

Sustainable Management at the Cosmo Energy Group

The Cosmo Energy Group Management Vision incorporates our desire for the sustainable growth of our Group and society.

The "Harmony and Symbiosis" and "Creating Future Values" included in our Group Management Vision constitute our Basic Concept of Sustainability and show our determination to promote sustainability in our management.

We have strived to realize our Group Management Vision by aiming to achieve sustainable growth within the Group and helping realize a sustainable society through our businesses.

To realize our Group Management Vision, it is important that the Group as a whole shares the same values and acts accordingly.

For this reason, the Cosmo Energy Group Code of Conduct, which translates our Group Management Vision into concrete action, is the cornerstone of our sustainability and serves as the foundation for the actions and values of all employees.



Cosmo Energy Group Management Vision

Striving for an infinite tomorrow, developing sustainably in harmony with humanity, society, and our planet.

Basic Concept of Sustainability

Harmony and Symbiosis

- Harmony and Symbiosis with the Global Environment
- Harmony and Symbiosis between Energy and Society
- Harmony and Symbiosis between Companies and Society

Creating Future Values

- Creating the Value of "Customer First"
- Creating Value from Diverse Ideas of the Individual
- Creating Value by Expressing Collective Wisdom

Cosmo Energy Group Code of Conduct

Chapter 1

We are determined to be a safe, accident-free corporate group

Chapter 2

We live up to customer expectations concerning reliability and satisfaction

Chapter 3

We value people

Chapter 4

We take care of the global environment

Chapter 5

We value communication with society

Chapter 6

We strive to maintain our position as an honest corporate group

Cosmo Energy Group Policies

- Safety Policy
- Quality Policy
- Human Rights Policy
- Human Resources Policy
- Health Management Policy
- Environmental Policy
- Social Contribution Activity Policy
- Sustainable Procurement Policy
- Compliance Policy
- Tax Policy
- Basic Policy on Information Security
- Risk Management Policy

Most Important Material Issues

Material issues for sustainable value creation

- Climate change countermeasures
- Provision of clean energy, products, and services
- Structural reform of profit-making businesses

Material issues that form the foundation of business continuity

- Promoting human resources' success, health, and job satisfaction
- Commitment to compliance and sharing of philosophy and values
- Strengthening of Group risk management
- Digital transformation (DX)
- Safe operations and stable supply

Cosmo Energy Group's Vision for the Future

Vision 2030

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

The Cosmo Energy Group seeks to realize its vision for the future by focusing on the following three pillars under Vision 2030.

