



ARKEMA
INNOVATIVE CHEMISTRY

**CAPITAL
MARKETS
DAY 2017**

Adhesives

Vincent Legros, Executive Vice-President Adhesives

We design **smart adhesives** for **sophisticated requirements**



Transportation



- Bonding and sealing*
- Fire retarding*
- Lightweighting*
- Insulation*



Construction



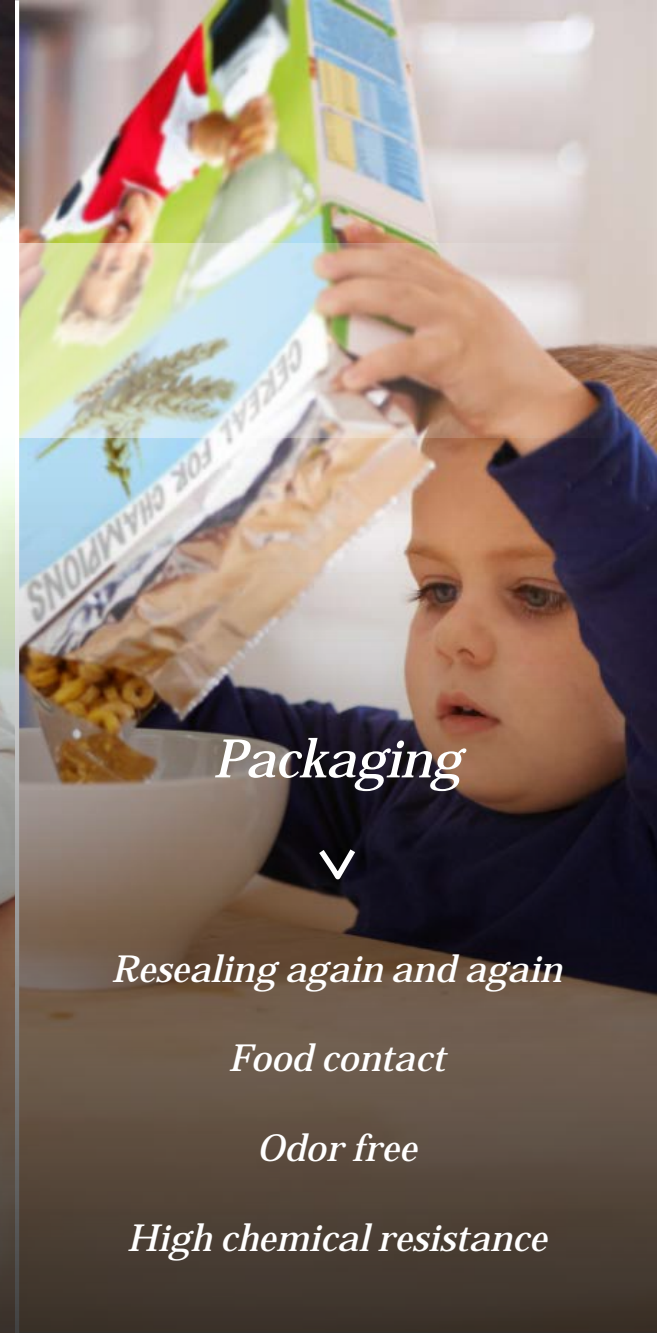
- Sealing*
- Waterproofing*
- Acoustic insulation*
- Thermal insulation*



Hygiene



- Bonding*
- Flexibility*
- Less odor*
- Thinner diapers*



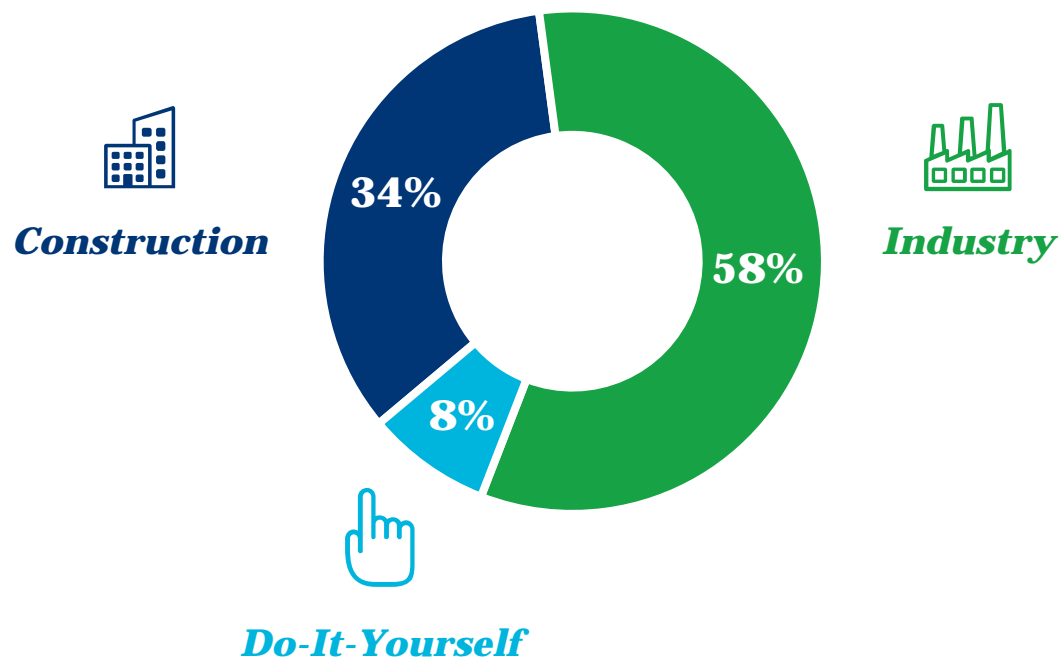
Packaging



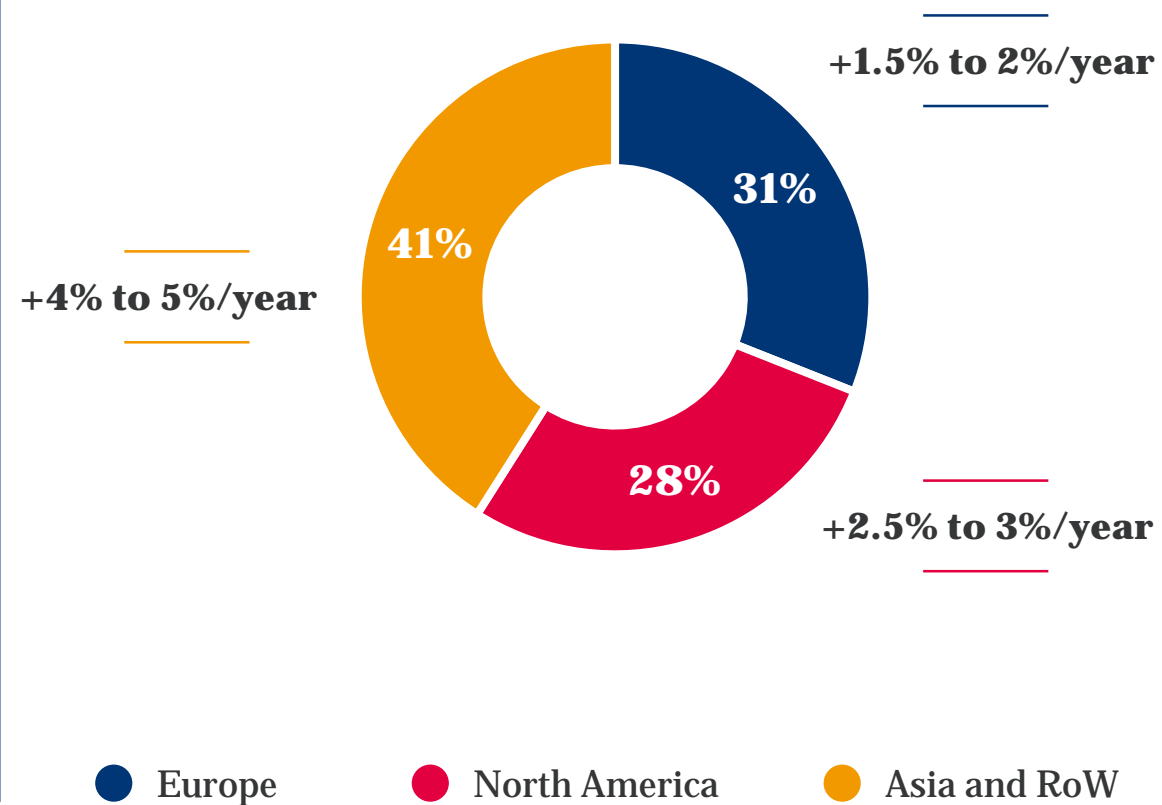
- Resealing again and again*
- Food contact*
- Odor free*
- High chemical resistance*

