

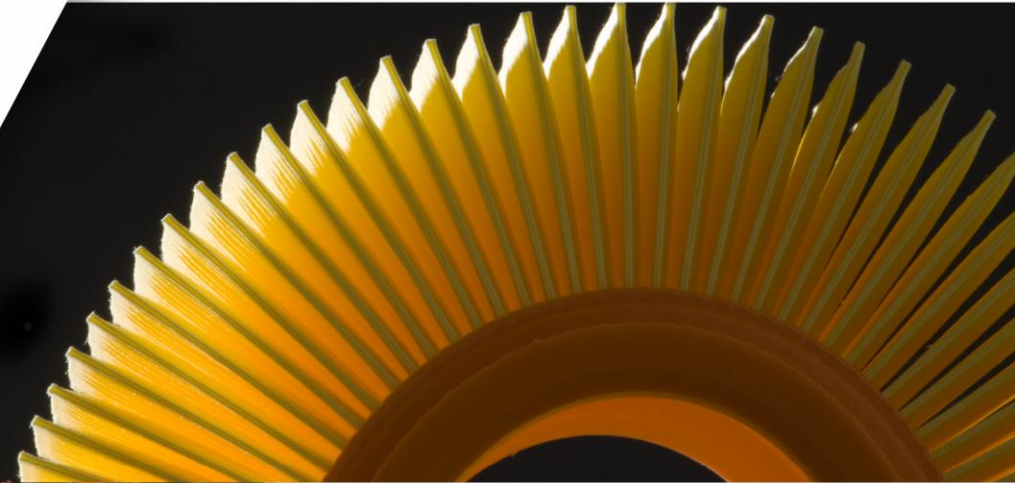
SO/GEFI

TECHNOLOGY PRESENTATION

Milano – November 28th, 2017

Laurent HEBENSTREIT

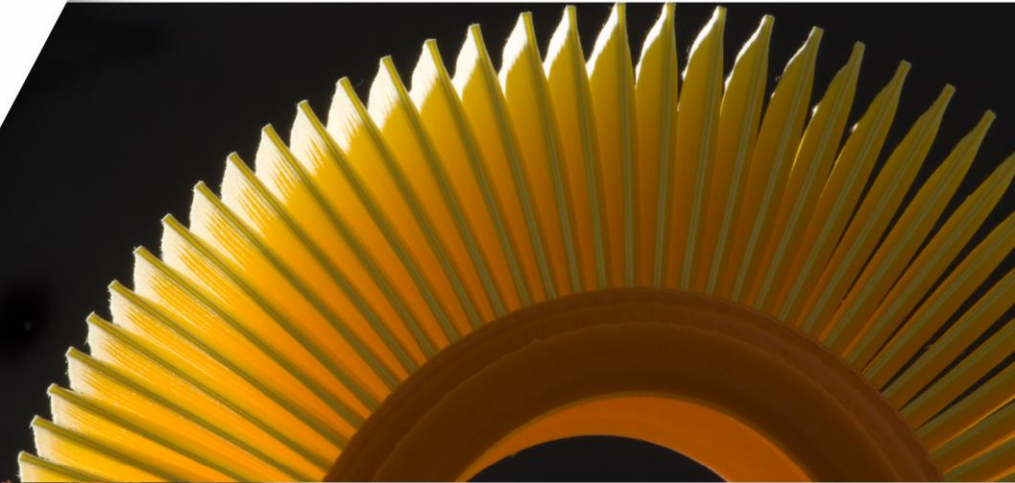
Chief Executive Officer



Agenda

- 1 Introduction**
- 2 Technology**
- 3 Profitable Growth Strategy**

Introduction



Who is Sogefi?

- **Young** automotive company created in 1980 by Carlo De Benedetti
- Listed in Milano Stock Exchange since 1986
- Strong Entrepreneurship DNA
- Developed through:
 - a series of strategic moves
 - tight cost control
- Joined the **best** automotive suppliers in 2005
- Generated 31M€ of Cash in 2016

