



# Chemistry Division Investors' Day 2022

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Perlen  
13 September 2022

# Agenda

Overview

Strategic realignment since 2014

Megatrends

Business development

Innovation

Outlook

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## Overview

Strategic realignment since 2014

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# Overview

Market	Molecular sieves					Specialities	
Business unit	C&E	IG	Medox	TD	SZ	Gels	Deutero
Applications	Ethanol plants Natural gas plants	Oxygen generation	Oxygen generation	Air desiccants for vehicle brakes and windows	Odour elimination	Agent separation	NMR labs Pharma: APIs Electronics: OLEDs
Production	Louisville, USA		Donghai, China		Zvornik, Bosnia and Herzegovina		Rüti, Switzerland

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**Strategic realignment since 2014**

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## Key success factors

Global distribution

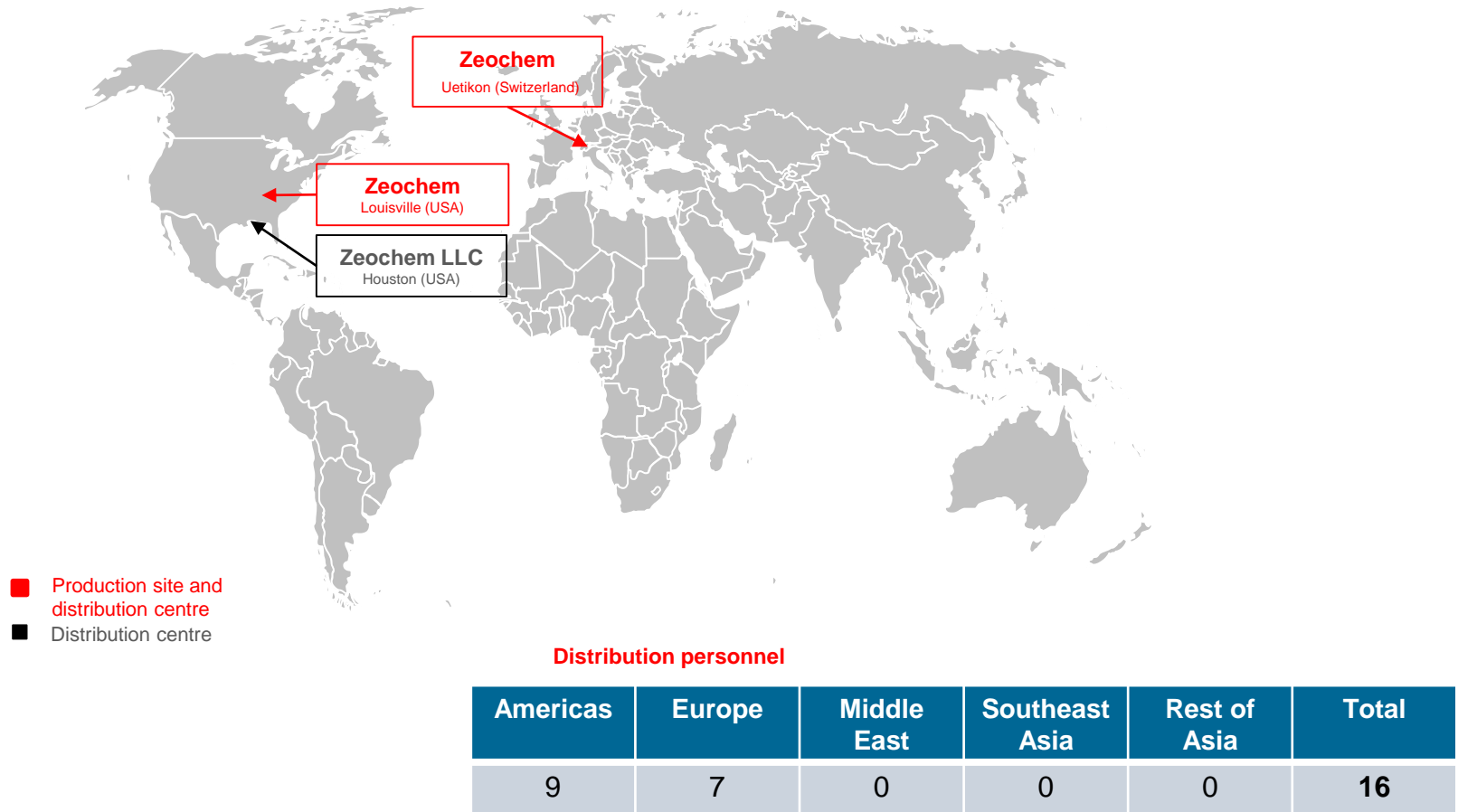
Production sites in the world's key regions