Bolster the green electricity supply chain

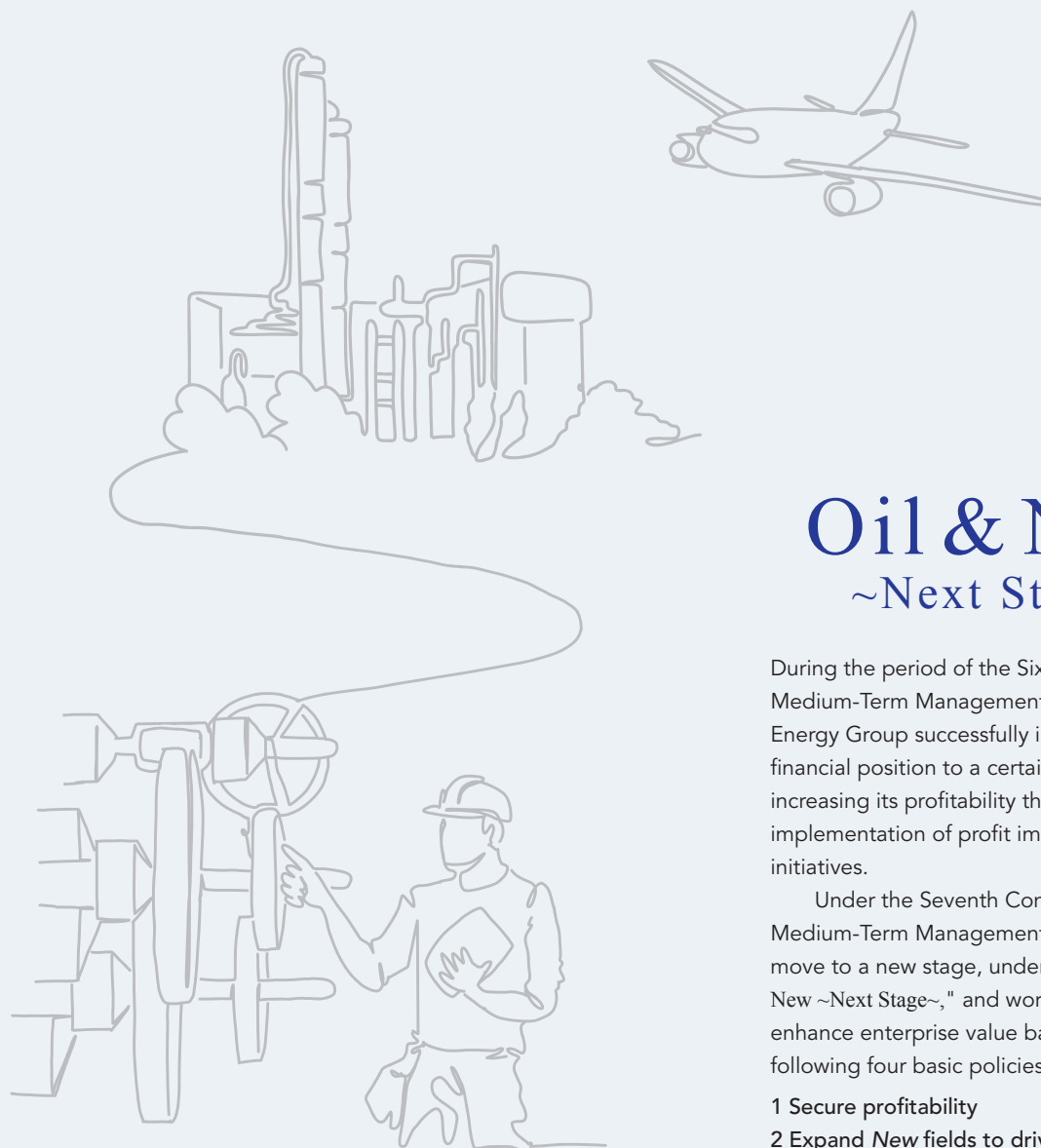
Build a high value-added supply chain that encompasses power generation, supply-demand adjustment, and sales

