Towards Sustainable Mobility

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Toyota environmental history

1969 S800
gas turbine hybrid

1963
Start of HV
car development

1975 Century
gas turbine hybrid

1997 RAV4-EV
1996 1st FC vehicle

1998 e-com

1997 Prius

2003 Prius
2nd generation

2009 Prius
3rd generation

2009
Lexus RX 450h

2007
Lexus LS 600h

2006
Lexus GS 450h

2005
Lexus RX 400h

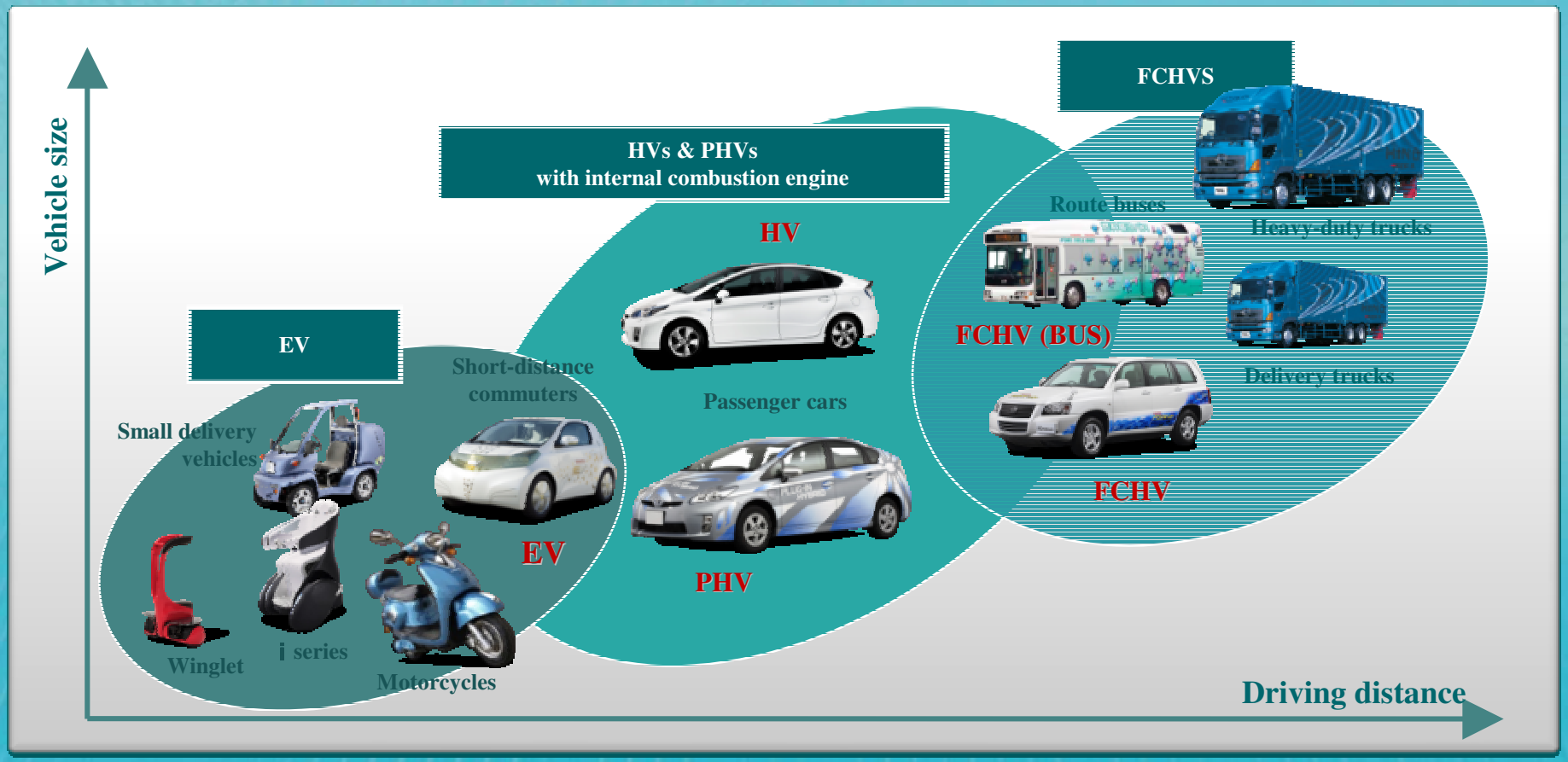
2010 Auris HSD

1960 1970 1980 1990 2000 2010

The main challenges of today, as Toyota sees it

1. Response to energy diversification
2. CO_2 reduction
3. Improved air quality

We believe in the Sustainable-mobility based society, where several types of eco-cars will co-exist…



