

Plug-In HEV

Press Release 2007-July



EV driving range 13km



【Charge Time】
1 ~ 1.5Hr(200V)
3 ~ 4Hr(100V)

Plug-In HEV (USA)

Ford ⇒ Southern California Edison(2007.12)

Daimler ⇒ NY Times (2007.4)



Sprinter Plug-In Hybrid
12kWh(Li Ion or NiMH)
EV driving 32km



Escape Plug-In Hybrid
10kWh(Li Ion)
EV driving 48km

Battery EV

- Expensive Battery Cost
- Short Driving Range
- Long Charge Time
- Poor Battery Life

Low performance Vehicle
by poor characteristics of Battery.

**Next Generation
Battery Project** by
NEDO/METI

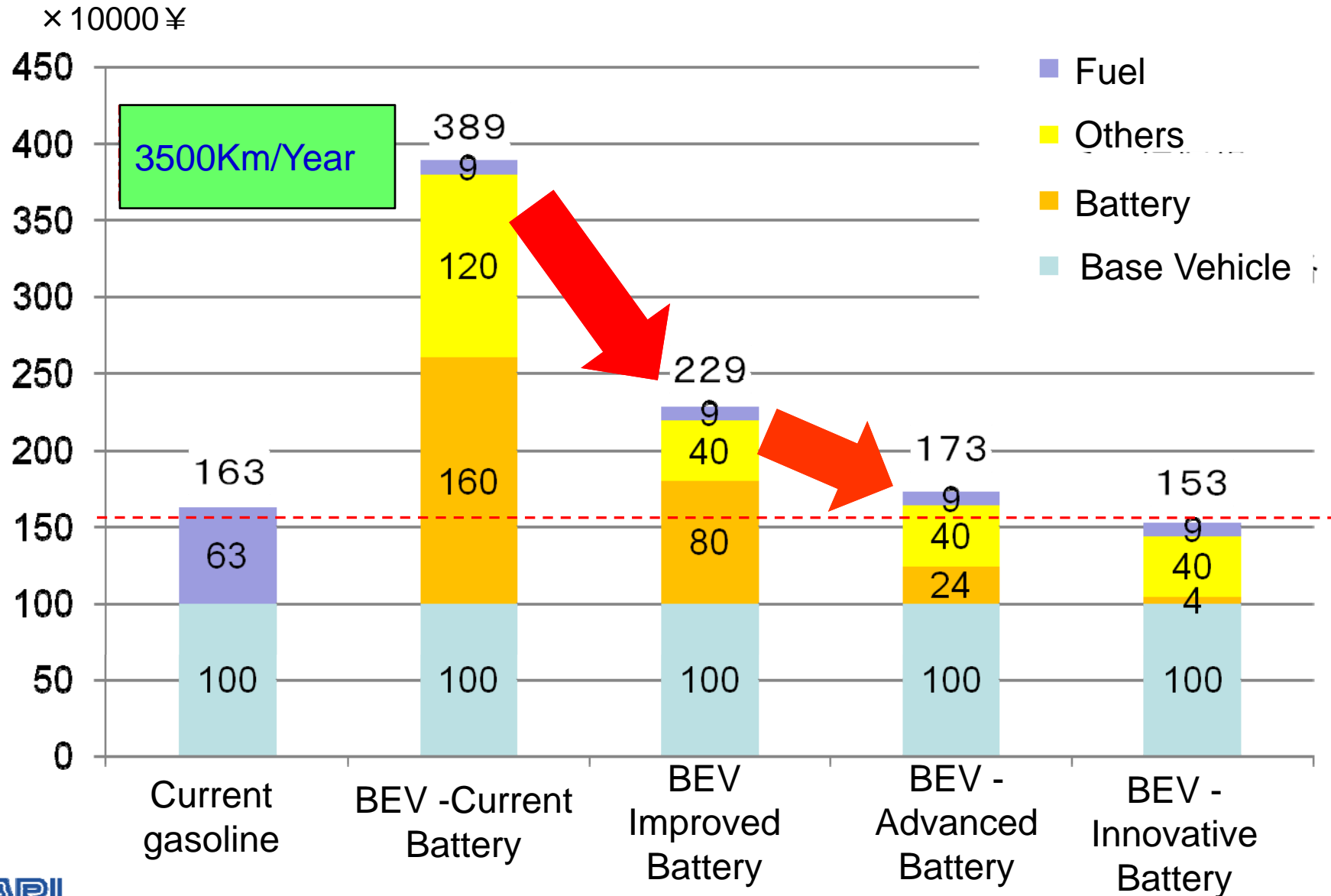
Appropriate **New
Concept** for Property of
Battery

