

## **#ForumAutomotive**

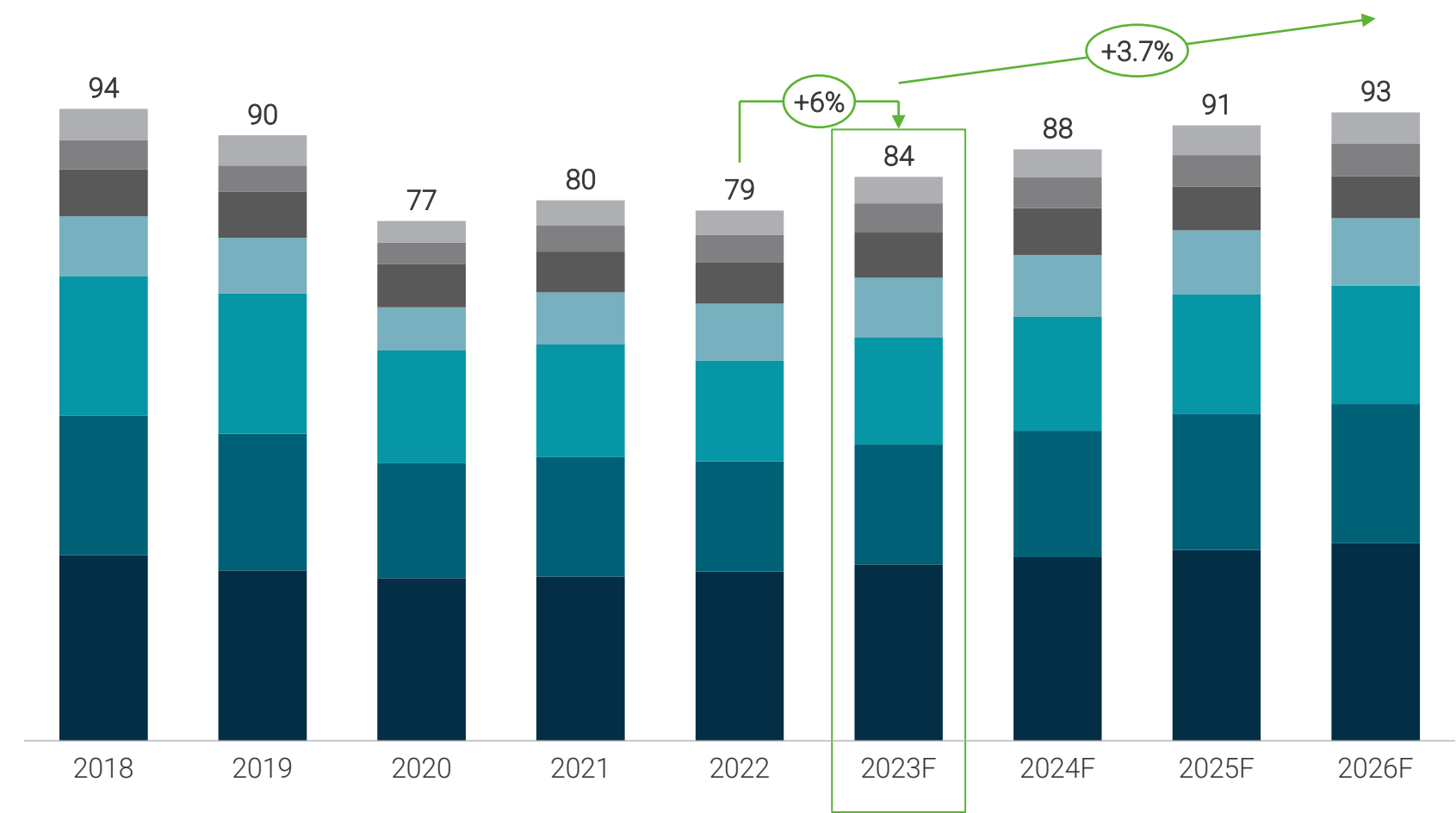
Dario Duse – Italy Country Head & EMEA Co-Leader Automotive and Industrials

20 Marzo 2023

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# New vehicles sales: rebound in 2023 to 84m vehicles as supply shortages progressively ease, follower by 3.7% CAGR to 2026

