



SOLVAY

asking more from chemistry®

Solvay Silica **Delivering innovative and** **sustainable solution for energy** **efficient tires**

An Nuyttens




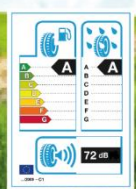
Solvay Silica President

Solvac BoD, July 29th, 2016

Delivering innovative & sustainable solutions

Energy efficient tires

Key player in HDS *
for fuel-efficient &
performance tyres

* Highly Dispersible Silica



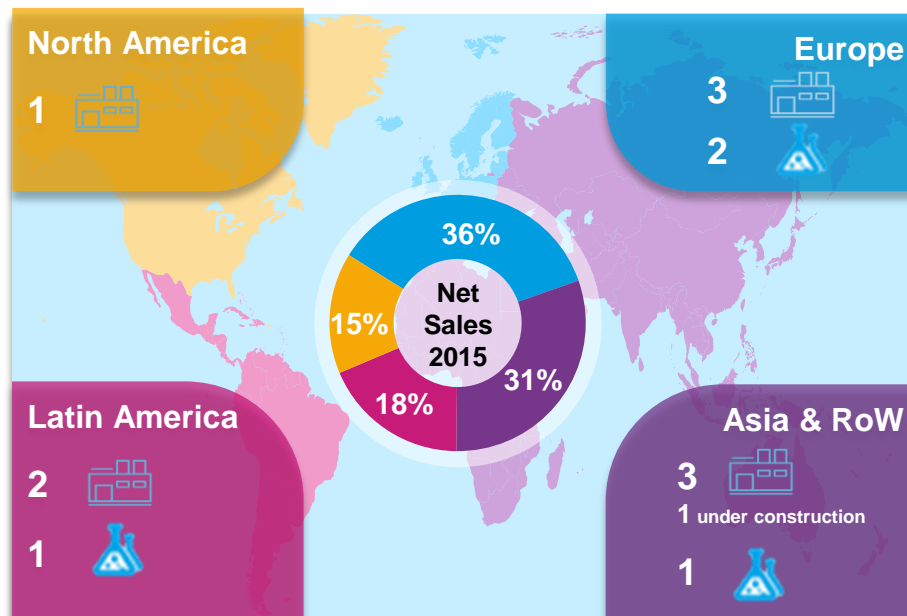
Animal nutrition



Battery separators



Oral care



Serving the global customers of the tire industry



€ 0.5 bn
Net sales 2015



~ 700
Employees



10 production sites
4 R&I centers

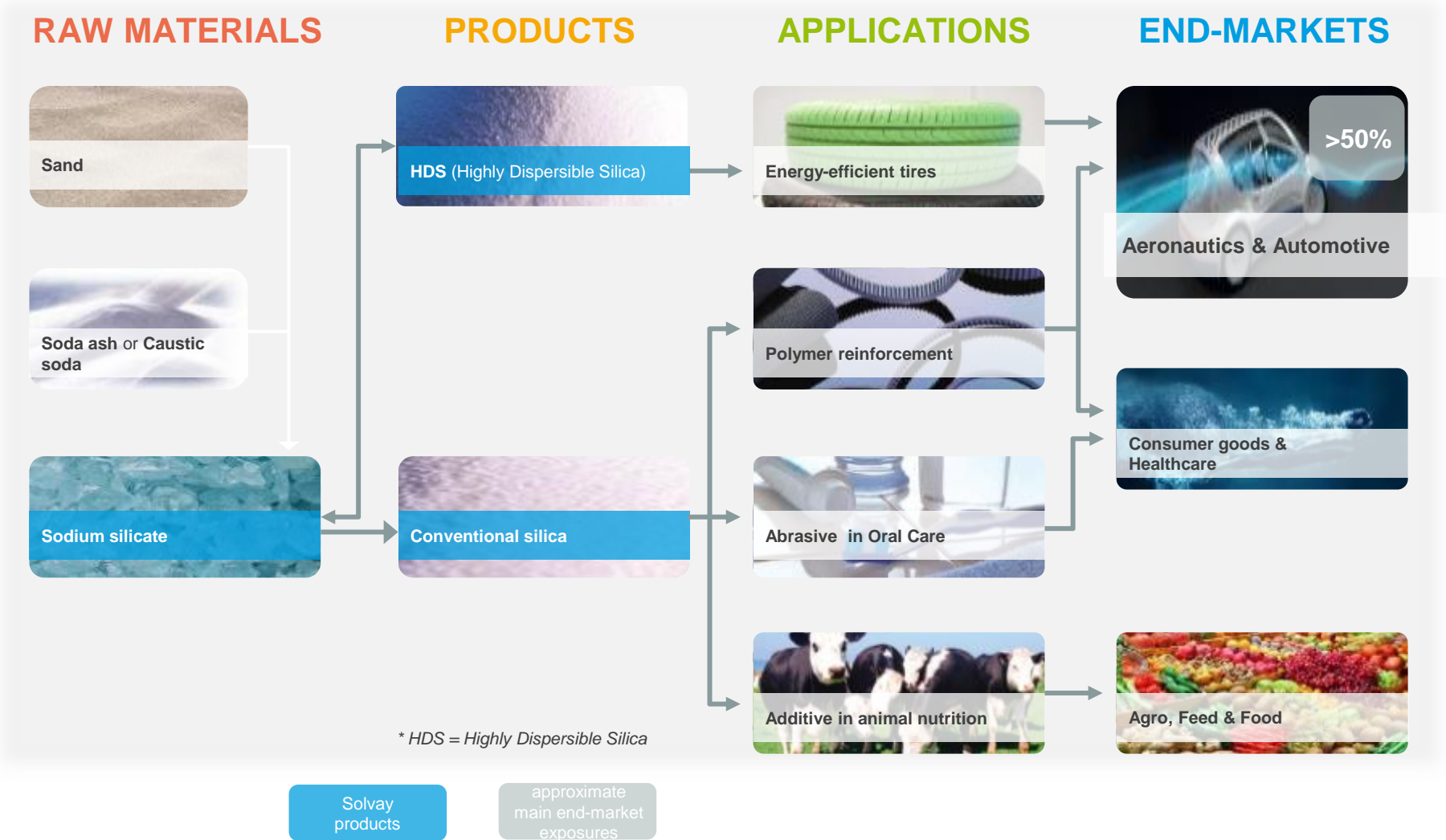


Production site

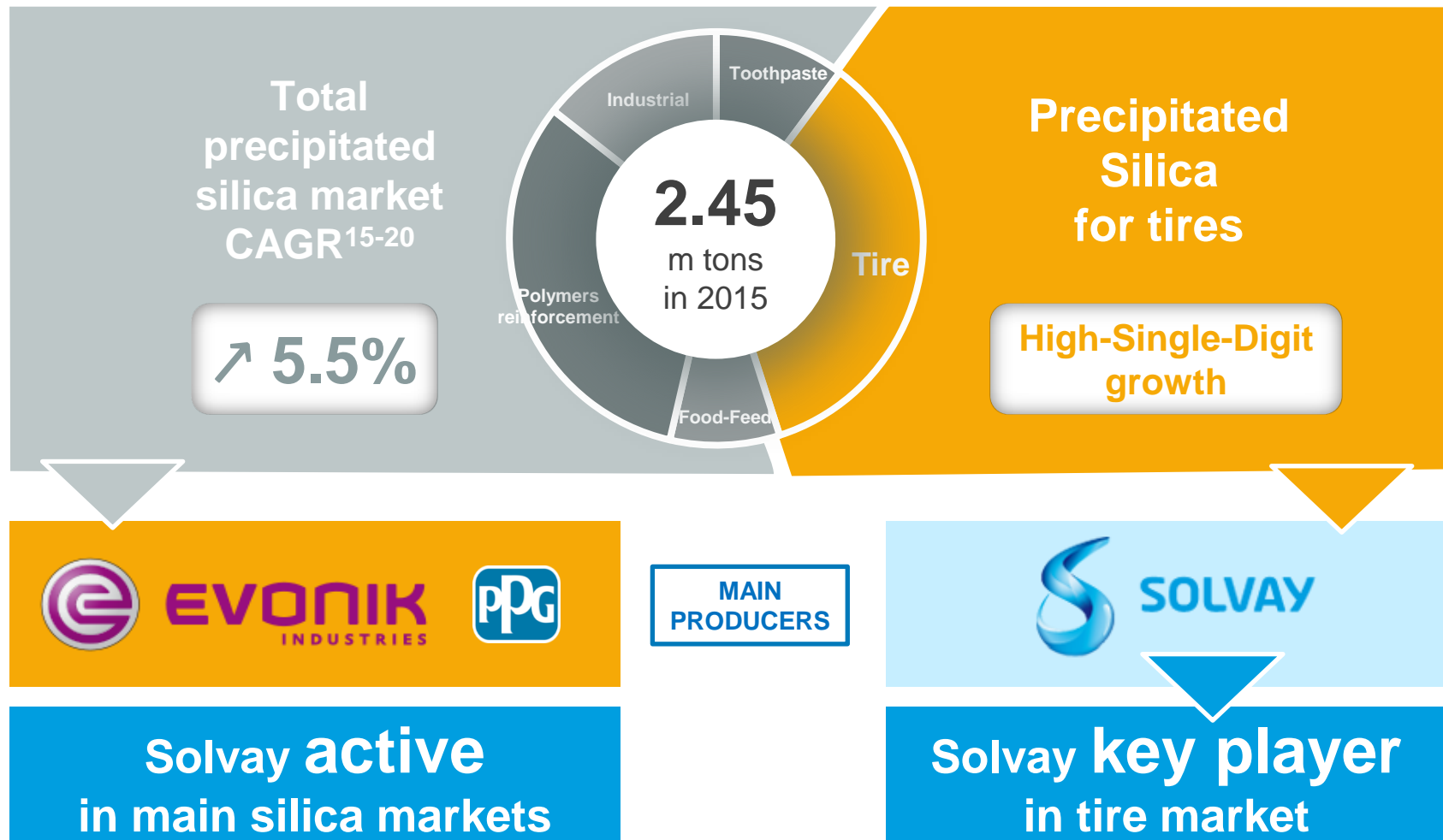


R&I Center

