

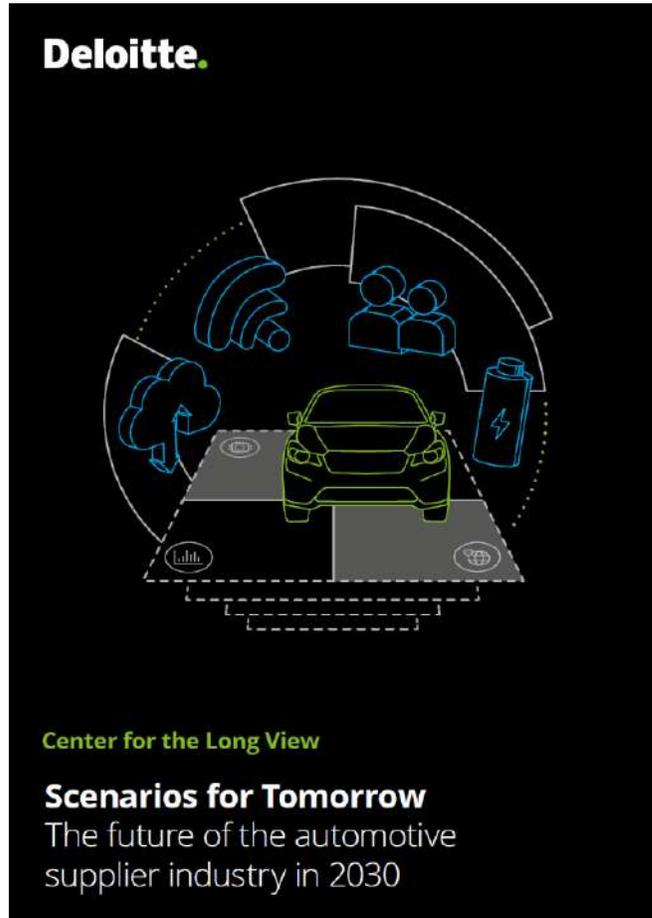
Future of Automotive Suppliers 2030

Four Industry Scenarios for 2030

January 27th 2021

The Future of the Automotive Supplier Industry

Four industry scenarios for 2030



From autonomous driving to electrification, the automotive industry is facing **fundamental change**. But what exactly can we expect from the coming revolution – and how will this **impact suppliers**?

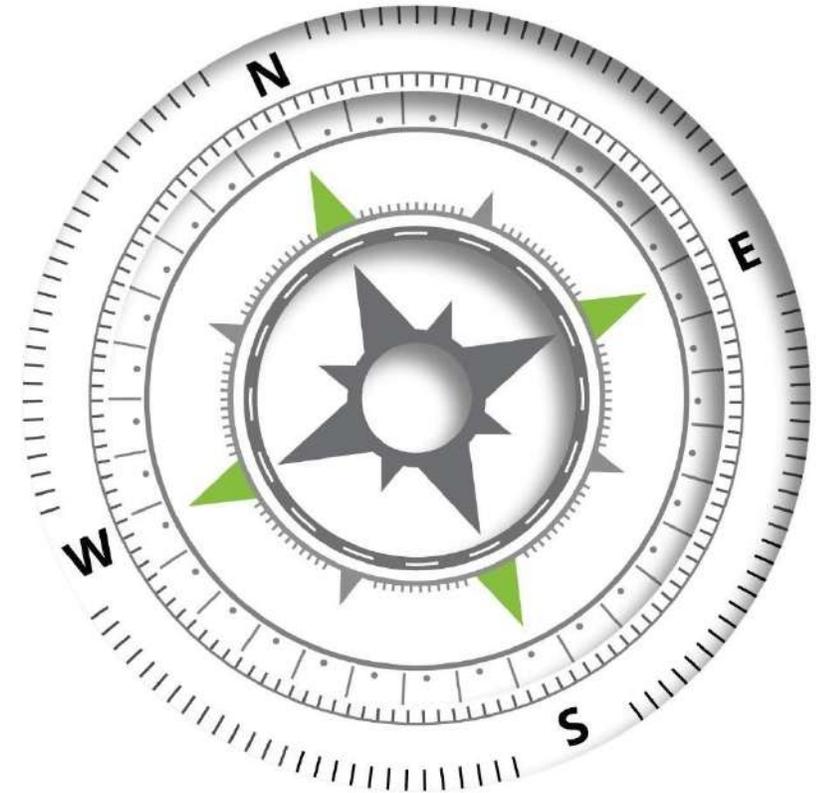
Deloitte’s automotive strategy experts will introduce you to a scenario-based approach and provide you with a framework to **anticipate and quantify** plausible outcomes

Point of view to be published beginning of February 2021 on
www.deloitte.com/de/automotive

Agenda

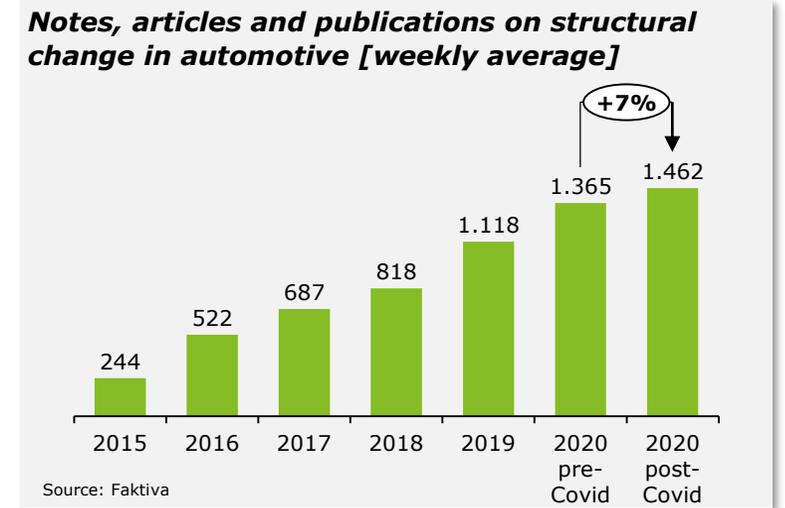
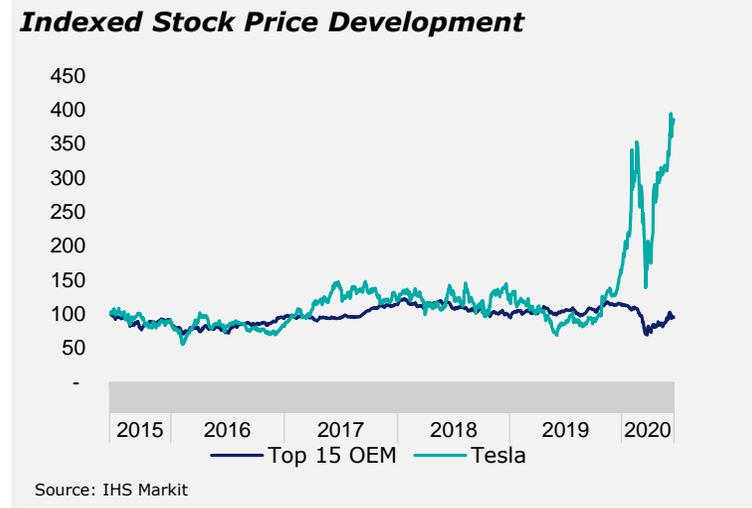
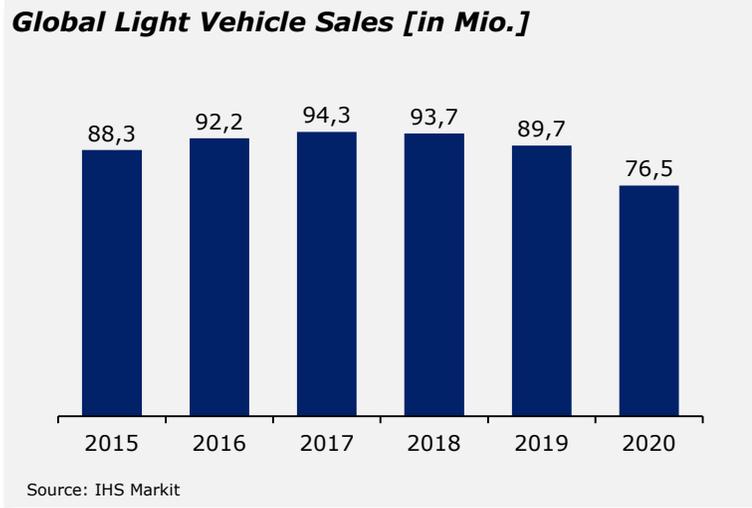
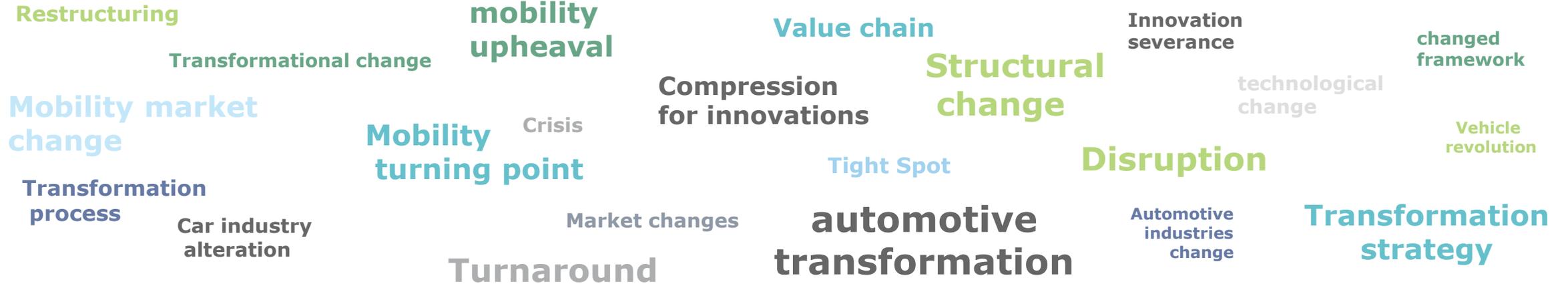
Our agenda for today

1. **How might the automotive supplier world look like in 2030?**
2. What are short-/ mid-term financial implications of certain scenarios?
3. What are the long-term financial implications of certain scenarios and transformation strategies derived from them?



Manoeuvring into the perfect storm?

