

TOMORROWING TODAY — ... FUTURING FUCHS

| Apu Gosalia

| Vice President Sustainability & Global Competitive Intelligence

| FUCHS PETROLUB SE

| BASF Sustainability Business Community Meeting | 10th May 2017



TOMORROWING TODAY — ... FUTURING FUCHS

01 | **▪ FUCHS PETROLUB SE**

02 | **▪ The Lubricants Market**

03 | **▪ Sustainability @ FUCHS**

FUCHS PETROLUB SE

Key Figures

Established **3**
generations ago as a
family-owned business

No. 1
among the independent
suppliers of
lubricants

The Fuchs family
holds **54%** of
ordinary shares

More than **2.3** bn
euro sales in 2016

Almost **5,000**
employees

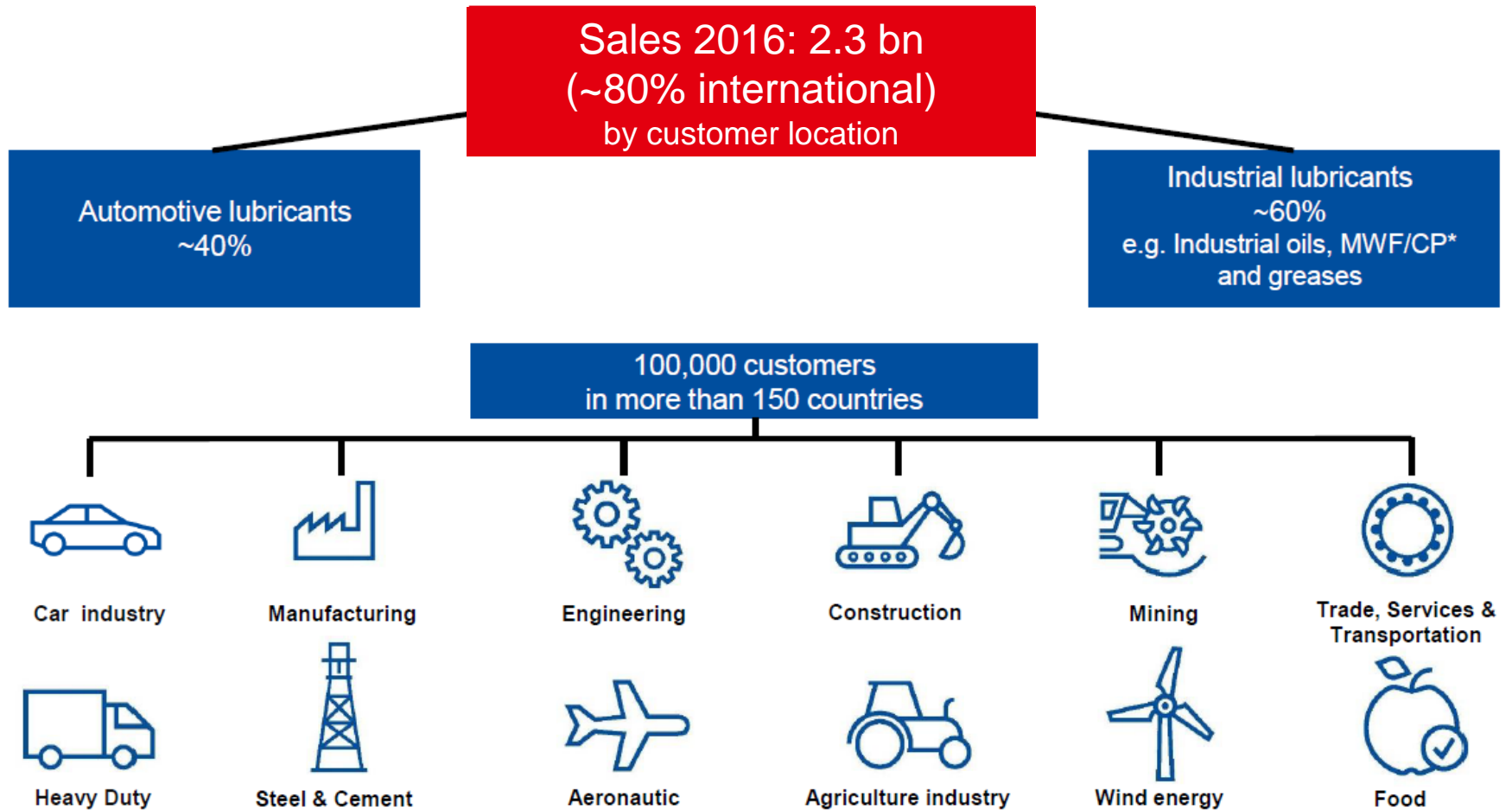
Preference share is
listed in the MDAX

57 companies
worldwide

A full range
of over
10,000
lubricants and
related specialties

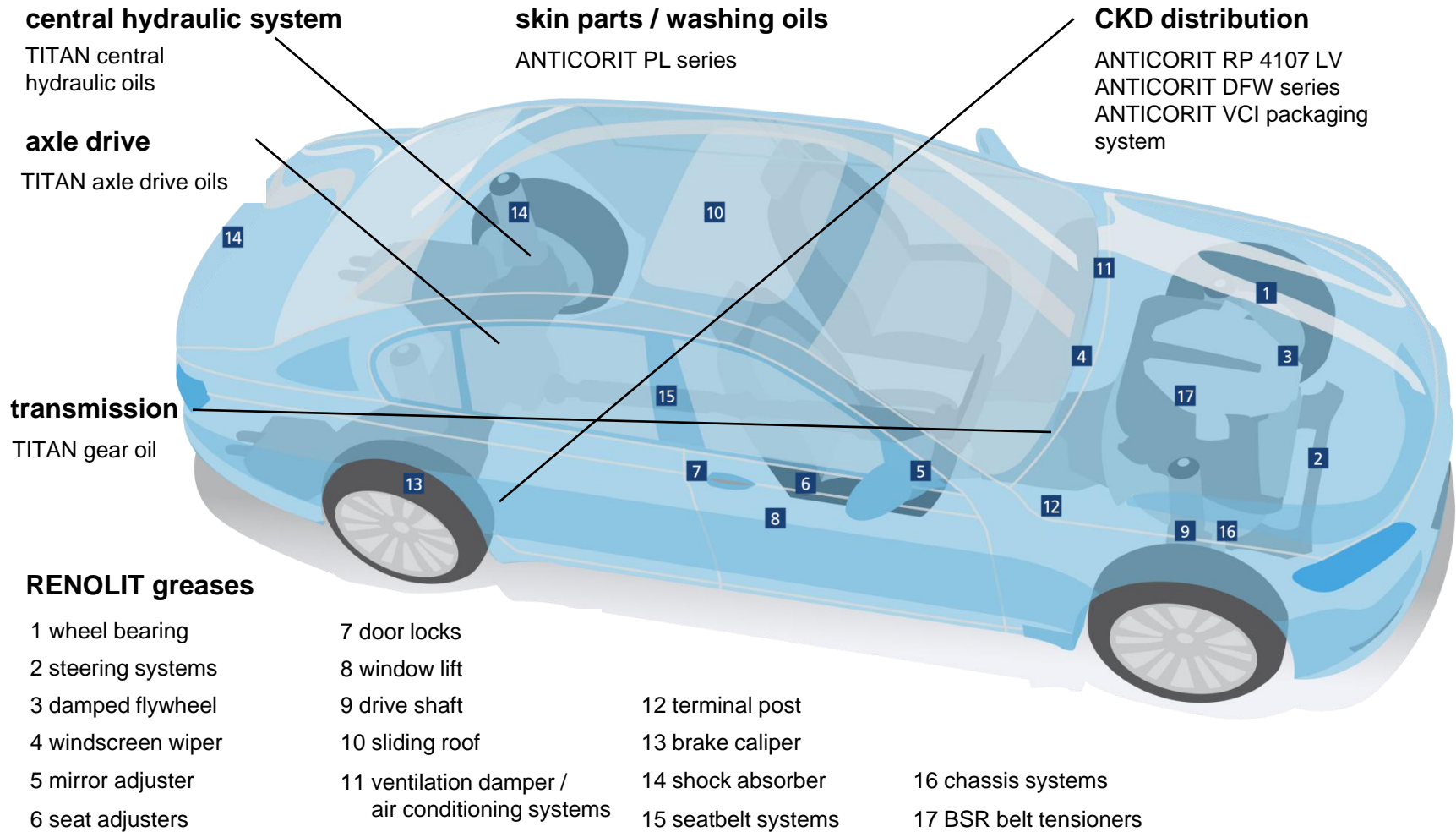
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Sales Breakdown



FUCHS PETROLUB SE

Car Industry



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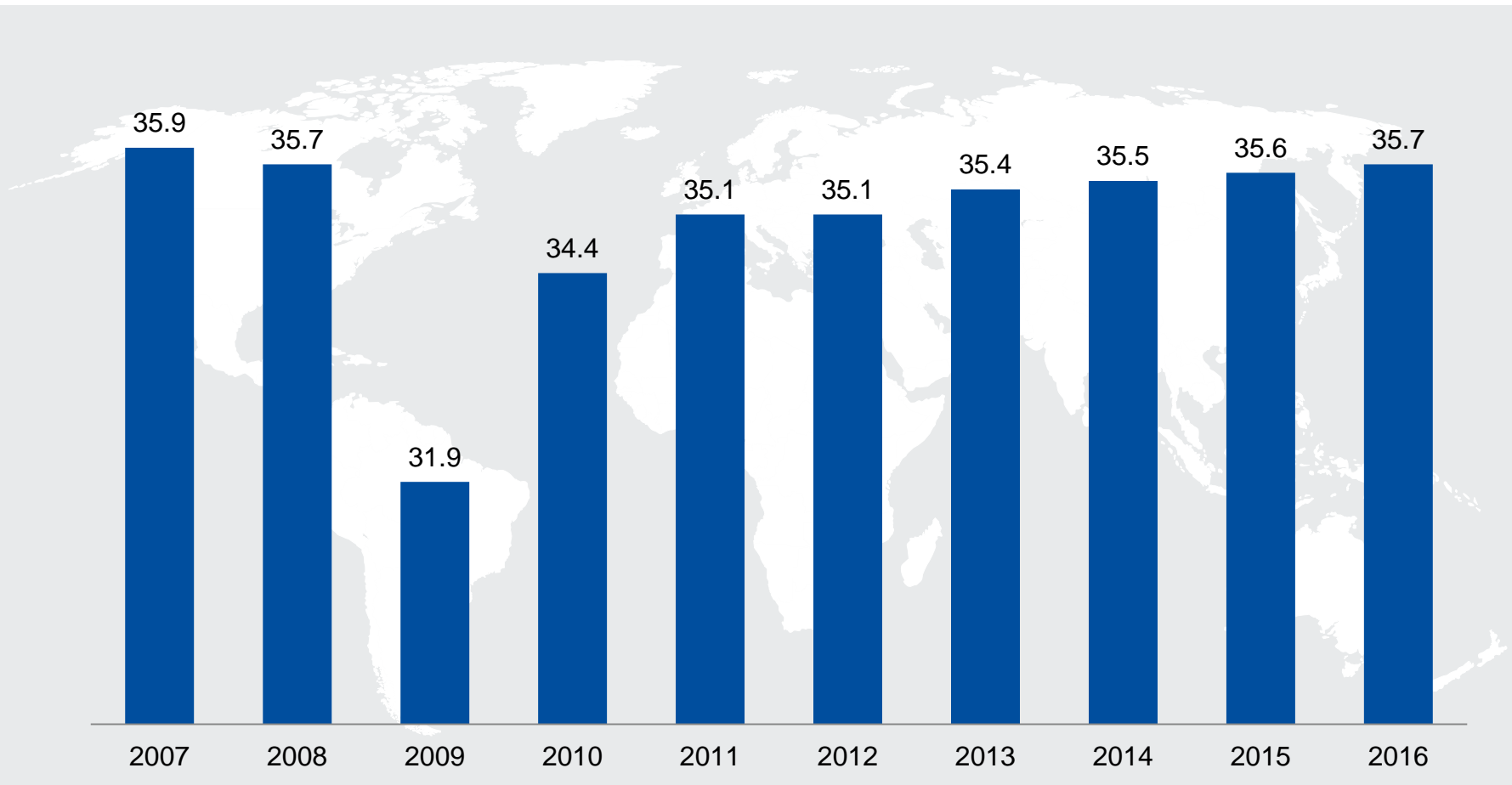
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02 | **▪The Lubricants Market**