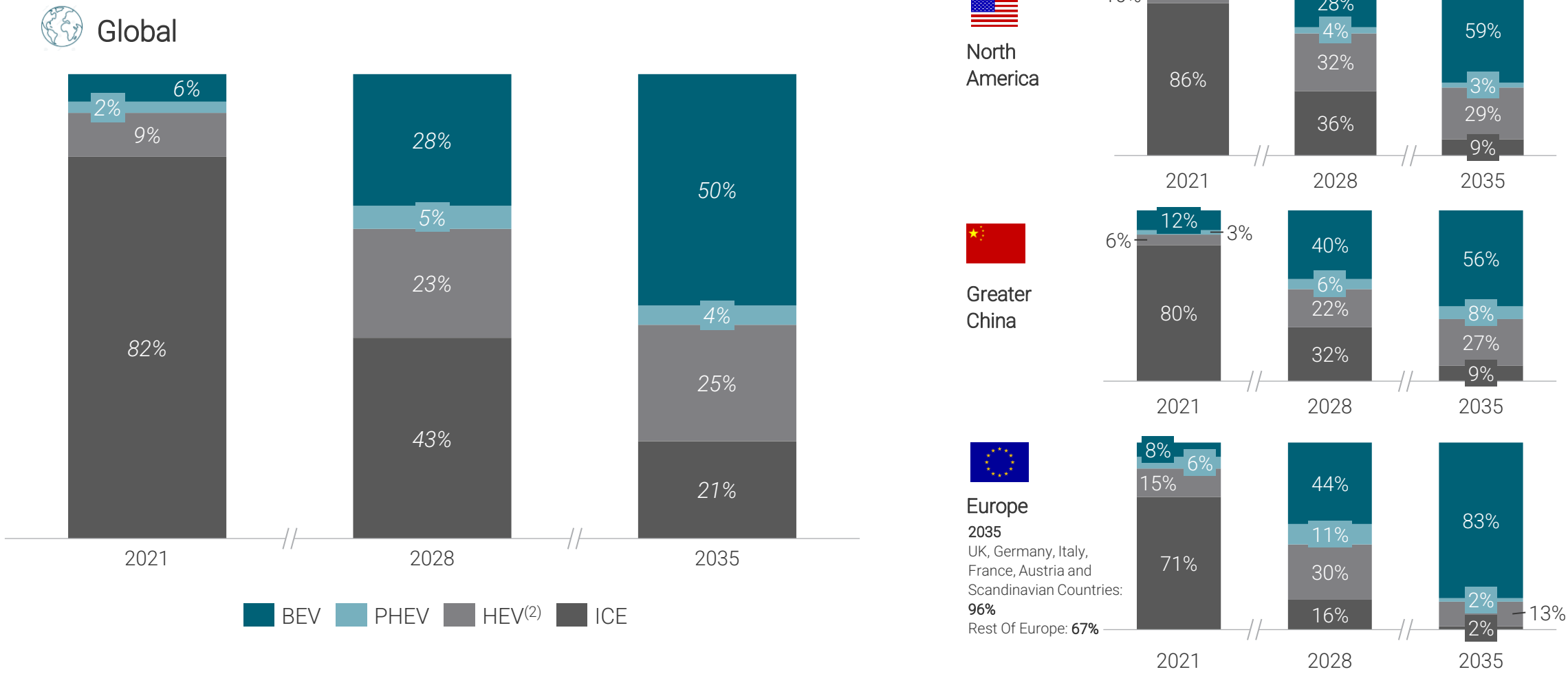
Global Light Vehicle Sales Volume (Units, millions, CAGR)



Region	CAGR	
	'20-'22	'23-'26
South America	0.4	0.7
	7%	6%
Middle East, Africa	0.8	0.5
	12%	3%
Japan/Korea	-0.3	-0.4
	-2%	-2%
South Asia	2.1	1.1
	15%	4%
Europe	-1.8	1.7
	-5%	3%
North America	-0.7	2.9
	-2%	5%
China	1.0	3.2
	2%	4%
Total	1.6	9.6
	1%	4%

