

**HONDA**  
The Power of Dreams

**How we move you.**  
CREATE ▶ TRANSCEND, AUGMENT

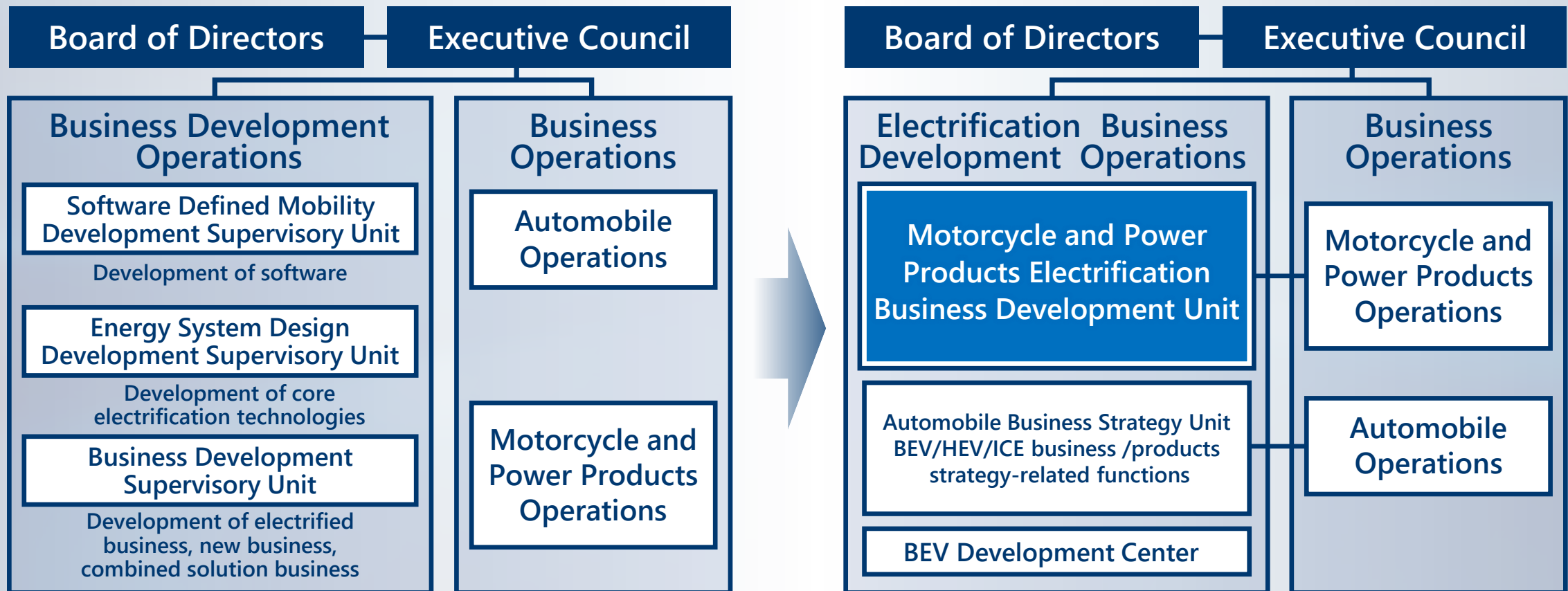
# 2023 Honda Briefing on Motorcycle Electrification Business

November 29, 2023 16:30-17:30

# Working toward the realization of carbon neutrality by 2050

## Electrification Business Development Operations

Newly established in April 2023



## Overview of Honda Motorcycle Business

Cumulative worldwide sales

**450** million units (As of November 2023)

Number of dealership locations

**30,000** locations (As of November 2023)

Operating profit  
(motorcycle business)

**488.7** billion yen (Fiscal year ended March 31, 2023)

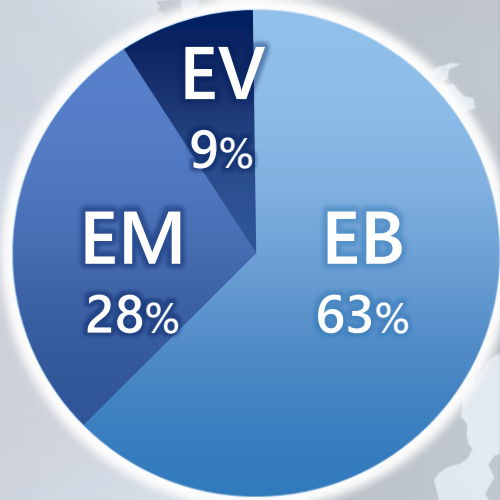
Operating profit margin  
(motorcycle business)