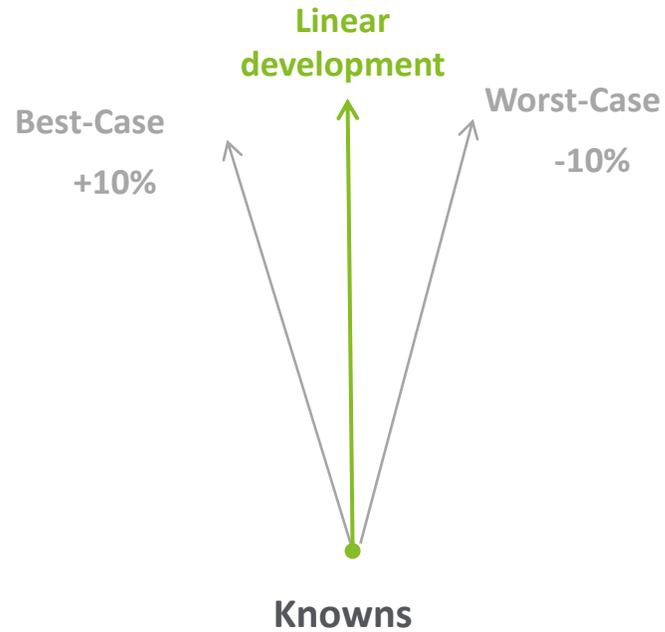
Significant challenges lie ahead for companies trying to rev up the global automotive engine



Predicting the future is impossible

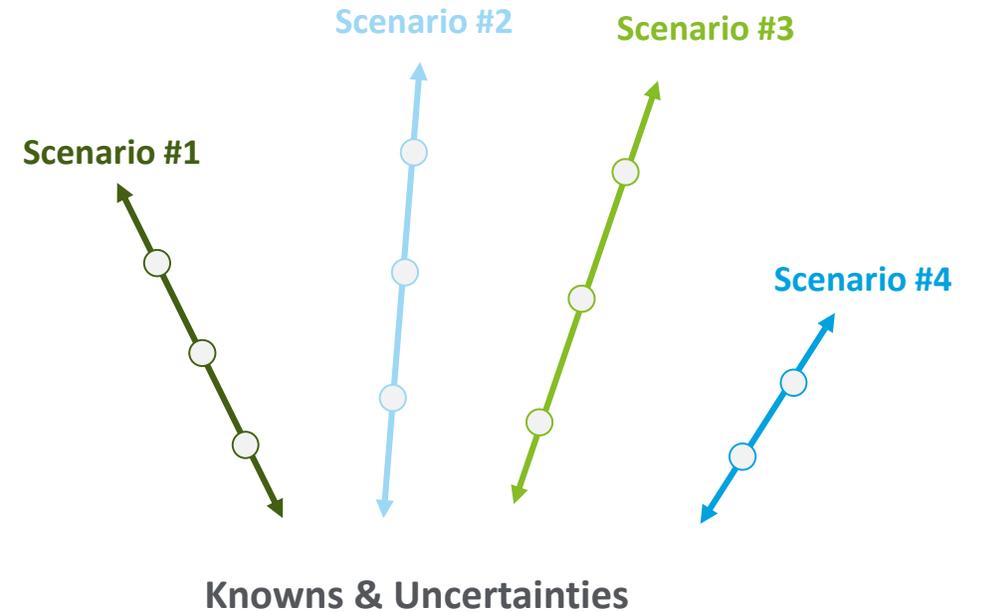
Anticipating plausible scenarios is more robust than traditional forecasts

Forecast mindset



Conventional approaches to planning yield conventional and often **unsurprising answers ...**

Scenario thinking



...whereas scenario planning **challenges assumptions** and provides organizations with more options to make **better decisions**

An aerial, top-down view of a parking lot. The lot is filled with cars, mostly white and grey, arranged in neat rows. A grid of white lines separates the parking spaces. The grid lines are labeled with letters and numbers, such as 'NB', 'NC', 'ND', 'NE', 'NF', 'NG', 'NH', 'NI', 'NJ', 'NK', 'NL', 'NM', 'NN', 'NO', 'NP', 'NQ', 'NR', 'NS', 'NT', 'NU', 'NV', 'NW', 'NX', 'NY', 'NZ', 'OA', 'OB', 'OC', 'OD', 'OE', 'OF', 'OG', 'OH', 'OI', 'OJ', 'OK', 'OL', 'OM', 'ON', 'OO', 'OP', 'OQ', 'OR', 'OS', 'OT', 'OU', 'OV', 'OW', 'OX', 'OY', 'OZ', 'PA', 'PB', 'PC', 'PD', 'PE', 'PF', 'PG', 'PH', 'PI', 'PJ', 'PK', 'PL', 'PM', 'PN', 'PO', 'PP', 'PQ', 'PR', 'PS', 'PT', 'PU', 'PV', 'PW', 'PX', 'PY', 'PZ', 'QA', 'QB', 'QC', 'QD', 'QE', 'QF', 'QG', 'QH', 'QI', 'QJ', 'QK', 'QL', 'QM', 'QN', 'QO', 'QP', 'QQ', 'QR', 'QS', 'QT', 'QU', 'QV', 'QW', 'QX', 'QY', 'QZ', 'RA', 'RB', 'RC', 'RD', 'RE', 'RF', 'RG', 'RH', 'RI', 'RJ', 'RK', 'RL', 'RM', 'RN', 'RO', 'RP', 'RQ', 'RR', 'RS', 'RT', 'RU', 'RV', 'RW', 'RX', 'RY', 'RZ', 'SA', 'SB', 'SC', 'SD', 'SE', 'SF', 'SG', 'SH', 'SI', 'SJ', 'SK', 'SL', 'SM', 'SN', 'SO', 'SP', 'SQ', 'SR', 'SS', 'ST', 'SU', 'SV', 'SW', 'SX', 'SY', 'SZ', 'TA', 'TB', 'TC', 'TD', 'TE', 'TF', 'TG', 'TH', 'TI', 'TJ', 'TK', 'TL', 'TM', 'TN', 'TO', 'TP', 'TQ', 'TR', 'TS', 'TT', 'TU', 'TV', 'TW', 'TX', 'TY', 'TZ', 'UA', 'UB', 'UC', 'UD', 'UE', 'UF', 'UG', 'UH', 'UI', 'UJ', 'UK', 'UL', 'UM', 'UN', 'UO', 'UP', 'UQ', 'UR', 'US', 'UT', 'UU', 'UV', 'UW', 'UX', 'UY', 'UZ', 'VA', 'VB', 'VC', 'VD', 'VE', 'VF', 'VG', 'VH', 'VI', 'VJ', 'VK', 'VL', 'VM', 'VN', 'VO', 'VP', 'VQ', 'VR', 'VS', 'VT', 'VU', 'VV', 'VW', 'VX', 'VY', 'VZ', 'WA', 'WB', 'WC', 'WD', 'WE', 'WF', 'WG', 'WH', 'WI', 'WJ', 'WK', 'WL', 'WM', 'WN', 'WO', 'WP', 'WQ', 'WR', 'WS', 'WT', 'WU', 'WV', 'WW', 'WX', 'WY', 'WZ', 'XA', 'XB', 'XC', 'XD', 'XE', 'XF', 'XG', 'XH', 'XI', 'XJ', 'XK', 'XL', 'XM', 'XN', 'XO', 'XP', 'XQ', 'XR', 'XS', 'XT', 'XU', 'XV', 'XW', 'XZ', 'YA', 'YB', 'YC', 'YD', 'YE', 'YF', 'YG', 'YH', 'YI', 'YJ', 'YK', 'YL', 'YM', 'YN', 'YO', 'YP', 'YQ', 'YR', 'YS', 'YT', 'YU', 'YV', 'YW', 'YZ', 'ZA', 'ZB', 'ZC', 'ZD', 'ZE', 'ZF', 'ZG', 'ZH', 'ZI', 'ZJ', 'ZK', 'ZL', 'ZM', 'ZN', 'ZO', 'ZP', 'ZQ', 'ZR', 'ZS', 'ZT', 'ZU', 'ZV', 'ZW', 'ZX', 'ZY', 'ZZ'.

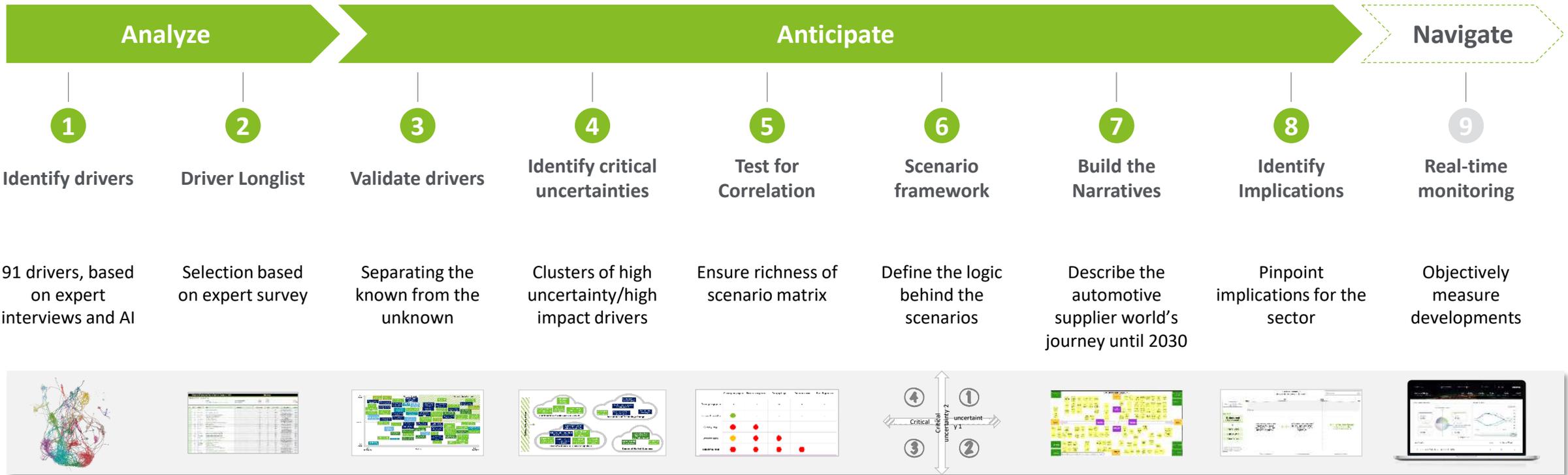
Focal Question:

What will the future of automotive suppliers look like in 2030?

How will the automotive supplier landscape develop in 2 years? In 5 years?

