

COSMO ENERGY HOLDINGS CO., LTD.

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<image>

$\begin{array}{c} \text{cosmo energy holdings} \\ \hline \textbf{COSMO REPORT 2022} \end{array}$





An energy company building a sustainable, prosperous society

The Cosmo Energy Group will strengthen its financial condition by increasing profitability of the Oil Exploration and Production Business and the Petroleum Business. From the perspective of long-term changes in the business environment, the Group will also expand its business portfolio by actively investing in the Renewable Energy Business and increasing the competitiveness of the Petrochemical Business.



Cosmo Energy Group Management Vision

In striving for harmony and symbiosis between our planet, man and society, we aim for sustainable growth towards a future of limitless possibilities.

Our Basic Approach to 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

Brand statement Filling up your hearts, too.

Oil & New Everything About Oil - And Beyond



Creating Future Values

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

The Sixth Consolidated Medium-Term Management Plan is based on the profit foundation established in the previous consolidated medium-term management plan. We are continuing the previous consolidated medium-term management plan's main initiative of improving the profitability of the oil refining and sales business (Oil) as well as advancing growth investment in the petrochemical business and the wind power generation business (New) with the aim of expanding the business portfolio, which anticipates no use of fossil fuel.

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Aggressive Management and Defensive Governance

Independent Outside Director, Audit and Supervisory Committee Member	\times	Independent Outside Director	\times	Independent Outside Director, Audit and Supervisory Committee Member	\times	Independent Outside Director
Keiichi Asai		Ryuko Inoue		Yasuko Takayama		Takuya Kurita

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COSMO 2022



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Related to all businesses **History of Value Creation** Related to the Petroleum Business Related to the Renewable Energy Business Related to the Oil E&P Business Thirty-five years have passed since the establishment of Cosmo Oil and the start of the Cosmo Energy Group. Related to the Petrochemical Business Amid a variety of environmental changes, the Cosmo Energy Group's mission of a safe and stable energy supply remains unchanged and the Group aims to contribute to society. 2007 >> 2014 Prospects for a new growth path Damage and reconstruction from the March 2011 Earthquake. 1986 >> 2006 Birth of a new Cosmo Oil toward a new development stage Became unwaveringly competitive despite rough waves of liberalization. 1933 >> 1985 Prologue to Cosmo Oil Business alliance formed with IPIC (currently MIC). 2007 1986 Cosmo Oil established Daikyo Oil and Maruzen Oil started operation. Japanese education program launched in the UAE. Full-scale entrance made into the petrochemical business. Hyundai Cosmo Petrochemical established. Shares of Eco Power acquired and full-scale entrance Corporate 1984 Cosmo Oil (Refining) established 2010 made into the wind power generation business Origin Delayed coker unit started operation at Sakai Refinery. Cosmo Oil established through tripartite merger of 2010 1986 Daikyo Oil, Maruzen Oil and former Cosmo Oil (Refining). Started the automobile leasing business Cosmo Vehicle Office in Abu Dhabi opened. Lease*. 1986 Maruzen Oil established. Fire and explosion accident at Chiba Refinery, due to 2011 Cosmo Service Stations completely redesigned. the Great East Japan Earthquake. Daikyo Oil established. 1939 Asian Oil merged into Cosmo Oil to form an Construction of mixed-xylene distillation unit completed Yokkaichi Refinery constructed. organization of four refineries. at Yokkaichi Refinery Matsuyama Refinery constructed. Abu Dhabi Oil's new concession agreement entered into Qatar offshore concession area acquired and Qatar 2012 Petroleum Development established. force Chiba Refinery constructed "Filling up your hearts, too," adopted as corporate Operation resumed at Chiba Refinery's No. 2 Crude Sakai Refinery constructed. message Distillation Unit (CDU) Sakaide Refinery closed, becoming an organization of Abu Dhabi Oil established. 2013 IPP business entered. three refineries Sakaide Refinery constructed. Business alliance formed with Nippon Mitsubishi Oil 2013 Hyundai Cosmo Petrochemical started commercial (currently ENEOS). operation of new paraxylene manufacturing unit. Cosmo Oil (Refining) established. LNG business entered. Strategic comprehensive alliance entered into with 2014 CEPSĂ Wind power generation started in Sakata City. *Currently Cosmo My Car Lease Full-scale entrance made into mixed-xylene business and CM Aroma established Construction of delayed coker unit started at Sakai Refinery. Chiba Refinen Yokkaichi Refine ココロも満タンに EABT-FU,

Sakaide Refinery

Sakai Refinery

Cosmo

Cosmo Service Station redesigned Corporate logo for "Filling up your hearts, too"







Offshore oil collection base for oil

Delayed coker unit at Sakai Refinery

2015 >> 2022

New journey as the Cosmo Energy Group

Striving to grow based on the Group's established business base and contributing to a sustainable society

2015 Cosmo Energy Holdings established. Business alliance entered into with Showa Shell (currently Idemitsu Kosan). Cosmo Energy Holdings established. 2015 Maruzen Petrochemical becomes a consolidated subsidiary. 2017 The Hail Oil Field production started. Fuel conversion work at the Yokkaichi Kasumi Power Plant completed. Joint company Chiba Arkon Production Limited established by Cosmo Energy Holdings, Maruzen Petrochemical, and Arakawa Chemical Sale of electricity started at Cosmo Denki (Electricity). Fiftieth anniversary of Abu Dhabi Oil celebrated. Eco Power becomes wholly owned subsidiary. renamed Cosmo Eco Power. Cosmo Energy Holdings expresses its support for 2020 and signs the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations. Offshore Block 4 in the Emirate of Abu Dhabi acquired. 2021 Alliance formed with Iberdrola Renewables Japan K.K. for the Aomori Northwest offshore wind power project. Decision made to use electricity from virtually 100% renewable energy sources at all service stations directly operated by the Cosmo Energy Group. 2021 Establishment of a supply chain model for biojet fuel production from domestic waste cooking oil, proposed jointly with JGC Japan Corporation, adopted as a project by NEDO. Sales of the Cosmo Zero Carbon Solution, a package of 2021 products including renewable energy and EVs, started. Concluded a memorandum of understanding regarding the consideration of collaboration with Masdar in the field of decarbonization. 2021 Concluded a basic agreement regarding the consideration of collaboration in a hydrogen business with Iwatani Corporation. A roadmap for achieving net zero carbon emissions by 2050 disclosed. Concluded a sales agreement of blue ammonia with Abu Dhabi National Oil Company. Joint study into domestically produced SAF manufacturing technology utilizing Alcohol to Jet (ATJ) technology begun with Mitsui & Co., Ltd.



Maruzen Petrochemical's Chiba Plant



Wind power generation

History of Value Creation

Thirty-five years have passed since the establishment of Cosmo Oil and the start of the Cosmo Energy Group. Amid a variety of environmental changes, the Cosmo Energy Group's mission of a safe and stable energy supply remains unchanged and the Group aims to contribute to society.

management

stable supply

Inputs

Human capital	Number of employees (consolidated) 7,11			
(As of March 31, 2022)	Average number of temporary workers 3,2	11		
Safety and	Operational Management System (OMS) as			
technology capital	a basis for safe operation and stable supply			
	Crude oil production Approx. 45,000 barrels per *FY2021 results (Comparison with crude oil processing capacity: Approx. 1	-		
	Crude oil processing capacity 400,000 barrels/	/day		
	Operating rate of refineries 95.4	4%		
	* FY2021 results on a calendar day basis Number of service stations 2,6 Petrochemical production capacity * As of March 31, 2022			
Manufactured capital	Olefinic production Ethylene* 1.29 million tons/	year		
	Aromatic production Para-xylene 1.36 million tons/	year		
	Benzene /35,000 tons/	year		
	Mixed-xylene 618,000 tons/			
	Wind power plant capacity 300,000 * As of March 31, 2022			
	No. 3 in Japan and 7% domest * Includes production capacity of Keiyo E (55% owned, consolidated subsidiary of Maruzen Petroch			
	(55% owned, consolidated subsidiary of Maruzen Petrocher	mcai)		
	Number of Cosmo the Card holders $\cdot_{\text{As of March 31, 2022}}$ Approx. 4.03 million ca	ards		
	Cosmo My Car Lease Cumulative total 96,214 Cumulative total 96,214	cars		
Social and relationship	Number of Carlife Square 4.72 million membra app downloads * As of March 31, 2022	oers		
capital	Friendly relationship with More than 50 yr oil-producing countries	ears		
	Familiarity of brand statement ranking Consumers across Japan conducted by Nikkei BP Consulting, Inc. in August 2020 241 compared	d of nies		
Natural	Crude oil reserves 140million bar	rels		
capital	(equivalent to approx. 17years of s	upply)		
	Wind power, sunlight and other natural energy			
	Total assets ¥1,938.4 bi	llion		
Financial	Net assets ¥584.0 bi	llion		
capital (FY2021 result)	Free cash flow ¥40.9 bi	llion		

Consolidated Consolidated **Medium-Term** Medium-Term Management Plan **Sustainability** Oil & New Management Plan Everything About Oil - And Beyond → P.17 → P.15 **Cosmo Energy Group** Sustainability **Business activity** Management Vision → P.57 → P.35 Oil Exploration and In striving for harmony and symbiosis Engagement with between our planet, man and society, **Production Business** the Environment we aim for sustainable growth → P.41 towards a future of limitless possibilities. Engagement Petroleum Business with Employees → P.45 Engagement with Customers **Petrochemical Business** Ensuring Safety → P.49 Measures Strengthening Renewable Energy Corporate Business Governance → P.53 Structure Material issues form the foundation Material issues for sustainable of business continuity planning value creation Occupational Structural reform of Diversity and Ethics and Climate change + safety & health businesses that are the integrity countermeasures equal opportunity foundation for revenue management Risk Safe operations and Product specifications Clean technology Compliance

Cosmo Energy Group's Sustainable Management

The Sixth

and clean fuel blends

opportunities

Values we create





The Cosmo Energy Group will accelerate change toward the future, aiming to evolve into a corporate group that is chosen by society.

Business environment of increasingly drastic change

In recent years, the business environment surrounding the Cosmo Energy Group has been changing drastically. The COVID-19 pandemic, which began in 2020, has yet to come to an end. In addition, Russia invaded Ukraine in February 2022. With these and other events, the future has remained uncertain. In response to the COVID-19 pandemic, we have continued to hold crisis meetings and have fully enforced infection control measures in the head office and manufacturing divisions.

We have established a teleworking system for all offices, excluding refineries. Regarding vaccinations, we promptly made vaccination possible in the workplace, enabling employees to receive three doses of the vaccine. Due to these and other ongoing comprehensive measures to prevent infection, there has been no impact on our business continuity, including the operations at our refineries.

Crude oil prices, which greatly impact the Group's business performance, have recovered from the sharp fall due to the decline in crude oil demand caused by the COVID-19 pandemic in 2020. In early FY2021, prices rose to pre-pandemic levels due in part to the recovery of the global economy following the increase of the vaccination rate. Crude oil prices continued to trend upward after that, and in 2022 they surged, partly due to the impact of Russia's invasion of Ukraine. They have hovered at a high level.

A rise in crude oil prices increases the inventory asset value in the short run, and it also generates positive time-lag in product margins, thus positively impacting business results. On the other hand, from the viewpoint of consumers, a rise in prices leads to a decline in demand. It also produces impacts such as an acceleration of energy conversion. Further, it is believed that, due to the impact of Russia's invasion of Ukraine, the supply-demand balance of crude oil will remain tight for some time.

Record-high profits achieved in FY2021

In FY2021, the Group's business performance remained strong overall thanks in part to the rise of crude oil prices.

Regarding the Petroleum Business, we were able to maintain the operating rates at our refineries at almost 100% because, due to our supplying Kygnus Sekiyu, we have taken a supply shortage position with a sales volume that is greater than production capacity. In addition, profits increased significantly due in part to the rise in crude oil prices.

In the Petrochemical Business, profits increased with the improvement of the market prices of benzene and other petrochemicals.

In the Oil E&P Business, profits increased significantly due to the rise in crude oil prices, which more than offset the year-on-year decrease in the production volume attributed to problems at some oil fields.

In the Renewable Energy Business, the development of onshore wind farms has been steadily progressing and power generation capacity has reached 300,000 kW. Last year was our first year of offshore wind power generation, and we submitted bids for the project off the coast of Yurihonjo City, Akita Prefecture. Unfortunately, we were not selected as an operator of the project, but we learned a lot from this valuable experience, which will be useful for the next bid. Regarding our business performance, profits fell due to the generation of upfront costs related to the development of offshore wind power generation.

The Group promotes four projects: One off the northwest coast of Aomori Prefecture, one in the Akita central sea area, the one off the coast of Yuza, Yamagata Prefecture, and the one off the north coast of Niigata Prefecture. To reflect what we learned in the bid that we did not win for the project off the coast of Yurihonjo City, Akita Prefecture in the prices of future tenders, we will review and reduce construction and operating costs together with consortium members, consider sales destinations by taking green value into account, and take other measures to review the overall supply chain to increase our price competitiveness. Regarding prices, we will acquire a price competitiveness that will enable us to compete internationally. We believe that the fast arrival of the era when consumer are able to use renewable energy at affordable prices will be beneficial for everyone, so we have set it as the goal of our efforts.

In FY2021, ordinary profit excluding the impact of inventory valuation increased ¥84.2 billion year on year, to ¥160.8 billion, and profit attributable to owners of parent rose ¥53.0 billion year on year, to ¥138.9 billion, exceeding the record high achieved in FY2020.