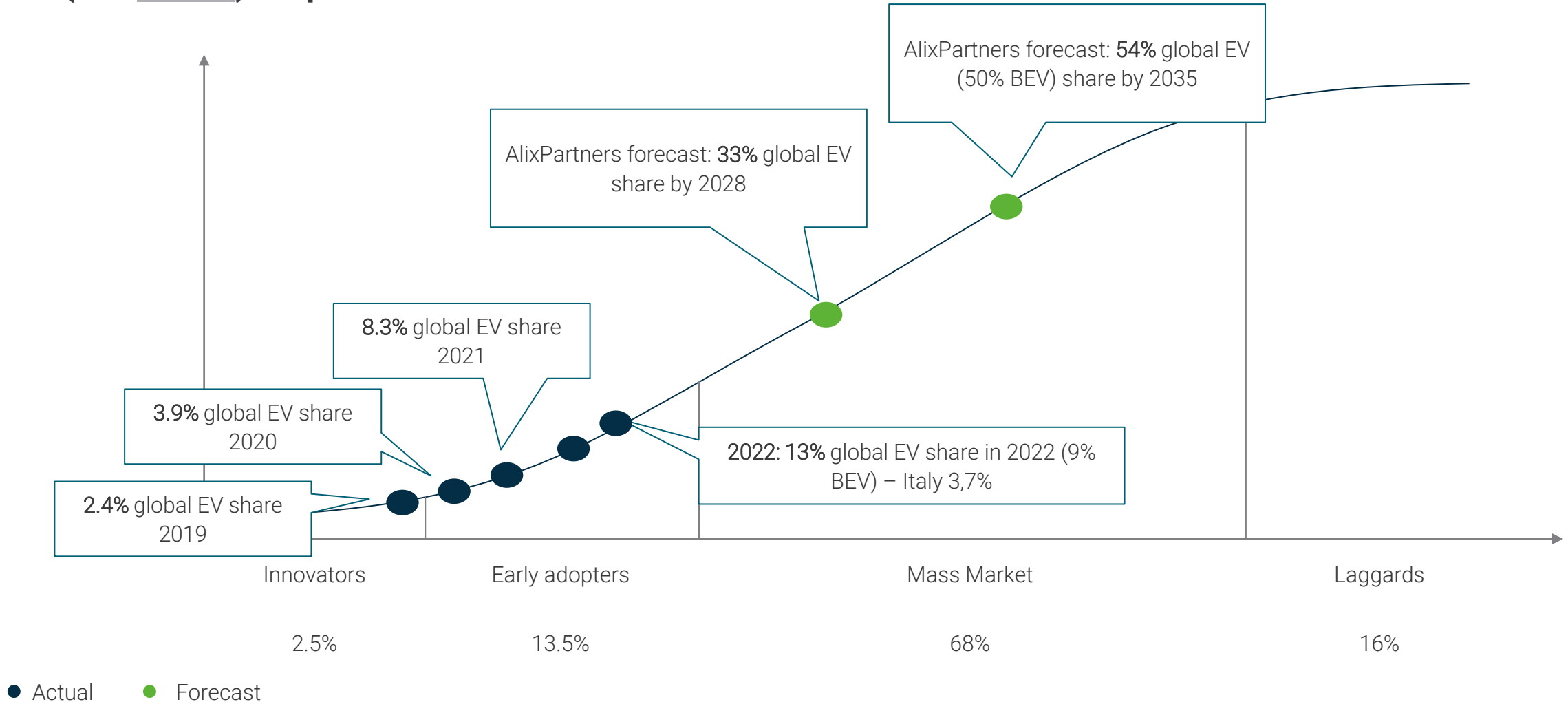
# BEV forecast: by 2035, BEVs to reach 50% share - 59% in N. A., 56% in China, 83% in Europe (but with increasing uncertainty)

## Evolution Of Light Vehicle<sup>1</sup> Powertrain Distribution (% of Sales Volumes)



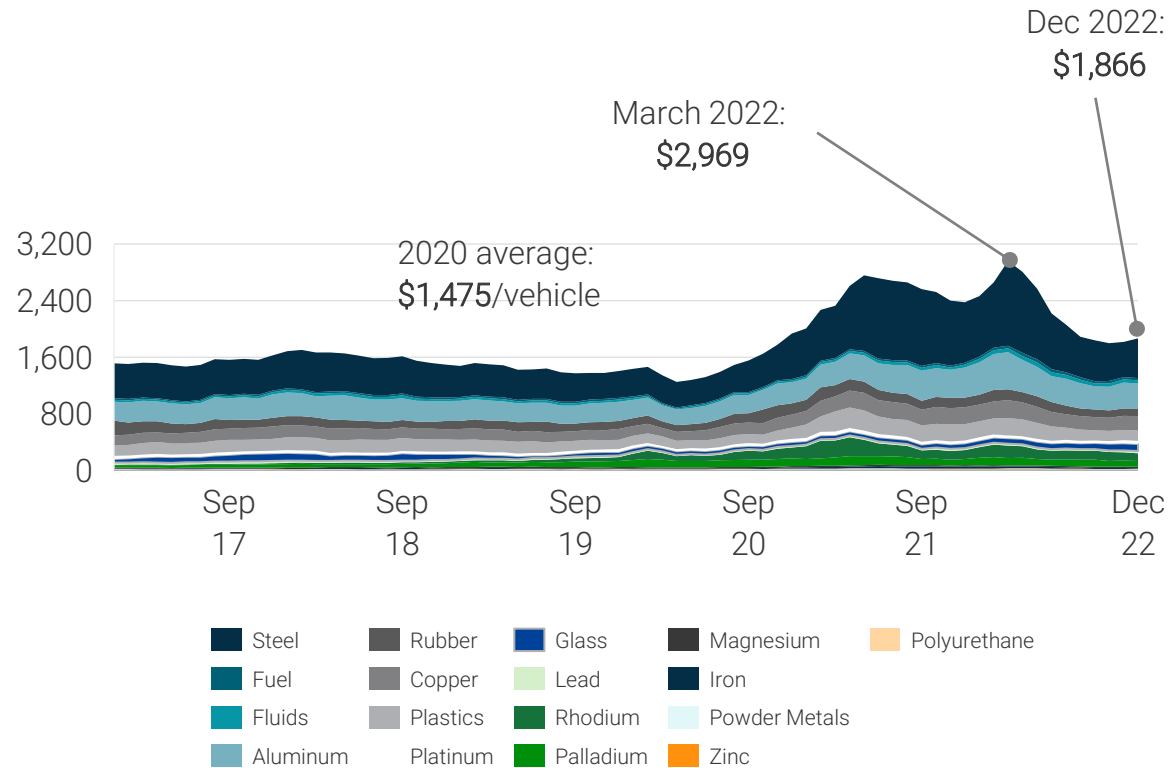
# EV is still in the early adopter stage; the next EV growth period will shift focus from time-to-market to cost and competitiveness