3 Business Units

Suspensions



- Stabilizer Bars
- Coil Springs

MAIN PRODUCTS

€ 1,574M
2016 Sales

Main Competitors

€ 563M
36%

Mubea

Filtration



- Oil Filters
- Engine Air Filters
- Fuel Filters
- Cabin Air Filters

€ 535M
34%

MANN+HUMMEL

Air & Cooling



- Manifolds
- Coolant Pumps
- Coolant Outlet Housings

€ 480M
30%

MAHLE

Sogefi Customers



CARS



AFTERMARKET



TRUCKS



2 WHEELERS



3 WHEELERS

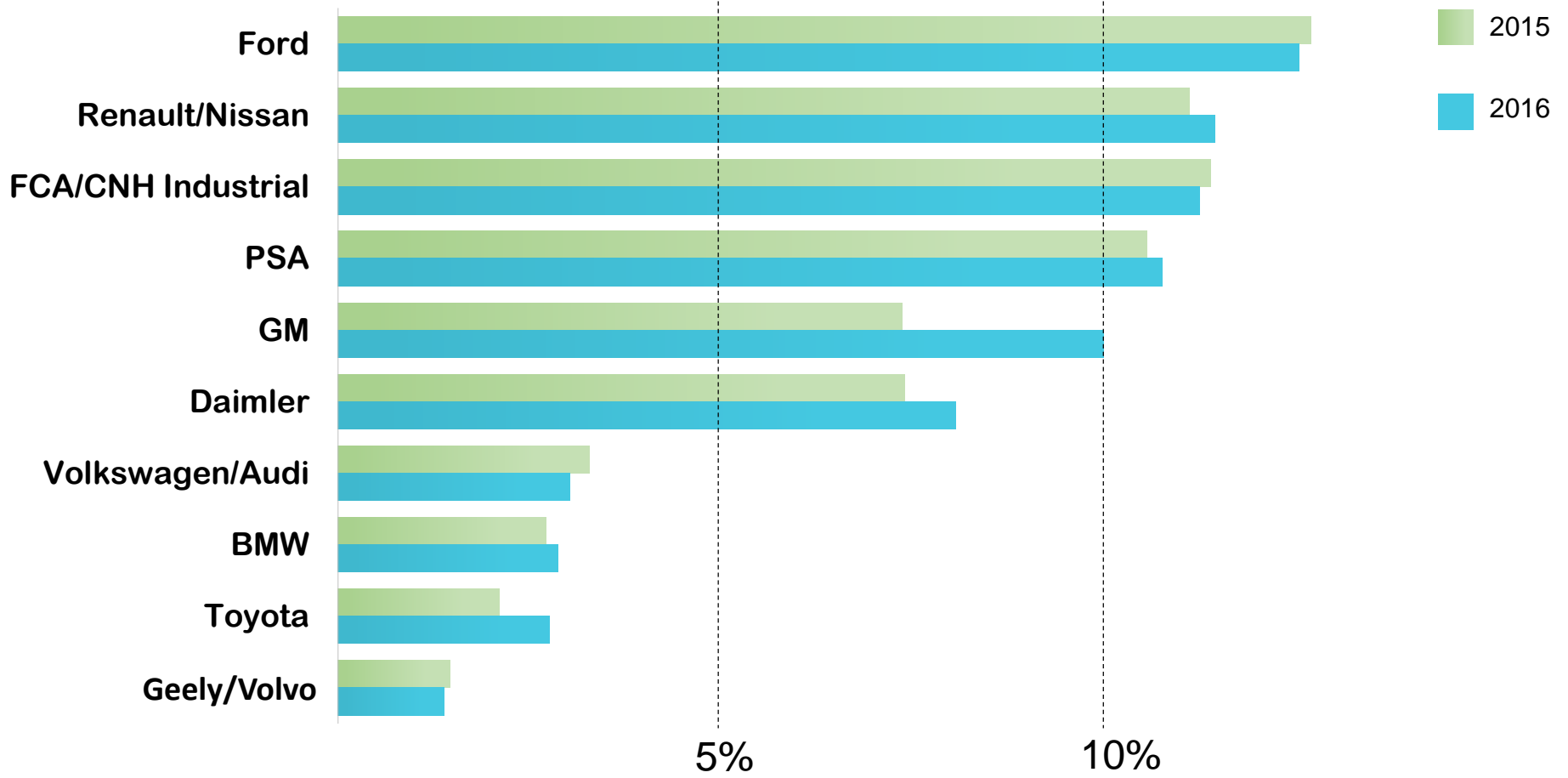
FILTERS purflux FRAM

COOPERS FLAAM FILTRi tecnocar

MAIN BRANDS

Well balanced clients mix

Sogefi Top 10 Clients – In % of Total Sales



Supplying premium customers & models

FERRARI 599



PORSCHE CAYENNE



AUDI A6



MASERATI QUATTROPORTE



BMW 5-serie



MERCEDES GLK



Mercedes-Benz



VOLVO XC90



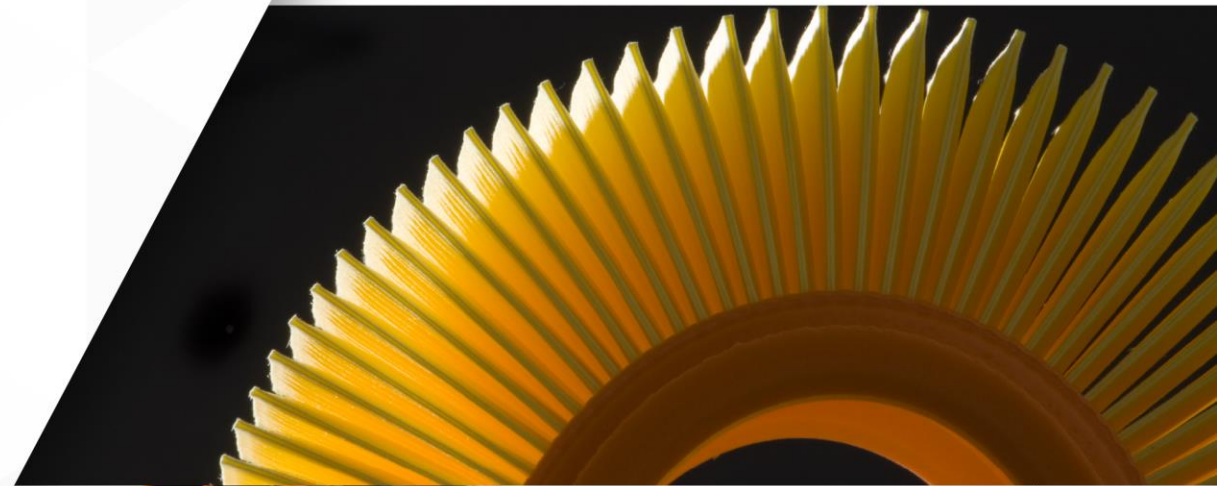
JAGUAR F-PACE



CORVETTE




Technology



Current Trends



Air Quality
Fine Particles
Reduction



CO₂ Emissions
Reduction
Fuel Consumption
Reduction




Weight
Reduction

Higher technology requirements



Filtration



Filtration
Air & Cooling

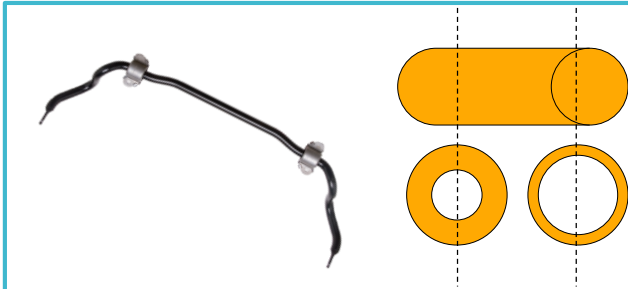
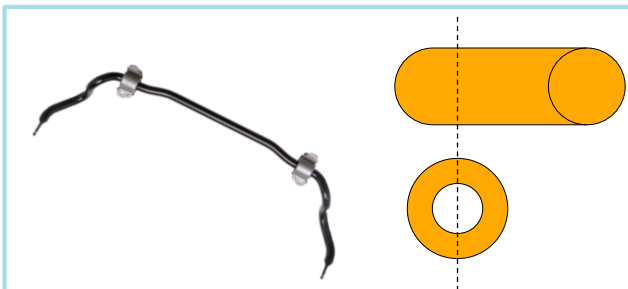
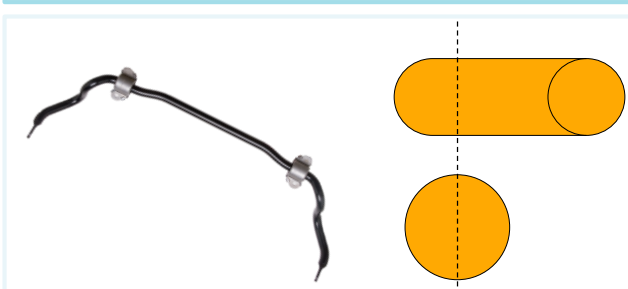


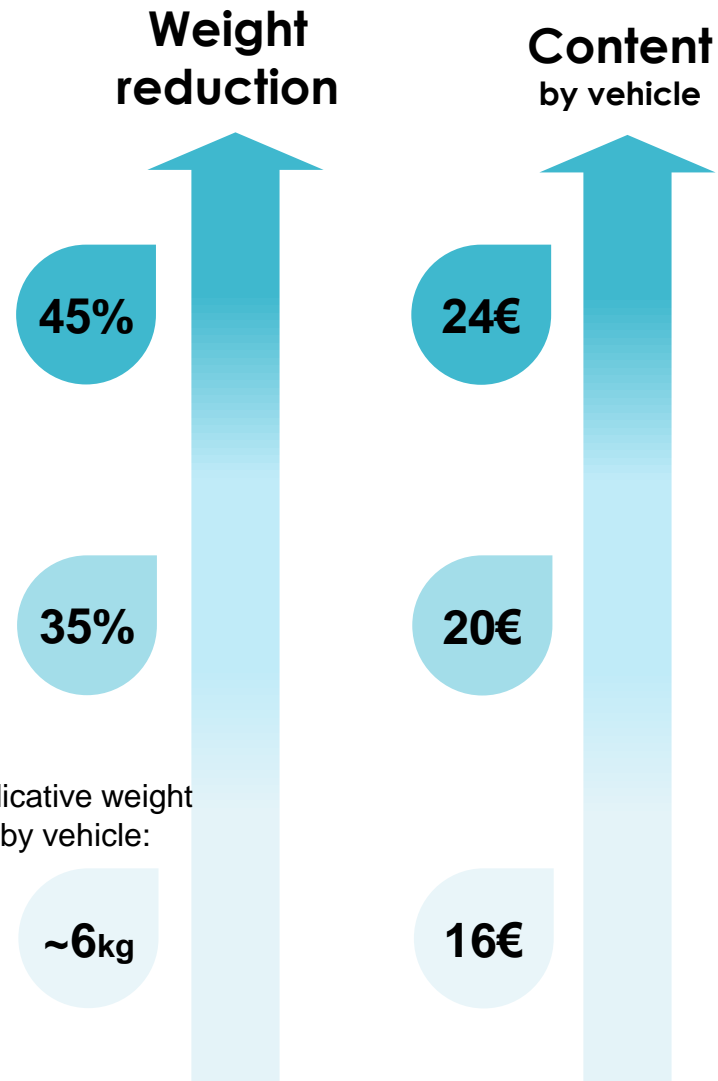
Filtration
Air & Cooling
Suspensions

Stabilizer Bar content

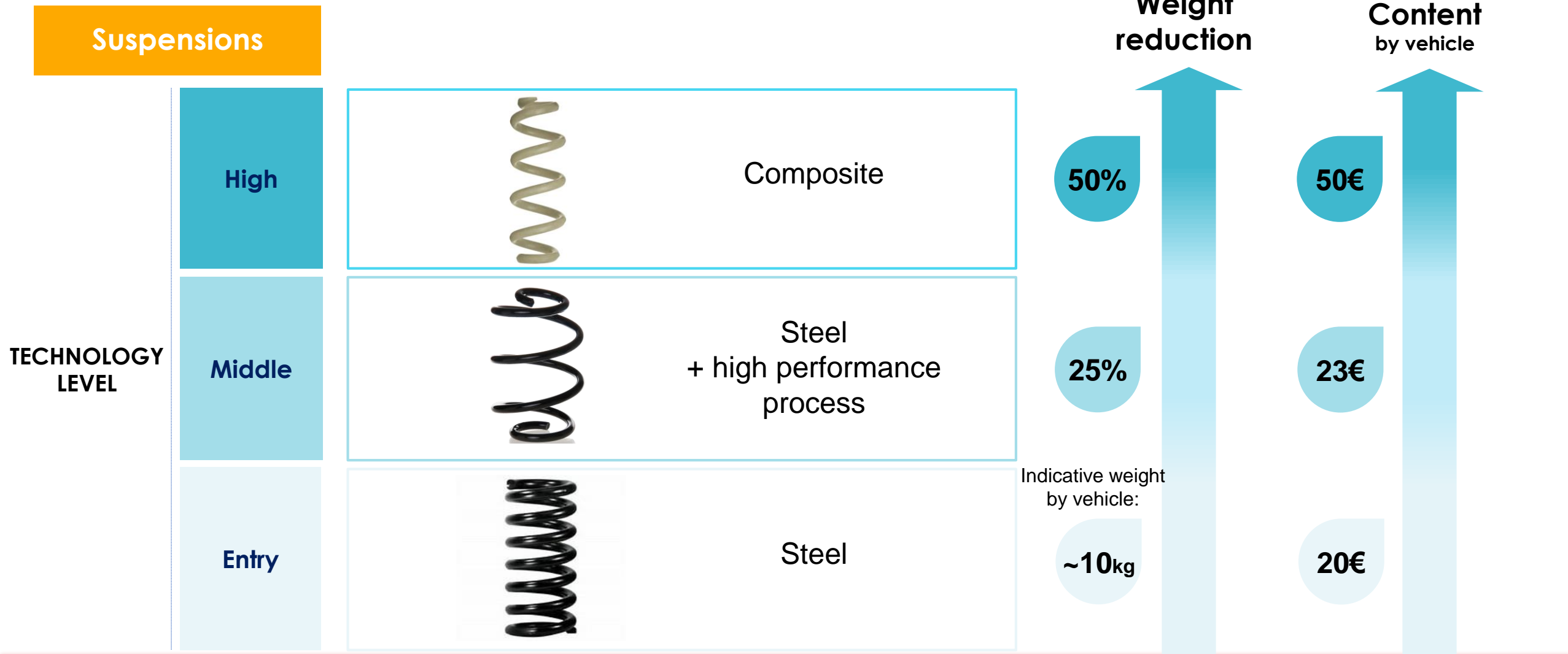
Suspensions

TECHNOLOGY LEVEL

High		Variable wall thickness Tube
Middle		Tube
Entry		Solid Bar



Coil Spring content



4 Disruptive Future Trends

1



CONNECTIVITY

2



AUTONOMOUS DRIVING

3



SHARED MOBILITY

4



ELECTRIFICATION

- Connected, Autonomous and Shared trends have **limited direct impact** for Sogefi