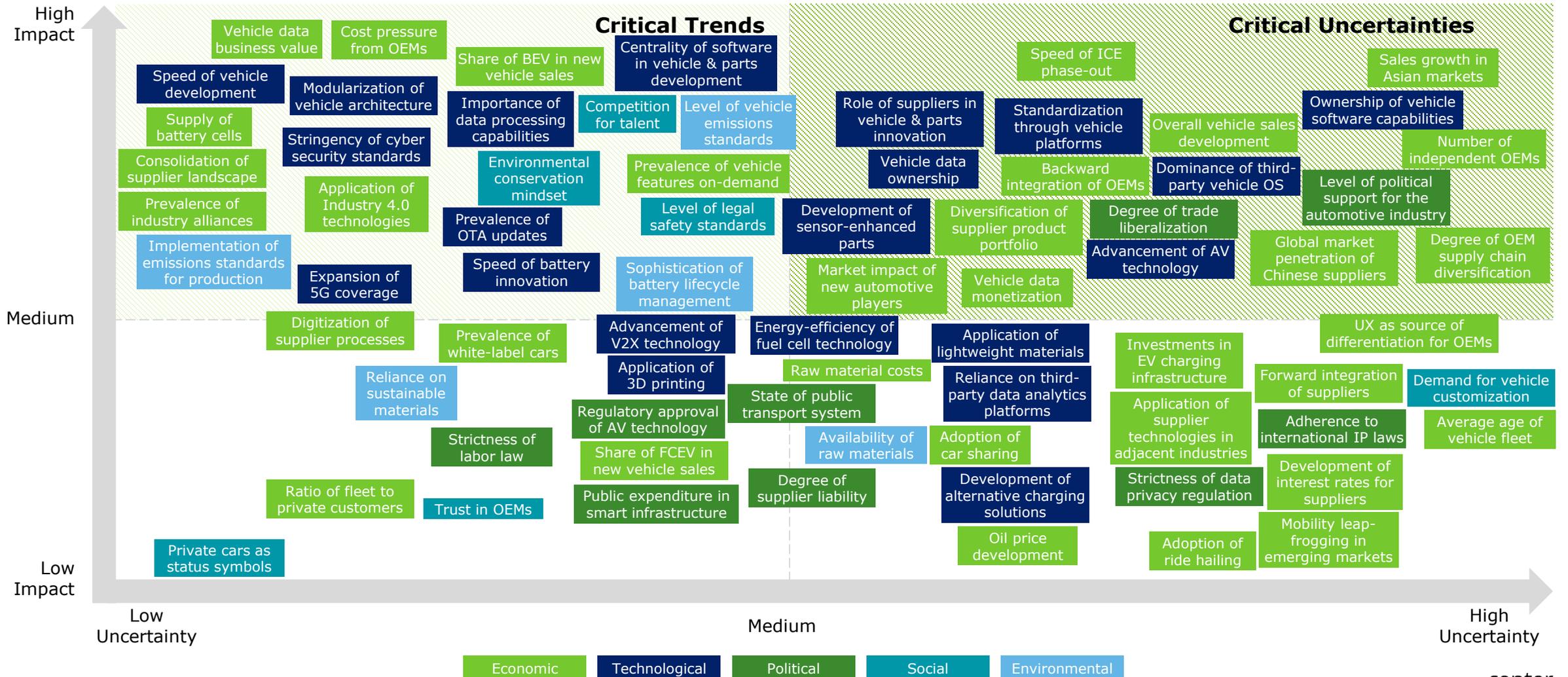
Scenario approach

To build extreme yet plausible scenarios, we identified relevant trends and had interactive sessions with sector experts



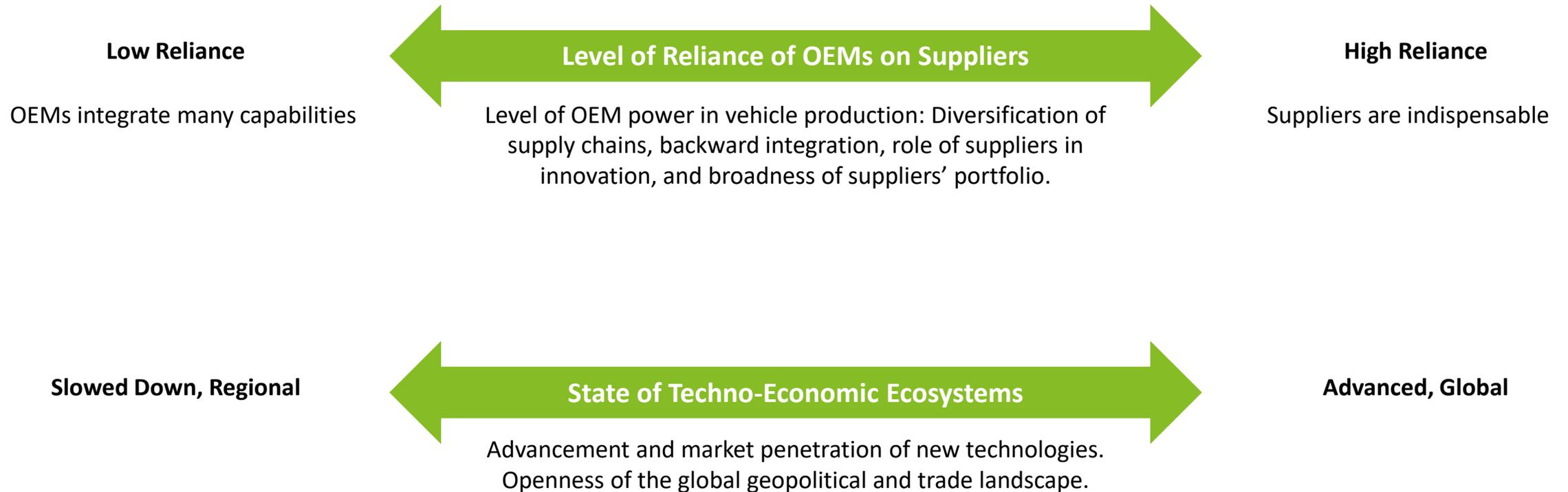
Driving forces survey results

The survey results provided insights into the most relevant drivers for scenario design



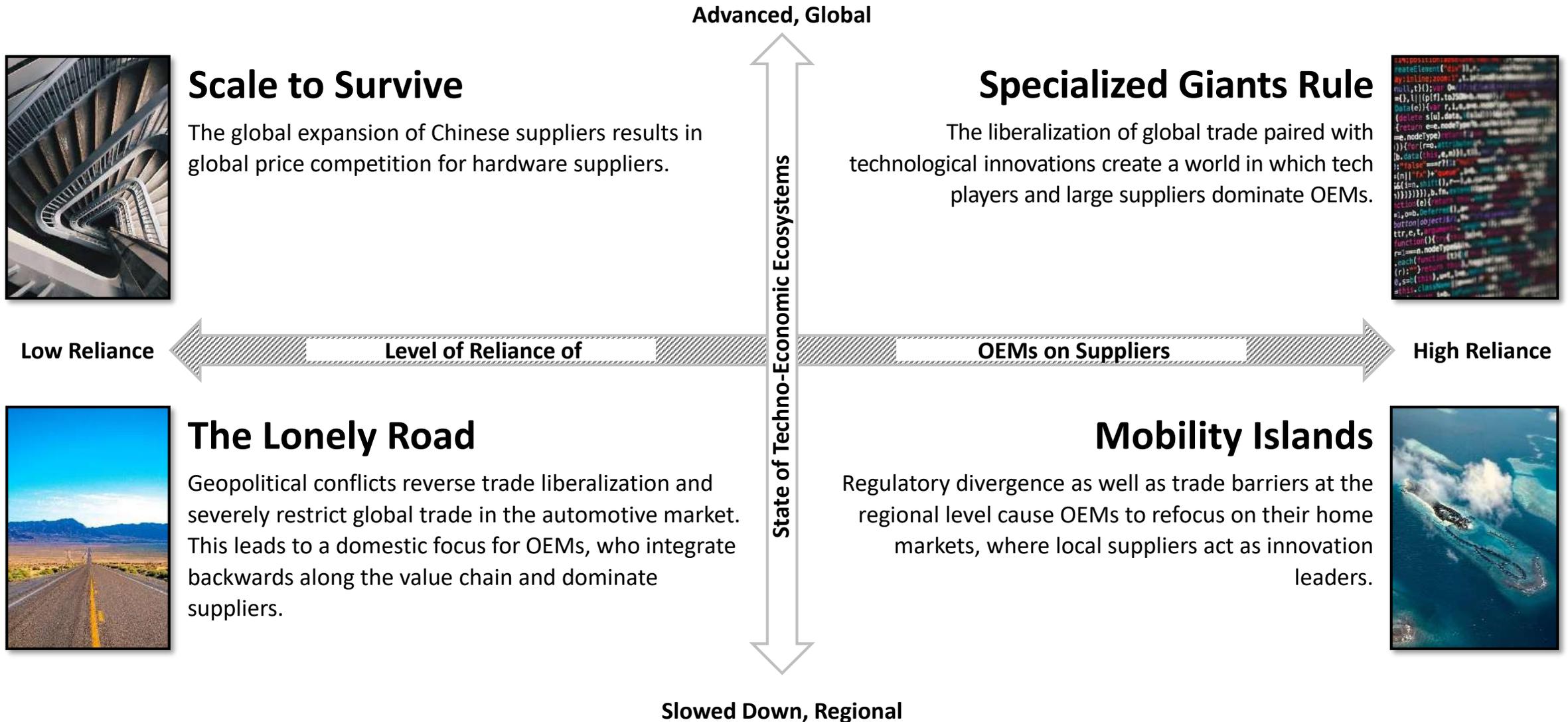
Critical uncertainty axes

The expert panel highlighted two uncertainties that will be critical for the development of the sector