Expand next-generation energy

Supply SAF and develop hydrogen and other energy businesses

Strengthen competitiveness of our Oil Business and pursue low carbonization

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



Oil & New ~Next Stage~

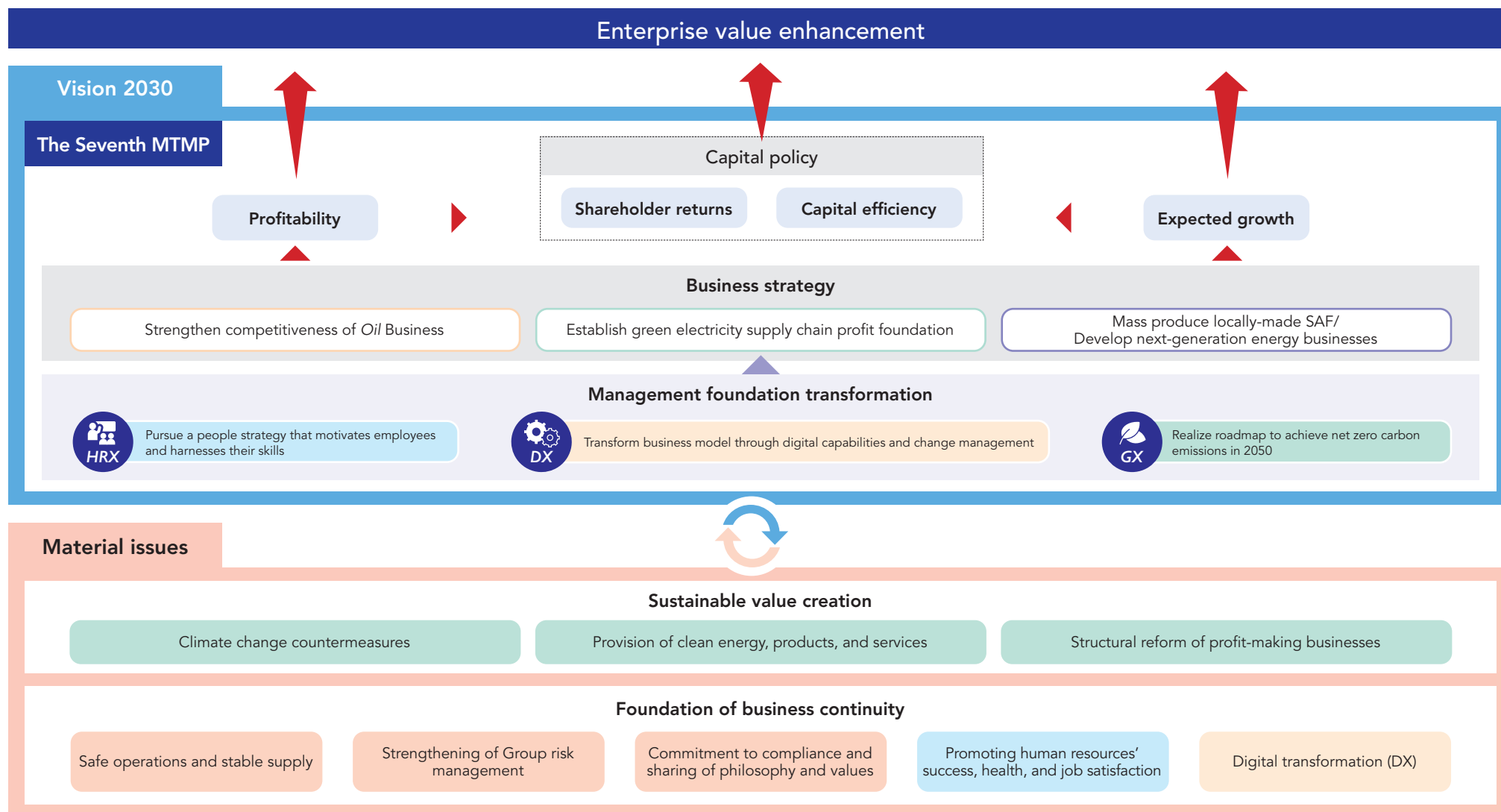
During the period of the Sixth Consolidated Medium-Term Management Plan, the Cosmo Energy Group successfully improved its financial position to a certain extent by increasing its profitability through the steady implementation of profit improvement initiatives.

Under the Seventh Consolidated Medium-Term Management Plan, we will move to a new stage, under the slogan "Oil & New ~Next Stage~," and work to sustainably enhance enterprise value based on the following four basic policies.

- 1 Secure profitability
- 2 Expand New fields to drive growth
- 3 Realize three-pronged capital policy
- 4 Transform management foundation

Materials Issues, Vision 2030 and the Seventh Consolidated Medium-Term Management Plan

In the Seventh Consolidated Medium-Term Management Plan, which ends in FY2025, the Cosmo Energy Group defined human resource transformation (HRX), digital transformation (DX), and green transformation (GX) as the three themes for transforming our management foundation. These themes are also linked to the long-term material issues we aim to solve by 2050, and by addressing them, we will realize our vision for the future as defined in Vision 2030 and enhance enterprise value.



