

SUZUKI GREEN Technology



Environmental Vision of SUZUKI



SUZUKI Corporate Philosophy

“Smaller, Fewer, Lighter, Shorter, and Neater” has been used for long years to express SUZUKI philosophy and culture.

小:Smaller: Enhanced efficiency by making things compact

少:Fewer : Optimally distributes resources by omitting wastes

軽:Lighter: Slims down for enhanced efficiency

短:Shorter: Shorten in time and distance

美:Neater: Neater in all activities for the best customer satisfaction.



We believe “Smaller, Fewer, Lighter, Shorter, & Neater” concept applies to the initiative toward tackling global environmental issue including climate change, water shortages and resources depletion.

Effort towards Carbon Neutrality



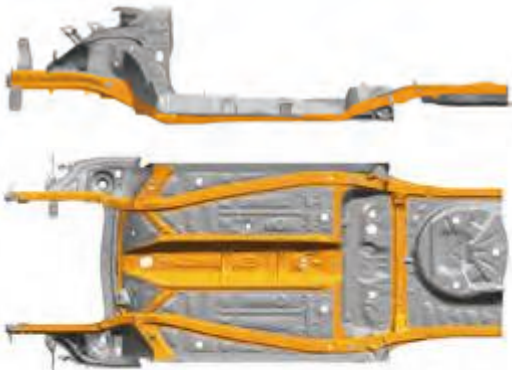
SUZUKI GREEN Technology

In line with philosophy of “Smaller, Fewer, Lighter, Shorter, and Neater” , SUZUKI has been developed **SUZUKI GREEN Technology** represent next generation eco-friendly technologies with lower fuel consumption and weight reduction technologies.

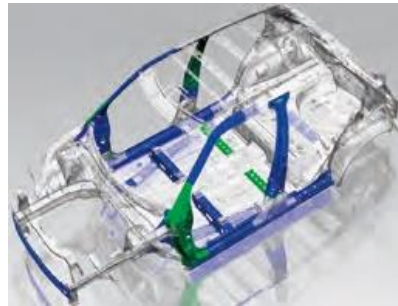
HEARTECT

Heartect

Lightweight high rigidity platform making the underbody stiffer and smoother



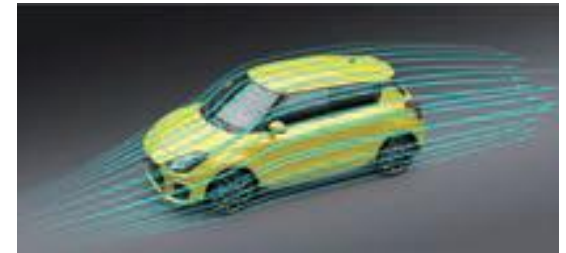
Lighten the load by adopting “Ultra High Tensile Sheet”



Designing a compact plastic part



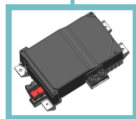
Reduction of air resistance



Reduction of engine weight by making compact and add the hybrid technology

Smart Hybrid Vehicle by Suzuki (SHVS)

