

Factbook  
2019



# WACKER: At a Glance

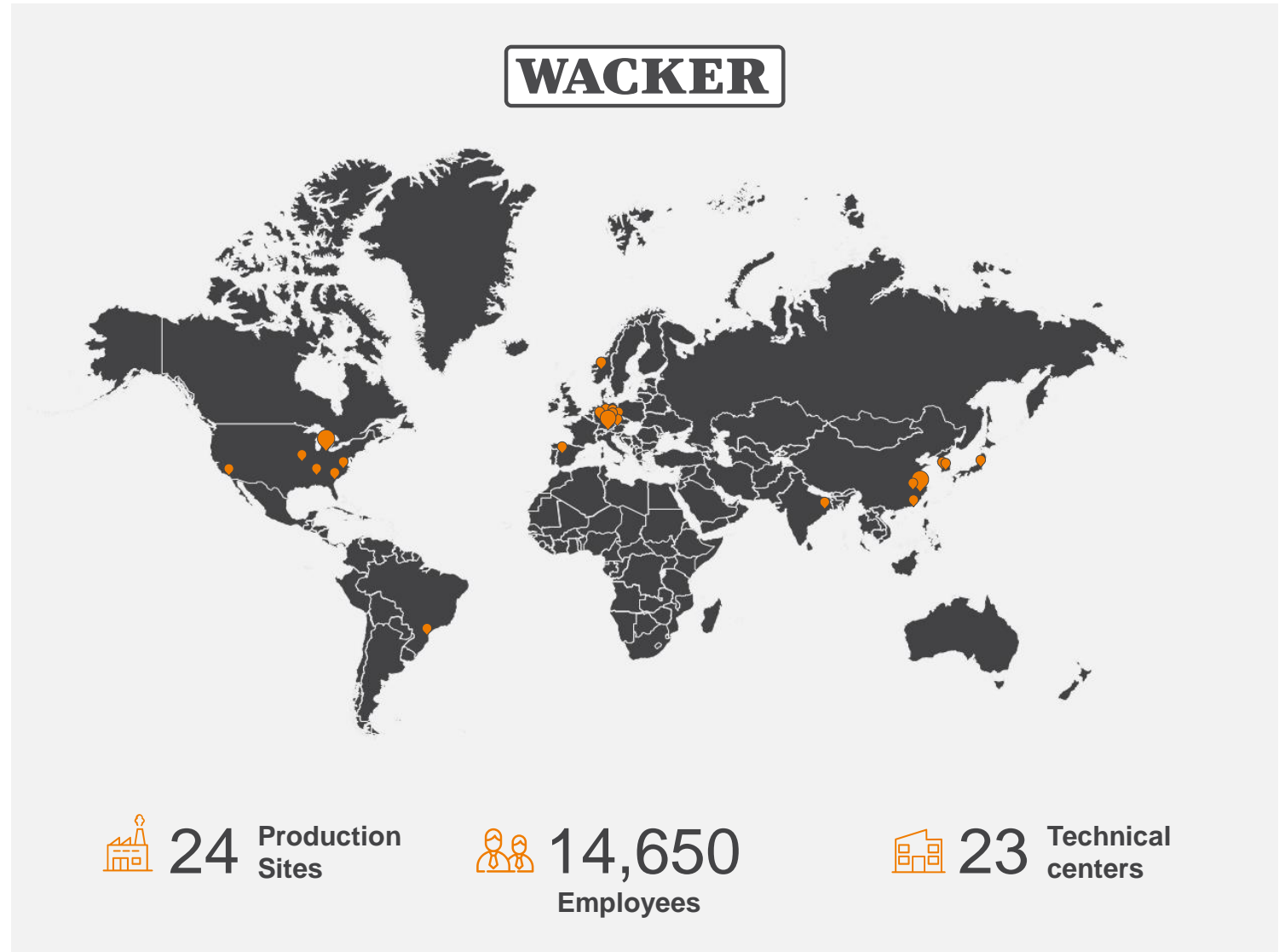
## Facts & Numbers

€783m  
EBITDA in 2019

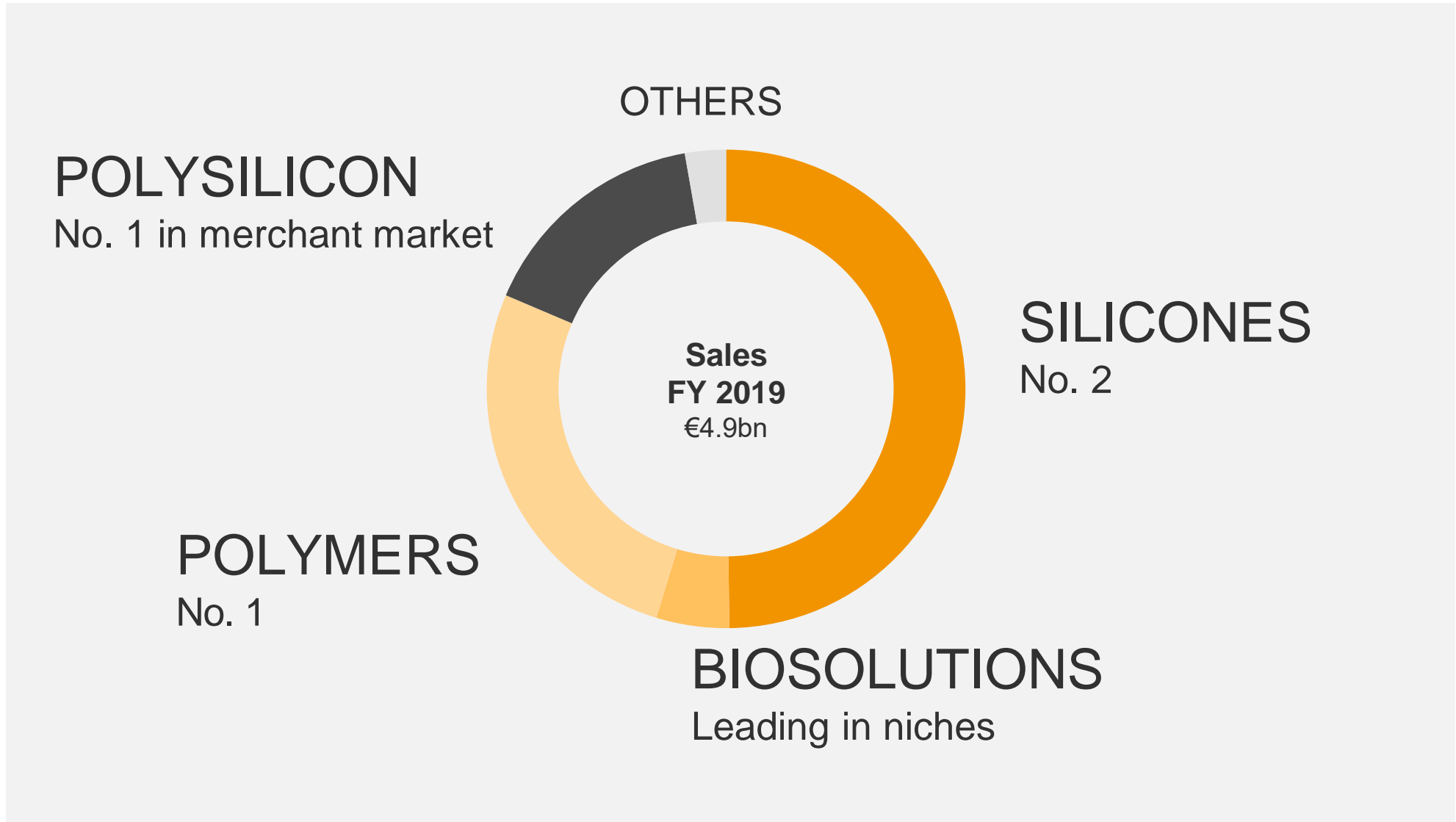
€4,928m  
Sales in 2019

15.9%  
EBITDA margin  
in 2019

4 Business  
Segments



# WACKER: An Overview



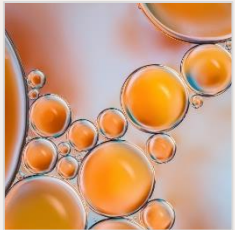
# Fact Book 2019: Agenda



▶ **At a glance**\_p.4



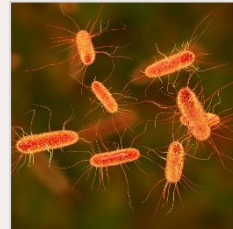
▶ **Strategy**\_p.9



▶ **SILICONES**\_p.21



▶ **POLYMERS**\_p.36



▶ **BIOSOLUTIONS**\_p.48



▶ **POLYSILICON**\_p.57



▶ **Sustainability**\_p.64



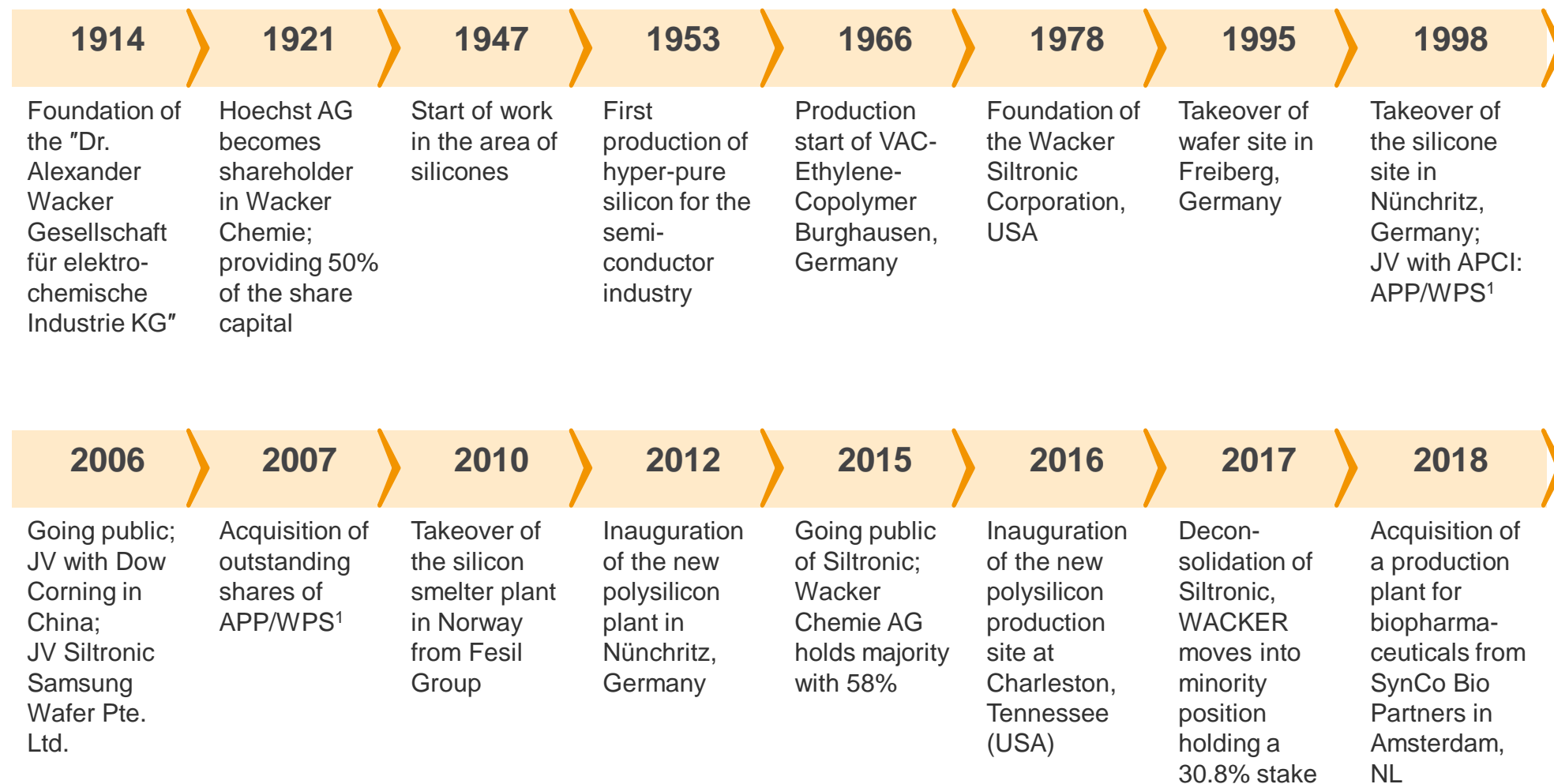
▶ **Financials**\_p.73



**WACKER AT A GLANCE**

# WACKER AT A GLANCE

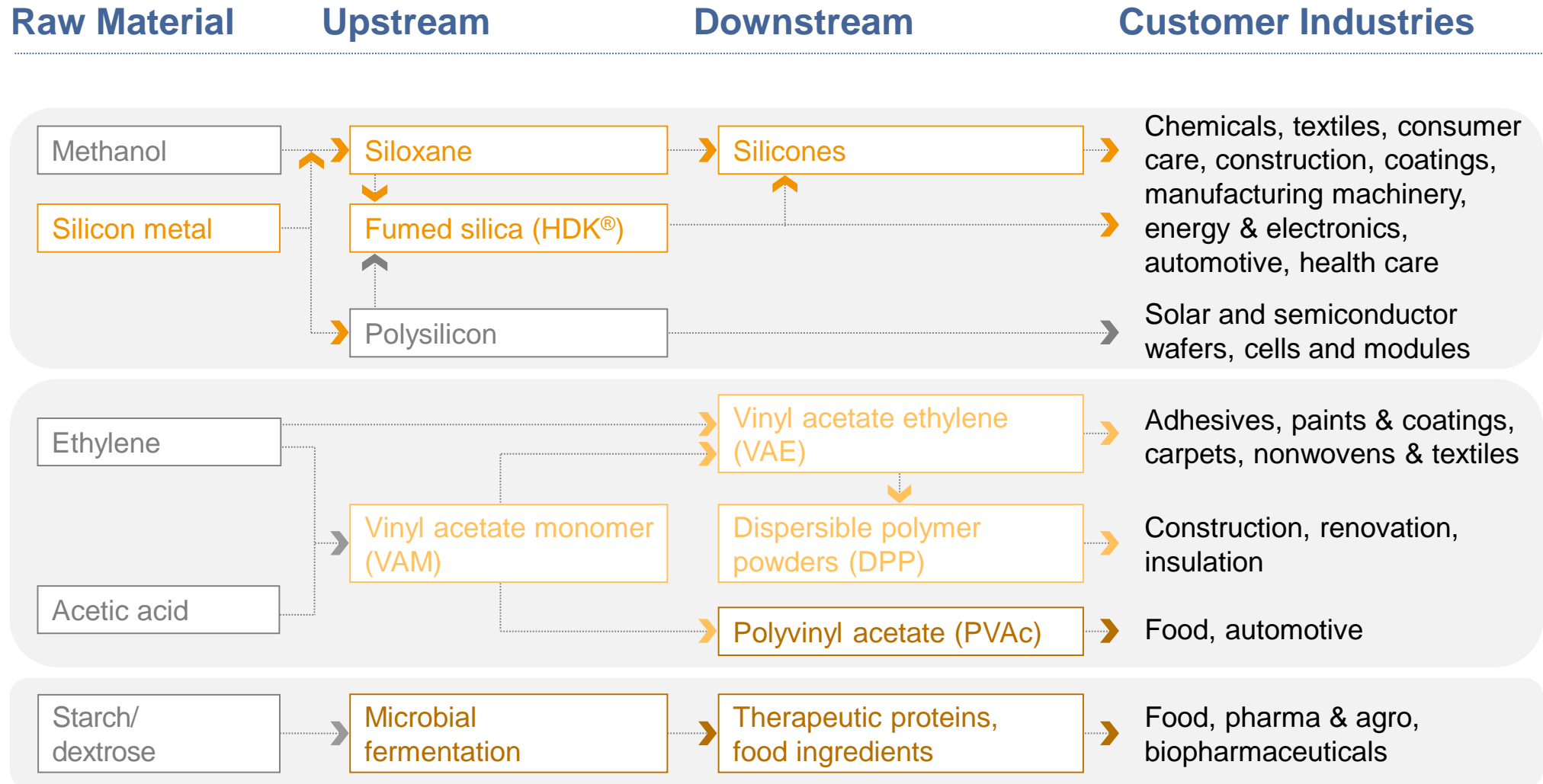
## Over 100 Years of History



<sup>1)</sup> APP/WPS = Air Products Polymers/WACKER Polymer Systems

# WACKER AT A GLANCE

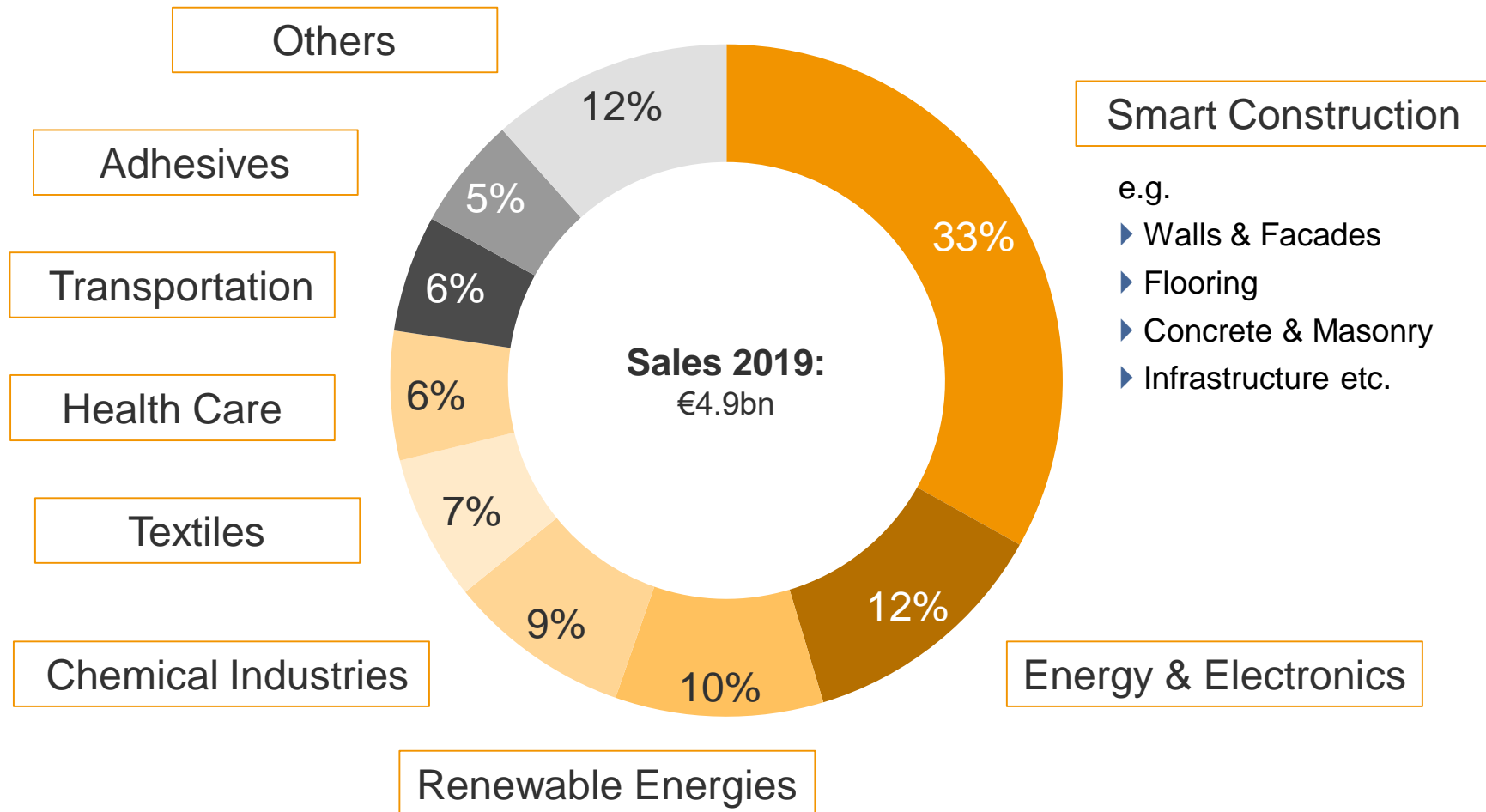
## Highly-Integrated Operations Based on Five Key Raw Materials