COSMO REPORT 2024

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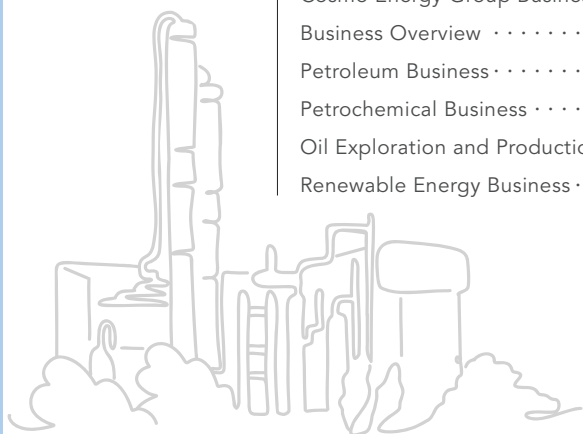
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Message from the CEO

Oil & New
~Next Stage~

Toward the realization of
enhanced enterprise value



Shigeru Yamada
Representative Director,
Group CEO

Looking back on FY2023

Reflecting on my first year as CEO

A year has passed since we formed our new management team. Although we have achieved some of the things I envisioned before assuming the role of Group CEO, new challenges have also become apparent. Overall, I feel that FY2023 was a year in which we were able to make positive steps toward enhancing enterprise value.

The external environment continues to see heightened geopolitical risks due to various conflicts such as the situations in Ukraine, Israel, and Palestine, and the continued tension in the Taiwan Strait. For Japan, which relies on imports for almost 90% of its primary energy, the importance of energy security, including supply chain diversification, continues to increase.

Furthermore, recent years have seen frequent large-scale natural disasters such as earthquakes, and I feel that this past year has brought a renewed awareness of the importance of petroleum products, which are easy to transport, store, and use. While we are of course committed to reducing

greenhouse gas (GHG) emissions, at the same time the year was also a reminder of our company's mission to offer a stable supply of petroleum products.

Along with expanding New fields as “energy that shapes the future,” set forth in Vision 2030, we will undertake thorough efforts in *Oil* fields, which currently constitute “energy that sustains society.” I believe it is crucial that we strike a balance between *Oil* and New going forward.

Progress on the Seventh Consolidated Medium-Term Management Plan

Vision 2030

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



Bolster green electricity supply chain

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



Expand next-generation energy

Supply SAF and develop hydrogen and other energy businesses



Strengthen competitiveness of Oil Business and pursue low carbonization

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

In terms of our Group's business performance in the first year of the Seventh Consolidated Medium-Term Management Plan (hereafter, “the Seventh MTMP”), we were able to achieve a certain degree of success thanks to the concerted efforts of all employees, in addition to enjoying a relatively favorable business environment. The theme of the Seventh MTMP is the sustainable enhancement of enterprise value, and I perceive this as a sound step forward.

In particular, in *Oil* fields, it was a year in which we successfully strengthened our profitability, developed during the Sixth Consolidated Medium-Term Management Plan; despite a few unplanned stoppages at refineries, we were able to demonstrate our presence and strengths. However, New fields mainly entails slightly longer-term projects, and there are some aspects in which we have yet to realize concrete results. Nevertheless, it is necessary to continue challenging ourselves, without fear of failure. Going forward, I am committed to leading these efforts.



Initiatives in *Oil* fields

To secure profitability in *Oil* fields, we implemented initiatives to realize high uptime and high-efficiency operations at refineries. After all, the foundation of our profitability is safe, stable operations.

Our company is strengthening its Operations Management System (OMS)¹, a company-wide management system that we have been using since 2016. The OMS does not produce results overnight, so we must repeatedly improve and test it. It has already been almost 10 years since we introduced the system, and I am confident that raising the safety awareness of each person working in the refineries and not overlooking even the slightest detail will foster a commitment to safety that will eventually become ingrained in our corporate culture. Without faltering, we will continue this effort to take our corporate culture of safety, which we have built until now, to an even higher level.