Adhesives and sealants, a 50 billion euro market

Worldwide split by market



Worldwide split by region



Durable goods

Transportation
(automotive, rail, marine, aeronautics, trucks)



Construction
(B to B)



Electronics



Bostik product

Converting

Flexible packaging



Packaging



Tapes & Labels



Hygiene

Diapers



Hygiene



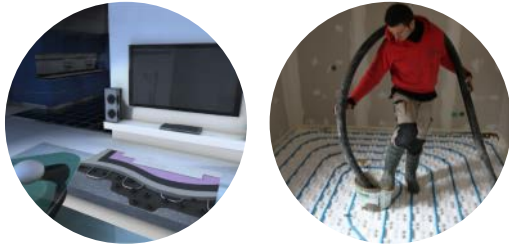
Tissues



Bostik product

Flooring

Floor preparation



Hard and soft flooring



Tiling



Sealants



Waterproofing

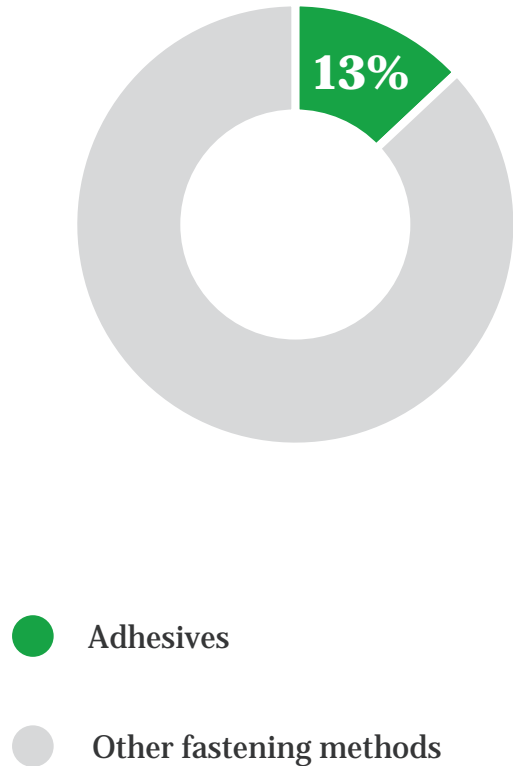


Do-It-Yourself (DIY)

