



IHS Markit™

AUTOMOTIVE

Luxury/Premium Portfolio Expansion in light of Regulation

26 January 2017 | Frankfurt, Germany

Thomas Meininger,
Senior Manager, IHS Advisory Services
thomas.meininger@ihsmarkit.com



Changing market framework causes a shift in information requests in the premium/luxury segment



How will **markets develop** and what are key drivers?



How does **regulatory pressure** and changing customer requirements affect the segment?



How much **volume opportunity** exists for a new vehicle or version?



Which **alternative powertrain applications** will emerge?

How do increasing **product offers and competition** shape the segment?

Who are the **segment benchmarks** for new technology and **powertrain** adoption?

Presentation Agenda

1

Luxury Segment

- Market insights and trends
- Segment development in light of regulation

2

Premium High Performance Segment

- Market insight and trends
- Segment development in light of regulation

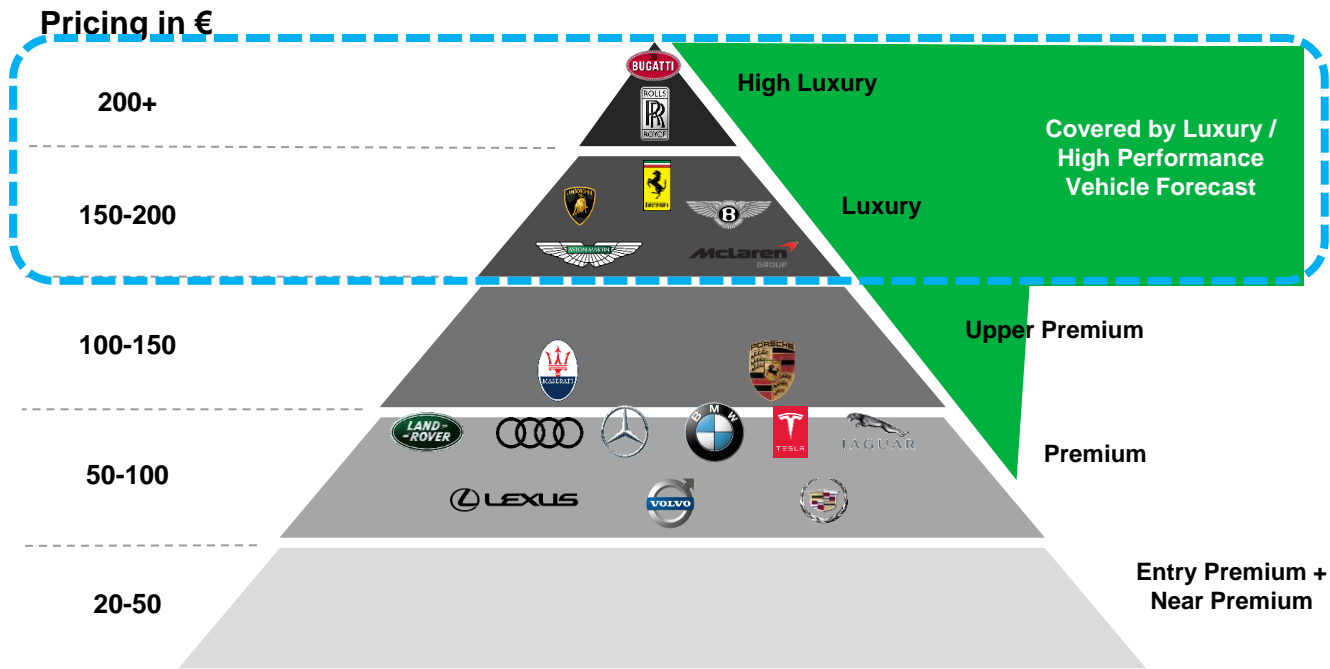
3

Summary and Key Takeaways

Luxury/ Premium Segment View

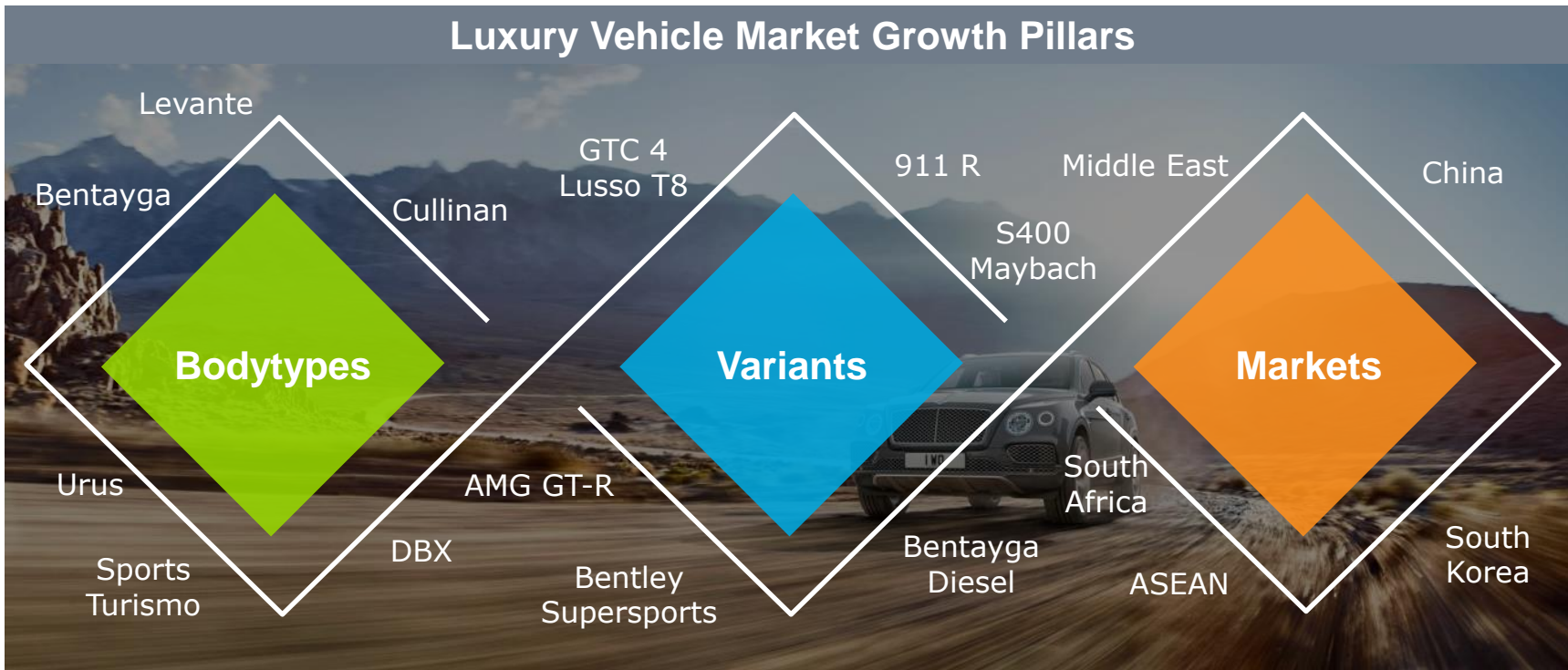
Growing IHS Forecast and Analysis Coverage

