

9th China International New Energy Industry Expo,
CLNB 2024

prime planet energy & solutions

*Securing Battery Metal Resources to Enhance Competitiveness
and Realize Green Battery*

31 May 2024

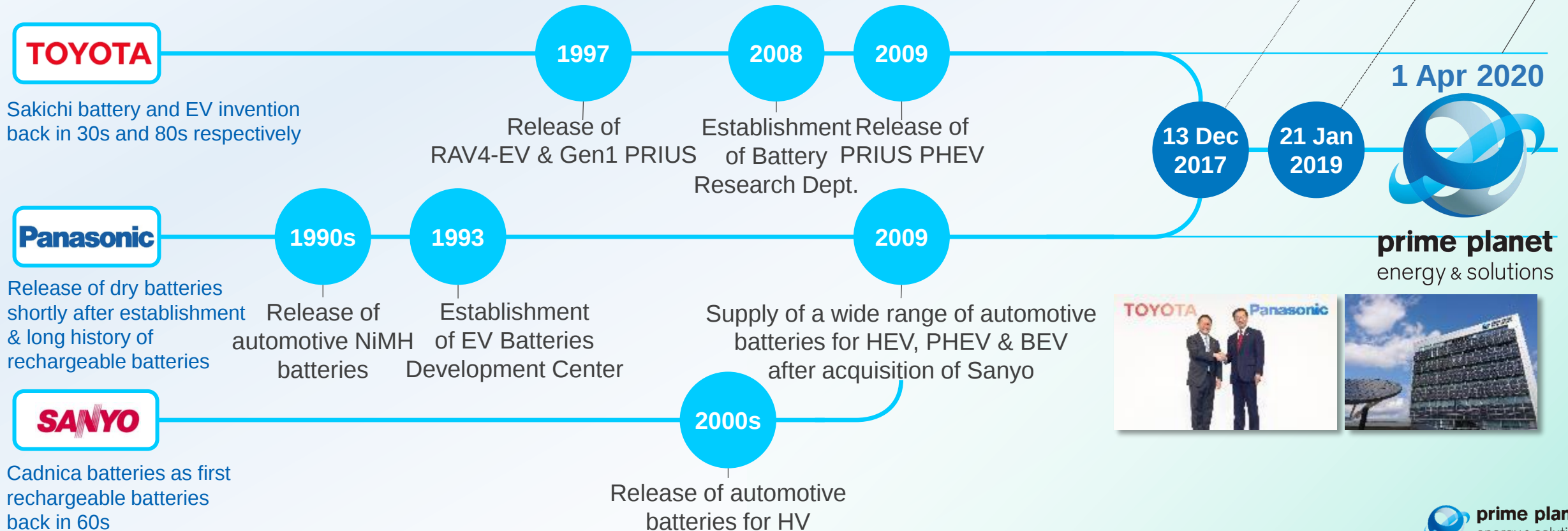
© 2024 Prime Planet Energy & Solutions, Inc.

Establishment

'Dec 2017 **TOYOTA** **Panasonic** Started studying feasibility of JV

'Jan 2019 Agreed to establish JV

'Apr 2020 PPES started operation



Product Lineups

For HEV
(High-power batteries)

11 products

Yr.2004~



Comprehensive Product Line-up

For BEV&PHEV
(High-capacity batteries)

9 products

Yr.2011~



Actual Production
In terms of number of vehicles
approx.

2.0 mil.

Yr. 2023

Wide Customer Base

Toyota

Other Customers



Flexible Form of Delivery

Cell



Stack



Pack



Locations (in operation)



Plant Locations

5

PPES Himeji Plant



PPEDL Dalian Plant



PPEDL Dalian Plant

Launching R&D Center and Utilizing Clean Energy

- With the launching of the PPEDL R&D Center in May 2023, we aspire to strengthen local efforts in battery development to empower the NEV industry in China.

