

Progress with Medium- to Long-term Strategy and Future Initiatives

June 6, 2024

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yarushika

Yarushika

A symbol representing our goal of creating a society that maintains harmony and balance between the pursuit of happiness and a sustainable environment.

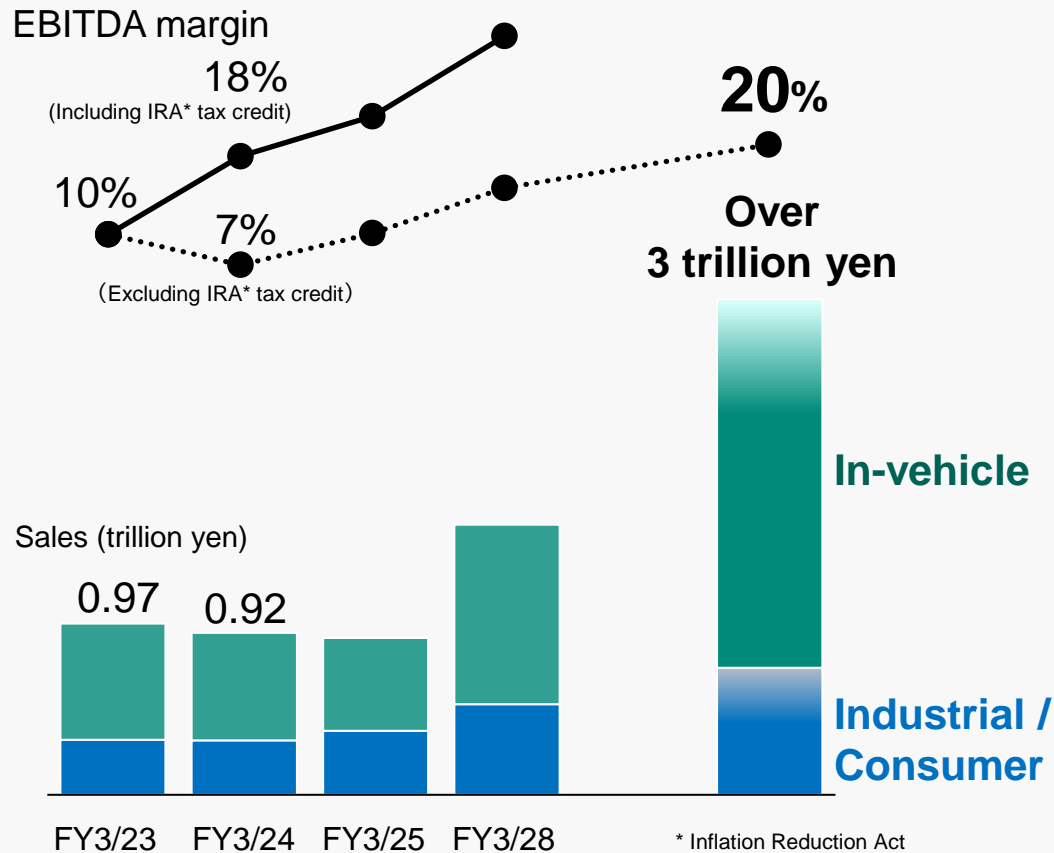
Notes:

1. This is an English translation of the original presentation in Japanese.
2. In this presentation, "FY3/25" refers to the fiscal year ending March 31, 2025.

Agenda

- 1. Progress with Medium- to Long-term Strategy**
- 2. Future Direction and Initiatives**

- Pursue “two-pillar management” driven by In-vehicle and Industrial / Consumer businesses, as well as “ESG management” to achieve sustainable growth
- The investment plan will remain unchanged until FY3/28; will respond flexibly according to the market environment from FY3/29 and onwards



Two-pillar Management

KGI EBITDA

In-vehicle

Sales growth driver

- Expand proven cylindrical battery platforms
- Commercialize next-generation products

Industrial / Consumer

Profitability driver

- Maximize value proposition with battery-applied systems
- Develop supply systems

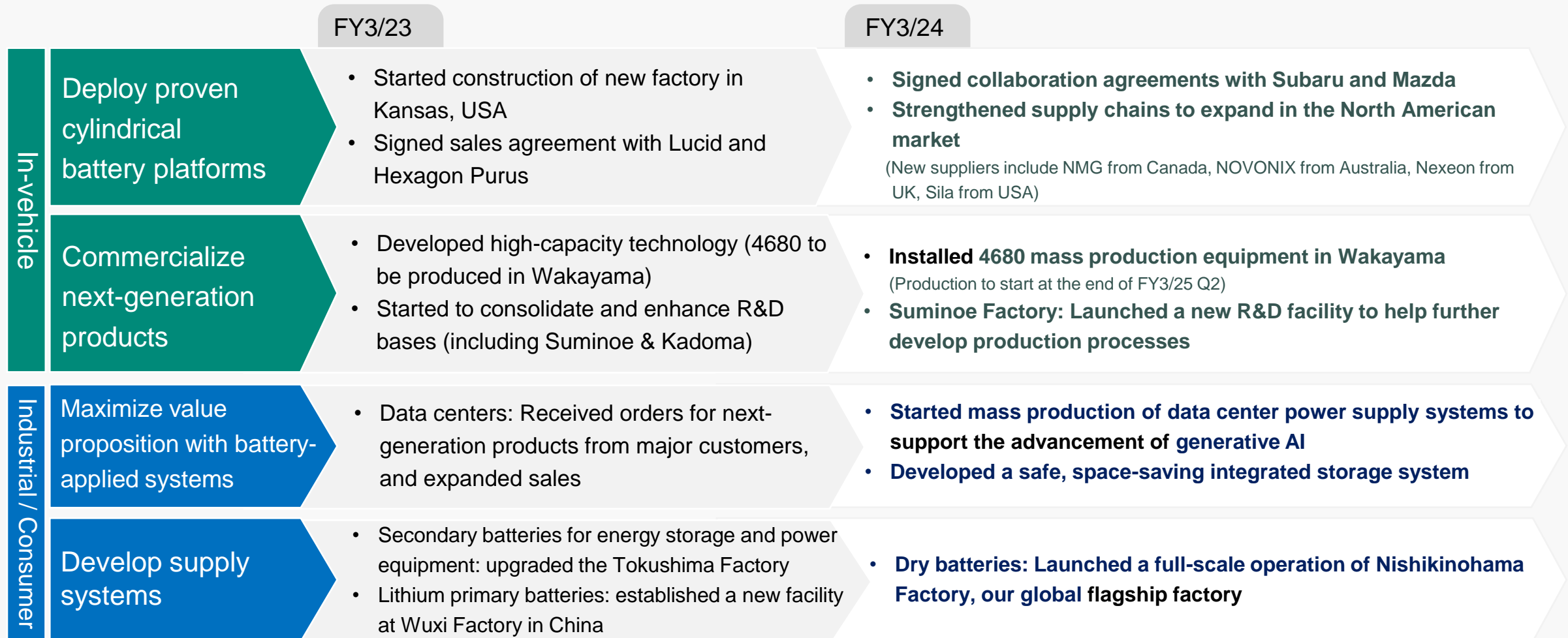
ESG Management

KGI CFP*

- Reduce CO₂ emissions and address resource issues
- Promote human capital management and human rights due diligence

*Carbon footprint

Defined specific growth strategies to achieve medium-to-long-term goals



Progressing towards start of 4680 mass production in Wakayama by the end of FY3/25 Q2 and of 2170 in Kansas during FY3/25 H2

Wakayama Factory (4680)

Kansas Factory (2170)

In the final stages of preparations for the planned start of mass production at the end of FY3/25 Q2

Building construction is almost complete, with phased introduction of production lines planned.