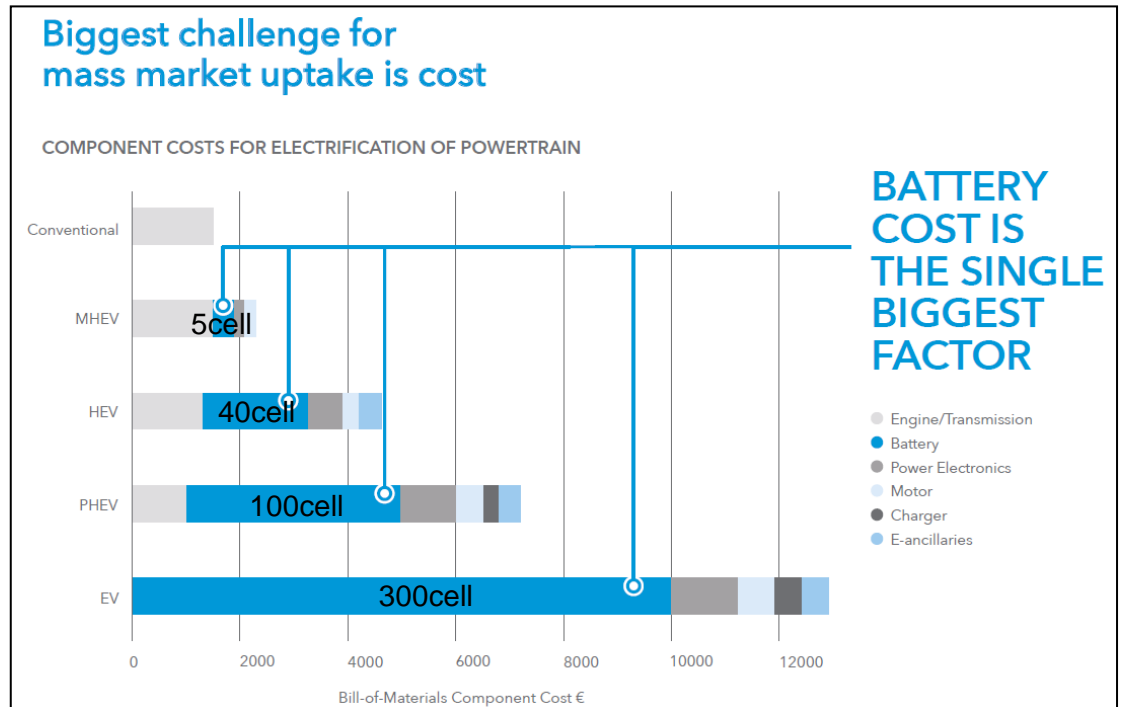
Since Eco-Friendly vehicles is important issue today, SUZUKI offers a solution with Smart Hybrid as a first step in developing technology to achieve fuel efficiency at affordable price.



Batt Lit-Ion



ISG



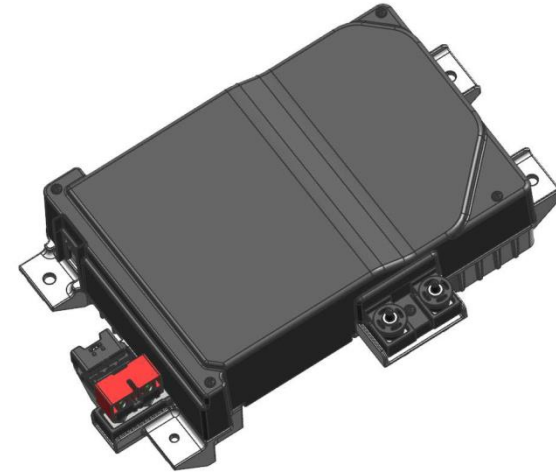
VIDEO: ERTIGA SMART HYBRID (SHVS)