- **Powertrain electrification is a key trend** for Filtration and Air & Cooling
- Sogefi developed with Mc Kinsey support a detailed **world data base and model to create alternative powertrain scenarios**

Higher technology requirements

Different types of powertrains

New Energy Vehicle (NEV)

Internal Combustion Engine (ICE)



Pure ICE



Hybrid

Electric Vehicle (EV)



Battery



Fuel Cell



Different types of powertrains



Pure ICE



Hybrid



MHEV FHEV PHEV 



BEV



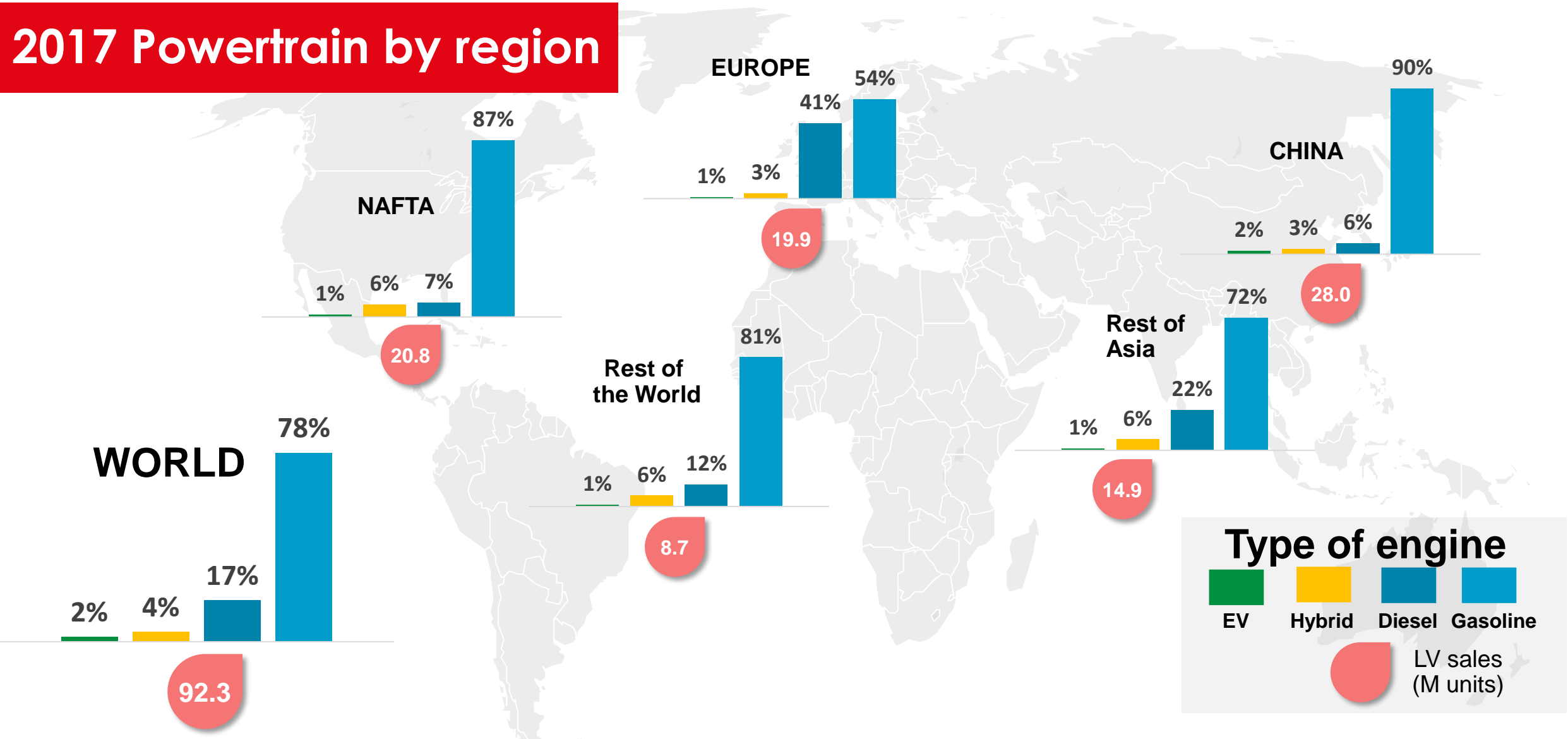
FCEV



Electrification 

- **ICE:** Internal Combustion Engine vehicle, operating on fuel.
- **MHEV:** Mild-Hybrid Electric Vehicle, 48V system. (e.g. **New Renault Scenic dCi 110**).
- **FHEV:** Full Hybrid Electric Vehicle, operating on fuel, assisted by a battery. Non rechargeable (e.g. **Toyota Prius**).
- **PHEV:** Plug-in Hybrid Electric Vehicle, operating on fuel, assisted by a battery. Rechargeable (plugged in to grid) (e.g. **New Golf GTE**).
- **BEV:** Battery Electric Vehicle, i.e., pure EV, with no ICE content (e.g. **Renault ZOE, Nissan LEAF, Tesla**).
- **FCEV:** Fuel Cell Electric Vehicle (e.g. **Toyota Mirai**).

2017 Powertrain by region



Type of engine

- EV
- Hybrid
- Diesel
- Gasoline

LV sales (M units)

Source: Sogefi and Mc Kinsey

Estimated volume, including Passenger Car (PC) and Light Commercial Vehicle (LCV) < 3.5T (LCV > 3.5T excluded)

Diesel/Electric disruption trends

1 Diesel disruption mainly affecting Europe due to

- More stringent regulations
- Consumers turning away from Diesel
- Politics
 - Diesel circulation restrictions in large cities

▶▶ *Diesel share in Europe: from **41%** in 2017 to **25%** in 2027 in Base case scenario (**20%** in Strong case)*

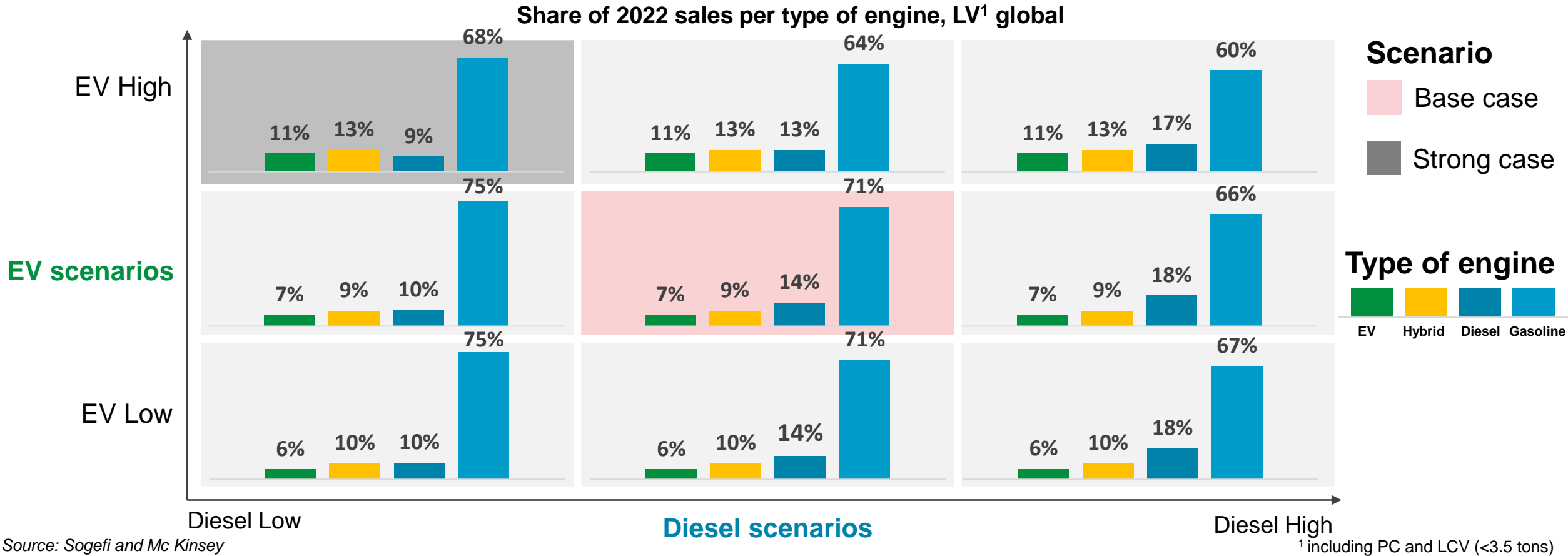
2 Electrified powertrain evolution

- Technology improvements
- Politics
 - France & UK to ban Diesel/Petrol cars from 2040
 - China to significantly increase EV