PPEDL R&D Center



Thoughts on Next-Generation Batteries

Connecting People and Mobility
Changing value of housing & mobility



Connecting Energy and Information
Energy storage & Social infrastructure



Connecting People and People
Making friends & Prolong partnerships

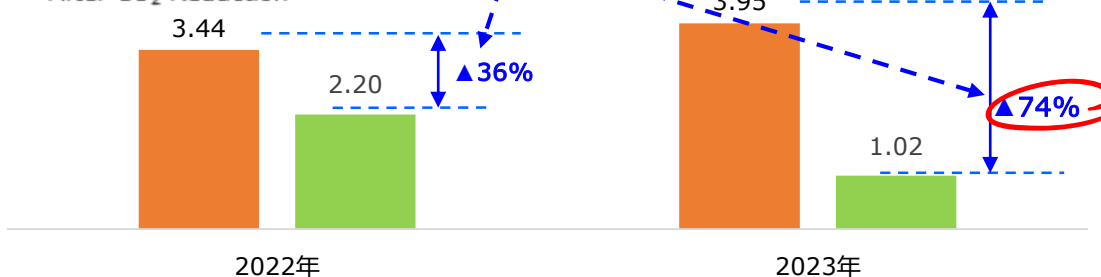
- Phase 3 plant achieved zero CO₂ emission in 2023.
- Targeting "zero-carbon" for the entire PPEDL by 2026.
- 100% renewable energy achieved
— Utilization of solar power + Purchase of clean energy

CO₂ Reduction at PPEDL Plant

Unit: 10,000 ton

Before CO₂ Reduction

After CO₂ Reduction

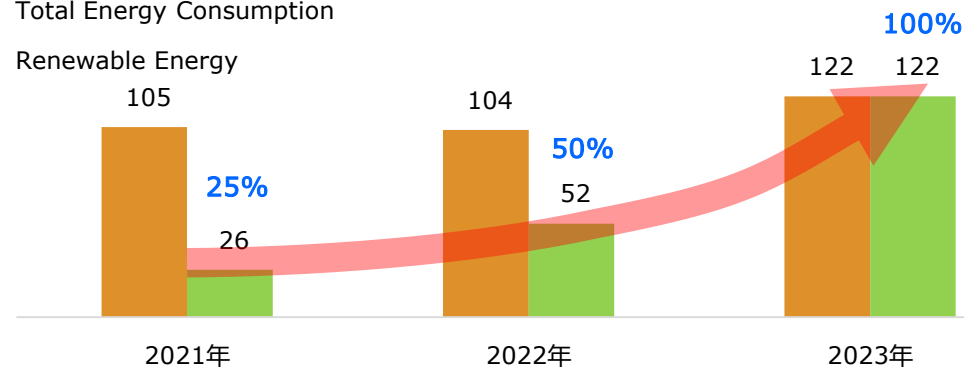


Unit: GWh

Renewable Energy at PPEDL

Total Energy Consumption

Renewable Energy



TOYOTA

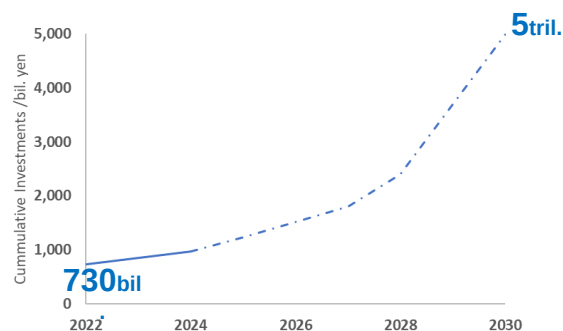
Increasing investments on BEV and its battery production in Japan/US

Aug 2022

Investments up to 730 billion yen in Japan/US battery production from 2024 to 2026, increasing 40GWh capacity for BEV.

May 2023

Announcing new investments on BEV and battery production adding up to 5 trillion yen through 2030.