## EV (BEV + PHEV) Adoption Curve

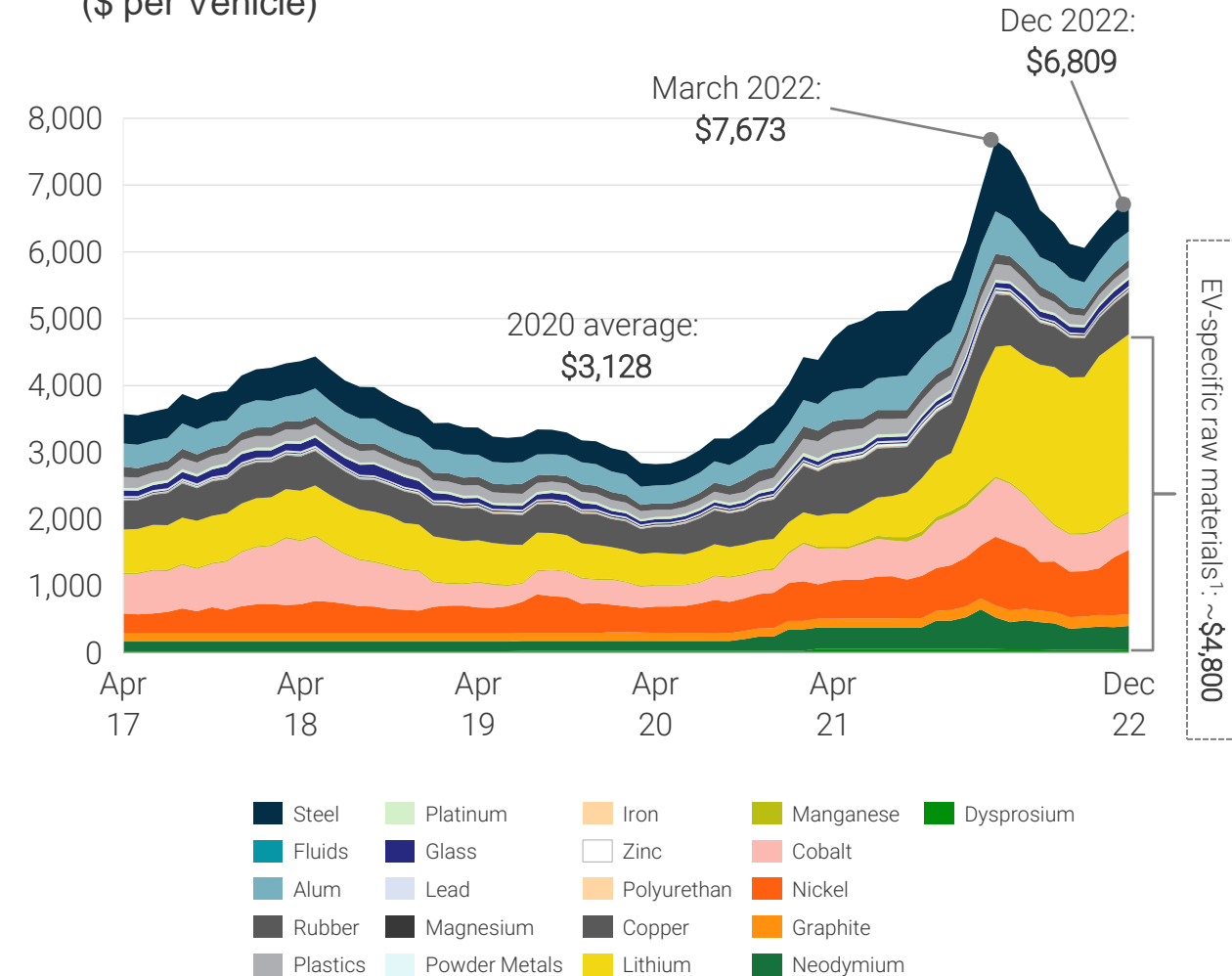


ICE Raw material bottomed at around 1,800\$, ~25% above '20 while BEV raw-material is ~\$6,800 per vehicle (+~\$5,000 vs. ICE and +220% vs. '20)