Silica, a key enabler for various markets and applications



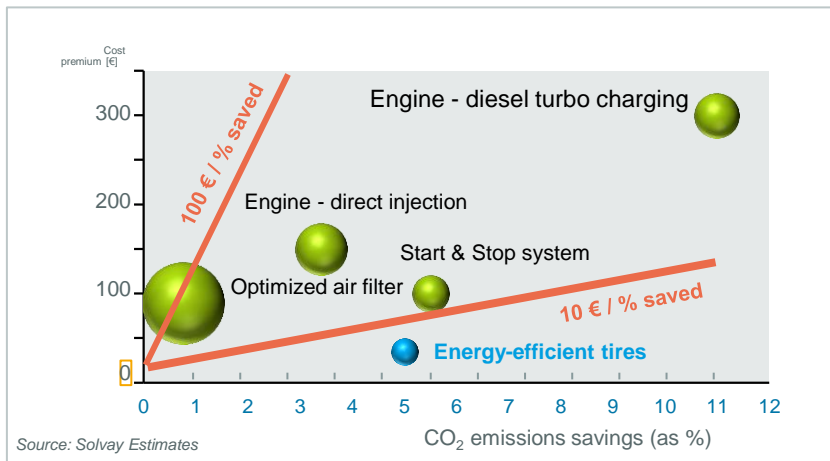
Solvay, a key player in High Performance Silica for passenger car & truck tires



CAGR: Compound Annual Growth Rate - Source: Solvay estimates / Notch consulting

Cost competitiveness & environmental regulations are key drivers for silica demand growth in tires

Original Equipment
CO₂ emission reduction regulation



The most competitive solution

Replacement Tire labelling



| Labelling | Japan | Korea | EU** | Brazil | US | China |
|--------------------|-------|-------|------|--------|-------------------|--------------|
| Rolling Resistance | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Wet grip | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Wear | | | | | ✓ | |
| Implementation | 2012 | 2012 | 2012 | 2016 | Draft legislation | Under review |

Source: Solvay Estimates

Toward a harmonized incentive scheme

** Australia, New Zealand, Israel also adopting an EU style labelling scheme by 2016

The fast silica penetration in the tire market is significantly contributing to sustainable mobility

Green tire penetration



Solvay latest silica innovations, enable further fuel consumption savings:

5.5% ↗ 7%

Annual Solvay HDS* sales allow

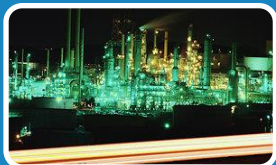
**13 million tons
of CO₂ emission reduction:**

Equivalent to Belgium and Luxembourg
annual emissions

To date, Solvay has helped consumers **saving about ~409 million barrels of fuel****
and sparing the emissions of **150 million tons of CO₂**** in the atmosphere