FUEL

Electricity | Gasoline, diesel, bio-fuels, compressed natural gas, gas to liquids, coal to liquids, etc. | **Hydrogen**

…however, we do believe in one technology platform: Hybrid Synergy Drive

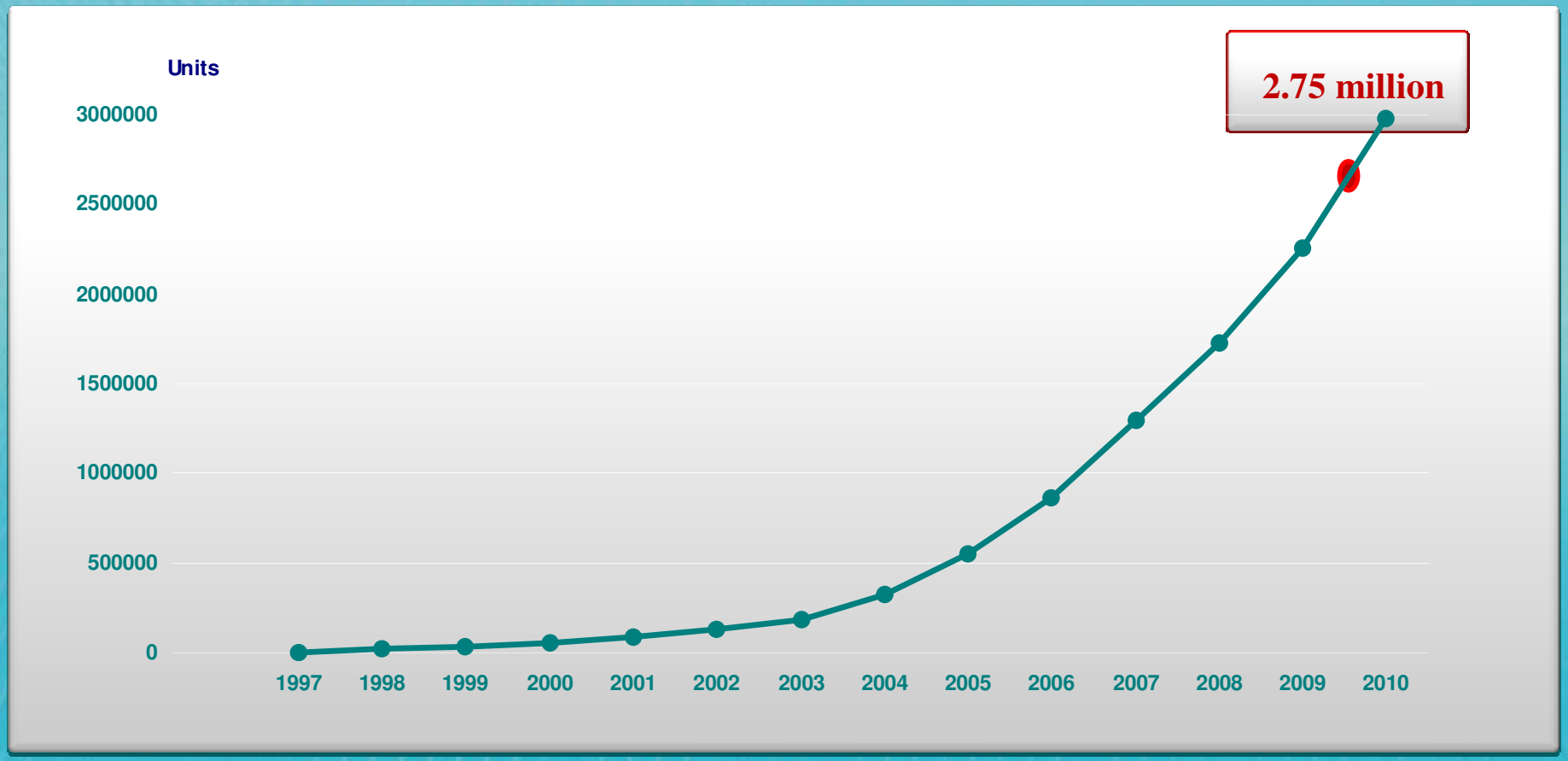