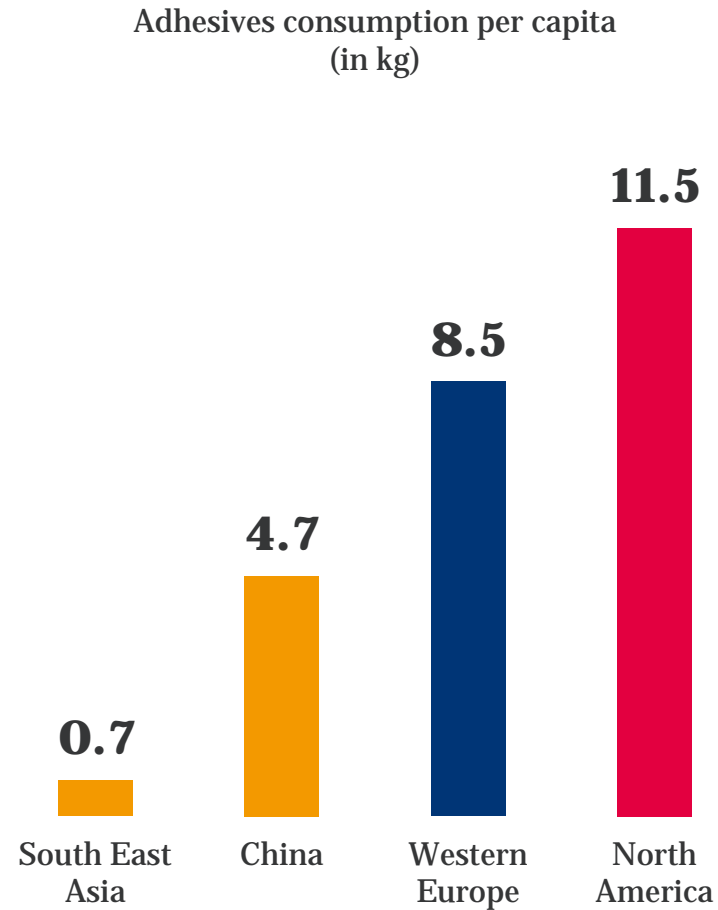


A market growing at 3% to 3.5% a year

Large potential for replacement



Growing consumption in emerging markets



Strong growth drivers

Replace mechanical fastening

Increasing needs for lighter materials

Bonding dissimilar materials

Emerging markets

Standard of living

Urbanization

Small portion of final product costs but critical to performance

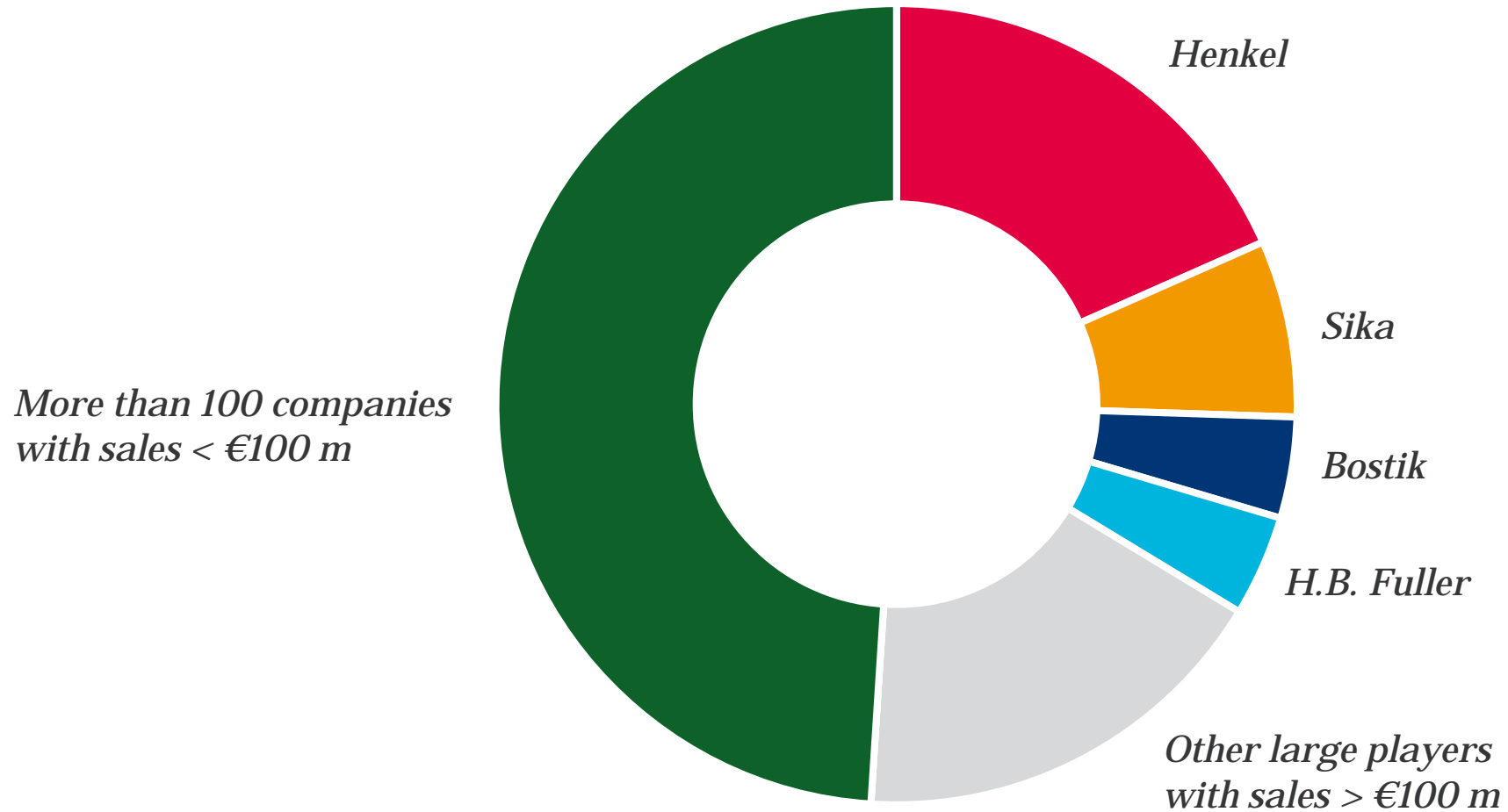
Increasing needs for home efficiency and insulation

Energy efficiency

Emission reductions

Source: IHS 2016 Adhesives and sealants

A fragmented market with high potential for consolidation



Bostik
today

Successful integration and long-term potential confirmed

A successful integration

2017 EBITDA target
achieved
**one year ahead
of plan**

EPS accretive after
one year

**Short term synergies
implemented in 2 years**

2016 financial highlights

€210 m EBITDA
(+33% versus 2014)

13.1%
EBITDA margin

+3.4%
volume growth

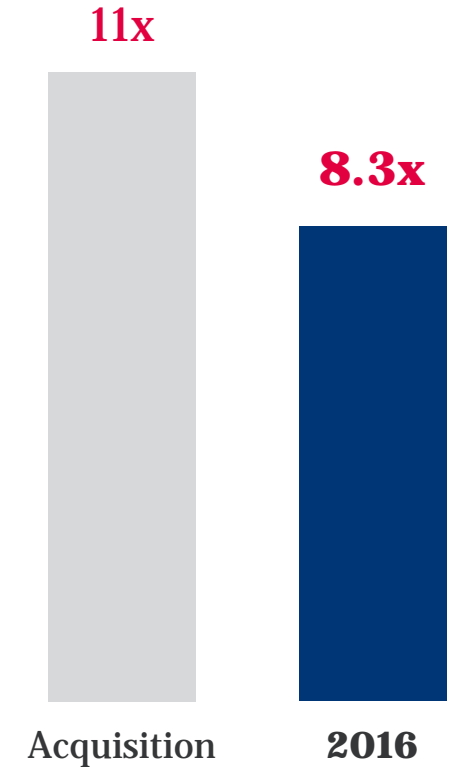
Main projects achieved

Acquisition of
Den Braven

6 new plant
openings

>600 new products
launched

EV/EBITDA



 **€1.6 bn sales**
(+€345 m from Den Braven)

 **5,000 employees**
(+1,000 from Den Braven)

 Present in **50 countries**

 **10.5% REBIT margin**

 **2.8% capex / sales**

Strengths

#3 worldwide

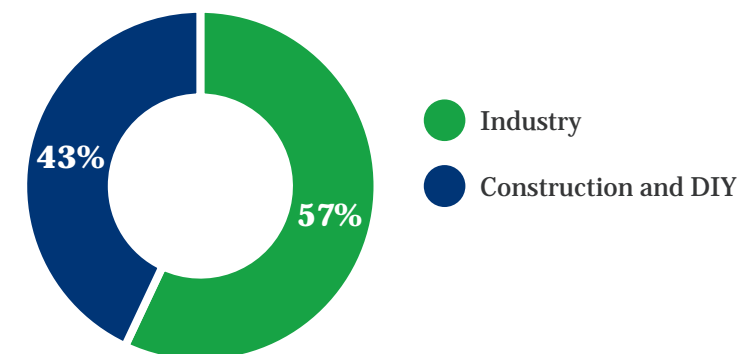
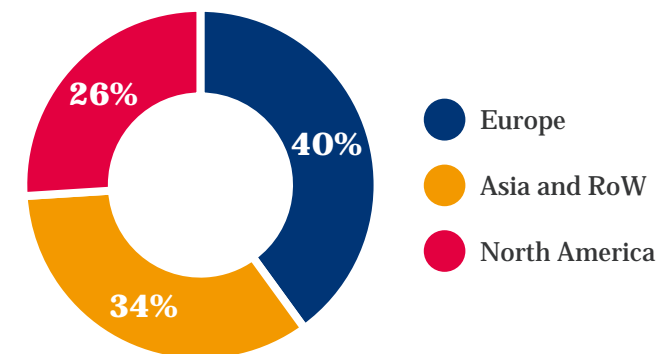
*World-class technologies
and applicative expertise*

Global reach

Powerful global and local brands

*Unique combination of an adhesive
formulator and a chemical player*

Sales split



Leading positions in a wide range of end-markets

Industry

#3/#4 worldwide



Our main markets:
Flexible packaging
Transportation
Assembly

Main global competitors:
Henkel
H.B. Fuller
Sika (transportation)

Hygiene

Among top 3 worldwide



Our main markets:
Disposable hygiene
(baby diapers, adult
incontinence, tissues)

Main global competitors:
Henkel
H.B. Fuller

Construction

Among top 3 in key countries



Our main markets:
Flooring
Tiling
Sealants

Main global competitors:
Henkel
Sika
Mapei

Do-It-Yourself

Among top 3 in key countries



Our main markets:
Assembly
Flooring
Sealants

Main global competitor:
Henkel

Significant growth potential from Bostik's technology breadth

125 years in adhesives

Technology leadership



Investment in core technologies

(elastic bonding, hot-melt PSA, polymer-modified binders, acrylic,...)

