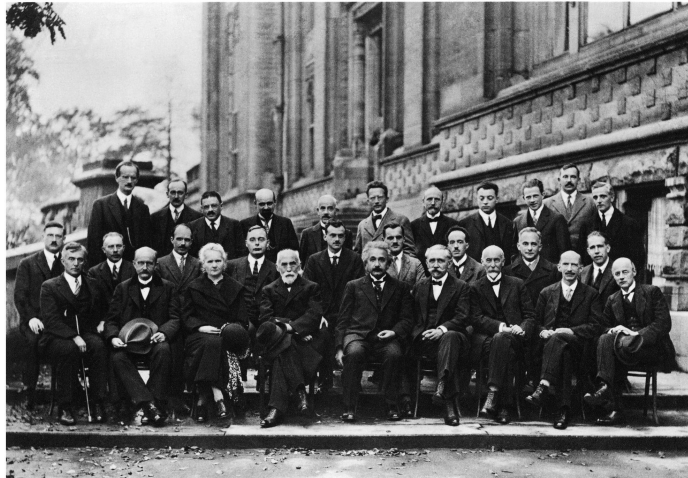


INSTITUTS INTERNATIONAUX FONDÉS FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912

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 FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912



INSTITUT INTERNATIONAL DE PHYSIQUE SOLVAY  
 CINQUIÈME CONSEIL DE PHYSIQUE - BRUXELLES, 1927



A. PICCARD, E. HENRIOT, P. EHRENFEST, ES. MERZEN, Th. DE DONDER, E. SCHRODINGER, E. VERSCHAFELT, W. PAULI, W. HEISENBERG, R.H. FOWLER, L. BRILLOUIN, P. DEBYE, M. KNUDSEN, W.L. BRAGG, H.A. KRUMHOLTZ, P.A.M. DIRAC, A.H. COMPTON, L. de BROGLIE, M. BORN, N. BOHR, J. LANGMUIR, M. PLANCK, Mrs. CURIE, H.A. LORENTZ, A. EINSTEIN, P. LANGMUIR, C.N. GUYE, C.T.A. WILSON, G.W. RICHARDSON  
 Absents: St. WIG. BRAGG, H. DELANDRINE et E. VAN AUDEL



INTERNATIONALE INSTITUUT VOOR FYSICA EN CHEMIE  
 Gesteeld door E. SOLVAY, v.z.w.  
 XVIII Raad voor Fysica - Brussel 20 november - 23 november 1912



INSTITUTS INTERNATIONAUX DE PHYSIQUE ET DE CHIMIE  
 Fondés par E. SOLVAY, A.S.B.L.  
 XVIII Conseil de Physique - Bruxelles 20 novembre - 23 novembre 1912

INSTITUT INTERNATIONAL DE PHYSIQUE SOLVAY  
 FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912



INTERNATIONALE INSTITUUT VOOR FYSICA EN CHEMIE  
 Gesteeld door E. SOLVAY, v.z.w.  
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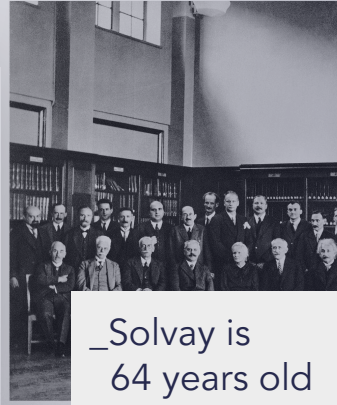
INSTITUT INTERNATIONAL DE PHYSIQUE SOLVAY  
 FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912



INSTITUT INTERNATIONAL DE PHYSIQUE SOLVAY  
 FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912



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 FONDÉ PAR E. SOLVAY - BRUXELLES 1911-1912



