



Roadmap for Improving Corporate Value

November 8, 2023

Cosmo Energy Holdings Co., Ltd.

(Code: 5021, Prime Market in the Tokyo Stock Exchange)

Contents

Section **1** **Roadmap for improving Corporate Value**

Section **2** **Improving Corporate Value through Optimal Capital Allocation**

- 9** **Optimal Capital Allocation**
- 10** **Strategic Setting of Financial Soundness Target**
- 11** **Cash Balance**
- 12** **Balancing Financial Soundness and Shareholder Returns**

Section **3** **Growth of Renewable Energy Business within Our Group**

- 13** **Growth of Renewable Energy Business**
 - Earnings Opportunities in Renewable Energy Business
 - Disadvantages of spin-off/independence of renewable energy business subsidiary

Section **4** **Competitiveness of Oil Business**

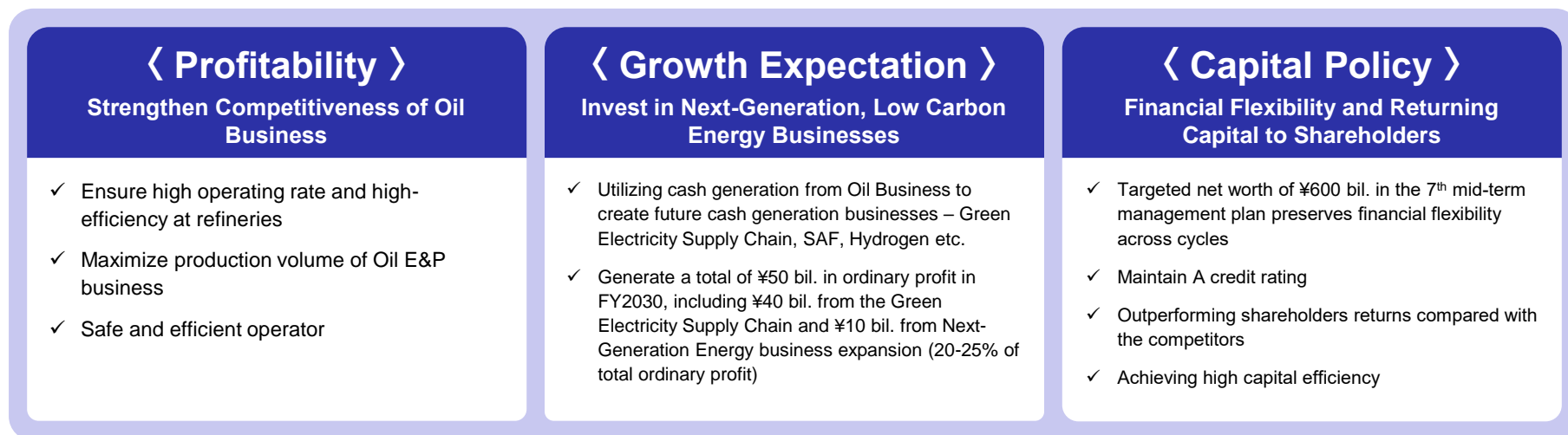
- 17** **Profitability of Oil Business**
 - Short position strategy
 - Achieving high operating rates and high profitability
- 20** **Superiority of the Oil Exploration and Production business**
 - Partnership with oil-producing countries
 - Competitiveness of the Oil E&P business

Section **5** **Vision 2030**

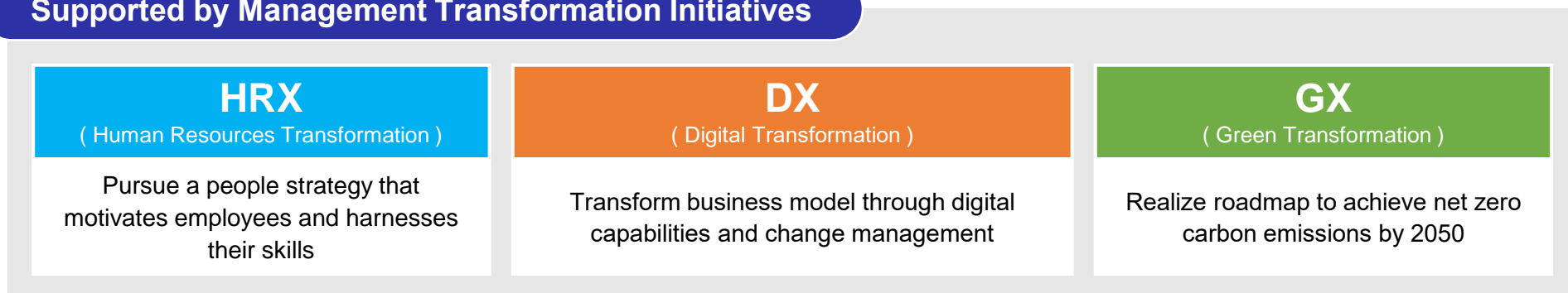
Roadmap for Improving Corporate Value

Roadmap for Improving Corporate Value

Maximizing the Value of Our Assets on Behalf of Shareholders



Supported by Management Transformation Initiatives



Business Growth Platform

Promote transition to NEW Business (Next-Generation Business) and secure growth opportunities

Cash Generation

Oil Business

- ✓ Three refineries with crude oil refining capacity of 363,000 B/D
- ✓ Maintain high operating rate at refineries through short position strategy where production volume is lower than sales volume. Our operating rate over the past three years was 92%, compared to the national average of 74%.

Oil E&P Business

- ✓ Based on relationships of trust with oil producing countries for over 50 years, remain highly cost competitive and maintain select operatorships
- ✓ Segment ordinary profit remained in the black even in 2016 and 2020, when crude oil prices were low



Reinvesting
Cash Flow
into New
Business

Investment in NEW business

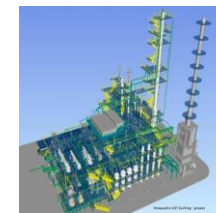
Green Electricity Supply Chain



(Provided by Akita Offshore Wind Corporation)

- ✓ Positioned as the most important business segment for growth
- ✓ Our subsidiary Cosmo Eco Power is specializing in wind power generation (3rd largest in Japan) with over 20 years of experience and an integrated system from development to O&M
- ✓ Earnings opportunities exist not only in power generation, but also in supply and demand adjustment, battery storage and green electricity sales
- ✓ Owning business and customer base within the group across the entire supply chain drives synergies

Next-Generation Energy



Complete image of mass production demonstration facility for Japan's first locally-made SAF



- ✓ Accelerating efforts toward mass production of Japan's first domestically produced SAF. Build a SAF supply system of 30,000 KL in FY2025 and 300,000 KL in FY2030
- ✓ Accelerating efforts toward hydrogen business starting with the deployment of hydrogen stations as an entry into the hydrogen supply chain

Transition of Future Investment and EBITDA Mix

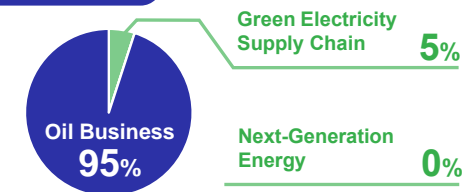
Achieve sustainable cash generation by reinvesting in next-generation businesses (NEW) that are responsible for high growth

(¥ bil.)