**16.8** % (Fiscal year ended March 31, 2023)

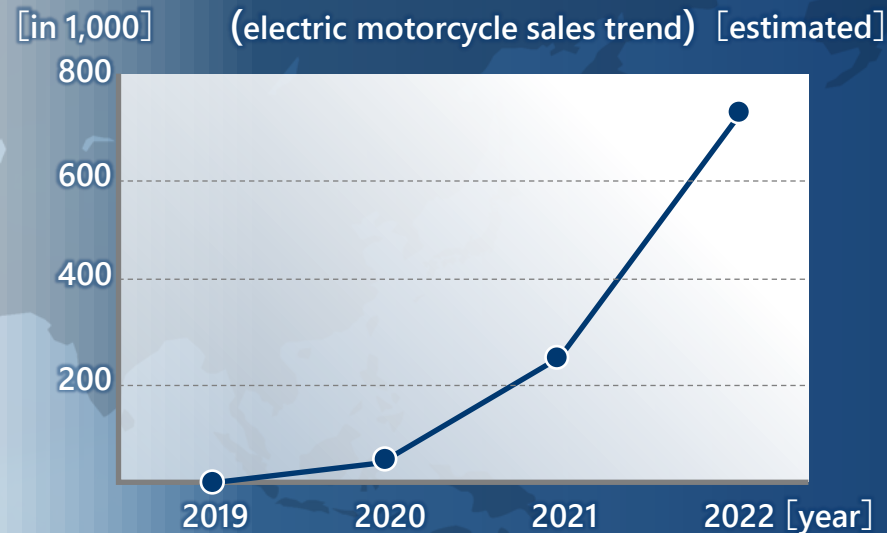
Honda has established motorcycle sales and service networks  
to serve customers all around the world

# Global Electric Motorcycle Market

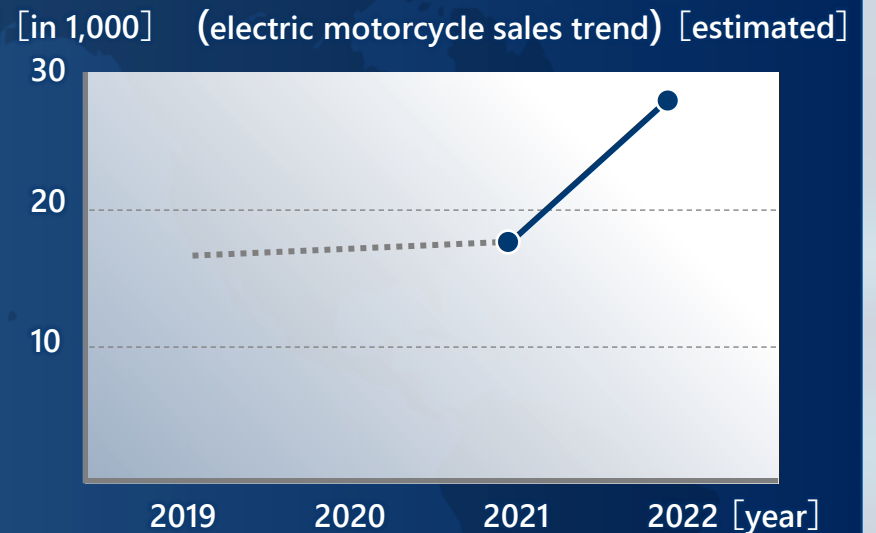
Global market size  
Approx.  
**5.5 million units**  
(EV/EM/EB Total)  
2022



## Rapidly growing Indian market



## Sign of market expansion in the ASEAN



Honda will further increase market share with sales of electric models



# Honda Electric Motorcycle Business Initiatives

1994  
CUV ES



2010  
EV-neo



2018  
PCX ELECTRIC



2020  
Honda e:  
Business bike series



GYRO CANOPY e:

GYRO e:

BENLY e:

2023  
3 China exclusive models



ZOOMER e:

Honda Cub e:

Dax e:

2023  
EM1 e:  
(equivalent to 50cc)



2024  
Introduction of models  
powered by swappable batteries  
(equivalent to 110-125cc)



Entering into full-fledged electric motorcycle market =  
Positioning 2024 as first year of global rollout of Honda electric motorcycle models

# Honda Electric Motorcycle Strategy

## Updates since the September 2022 announcement

<p><b>Sales target</b> (Honda Group unit sales)</p>	<p>2030</p>	<p><b>4million units</b> (Up 500,000 from the target announced in 2022)</p>
<p><b>Total number of electric models</b></p>	<p>By 2030</p>	<p>Approx. <b>30models</b> (2022 announcement: "more than 10 models by 2025")</p>
<p><b>Cost reduction target for finished electric motorcycles</b></p>	<p>By 2030</p>	<p>Approx. <b>50%reduction</b></p>
<p><b>Investment amount</b></p>	<p>By 2030</p>	<p>Approx. <b>500billion yen</b> (including dedicated electric motorcycle plans, battery plants and development expenses)</p>
<p><b>Profit target</b> (operating profit margin)</p>	<p>By 2030 In 2030s</p>	<p>More than <b>5%</b> More than <b>10%</b> ※Electric motorcycle business only</p>

