



HIGH PERFORMANCE MATERIALS

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Executive Vice-President
High Performance Materials

ARKEMA
INNOVATIVE CHEMISTRY

21ST CENTURY: THE ADVANCED MATERIALS REVOLUTION

ADVANCED MATERIALS MUST...

...DO MORE

FUNCTIONAL

*Fire retardant, Sound dampening, Moisture barriers,
Energy return, Vibration absorption, etc.*

...WITH LESS

EFFICIENT

Lightweight, Down gauging, Low energy, etc.

...FOR ALL

SUSTAINABLE

Renewable, Recyclable, Affordable, Life cycle, etc.

ARKEMA, AN ACTIVE PLAYER OF THIS REVOLUTION

FUNCTIONAL



WALL PLASTERS
WITH INSULATION PROPERTIES



Pebax®



Piezotech®

EFFICIENT



Rilsan®
LOWER FUEL CONSUMPTION

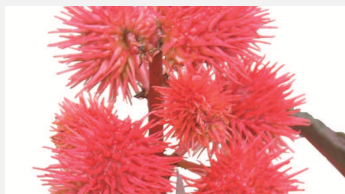


CECA ADDITIVES
FOR ENHANCED OIL RECOVERY

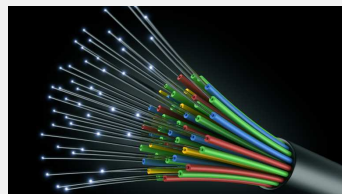


Kynar® Aquatec

SUSTAINABLE



Rilsan®, Hiprolon®
BIO-SOURCED



UV CURING RESINS
NO VOC



PEELABLE FLOOR ADHESIVES

HIGH PERFORMANCE MATERIALS AT A GLANCE

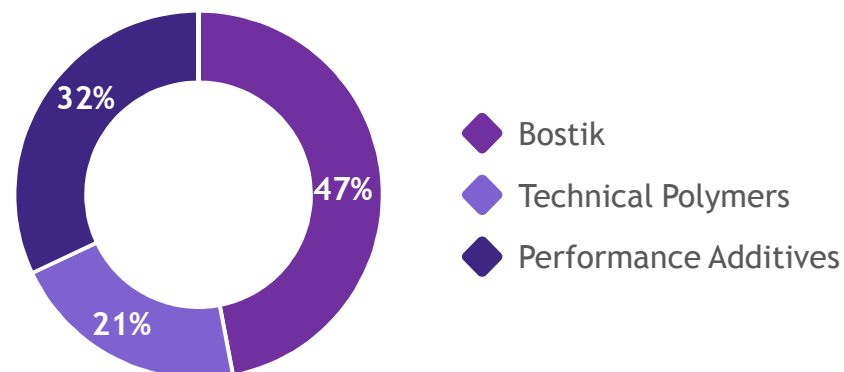
2014 KEY FIGURES*

IN €M	HPM (w/o Bostik)	Bostik
Sales	1,730	1,533
EBITDA	314	158
EBITDA margin	18.2%	10.3%
EBIT	213	117
Capex	112	37

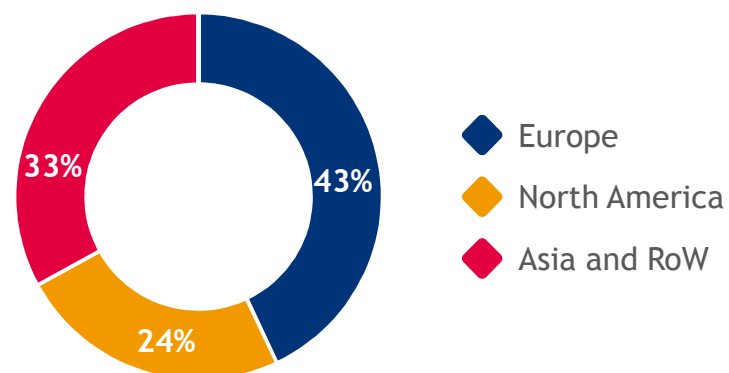
KEY SUCCESS FACTORS

- ▶ Leading positions in high growth niche markets
- ▶ Strong innovation pipeline of solutions for megatrends
- ▶ Strong partnerships with customers
- ▶ Global footprint
- ▶ Well-recognized brands (Bostik®, Rilsan®, Pebax®, Kynar®)

2014 PROFORMA SALES BY BUSINESS UNIT**



2014 SALES BY REGION**



* 2014 figures using new reporting

** 2014 sales including Bostik sales and using new reporting

LEADING POSITIONS IN THREE MAIN PLATFORMS...

BU / platform	Main products	Main end-markets	Worldwide position
SPECIALTY ADHESIVES (BOSTIK)	<ul style="list-style-type: none"> ▶ Adhesives 	<ul style="list-style-type: none"> ▶ DIY ▶ Construction ▶ Industry 	#3
TECHNICAL POLYMERS	<ul style="list-style-type: none"> ▶ Specialty polyamides ▶ Fluoropolymers 	<ul style="list-style-type: none"> ▶ Oil & Gas ▶ Automotive ▶ Aeronautics ▶ Industrial coatings ▶ Electronics 	#1
PERFORMANCE ADDITIVES	<ul style="list-style-type: none"> ▶ Filtration and adsorption ▶ Organic peroxides ▶ UV curing resins 	<ul style="list-style-type: none"> ▶ Oil & Gas ▶ Industrial Coatings ▶ Advanced materials 	#2

...LEVERAGING STRONG COMMON ASSETS

TECHNOLOGY LEADERSHIP

- ▶ From polymers design to formulation know-how
- ▶ High R&D intensity
- ▶ Strong patent culture

INNOVATION-DRIVEN GROWTH

- ▶ Solutions for megatrends: energy efficiency, renewable, etc.
- ▶ Materials with outstanding properties: temperature resistance, lightweight, etc.
- ▶ Smart adhesives: more than just sticking things together



CUSTOMIZED SOLUTIONS FOR CUSTOMERS

- ▶ Long-term partnerships
- ▶ Long certification cycle
- ▶ Application-driven with regional R&D hubs

STRONG AND WELL-RECOGNIZED BRANDS

KYNAR
BY ARKEMA

RILSAN
BY ARKEMA

PEBAX
BY ARKEMA

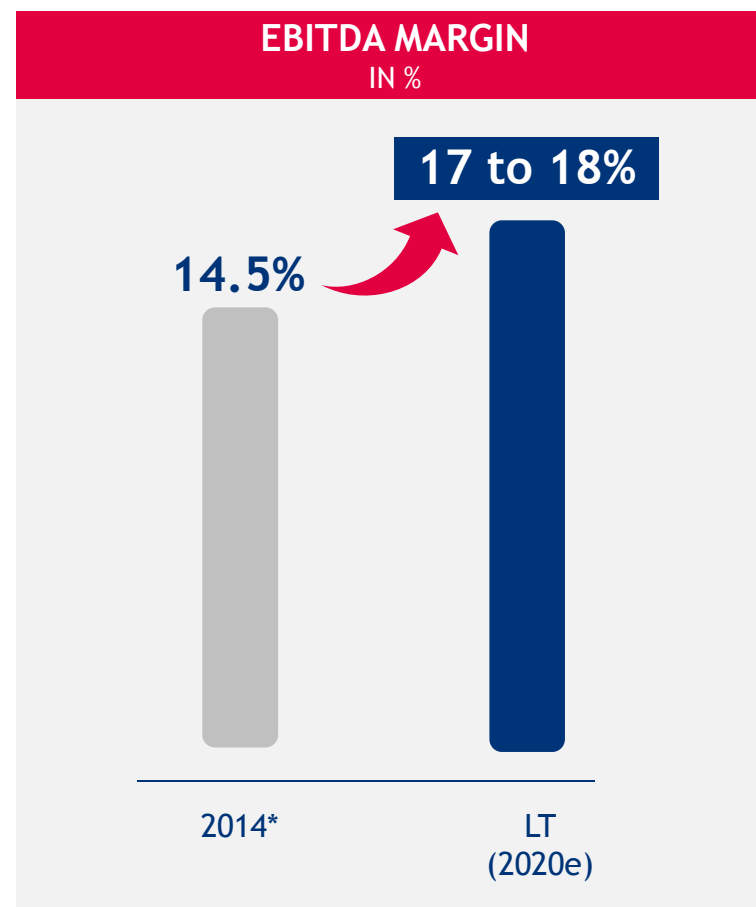
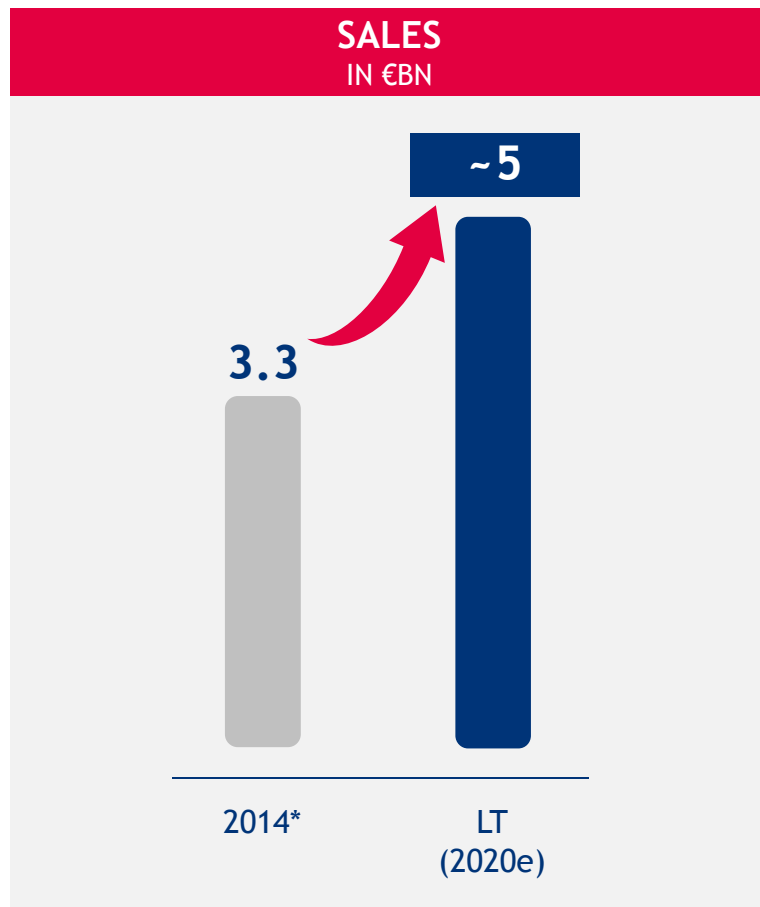
Bostik
smart adhesives