\_Solvay is  
 64 years old

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\_Ben Feringa,  
2015



\_Peter Schultz,  
2013

\_Susumu Kitagawa,  
2017



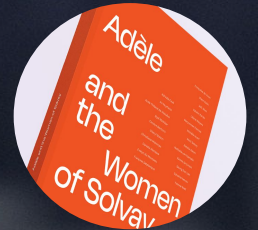
\_Carolyn Bertozzi,  
2020



\_Katalin Karikó,  
2022

\_Solvay is  
159 years old

\_Adèle and the  
Women of Solvay,  
May 2023





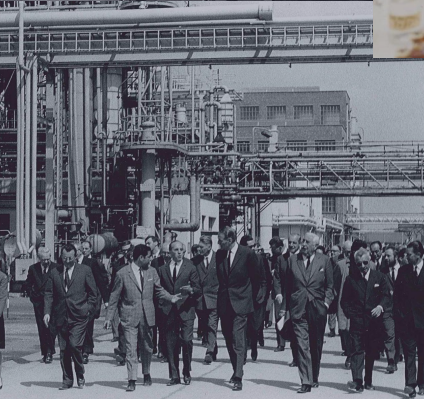
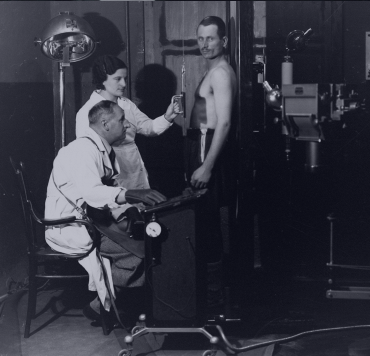


# Transmission

\_Solvay is  
98 years old

\_Solvay is  
153 years old







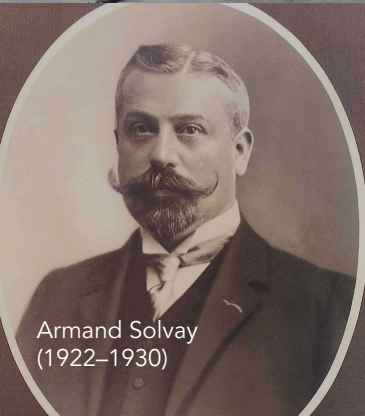


Ernest Solvay  
(1863–1922)

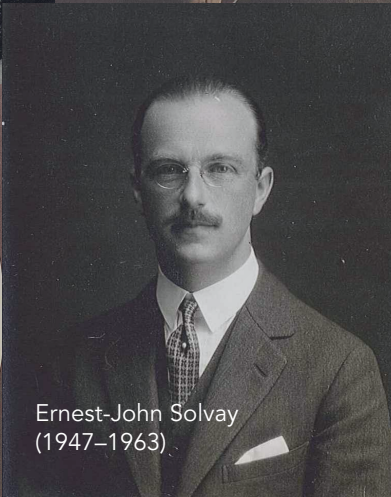
Alfred Solvay  
(1863–1894)



Louis  
Solvay  
(1930–1947)



Armand Solvay  
(1922–1930)



Ernest-John Solvay  
(1947–1963)



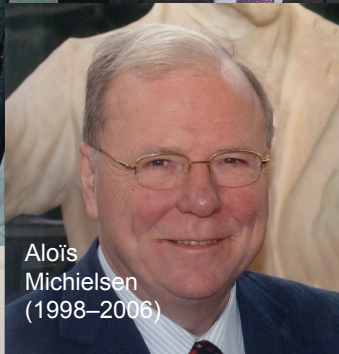
René Boël  
(1964–1971)



Jacques Solvay  
(1971–1986)



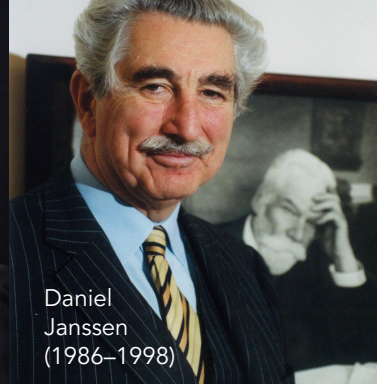
Jean-Pierre  
Clamadieu  
(2012–2019)



Aloïs  
Michielsen  
(1998–2006)



Christian Jourquin  
(2006–2012)



Daniel  
Janssen  
(1986–1998)