In addition, as part of our digital transformation (DX)

initiatives launched in FY2023, we began operating an Asset Performance Management (APM) System² and are undertaking an initiative to build digital twins³. We aim to reduce unplanned stoppages by consolidating data on refinery facilities and equipment in the APM System and predicting failures before they occur. Moreover, we can create virtual versions of the refineries and combine them with AI simulations to further widen our efforts to reduce the risk of trouble.

The energy industry is undergoing a period of transformation as it works toward net zero carbon emissions in 2050. To ensure a stable energy supply, which is our company's mission, we will pursue even safer and more stable operations by integrating DX initiatives into our corporate culture of safety.

1 Operations Management System (OMS): The Cosmo Oil Group's refinery division has established a policy consisting of 25 requirements as critical items indispensable for achieving safe operations and stable supply. Based on this policy, the head office and refineries are strengthening their respective initiatives and cooperation through the OMS. For further information on our OMS initiative, please refer to [Page 71](#).

2 Asset Performance Management (APM) System: The system incorporates the global standard for maintenance and equipment reliability work processes and can efficiently and effectively manage big data on maintenance as well as improve comprehensiveness, predictability, and manageability. For further information on our APM System, please refer to [Page 36](#).

3 Digital twin: A digital representation of an actual refinery, from which necessary information about refinery facilities and equipment (operating data, repair history, equipment specifications, etc.) can be immediately accessed. For further information on our digital twin initiative, please refer to [Pages 18-19](#).

Initiatives in *New* fields

With an eye toward growth, we are expanding *New* fields by undertaking initiatives to establish a green electricity supply chain profit foundation and mass-produce Japan's first locally-made SAF.

Our green electricity supply chain consists of three

business areas: renewable energy generation, supply-demand adjustment and storage, and green electricity sales.

In renewable energy generation, our onshore wind power business began operations of Kamiyuchi Wind Farm (Hokkaido) and Oita Wind Farm (Oita Prefecture) in 2023 and is making steady progress. As for offshore wind power, although the business environment is becoming more challenging for reasons such as the increasing number of competitors and rising costs, expectations for large-scale sources of green electricity are growing given the global trend toward decarbonization, and our company is preparing for future rounds of bidding after first ensuring sound profitability.

In terms of supply-demand adjustment and storage, in FY2023 we began validating our power storage business at the Research & Development Center and directly-managed service stations. In FY2025, we also plan to begin validation at our Yokkaichi Kasumi Power Plant. Based on the validation results, we will consider acquiring storage battery operation know-how and engaging in new electricity market transactions.

In terms of green electricity sales, more than 3,000 facilities have introduced Cosmo Denki (Electricity) Business Green as of October 2024. The share of green electricity to total electricity sales reached 50% as of the end of FY2023, and is steadily increasing. Going forward, we will continue to focus on growing green electricity sales.

Aiming to mass produce Japan's first locally-made SAF, in May 2023 we began construction of a facility⁴ to produce SAF from used cooking oil as feedstock at Cosmo Oil's Sakai Refinery. Steady progress is being made toward completion and commencement of operations in FY2024.

Regarding feedstock procurement, an important element in business development, we are working with a wide range

of industries, including restaurant chains, department stores, airport management companies, and railroad operators, through SAFFAIRE SKY ENERGY LLC, which we jointly established with JGC Holdings Corporation and Revo International Inc.

4 New Energy and Industrial Technology Development Organization (NEDO)-subsidized project: "Establishment of a supply chain model for SAF production from domestic used cooking oil."

Capital and business alliance with Iwatani Corporation

In April 2024, our company entered into a capital and business alliance with Iwatani Corporation.



Having maintained a strong business relationship in the trade of LPG and petroleum products for many years, in 2022 we concluded a basic agreement concerning possible collaboration in the hydrogen business. We have been considering partnering in three areas: hydrogen stations, the engineering field, and supply chain construction.