Strong results are expected again in FY2022, elevating shareholder returns to the next stage

The Cosmo Energy Group has been moving forward with its five-year Sixth Consolidated Medium-Term Management Plan since 2018 under the slogan, "Oil & New." FY2022 is the final year of the Sixth Medium-Term Plan, but we achieved the plan's management goals at the end of FY2021, one year ahead of schedule. We position FY2022 as a period of transition when we will consider the next policy and strategy in preparation for the Seventh Medium-Term Management Plan.

Our earnings power has increased due to the steady implementation of the Sixth Medium-Term Plan and our success significantly improving our financial condition and achieving the goals of the medium-term plan one year early. In view of our future growth strategy, we believe that we need to continue to improve our financial condition. At the same time, we also believe that we have already reached a level where we can return a certain amount to our shareholders. In FY2022, we will increase shareholder returns, elevating them to the next stage. Specifically, we will offer shareholder returns with the target of 50% of profit attributable to owners of parent excluding the impact of inventory valuation. We plan to pay an annual dividend of ¥150 per share (interim dividend of ¥75 and year-end dividend of ¥75), up ¥50 from the previous fiscal year. Further, we plan to repurchase our own stock, with the total number of acquired shares at 8 million or with an upper limit in the total acquisition amount of ¥20 billion. From FY2023 onwards, we will consider shareholder returns based on this same level of returns and announce a specific shareholder return policy in the next medium-term management plan.

Regarding performance forecasts for FY2022, in the Petroleum Business, there are no planned large-scale regular repairs of our refineries, so we would like to maintain high operating rates to steadily earn profits. Globally, demand declined due to the COVID-19 pandemic, and the market prices of products dropped. At present, however, demand has been trending toward recovery due to the recovery of global economy. In addition, product prices have been 'Completed on July 6, 2022

Develop the next growth drivers



rising, partly reflecting the impact of Russia's invasion of Ukraine. Regarding jet fuel, which was affected most greatly, the environment has improved in terms of both quantity and prices. In Japan, the supply-demand environment has remained stable. While there are influences from fluctuations of crude oil prices, the basic environment has been favorable. Regarding the Petrochemical Business, the improvement of market prices is expected to be difficult because the COVID-19 pandemic will continue to impact the business to a certain extent in FY2022. Regarding the Oil E&P Business, we expect the earnings environment to be favorable because crude oil prices have been high. In the Renewable Energy Business, while our onshore power generation projects will progress steadily, expenses, including labor expenses are expected to be generated due to the full-scale development of offshore wind power generation facilities.

As a result of the above, we expect that ordinary profit excluding the impact of inventory valuation will decrease ¥5.8 billion year on year, to ¥155.0 billion and that profit attributable to owners of parent will decrease ¥45.9 billion year on year, to ¥93.0 billion in FY2022.

The 6th Consolidated Medium-Term Management Plan Oil & New Diagon Colspan="2">The Cosmo Energy Group is making a new and vigorous step into the future. Building the next business portfolio with the petroleum-related business at its core Oil Increase the competitiveness of petroleum-related business Oil Increase the competitiveness of petroleum-related business Masic policy Basic policy (a) Improve the financial condition

4) Strengthen the Group management foundation

Going beyond the Sixth Consolidated Medium-Term Management Plan, Oil & New

The Sixth Medium-Term Plan started in FY2018, which means that we formulated it in FY2017. At that time, the oil industry in Japan was being reorganized. Now, the domestic environment is improved compared to that period. We secure appropriate margins, and the supply-demand balance is stable. Crude oil prices, which had been expected to rise, have actually risen higher than expected.

We do not deny that it is partly because the environment has been better than projected by the medium-term plan and the significant increase of crude oil prices that we were able to achieve our goals one year early. However, we proceeded steadily with the structural reform of our foundation. Operating rates have been rising, and sales volumes have also been increasing. We have also steadily increased our ability to generate cash flow from operating activities.

Operating rates at our refineries are much higher than other companies. Since the Great East Japan Earthquake, we have been taking thorough safety measures, which also results in our ability to maintain high operating rates. We have made capital investments for safety, introduced an Operation Management System (OMS), and taken thorough measures regarding both tangible and intangible aspects of our business. Because we have spent more than ten years working on this theme, we feel great pleasure and a sense of achievement, with our achievements taking the form of much higher operating rates and significantly fewer accidents than other companies.

Our financial condition has also improved. Thanks to the structural reform pushed forward during the Sixth Medium-Term Management Plan, our financial condition now enables us to take an aggressive stance as we create the Seventh Medium-Term Management Plan.

New

In the Sixth Medium-Term Management Plan, we announced our stance towards decarbonization with the slogan, Oil & New. As far as I can recall, in FY2018 there were not so many companies that had clarified their stance on decarbonization. Currently, environmental awareness is taken for granted, and I feel that the trend of creating new businesses that connect the environment to business has been established. An example of this is EVs.

The direction we have taken is that we will shift to renewable energy with a focus on wind power as the fossil fuels business continues to shrink in the future. During the Seventh Medium-Term Management Plan, we believe that the trend will be stronger, not to mention that going back to the past trend is unthinkable.

Maintaining our strong relationship of trust with the Emirate of Abu Dhabi

As the Cosmo Energy Group transforms its business portfolio toward decarbonization, its relationship with the Emirate of Abu Dhabi has entered a new phase.

In March 2022, Mubadala Investment Company (hereinafter, "Mubadala"), which was a major Cosmo Energy Holdings shareholder, offered shares of Cosmo Energy Holdings stock for sale. Mubadala is a company from the oil-producing Emirate of Abu Dhabi, and their decision is the result of Mubadala's intent to change its investment strategy and invest proactively in technology, infrastructure, life science, and other sectors because its strategic alliance with us has resulted in certain achievements. Although the capital relationship with Mubadala was dissolved, the strong trust-based relationship with the Emirate of Abu Dhabi that has continued for more than 50 years will never be dissolved, and our business in the Emirate of Abu Dhabi will continue. At present, we are proceeding with the exploration of Block 4, a new exploration block in the Emirate of Abu Dhabi, and considering a collaboration with Abu Dhabi Future Energy Company PJSC-Masdar, a leading renewable energy company in the country, and several collaborations with Abu Dhabi National Oil Company (ADNOC) in CCS/CCUS, and other decarbonization fields. Thus, we will deepen our relationship with the country.

Towards the achievement of net zero carbon emissions by 2050

The Cosmo Energy Group believes that formulating and implementing a management plan based on even greater consideration of climate change is essential for the sustainable development of our planet, society and ourselves. Therefore, we regard climate change countermeasures as one of our most important material issues. We made the 2050 Carbon Net Zero Declaration in May 2021, and conducted a TCFD scenario analysis as the first step toward the achievement of net zero carbon emissions by 2050.

Through the scenario analysis conducted using the IEA's 1.5°C, 2°C and 4°C scenarios, we identified climate change risks and opportunities in our business activities and evaluated the financial impact of the actualization of any of these risks.

We evaluated physical risks and transition risks and found that transition risks such as changes in energy demand and the energy mix may greatly impact the Group.

While they are risks, we can also regard them as opportunities. We will realign our business portfolio to fulfill energy demand and customer needs in our efforts to ensure the sustainable development of our businesses.

Having made the Carbon Net Zero Declaration, in May 2022 we disclosed our roadmap for net zero carbon emissions by 2050 based on a TCFD scenario analysis. In this roadmap, we have set a reduction target to be achieved by 2030, the halfway point, to ensure the steady progress of our decarbonization initiatives. While fulfilling our responsibility to maintain a stable energy supply, we will work on our conversion to zero-carbon energy, negative emissions

technologies and other initiatives with the goals of reducing emissions 30% by 2030 and achieving carbon net zero by 2050. In the Seventh Medium-Term Management Plan, we aim to build a structure that integrates climate change risks and opportunities into our management strategies. The Cosmo Energy Group is also an energy provider. Therefore, it is important that we understand the speed of society's decarbonization as we think about our own path to decarbonization. We cannot fulfill our mission to maintain stable energy supply unless we provide society with the type of energy it demands in the amount it needs.

Improvement of the customer experience (CX),DX and branding

I believe that one of the Cosmo Energy Group's goals is related to CX, the Customer Experience. At the Cosmo Energy Group, we deal in energy as a commodity. It is difficult to differentiate a commodity itself. Therefore we must ensure that we are chosen by customers by providing additional customer value and a superior customer experience (CX).

The key points in our provision of an optimal CX to customers are branding and DX.

We have had many points of contact with customers, including service stations. Of course, we have been analyzing and making use of our experience at those points of contact. By analyzing a large amount of data using DX, however, we will be able to visually understand what would have been implicit knowledge and note things that we were unaware of before. By reviewing our previous practices and habits and even dismantling them where necessary, we will more broadly and deeply understand customer needs to increase customer satisfaction.

We have started to promote DX in earnest under the catchphrase, "Full-fledged DX." In November 2021, we invited Ms. Noriko Rzonca to be our first CDO and established the Corporate DX Strategy Dept. By pushing forward with DX, we will improve the

digital literacy of the Group as a whole and accelerate data-driven management. We will build an environment which will enable human resources to acquire the skills needed by the Group as a whole and recruit and develop human resources with these skillsets.

The Cosmo Energy Group deals in energy, a commodity that is difficult to differentiate, and we aim to develop a virtuous circle in which we are chosen by customers because of our integration of branding and DX and provision of an optimal CX, which will further strengthen the Cosmo brand.

Strengthening of the Cosmo brand will positively impact not only existing businesses but also the new businesses we enter. For example, a good brand image will increase the possibility of success when advancing an environmental business, such as a wind power generation business. While the environment surrounding us continues to change significantly, it will become more necessary to take on an array of challenges that are not limited to environmental businesses. We would like to strengthen the Cosmo brand to create an environment that will enable young employees to take on new challenges with new values without difficulty and succeed in their attempts.

Sustainable Management

We strongly feel that stakeholders' demand that companies be sustainable has been growing every year.

We have built a system for pushing forward with sustainable management, including the Sustainability Strategic Conference that I chair as the representative director. In FY2021, the Sustainability Strategic Conference met a total of eight times including extraordinary sessions. At the meetings, we identified and developed a consensus on current issues and opportunities, such as climate-related disclosure conforming to the TCFD recommendations and the establishment of a relevant philosophy system and policies. We also addressed issues, such as human



rights, diversity and employees' wellness management, and built a foundation for holistically addressing ESG matters.

Regarding the executives' remuneration plan, we have linked about 10% of their remuneration to the ESG evaluation, so we believe we can increase the effectiveness of our sustainable management and express our determination toward sustainable management.

In formulating the Seventh Medium-Term Management Plan, we will integrate the medium-term management plan and the consolidated medium-term sustainability management plan, which previously were formulated separately. We will thus deepen our sustainability management with an awareness of both non-financial and financial aspects of our businesses.

Further, the Cosmo Energy Group signed the United Nations Global Compact (UNGC) in February 2006. We will continue striving for the realization of the Ten Principles related to human rights, labor, environment and anti-corruption, and with all of these initiatives, we will contribute to the sustainable development of society and the achievement of the SDGs.

To Our Valued Stakeholders

Conversations with investors and other stakeholders are valuable opportunities to listen to your opinions. The opinions of our stakeholders are considered by the Board of Directors and reflected in our management. We will work toward our shared goal of improving our corporate value. Let me reiterate that the environment surrounding us continues to change significantly. Amid these major changes, we will aim to achieve carbon neutrality by 2050 while fulfilling our mission to maintain a stable energy supply.

We will continue to aim to be a valuable company for our shareholders, customers, business partners and all other stakeholders. We sincerely hope that you will continue to extend your support for many years to come.

Progress of the Sixth Consolidated Medium-Term Management Plan (FY2018-FY2022)

The end of FY2021 was the end of the fourth year of the Sixth Consolidated Medium-Term Management Plan (the sixth management plan), which was implemented under the slogan, "Oil & New Everything About Oil - And Beyond," While there have been significant changes in the business environment during the period of the sixth management plan, we achieved our management goals one year earlier than planned, thanks to the strong business performance achieved mainly in FY2021. In FY2022, which is the final fiscal year of the sixth management plan, we will continue to increase our the strengthening of profitability and improve our financial condition and formulate the Seventh Consolidated Medium-Term Management Plan that will start in FY2023.

Basic policy

The Fifth

Consolidated

Medium-Term

Management

Plan's Main

Initiatives



The previous medium-term management plan was positioned as "five years to establish a solid business foothold for further expansion." Under this plan, we made structural improvements, such as improving the profitability of the oil refining and sales business, as a leading initiative, and rationalizing the supply division.

The sixth management plan is based on the profit foundation established in the fifth plan. We are continuing the fifth plan's main initiative of improving the profitability of the oil refining and sales business (Oil) as well as advancing growth investment in the wind power generation business and the petrochemical business (New) with the aim of expanding the business portfolio, which anticipates no use of fossil fuel.

Oil	New
 Increase the profitability of the petroleum business, for example, by complying with the IMO^{*1} regulations on use of high-sulfur C fuel oil and taking the lead in the supply of clean marine fuels. 	 Invest in wind power generation and other businesses that will lead the next growth stage.
Strengthen the financial condition based on earning power.	Contribute to the achievement of SDGs* ² through business activities.

reducing the sulfur oxides (SOx) emitted by ships. In 2020, the limits for the sulfur content of marine fuels were made stricter, decreasing from 3.5% to 0.5%

*2 SDGs: Sustainable Development Goals. Adopted at the UN Sustainable Development Summit held in September 2015, the SDGs are goals set by 193 UN member states to be achieved during the 15 years from 2016 to 2030. There are 169 specific targets for 17 goals.