# Honda Electric Motorcycle Strategy

<b>Sales target</b> (Honda Group unit sales)	In 2030	<b>4</b> million units	<b>Investment amount</b>	By 2030	Approx. <b>500</b> billion yen
<b>Total number of electric models</b>	By 2030	Approx. <b>30</b> models	<b>Profit target</b> (Operating profit margin)	By 2030	More than <b>5%</b>
<b>Cost reduction target for finished electric motorcycle</b>	By 2030	Approx. <b>50%</b> reduction		In 2030s	More than <b>10%</b>

## Vision for Electric Motorcycle Business

- To offer experiences that make the daily lives and travel time more enjoyable for all people
- To offer peace of mind and comfort in various situations in people's ever-evolving daily lives and mobility society

### Strengths of Honda

Offering a full lineup of motorcycle products

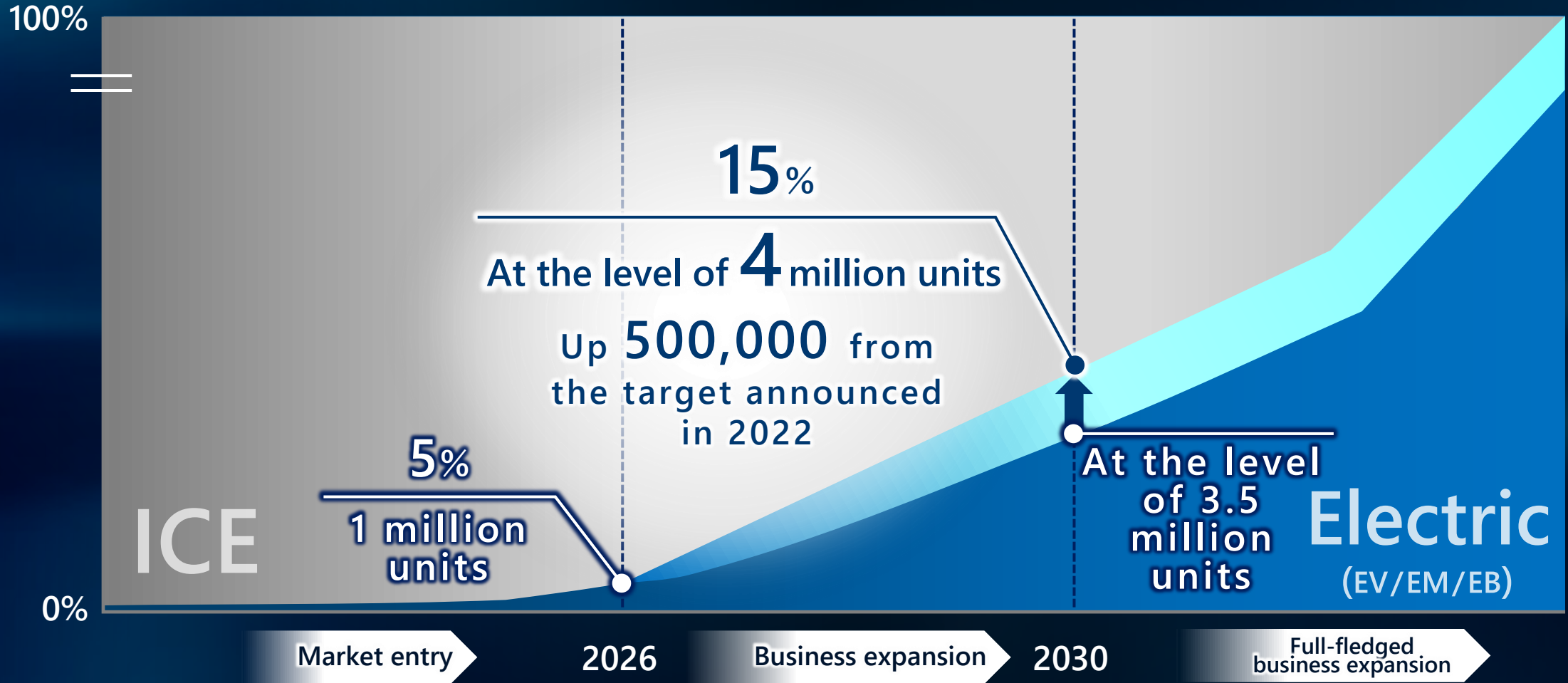
Development, production and procurement capability amassed through ICE motorcycle business

Electric models featuring the fundamental functionality of motorcycles - accelerating/cruising, turning and stopping – as well as connectivity

Offering integrated online and offline customer touchpoints through utilization of a sales network with 30,000 dealership locations.