* Highly Dispersible Silica
** Solvay own assessment

An unmatched value proposition for the tire industry



Security of Supply

- Global & local footprint
- Supply contingency plan (back-up plants)
- Short lead time



Product Innovation

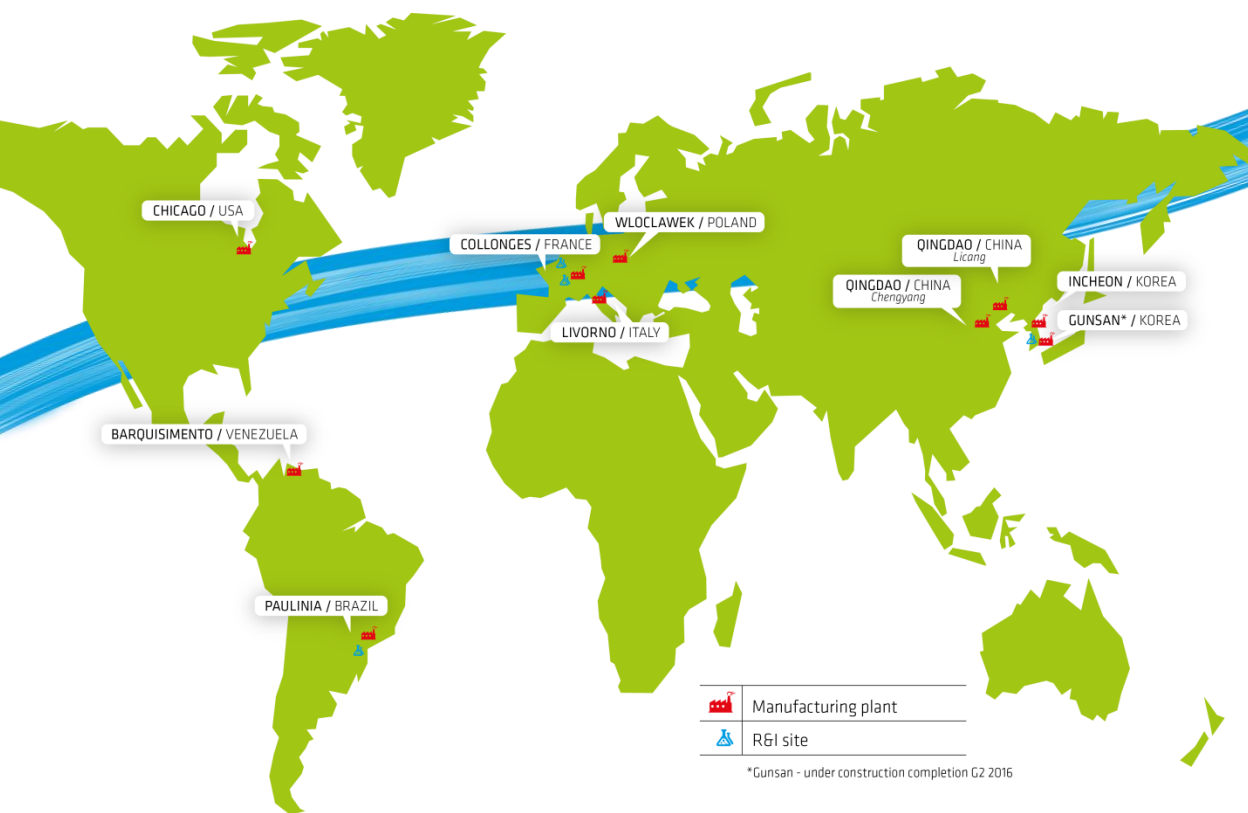
- Best innovation track record for Tire industry
- 3 application labs supporting customers with local/global developments
- Customized products
- Privileged access to Solvay Group technologies



Customer Intimacy

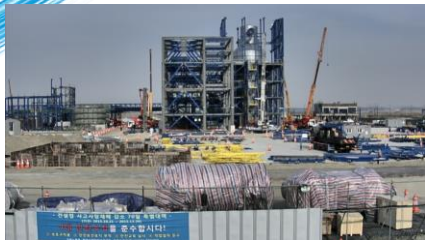
- Global & Regional Key Account Manager
- Global & Regional Technical Marketing

Solvay, close to customers, delivering service value through a global industrial and application lab footprint



Focus on KOREA

Gunsan



Site under construction
Completion by Q3 2016

R&I Lab at EHWA University



Our customer centric organization and culture



Solvay, strategically focused on innovation

Break technology barriers
New morphology
New surface chemistry



Solvay, delivering value to customers through innovative solutions, technology edge, ahead of competition



Increases productivity of HDS tire manufacturing

- Cuts processing gap for tire makers vs. carbon black



- Silica compatible with truck tires
- Enhanced productivity, combined with tire performance gains, leads to a significant adoption potential at our customers.



