## Summary of Honda Briefing on Automobile Electrification Business <br> - Honda introduces its progress toward electrification and business transformation for the future -

■ Honda will strive to transform its business portfolio by shifting focus from non-recurring hardware (product) sales business to recurring business in which Honda continues to offer various services and value to its customers after the sale through Honda products that combine hardware and software.
■ Over the next 10 years, Honda will allocate approximately 5 trillion yen in the area of electrification and software technologies to further accelerate its electrification, including both R\&D expenses and separate investments. Honda's overall R\&D expenses budgeted for this period will be approximately 8 trillion yen.
■ Honda is planning to launch 30 EV models globally by 2030 with production volume of more than 2 million units annually.

- Honda will build a demonstration line for the production of all-solid-state batteries with an investment of approximately 43 billion yen and further accelerate the research with a goal to start demonstration production in Spring 2024.

TOKYO, Japan, April 12, 2022 - Honda Motor Co., Ltd. today held a press briefing on its initiatives in automobile electrification business that included participation of the following Honda executives:

- Toshihiro Mibe, Director, President and Representative Executive Officer
- Kohei Takeuchi, Director, Executive Vice President and Representative Executive Officer
- Shinji Aoyama, Senior Managing Executive Officer

A summary of the briefing follows:

## 1. Honda initiative for electrification

Honda is striving to be a company which serves as a source of "power" that supports people around the world who are trying to do things based on their own initiative and that helps people expand their own potential. To this end, Honda strives to realize "the joy and freedom of mobility" by seeking a "zero environmental footprint."

## <Solidifying existing businesses>

Over the past several years, Honda has been pursuing various initiatives toward the direction to "solidify existing businesses" and to "prepare for new growth" and these initiatives have begun showing positive results in the areas of products, businesses and new technologies.

- The structure of Honda automobile business has made steady improvement. As of today, the total number of variations at the trim and option level for global models has been reduced to less than one-half of the number in 2018 (Target: a reduction to onethird by 2025).
- As for cost associated with global automobile production, Honda is on track to achieve its 10\% reduction target, compared to the cost recorded in 2018.

Honda will continue to accelerate its efforts to generate resources by solidifying existing businesses and invest such resources in electrification and the preparation for new growth.

## <Unique Honda approach>

As the world's largest power unit manufacturer with annual sales of approximately 30 million units of mobility products including motorcycles, automobiles, power products, outboard motors and aircraft, we aim to realize carbon neutrality for all products and corporate activities Honda is involved in by 2050, striving to eliminate carbon emissions from power sources of a wide variety of products. To this end, Honda believes that a multifaceted and multidimensional approach is needed, not a mere replacing of engines with batteries.

Including the utilization of swappable batteries and hydrogen as well as electrification of automobiles, Honda will offer a variety of solutions for all of its mobility products according to how its customers use the products in various countries and regions.

Furthermore, with the connected platform, which connects all these elements, Honda will enhance the convenience and efficiency of society as a whole.

<Organizational changes made to strengthen electrification business>
In the past, Honda divided its organization by products, namely motorcycle, automobile and power products. However, starting this fiscal year, technology areas which will become the core of the future competitiveness of Honda have been moved from their respective product-based organizations and combined under the newly created Business Development Operations. Such core areas are: electrified products and services, battery, energy, Mobile Power Pack, hydrogen and software/connected technologies that connect all core areas. With this change, Honda will accelerate the speed at which it can move and enhance the "cross-domain" synergy effect among Honda products.

## 2. Initiatives for automobile electrification business

## <Battery procurement strategy>

The key challenge in the EV era is the global procurement of batteries. Honda has two basic approaches for its battery procurement strategy.

1) Now and for the time being:

Honda will ensure stable procurement of liquid lithium-ion batteries in each region by strengthening the external partnership.

- North America: Honda will procure Ultium batteries from GM. Separately, aside from GM, Honda is exploring the possibility of creating a joint venture company for battery production.
- China: Honda will further strengthen our collaboration with CATL.
- Japan: Honda will procure batteries for mini-EVs from Envision AESC.

2) From the second half of the 2020s:

Honda will further accelerate its independent research and development of next-generation batteries. For the all-solid-state batteries it currently has under development, Honda decided to build a demonstration line, investing approximately 43 billion yen, with a goal to make it operational in Spring 2024. Honda aims to adopt its next-generation batteries to models to be introduced to the market in the second half of the 2020s.