# Image of Global Sales of Honda Electric Motorcycles

## Sales ratios of electric and ICE models





# Building a Full Lineup of Electric Models

Introducing more than 10 models by 2025

Introducing a total of  
approx. **30** electric models  
globally by 2030

Business bike series



3 China exclusive  
EB models



Personal-use  
EM1 e:



Model  
equivalent to  
110-125 cc



Plug-in commuter



2020

2023

Market entry

2025

Business expansion

2030

Full-fledged  
business expansion

# Advancement of Honda Motorcycles with Electrification

## Strengths of Honda

- Know-how in areas of development, production and procurement amassed through ICE motorcycle business
- Fundamental functionality, such as accelerating/cruising, turning and stopping

Enhanced comfort  
through connectivity



Products that continue to  
advance through post-  
purchase software updates

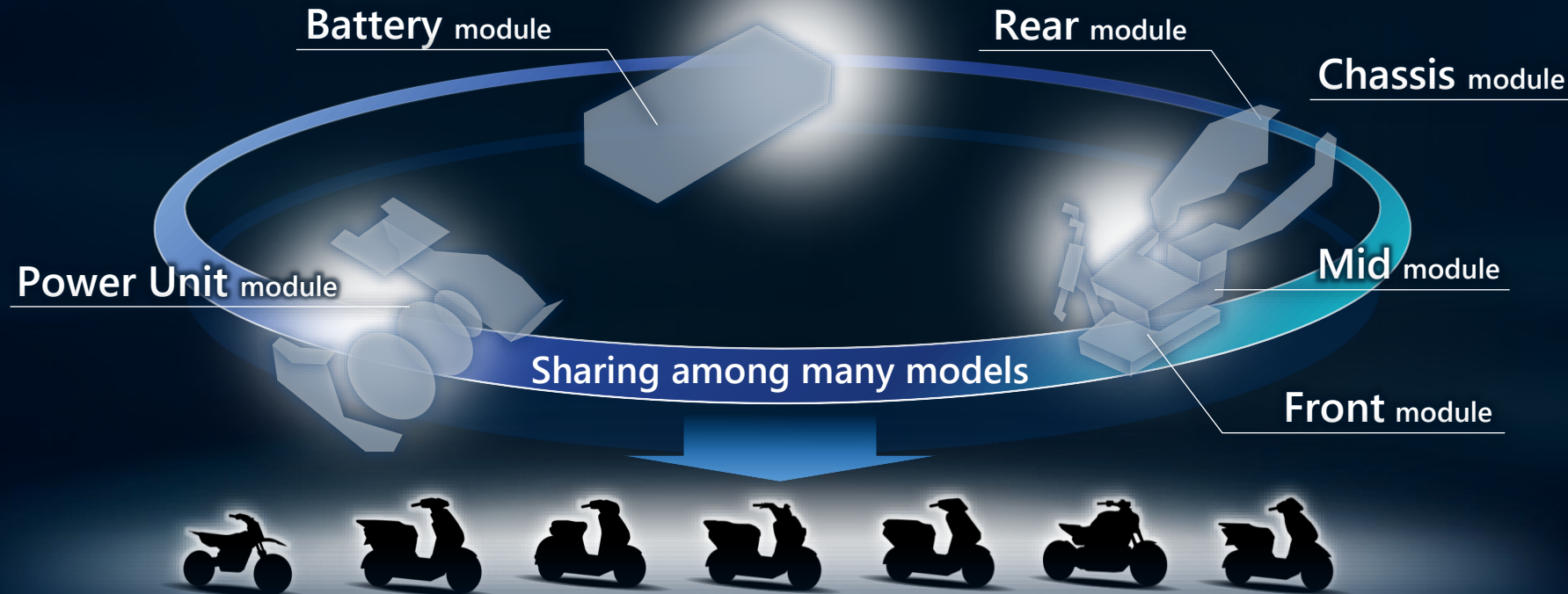
Target

Early adopters (throughout market entry and business expansion period)