This new capital and business alliance is based on our belief that deepening collaboration toward carbon neutrality by 2050 will lead to the creation of new synergies and,

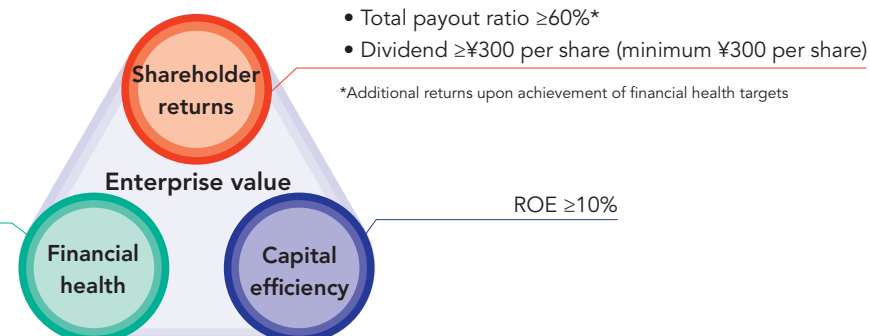
consequently, enhance enterprise value. Currently, we have established an alliance promotion committee, chaired by the representative directors of both companies, and are accelerating initiatives to realize a decarbonized society, including collaboration in the hydrogen field, in addition to strengthening our relationship in existing business fields.

As for ongoing initiatives, in 2023 we established a joint venture for the hydrogen station business, with the first station opening in April 2024. We were also selected to operate two other hydrogen stations at sites owned by the Tokyo Metropolitan Government, and we plan to open our second and third hydrogen stations in 2025 and thereafter. We will continue to expand the hydrogen station business, which is expected to contribute to the reduction of CO₂ emissions in the transportation sector.

In addition, in 2023 we established a joint venture for our hydrogen engineering business. As our refineries handle hydrogen produced in the petroleum refining process, our Group possesses engineering technologies and capabilities related to hydrogen facilities and equipment, and we aim to expand profits by matching Iwatani Corporation's know-how in the hydrogen field with users' needs.

Capital policy

Net D/E ratio 1.0 times
(Net worth ≥¥600.0 bil.)



Progress of our capital policy

As we aim to maximize enterprise value, I believe it is important to expand, in a well-balanced manner, our three-pronged capital policy set forth in the Seventh MTMP: namely, shareholder returns, financial health, and capital efficiency. In particular, it is vital to optimize capital efficiency and financial health by improving profitability so that there is no trade-off between the two.

In FY2023, as a result of implementing our three-pronged capital policy against a backdrop of solid business performance, particularly in the Petroleum Business, our main revenue driver, we were able to achieve the targets defined in the Seventh MTMP in all three areas: shareholder returns, financial health, and capital efficiency.

For shareholder returns, we increased the dividend twice during the period, as well as raised the minimum dividend for the Seventh MTMP period in light of strong profit levels. Alongside dividends, we also achieved a single-year total payout ratio of 60% to shareholders in FY2023 by buying back our own shares.

In terms of capital efficiency, despite unplanned stoppages at refineries, ROE far exceeded our 10% target thanks to initiatives carried out since the Sixth MTMP period to strengthen our profitability.

Regarding financial health, we have achieved our net debt-to-equity ratio and net worth targets from the first year of the Seventh MTMP by improving profitability.



Management foundation transformation

Initiatives to drive human resource, digital, and green transformations

Under the Seventh MTMP, we are implementing human resource, digital, and green transformation initiatives to transform our management foundation, which supports our business strategies.

Our human resource transformation (HRX) efforts are centered around a people strategy that motivates employees and harnesses their skills, and we are undertaking initiatives to integrate management and human resource strategies to lead the company and its employees to growth. In FY2023, we made steady progress in this regard by achieving an engagement index of 60 points or higher, which we defined as a KPI, and making a human resource development investment of ¥130,000 per person.

Additionally, the growth of each employee is equally as important as achieving our KPIs. I believe that it is difficult to sustainably enhance enterprise value if individual employees do not grow, even if the company's performance improves. For this reason, it is essential that employees have the autonomy and take the initiative to pursue self-driven growth. Therefore, by providing an environment that is easy to work in and enhancing the range of employee' upskilling programs, we aim to create a virtuous cycle in which the working environment transforms employees' mindsets and behaviors.