# WACKER AT A GLANCE

## Well Diversified End Market Portfolio

### Sales Split by End-market

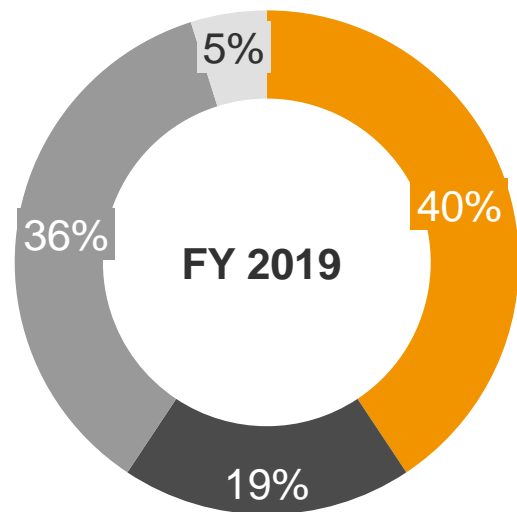




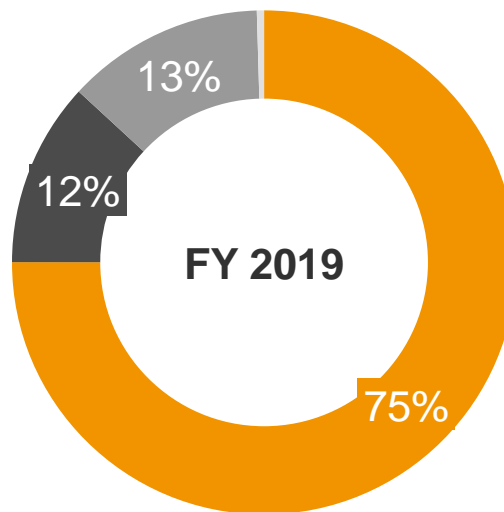
# WACKER AT A GLANCE

## Regional Footprint: Globally Present and Close to Customers

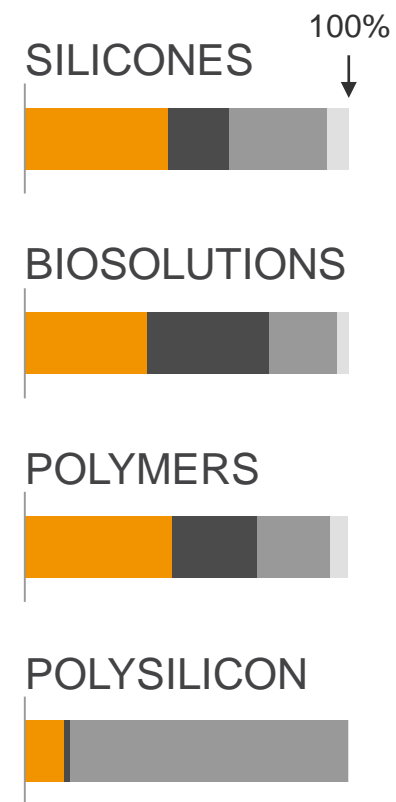
### Sales Split per Region



### Employees



### Segment Sales 2019



Europe Americas Asia Other Regions



**STRATEGY: Managing for Growth and Cash**

# Targets for the Next Years – Growth and Cash

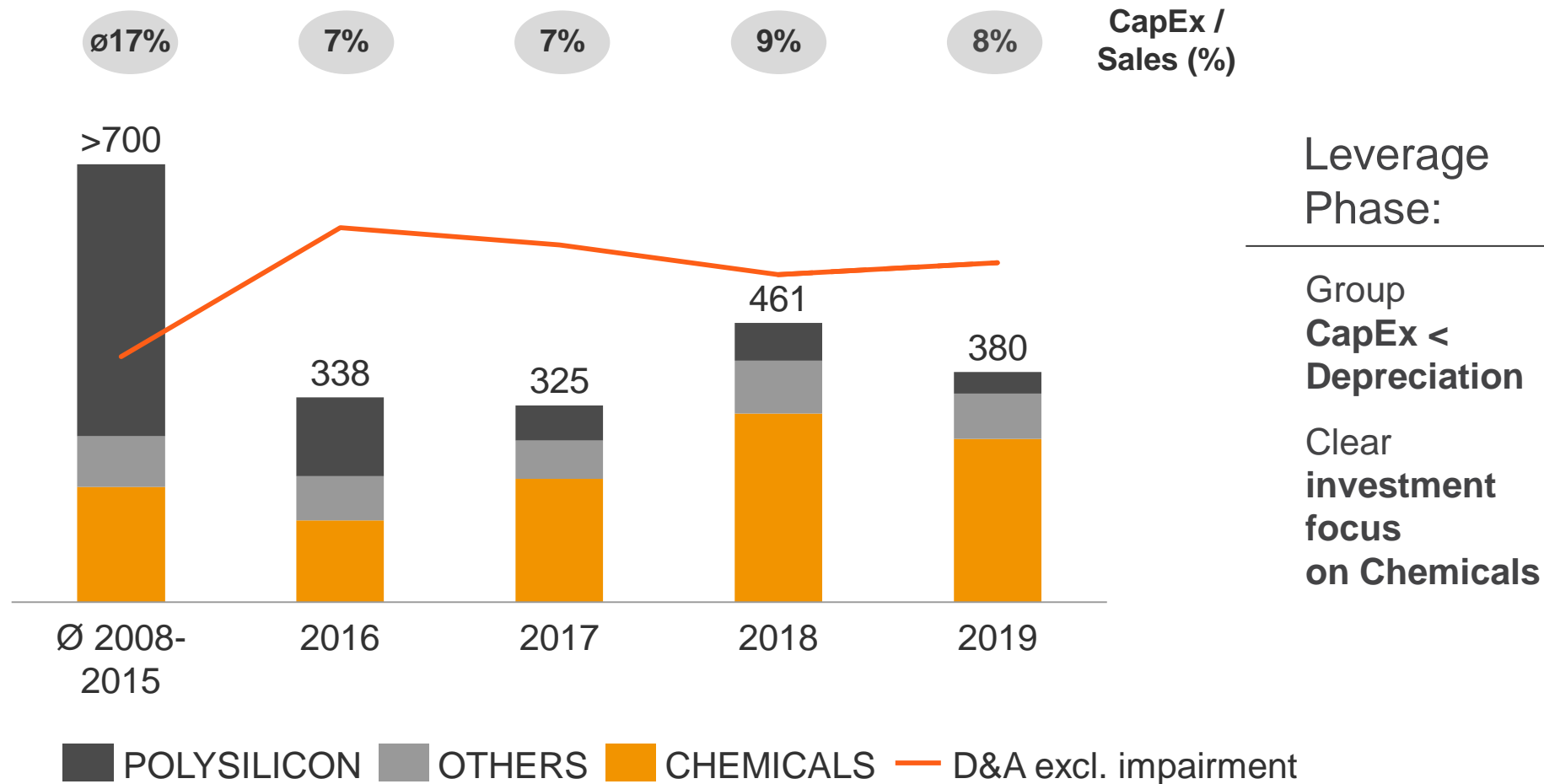
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- 1** Extend Leverage Phase
- 2** Continue to Grow Above Chemical Production
- 3** Focus on Sustainability
- 4** Sustain Attractive Margins Throughout the Cycle
- 5** Generate Cash

# Target: Extend Leverage Phase with Investment Focus on Chemicals

1

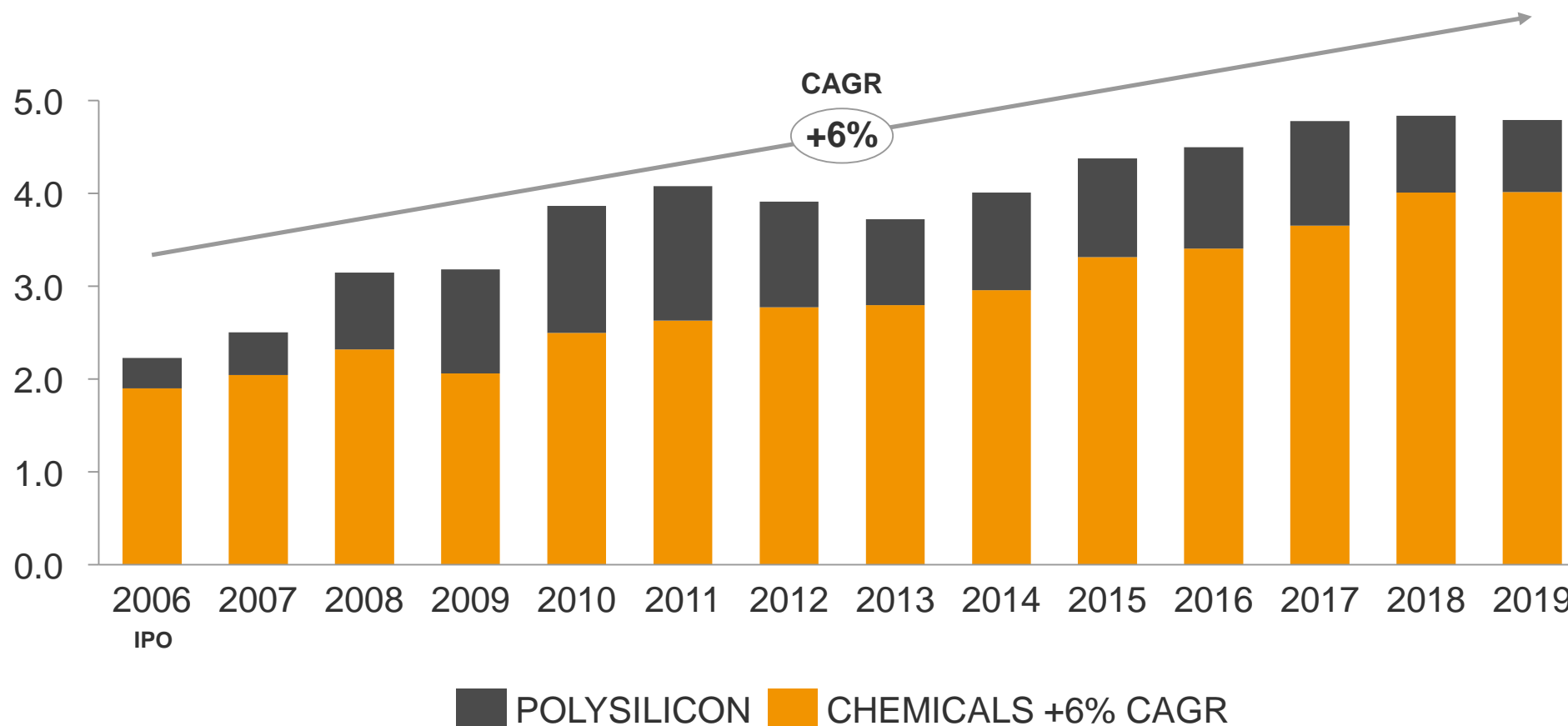
## CapEx vs. Depreciation expense WACKER Group w/o Siltronic (€m)



# Target: Continue to Grow Above Chemical Production

2

## Development of Sales (€bn) – Chemicals divisions and POLYSILICON



# Target: Focus on Sustainability

3

## Raw Materials



Sustainable Sourcing



Product stewardship

## Production



Energy efficiency



Integrated cycles - Recycling

## Products



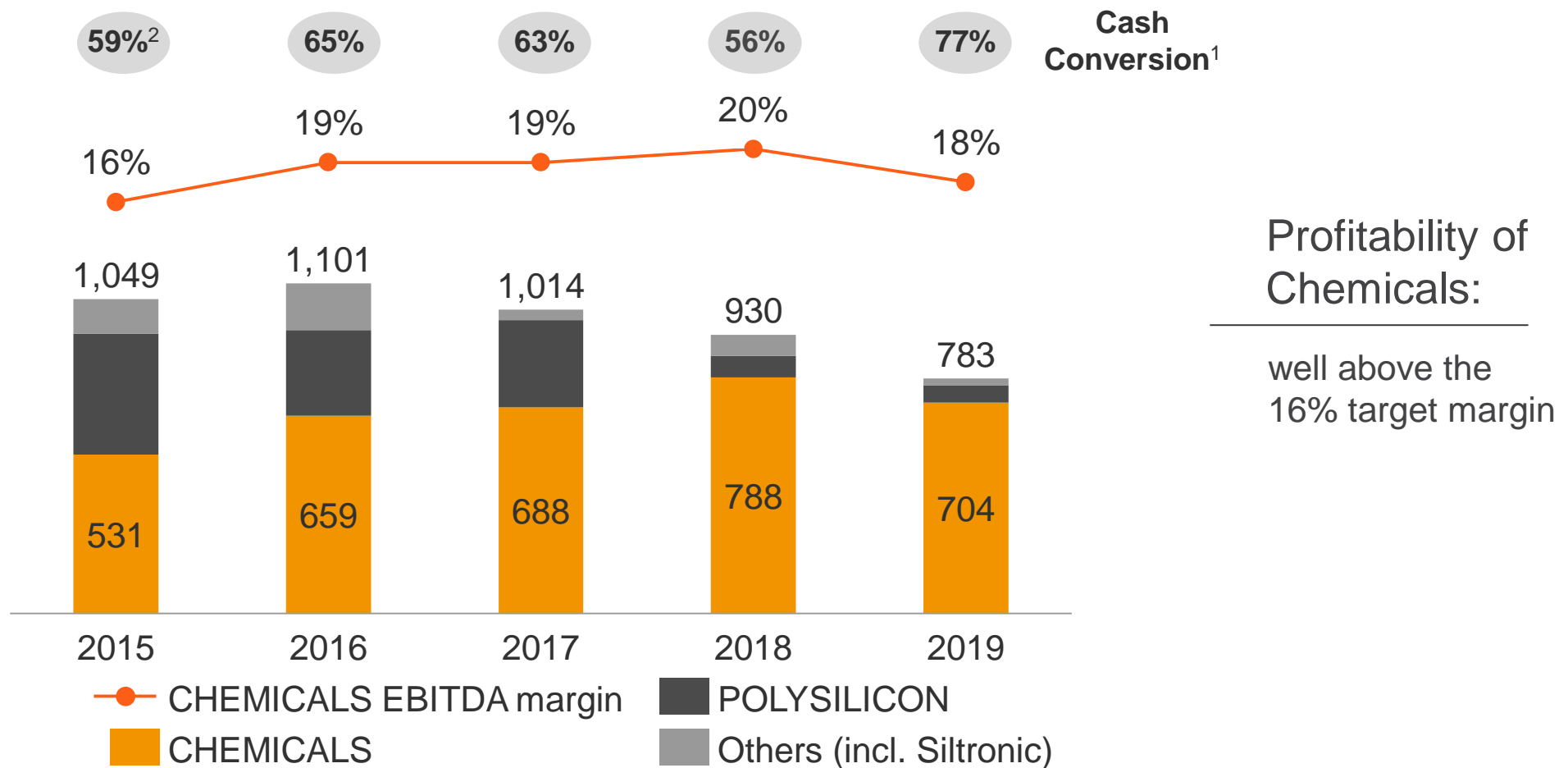
Sustainable Portfolio



Enable Sustainable Solutions

# Target: Sustain Attractive Margins Throughout the Cycle

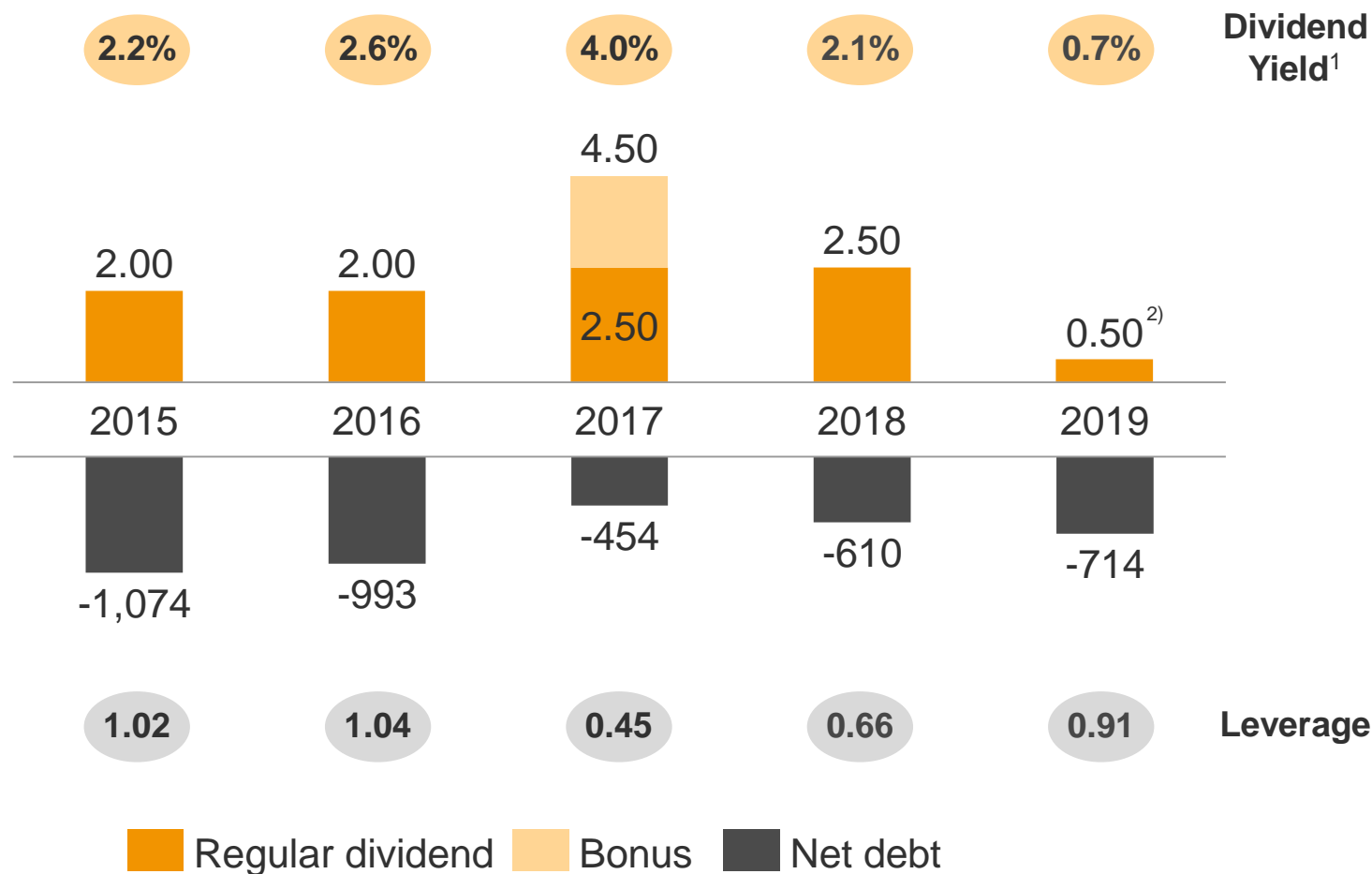
## Development of Group Earnings (€m) (as reported)



<sup>1)</sup> Gross Cash Flow / EBITDA (excluding Siltronic); <sup>2)</sup> including Siltronic

# Target: Generate Cash

## Dividend (€) and Net Debt (€m)



### Targets:

Leverage: **0.5-1.0x**  
EBITDA

Dividend: **50%** of  
Net income

<sup>1)</sup> based on average weighted share price; <sup>2)</sup> Dividend proposal



# OPERATIONAL EXCELLENCE

## Focus on Productivity and Relentless Optimization

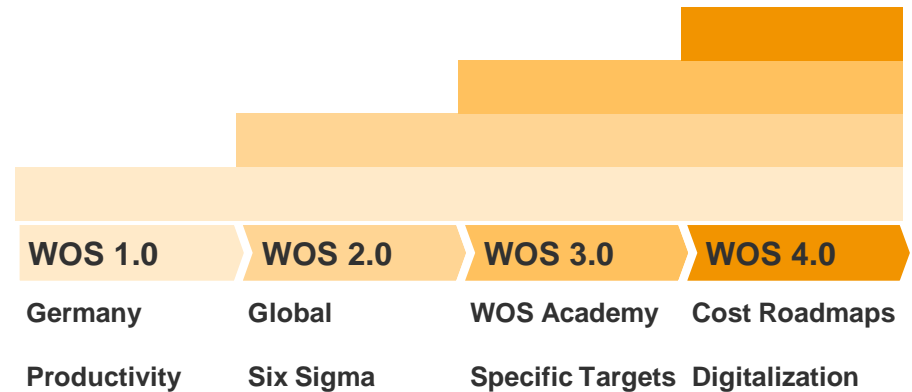
### Reduce Specific Operating Costs

- ▶ Plant utilization levels
- ▶ Specific energy consumption
- ▶ Raw-material yields
- ▶ Labor productivity & maintenance costs

