

**ARKEMA**

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**Lead for sustainable growth**

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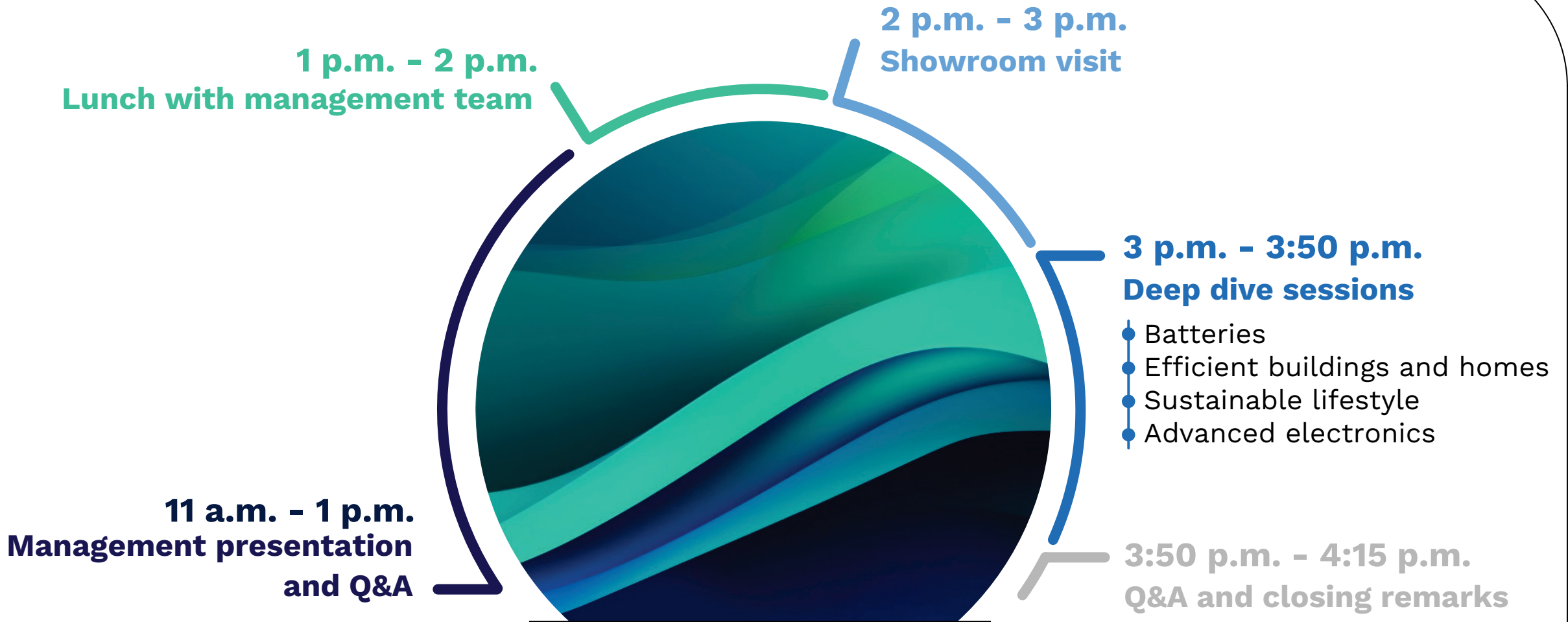
Strategy Update

27 September 2023

**CAPITAL  
MARKETS  
DAY 2023**

**MA**

# Agenda for today



# Introduction

Our last Strategy Update, which took place in April **2020** in the unusual Covid context, set **ambitious targets for 2024**

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This document outlines our significant **financial and non-financial achievements since 2020**, in a volatile and challenging environment

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We are now sharing the **Group's growth strategy and targets for 2028**

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**Cutting-edge innovation** and attractive end-markets with superior growth potential will be highlighted in the showroom and focus sessions

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CAPITAL  
MARKETS  
DAY 2023

Arkema is a  
**high-performance  
Materials** company





# Our world is being transformed by disruptive megatrends



**Natural resources  
preservation and  
decarbonization**



**Urbanization  
and living  
standards**



**Transition  
to electric  
mobility**



**Technology  
disruptions  
and AI**



**Social change  
and consumer  
behaviors**

Our vision is shaped by the accelerating demand for high-performance materials



A **SIGNATURE**

FOR A **VISION**

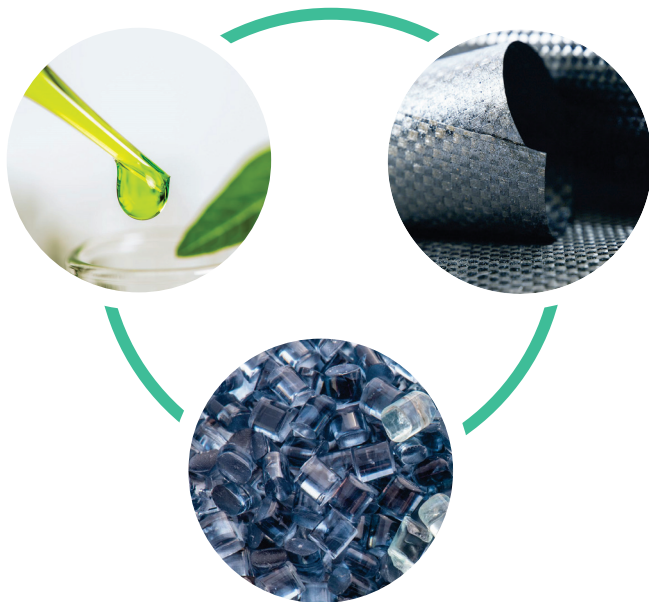
## INNOVATIVE **MATERIALS** FOR A SUSTAINABLE WORLD

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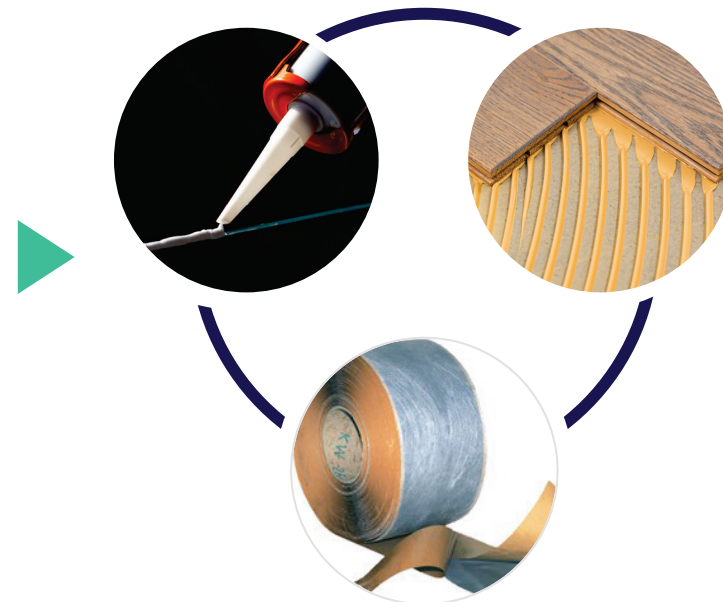
“Be the Specialty Materials leader, **offering the most innovative and sustainable solutions** to address our customers’ current and future challenges”

## **3** unique and complementary capabilities to seize opportunities from global megatrends

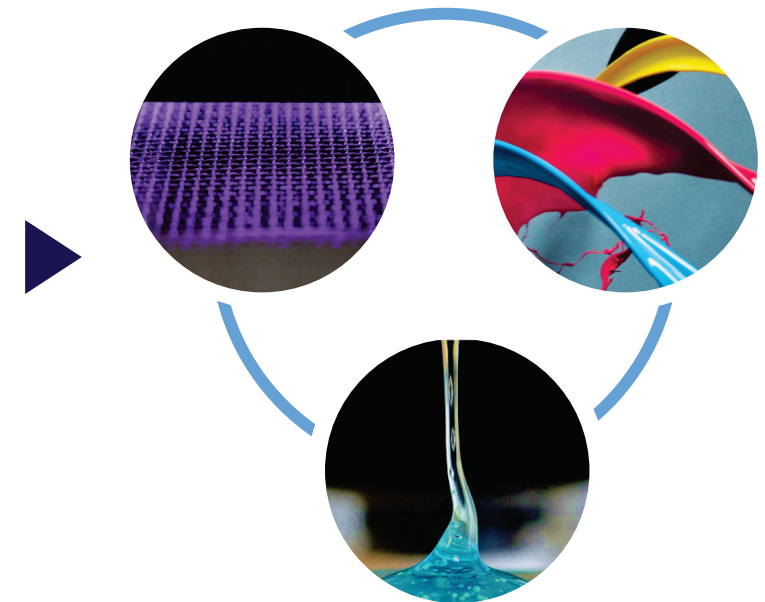
### Creating and strengthening materials