In the area of digital transformation (DX), we are working to establish infrastructure to promote data utilization and

develop human resources with digital skills. We have set a KPI of developing 900 core digital personnel by FY2025, and I feel confident that we are on track to achieve this, as we exceeded one-third of our target in FY2023, the first year.

Aiming to enhance DX literacy through training, we have also established a system to gather not only top-down but also bottom-up latent ideas from the frontlines and realize them through DX events such as Cosmo's DX Hub⁵. One such example is the digital twin initiative at refineries, which I mentioned as an Oil fields initiative.

Finally, regarding green transformation (GX), our unwavering goal is to realize our roadmap to achieve net zero carbon emissions in 2050. In 2030, a particularly significant year, we plan to reduce GHG emissions by 30% compared to FY2013 levels. As of 2023, we are making steady progress toward achieving our plan, although the numbers may not look significant on paper.

In terms of specific initiatives in FY2023, in addition to announcing our participation in the GX League, we began exploring ways to collaborate with electric power companies, shipping companies, and others to create a CCS⁶ value chain. We also began joint studies with multiple companies that have promising technologies to make effective use of captured CO₂. In these ways, we are making steady progress on our initiatives aimed at reducing future CO₂ emissions.

⁵ Cosmo's DX Hub: For further information, please refer to [Page 70](#)

⁶ CCS (Carbon dioxide Capture and Storage)

A message to all our stakeholders

Strengthening corporate governance

The theme of our Seventh MTMP is enhancing enterprise value. In order to achieve this, it is important that the Board of Directors is able to determine the Company's major direction and fulfill its supervisory function in business execution. I believe the outside perspective needed for the board, as well as diversity in gender, skills, and experience must be considered in terms of the board's ability to fulfill its role. In addition, as the business environment becomes increasingly complex, advisory functions are also required along with traditional monitoring functions.

Our company's board has strengthened the transparency and diversity necessary for the sustainable enhancement of enterprise value, with independent outside directors accounting for half of all directors and one-third of directors being women. Additionally, I believe that new directors with extensive experience in corporate management will also strengthen the board's advisory function. As outside directors have commented, the atmosphere of our company's board makes it very easy to speak up, with the board engaging in free and open discussions. Moreover, we provide outside directors with opportunities to visit our facilities and take part in study sessions where possible, and also value free discussions on such occasions. Thanks to these initiatives, we have received a variety of questions and opinions from outside directors during preliminary briefings of board meeting agendas, and I feel that the effectiveness of board meetings has improved.

Renewed determination to enhance enterprise value

Our company's stock price has risen significantly over the past year, allowing our price book-value ratio (P/B ratio) to exceed 1.0 times for the first time in six years, since 2017.

P/B ratio is said to be ROE x P/E ratio (price-earnings ratio), and we see the improvement in profitability of the entire group and the implementation of our capital policy as the reason behind our high ROE. Meanwhile, we recognize that there is room to raise our P/E ratio a bit further. For our shareholders and investors, I feel we have not yet fully communicated the future potential of *New fields*. This is a pillar of future growth that will include some long-term projects. With this point in mind, I consider it necessary for me, as Group CEO, to proactively convey our message of growth in *New Fields* while we continue to steadily generate results. Although we have been focusing on dialogue with capital markets, we will enhance our engagement with shareholders and investors, so they gain a better understanding of our initiatives in *New fields*.

Also, though our P/B ratio has exceeded 1.0 times, this is not the goal from the perspective of enhancing enterprise value; rather, we recognize that we have finally reached the starting point. To sustainably enhance enterprise value, it is necessary not only to achieve our financial management goals but also to have all stakeholders, including shareholders, investors, customers, local citizens, employees, business partners, financial institutions, and government agencies, view the Cosmo Energy Group as a strong and reputable organization. Considering this, I am proud that we have made a step forward in the first year of the Seventh MTMP, including

from a financial perspective.

