

### Summary of 2024 Honda Business Briefing on Direction of Electrification Initiatives and Investment Strategy

#### ● Approach to electrification targets:

Honda has not changed its belief that EVs are the most effective solution in the area of small mobility products such as motorcycles and automobiles, and Honda's electrification target to make EVs and FCEVs represent 100% of its global vehicle sales by 2040 remains unchanged. Honda must look ahead to the period of EV popularization and build a strong EV brand and a strong EV business foundation from a medium- to long-term perspective.

#### ● Structural reform of procurement and production operations:

Through the establishment of a vertically-integrated EV value chain with a central focus on batteries, **as of 2030, Honda will reduce the cost of the battery to be procured in North America by more than 20% compared to the cost of current batteries.**

Honda will **establish a competitive business structure with an aim to reduce overall production cost by approximately 35%**. Honda already has a positive outlook to secure enough batteries for the planned production of approximately 2 million EVs per year.

#### ● EV lineup strategy:

For the Honda 0 Series, a global EV series which will be the flagship series of Honda EVs, **a total of seven models will be launched globally by 2030 including various models ranging from small to large size.** As a part of electrification with the use of Honda Mobile Power Pack e: (MPP), **Honda will introduce a micro-mobility product which will be equipped with 4 MPPs in Japan before the end of FY2026**, enhancing the applications of MPPs.

#### ● Financial strategy:

Honda is **planning to invest approximately 10 trillion yen in resources over the 10-year period through FY2031**, when the period of full-fledged popularization of EVs is expected to start. Honda will pursue both bold investments for future growth and shareholder returns.

TOKYO, Japan, May 16, 2024 -- Honda Motor Co., Ltd. Director, President and Representative Executive Officer (Global CEO) Toshihiro Mibe today held a press briefing on Honda initiatives centering on automobile electrification.

Following is a summary of his formal remarks:

## 1. Honda approach to electrification and initiatives toward achieving its targets:

The environment surrounding automobile electrification is undergoing dramatic changes, and in some regions, the sense of a slowdown in EV market growth is gaining attention. There are various approaches toward Honda's 2050 goal of carbon neutrality. For example, to achieve "zero environmental impact" in powering large mobility products such as aircraft and large watercraft, the use of SAF\*<sup>1</sup> and e-fuel is being viewed as a high potential solution, from the perspective of range.

On the other hand, Honda has not changed its belief that EVs are the most effective solution in the area of small mobility products such as motorcycles and automobiles. Looking at the trend from a longer-term perspective, Honda is confident that the EV shift will continue to proceed steadily. Without getting too caught up in the current changes in the situation, Honda must look ahead to the period of EV popularization, which will begin in the second half of the 2020s and build a strong EV brand and a strong EV business from a medium- to long-term perspective.

As of 2030, Honda plans to make EVs and FCEVs represent 40% of its global auto sales, and to produce more than 2 million units of EVs. Working toward this future, Honda will steadily pursue the following three initiatives, while making investment decisions at the right timing:

### 1) Introduction of attractive EVs only Honda can offer

### 2) Establishment of a comprehensive EV value chain with a central focus on batteries

### 3) Advancement of EV production technologies and facilities

Through these initiatives, Honda is aiming to achieve **a return on sales (ROS) of 5% for its EV business as of 2030** to further increase its profit margin to make its BEV business self-sustaining.

\*1 SAF: sustainable aviation fuels

## 1-1. Introduction of attractive EVs only Honda can offer

The Honda 0 Series, which will play a key role in the Honda EV strategy, will be a completely new EV series Honda will create from "zero" with a new EV development approach of "**Thin, Light, and Wise.**" In January of this year, at CES, two concept models were unveiled, namely Saloon and Space-Hub. As for Saloon, which will become a flagship model of the series, Honda is planning for the market launch of a model very similar to this concept model, in 2026.

### ■ "Thin"

Honda will strive to offer value to our customers with "space" that excels in both driving performance and comfort, embodying Honda's long-cherished M/M (Man Maximum, Machine Minimum) concept in the EV era.