### Bonding and assembling materials

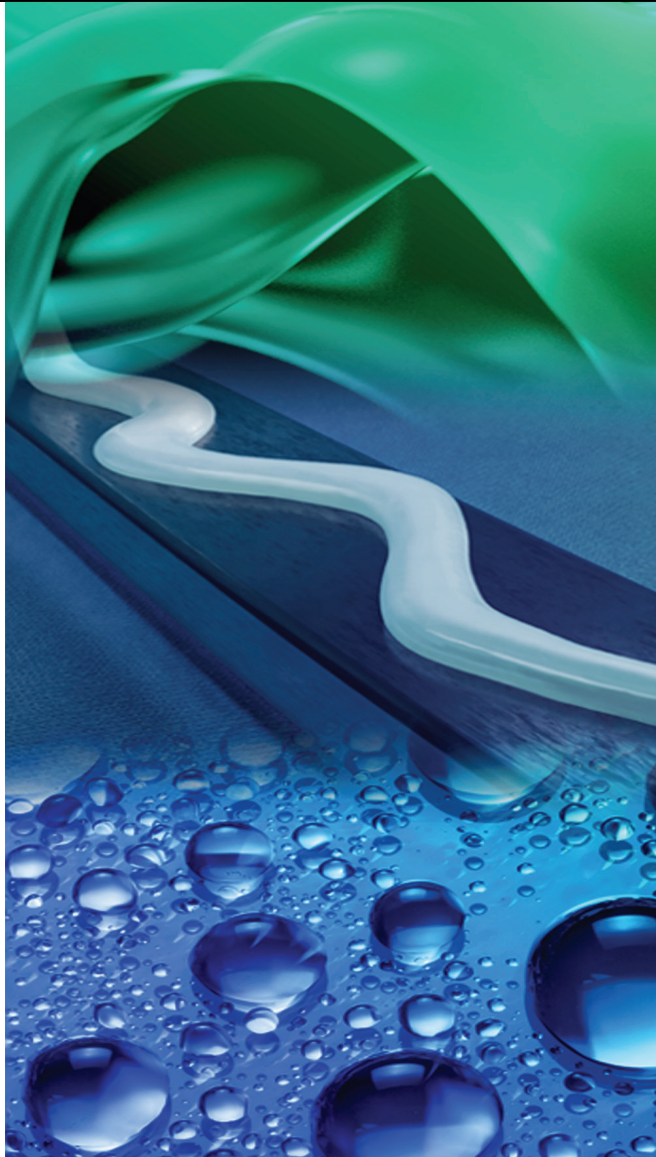


### Protecting and modifying materials

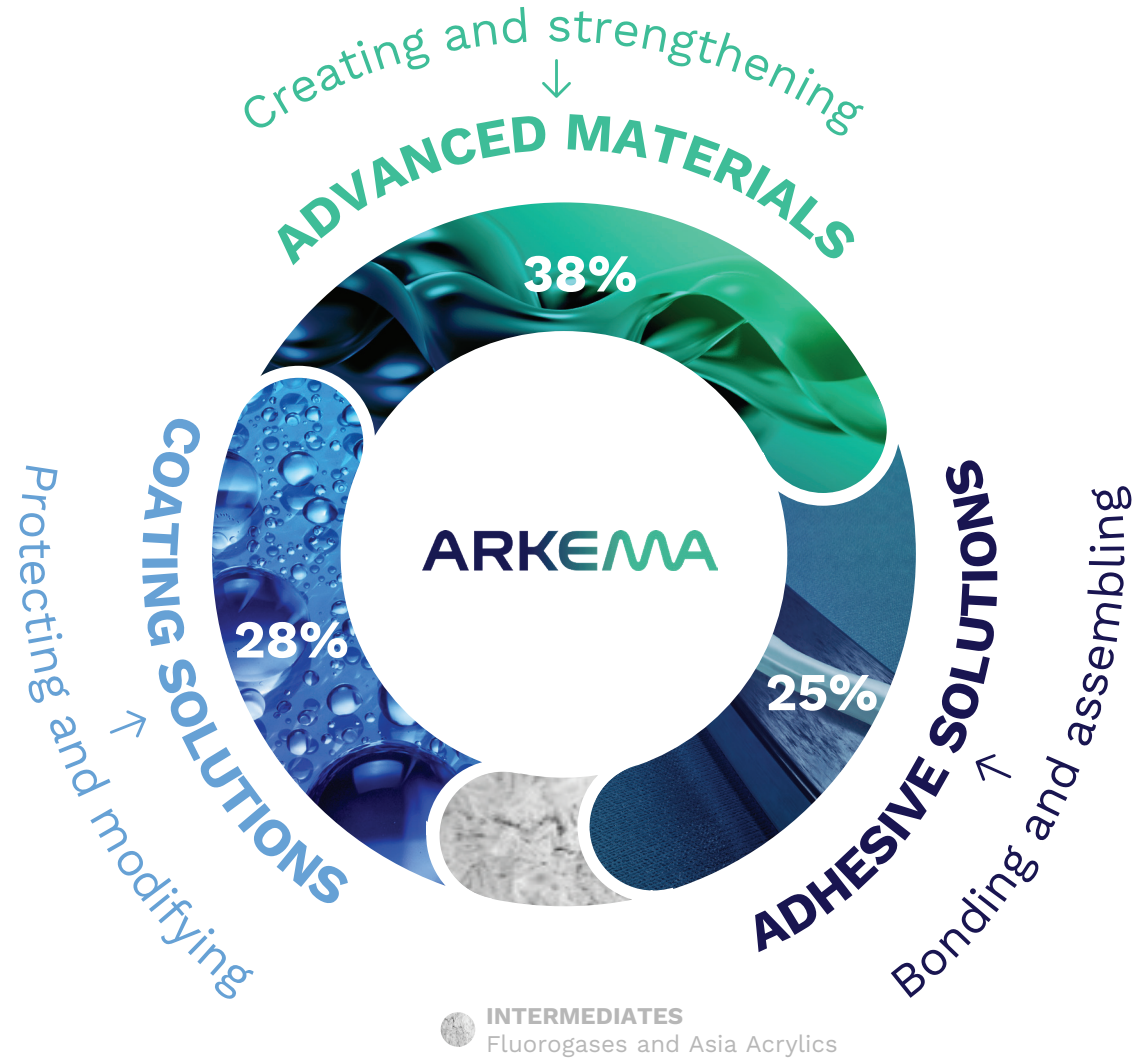




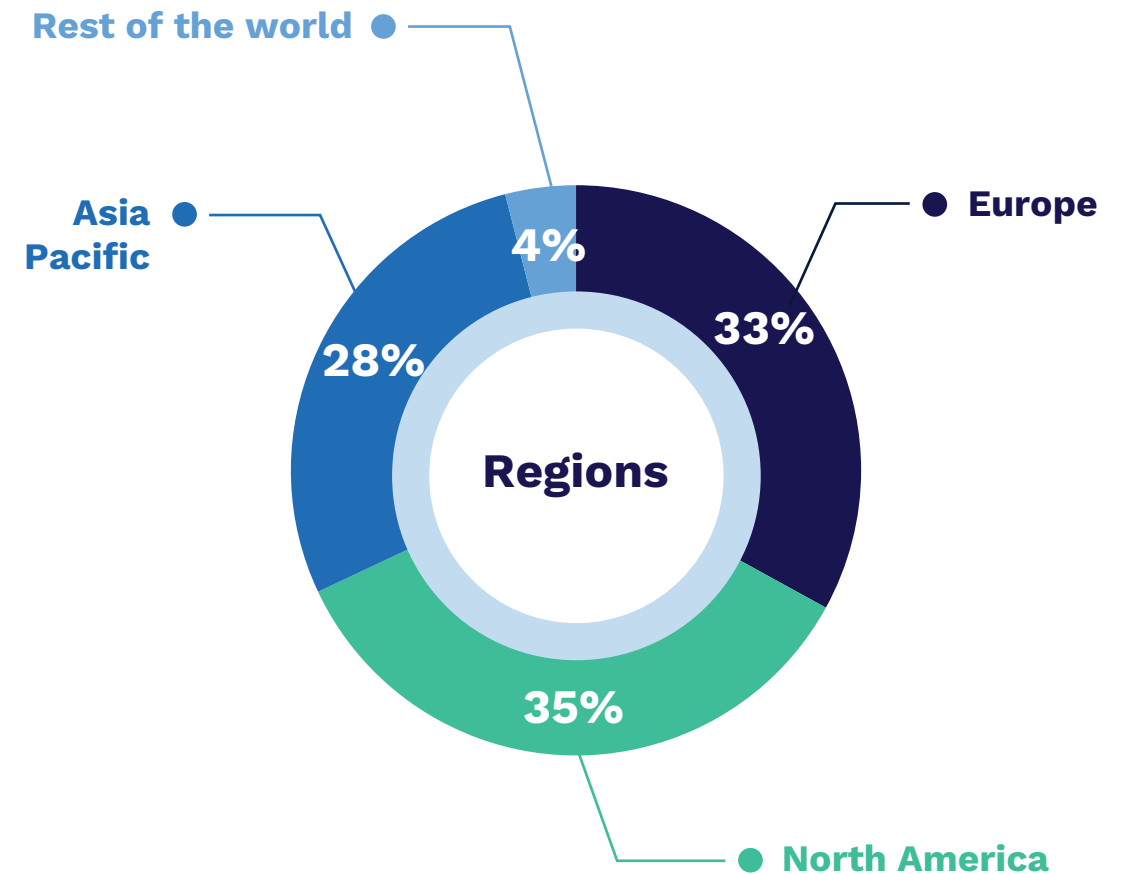
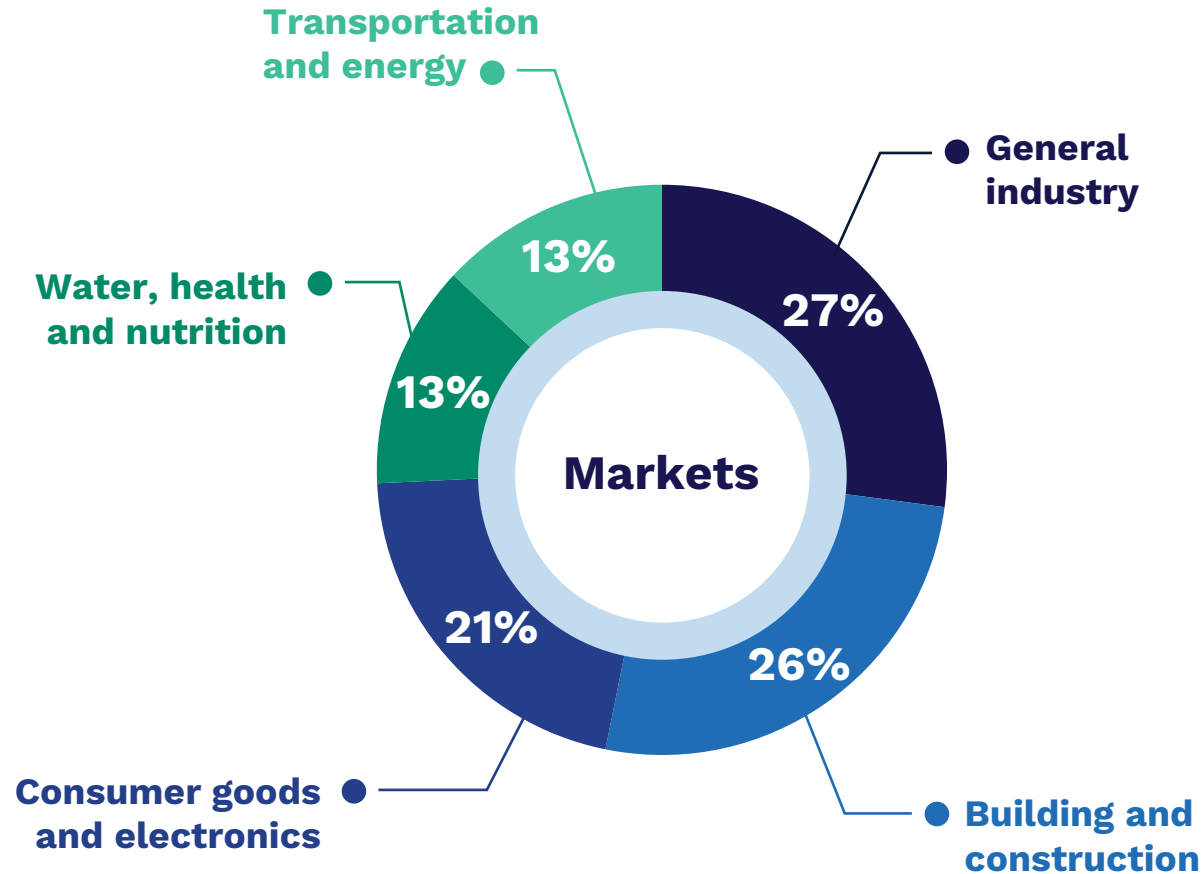
# These capabilities define our 3 Specialty Materials segments