**European ICE-Vehicle: Costs per Vehicle for Key Raw Materials**  
(\$ per Vehicle)

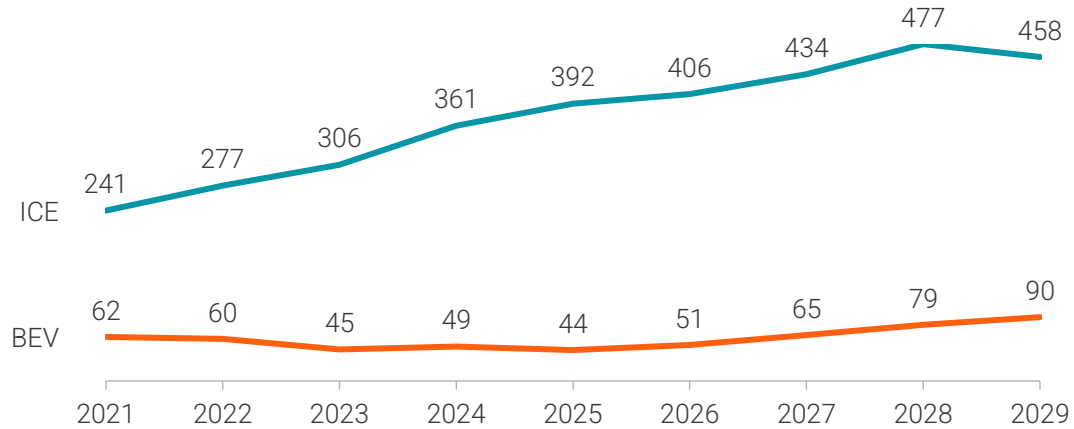


**Europe. BEV-Vehicle: Costs per Vehicle for Key Raw Materials**  
(\$ per Vehicle)

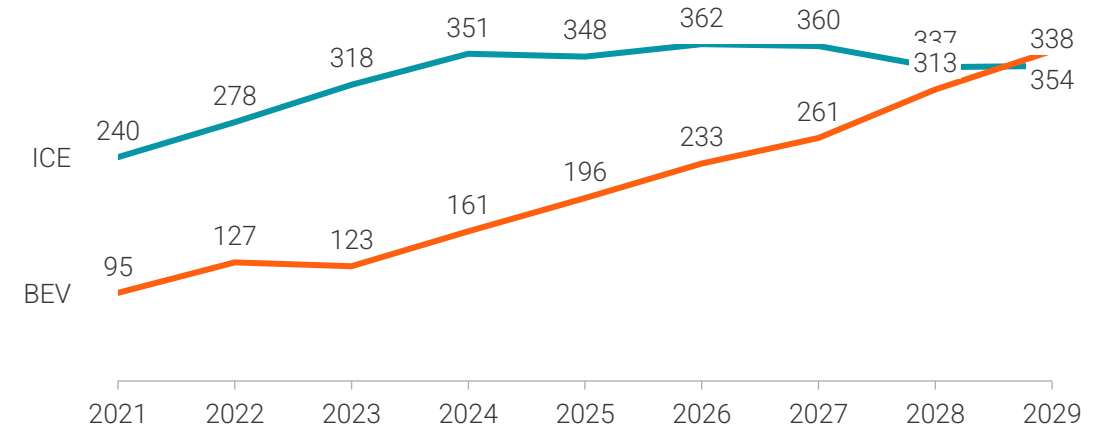


Based on current projections and announcements, smaller BEV segments will struggle to absorb fixed and ER&D costs until the end of the decade