Recovery in profitability

Closed the Sakaide Refinery and shifted to a three-refinery structure, as part of rationalization, to ensure competitiveness.

Execution of growth strategy

Executed large-scale growth investment (the Hail Oil Field, para-xylene plant, and new wind power plants)

Progress of Management Goals

		Res	sults			Achievement
Management Goals	FY2018	FY2019	FY2020	FY2021	Management Goals (FY2022)	(As of the end of FY2021)
Ordinary profit (excluding impact of inventory valuation)	¥107.4 billion	¥68.5 billion	¥76.6 billion	¥160.8 billion	Over ¥120 billion	•
Profit attributable to ownersof parent	¥53.1 billion	-¥28.2 billion	¥85.9 billion	¥138.9 billion	Over ¥50 billion	•
Free cash flow	¥6 billion	¥27.5 billion	¥82.8 billion	¥40.9 billion	Over ¥150 billion (FY2018 - FY2022 Five years total)	•
Net worth (Net worth ratio)	¥281.1 billion (16.5%)	¥239.8 billion (14.6%)	¥324.9 billion (19.0%)	¥456.2 billion (23.5%)	Over ¥400 billion (Over 20%)	•
Net D/E Ratio*	1.98 times	2.41 times	1.59 times	1.04times	1.0-1.5 times	
ROE	20.4%	-10.8%	30.4%	35.6%	Over 10%	۲
Precondition						
Dubai crude oil price (USD/B)	69	60	45	78	70	
Exchange rate (Yen/USD)	111	109	106	112	110	

* Concerning the ¥30 billion hybrid loan made on March 31, 2020, 50% of this loan is included in Equity.

Sixth Consolidated Medium-Term Management **Plan & Consolidated** Medium-Term Sustainability Management Plan Goal FY2022

Improve the business portfolio for subsequent growth in view of the longterm direction.

Strengthen the financial foundation by increasing the profitability of the Oil E&P and Petroleum businesses.

Restored profitability during the previous medium-term management plan, which led to new investments in the sixth management plan

The Seventh **Consolidated Medium-**Term Management Plan

Deepening sustainable management by integrating financial and non-financial aspects

(FY2023 -)

The Cosmo Energy Group will realize sustainable management.

The Cosmo Energy Group is aware that, as an energy company, we are responsible for the provision of safety and peace of mind people and the protection of the global environment. We have established the Cosmo Energy Group Management Vision, which says, "In striving for harmony and symbiosis

Realignment of the Business Portfolio



policy of increasing the competitiveness of petroleum-related businesses and shifting to renewable energy. During the next medium-term plan, we will accelerate the realignment of the business portfolio.

- In view of the transition to a fossil-fuel-free society, shift the focus to the renewable energy business through active investment while increasing the competitiveness of petroleum-related businesses.
- Contribute to the achievement of SDGs through the sustainable growth of the Cosmo Energy Group.



market

D

Long-Term Vision

2050 Achieving carbon net zero

Contribute to the achievement of SDGs through the sustainable growth of the Cosmo Energy Group.

between our planet, man and society, we aim for sustainable growth towards a future of limitless possibilities.'

We have announced the Carbon Net Zero Declaration, a long-term vision for the reduction of the greenhouse gases (GHG) emitted by our businesses to effectively zero by FY2050.

A • Possibility of peak out after 2030 Cost competitiveness is key

Sixth MTMP

Maintain production level & reduce OPEX

Future

• Seek added-value projects utilizing the Company's strengths

B • Domestic onshore sites are mostly occupied but offshore expansion is possible

Sixth MTMP

 Maximize onshore Expand to offshore

Future

- Become one of the core businesses
- Aim to be a domestic leading company in offshore wind power generation

• Domestic demand will continue to decline, but relative competitiveness will ncrease until around 2030

Sixth MTMP

• Focus on profitable products Strengthen synergy with the petrochemical business

- Future
- Shift from petroleum fuel to petrochemical feedstock
- International markets are growing based on an increase in the global population. • Ethylene production to maintain competitiveness
- Able to swing from petroleum fuel

Sixth MTMP

- Strengthen competitiveness in global
- Development of differentiating products Synergy with oil refining business

Future

• Shift from petroleum fuel to petrochemical feedstock

Issues that materially impact the Cosmo Energy Group and the Consolidated Medium-Term Sustainability Management Plan

The Cosmo Energy Group newly identified the important ESG tasks (material issues) that will influence the sustainable growth of society and the Group, with the goal of working to create an ideal society for 2050. Regarding the material issues for the sustainable creation of value, we will promote activities under the "Oil & New," slogan during the Sixth Consolidated Medium-Term Management Plan from the perspective of social issues as well. The base of these activities is the material issues that are the foundation of our business continuity planning. In FY2021, we identified the SDGs that we contribute to achieving by addressing our material issues, based on the 169 targets of the SDGs, and considered KPIs for the Seventh Consolidated Medium-Term Management Plan.

To achieve the sustainable growth declared in the Cosmo Energy Group Management Vision, we have developed and are implementing the Consolidated Medium-Term Sustainability Management Plan (FY2018-FY2022; hereafter, the "Sustainability Plan") in line with the Sixth Consolidated Medium-Term Management Plan. As a part of these activities, we have identified material risks and opportunities and are engaged in an array of initiatives with the goal of achieving how the Company wants the Group to be through a focus on the material issues. In FY2021, we worked to achieve the KPIs of the current sustainability plan. At the same time, we formulated the Seventh Consolidated Medium-Term Management Plan, aiming to resolve issues and increase opportunities concerning newly identified material issues.

Most important material issues



Material Issue Identification Process

In identifying material issues, we listened to the opinions of our stakeholders including opinions from within the Group. We first selected 154 candidate tasks referencing international initiatives and guidelines from within and outside the industry. We consolidated these tasks and created a list of 41 candidate material issues.

We placed the material issues on the horizontal axis by identifying their importance for the Group through a workshop held by our directors. We also considered the Group's Management Vision, Code of Conduct and the content of various initiatives. Next, we placed the issues on the vertical axis by determining their importance for society based on evaluations from an array of rating agencies, information from our peers in the industry, the results of consumer surveys and employee questionnaire surveys, interviews with investors, dialogue with experts and other information. We created a matrix which plots these elements and identified the ten most important material issues.

We ensured the identified material issues were reflected in our business and medium-term plans, implementing a PDCA cycle.

Consolidated Medium-Term Sustainability Management Plan

	Material issues	Vision	SDG contributions	Major KPIs (FY2021 results)	Reference	e Evaluatio
	Climate change measures	 GHG emissions are managed appropriately. Progress has been made toward achieving net zero carbon emissions by 2050. 		CO ₂ emissions were 6.97 million tons (Reduction of 490,000 tons compared to the reduction target of 1.2 million tons (from the FY2013 level) under the consolidated medium-term management plan)	P65	\triangle
Material issues	Product specifications and clean fuel blend	 Opportunities to offer and sell clean fuels catering to customers' needs have been acquired. Clean fuels are continually developed and demonstrated. 	iately. wing net zero carbon emissions by 2050. *Co. emissions were 6.97 milli preduction of 490,000 trace and demonstrated. Japan in the generation of power from enewable energy sources. Is have become an RBD them of focus, leading to the acquisition of the generation of power from enewable energy sources. Is have become an RBD them of focus, leading to the acquisition of the generation of power from enewable energy sources. Is have become an RBD them of focus, leading to the acquisition of the generation of prover from enewable energy sources. Is have become an RBD them of focus, leading to the acquisition of the generation of proving the measures of the acquisition of the de to expansion of profits from new businesses focused on eneme of corporate value. If the distance of the acquisition of the acquisition the acquisition of the staff members in accidents has been prevented. Is of distance and emergency. If the acquisition the acquisition is a scheden stage in the acquisition is a scheden stage in acquired and managed. If the acquisition the acquisition is a scheden stage in the acquisition is a scheden sch	► KPIs are being formulated toward the next consolidated medium-term management plan.	-	-
for sustainable value creation	Clean technology opportunities	 We have become the leading company in Japan in the generation of power from renewable energy sources. Low-carbon/decarbonization technologies have become an R&D theme of focus, leading to the acquisition of business opportunities. Clean products and services other than fuels are provided. 	🛞 🐱 🐼 🗞	KPIs are being formulated toward the next consolidated medium-term management plan.	-	-
Turt	Structural reform of profit-based business	 Stable profits are being earned from existing businesses, and these profits are invested in new businesses, enabling steady shift to new businesses. The financial foundation has been stable due to expansion of profits from new businesses focused on clean technologies, as well as improvement of corporate value. 	8 minutes.	▶ KPIs are being formulated toward the next consolidated medium-term management plan.	-	-
		The injury of officers, employees, and other staff members in accidents has been prevented.		Number of major work-related accidents: Target 0 Result 0		0
	Safe operation/ stable supply	 Plant accidents and product (quality) accidents have been prevented. Our operations do not threaten the safety of areas where we operate and local residents of the areas. 		Number of major accidents (excluding natural disasters and COVID-19): Target 0 Result 0	P75	0
Material issues	otable supply	Energy is supplied stably even in times of disaster and emergency.		Number of major product (quality) accidents: Target 0 Result 0		0
form the foundation of business	Dick monogoment	In addition to operational risks, the strategy risks and opportunities we face have been identified, and these risks are bedged and bandled appropriately.		Number of priority risks: 329 (330 at the beginning of the fiscal year)	P77	-
continuity planning	Risk management	are hedged and handled appropriately. The serious risks faced by the Group as a whole have been identified and managed.	-	Cosmo Energy Group priority risks: 5 items	P77	-
continuity planning	Compliance	 Laws, regulations, and social norms are observed. Officers, employees, and other staff members understand and observe internal regulations. 	8 mm mm k	Number of major non-compliance instances: Target 0 Result 0	P78	0
				Sustainable procurement is being practiced.	P78	-
		The Comme Frequery Cyclum Code of Conduct and the Cyclum's policies have become antenacted, applied	8 Internet and 12 Internet 16 Aut. Anter	The ratio of the "AA" evaluation rating of three promises: Target 48.5% Result 48.1%		\bigtriangleup
COSTO COSTA	Ethics and integrity	individuals to make appropriate decisions.	m 💿 🔀	Customer evaluation: Target Quality evaluation 3.4/Performance evaluation 3.4 Result 3.30/3.53	P71	\triangle
				Rate of service complaints: Target 0.11 Result 0.07		0
				Percentage of employees who have received a health check-up: 100%		0
	Industrial safety and health	 The injury of employees in accidents has been prevented. Work-related accidents caused by overwork or harassment have been prevented. 	5 mm 8 mm rotation	Total work hours: Target 1,860 hours or below Result 1,936 hours (YoY: Down 28 hours)		\triangle
	nounn	Employees are working with a peace of mind and in good health.	¥ III	Paid leave acquisition rate: Target 90% or higher Result 90.6% (YoY: Up 9.2 percentage points) P70	0
	Diversity and	Every employee is able to fully demonstrate their capabilities regardless of age, gender, nationality, job	5 mm 8 mmc.com 10 mmc. 12 mmm	Percentage of new graduate hires who are women: FY2022 Target 50% Result 50%		0
9	equal opportunity	 category, organization, or job history. There is lively discussion before decisions are made, and diverse opinions are reflected in decision-making. 	🔮 ᡝ 🄃 😳	Percentage of managers who are women: Target 6% (as of April 1, 2023) Result 5.9% (as of April 1, 2022)		0



Level of importance for the Group

Major Key Performance Indicators (KPI) Used as Targets

Financial



*2 The FY2020 figure was corrected, reflecting the improvement of the accuracy of aggregation.

*3 Definition and coverage: Employees, contract employees, and part-time employees of Cosmo Energy Holdings, Cosmo Energy Exploration & Production, Cosmo Oil, and Cosmo Oil Marketing are included. Those who were out of work during the entire term and those who retired during the term are excluded from the calculation.

*4 A major work-related accident is a fatal accident or an accident resulting in an injury or disease with a disability grade of 1 to 7.
*5 A major accident and a major non-compliance instance refer to an accident or an accident or ano-compliance instance which may have a serious negative impact on any one of the following ranges
(1) Overall management of the Group companies (2) Core operating companies and semi-core companies (3) Overall management or multiple departments of each Group company
^{*} In FY2019, one serious accident was also counted as a non-compliance event.

Financial Strategy and Financial Report

Given that the medium-term management plan was achieved ahead of schedule, we aim for a higher level in both execution of growth strategy and provision of shareholder returns.

Representative Director, Senior Managing Executive Officer In charge of Sustainability Initiative Dept., Accounting Dept. and Finance Dept.

Takayuki Uematsu

Financial targets under the medium-term management plan achieved earlier than planned

Under the Sixth Consolidated Medium-Term Management Plan (the sixth management plan) for the five-year period from FY2018, we have been working under the policy of strengthening our financial foundation by increasing the profitability of Oil E&P and oil refining businesses while also improving the business portfolio for subsequent growth in view of the long-term direction. As financial targets, we set a number of financial indicators, aiming to increase net worth to a level that allows us to endure environmental changes in the market and achieve a net D/E ratio of 1.0-1.5 times as soon as possible, by strengthening of profitability and improving our financial condition.