Sustainable Mobility

Energy diversity **CO_2 reduction** **Air quality**

Gasoline, diesel	Gaseous fuels	Biofuels	Synthetic fuels	Electricity	Hydrogen

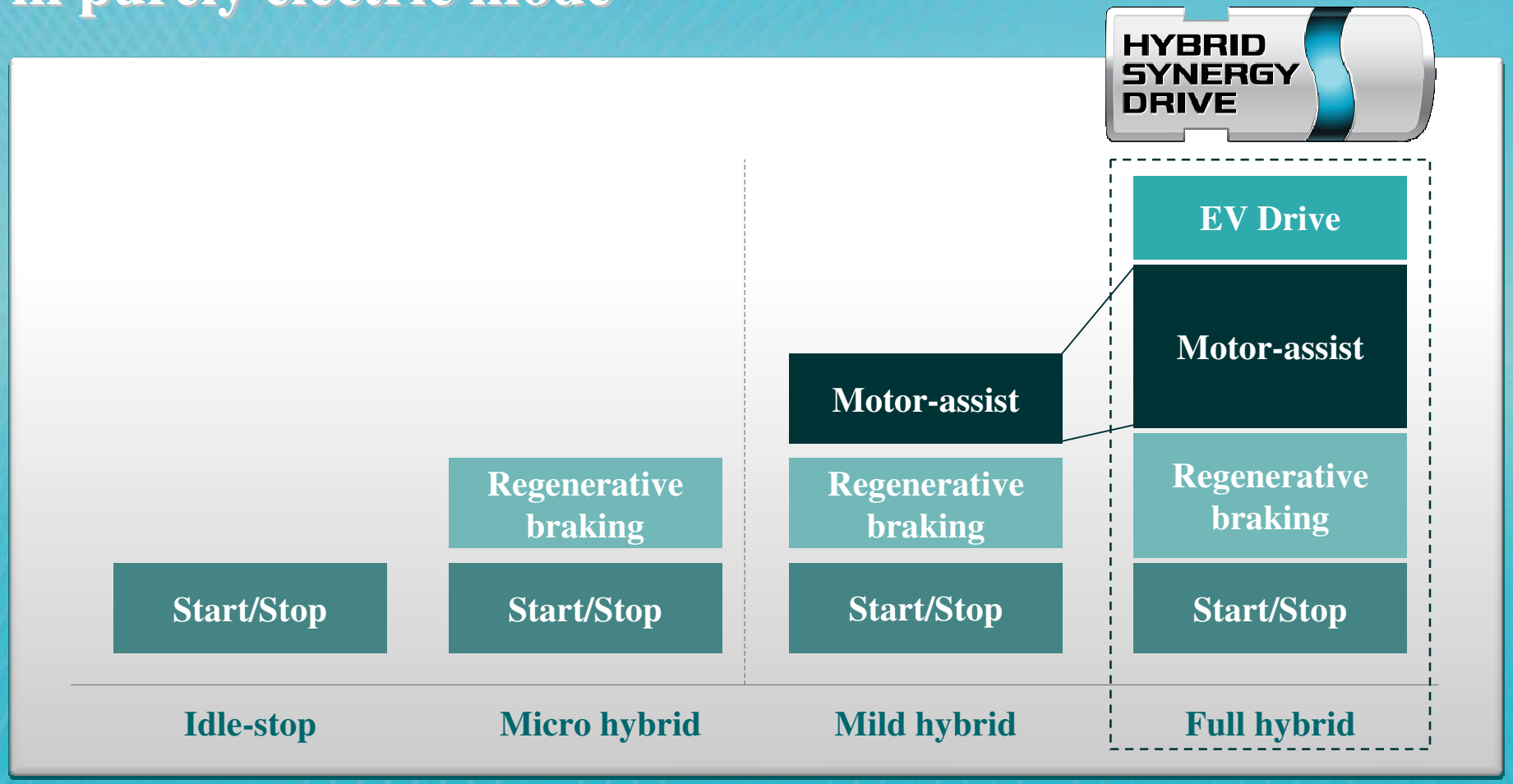
The right car, the right place, the right time