▶▶ *WW EV + Hybrid share: from **6%** in 2017 to **30%** in 2027 in Base case scenario (**33%** in Strong case)*

2022 Sogefi Forecast

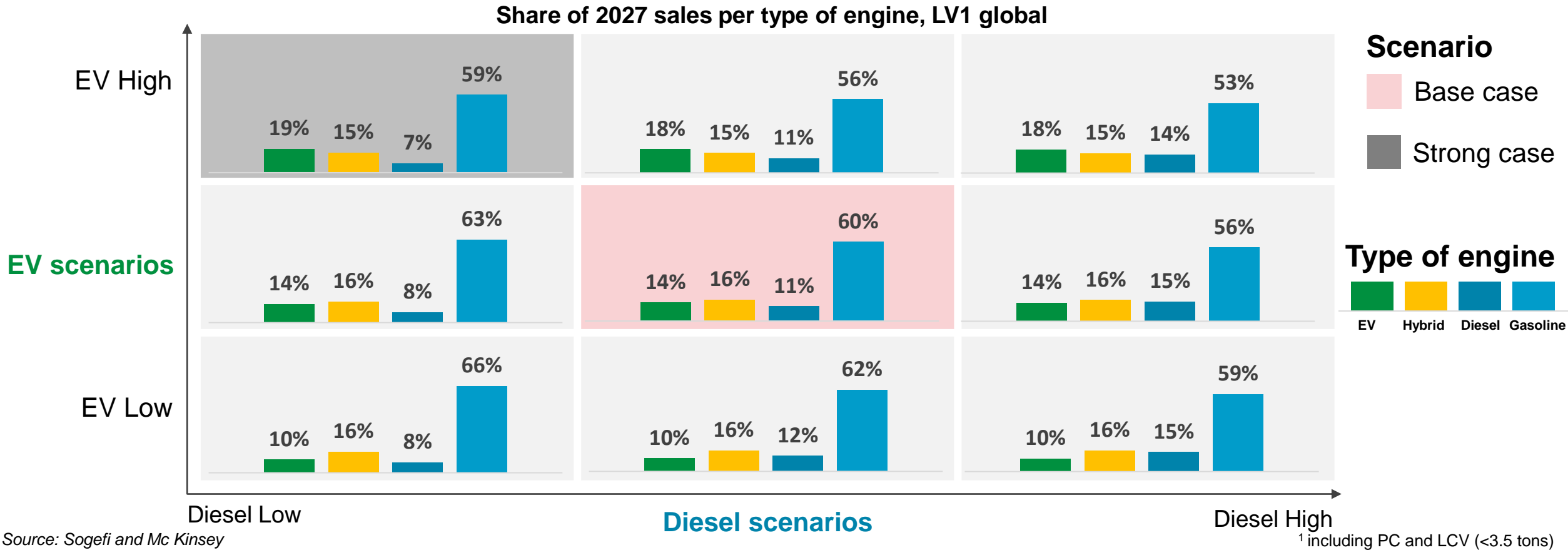
All scenarios predict a reduction of ICE from 98% in 2017 to 93% in Base Case and 89% in Strong Case in 2022



Source: Sogefi and Mc Kinsey

2027 Sogefi Forecast

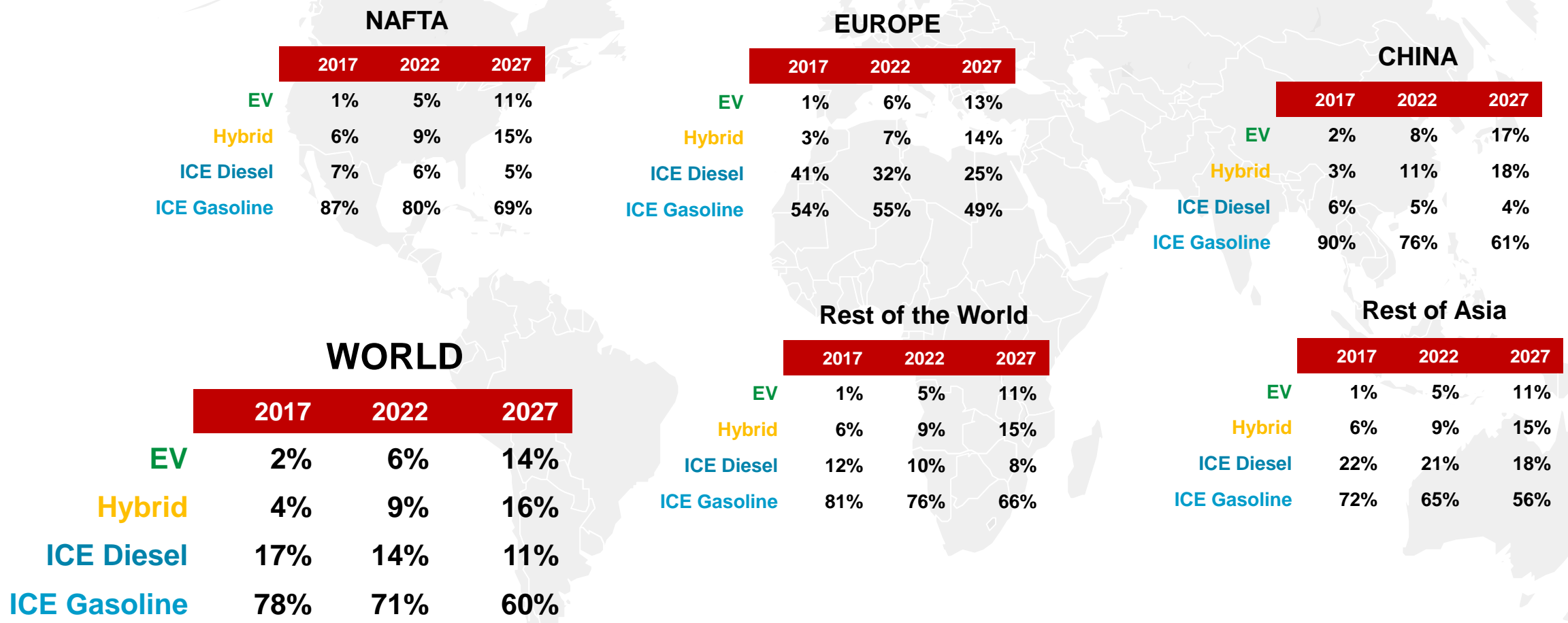
All scenarios predict a reduction of ICE to reach 86% in Base Case and 81% in Strong Case in 2027



Source: Sogefi and Mc Kinsey

¹ including PC and LCV (<3.5 tons)

Powertrain Forecast by region (Sogefi Base Case)



Source: Sogefi and Mc Kinsey

Light Vehicles Sales Forecast (Sogefi Base Case)

- Strong growth of Hybrid powertrains and Electric Vehicles (EV)
- But total Internal Combustion Engine (ICE) remains flat

	2017	2022	2027	CAGR 17/22	CAGR 22/27
Total Vehicles (M units)	92	99	110	1.4%	2.1%
EV	1	6	15	35%	19%
Hybrid	4	9	17	19%	14%
ICE Diesel	15	14	12	-2%	-2%
ICE Gasoline	72	70	66	0%	-1%
Total ICE	91	93	95	0.4%	0.5%

Source: Sogefi and Mc Kinsey

Volume including Passenger Car (PC) and Light Commercial Vehicle (LCV) < 3.5T

Sogefi Filtration / Air&Cooling Main Products

Filtration

Air & Cooling

OEM



Oil Filter



Engine Air



Fuel Filter



Cabin Air Filter

AFTERMARKET



European Car Park
10 years average age

Air & Cooling



Manifold



Coolant Pump



Coolant Outlet Housing

Hybrid Powertrain



Air & Cooling

VOLUME X2



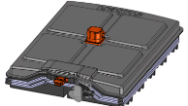
Manifold



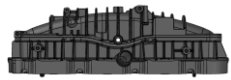
Coolant Pump



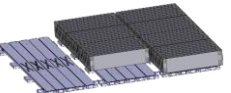
Coolant Outlet Housing



Battery Pack



Battery Pack coolant Manifold



Thermal Pack



Coolant Valve



Filtration



Oil Filter



Engine Air



Fuel Filter



High performance Cabin Air Filter

Volume Effect

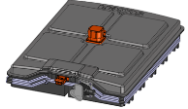

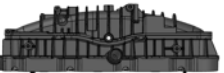

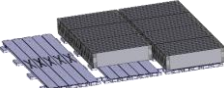





New Product



BEV Powertrain



Air & Cooling

-  Battery Pack 
-  Battery Pack Coolant Manifold **Module** 
-  Battery Thermal Pack 
-  Electric Cooling Module 