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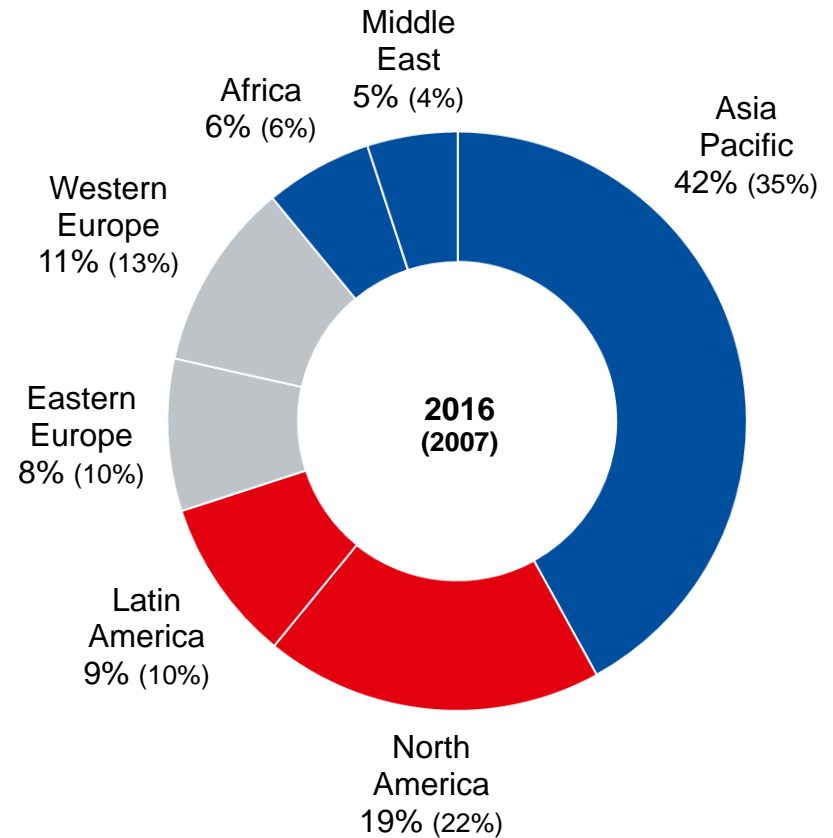
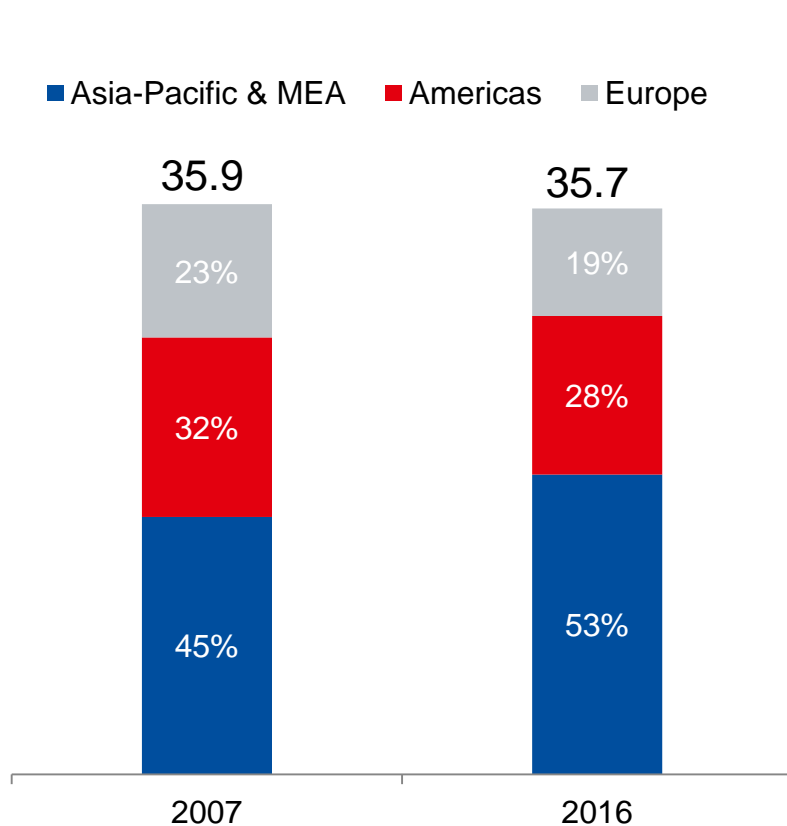
The Lubricants Market