Market Clustering



Growth Drivers

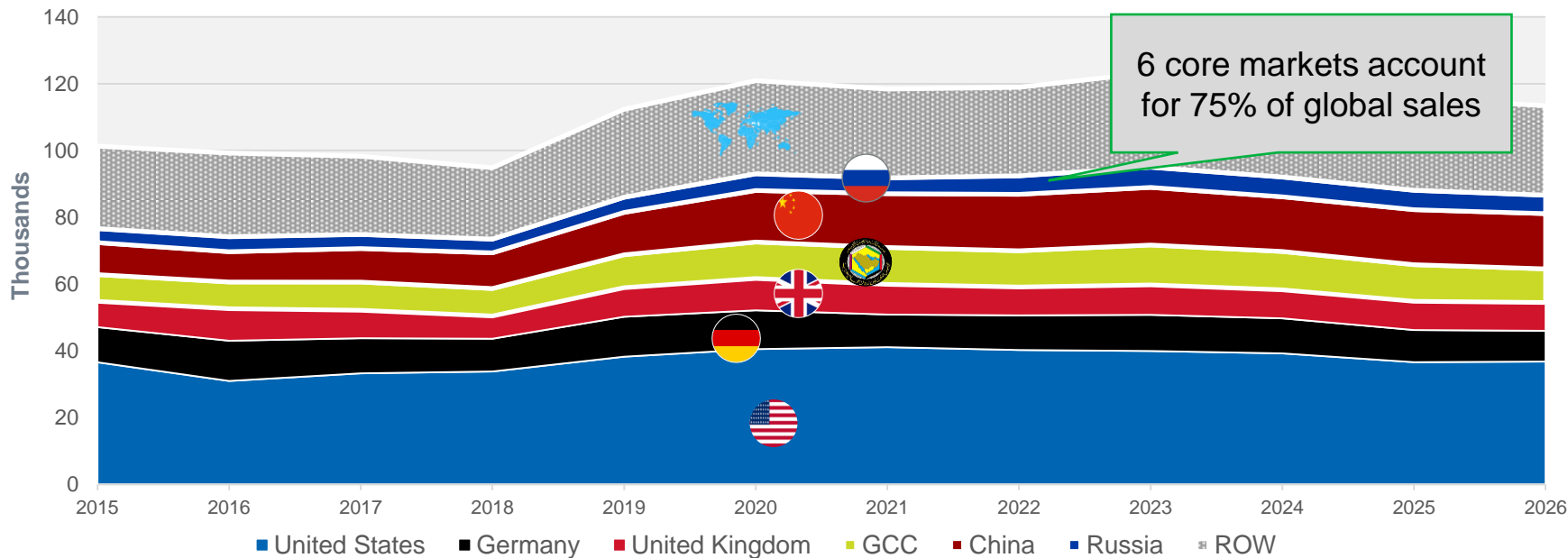
Product expansion appeals to growing rich with multi-car ownership



Luxury Forecast Insight

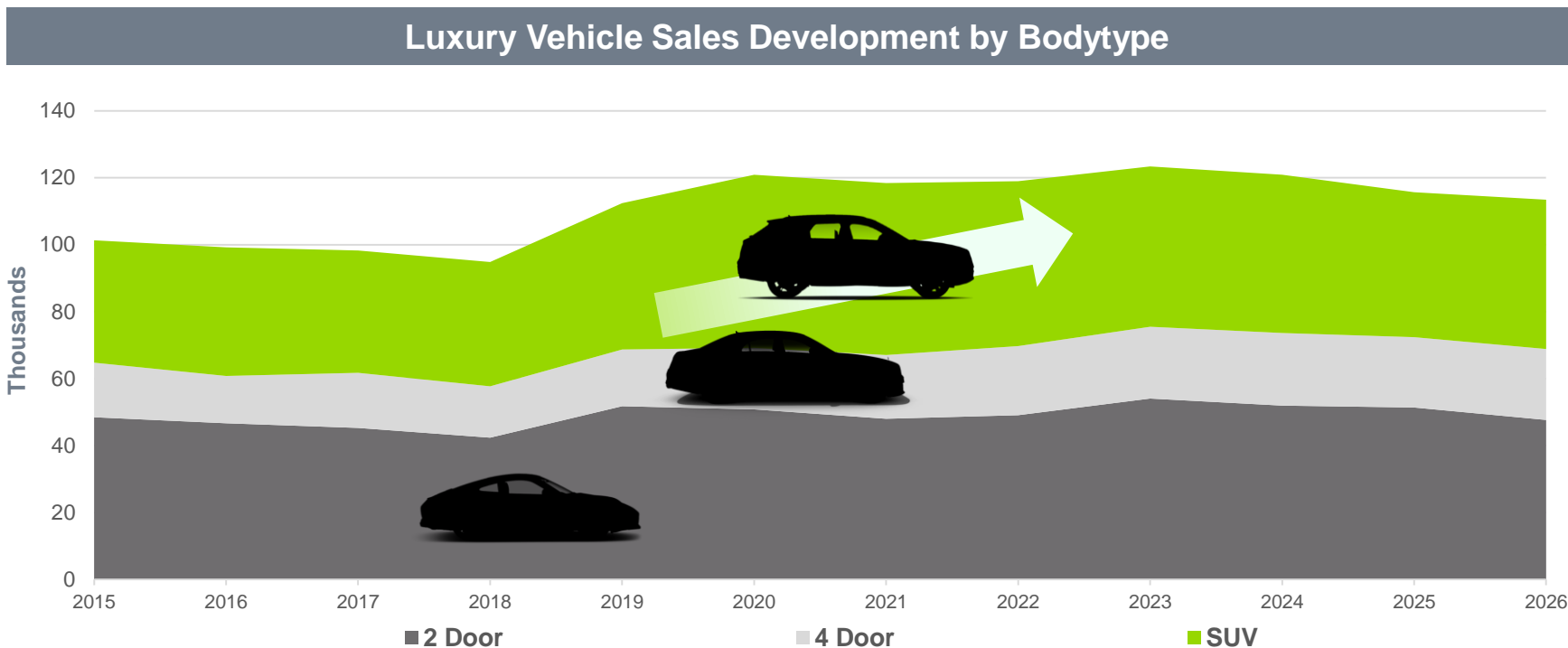
US single biggest market, China offers opportunities despite headwinds