METI 「Next Generation Battery Project」

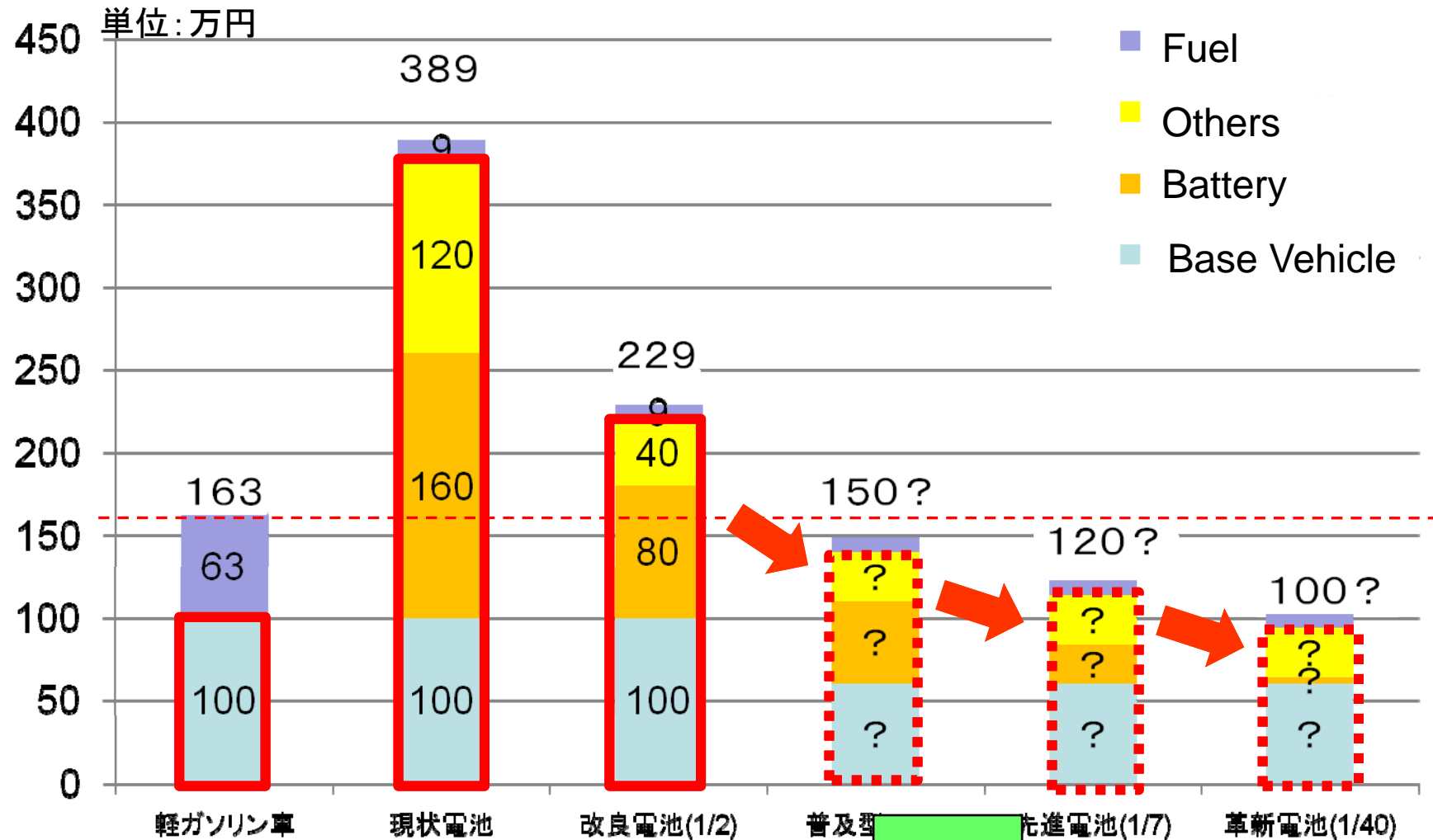
- ① Improved Phase ② Advanced Phase
③ Innovative Phase