Development Global Lubricants Demand (Million Tons)*



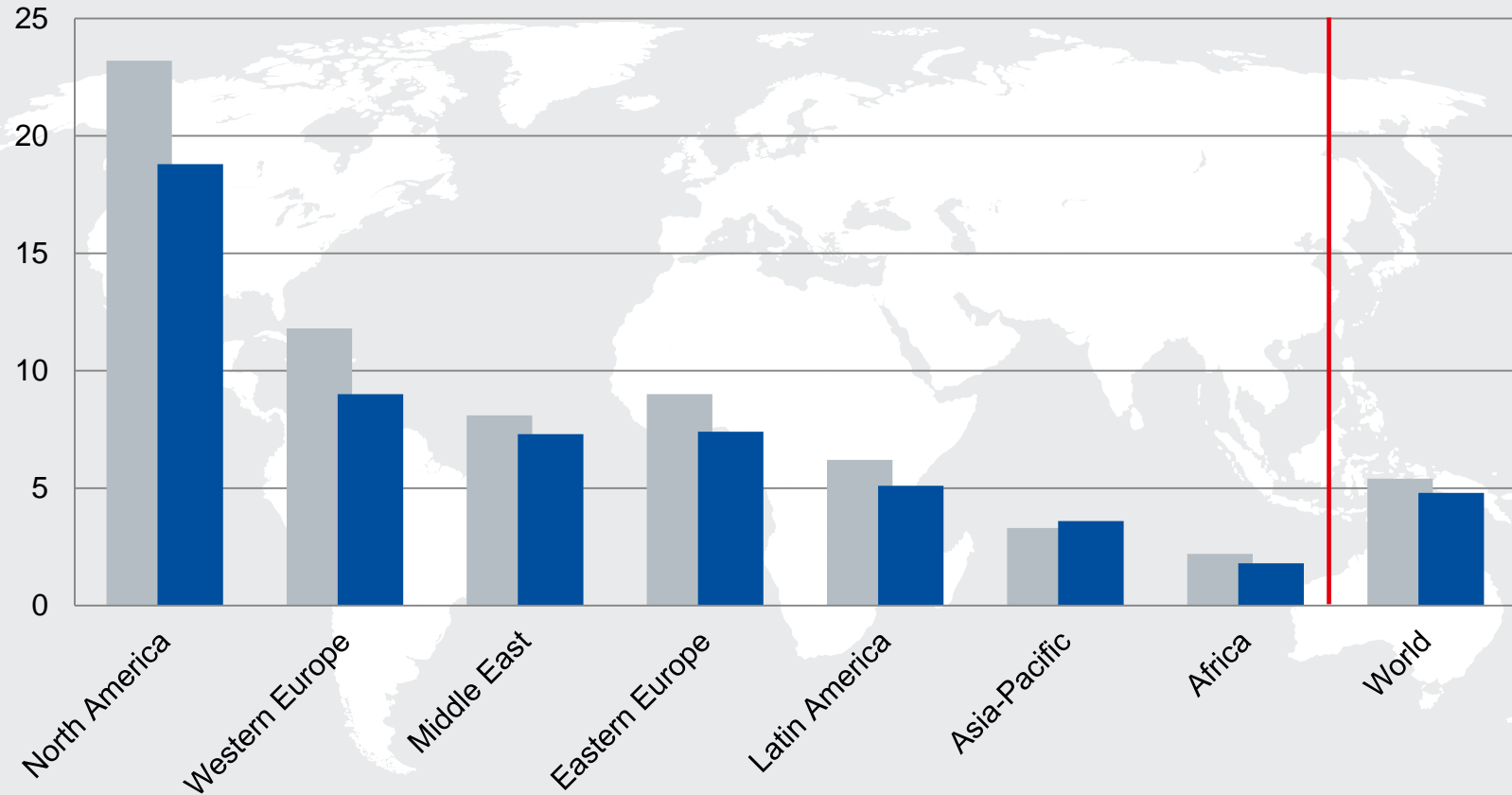
The Lubricants Market

Development Regional Lubricants Breakdown (Million Tons)*



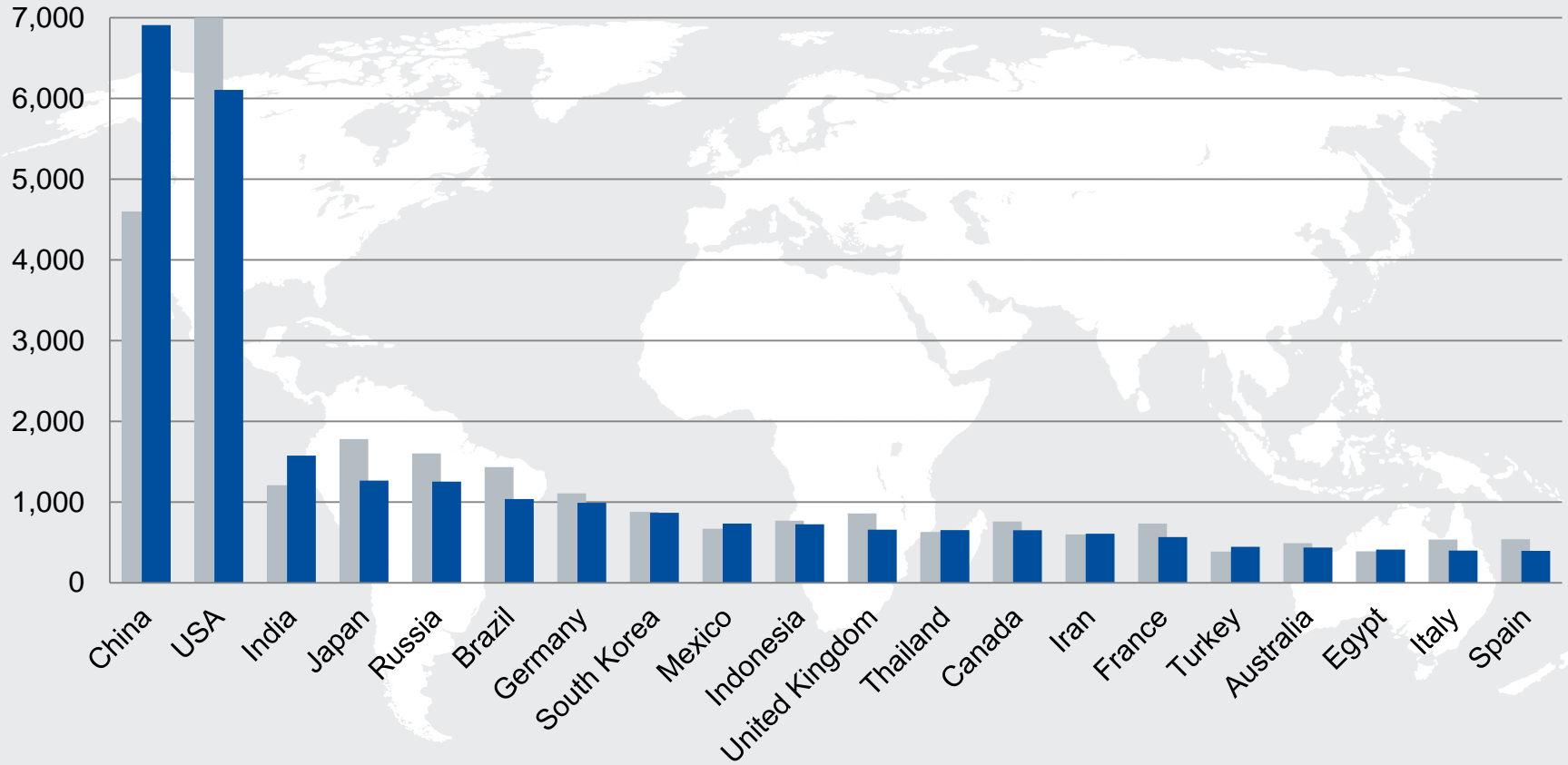
The Lubricants Market

Regional Per-Capita Lubricants Demand (kg)