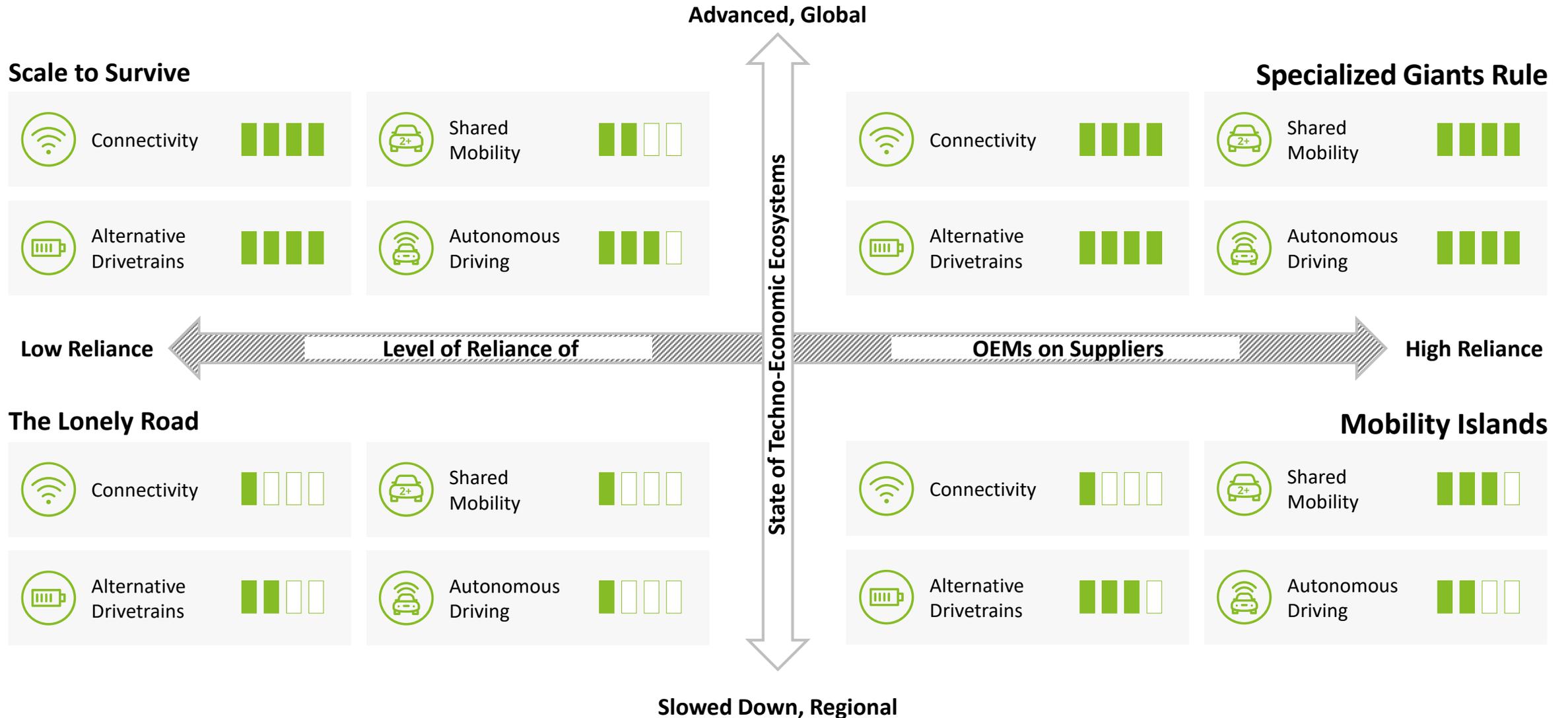
Automotive supplier scenarios 2030

We developed four scenarios for the Future of Automotive Suppliers 2030



Automotive supplier scenarios 2030 | Expression CASA Trends per Scenario

Technological advancement and adoption in the mass-market of each CASA trend

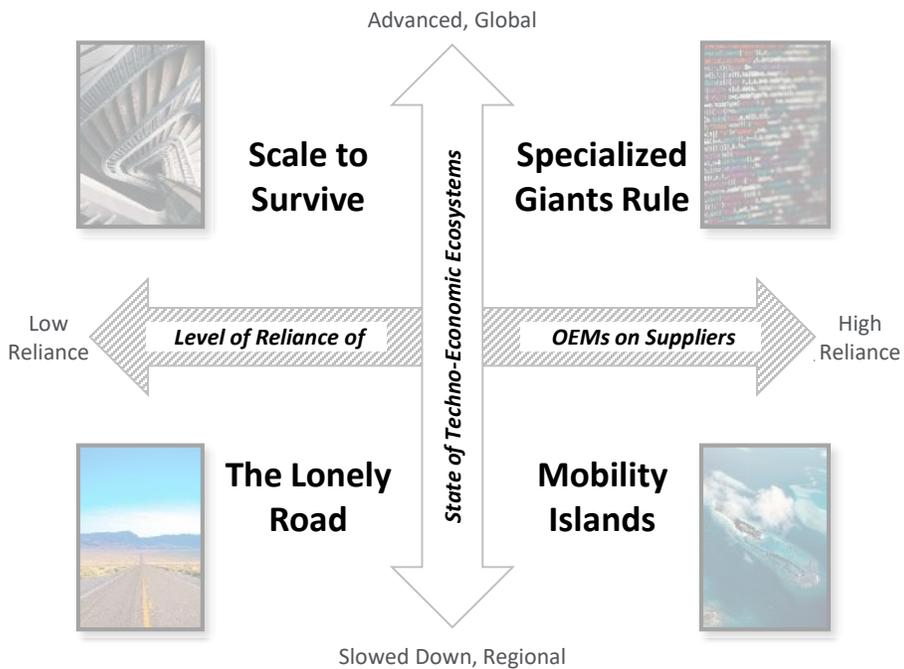


From scenario analysis to quantification

To decide upon actions on a tactical and strategic level it is key to quantify the impact of measures or transformation strategies for each specific scenario

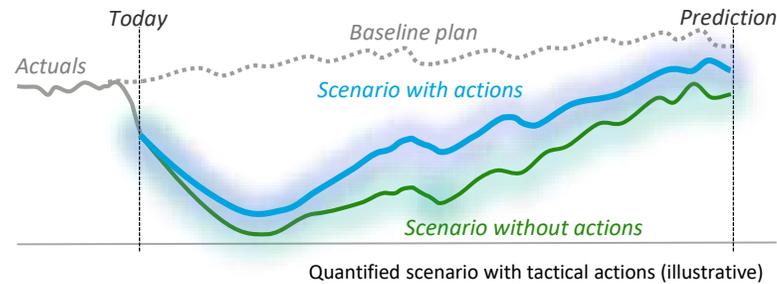
1 Future scenario analysis 2030

In which context will automotive suppliers need to maneuver in 2030?



Scenario Framework

2 Tactical quantification model (short-/ mid-term)



Short- to mid-term financial modelling including detailed financial projections and conclusions for a specific supplier

3 Strategic quantification model (long-term)



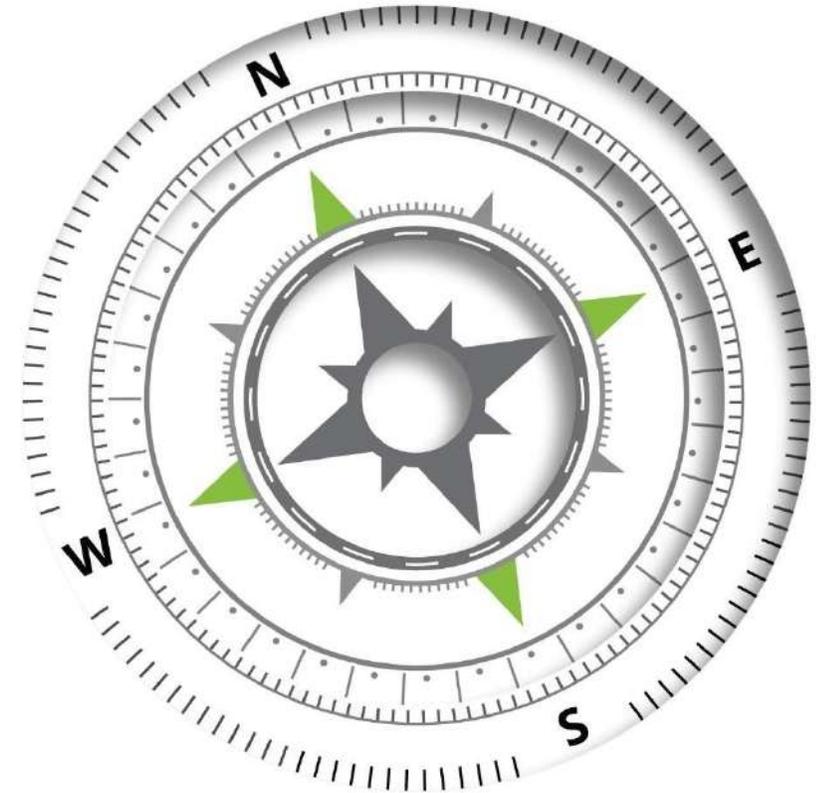
Shift of component profit pools until 2030

Long term modelling of market development and transformation strategies for a specific supplier

Agenda

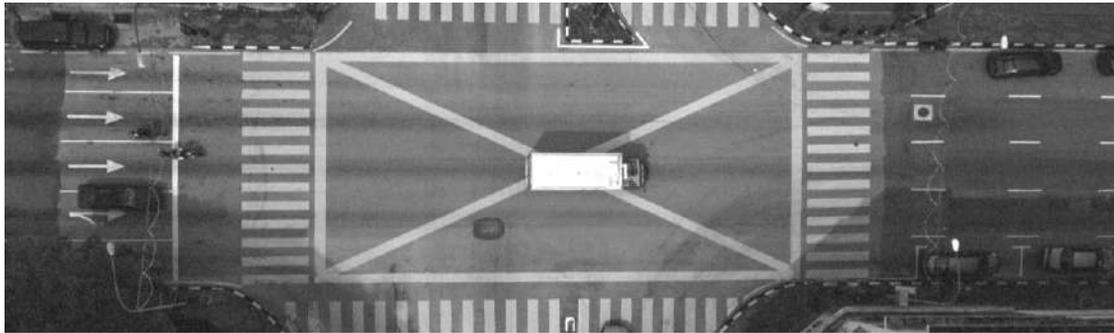
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Tactical quantification supplier case | Introduction

Using the scenarios approach we simulated the financial impact of concrete activities for an automotive supplier, heavily impacted by COVID-19 and the industry disruption



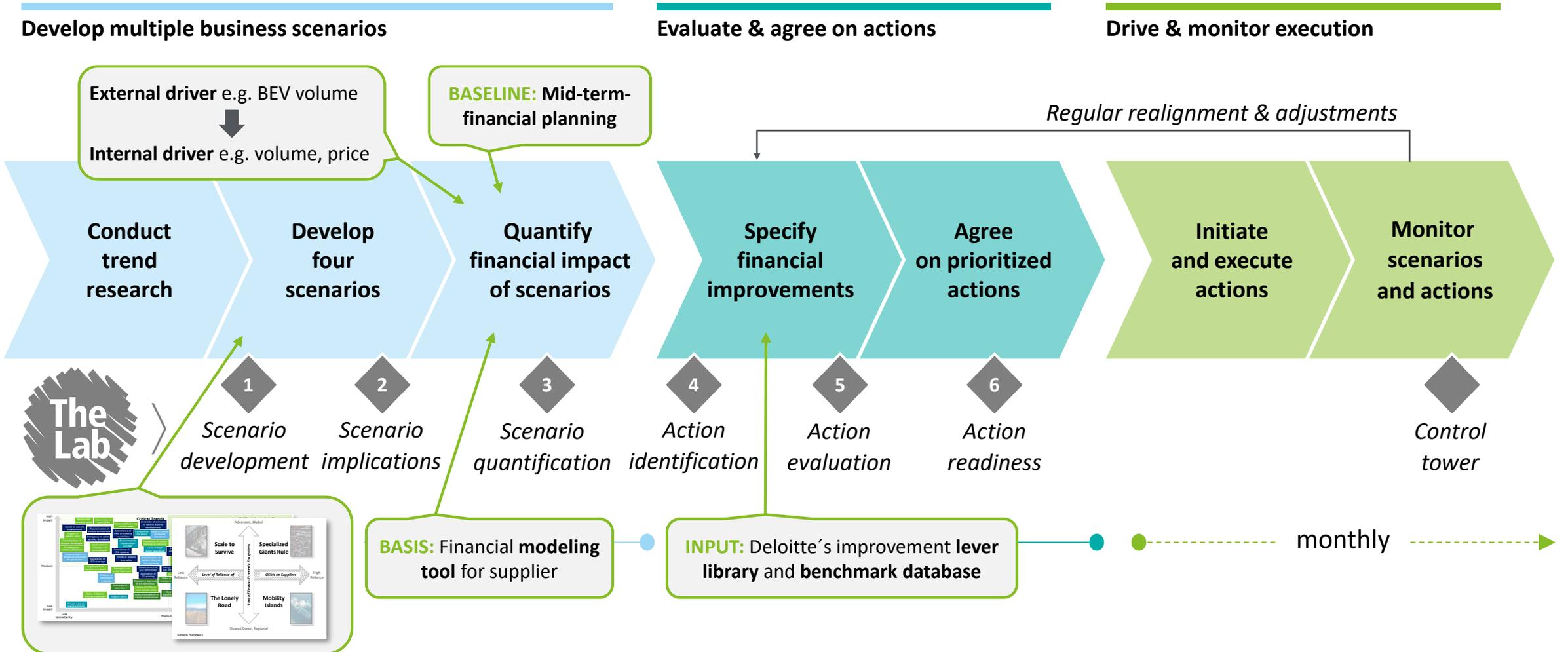
- Heavy **slump** in global **vehicle sales** due to COVID-19 with anticipated slow recovery
- **Ongoing transformation** of business to cope with disruption (e.g. alternative drivetrains, connectivity)
- Current **planning** approach **focused on a single view** of the future with outdated information