	Today	2010 Improved batteries	2015 Advanced batteries	(2020)	2030 Innovative batteries
	• Small-sized EVs (utility use)	• Commuter EVs (business use) • Improved HVs	• Commuter EVs (personal use) • FCVs • Plug-in HVs	• High performance plug-in HVs	• Full-range EVs
Performance target (today = 1)	1	1	1.5	(3)	7
Cost target (today = 1)	1	1/2	1/7	(1/10)	1/40
Cost target [yen/kwh]	200,000	100,000	30,000	(20,000)	5,000
R&D Lead	Industry	Industry	Collaboration / PPP	----	Universities / research institutions
Technology	Ni-MH Lithium-Ion	Ni-MH Lithium-Ion	Lithium-Ion		???

BEV 10 years Lifecycle Cost

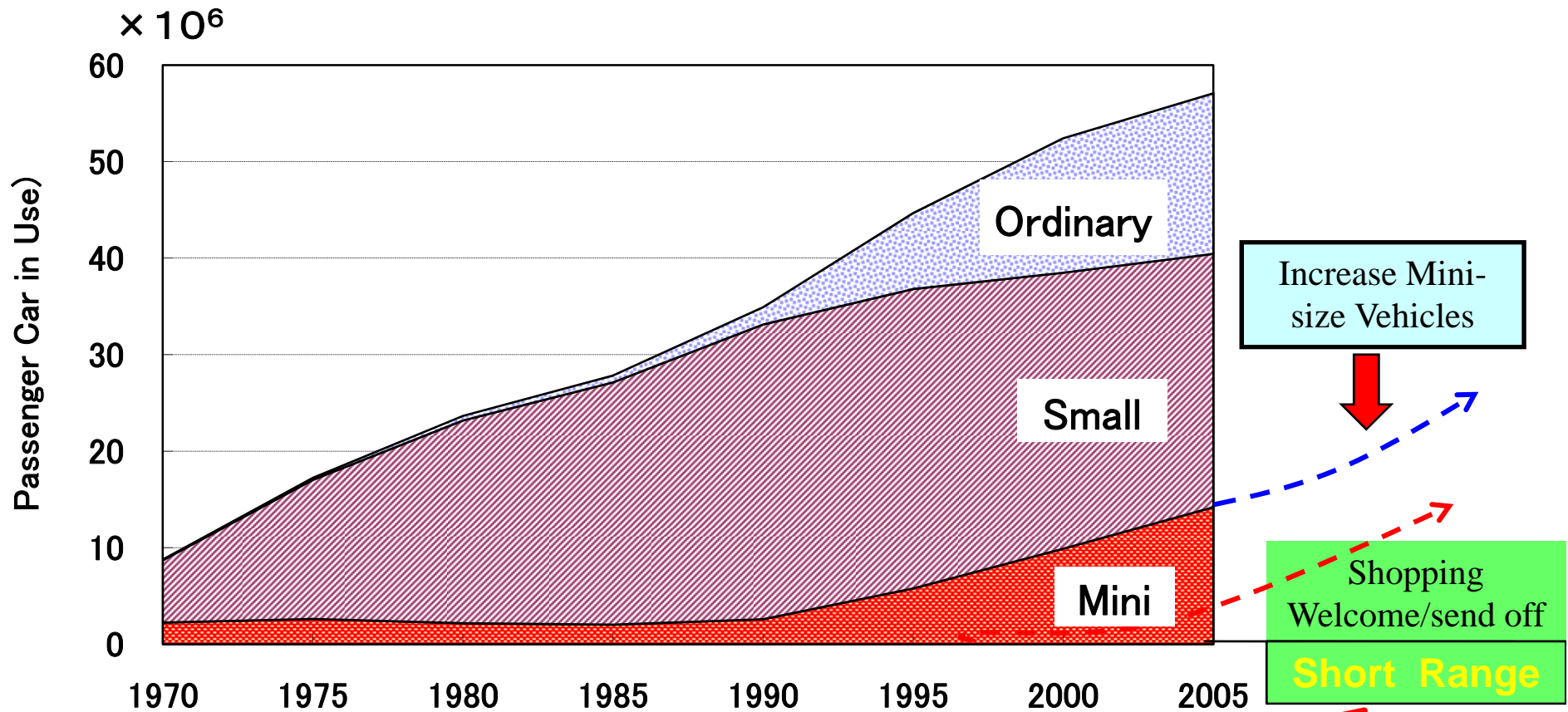


New Concept BEV 10 Years Lifecycle Cost



Required New Concept Vehicles

Change of Passenger Car Category in Japan

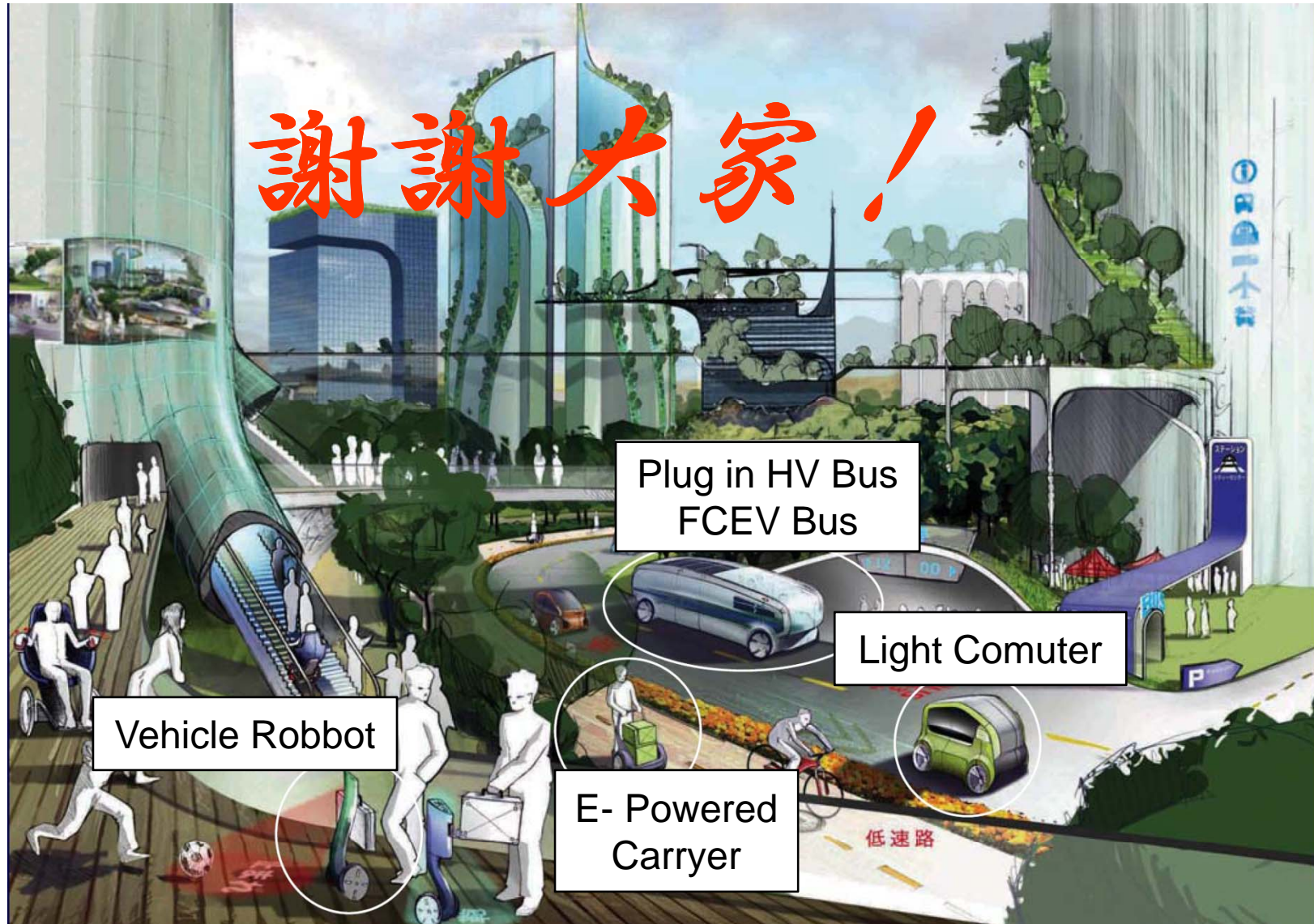


Increase Light Commuter → New Concept

Ultra Light Commuter(INRIA Fr.)



Thank You for Your Attention !



Diversification in Vehicle Technology

- Traditional single-track scenario was to realize fuel cell vehicles
- However, rising interests in hybrids, clean diesels, and alternative fuels show how vehicle technology has diversified in recent years