Positioning	Serving as the initial mass production and mother base of 46-diameter cells
Progress	<ul style="list-style-type: none"> • Currently in the final stage of mass production feasibility verification • Strengthening mother functions (personnel & production capabilities)

Positioning	Serving as the latest mass production base for 21-diameter cells
Progress	<ul style="list-style-type: none"> • Started equipment installation and ramped up local recruitment activities • Initial production to start in the second half of FY3/25, with full production planned from the end of FY3/27



Steadily improving operations and accelerating implementation of ESG initiatives in order to achieve medium-to long-term goals

Strengthening Operations

In-vehicle

Boosting profitability through improvements in production volume and reductions in loss rates

Nevada Factory

- Production volume (M cell/day): **+10%** (vs FY3/22)
- Quality loss rate: **-2.5pt** (vs FY3/22)

Industrial / Consumer

Increase high added-value in target areas

Data Center Business

- Module/system ratio: **+30pt** (vs FY3/22)

ESG Management

Environment

Accelerating the deployment of zero-CO₂-emission factories*

Achieving Carbon Neutrality at factories

- **14 out of 20 factories have already achieved carbon neutrality** (as of end FY3/24)
- **Expect to achieve carbon neutrality at all sites in Japan by September 2024**

*A site that has virtually zero CO₂ emissions, achieved through energy-saving initiatives, introduction of renewable energy, and the use of carbon credits.

Human Capital

Driving the growth of “people,” the source of our competitiveness

Enhancing technical talent and establishing a research environment

- Number of employees:** **+600** (vs FY3/22)
- R&D facility in Nishikadoma: construction to be completed by FY3/26 (utilizing material informatics and digital transformation of facilities)

** Employees at Panasonic Energy in Japan

1-4. Discrepancies from Expected Outlook

- In-vehicle: **Changes in North American EV demand** due to Inflation Reduction Act and **responses to past manufacturing-process issues**
- Industrial / Consumer: The downturn in the market for consumer products and power equipment has been more **prolonged than initially anticipated**

In-vehicle

Japan-made products are struggling to maintain price competitiveness in the North American market after IRA implementation



Responding to a rapid decrease in demand, adjusting production in Japan to an appropriate inventory level

Short-term Countermeasure
Optimization of domestic fixed costs in line with demand

Past manufacturing-process issues (No concerns regarding safety)



Provisioning for expenses related to past manufacturing process issue response costs

Impact on FY3/25

- Permanent measures have been implemented for current manufacturing processes
- There is no possibility of additional provisions

Industrial / Consumer

A rebound from FY3/24 H2 had been anticipated, however the market downturn continued



Decreased sales of lithium-ion batteries, etc. for consumer products and power equipment

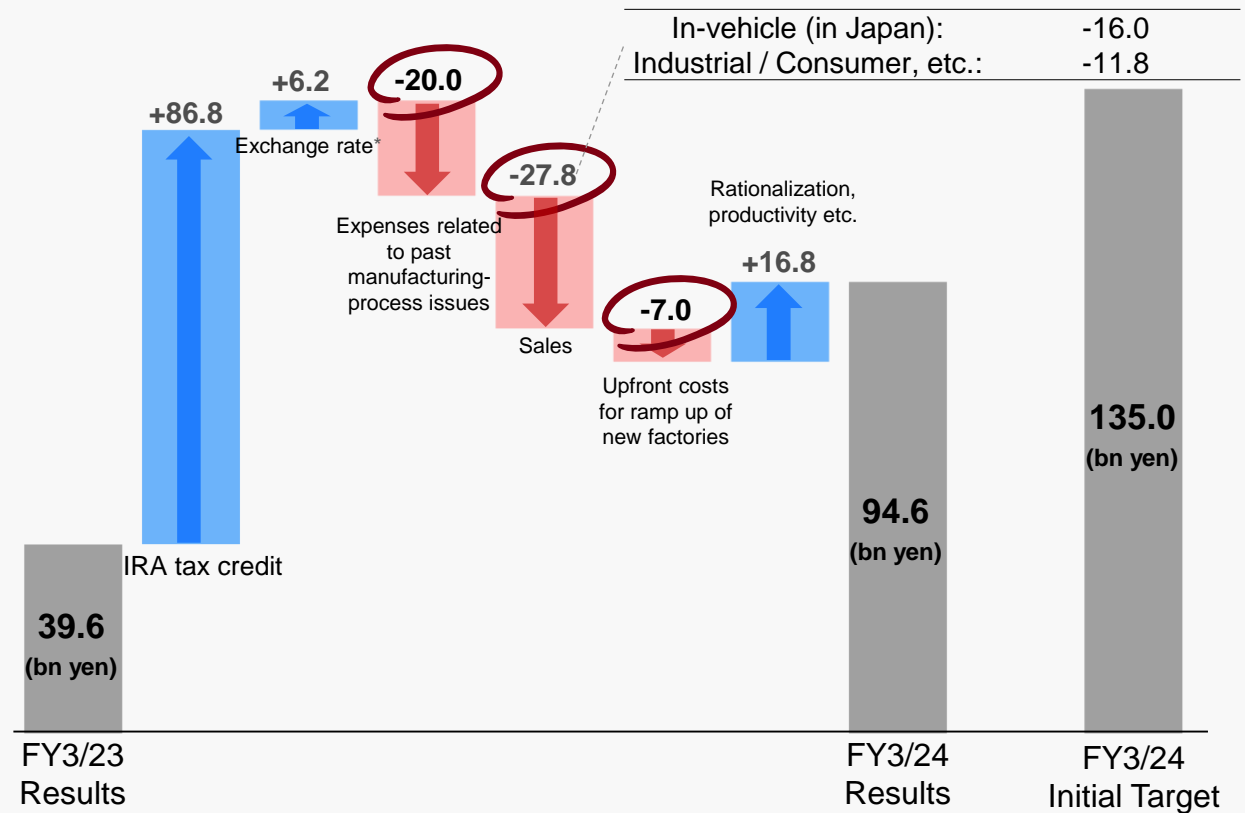
Future Outlook

Demand in the consumer products and power equipment market is expected to recover in the second half of FY3/25

Initial targets were not achieved due to expenses related to past manufacturing-process issues for in-vehicle business, the impact of reduced production in Japan, and a delay in the market recovery for consumer/power usage

(JPY Billion) Including IRA tax credit	FY3/24 Results	YoY	Comparison with initial target
Sales	915.9	94%	89%
Adjusted operating profit	94.6 (10.3%)	+ 55.0	- 40.4
Operating profit	88.8 (9.7%)	+ 55.6	- 44.2
EBITDA	160.4 (17.5%)	+ 61.9	- 43.6
ROIC	14.6%	+ 9.6pt	- 3.3pt

Analysis of Adjusted Operating Profit (year-on-year)