- With the adoption of a new dedicated platform for mid- to large-size EVs and a further advanced power unit, a package featuring unprecedented styling with a low vehicle height and a short overhang will be realized.

- With the adoption of a newly-developed compact e-Axle and the world's top-class ultra-thin battery pack, the motor room and floor will be made thin. Moreover, both the low vehicle height styling and a spacious and comfortable interior space will be achieved through the application of technologies Honda has amassed through our long history of car making. This includes optimization of the parts layout, reduction of the number of parts, as well as adoption of Honda's original collision control technology, and the adoption of body frames that combine excellent design and performance.
- Furthermore, the cabin will be designed to realize more comfort and more fun of driving, featuring an intuitive user interface and exhilarating visibility.

### ■ “Light”

For its new EV series models, Honda will pursue **sporty driving that leads to the “joy of driving,”** which has been a commitment in Honda's car making.

- In addition to lighter body frames, the new EV series models will adopt an all-new power unit, which was made lighter and thinner by applying Honda's original technologies amassed through the development of F1 machines and HEV models. This will enable Honda to **reduce the overall vehicle weight by approximately 100kg (220 pounds) compared to initial Honda EVs.**
- Heavy components such as the battery and power unit will be placed low and in the center of the vehicle body to realize a low center of gravity, resulting in stable vehicle behavior and a nimble and sporty driving performance.
- As a technology to realize vehicle control at the will of the driver, a further advancement was achieved for the motion management system developed based on posture control technology that Honda has amassed through the development of its original robotics technologies.
- By combining the highly efficient power unit and excellent aerodynamic technology Honda has amassed through motorsports activities, the new EV series models will achieve both a sporty driving experience unique to Honda and the world's top class electricity efficiency performance. With that, Honda will strive to realize sufficient range of more than 300 miles (480 km)<sup>\*2</sup> for each of the Honda 0 Series models.

\*2 A range measured based on the standards set by the EPA (the U.S. Environmental Protection Agency)

### ■ “Wise”

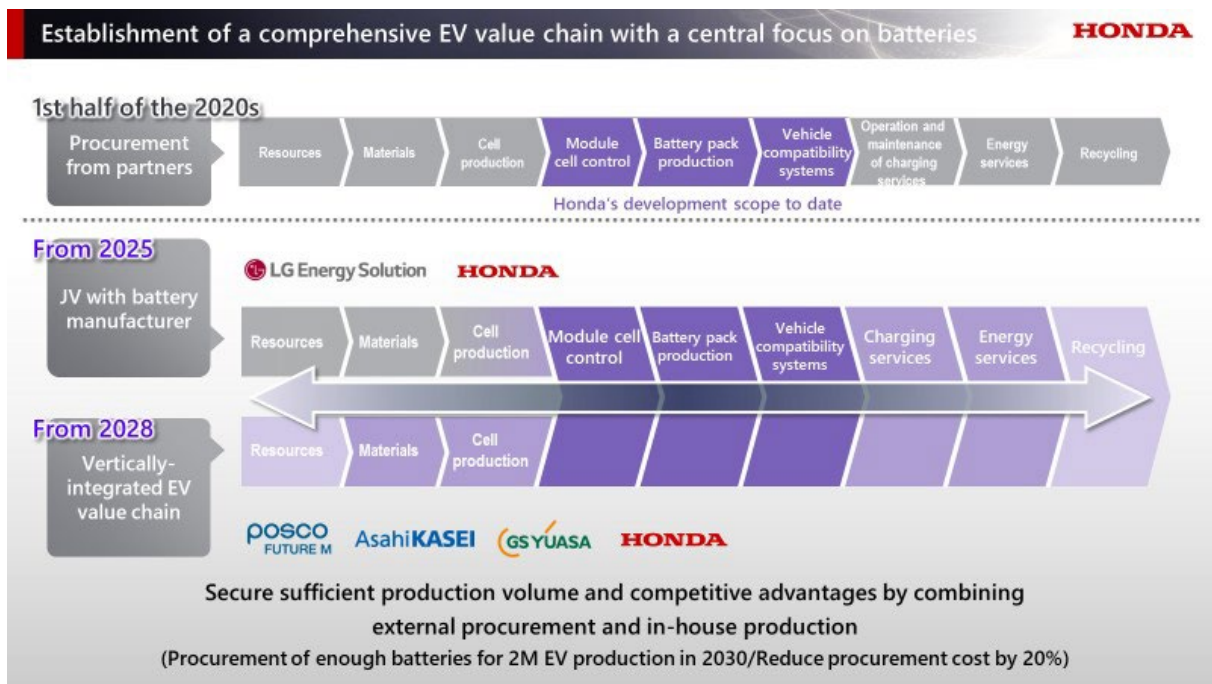
Equipped with an original vehicle OS, Honda 0 Series models will **offer a digital UX optimized for each individual customer,** in conjunction with the advancement of connected technologies. **Vehicle functions will be continuously updated with OTA (over-the-air) updates, which will further advance our EVs as attractive products only Honda can offer.**