Focus on innovative and high-value products (Li, binder-free, DMSO, methanol)

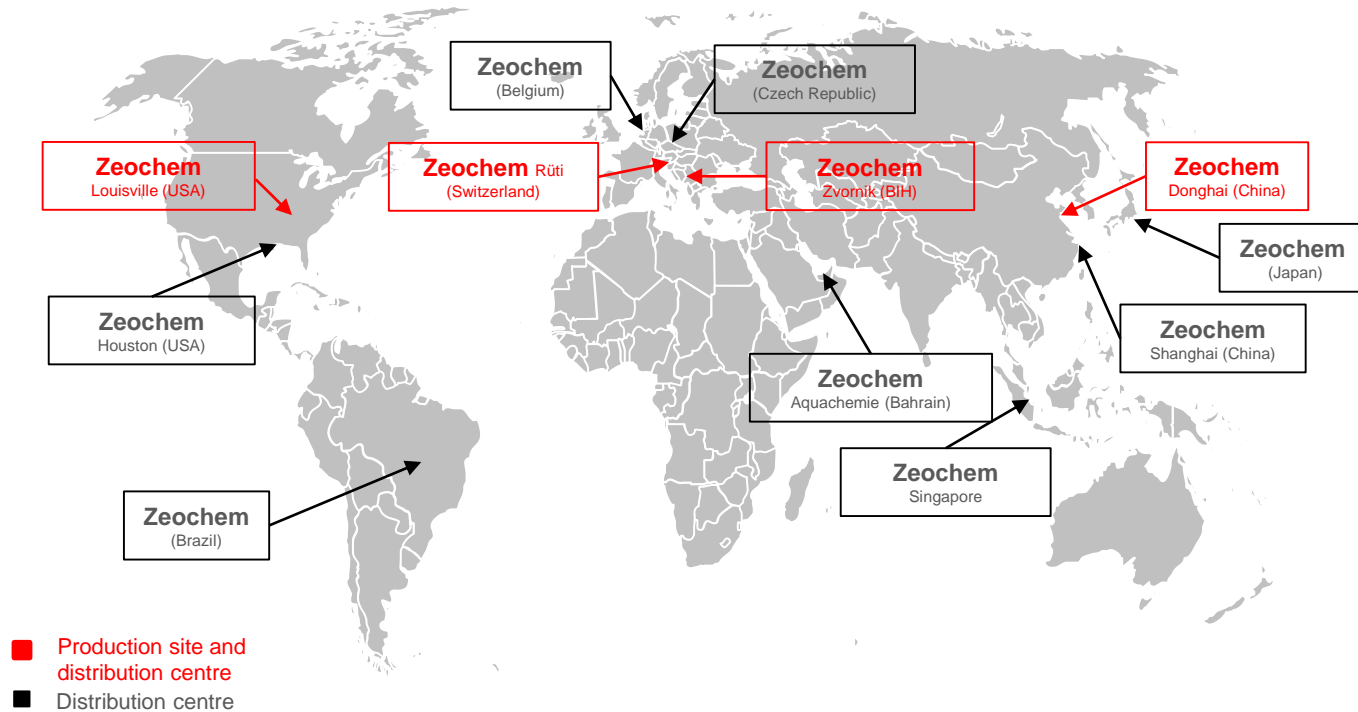
New applications for Zeochem products (spacers/Purmol, OLED/DMSO) generating sales in new markets

Market share gained from competitors through investments in distribution and capacities