In FY2021, which is the fourth year, ordinary profit excluding the impact of inventory valuation was ¥160.8 billion, and profit attributable to owners of parent was ¥138.9 billion, both record highs, mainly due to the improved margin reflecting rising crude oil prices and high operating rates maintained at our refineries. In addition, improvements to our financial situation made progress thanks to the significant improvement of profitability, resulting in net worth at ¥456.2 billion (net worth ratio: 23.5%) and net D/E ratio at 1.04. We were able to achieve all financial targets under the sixth management plan, which include free cash flow and ROE in addition to the above, a year earlier than planned. While this is attributable in part to

rising crude oil prices as an external factor, the Group's short position strategy and high operating rates maintained at refineries led to the result, which I evaluate highly. In FY2022, the final year under the sixth management plan, we expect both ordinary profit excluding the impact of inventory valuation and profit attributable to owners of parent to decline year on year, due in part to resolution of the positive time lag that was generated in the Petroleum Business in the previous fiscal year. While the external environment involves uncertain factors, such as U.S. FRB's interest rate hike and the Russian invasion of Ukraine, we aim to surely achieve the full-year targets that we announced in May.

Increasing shareholder returns

I believe that we have reached a level that enables us to provide a certain amount of shareholder returns because the improvement of our financial situation has made progress, as well as because our profitability was strengthened mainly in the Petroleum Business due to the steady implementation of measures set under the sixth management plan. Reflecting this, in FY2022, we will further increase shareholder returns to move to the next stage.

Specifically, we have set a target of shareholder returns at 50% of net profit, excluding the impact of inventory valuation. Regarding dividends, we will increase the amount by ¥50 year on year, to ¥150 per share. We will also implement the Group's

Summary of Consolidated Financial Results

(billion yen)	FY2021 results	FY2020 results	Changes	FY2022 forecasts	Changes
Ordinary profit (excluding the impact of inventory valuation)	160.8	76.6	84.2	155.0	- 5.8
Profit attributable to owners of the parent	138.9	85.9	53.0	93.0	- 45.9
Net worth	456.2	324.9	131.3	514.4	58.2
Net worth ratio (%)	23.5	19.0	4.5	25.7	2.2
Net D/E ratio (times)	1.04 [°]	1.59 [°]	- 0.55	0.96	- 0.08

*Concerning the ¥30 billion hybrid loan made on March 31, 2020, 50% of this loan is included in Equity

Net Worth and Net D/E Ratio

600 (billion yen)





first share repurchases of ¥20.0 billion*. From FY2023 onward, we will maintain the above level of shareholder returns as the base. We plan to announce a specific shareholder return policy in the next medium-term management plan. *Completed on July 6, 2022

Fund procurement for achieving a transition strategy

At the Cosmo Energy Group, in May 2022 we disclosed our roadmap for achieving net zero carbon emissions by 2050. We will begin considering specific climate change initiatives and the direction of investments. Going forward, we will need to consider large-scale investments in the offshore wind power generation business and other areas as one of transition strategies toward a long-term sustainable society. In this process, we aim to diversify funding sources further to prepare for global moves to achieve carbon neutrality. At the Cosmo Energy Group, we will continue to procure short-term funds indirectly from financial institutions and directly by issuing commercial paper. For long-term funds, we will consider direct procurement by issuing corporate bonds, in addition to direct procurement from financial institutions. At the same time, we would like to continue considering the possibility of ESG financing.

We will also strive to improve our financial situation further and achieve a higher rating, so as to diversify funding sources. The Cosmo Energy Group's rating was improved to BBB+ last

Increasing shareholder returns

	Annual dividend per sha	are	Share repurchases
FY2022 forecast	FY2021 result	YoY change	- ¥20 billion
¥150	¥100	¥50	≠20 billion

*Completed on July 6, 2022

-Net D/E ratio (RH) (Times) 6.0 514.4 5.0 456 2 4.0 324.9 3.0 239.8 2.0 1.0 59 90.0 1 04 FY2021 FY2022

year. However, ratings of our peers in the industry are A or higher. We believe acquiring and maintaining a rating of A or higher is essential from the viewpoint of flexible funding. In addition, we understand it is necessary to increase net worth to a certain level, partly because we posted an inventory valuation loss of around ¥200 billion when crude oil prices dropped significantly in the past. We will consider the appropriate level of net worth in time with the formulation of the next medium-term management plan.

To our valued stakeholders

At the Cosmo Energy Group, our priority tasks have been improving profitability and strengthening our financial foundation. I believe that, due to the implementation of strategy under the sixth management plan in addition to the fruits of measures taken in the past, we have established a framework that enables us to achieve a higher level in both execution of our growth strategy and the provision of shareholder returns.

Further, in light of the recent global moves to achieve carbon neutrality, we would like to produce a new management plan featuring integration of financial and non-financial aspects and announce it as the next medium-term management plan.

We hope to deepen engagement with stakeholders further, so as to achieve medium- to long-term growth in an environment with declining domestic demand for oil. I would like to ask for your continued support.

Financial Strategy and Financial Report

Business Results & Forecast, **Cash Flow Situation**, and **Analysis of Financial Position**

Summary of Consolidated Profit

FY2021 Results

In FY2021, ordinary profit increased ¥135.7 billion year on year, to ¥233.1 billion, and net profit attributable to owners of parent increased ¥53.0 billion year on year. to ¥138.9 billion. Actual ordinary profit excluding the impact of inventory valuation increased by ¥84.2 billion to ¥160.8 billion.

Concerning the segment breakdown of ordinary profit excluding the impact of inventory evaluation, the profit of the Petroleum Business was ¥93.2 billion, up ¥39.9 billion year on year. This primarily reflects the improved margin, reflecting the positive time lag associated with rising crude oil prices, high operating rates maintained at our refineries, and an increase in the sales volumes of the four major products. Profit from the Petrochemical Business increased ¥16.9 billion year on year, to ¥13.6 billion thanks to improvements in the market for benzene and the absence of the impact of regular maintenance at Maruzen Petrochemical and the postponed receipt of naphtha, which existed in the previous fiscal year. Profit in the Oil E&P Business increased ¥30.9 billion year on year, to ¥44.8 billion, due to the rise in crude oil prices, which offset a decrease in sales volume. In the Renewable Energy Business, operating profit decreased ¥0.6 billion year on year to ¥3.5 billion due to generation of upfront cost associated with Cosmo Eco Power's development of the offshore wind power generation facilities.

Forecasts for FY2022

In FY2022, ordinary profit is forecast to be ¥190.0 billion, down ¥43.1 billion from FY2021, and profit attributable to owners of parent is expected to be ¥93.0 billion, down ¥45.9 billion year on year. Real ordinary profit excluding the impact of inventory valuation is expected to be ¥155.0 billion, down ¥5.8 billion from the previous fiscal year.

As for the segment breakdown of ordinary profit excluding the impact of inventory valuation, Petroleum Business profit is expected to decrease ¥29.2 billion year on year, to ¥64.0 billion, partly because profit will decrease chiefly due to the absence of the positive time lag effects in the previous fiscal year and an increase in in-house fuel costs resulting from an increase in crude oil prices while earnings from JET and products other than the four major products are likely to increase due to the improvement of overseas market conditions. Profit from the Petrochemical Business is expected to decrease ¥6.6 billion year on year, to ¥7.0 billion, due to the deterioration of the market prices of petrochemicals, such as benzene, while the sales volume of Maruzen Petrochemical will increase because of the elimination of the impact of regular maintenance that occurred in the previous fiscal year. In the Oil E&P Business, we expect profit to increase ¥30.2 billion year on year to ¥75.0 billion due to the rise of crude oil prices. In the Renewable Energy Business, operating profit is expected to decrease ¥0.5 billion year on year to ¥3.0 billion, due to generation of upfront cost, including labor expenses, which is associated with Cosmo Eco Power's fullscale development of the offshore wind power generation facilities.

Outline of consolidated statement of income (YOY comparison)

(billion yen)	FY2021	Changes	FY2022 Forecast	Changes
Net sales	2,440.5	207.2	2,930.0	489.5
Operating profit	235.3	134.0	193.0	- 42.3
Ordinary profit	233.1	135.7	190.0	- 43.1
Inventory impact	72.3	51.5	35.0	- 37.3
Ordinary profit (excluding the impact of inventory valuation)	160.8	84.2	155.0	- 5.8
Petroleum	93.2	39.9	64.0	- 29.2
Petrochemical	13.6	16.9	7.0	- 6.6
Oil exploration and production	44.8	30.9	75.0	30.2
Renewable Energy Business	3.5	- 0.6	3.0	- 0.5
Other	5.7	- 2.9	6.0	0.3
Profit attributable to owners of parent	138.9	53.0	93.0	- 45.9
Dubai crude oil price (US\$/barrel, April to March)	78	33	100	22
Foreign exchange rate (¥/US\$, April to March)	112	6	125	13
For reference				
Dubai crude oil price (US\$/barrel, Jan. to Dec.)	69	27	95	26
Foreign exchange rate (¥/US\$, Jan. to Dec.)	110	3	123	13

*Dubai crude oil price in Nov. 2021 to Oct. 2022



Outline of Consolidated Cash Flows and Consolidated Balance Sheet

Financial Position

In FY2021, free cash flow decreased from the previous fiscal year because cash flows from operating activities declined because of an increase in inventory, although negative cash flow from investing activities decreased.

Regarding financial indicators, net worth, net worth ratio, and net D/E ratio improved significantly from FY2020 due in part to the posting of profit attributable to owners of parent. Above all, the net D/E ratio improved significantly by 0.55 points from 1.59 in the previous fiscal year to 1.04. Thus, the target net D/E ratio in the sixth management plan, which is 1.0-1.5, was achieved one year earlier than planned.

In FY2022, it is forecast that net D/E ratio will continue to be improved as in the previous fiscal year, and net worth will also increase.

Consolidated Cash Flows

(billion yen)	FY2020	FY2021
Cash flows from operating activities (1)	167.4	108.4
Cash flows from investing activities (2)	- 84.6	- 67.5
Free cash flow (1+2)	82.8	40.9
Cash flows from financing activities	- 80.6	- 42.0
Cash and cash equivalents at end of the period	44.5	48.1

Consolidated Balance Sheet

(billion yen)	Mar. 31, 2021	Mar. 31, 2022	Changes
Total assets	1,709.0	1,938.4	229.4
Net assets	449.1	584.0	134.9
Net worth	324.9	456.2	131.3
Net worth ratio	19.0	23.5	4.5
Net interest-bearing debt*1	556.4	503.3	- 53.1
Net debt-to-equity ratio (times)*2	1.59	1.04	- 0.55

*1 Total interest-bearing debts net of cash and deposits, etc. as of the end of the period

*2 Calculated on the basis that 50% of the ¥30 billion Hybrid Loan made on March 31, 2020, is included in equity

Special Feature

Making the Cosmo Energy Group Sustainable, Aiming to Build a **Sustainable Society**

Society changes. So does the Cosmo Energy Group However, there are some things about us that will remain unchanged. One of these things is our mission to continue supplying the energy that supports society. We will change to continue fulfilling this mission.

P.26	For the Achievement of the Sustainability Transformat
P.27	Roadmap for Achieving Net Zero Carbon Emissions by
P.29	Shaping a Decarbonized Society with Wind Power — Construction of Kamiyuchi Wind Farm Underway —
P.31	Cosmo Energy Group's Digital Transformation (DX)
D 33	Cosmo Energy Group's Brand Strategy

COSMO ENERGY HOLDINGS

Sustainable management

For the Achievement of the **Sustainability Transformation**

At the Cosmo Energy Group, we have set the Management Vision, "In striving for harmony and symbiosis between our planet, man and society, we aim for sustainable growth towards a future of limitless possibilities," and work on sustainable management to achieve this vision. In FY2021, we established the Sustainability Strategy Committee, aiming to make decisions integrating financial and non-financial goals. Thus, we have developed a framework for implementing sustainability transformation (SX).

Sustainability Strategy Committee

We have established the Sustainability Strategy Committee and Sustainability Committee as an organizational structure for overseeing activities related to sustainability and internal control, aiming to achieve the Cosmo Energy Group Management Vision. The Sustainability Strategy Committee consists of central executive officers including the president and CEO, the core operating companies' presidents, and the general managers of their planning departments. In addition, outside directors and directors who are Audit and Supervisory Committee members also participate in the committee as observers. The committee deliberates on policies regarding sustainability activities, including policies

related to safety, risk management, human rights and the environment, and monitors and evaluates achievements. It reports important matters to the Board of Directors, thus advancing even more focused, proactive initiatives. In FY2021, the Sustainability Strategy Committee met eight times, discussed 20 agenda items, and submitted/reported 11 of them to the Board of Directors for deliberation.

In addition, committees have been established at core operating companies and semi-core companies in accordance with the functions of each company. These committees work together with our Sustainability Strategy Committee to oversee all Group companies

Activities in FY22/03

	May 13, 2021	Non- regular	• 2050 Carbon Net Zero Declaration
			 FY2021 plan of the Sustainability Strategy Committee
	June 3,	1st	 Policies on response to the revised Corporate Governance Code
	2022	meeting	 Overview of the plan to establish the Group's vision
			 Non-financial KPIs (FY2020 results and FY2021 targets)
			 Results of TCFD scenario analysis and discussion for their disclosure
	September 30, 2021	2nd meeting	 Establishment of the Environmental Policy and Human Rights Policy and revision of the Human Resources Policy and the Disclosure Policy
-			 Formulation of FY2021 CO₂ emissions forecast
	October 8, 2021		 Reporting and discussion of progress in non- financial KPIs in FY2021
		meeting	 Key points in response to the revised Corporate Governance Code



December 8, 2021	Non- regular	 Disclosure in line with the TCFD recommendations
December 23, 2021	4th meeting	 Guidelines on non-financial KPIs for FY2022 ESG rating assessment Status of risk management initiatives at the Cosmo Energy Group
January 6, 2022	5th meeting	 SDGs to which we contribute to achieving by addressing our material issues Establishment of the Sustainable Procurement Policy, Compliance Policy, Social Contribution Activity Policy, Basic Information Security Policy and Tax Policy
February 22, 2022	6th meeting	 Setting of non-financial KPI targets for FY2022 Proposed roadmap for achieving net zero carbon emissions by 2050 Formulation of the Employees' wellness management policy

Roadmap for Achieving Net Zero Carbon Climate change **Emissions by 2050**

At the Cosmo Energy Group, we understand that formulating and implementing a management plan reflecting a greater awareness of climate change is essential for the sustainable development of the earth, society and ourselves. We made the 2050 Carbon Net Zero Declaration.