### Strong Employee Participation

- ▶ 900 employees trained in total at WOS<sup>1</sup> ACADEMY
- ▶ Productivity methods, such as Six Sigma and LEAN

### Evolution of Operating System



### WOS Scorecard 2017

- ▶ 6% improvement in labor productivity
- ▶ 5% drop in specific maintenance costs
- ▶ 3% lower specific energy consumption
- ▶ €140m in business value contribution<sup>2</sup>

<sup>1</sup> WOS = WACKER Operating System <sup>2</sup> 2-year reporting period 2017-18

# *DIGITALIZATION*

## Further Improving Stability and Efficiency in Production



### **Digital Operations**

#### **Prediction**

- ▶ Estimate lifetime and maintenance

#### **Condition Monitoring**

- ▶ Internal view of key equipment

#### **Avoid Surprises**

- ▶ Anomalies are detected instantly

#### **Soft Sensors**

- ▶ Process Optimization

## Innovation is Key to WACKER's Business Strategy

### Innovation Figures

3.3%

of 2018 group sales  
spent in R&D

165

R&D Spend  
in €m in 2018

730

Employees  
in R&D

3,900

Active patents

1,700

Pending patent  
applications

85-100

inventions annually applied  
for over the last 5 years

45

Scientific  
collaborations



#### Tomorrow's Solutions

- ▶ New markets & products



#### Biotech platforms

- ▶ New syntheses & molecules



#### Process Development

- ▶ Scale-up lab and modelling
- ▶ Process improvement



#### Chemistry & Formulation

- ▶ Profound formulation knowledge

## Our R&D Pipeline Covers a Diverse Range of Applications



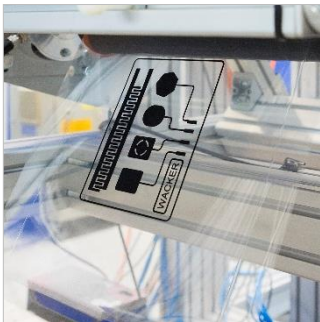
### New Battery Solutions

- ▶ Active anode materials for lithium-ion-batteries
- ▶ Silicone based thermal interface materials



### Adhesives

- ▶ Medical skin adhesives
- ▶ Pressure sensitive adhesives for electronics
- ▶ Hybrid adhesives



### Electronics

- ▶ Ready-to-use electroactive silicone laminates
- ▶ Silicones for automotive electronics



### Sustainable Products

- ▶ Biocide-free powder paints
- ▶ Silicone fluids and polymer binders made from renewable raw materials



### Construction

- ▶ Polymer-modified bitumen emulsions
- ▶ Reinforced concrete
- ▶ Waterproofing membranes



### Food / Pharma

- ▶ Functional ingredients for food and pharma
- ▶ Innovative production systems for biologics

# CUSTOMER FOCUS

## WACKER ACADEMY – A Global Network for our Customers

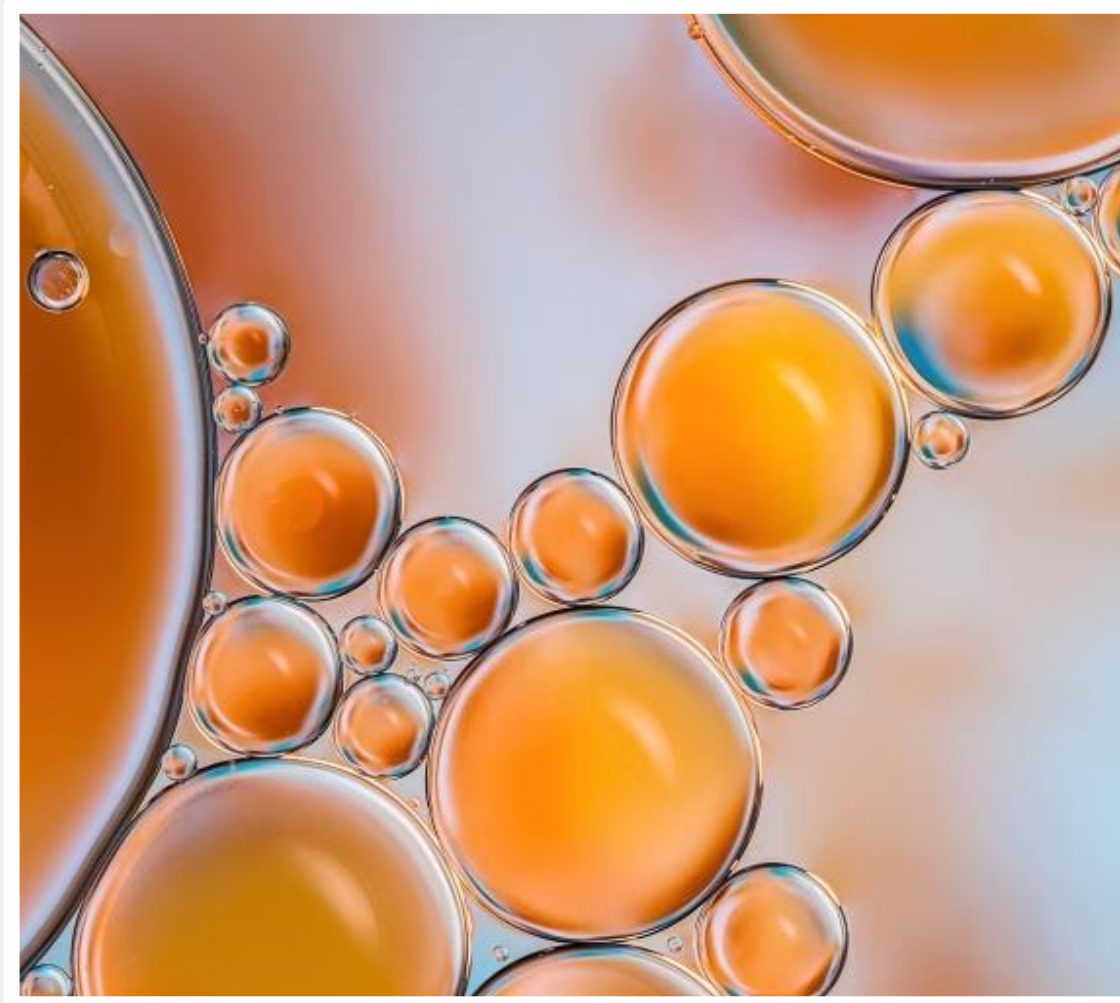
15  
WACKER  
ACADEMIES

8,500  
Participants  
worldwide

850  
Events  
Globally



- ▶ Customer & Distributor teach-in
- ▶ Mix between theory and practice
- ▶ Meeting room plus lab
- ▶ Direct customer interaction

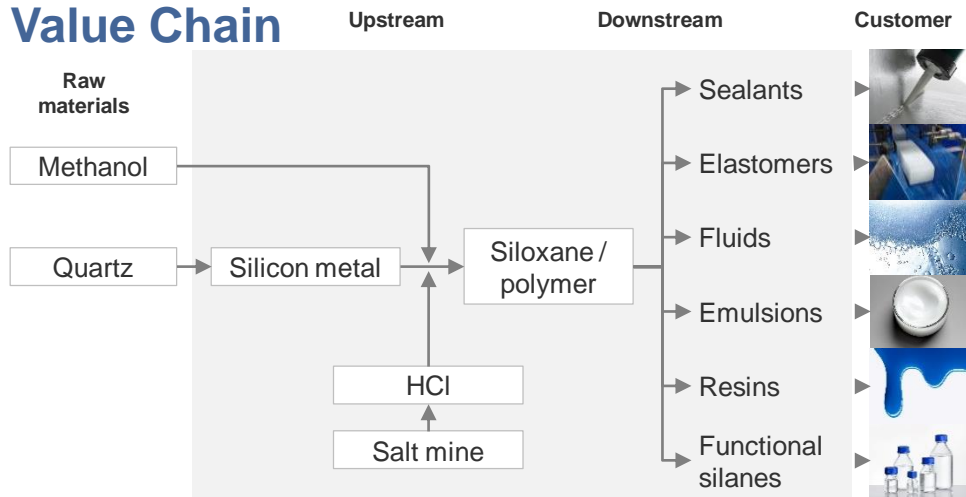


**WACKER SILICONES**

# WACKER SILICONES

## An Integrated Global Player with a Leading Market Position

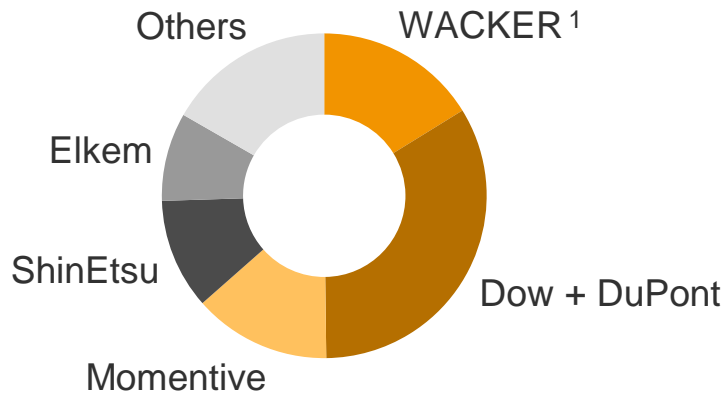
### Value Chain



### Global Footprint



### Competitive Landscape 2018



<sup>1</sup> WACKER JV participations fully consolidated

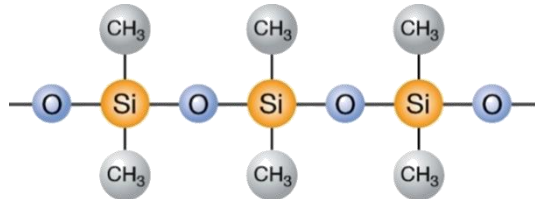
### Market Characteristics

- ▶ Historic growth rates above worldwide GDP
- ▶ High entry barriers (capital and technology)
- ▶ Serving diversified end markets through broad market penetration and wide customer base
- ▶ Innovation broadens scope of applications

# WACKER SILICONES

## Structural Variety as a Formula for Success

### Silicone Fundamentals



**Non organic** silicon-oxygen (Si-O) backbone chain with **organic side groups** (CH<sub>3</sub>)

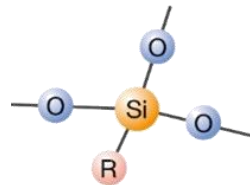
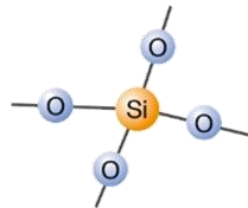
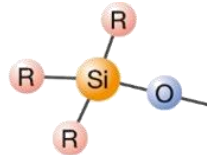
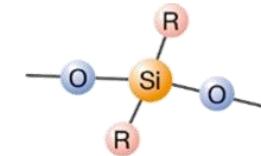
#### Extremely Stable

- ▶ Si-O molecule with very **high bonding energy**

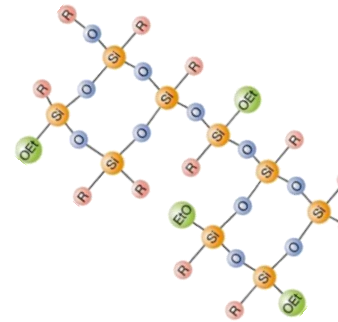
#### Extremely Versatile

- ▶ **Multiple ways to modify** structure, side groups and chain length

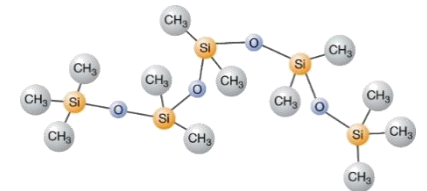
### Building Blocks



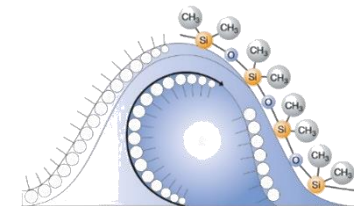
### Silicone Examples



Resins



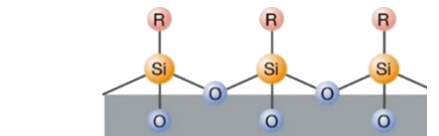
Fluids



Antifoam agents



Textile finishes



Masonry protection agents



# WACKER SILICONES

## Silicone – A Material for Unlimited Applications

### Broad Spectrum of Adjustable Properties

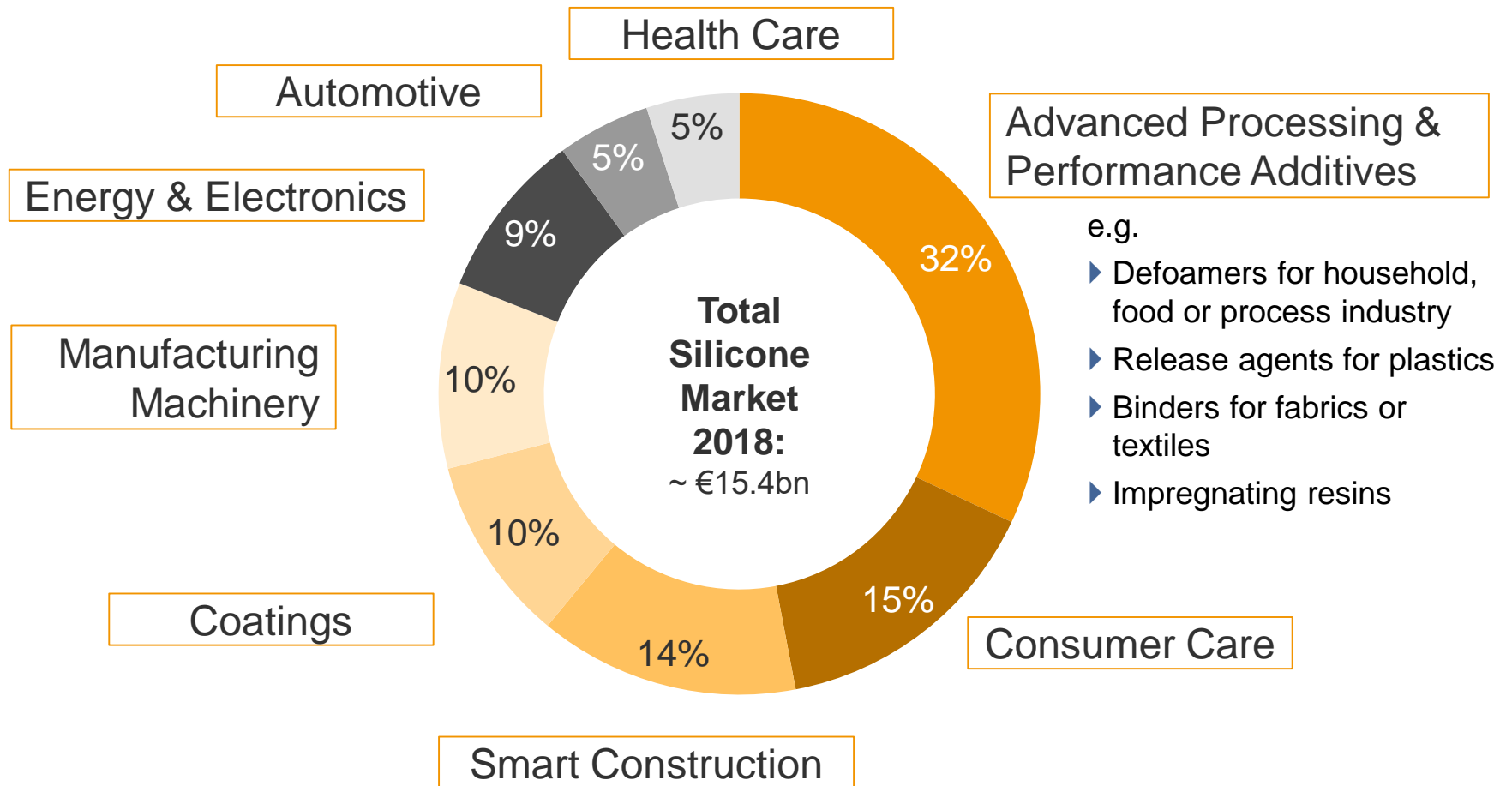


### Customized Products with Unique Properties

<p><b>UV stability</b></p>	<p><b>Long term elasticity</b></p>	<p><b>Surface tension</b></p>
<p><b>Heat stability / resistance</b></p>	<p><b>Best-in-class lubrication</b></p>	<p><b>Water-vapor permeable</b></p>
<p><b>Chemical resistant</b></p>	<p><b>Microbial resistant</b></p>	<p><b>Water repellent</b></p>
<p><b>Softening</b></p>	<p><b>Release properties</b></p>	<p><b>Weather resistant</b></p>