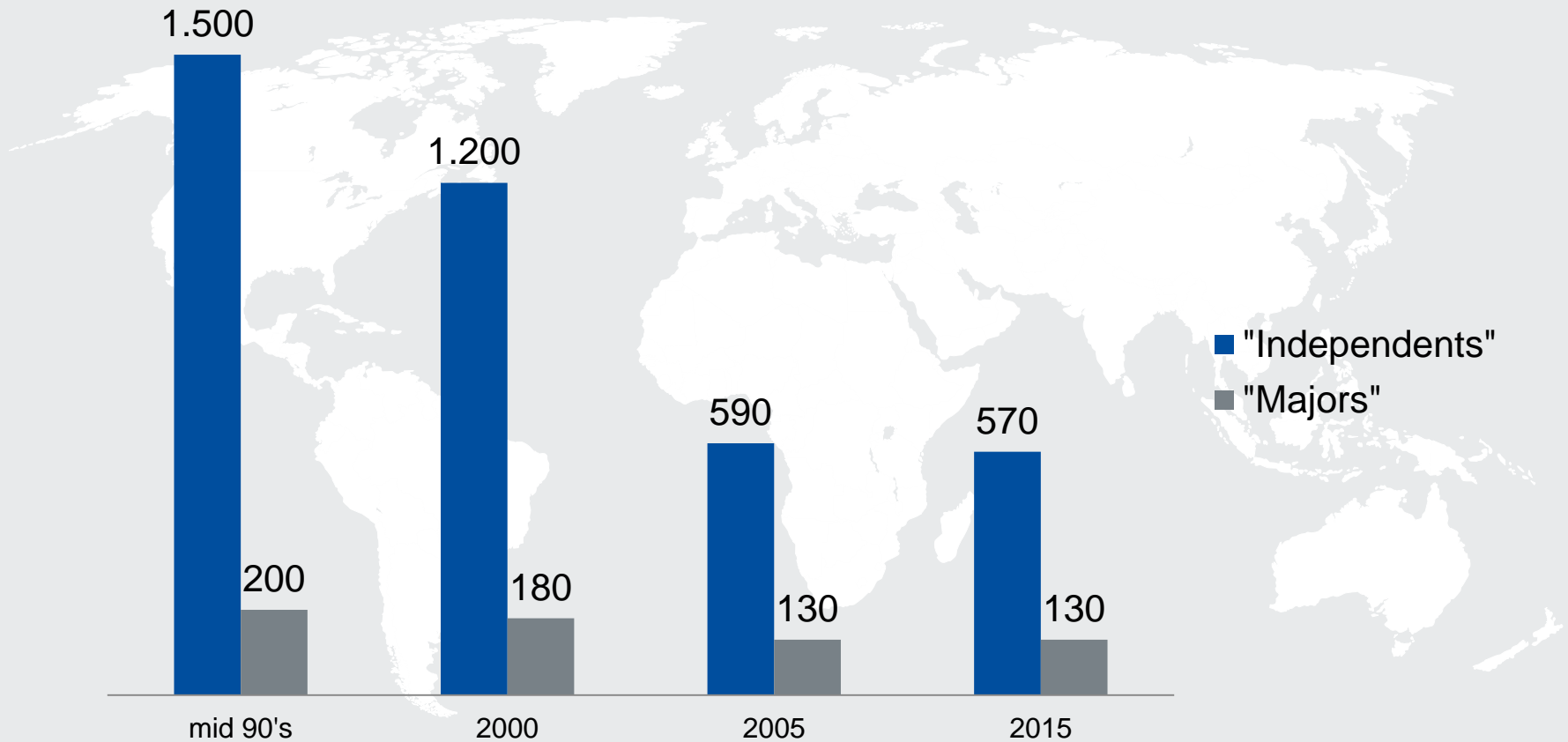
The Lubricants Market

Ranking Top 20 Lubricant Countries



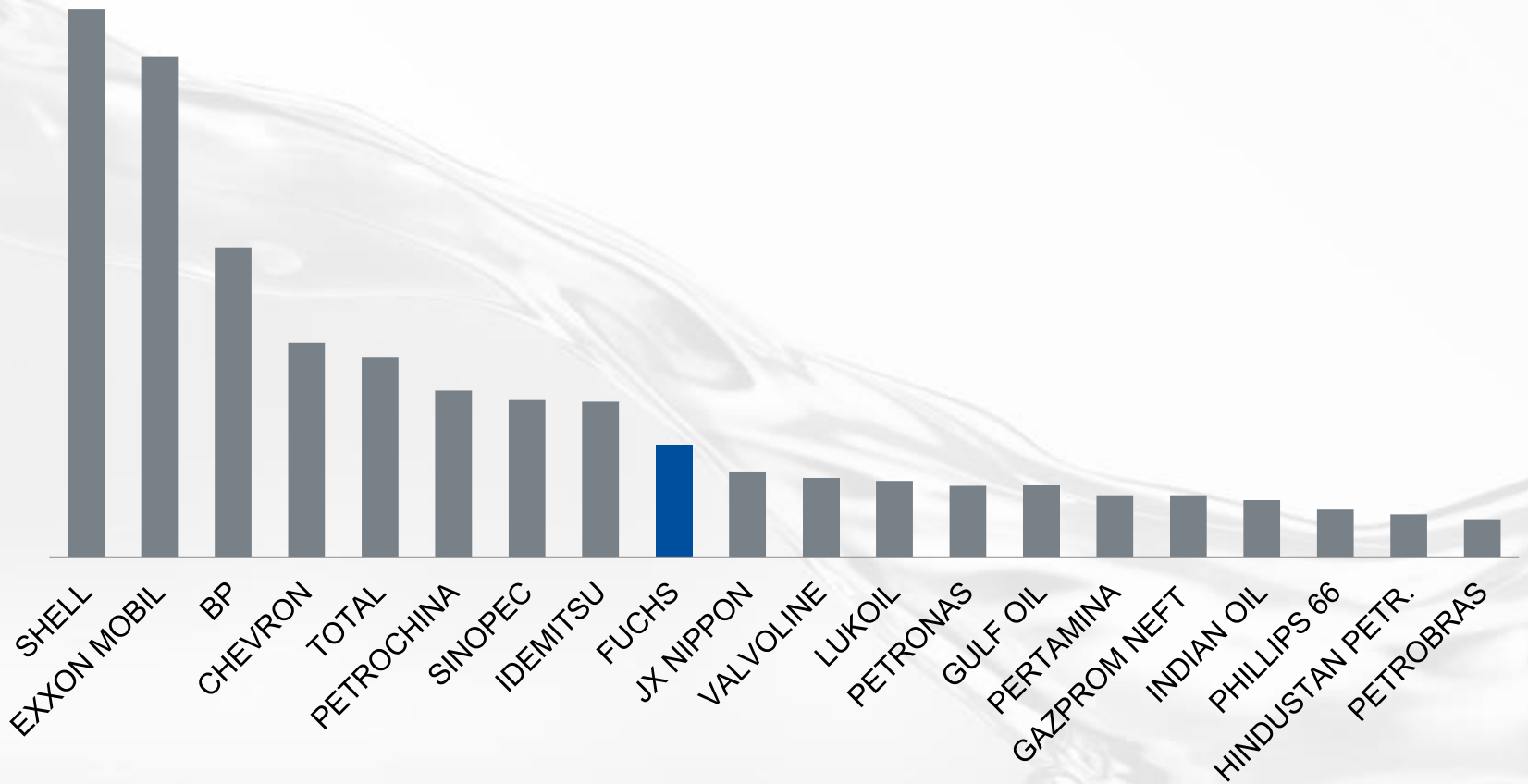
The Lubricants Market

Global Industry Structure*



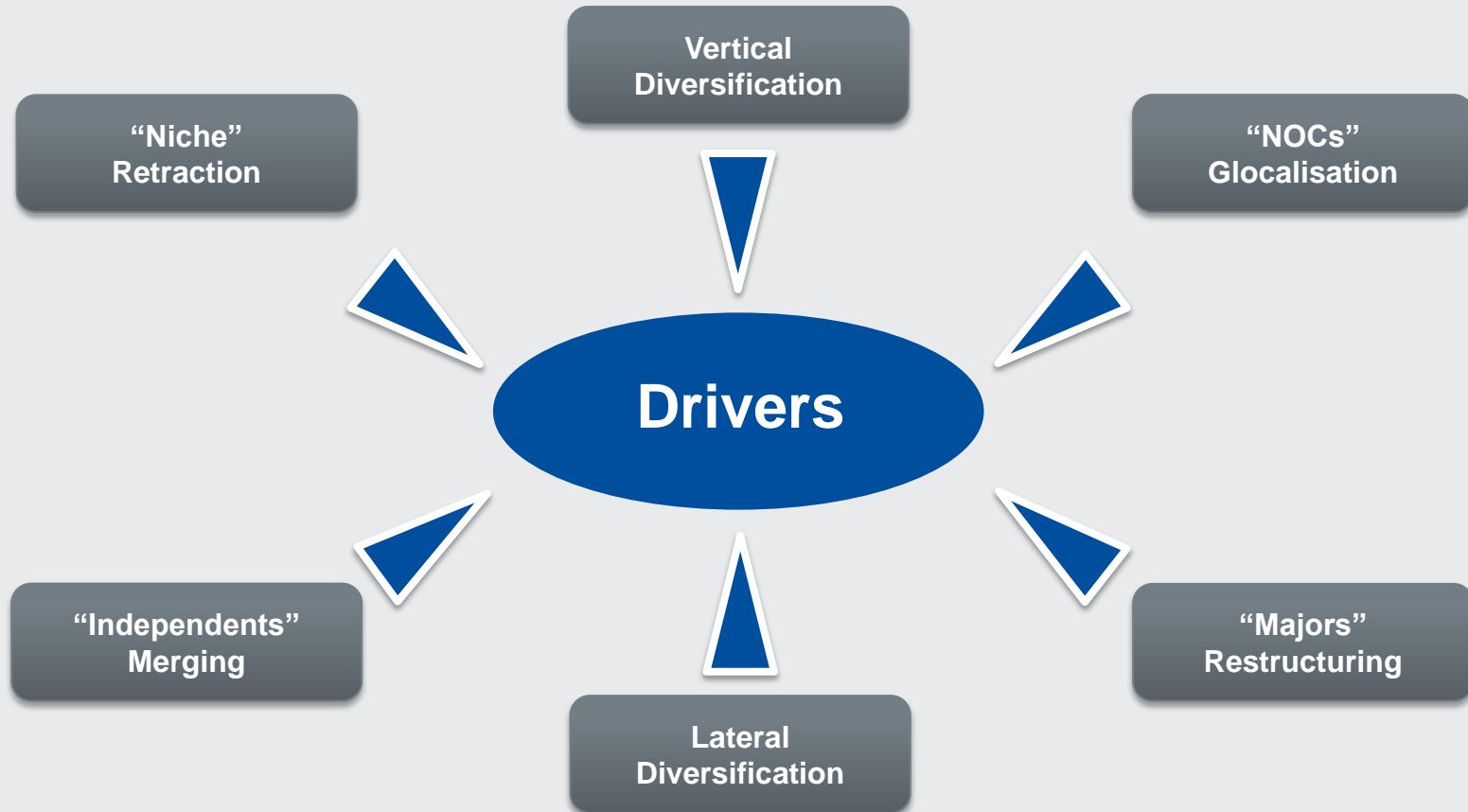
The Lubricants Market

Ranking Top 20 Manufacturers*



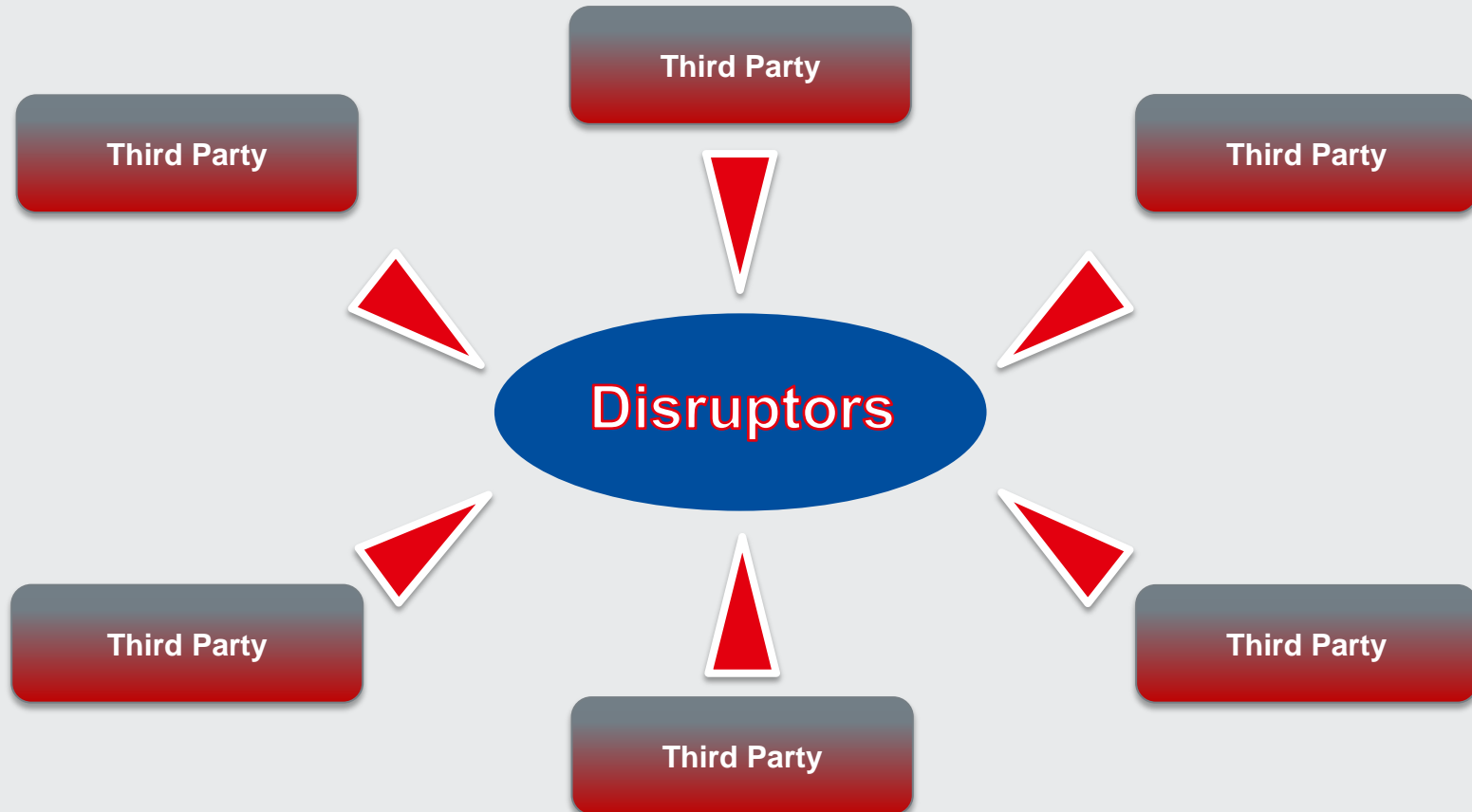
The Lubricants Market

Competitive Landscape



The Lubricants Market

Digitalization



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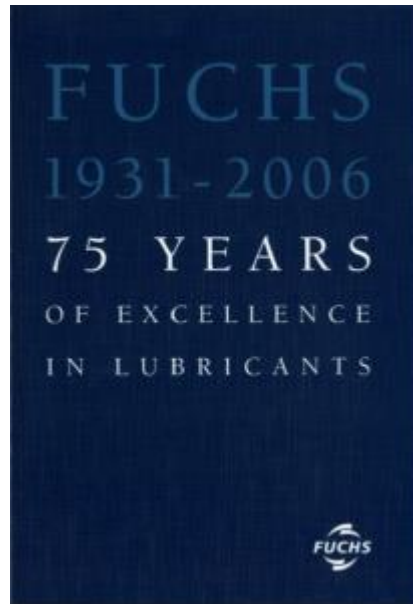
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Sustainability@FUCHS

Legacy



*Company founder Rudolf
Fuchs*

Poor-quality oil does not lubricate properly, no matter how much of it you use ... Skimping on the quality of the oil used can lead to ten times the cost in repairs. Therefore, cheap oil ultimately is the most expensive oil.

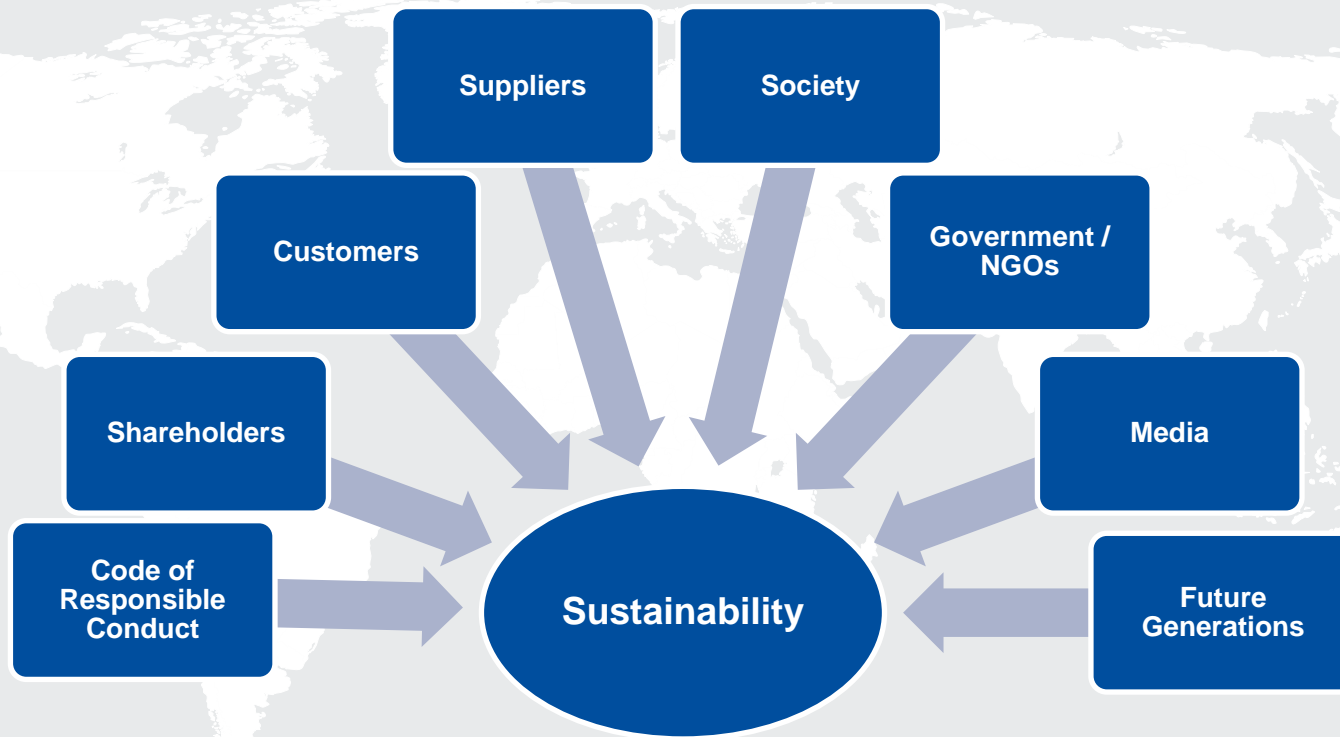
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Internal Drivers