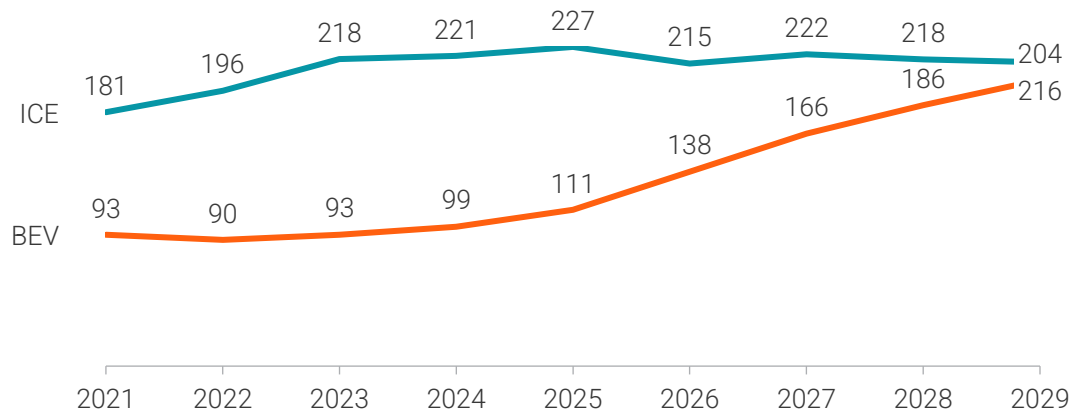
**A+B Segment volume per platform (000s)**



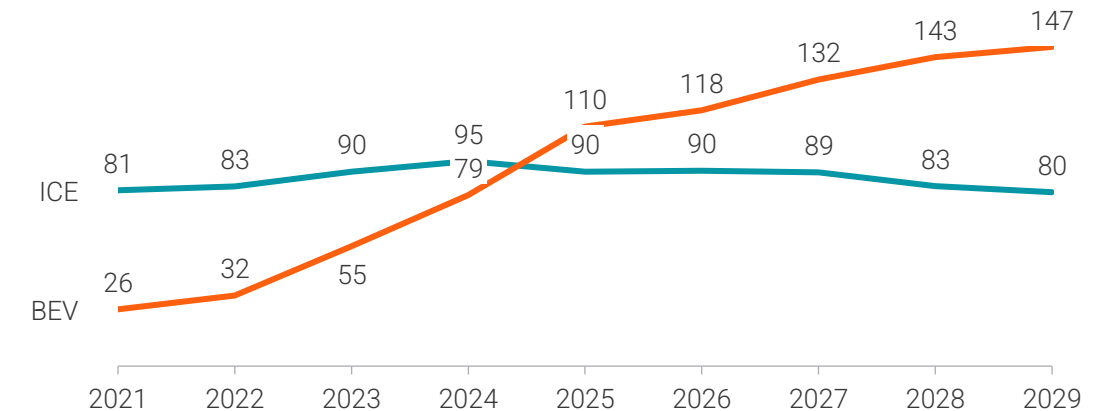
**C Segment volume per platform (000s)**