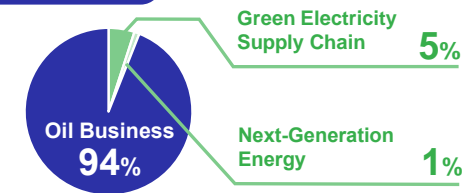
Segment		Project Type	Capital Investment (FY23-FY25)	Ordinary Profit FY25	Target Return	Capital Investment (FY23-FY30)	Ordinary Profit FY30	Target Return		
New Business	Green Electricity Supply Chain	Wind Power Generation	83.0	8.0		300.0	40.0			
		Electric Power Adjustments & Sales, etc.	17.0							
	Next-Generation Energy	Sustainable Aviation Fuel (SAF)	25.0	1.0		ROE >10%	100.0		10.0	ROE >12%
		Next-Generation Energy, etc.	15.0							
Oil Business	Strategic Investments	Oil E&P	50.0	154.0	ROIC >6%	200.0	150.0	ROIC >8%		
		Petroleum Refining & Sales	11.0							
		Petrochemical	3.0							
	Stable Supply Investments	Oil E&P	27.0			Non-disclosed				
		Petroleum Refining & Sales	142.0							
Petrochemical	47.0									

EBITDA Mix by Segment

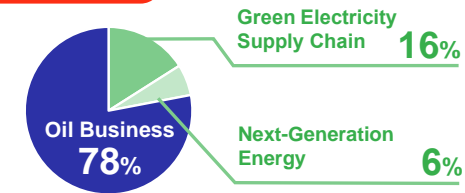
FY2023E



FY2025E

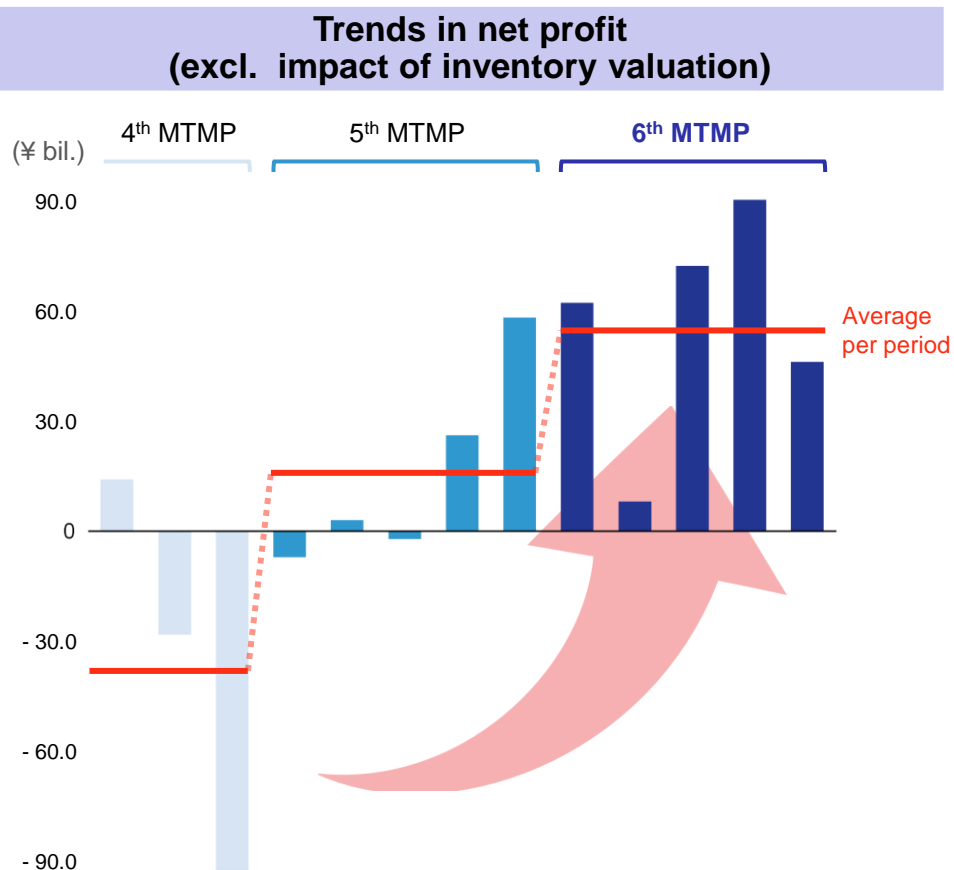


FY2030E



6th MTMP Management Goals

All management targets in the 6th MTMP Management achieved



Management Goals	Results
Ordinary profit (excl. impact of inventory valuation)	>¥120.0 bil. / ¥142.9 bil.
Net profit	>¥50.0 bil. / ¥67.9 bil.
Free cash flow (5 years cumulative)	>¥150.0 bil. / ¥152.2 bil.*
Net worth (Net worth ratio)	>¥400.0 bil. (>20%) / ¥527.9 bil. (24.9%)
Net D/E ratio	1.0-1.5x / 1.1x
ROE	>10% (excl. inventory effect) / 10.7%

* Excluding the impact of the fuel oil price drastic fluctuation mitigation subsidy and provisional payment of consumption tax and corporate tax in FY2022

7th MTMP Management Goals For 2025

Shareholder Returns

Total payout ratio
(excl. impact of
inventory valuation)

≥60%

(three-year cumulative)

Dividend

≥¥250 per share

Financial Health

Net D/E ratio

1.0 times

(Net worth ≥¥600.0 bil.)

Capital Efficiency

ROE

≥10%

ROIC

≥6%

Profitability

Ordinary profit
(excl. impact of
inventory valuation)

≥¥165.0 bil.

(Profit attributable
to owners of parent
≥¥60.0 bil.)

Future Investment

Investment in
New fields

¥140.0 bil.