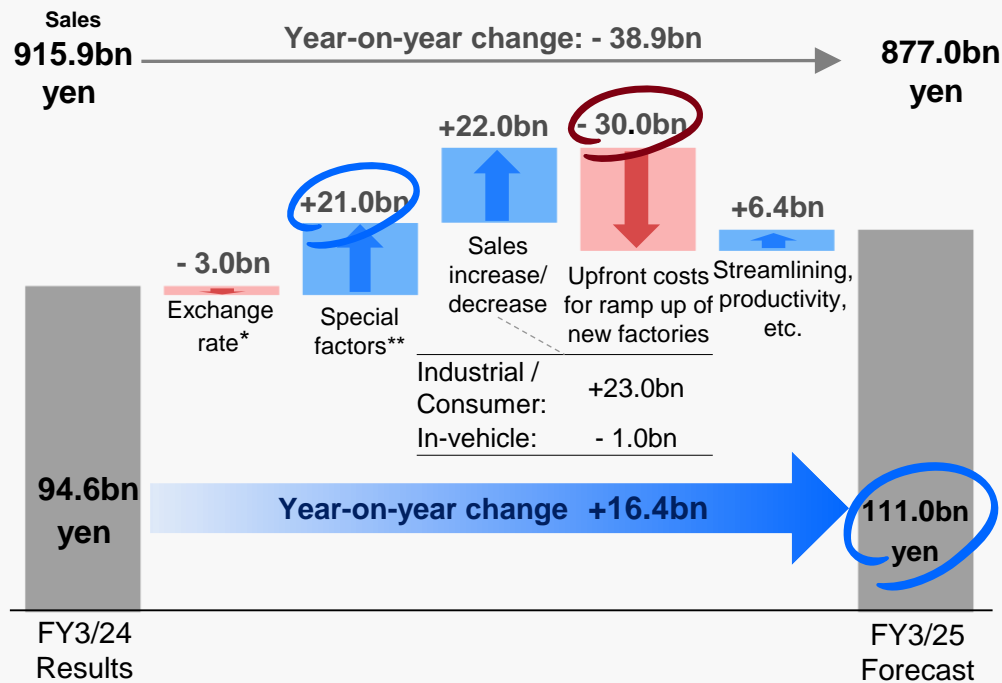
*FY3/24 exchange rate: 1 USD = 145 JPY

1-6. Outlook for Achieving Medium-term Management Goals in FY3/25

- Although there are upfront costs for Kansas/Wakayama, etc., profit is expected to increase year-on-year, factoring in increased profits from sales in industrial and consumer products, etc
- We expect to strengthen profitability to achieve cumulative operating cashflow target

FY3/25

Analysis of Adjusted Operating Profit (year-on-year)



*Exchange rate used in FY3/25 business plan: 1 USD = 140 JPY

**The impact of previous year's expenses related to past manufacturing-process issues

Medium Term (~FY3/25)

KGI	Target	Forecast (Excluding IRA tax credit)
Operating Profit (FY3/25)	87bn yen	109bn yen (22.0bn)
EBITDA (FY3/25)	150bn yen	187bn yen (100.0bn)
Cumulative Operating Cashflow (FY3/23-FY3/25)	330bn yen	330bn yen* (330.0bn)
ROIC (FY3/25)	12%	9.1% (2.2%)

(excluding new investment in Kansas, etc.)

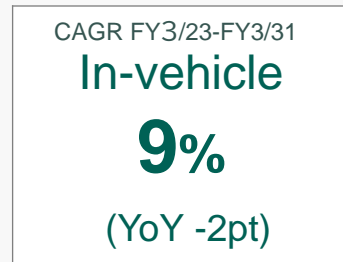
*FY3/23-FY3/24 progress: 64%
FY3/25 operating cashflow target: 120.1bn yen

Future Direction and Initiatives

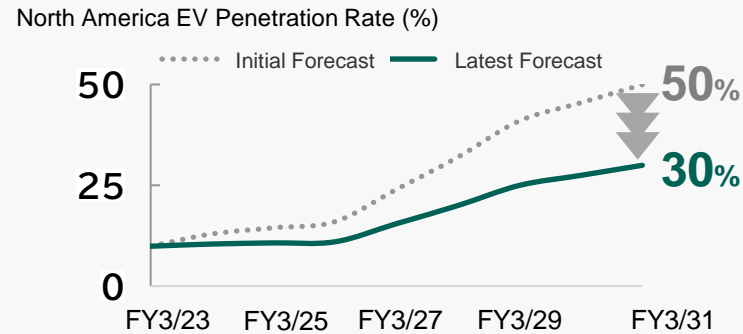
Despite undergoing rapid changes, the market continues to grow steadily

In-vehicle Business

Even with a slight slowdown, the in-vehicle battery market is still poised for significant growth



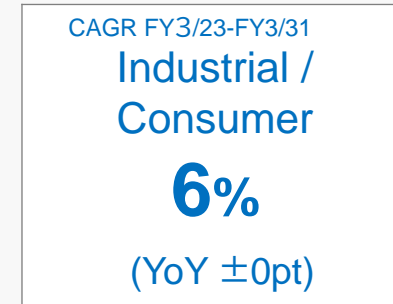
Source : Estimated by Panasonic Energy (PEC) based on Fuji Keizai study



Source : Boston Consulting Group (BCG) study

Industrial / Consumer Business

Long-term market growth prospects



Source : Estimated by PEC based on Fuji Keizai study

Regulations aimed at decarbonization will drive long-term market expansion

(A certain number of BEVs is required)

	China	Europe	USA	Japan
Regulation/ Policy	NEV regulation	CAFE***	CAFE (Federal) ACC*** II regulation (State)	Green Growth Strategy
Guideline	CY25 NEV* 38%	CY35 EV/FCV 100%	CY32 BEV 35~56%	CY30 EV 20~30%
EV Penetration Rate (CY23→CY30)	32%→68%	21%→60%	9%→30%	3%→24%

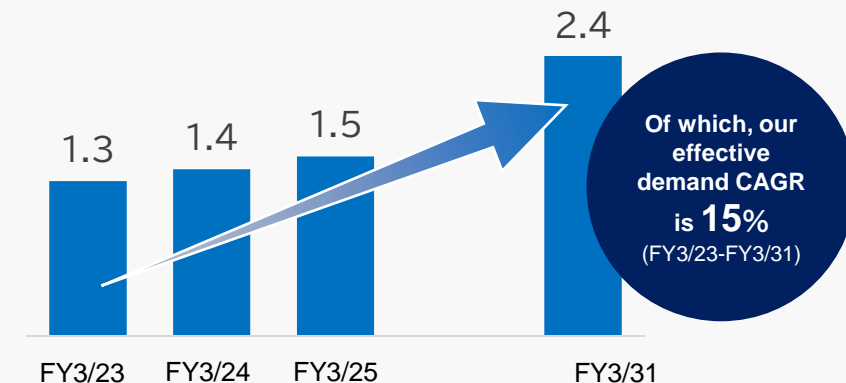
Source: Regulatory standards announced by governments, EV penetration rate estimated by PEC based on B3/S & P/BCG/ IEA survey data

*New Energy vehicle

**Corporate Average Fuel Efficiency

***Advanced Clean Cars

Battery Demand for Data Center (GWh)
CAGR of the overall market: **8%** (FY3/23-FY3/31)



Source : Estimated by PEC based on Synergy Research.

2-2. Overall Strategy (Revision and Reinforcement)

- **Partial revision of strategies and reinforcement measures** to achieve sustainable medium- to long-term growth through two-pillar management
- **Achieve management structure generating ROIC of over 10% & operating cashflow of over 300 billion yen**

Strategic Framework

Two-pillar management

In-vehicle Strategy Revision

- Shifting from "focus on North America" to "Japan and North America dual-region focus"