2022 sales



# Our segments serve attractive end-markets with a balanced geographical presence



2022 sales

# Our global footprint is the backbone of our strong customer intimacy



## R&D

- 1,800 researchers
- 16 R&D centers
- >200 filed patents/y
- €270m spendings

## Manufacturing

- ~€650m capex/y  
55% growth incl. exceptional capex<sup>1</sup>  
45% maintenance
- 148 production sites

**21,100** employees  
Presence in **55 countries**

1. Corresponding to capacity expansion of PA11 in Asia and Nutrien partnership



CAPITAL  
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DAY 2023

We have achieved  
a strongly  
value creative  
transformation



# Our talents have been the cornerstone of our success



## Employee engagement

**77%** of employees fully engaged  
*Arkema Cares global internal satisfaction survey*

**7.8%** of Arkema shares held by employees  
*0.7% in 2006*

2022 data



**Increasing diversity**  
in leadership positions

**26%**  
women

**40%**  
non-French

2022 data



## Employer of choice

Certified as a **Top Employer**  
in 7 countries

Among the **world's best employers**  
by Forbes and  
TIME Magazine



## Philanthropy

Major partner of **Sport dans la Ville**  
Promoting integration for youth  
from disadvantaged neighborhoods

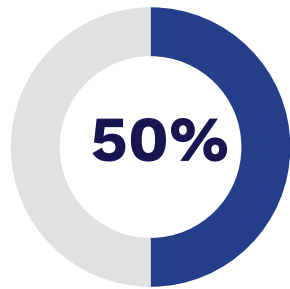
### **Habitat for Humanity Philadelphia**

Partnership and volunteering to provide  
families with safe & comfortable homes

# Our business profile has been significantly upgraded

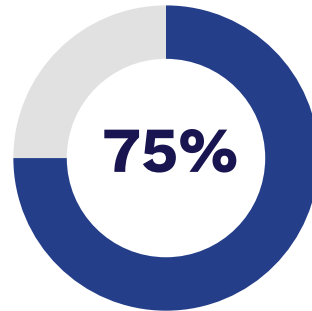
2006

Sales breakdown

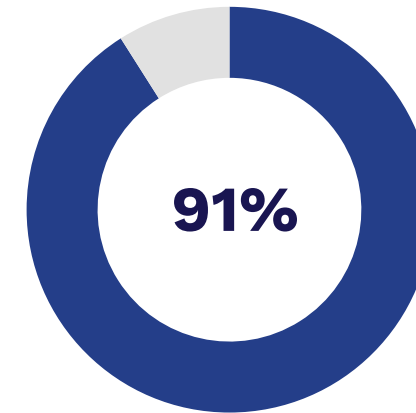


● Specialty Materials ● Intermediates

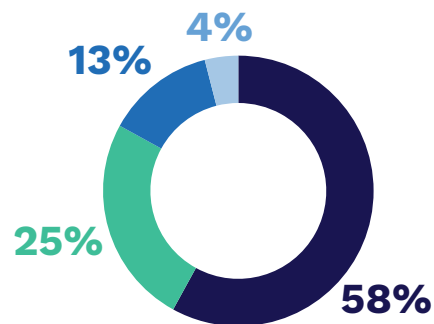
2012



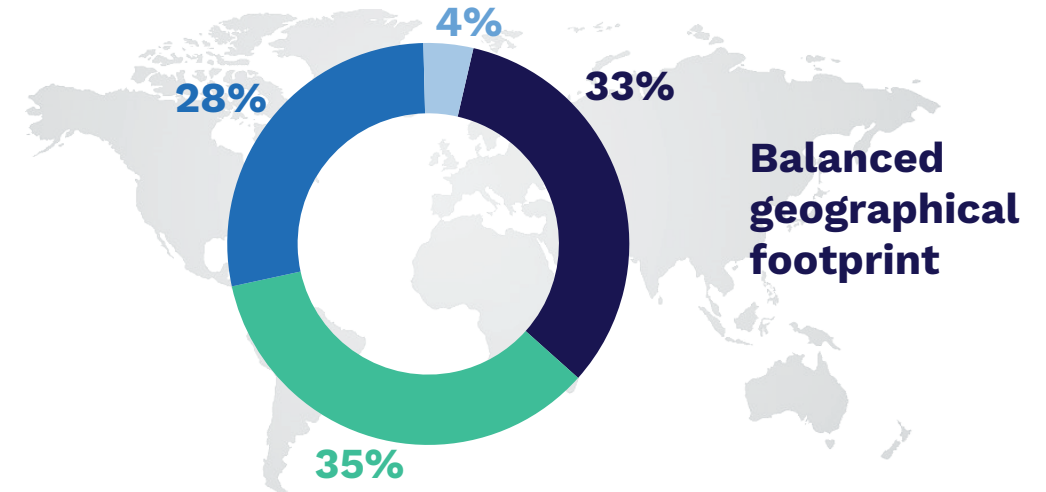
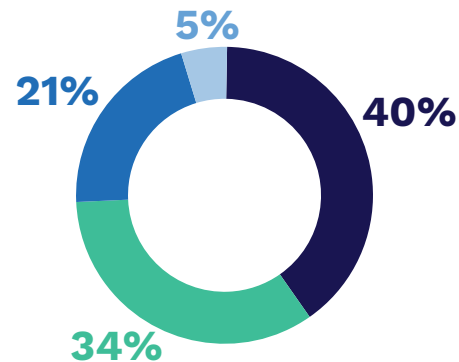
2022



**Towards  
100%  
Specialty  
Materials**



● Europe ● North America ● Asia Pacific ● Rest of the world



**Balanced  
geographical  
footprint**



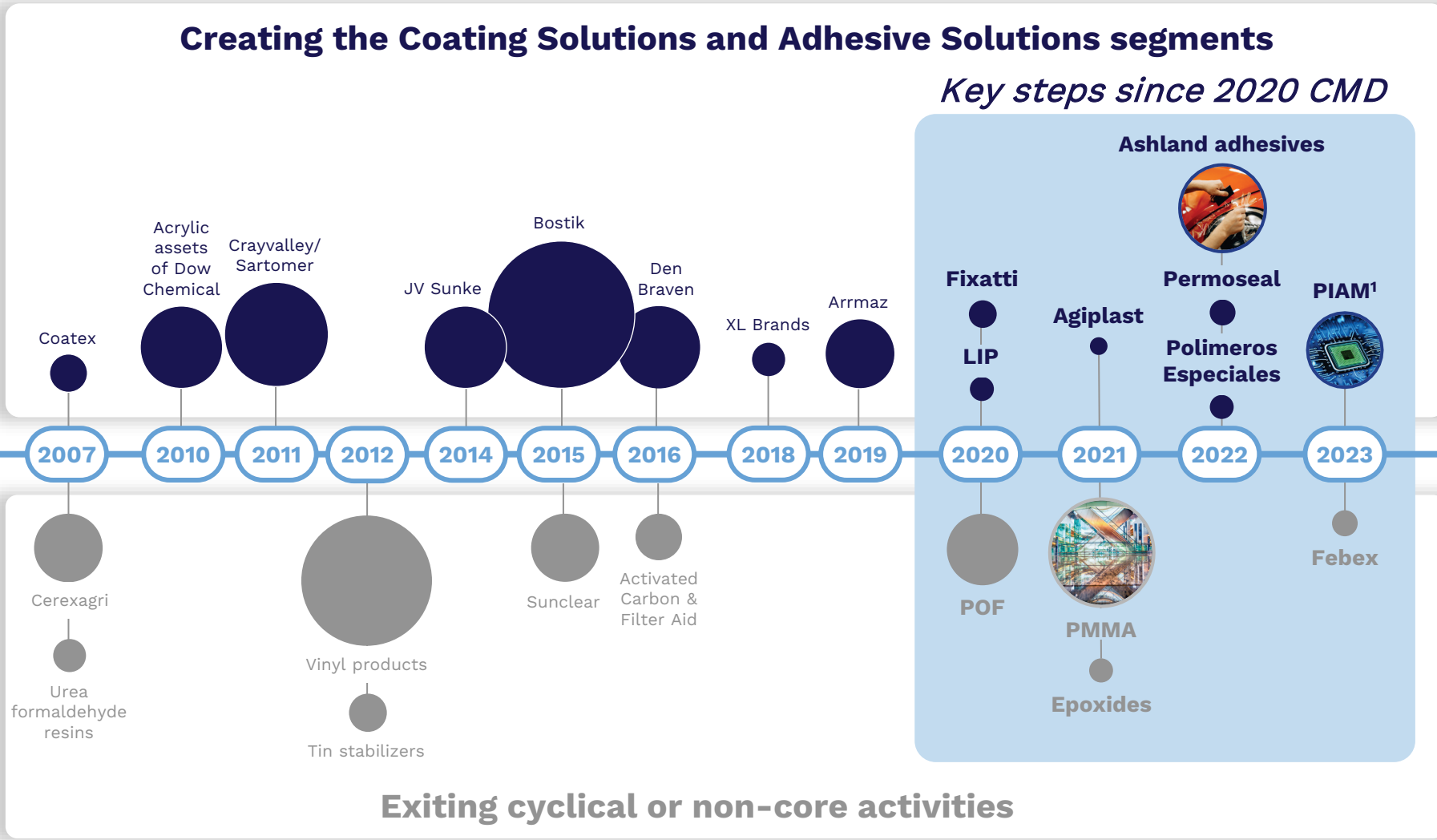
# Portfolio management has been a key enabler