Ilham Kadri  
(2019- now)



1

\_ Transmitting  
a solid  
performance







\_Solvay is  
159 years old





EBITDA

We delivered 12.1%  
CAGR (organic)

Versus mid single digit target (2019-2024)

\_Solvay is  
159 years old





# FCF

# We reach + 6.1 pp

Target: >30% (2019-2024)

\_Solvay is  
159 years old





# ROCE

# We reach +7.9pp

Target: > 11% (2019-2024)

\_Solvay is  
159 years old





20  
22

performance

\_Solvay is  
159 years old



# €13.4bn

## Net Sales

+25.6% organic yoy

+24.4% pricing

+1.3% volumes

\_Solvay is  
159 years old

2022 vs 2021





€3.2bn  
EBITDA Underlying

+28.7% organic yoy

---

24.0% EBITDA margin

---

\_Solvay is  
159 years old

2022 vs 2021



# €1.1bn

## Free Cash Flow From continuing operations

15th quarter of positive FCF

---

FCF conversion at 34%

---

Solvay is  
159 years old

2022 vs 2021





16%  
ROCE

New record level

Versus 11.4% end of 2021 and 8.1% end of 2019

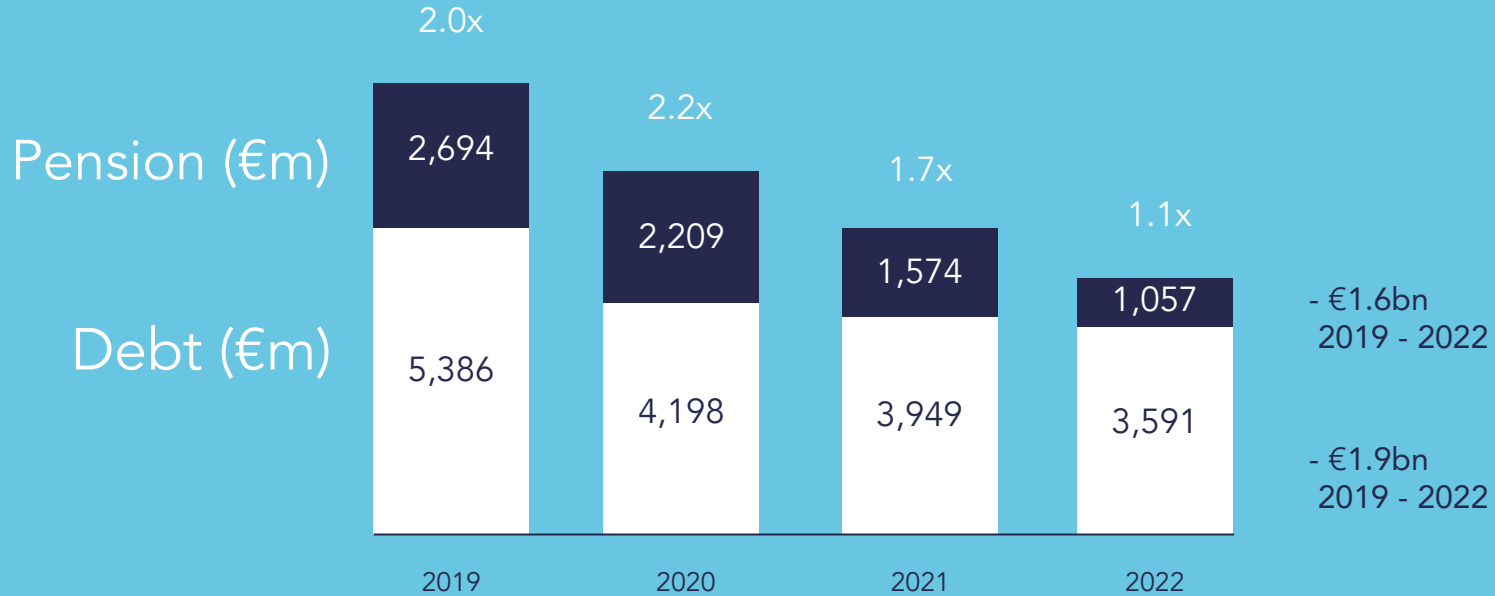
Solvay is  
159 years old



1.1x  
Debt

\_Solvay is  
159 years old





\_Solvay is  
159 years old



€4.05  
Dividend per share

+ €20 cents

---

\_Solvay is  
159 years old

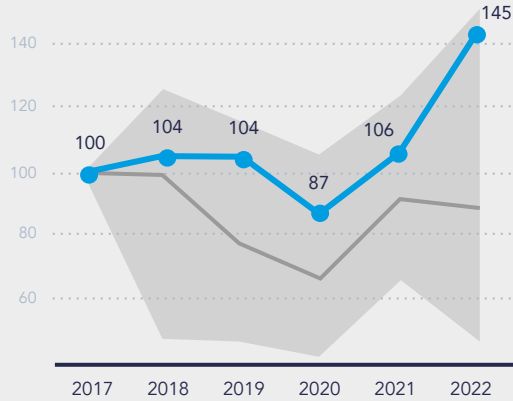
2022 vs 2021





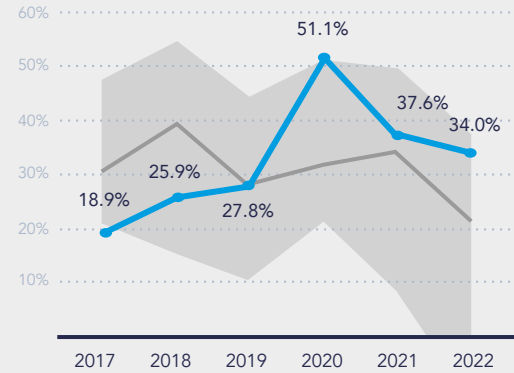
## EBITDA

Growth



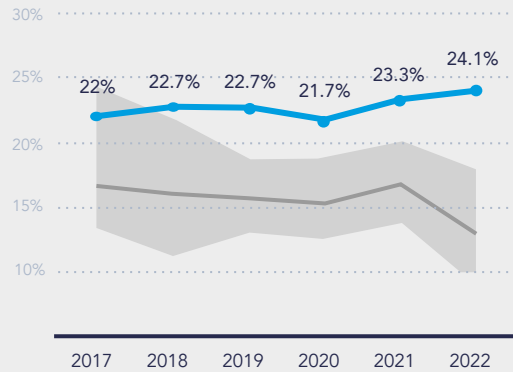
## Cash

FCF Conversion



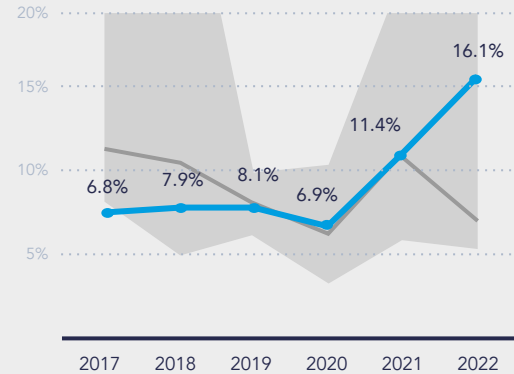
## Profit

EBITDA Margin



## Returns

ROCE



Solvay data: company's reported

Considered peers: Akzo Nobel, Arkema, BASF, Clariant, Covestro, DSM, Evonik, Lanxess