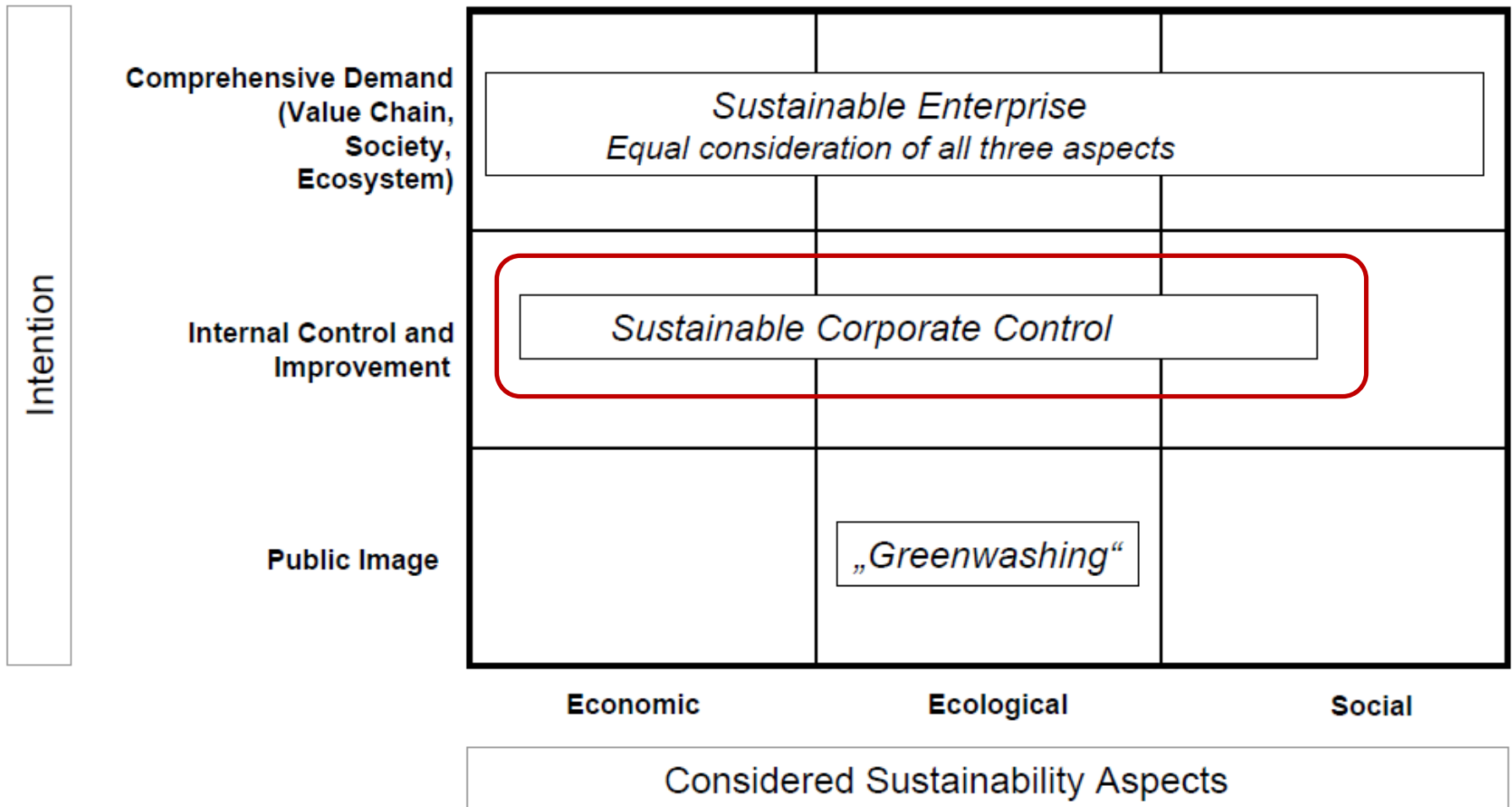
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External Drivers



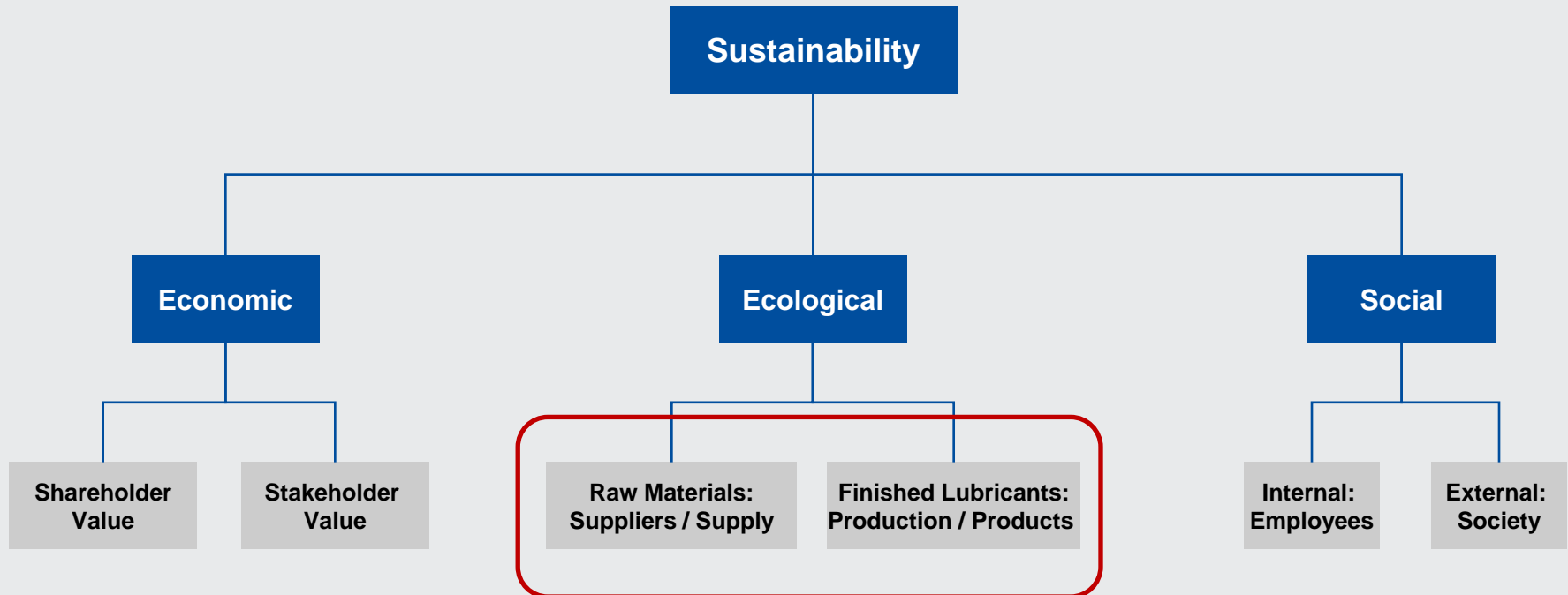
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Intentions



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Dimensions

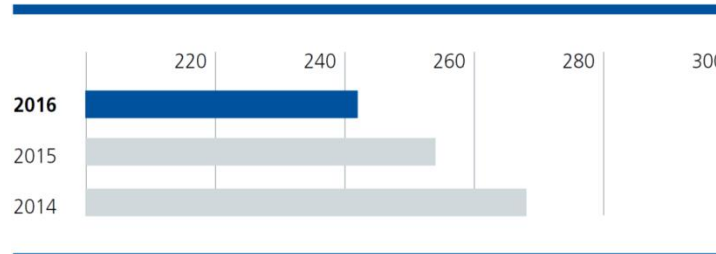


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Ecological KPIs

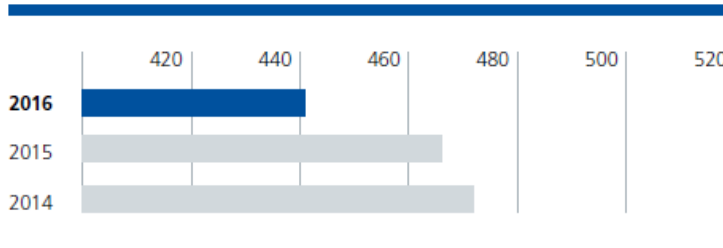


Development of Energy Consumption
(in kilowatt hours per ton produced)



Basis: FUCHS production locations

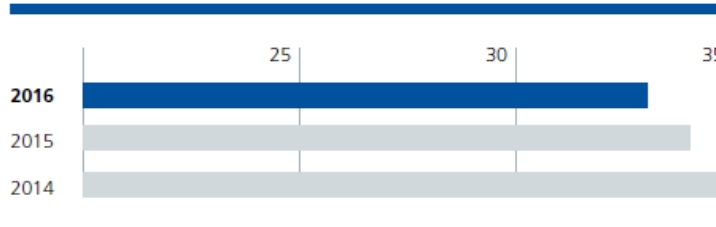
Development of Water Consumption
(in liters per ton produced)



Basis: FUCHS production locations



Waste Generation
(in kilograms per ton produced)



Basis: FUCHS production locations .



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Waste Reduction

Tank cleaning with compressed air

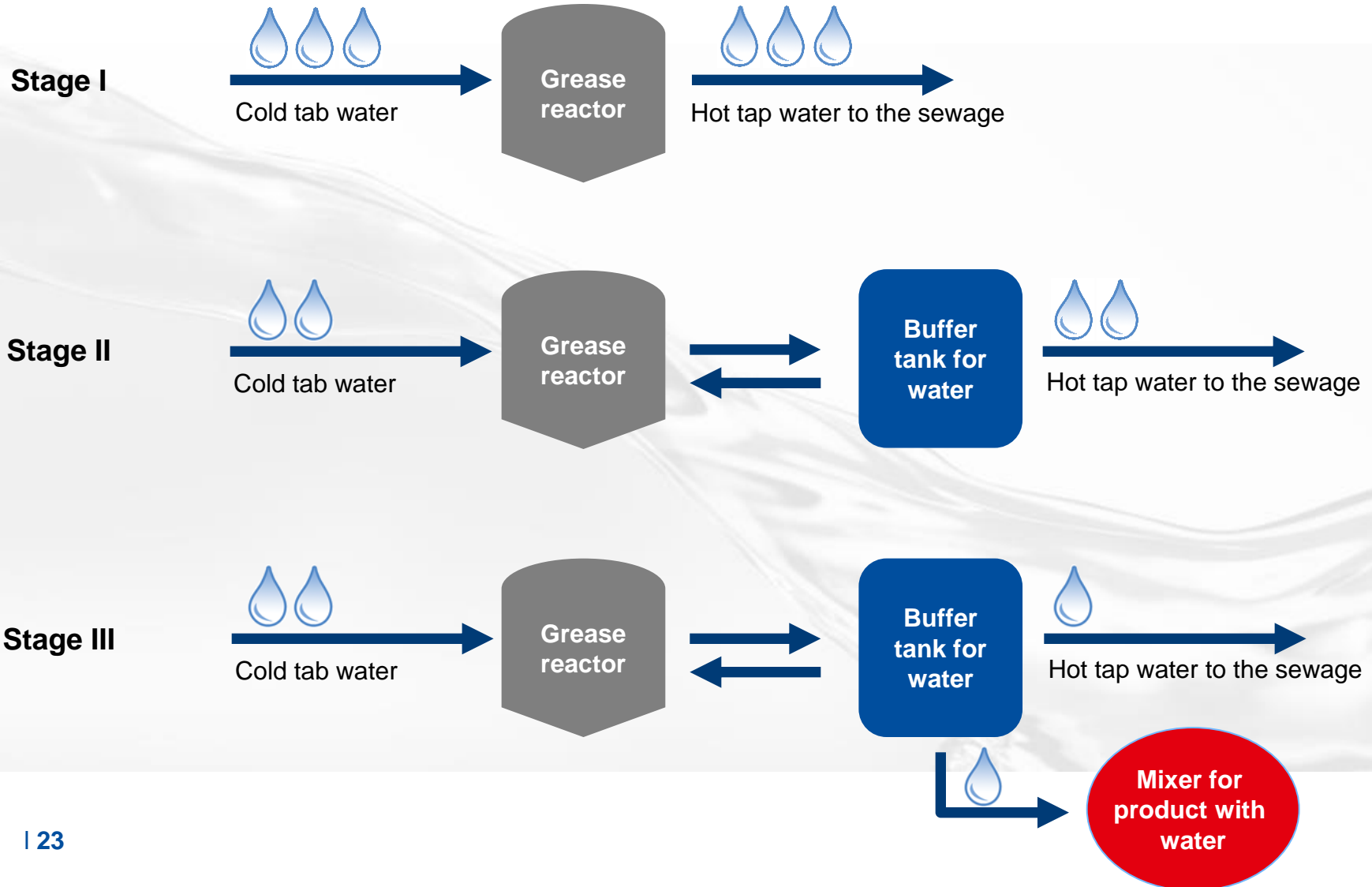


- Manufacturing and storage tanks characterized by: plain interior surface, external heating coils, cone bottom for better flow of oil
- Inlying loop, which descends automatically after drain and cleans the tank wall using compressed air