WHAT WE HAVE ACHIEVED SO FAR



OUR AMBITION


“A designer of materials and innovative solutions”



* 2014 figures using new reporting and including Bostik 2014 sales

HIGH PERFORMANCE MATERIALS STRATEGY

4 STRATEGIC PRIORITIES



Bostik
smart adhesives


Grow the adhesives platform



Accelerate development in advanced materials



Capture growth opportunities in high growth countries



Reinforce portfolio with bolt-on acquisitions in advanced materials and adhesives

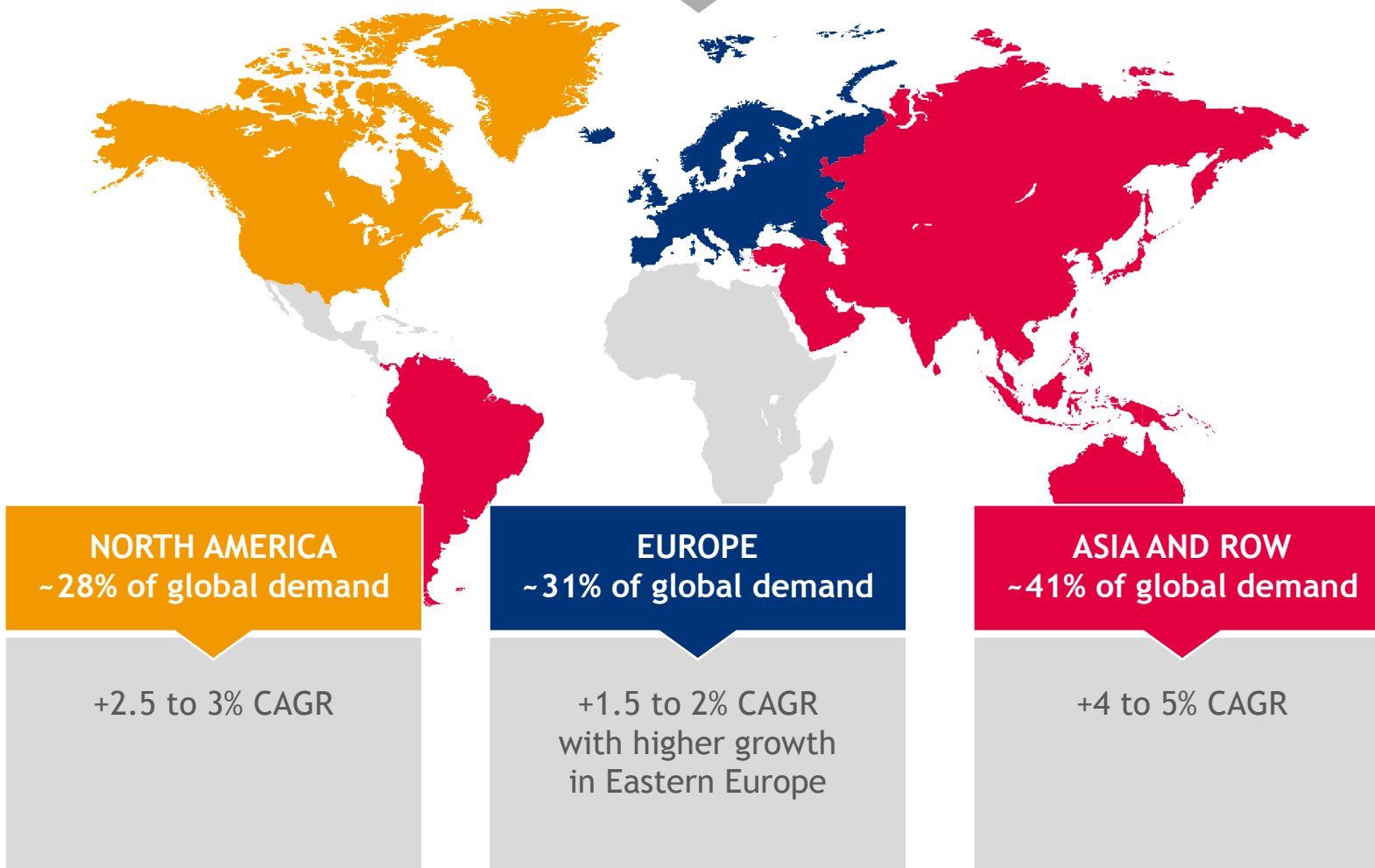
It's all about profitable growth

BOSTIK

ARKEMA
INNOVATIVE CHEMISTRY

A LARGE AND GROWING MARKET

2014 market size: €50 bn*
+3 to 3.5% CAGR expected over coming years




Source: Arkema internal estimates, ASC
* Adhesives and sealants including mineral-based adhesives

ADHESIVES: A WIDE RANGE OF APPLICATION MARKETS

INDUSTRY

58% of global market



- ▶ **General industry**
 - Packaging
 - Tapes and labels
 - Woodworking
 - Non-woven
- ▶ **Assembly**
 - Electronics
 - Transportation
 - Engineered adhesives

CONSTRUCTION


34% of global market



- ▶ **From basement to roof**
 - Floor underlayment
 - Floor covering adhesives
 - Ceramic tiles adhesives
 - Wall covering adhesives
 - Waterproofing
 - Sealants and grab adhesives

CONSUMER

8% of global market



- ▶ **Do-it-yourself**
 - Stationery
 - Repair glues
 - Assembly (grab, wood and contact adhesives)
 - Sealing and waterproofing
 - Tapes

AN ATTRACTIVE MARKET TO BE IN

SPECIALIZED AND DIFFERENTIATED PRODUCTS



KEY TO END-PRODUCT PERFORMANCE BUT ONLY A SMALL PORTION OF TOTAL PRODUCT COST



STRONG BRAND LOYALTY



FROM MECHANICAL FASTENING TO CHEMICAL BONDING



FROM DRY MIX TO POLYMER-MODIFIED MORTARS



INCREASING STANDARDS OF LIVING IN EMERGING COUNTRIES



A FRAGMENTED INDUSTRY WITH OPPORTUNITIES FOR CONSOLIDATION



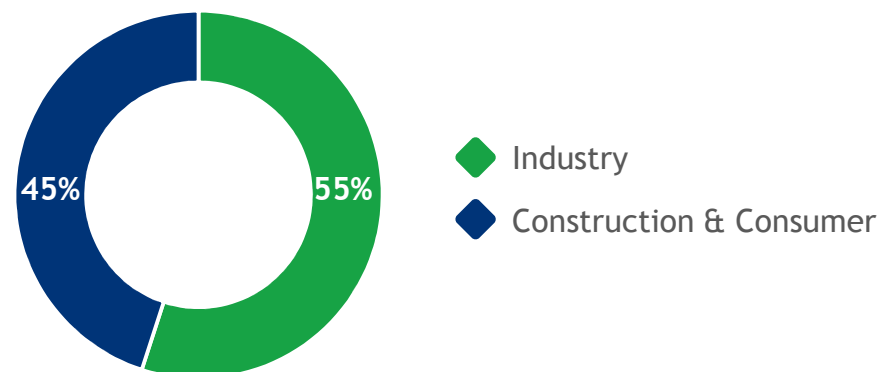
BOSTIK AT A GLANCE

2014 KEY FIGURES PROFORMA

IN €M

Sales	1,533
EBITDA	158
EBITDA margin	10.3%
EBIT	117
Capex	37

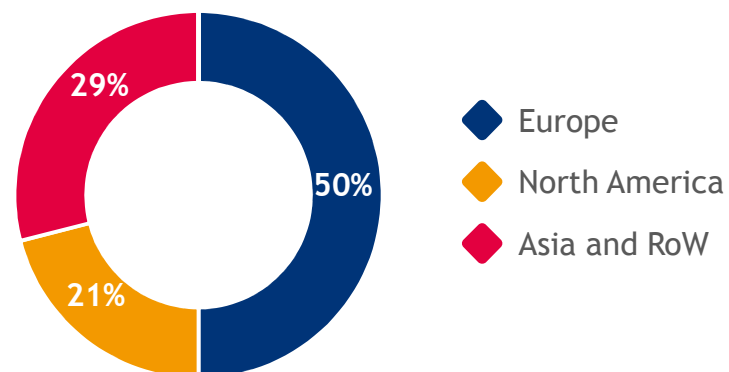
2014 SALES BY SEGMENT



KEY ASSETS

- ▶ #3 worldwide
- ▶ 3 leading technology platforms
- ▶ Growing pipeline of new and innovative products
- ▶ Powerful brands with high customer loyalty
- ▶ Global reach with strong exposure to higher growth countries
- ▶ Committed teams with high reactivity