## Silicones Create Value in Many Industries

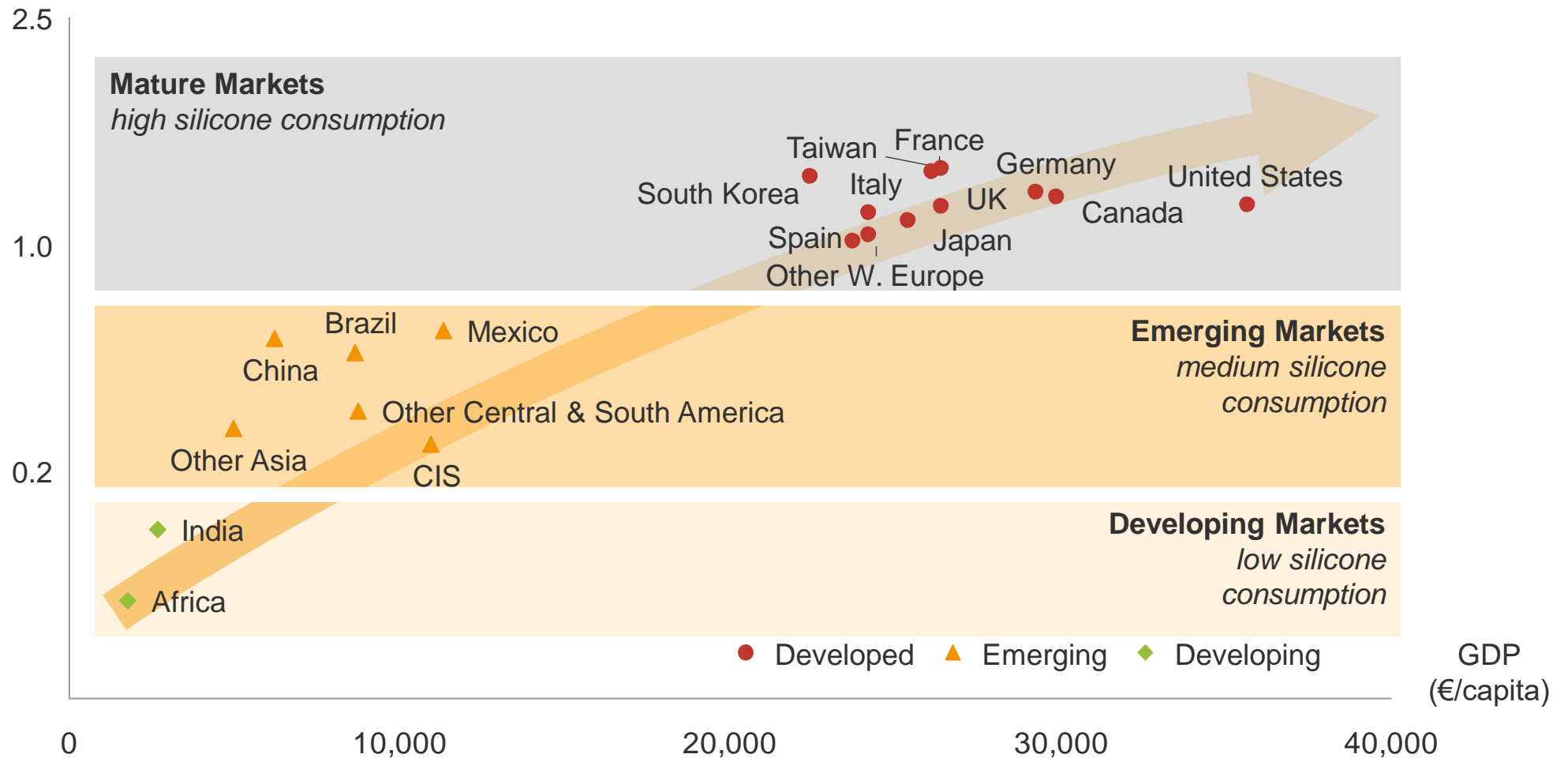
### Market Structure by Application



Industry Split; Source: Freedonia, Company Reports, WACKER Estimate

## Regional Growth Opportunities: Emerging Markets Catching Up

### Silicone Consumption (kg/capita)



Source: WACKER Estimate

# WACKER SILICONES

## Increasing Demand for Silicones in Future Growth Markets



Hair Care



Cosmetics

Comfort

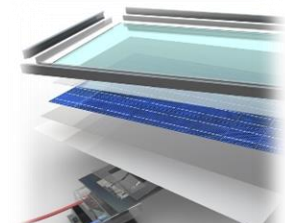


Paints



Concrete

Urbanization



Encapsulation



Energy Transmission

Renewable Energy



Battery



E-Motor

E-Mobility



Medical Care



Wound Care

Aging Population



Electronics



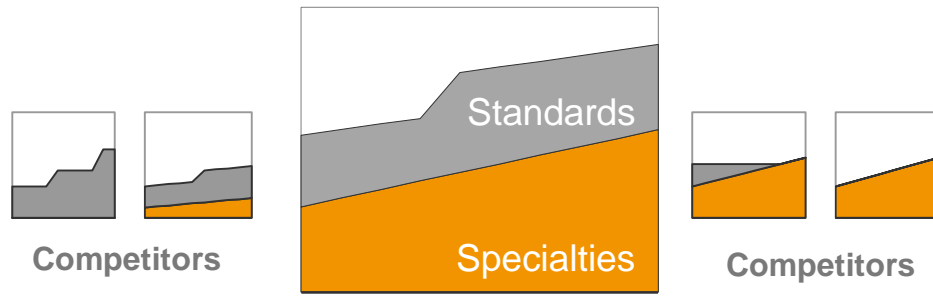
Sensors

Communication

# WACKER SILICONES

## Full Portfolio Provider with Focus on Specialties

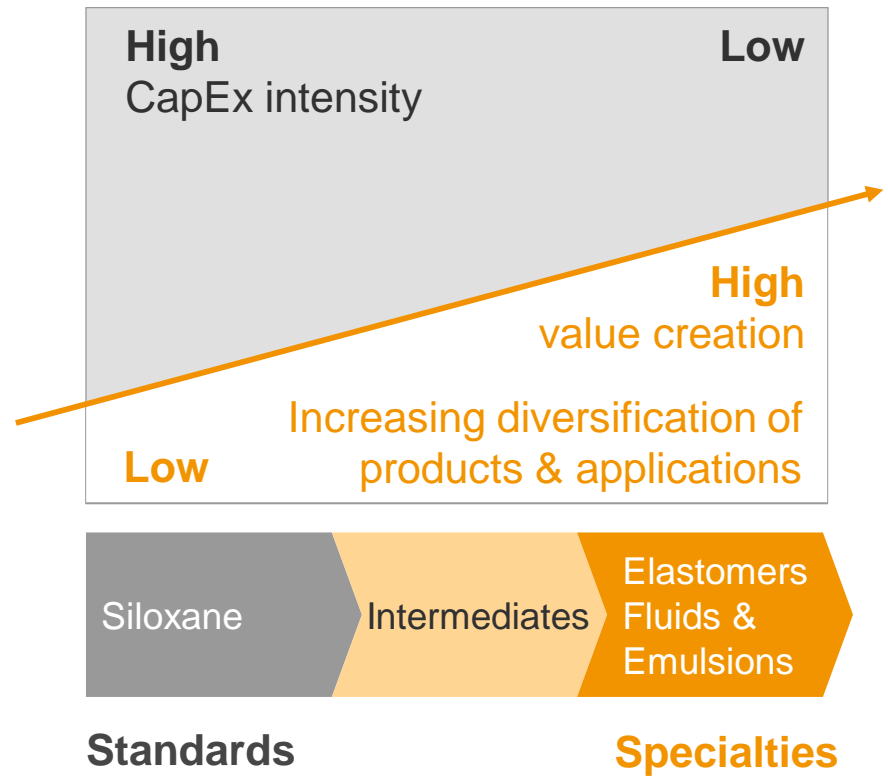
### Full Portfolio Provider



**WACKER  
SILICONES**

- ▶ Backward integrated
- ▶ Cost leadership
- ▶ Focus on innovation, customers and technical service

### Mix Shift Towards Specialties



# WACKER SILICONES

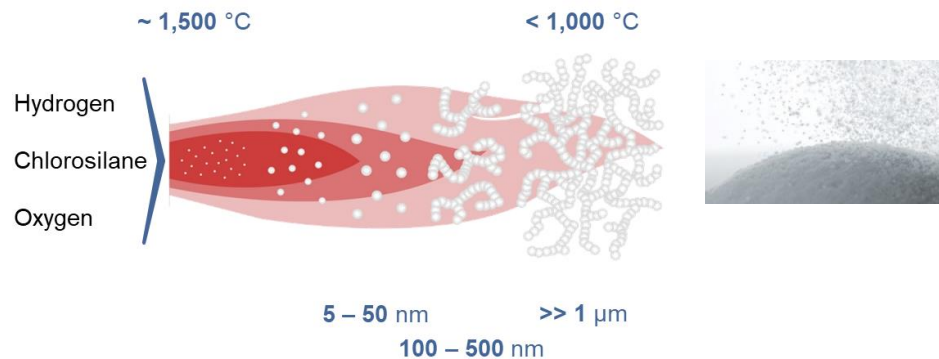
## A Global Competence Network – Close to our Customers



## Fumed Silica HDK<sup>®</sup> – A Valuable Specialty

### Properties

- ▶ **Unique effects:** powder free flow, thermal insulation, rheology control, reinforcement and many more
- ▶ A **highly versatile** performance enhancer
- ▶ A **safe and consistent** substance, non-hazardous for humans and for the environment



### Applications



### Beside industrial use, fumed silica applications include:

- ▶ Cosmetics & Personal care
- ▶ Pharmaceuticals (excipient)
- ▶ Food (direct food additive) & Feed

## Fumed Silica HDK<sup>®</sup> Enables Innovative Insulation Solutions

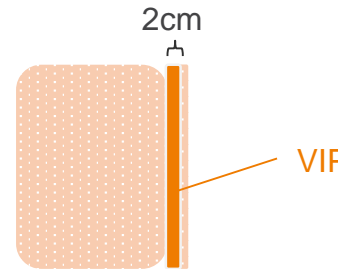
### WACKER Solution: Vacuum Insulation Panels (VIPs) filled with HDK<sup>®</sup>



Non-Flammable



Space Saving



- ▶ Excellent insulator
- ▶ Improved fire safety
- ▶ Extremely robust
- ▶ Long-term stable
- ▶ Re-usable core
- ▶ Light weight

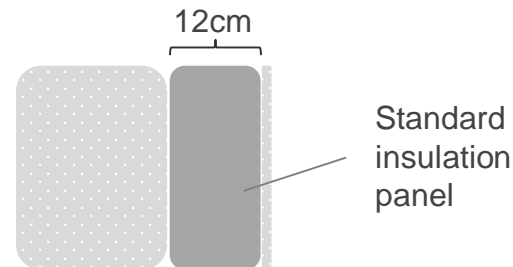
### Traditional Insulation (e.g. PU, PS, Fiberglass, Mineral wool)



Flammable

and / or

Voluminous





## “WACKER Silicon Verbund” Enables Competitive Cost Position

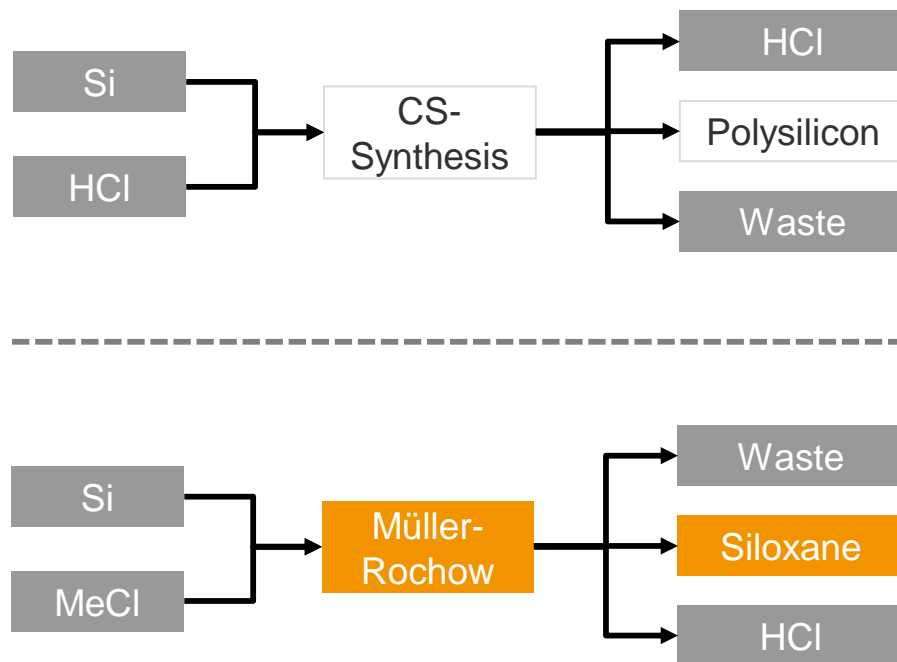


# WACKER SILICONES

## WACKER with Highest Level of Integration in the Industry

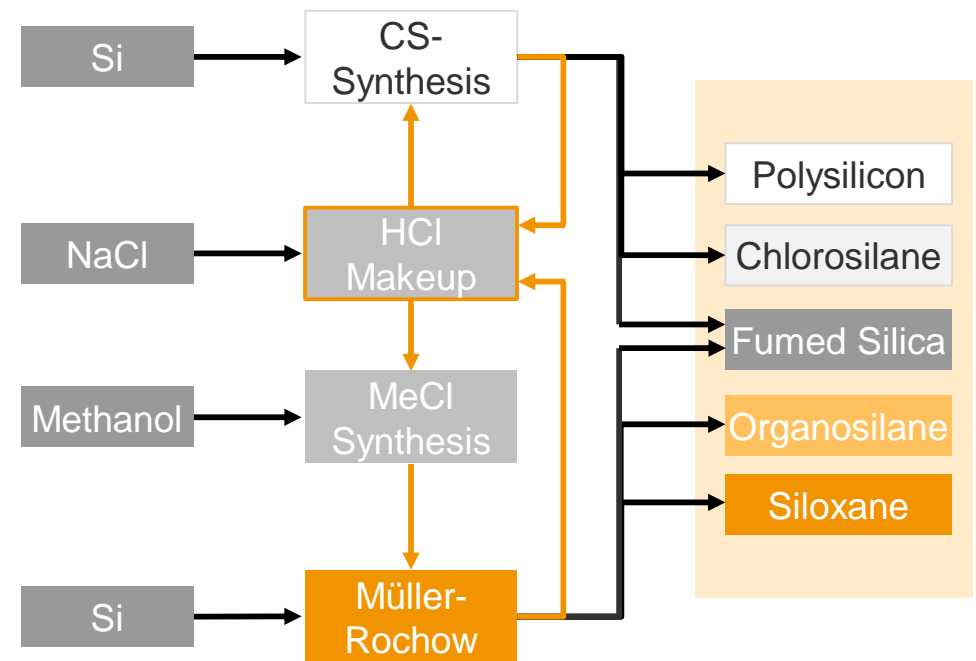
### Open Loop Silicones & Poly Production

#### Competitor Processes



### Unique Silane-Silicone-Silica Loop

#### WACKER



## Strong Chemistry, Innovation Potential and Set Up



### A World of Unlimited Potential

**High performance products for future growth markets**



### Innovative Specialty Portfolio

**Growth with focus on specialties**



### Unique Silicon Verbund

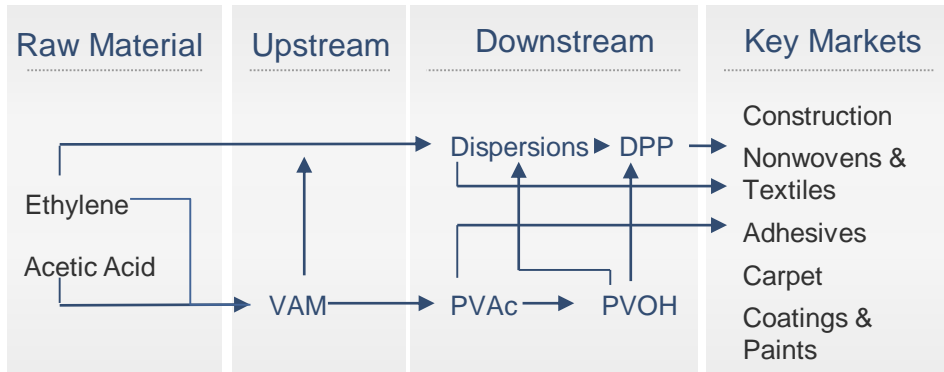
**Full portfolio provider with benchmark costs**



**WACKER POLYMERS**

## Market Leader in VAE Dispersions and Powders

### Value Chain



VAM = Vinylacetate monomer, PVAc = Polyvinyl acetate, PVOH = Polyvinyl alcohol

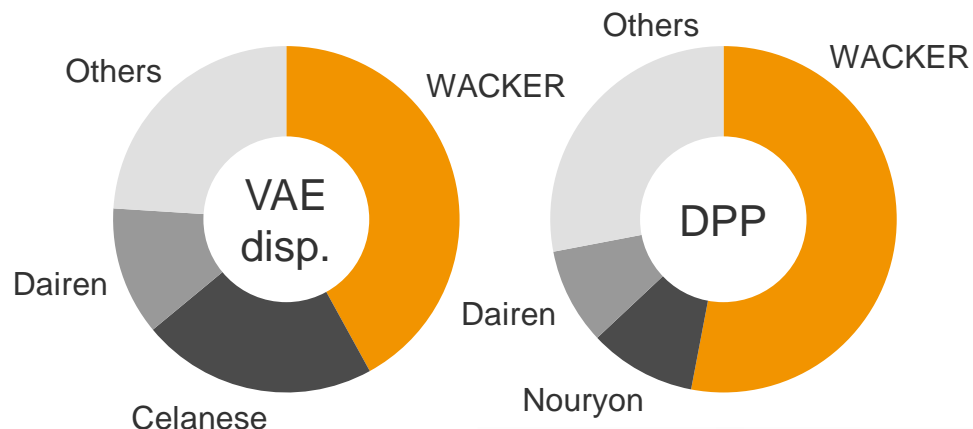
### Global Footprint



● Dispersion production ● Powder production ● Technical center

### Competitive Landscape 2018

#### Global VAE<sup>1</sup> Dispersions and DPP<sup>2</sup> Market



### Market Characteristics

- ▶ Diverse market and customer base
- ▶ Historic growth above GDP
- ▶ Moderate capital entry barriers and high technology barriers in most segments
- ▶ Innovation and in-depth formulating expertise broaden scope of applications

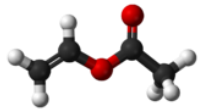
<sup>1</sup> VAE = Vinyl acetate ethylene <sup>2</sup> DPP = Dispersible Polymer Powders

# WACKER POLYMERS

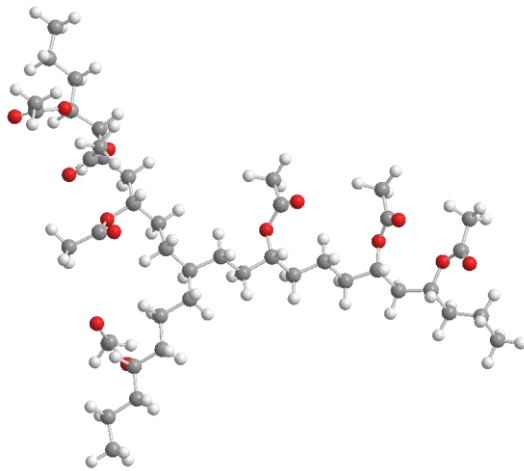
## From Monomers to Polymers – Enabling Tailor-Made Solutions

### VAE Fundamentals

Vinyl acetate



Vinyl acetate ethylene (VAE)



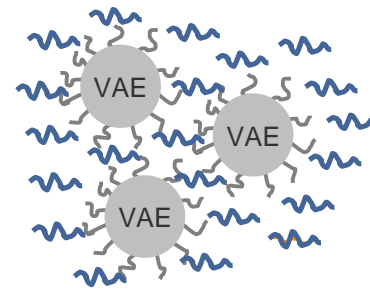
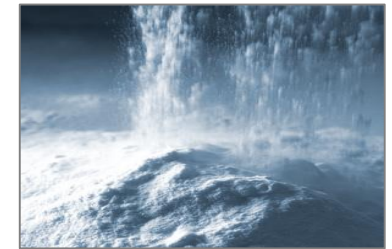
Ethylene



VAE Dispersions

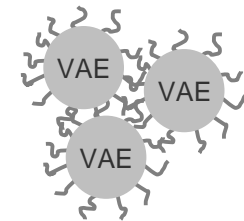


Dispersible Polymer Powders (DPP)



Drying

Redispersing



#### Environmentally friendly solutions

- ▶ with ethylene functioning as internal plasticizer, VAE dispersions are **waterborne** and **free of additional solvents**

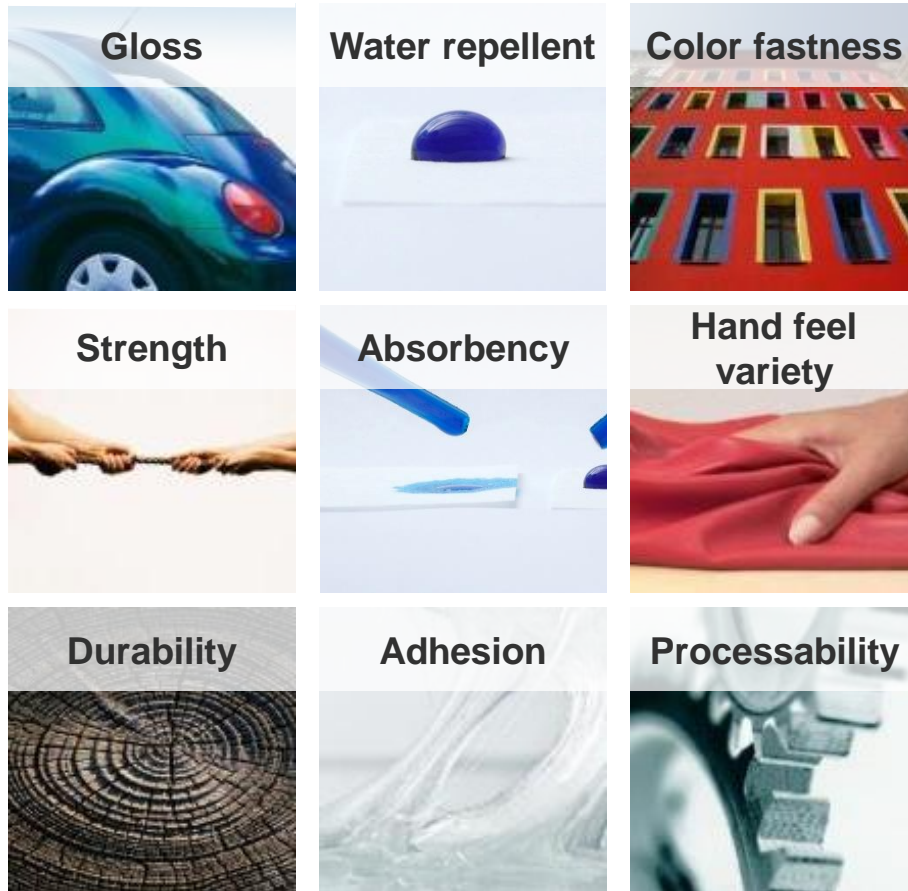
#### Versatile binders

- ▶ with **multiple ways to modify** (e.g. ethylene content, stabilizing system, etc.)