VOLUME X2

-  Electric Coolant Pump 
-  Coolant Outlet Housing 
-  Coolant Valve 



Volume Effect 
New Product 

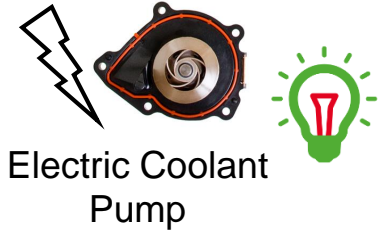
Filtration

-  High performance Cabin Air Filter

FCEV Powertrain



Air & Cooling



New Product

Filtration



SOGEFI on Hybrid and Electric Powertrain



3-serie



A8



MALIBU



TX5



S-CLASS



PANAMERA



PACIFICA



ZOE



FORTWO



B-CLASS



500



Sogefi Filtration / Air&Cooling products offer opportunities

- Even if all scenarios predict an increase of EV, **the total ICE powertrains could remain flat or a substantial part of the market until 2027.**
- **Hybrid powertrain** is a first step towards a world of **multiple powertrains.**
- The rise of **EV is depending on key evolving factors** (vehicle range, battery costs, infrastructures development,...)
- The rise of **Hybrid, BEV and FCEV offers opportunities** for SOGEFI.



More volume of Cooling products



New Sogefi products



Higher content for existing Sogefi products

Oil Filter content

Filtration

TECHNOLOGY LEVEL

High



Oil Filter Module
+ Oil Cooler
+ Valves

23€

Middle



Oil Filter Element
+ Cap

2€

Entry



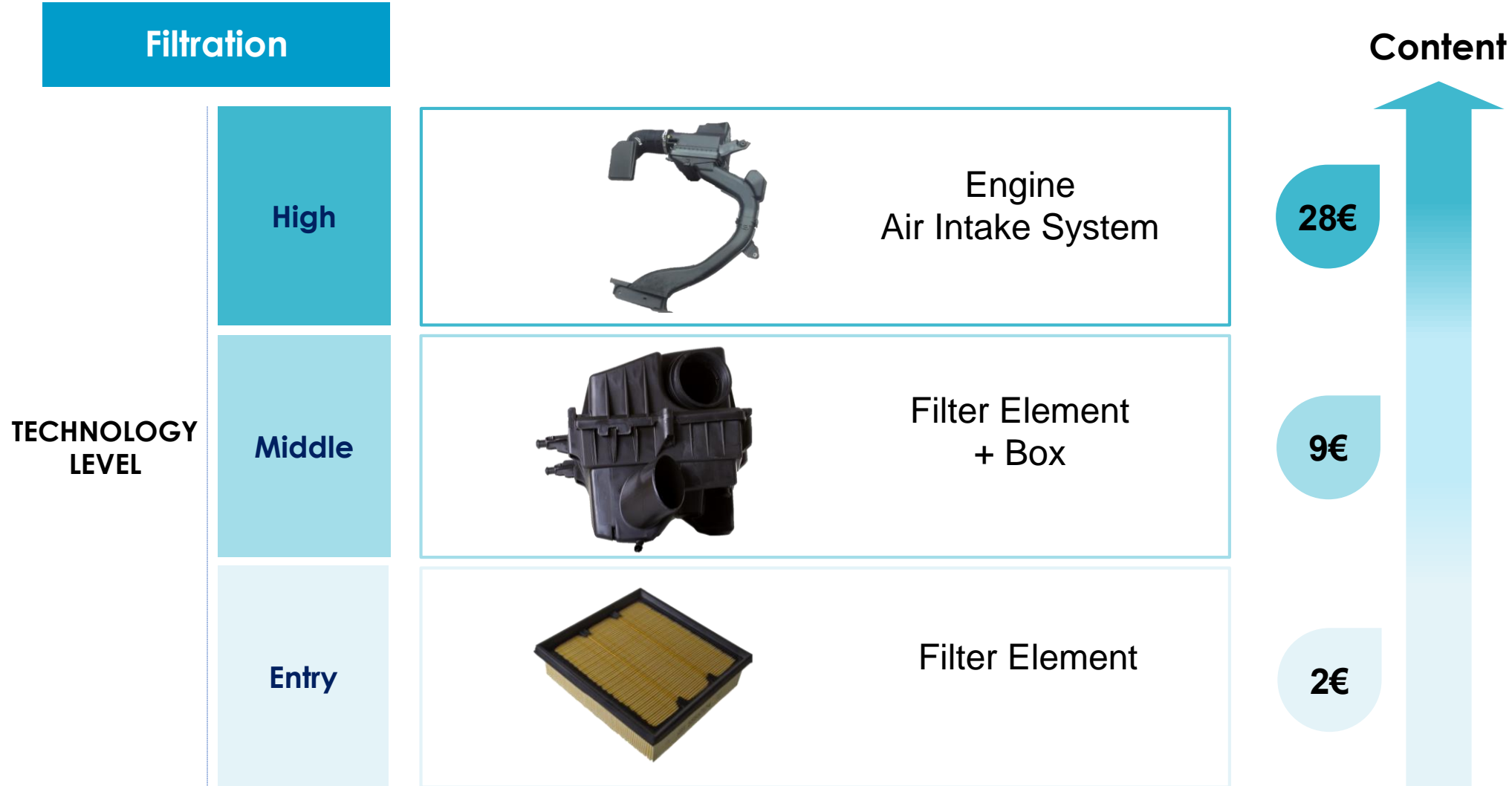
Oil Filter
Spin-on

1€

Content



Engine Air Filter content




Air Cabin Filter content

Filtration

TECHNOLOGY LEVEL

High



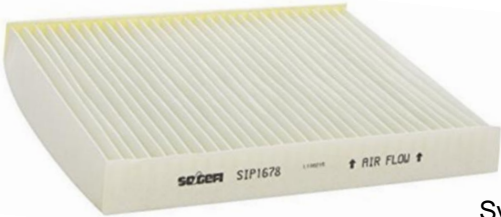
Anti-allergen
Synthetic media with activated carbon + anti-allergen properties + high performance