# Zeochem's global presence 2014



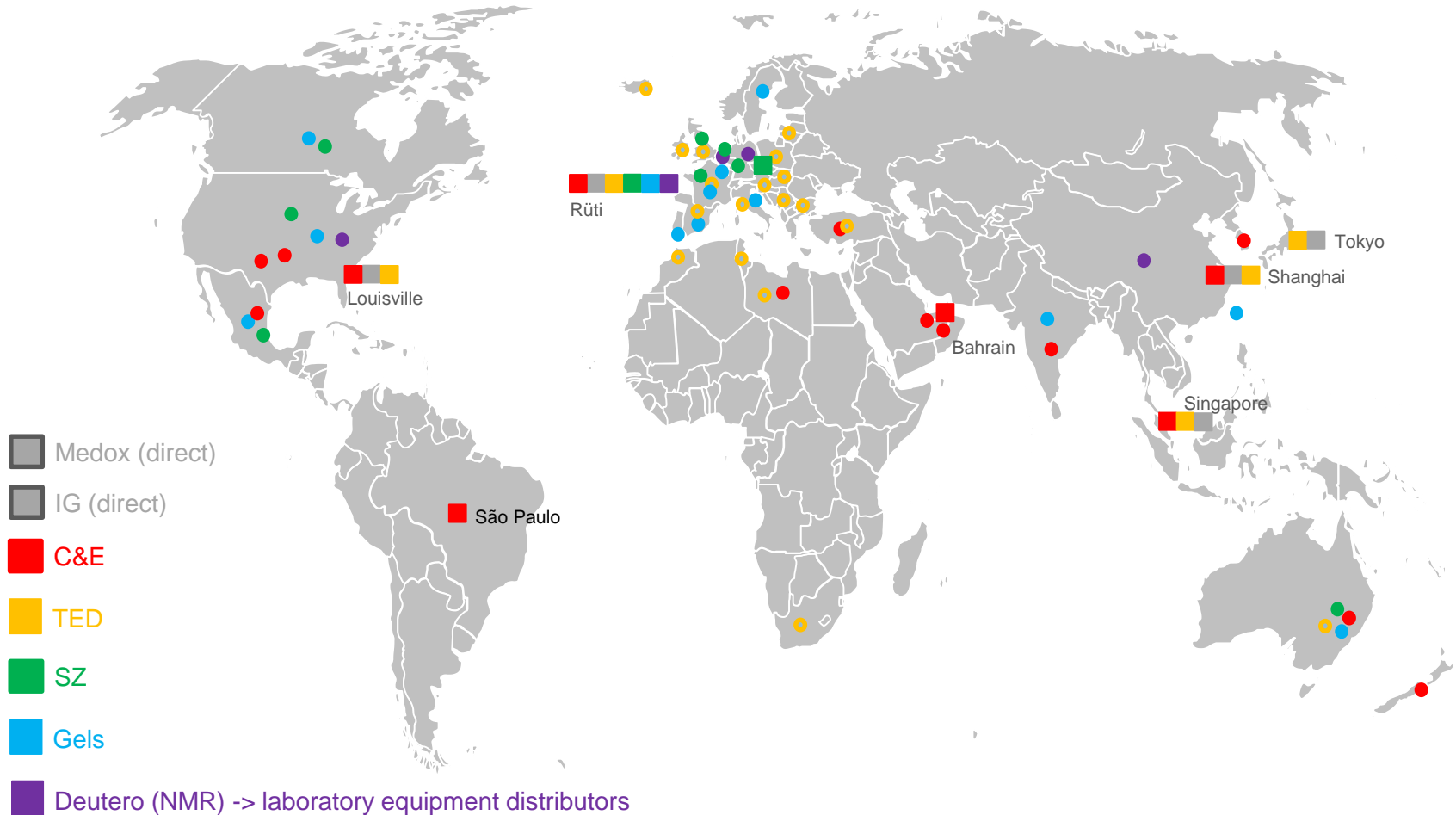
# Zeochem's global presence 2022



### Distribution personnel

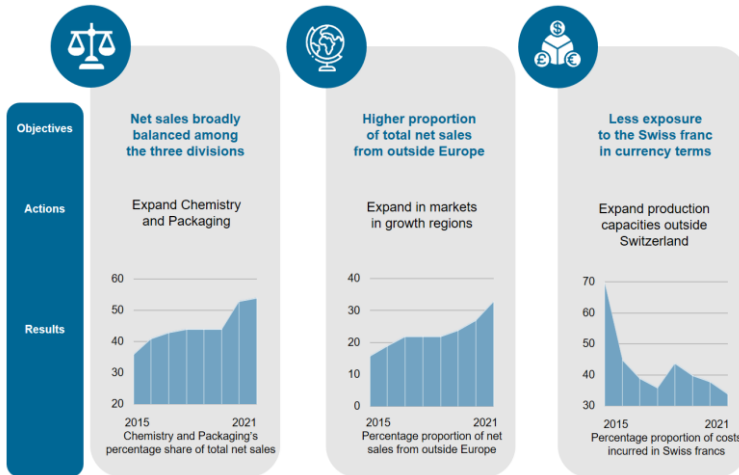
Americas	Europe	Middle East	Southeast Asia	Rest of Asia	Total
11	9	1	1	5	27