Industrial / Consumer

Strategy Reinforcement

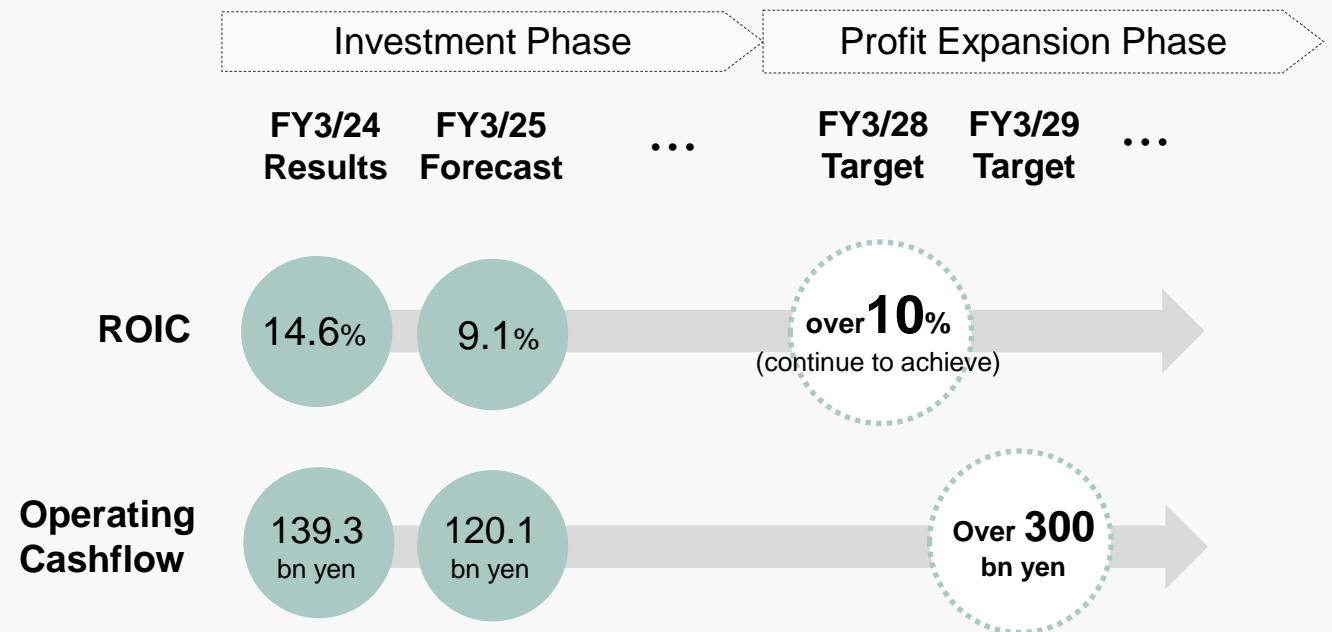
- Maximizing value proposition by battery-applied systems
- **Strengthening portfolio in new areas**

Environmental / ESG Management (continued)

- CO₂ emission reduction, promotion of human capital management

Approach During the Next Medium-term

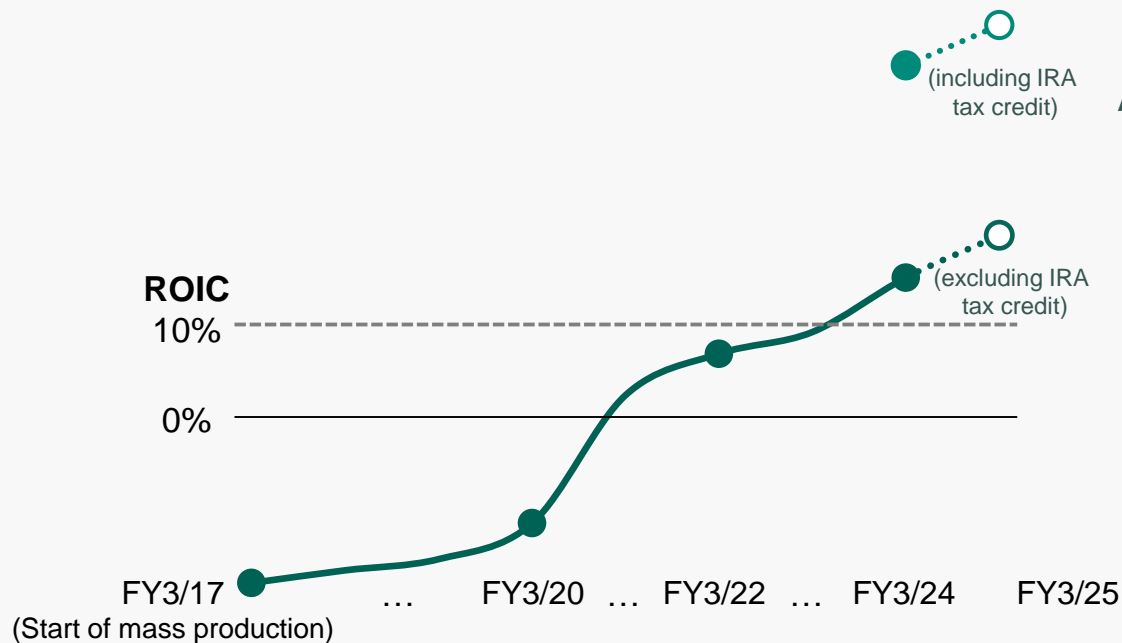
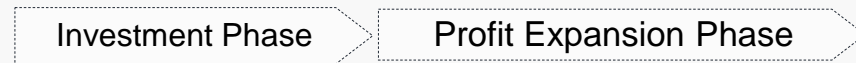
Building a structure to accommodate profit expansion phase



Transition from investment phase to profit growth phase with sustained ROIC of more than 10%

Nevada Factory

- Achieved ROIC of 10% within 5 years of start of mass production
- Continue improvement in ROIC during profit expansion phase

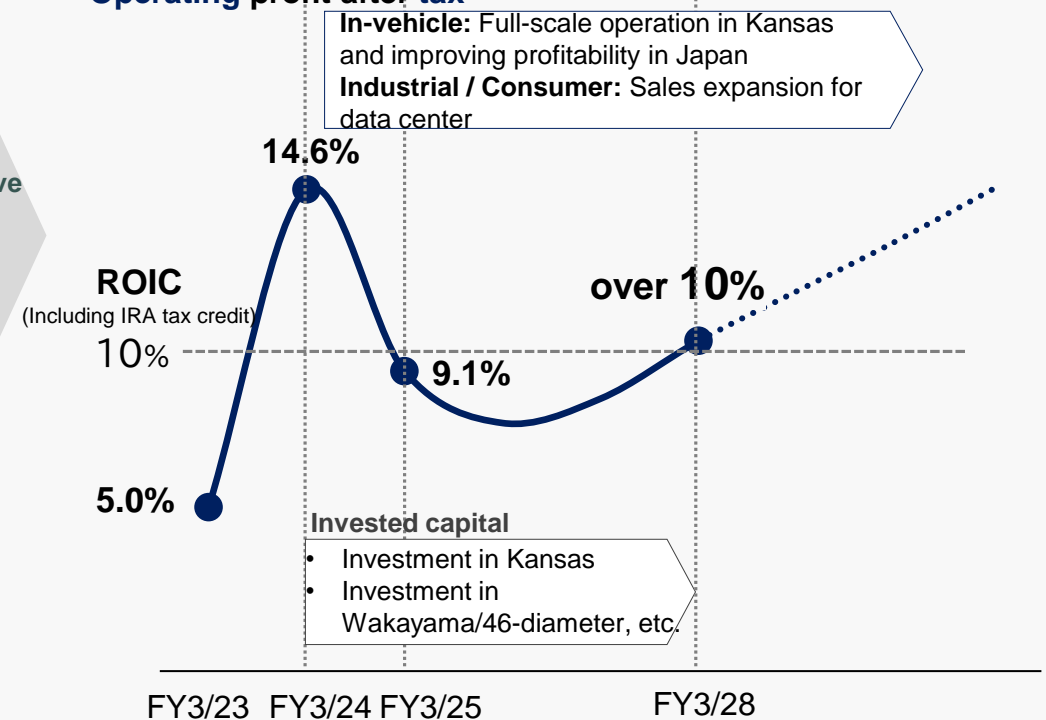


Kansas:
Aim to achieve 10% ROIC (2 years faster than Nevada)

Panasonic Energy Companywide

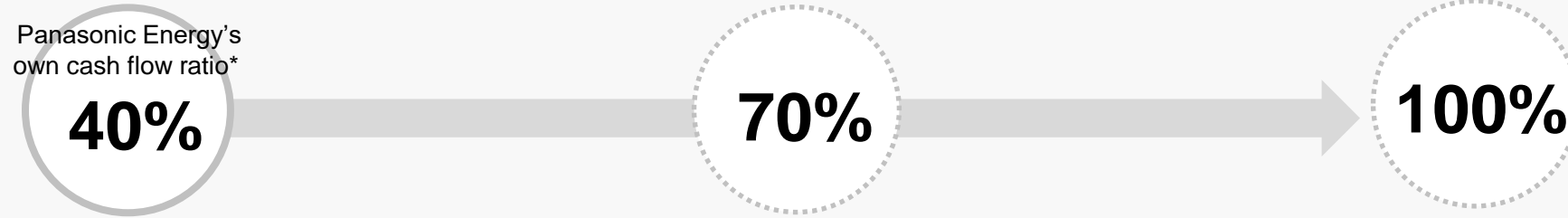
- Profit increase due to Kansas operation & improved profitability in Japan
- Significant increase in recent invested capital (Kansas/Wakayama, etc.)