# WACKER POLYMERS

## VAE Binders with a Wide Range of Performance Attributes

### Features for Consumer & Industrial Applications

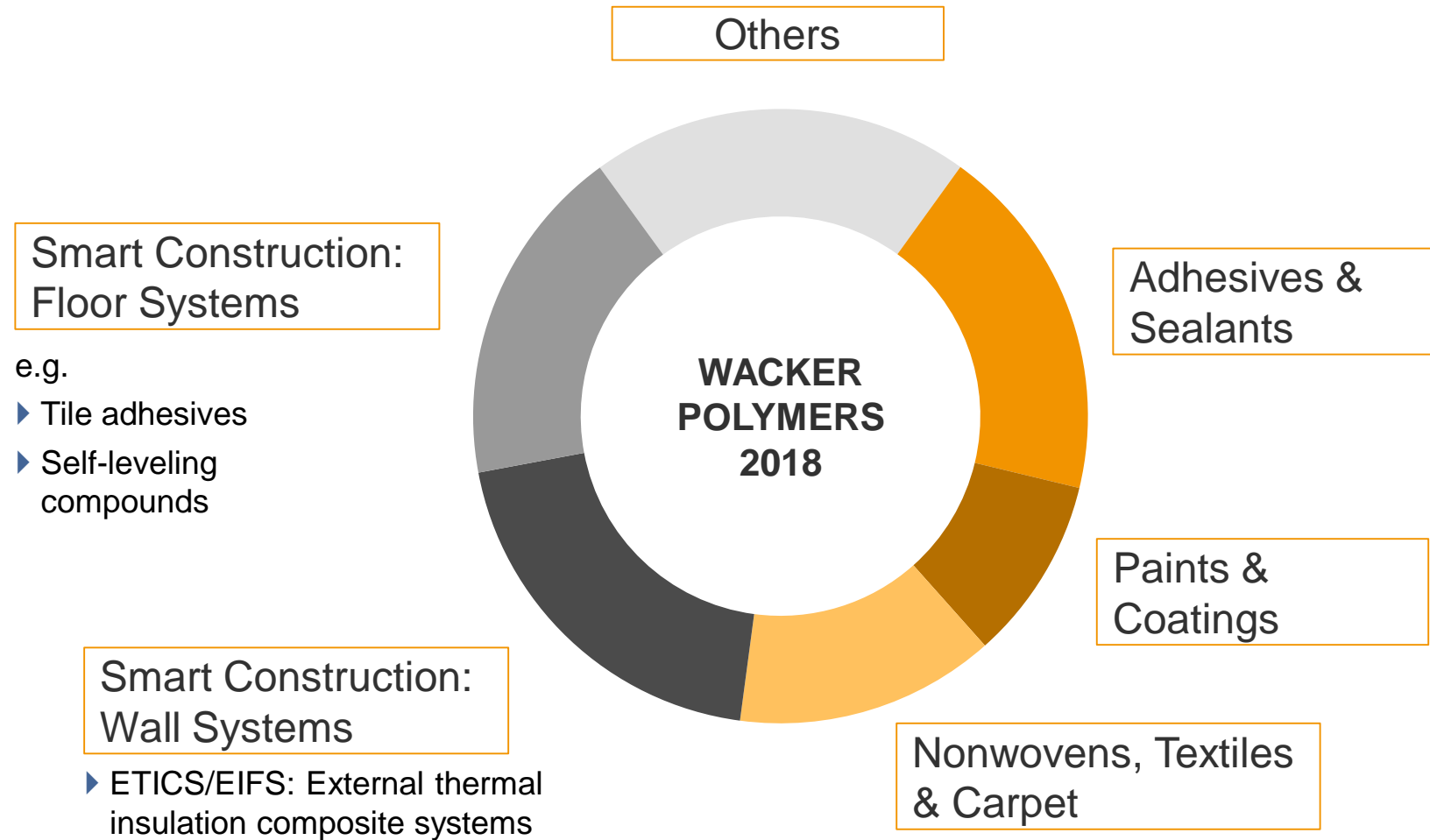


### Features for Construction Applications



## Polymer Binders Creating Value in Many Industries

### Market Structure by Application



WACKER Sales Split; Source: WACKER Estimate



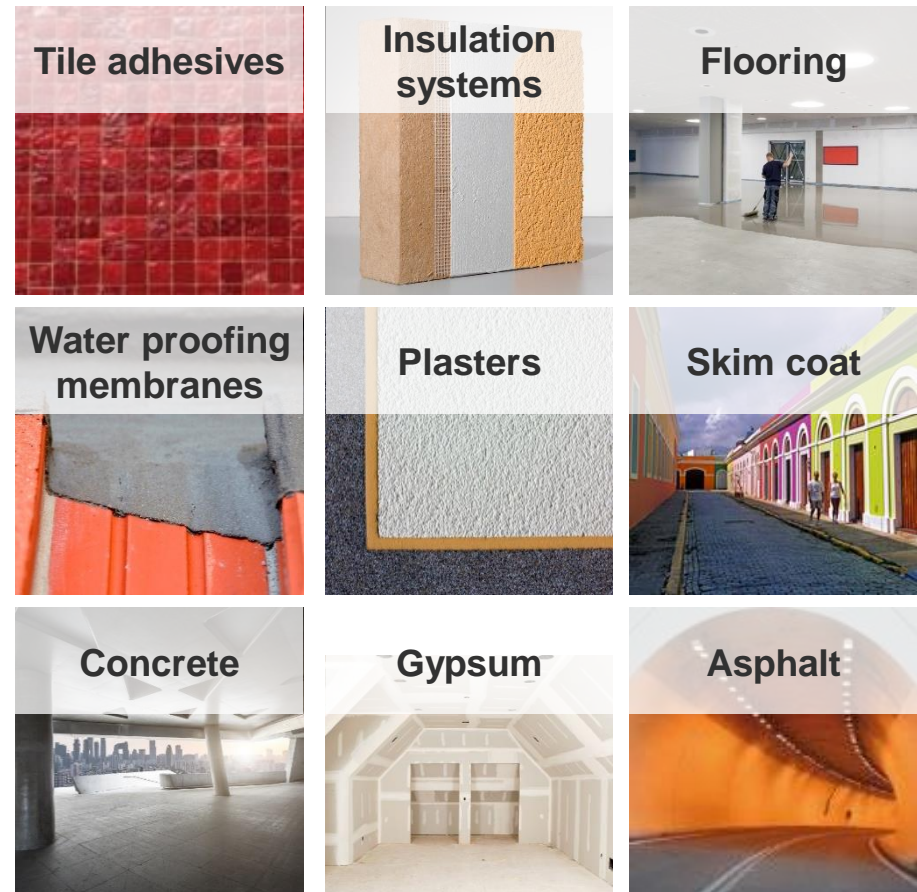
# WACKER POLYMERS

## Excellent Performance in a Wide Variety of Applications

### Consumer & Industrial Polymers

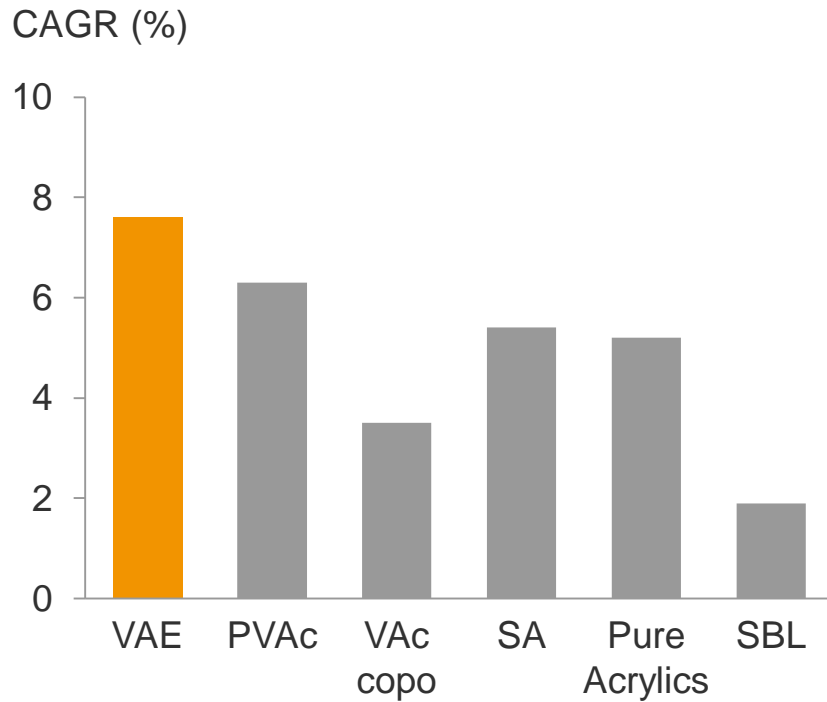


### Construction Polymers

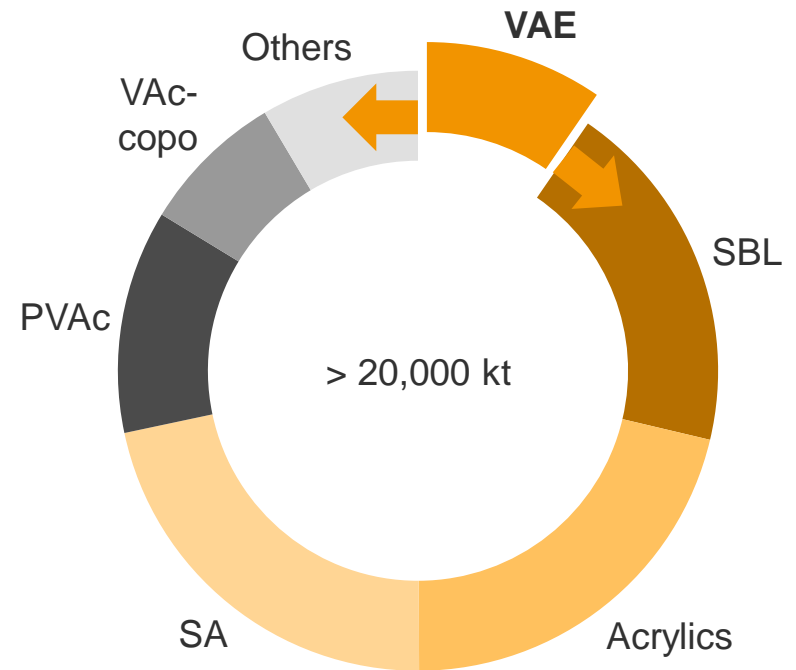


# VAE Outgrew Other Polymers in Latex Market in the Last Years

Synthetic Polymer Latex Market<sup>1</sup>  
Volume Growth 2011-2016



Global Synthetic Polymer Latex Market 2016

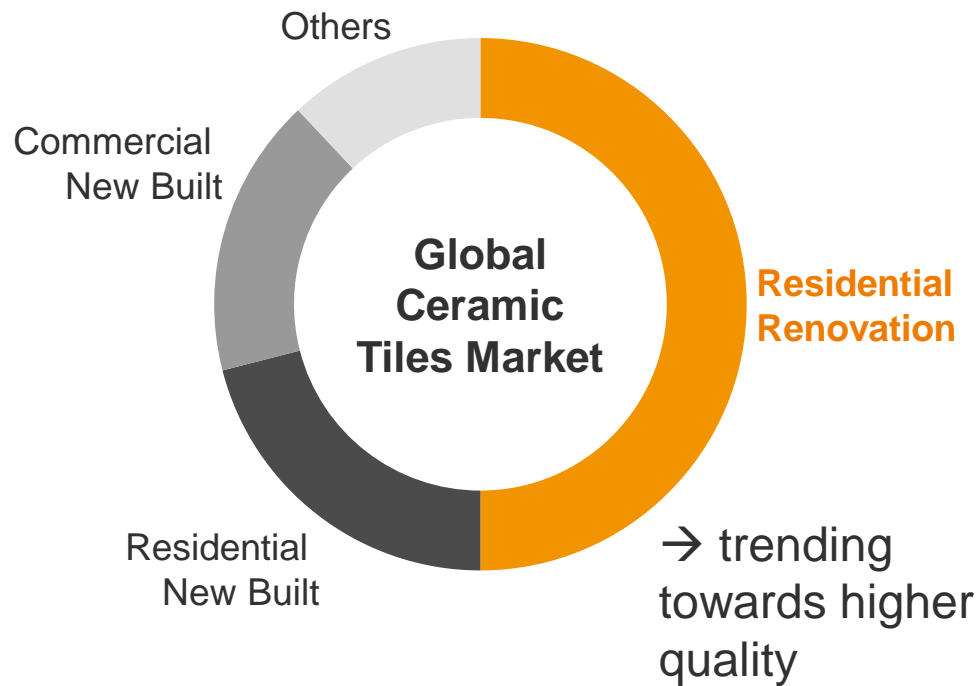


SA = Styrene Acrylics, VAc-copo = Vinyl Acetate Co-Polymers, PVAc = Polyvinyl Acetate, SBL = Styrene Butadiene Latex

<sup>1</sup> Source: Kline 2017

## Growing in Mature Markets and Transforming Emerging Markets

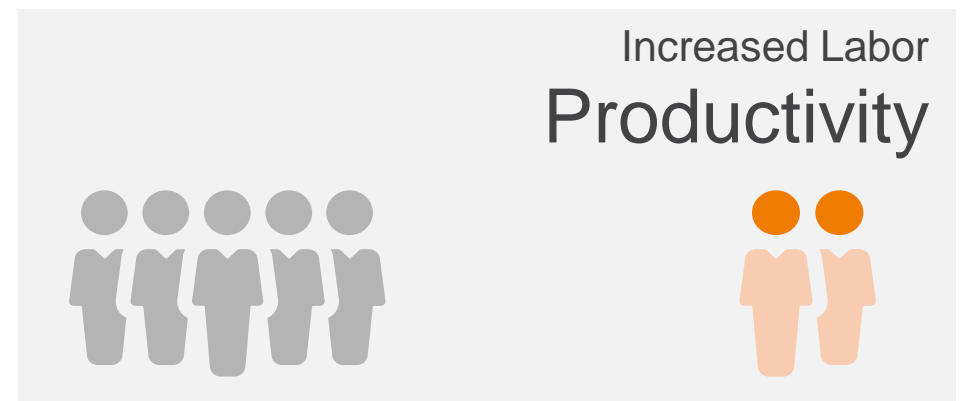
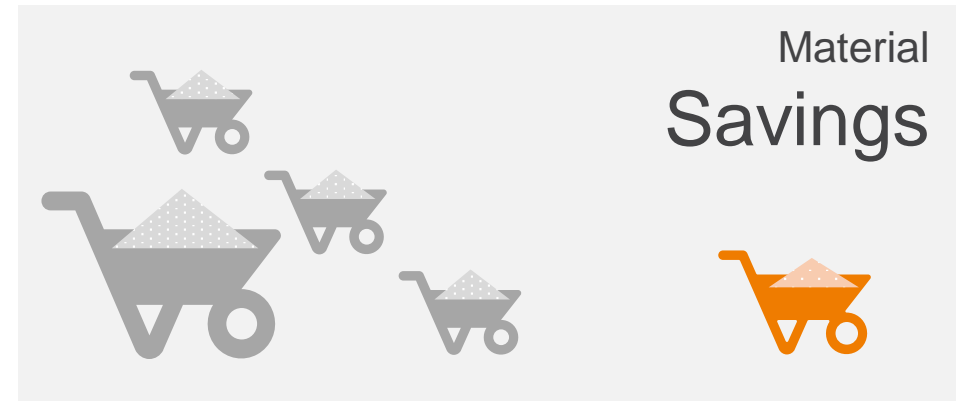
### Enabler in Mature Markets



### Enabler in Emerging Markets

Thick bed CTA<sup>1</sup>

Thin bed CTA



<sup>1</sup>) CTA = Ceramic Tile Adhesives; Source: Transparency, WACKER Estimate

# WACKER POLYMERS

## Dispersible Polymer Powders for Biocide-Free Wall Paints

### New Product Opportunity for Paint Industry



Liquid Paints	NEXIVA® based Powder Paints

#### Biocide-Free

Simply add water just prior to application – no need for adding biocides to avoid spoilage

#### Low Weight

Avoids plastic usage for paint buckets

Preparation on demand and at precise dosage

#### Ease of Storage

At challenging climate conditions

# WACKER POLYMERS

## Success Based on Combination of Dispersions and Powders

### Leading VAE Producer









>1,000,000  
tons of VAE globally  
in 2018

 **5** Production Sites

 **~1,600**  
Employees

 **16** Technical centers

### VAE Dispersions and DPP Tandem

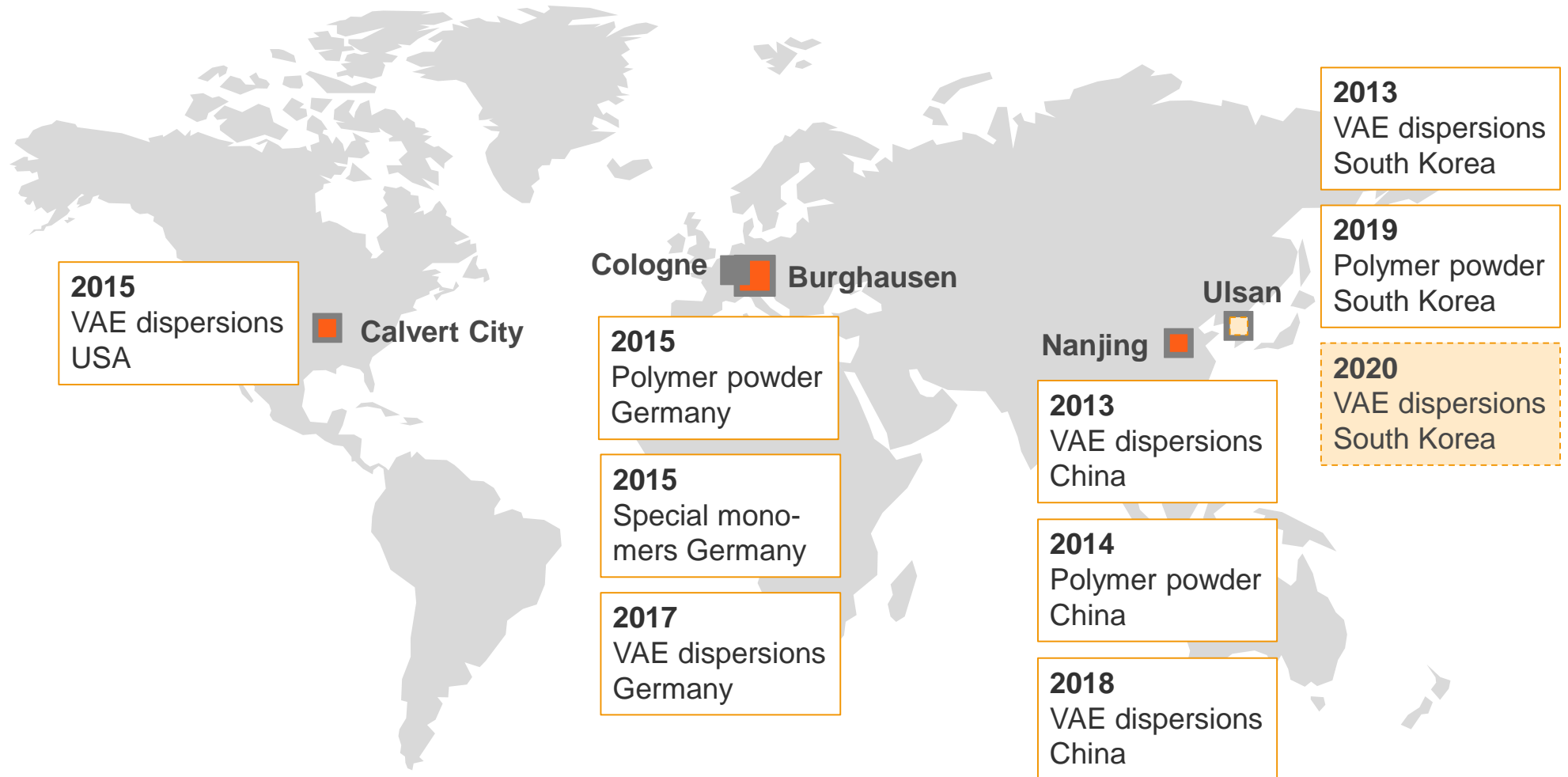
	VAE disp.	DPP	# of tech centers
<b>Global</b>	 + 		<b>16</b>
<b>Americas</b>			<b>5</b>
<b>Asia-Pacific</b>			<b>7</b>
<b>EMEA</b>			<b>4</b>