(three-year cumulative)

DX

Development of
core digital personnel

900 people

HRX

Engagement index

≥60 points

Human capital
investment

¥180,000

/person

GX

GHG emission
reduction

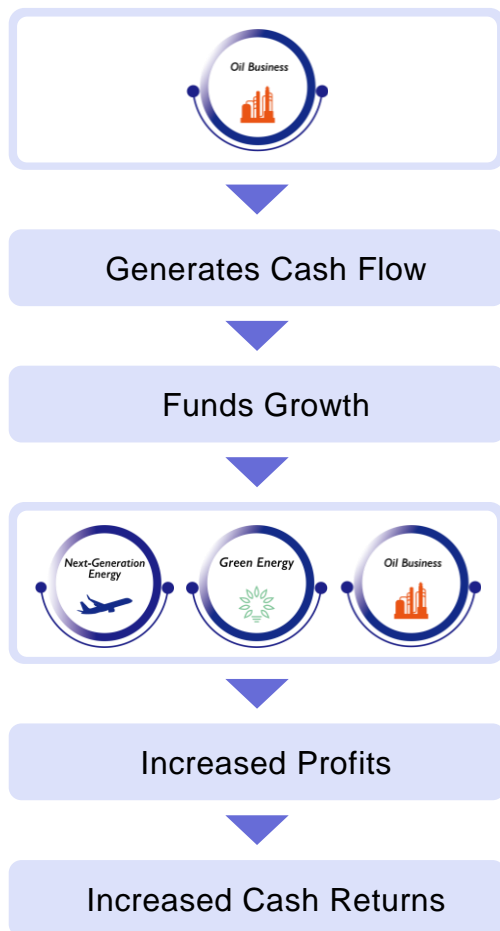
2030 vs 2013
(incl. Scope 1,2 and
reduction contribution)

-30%

Improving Corporate Value through Optimal Capital Allocation

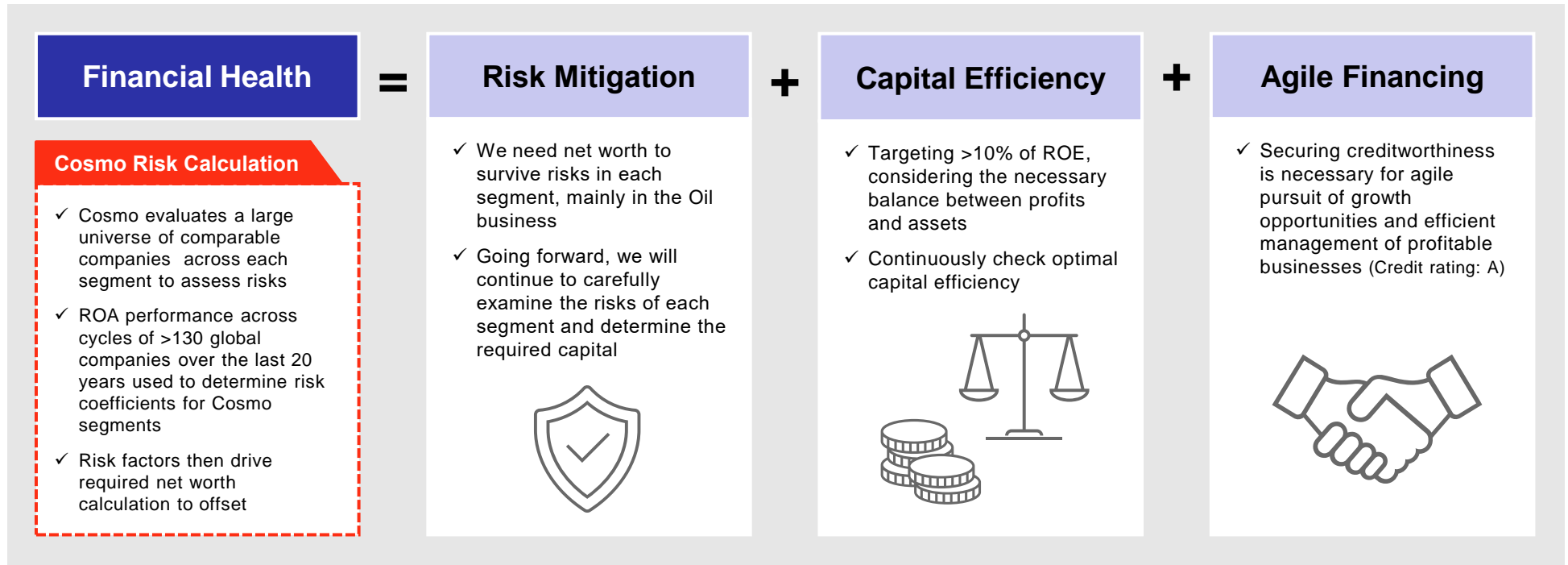
Optimal Capital Allocation

Implementing optimal capital allocation with an eye toward improving corporate value



1	Maintaining strong balance sheet and financial soundness		
	Maintain A credit rating	Over ¥600 bil. net worth Target 1.0x Net Debt to Equity Ratio	
2	Required investment / Shareholder return		
	Sustaining Capex / Stable supply investments <ul style="list-style-type: none"> Make essential investments, mainly investments in safe operations to maintain the current high competitiveness (total of ¥216 bil. until FY2025) 	Shareholder return <ul style="list-style-type: none"> Commitment to a total return ratio of 60% or more (minimum dividend of 250 yen/share) Achieving the highest return among other companies in the industry Additional capital to be returned once financial soundness targets (net worth of ¥600 bil. and net D/E ratio of 1.0x) are achieved 	
3	Strategic investment		
	New Business <ul style="list-style-type: none"> We will invest ¥140 bil. in New businesses by FY2025 and ¥400 bil. by FY2030, focusing on investments in green electricity supply chains and next-generation energy 	Oil Business <ul style="list-style-type: none"> Invest ¥64 bil. in the Oil business by FY2025 and ¥200 bil. by FY2030, focusing on early production and recovery of crude oil, higher efficiency of refineries, and expansion of specialty chemicals 	Acquisitions <ul style="list-style-type: none"> We conduct a thorough examination from the perspective of increasing corporate value and implement profitable investments