2014 SALES BY REGION



LEADING POSITIONS IN A WIDE RANGE OF END-MARKETS

	NON-WOVEN	INDUSTRY	CONSTRUCTION CONSUMER
BUSINESS MODEL	Global	Regional	Local
POSITION	<ul style="list-style-type: none"> ▶ #2 worldwide ▶ #1 for specialties 	<ul style="list-style-type: none"> ▶ #3 worldwide 	<ul style="list-style-type: none"> ▶ Top 3 in key countries
UNDERLYING MARKET DRIVERS	<ul style="list-style-type: none"> ▶ Demographics ▶ Emerging middle class (baby diapers penetration) ▶ Ageing population (adult incontinence) ▶ Global customers 	<ul style="list-style-type: none"> ▶ Good balance of consumer and durable goods end-markets ▶ Technological substitution ▶ Mid to large size regional customers 	<ul style="list-style-type: none"> ▶ Housing Repairs, Maintenance and Improvements (RMI) ▶ Increasing regulations on energy efficiency ▶ Urbanization of emerging countries ▶ Fragmented customers base - Local distribution
MAIN COMPETITORS	<p>HENKEL</p> <p>HB FULLER</p> <p>SIKA</p>		

TECHNOLOGICAL LEADERSHIP ON 3 PLATFORMS

Elastic bonding



- ▶ Semi-structural reactive adhesives with high flexibility
- ▶ Able to withstand frequent levels of elongation, contraction and energy-absorption

Hot-Melt Pressure Sensitive Adhesives (PSA)

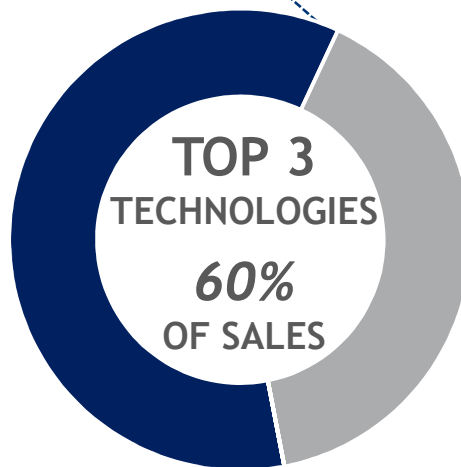


- ▶ Solvent-less adhesives applied in a melted state
- ▶ Adhere without needing much pressure

Polymer-modified binders



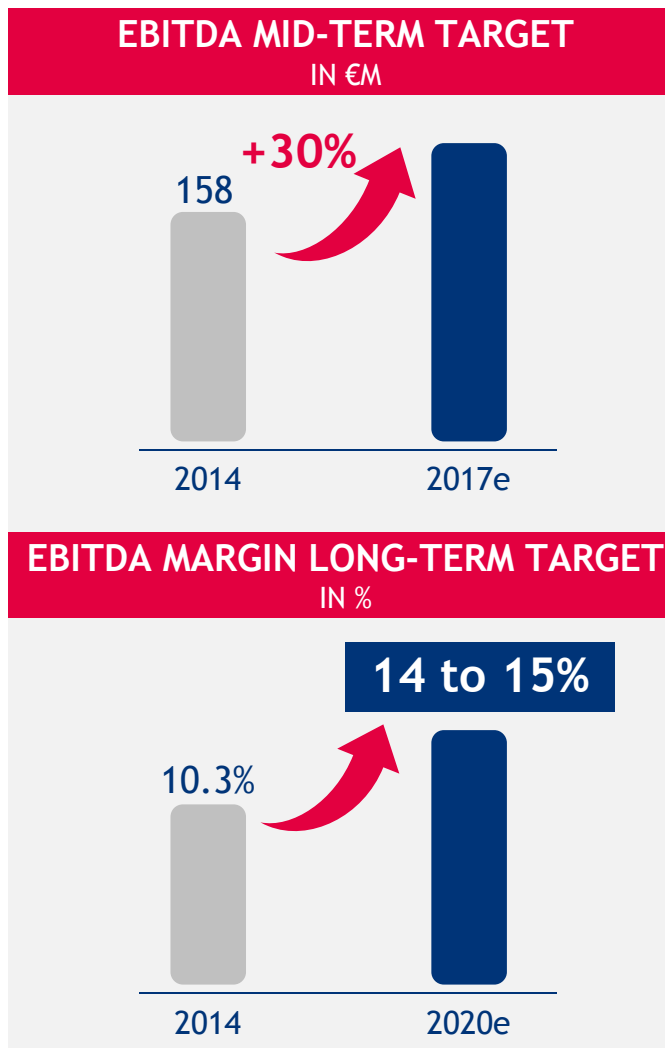
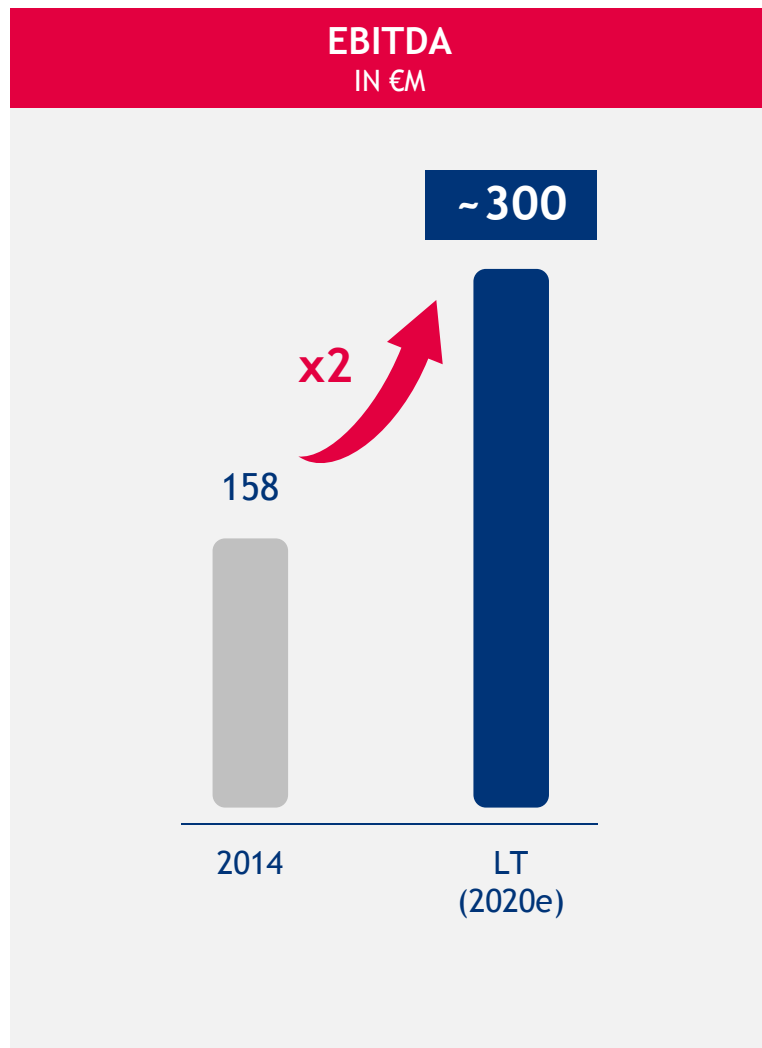
- ▶ Cement based adhesives with functional additives
- ▶ Stronger adhesion, better flexibility, higher crack resistance and durability