From FY2024 onwards, we will continue to make every effort to enhance our enterprise value by steadily advancing step-by-step toward achieving the Seventh MTMP and, beyond that, realizing Vision 2030. The energy industry is going through a period of major transformation, and I hope that you will join us as we go beyond a mere extension of the past and look forward to a new era of growth for the Cosmo Energy Group.



Initiatives to Enhance Enterprise Value

Although the Cosmo Energy Group experienced a notable decline in financial health due to factors such as the impact of the Great East Japan Earthquake and the booking of substantial inventory valuation losses resulting from the fall in crude oil prices, we successfully restored our financial standing up to a certain level through the diligent execution of various initiatives during the period of the Sixth MTMP (FY2018-2022).

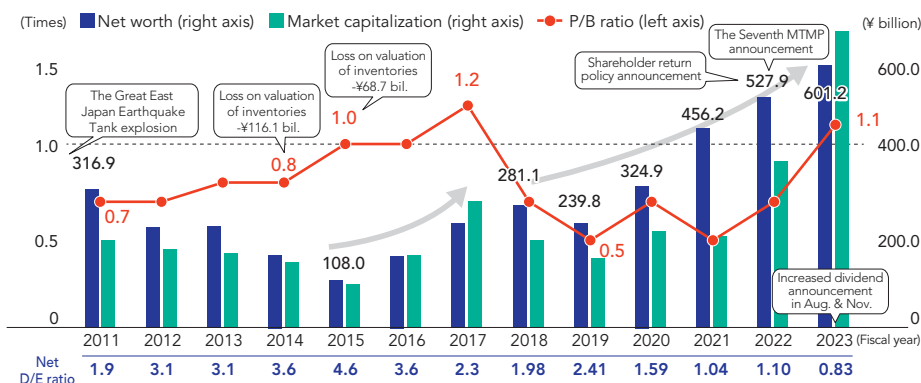
In FY2022, we announced a shareholder return policy that explicitly emphasized significant strengthening of shareholder returns, and in March 2023, we newly unveiled the

Seventh MTMP, which includes our capital policy.

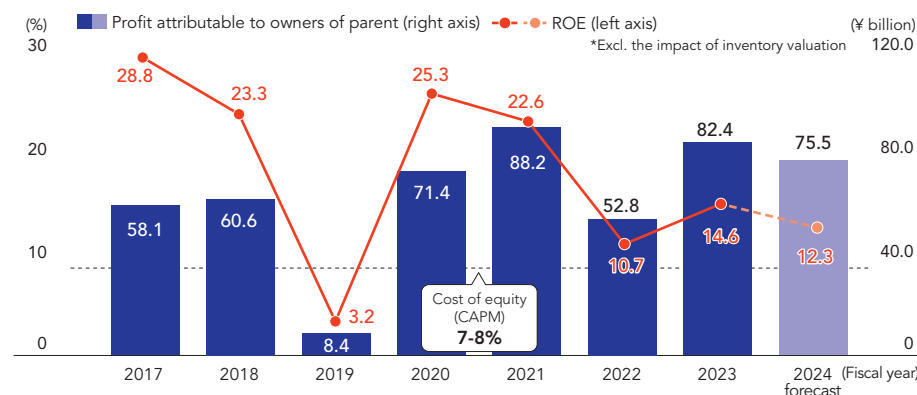
As a result of realizing our three-pronged capital policy, which encompasses shareholder returns, financial health, and capital efficiency, based on solid earnings, stock prices rose significantly during FY2023, resulting in our price book-value ratio exceeding 1.0 times.

Even though our price book-value ratio was more than 1.0 times, we consider this the starting line, and will work to implement each of the initiatives outlined in the Seventh MTMP as we seek to further enhance enterprise value.

Trend in P/B ratio, net worth, and market capitalization



Trend in ROE



Enterprise value enhancement (P/B ratio improvement)