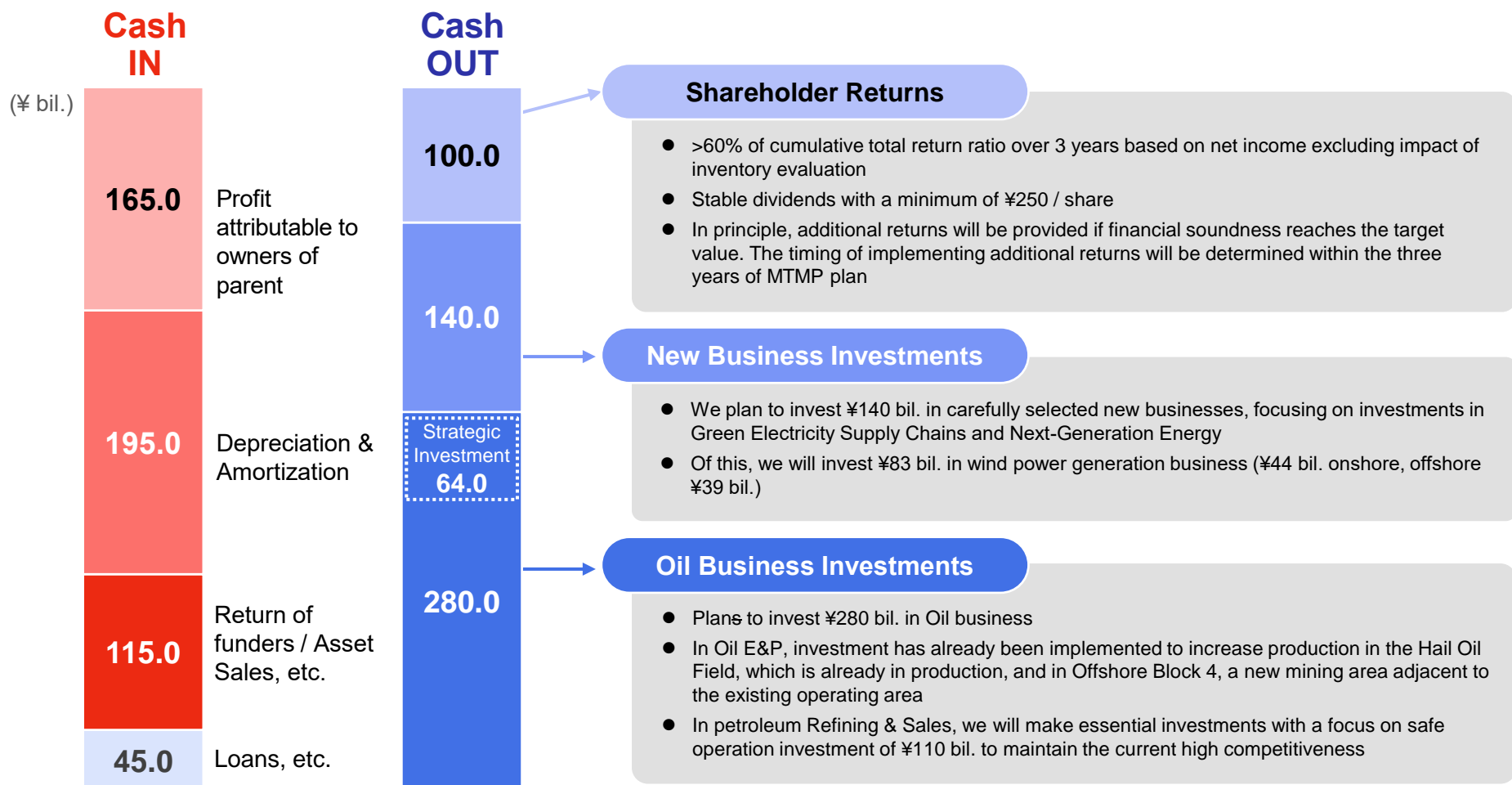
Strategic Setting of Financial Soundness Target



- ✓ **Net worth of ¥600 bil. and net D/E ratio of 1.0x during the 7th MTMP period are optimal for financial health**
- ✓ **Achieve high capital efficiency and flexible financing while mitigating risks**

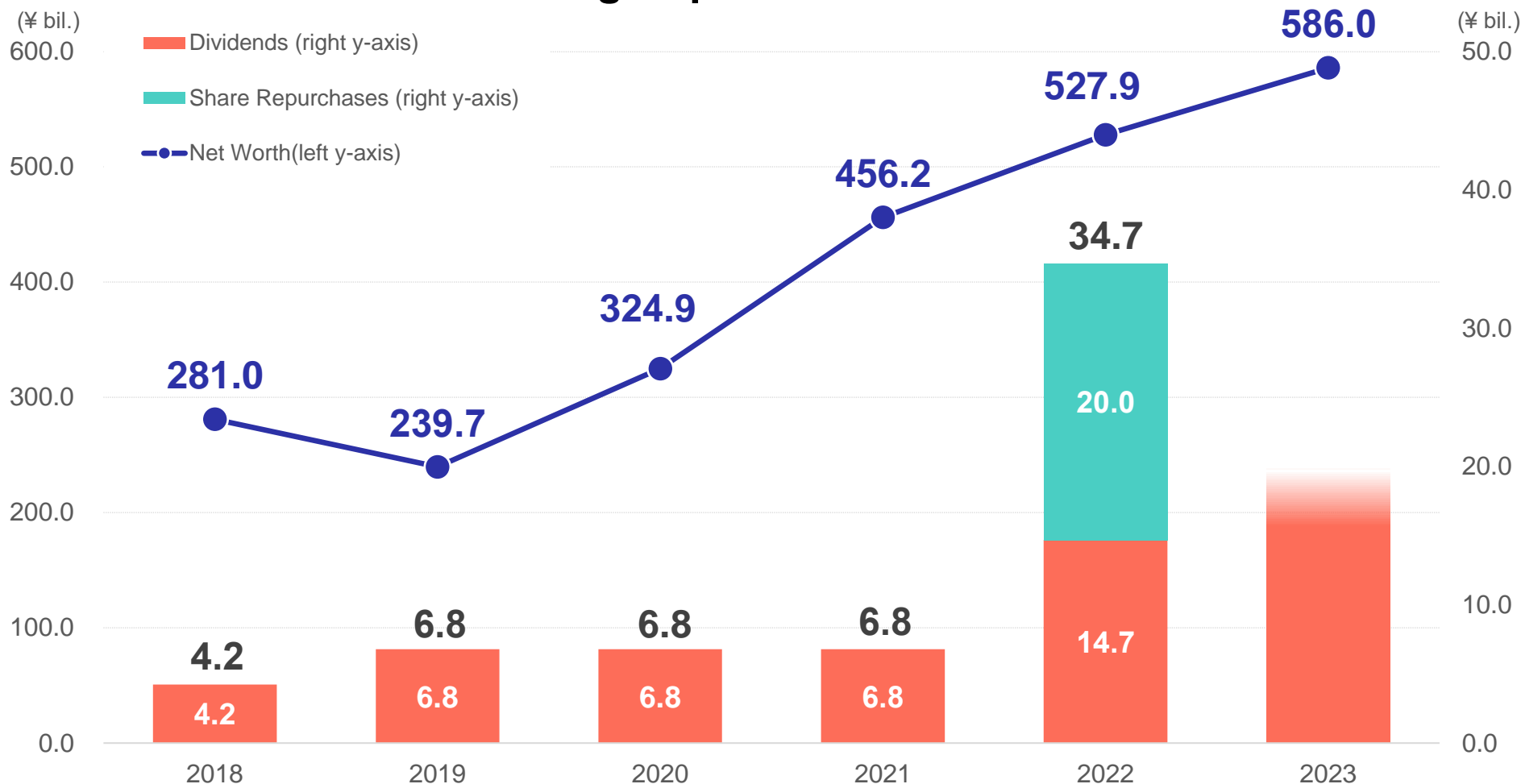
Cash Balance

Cosmo Balances Near-Term Cash Returns to Shareholders With Investments to Secure Long-Term Corporate Value Appreciation