## Utilization of Modular Platforms

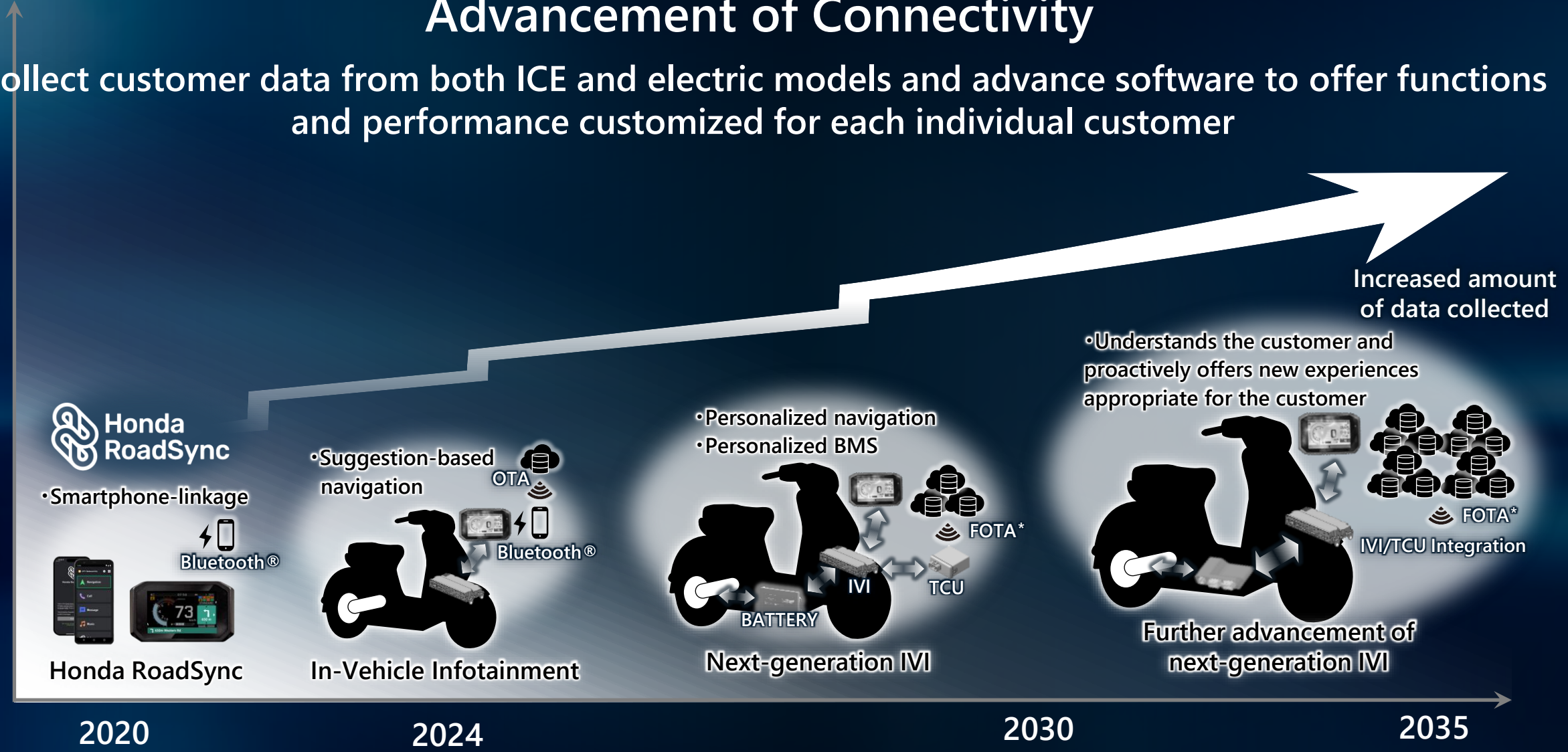
Leveraging know-how of platform sharing amassed through ICE motorcycle business, the battery, power unit and chassis of electric motorcycles are modularized respectively



Utilization of modular platforms will enable efficient introduction of models that accommodate the diverse needs of customers around the world

# Advancement of Connectivity

Collect customer data from both ICE and electric models and advance software to offer functions and performance customized for each individual customer