Source: Toyota HP



Expanding battery production lines keep up with TOYOTA

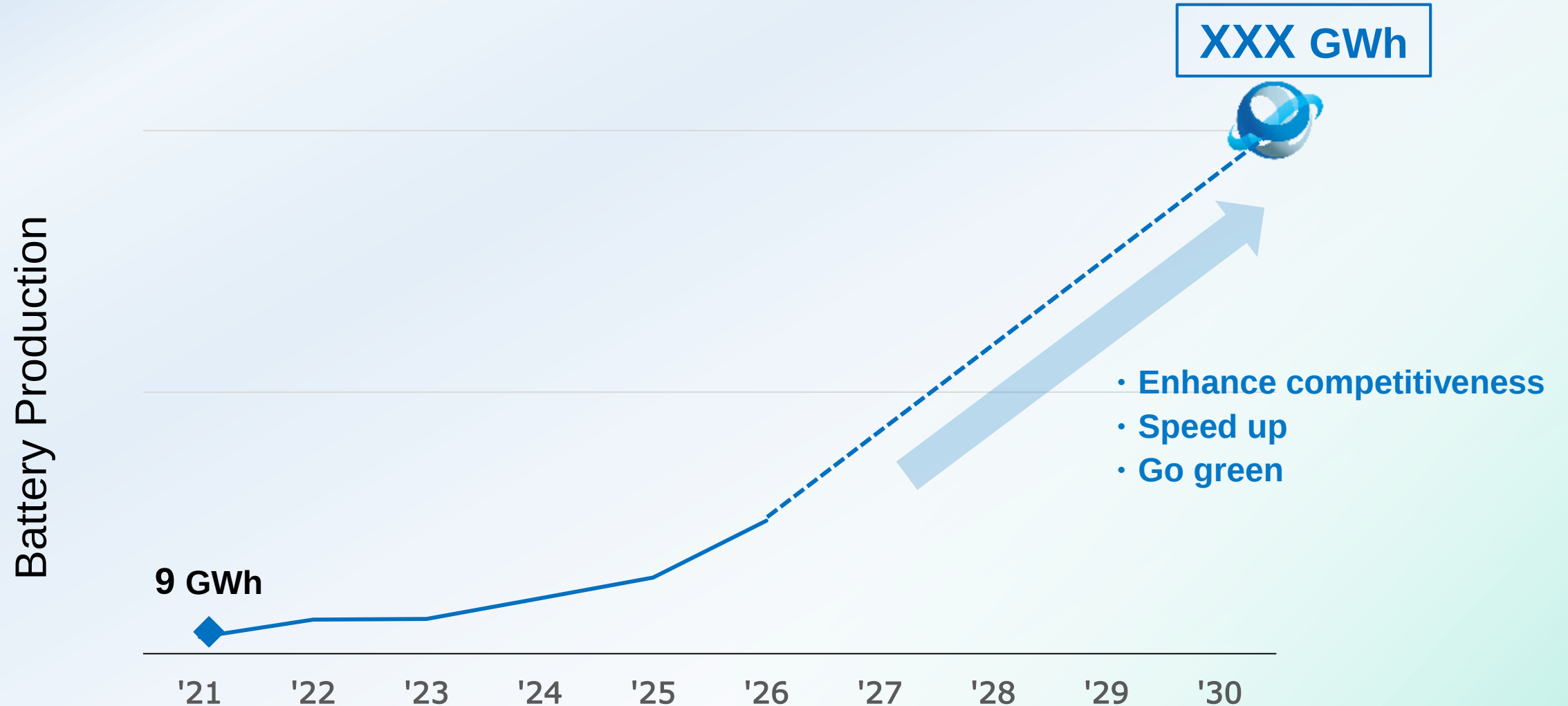
■ New lines will be on stream in Himeji, Japan to start production within 2024. Annual production capacity of 7 GWh as the first step of further expansions toward 2030 and beyond.

■ For further growing demand from TOYOTA, we will keep collaborating to take various approaches and preparation for that.

Aligning with TOYOTA's 40GWh expansion plan in next three years, PPES is leading battery development, production line preparation and securing battery metals together with TOYOTA as "one team"

Target Production by 2030

Target production to reach XXX GWh



A pair of hands is shown holding a glowing, fiery Earth. The Earth is depicted with bright orange and yellow flames or energy emanating from its surface, set against a dark, starry background. The hands are positioned at the bottom, cupping the globe. The overall scene is bathed in a warm, golden light, suggesting a sunrise or sunset. The text "BUSINESS STRATEGY" is overlaid in the center of the Earth in a bold, white, sans-serif font.