## Creating the Coating Solutions and Adhesive Solutions segments

Key steps since 2020 CMD

ACQUISITIONS

DIVESTMENTS



26 acquisitions  
c. €5bn sales

Average EV/EBITDA  
**11.2x**  
↓  
**6.9x**  
post synergies<sup>2</sup>

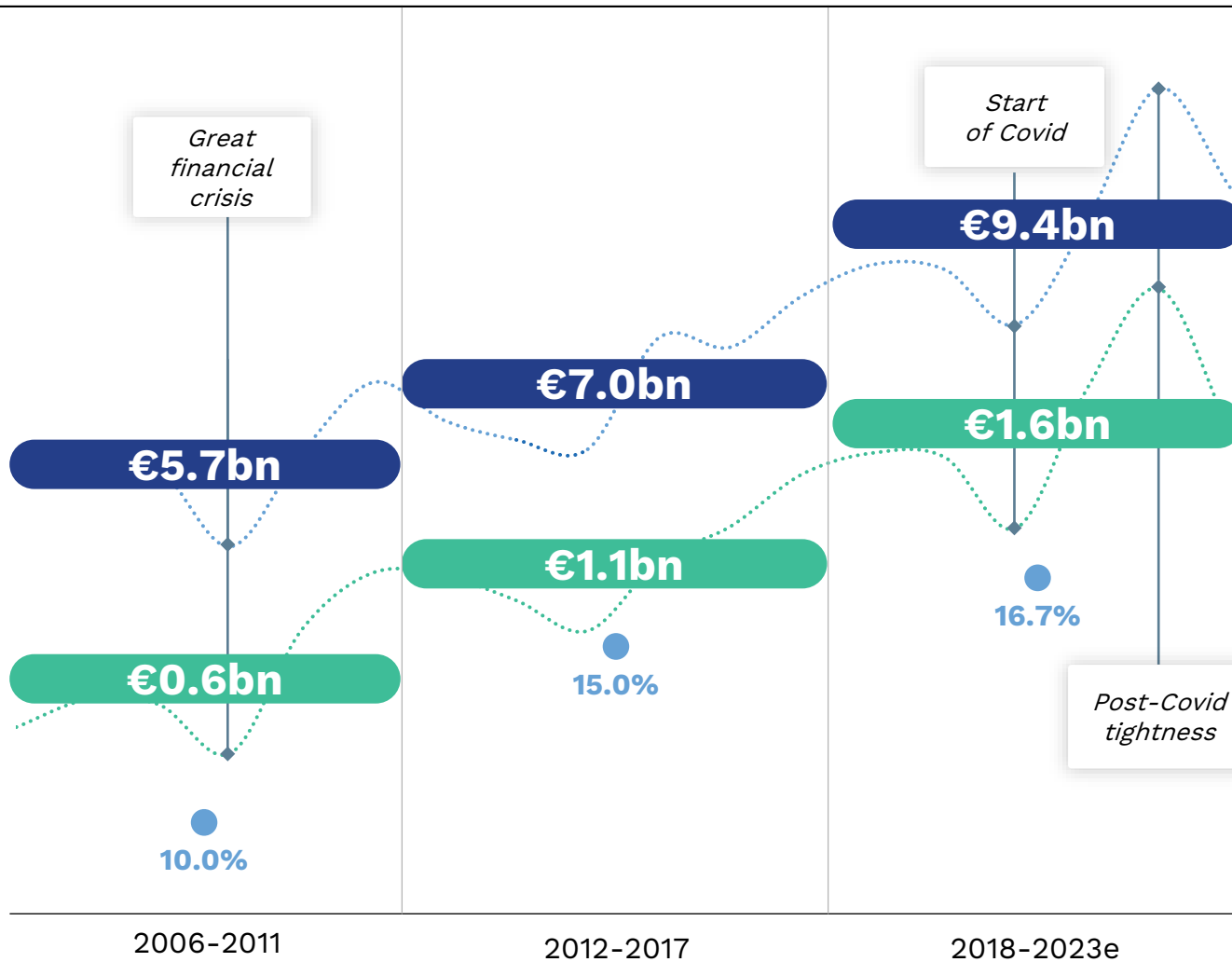
20 divestments  
c. €3bn sales

Average EV/EBITDA  
**9.6x**

Exiting cyclical or non-core activities

1. Subject to the approval of relevant legal authorities, closing expected end-23  
2. The calculation includes the full amount of synergies expected after 5 years for Ashland adhesives and PIAM, and the 2022 figures for the other acquisitions

# We strongly improved our financial performance



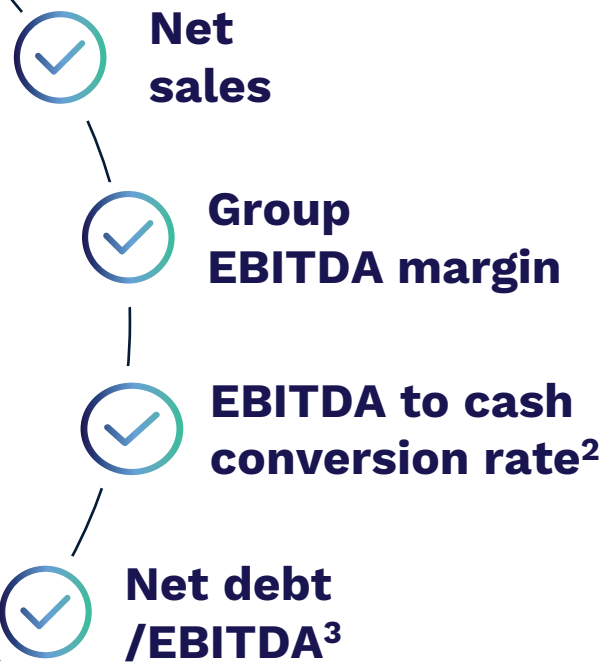
Average per year over the period

**Sales**   **EBITDA**   **EBITDA margin**

	ARKEMA	Diversified peers <sup>1</sup>	Specialized peers <sup>2</sup>
<b>CAGR sales<sup>3</sup></b> 2010 to 2023e	<b>+3.9%</b>	+1.7%	+4.6%
<b>CAGR EBITDA<sup>3</sup></b> 2010 to 2023e	<b>+5.1%</b>	+0.8%	+5.4%
<b>TSR</b> 01/2010 to 08/2023	<b>+398%</b>	+106%	+273%

1. Lanxess, Evonik, Solvay, Clariant, Wacker, BASF, Celanese  
 2. Victrex, EMS, HB Fuller, Henkel Adhesives  
 3. Compound annual growth rate with 2023e data as per Nasdaq consensus

# We are on track to reach our 2024 targets



## 2024 Ambition<sup>1</sup> from 2020 CMD

€10-11bn

c. 17%

>40%

<2x

## Average 2020-2023

€9.7bn

16.7%

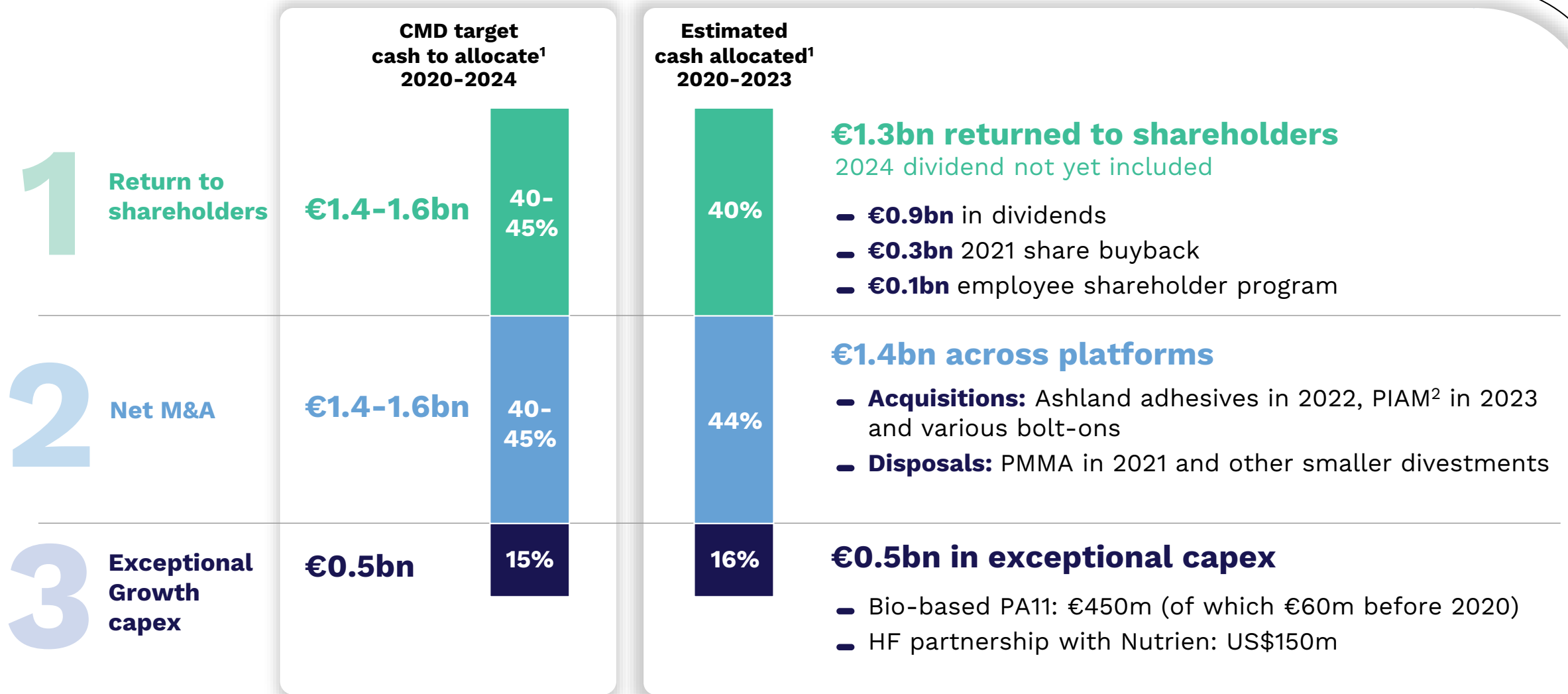
48%

1.4x

1. In normalized macroeconomic and market conditions as defined in the "Strategy Update" presentation dated 2 April 2020
2. Free cash flow excluding exceptional items (exceptional capex and non-recurring cash flow) divided by EBITDA
3. Includes payment of PIAM acquisition (subject to the approval of relevant legal authorities, closing expected end-23)