\*FOTA = Firmware Over The Air

# Battery Application Strategy

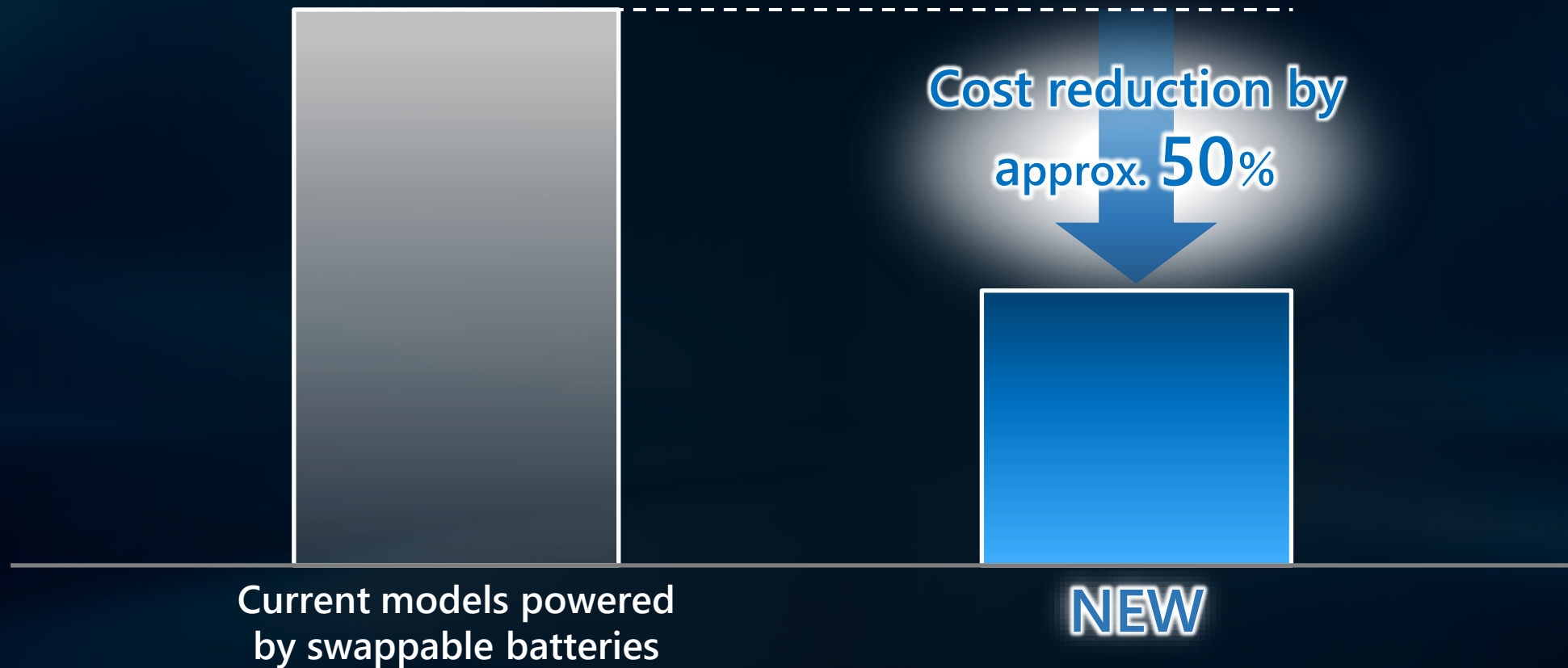
- **Lithium-ion batteries (NCM/LFP)**  
Offer most suitable batteries in accordance with how and in what kind of environment our electric motorcycles will be used by customers around the world
- **All-solid-state batteries**  
Explore adoption in the mid- to long-term

All-solid-state  
batteries

lithium ferro-phosphate batteries  
(LFP)

Ternary lithium-ion batteries  
(NCM: nickel-cobalt-manganate)

## Reducing the Cost of Finished Electric Motorcycles



Reduce the current cost of finished electric motorcycles by 50% through the optimization of batteries, adoption of modular platforms, and optimization in the areas of production and procurement



# Production and Procurement System and Capability for Electric Motorcycles

## Production

From now to 2027

Fully utilize the existing infrastructure for ICE models

Toward 2030 sales target of **4 million units**

2027

Begin production at the first dedicated electric motorcycle plant

Length of production line Including the application of modularization technology  
Approx. **40% shorter**(vs. ICE lines)

Production capacity Increased automation and efficiency  
**1 million units/year** (per plant)

Investment amount **Approx. 50 billion yen**(per plant)

Flexibly leverage existing infrastructure for ICE motorcycles, while building dedicated electric motorcycle plants to accommodate the growing production volume