- ▶ Only producer with production sites for VAE dispersions **and** DPP in Americas, Europe and Asia

# WACKER POLYMERS

## Continuously Expanding Footprint

### Latest Capacity Expansions



## A Global Competence Network – Close to Our Customers

### Global Footprint of Technical Centers



## Growth via Customer Focus, Substitution and Innovation



### Customer Focus

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**Global presence  
with production  
and technical  
centers**



### Substitution

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**Value based  
substitution &  
transformation  
towards higher  
building  
standards**



### Innovation

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**Sustainable  
binder  
solutions  
for target  
markets**



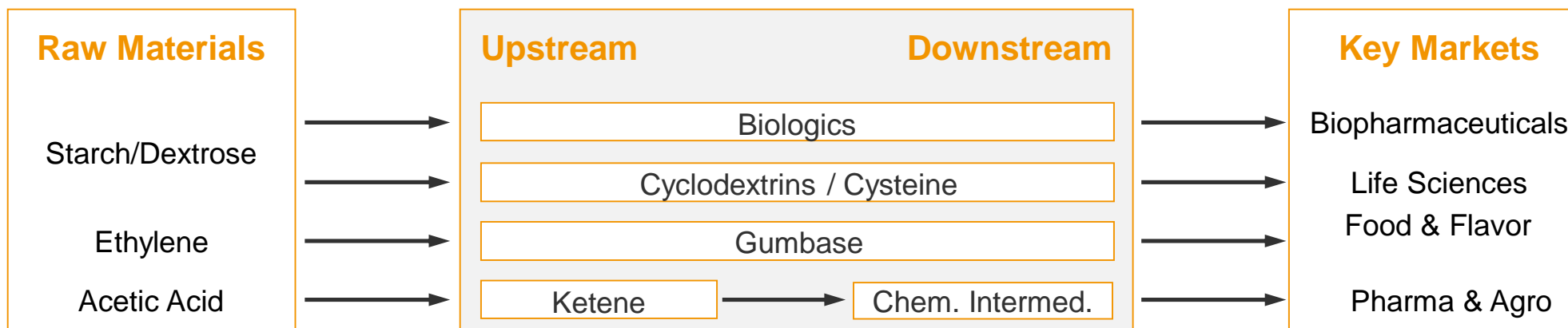


**WACKER BIOSOLUTIONS**

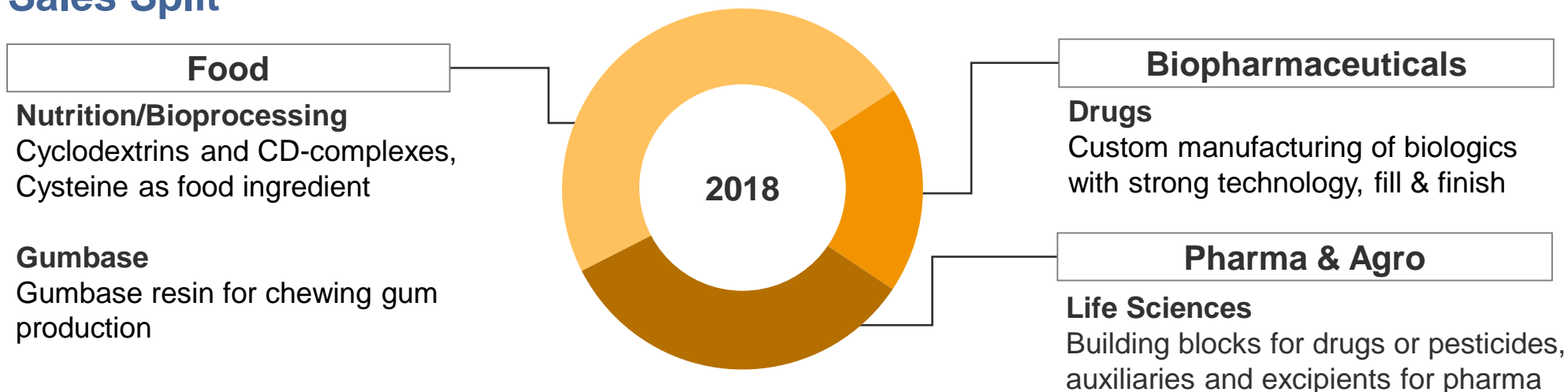
# WACKER BIOSOLUTIONS

## Focusing on Fast-Growing Markets

### Value Chain



### Sales Split



## Biopharmaceuticals and Nutrition are Strategic Growth Areas

### Accelerated Growth

#### Biopharmaceuticals



- ▶ Service business
- ▶ Process development
- ▶ Genetic modification, fermentation, purification, fill & finish

#### Nutrition/Bioprocessing



- ▶ Dietary Supplements
- ▶ Cysteine for bakery and flavors
- ▶ Cyclodextrins for food and household applications

### Organic Growth

#### Pharma & Agro



- ▶ Cyclodextrins for pharma, industrial and agro applications
- ▶ Cysteine for Pharma
- ▶ Acetyl acetone and fine chemicals

#### Gum



- ▶ PVAc<sup>1</sup> for gumbase
- ▶ Copolymers for innovative products

<sup>1</sup>) PVAc = Polyvinyl acetate

# WACKER BIOSOLUTIONS

## Establishing a Fast Growing Biopharmaceuticals Business

### Established by R&D and Acquisitions



▶ 2005:  
ProThera  
(Jena)

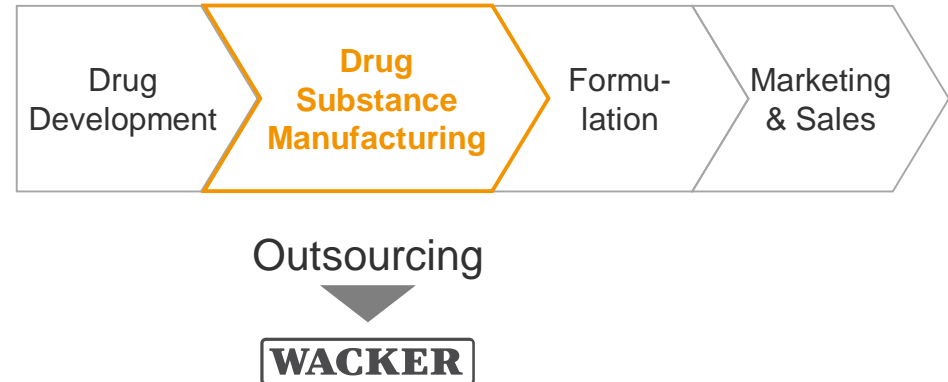


▶ 2014:  
Scil Proteins  
Production  
(Halle)



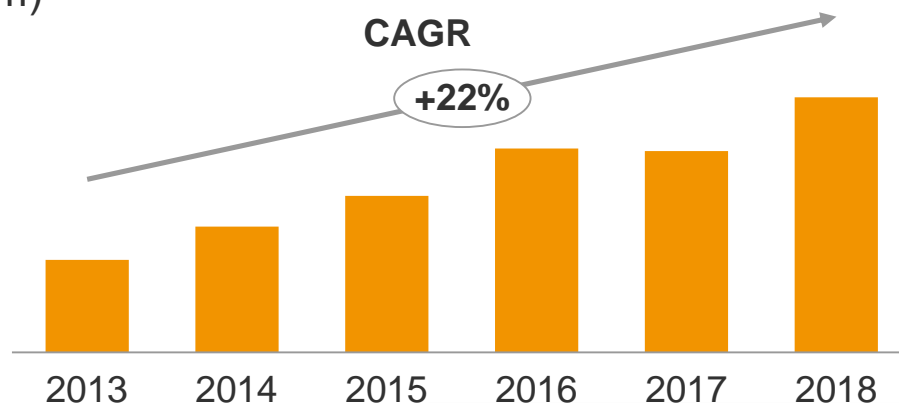
▶ 2018:  
SynCo  
Biopartners  
(Amsterdam)

### Business Model



### Biopharmaceuticals Sales Growth

(€m)

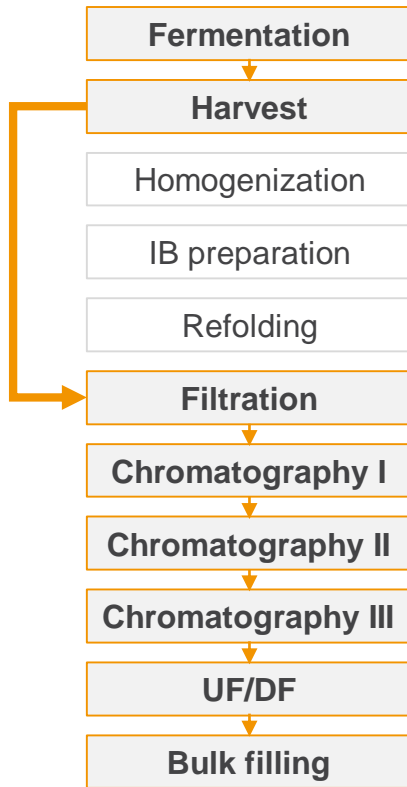


### Rationale

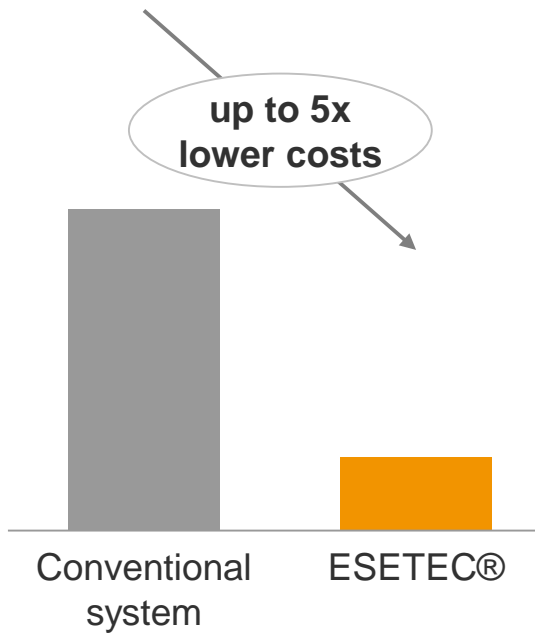
- ▶ Strengthened position as microbial contract manufacturer globally
- ▶ SynCo transaction doubled WACKER Biotech's fermentation capacity for pharmaceutical actives
- ▶ Leverage our proprietary ESETEC<sup>®</sup> technology

## Time and Cost-Efficient Manufacturing of Biopharmaceuticals

### ESETEC<sup>®</sup> (*E.coli* secretion technology)

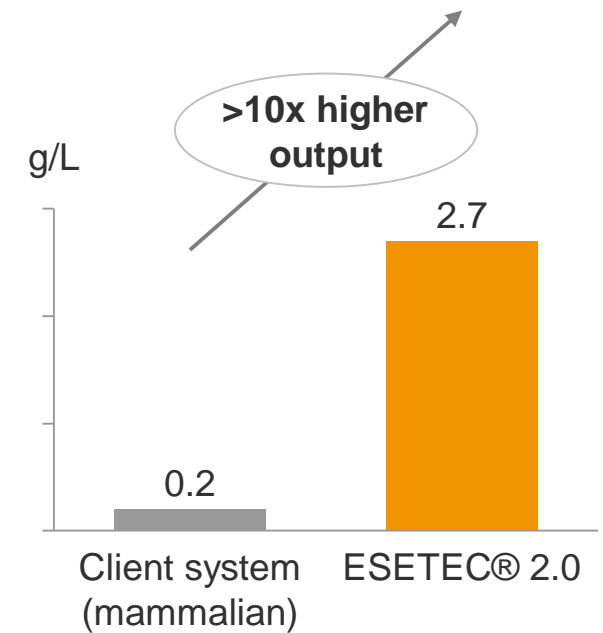


- ▶ ESETEC<sup>®</sup> reduces the number of process steps



- ▶ ESETEC<sup>®</sup> reduces production costs

### Example: Medimmune Project



- ▶ ESETEC<sup>®</sup> significantly increases yields

## Cyclodextrins & Cysteine: The Pillars of Our Nutrition Business

### Cyclodextrin Applications



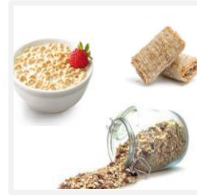
Emulsifier  
Whip-it



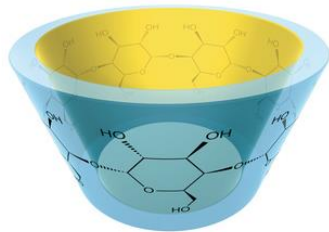
Taste  
masking



Curcumin  
complex



Soluble fiber



Vegetarian  
sausages



Fat-binding  
fiber



Bakery

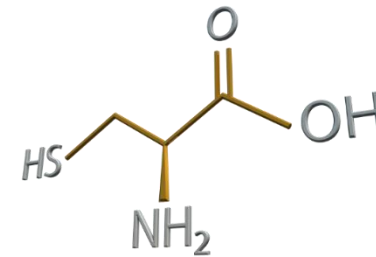
### Cysteine Applications



Dough Softening



Vegetarian Savory  
Flavor



Probiotics



Anti-Fruit Browning

## Gumbase: Leveraging Our Leading Global Market Position

### VINNAPAS® Gumbase Resins

- ▶ Leading supplier of PVAc<sup>1</sup> to the chewing gum industry with over 60 years of experience
- ▶ Two world-scale sites in Germany and China with highest food quality standards



### Innovation

CAPIVA® platform for next generation chewing gums:

**CAPIVA® S:**  
Simplified gum base formulation replacing elastomers and resins



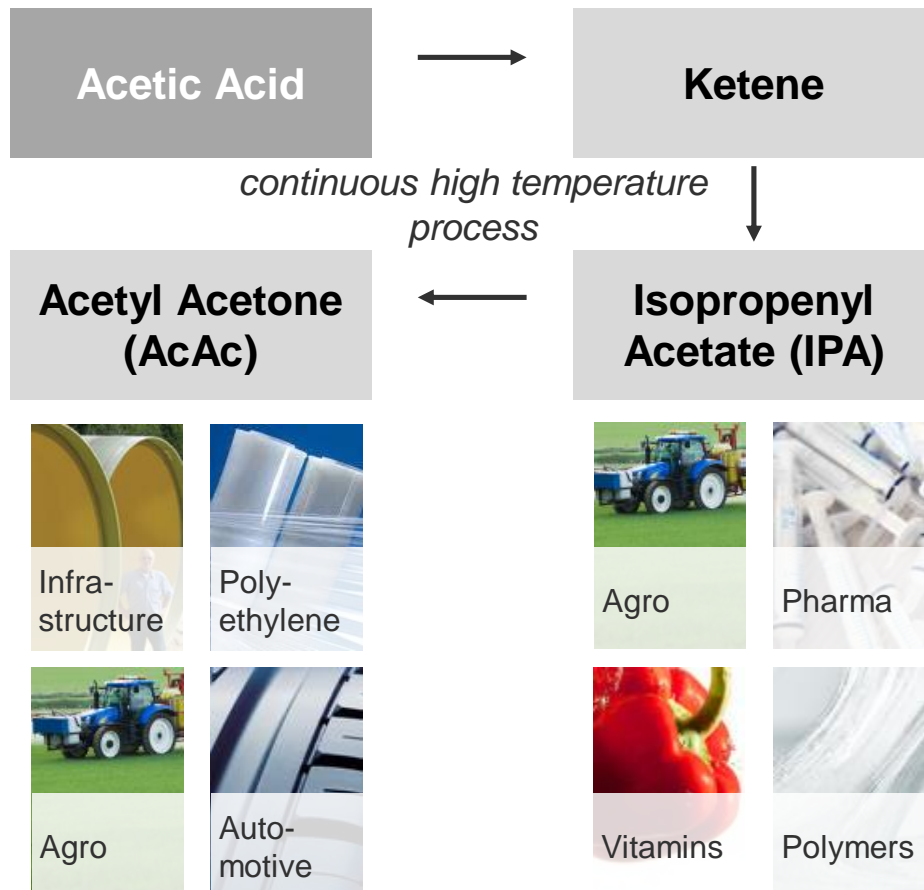
**CAPIVA® C:**  
New kind of gum made in a cooking process enabling new shaping technologies.



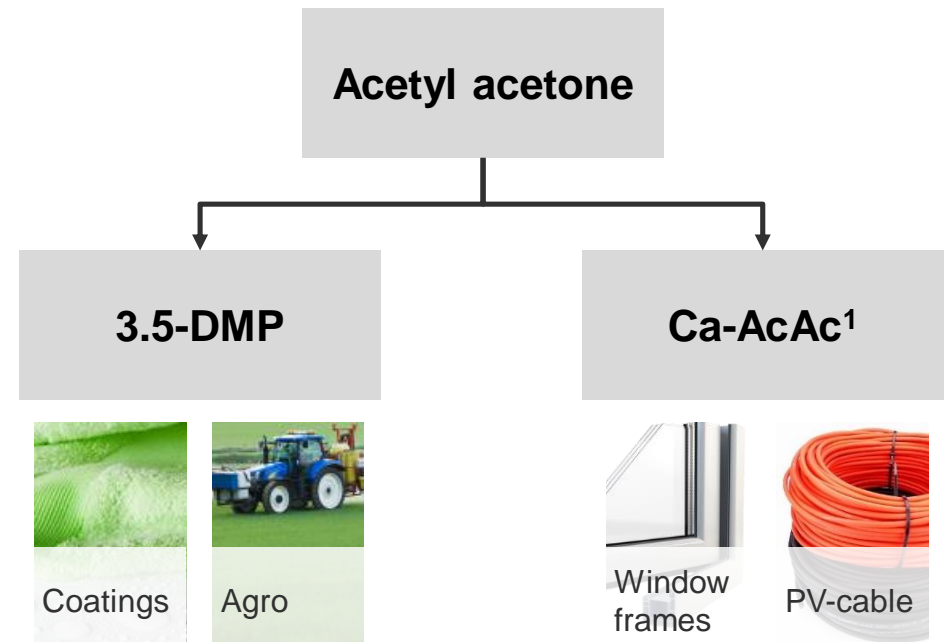
<sup>1)</sup> PVAc = Polyvinyl acetate

## Pharma & Agro: Profitable Business with Our Ketene Products

### Ketene Products



### Acetyl Acetone Downstream



- ▶ Other Metal-AcAc salts for e.g., rubber curing (Co), print applications (Ti), PVC stabilization (Zn)

<sup>1)</sup> Ca-AcAc = Calcium Acetylacetonate



# WACKER BIOSOLUTIONS

## Well Positioned for Further Growth



### Unique Technology Platforms

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**Develop fast growing biotechnology businesses**



### Innovative Solutions Partner

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**Leveraging our know-how, experience and assets**



### Strong Track Record

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**Continuous investments in innovation and growth**