## <Introduction of EVs>

Specific plans for the market introduction of EV models are as follows.

1) From now through the second half of the 2020 s:

Honda will introduce products tailored to the market characteristics of each region.

- North America: In 2024, Honda will introduce two mid- to large-size EV models currently being developed jointly with GM. (Honda brand: All-new Prologue SUV, Acura brand: an EV SUV model.)
- China: Honda will introduce a total of 10 new EV models by 2027.
- Japan: In early 2024, Honda will first introduce a commercial-use mini-EV model at the 1 -million-yen price range. Then, Honda is planning to make the timely introduction of personal-use mini-EVs and EV SUVs.


2) After the second half of the 2020 s :

Assuming it will become the time of the popularization of EVs, Honda will begin introducing the best EVs from a global perspective.

- In 2026, Honda will begin adopting Honda e: Architecture, an EV platform that combines the hardware platform and software platform.
- Through the alliance with GM, Honda is planning to introduce affordable EVs in 2027, with a cost and range that will be as competitive as gasoline-powered vehicles, starting from North America.

Through these initiatives Honda is planning to launch 30 EV models globally by 2030, with a full lineup from commercial-use mini-EVs to flagship-class models, and Honda is planning for production volume of more than $\mathbf{2}$ million units annually.


## <EV production>

- As for EV production operations, in China, Honda is planning to build a dedicated EV plant in Guangzhou as well as Wuhan.
- Honda is planning for a dedicated EV production line also in North America.


## 3. Strengthening of the areas of connected / software technologies

Honda is striving to offer greater value not only with each of our products, but when various Honda products become linked and realize a connectivity beyond their product domains.

The key to achieve such connectivity is the technologies and frameworks, where Honda positions its electrified products as "terminals" and connects energy and information stored in each product with its users and society. Therefore, Honda will work on the establishment of the cross-domain connected platform, which will create new value for its customers.

In the areas of electrification technologies, including batteries, as well as software and connected technologies, for the acceleration of its development efforts, Honda will strive for a significant enhancement of development capabilities, which will include the strengthening of its human resource recruiting from outside Honda.

Also, in these areas, Honda will proactively pursue inter-industry collaboration and alliances, as well as investments in startups.


## 4. Financial strategies that support the transformation of Honda businesses

While making progress in electrification, Honda will shift focus from non-recurring hardware sales business and strive to transform the portfolio of Honda businesses by combining hardware and software to expand connections with its customers and the range of its businesses. Also, after 2030, Honda will strengthen its combined solution business and also businesses in new areas. To realize such transformation of the business portfolio, Honda has been putting effort into solidifying its existing businesses.

## <Improvement of the earnings structure>

In addition to its steady efforts to solidify existing businesses, Honda strived to reduce costs from all directions while facing a difficult business environment due to issues such as the pandemic and semiconductor shortage. As a result, the business structure has been improving, and Honda is confident that its continuous efforts will enable an adequate achievement of the return on sales (ROS) of more than $7 \%$, which had been Honda's midto long-term target. Also, the net cash balance was 1.9 trillion yen (at the end of the third quarter ended Dec. 31, 2021), maintaining a healthy level.
<Resource investments over the next 10 years and utilization of external funding>

- Honda will budget approximately 8 trillion yen for its research and development expenses. Of all R\&D areas, Honda is planning to invest approximately 5 trillion yen in the areas of electrification and software (Approx. 3.5 trillion yen for R\&D expenses and approx. 1.5 trillion yen for investments).
- For the preparation of new growth, including new technology areas and resource circulation, Honda will invest approximately 1 trillion yen over the next 10 years.
- Honda will be active in investing in startups with high-potential advanced technologies and business models at a scale of 10 billion yen per year, which will expand the range of Honda technologies and businesses.
- Based on its policy to utilize external funding methods on an as-needed basis, Honda issued Green Bonds totaling US $\$ 2.75$ billion in March of this year. By allocating the proceeds from these Green Bonds to the development and production of zero-emission vehicles such as EVs and FCVs, Honda will further accelerate our initiatives toward the realization of a society that aims for zero environmental impact.


## 5. Sports models

While taking on challenges toward carbon neutrality and electrification, Honda always has a passion to offer FUN for its customers. The "joy of driving" will be passed on to our models even in the era of electrification, and Honda will globally introduce two sports models, a specialty and a flagship model, which will embody Honda's universal sports mindset and distinctive characteristics.