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Water Reduction



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Energy Reduction

Tank/Pipe insulation



- Objective: Identifying the key areas where insulation would provide the biggest savings
- Project started in January 2014 and completed in May 2014
- Project cost payback: 15 months

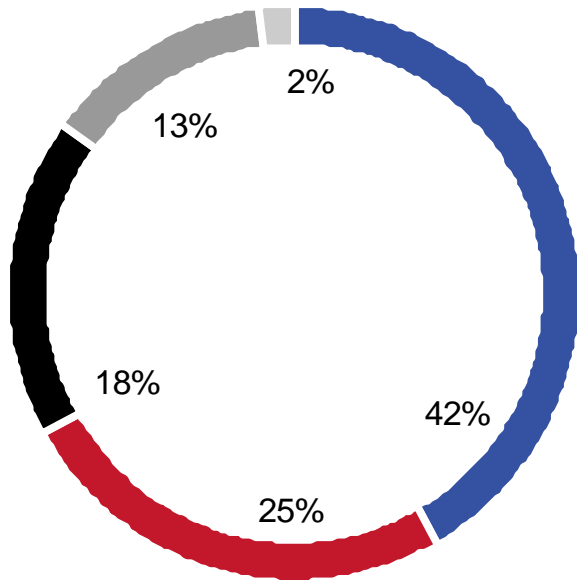
- Nicor Gas Energy Efficiency Program initiated with an engineer to do a study of the facility
- Scope: insulation of 13 storage tanks, boiler room, steam & condensate return lines
- Annual energy savings of nearly 6 million kWh



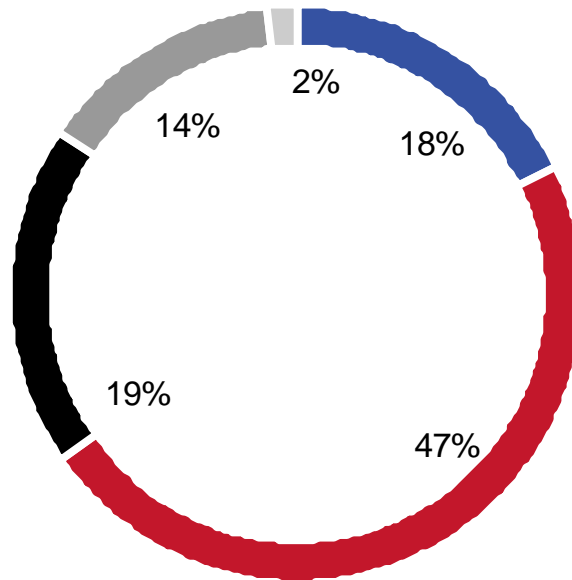
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Energy Efficiency

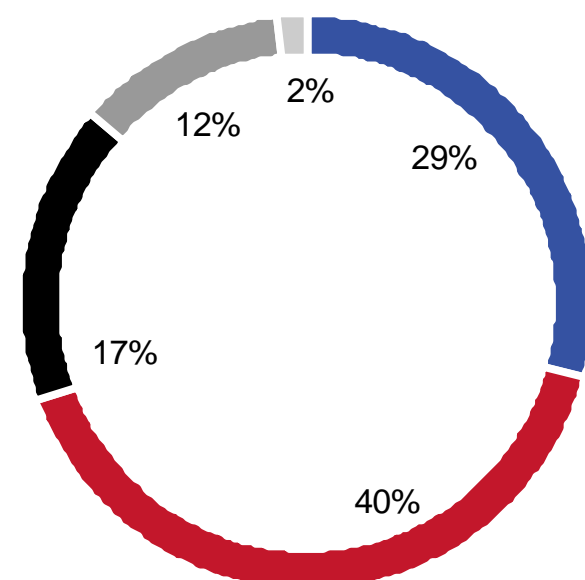
Consumption



Cost



Carbon

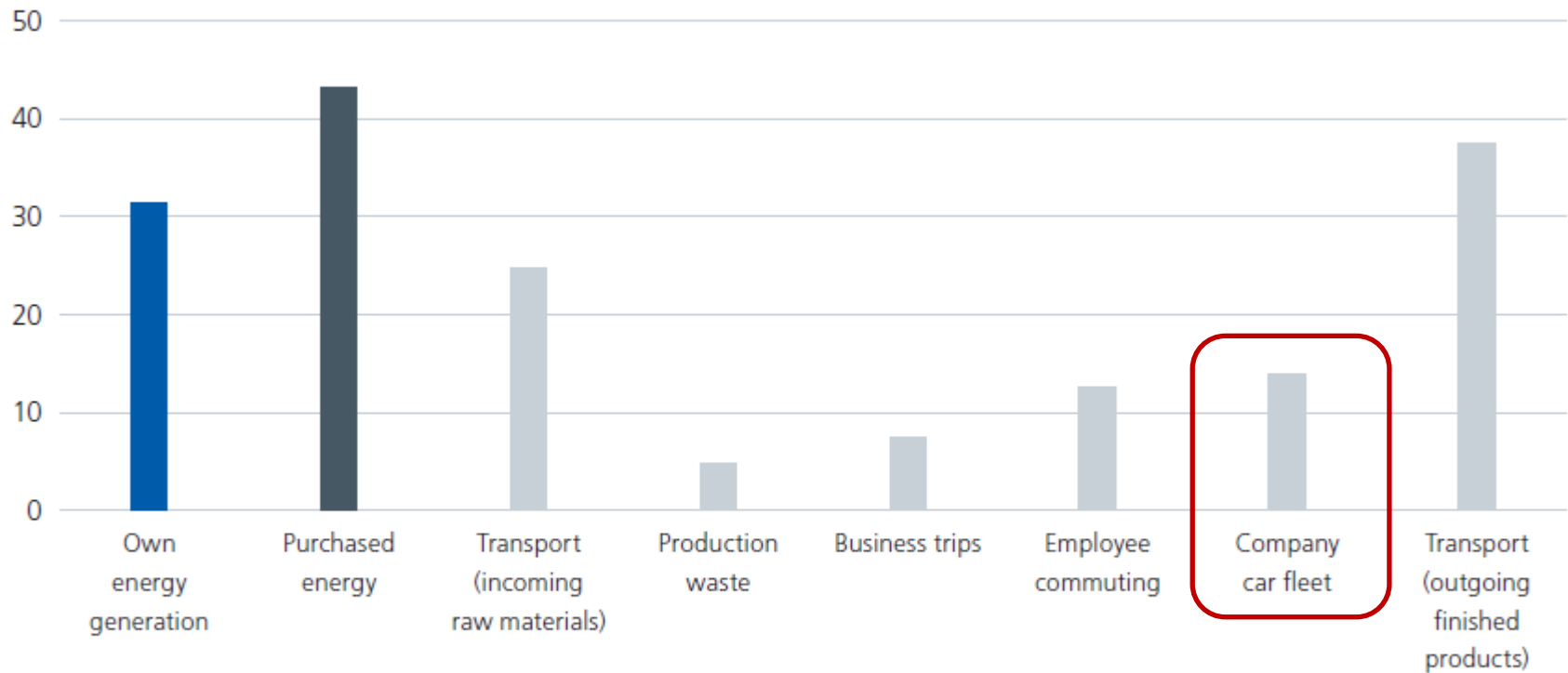


■ Gas
 ■ Electricity
 ■ Steam
 ■ Heating Oil
 ■ Other energy source

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Corporate Carbon Footprint*

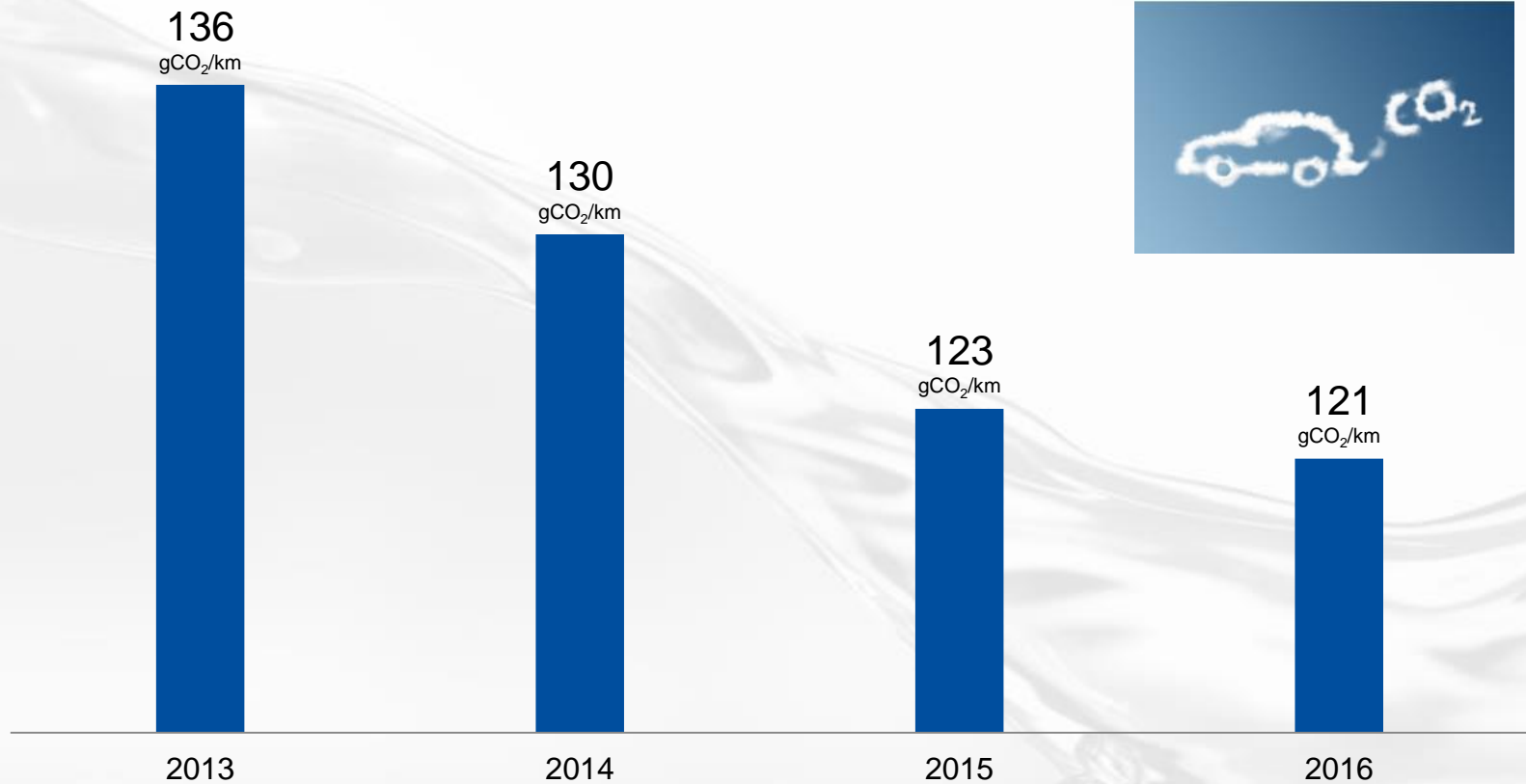
(in kilogram CO₂e per ton produced)