Smart Hybrid illustration

ISG (Integrated Starter Generator)
Generator with Motor Function



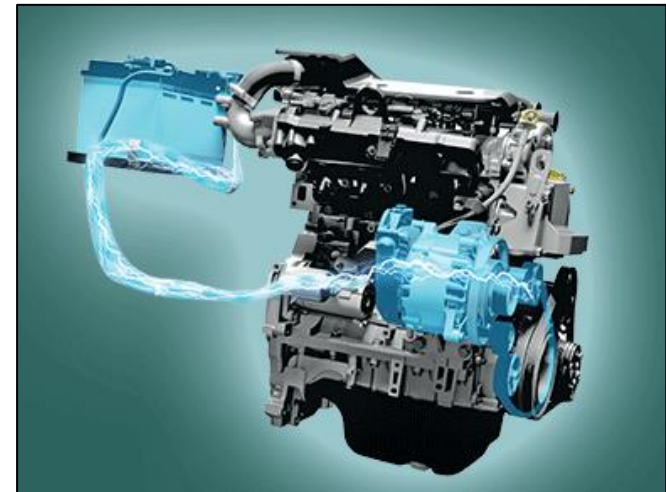
Lithium Ion Battery
Pack



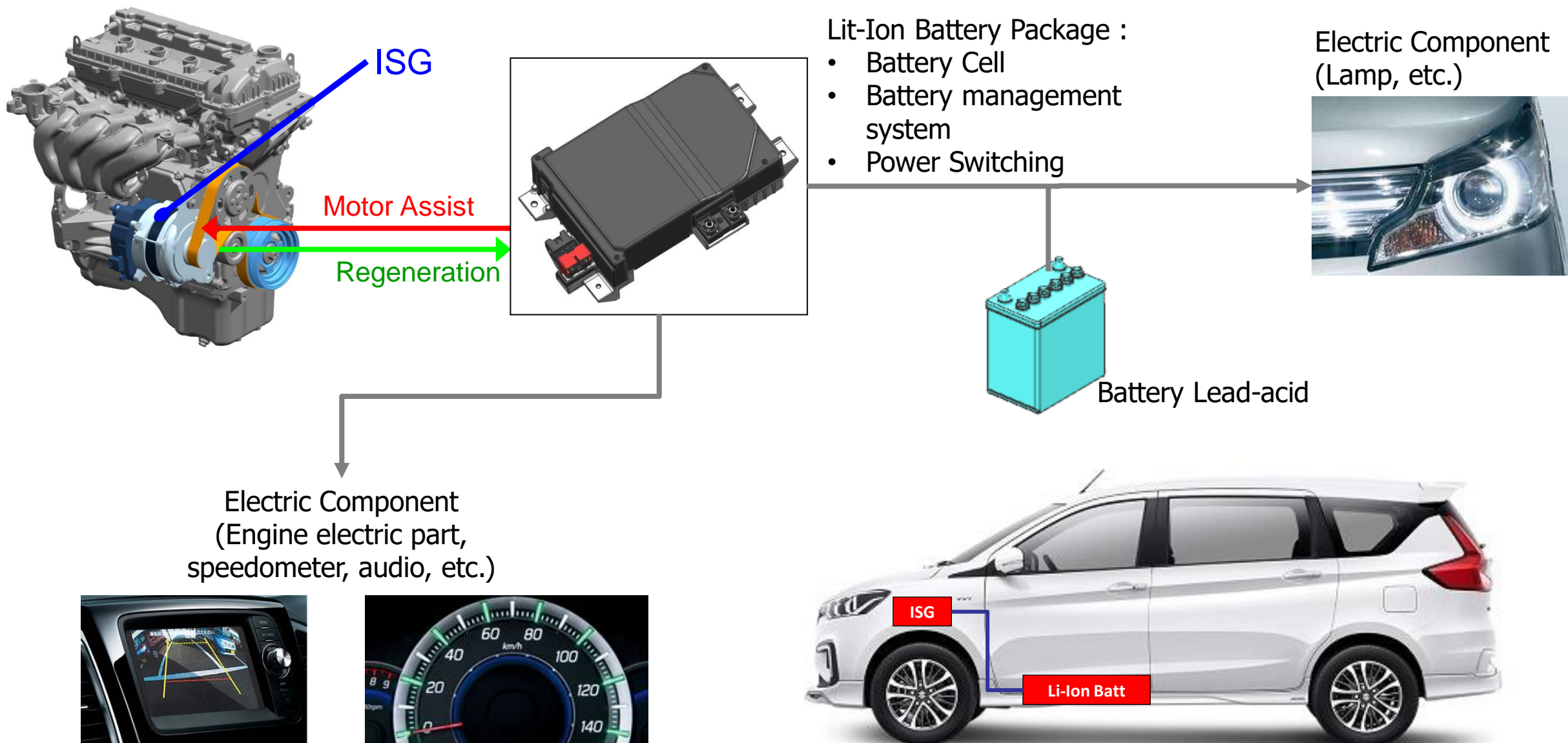
ISG And Lit-ion battery

This system has the function of increasing fuel efficiency by :