# Focused channel management





# CPH strategy as applied to the Chemistry Division



-  Tangible increases in Zeochem's net sales in 2021 and 2022 bringing better balance to divisional shares of CPH's total net sales.
-  Development of new markets in Asia and in North and South America increasing proportion of group net sales generated outside Europe.
-  Closure of Uetikon site has reduced dependence on the Swiss franc in currency terms.

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## Megatrends

Trend	Description	Zeochem and the trend
Healthcare Energy Mobility	The health of the world's population is improving globally at different speeds. Most countries' healthcare markets are growing 7% faster than their GDP, and the value of these markets could quadruple (compared to 2010) to USD 20 billion by 2030.	<ul style="list-style-type: none"><li>- Zeochem manufactures high-performance molecular sieves for the production of medical oxygen.</li><li>- Zeochem's chromatography gels are used to purify APIs and neutraceuticals.</li><li>- Methanol- and deuterium-based solvents are used in APIs to optimize the dosages of medications for the human body.</li></ul>

## Megatrends

Trend	Description	Zeochem and the trend
Healthcare Energy Mobility	Energy is indispensable to the global economy. The switch from fossil to sustainable energy sources has begun. Optimizing energy consumption and reducing CO <sub>2</sub> emissions are the two prime focuses in countering climate change.	<ul style="list-style-type: none"><li>- Zeochem's molecular sieves are used in the purification of natural gas. Natural gas is regarded as an interim product in the move from oil to alternative energies.</li><li>- Zeochem manufactures high-performance molecular sieves that are used to produce ethanol as an alternative energy source.</li><li>- Zeochem's molecular sieves are used in oxygen concentration processes. Higher concentrations of oxygen put less strain on the environment when used in steel and glass manufacture.</li></ul>

# Megatrends

Trend	Description	Zeochem and the trend
Healthcare Energy Mobility	The mobility megatrend describes the rise of a global mobile culture, changes through new products and services and the future use of transportation.	<ul style="list-style-type: none"><li>- Zeochem manufactures products that are used in vehicle braking systems.</li><li>- Zeochem's products are used to purify natural gas, an energy source which is helping ensure the transition from oil and coal to renewable energy technologies.</li><li>- Zeochem's (Purmol) products are used in the interiors of various transport vehicles.</li><li>- Manufacturers of OLED flatscreens for the vehicles of today also put their faith in Zeochem products.</li></ul>

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Strategic realignment since 2014