In-depth knowledge

from product formulation to application at customers

Close to our customers



11 applied technology centers
in the world close to our customers

Dedicated teams

in business and in R&D / technical support
(500 people)

Recognized know-how



Customer awards



SIEMENS



Global R&D footprint at our customers' service

3 state-of-the-art
smart technology centres



Venette
France

Europe



Den Braven
Netherlands



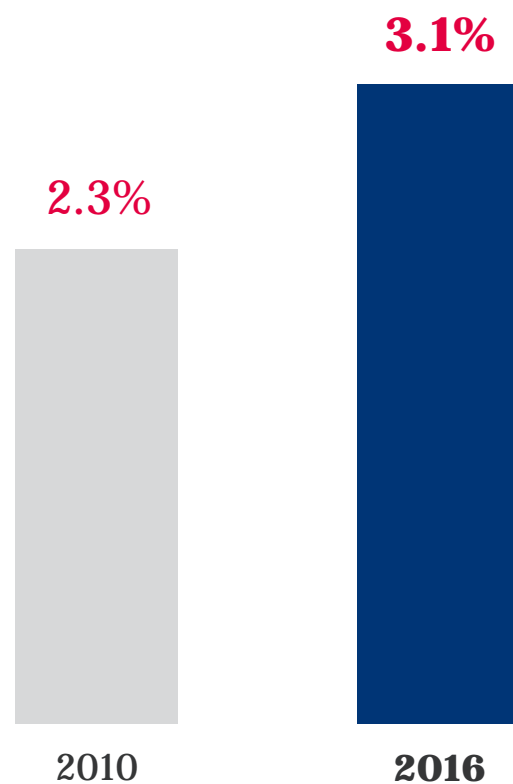
Milwaukee
United States



Shanghai
China

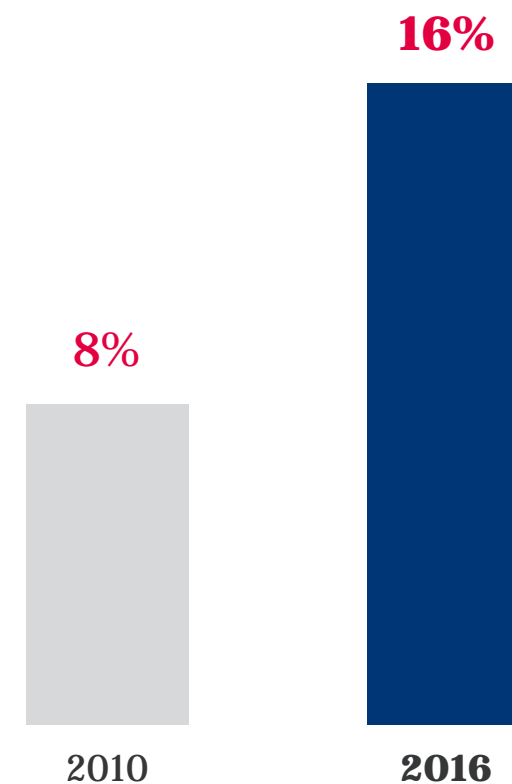
Increased R&D efforts

R&D expenses as a % of sales



Sales from products < 3 years old

as a % of sales



A dynamic innovation pipeline

Brilliance™

Low odor adhesives
for hygiene



Kizen®

Next generation cardboard
adhesives for packaging
(high performance / easy to use)