- Scope 1: Direct emissions through own energy generation
- Scope 2: Indirect emissions through purchased energy
- Scope 3: Indirect emissions along the value chain

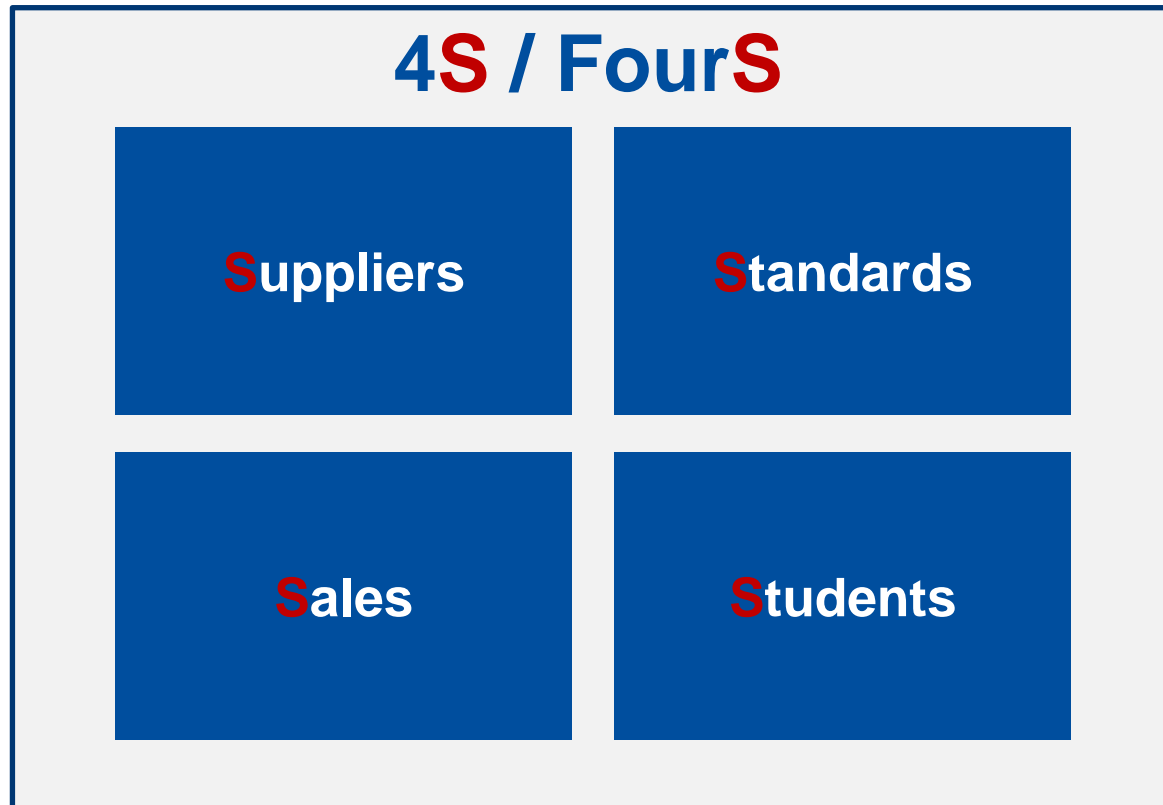
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Company Car Fleet*



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Strategy



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Suppliers

From 2017 on Sustainability will become part of the Supplier Performance Evaluation

Participating FUCHS Companies

Australia, Belgium, China, France, Italy,
Germany (FS, FLT, Wisura), Poland,
Spain, UK, USA, South Africa

Participating Functions

Lead Buyers, Local Buyers, R&D Specialists,
Sustainability Manager

Rating Criteria

Business Relationship:
Price Competitiveness :
Development Ability:
Quality:
Delivery:

Subcriteria

5
4
4
3
4

total: 20
+5

Sustainability:

Not everybody can rate every criterion

Business Relationship: All
Price Competitiveness: Lead Buyer only
Development Ability: R&D only
Quality: Local Buyer and R&D
Delivery: Local Buyer only
Sustainability: Sustainability Manager

Rating:

Very Good: 5 Points
Good: 4 Points
Average: 3 Points
Poor: 2 Points
Very Bad: 1 Point
Unknown: Do not rate
Sustainability: 2 / 1 / 0 Points

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Supplier Performance Evaluation (SPE)

Sustainability Rating / Subcriteria Scoring Points	Yes	On the way	No
ESG (Environmental Social Governance) Guidelines	2	1	0
Corporate Carbon Footprint (CCF)	2	1	0
Product Carbon Footprint (PCF) - Overall / General	2	1	0
Product Carbon Footprint (PCF) - Supplies to FUCHS	2	1	0
Product Carbon Footprint (PCF) - Reduction Targets	2	1	0

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Standards



The topic of sustainability is becoming increasingly important. In cooperation with suppliers and customers, FUCHS is working to quantify the term sustainability. The objective is to develop a benchmark that allows our products to be assigned to categories. From this we derive tasks for research and development. We expect the change from qualitative to quantitative assessment of sustainability to bring significant progress. Sustainability will be included in the specifications for lubricants in the future.

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Lubricants Industry Initiative

- Proposed/Named by FUCHS, the sustainability working group “**NaSch**“* was established under the roof of the VSI (German Lubricants Manufacturers Association)



- Members:** AVIA BANTLEON, FUCHS, ROWE KLÜBER LUBRICATION, ZELLER+GMELIN



- Objective:** Establish sustainability standards, KPIs, benchmarks for the lubricants industry and emphasize its value for society (image campaign)

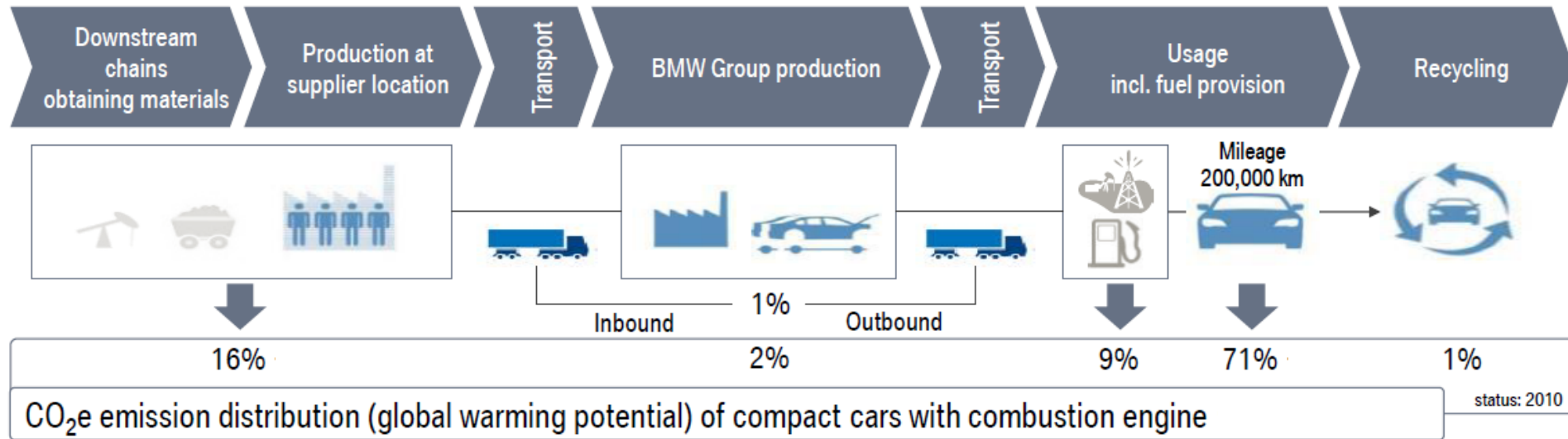


- UEIL cooperation with NASCH carrying sustainability forward to the level of the **European lubricants industry**



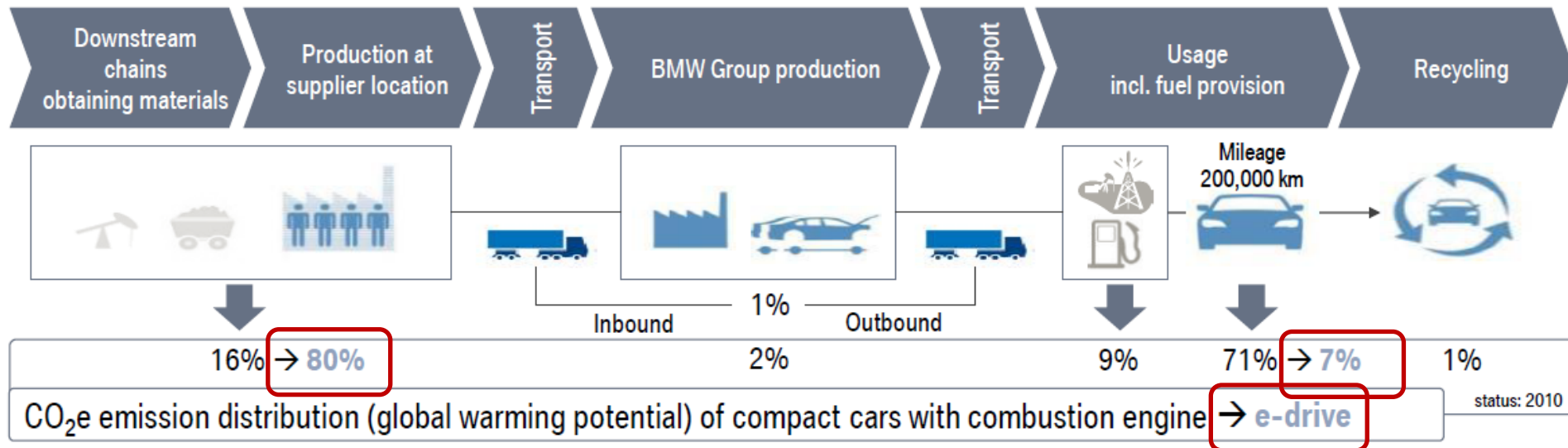
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Sales



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E-Mobility



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Students

Chair of Corporate Social Responsibility

CHAIR OF CORPORATE SOCIAL RESPONSIBILITY
Prof. Dr. Laura Marie Schons

*CSR-Weekend at the
University of Mannheim*

Cooperation with Student Initiatives



TED^x UniMannheim
x = independently organized TED event



MANNHEIM
FORUM



INFINITY
MANNHEIM E.V.

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Engagements

Responsible Care

FUCHS is a signatory to the Responsible Care Global Charter of the International Council of Chemical Associations (ICCA). FUCHS is committed to this initiative.