\_Solvay is  
159 years old



€1 billion of  
investments in sustainable  
growth

\_Solvay is  
159 years old



1



A new PVDF  
line in China

2



Increased capacity  
of sodium  
bicarbonate  
in Bulgaria

3



Rare Earths hub  
in La Rochelle,  
France



\_Solvay is  
159 years old

# Q1 - 2023



€3.2bn

Net Sales



+2%

organic

€839m

EBITDA  
Underlying



+22%

organic

€125m

FCF



>30%

16.7%

ROCE



+4.4pp

vs Q1 2022



# Outlook upgraded\*

## EBITDA

Underlying

**+2% to -5%**  
organic growth

---

 Previously between -3% and -9%

## Free cash flow

continuing operations

**~€900 m**

---

 Previously ~€750 m

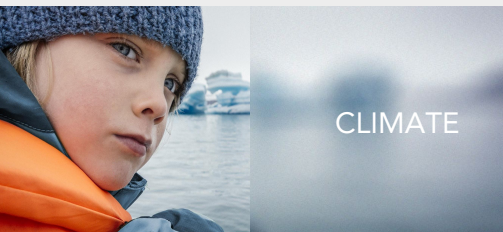


# 2

\_Transmitting  
One Planet's  
foundations



# Solvay One Planet ambition

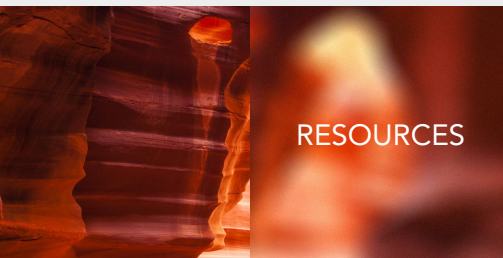


## CLIMATE

Align **greenhouse gas emissions** with Paris Agreement

Phase out **coal**

Reduce negative pressure on **biodiversity**



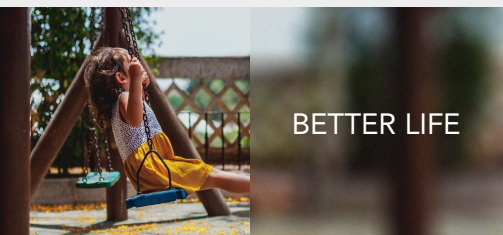
## RESOURCES

Increase **Sustainable Solutions** revenues

Increase **Circularity**

Reduce non-recoverable **industrial waste**

Reduce intake of **freshwater**



## BETTER LIFE

**Safety** is a priority

**One Dignity**: The DEI program



2030 goals, vs. 2018

Reduce by 31% (-2%/y)

Achieve 100%

30% reduction

Achieve 65% vs 50%

Achieve 15% vs 7%

30% reduction

25% reduction

Aim for zero accident

**Parity**

for mid & senior management

\_Solvay is 157 years old



Paris  
agreement  
(2020)

Carbon  
neutrality by  
2050  
(2021)

Scope 1, 2 & 3  
targets validated  
by SBTi  
(2023)

Solvay is  
160 years old



# 59 projects enable the energy transition



taking 2 million cars off the road or -3.5 Mt of CO<sub>2</sub> per year

Renewable Energy  
Solar, biomass, wind & biogas

Process Efficiency  
Electrification, waste heat recovery, equipment optimization,

Other  
Energy mix, industrial emissions



-4%\*



Rheinberg  
Germany

\_Solvay is  
156 years old

\*Group Total GHG emission





-2%\*



Dombasle  
France

Solvay is  
159 years old

\*Group Total GHG emission



# Ernest Solvay 2.0



\_Laboratory testing of soda ash



\_Dombasle site - pilot



## Targeting

- ❖ 50% less CO<sub>2</sub>
- 
- ❖ Less water, brine and limestone consumption
- 
- ❖ Zero limestone discharge Zero limestone discharge by 2050





-2%\*



Devnya  
Bulgaria

\*Group Total GHG emission

\_Solvay is  
159 years old





-1.5%\*



Green River  
US

\*Group Total GHG emission

\_Solvay is  
159 years old



# The shift to renewable electricity



40 sites,  
United States

100% of 9 operation  
sites in China

\_Jasper Solar Farm, South Carolina, US  
(~ 500 soccer fields)



Solar facility project with Iberdrola,  
Tavaux and Saint Fons plants, France

Voikkaa site, Finland,  
100% wind-generated electricity

\_Solvay is  
159 years old



Reaching  
2x Paris  
Agreement



Progress

Reduce our GHG  
emissions (scope 1 & 2)