Our experience tells us that the market for hybrid vehicles is growing

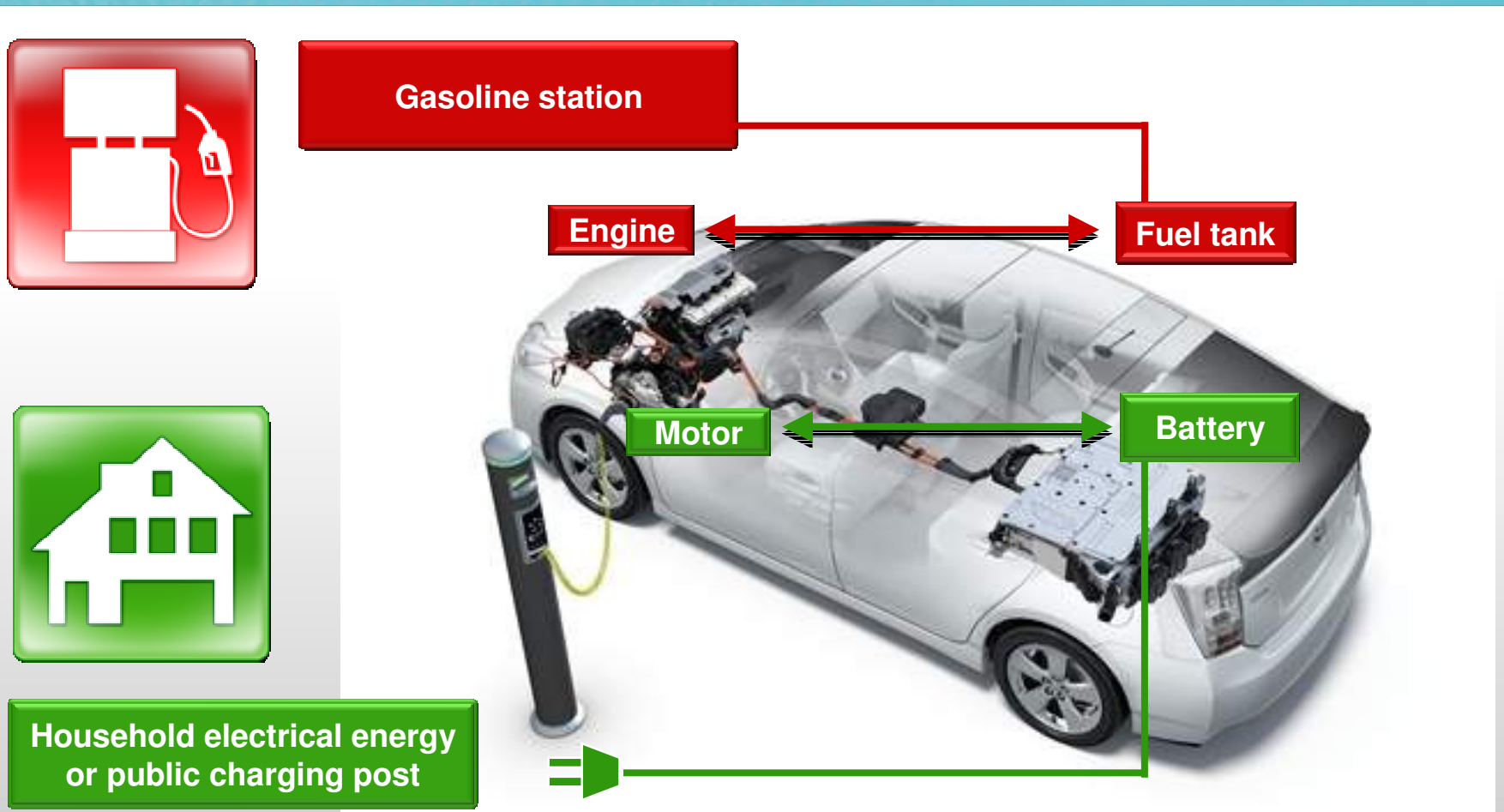


Our aim: 1 million hybrid sales per year, early 2010s
1 hybrid option in every model, early 2020s