Luxury Vehicle Sales Development by Market



Luxury Forecast Insight

SUV expansion as growth driver, traditional 4-door under pressure



Electrification to maintain the traditional engine business



“All Ferraris sold from 2019 will have some hybrid elements.”

Sergio Marchionne
Ferrari CEO, Nov. 2016



“A totally electric Urus is a maybe, depending on how technology and regulations develop”

Stefano Domenicali
Lamborghini CEO, Sept. 2016



“In the latter part of this business plan to 2022, more than half our cars will be hybrids.”

Mike Flewitt
McLaren CEO, May 2016



“So the way to keep the V12 and V8... is to create the opposite ... – pure electric...”

Andy Palmer
Aston Martin CEO, April 2016



ASTON MARTIN

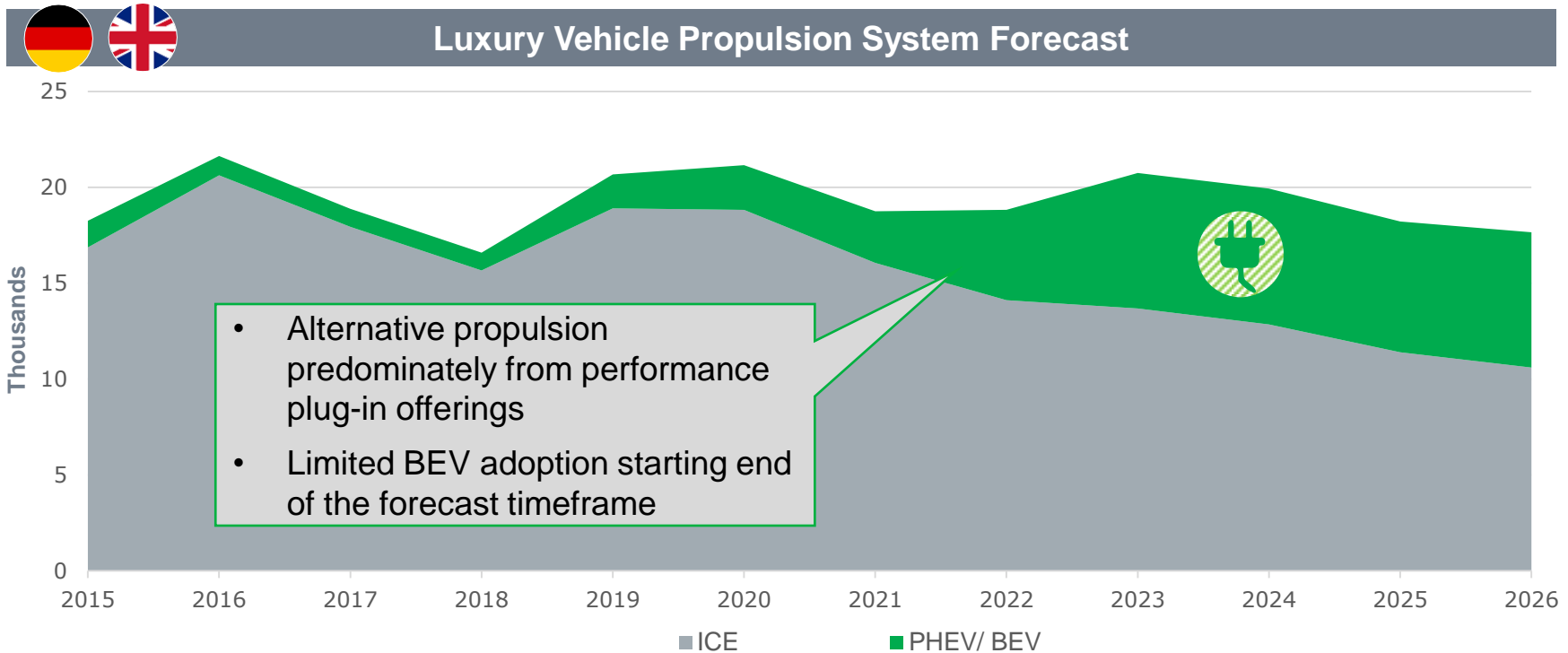
“From my point of view, plug-in hybrid technology provides the best of two worlds”