Key questions for scenario & action planning

- 1 *What will the future of our industry look like in 2 and 10 years?*
- 2 *What is the financial impact of identified scenarios?*
- 3 *Which actions are required to cope with the scenarios?*

Tactical quantification supplier case | Approach

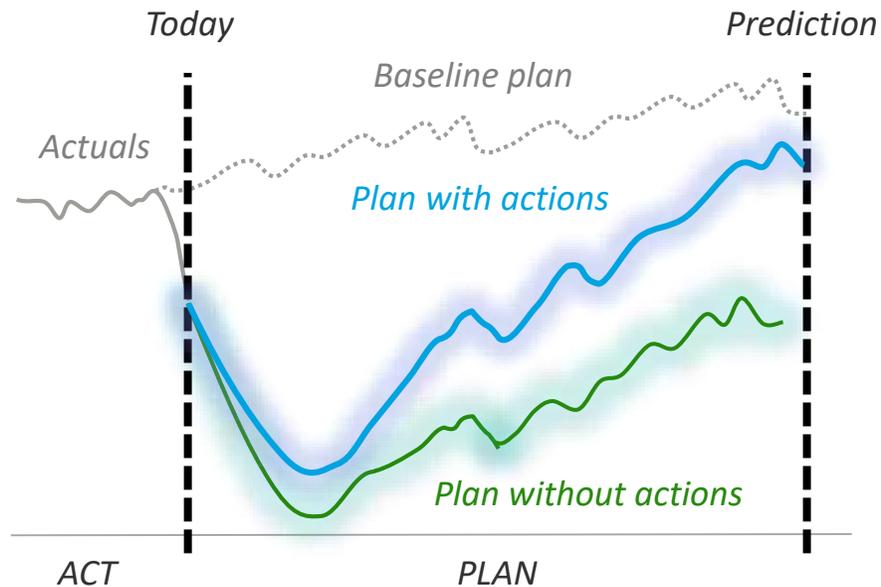
A lab-based approach from trend research to action prioritization was conducted within approx. seven weeks



Tactical quantification supplier case | Scenario quantification and actions

Underlying external drivers of scenarios are linked to driver-based financial model and actions to cope with different scenarios are identified and quantified

Driver validation and definition of action



Lessons learned

..for quantification

- Around **15 financial drivers and 5 planning objects** sufficient for **modeling 80%** of the business model
- **Expert** knowledge **essential** for translation of external to internal drivers
- **Pre-configured planning and simulation solution** helpful for quick financial modeling
- **Corridors** of likely deviations applied to **reflect degree of uncertainty**

...for action definition

- **Ideation** of actions along **E2E supply chain** important for holistic view
- Use **action library** as basis for **quick identification** of 'standard' actions
- Coverage of actions with **short-term** and **mid-/ long-term** impact needed

Tactical quantification supplier case | Quantification tool

Lever databased and pre-configured planning tool used to identify and quantify actions for different scenarios

2

Key results achieved for scenario "Specialized Giant Rule" on existing supplier plan in FY21

- **Sales slump** between 20% and 30% compared to initial plan
- **Profitability (EBIT) collapse** by up to -180%
- Actions initiated to **reset ~50%** of profitability decline
- Major impact in FY21 through **supplier renegotiations**
- Last year (FY20) strong positive impact by 'Kurzarbeit'

Design season

1

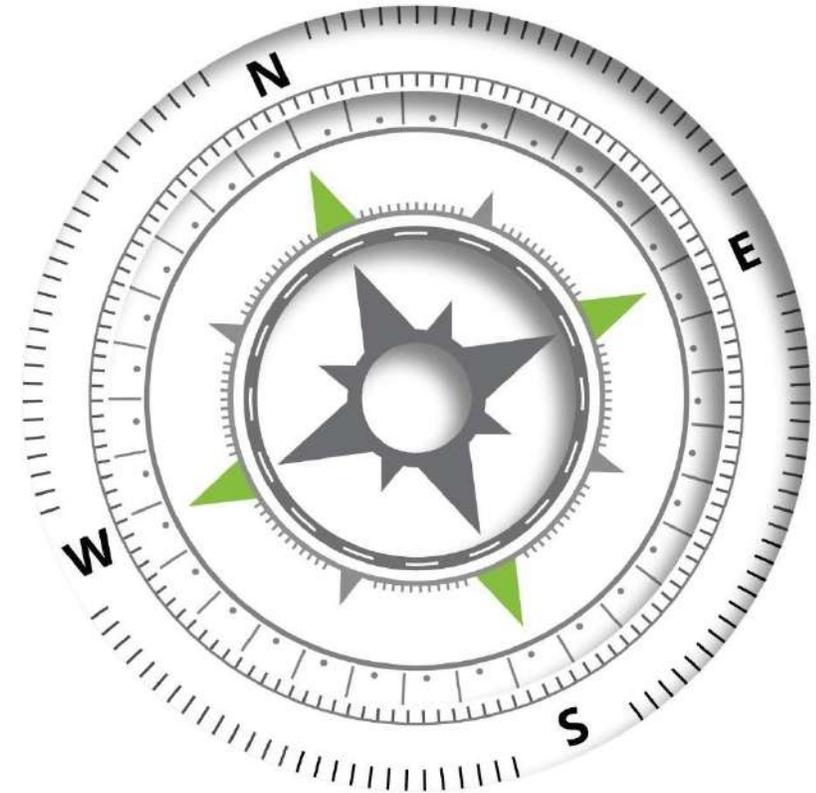
Update and breakdown of end values

Review overall results and adjust

Agenda

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Scenario-based thinking using a transformation model

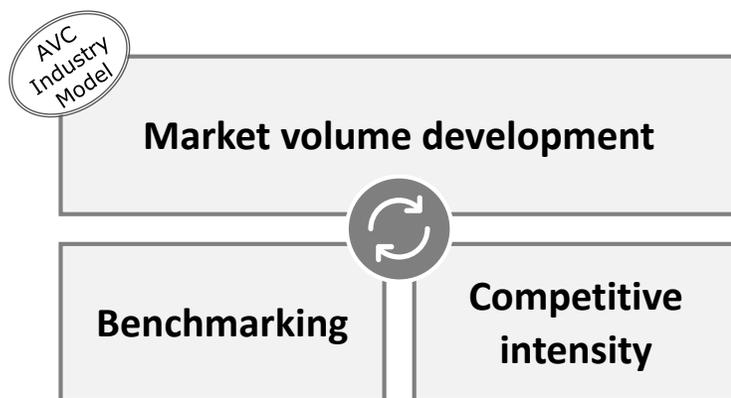
Our financial model includes a market forecast and allows to model a supplier within his market to understand transformation options – for each future supplier scenario

Supplier Financial Transformation Model – Illustrative structure



Market view

Volume and profitability development for 19 component clusters



Profit Pool development



Supplier view

Specific supplier doing business in one or several component clusters

1 | Base Case

Simulation of market developments

(considering inputs like cost structure, investment needs, debt structure, asset utilization, etc.)

2 | Transformation Case

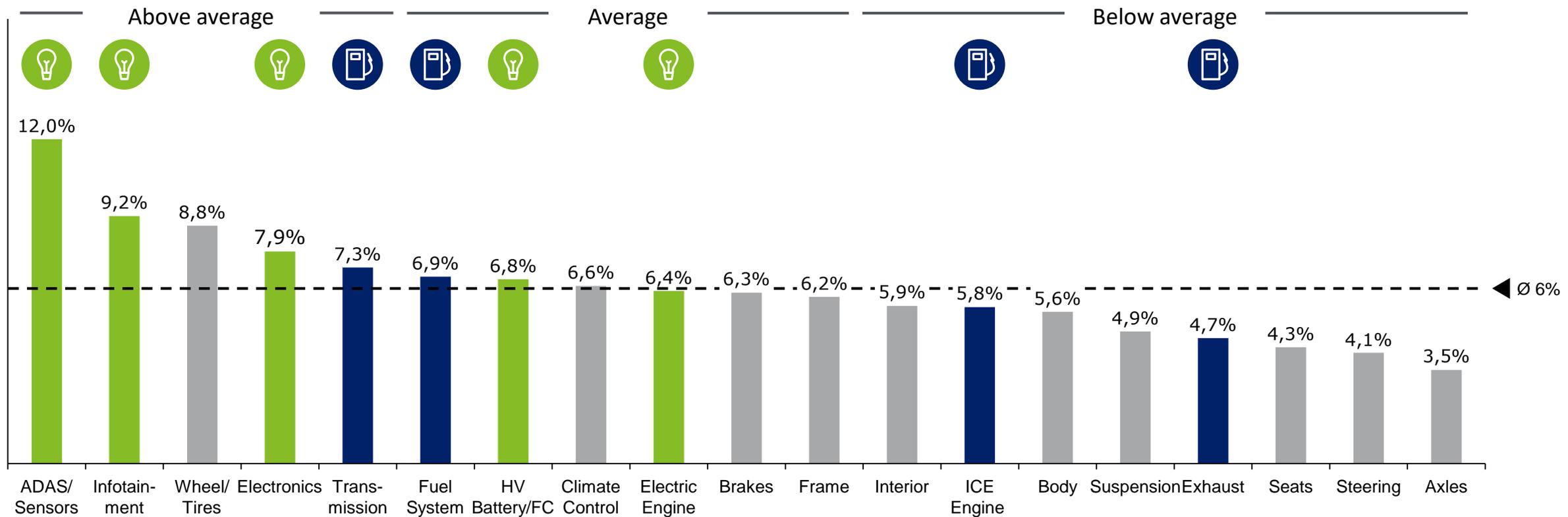
Simulation of transformation strategies

P&L, Balance Sheet, Liquidity development

Market view | Current profitability

Our benchmarking of 500 suppliers is the basis to model profit pool development

Overview of average EBIT margins per profit pool



"Emerging technologies"