**D Segment volume per platform (000)s**

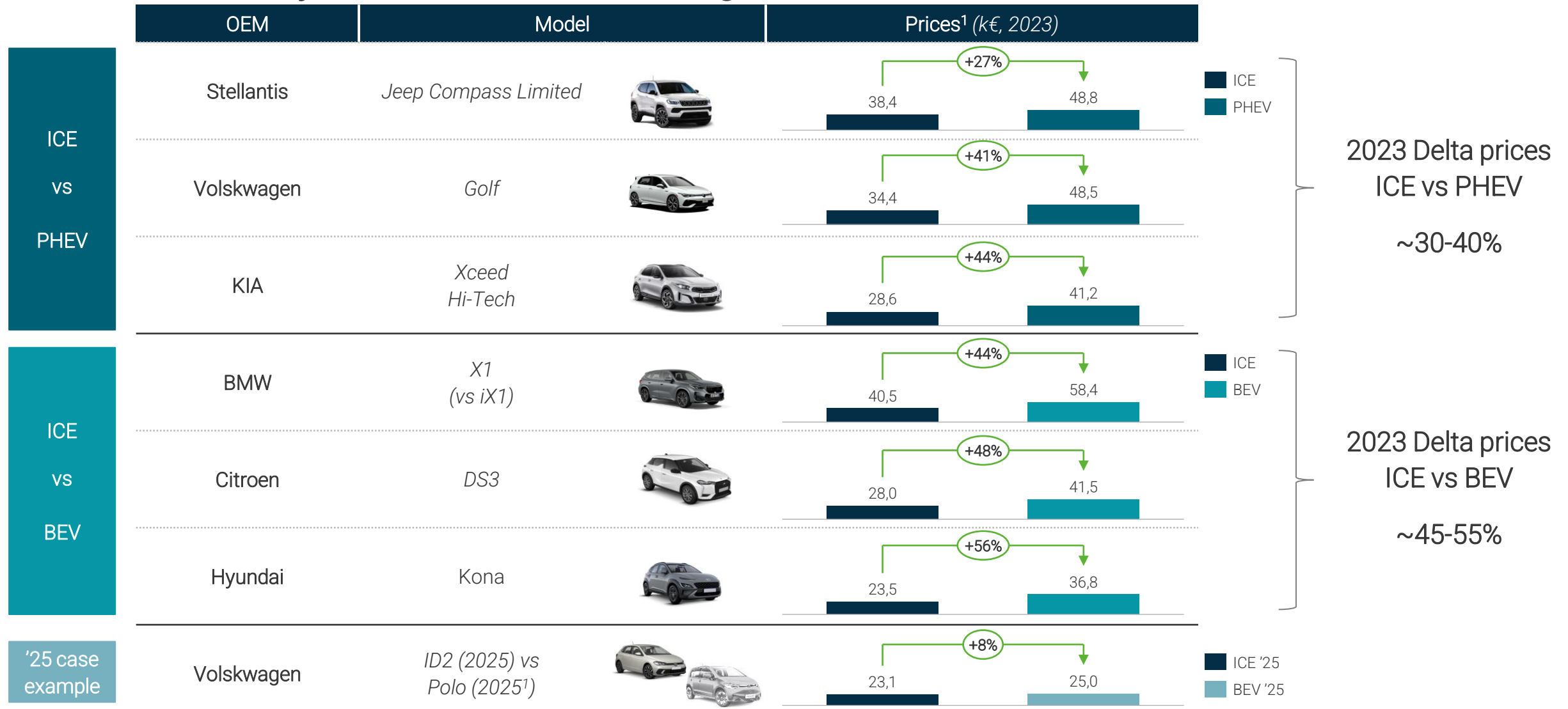


**E+F Segment volume per platform (000)s**



1 BEV Platforms are those expected to generate >50% volume from BEV through 2029  
Source: AlixPartners Analysis, IHS Sales Forecast

# PHEV prices at around +30-40% vs comparable ICE versions; BEVs up to +45-55% today but with decreasing trend

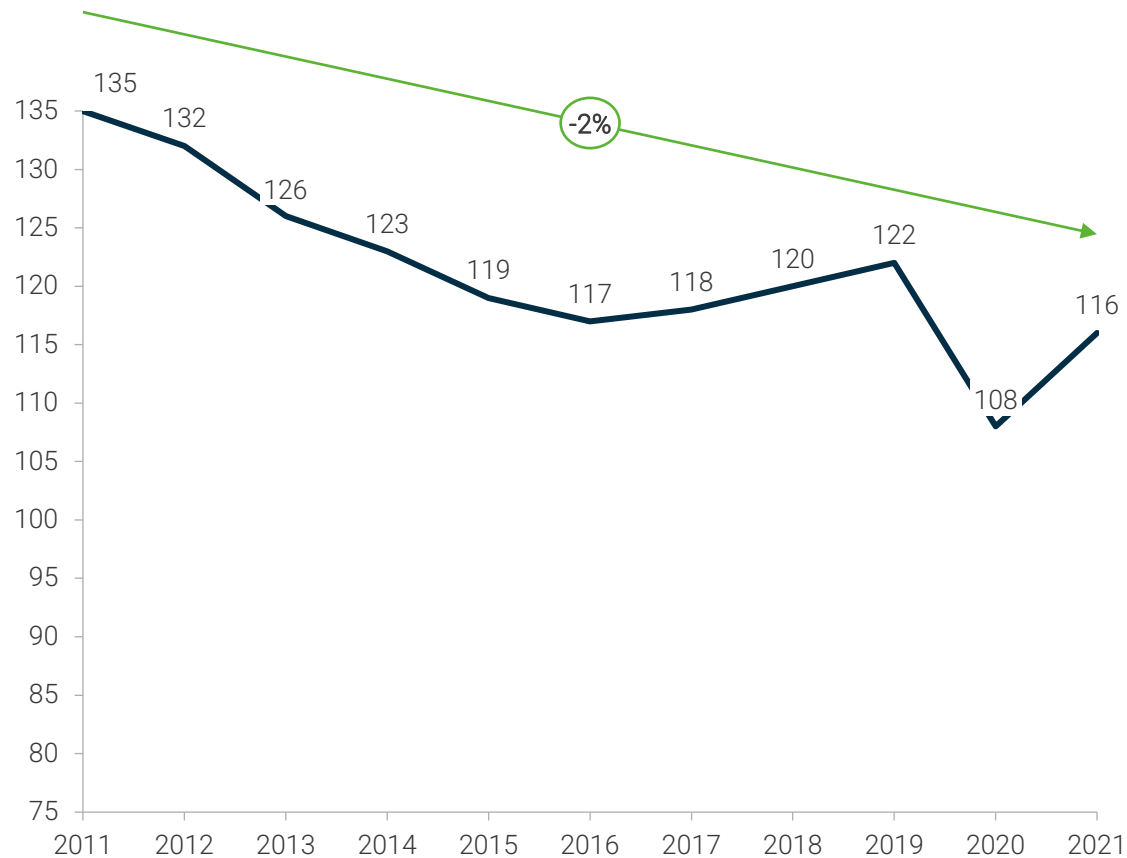


Source: AlixPartners elaboration on Quattroruote data (March-'23) on selected sample of comparable model versions