Specifically engineered for performance in winter and Nordic conditions

- +20% wet and snow grip
- Non tread and rubber goods applications compatible



New generation HDS for further fuel savings

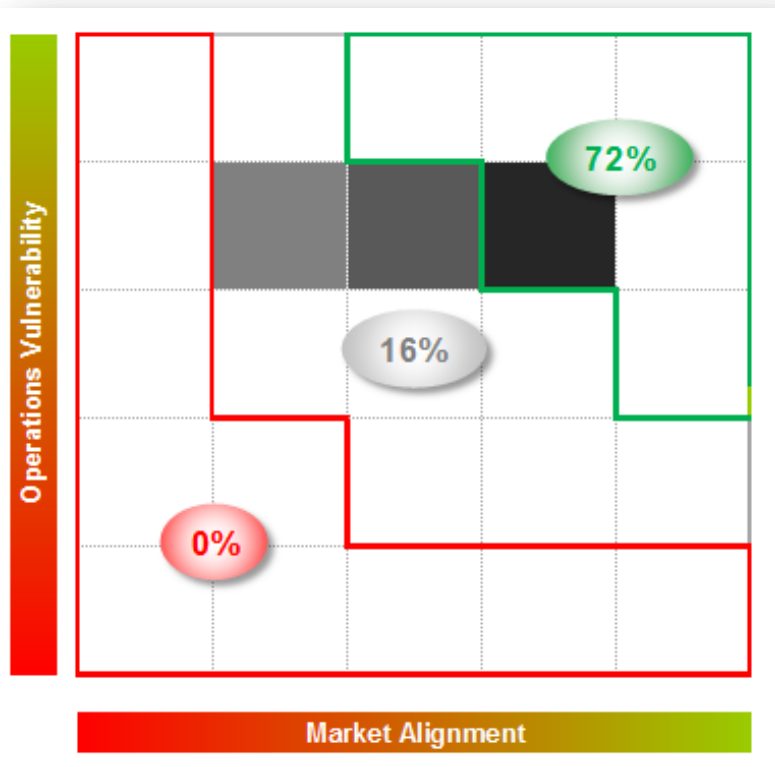
- Better rolling resistance
→ Improved label
- Improved wear
→ Lighter or longer life tire
→ Better dynamic properties
Increased handling for UHP tires