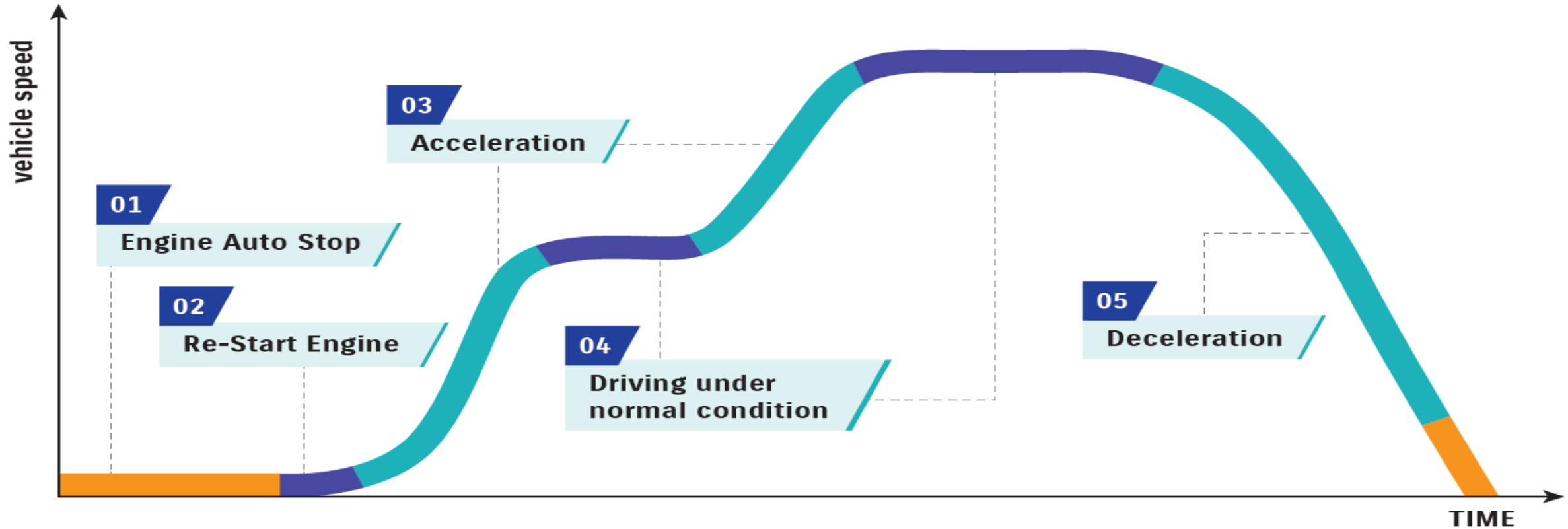
- Auto Stop function
- Smooth engine restarting after auto stop
- Power support from ISG during vehicle acceleration
- Battery power regeneration during vehicle deceleration



What is Smart Hybrid?



How SUZUKI Smart Hybrid works



01 Engine Auto Stop

This smart feature automatically turns off the engine when the car stops which makes it more fuel efficient.

02 Re-Start Engine

This feature sends power from the battery to the ISG when the engine restarts after the Engine Auto Stop is activated.

03 Acceleration

The ISG technology assists the engine by adding power to the engine during acceleration for higher fuel efficiency.

04 Driving under normal condition

When driving in normal condition, the Lithium battery stops the power supply to the ISG. This allows the engine to work on its own to move the vehicle.

