

# Hino's Electrification Strategy

Oct. 29, 2020

Hino Motors, Ltd.

Hisaki Torisaka

**Chief Officer, Advanced Technology Div.** 

## To help attain SDGs



## Hino's ideal state that could be achieved by helping attain SDGs



## HINO

## **Basic policy for electrification**

With the aim of actualizing

"an affluent, comfortable, sustainable society"

where people and goods can move freely, safely, and efficiently,

we will cooperate with the best partners in the aspects of regionality, technology, and timing, while considering local needs, laws, regulations, infrastructure, etc. and embody electric commercial vehicles for contributing to each customer's business.



## **Concept of electrification of commercial vehicles**

## To place the right vehicle in the right place for meeting customer needs

Characteristics of commercial vehicles: A broad range of vehicle sizes (load capacities), travel distances, places and purposes of use



## Policy for electrification of vehicles



### **Promotion phase**

Swift release while advancing and utilizing technologies of our company and partners

### **Full-scale distribution phase**

Cooperation with partners for developing an optimal platform for EVs



FCV Demonstration for distribution

EV EVs in urban areas



Ratio of EVs: 100%



**Down-to-earth solutions** 

## **Hino PROFIA Hybrid**



"Down-to-earth solution" to considerably reduce CO<sub>2</sub> emissions today

A customer's track record

## Fuel efficiency improved about 15% compared with diesel trucks



We will promote more customers to drive this truck to help reduce CO<sub>2</sub> emissions.

## **Project Z in the U.S.**



To develop EVs speedily in cooperation with local competent partners while local business operators, who are the closest to customers, will take the initiative



**HINO XL Series (Class 8)** 

: mounted with Toyota's fuel cell system



HINO L Series (Class 7): mounted with the fully electrified drive system of Hexagon Purus

HINO M Series (Class 5): mounted with the motor of SEA Electric

HINO XL Series (Class 8): mounted with the batteries and the electrified drive system of Xos

Truck

(From the left in the image)

## **Cooperation with partners: BYD**

We aim to speedily release commercial EVs suited for meeting customer needs mainly in the Asian market.







## Agreement with BYD for establishing a joint venture to develop commercial EVs

In 2021, we plan to establish a new company for developing commercial EVs in China. We will develop commercial EVs while utilizing the strengths of both companies, and aim to release EVs of the Hino brand in the early 2020s.

Apr. 2020

Signed a "strategic partnership contract" mainly for cooperation in the development of commercial EVs

Oct. 2020

Signed a joint-venture contract for establishing a new company for developing commercial EVs



## HINO

## **Cooperation with partners: TRATON**

We will combine the strengths of both companies as commercial vehicle manufacturers, design a comprehensive mid/long-term plan for EVs, and engage in development in respective areas of specialty.



## Hino Motors and TRATON concludes a contract for cooperation in electrification

We will share the platform and components for electrification.

We will organize a team of personnel with expertise, start activities in Sweden, and plan to establish a base also in Tokyo.

We will shorten the lead time for putting EVs and FCVs, which will be indispensable in the future society, into practical use.

Apr. 2018

Signed a strategic cooperation framework agreement (SCFA) from the long-term, fifty-fifty, mutually beneficial perspectives.

Oct. 2020

Concluded a contract for cooperation for planning and providing EVs.



## HIND

## To help realize a hydrogen-based society in cooperation with Toyota Motor

To promote the practical use of commercial fuel cell (FC) vehicles through the demonstration of running, in order to actualize a low-carbon or hydrogen-based society



**Heavy-duty FC trucks** 



**Light-duty FC trucks** 



Heavy-duty FC trucks for the North American market



Large FC route buses (already in service)

### Acceleration of release of electric vehicles



Based on the track records of electrification, we will release full-fledged EVs in Japan, North America, and other Asian market by fiscal 2025.

### Track records

**HV** trucks and buses **Since 1991 About 30 years** of sales



**EV** low-floor microbuses **Since 2012** Limited sale



**EV** delivery trucks 2013 to 2014



**Experimental operation** 

PHV medium-sized buses

**Since 2016** Limited sale



FCV large route buses **Since 2017** [Toyota brand]