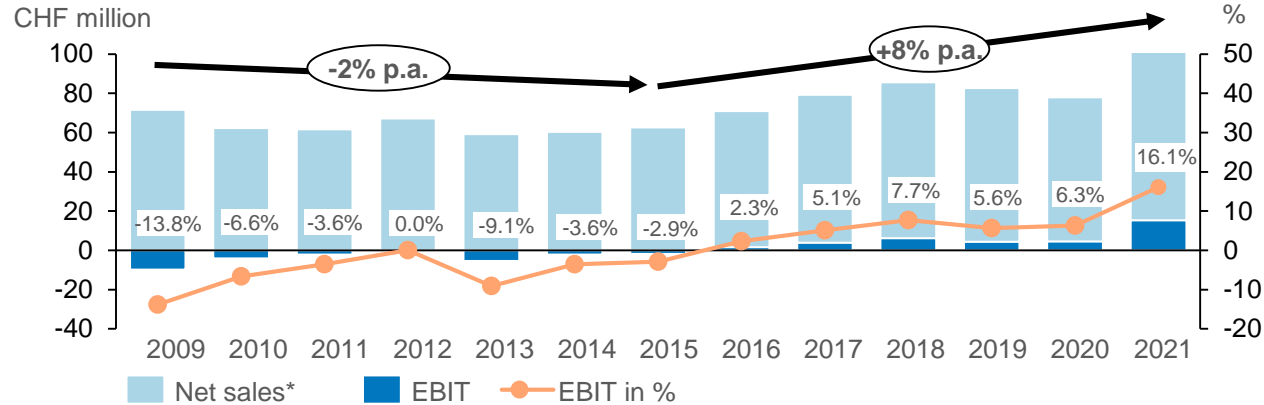
Megatrends

**Business development**

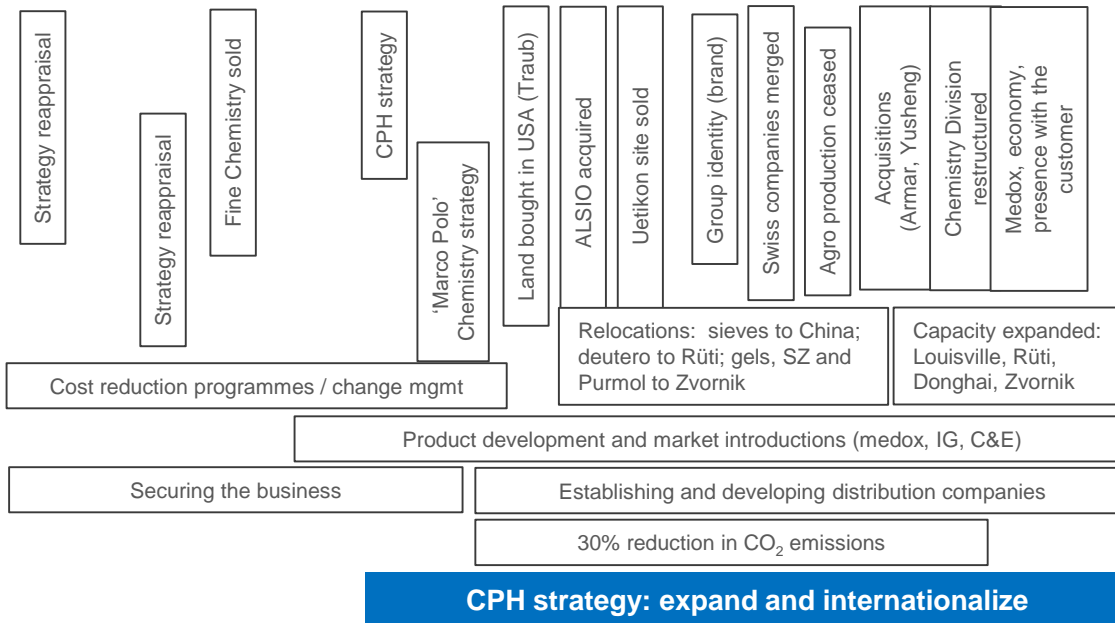
Innovation

Outlook

# Business development



- Swiss franc strengthened around 40% against the euro between 2009 and 2015 (from EUR 1.00 = CHF 1.50 to EUR 1.00 = CHF 1.05); pressure on net sales and earnings
- 2007/2008: collapse of business-focused bio-ethanol business
- 2009 onwards: ‘regaining’ customers from markets previously left
- 2009-2015: net sales decline of 13%, or of 2% p.a.
- 2015-2021: net sales growth of 50%, or of 8% p.a.
- Tangible EBIT increase and EBIT margin raised to 16.1% (2021)
- A sustainable turnaround
- Capacities expanded at all operating sites from 2020 onwards



\* Silicate Chemistry / Other Chemistry (until 2015)

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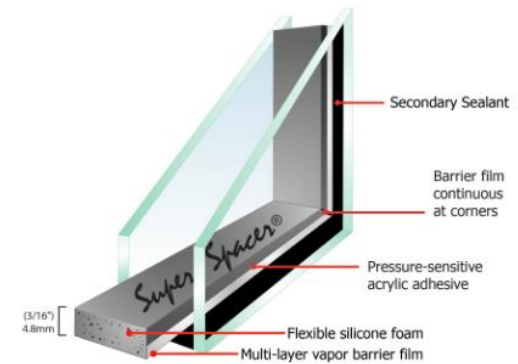
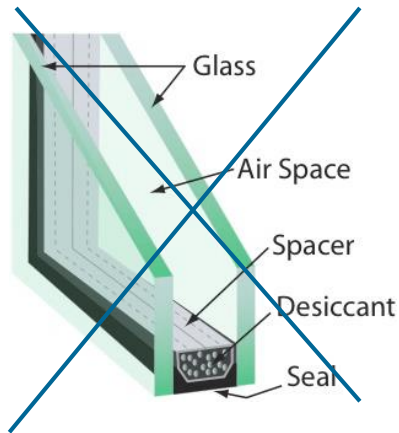
Business development