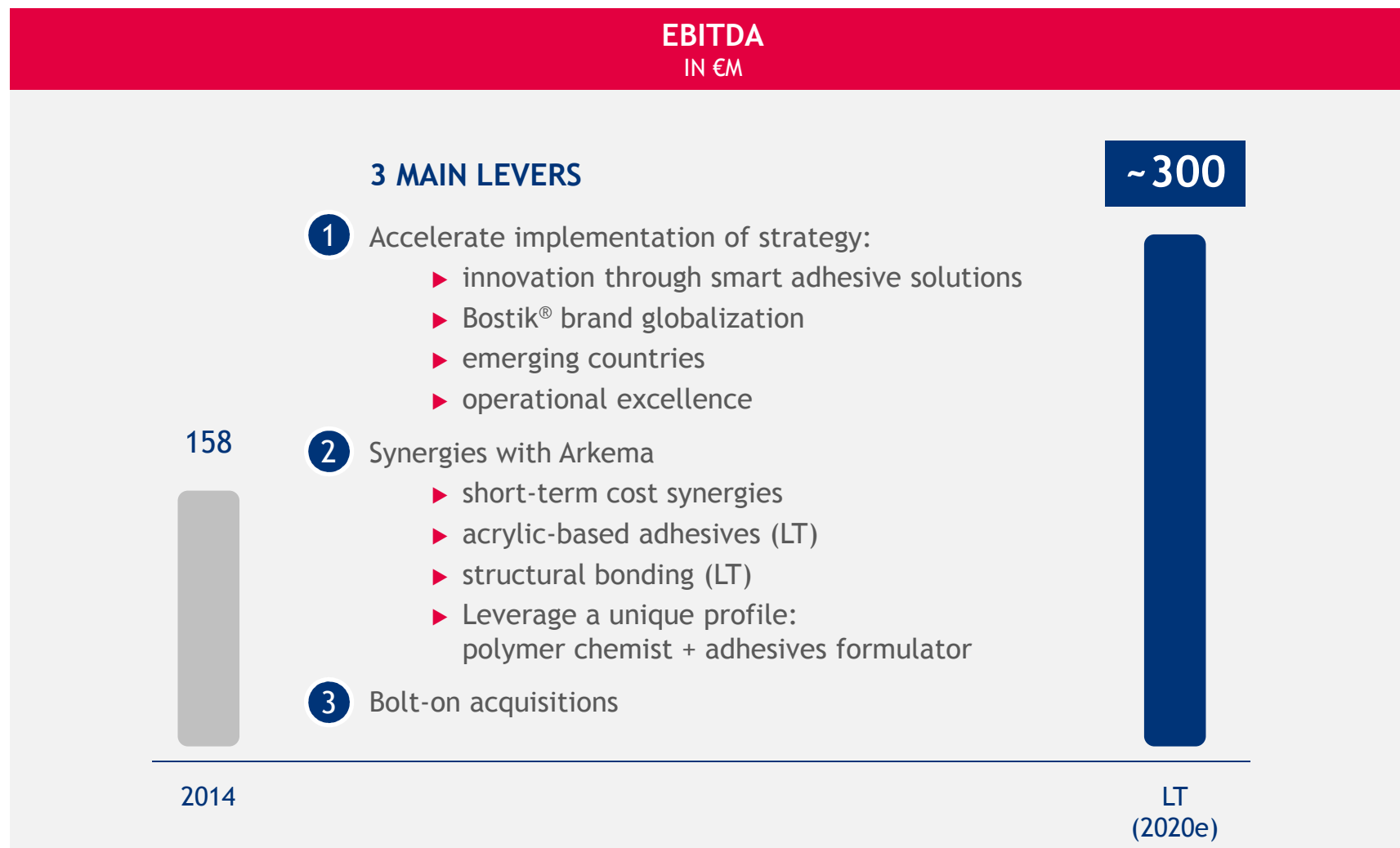
OTHER TECHNOLOGIES

- ▶ Acrylics
- ▶ Silicone
- ▶ Solvent
- ▶ Vinyl
- ▶ Structural bonding
- ▶ etc.

OUR AMBITION FOR BOSTIK



OUR ROADMAP FOR BOSTIK



INNOVATION IN SMART ADHESIVES SOLUTIONS

Milwaukee (US)



- ▶ WW Center for Hot Melt PSA
- ▶ Opened in 2012

Compiègne (France)



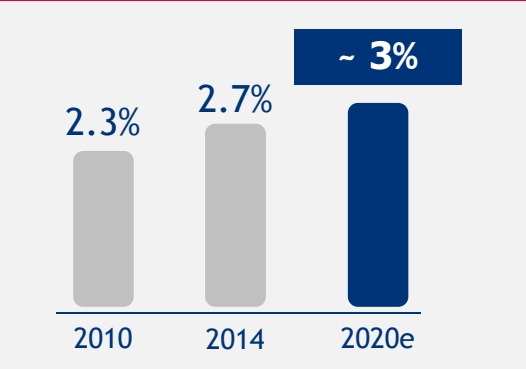
- ▶ WW Center for Elastic Bonding and Polymer-Modified Binders
- ▶ Opened in 2014

Shanghai (China)

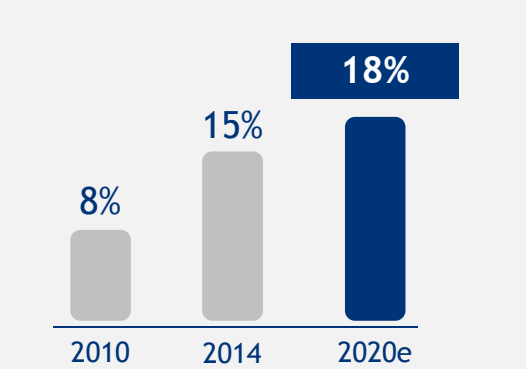


- ▶ Asia technical center
- ▶ Opened in 2012

R&D INTENSITY (R&D / SALES) IN %



SALES FROM PRODUCTS < 3 YEARS OLD IN %



Thin core diapers



- ▶ Fluff-less PSA core-bonding technology

Reactive tapes and labels



- ▶ Substitution of solvents in durable pressure sensitive labels

Self levelling screed



- ▶ Formulated screed with self levelling non shrinking properties (2 in 1)

RATIONALIZE PORTFOLIO OF BRANDS

1

FROM 40 BRANDS...