Wolfgang Dürheimer
Bentley CEO, Jan. 2017



Luxury Segment Powertrain Outlook

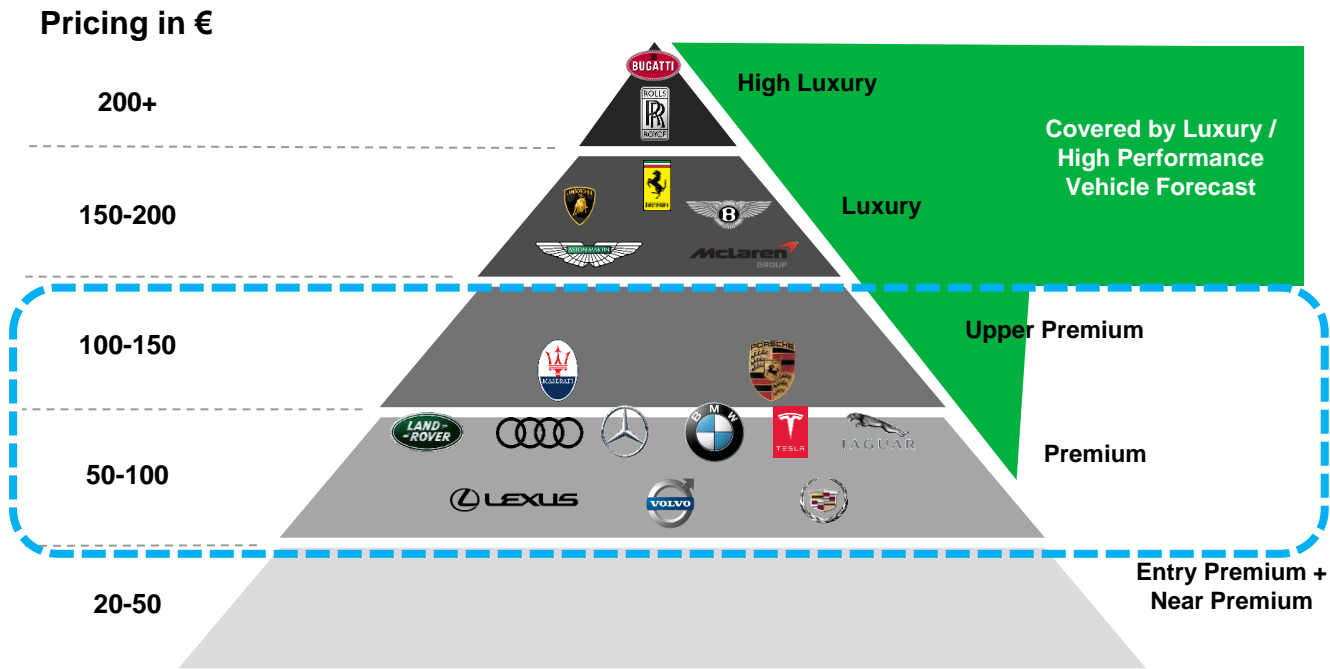
Growing offering range and customer acceptance to change the mix



Luxury/ Premium Segment

Growing IHS Forecast and Analysis Coverage

Premium/ Luxury Vehicle Market Clustering



German 3 Performance Vehicle Lineup

From emphasis on 2 main vehicle clusters and higher size groups...

	Sedan	4-door coupe	SUV	Crossover	Hatch	Coupe/Cabrio Roadster	Wagon
2007							
Large							
Full Size							
Medium							
Compact							

German 3 Performance Vehicle Lineup

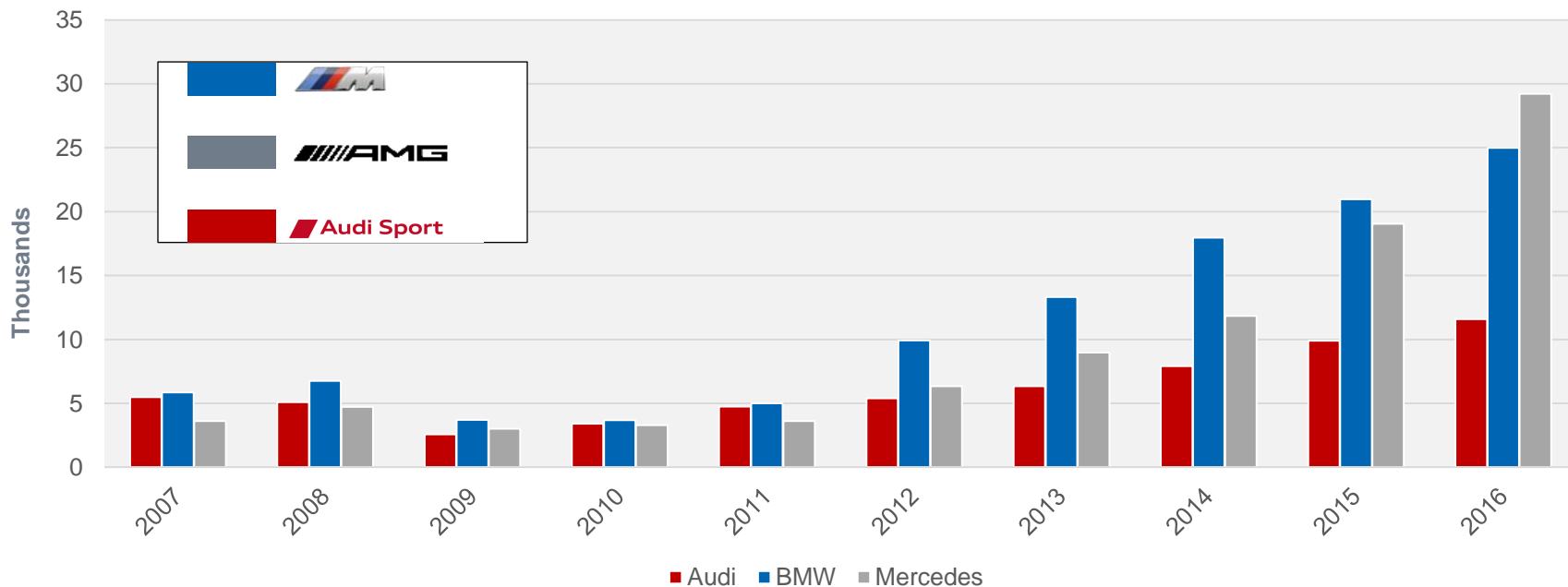
...to successful, continued expansion into high demand trend segments