**Innovation**

Outlook

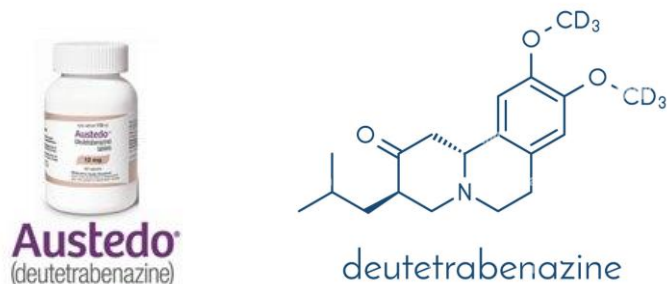
# Innovation: The Superspacer

A more energy-efficient way to manufacture non-fogging double glazing



## Innovation: dosing medications

Substituting H<sub>2</sub>O with D<sub>2</sub>O in medications (APIs) ensures that the active ingredients remain longer in the human body, which in turn helps optimize the dosages required.



Approved by the FDA for the treatment of tardive dyskinesia and Huntington's in 2019

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# Outlook: ongoing investment projects make Zeochem fit for the future

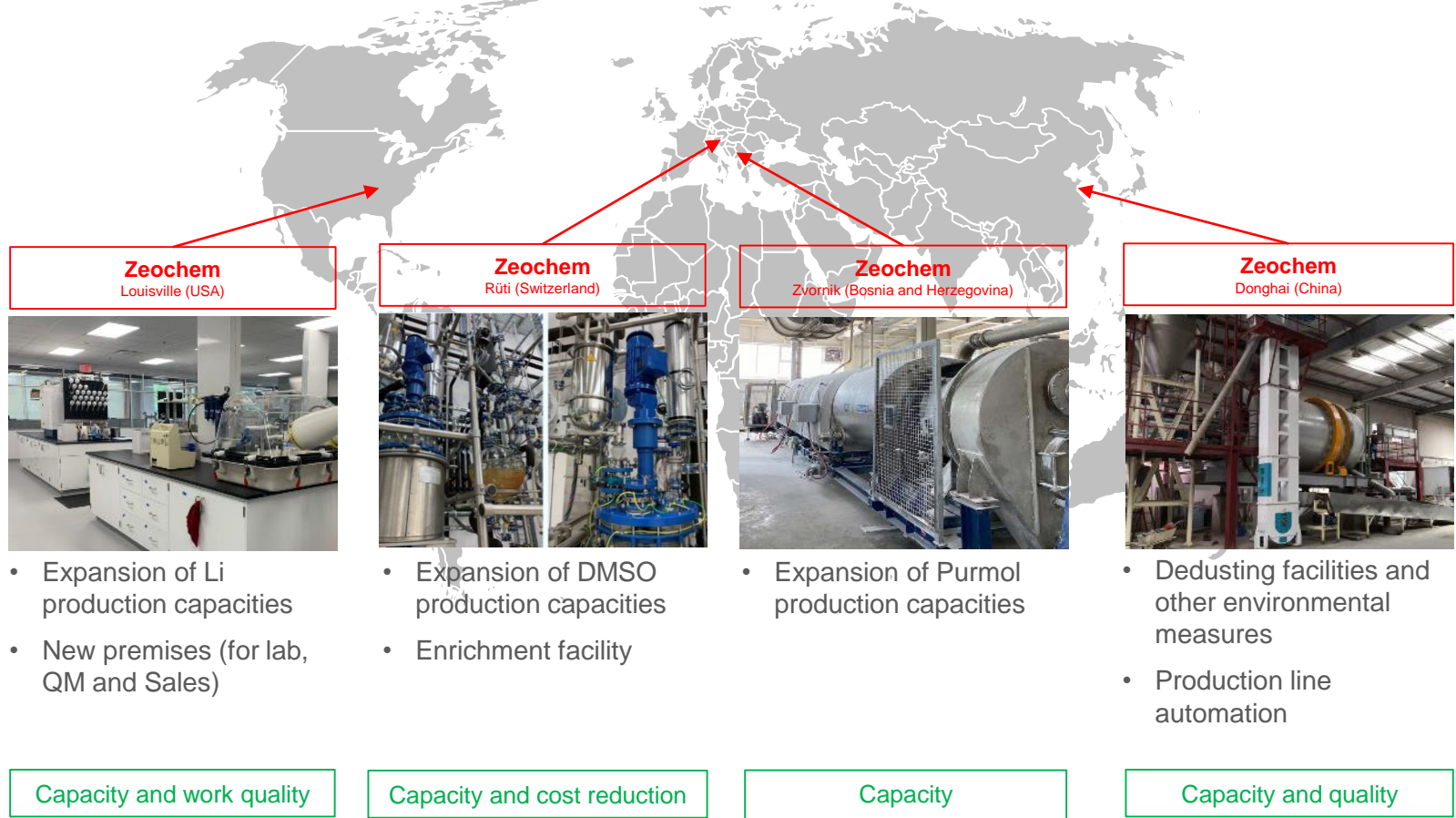
Trend

Healthcare, energy

Healthcare

Mobility

Healthcare



Objective(s)

Capacity and work quality

Capacity and cost reduction

Capacity

Capacity and quality

# Outlook by business unit

Market	Molecular sieves					Specialities	
Business unit	C&E	IG	Medox	TD	SZ	Gels	Deutero
Outlook	Steep increase in demand for ethanol in India; growing demand in the USA for natural gas	Oxygen generation for steel and glass manufacture, fish farming and battery production / partnership with Linde	Short-term post-COVID decline in demand, but upward trend should return in the longer term	Air braking systems and 'spacer' technologies will support further business growth	Continuous steady further development	Continuous steady further development	Strong growth in the OLED, NMR and pharma fields

## Outlook: in summary

### **2022**

Double-digit net sales growth expected