Middle



Particles and odours
Synthetic media with activated carbon

Entry

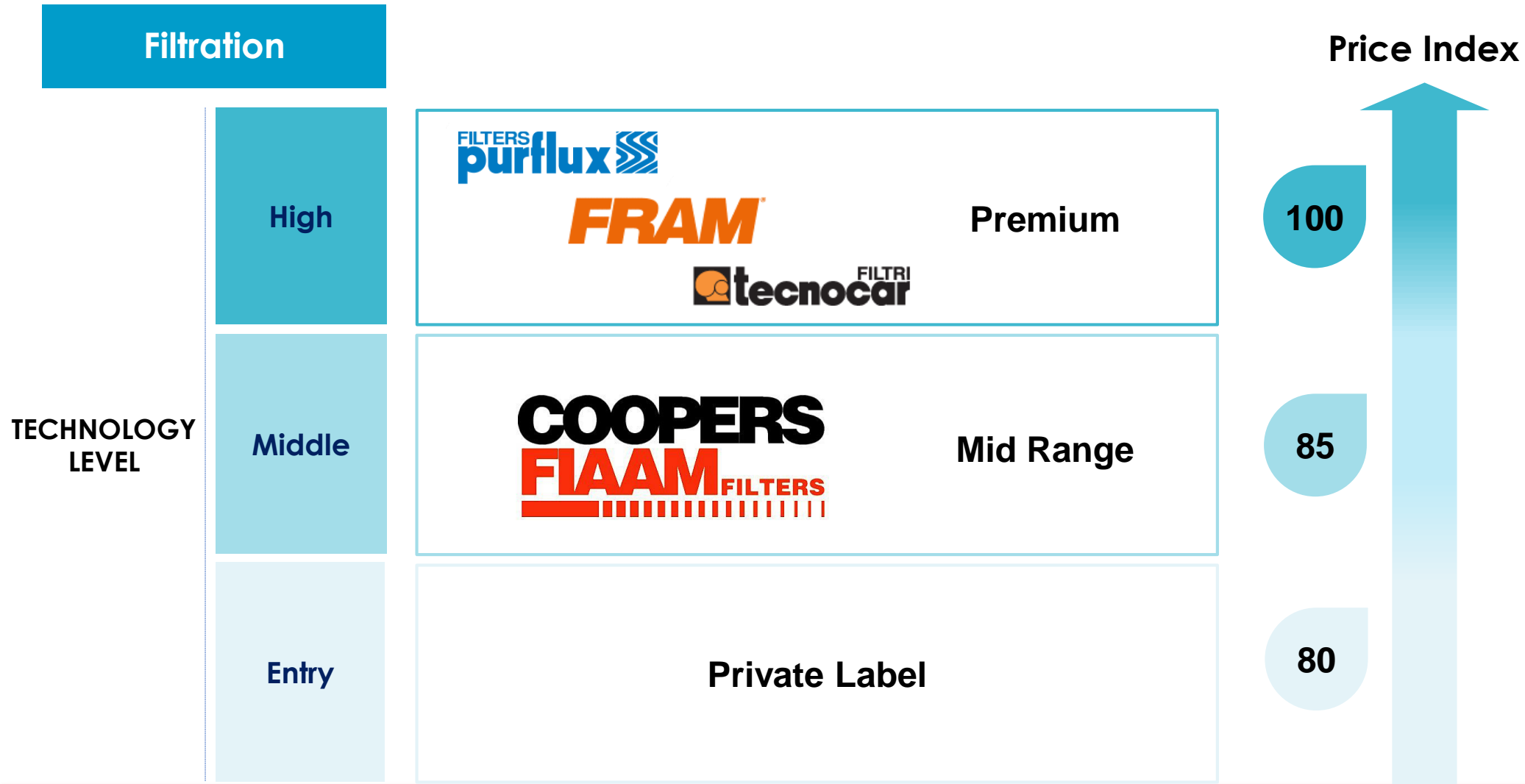


Pollen
Synthetic media

Content



Aftermarket Pricing Power

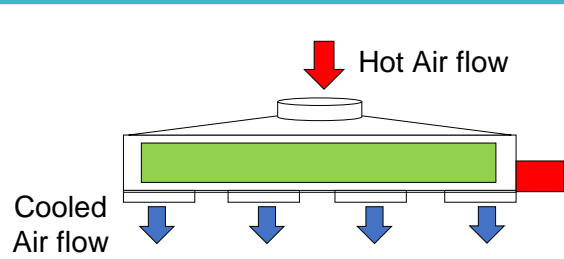


Air Intake Manifold content

Air & Cooling

TECHNOLOGY LEVEL

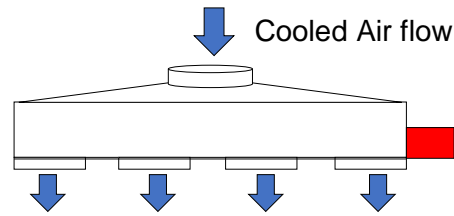
High



With Actuator and Cooler

40€

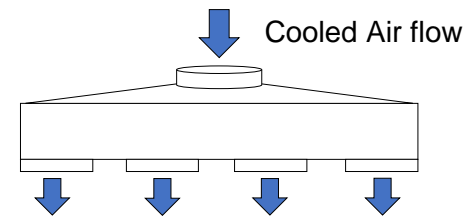
Middle



With Actuator

23€

Entry



Simple

10€

Content



Coolant Pump content

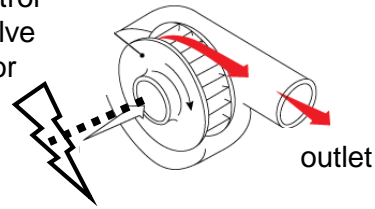
Air & Cooling

TECHNOLOGY LEVEL

High



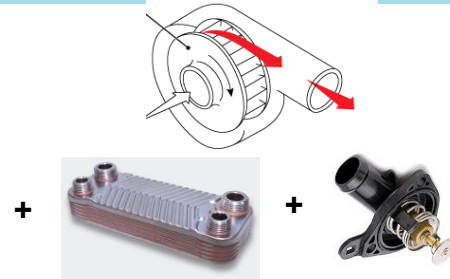
Flow control with e-valve or e-motor



Smart Coolant Pump

25€

Middle



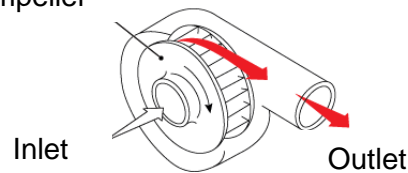
Pump module with Cooler + Thermostat

20€

Entry



Impeller



Mechanical pump

8€

Content



Coolant Outlet Housing content

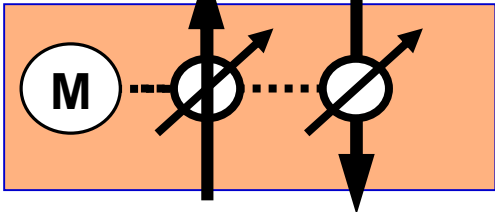
Air & Cooling

Coolant Outlet Housing

Content

TECHNOLOGY LEVEL

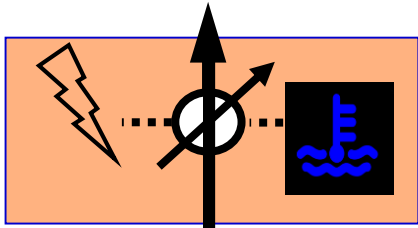
High



Smart Multi Way Valves

25€

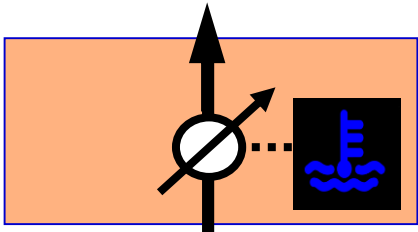
Middle



Electric Thermostat

13€

Entry



Thermostat

8€



**Startups are becoming key players
of the automotive world**



disrupting existing business

creating new business

OBJECTIVES

Generate profits

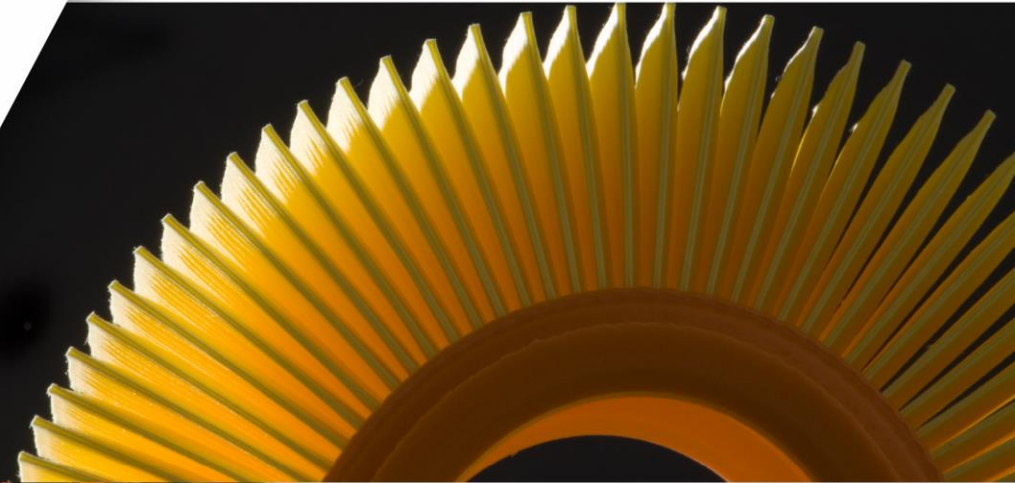
**Add value to existing Sogefi
products**

Generate new Sogefi products

HOW

- 1. Monitor the fields relevant to Sogefi:
Air and Cooling, Filtration, Suspensions**
- 2. Build joint development agreements with startups**
- 3. Buy minimum 5% to 10% equity**
- 4. Secure active minority shareholders' role**
- 5. Cash investment of 3 ~ 5 M€ per year**

Profitable Growth Strategy



Profitability improvement plan

5 performance drivers to increase operational efficiency

1 PURCHASING

- Cost reduction through technical modifications
- Pluriannual price and productivity negotiations
- Low Cost Country sourcing

2 SHOPFLOOR

- Scrap reduction
- Direct labor productivity
 - Higher automatization
 - Shorter reaction times to deviations
- Indirect labor productivity increase
 - Lean organizations

3 PROGRAM MANAGEMENT

- Price increases for technical modifications
- Systematic price increases for volume fluctuations
- Development and tooling cash payment