Only the full hybrid technology allows driving in purely electric mode



A Plug-in Hybrid: simply a conventional hybrid, with an extended EV range…



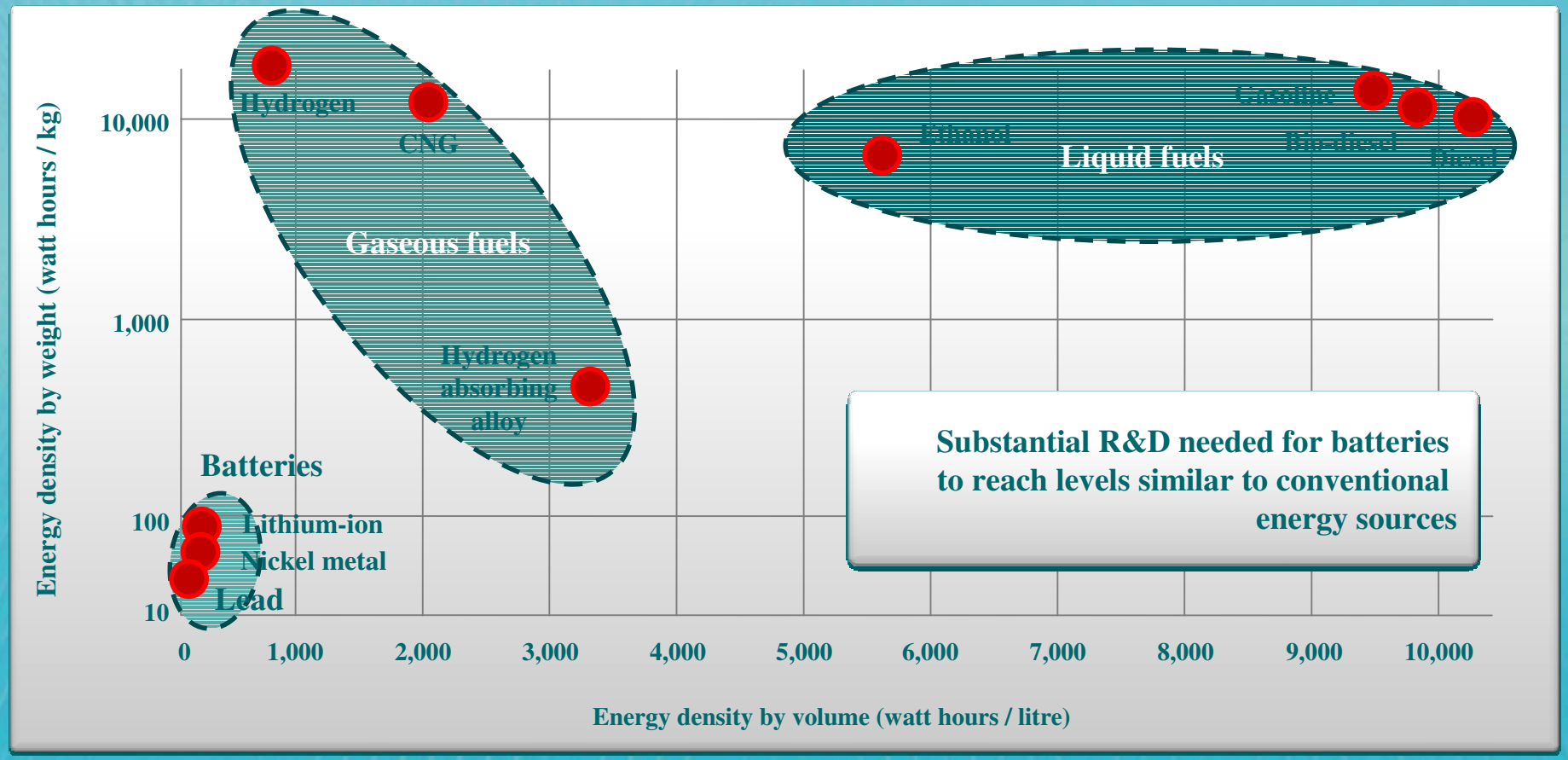
… functions as EV for city transportation and as a conventional full hybrid for longer drives