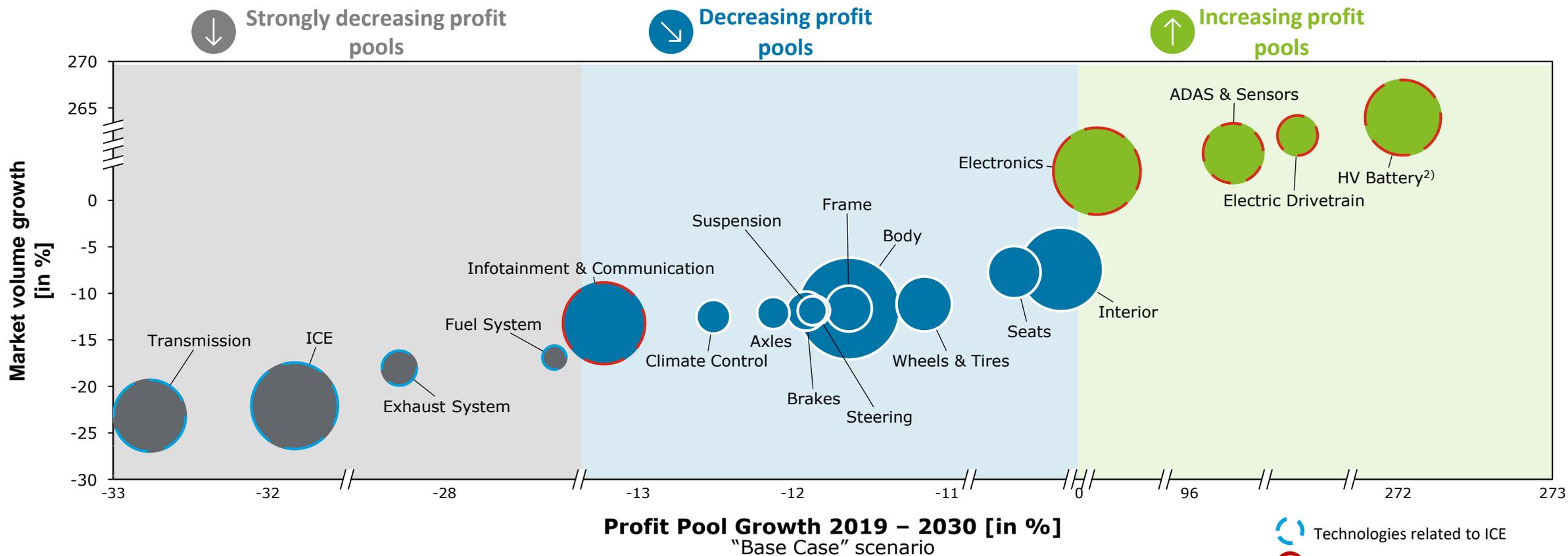


Technologies related to ICE

Market view | Profit pools

The changes in the automotive value chain result in a shift of profit pools – there are winners and losers

Profit pools development of component clusters



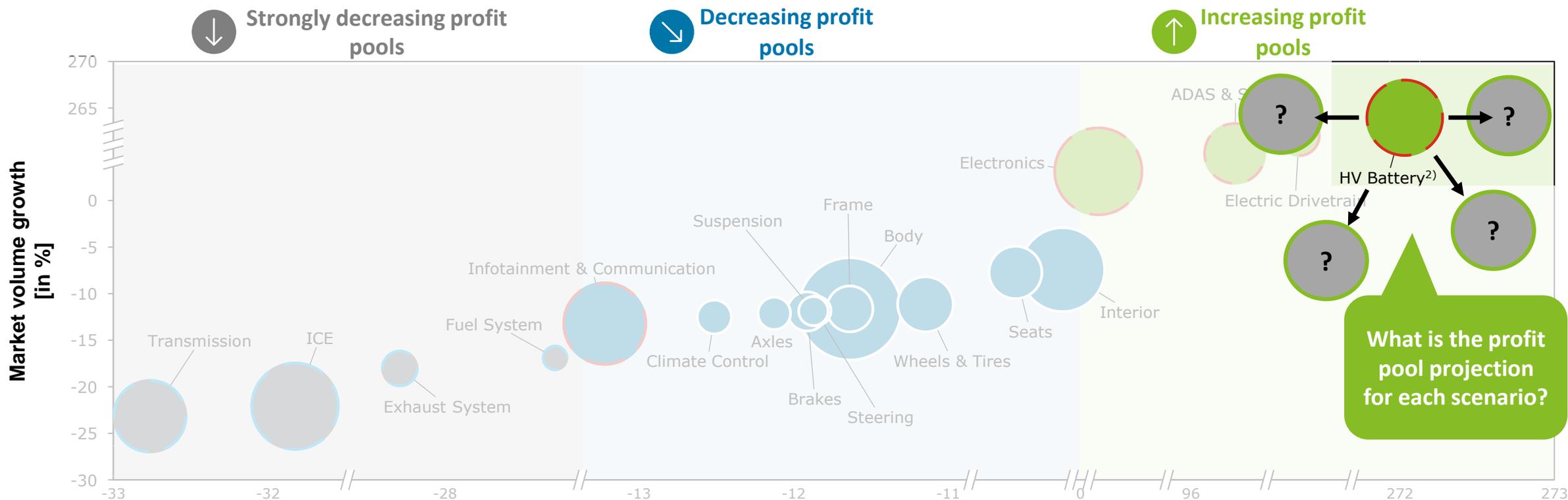
1) Bubble sizes indicate the market volumes 2030 (Germany, NAFTA, China); excluding inflation and AM

2) HV Battery Cluster also incl. Fuel Cell

Market view | Profit pools

The changes in the automotive value chain result in a shift of profit pools – there are winners and losers

Profit pools development of component clusters



What is the profit pool projection for each scenario?

Profit Pool Growth 2019 – 2030 [in %]
"Base Case" scenario

- Technologies related to ICE
- "Emerging technologies"

1) Bubble sizes indicate the market volumes 2030 (Germany, NAFTA, China); excluding inflation and AM

2) HV Battery Cluster also incl. Fuel Cell

Scenario-based thinking using a transformation model

A model-based "on-the-fly" simulation of the transformation strategies allows a direct financial impact evaluation and definition of a feasible transformation sequence

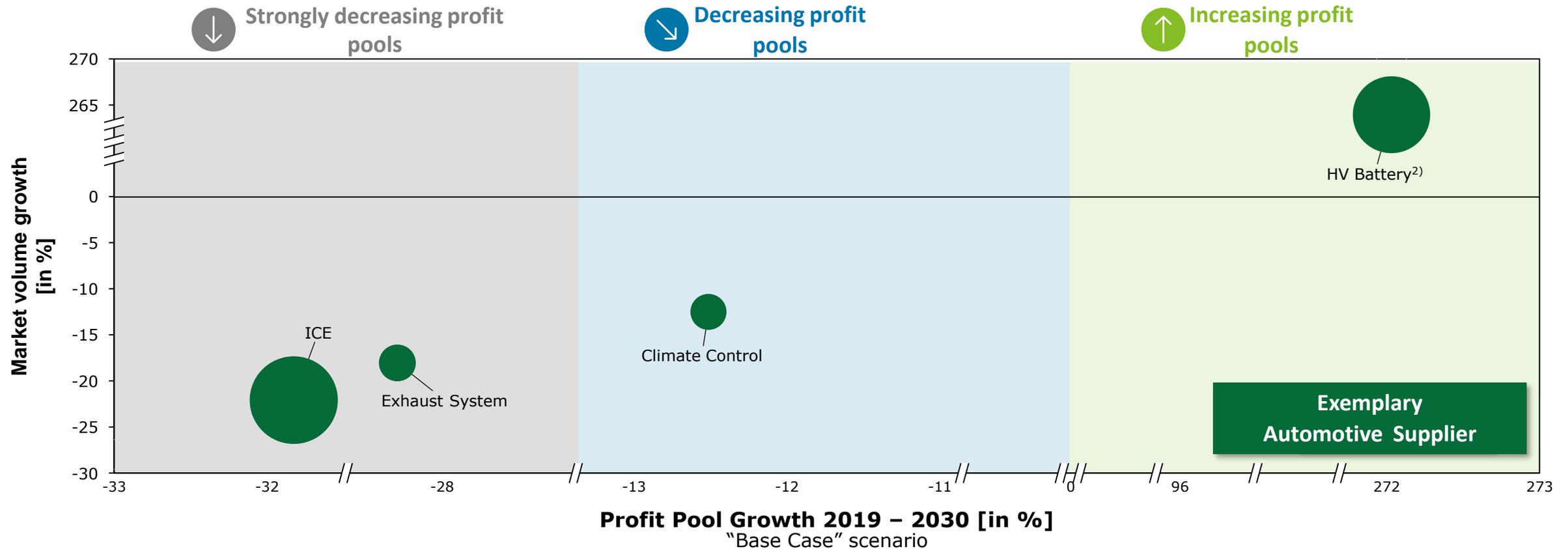
Supplier Financial Transformation Model – Illustrative structure



Market view | Profit pools

Our case study supplier is broadly positioned, but a significant share is targeting decreasing profit pools

Profit pools development of component clusters



1) Bubble sizes indicate the market volumes 2030 (Germany, NAFTA, China); excluding inflation and AM

2) HV Battery Cluster also incl. Fuel Cell

Supplier view | Base case: Revenue and EBIT development

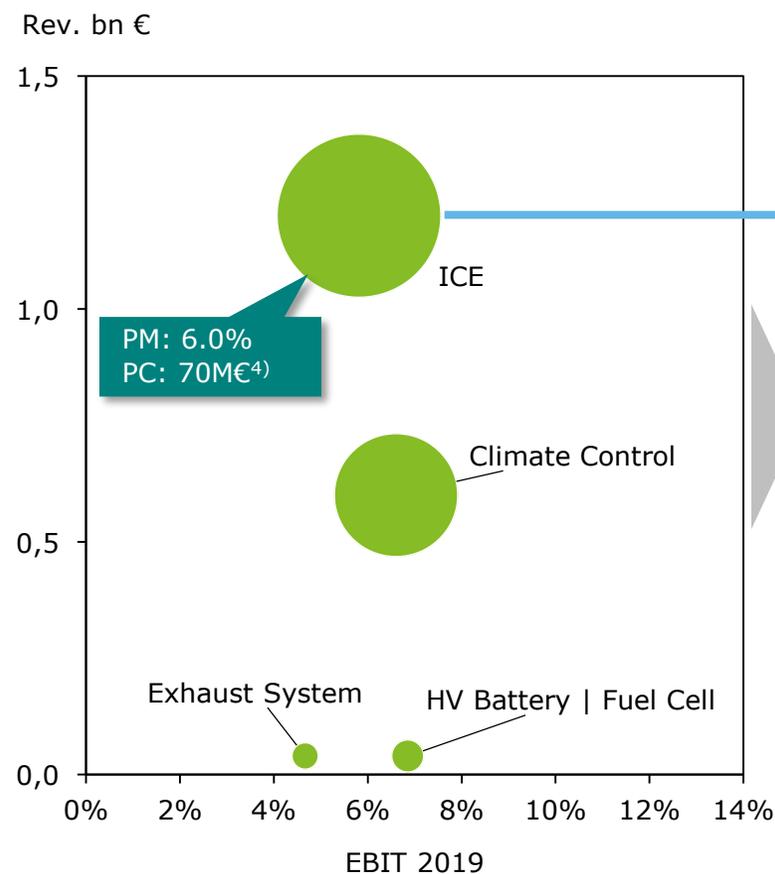
How to compensate for a total profit loss of ~67M€ for ICE?

