



**SOLVAY**

asking more from chemistry®

# Special Chem

Innovative solutions for growth industries



**Rodrigo Elizondo**  
President, Special Chem

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Solvac Board, Brussels

# GBU SPECIAL CHEM “AT A GLANCE”

→ SPECIAL CHEM



€0.9 bn  
Net sales 2017



~ 2,450  
Headcount



20 Production sites  
8 R&I/admin sites



Main  
markets:



ELECTRONICS



AUTOMOTIVE



AGRO



BATTERIES



INSULATION



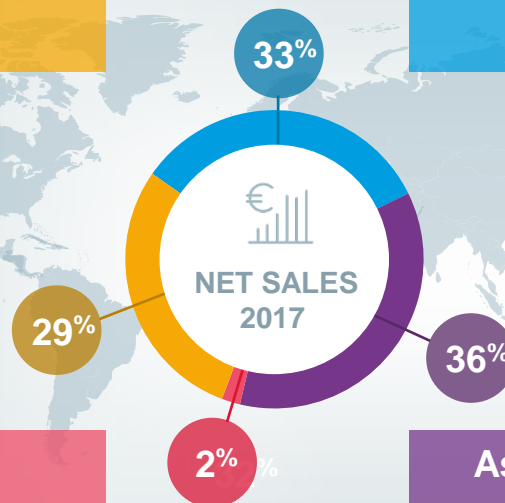
NICHES & SPECIALITIES

North  
America

Europe

Latin  
America

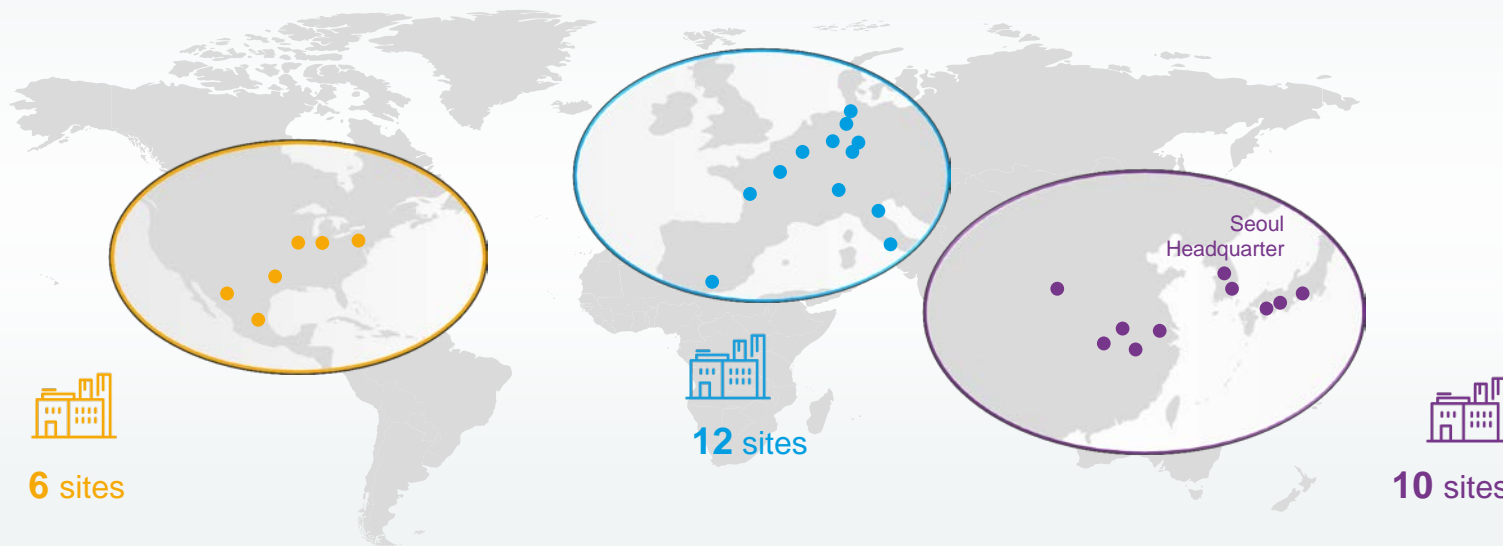
Asia & RoW



# OUR GLOBAL FOOTPRINT

## STRONG FOCUS ON ASIA

Solvay production/R&I  
and admin sites



Global footprint to  
support customers  
**globally and locally**

**Special Chem**  
headquartered in  
Seoul (S. Korea)

Asia is Special Chem's  
**largest and fastest  
growing region**

Majority of **new  
investments**  
in Asia

# TRANSFORMATION JOURNEY SINCE OUR CREATION IN 2015



# SERVING OUR MARKETS WITH 3 ADVANCED MATERIAL TECHNOLOGIES

List of examples

	Electronics	Automotive	Battery	Agro	Insulation	Niches/ specialties
Rare Earths & Inorganics	Materials for MLCC Semiconductor polishing	Autocatalysis ingredients				Contrast agents for MRI (medical)
Fluor chemicals	Semiconductors etching & cleaning	Brazing material for heat exchangers	Electrolyte ingredients (solvents, additives & salts)	Agro intermediates	Foam blowing agents for thermal insulation	Etching for steel
High Purity Molecules						