Operating profit after tax

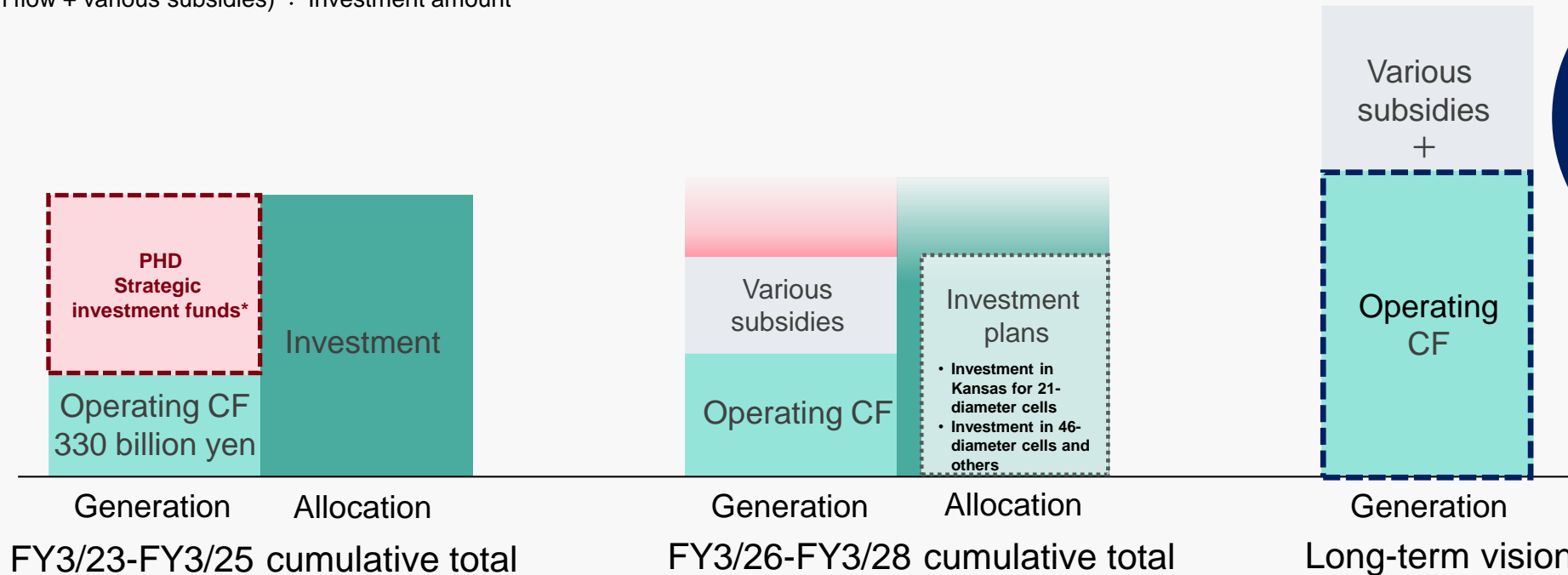


2-4. Long-term Vision

Continuing large-scale investments in In-vehicle business, generating cash that will allow a balance of both investment and return



*(Operating cash flow + various subsidies) ÷ Investment amount



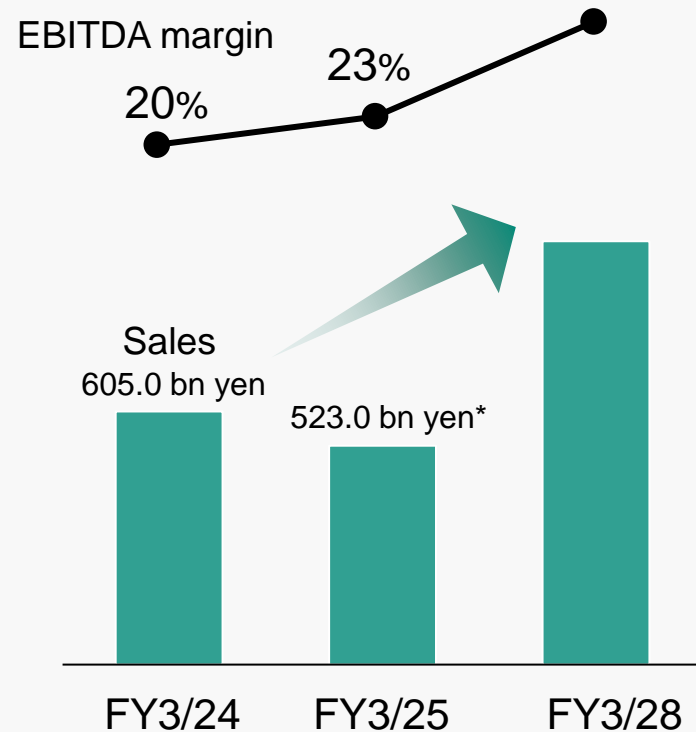
Achieve sustainable investment through self-financing

*Capital allocation from Panasonic Holdings

Shifting from a "North America-focused" strategy to a "Japan and North America dual-region focused" strategy, strengthening the management and revenue foundation

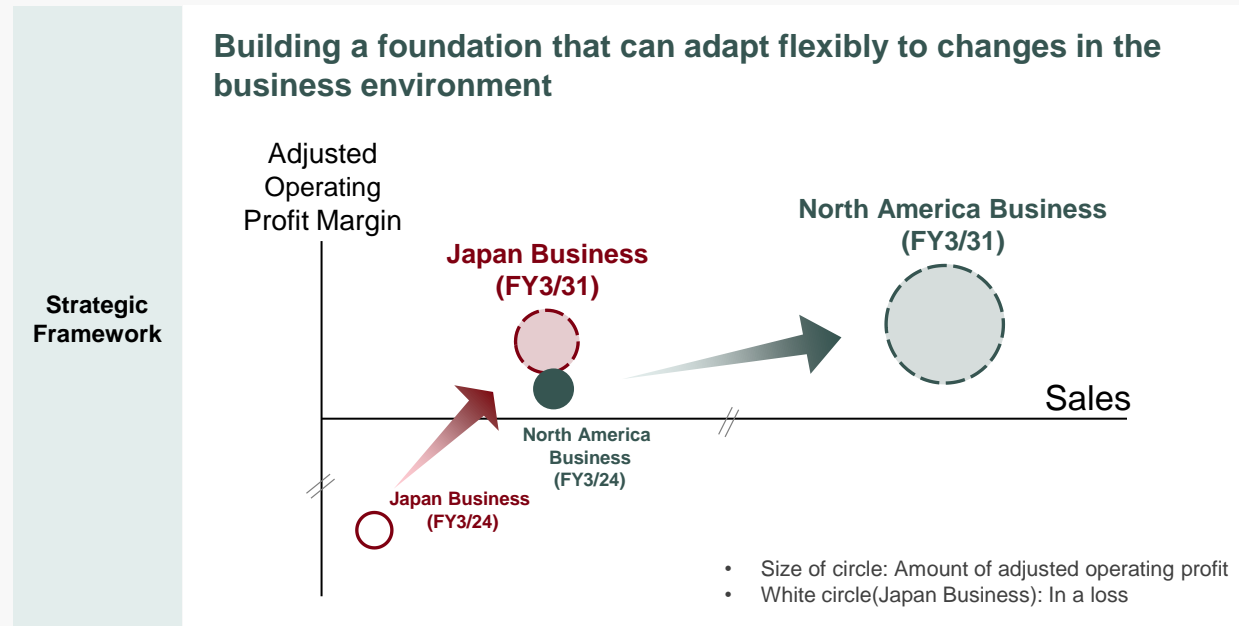
Sales and EBITDA Margin Trend

(Including IRA tax credit)