Base case ICE – outlook 2030

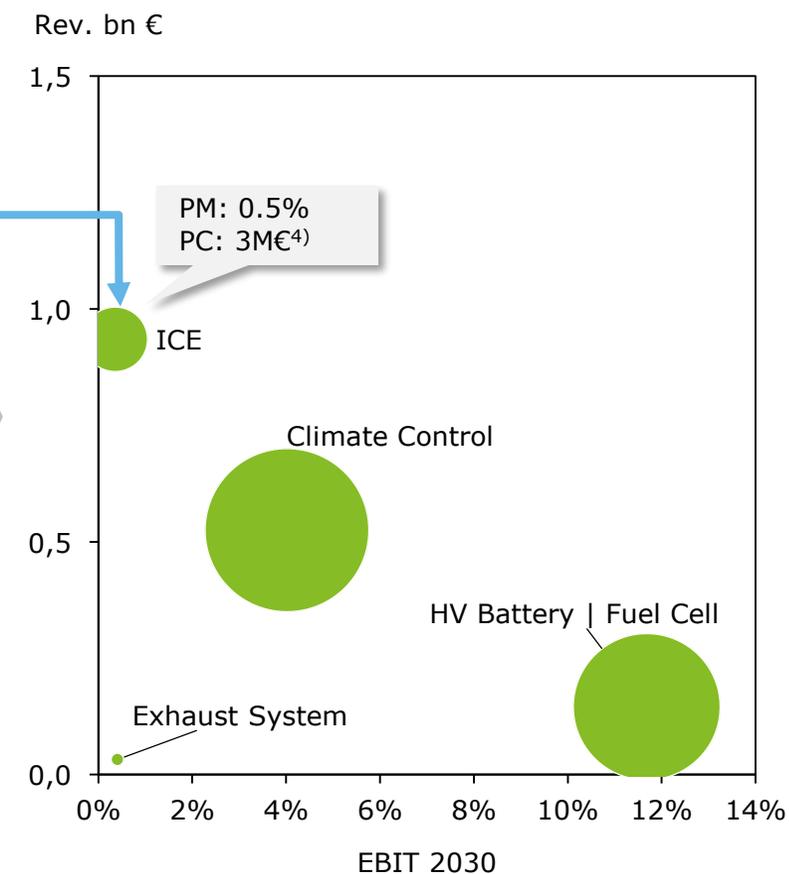
- Slight decrease in ICE revenue from 1.2bn€ to 0.9bn€
- ICE decreasing profit margin from ~6.0% to ~0.5%
- ICE profits decreasing (from ~70M€ to ~3M€)

How to keep up profits for mastering the transformation into new revenue and profit streams?

Revenue split and EBIT margin 2019



Revenue split and EBIT margin 2030



Supplier view | Overview of transformation strategies

We roughly simulated three basic strategies assigned to the ICE cluster



Harvest

- **„Milking“ the current declining core business** to finance required investments for the development of new growth areas
- **Cost savings** of the supplier **must exceed the price downs expected by OEMs**
- **Radical and comprehensive improvements** of the cost base e.g. footprint optimization, outsourcing, etc.
- **Reduce maintenance investments** in assets (increase time of use)



Consolidate

- Aiming at **driving market consolidation** by actively crowding out competitors in a fiercely competitive landscape (“last-man-standing”)
- **Gaining market share** and keeping existing plants utilized in falling markets requires **additional volume**, while following a volume strategy in declining markets requires **aggressive pricing**
- **Acquisition** of competitors



Portfolio Shift

- Aiming at **growing market clusters** by actively shifting the balance of the product portfolio into emerging technologies
- **Acquisition** of suppliers for emerging technologies to gain market shares in new clusters
- **Support the financing** of the acquisition activities **through an harvest** strategy for declining business

Supplier view | Transformation option ICE: Harvest strategy

Leveraging current market position through operations excellence driven cost reduction and reduction of R&D costs increase the profit by 40M€

“Harvest” strategy

Reduce cost base as-of FY22 until FY28: **-3%**
(-25M€)

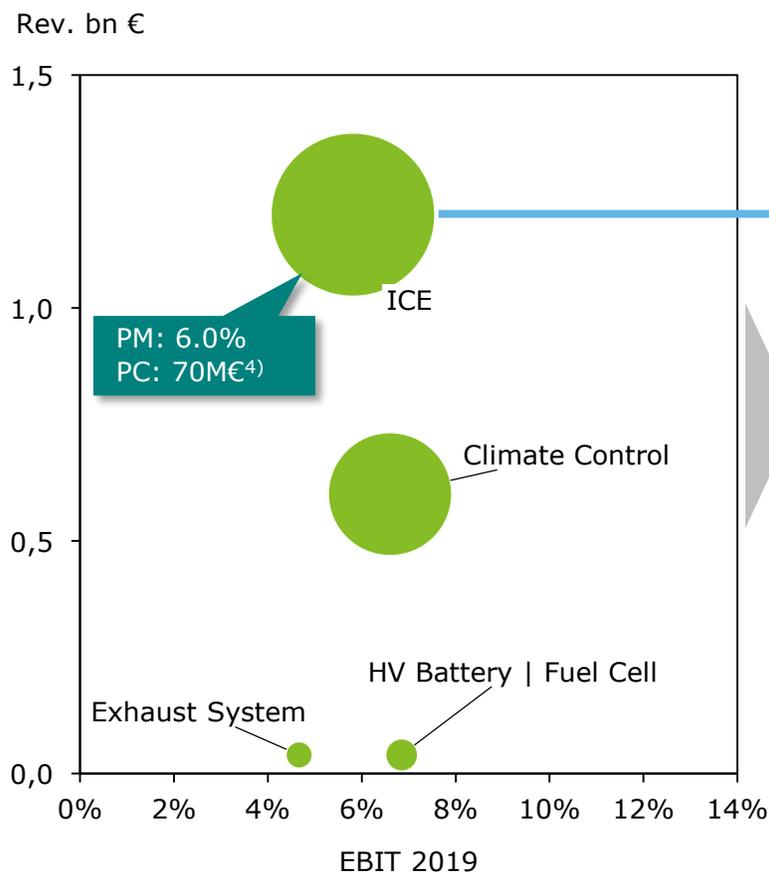
- Material cost
- Personnel cost
- Other operating cost (automate, digitize, optimize)
- ...

Reduce R&D cost as-of FY22: **-30%**
(-8M€)

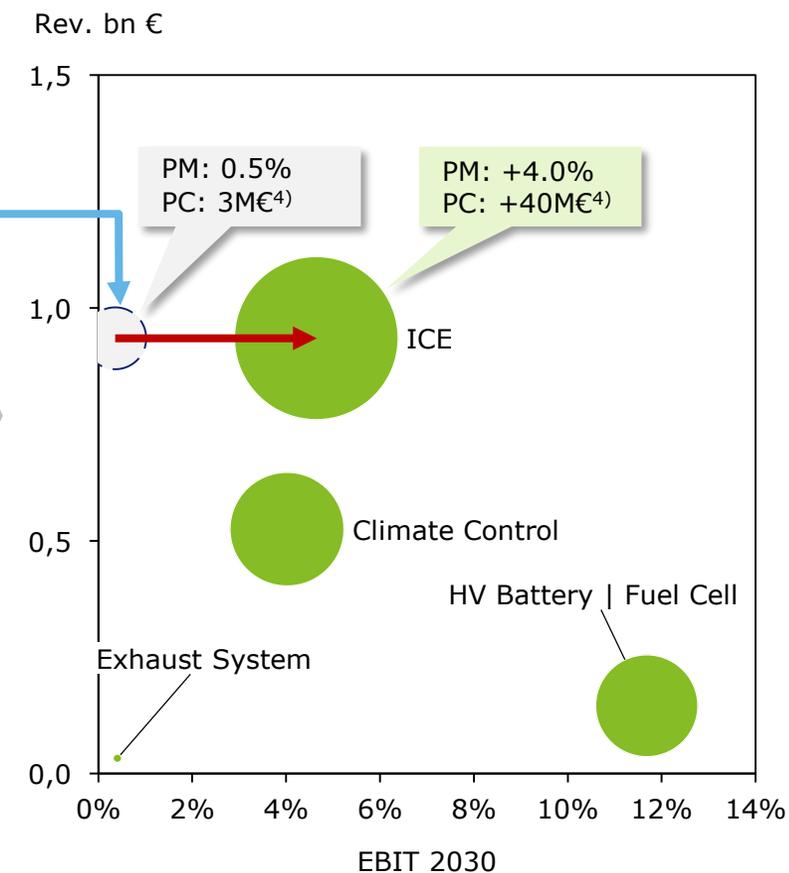
- Noticeable R&D reduction
- Maintaining innovation power to cope with strict 2025/2030 CO₂ targets (low risk)
- Maintaining position as technology leader
- Harvest ICE technology as long as possible

Reduce yearly maintenance investment in assets **-20%**
(use machinery longer than depreciation horizon)

Revenue split and EBIT margin 2019



Revenue split and EBIT margin 2030



Supplier view | Transformation option ICE: Consolidation strategy

Increasing strength of current market position and market share through a focus on consolidation & leveraging synergies increase profit by 30M€

“Consolidation” strategy

Acquire global ICE supplier as-of FY22: **+300M€**

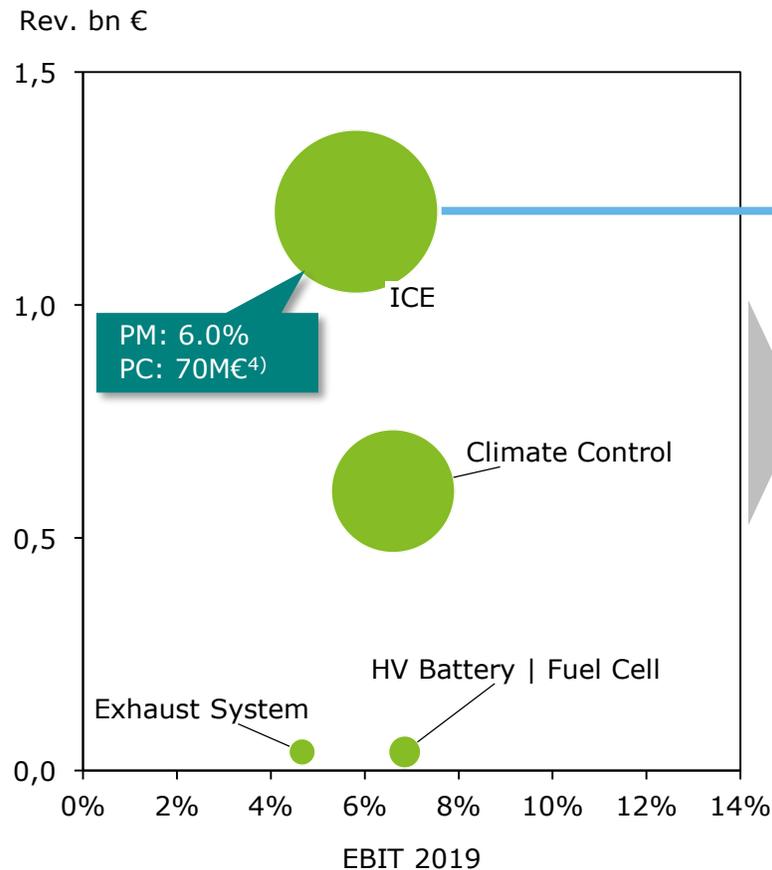
Synergies ~1.5% of combined base as-of FY23: **-20M€**

- Profiting from market consolidation by leveraging synergies – weaker effect
- Smaller investment, lower risk but lower financial impact