- Honda will independently develop the underlying E&E architecture, the vehicle OS which is the upper layer of the overall architecture, as well as various applications that will be on the vehicle OS. Honda will **apply original customization to the SoC (system-on-chip) semiconductors which will be installed in Honda 0 Series models.** For example, such customized SoC will feature AI, which is essential for the advancement of automation and intelligence, yet helps lower power consumption.

- The EV models we will introduce in the second half of the 2020s will continuously advance in a way that they will possess intelligence to be more attentive to the preferences and needs of each individual customer.
- The Honda 0 Series models which will be introduced in the second half of the 2020s will **adopt a centralized architecture**, which will **consolidate** multiple ECUs which are serving individual functions to control the vehicle's systems, **to a core ECU and serve as a single "brain" for the entire vehicle**. This will align each and every function and make it possible to speedily offer new and inspiring experiences never before possible. With that, Honda EV models will continuously advance in a way that they will possess intelligence to be more attentive to the preferences and needs of each individual customer.
- As for AD/ADAS (automated driving and advanced driver assistance systems), Honda is aiming to offer a seamless mobility experience, not only inside the vehicle but the entire process from the moment the customer enters the vehicle until they exit the vehicle. To this end, the AD/ADAS will be advanced to be more in tune with human sensibilities by adopting further advanced sensing technologies and intelligence technologies including AI. As for driver-assistive technologies, the Level 3 automated driving technology, which Honda put into practical use ahead of other companies around the world, will be utilized to make automated driving functions available in a broader speed range on expressways, as well as on regular roads. Moreover, by providing customers with consistent support for their entire mobility experience, including pickup arrangement and parking of the vehicle at places away from home, Honda will realize "the joy and freedom of mobility" with less stress to our customers.

## 1-2. Establishment of a comprehensive EV value chain with a central focus on batteries

To secure high competitiveness from a long-term perspective, Honda will strive to build value chains in stages with a central focus on batteries, which are core components of EVs and determine the competitiveness of EVs.



#### ■ The early days of EVs: the first half of the 2020s

Honda will stably procure necessary volume of batteries while holding down the cost by strengthening external partnerships for the liquid lithium-ion batteries in each respective region.

#### ■ The transitional period for EVs: in the mid-2020s

Honda will begin battery production with its JV partners.

In the U.S., in 2025, the joint venture EV battery plant with LG Energy Solution will begin production with a capacity of 40GWh of batteries per year. By building a solid value chain with its partner, which will have the largest scale in North America, Honda will realize a competitive battery cost. Moreover, the lightweight and compact battery packs, which will be produced with Honda's high-density packaging technologies, will be installed in the Honda 0 Series models and contribute to enhance the product value of those models.

In addition to EV production, Honda will expand the scope of its business into the battery life cycle business, which includes the areas of charging service, energy service and reuse/recycle. Honda will build a stable business foundation by expanding the areas of battery business Honda will do in-house.