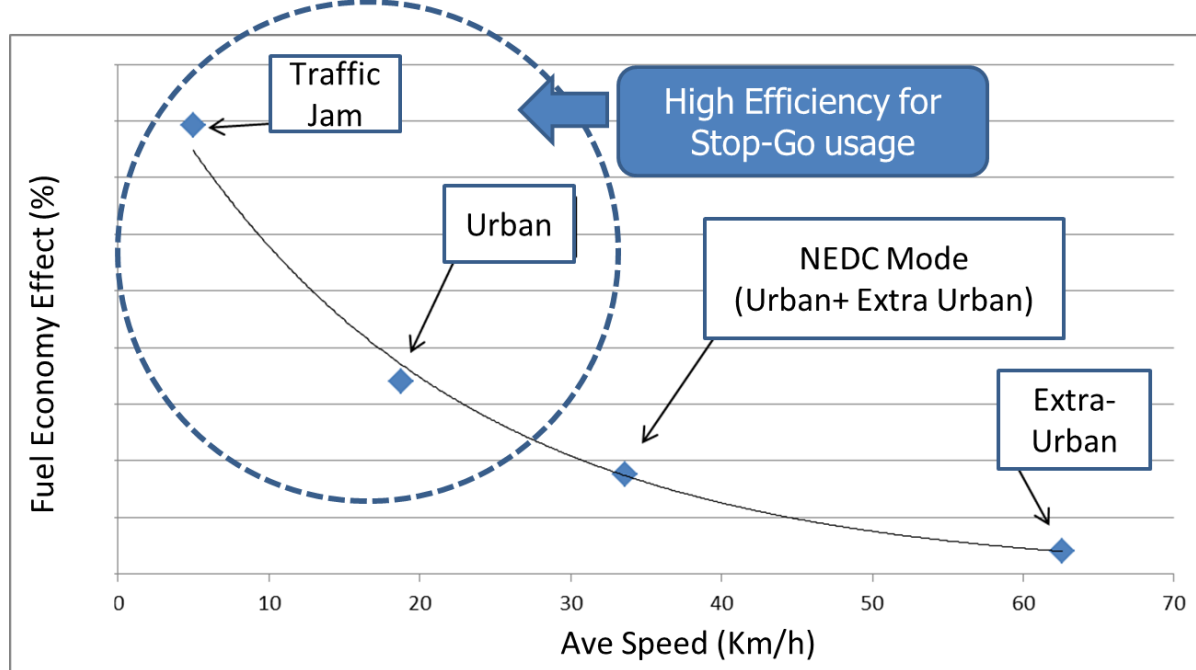
05 Deceleration

During deceleration ISG will use the energy to charge the battery.

Benefit for Smart Hybrid user



Benefit of SUZUKI Smart Hybrid :



- The advantage of Smart Hybrid System is reducing fuel consumption during congestion (stop-go).
- Fuel efficiency at affordable price.