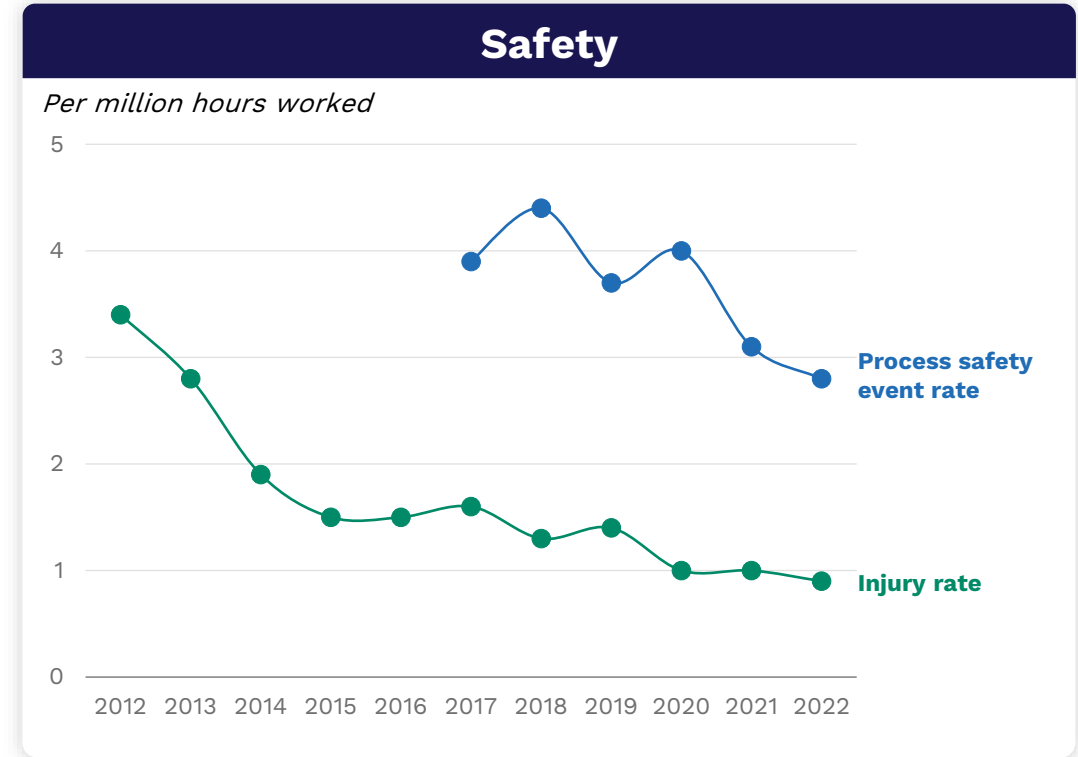
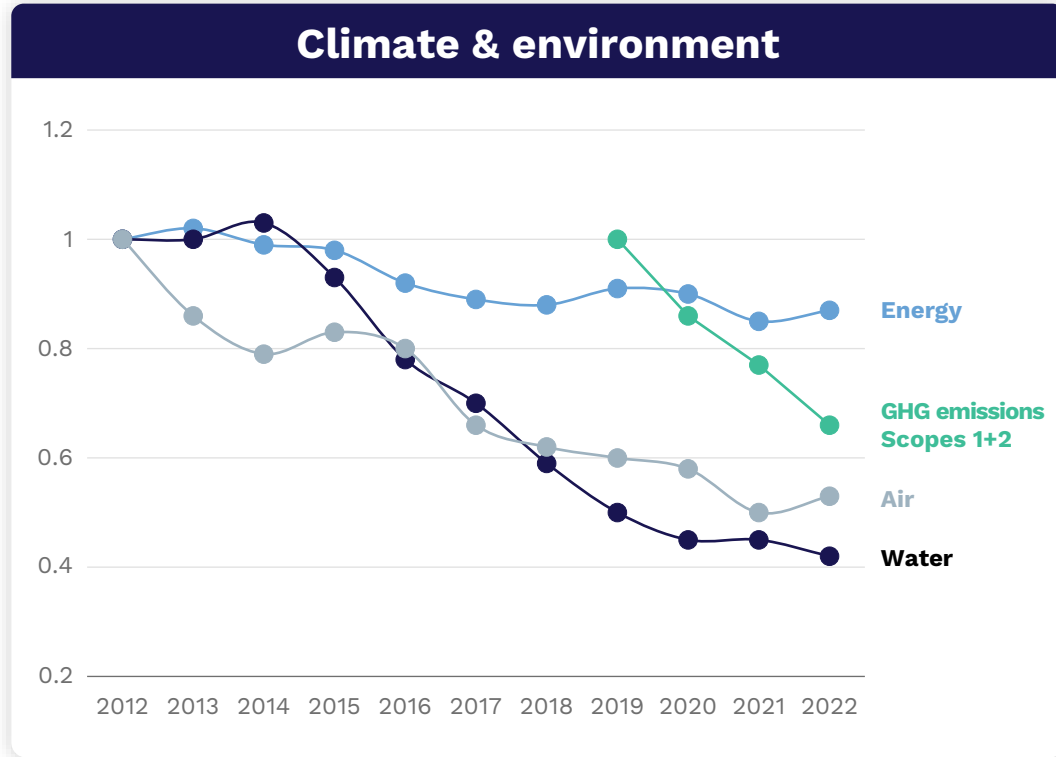


# Our cash allocation is fully in line with our 2024 targets



1. Cash to allocate/allocated = Cash from operations minus recurring capex  
 2. Subject to the approval of relevant legal authorities, closing expected end-23

# We have strengthened our CSR performance over the years



**1.5°C trajectory  
by 2030 validated  
by SBTi**

**3<sup>rd</sup> place  
DJSI World 2022**  
*“Chemicals” category*

S&P Global  
Sustainability  
Yearbook 2023

Moody’s ESG Solutions  
**69**  
Superior percentile  
across all sectors

Included in  
**CAC40<sup>®</sup> ESG**  
**CAC<sup>®</sup> SBT 1.5<sup>°</sup>**  
indexes

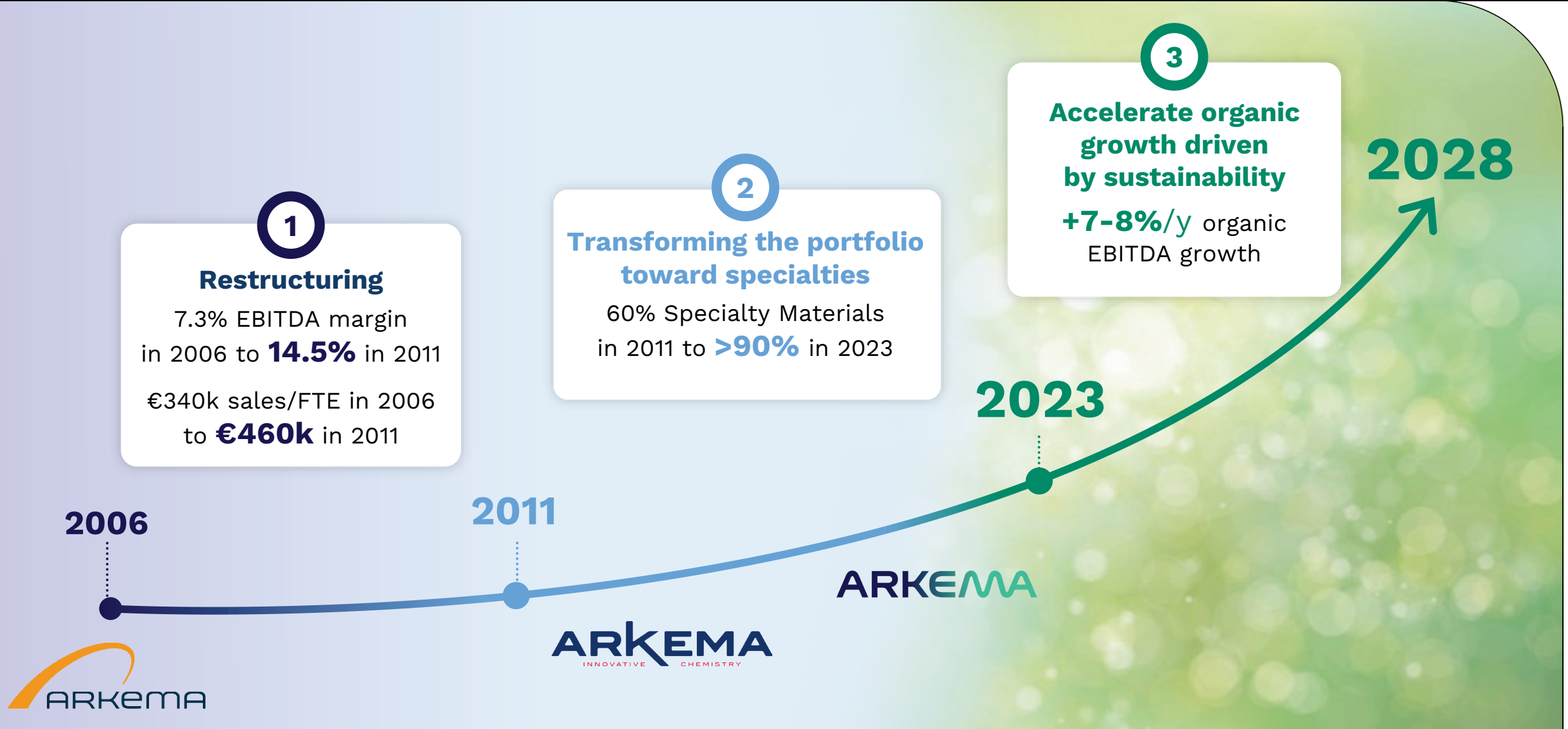
**CAPITAL  
MARKETS  
DAY 2023**

**Our 2028 ambition**





# We are now ready to progress to the next phase



# Our strategy underpins ambitious financial objectives

## 2028

c. **€12bn**

○ **Sales**

c. **18%**

○ **EBITDA  
margin**

**Sales +4%/y**

**EBITDA +7-8%/y**

○ **Organic  
CAGR**  
over 2024-28



○ **Strict financial discipline**

+

**Net debt to EBITDA  $\leq 2$**   
Solid investment grade rating

+

**Operating cash  
conversion rate<sup>1</sup>  $\sim 70\%$**

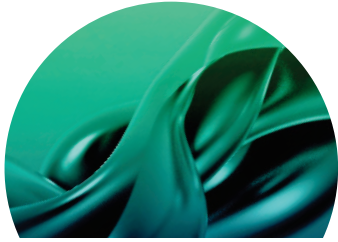
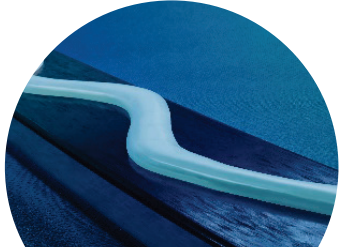
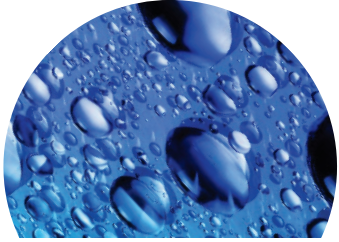
+