#### ■ The popularization period for EVs: in the second half of the 2020s

Honda will further expand its scope of battery business and strive to **build a vertically-integrated and comprehensive EV value chain with a central focus on batteries**, that includes all aspects of EV production, from procurement of raw materials mainly for batteries, through production of finished EVs, as well as battery reuse and recycling.

In Canada, Honda will begin in-house production of the EV battery being co-developed with GS Yuasa. As for key battery materials, in Canada, Honda will proceed to internalize production by producing cathode materials with POSCO Future M, and separators with Asahi Kasei, at our respective new joint venture plants to be constructed.

Moreover, Honda is aiming to build a comprehensive value chain with an eye toward secondary use and the recycling of EV batteries. With that, in addition to optimizing battery prices and achieving a stable supply, Honda will ensure the competitiveness of its entire value chain, including the upstream and downstream areas of EV battery business.

With these initiatives, **in 2030, Honda will reduce the cost of the battery to be procured in North America by more than 20% compared to the cost of current batteries**. As for batteries necessary for the production of approximately 2 million units of EVs planned for 2030, we already have a positive outlook to secure enough batteries.

### 1-3. Advancement of EV production technologies and facilities

The period of transition from ICE to EV leading up to the mid-2020s will be a phase in which Honda will respond flexibly to changes in demand and the business environment while also ensuring profitability. During this phase, our existing production facilities will be fully utilized to produce both ICE and EV models on the same line.

In addition, Honda will advance its production operations by steadily incorporating advanced technologies necessary to realize the “Thin, Light and Wise” concept. This will lead to the establishment of a highly efficient production structure at dedicated EV plants in the future.

As for the production line of the thin battery pack, which will be the key to EV production, the new battery case production line to be installed at our Anna Plant in Ohio will be **equipped with mega casting machines, which are 6,000-ton class high-pressure die-casting machines**. This will greatly reduce the total number of parts consisting of the battery case and secondary parts from over 60 to 5 parts. Also, combined with the technology of friction stir welding (FSW), investment will be reduced and production efficiency will be increased at the same time.

**Honda became the first company in Japan\*<sup>3</sup> to install a 6,000-ton class mega casting machine to its production technology R&D facility located in Tochigi, Japan, currently being verified for mass production.**

Including application to the production of large cast aluminum body frame parts in the future, the die-casting technology will be continuously advanced.

As for the battery pack assembly line, Honda’s original “**Flex Cell Production System**,” will be adopted. This system combines 1) the modular parts configuration according to the product function of the vehicle and 2) the “cell production system” that brings together in a single area the equipment, jigs, and production associates required for each production process. The adoption of the Flex Cell Production System ahead of the start of full-capacity EV production will enable flexible responses to changes in production models and fluctuations in production volume. In addition, by utilizing the **Digital Twin**, which reproduces real-life production line conditions in cyberspace in real time, the production efficiency in various aspects including the supply of parts to factories, production volume and speed will be optimized. In this way, Honda will supply products in a timely manner in accordance with market needs. In the future, Honda plans to further expand the scope of applications of these technologies beyond the battery pack production line, and apply them to all lines at Honda EV production facilities.

Ultimately, the culmination of these initiatives will be demonstrated at the dedicated EV plant which will become operational in 2028 in Canada. By achieving the world’s top-level production efficiency, including a significant increase in capacity utilization rates and a reduction of fixed costs, Honda aims to **reduce overall production cost by approximately 35%** compared to conventional mixed-flow production lines.

\*<sup>3</sup> Honda internal research

## 2. Advancement of overall operation with real-time data linkage

In addition to the initiatives in the areas of product, procurement and productions, Honda will further advance all of our automobile business operations, everything from planning to after-sales services, by linking them with software. By utilizing data obtained from Honda's original software-defined mobility products, it becomes possible to offer products and experience-based value more closely tailored to each individual customer in all situations, and with greater speed. For example, data on the latest market trends and customer preferences obtained "at the spot" of sales will be fed back to our product development and production teams on a real time basis, enabling the fastest possible delivery of products optimized to fulfill the needs of our customers and market.