JAKARTA



BANDUNG



SURABAYA



MEDAN

Purchasing Power & Market Condition



Sales data of 2019 until June 2022 for Non ICE & ICE

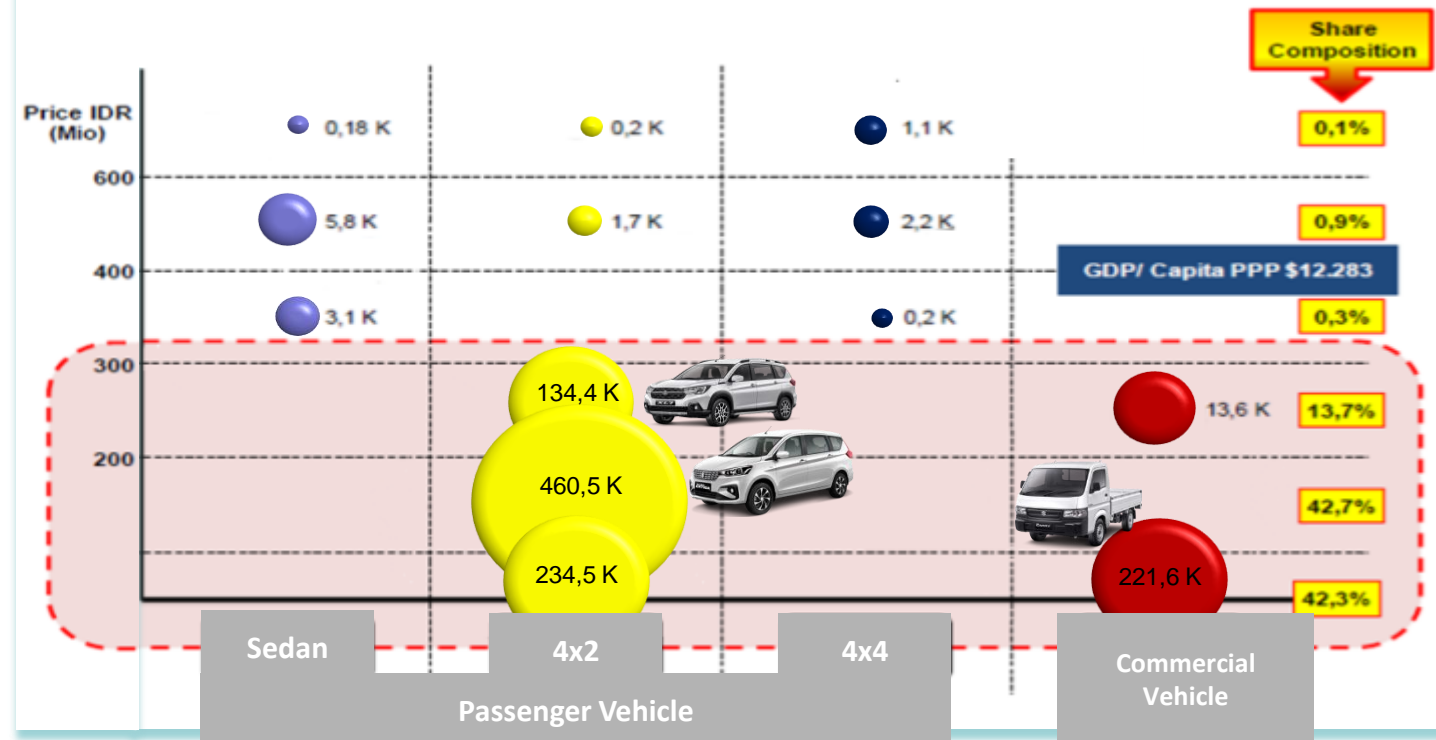
Kategori	2019		2020		2021		~ June 2022	
	Qty	Share	Qty	Share	Qty	Share	Qty	Share
BEV	-	0,0%	125	0,0%	687	0,1%	495	0,1%
PHEV	25	0,0%	8	0,0%	46	0,0%	10	0,0%
HYBRID	787	0,1%	1.191	0,2%	2.472	0,3%	3.314	0,7%
ICE KBH2	217.454	21,1%	104.650	19,7%	146.520	16,5%	76.802	16,2%
ICE (PC&CV)	814.641	78,9%	426.433	80,1%	737.477	83,1%	394.700	83,0%
TOTAL	1.032.907	100%	532.407	100%	887.202	100%	475.321	100%