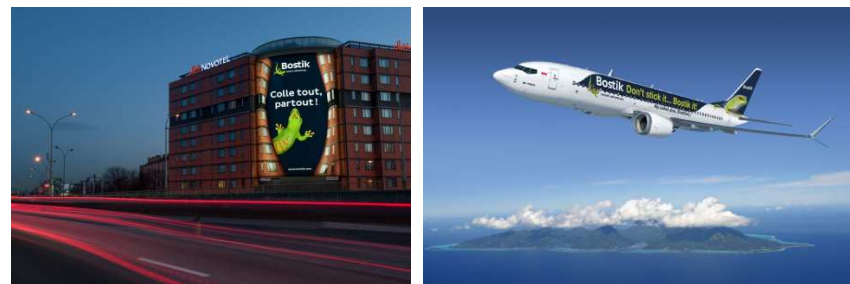
... TO 1 GLOBAL + 5 LOCAL BRANDS



VISUAL IDENTITY ALIGNMENT



BRAND AWARENESS BUILD-UP



CAPTURE GROWTH IN EMERGING COUNTRIES

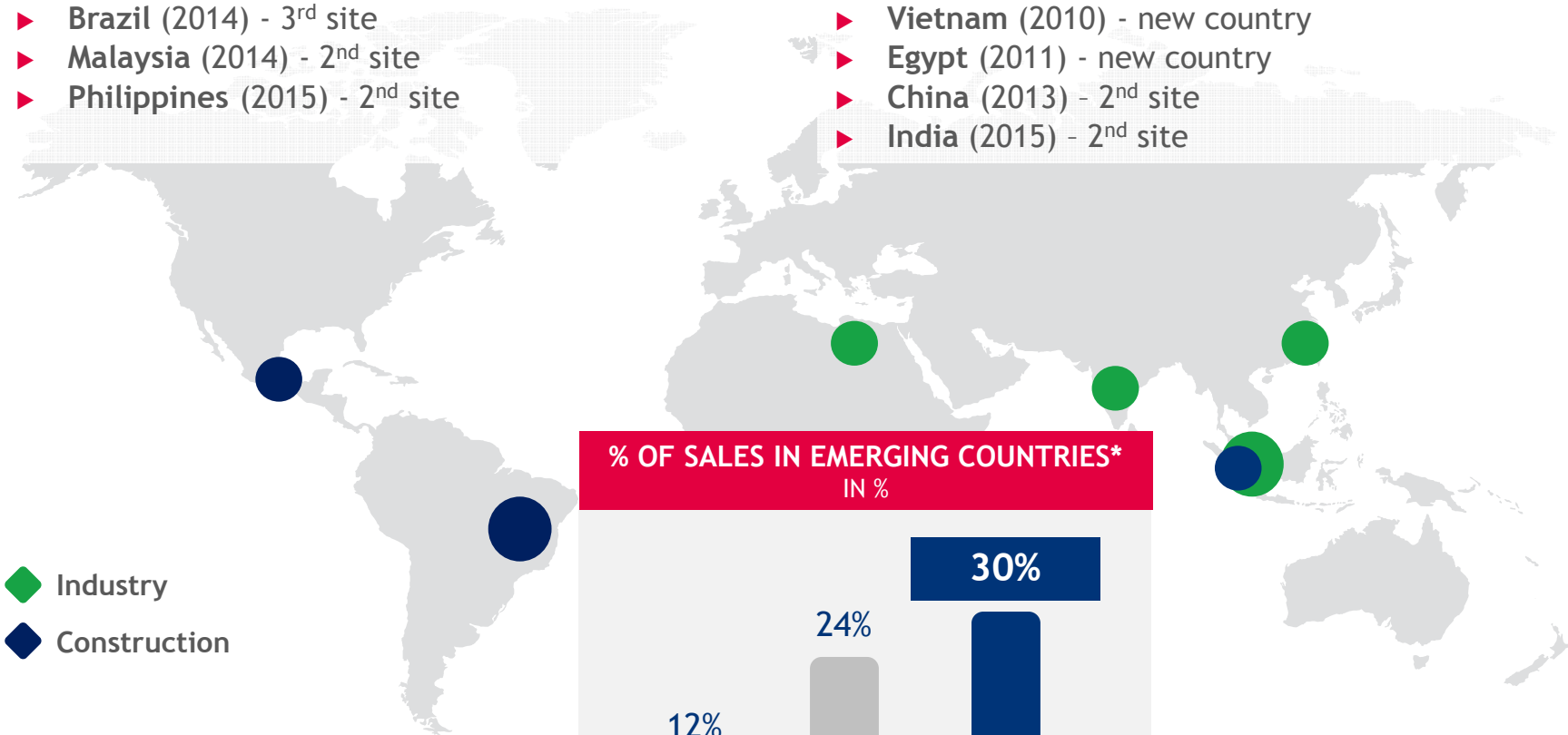
1

CONSTRUCTION Small production units close to customers

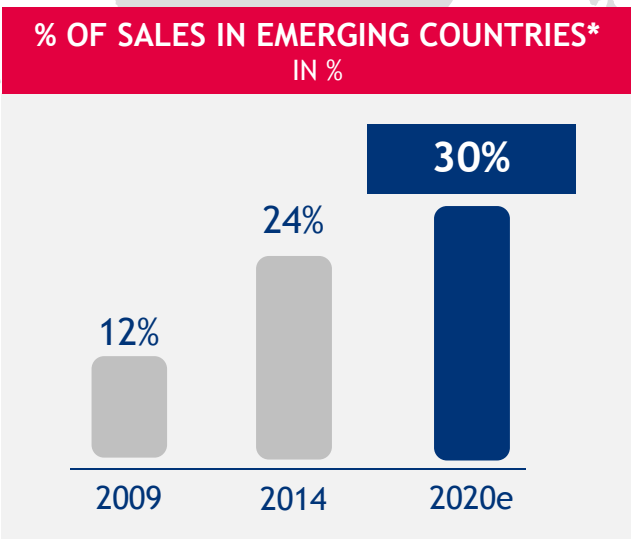
- ▶ Brazil (2012): acquisition of Fortaleza - new country
- ▶ Brazil (2014) - 3rd site
- ▶ Malaysia (2014) - 2nd site
- ▶ Philippines (2015) - 2nd site

INDUSTRY New production units to support our customer expansion

- ▶ South Korea + Thailand (2010) - new country - sales offices
- ▶ Vietnam (2010) - new country
- ▶ Egypt (2011) - new country
- ▶ China (2013) - 2nd site
- ▶ India (2015) - 2nd site



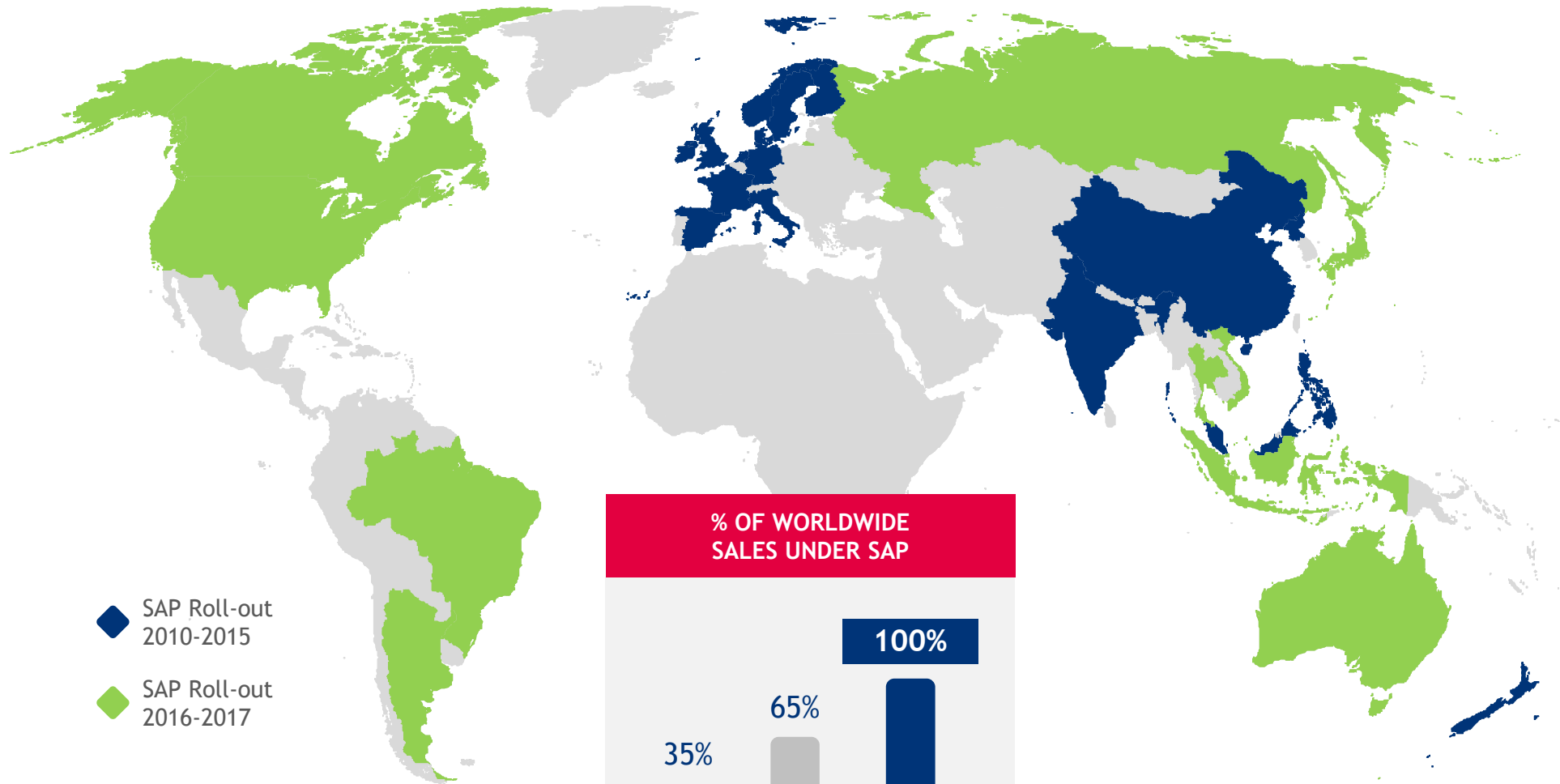
◆ Industry
◆ Construction



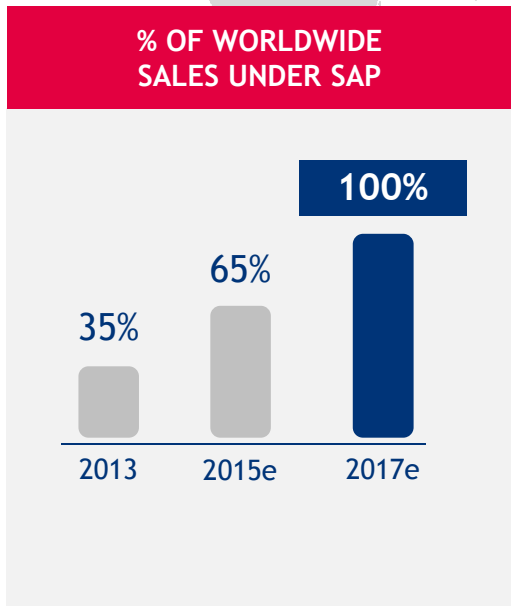
* China, India, SE Asia, Latin America, Eastern Europe, Middle East