In addition, real-time vehicle data obtained through the connected function will be linked to Honda service operations, enabling Honda to formulate and propose an optimal service menu for customers on a real-time basis through the dedicated Honda app.

Going beyond these examples, by constantly linking the entire value chain with the latest data, Honda will build a system that enables quick and flexible responses to rapid changes in the EV market.

## 3. EV lineup strategy

Preparing for the start of the EV popularization period in 2030, Honda will strategically launch EV models globally, mainly with Honda 0 Series models. Moreover, as for hybrid-electric models, for which demand is strong in the current market, Honda will further advance performance and enhance the lineup globally.

The following is the outline of new model introduction plans,

<EVs>

### • Honda 0 Series - global EV series

The Honda 0 Series models will be first introduced in North America in 2026, then rolled out globally. **Including various models ranging from small to large size, a total of seven models will be launched globally by 2030.**

### • EV lineup in China

Honda will introduce a total of 10 Honda-brand EV models by 2027 and make EVs represent 100% of our automobile sales in China by 2035. Honda unveiled the "Ye Series," a new EV series which will follow the e:N Series currently available, continuing to enhance its EV lineup in China.

### • Small-size EV lineup

Starting with the N-VAN e:, a commercial-use mini-EV that will go on sale in Japan this fall, Honda will make sequential introductions of small-size EVs in regions where there is a need for them. This also will include introduction of personal-use mini-EV models in 2025 as well as **small EVs that emphasize the "joy of driving,"** in 2026.

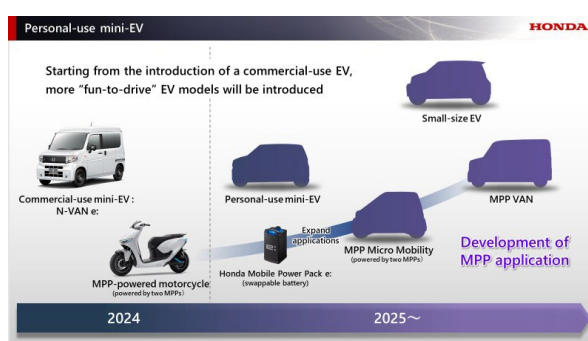
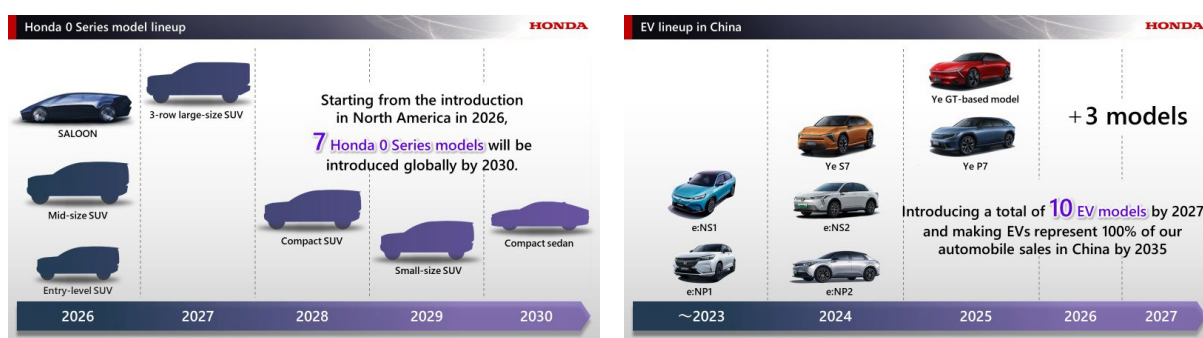
<Electrification with the use of Honda Mobile Power Pack>

- In 2024: Introduction of electric motorcycle models which will be powered by two MPPs
- In FY2026 (fiscal year ending March 31, 2026): **Introduction of a micro-mobility product which will be equipped with 4 MPPs in Japan**