Sumber: GAIKINDO Data

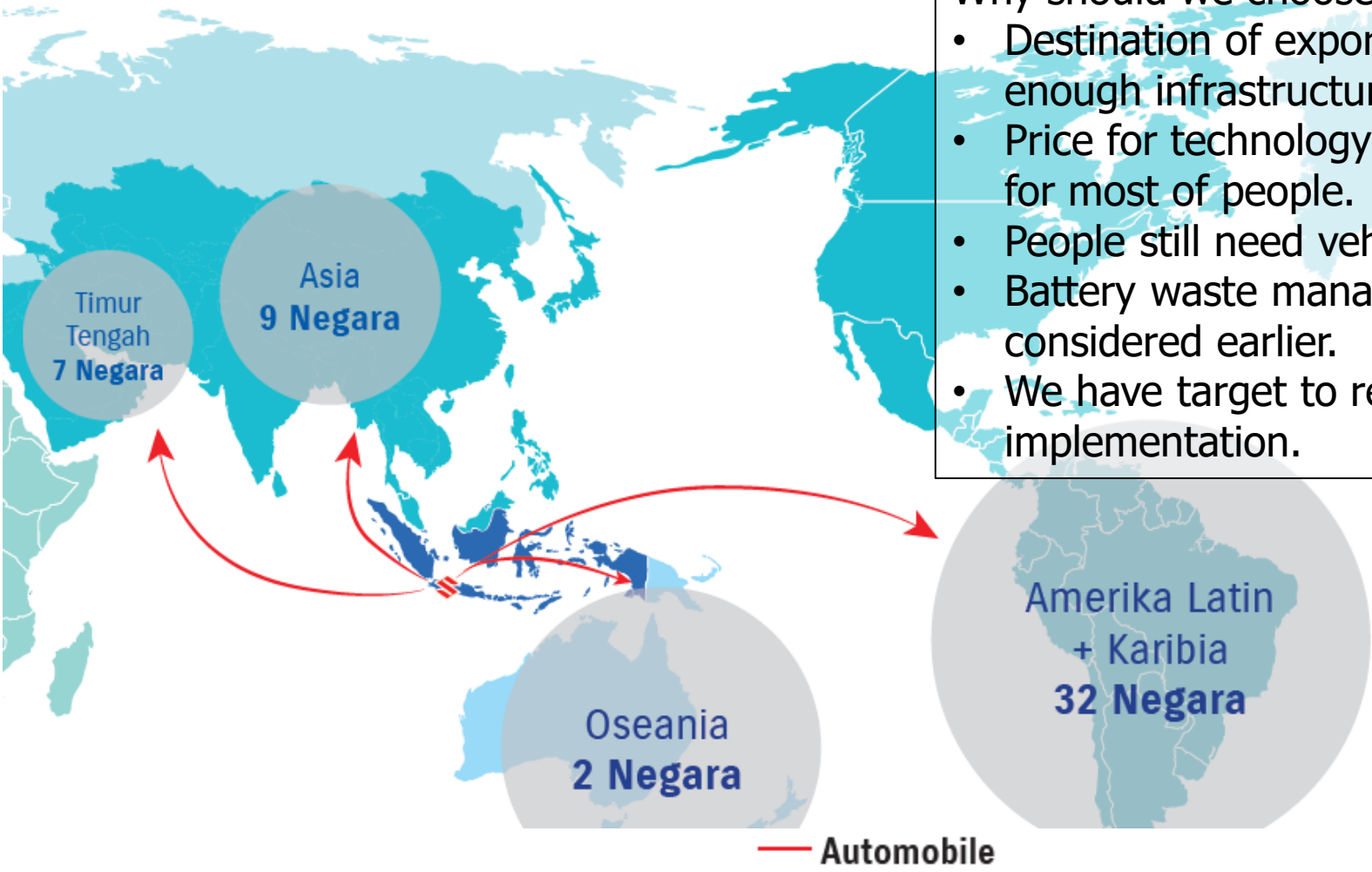
xEV Market Share from 2019 – 2022 is still relatively low, because of purchasing power in Indonesia is still around **Rp. 250 Million – Rp. 300 Million**



SUZUKI Smart Hybrid is answer of consumer needs, purchasing power and environmental improvement.



SUZUKI Export Market



Why should we choose Smart Hybrid?

- Destination of export countries for SUZUKI mostly don't have enough infrastructure for BEV yet.
- Price for technology above Smart Hybrid is not affordable yet for most of people.
- People still need vehicle at affordable price.
- Battery waste management is ecological issue and need to be considered earlier.
- We have target to reduce Carbon dioxide emission for COP 26 implementation.



SUZUKI present to fulfill export market with Smart Hybrid Technology

Conclusion



- SUZUKI in April 2022 had produced All New Ertiga with electrification technology (xEV) called “Smart Hybrid” as one of the efforts to support LCEV (Low Carbon Emission Vehicle) program in order to achieve COP26 target by reducing CO2 emissions in 2030.
- “Smart Hybrid” technology is one of a good options for today, considering below circumstances :
 1. Electrification vehicle (xEV) market share in Indonesia from 2019 until 2022 still relatively low due sales in high price range, while vehicle price in Indonesia is dominated by price range Rp. 250 Mio to Rp. 350 Mio.
 2. Congestion condition in some of big cities in Indonesia results wastage of fuel. Smart Hybrid has advantage to reduce fuel consumption in congestion condition.
 3. Maintenance cost of Smart Hybrid is affordable.
 4. Export destination countries still need electric vehicle at affordable price.

TERIMA KASIH