* Overall sales volumes are expected to increase slightly due to increased sales at North American factories. However, due to price revisions in line with the declining price of raw materials of -60 billion yen, the -20 billion yen impact of exchange rate changes and other factors, sales are expected to decrease year-on-year

Strategic Framework & Key Initiatives



- Key Initiatives**
- **Japan: Establishing a supply base for domestic customers** (Suminoe Factory)
 - **North America: Maximizing profitability in North America** (Nevada and Kansas Factories)

Maximize profitability in North America while transforming our business structure in Japan to **achieve growth and profitability in the medium to long term**

Japan Business

North America Business

Establishing a supply base for Japanese customers

Maximize profitability through continuous improvement

Short-term	<ul style="list-style-type: none"> • Enhance the operation of factories in Osaka <ul style="list-style-type: none"> ➢ Reallocate personnel ➢ Enhance profitability through cost reductions • Commence mass production of 4680 at Wakayama factory
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Nevada Factory	<ul style="list-style-type: none"> • Strengthen parts of the production line (planned operation start FY3/25) <ul style="list-style-type: none"> ➢ Production volume up 5% • Continuously improve production capacity
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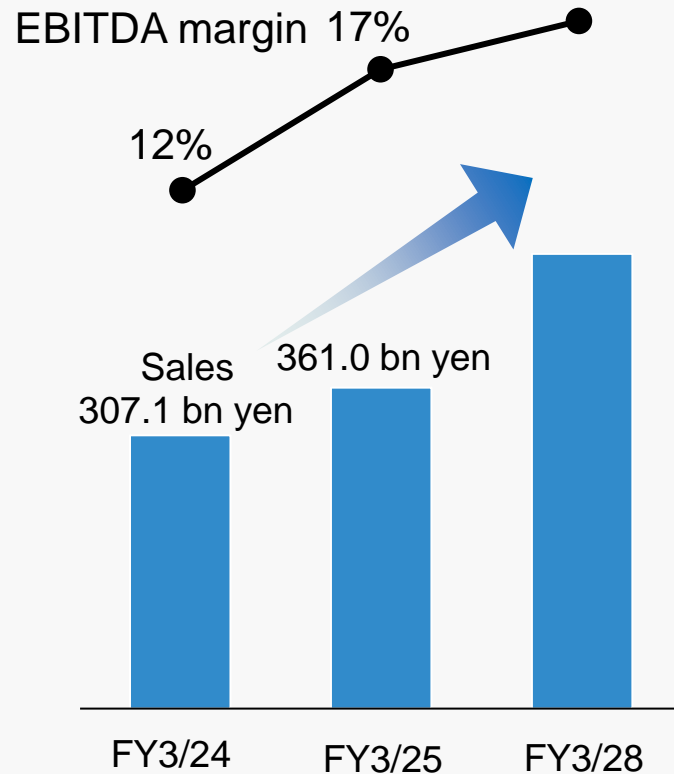
Production capacity
 (FY3/24→FY3/31)
+15%

Medium to long term	<ul style="list-style-type: none"> • Strengthen collaboration with Japanese OEMs • Production shift to 2170 <ul style="list-style-type: none"> ➢ Personnel per GWh down over 35% by FY3/29 (vs FY3/23)
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Kansas Factory	<ul style="list-style-type: none"> • Install automated production line <ul style="list-style-type: none"> ➢ Personnel per GWh down over 30% (vs Nevada Factory) • Introduce next-generation cells through material evolution <ul style="list-style-type: none"> ➢ Cell energy density up 5% (vs conventional standards)
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- Expanding in the fields of information infrastructure such as data centers and electrification of power equipment, which are expected to grow in the medium- to long-term
- Maximizing value proposition by developing advanced system business with high-safety, high-reliability cells and control technologies

Sales and EBITDA Margin Trends



Strategy & Progress

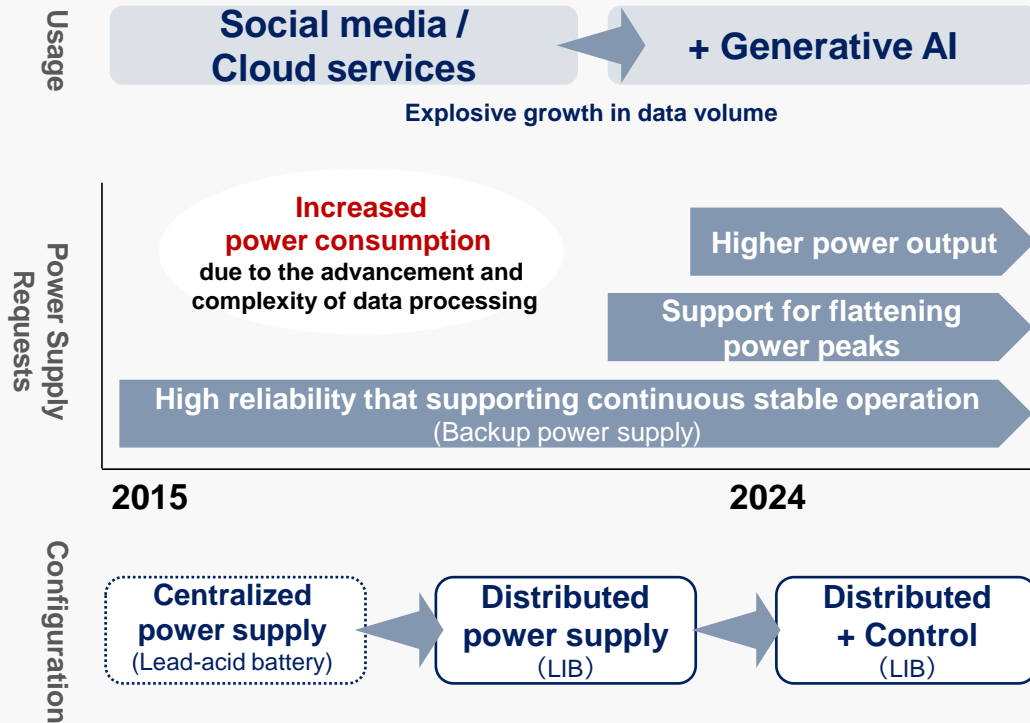
	Strategy	Progress
Growth Fields	Data Centers <ul style="list-style-type: none"> • Long-term equipment reliability / realize power savings • Differentiate ourselves from competitors through module integration 	<ul style="list-style-type: none"> • Received next-generation product orders from key customers • Completed development of dedicated high-power cells <div style="display: flex; align-items: center;"> <div style="background-color: #0056b3; color: white; padding: 5px; margin-right: 10px;">Sales CAGR*</div> <div style="font-size: 24px; margin-right: 10px;">17%</div> </div>
	Power Equipment <small>Power-assisted bicycles, construction and agricultural machinery</small> <ul style="list-style-type: none"> • Develop application-specific cell systems • Co-create solutions with industry-leading customers 	<ul style="list-style-type: none"> • Winning orders from industry-leading customers in Taiwan, Japan & Europe • Progressed to demonstrations with Japanese manufacturers <div style="display: flex; align-items: center;"> <div style="background-color: #0056b3; color: white; padding: 5px; margin-right: 10px;">Sales CAGR*</div> <div style="font-size: 24px; margin-right: 10px;">14%</div> </div>
New Fields	<ul style="list-style-type: none"> • Reinforce revenue foundation through portfolio expansion 	<p>Commenced discussions about expansion of electric two-wheel vehicle business (Initiated discussions regarding collaboration with IndianOil)</p>

*Growth ratio from FY3/24 to FY3/28

In response to the rapid evolution of generative AI servers, maximize our contributions of power supply solutions including control