<Advancement of HEV models>

- Honda's original two-motor hybrid-electric system, namely e:HEV system, as well as the HEV platforms will be renewed. After the renewal, the e:HEV system will be lighter and more efficient, and the platforms will also be more efficient and shared by more models, achieving both further improved fuel economy and a high-quality, exhilarating driving experience.
- Honda will repurpose its EV development technologies to hybrid-electric models and **adopt an electric all-wheel drive (e-AWD) system** that leverages the motor installed in EV models. Compared to the conventional mechanical all-wheel drive system, the e-AWD system will increase maximum driving force output and enable more responsive and precise control on drive force distribution. Moreover, by applying cooperative control along with the Motion Management System, the e-AWD system will realize excellent driving performance while stabilizing vehicle behaviors, leading to the realization of both peace of mind and the fun of driving for the customers.

Honda will offer its further advanced hybrid models to a large number of customers around the world. At the same time, the structure of our ICE business, which includes hybrid-electric models, will be further strengthened to ensure steady earnings. Then, the funds generated by ICE business will be invested into EV and other new businesses.





#### 4. Financial strategy – Securing resources to invest/Capital allocation

For Honda to realize its electrification strategy, it will be essential to make investments strategically at the right timing. Therefore, **Honda is planning to invest approximately 10 trillion yen in resources over the 10-year period through FY2031**, when the period of full-fledged popularization of EVs is expected to start.

The breakdowns of the 10-trillion-yen investment are as follows:

- **Approximately 2 trillion yen** for R&D expenditure toward the realization of software-defined mobility
- **Approximately 2 trillion yen** for the investments and capital contributions related to the establishment of comprehensive EV value chains in key markets such as the U.S., Canada and Japan
- **Approximately 6 trillion yen, a sum of 3 trillion yen for development-related expenditures and 3 trillion yen for investments**, for the areas related to our Monozukuri (art of making things), such as:
  - The area of production that includes the construction of dedicated next-generation EV production plants
  - Electrification of motorcycles,
  - Development of new EV models
  - Investment in fabrication of dies

While carefully assessing the level of EV popularization in the market, Honda will flexibly make investment decisions at the appropriate timing.

The cash Honda generates will be allocated for 1) the investment of resources to ensure our future growth and 2) the return to shareholders. Plans for company-wide capital allocation are outlined below.

##### ■ From FY2022 to 2026 (a phase to strengthen ICE product business and invest resources to EV business)

Honda will generate **12 trillion yen in operating cash flow by strengthening** its motorcycle and **ICE/HEV businesses**. Such cash will be allocated among EV business, ICE/HEV business and investment in new areas, while at the same for stable and continuous dividend payments. As Honda has been proceeding with the plan to buyback 780-billion-yen worth of our own shares over the four-year period from FY2022 through FY2025 to achieve the PBR (price-to-book ratio) of above 1 as early as possible, capital efficiency will be improved, including optimization of the amount of equity capital accumulated from the past.

##### ■ From FY2027 to 2031 (a phase of full-fledged business conversion from ICE to EV)

Honda will strive to earn the same level of cash as the FY2022-2026 period by raising operating cash flow through increasing unit sales of motorcycles mostly in newly emerging countries and further improving the business structure of ICE/HEV business. On top of that, Honda will improve profitability of its EV business with an aim toward 5% ROS and increase EV unit sales to add more operating cash flow. Both combined, Honda will **strive to**

**generate more cash than that of the FY2022-2026 period.**

As for resource allocation, Honda will further accelerate its investment of resources in the areas of electrification and software to ensure the growth of our EV business. At the same time, Honda will continue making stable and continuous dividend payments and expeditious share buybacks for shareholder returns.

As for dividends, Honda is planning to pay more than 1.3 trillion yen for the FY2022-2026 period and more than 1.6 trillion yen for the FY2027-2031 period. These dividend payment amounts indicate our intention to make stable and continuous dividend payments without reducing the dividend per share, even if short-term profits fluctuate as a result of on-going up-front investments which will be necessary during the transformation period.

Honda will maximize cash generation from the earnings base built up to date as well as from the new growth areas. In doing so, **both bold investments for future growth and solid shareholder returns** will be pursued.