Axios®

Moisture and acoustic barriers
in hardwood adhesives



Wet on Wet®

Immediately paintable
high performance sealants



Reseal®

Resealable lidding
for food flexible packaging



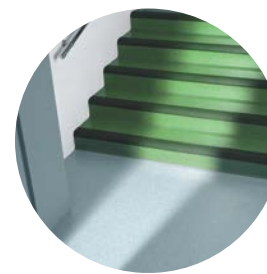
Simson®

Primerless sealant
for automotive windscreen



Green Contact®

Low VOC and odor-free
waterborne adhesives for soft flooring



Vivid®

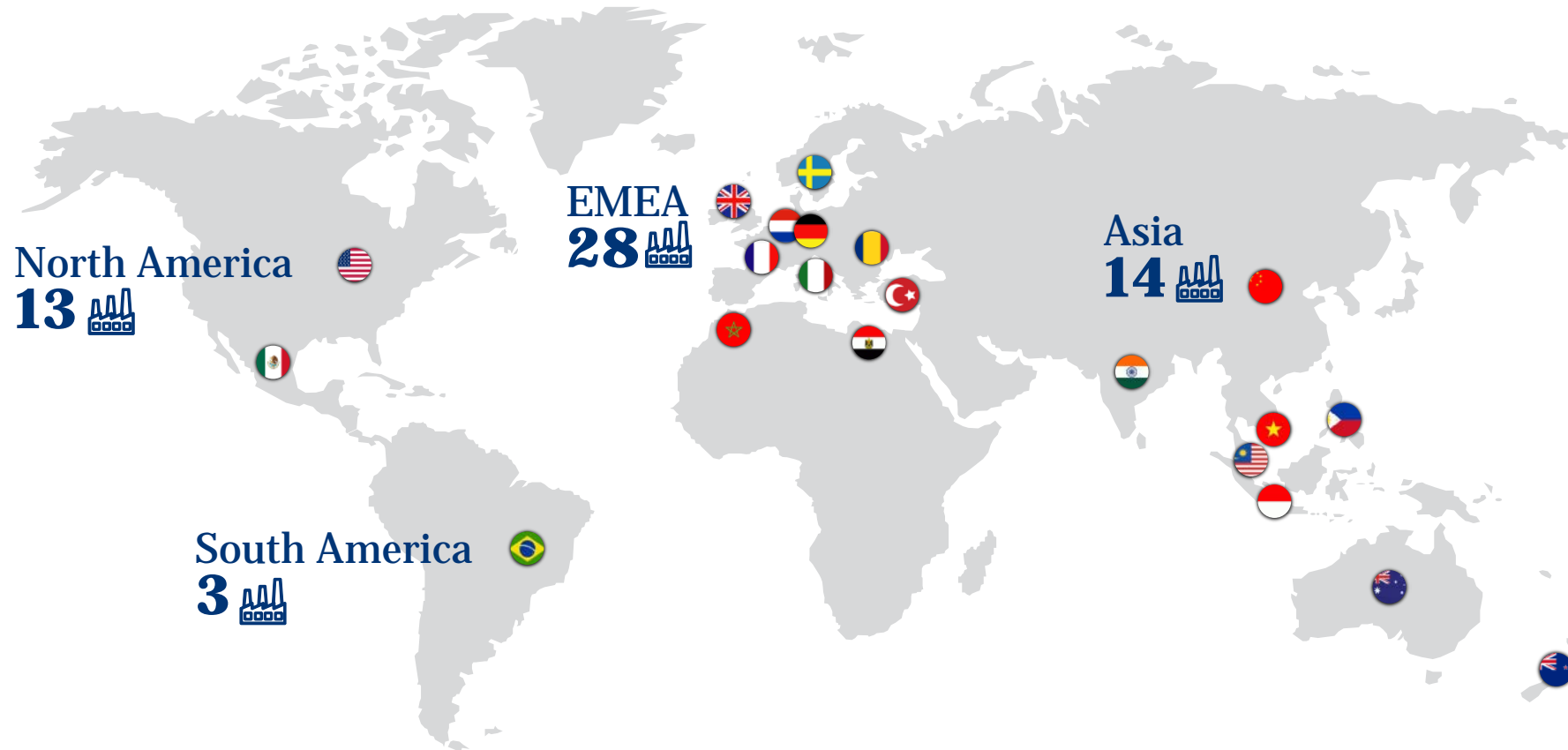
High aesthetic grouts



A global footprint with potential for further expansion

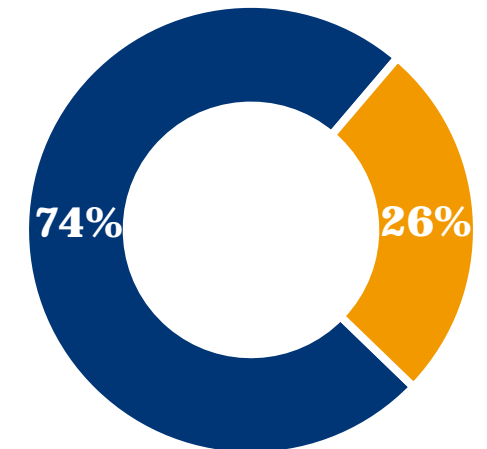
Manufacturing footprint

Number of production sites



Adhesives sales split by region

2016 sales



- Mature markets
- Emerging markets

Long-term
ambition

Our long-term ambition (2023) for Adhesives



12.5% to 13%
REBIT margin



More than double
sales versus 2016



3% to 4%
organic sales growth



A differentiated strategy by segment leveraging key strengths

Hygiene / Industrial assembly / Construction / DIY



***Accelerate
geographic expansion***



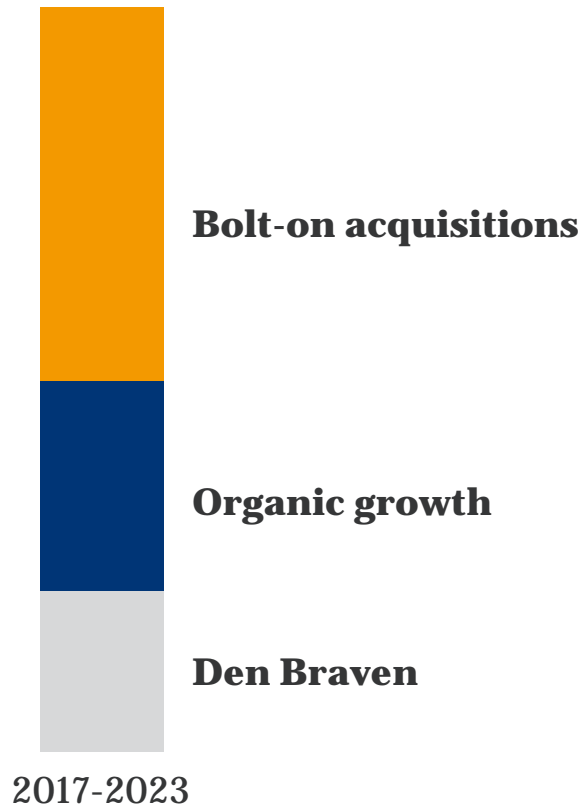
***Participate
in market consolidation***



***Strengthen
operational excellence***

More than double our sales in Adhesives

*A combination of organic growth
and acquisitions*



Organic growth

- > **3% to 4% growth on average**
 - > Innovation
 - > Geographic expansion
 - > Global branding
 - > Development synergies with Arkema

Bolt-on acquisitions

- > **Small to mid-size acquisitions**
- > **Focus areas**
 - > Broaden technology range
 - > Increase market share in mature economies
 - > Expand in new geographies
- > **Delivering high synergies**
 - > Purchasing and cost savings
 - > Cross-selling

A differentiated strategy by segment

Hygiene



*Be the innovative leader
of the industry*

*Further globalize
the footprint*

Industrial assembly



*Build on core segments to reach
global leading positions*

*Leverage broad technology
portfolio and commercial reach
to expand in high value added
niches*

Construction



*Build global leadership positions
in flooring and sealants*

*Leverage the benefits from recent
and future bolt-on acquisitions*

Do-It-Yourself



*Leverage Bostik® global brand
and be recognized as the
preferred innovative player*

*Enhance marketing with
comprehensive digital approach*

Build on the unique combination of a chemical company (Arkema) and a formulator of adhesives

Hygiene highlights

> **€1 bn** market

Among top 3 worldwide

+6% expected annual growth

Bostik unique value proposition

Dedicated teams

*Worldwide smart technology centre
for hot melt PSA*

*Arkema expertise
in chemistry and odor*

World-class facilities and logistics

Recent developments

Innovation

Launch of low odor Brilliance™



New technology for thinner diapers



Geographic expansion

*New powerhouses
Mexico and India*

Manufacturing footprint



Mexico



India

Flexible packaging highlights

> **€1.8 bn** market

+5% expected annual growth

Bostik unique value proposition

Leader in fast-growing Reseal and cold seal applications

Expertise in all technologies

Strong innovation pipeline

Dedicated teams, globally and locally

Synergies with Arkema

Recent developments

Innovation



Coating, lamination and high value added polyesters

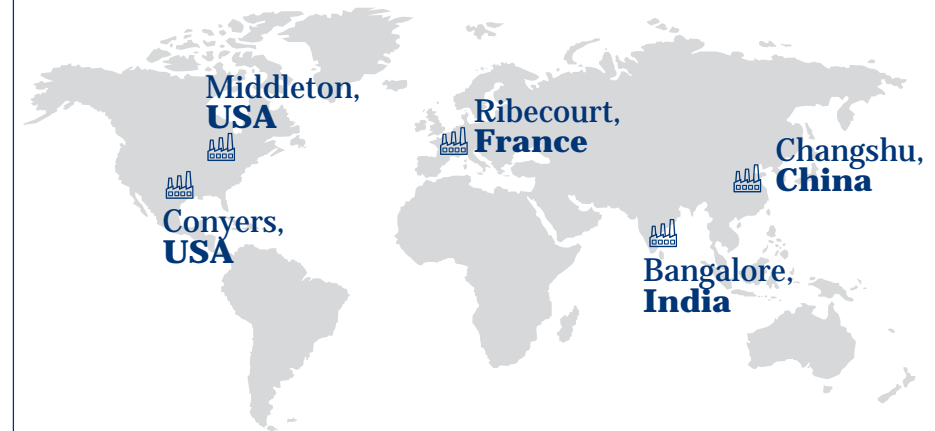


Cold seal and Reseal, a technology first developed by Bostik

Geographic expansion

New production capacities in France and China

Manufacturing footprint



France



India

Key characteristics

Small size businesses

Faster growing markets

Technology-driven

Co-developments with customers

Potential for offer globalization

Examples of applications



Appliances



Encapsulation



Insulating glass



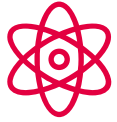
Marine



Filters

Expand in high value niches: example of appliances

Decoration or emblem bonding



Cooling coil bonding



Hole sealing



Vacuum insulated panel (VIP) bonding



Evaporator bonding



Door handle reinforcement



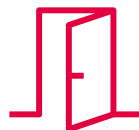
Display bonding



Cabinet seam sealing



Shelves assembling



Door assembling

Fast growing niches

*Higher standard of living
in emerging markets*

Replacement of mechanical fastening

Bostik unique value proposition

All technologies

*Leverage synergies with Arkema:
OEM relationships and
expertise in advanced materials*