IMPROVE OPERATIONAL EXCELLENCE THROUGH INTEGRATED WORLDWIDE IT SYSTEM

1

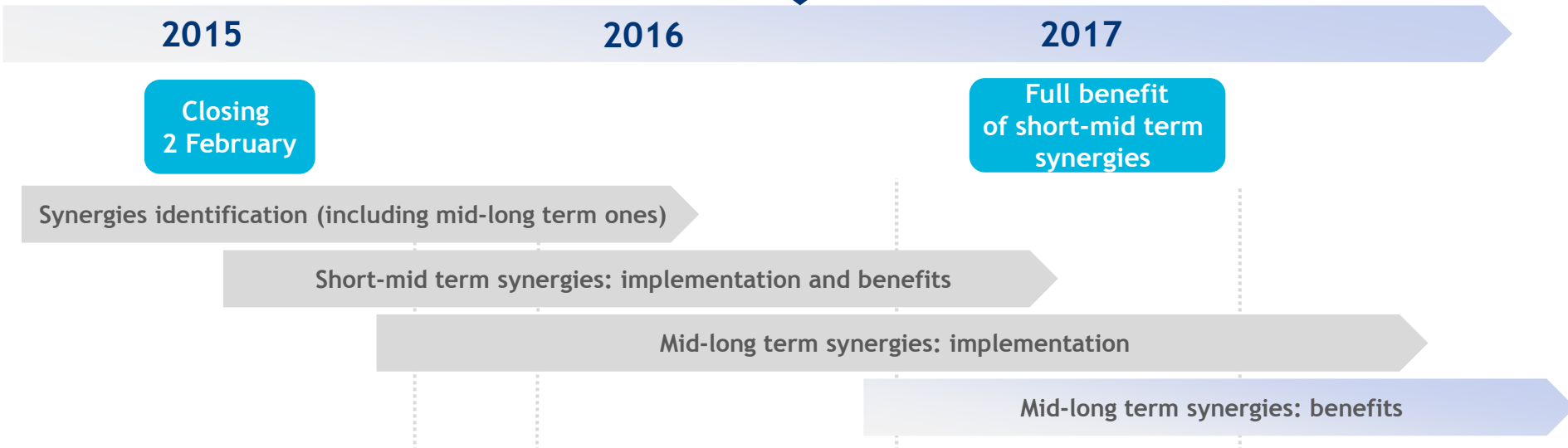


- ◆ SAP Roll-out 2010-2015
- ◆ SAP Roll-out 2016-2017



A FULL BENEFIT OF SHORT-MID TERM SYNERGIES BY END 2017

IMPLEMENTATION HAS NOW STARTED WITH A STRONG MOBILIZATION

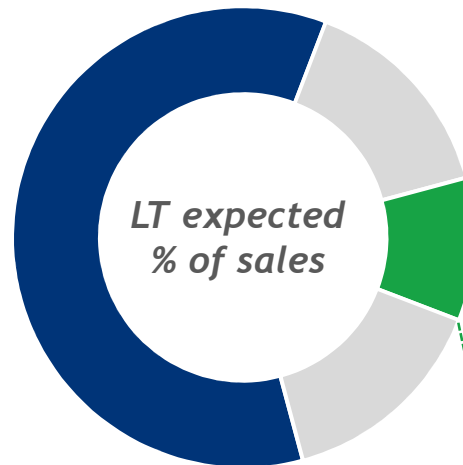
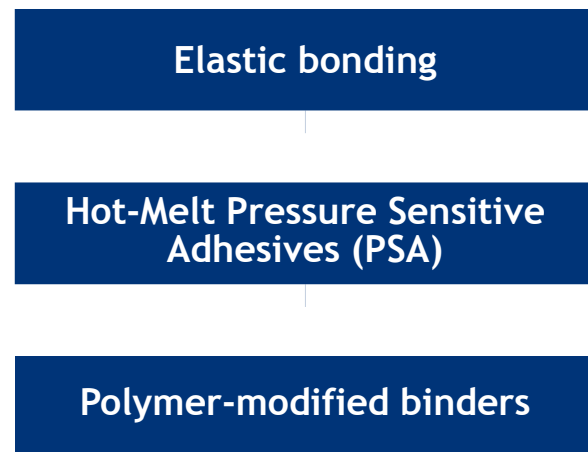


WELL-IDENTIFIED SHORT-MID TERM SYNERGY AREAS

PURCHASING: ~75%			G&A: ~25%	OPERATIONAL EXCELLENCE
Raw materials <ul style="list-style-type: none"> • 16 projects • Internalization • Size leverage 	Goods & Services <ul style="list-style-type: none"> • New organization for Bostik • Savings on capex • Supplier rationalization 	Transport <ul style="list-style-type: none"> • Joint tenders • Freight optimization • Best practices 	<ul style="list-style-type: none"> • Focus on 3 main countries: US, France, China • Shared services 	<ul style="list-style-type: none"> • Process improvement • Best practices • Engineering

LONG-TERM SYNERGIES: OPENING TWO NEW PROMISING PLATFORMS

2



Acrylic-based adhesives

- ▶ Second largest adhesives technology
- ▶ Fast growing water-based systems
- ▶ Upstream integration



Structural bonding

- ▶ High value-added applications
- ▶ PMMA based technology
- ▶ Leverage Bostik global network



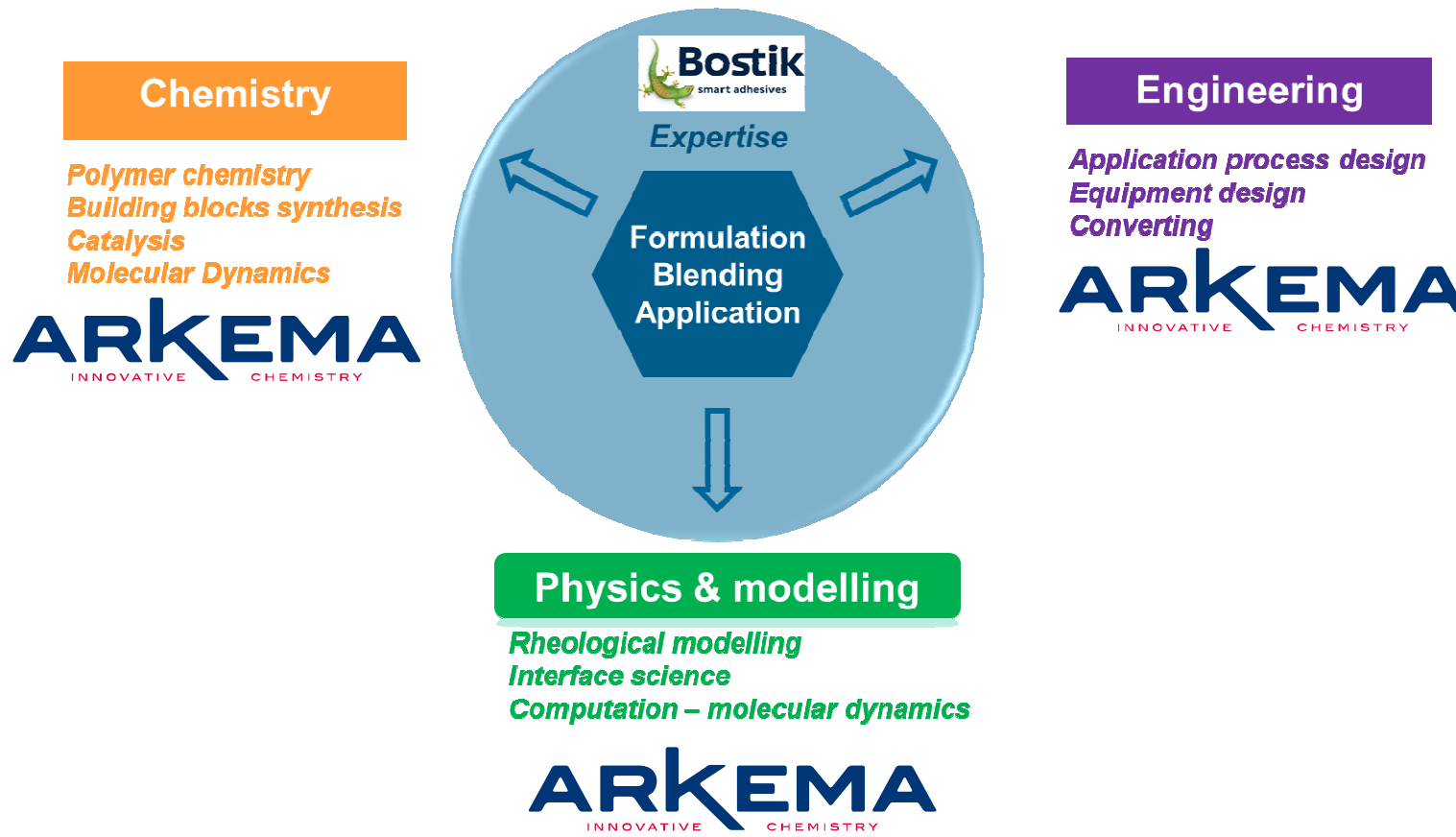
LEVERAGE A UNIQUE COMBINATION OF AN ADVANCED MATERIALS PLAYER AND AN ADHESIVE FORMULATOR