4 INDIRECT COSTS REDUCTION

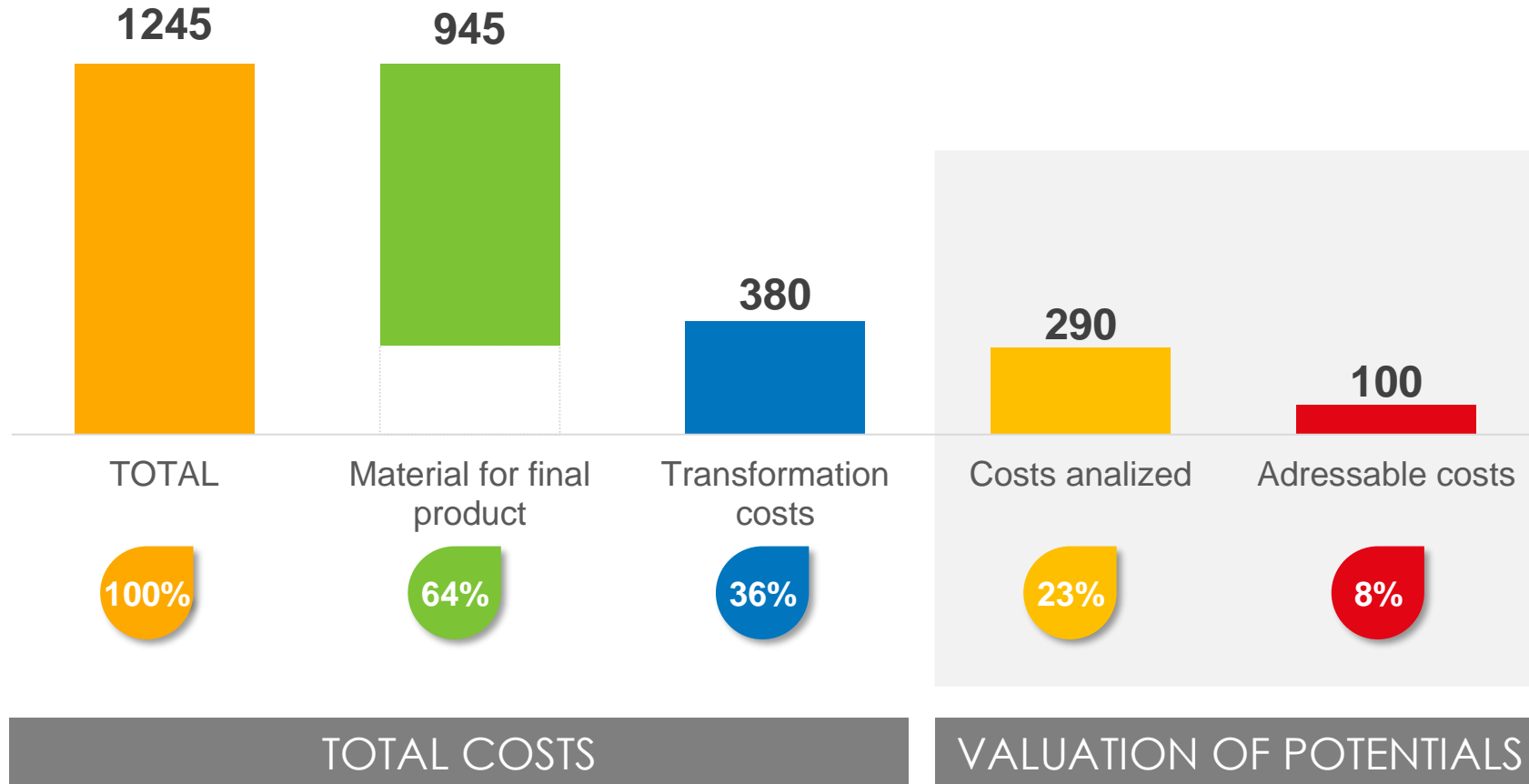
- Polyvalence and Polycompetence
- Process redesign

5 COMPETITIVE FOOTPRINT

- Industrial excellence
- Plant competitiveness plan

Sogefi Excellence System

Strategic cost reduction initiative



- A deep analysis of the cost base has been done
- On € 100m addressable costs some productivity potential have been identified with expected saving in the next 3 years