## Procurement

Current

Procuring finished components of electric motorcycles

To optimize the cost of electric models

Future

Adopt optimal procurement structure for electrification components

Procurement of materials

Machining process

Assembly process

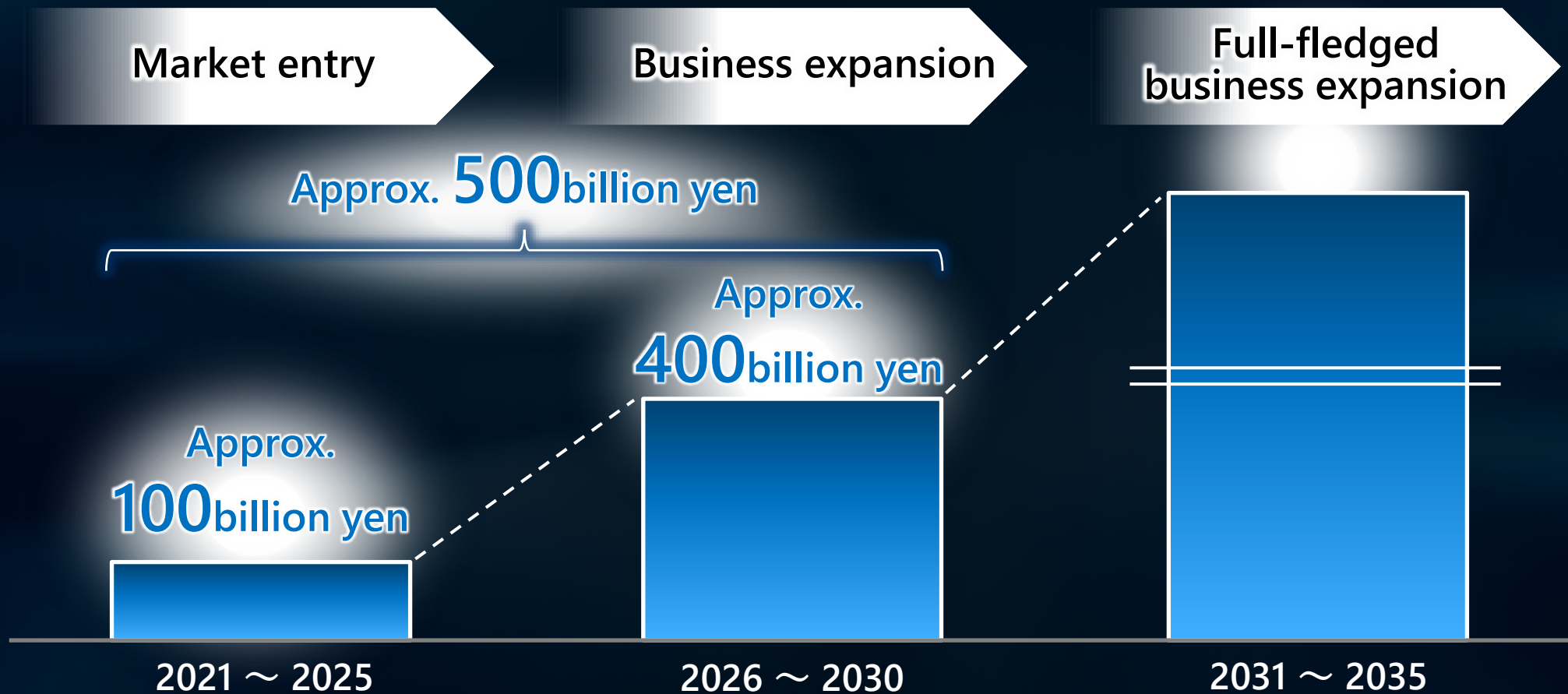
Total optimization of  
SCM and ECM\*

\*ECM = Engineering Chain Management

Pursue the establishment of optimal procurement structure by dismantling and reorganizing the current procurement structure

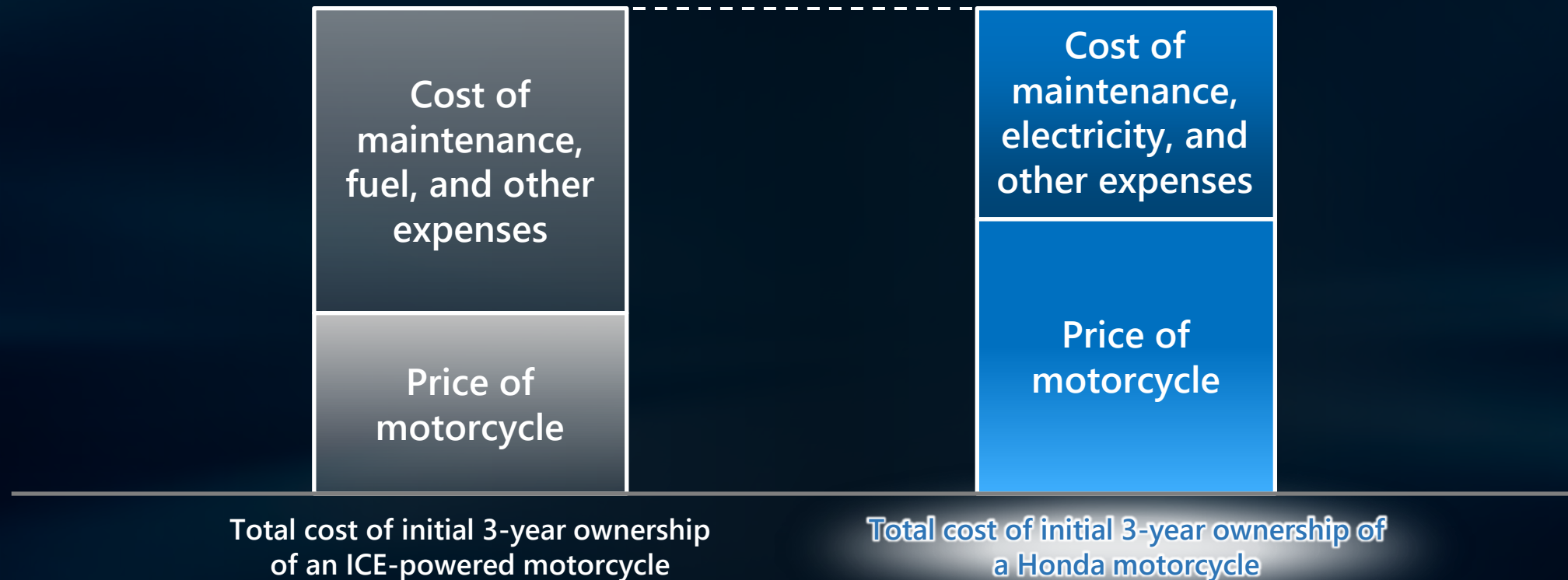
# Amount of Investment in Electric Motorcycle Business