Customer Needs

- Responding to the increase in power consumption due to the advancement and complexity of data processing
- Development of power supply systems that fit within limited space

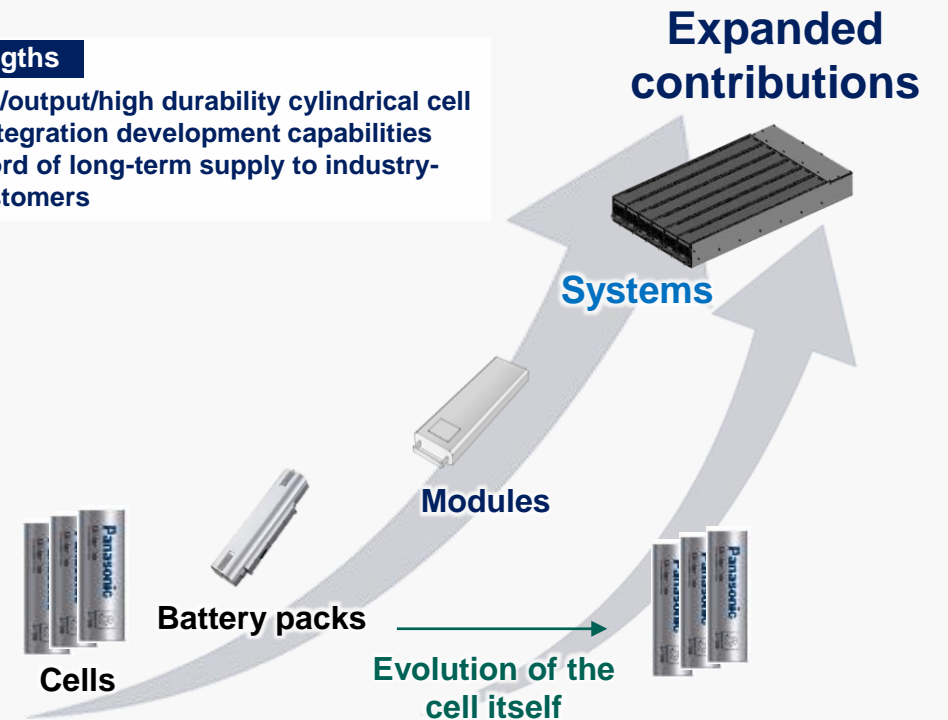


Value Proposition

- Providing our unique value through development of power supply systems that meet high input/output, high durability, safety, and energy efficiency requirements

Our Strengths

- High input/output/high durability cylindrical cell
- Vertical integration development capabilities
- Track record of long-term supply to industry-leading customers



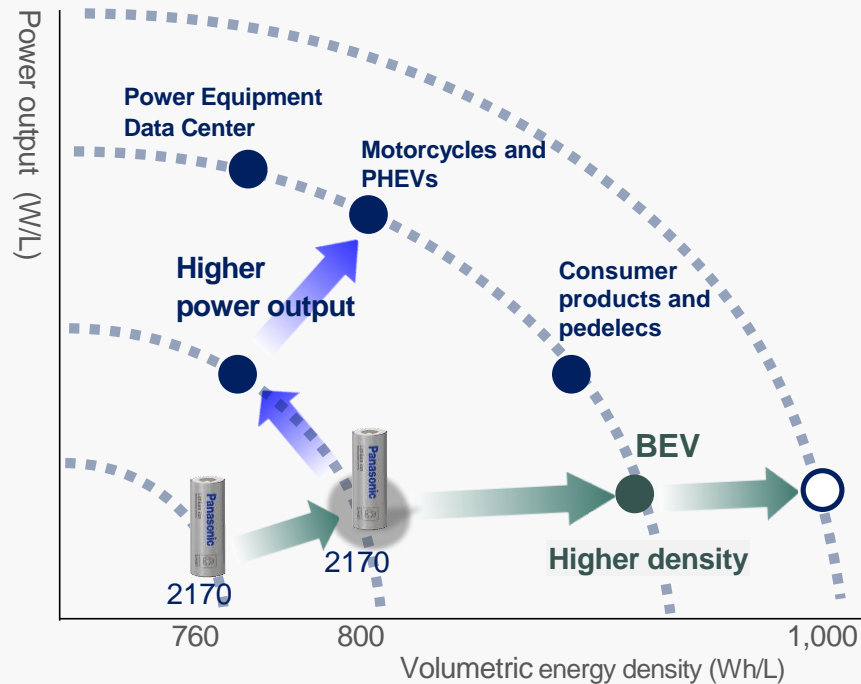
2-9. Reinforcing our Business Foundations

- Enhance product competitiveness along evolutionary axes of **higher energy density and power output**
- Promote local material procurement in North America and IP income base to strengthen business foundations

Enhancing Product Competitiveness Through Technological Innovation

Pursue higher energy density* and power output** in response to customer demand

*5% increase in density compared with previous model
 **Twice the number of cycles compared with previous model



2170: Advancing from the world's highest energy density (800Wh/L) to achieve increased levels of both power output and density

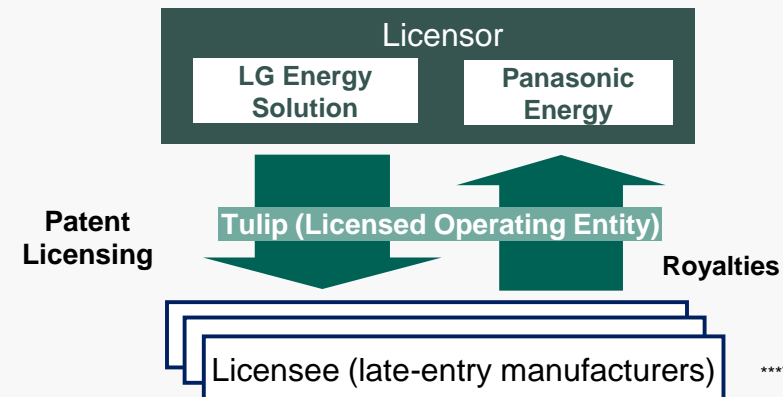
4680: Starting mass production of the world's highest capacity 46-diameter (end of FY3/25 Q2)

Supply Chain Resilience

- **Signed contracts for procurement from North America and other regions, mainly for anode materials**
 NMG (graphite), NOVONIX (graphite), Sila (silicon materials), etc.
- **Building supply networks for local production and consumption/purchasing of recycled materials in the U.S.**

Establishing IP Foundation

- **Launched the industry's first joint licensing program with LGES**
- **Fair competition and reinvest in development of differentiated technologies**



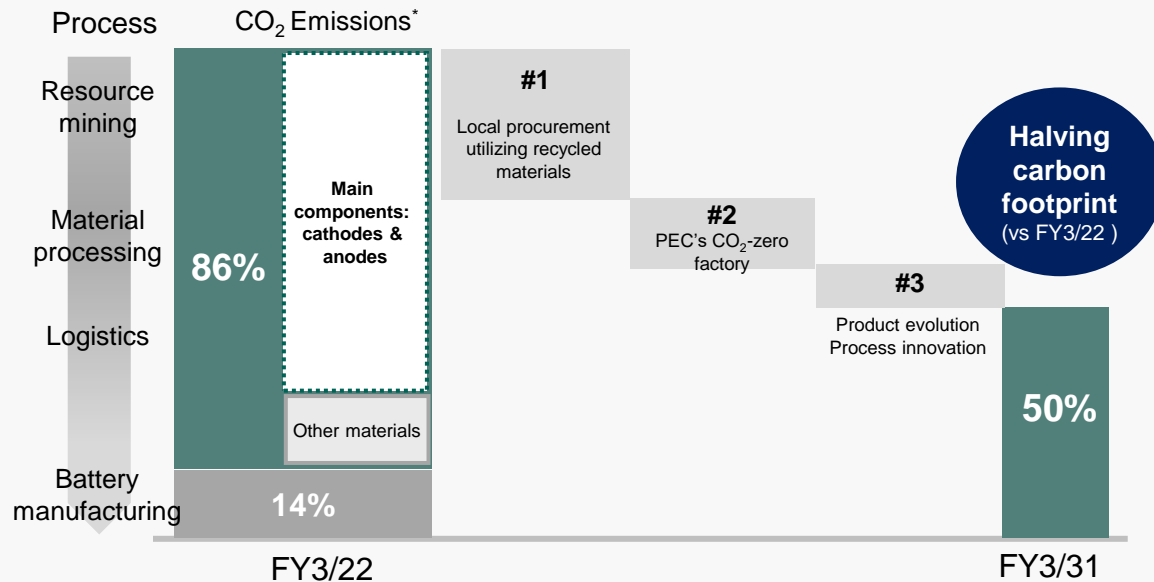
***The press release was issued by Tulip.