Data: 2016 cost base

Growth Strategies : Harvest, Challenger, Leader

- Harvest ✓
- Challenger ✓
- Leader ✓

Filtration

Air & Cooling

OEM

AFTERMARKET

Oil Filter ✓ N°4 Worldwide

Engine Air ✓

Fuel Filter ✓

Cabin Air Filter ✓

FILTERS purflux ✓ N°1 France

FRAM ✓

COOPERS FIAAM FILTERS ✓

tecnocar FILTRI ✓

European Car Park
10 years average age

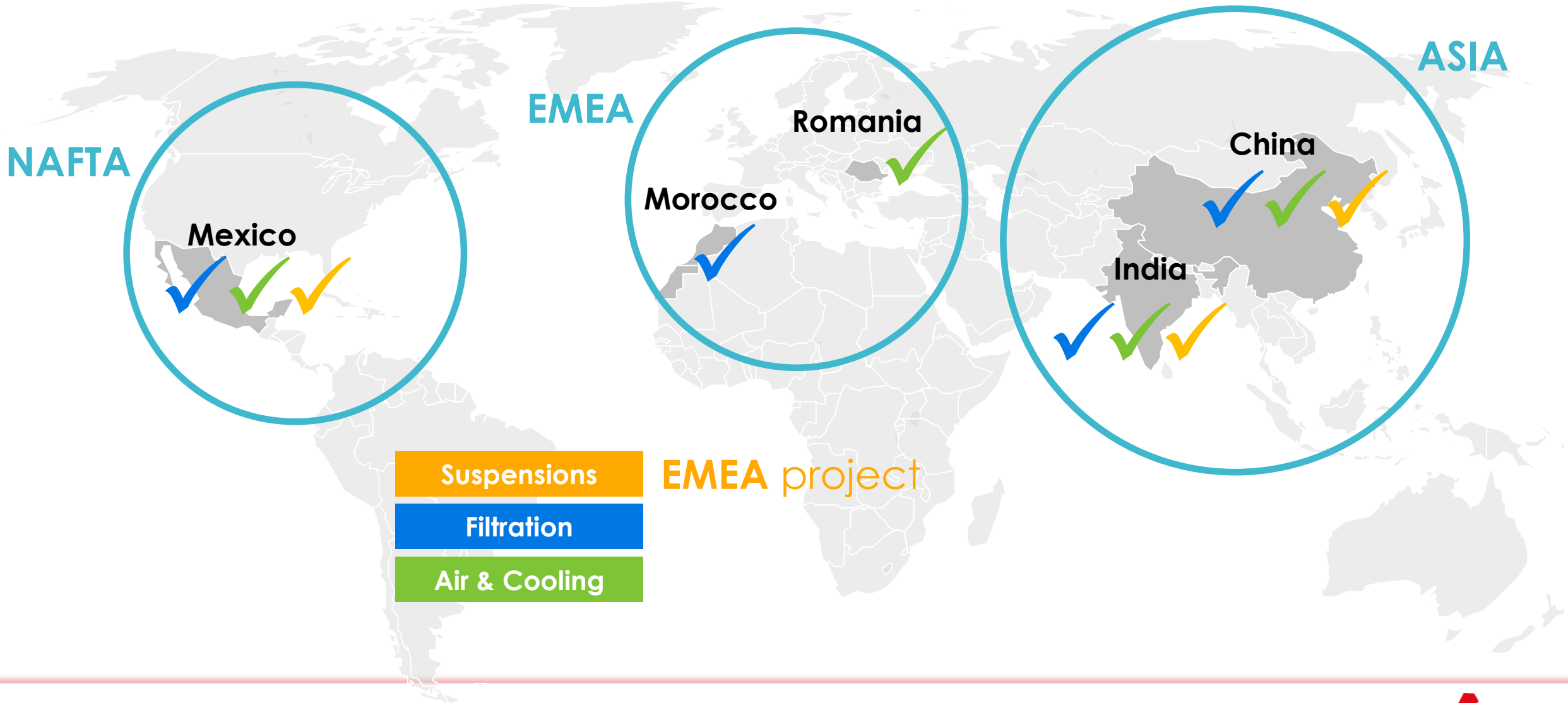
Air & Cooling

Manifold ✓ N°2 Worldwide

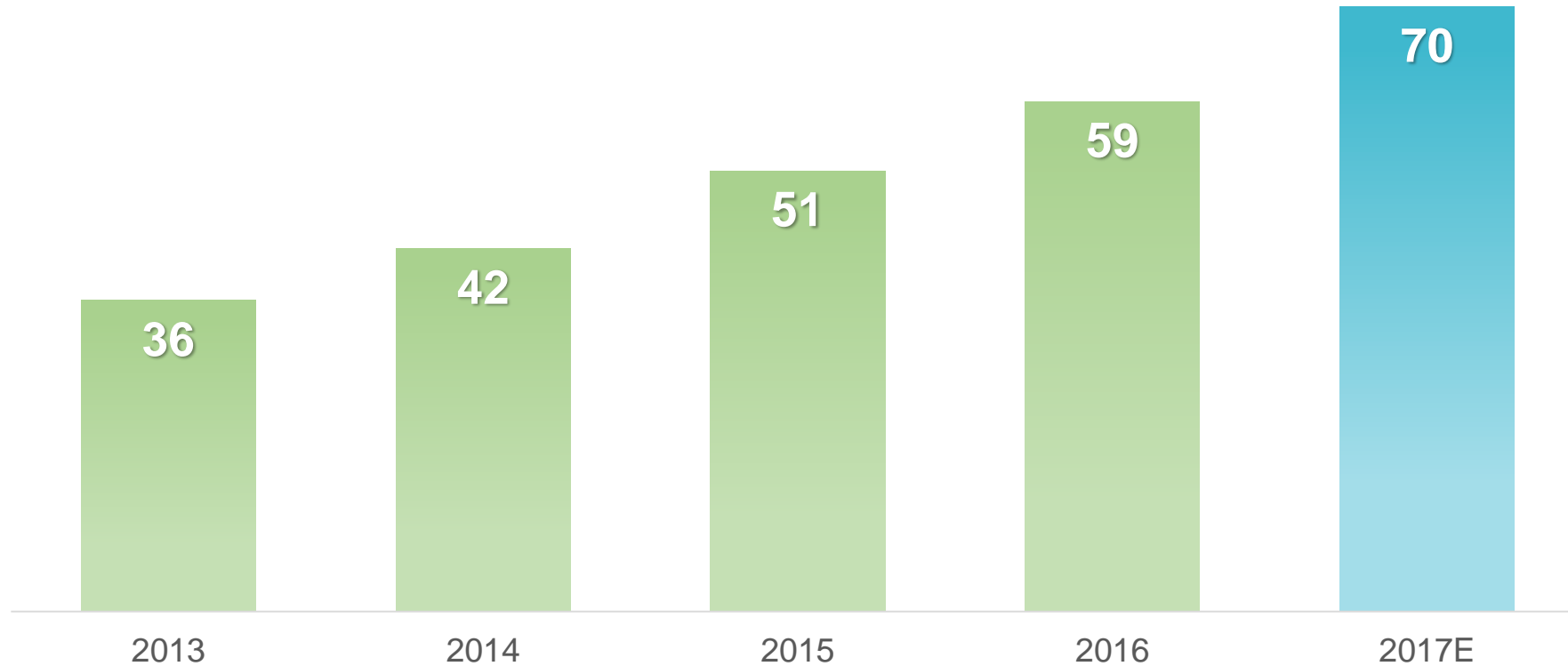
Coolant Pump ✓

Coolant Outlet Housing ✓

Geographical Expansion and cost competitive footprint

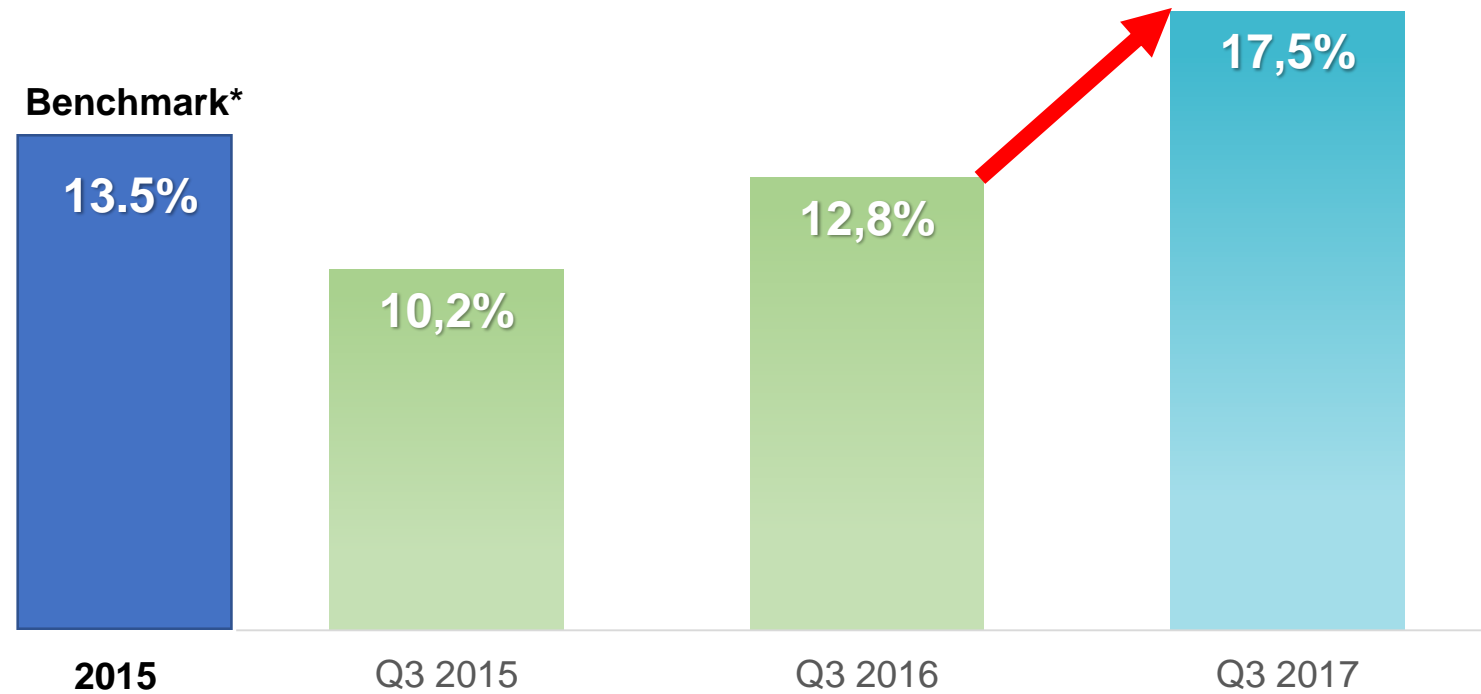


Tangible Investments 2014-2017E



Health & Safety, Quality, Capacity increase, Efficiency, New products, New plants

Value Creation Through ROCE Increase

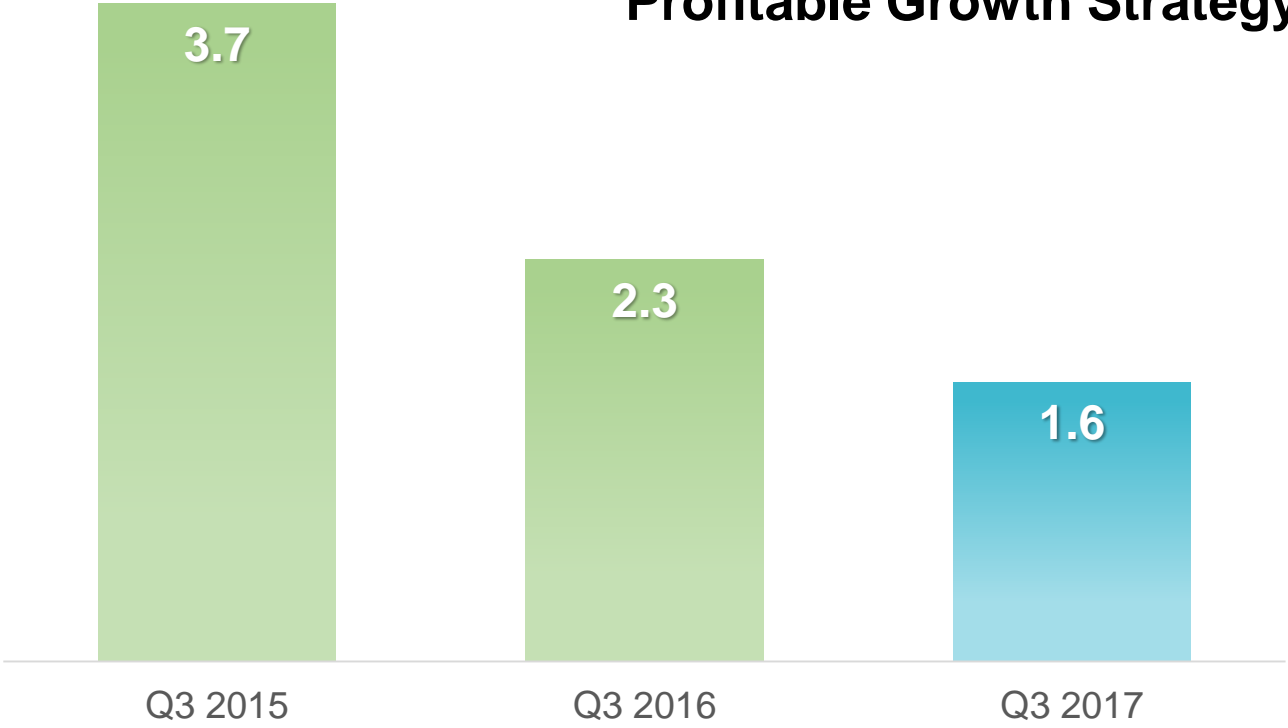


EBIT: 12 months rolling

* Lazard – Roland Berger: global automotive suppliers study. ROCE of ~600 key suppliers

DEBT/EBITDA Ratio Improved

Leverage now supports
Profitable Growth Strategy



DEBT: Net debt (end of period)

EBITDA: 12 months rolling

Executive Summary

Sogefi Strengths

1. Entrepreneurship DNA
2. Intimacy with R&D, Purchasing and Top Management of vehicle manufacturers
3. Recognized technical credibility to develop, launch and ramp-up innovative products
4. Multi-brand Aftermarket provides resilience to OEM volumes fluctuations

Higher Technology Requirements

- ➡ EV expected to increase but **total ICE will remain a substantial part of the market**
- ➡ NEV offer opportunities in terms of **more volume of cooling products, new products and higher content**

Profitable Growth Strategy

- ➡ **Cost reduction plan** to sustain profitability and cash generation
- ➡ Differentiated product strategies between **Harvest, Challenger, Leader**
- ➡ External growth opportunities researched to complement organic growth

so/GEFI