**ROCE  $\sim 10\%$**

Forecasts defined in normalized macroeconomic and market conditions

1. Free cash flow before capex (intangible assets and property, plant and equipment additions) divided by EBITDA

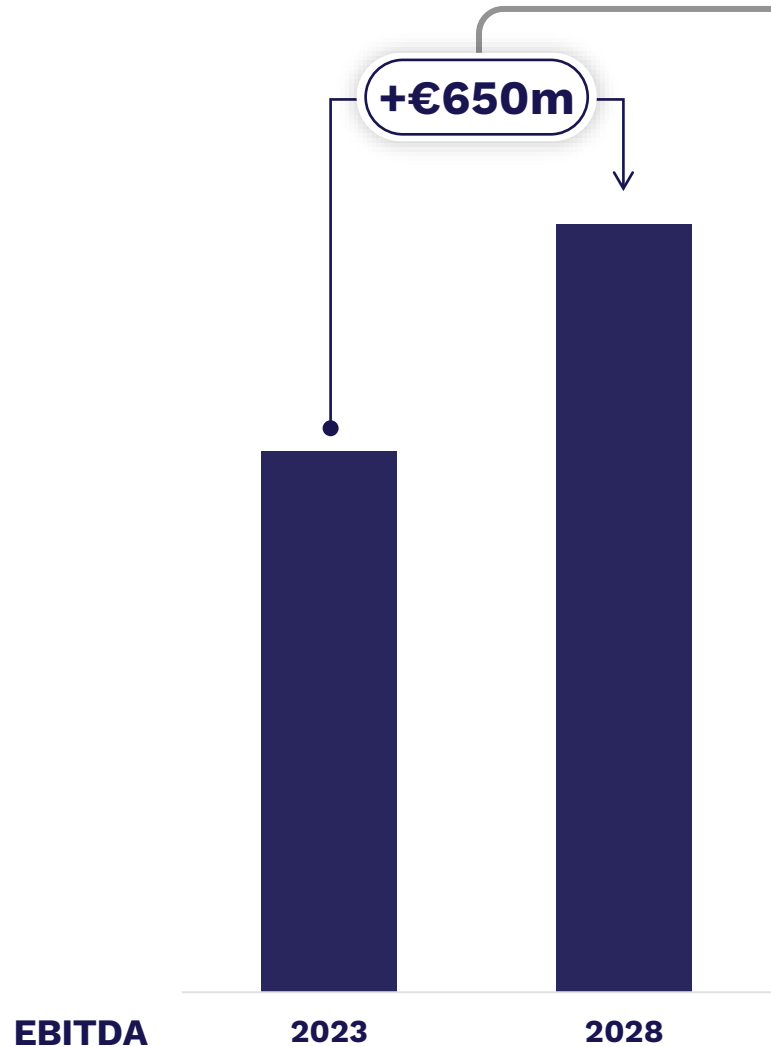
Each segment has aligned its targets with the Group objectives

	 <b>Advanced Materials</b>	 <b>Adhesive Solutions</b>	 <b>Coating Solutions</b>
<b>% of Group sales in 2028</b>	c. <b>45%</b>	c. <b>30%</b>	c. <b>25%</b>
<b>Organic sales CAGR over 2024-28</b>	<b>+6%/y</b>	<b>+3.5%/y</b>	<b>+3%/y</b>
<b>2028 EBITDA margin target</b>	<b>23%</b>	<b>17%</b>	<b>17%</b>

Forecasts defined in normalized macroeconomic and market conditions



# EBITDA growth is driven by well identified levers



Forecasts defined in normalized macroeconomic and market conditions

- **+€350m** from **major capex** focused on superior growth markets
- **+€300m** from ongoing **organic growth** combining:
  - **c. €500m** from increased volumes, pricing and product mix, including recovery from 2023 destocking
  - **c. -€200m** from inflation net of the €250m savings plan
- Neutral scope effect with **PIAM<sup>1</sup>** acquisition and further **bolt-ons** offset by **disposal of intermediates**

1. Subject to the approval of relevant legal authorities, closing expected end-23

Cumulative EBITDA  
2024-28

**~€10bn**

**-30%**

for tax, interest expense,  
working capital variation  
and others



**70%**

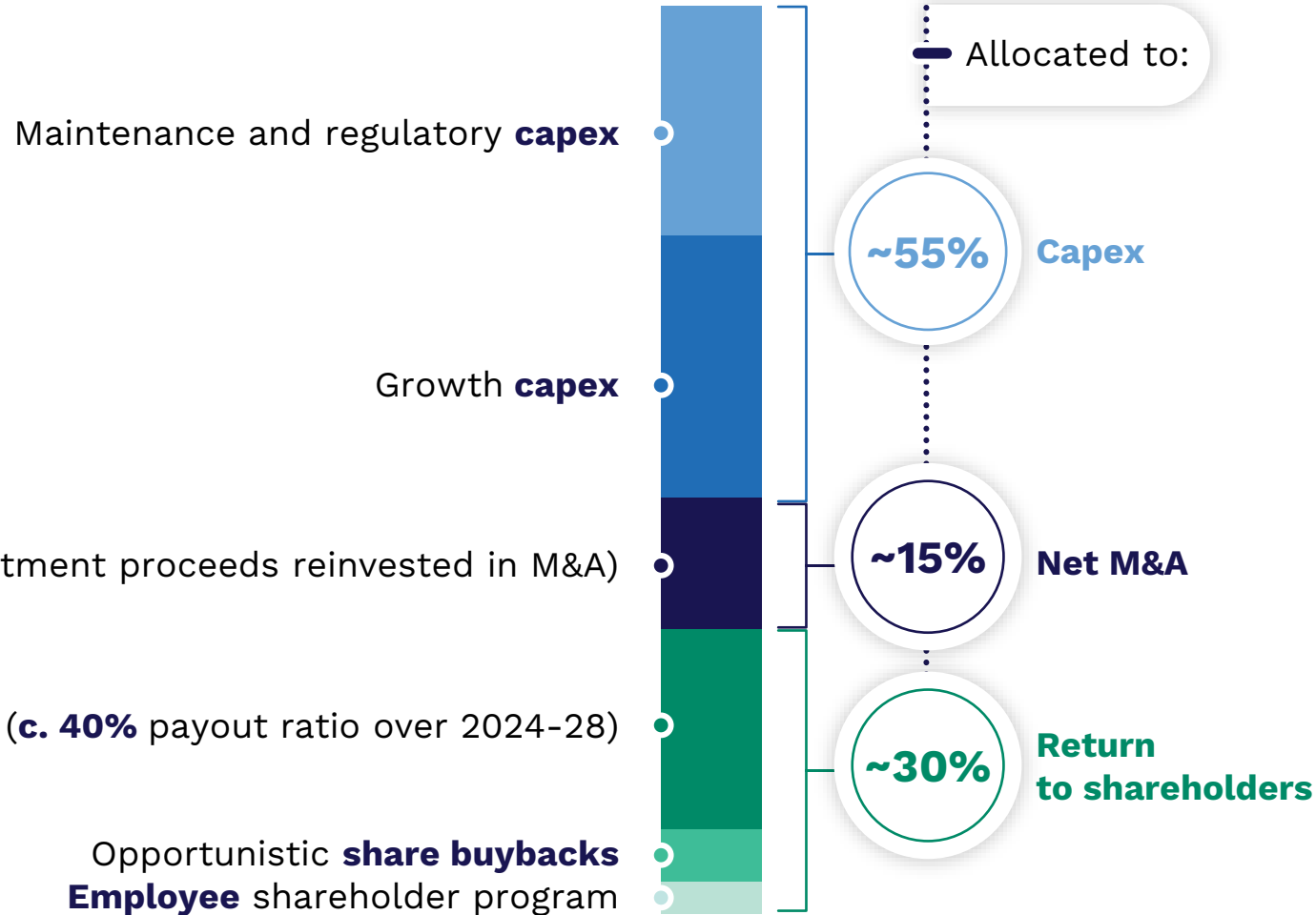
Operating cash flow<sup>2</sup>  
**c. €7bn**

2. Free cash flow before capex (intangible assets and property, plant and equipment additions)

# Capital allocation will be value driven and attractive for our shareholders

## Operating cash flow over 2024-28 period

c. €7bn



Around **+15%** vs last 5y period (2019-23) to reflect inflation, decarbonization and increased focus on batteries

**Half** of 2019-23 period

**+30%** vs 2019-23 period

Forecasts defined in normalized macroeconomic and market conditions

# We place sustainability at the heart of our strategy



Leverage the strength of **One Arkema** to enhance employee **empowerment** and **customer intimacy**



Achieve superior growth from **sustainable innovation** in key technologies and focus markets



Ramp-up **recent major capex** and carry out **new targeted high-return projects**



Further strengthen the portfolio with **bolt-on M&A** and finalize the divestment of **Intermediates**