Balancing Financial Soundness and Shareholder Returns

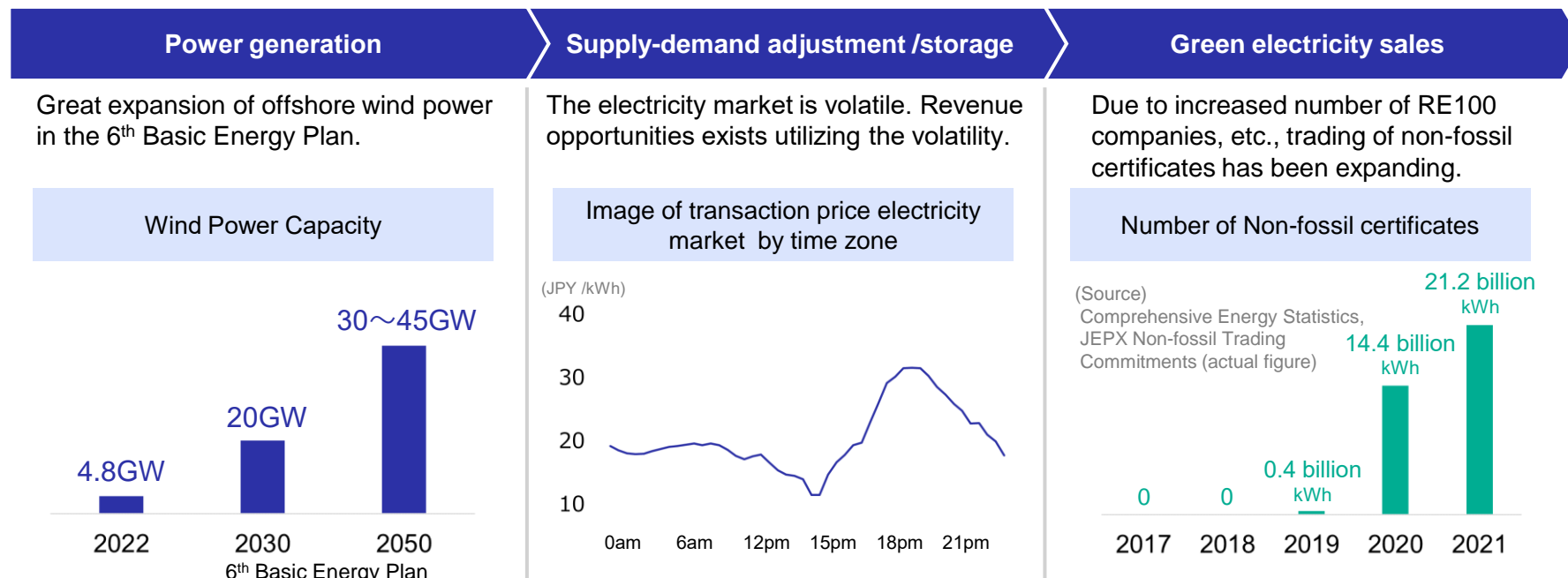
Track Record of Increasing Net Worth While Simultaneously Returning Capital to Shareholders



Growth of Renewable Energy Business

Earnings Opportunities in Renewable Energy Business

- ✓ Earnings opportunities exist not only for power generation, but **also for supply-demand adjustment/storage, and green electricity sales.**
- ✓ We already have multiple businesses and customer bases within the Group, aiming to create synergies throughout the supply chain.



Major Group Companies with Business and Customer Bases

COSMO
Cosmo Eco Power Co., Ltd.

COSMO
Cosmo Energy Solutions Co., Ltd.

COSMO
Cosmo Oil Marketing Co., Ltd.

Disadvantages of spin-off/independence of renewable energy business subsidiary

- ✓ The spin-off/independence of a renewable energy business subsidiary (Cosmo Eco Power Co., Ltd.) would cause **various disadvantages**.

Major disadvantages of spin-off/independence

- i) **Lack of knowledge and delays in project execution due to return of HR**

Number of Directors and Employees

	Director	Employee
Number of employee of Cosmo Eco Power Co., Ltd.	8	287
Number of employee assigned from Cosmo Energy Group	5*	43

* Including company transfers

- ii) **Incapable of using Cosmo's credit rating and financing power**

Rating information of Cosmo Energy Holdings Co., Ltd.

Credit Rating Company	Long-term Issuer rating	Short-term Issuer rating
R & I	A- (Outlook: Stable)	a-1
JCR	A- (Outlook: Stable)	J-1

- iii) **Declines in creditworthiness of various business situation**
(Project consortium, administrative, fisheries cooperatives, local residents)

- iv) **Increased labor loads per person associated with the spinoff /independence**

- v) **Unrealistic to achieve net-zero carbon emissions by 2050**

Disadvantages of spin-off/independence of renewable energy business subsidiary

- ✓ The spin-off of the business may not be the right path to choose as the business is currently in the early stage of growth
- ✓ Open to other strategic options to enhance enterprise value in the mid and long term

Peer Reference Range*

**2023FY
EBITDA**

(JPY bil.)

2.0

 **COSMO**
Cosmo Eco Power Co., Ltd.

158.0

**Power
Generation**

(MW)

300

 **COSMO**
Cosmo Eco Power Co., Ltd.

9,430

**Total
Assets**

(JPY bil.)

65.0

 **COSMO**
Cosmo Eco Power Co., Ltd.

3,467.0

* Peer comparables include: NYSE: NOVA, SZSE: 002015, NYSE: ORA, NasdaqGS: AY, NasdaqGS: RNW, NYSE: NEP, NSEI: NHPC, NYSE: CWEN.A, and TSX: NPI

Profitability of Oil Business

Short position strategy *

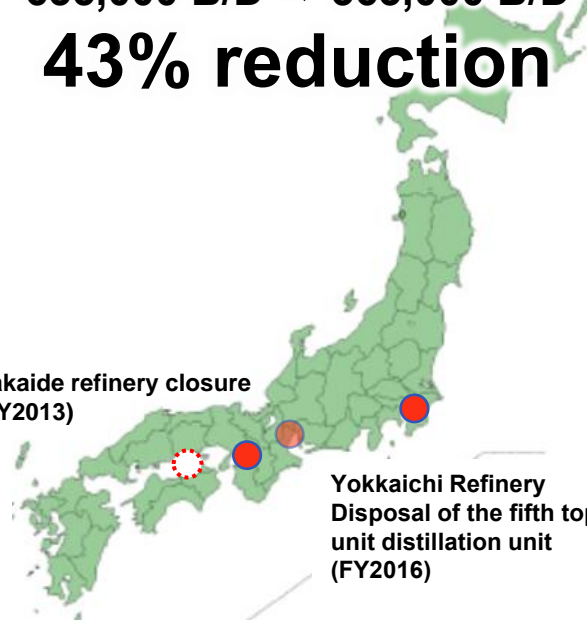
* Insufficient crude oil processing capacity to produce relative to sales volume

- ✓ In addition to **a significant strategic reduction in refining capacity, sales volume is expanding.**
- ✓ Even considering the future decline in domestic demand, **high operating rate is expected to continue for the time being.**