2017+	Sedan	4-door coupe	SUV	Crossover	Hatch	Coupe/Cabrio Roadster	Wagon
Large	 Mercedes-Benz Audi		 Mercedes-Benz			 Mercedes-Benz Audi	
Full Size	 Mercedes-Benz	 Mercedes-Benz Audi BMW	 Mercedes-Benz Audi	 Mercedes-Benz Audi	 Mercedes-Benz	 Mercedes-Benz Audi	 Mercedes-Benz Audi
Medium	 Mercedes-Benz Audi BMW	 Mercedes-Benz Audi BMW	 Mercedes-Benz Audi	 Mercedes-Benz Audi		 Mercedes-Benz Audi BMW	 Mercedes-Benz Audi
Compact	 Audi	 Mercedes-Benz Audi	 Mercedes-Benz Audi		 Mercedes-Benz Audi BMW	 Mercedes-Benz Audi BMW	

Performance Vehicle Sales

Resulting in major volume growth from compact and entry performance

Western Europe Sales Development*



Sales Growth Implications

Positive business case increasingly clouded by CO₂ worries

Profitability Opportunity

CO₂ Threat



+116* %

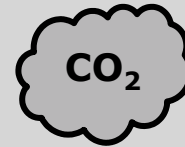
List price
mark up
potential



Entry vehicle

VS

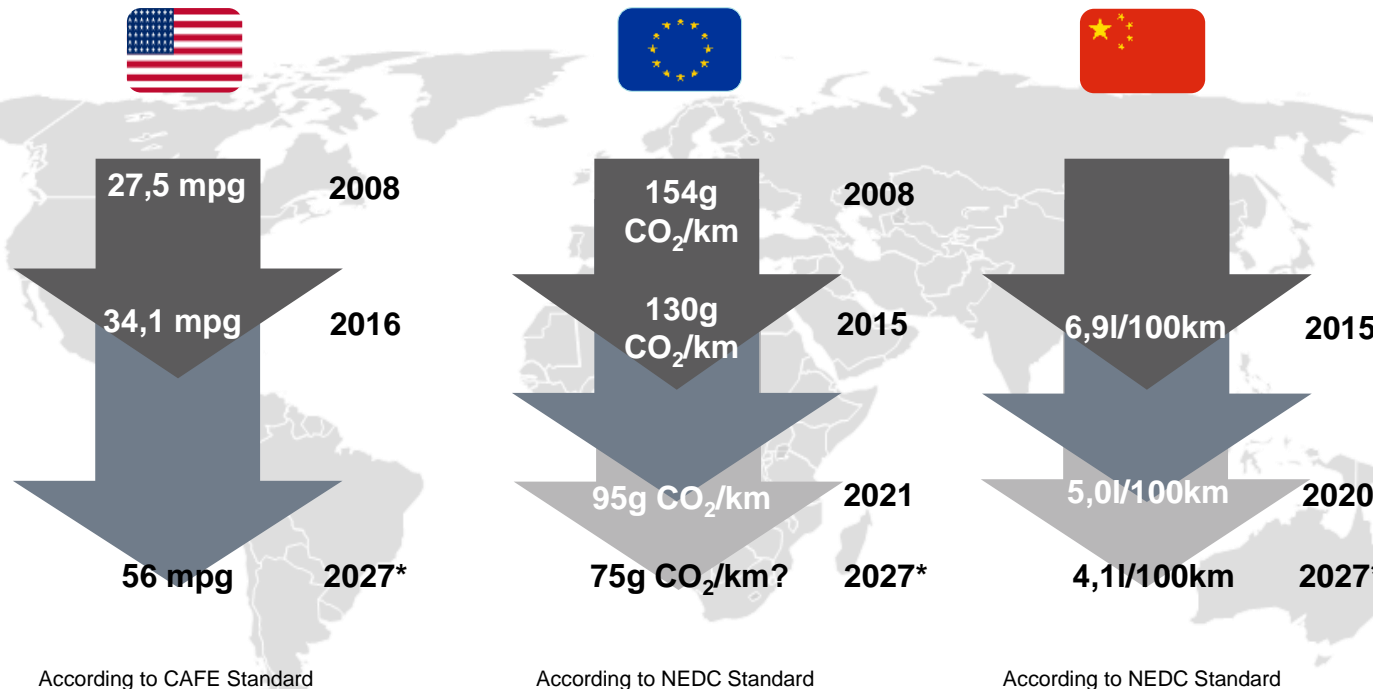
Top-range vehicle



+77* %

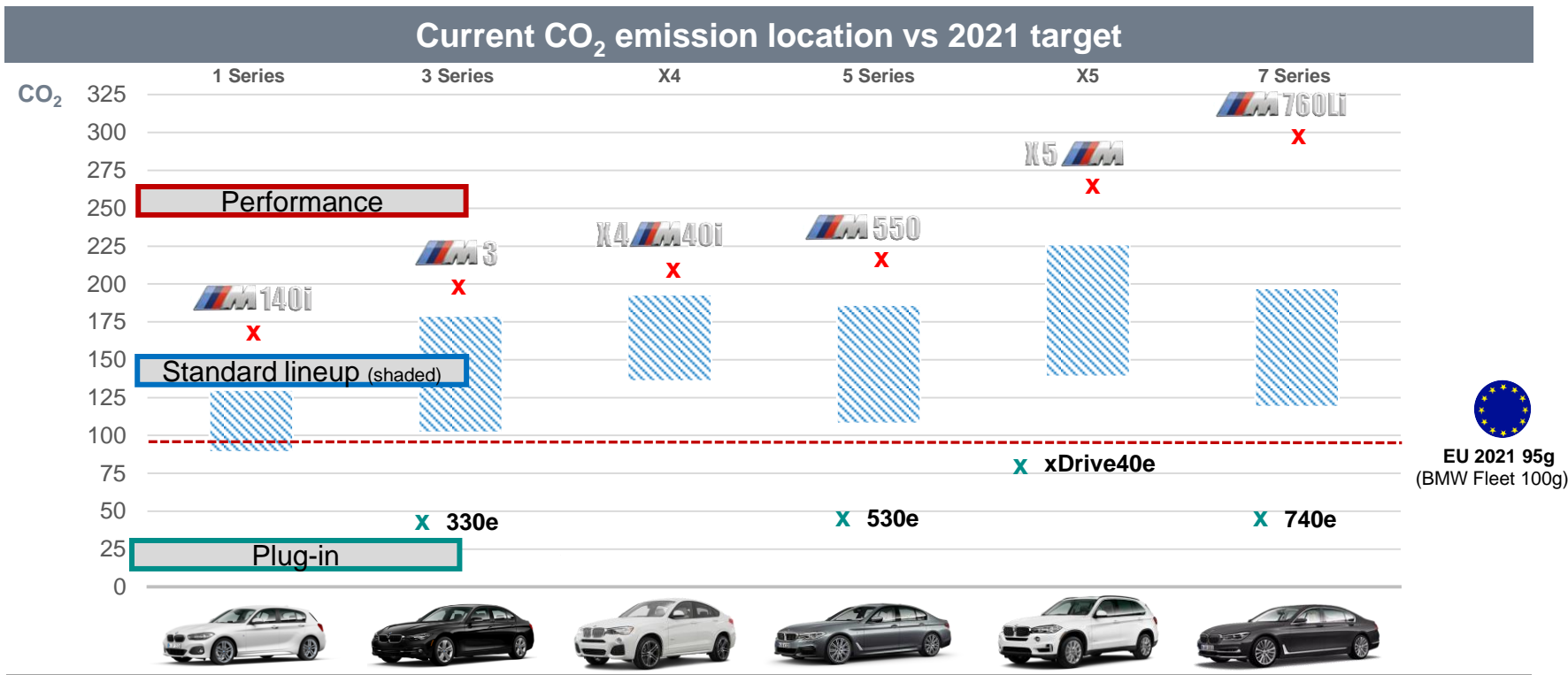
More
emissions

Vehicle Emission Target Regulation



Emissions Overview

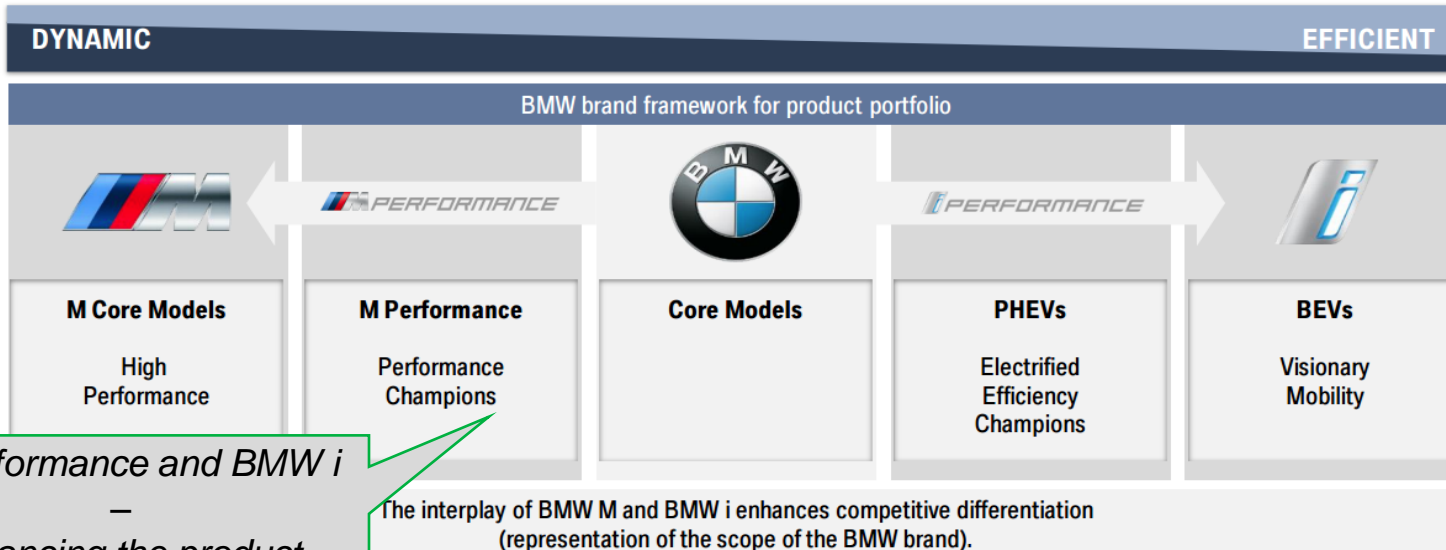
Performance emissions considerably above target while sales grow