-19%  
-15% structural

Phase out coal  
solid fuels

-15%

Reduce our GHG  
scope 3 emissions

-18%  
structural

2030 targets

-31%

-100%

-24%

\_Solvay is  
159 years old

Vs 2018

20  
30





9%

Sales of  
circular products

\_Solvay is  
159 years old



1



Batteries

---

2



Thermoplastic  
Composites

---

3

More than  
**€10bn**  
growth  
opportunity

Green  
Hydrogen

---

4



Renewable  
Materials and  
Biotechnology

---







Bio-based guar  
seeds for hair  
care solutions

Solvay is  
159 years old





Rice bran for  
natural vanillin

Solvay is  
159 years old





Recycling  
of single-use  
surgical  
instruments

Solvay is  
159 years old



Rapeseed oil  
and sugar for  
soap and  
shampoo

\_Solvay is  
159 years old







We  
Care

We  
Dare





We bond people,  
ideas and elements  
to reinvent progress



\_Solvay is,  
156 years old





€9.5M

bonus for  
employees most  
affected by  
inflation

---

€15M

Global Performance  
Sharing Plan budget  
for "non-executive"  
employees

---

\_Solvay is  
159 years old



Employee Share  
Ownership Centre prize  
for the Solvay Employee  
Share Purchase Plan

 EsopCentre

5,000

employees are  
shareholders

28%

employee  
participation to  
the first employee  
share plan

Solvay is  
159 years old





\_Solvay is  
158 years old



>642 babies

have benefited from  
Solvay's universal 16-week  
parental leave

# First

gender pay gap  
publication

# 951

corrective measures  
in place

# 450

junior female  
managers followed  
the A Effet program

# 50%

van vrouwen in de  
Solvay Leadership Community

\_Solvay is  
159 years old

\_Solvay Citizen Day,  
India, 2022



> 100 sites  
and 40% employees  
participating in  
Citizen Day on DEI

\_Solvay Citizen Day, China, 2022

9 Employee resource groups

# 26,5%

of women at middle  
and senior management  
(+2,2% versus 2019)



唯有你  
骑乐无穷  
2022 00000000





1,200

leaders trained  
– in 2022

380

trainings on  
unconscious bias

>100

managers followed  
inclusive leadership workshops

15,000

hours of mental health & Insight  
Principles training since 2019



\_Solvay is  
159 years old





20

different courses  
in the Sales'  
Academy

>900

sales people trained

\_K Fair, Germany, 2022

\_Solvay is  
159 years old





79%  
engagement  
score

75%  
of our employees  
proud to work at  
Solvay

70%  
would recommend the company  
as a good place to work!

Solvay is  
159 years old



# Solvay CEO Awards



\_Solvay is  
159 years old





## MSCI

ESG RATINGS

A rating  
(scale AAA to CCC)



Reporting Matters  
In the top 10 out of 230



Recognition  
on Biodiversity



B- rating  
Prime company



#6/39 in the sector



FTSE4Good

Member of FTSE4Good



Top 2%



A-  
Scale A to D



C-  
(from 44 to 15)

\_Solvay is  
160 years old



Local  
communities

€10  
million  
donated

53  
projects

14  
countries

\_Solvay is  
159 years old

\_Devnya hospital





€1.5m  
to support  
Ukraine

Solvay is  
159 years old

Ukraine





€2m

For families  
and communities  
impacted by  
floods in  
Belgium

Solvay is  
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Pepinster, Liège,  
Belgium, 2021





€500,000  
to support  
Turkey & Syria

\_Solvay is  
159 years old



3 \_Transmitting  
two companies



From  
one Solvay

to two  
Solvays

\_Solvay is  
160 years old



# Solvay has transformed in the past 4 years



G.R.O.W.