- Enhancing our strategies in the upstream of supply chain and accelerating efforts towards halving carbon footprint
- Promoting environmental impact reduction through recycling leveraging the characteristics of ternary LIBs*

*Lithium-ion battery using nickel-based cathode.

Carbon Footprint Reduction

Steadily advancing efforts to halve carbon footprint

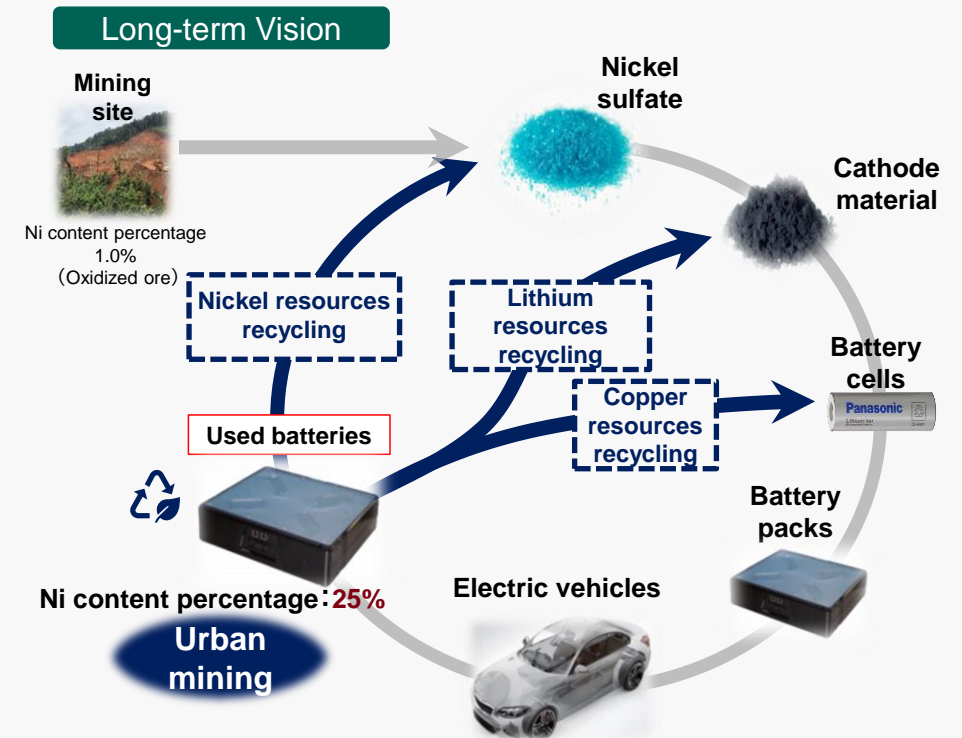


* Based on PEC's own calculations (Lithium-ion batteries for EVs, products manufactured at North American factories, CO₂ emissions per unit of battery capacity)

Initiative	1	2	3
Progress	<ul style="list-style-type: none"> Graphite (NMG, etc.) Copper foil and cathode (Redwood) 	Targets for FY3/29	<ul style="list-style-type: none"> Utilization of recycled nickel Advancement of less-nickel development

Development of Circular Economy Model for LIBs

- Establishing a cycle of utilizing recycled materials to contribute to the environment (conservation and reduction of carbon footprint)
- Ensuring a reliable supply of resources to support business growth



Panasonic ENERGY

Energy that changes the future.

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KGI

■ Cumulative operating CF (FY3/23-3/25)	: 330.0 billion yen
■ Return on Invested Capital (ROIC) (FY3/25)	: 9.1%
■ EBITDA (FY3/25)	: 187.0 billion yen
■ Carbon footprint (FY3/31)	: Half (vs FY3/22)

(yen: billions)	FY3/23		FY3/24		FY2/25	
	Results	YoY Change	Results	YoY Change	Forecast	YoY Change
Sales	971.8	+199.0	915.9 (1,017.3)	-55.9 (+45.5)	877.0 (978.0)	-38.9 (-39.3)
Adjusted operating profit	39.6	-31.2	94.6 (7.8)	+55.0 (-31.8)	111.0 (24.0)	+16.4 (+16.2)
Operating profit	33.2	-33.6	88.8 (2.0)	+55.6 (-31.2)	109.0 (22.0)	+20.2 (+20.0)
EBITDA	98.5	-24.5	160.4 (73.6)	+61.9 (-24.9)	187.0 (100.0)	+26.6 (+26.4)
Operating CF	70.6	-5.5	139.3	+68.7	120.1	-19.2
ROIC	5.0%	-9.1%	14.6% (0.4%)	+9.6% (-4.6%)	9.1% (2.2%)	-5.5% (+1.8%)

Figures in brackets exclude US IRA tax credit

Reference | Financial Figures (P/L, B/S, C/F)

(Unaudited; Including US IRA tax credit)

P/L	(yen: billions)	FY3/23 Results	FY3/24 Results	FY3/25 Forecast
Sales		971.8	915.9	877.0
	In-vehicle	654.1	605.0	523.0
	Industrial / Consumer	310.7	307.1	361.0
Adjusted operating profit		39.6	94.6	111.0
	In-vehicle	10.7	68.1	70.0
	Industrial / Consumer	28.5	26.1	40.0
Other income/loss		-6.4	-5.8	-2.0
Operating profit		33.2	88.8	109.0
(OP % to sales)		3.4%	9.7%	12.4%
Depreciation (tangible) *		65.3	71.6	78.0
EBITDA *1		98.5	160.4	187.0
(EBITDA % to sales)		10.1%	17.5%	21.3%

C/F	(yen: billions)	FY3/23 Results	FY3/24 Results	FY3/25 Forecast
Free cash flow		0.5	-174.0	—
Operating CF		70.6	139.3	120.1
Investing CF		-70.1	-313.3	—
Capital investment (tangible)		90.6	292.1	430.0
Investment in intangible assets		1.1	3.4	—
R&D expenditures		25.1	23.2	—

B/S	(yen: billions)	FY3/23 Results	FY3/24 Results	FY3/25 Forecast
Cash and cash equivalents		120.2	222.6	—
Trade receivables		261.6	229.9	—
Inventories		204.2	160.9	—
Other current assets		33.7	54.7	—
Current assets		619.7	668.1	—
Property, plant and equipment		181.5	464.1	—
Right-of-use assets		6.9	6.6	—
Goodwill and intangible assets		3.1	5.9	—
Other non-current assets		10.6	228.8	—
Non-current assets		202.1	705.4	—
Total assets		821.8	1,373.5	—
Trade payables		204.1	180.7	—
Debt (1)		129.7	169.2	—
Lease liabilities (2)		7.0	6.7	—
Other liabilities		106.9	258.2	—
Liabilities		447.7	614.8	—
Equity (3)		374.1	758.7	—
Invested capital (1)+(2)+(3)		510.9	934.7	—
ROIC		5.0%	14.6%	9.1%

* Additionally adjusted with the amount equivalent to depreciation corresponding to underlying assets that are applied with lease accounting treatment as a lessor