We have created a roadmap in which we summarized initiatives and processes for achieving the Declaration, based on scenario analyses guided by the Task Force on Climate-related Financial Disclosures (TCFD) Recommendations, analyses of external and internal environments and other efforts.

At the Cosmo Energy Group, we advance initiatives for achieving net zero carbon emissions by 2050, with Oil & New and the formation of a carbon neutral society as the two major pillars. While fulfilling our responsibility to maintain stable supply of energy, we aim to expand our businesses beyond the field of oil and achieve net zero GHG emissions by 2050.

GHG emissions targets and reduction

While continuing to fulfill our responsibilities for stable energy supply, we will switch to zero-carbon energy, make use of negative emission technologies, and engage in other initiatives, aiming to reduce emissions from our own operations (Scope 1 + Scope 2 emissions) by 30% (from the FY2013 level) by the year 2030 and achieve net zero carbon emissions by 2050.



*GHG: The abbreviation for greenhouse gas, Scope 1 and 2 GHG emissions are the emissions of the Group

Priority themes for achieving net zero carbon emissions

We are working to achieve net zero carbon emissions under the following six priority themes, including a

conversion to zero-carbon energy and negative emissions technologies.

> Initiatives to reduce emissions

2050 Net zero

carbon emissions

Oil & New

witch to "New

1 Direct reductions

Reducing Scope 1 + Scope 2 emissions by switching to lowcarbon fuels (including LNG and biofuels) and zero-carbon fuels (including hydrogen and ammonia), introducing renewable energy, conserving energy and implementing other measures • Introducing electricity from virtually 100% renewable energy sources at all service stations directly operated by the Group

2 Utilization of negative emission technologies

• Considering the possibility of CO₂-EOR at oil fields where the Group has concessions, and considering the possibility of capture and utilization of CO₂ from main devices (CCS/CCUS)

3 Expansion of the renewable energy business

- Aiming to increase the total capacity of onshore and ore wind power plants to more than 1.5 million kW bv 2030
- Considering geothermal, solar, and biomass power generation businesses that use the technologies, networks and assets owned by the Group

6 Utilization of carbon credits

• Offsetting residual emissions remaining after implementing reduction measures using negative emission technologies avoided emissions including those achieved by operating the Renewable Energy Business, carbon credits, and other measures, aiming to reduce emissions by 30% (from the FY2013 level) by the year 2030 and achieve net zero carbon emissions by 2050

5 Next-generation energy / raw material initiatives

- Accelerating business development to build an SAF supply chain with the goal of starting the operation of SAF manufacturing facilities and beginning to supply SAF by 2025
- Considering supply of carbon recycling (synthetic fuels/ chemicals) products
- Considering supply of hydrogen/ammonia Considering chemical recycling

4 Initiatives to mobility service

- Expanding businesses including the installation of rapid charging equipment for EVs at service stations, the supply of EVs for Cosmo My Car Lease, and the provision of EV car sharing services
- Contribution to regional revitalization

Basic approach and process toward net zero carbon emissions

We will proceed with consideration and introduction for our conversion to zero-carbon energy and utilization of negative emission technologies while fulfilling our responsibility to maintain a stable energy supply.



service stations directly operated by the Cosmo Energy Group. July 2022 The supply target of SAF for 2030 has been set at 300,000 KL per year.

Conclusion of the memorandum of understanding regarding the consideration of collaboration

entative Director

shi Kiriyama



CEO, Abu Dhabi Future Energy Company PJSC - MasdarMoha

eel Al Ramah

hamed



• We are also determined to push forward with the expansion of the Renewable Energy Business focused on wind power, initiatives in next-generation energy and raw materials, the expansion of mobility services and initiatives for regional revitalization.

2040	2050
witch to decarbonized	l energy
els, etc.) ogen, ammonia, etc.) aimed at Jecarbonized fuels	• Expanded use of decarbonized fuels
ilization of negative e	emission technologies
on and operational start o	of CCS/CCUS facilities
wind power generation b f over 1,500,000 kW for c s generation businesses	usiness n-shore and off-shore wind)
ext-generation energy	/ / raw material initiatives
sturing pply f hydrogen / ammonia ical recycling products	Supply of carbon recycling (synthetic fuels/chemicals) products

- Started sales of the Cosmo Zero Carbon Solution, a package of products including renewable
- Concluded a memorandum of understanding regarding the consideration of collaboration with
- Joined ACT FOR SKY, an organization implementing initiatives for the commercialization,
- Concluded a basic agreement regarding the consideration of collaboration in a hydrogen business
- Completed switch to electricity that is virtually all from renewable energy sources at a total of 603

Diagram of the joint project considering the business of domestically producing SAF utilizing Alcohol to Jet (ATJ) technology

oply of hanol	ATJ technology	SAF manufacturing	SAF 220,000 kL	Aircraft
الله ا	currenter			Renewable diesel
LanzaTech	Ethanol	×.	Renewable diesel	 Airport ground vehicles (including buses and cargo
canzalech		 SAF large-scale manufacturing 	20,000 kL	vehicles) • Data centers
		Blend / quality management		 Trucks, heavy machinery

Shaping a Decarbonized Society with Renewable Energy Wind Power Generation

- Construction of Kamiyuchi Wind Farm Underway -

Driving Wind Power Generation Business to Achieve Net Zero Carbon Emissions

At the Cosmo Energy Group, we understand that formulating and implementing a management plan reflecting a greater awareness of climate change is essential for the sustainable development of the earth, society and ourselves. We made the 2050 Carbon Net Zero Declaration in May 2021. In May 2022, we created a roadmap in which we summarized initiatives and processes for achieving the Declaration. In this roadmap, the expansion of Renewable Energy Business focused on

wind power generation is one of the priority themes.

Wind power is an eco-friendly, clean energy without the need for concern over the depletion of resources or CO₂ emissions. It contributes not only to the reduction of CO₂ emissions but also to the improvement of the energy selfsufficiency rate of Japan, which is highly dependent on imported energy.

Cosmo Eco Power plays a central role in the Renewable Energy Business which is building a system that will enable us to

Construction of Kamiyuchi Wind Farm Under Way

The Kamiyuchi Wind Farm is an onshore wind power generation site being constructed in Wakkanai-shi, Hokkaido. Construction began in May 2020 with the goal of starting operations in March 2023. It will be a large-scale onshore wind power generation site, with 12 turbines and a capacity of up to 49,400 kW. Each wind turbine has a power generation capacity of 4,300 kW. At its highest point the tip of the blade is 145 meters high and the rotor diameter is 120 meters. A large-scale project with a construction period exceeding three

years, the Kamiyuchi Wind Farm has entered its final phase toward its target completion in the second half of FY2022.



implement the development of onshore wind power generation sites and the design, construction, operation and maintenance of power plants all on our own. As of June 30, 2022, we have 175 wind turbines in 23 areas across Japan. To build a sustainable society, we will continue to drive the expansion of wind power generation with the understanding and cooperation of local communities, landowners and local governments.

Wakkanai Station

Kamiyuchi

planning site

ind Farm project

Minami-Wakkanai

Station



a power grid while considering the natural environment.



Cosmo Eco Power Co., Ltd. **Business Development Department** Head of Development Group 1 Takeo Kogure Development Group 1 Ayumi Hori

Message from We are building the Kamiyuchi Wind Farm with the cooperation of local people.

At Kamiyuchi Wind Farm, I am in charge of all of the operations in the project, including process management, quality management, coordination with the government and coordination with local residents. The understanding and cooperation of local residents is essential for the wind power generation business. We therefore attach the greatest importance to building a good relationship with them, which is our strength. The government of Wakkanai-shi, where the Kamiyuchi Wind Farm is located, promotes power generation using wind power as renewable energy. Partly because of this,

many local residents have a very deep understanding of wind power generation. Kamiyuchi has superior wind conditions and piers and roads for transporting materials. However, the wind turbines are among the largest (onshore) turbines in Japan. This makes the project very difficult in terms of both transportation and installation. Kamiyuchi Wind Farm is one of the largest-scale onshore wind power generation sites in the Cosmo Energy Group. I would like to complete this project, which will also contribute to addressing climate change, and boast of it to my family.



It is a large-scale project including the development of

We have maintained a good relationship with Wakkanai-shi in Hokkaido for more than 20 years. This means that the local area was ready to accept this development project. However, because the site is positioned along the flying routes of migratory birds, birds of prey, and other airborne animals, we advanced the project with the utmost consideration for the natural environment, with the cooperation of experts. This development project greatly differs from past projects in that power lines were also constructed. In 2013, the Ministry of Economy, Trade and Industry chose Hokkaido-Hokubu-Fuuryoku-Souden Co., in which Cosmo Eco Power has a stake, as the business operator in charge of building a power grid.

Construction of the power lines commenced in September 2018, and construction of Kamiyuchi Wind Farm was started in accordance with the scheduled date of the completion of the power lines. It is a long-term, large-scale project. We can say it has the potential to be a model project in the future because it involves the development of a power grid for offshore wind power generation and leads to the establishment of microgrids and energy security. Further, to thank the local people for the relationship that has lasted more than 20 years, we have made a donation to the municipal government of Wakkanai utilizing the regional revitalization support tax system (the corporate version of hometown tax payment).



Kamivuchi Wind Farm Construction Supervisory Group Wind Power Generation Project Department Wind Power Generation Division Cosmo Engineering Co., Ltd. Head Junichi Wakui

Full-fledged DX

Digital Transformation (DX) at the Cosmo Energy Group

DX Vision

In the business environment surrounding the Cosmo Energy Group, we are seeing increased momentum in a shift away from fossil fuels due to the recent tightening of environmental regulations and the Fourth Industrial Revolution, while the use of renewable energy and electric vehicles is expanding rapidly along with our sharing economy. In particular, since we formulated the Sixth Consolidated Medium-Term Management Plan, which we are currently implementing, the use of big data, the Internet of Things (IoT), artificial intelligence (AI), and other technologies has become so widespread that it can greatly influence

our business growth.

Amid such changes, the Cosmo Energy Group is swiftly refocusing our business portfolio under the slogan "Oil & New." This plan calls for us to reinvest profits in growth drivers such as our Renewable Energy (wind power) business as well as maintain competitiveness and earnings in our Petroleum businesses.

We also seek to swiftly undertake a fundamental transformation of our business model through digitalization. Our goal is to utilize digital tools and platforms to enhance the customer experience and increase the value we offer in line with the

basic policy of the Sixth Consolidated Medium-Term Management Plan.

Across the group, we have started to promote digital transformation (DX) in earnest under the catchphrase, "Fullfledged DX." As society moves beyond a dependence on oil and the world undergoes rapid change, business transformation based on the premise of digital data is crucial for Cosmo Energy Group's ultimate survival. With this in mind, we are committed to improving the digital literacy of the Cosmo Energy Group as a whole and to accelerating our transition to data-driven management.

CDO MESSAGE

Noriko Rzonca CDO, Senior Executive Officer In charge of Corporate DX Strategy Dept.. Corporate Communication Dept., and IT Initiative Dept.

Cosmo's 5Cs
Chance
Challenge
Change
Communicate
Commit

At the Cosmo Energy Group, we are committed to undertaking transformation of our business model to realize datadriven management.

Specifically, I think that promoting the improvement of our digital capabilities and a corporate culture of change management is key to enhancing the customer experience and rapidly upgrading our operations. First, to bolster our digital capabilities, we need to take three actions: (1) develop our digital know-how and expertise,

(2) promote partnering, and (3) strengthen

rn	I transfor	usiness mode
lit	al capabil	Digita
B	Partnering	Development of digital know-how & expertise
-		
	et reform re they t	
en	Challe	Chance
	Are you t new chall	Do you see the present as an

Examples of DX

At the Cosmo Energy Group, we are working to enhance the customer experience and rapidly upgrade our operations to ensure the successful transformation of our business model.

Cosmo Zero Carbon Solutions

Cosmo Zero Carbon Solutions is a green power-based mobility platform that offers customers an innovative experience. When it comes to energy management, we have partnered with REXEV Inc. to help us speed up the process of developing solutions to the energy management challenges faced by our customers.

DX Certification (July 2022)

We have been recognized for our business strategy and DX promotion framework, our disclosure of information to stakeholders and other initiatives.

The Cosmo Energy Group was certified as a DX-certified operator under the Digital Transformation (DX) Certification system established by Japan's Ministry of Economy, Trade and Industry.* In doing so, METI recognized our DX efforts, including our business strategy and framework for promoting DX, as meeting the certification criteria based on the DX Promotion Indices. It also praised our appropriate

disclosure of information to stakeholders. At the Cosmo Energy Group, we will continue to accurately identify trends in digitalization with each employee upholding their commitment as a business professional. At the same time, we will strongly promote DX leveraging the Group's strengths, thus fulfilling the expectations of society and customers regarding a stable energy supply, the

*The DX Certification system is a national initiative that is based on the Act on Facilitation of Information Processing. It certifies companies that are recognized as taking steps to promote DX in line with the basic requirements specified in the Digital Governance Code.