Short distance: EV

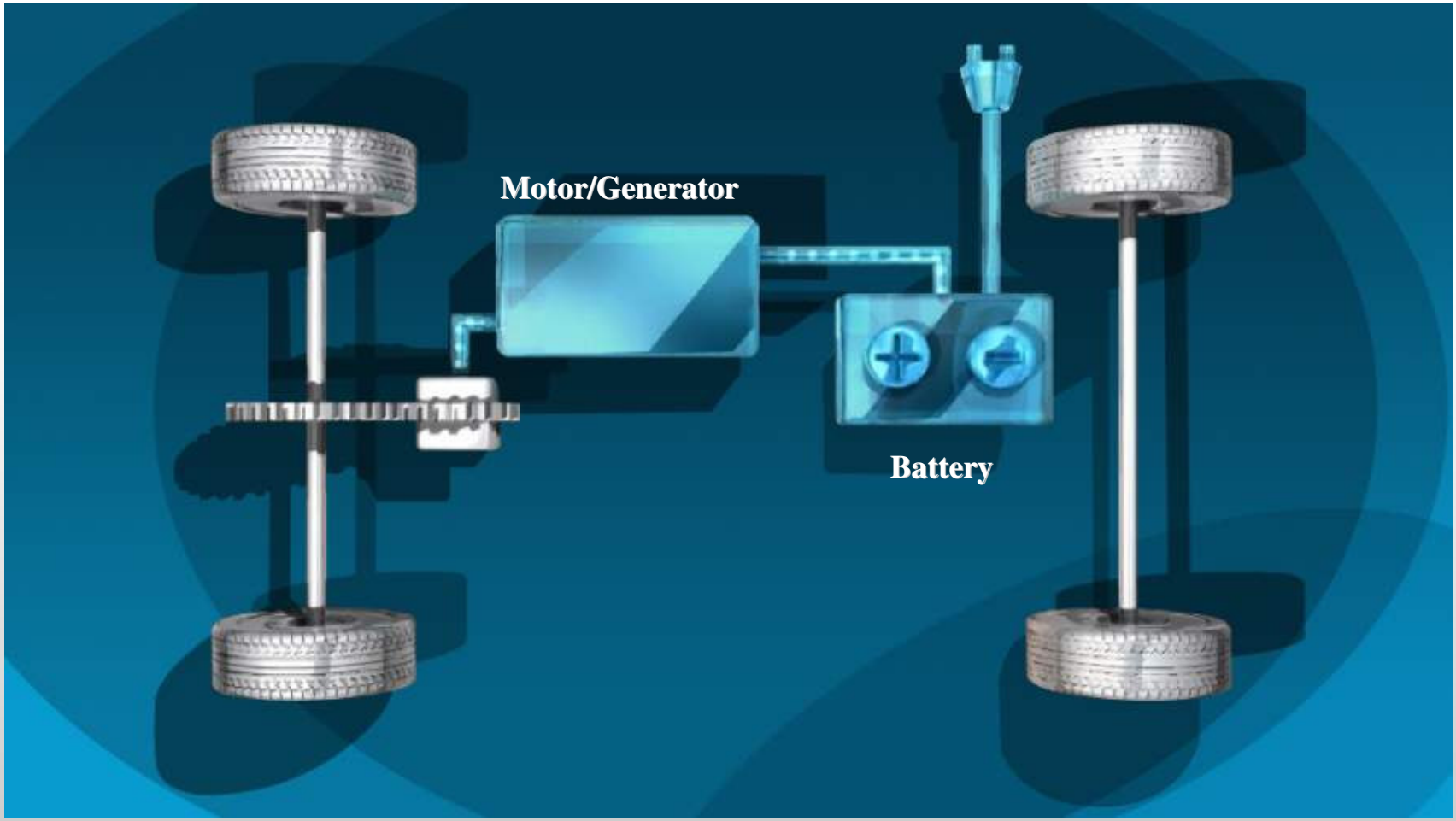
Long distance: Hybrid

PHV: “the best of both worlds”