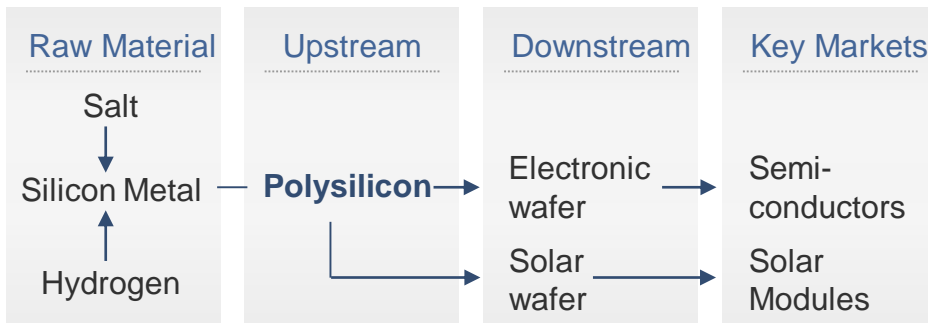


**WACKER POLYSILICON**

# WACKER POLYSILICON

## A Market Leader in Cost and Quality

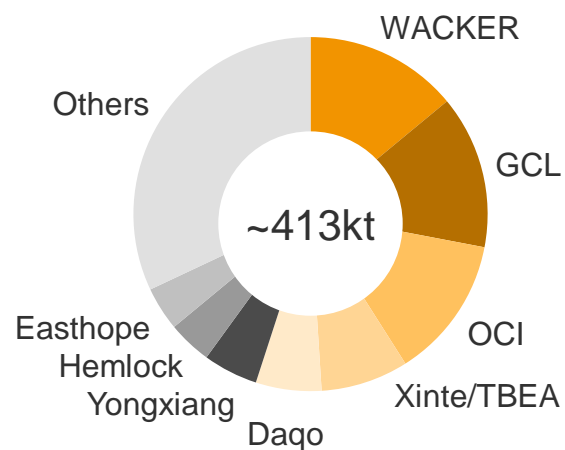
### Value Chain



### Global Footprint



### Competitive Landscape 2018



### Market Characteristics

- ▶ PV market growth driven by increasing competitiveness of solar as a source of power
- ▶ Excellent product quality is key to highest conversion efficiencies in solar
- ▶ Cost and quality are decisive for market success
- ▶ Intense competition further drives industry consolidation

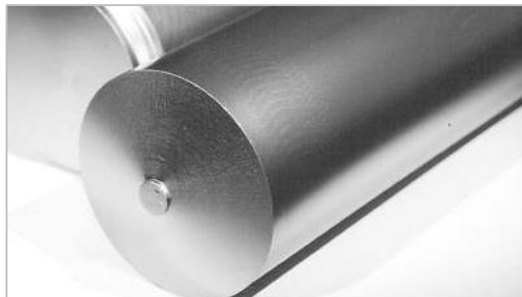
Source: Industry announcements; WACKER estimate

### Product Groups

- ▶ Polysilicon chunks



- ▶ Polysilicon rods



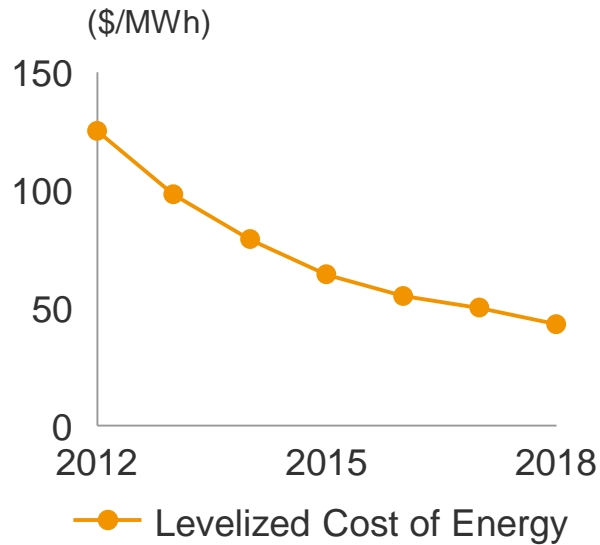
### Various Chip Sizes for Optimized Crucible Filling and Recharging



# WACKER POLYSILICON

## High Quality Polysilicon Required for Mono Growth Trend

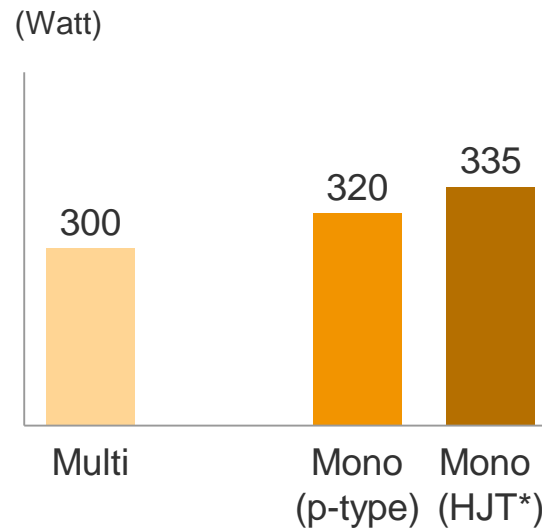
### Solar PV LCOE



- ▶ Solar is lowest cost and most scalable form of energy production
- ▶ Market shifts from subsidy driven to competitive pricing

Source: LCOE Analysis, v.12, Lazard

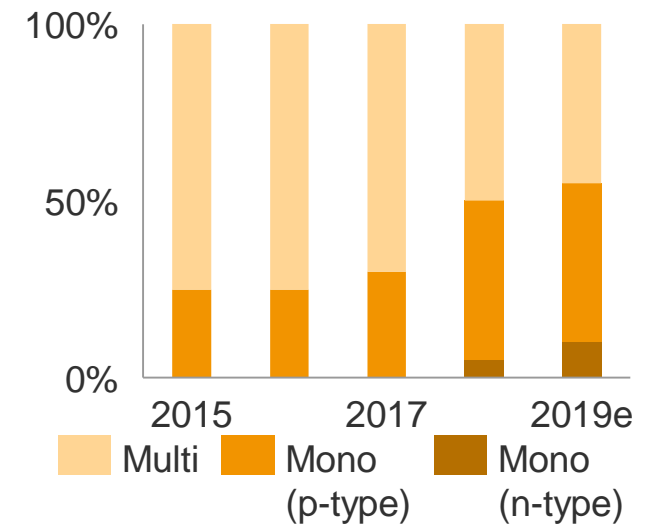
### Module Output



- ▶ Mono (p-type PERC) modules have ~5% more power output
- ▶ New technologies (mono n-type HJT) improve output further

\* HJT = Heterojunction technology; Source: ITRPV Roadmap, 10<sup>th</sup> edition, Mar. 2019

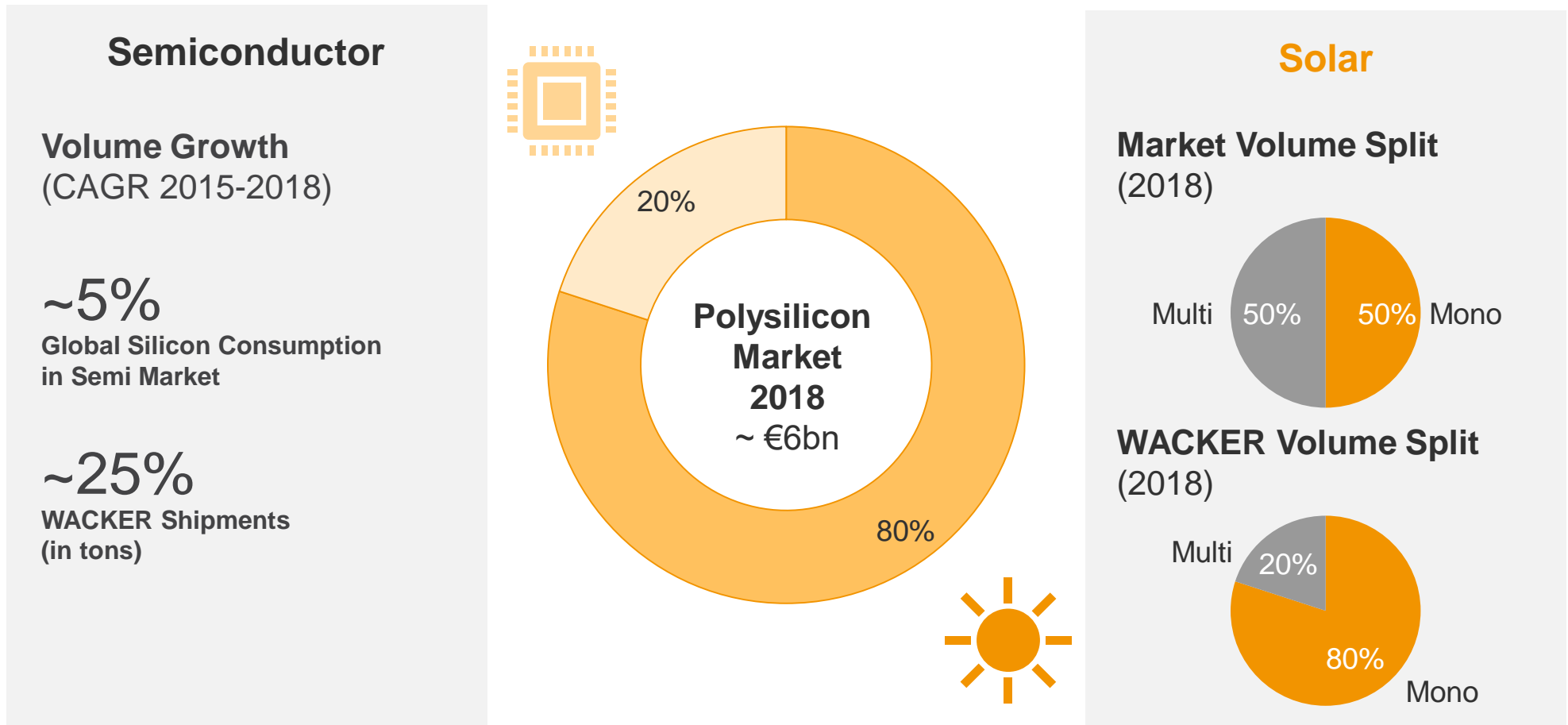
### Market Share



- ▶ Shift to highest efficiency modules continues
- ▶ WACKER material is a key enabler to our customer's processes

## WACKER Quality Reflected in Overproportional Mono Share

### Market Structure by Application Segment

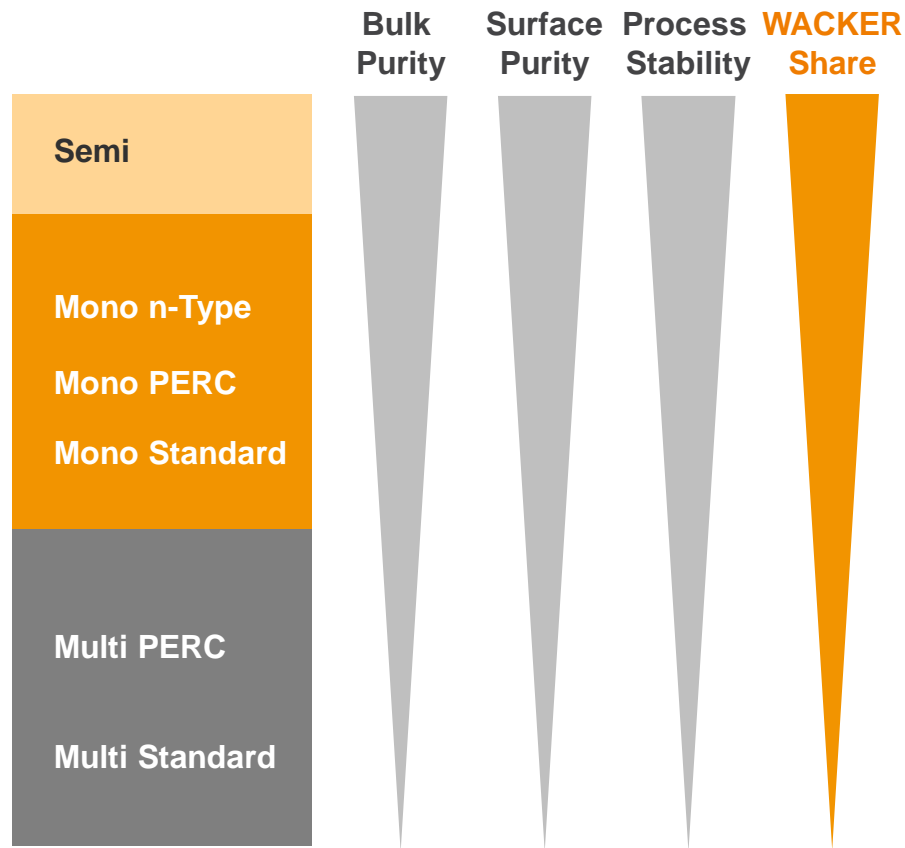


Source: WACKER Estimate; Semiconductor: Gartner

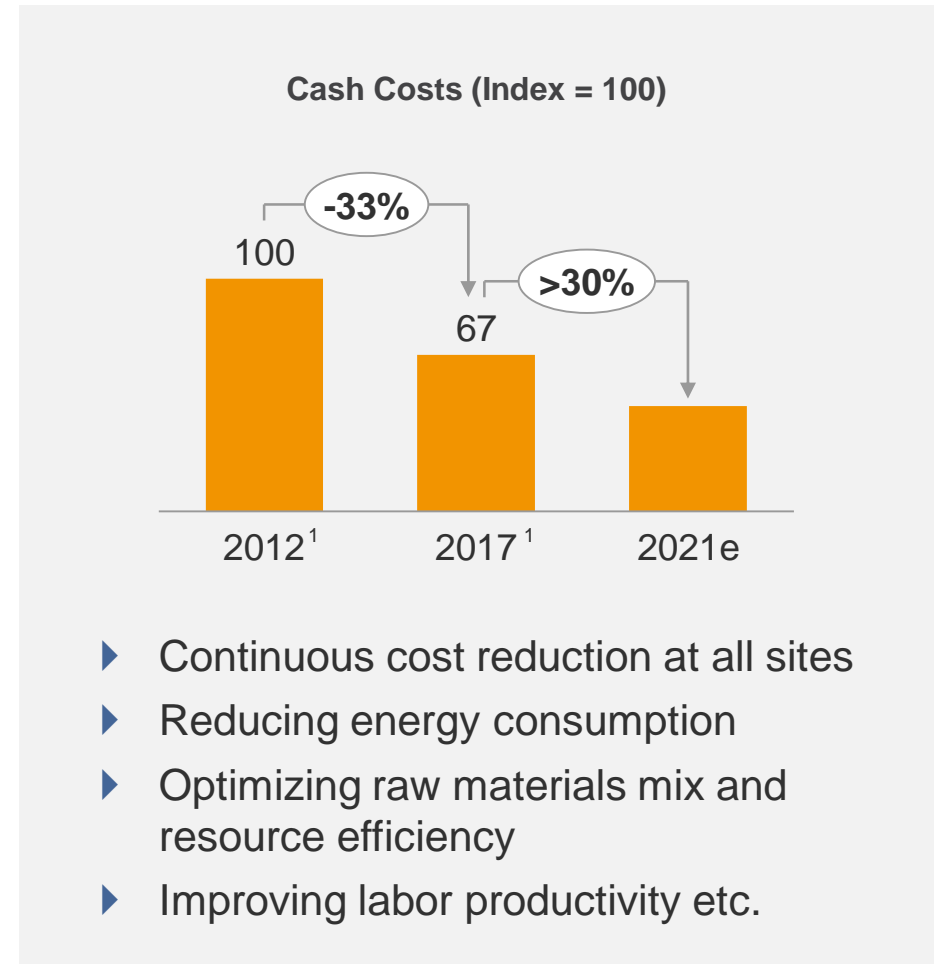
# WACKER POLYSILICON

## Maintaining Highest Quality while Reducing Costs

### Polysilicon Market Segmentation



### Aggressive Cost Reduction Targets



<sup>1</sup>) without Tennessee

# WACKER POLYSILICON

## Generate Cash Flow from Strong Assets



### Serving High-End Markets

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**Focus on cost  
and quality**



### Aggressive Cost Roadmap

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**Cost leadership  
in high quality  
polysilicon**

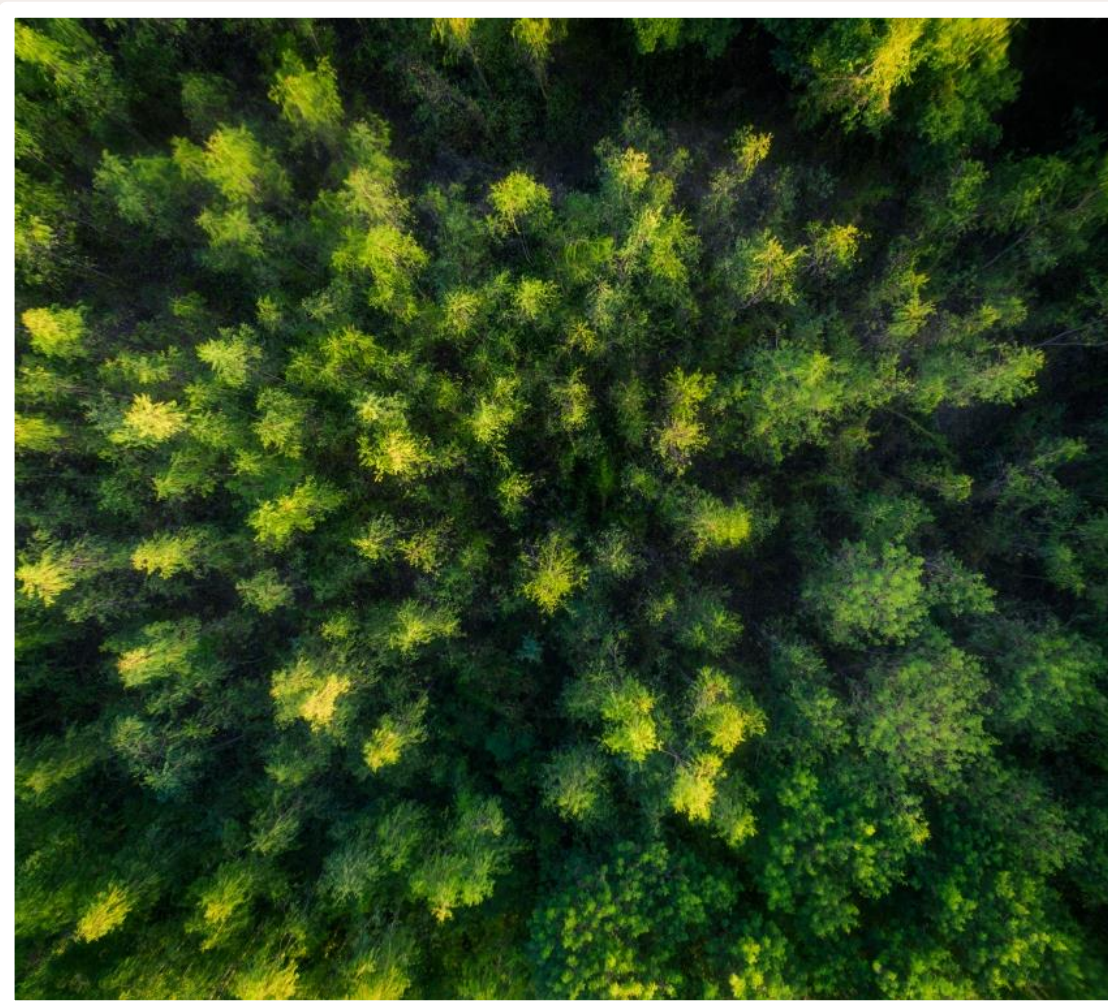


### Fully Invested

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**Leveraging our  
assets**





**SUSTAINABILITY**

# SUSTAINABILITY

## Our Contribution to the UN Sustainable Development Goals

▶ **Global challenges** that WACKER can help overcome



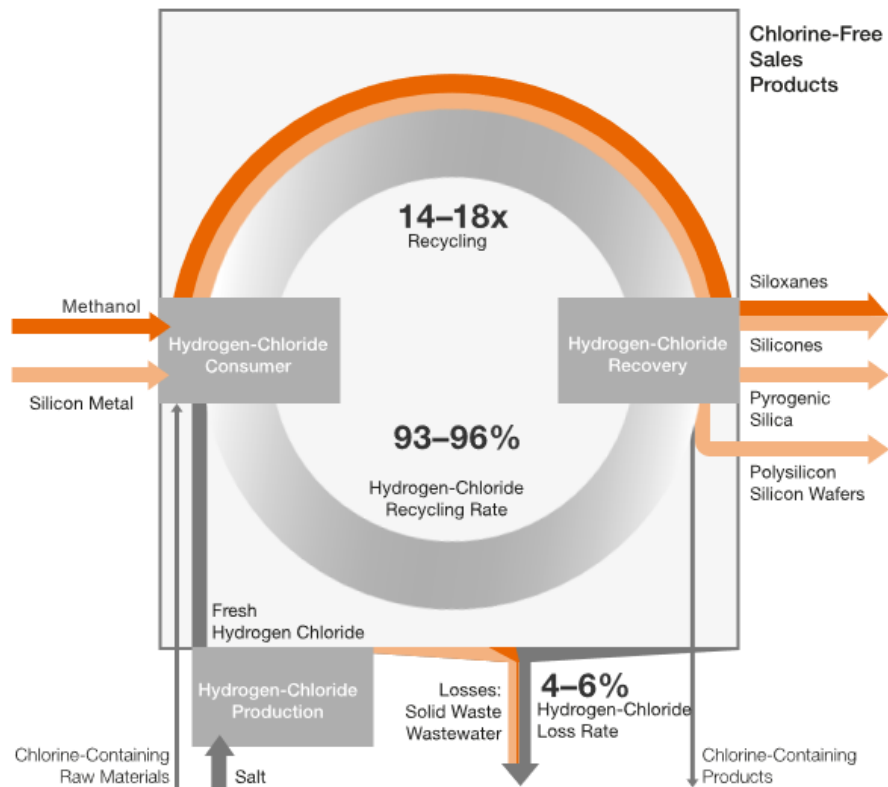
▶ **Significant opportunities** for our operations