Crude oil processing capacity*1

635,000 B/D \Rightarrow 363,000 B/D
43% reduction

Sakaide refinery closure
(FY2013)



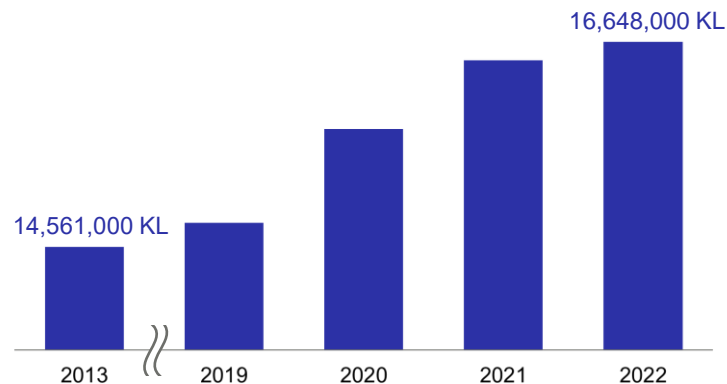
Yokkaichi Refinery
Disposal of the fifth topper
unit distillation unit
(FY2016)

*1 Comparison of topper unit capacity in April 2013 and April 2023, which excludes consignment of crude oil refining to Showa Yokkaichi Sekiyu.

Sales volume*2

14,561,000 KL \Rightarrow 16,648,000 KL
14% increase

Sales Volume of four main products

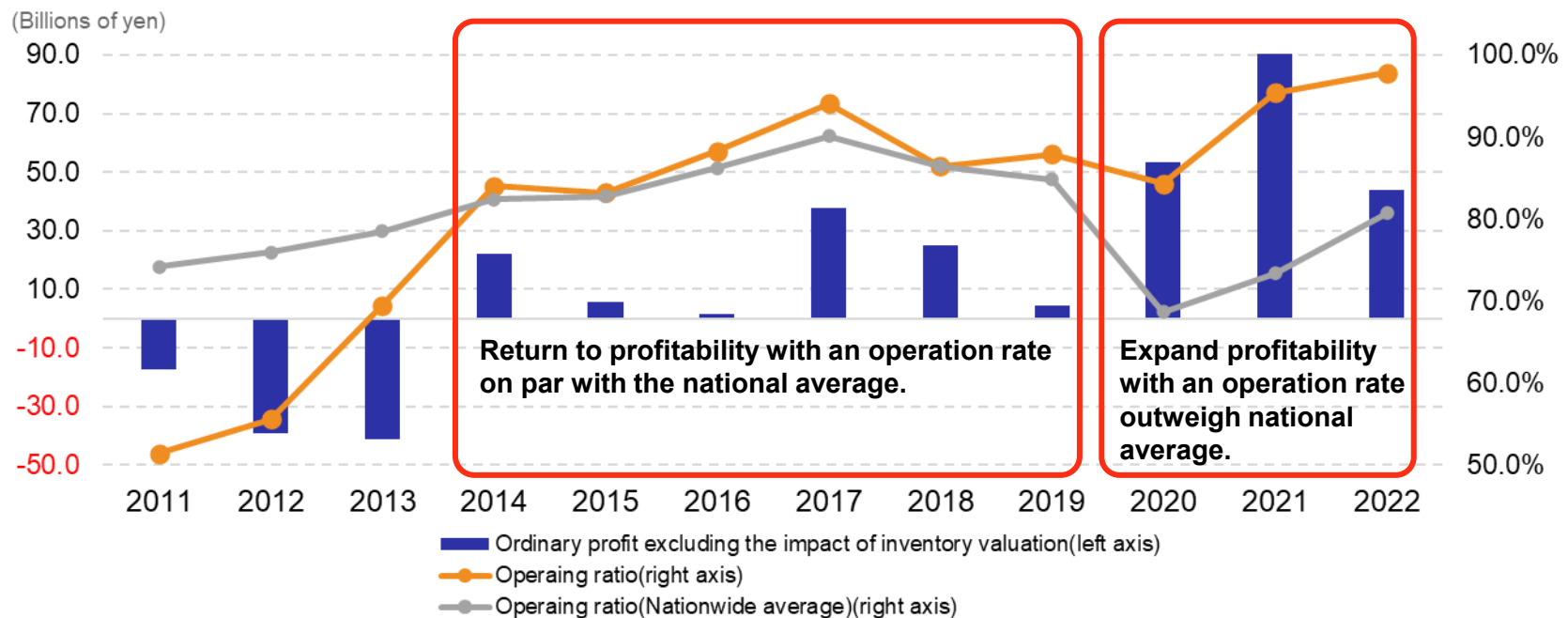


*2 Comparison of domestic sales volume of four products (Gasoline, Kerosene, Diesel fuel and Heavy Oil A) in FY2013 and FY2022.

Achieving high operating rates and high profitability

- ✓ In addition to the short-position strategy, due to the introduction of an “Operation Management System” and other measures **improved the level of safe operations, our refineries has been continuing to operate at a high level**, significantly exceeding the national average.
- ✓ By integrated operation at the three refineries, **we have reduced production of high-sulfur heavy oil to zero** and increased production of high-value-added gasoline. That leads **high competitiveness**.

Profit of Petroleum business and operating ratio at refinery



Superiority of the Oil Exploration and Production business

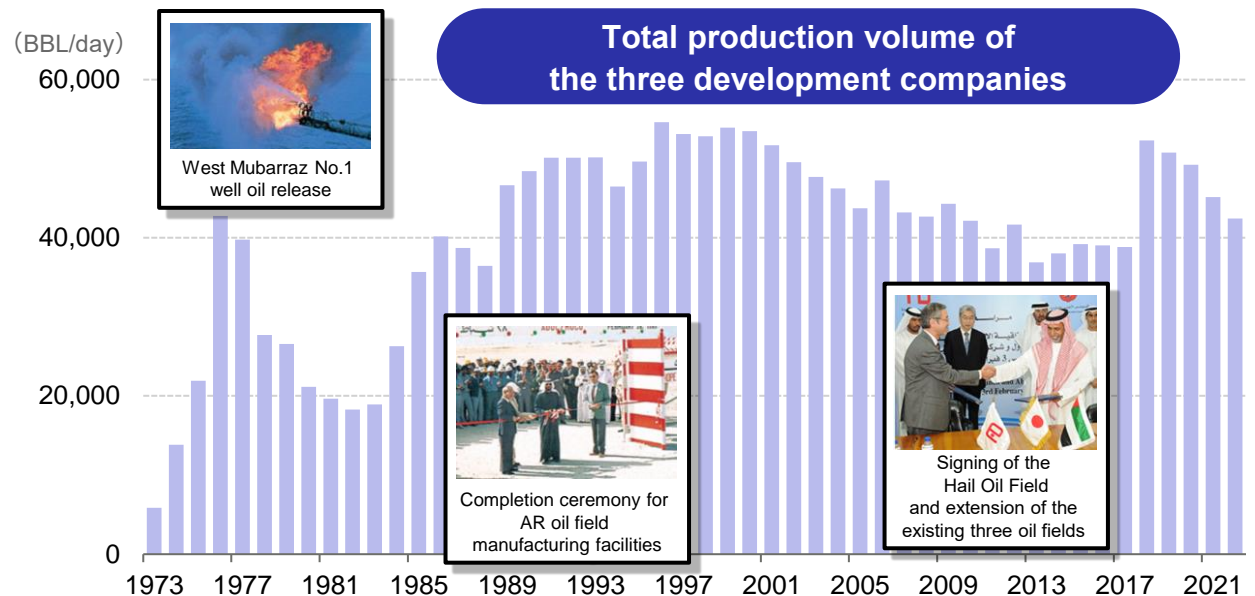
Partnership with oil-producing countries