Drive our manufacturing excellence including a strong focus on **decarbonization** and **digitalization**



## One Arkema

3 **complementary capabilities** in materials driving cross business line expertise



Joint communication strategy and **key account managers**



5 embedded **corporate values**



Enhanced **career development** opportunities for our employees



Shared **support services** for better efficiency and quality



## Customers at the center of our actions

- Acting as One Arkema to strengthen **customer intimacy**
- Joint innovation driving **partnerships**
- Implementing **new digital channels**, including My Arkema customer portal
- Increasing **proactivity** and **agility** of our teams

NPS target  
by 2030

30

# We identified 5 key submarkets with superior growth driven by sustainable megatrends

## Our end-markets

## Selected submarkets with outstanding growth

Transportation and energy



**Green energy and electric mobility**

Consumer goods and electronics



**Advanced electronics**

**Sustainable lifestyle**

Building and construction



**Efficient buildings and homes**

Water, health and nutrition



**Water filtration, medical devices and crop nutrition**


+8%/y

+12%/y

+16%/y

Arkema planned CAGR over 2024-28

# Over time, we have built an unmatched portfolio of cutting-edge technologies



## Advanced Materials

Creating and strengthening



## Adhesive Solutions

Bonding and assembling



## Coating Solutions

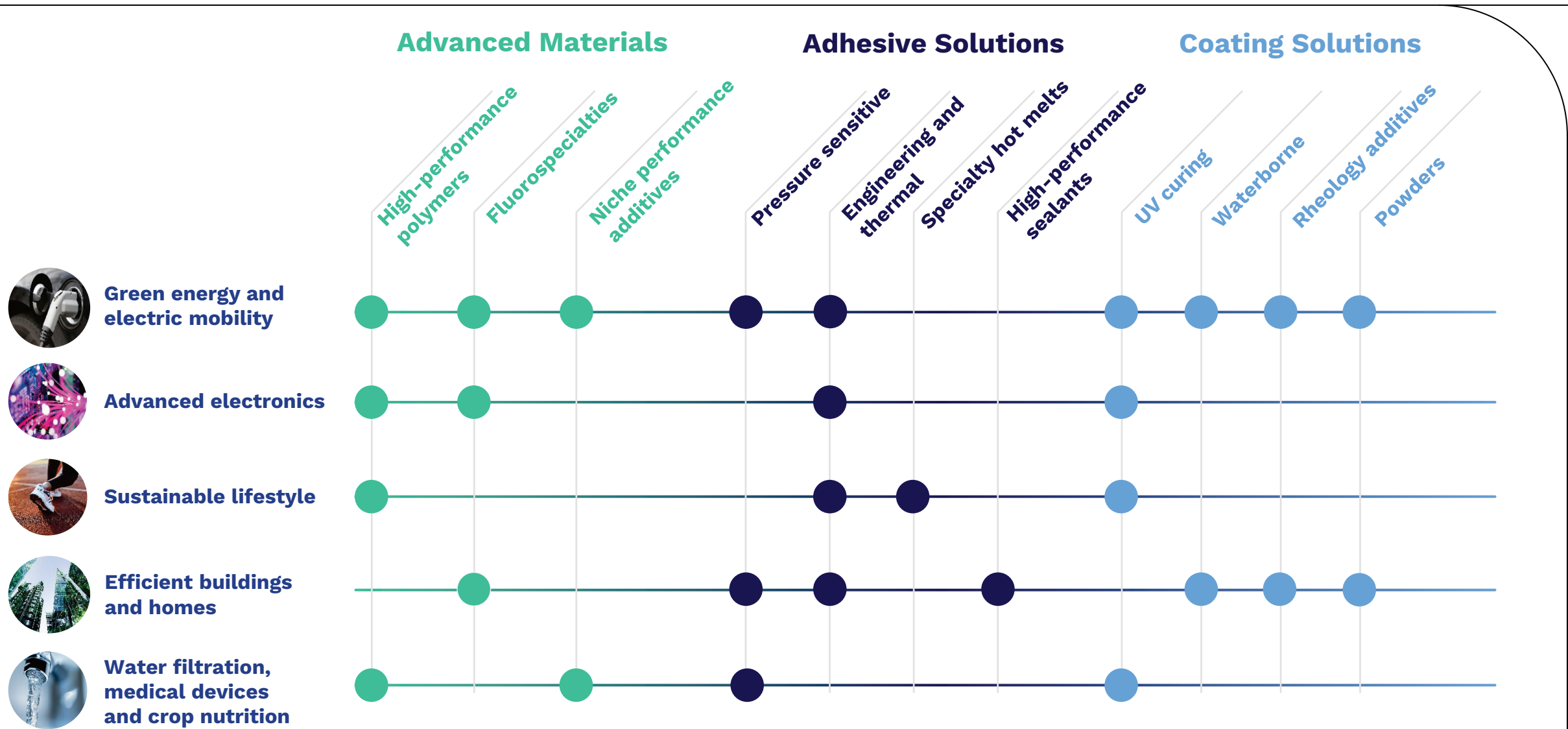
Protecting and modifying

- High-performance polymers (bio PA11, PA12, Pebax®, PVDF, PEKK, Polyimide<sup>1</sup>)
- Fluorospecialties (1233zd, electrolyte salts)
- Niche performance additives (DMDS, biosurfactants)
- Pressure sensitive adhesives
- Engineering and thermal adhesives
- Specialty hot melts
- High-performance sealants (MS, PU)
- UV curing monomers
- Waterborne resins
- Rheology additives
- Powders

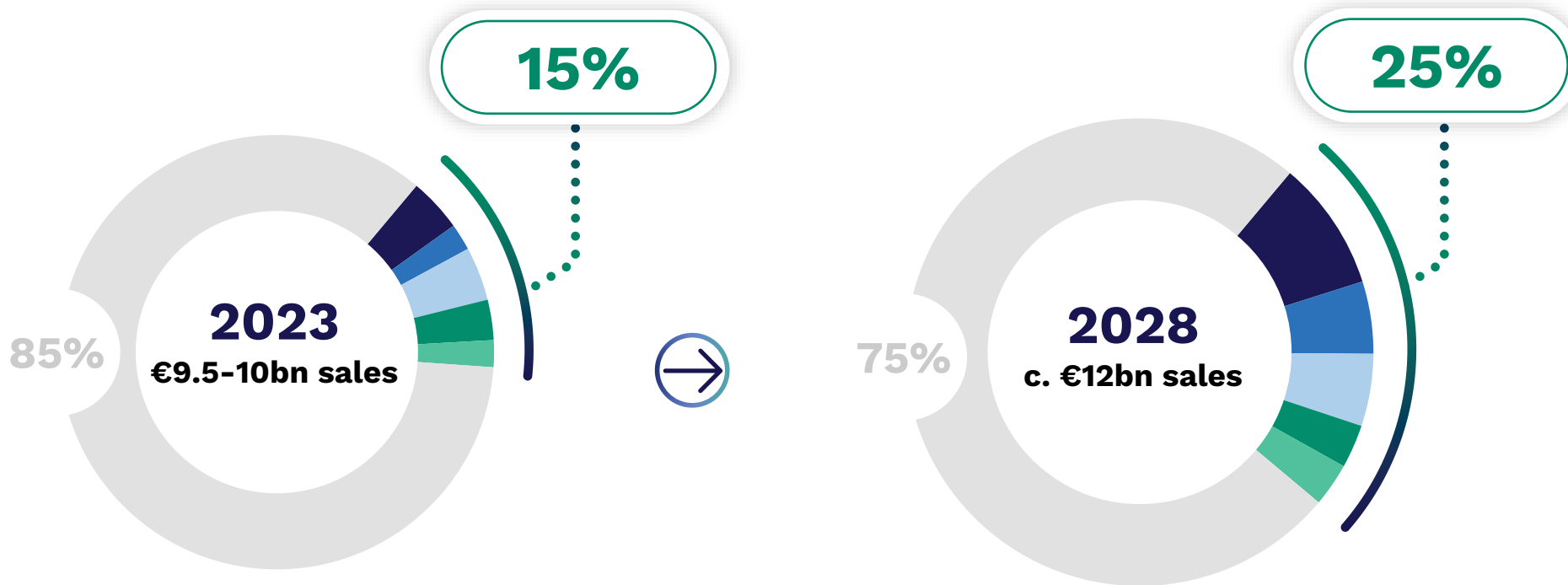
1. Subject to the approval of relevant legal authorities, closing expected end-23



With these differentiated technologies, we are uniquely positioned to serve the key identified submarkets



# This combination of technologies x submarkets will accelerate our growth



**3x** higher organic sales CAGR than Group's average  
**Over 50%** of Arkema R&D spendings

- Green energy & electric mobility
- Advanced electronics
- Efficient buildings and homes
- Sustainable lifestyle
- Water filtration, medical devices & crop nutrition

Forecasts defined in normalized macroeconomic and market conditions

# Recent capex and acquisitions are driving Arkema's vision

## Capex

### Bio-based PA11/Pebax® - 2022-23

New units or expansions in **Singapore, China** and **France** for consumer goods, sustainable lifestyle and mobility

### PVDF - 2023

Expansions in **China** and **France** for batteries and semicon

### Fluorospecialties - 2023-24

- **HF** with Nutrien to strengthen supply chain in the **US**
- **HFO 1233zd** in the **US** for building insulation and batteries

### UV curing resins - 2023

Expansion in **China** for new energies, electronics and 3D printing

Combined capex

**€800m**

EBITDA contribution in 2028

**c. +€250m** vs 2023

## Acquisitions

### PI Advanced Materials *expected end-2023<sup>1</sup>*

Leader in ultra high-performance **PI films** for electronics and batteries

### Ashland Performance Adhesives *in Feb. 2022*

A first-class US leader in high-performance **pressure sensitive adhesives** for industrial applications

EBITDA contribution in 2028

**c. +€200m** vs 2023

Forecasts defined in normalized macroeconomic and market conditions

1. Subject to the approval of relevant legal authorities, closing expected end-23



# New attractive capex initiatives will be implemented



## Additive for biofuels

**DMDS** capacity in Beaumont, US. Essential additive in **biofuel** production



## Decarbonization of acrylics production

Manufacturing process modification at Carling, France. Patented purification technology **to decarbonize** and improve **competitiveness**



