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Autos & Shared Mobility | North America

Detroit 2030: 10% BEV Mix May Be the ‘Right’ Level

How many times have you heard a legacy auto company talk about being ‘all in’ and express confidence in their ability to have BEVs reach 20%, 30% or even 50% of their total sales by 2030? We’ve heard an awful lot of these types of targets over the past few years. But we think it’s worth a moment to just step back and think about what that really means by breaking down our 2030 EV forecast into the relevant ‘strata’ or layers of contributing sub-markets:

- **2030 global EV penetration: 40%.** Our global auto team has a current FY30 EV penetration (pure BEVs) of 40% by 2030. But this includes China at 55% penetration by 2030.
- **Excluding China, global EV penetration by 2030: the low 30% range.** This includes Europe at 55% and USA at 25% (MS fcst). But this includes the EV ‘pure plays’ such as Tesla, other EV startups and all the China EV pure play names (BYD, Huawei, etc) who will have sizeable share in Western markets. We estimate the pure play names may command roughly ½ of the non-China EV market.
- **If we go further and exclude the EV ‘pure plays’ from the non-China EV market, EV penetration by 2030: approx. 20%.** But again, this includes geographies where EV penetration may be far higher than the US market where Detroit OEMs easily generate substantially 100% of their global profits and cash flow.
- **Isolating the US market (excluding the pure-play names), our forecasted 2030 EV penetration: approx. 10%.** We currently forecast the US market to support 4.2mm units of BEVs by 2030 (25% penetration). Of this number, we forecast nearly 2/3 to be supplied by pure-play EV producers such as Tesla, leaving the EV implied share of the legacy auto manufacturers in the US market closer to 10%.
- **Further isolating the segments most relevant to the Detroit players (pickups, full-sized SUVs, commercial end markets) the relevant US segment-adjusted EV penetration level may be closer to 5% than 10%.**

Bottom line: Platitudinous goals from legacy ICE companies targeting 50%-type EV penetration by end of decade does not properly account for the relevant geographic mix, demographic mix, segment mix and does not allow for the inclusion of large pure-play companies in a global EV market that still faces significant hurdles in terms of supply chain, geopolitics, cost and economics. While we see potential for Detroit’s auto makers to participate in global EV adoption in a relevant way, we expect to see changes in the scaling and magnitude of their strategies in the coming quarters.

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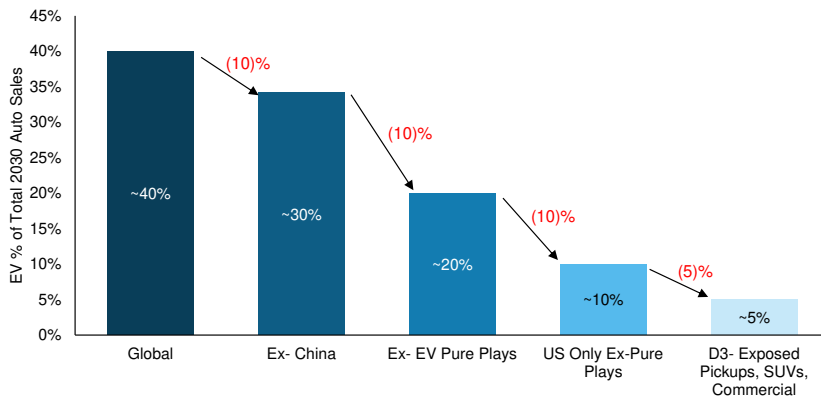
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Exhibit 1: What's the Right 'Benchmark' for Detroit's EV Strategy?



Source: Morgan Stanley Research

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	Count	% of Total	Count	% of Total IBC	% of Rating Category	Count	% of Total Other MISC
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Not-Rated/Hold	3	0%	0	0%	0%	1	0%
Underweight/Sell	630	17%	70	10%	11%	236	15%
Total	3,748		676			1578	

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Asbury Automotive Group Inc (ABG.N)	U (05/20/2022)	\$210.80
AutoNation Inc. (AN.N)	U (01/17/2023)	\$143.96
Avis Budget Group Inc (CAR.O)	O (06/20/2023)	\$155.89
BorgWarner Inc. (BWA.N)	O (05/15/2023)	\$33.48
Carmax Inc (KMX.N)	O (07/10/2018)	\$70.99
Carvana Co (CVNA.N)	U (07/26/2023)	\$43.80
Ferrari NV (RACE.N)	O (05/09/2019)	\$371.66
Fisker Inc (FSR.N)	U (01/25/2023)	\$0.76
Ford Motor Company (F.N)	O (10/05/2022)	\$11.59
FREYR Battery SA (FREY.N)	E (11/13/2023)	\$1.26
General Motors Company (GM.N)	O (05/01/2023)	\$37.79
Group 1 Automotive, Inc (GPI.N)	U (05/20/2022)	\$268.16
Harley-Davidson Inc (HOG.N)	O (03/21/2023)	\$33.88
Hertz Global Holdings Inc (HTZ.O)	O (01/17/2024)	\$8.21
Lear Corporation (LEA.N)	E (02/28/2022)	\$134.36
Li-Cycle Holdings Corp. (LICY.N)	U (01/25/2023)	\$0.37
Lithia Motors Inc. (LAD.N)	U (02/09/2021)	\$291.85
Lucid Group Inc (LCID.O)	U (09/13/2021)	\$3.22
Magna International Inc. (MGA.N)	O (10/14/2021)	\$56.73

Mobileye Global Inc (MBLY.O)	E (07/24/2023)	\$26.95
Penske Automotive Group, Inc (PAG.N)	U (11/17/2021)	\$149.61
QuantumScape Corp (QS.N)	U (11/09/2022)	\$6.76
Rivian Automotive, Inc. (RIVN.O)	O (12/05/2021)	\$14.94
Sonic Automotive Inc (SAH.N)	U (11/17/2021)	\$50.66
Tesla Inc (TSLA.O)	O (09/10/2023)	\$181.06
Visteon Corporation (VC.O)	E (06/01/2022)	\$117.35

Stock Ratings are subject to change. Please see latest research for each company.

* Historical prices are not split adjusted.

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