Co-development

Leverage Arkema's geographic presence, partnerships with leading players and market expertise



Automotive



Sports



Labels



Water filtration



Packaging

Know-how combination

Combine Bostik's formulation and application know-how with Arkema's expertise in chemistry and processes



Disruptive process in solvent substitution in durable pressure sensitive labels



Redispersible powder and additives in tile adhesives



Transfer AEC Polymers' methacrylic technology of structural adhesives from Arkema to Bostik

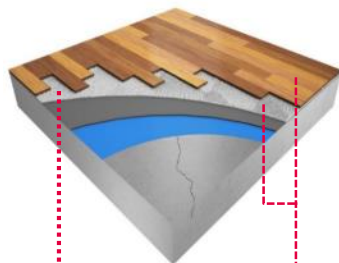
Combining Arkema and Bostik skills brings significant value

Towards a full range of flooring solution systems

#1

in hardwood flooring in the US

Hardwood flooring

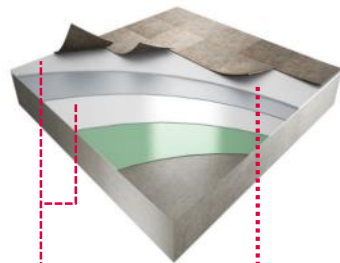


Adhesive

#2

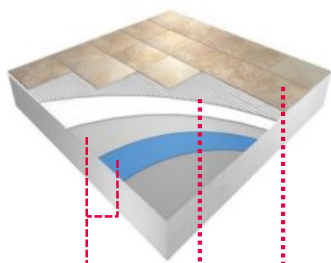
in soft flooring in Europe

Soft flooring



Acrylic adhesive

Tiling

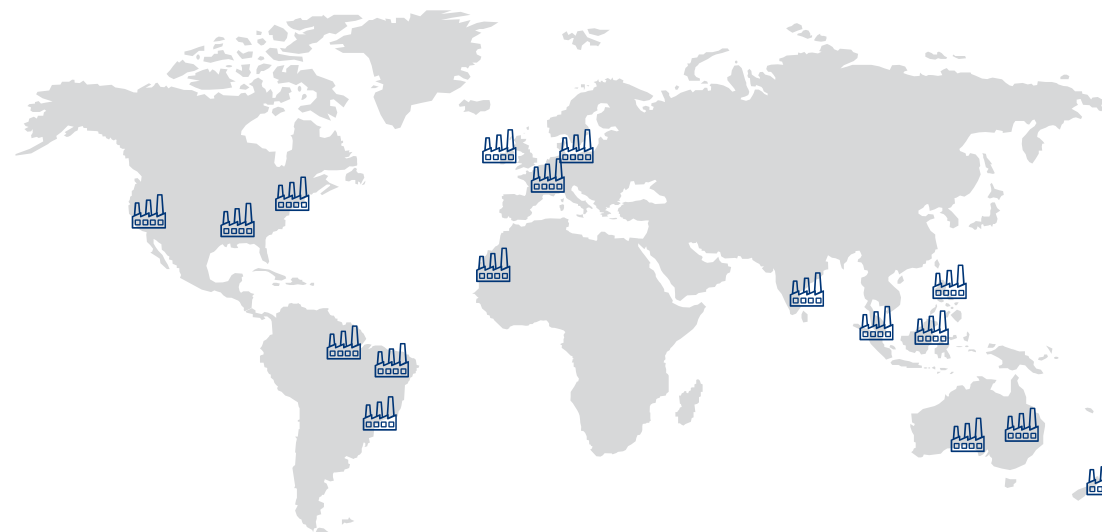


Mortar Grout

Floor preparation

Flooring solutions range in the US strengthened with CMP's floor preparation business acquired in May 2017

Market > €1.7 bn



Build on strong European footprint to further expand in Eastern Europe

Significant potential for expansion outside of Europe with a target of 2 to 3 new units per year

Small to mid-size acquisitions considered to complete the range of full system solutions

Build a global leadership position in sealants

Sealants highlights

€9 bn market

+3% to 4% expected annual growth

Bostik unique value proposition

Leader in high performance
sealants in Europe
(12% market share)

World-class facilities in Europe
with Den Braven powerhouses

World-class proprietary technologies

Addressing both construction
and industry markets

Recent developments

Innovation



Wet on Wet®
Acrylic-based sealants
offering possibility
of painting directly
after use



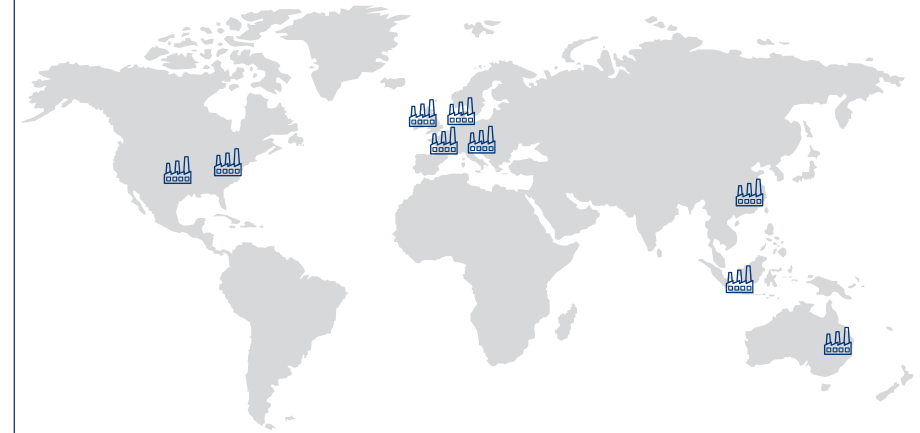
Seal N Flex®
Polyurethane
construction sealants

Organic growth and M&A

Acquisition of Den Braven

Leverage geographic
complementarity with Bostik

Manufacturing footprint



Well on track to implement Den Braven's acquisition synergies

Implementation has started with strong mobilization of teams

Set-up of a dedicated integration team

Cost synergies: implementation and benefits

Development synergies: implementation and benefits



Well identified areas for synergies

1/3 purchasing

- > 6 main projects identified
- > Size leverage
- > Internalization

1/3 operational excellence

- > Process improvement
- > Leverage best manufacturing practices
- > Product range rationalization

1/3 commercial synergies

- > Specific approach defined for 10 main countries in Europe
- > Accelerate growth in South East Asia and North America by leveraging Bostik commercial network