Additional US capacities will come into operation

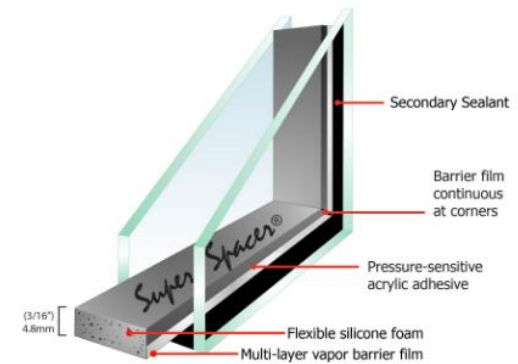
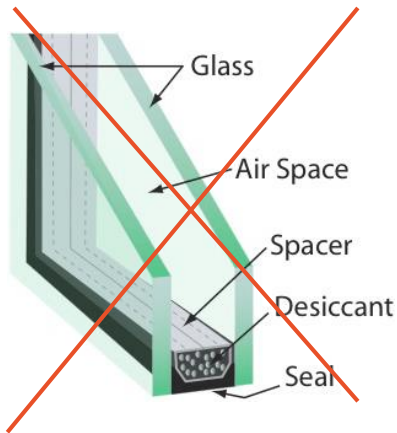
Raw materials and transport costs will continue to rise

Operating margin likely to fall somewhat short of its high 2021 level

**→ For 2022 we expect to see higher net sales and pressure on our margins**

# Innovation: The Superspacer

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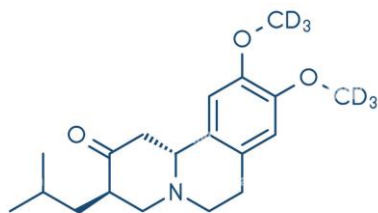


## Innovation: dosing medications

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**Austedo**  
(deutetrabenazine)



deutetrabenazine

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- Megatrends
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- Outlook

# Outlook: ongoing investment projects make Zeochem fit for the future

Trend

Healthcare, energy

Healthcare

Mobility

Healthcare

**Zeochem**  
Louisville (USA)



- Expansion of Li production capacities
- New premises (for lab, QM and Sales)

Objective(s)

Capacity and work quality

**Zeochem**  
Rüti (Switzerland)



- Expansion of DMSO production capacities
- Enrichment facility

Capacity and cost reduction

**Zeochem**  
Zvornik (Bosnia and Herzegovina)



- Expansion of Purmol production capacities

Capacity

**Zeochem**  
Donghai (China)



- Dedusting facilities and other environmental measures
- Production line automation

Capacity and quality

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