DX Promotion Framework

To strengthen our DX efforts, we established the Corporate DX Strategy Department in November 2021 and appointed Ms. Noriko Rzonca as Chief Digital Officer. The newly established department will formulate DX strategies for the Cosmo Energy Group and support group companies to undertake DX. It will also develop data analytics platforms, hire and train DX personnel, establish partnerships with outside parties, and engage in other activities.

In FY2021, we pushed forward with the formulation of the Group's DX strategy and the establishment of a DX promotion structure, with the Corporate DX Strategy Department driving such efforts under the leadership of the CDO. The following three areas are areas of focus. In FY2022, we will continue activities by further reinforcing the structure.

Organizational structure for promoting DX



Areas of focus of DX

- 1 Enhancing the customer experience (CX)
- 2 Cultivating DX human resources, with a focus on digital and data science talent, throughout the Group
- 3 Motivating employees to ensure speedy innovation and building of a sustainable organization

Promoting the Improvement of Digital Capabilities and a Corporate Culture of Change Management

our data utilization infrastructure

To advance the other initiative, change management, we need to cultivate DX human resources, establish diversified organizations, and strike a balance between innovation and traditional corporate culture. Further, DX will be implemented within the Cosmo Energy Group with the full participation of everyone in the group. We will pursue Cosmo's 5Cs as five indicators to motivate individual employees and encourage them to change how they view DX and take ownership in the Group's DX efforts.



Digitalization of service stations

We make effective use of data through the digitalization of service stations with tools including Digital Station System (DSS), the Carlife Square (CLS) app, and Customer Relationship Management (CRM). We established a solid customer base by acquiring and linking customer data throughout each phase of the customer journey to strengthen our interaction with customers at onsite (DSS), offsite (CLS) and follow-up (CRM) touchpoints.

> expansion of clean energy with a focus on wind power generation, and the provision of value that supports people's car life, mobility and daily lives.



Branding

Cosmo Energy Group's Brand Strategy

Good Response Felt in the Second Year

The branding activities that we began in full scale in 2020 led to increased awareness of the four brand core values of foresight, trust, supplying a sense of security, and customer service orientation, leading to their materialization through various operations. It appears that the Cosmo brand has taken root both internally and externally.

At the Cosmo Energy Group, we are transforming our business portfolio in

Cosmo brand framework

Effects of a brand

are also transforming our brand strategy in line with the times in our efforts to develop a corporate climate for the creation of a sustainable, affluent society in a Group-wide manner. We will continue to develop a sense

response to environmental changes. We

of unity and consistency within the entire Group, including not only the Petroleum Business but also the Renewable Energy Business.

value which should be built. This is the idea on which our branding activities are based.

to work, greater loyalty to the company, and greater awareness of compliance.

A beautiful logo and a delightful catch-phrase are not the only elements that constitute a brand. The important

thing is the things that people feel and expect and the actions they want to take when they see, hear, and read the

A brand enables the creation of a comfortable work environment internally and a resilientbusiness

In the market, it is not only competitive prices that enable us to be selected by customers. It is also peoples' trust

and expectations of Cosmo as a familiar brand that greatly help us to be selected, even where it is difficult to

differentiate our service or business from our competitors'. When customers have developed a deep attachment to a brand, more of them will repeatedly choose that same brand when there are other opportunities and for other

Further, when brand value is improved, employees take pride in the brand, resulting in their increased motivation

logo, melody, and catch-phrase. It is this trust and these expectations that form the essence of a brand and the

What is a brand? A brand is a stockpile of trust and expectations created by good experiences.

structure that generates stable profit.

services, thus leading to stable profit.



company that fills up hearts of all of

the people engaged with Cosmo.

Internal branding activities of the Cosmo Energy Group

We engage in internal branding activities to inform all employees of the unique quality of Cosmo in accordance with changes of the times and the environment, so that they consistently embody the brand core values of foresight, trust, supplying a sense of security, and customer service orientation in all corporate activities.

We held COSMO BRAND AWARD 2021 in March 2022 as part of our inner branding activities. The goal of this recognition event was to share and commend the activities of 26 Group companies in the preceding year from the perspective of brand value improvement. We introduced examples of excellent activities materializing the brand core values and shared the award winners' passion for the Cosmo brand, in our efforts to enhance our corporate climate.

Cosmo Brand E-Learning Programs

We provide e-learning programs to deepen employees' understanding of the Cosmo brand and enable this understanding to be reflected in their daily operations. The e-learning programs are used to enable them to reaffirm the brand value, which we have defined on our own, and enable the brand value to be reflected in specific actions in their daily operations. All employees realizing the brand core values through their daily operations and actions to strengthen the brand in a PDCA cycle has become an established practice.



We are advancing branding activities in advertisements, service stations, products, services, and other aspects by attaching importance to consistency, so that everyone will feel the same unique quality of Cosmo whenever and wherever they are engaged with the brand.

In addition, in the advertisements that we created in FY2021, we introduce our wind power generation business, electricity retail sales business delivering the generated power to customers, the use of the electricity at our service stations, and other initiatives that fall into the "New" of "Oil & New," thus communicating our efforts to supply energy that are suited to the times which are not limited to oil.

We will continue striving to maximize the value of the Cosmo brand through branding activities.

風を、



Filling up your hearts, too.

Brand statement A simple phrase that describes what the brand is like

COSMO BRAND AWARD 2021











TV commercial



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BUSINESS ACTIVITY

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SS

The Cosmo Energy Group's Business



Products and services



Petroleum products Gasoline, kerosene, diesel oil, and fuel oil, etc.



Petrochemical products (Materials for products for daily life) Shopping bags, bottles, clothes, tires, and frames of electric appliances, etc.



Motoring lifestyle solutions Car leasing for individuals, etc.



Electric power

Business Overview	Oil Exploration and Production Business	Petroleum Business (Refining and Sales)	Petrochemical Business	Renewable Energy Business	Total *Including other businesses
Business summary	Business of exploration and production of crude oil in Abu Dhabi, United Arab Emirates (UAE) and Qatar	Business to refine imported crude oil and sell the products to nationwide service stations, factories, and general consumers	Business to manufacture raw materials of polyester fiber, pet bottles, plastics,and synthetic rubber, etc.	Business to engage mainly in wind power generation as a renewable energy.	
Net sales (FY2021 result)	¥91.0 billion	¥2,137.7 billion	¥359.4 billion	¥13.1 billion	¥2,440.5 billion*2
Ordinary profit (FY2021 result)	¥44.8 billion	¥165.5 billion / ¥93.2 billion (excluding the impact of inventory valuation)	¥13.6 billion	¥3.5 billion	¥233.1 billion / ¥160.8 billion*2 (excluding the impact of inventory valuation)
Number of employees (As of March 31, 2022)	266	4,512	1,227	237	7,111
Major assets (As of March 31, 2022)	Crude oil reserves (proved and probable) 143.1 million barrels Equivalent to approx. 17 years of supply (As of December 31, 2021) Crude oil production (of the entire Group) Approx. 45,000 barrels/day Comparison with refining capacity: Approx. 11% (January to December 2021 result) Partnerships Solid relationship of trust with oil producing countries for about more than 50 years	Crude oil processing capacity*1Number of service stations in Japan400,000 barrels/dayNumber of Cosmo brand stationsDomestic market share: Approx. 11.6%2,695Number of Cosmo the Card holdersCosmo My Car Lease Cumulative total 96,214 carsNumber of Carlife Square app downloads 4.72 million members	Ethylene production capacityPara-xylene production capacity1.29 million tons/year*31.36 million tons/yearDomestic market share: Approx. 19%Mixed-xylene production capacityBenzene production capacityMixed-xylene production capacity0.74 million tons/year0.62 million tons/year	Wind power plant capacity 300,000 kW No.3 in Japan Market share of 7% Number of windmills 175 (23 regions)	Brand statement familiarity as a reminder of the company name 2nd of 241 companies Results of a survey of general consumers across Japan conducted by Nikkei BP Consulting, Inc. in September 2021
Group-wide risks	 Foreign Exchange Rates Interest Rates Asset Value Reversal of Deferred Tax Assets 	 Infectious Diseases Climate Changes Disasters and Accidents Laws and Regulations 	·	of Laws and Ordinances n Management ontrol	 *1 Including the supply of petroleum product/semi product (37,000 barrels/day equivalent) from the Idemitsu Kosan Group with the business alliance *2 Including consolidating adjustment *3 Including whole capacity of Keiyo Ethylene (55% owned, consolidated subsidiary of Maruzen Petrochemical)

Impact of inventory valuation

The impact of inventory valuation indicates the impact on the cost of sales in the financial statements, according to the inventory valuation method, when there is a change in the price of crude oil. It can be separated into the following two categories:

1 Inventory valuation impact based on reduction in book value

If the market value of inventory at the end of the term falls below the book value, it is necessary to reduce the book value to the market value, and this indicates that a resulting loss is incurred.

2 Inventory valuation impact based on the periodic average method

This indicates the impact in terms of income based on the periodic average method, which is an inventory valuation method. In a phase when crude oil prices rise, the cost of sales is pushed down because the unit prices of purchased inventory that have risen during the term are averaged with the lower inventory unit prices at the start of the term. Conversely, in a phase when crude oil prices fall, the cost of sales is increased because the unit prices of purchased inventory that have fallen during the term are averaged with the higher inventory unit prices at the start of the term.





OIL EXPLORATION AND PRODUCTION BUSINESS

In addition to our achievements in oil development spanning half a century, we strive to expand business based on our trustworthy relationships with Middle Eastern oil-producing countries.



Business Overview

The oil exploration and production business is a revenue driver within the Group business portfolio, and based on the core area of the Middle East, centered on Abu Dhabi, United Arab Emirates (UAE) and Qatar, with which we have established long relationships of trust, we are promoting safe and stable operations in existing concession areas.

FY2021 Results and FY2022 Forecasts

In FY2021, ordinary profit increased ¥30.9 billion year on year, to ¥44.8 billion, due to a rise in crude oil prices (Dubai crude oil price in Jan. to Dec. 2021: US\$69/barrel, up US\$27/barrel year on year), more than offsetting a decrease in sales volume.

In FY2022, we expect ordinary profit to increase ¥30.2 billion year on year to ¥75.0 billion, due to the impact of a much greater rise in crude oil prices than in the previous fiscal year (assumed Dubai crude oil price in Nov. 2021 to Oct. 2022: US\$95/barrel, up US\$26/barrel year on year).

Ordinary profit



Crude oil production volume*



Production volume is the combined production of Abu Dhabi Oil Co., Ltd., Qatar Petroleum Development Co., I td., and United Petroleum Development Co., I td., which are the major oil operating companies in the Group

Identified risks

- Risks related to crude oil prices and production
- Risk of stranded assets associated with energy transition
- Risk of accidents in oil fields and at production facilities
- Risks related to exploration and development

Opportunities

- the period of the transition to decarbonization
 - popularization
- producing countries in the field of decarbonization

Business strategy

In the Oil E&P Business, we have identified the following four major risks: (1) risk of the fluctuation of crude oil prices attributed to global trends in oil supply and demand as well as political instability in oil-producing countries and surrounding countries; (2) risk of the asset stranding of oil fields and other asset holdings associated with the energy transition; (3) risk of accidents at oil fields and production facilities associated with operations, and; (4) risk that a commercially viable amount of resources cannot be found in a newly awarded exploration block.

We can say that the strong market demand for a stable energy supply in the period of the transition to decarbonization is an opportunity in our business environment. In March 2022, we concluded a memorandum of understanding on the consideration of collaboration with Abu Dhabi National Oil Company (hereafter, "ADNOC") in the field of decarbonization including CCS and CCUS. We plan to investigate and consider projects jointly with ADNOC.

The greatest strength of the Group is our close and trustworthy relationship with the Emirate of Abu Dhabi for more than 50 years since before the UAE was founded. In 2021, we acquired the new Offshore Block 4. The new block is adjacent to an oil field possessed by Abu Dhabi Oil Co., Ltd., a Group company.

We therefore expect that synergy, including the reduction of development and operating costs, will be created by the joint utilization of production, storage and shipping facilities. Furthermore, our oil fields including the new block are located in shallow offshore areas, which makes it possible to reduce operating cost and thereby features high competitiveness. At the Cosmo Energy Group, we possess technological capabilities and expertise cultivated over many years of self-operation in the Emirate of Abu Dhabi and other oilproducing countries.

- Realization of stable energy supply in
- Expectations for global progress in CCS and CCUS technologies and their global
- Potential for collaboration with oil-

Strengths

- Trust-based relationships with oil producing countries for more than 50 years
- Possession of highly competitive oil fields
- Technologies and know-how cultivated through oil field operations



Competitive advantages

Firm relationship maintained with the Emirate of Abu Dhabi

The relationship between Abu Dhabi Oil Co., Ltd. in the Cosmo Energy Group and the Emirate of Abu Dhabi, the UAE, started in 1967, before the UAE was founded. The strong relationship of trust has been maintained for 55 years. The Group has continued safe, stable crude oil development in collaboration with ADNOC in the Emirate of Abu Dhabi.

In January 2022, Cosmo Energy Holdings and Masdar* concluded a memorandum of understanding regarding the consideration of collaboration in the field of decarbonization. We can say that this and other moves, including the acquisition of Off-shore Block 4 in the Emirate of Abu Dhabi and the conclusion of a memorandum of understanding regarding the CCS and CCUS with ADNOC, which are described on the previous page, prove that the Emirate of Abu Dhabi and ADNOC have evaluated us highly as a reliable partner. We will continue to strive to remain a friendly, trusted partner of the Emirate of Abu Dhabi.