Weight & package are limiting today's battery technology…



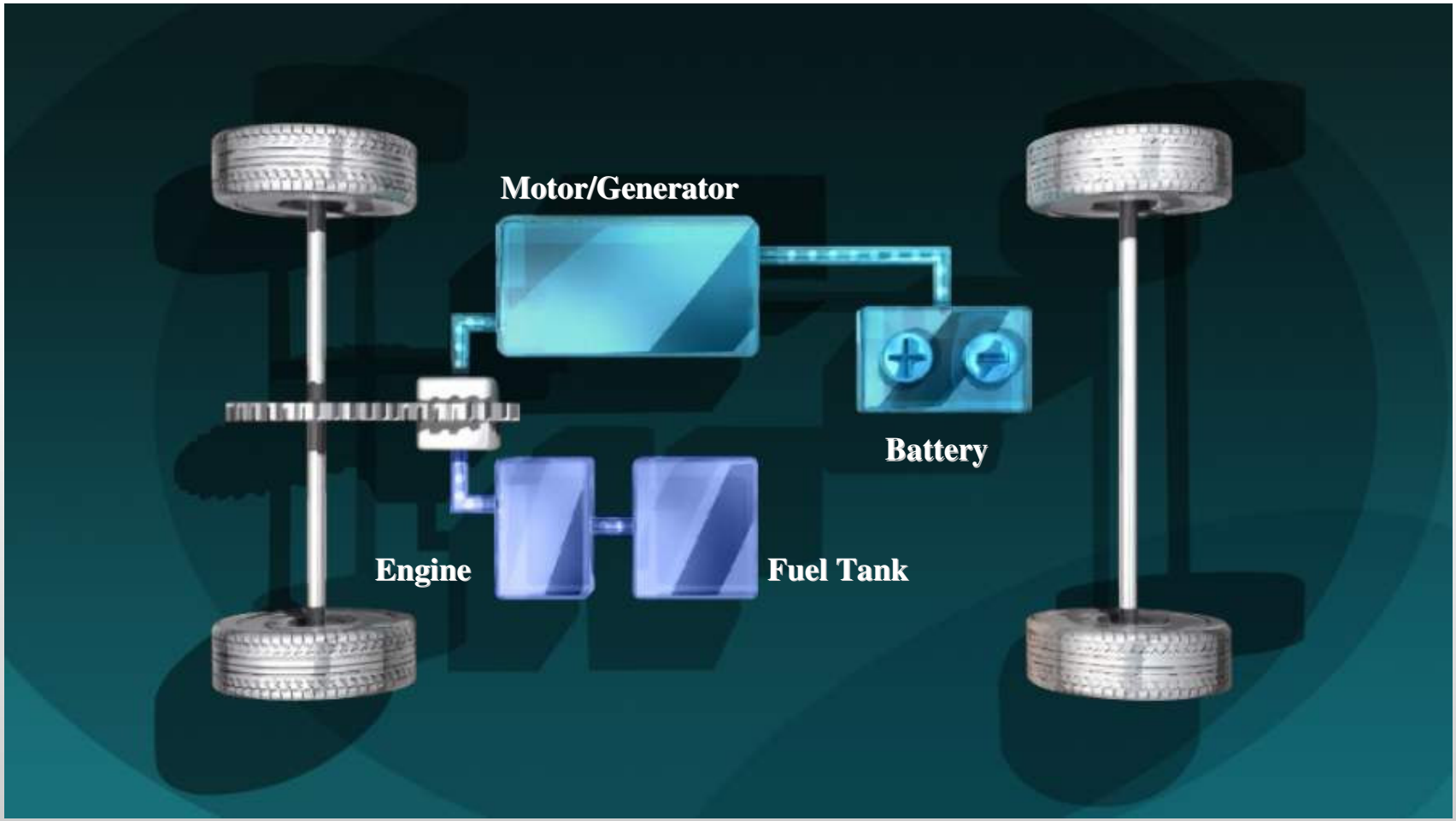
Electric Vehicle - EV



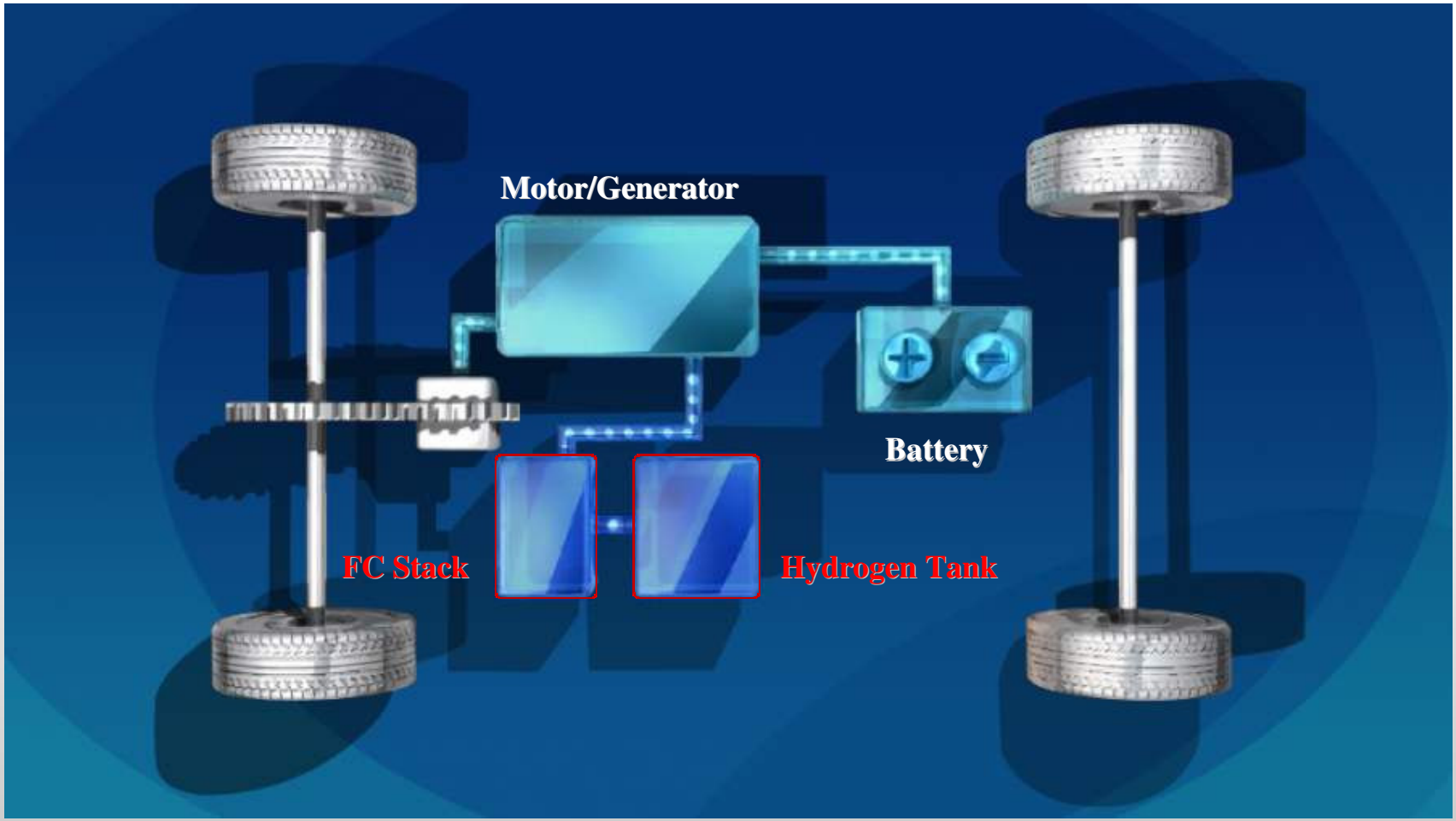
FT-EVII

Launch of small commuter EV planned for 2012

Modular HSD - Readily adaptable to PHV, EV and FCHV



Fuel Cell Hybrid Vehicle - FCHV

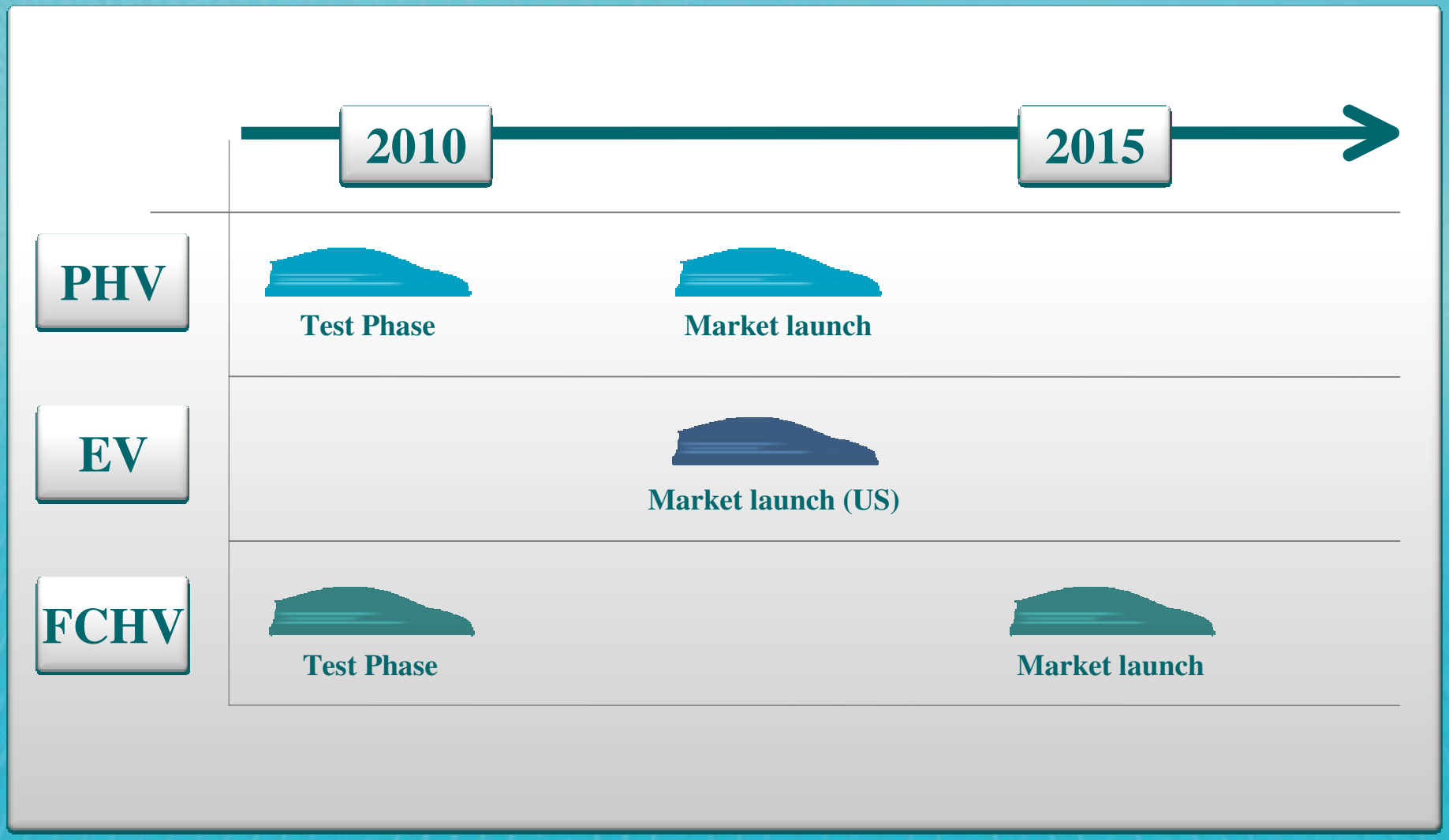


Reality not theory: the FCHV-adv

Vehicle	Overall length/ width/ height (mm)	4,735/ 1,815/ 1,685	Fuel	Type	Pure hydrogen
	Max. speed (km/h)	155		Storage system	High-press. H_2 tank
	Cruising range (km)	790*1		Max. storage pressure (MPa)	70
	Fuel economy (km/kg H_2)	128*1		Tank capacity (kg H_2)	6.1 (25˚C)
	Seating capacity	5		Curb weight	1,880kg

*1: in LA#4 test cycle, Toyota in-house test

Next steps: Toyota's expansion plan for EVs, PHVs and FCHVs



Prius Plug-in Hybrid

Thank you