2

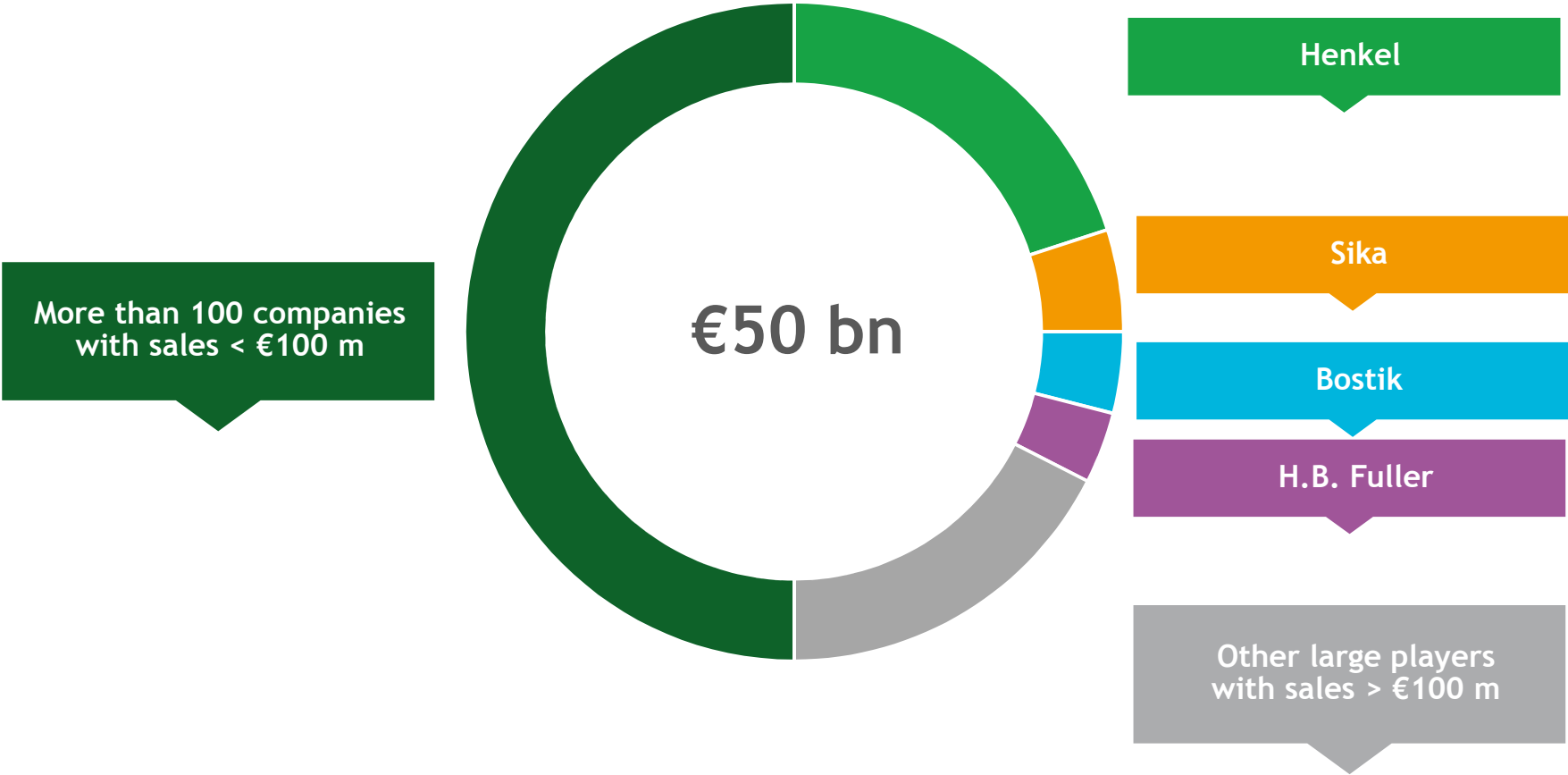
SLIDE PRESENTED AT THE WORLD ADHESIVES CONFERENCE
(19 SEPTEMBER 2012)



Moving from Formulations to Materials Science



BOLT-ON ACQUISITIONS TO ACCELERATE GROWTH



A FRAGMENTED MARKET WITH NUMEROUS OPPORTUNITIES FOR CONSOLIDATION

Source: Arkema internal estimates

ADVANCED MATERIALS

ARKEMA
INNOVATIVE CHEMISTRY

NICHE MARKETS IN ADVANCED MATERIALS: AN UNLIMITED FIELD OF OPPORTUNITIES ...



WATER TREATMENT



OIL AND GAS



SPORTS



BATTERIES



AUTOMOTIVE



COATINGS



ELECTRONICS



PHOTOVOLTAICS



AERONAUTICS



ADHESIVES
FOR CONSTRUCTION



ADHESIVES
FOR INDUSTRY



...DRIVEN BY MEGATRENDS



MEGATRENDS	INDUCED MARKETS	HIGH PERFORMANCE MATERIALS SOLUTIONS
ENERGY EFFICIENCY	<ul style="list-style-type: none"> ▶ Lightweight materials in transport (automotive, aeronautics, etc.) ▶ Electric vehicles ▶ Thermal insulation in housing 	<ul style="list-style-type: none"> ▶ Rilsan® HT, composites (PEKK), composite bonding ▶ Kynar® ▶ Kynar® Aquatec, CECA molecular sieves, wall plasters with insulation properties
NEW ENERGIES	<ul style="list-style-type: none"> ▶ Photovoltaics ▶ Batteries ▶ Wind power 	<ul style="list-style-type: none"> ▶ Kynar® , Apolhya® Solar, Luperox® Solar ▶ Kynar® ▶ AEC Polymers® structural adhesives
CONVENIENCE LIFESTYLE	<ul style="list-style-type: none"> ▶ Electronics ▶ Hygiene and medical care ▶ Sport and leisure ▶ Packaging 	<ul style="list-style-type: none"> ▶ Specialty polyamides (Rilsan® Clear), AEC Polymers®, Piezotech® ▶ Non-woven adhesives, CECA molecular sieves for medical oxygen ▶ Pebax® ▶ Adhesives for packaging, glass coating
RESOURCE CONSTRAINTS	<ul style="list-style-type: none"> ▶ Water treatment ▶ Enhanced oil and gas recovery ▶ Renewable raw materials 	<ul style="list-style-type: none"> ▶ Kynar®, CECA activated carbons ▶ CECA oil additives, Kynar®, Rilsan® ▶ Rilsan®, Hiprolon®, Sarbio® (Sartomer)
LOW-COST SOLUTIONS	<ul style="list-style-type: none"> ▶ 3D printing 	<ul style="list-style-type: none"> ▶ Sartomer UV-curing resins, polyamides, PEKK

A UNIQUE COMBINATION OF SOLUTIONS FOR FLEXIBLE PIPES IN THE OIL AND GAS



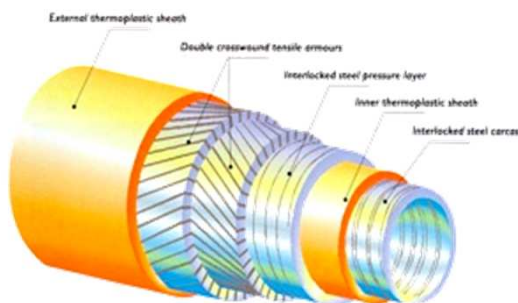
- ▶ 2 complementary solutions used depending on the characteristics of the oilfields
- ▶ Highly technological content: a performance more than a product
- ▶ Strong partnerships with customers
- ▶ Potential of PEKK solution in the longer term

RILSAN®

- ▶ Chemical resistance
- ▶ High thermo-mechanical properties
- ▶ Flexibility
- ▶ Durability up to 25 years

KYNAR® FOR VERY STRINGENT CONDITIONS

- ▶ Chemical resistance
- ▶ High temperature resistance (up to 130° C)
- ▶ High pressure
- ▶ Flexibility
- ▶ Durability up to 25 years



EVERYWHERE IN BATTERIES

Expected annual growth **>+10%**

TODAY SOLUTION: KYNAR®

- ▶ Kynar®: everywhere in the battery
 - as a **binder** to ensure the cohesion of the active material and adhesion on the aluminum foil electrode
 - as a **coating for separators** improving cycle durability and safety
- ▶ An excellent combination of strong performance, good processability, quality and cost bringing more value to our customers

TOMORROW DEVELOPMENTS

- ▶ 2 new salts under development
- ▶ Main application: transport lithium in lithium-ion batteries
- ▶ Markets:
 - mostly **portable devices** today
 - **electric vehicles** starting today and tomorrow
 - **energy storage** tomorrow
- ▶ Expected contribution from 2017/2018