Sell of Polyamides



Solvay One Planet



New Code of Integrity



Growth platforms



New Leadership structure



Investment in batteries



Commitment to phase out fluorosurfactants by 2026



Targets for Scope 3 emissions

2019

2020

2021

2022

New Exco with new mandate

New Purpose, values, best behaviors

Solidarity Fund

16 weeks co-parental leave

Solvay One Dignity

Carbon neutrality

Assess and close gender pay gaps

First employee share purchase plan

Unveiled Power of Two project





Preparing  
the split

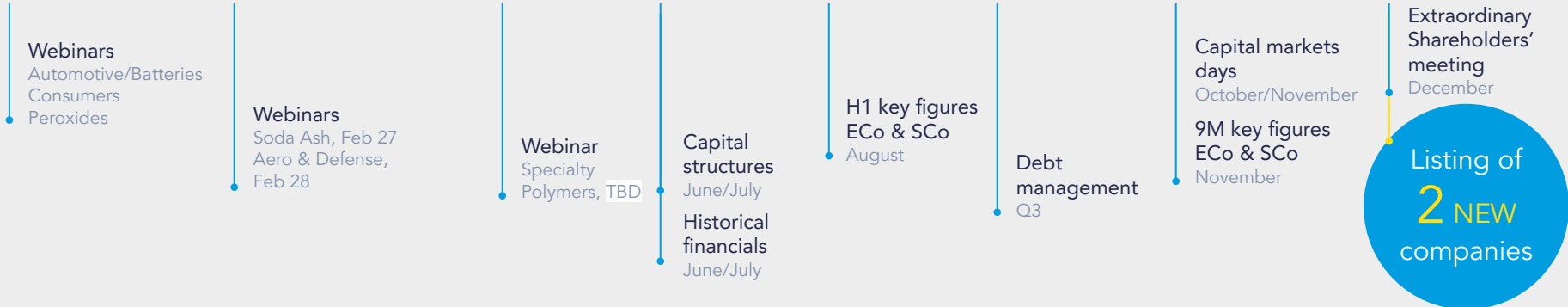
while  
conducting  
business

\_Solvay is  
160 years old





2022 Q1 Q2 Q3 Q4 2023



Solvay is 160 years old

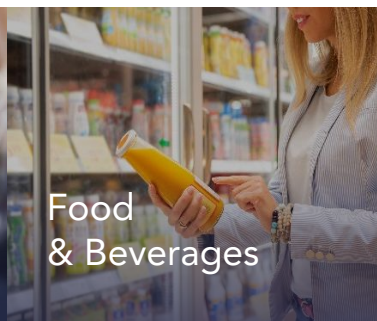
This timetable is indicative and reflects a likely scenario. ECo and SCo are not reflective of the future company names.

## MARKET POSITION

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

€5.5bn

2022 Net sales

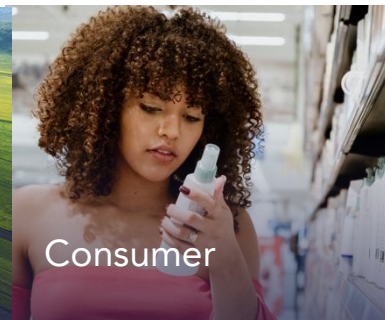
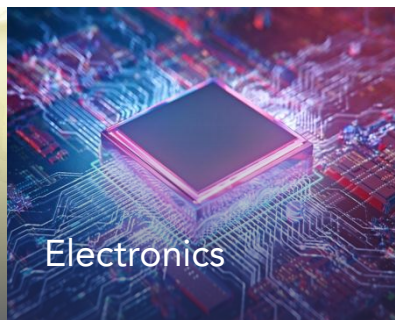




## MARKET POSITION

MATERIALS			
	Specialty Polymers	#1	High-performance polymers; leading position in thermoplastic composites Battery Materials, Thermoplastic composites, Green Hydrogen, Renewable materials & Biotechnology
	Composites	#2	Composites for civil aerospace
		#1	Composites for defense
CONSUMER & RESOURCES	Novecare	#2	Specialty surfactants and polymers
	Aroma	#1	Flavors & Fragrances; Natural Vanillin
	Technology Solutions	#1	Mining reagents
	Oil and Gas Solutions	#1	Biocides for recycled water

€7.8bn  
2022 Net sales





# EssentialCo SpecialtyCo Manifestos

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160 years old





For  
generations

to come



Progress beyond