Masdar: Abu Dhabi Future Energy Company PJSC – Masdar It is a renewable energy company in the Emirate of Abu Dhabi. To address global sustainability issues, the company is working to commercialize and expand renewable energy, sustainable urban development and clean technologies. Masdar is a wholly owned subsidiary of Mubadala Investment Company, a strategic investment company owned by the Government of Abu Dhabi. The goal of the company is to support the diversification of both the economy and energy sources of the UAE for the benefit of future generitions while maintaining the UAE's leadership in the global energy sector. It operates business in approx. 40 countries, including the UAE, Jordan, Saudi Arabia, Mauritania, Egypt, Morocco, the United Kingdom, the United States, Australia, Serbia, India, Indonesia, and Uzbekistan.

Advantage related to CCS and CCUS

At the Cosmo Energy Group, our advantage in CCS and CCUS is that we have technologies and expertise in the field of oil exploration and production that are highly connected to CCS and CCUS, including experience injecting gases

Highly competitive oil fields that we operate on our own

The area where the Group is engaged in oil exploration, development, and production contains traditional oil fields located in shallow seas. They have lower operating costs and are more competitive than non-traditional oil fields, which are typically deep water oil fields and shale oil fields. In addition, the Cosmo Energy Group has been exploring, developing, and producing oil as an operator* in oil-producing countries. Therefore, we have accumulated technologies, expertise, and experience related to oil field operations. Our Oil E&P Business segment secured ordinary profit even in FY2016 and FY2020, when crude oil prices were weak.

*Operator: A company that not only invests but also plays a central role in the planning of a project and the implementation of exploration and development tasks



* Created based on data from an external research organization. Production cost differs among oil fields.

associated with zero-flaring operations, which we achieved in May 2001. Moving forward, we will study the feasibility of CCS and CCUS in the Emirate of Abu Dhabi jointly with ADNOC.



Initiatives and achiev

Stable production and reduction of operating costs at the Hail oil fields and existing oil fields

In the Oil E&P Business segment, we have been considering business strategy from a long-term perspective by seeking "added-value projects utilizing the Company's strengths" under the Sixth Consolidated Medium-Term Management Plan. During the period of the medium-term management plan, we have been engaged in stable production at the Hail oil fields and existing oil fields. We have also been striving to reduce operating costs. The world is accelerating towards decarbonization, but the transition from fossil fuels to zero carbon fuels cannot be completed in a single step. We believe that the social responsibility of the Cosmo Energy Group as an energy company is to ensure stable energy supply in step with the development of technologies and legal systems and changes in demand. Cosmo Energy Exploration & Production Co., Ltd. will continue to supply energy, which will be needed for energy security, in line with the times.

Acquisition of new Offshore Block 4 and commencement of exploration

Cosmo Energy Exploration & Production acquired the Offshore Block 4, an offshore exploration block in the Emirate of Abu Dhabi, to realize long-term stable supply. We believe that the bid for the Offshore Block 4 was successful due to the high evaluation of the solid, trust-based relationships the Group has built in the Emirate of Abu Dhabi, its many years of operating oil fields, and other reasons. To start explorations in Offshore Block 4, we have newly established Cosmo E&P Albahriya Limited. For the exploration



A joint investigation with ADNOC launched toward decarbonization

On March 2, 2022, we concluded a memorandum of understanding with ADNOC based on an agreement to begin a joint investigation for the exploration of technologies that can contribute to decarbonization and a feasibility assessment regarding CCS and CCUS in the Emirate of Abu Dhabi. Toward

Initiatives and achievements in the medium-term management plan



project in Offshore Block 4, we reached an agreement with JOGMEC* to receive equity financing. In addition offshore Block 4 lies adjacent to an oil field owned by Abu Dhabi Oil, a Group company. We expect that, if we reach the phase of development and production, the shared use of production, storage, and shipping facilities will minimize production and operating costs and maximize the synergy between the two companies.

* JOGMEC: The Japan Oil, Gas and Metals National Corporation



the realization of a decarbonized society, we will work to evaluate the feasibility of businesses related to new initiatives, acquire knowledge, and create opportunities for collaboration.

PETROLEUM **BUSINESS**

As the production and sales division for petroleum products, we promote world-class, stable operations and stable supply to customers.



Business Overview

In the petroleum business, Cosmo Oil, a core company of the Cosmo Energy Group, is mainly engaged in crude oil procurement, manufacturing, distribution, and importation and exportation of petroleum products.

Cosmo Oil Marketing, which is also a core company, sells Group products, including petroleum products, to corporate and individual customers.

FY2021 Results and FY2022 Forecasts

In FY2021, ordinary profit excluding the impact of inventory valuation was ¥93.2 billion (+¥39.9 billion year on year), due to the improved margin of petroleum products reflecting rising crude oil prices, an increase in the sales volumes reflecting a recovery from the impact of COVID-19 and the high operating rates maintained at our refineries.

In FY2022, while we expect demand for jet fuel to recover, reflecting the reduced impact of COVID-19, we forecast ordinary profit excluding the impact of inventory valuation to be ¥64.0 billion (-¥29.2 billion year on year), chiefly reflecting the absence of the positive time lag of the margin of the four major products, which was generated in the previous fiscal year due to a rise in crude oil prices.







Identified risks

- Risks related to crude oil price and crude oil procurement
- Risks related to petroleum product prices and demand
- Risks related to accidents at and leakage from refineries and other facilities
- Risks of business continuity associated with rapid environmental changes
- Risks related to book value devaluation of inventories due to a decline in profitability

- · Globally accelerating trends toward carbon neutrality and measures for shifting to a decarbonized society Measures for shifting to a decarbonized society (initiatives regarding the shift to EVs, green electricity, and new fuels)
- Recovery in demand for jet fuel attributed to the relaxation of COVID-19 border controls • CASE (mobility supply, maintenance, etc.)
- trends · Changes in customer trends, digitalization, and the wider use of

Business strategy

In the Petroleum Business, we have identified risks including the following: the risk that crude oil prices and crude oil procurement will be affected by the Russian invasion of Ukraine and political instability surrounding oil-producing countries in the Middle East; the risk of the fluctuation of petroleum product prices and product demand caused by trends in demand from general consumers, mainly reflecting the impact of COVID-19 and the risk related to accidents and leaks at refineries and service stations and in the distribution process.

On the other hand, our business opportunities include: measures for responding to the shift to EVs, the expansion of green electricity and the development and popularization of new fuels such as SAF,*1 which reflect the trend toward decarbonization accelerating globally; measures for responding to changes in customer trends, such as the acceleration of digitalization including CASE⁺² and MaaS⁺³ and the expansion of cashless payment, and the recovery of demand for jet fuel reflecting the relaxation of COVID-19 border controls.

Our strength in oil refining is the point that we are able to maintain high operating rates at our refineries despite the decline in fuel oil demand because we began supplying fuels to Kygnus Sekiyu, moving us to a supply shortage position. Our strength in petroleum sales is that we are providing value ahead of competitors by developing brand products that address the diverse needs of customers. We are responding to the diversification of car lifestyles through efforts such as the development of the Carlife Square app and the provision of Cosmo My Car Lease, through which we have exceeded 96,000 total contracts. Further, our strength in the electricity retail sales business is that we can provide electricity featuring the use of virtually 100% renewable energy sources, which is linked to the wind energy generated by Cosmo Eco Power, as demand for green electricity has been growing. We have also released the Cosmo Zero Carbon Solution, which provides renewable energy and EVs as a one-stop solution, thus supporting corporate customers and local governments in their decarbonization efforts by working together with local service station operators.

Opportunities

cashless payments

Strengths

- Maintaining high operating rates at refineries despite declining demand (a supply shortage position associated with fuel supply to Kygnus Sekiyu)
- Reinforcing connections with customers, and presence of connections with service station dealers as our partners
- Development of brand products (Commitment Compulsory Car Inspection, Cosmo Denki (Electricity) Yasashi (friendly) Car Sharing, and Cosmo My Car Lease)
- High level of customer satisfaction, diversification of payment methods, and value creation focused on branding activities

Joined ACT FOR SKY, an organization implementing initiatives for the commercialization, popularization, and expansion of SAF produced in Japan.





- *1 SAF: Sustainable Aviation Fuel This fuel is produced mainly from biomass-derived raw materials, including plants, as well as waste and waste food oil from restaurants and households. It enables the reduction of CO2 emissions compared to fossil fuels. *2 CASE: An acronym for Connected, Autonomous, Shared & Services, and Electric.
- *3 MaaS (Mobility-as-a-Service): A next-generation transportation service that combines conventional means of transportation and traditional transportation services with various technologies, such as automated driving and Al

Initiatives and achievements under the medium-term management plan

Oil refining business

High operating rates maintained with stable operation

In FY2019, we began supplying fuels to Kygnus Sekiyu, which is a major initiative in the Sixth Consolidated Medium-Term Management Plan. The domestic demand for fuel oil fell sharply due to the COVID-19 pandemic which began later, but we were able to address the situation without lowering the operating rates of our refineries because we had moved to a supply shortage position due to our beginning to supply fuels to Kygnus Sekiyu. We believe that, amid the ongoing consolidation of the oil industry, our strategy to emphasize the supply-demand balance, rather than expand in scale through integration, has proved effective.

In January 2020, the International Maritime Organization (IMO) strengthened environmental regulations to reduce the content of sulfur in marine fuel oil from 3.5% to 0.5%. This resulted in a shift of demand from high-sulfur C heavy oil to low-sulfur C heavy oil that conforms to the regulations. At the Cosmo Energy Group, we increased the coker capacity of the Sakai Refinery in 2019, in addition to making the maximum use of the direct desulfurization unit at the Chiba Refinery, to ensure a stable supply of oil complying with the regulations.

Operating rate of refineries (on a calendar day basis)



The Super Nintei Mark that only super nintei jigyosha are allowed to use



This resulted in the establishment of a system that does not produce high-sulfur C heavy oil (bottomless system) and made it possible to increase the production of profitable products.

Further, the Chiba Refinery obtained super nintei jigyosha (tokutei nintei jigyosha) certification in April 2021, followed by the Yokkaichi Refinery in August 2022. To continue safe, stable operations, we will push forward with safety activities by enhancing the development of specialized human resources, conducting high-level risk assessments, implementing advanced technologies, and taking other initiatives.

In June 2022, Japan began to accept foreign tourists again, relaxing its COVID-19 border controls. Reflecting this, the number of international passenger flights to and from Japan is expected to increase. Therefore, demand for jet fuel is anticipated to increase year on year.

The refineries of the Cosmo Energy Group plan to operate at their full capacity again this fiscal year. We expect that we will be able to maintain high operating rates by taking advantage of the supply shortage position, which is our competitive advantage, against a certain level of decline in demand.



Sakai Refinery coker

Petroleum sales business

Expansion of the car life business

In the Sixth Consolidated Medium-Term Management Plan, we set the expansion of car life business as a target and put in place a policy of creating a virtuous circle involving the business and the fuel oil retail business. The environment surrounding car lifestyles and mobility in the Petroleum Business is changing rapidly due to the decline in fuel oil demand and in the size of the working population. In addition, changes in lifestyles associated with the popularization of digital devices and the digitalization of car lifestyles, including CASE and MaaS, are accelerating.

The Cosmo Energy Group began digitalization initiatives by developing the Carlife Square app and launched the services in August 2019. The services have been utilized by many customers since their launch. As of March 31, 2022, the total number of downloads has reached approx. 4.72 million. Further, in February 2022, we began to provide Cosmo SS Pay, an app payment service that permits users to pay for fuel oil just by showing a QR code.* We are the first oil wholesaler to add a payment function to our own smartphone app. It has grown more convenient, as it is compatible with d Payment[®] provided by NTT DOCOMO, a new payment method. Reinforcing connections with customers, this service also contributes to sales of gasoline in the "Oil" of "Oil & New." We will continue to expand apps as our platforms in our efforts to improve customer convenience.

The total number of Cosmo My Car Lease contracts, which have been highly acclaimed by customers since their launch, had exceeded 96,000 as of March 31, 2022. Operating 304 Cosmo My Car Leasing Stores all over Japan as stores dedicated to vehicle sales and leasing, we will continue to address the diversification of car lifestyles.

In the electricity retail sales business, we began to sell Cosmo Denki (Electricity) for households in FY2019 and Cosmo Denki Green in December 2019. Further, in October 2020, the company began to provide the Cosmo Denki Business and Cosmo Denki Business Green services to its corporate customers. In September 2021, we began to sell the Cosmo Zero Carbon Solution, which provides renewable energy and EVs, etc. as a one-stop solution for corporate customers and local governments engaging in decarbonization initiatives. We are proposing this solution to corporations and local governments by working together with local service station operators.

At the Cosmo Energy Group, we will continue to strengthen connections with customers and develop and expand brand products to support customers' car lifestyles, mobility, and home lives. * QR Code is the registered trademark of DENSO WAVE.

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Cumulative Number of Cosmo Car Leasing Contracts

Number of Carlife Square downloads



Cosmo Zero Carbon Solution



(gymnasium, etc.)

PETROCHEMICAL **BUSINESS**

As the international market expands with population growth, we make the most of our competitive advantage in petrochemical products.



Business Overview

In the petrochemical business, Maruzen Petrochemical, a group company, provides a stable supply of petrochemical products as an ethylene center in the petrochemical complex.

In addition, Hyundai Cosmo Petrochemical (HCP), a joint venture with Hyundai Oilbank (HDO), supplies competitive petrochemical products with its Asia-leading para-xylene manufacturing facility.

FY2021 Results and FY2022 Forecasts

In FY2021, ordinary profit increased ¥16.9 billion year on year, to ¥13.6 billion, mainly due to the improvement of benzene market conditions and an increase in production volume attributed to a difference in the scale of regular maintenance from the previous fiscal year.