- ✓ **Building a strong relationship of confidence with Abu Dhabi Emirates for more than 50 years since the signing of the Rights Agreement in 1967. Building a Stable Production System over the Long Term**
- ✓ **In the Middle East region, the only Japanese company is promoting its business as an operator. Holding several highly cost-competitive oil fields**

Continue stable production for a long period of time



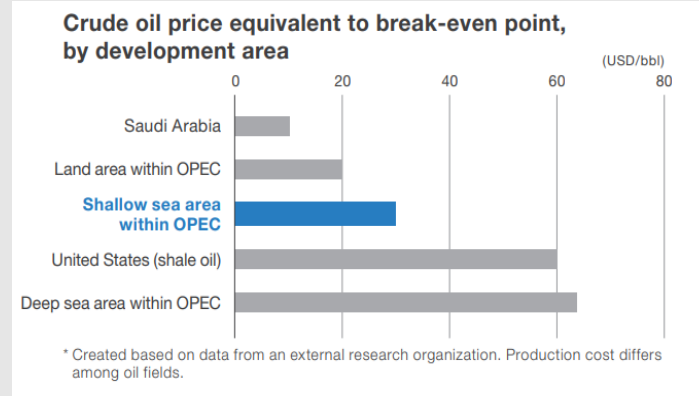
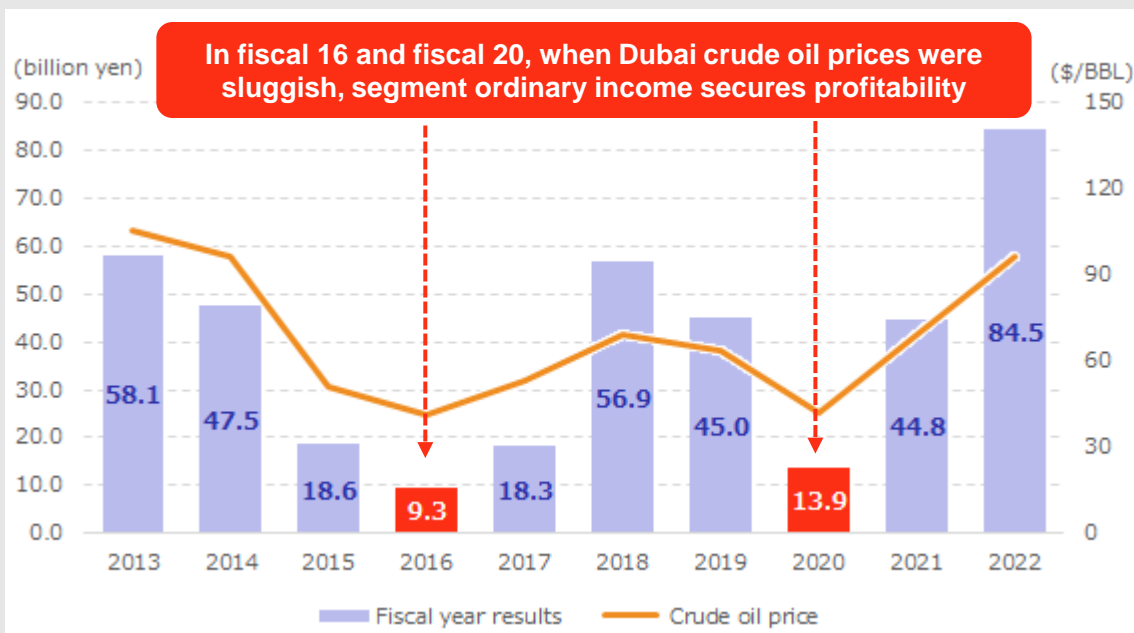
1967
Concession agreement concluded



Competitiveness of the Oil E&P business

- ✓ The production area is a conventional oil field located in the shallow sea. Our oil fields are **competitive and with lower operating costs** compared with unconventional oil fields such as large-water deep oil fields and shale oil.
- ✓ Exploration, development, and production of petroleum has been carried out for more than 50 years as an operator. **Accumulate technologies, expertise and experience**
- ✓ In fiscal 2016 and 2020, when crude oil prices were sluggish, segment ordinary income remained in the black.

Oil Exploration and Production Business: Ordinary Income



Vision 2030

Vision 2030

To create energy that shapes the future,
energy that sustains society, and new forms of value

Green Energy



**Bolster green
electricity supply chain**

Build a high value-added supply chain that encompasses power generation, supply-demand adjustment and sales