## Niche additive for renewable energy

Expansion in Changshu, China. **“Mission critical” additive** for multiple applications including solar panels



## Solutions for batteries

Significant **PVDF** investment and new **electrolyte salts** unit to support strong global growth of **EV batteries** with a focus on the US (Calvert City)



## Bio PA11 value chain

Continue to leverage the **Amino 11** backbone by investing in high-end **bio-based polymers** including transparent and recycled grades

Preliminary estimate of capex (announced today or under review)

**€900m - €1bn**

Annual EBITDA contribution at maturity

**c. +€250m**

(c. +€100m in 2028 vs 2023)



Announced today



Review ongoing

Forecasts defined in normalized macroeconomic and market conditions

# We will bolster operational excellence

## Increase competitiveness

- Review overall efficiency of **internal processes** and interfaces between functions
- Continue manufacturing **cost optimization** through yield improvement, energy efficiency and product quality uniformity
- Further improve the **reliability** of the manufacturing asset base
- Accelerate **digitalization**, automation and process simplification

**€250m/y cost savings**  
after 5 years

**50%** fixed costs      **50%** variable costs

**€100m** one off cost  
for implementation



# A clear CSR roadmap is embedded in our strategy



## Climate by 2030 vs 2019

Near-term SBTi targets

- Scopes 1 + 2 GHG emissions: **-48.5%**
- Scope 3 GHG emissions: **-54%**

## Environment by 2030 vs 2012

- Net energy purchases: **-25%**
- VOC emissions (air): **-65%**
- Chemical oxygen demand (water): **-65%<sup>1</sup>**

1. New target vs previous target of -60% by 2030 vs 2012

## Sustainable solutions

**65%**  
by 2030

## Circular economy by 2030

Sales contributing significantly to UN SDGs

Supported by >90% of filed patents related to sustainability

Life Cycle Assessment **90%** of sales

## Safety by 2030

## Diversity by 2030

## Employee engagement by 2030

Total recordable injury rate TRIR **0.8**

Process safety event rate PSER **2.0**

*In leadership positions*

Women **30%**

Non-French **50%**

**>80%**



# We will continue to decarbonize our value chain



## Upstream - Scope 3

- Increase **bio-based** and **recycled** raw materials  
*E.g.: new Amino 11 and Polyamide 11 (Singapore)*
- Engage our **suppliers** to reduce the carbon footprint of their products  
*E.g.: partner to accelerate biomass balance solutions (Perstorp)*

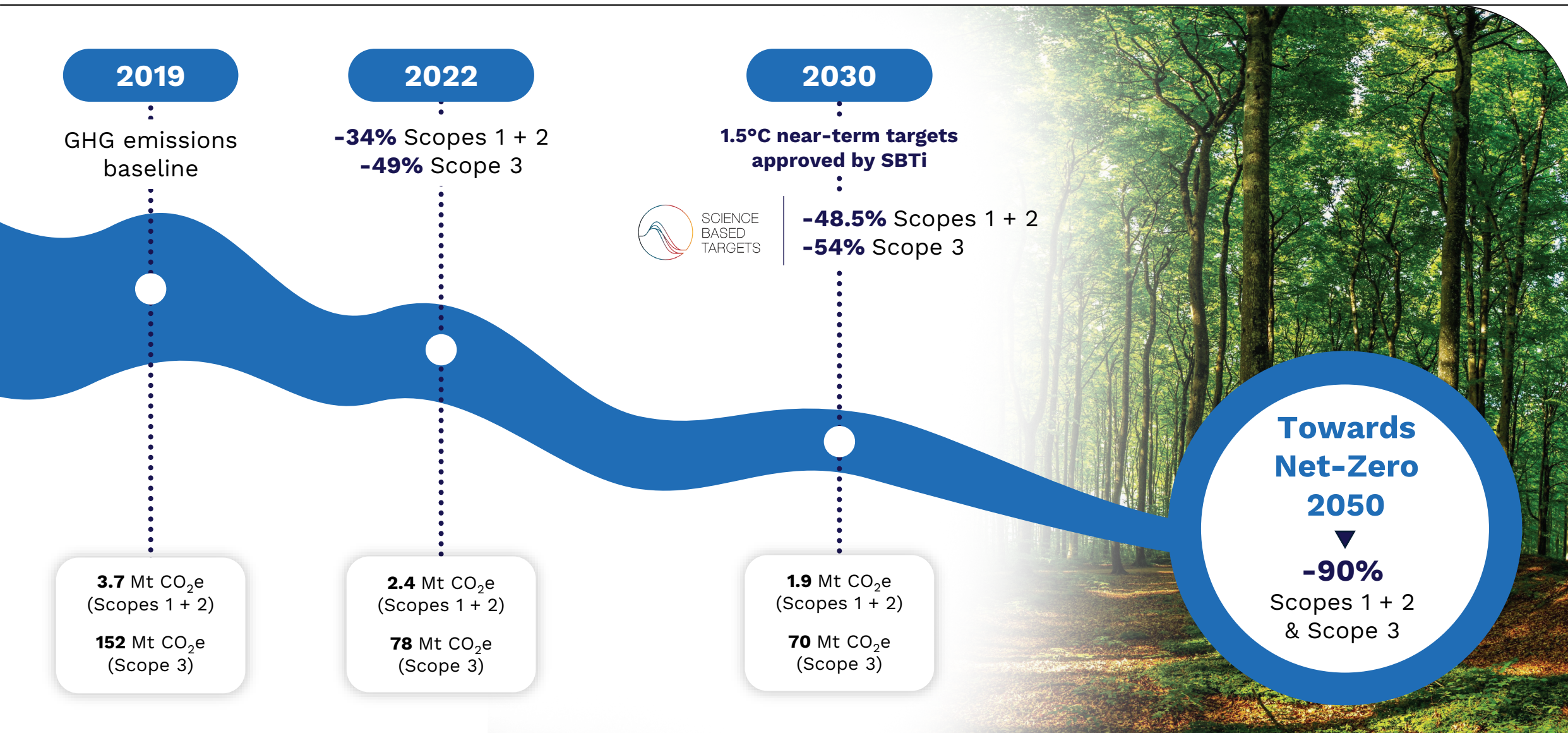
## Operations - Scopes 1 + 2

- Shift to **low carbon** energy and steam  
*E.g.: biomethane contract with Engie (France)*
- Optimize production process and energy **efficiency**  
*E.g.: new patented purification technology at Carling (France)*

## Downstream - Scope 3

- Grow our portfolio of **sustainable** solutions  
*E.g.: 65% of sales contributing significantly to UN SDGs by 2030*
- Further develop **recycling** loops of our products  
*E.g.: ramp-up of Agiplast (Italy)*

# We are paving the way to Net-Zero by 2050





## Arkema is a Specialty Materials leader

- Unique set of complementary capabilities in **materials science** organized into 3 synergistic segments
- Attractive end-markets and strong customer intimacy strengthened by the **One Arkema** approach
- Pioneering on **sustainable solutions** and on **decarbonization** with SBTi-approved 2030 1.5°C trajectory
- Portfolio transformation to **Specialty Materials > 90%** completed

## Progressing to an ambitious next phase

- Objective to reach **c. €12bn sales** and **c. 18% EBITDA margin** in **2028**
- Acceleration of **organic growth** to **4%/y sales CAGR** and **7-8%/y EBITDA CAGR** over 2024-28
- Right **cutting-edge technologies** to serve identified submarkets with **outstanding growth** driven by sustainable megatrends
- Stepping-up our decarbonization initiatives, paving the way to **Net-Zero by 2050**

## With a value driven capital allocation

- Support **organic growth** with some more significant **capex** projects with IRR>15% and capex/EBITDA around **4x** at maturity
- 50% lower net M&A allocation *versus* the prior period, focusing on the **divestment of Intermediates** and targeted **bolt-ons**
- **Shareholder return** expected to **increase by 30%** over 2024-28 *versus* 2019-23

Forecasts defined in normalized macroeconomic and market conditions



The information disclosed in this document may contain forward-looking statements with respect to the financial condition, results of operations, business and strategy of Arkema. In the current context, where the world economy and the consequences of the Russian offensive in Ukraine on geopolitical equilibriums remain uncertain the retained assumptions and forward looking statements could ultimately prove inaccurate.

Such statements are based on management's current views and assumptions that could ultimately prove inaccurate and are subject to material risk factors such as among others, changes in raw material prices, currency fluctuations, implementation pace of cost-reduction projects, development of the Russian offensive against Ukraine, and changes in general economic and business conditions. These risk factors are further developed in the 2022 Universal Registration Document.

Arkema does not assume any liability to update such forward-looking statements whether as a result of any new information or any unexpected event or otherwise.

Further information on factors which could affect Arkema's financial results is provided in the 2022 Universal Registration Document and other documents filed with the French *Autorité des marchés financiers*.

Financial information since 2006 is extracted from the consolidated financial statements of Arkema. The business segment information is presented in accordance with Arkema's internal reporting system used by the management.

Besides its IFRS accounts, Arkema also uses alternative performance indicators to provide a more consistent and comparable analysis of the Group's financial performance. Such indicators are defined in the 2022 Universal Registration Document. In this presentation, the Group uses in particular the following indicators:

**EBITDA margin:** corresponds to EBITDA as a percentage of sales, EBITDA equaling recurring operating income (REBIT) plus recurring depreciation and amortization of tangible and intangible assets

**CAGR over 24-28:** corresponds to the compound annual growth rate over the 5-year period 2024-28

**EBITDA to cash conversion rate:** corresponds to free cash flow excluding exceptional items (exceptional capex and non-recurring cash flow) divided by EBITDA

**Operating cash flow:** corresponds to free cash flow before capex (intangible assets and property, plant and equipment additions)

**Operating cash conversion rate:** corresponds to operating cash flow divided by EBITDA

**ROCE:** corresponds to the REBIT divided by the capital employed at the end of the year

This document contains forward looking information, which describe expectations, strategies, future events or intentions. Forecasts and financial objectives are defined in normalized macroeconomic and market conditions, among other EUR/USD exchange rate of 1.1, GDP of 3% and oil price at US\$80/bbl. The achievement of these forecasts and financial objectives is therefore subject to uncertainties regarding these economic factors, as well as regarding changing market conditions, competitive landscape, regulatory evolutions, and other unplanned events. As a consequence, results may differ from those expressed or implied in this document.