(including dedicated electric motorcycle plants, battery plants and development expenses)





## Price Range of Honda Electric Motorcycles During Market Entry Period



Honda will offer electric motorcycles at prices that achieve fair lifetime cost compared to that of ICE-powered motorcycles

# Customer Touchpoint in the Era of Electrification

Enhanced convenience through online services x peace of mind customers feel with offline services provided by the network of 30,000 dealership locations



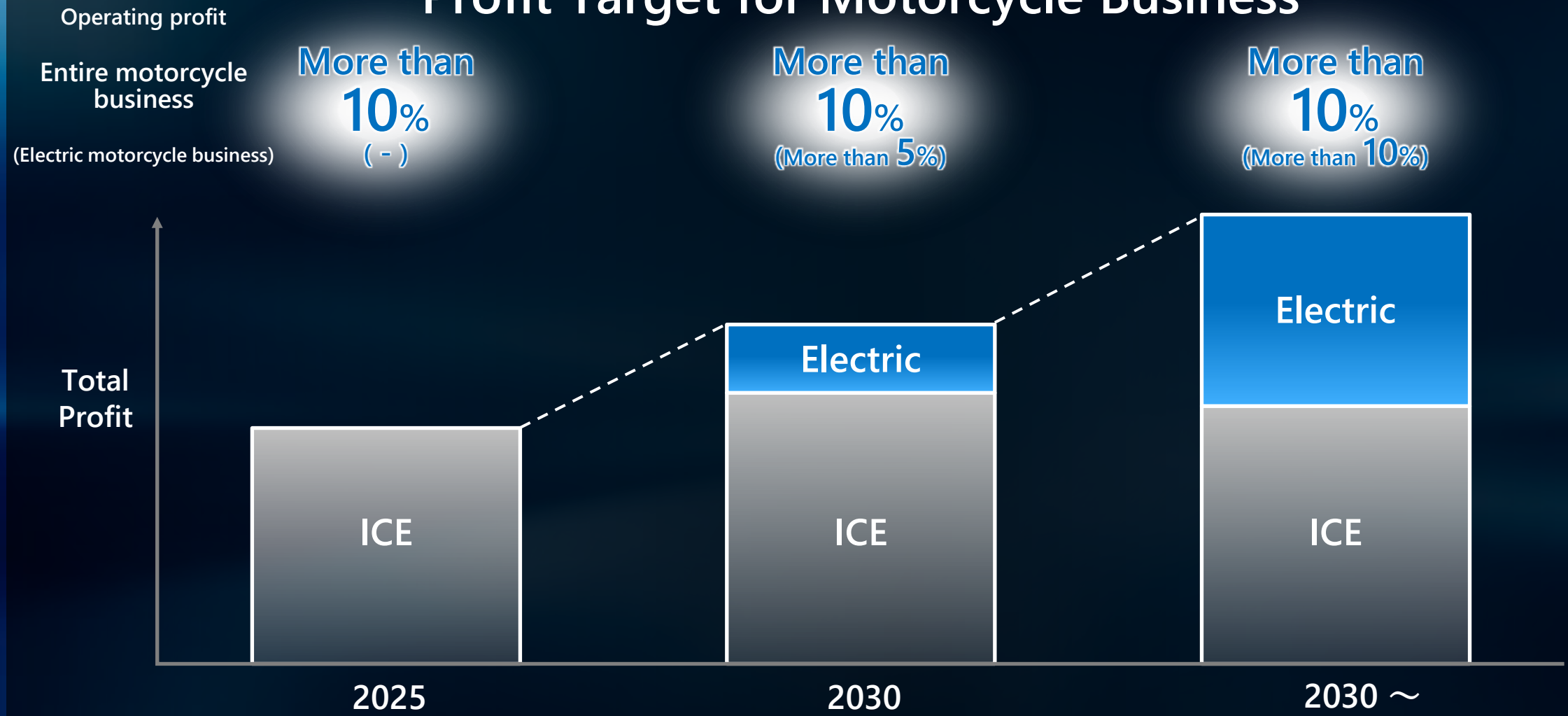
Online sales that enable the experience of being able to view and buy products anywhere, anytime



Establish "Experience Centers" where customers can experience and related to the world of electric motorcycles offline. Customers can touch the actual products and gain peace of mind with after-sales services

Honda will strengthen online services and offer integrated online and offline customer touchpoints that provide customers with more convenience and peace of mind

# Profit Target for Motorcycle Business



# Honda Electric Motorcycle Strategy

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