Confirmed total synergies of at least €30 m to be fully achieved within 5 years

Diversified range of products



Do-It-Yourself highlights

€4 bn market

Among top **3** in key countries

~2.5% annual growth

Bostik unique value proposition

A powerful combination of leading **global and local brands**

Full range of products complementary to the range for professionals

Strong innovation capability

Strong customer loyalty and credible partner for DIY chains

Recent developments



Rapid setting wood adhesives, 40% faster than traditional wood adhesives



Fixer sans percer



Greentec Tin-free grab adhesives

Dual strategy with global and local brands



**Mosaic
contest**



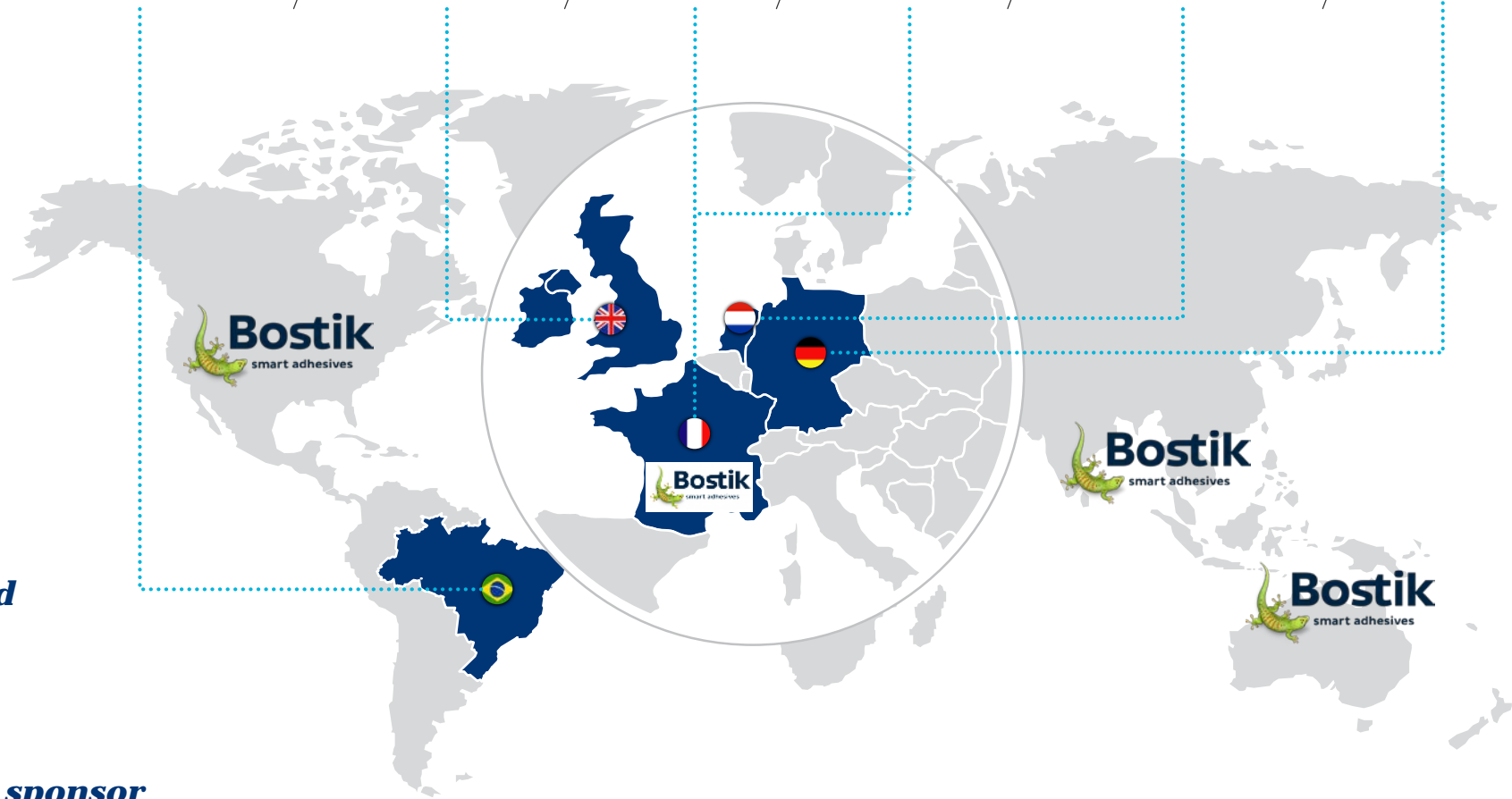
**Tour
de France**



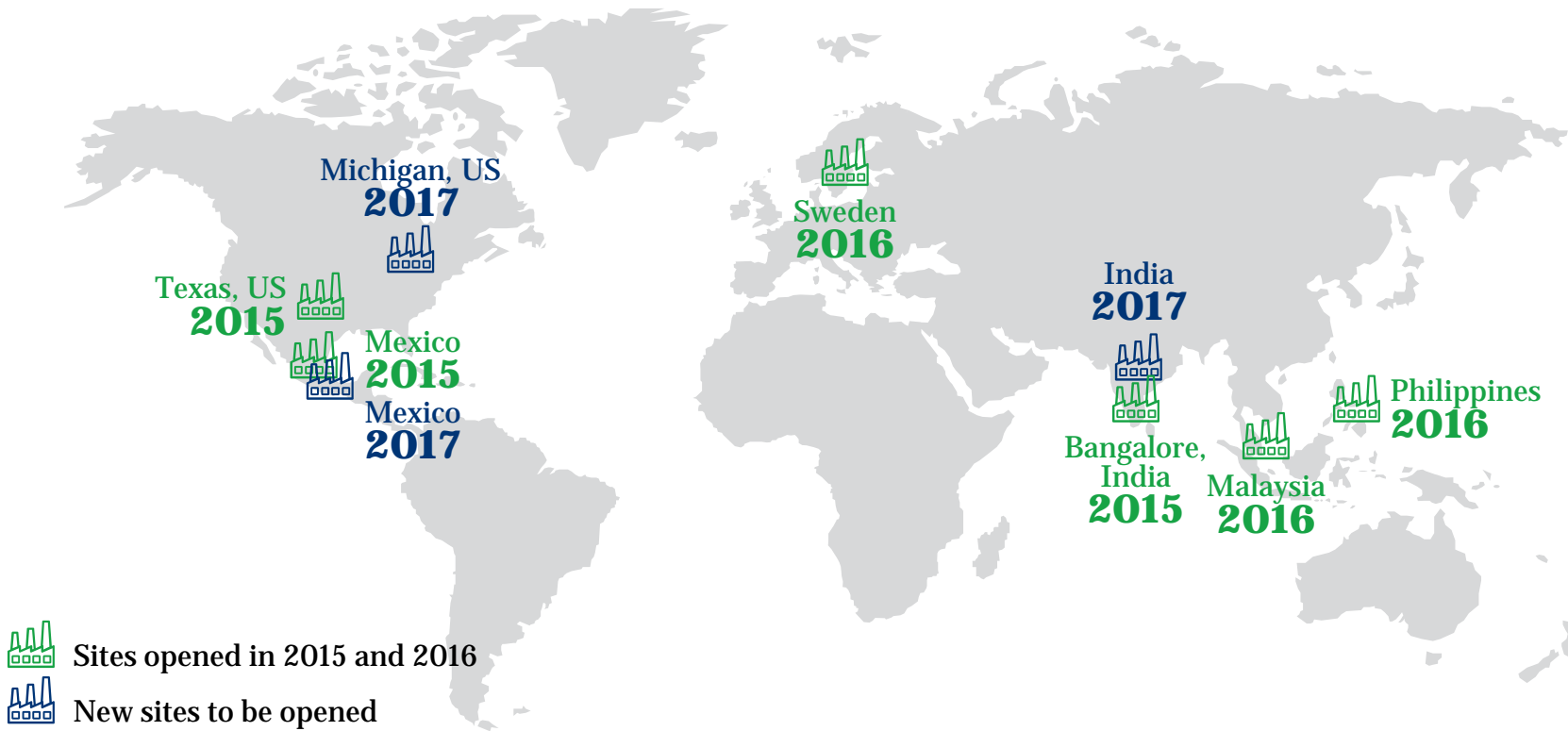
**6 months
on the Bund**



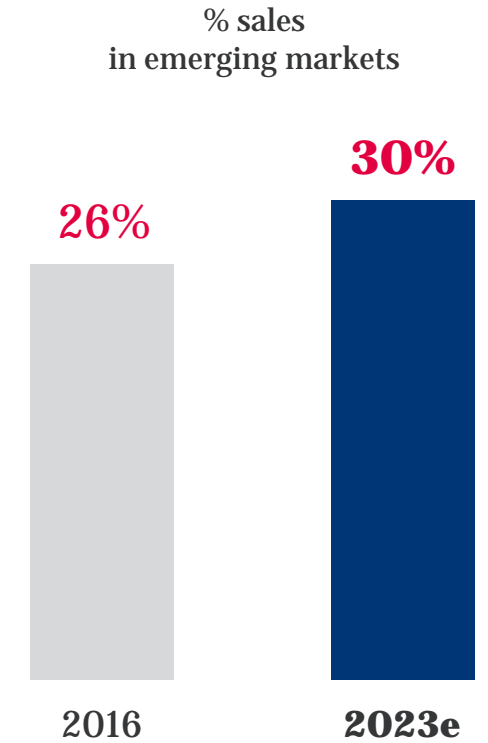
**2016
rugby sponsor**



6 new plant openings in 2015 and 2016



Double sales in emerging markets



>15 new plants over 2017-2023

*Bolt-on acquisitions
delivering high synergies*

A combination of:

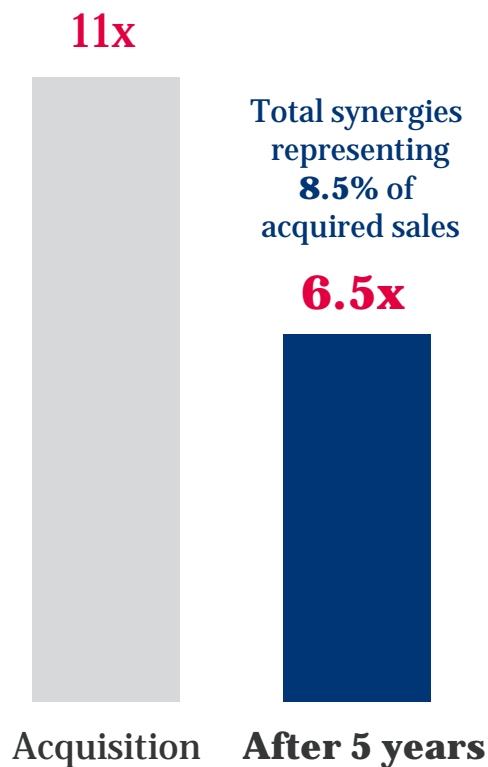
*Purchasing synergies:
raw materials, goods and
services, logistics*

Operational excellence

*Commercial synergies:
new geographies, new markets*

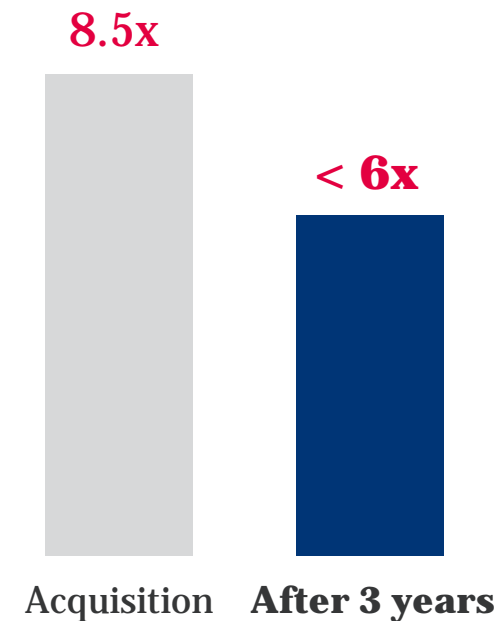
*Den Braven
(December 2016)*

EV/EBITDA



*CMP Specialty Products
(May 2017)*

EV/EBITDA



Powerhouse

**Duplicate powerhouse concept
in key production lines
(sealants, hygiene, packaging, tapes & labels)**



Constant high-quality

High efficiency units

Digitalization & automation

**Improve
manufacturing
processes**



Reinforced quality through automation
of manufacturing processes

Higher reliability and optimized capacities

Leverage Arkema's disruptive engineering
know-how

Objective

Gains of around **€10m per year**

Deliver, on top of annual gains, cost synergies
between Bostik and Den Braven

Low capital intensity with
capex below 3% of sales

Pursue systematic emphasis
on variable cost optimization
(quality journey, reformulations, purchasing,...)



*Organic growth platforms
well identified*



*Successful integration
with Arkema*



*Improved financial performance and
ambition revised upward*



*Highly synergetic
bolt-on acquisitions*



*Continue the
operational excellence journey*