Adjusting the Portfolio

Electrification rollout to balance emissions and protect trad. performance

BMW product portfolio expansion

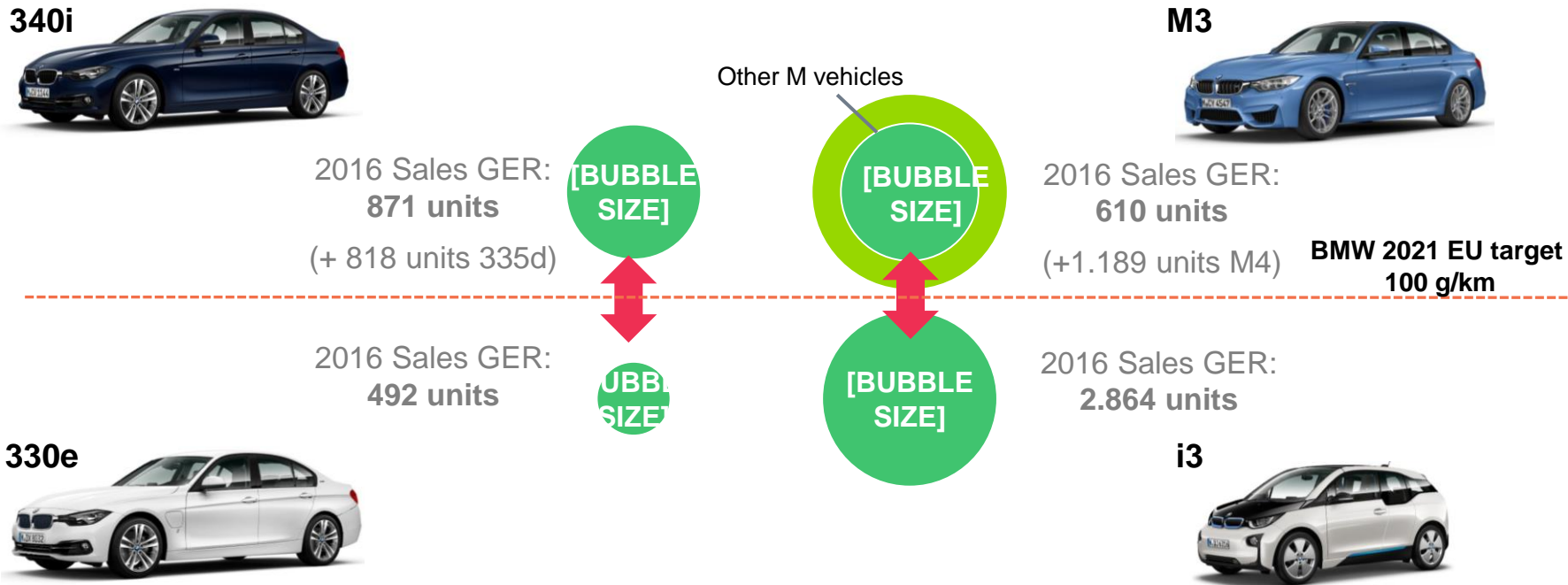


*“i Performance and BMW i
—
Balancing the product
portfolio”*

M and i vehicles theoretically offsetting each other...

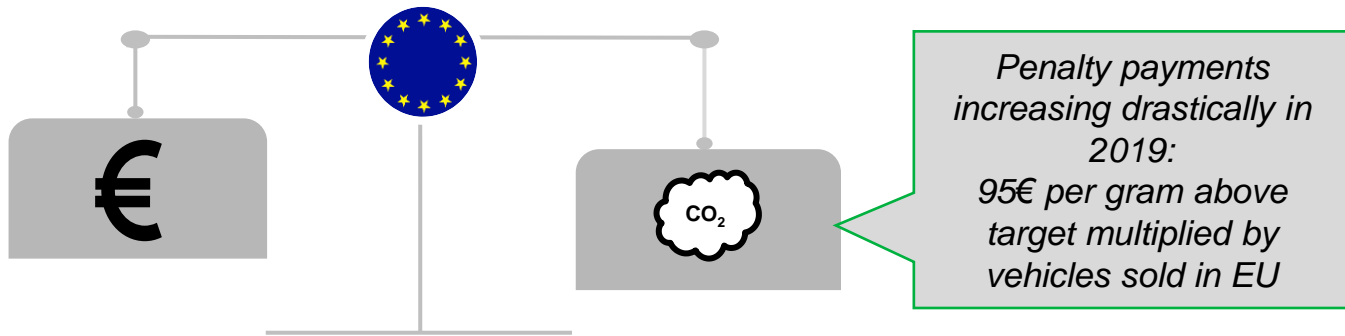



...yet buying preferences do not enable a compensation




Increasing Evaluation: Penalty vs. Profit?