Next-Generation Energy



**Expand next-
generation energy**

Supply SAF and develop hydrogen and other energy businesses

Oil Business



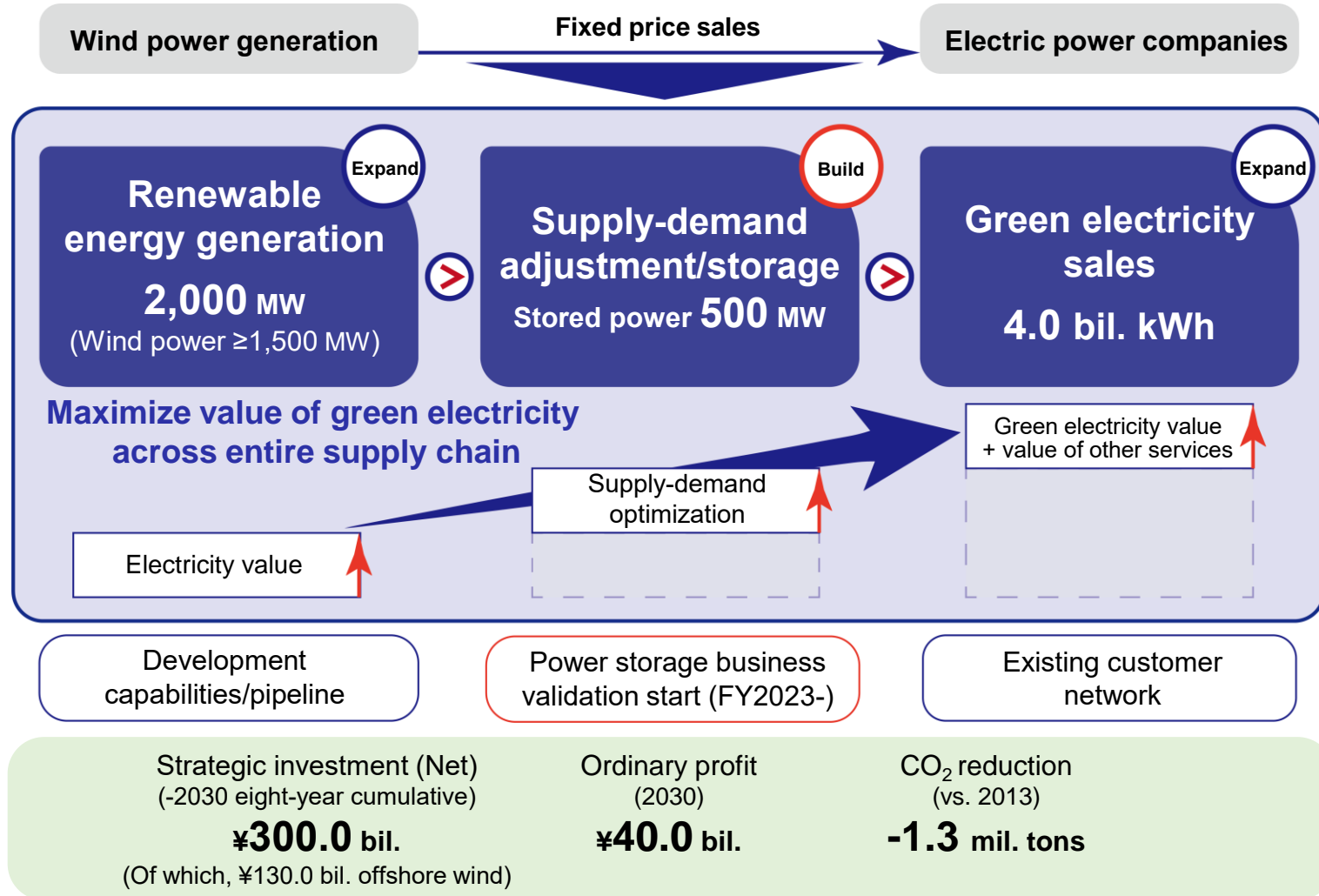
**Strengthen competitiveness
of Oil Business and pursue
low carbonization**

Enhance competitiveness by digitizing refineries, etc. and shift to low-carbon operations through CCS/CCUS

Vision 2030_Bolster green electricity supply chain (1/2)



Transformation of the current business model



Vision 2030_Bolster green electricity supply chain (2/2)



Renewable energy generation
2,000 MW
 (Wind power $\geq 1,500$ MW)

Expand



Supply-demand adjustment/storage
Stored power 500 MW


Build

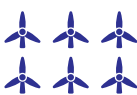



Green electricity sales
4.0 bil. kWh


Expand

Development capabilities/pipeline






Onshore wind power: current capacity
300MW 

Onshore wind power: planned capacity
600MW 
 (of which 400 MW is under construction/development)

Offshore wind power: planned capacity
600MW 


 Cosmo Eco Power Co., Ltd.
Integrated development/O&M framework

Power storage business validation start (FY2023-)

   Market
  Consumers

Installation of storage batteries at power plants/grid-scale storage systems

Existing customer network

 
 Cosmo Denki Green Cosmo Zero Carbon Solution

Introduced at over 1,000 sites **RExEV solution**



5 mil. app downloads

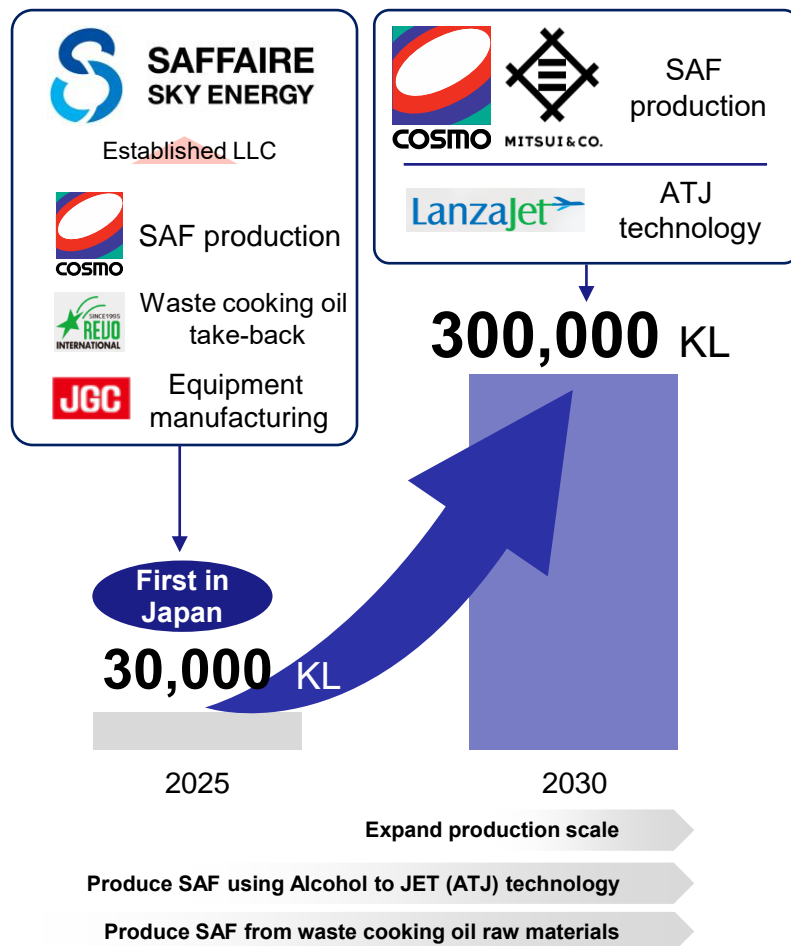
 
60,000 Eco Card holders **コスモMyカーリース**
 Cosmo My Car Lease

Lease contracts signed for cum. total of 100,000 vehicles

Vision 2030_Expand next-generation energy



Mass production of Japan's first locally-made SAF



Development of hydrogen and other energy businesses

Entry into hydrogen supply chain

- © Considering partnering with Iwatani Corp.
Operation of hydrogen station for trucks



Use of existing assets for entry into hydrogen supply chain

- © Exploring new hydrogen production technologies (turquoise hydrogen)
Joint development with Toda Kogyo Corp.

*In addition, we will undertake R&D and proof-of-concept testing for waste plastic recycling as well as ammonia, synthetic and other fuels.

Strategic investment (-2030 eight-year cumulative)	Ordinary profit (2030)	CO ₂ reduction (vs. 2013)
¥100.0 bil.	¥10.0 bil.	-400,000 tons