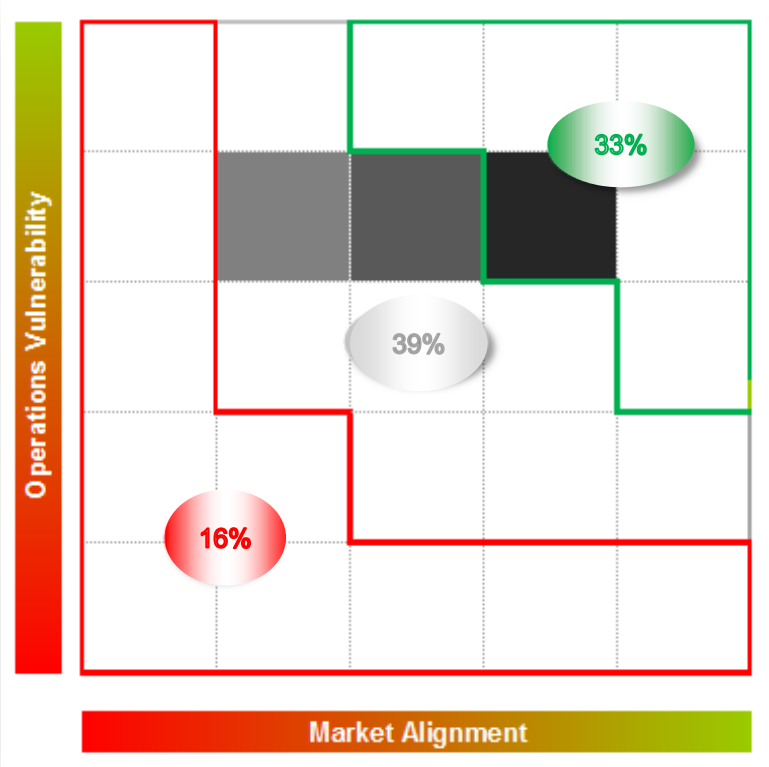
Solvay Silica

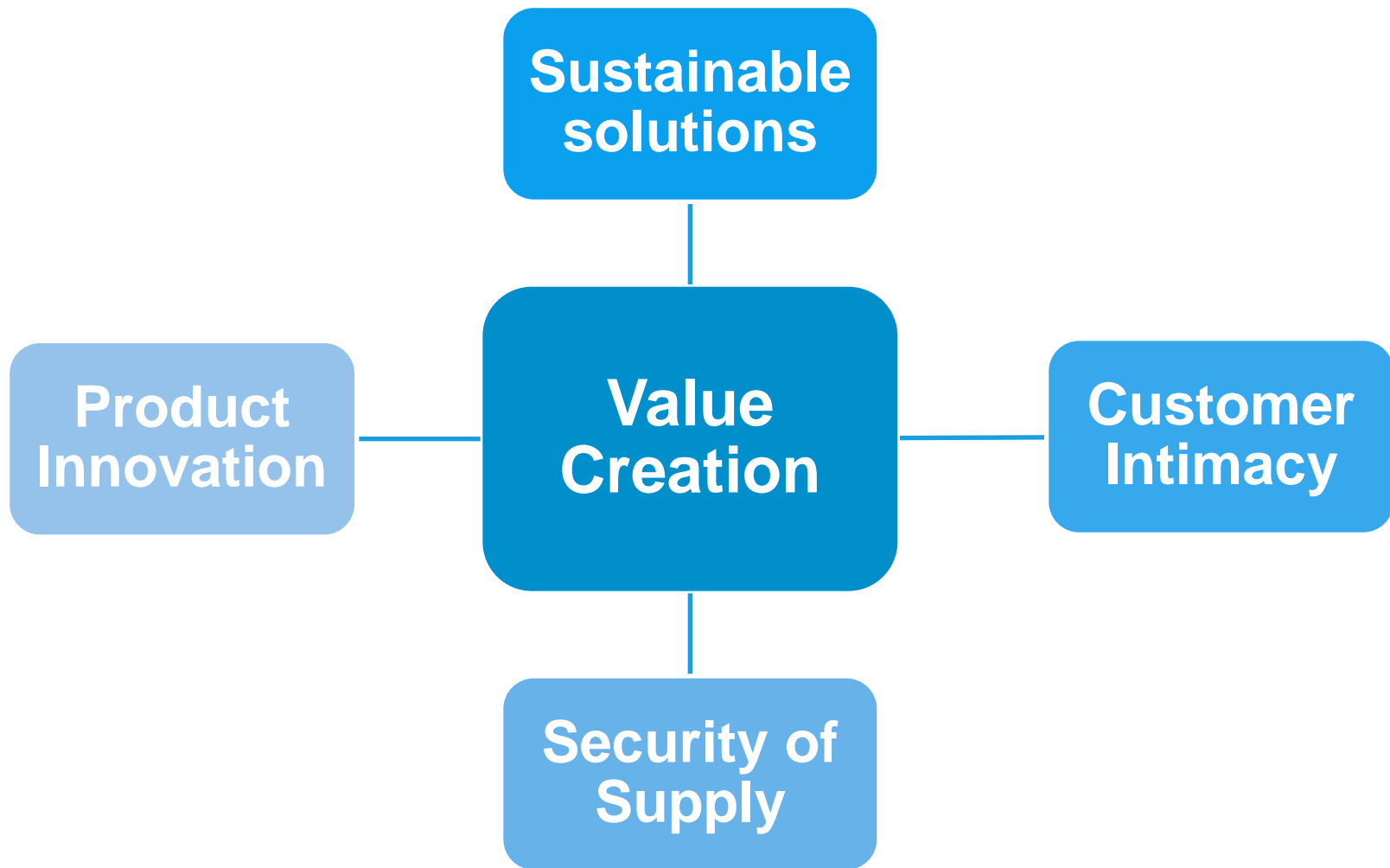
Underpins the Group's commitment to sustainability

SILICA – Portfolio Sustainability Matrix



SOLVAY – Portfolio Sustainability Matrix





Q&A session



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