Recurring operating income (REBIT): is calculated as the difference between operating income and other income and expenses. It excludes the depreciation and amortization resulting from the revaluation of tangible and intangible assets as part of the allocation of purchase price of acquired businesses.

Other income and expenses: correspond to a limited number of well-identified non-recurring items of income and expense of a particularly material nature that the Group presents separately in its income statement in order to facilitate understanding of its recurring operational performance (as defined in the 2016 consolidated financial statements included in chapter 4 of the 2016 Reference Document).

EBITDA: corresponds to recurring operating income increased by the depreciation and amortization not included in other income and expenses.

Adjusted net income: corresponds to Net income – Group share adjusted for the Group share of the following items:

- other income and expenses, after taking account of the tax impact of these items,
- income and expenses from taxation of an exceptional nature, the amount of which is deemed significant,
- net income of discontinued operations,
- unrealized exchange differences on foreign currency financing for investments of an exceptional nature.

Free cash flow: corresponds to cash flow from operations and investments excluding the impact of portfolio management.

Exceptional capex: correspond to exceptional investments which are unusual in size or nature.

EBITDA to free cash conversion: corresponds to the ratio of EBITDA on the free cash flow excluding exceptional capex. Free cash flow will be restated to offset the impact of the raw material environment on changes in working capital.

Return on capital employed: corresponds to the ratio of: $(\text{REBIT} - \text{current income taxes}) / (\text{net debt} + \text{shareholders' equity})$ under current IFRS rules. All other accounting and financial indicators are defined in the 2016 consolidated financial statements included in the 2016 Reference Document.

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 Company's 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 since 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 Glossary and in the chapter 4 of the 2016 Reference Document.