Performance shall not become decisive factor to miss fleet goal



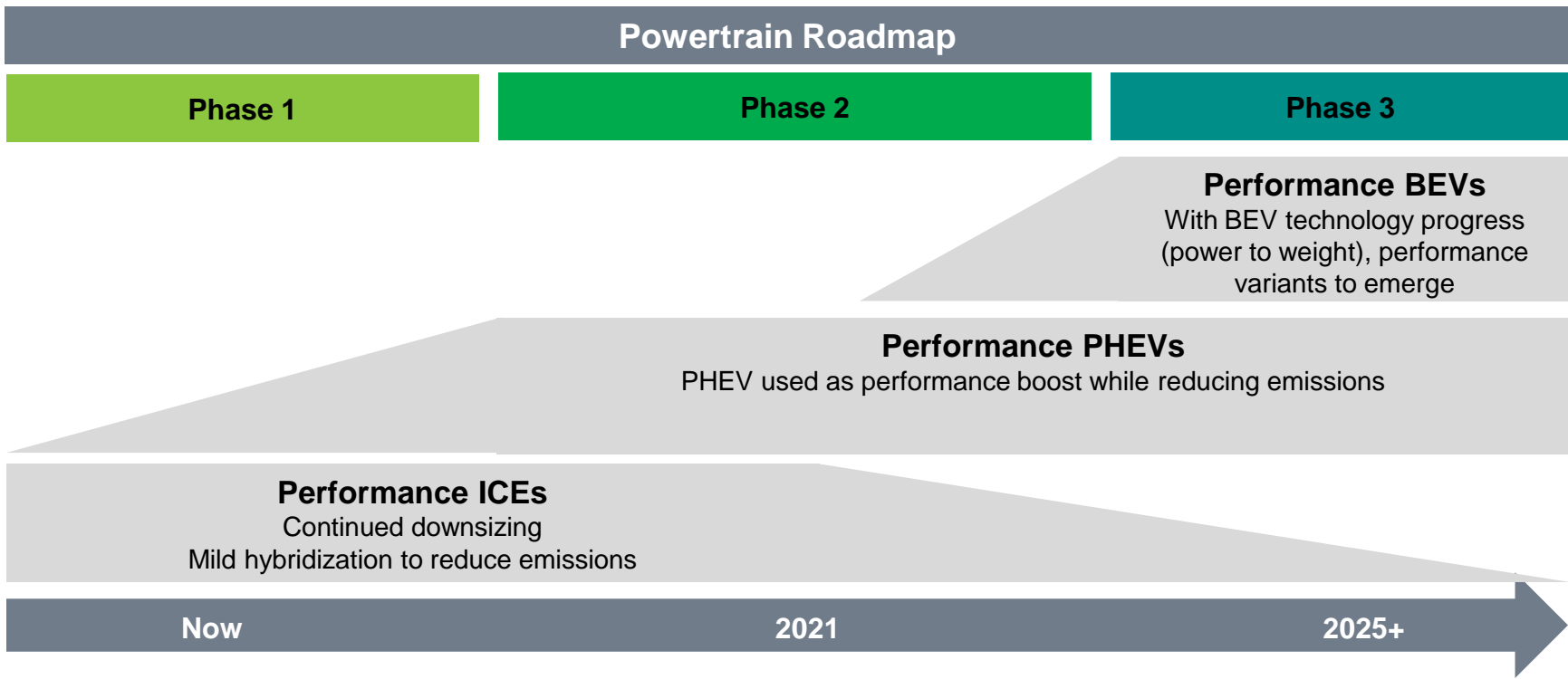
M – Vehicle Profits

35.000 Units <i>(EU forecast indication)</i>
10.000 € Profit/Vehicle <i>(assumption)</i>
350 Million € Profit

VS

EU Penalty Payments

913.000 Units <i>(IHS forecast EU)</i>
95 € Penalty/Gramm
87€ Million Penalty / Gramm

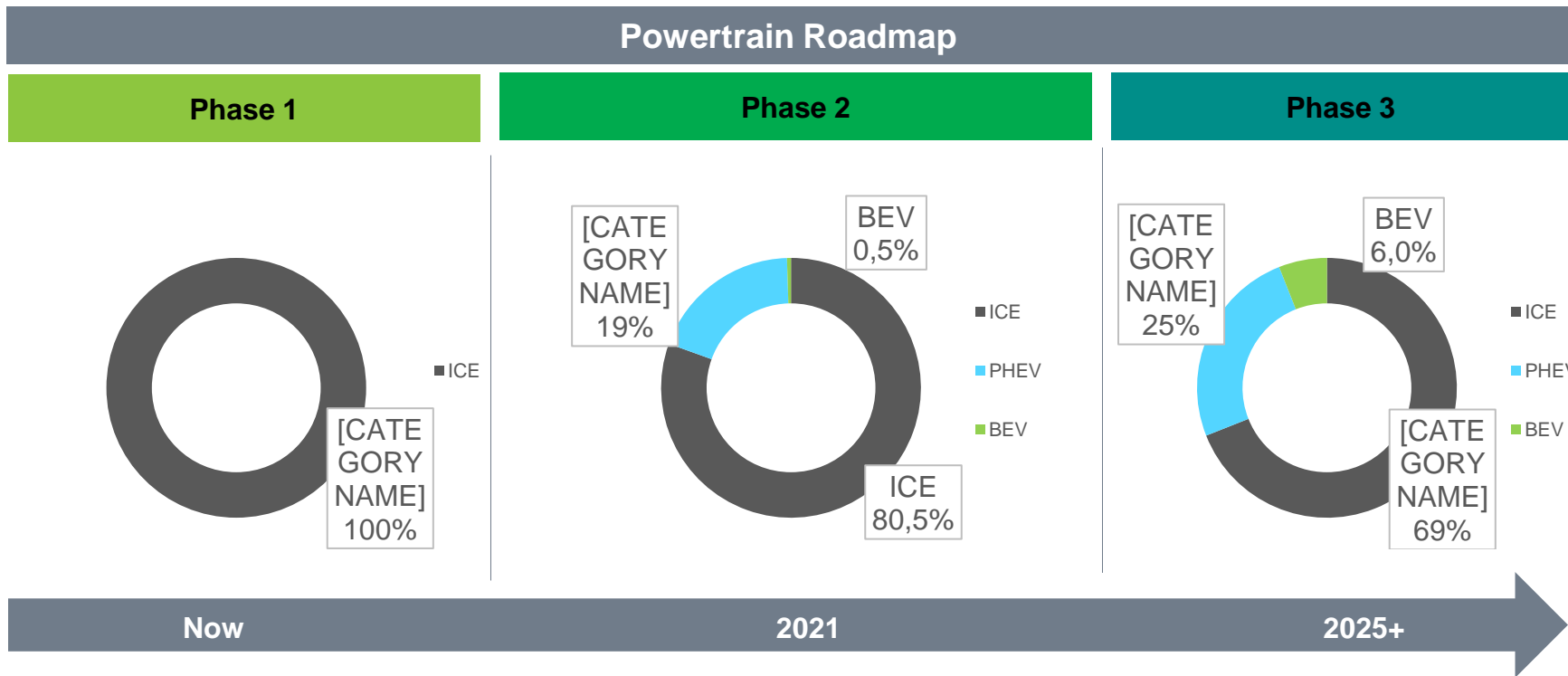
Performance Powertrain Outlook

Mid-term adoption of performance plug-ins, BEV expected long-term



Performance Powertrain Outlook

Assuming clear reduction targets imposed, up to 30% xEV required



Summary and Key Takeaways

- Expansion of luxury/ premium performance offerings leading to a sizable volume growth forecast.
- US and West Europe remain the key sales markets, China is growing with roomier concepts and lower engine size versions.
- The business is highly profitable, but tightening emission regulation will make the combination of high volume / high emissions an issue.
- Mid-term outlook: Securing traditional high-cylinder ICEs by means of latest fuel saving technology, downsizing and eventually plug-in applications. Understanding competitive measures and conquest vs. cannibalization effects becomes key.
- Long-term outlook: Power oriented plug-ins gaining solid volume share and are a necessity (e.g. China cities). BEV performance variants arriving mid-2020s after required technology progress.

IHS Markit Customer Care:

CustomerCare@ihsmarkit.com

Americas: +1 800 IHS CARE (+1 800 447 2273)

Europe, Middle East, and Africa: +44 (0) 1344 328 300

Asia and the Pacific Rim: +604 291 3600

IHS Markit™ COPYRIGHT NOTICE AND DISCLAIMER © 2017 IHS Markit.

No portion of this presentation may be reproduced, reused, or otherwise distributed in any form without prior written consent of IHS Markit. Content reproduced or redistributed with IHS Markit permission must display IHS Markit legal notices and attributions of authorship. The information contained herein is from sources considered reliable, but its accuracy and completeness are not warranted, nor are the opinions and analyses that are based upon it, and to the extent permitted by law, IHS Markit shall not be liable for any errors or omissions or any loss, damage, or expense incurred by reliance on information or any statement contained herein. In particular, please note that no representation or warranty is given as to the achievement or reasonableness of, and no reliance should be placed on, any projections, forecasts, estimates, or assumptions, and, due to various risks and uncertainties, actual events and results may differ materially from forecasts and statements of belief noted herein. This presentation is not to be construed as legal or financial advice, and use of or reliance on any information in this publication is entirely at your own risk. IHS Markit and the IHS Markit logo are trademarks of IHS Markit.