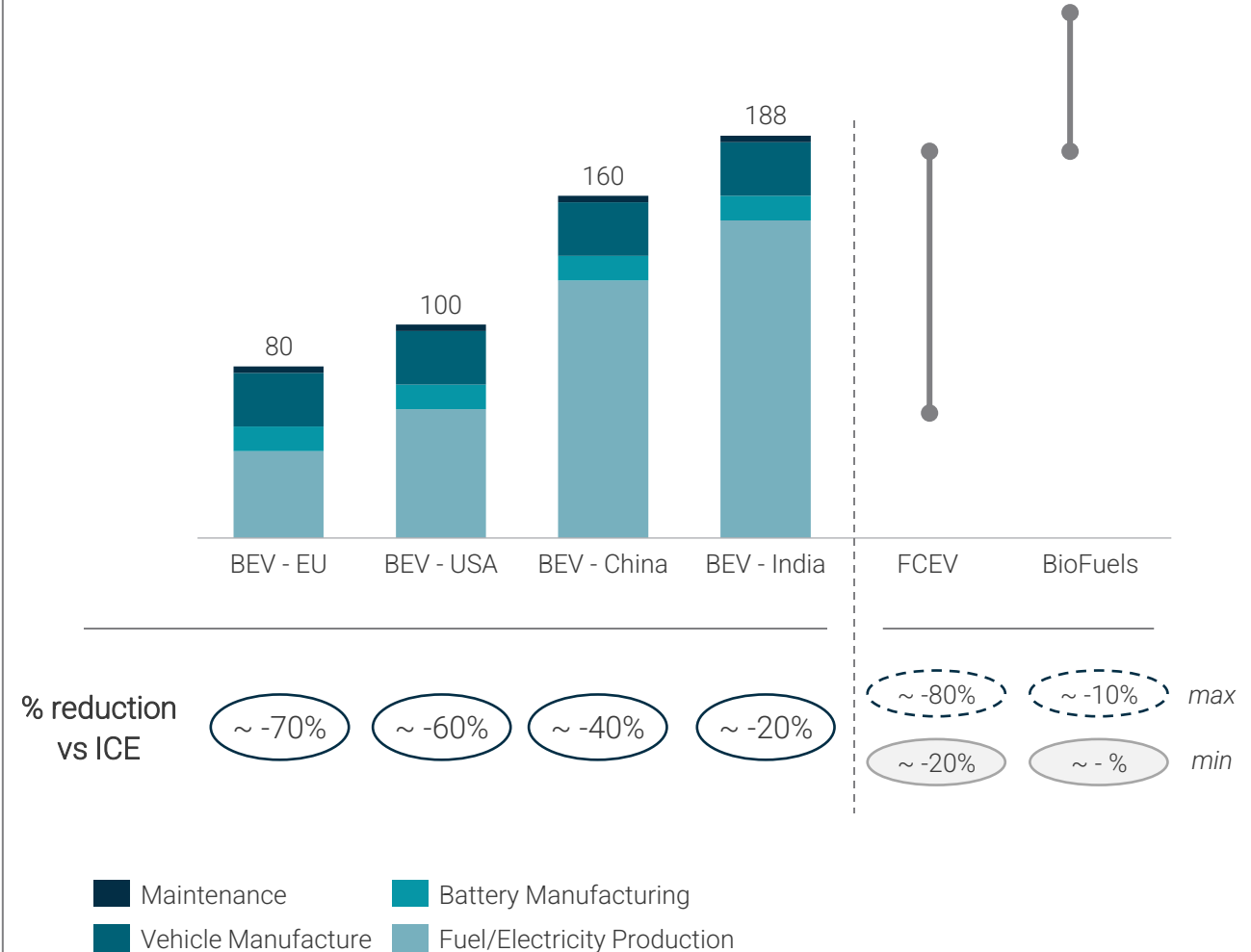
1) Considering 2023 price (22.000€) + incremental price '23-'25 (+5%) due to inflation

# Avg. new car emissions in EU declining slowly and worsening in 2021; BEV impact highly dependent from generation mix

EU avg new cars emissions (gCO<sub>2</sub>/ Km, 2011-2021)<sup>1</sup>



Lifecycle BEV emissions (gCO<sub>2</sub>/ lifecycle, 2021)<sup>2</sup>



1. Source: ACEA; AlixPartners analysis  
2. Source: ICCT - International Council on Clean Transportation (July-2021), AlixPartners analysis



# **AlixPartners**

**WHEN IT REALLY MATTERS.**