▶ Our **guiding principle** for innovations

# SUSTAINABILITY

## WACKER's Integrated Production Helps Avoid CO<sub>2</sub> Emissions

### Hydrogen Chloride System



### Very High Recycling Rates

- ▶ Integrated production at Burghausen prevents about 1 million metric tons of CO<sub>2</sub>eq<sup>1</sup> emissions annually

### Closed Loops Reduce Waste

- ▶ Byproducts and waste heat are fed back into production via highly complex material and energy loops

<sup>1)</sup> CO<sub>2</sub>eq=CO<sub>2</sub> equivalent

## Our Environmental Management Strictly Controls Emissions

### Fewer Dust Emissions



- ▶ Silicon-metal production
- ▶ Process optimization
- ▶ Reduction of specific dust emissions by 50% since 2012

### Fewer Water Pollutants



- ▶ Wastewater treatment plant
- ▶ Emissions of organic pollutants to the Salzach river have decreased by 42% since 2010

### Fewer CO<sub>2</sub> Emissions

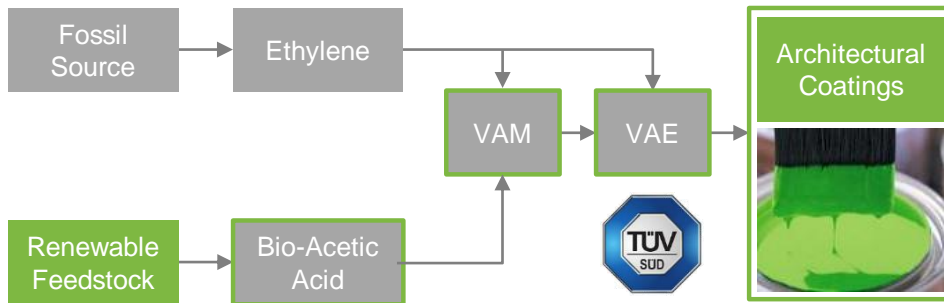


- ▶ Ethylene recovery plant
- ▶ CO<sub>2</sub> emissions reduced by 6,800 mt per year since 2015

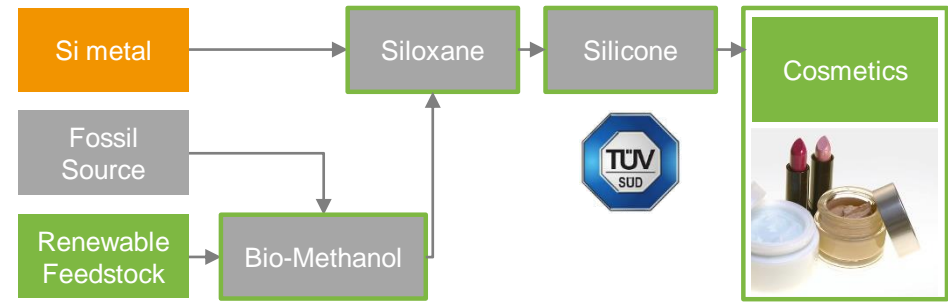
# SUSTAINABILITY

## We Offer Coatings and Cosmetics Based on Renewable Raws

### Polymers with Bio-Acetic Acid



### Silicones with Bio-Methanol



### VINNECO® VAE

- ▶ Performance identical to non-biomass based
- ▶ No reformulation necessary
- ▶ Bio-acetic acid feedstock: cellulose, no competition to food
- ▶ Renewable content available at 60% and 100% based on solids

### BELSIL® eco Silicone

- ▶ Same properties as fossil based products
- ▶ Drop-in-solution for customers
- ▶ Bio-methanol feedstock: grass, straw, sugar beets
- ▶ 100% fossil free cosmetic products

# SUSTAINABILITY

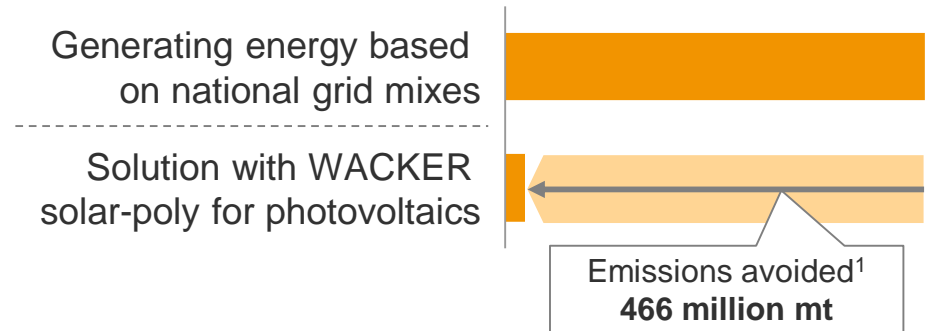
## Our Products Reduce Material Intensity and CO<sub>2</sub> Emissions

### Polysilicon for Photovoltaics (PV):

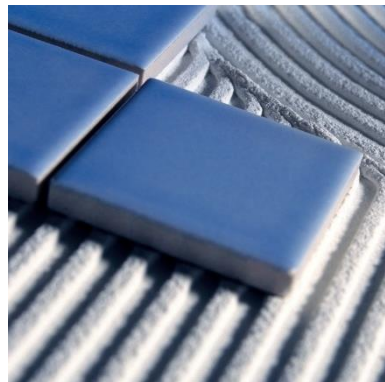


**Avoided Emissions Compared to Coal**

### Emissions along the entire value chain

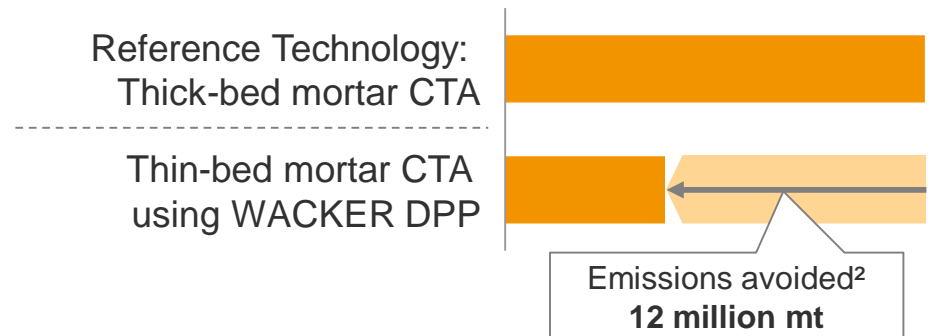


### Binders for Ceramic Tile Adhesives (CTA):



**Reduced Materials compared to Thick-Bed CTA**

### Emissions along the entire value chain



<sup>1)</sup> over a life span of 30 years with the amount of solar-poly sold in 2017 <sup>2)</sup> using the amount of Dispersible Polymer Powder (DPP) produced in 2017

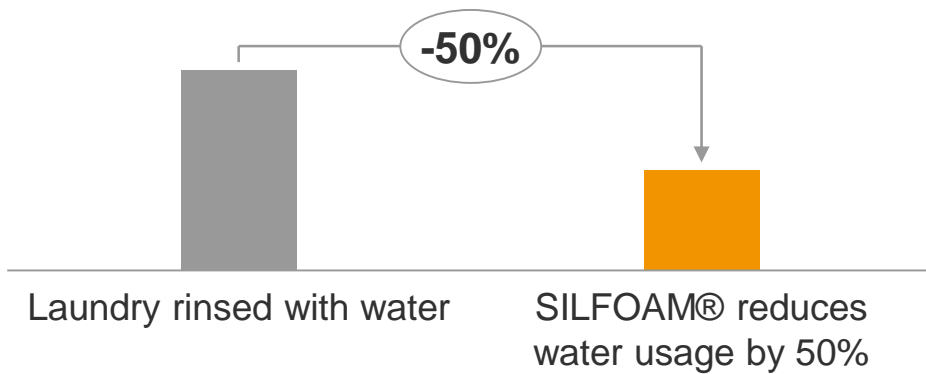
# SUSTAINABILITY

## Our Products Enable Sustainable Applications and Processes

### Antifoam Compounds for Hand Wash



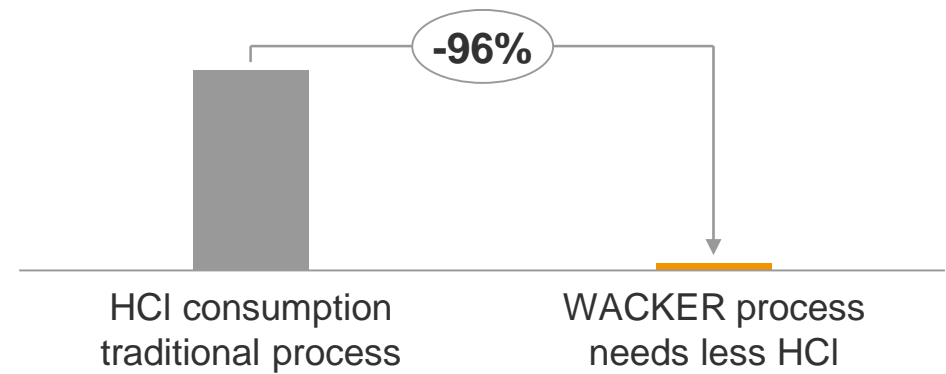
Reduction in Water Consumption



### Sustainable Cysteine Production



Reduction in Consumption of HCl<sup>1</sup>



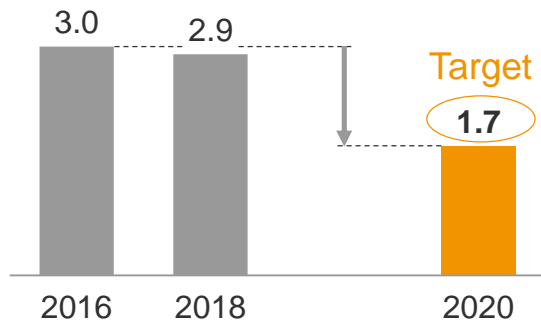
<sup>1</sup>) HCl = Hydrochloric acid; Source: WACKER Estimate

# SUSTAINABILITY

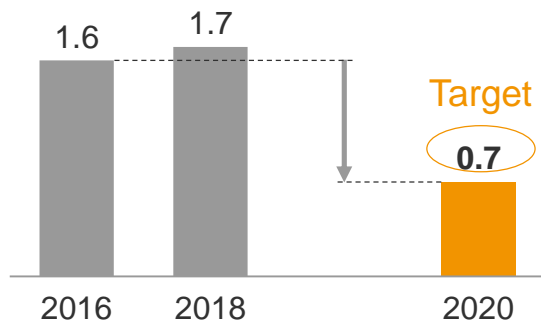
## Continuously Working on Quantitative EHS and Energy Targets

### Safety

#### ▶ Lost Time Injury Frequency

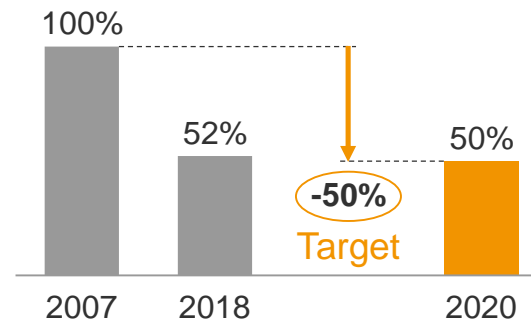


#### ▶ Process Safety Incident

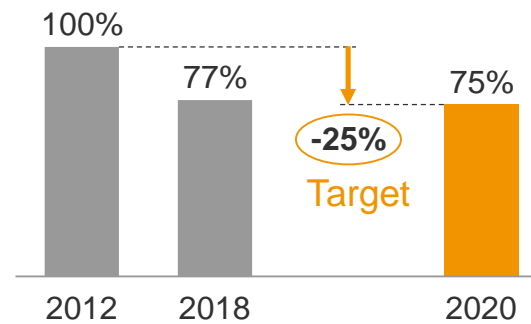


### Environment

#### ▶ Specific dust emissions

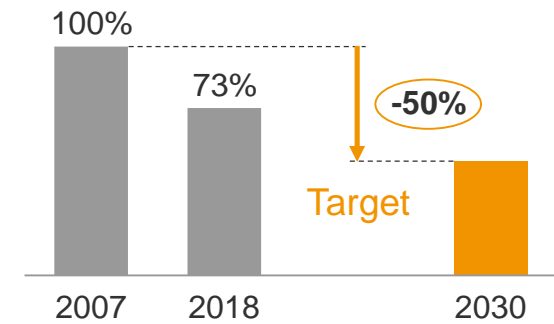


#### ▶ Spec. rel. VOC<sup>1</sup> / Spec. NO<sub>x</sub>

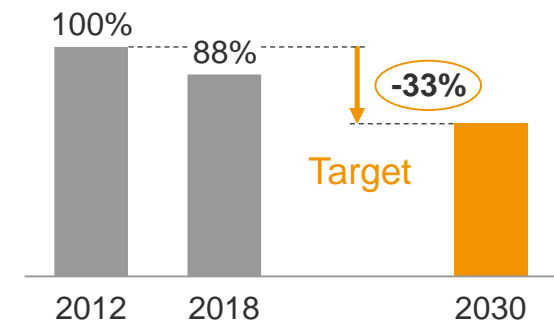


### Energy & Climate

#### ▶ Spec. energy consumption



#### ▶ Spec. CO<sub>2</sub> emissions



EHS = Environment – Health – Safety; <sup>1</sup> VOC = Volatile Organic Compounds



## Recognition for Sustainability by Independent Organizations



- ▶ WACKER ranked as “Outperformer” by SUSTAINALYTICS in 2018
- ▶ “Very strong Environmental Management Systems”



- ▶ WACKER received a “PLATINUM” CSR rating by EcoVadis in 2020
- ▶ “The result in all evaluated areas is well above the industry average”



- ▶ WACKER ranked with a “B” in CDP’s 2019 climate change ratings



- ▶ WACKER ranked with an “A” by MSCI in 2018
- ▶ “Corporate governance practices are generally well aligned with shareholder interests”



**FINANCIALS**

# FINANCIALS

## FY 2019 and Q4 2019 Results – P&L

In €m	FY 2019	FY 2018	% YoY	Q4 2019	Q4 2018	% YoY
Sales	4,928	4,979	-1%	1,156	1,189	-3%
EBITDA	783 <sup>1</sup>	930	-16%	158	174	-9%
EBITDA margin	15.9%	18.7%	-	13.7%	14.6%	-
EBIT	-536	390	n.a.	-744	37	n.a.
EBIT margin	-10.9%	7.8%	-	-64.4%	3.1%	-
Net income for the period	-630	260	n.a.	-748	29	n.a.
EPS in €	-12.94	4.95	n.a.	-15.13	0.53	n.a.
Capital expenditures	380	461	-18%	89	172	-48%
Depreciation / amortization	1,320	540	>100%	902	137	>100%
Net cash flow	184	86 <sup>2</sup>	>100%	122	45	>100%

<sup>1)</sup> incl. insurance compensation of €112.5m from 2017 incident in Charleston <sup>2)</sup> restated due to changed definition

# FINANCIALS

## FY 2019 and Q4 2019 Results – Breakdown by Business

In €m / %	FY 2019			FY 2018			Q4 2019		Q4 2018	
	SALES	EBITDA	EBITDA MARGIN	SALES	EBITDA	EBITDA MARGIN	SALES	EBITDA	SALES	EBITDA
<b>Chemicals</b>	4,011	704	17.5%	4,009	788	19.7%	931	162	962	146
SILICONES	2,453	479	19.5%	2,500	617	24.7%	565	104	605	118
POLYMERS	1,315	194	14.8%	1,282	148	11.5%	303	48	298	26
BIOSOLUTIONS	243	31	12.8%	227	24	10.4%	63	11	58	2
POLYSILICON	780	57	7.3%	824	72	8.8%	193	2	189	-19
Others	158	22	14.2%	171	71	41.4%	37	-7	45	46
Consolidation	-21	0	-1.4%	-24	-1	-	-6	1	-7	0
<b>WACKER Group</b>	<b>4,928</b>	<b>783</b>	<b>15.9%</b>	<b>4,979</b>	<b>930</b>	<b>18.7%</b>	<b>1,156</b>	<b>158</b>	<b>1,189</b>	<b>174</b>

# FINANCIALS

## Key Figures

In €m / %	2019	2018	2017	2016 <sup>1</sup>	2015	2014
Sales	4,928	4,979	4,924	4,634	5,296	4,826
EBITDA	783	930	1,014	956	1,049	1,042
EBITDA margin	15.9%	18.7%	20.6%	20.6%	19.8%	21.6%
EBIT	-536	390	424	338	473	443
EBIT margin	-10.9%	7.8%	8.6%	7.3%	8.9%	9.2%
Net income for the period	-630	260	885	189	242	195
- From continuing operations	-630	260	250	178	242	195
- From discontinued operations	-	-	635	11	-	-
Net cash flow	184	86	358	361	23	216
Return on capital employed	-11.3%	5.9%	7.5%	5.6%	8.1%	8.4%
EPS in €	-12.94	4.95	17.45	3.61	4.97	4.10
Dividend per share	0.50 <sup>2</sup>	2.50	4.50	2.00	2.00	1.50
Dividend yield	0.7%	2.1%	4.0%	2.6%	2.2%	1.7%

<sup>1)</sup> Adjusted according to IFRS 5; <sup>2)</sup> Dividend proposal

# Disclaimer

The information contained in this presentation is for background purposes only and is subject to amendment, revision and updating. Certain statements and information contained in this presentation may relate to future expectations and other forward-looking statements that are based on management's current views and assumptions and involve known and unknown risks and uncertainties. In addition to statements which are forward-looking by reason of context, including without limitation, statements referring to risk limitations, operational profitability, financial strength, performance targets, profitable growth opportunities, and risk adequate pricing, other words such as "may, will, should, expects, plans, intends, anticipates, believes, estimates, predicts, or continue", "potential, future, or further", and similar expressions identify forward-looking statements. By their nature, forward-looking statements involve a number of risks, uncertainties and assumptions which could cause actual results or events to differ materially from those expressed or implied by the forward-looking statements. These include, among other factors, changing business or other market conditions and the prospects for growth anticipated by the Company's management. These and other factors could adversely affect the outcome and financial effects of the plans and events described herein. Statements contained in this presentation regarding past trends or activities should not be taken as a representation that such trends or activities will continue in the future. The Company does not undertake any obligation to update or revise any statements contained in this presentation, whether as a result of new information, future events or otherwise. In particular, you should not place undue reliance on forward-looking statements, which speak only as of the date of this presentation.

The logo for WACKER, featuring the word "WACKER" in a bold, black, sans-serif font, enclosed within a black rectangular border with rounded corners.

# Imprint

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WCH

#### WKN

WCH888

## Publications



CUSTOMER  
MAGAZINE



ANNUAL  
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SUSTAINABILITY  
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SQUARE  
APP