Chemie³

FUCHS is engaged in the Chemie³ sustainability initiative of the German Chemical Industry Association (VCI), the German Mining, Chemical and Energy Industrial Union (IG BCE) and the German Chemical Industry Employers' Federation (BACV).



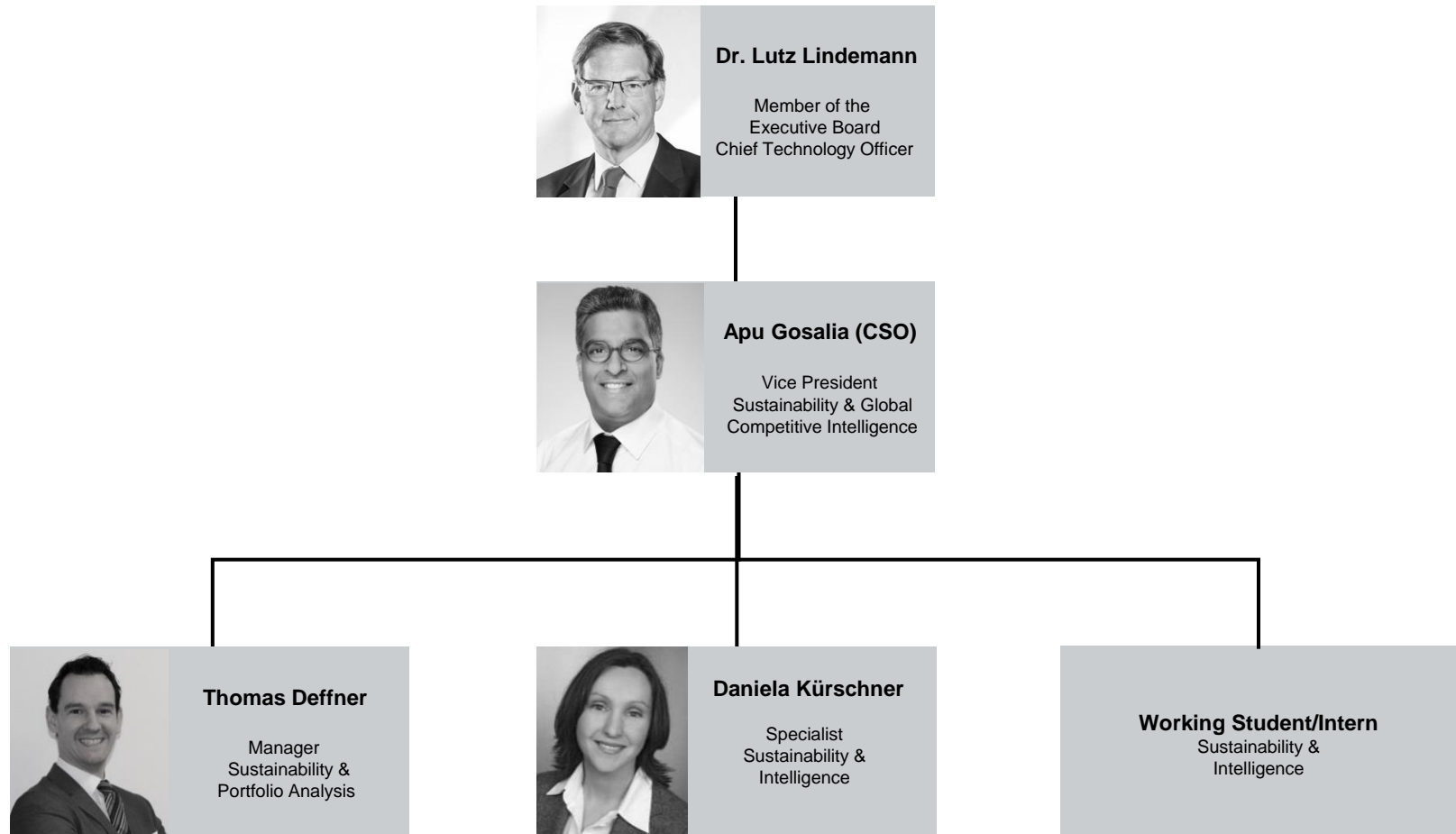
Wittenberg-Zentrum für Globale Ethik/econsense

FUCHS is engaged in a cross-industrial initiative of German companies with the objective of creating sustainability networks in emerging and developing nations. This initiative has been set up by the sustainability network econsense and the WZGE.



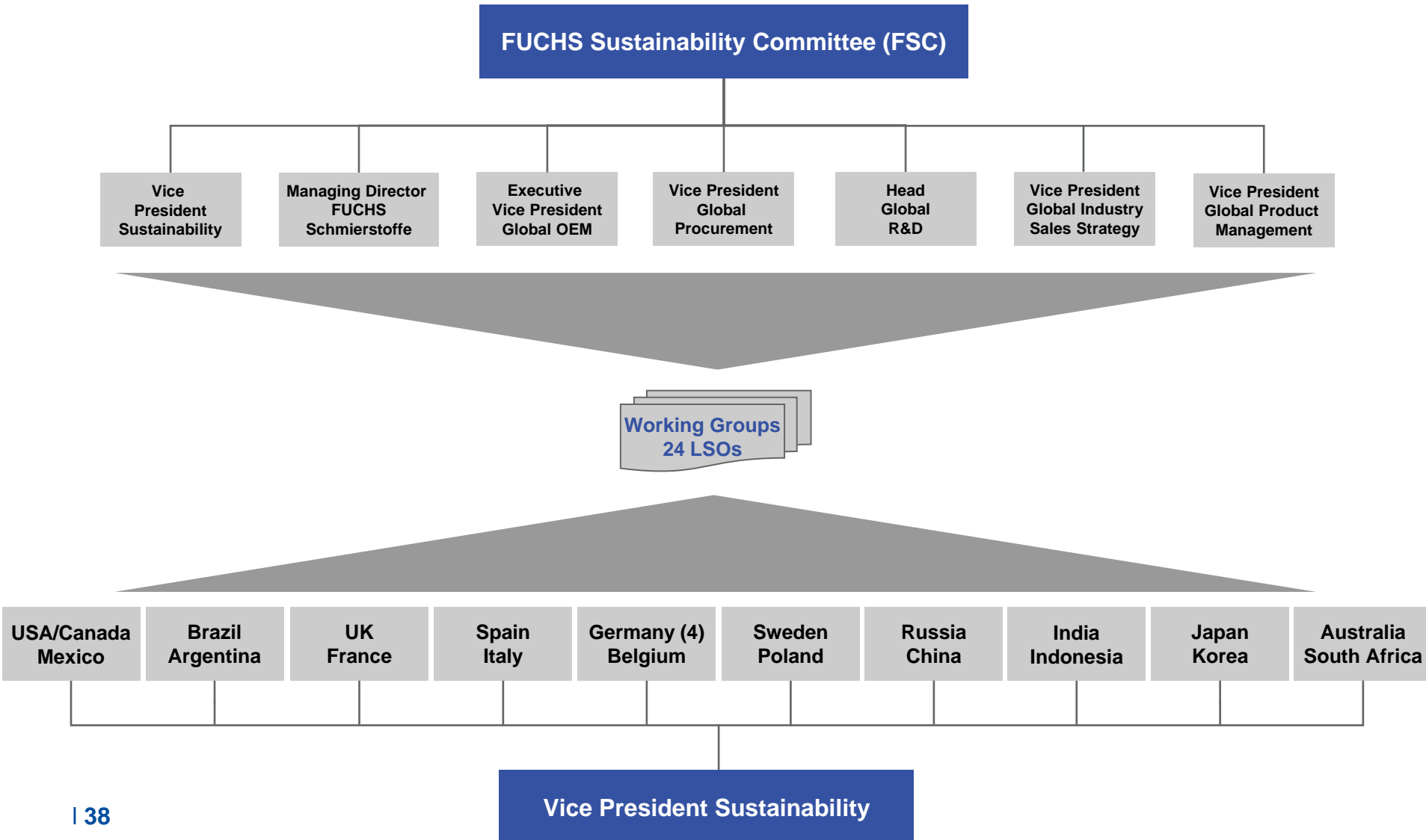
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Department



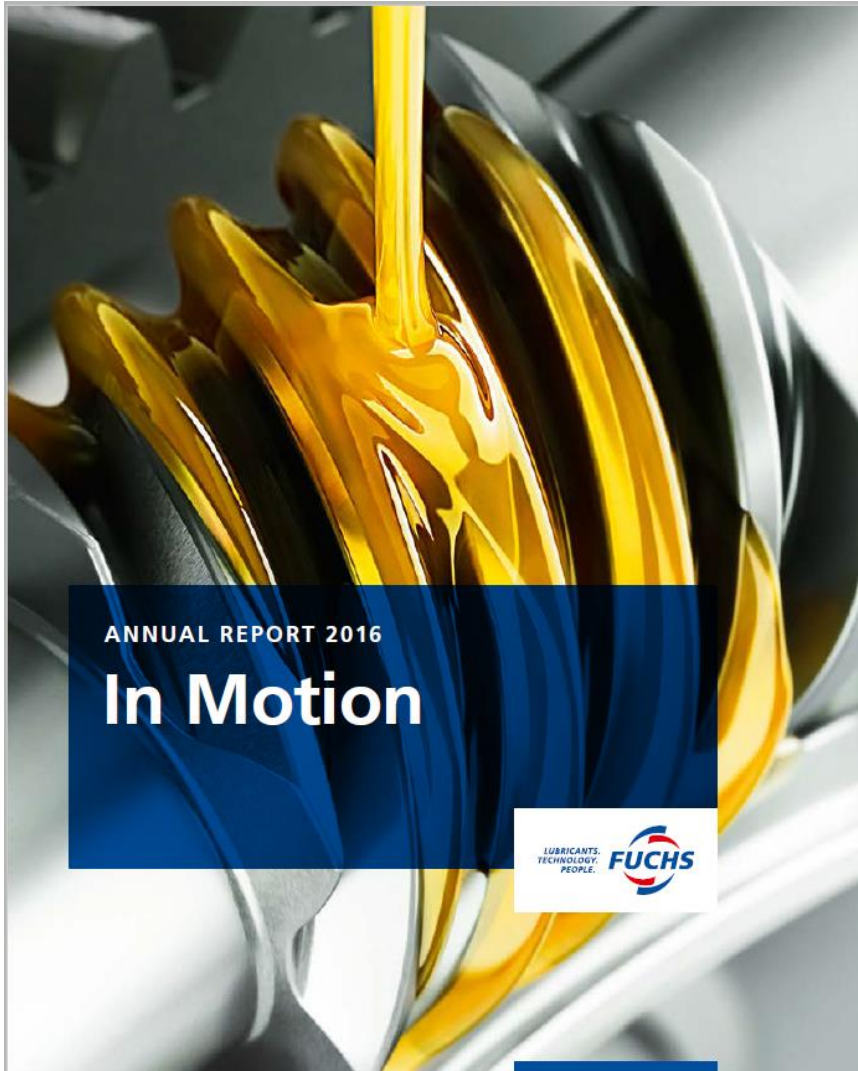
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Network



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FUCHS In Motion



Digitalization

E-Mobility



**GERMAN
SUSTAINABILITY AWARD**

Germany's Most Sustainable
Medium-sized Company 2016

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