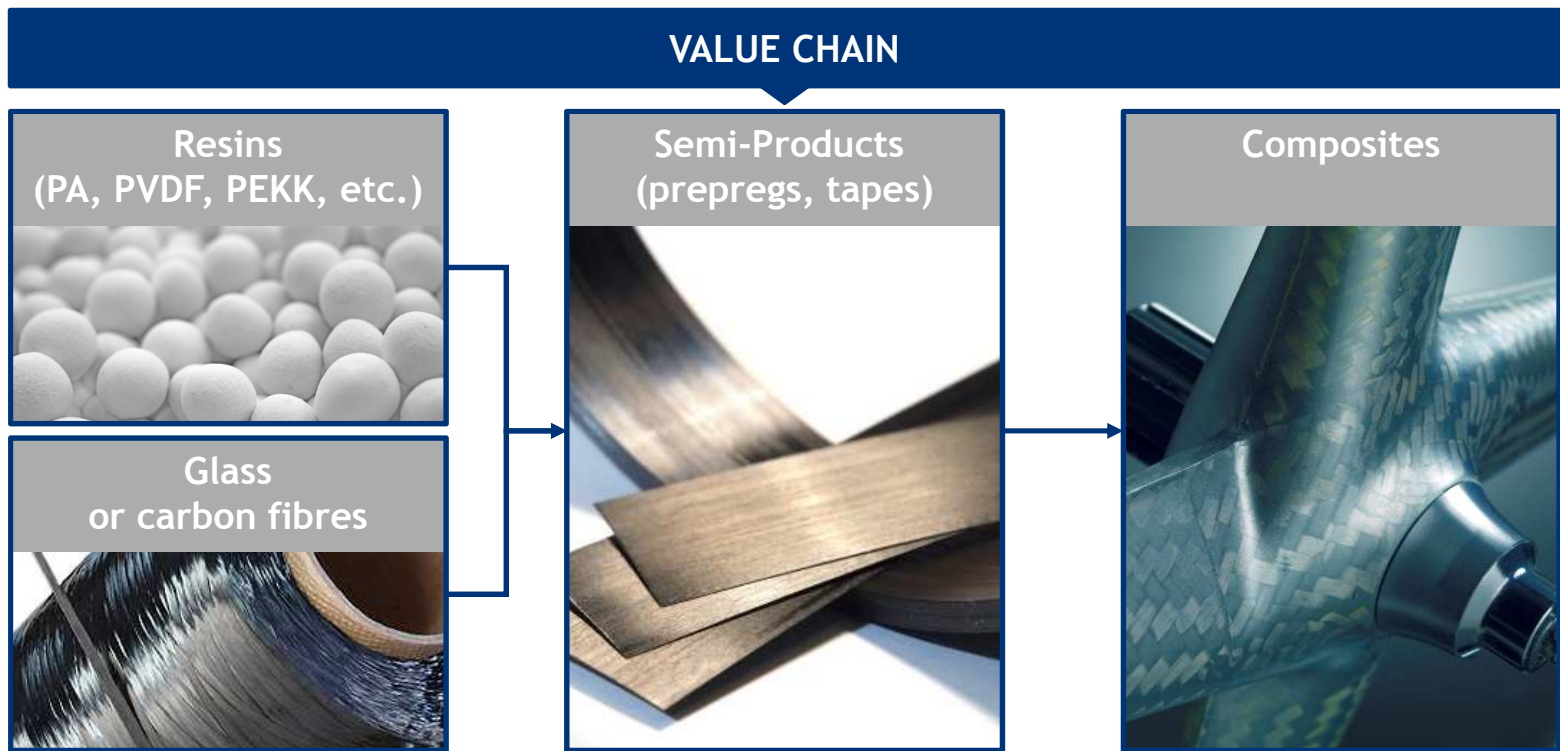
Electrolyte salts

SIX INNOVATION PLATFORMS



LIGHTWEIGHT MATERIALS

Expected annual growth >+7%



- ### BENEFITS FROM THERMOPLASTIC COMPOSITES
- ▶ Higher productivity
 - ▶ Versatility of design
 - ▶ Mechanical performances
 - ▶ Recyclability

TARGETED MARKETS



A WIDE RANGE OF SOLUTIONS FOR AERONAUTICS

World fleet
x1.5
over next
20 years



Orgasol® the innovative solution for toughening thermoset composites

Altuglas® PMMA transparent thermoplastics with high resistance

Embossing resins

Laminate adhesives

Heat seal and attachment adhesives

Mounting adhesives

Skin to core composite adhesives

Kynar® the new generation foam for a durable insulation system

Polystrand® for ultra-light luggage containers

Kepstan® the latest generation polymer at very high performance

A GLOBAL MANUFACTURING NOW WELL IN PLACE TO CAPTURE GROWTH IN HIGH GROWTH COUNTRIES



	NORTH AMERICA	EUROPE	ASIA	WHAT REMAINS TO BE DONE
SPECIALTY ADHESIVES (BOSTIK)	✓	✓	✓	▶ Target 30% sales in emerging countries
KYNAR® PVDF	✓	✓	✓	
SPECIALTY POLYAMIDES	✓	✓	✓	
FILTRATION AND ADSORPTION		✓		<ul style="list-style-type: none"> ▶ x2 capacities at Honfleur (Fr) to serve Asia and Middle East ▶ Ramp-up new unit in oil additives in Saudi Arabia
ORGANIC PEROXIDES	✓	✓	✓	<ul style="list-style-type: none"> ▶ x2 capacities at Changshu (China) ▶ Project of a new unit in Saudi Arabia
UV-CURING RESINS	✓	✓	✓	
COMPOSITES (PEKK)		<i>Materials for tomorrow</i>		<ul style="list-style-type: none"> ▶ x2 capacities in France (1H'16) ▶ World-scale unit in Mobile - US (2H'18)

LIMITED NEED FOR SIGNIFICANT CAPEX OVER THE COMING YEARS

SILIPORITE[®], A NEW GROWTH DRIVER FOR FILTRATION AND ADSORPTION (CECA)

Expected annual growth
+6 to 7%



THE LATEST GENERATION OF MOLECULAR SIEVES

- ▶ Siliporite[®] SPX 5003 for xylene separation in petrochemicals process
- ▶ A combination of unique properties:
higher purity + higher yield + higher lifetime
=
HIGHER PERFORMANCE
- ▶ A 20-year successful partnerships with AXENS, and IFPEN for R&D on the adsorbants, in view of higher performances for their xylene separation process

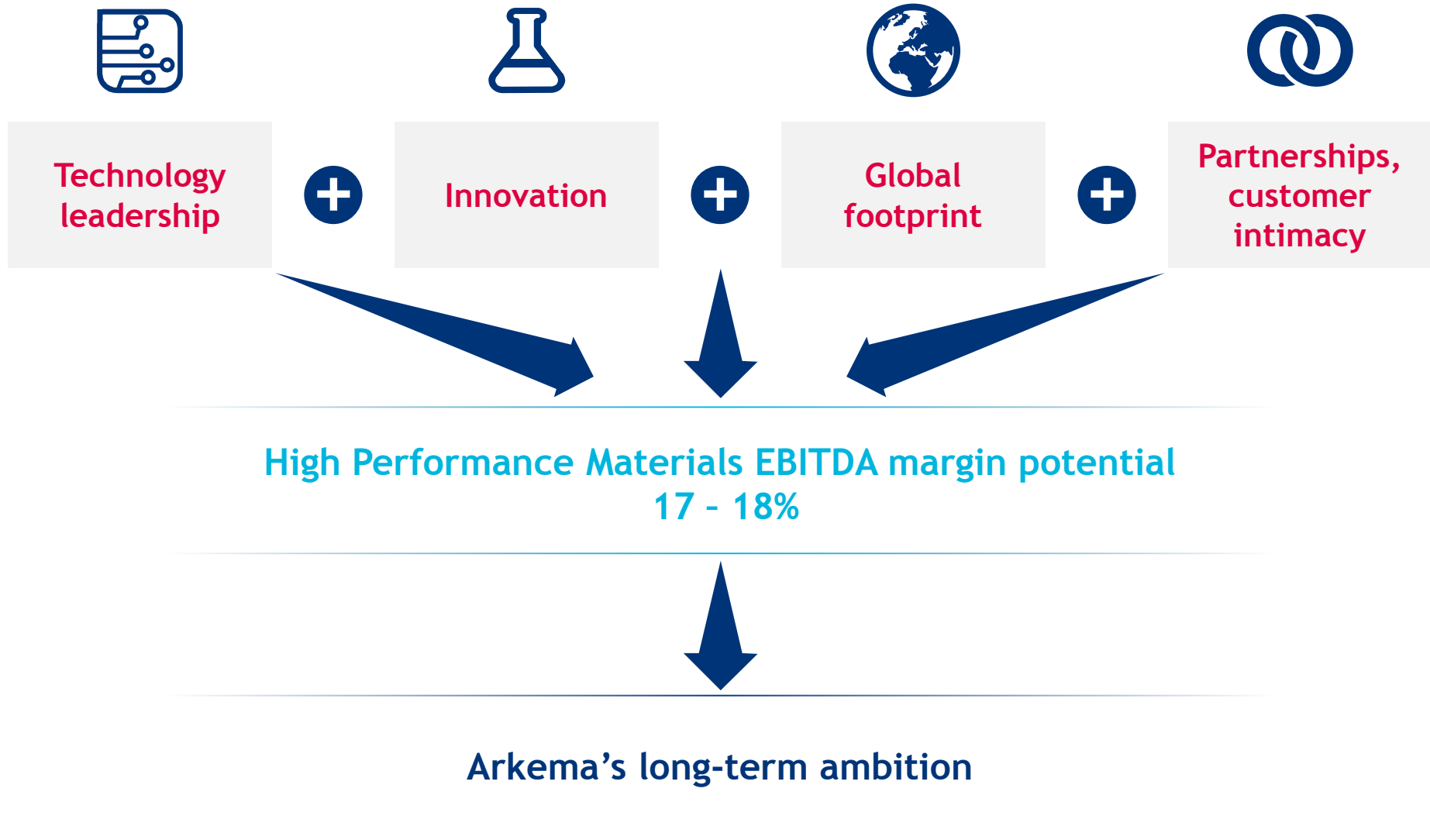


x2 PRODUCTION CAPACITIES AT HONFLEUR (FR)

- ▶ Strong growth in Asia and Middle East for 2 end-uses: synthetic textiles and PET bottles
- ▶ ~ €60 m capex
- ▶ 2 start-up phases in 2016 and 2017

Accelerating our customer performance

WELL POSITIONED TO SUPPORT GROUP'S LONG-TERM AMBITION



DISCLAIMER

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. 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 and changes in general economic and business conditions. These risk factors are further developed in the reference 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 documents filed with the French *Autorité des marchés financiers*.

Financial information for 2015, 2014, 2013, 2012, 2011, 2010, 2009, 2008, 2007, 2006 and 2005 is extracted from the consolidated financial statements of Arkema. Quarterly financial information is not audited.

The business segment information is presented in accordance with Arkema's internal reporting system used by the management.

The definition of the main performance indicators used can be found in the reference document filed with the French *Autorité des Marchés Financiers* and available on www.finance.arkema.com