BUSINESS STRATEGY

Enhance Competitiveness

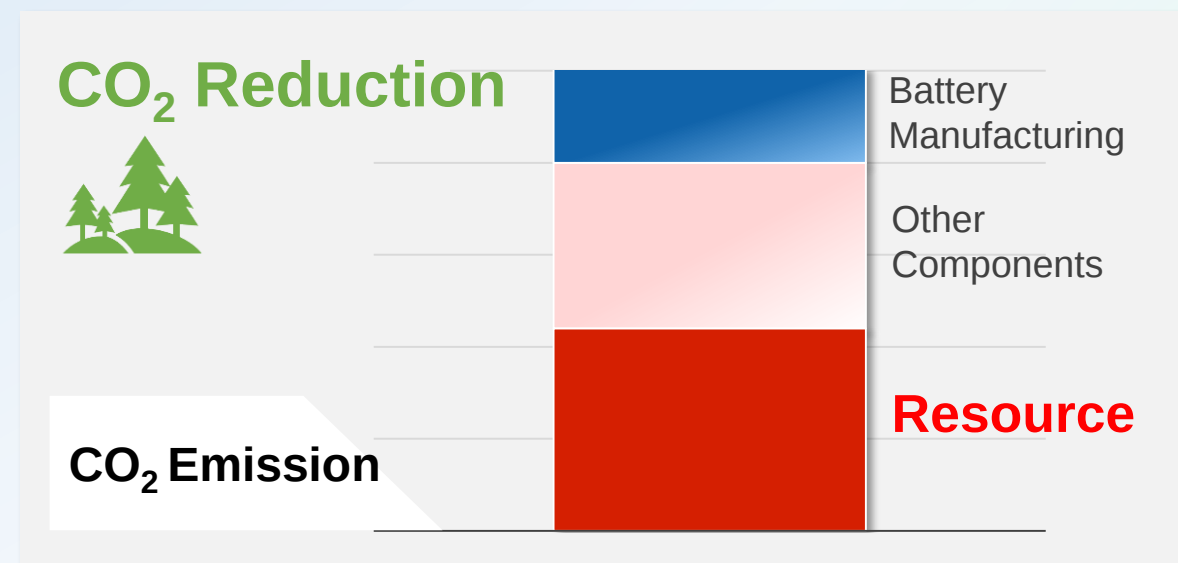
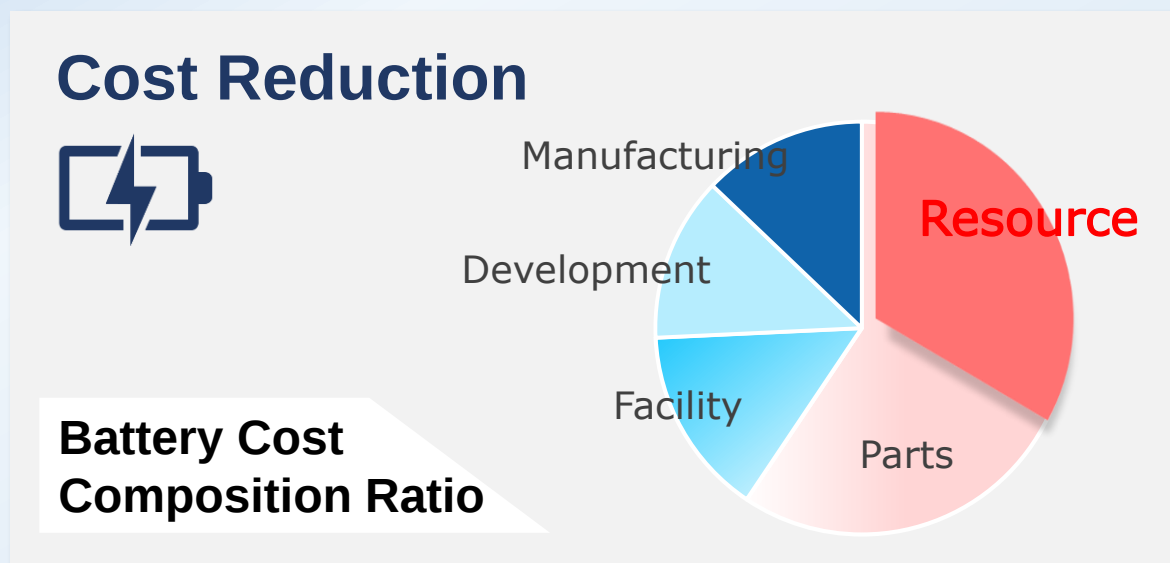
- ① High quality and high performance
- ② Speeding up
(reformation of work style)
- ③ Flexibility to demand,
Cost competitiveness



Go Green

- ① Carbon neutrality
- ② Establishment of recycle system
- ③ Responsible procurement
- ④ Symbiosis with nature and society





Competitiveness of battery to be achieved while lowering the production cost especially for resources and CO₂ emission.

以上内容仅为本文档的试下载部分，为可阅读页数的一半内容。如要下载或阅读全文，请访问：<https://d.book118.com/608065121052007045>