Creating  
value



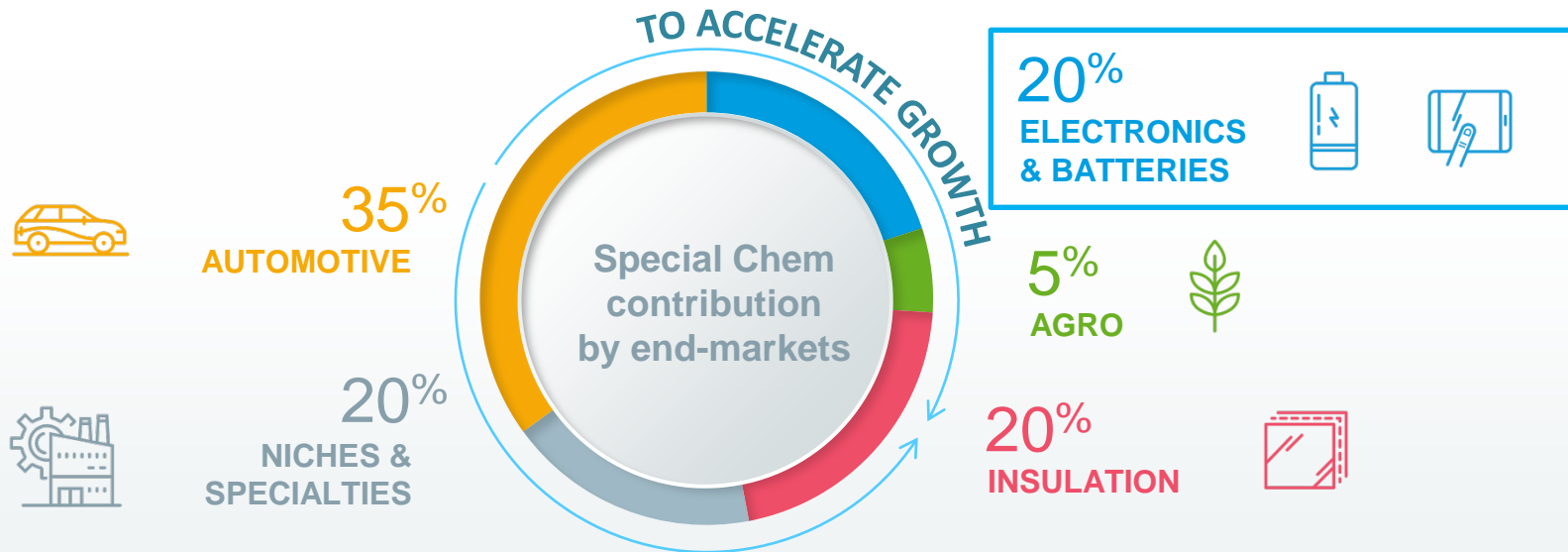
Dynamic portfolio management  
to invest in growth segments

Enhanced innovation  
capabilities

Capturing growth in  
Asia

# OUR PORTFOLIO: MIX OF GROWTH & RESILIENT CASH

## STRONG FOCUS ON ELECTRONICS & BATTERIES



Growth accelerators  
driven by mega trends

Digitization

Clean mobility

Climate Care

# LEADER IN PROCESS CHEMICALS FOR SEMICONDUCTOR INDUSTRY



## High margin business built on unique differentiating strengths

- Recognized expertise in high purity chemistry
- High quality product portfolio addressing key sub-segments
- Qualified by leaders, network of assets to supply them regionally

Favorable industry underlying trends >

Double digit growth



## Invest in fast growing China market

(16% growth rate of Chinese IC manufacturing)



## Expansion of portfolio offer (M&A, licensing)



## Innovation (CMP, Fluor gases,...)



# HIGH PURITY ELECTRONICS MATERIALS NEW PLATFORM IN ZHENJIANG





# LEADING SUPPLIER TO THE AUTOMOTIVE CATALYSTS



## Market

Solid **mid single digit growth** market growth next 5 years driven by:

- Growth in hybrid passengers cars
- Higher catalysis loading to meet stricter emission norms in passenger car and heavy duty

## Solvay

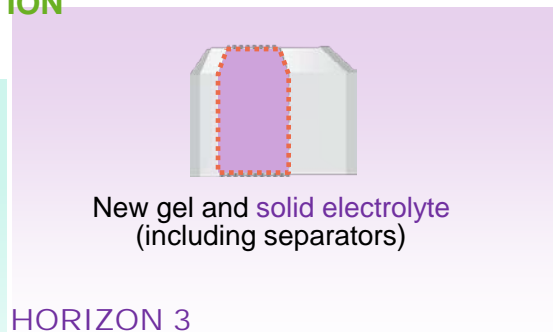
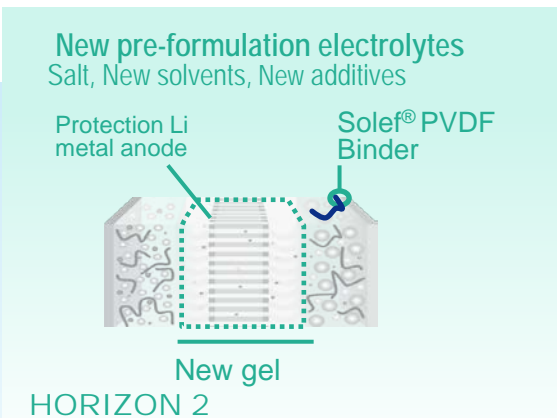
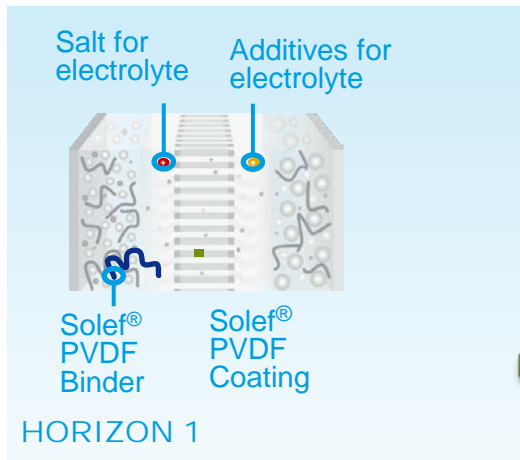
Market leader **to grow above market:**

- Sole supplier with global industrial footprint
- Innovative solutions with strong IP protection
- Strong customer service model backboned by innovation and pilot plants in each regions

# BATTERY TECHNOLOGY ROADMAP FROM LI-ION TO ADVANCED LI-ION AND SOLID-STATE

## TO ENABLE VEHICLE ELECTRIFICATION

### ✓ Battery solutions of Special Chem



### ✓ Salts and additives for medium voltage Li-ion batteries

Binder for cathode

Binder for anode

Coating for separators

### ✓ Electrolyte ingredients for High Voltage batteries

Protection Li metal anode

### ✓ New Gel Electrolyte

### ✓ Technologies for LiS

### ✓ Solid Polymer Electrolyte

### ✓ Solid inorganic electrolytes

# CLEAR STRATEGY FOR SPECIAL CHEM TO DELIVER SUSTAINABLE GROWTH

## Combining 3 advanced technologies with market expertise to unlock growth

- Market growth driven by megatrends: digitization, clean mobility and climate care
- Solvay is recognized techno-leader in fluorine, rare earths/inorganics and high purity chemicals

## Delivering sustainable results to its shareholders

- Mid to high single digit EBITDA growth over past 3 years
- Value creation since 2017

## Dynamically allocating resources to prepare the future

- M&A, Capex and breakthrough R&I as key levers to invest in future growth segments
- Majority of investments in high growth Asia region and Electronics & Batteries



## Rodrigo Elizondo

*President, Special Chem*

### Rodrigo Elizondo

joined Solvay in 1992 in Mexico. In 1997 he moved to the United States where he held various commercial positions. In 2002 he relocated to Germany where he served as Strategic Marketing Director for Barium & Strontium business and Chief Operating Officer for Solvay & CPC Barium Strontium GmbH.

Rodrigo moved to Seoul in 2010 and held various business management positions in the field of fluorine and electronic chemicals. He was part of the team that led the creation of GBU Special Chem in 2015 and served as its Commercial Director until he was appointed GBU President on March 2018. He remains based in Seoul, South Korea.

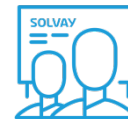
He has a Chemical Engineering degree from I.T.E.S.M. in Monterrey, Mexico and completed a Senior Executive Program at London Business School.

# Q&A



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