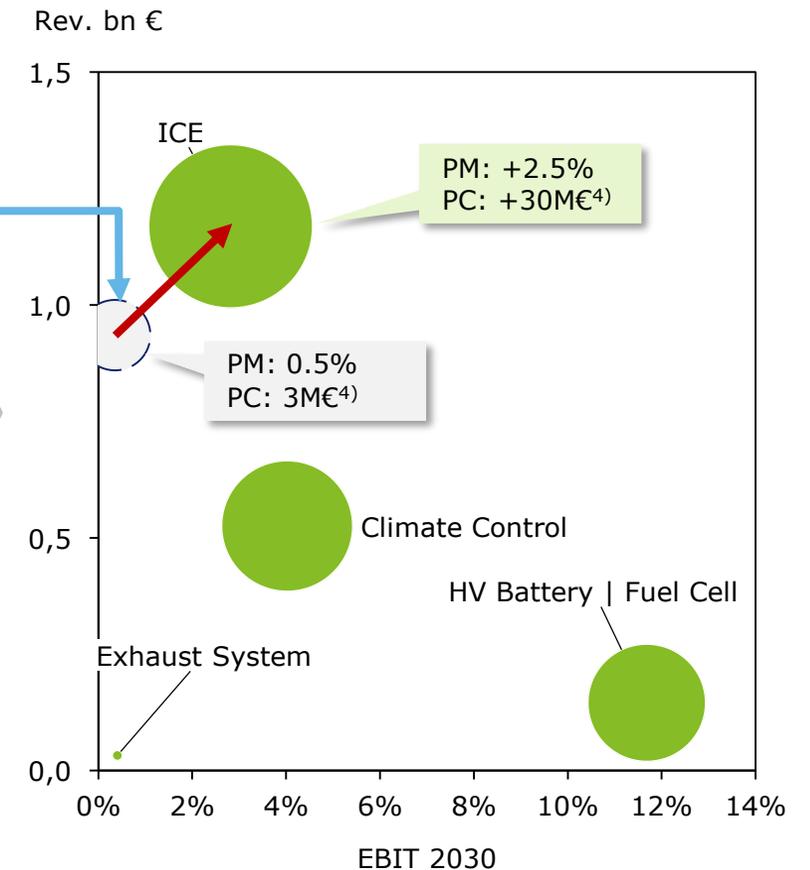
Reduce R&D cost of own ICE as-of FY22 and purchased supplier from FY23: **-30%** **(-10M€)**

- Noticeable R&D reduction
- Maintaining innovation power to cope with strict 2025/2030 CO₂ targets (low risk)
- Maintaining position as technology leader

Revenue split and EBIT margin 2019



Revenue split and EBIT margin 2030



Supplier view | Transformation option ICE: Portfolio shift

Expanding current product portfolio with investments in HV Battery | Fuel Cell technology while following a Harvest strategy for ICE increases overall profit by 75M€

“Portfolio Shift” strategy

Harvest in ICE as of FY22

Reduce cost base as-of FY22 until FY28: **-3%**
(-25M€)

Reduce R&D cost as-of FY22: **-20%**
(-8M€)

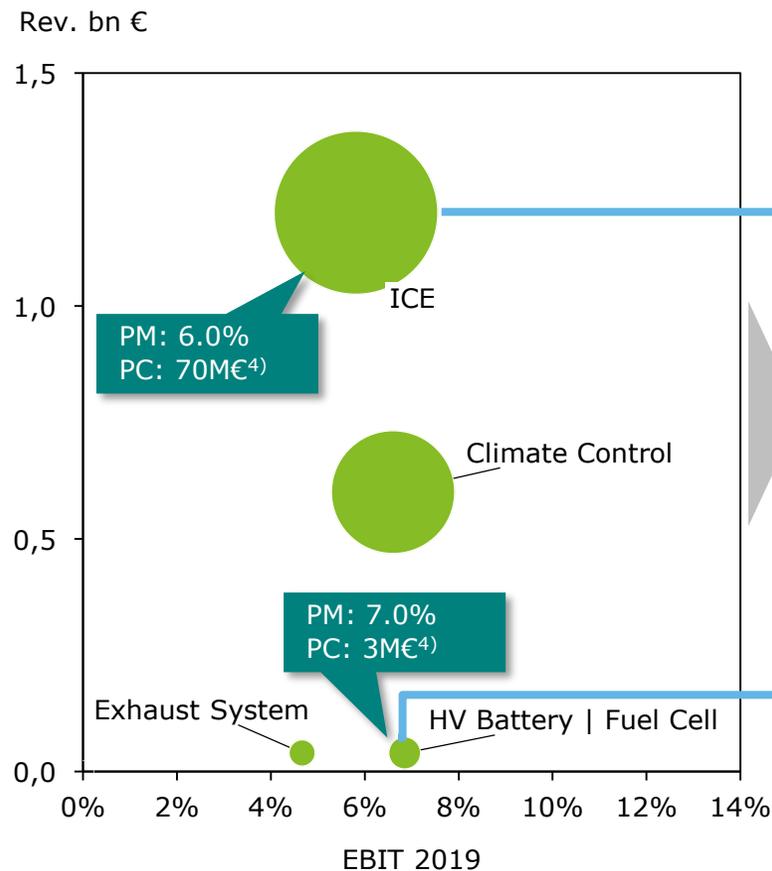
- Use harvest strategy for ICE to finance a larger footprint in electric drivetrain technology
- Gradually shift core business

Reduce yearly maintenance investment in assets **-20%**
(use machinery longer than depreciation horizon)

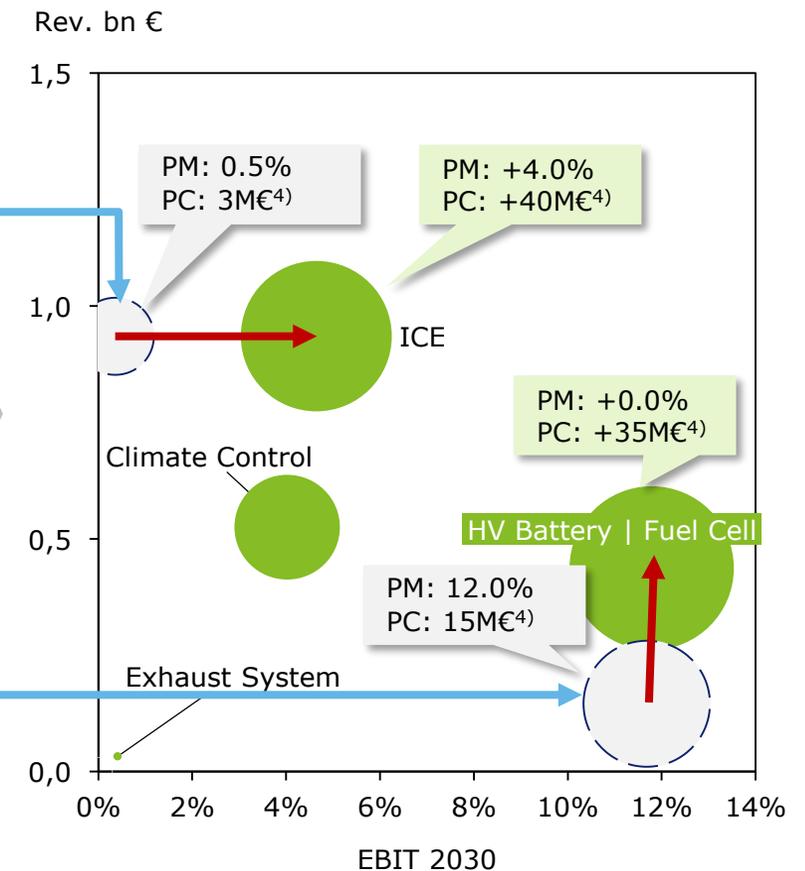
Invest in HV Battery | fuel cell company in FY22: **+80M€**

- Targeted investment in select core technologies
- Expand product portfolio organically

Revenue split and EBIT margin 2019



Revenue split and EBIT margin 2030

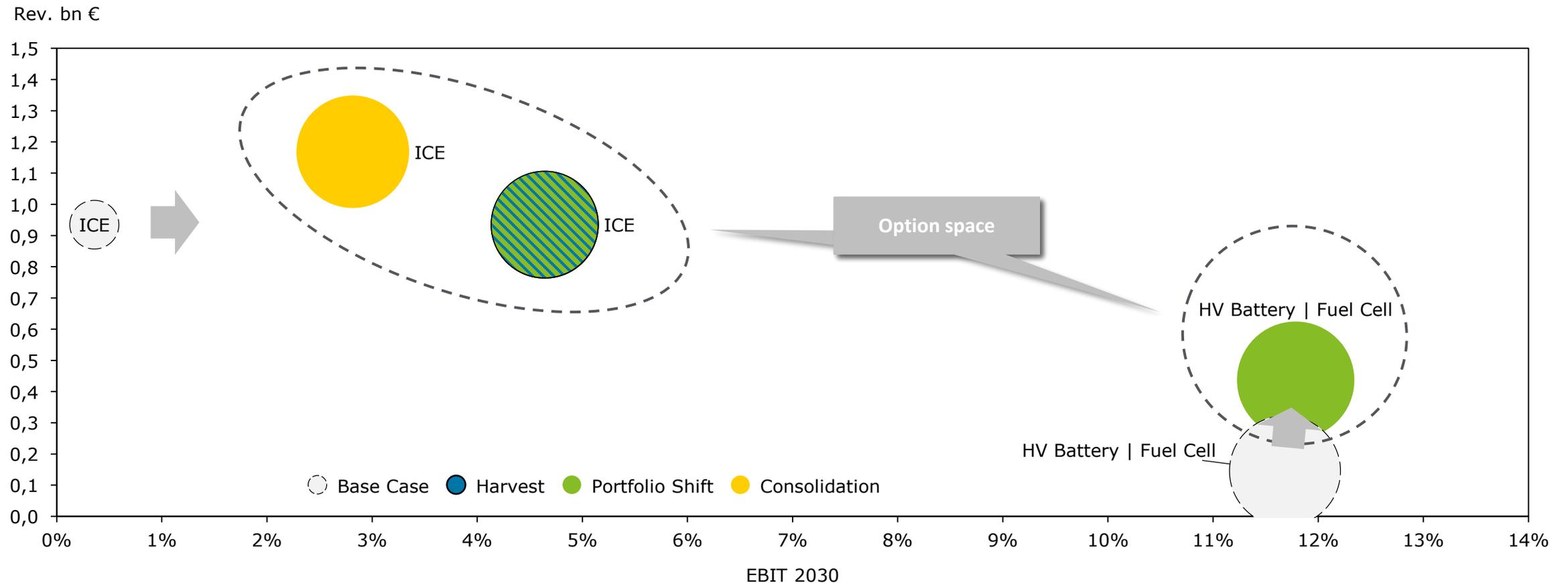


Supplier view | Transformation options: Strategy overview

The simulated strategies span an option space indicating possible target states

For illustration purpose: Indicative and assumption based, for an exemplary automotive supplier

Revenue split and EBIT margin 2030



The future of the automotive supplier industry

Four industry scenarios for 2030

**We have scenarios,
quantification models and
the data-basis – let's
analyze your case and find
the best strategy for your
business!**

Your Contacts

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