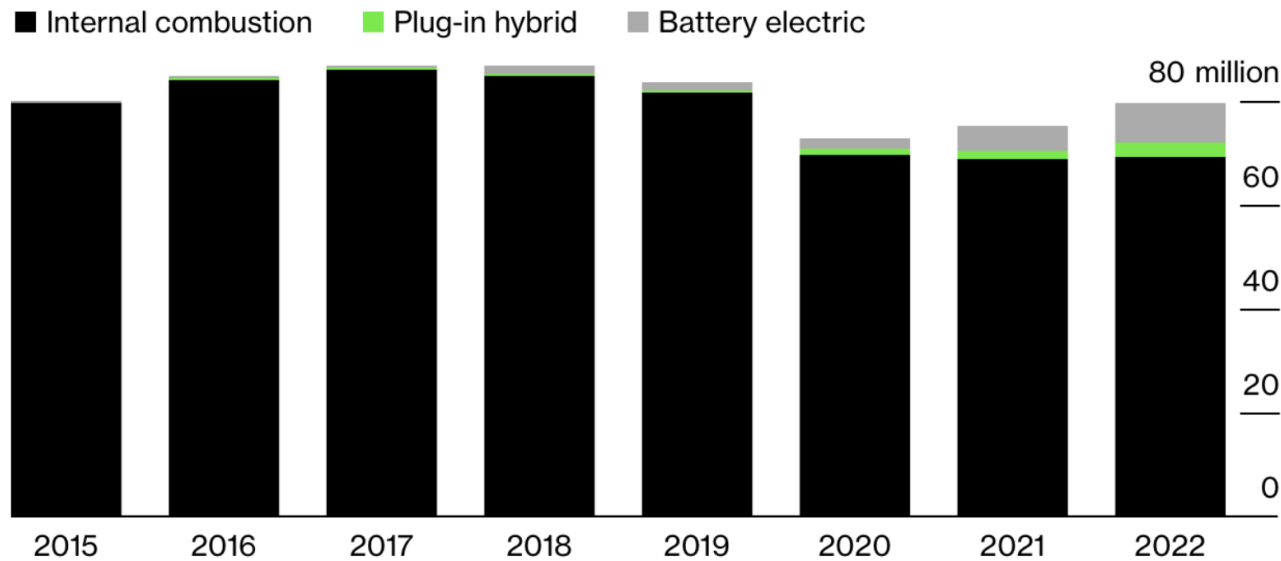


Conventional (ICE) vehicle sales potentially peaked in 2017

A reverse in trend is unlikely in global EV adoption. EV considered as parallel action as the grid emissions are addressed.

Global passenger vehicle sales by drivetrain



Strategic competition for EV supply chain in ASEAN

Malaysian PM Anwar discusses Tesla investment, Starlink with Musk

Reuters

July 14, 2023 12:13 PM GMT+7 · Updated 5 months ago



China's carmaker BYD breaks ground on Thailand plant

Xinhua | Updated: 2023-03-13 09:42



Indonesia tax cut drives electric car sales for Hyundai, Wuling

Business



Source: BloombergNEF, JATO, MarkLines, IEA
EV Stock represented for cars

Clarity in 'strategic drivers' for EV subsidy matters for politics



Oil imports?

- Are other measures to restrict ICEV and fuel demand in place?
- Conflict with regional govt. fuel tax income?



Fuel subsidies and social justice

- **What is being displaced?** 2W, lower-end or higher-end 4W?
- Are other measures to restrict ICEV and fuel demand in place?



EV and car industry?

- Lessons from other countries: Incentive structure, technologies..
- **Market concentration of existing players** very strong



Emissions and pollution?

- What are the real-world emission reduction benefits?
- EV for domestic market vs export

Have the **incumbent auto players** indicate a shift?
How impactful is **domestic nickel** in lowering EV prices?
Emphasis on **2W**?
Other measures to **restrain ICEV growth**?

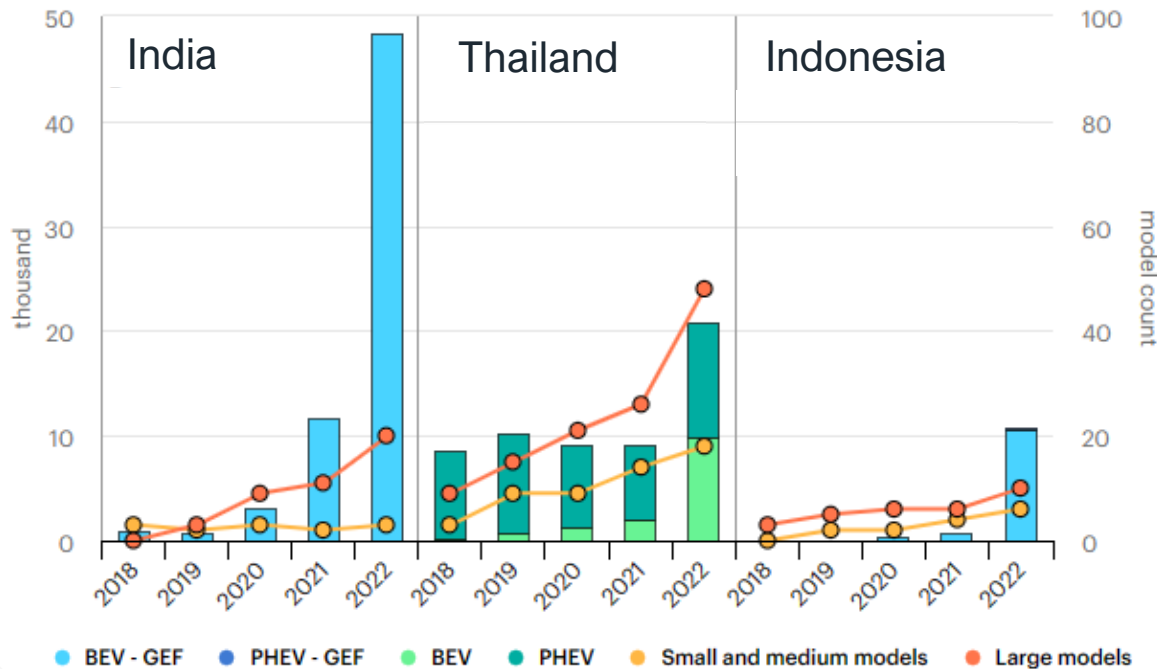
Credibility on multi-year commitment of EV, domestic EV roadmap and milestones.

Diverse context – pursuit of ‘inflection point’

Political support is key to allow initial take-off of EV industry.



EV sales
Number of EV models



- India **relative consistency** and regional involvement
- Thailand able to **muster political support** despite being ASEAN largest auto producer
- **Indonesia’s EV narrative** faces some additional challenges
 - Very concentrated incumbents
 - Nickel development vs EV. EVs not using nickel batteries, nickel for exports.
 - 2W adoption and support
 - ...

Source: IEA