In FY2022, we expect ordinary profit to decrease ¥6.6 billion year on year, to ¥7.0 billion, mainly reflecting the deterioration of market conditions of benzene and other aromatic products, offsetting an increase in profit expected due to the absence of the impact of regular maintenance at Maruzen Petrochemical that was generated in the previous year.

In addition, in an initiative promoting synergy with the Petroleum Business, a production facility for hydrogenated petroleum resins is scheduled to begin operation in FY2022 at Chiba Arkon Production, a three-company joint venture involving Arakawa Chemical Industries.

Ordinary profit



Identified risks

- · High volatility of petrochemical product prices
- Relaxation of supply and demand resulting from new construction/ expansion of overseas plants
- Sharp increase of raw material prices attributed to the Ukrainian crisis and the weaker yen, and planned power outages as a measure to address power shortages

Opportunities

- Long-term growth in semiconductor demand
- (fluctuation of the operations of the complex)

- Growth in demand attributed to the recovery of the global economy
- Net zero carbon emissions (acceleration of the global move towards decarbonization)

Business strategy

We assume the following risks in our business environment: the risk of a global decline in product prices stemming from the loosening and deterioration of the supply-demand balance attributed to construction/expansion of overseas plants (especially plants in Asia), the risk of a steep rise in energy and raw material prices attributed to the Ukrainian crisis and depreciation of the yen; the risk of fluctuations in the operation of complex resulting from planned power shortage, the risk of supply disruptions attributable to damage to manufacturing devices caused by a natural disaster and the resultant suspension of production and shipment, the risk of market fluctuations resulting from another wave of infection, and the risk of cost increases and changes in the patterns of consumer spending reflecting measures to achieve carbon neutrality.

On the other hand, we view the increase in demand for specialty chemicals, which is associated with the long-term increase of demand for semiconductors, as an opportunity in the business environment. We see an increase in investments in data centers necessary for building networks, as well as an increase in products for personal use such as PCs and smartphones, and brisk demand for EVs. We believe that the impact of COVID-19 will move toward an end and the global economy will see a growth in demand. While the global move towards decarbonization is accelerating, it is likely that new technologies and products for net zero carbon emissions will be created. We also believe that demand for environmentally friendly products will increase, providing opportunities for business growth.

The strength of the Cosmo Energy Group lies in Maruzen Petrochemical and Keiyo Ethylene together as a single plant having the largest ethylene production capacity in Japan. We have increased the utilization rates of fractions as by-products (such as C4 and C5), as well as ethylene and propylene as mainstay products. Thus, we also have a large capacity to



Strengths

- Two ethylene production facilities, and ethylene production capacity that is among the largest in Japan
- Promoting cooperation in oil refining with the Cosmo Oil Chiba Refinery (Petroleum Business) and cooperation between complexes
- World-leading market share in polymers used in semiconductor photoresists

produce other by-products, including methyl ethyl ketone, for which we have the largest production capacity in Japan. In addition, we have built an integrated supply chain spanning from the production of petrochemical products from naphtha as the main raw material to sales of the products in the complex via a pipeline. We are advancing a collaborative project to increase synergy with the Petroleum Business. In the field of specialty chemicals, we boast a world-leading market share in polymers for semiconductor photoresists. In the field of chemical products, we possess global niche products used for environmentally friendly products.



Competitive advantages

Continued acceleration of specialty chemical initiatives

Regarding the semiconductor market, changes in the market environment need to be watched at present because the growth of PCs and smartphones has slowed. In the medium to long term, however, further market expansion is expected mainly due to the resumption of investment in data centers, the ubiquitization of 5G, IoT products and AI, and the expansion of the utilization of big data and cloud computing. Further, moves towards greater miniaturization and higher integration of semiconductors are continuing globally, and semiconductors are playing an increasingly important role as the foundation of all of industry. They are also playing a role in the achievement of net zero carbon emissions.

In this market environment, at Maruzen Petrochemical, we are expanding our specialty chemical business. Above all, regarding polymers for photoresists, we boast world-class market shares in polymers for KrF^{*1} photoresists and polymers for ArF^{*2} photoresists.

Currently, demand for polymers for KrF and ArF photoresists and other photoresists, mainly including photoresists used for memory, is increasing significantly. Automotive semiconductors, including semiconductors for memory and sensors, are expected to increase in the future. We therefore expect the continued expansion of sales.

Maruzen Petrochemical commercially supplies polymers for photoresists and anti-reflection coating, in addition to polymers for KrF and ArF photoresists, which are the mainstream at present. Further, we also aim to enter the markets of polymers for cuttingedge EUV*³ photoresists and polymers for thick-film photoresists for redistribution layers, which are increasingly in demand in the semiconductor post-process. For this purpose, we are collaborating with customers, starting from the development phase. With our lineup of diverse polymers, we cater to customer needs for a wide range of applications.

We also have competitive manufacturing technologies, analytical technologies, and quality assurance capabilities in cutting-edge fields. Our polymers for photoresists are made-to-order products.

We fulfill high customer quality requirements and customer requests to increase production volume by fully leveraging our integrated supply chain which includes raw material procurement, manufacturing and quality assurance, thus demonstrating our competitive advantages.

- *1 KrF (krypton fluoride): It is an excimer laser, which is a light source for exposure with a velenath of 248 nm
- *2 ArF (argon fluoride): An excimer laser, which is a light source for exposure with a wavelength
- *3 EUV: Extreme ultraviolet. It is a next-generation light source with a wavelength of 13.5 nm to be used for exposure technology for semiconductor manufacturing



The facility manufacturing polymers for cutting-edge photoresists

Market shares of polymers for photoresists





Implementation of measures to improve competitiveness

In the Sixth Consolidated Medium-Term Management Plan, we set the improvement of profitability in the functional product area and investment to increase competitiveness for the future as measures to take in the Petrochemical Business. Maruzen Petrochemical has been supplying competitive petrochemical products by operating two naphtha crackers - one at its own ethylene plant and one of Keiyo Ethylen, which is the newest and largest in Japan. From 2018 to 2020, we undertook the large-scale replacement of ethylene cracking furnaces and partially introduced furnaces with high production efficiency. This has not only led to even more stable supply but also reduced CO2 emissions and environmental impact due to the reduction of fuel consumption.

Chiba Arkon Production, a joint venture between Maruzen Petrochemical, Cosmo Energy Holdings, and Arakawa Chemical Industries, is scheduled to begin the commercial operation of a production facility for hydrogenated petroleum resins in FY2022. Hydrogenated petroleum resins are used as raw materials for hot-melt adhesives, which are used for hygiene products such as paper diapers. Demand for many hygiene products is expected to increase globally due to the

Enhancement of chemical products and specialty chemicals

Maruzen Petrochemical will continue to enhance its chemical products and specialty chemicals, which have grown into revenue drivers. In addition to the abovementioned Chiba Arkon Production, we have started to export methyl ethyl ketone to Europe and the United States by developing shipping infrastructure. We are also expanding domestic and overseas sales of vinyl ether products, hypoallergenic substances that are used widely in the field of environmentally friendly products, by increasing our manufacturing capacity.

For polymers for photoresists, we have also secured facilities for meeting the demand for high-viscosity, highconcentration resin solutions for thick-film photoresists. We have also constructed a new in-house facility for manufacturing polymers for EUV photoresists, a cutting-edge technology that is expected to see growing demand. We started the trial operation of this facility in July 2022. (The facility building is pictured in the photo in the upper part of the left page and the interior of the building is in the photo at right.) Further, in time with the expansion of our research

Semiconductor market forecast

Initiatives and achievements under the medium-term management plan

population increase and economic growth mainly in Asian countries.

In 2022, we started operating a propylene rectifying tower. Significant value is added to polymer grade propylene (PGP) using the propylene rectifying tower, and expectations are high that PGP will lead to the creation of new businesses with applications across a broad range of fields.



Propylene rectifying towe

center that is planned at the end of 2022, we will appropriately invest for the introduction of advanced analytical instruments, construction of a clean environment and other purposes, further enhancing our quality assurance structure and accelerating research and development efforts.



Inside the facility manufacturing polymers for cutting-edge photoresists

RENEWABLE ENERGY BUSINESS

We work to create a sustainable society by expanding the wind power generation business.



Masayoshi Noji



Business Overview

Cosmo Eco Power, a Group company, is working in the Renewable Energy Business as a pioneer in the wind power generation business in Japan. Since its founding in 1997, the company has been working to build a system capable of developing wind power generation sites and designing, constructing, operating and maintaining wind power plants in an integrated manner. Taking advantage of this strength, we are working to expand our onshore wind power generation business further. At the same time, we are actively engaged in offshore wind power generation projects, which are expected to expand in the future.

FY2021 Results and FY2022 Forecasts

In FY2021, net sales reached ¥13.1 billion (up ¥1.4 billion year on year), marking a record high, due to the smooth operation of new onshore wind power generation sites. However, regarding costs, upfront costs (including labor expenses and expenses for development surveys) increased due to the full-scale development of offshore wind power generation facilities. As a result, ordinary profit decreased ¥0.6 billion year on year, to ¥3.5 billion.

In FY2022, we expect ordinary profit to decline ¥0.5 billion year on year, to ¥3.0 billion, mainly reflecting an increase in upfront costs related to the development of offshore wind power generation facilities as in FY2021, offsetting the beginning of the operation of a new wind power generation site planned in the second half.

Ordinary profit



Starting at the end of FY2020, we disclose information about the Renewable Energy Business as a single segmen

Wind power plant capacity



Identified risks

- Changes to government policies and institutions related to renewable energy
- Decline in profitability resulting from intensified competition
- The offshore wind power generation industry is still in its infancy.

• Expansion of offshore wind market to 45GW including floating windmills by 2040)*

generation

(Expected total capacity: 15.9 GW*2 in 2030)

neutrality by 2050.

*1 Source: Energy Kihon Keikaku (Basic Energy Plan) published in October 2021
*2 Source: 2030 nendo ni okeru energy jukyu-no mitoshi (karnen shiryo) (Outlook for energy supply and demand in FY2030 (related document)) published in October 2021

Business strategy

A risk in the business environment is the fact that policies and institutions related to renewable energy are expected to continue changing as the energy policies of the Japanese government change greatly centered on the keyword, "decarbonization." We need to respond appropriately to these changes.

For example, the plan is that the feed-in tariff (FIT) scheme, which was introduced in 2012 to expand renewable energy, will start shifting to the feed-in premium (FIP) scheme in FY2023 with the goal of making renewable energy the main form of energy and commercializing it.

Unlike FIT, under which electricity was sold at a fixed price, FIP is linked to the market price, so electricity prices will change depending on supply and demand. We need to respond even more appropriately than before, such as by devising creative measures to generate more power in the demand season.

In addition, as the future potential of the wind power business becomes more widely known, new companies are entering the market one after another. This trend is especially remarkable in the offshore wind power generation market. Intensified competition is likely to reduce the profitability of the business in the short term.

Above all, we believe that we need to advance projects by managing risks appropriately, considering that the offshore wind power industry in Japan is still in its infancy.

On the other hand, opportunities in the business environment include the government's policy of expanding wind power generation as much as possible to achieve carbon neutrality by 2050, which leads us to expect that onshore wind power generation will expand faster than ever due to power grid development, the easing of various regulations, and other changes. It is also expected that the number of large-scale offshore wind power generation projects will increase rapidly due to the development of new laws.

Opportunities

- Renewable energy will be the main power source towards the achievement of carbon
- Government-led promotion of wind power
- (including power grid development, changing rules on power feeding, and the easing of regulations
- (Establishing projects with a total capacity of 10 GW by 2030 and projects with a total capacity of 30 GW
- Expansion of the onshore wind market

Strengths

Onshore

- Japan's first company specialized in wind power generation with a track record of more than 20 years of operation
- Already operating projects with a capacity of 300,000 kW, we can expand further by building on our expertise.

Offshore

- Leading the industry, we are advancing multiple projects including offshore sites under construction and projects under development.
- Partnership with Iberdrola and acquisition of expertise in overseas operations

Cosmo Eco Power is Japan's first company specialized in wind power generation, which boasts the third largest share of the domestic onshore wind power generation market. We are striving to expand our business further by expanding our onshore wind power business and leveraging our expertise in the business in offshore wind power generation. Additionally, in the project off the northwest coast of Aomori Prefecture (Sea of Japan off the Coast of Aomori Prefecture (South Side)), in which Cosmo Eco Power is the largest equity investor, we have formed a partnership with Iberdrola,* the world's largest company operating wind power generation facilities. Through this, we are striving to improve business viability and increase our competitiveness by acquiring the expertise of the overseas partner.

^{*} A major electricity enterprise in Spain, which is a world-leading company in terns of the scale of wind power generation facilities it possesses



Competitive advantages

Relationships building with local communities and industry-leading availability of wind turbine

Cosmo Eco Power was established in 1997 as Japan's first company specialized in wind power generation. Since then, we have been working to build a system serving the entire wind power generation process, from site development to the design, construction, operation, and maintenance of power plants. We boast the third largest share of the domestic onshore wind power generation market. To date, we have constructed wind turbines in more than 25 areas by advancing the development of projects together with the local people involved. We aim to be a company that operates its business by striving to have its projects understood by local people, always with respect for them, and overcoming worries and issues together with them. As a result, we have built good relationships with the local people in the areas where we have developed wind power plants to date, something that we are proud of.

These achievements and strengths are also leveraged in offshore wind power projects that are being newly expanded. We are advancing offshore wind power projects in a locally based manner, aiming for co-existence and co-prosperity with local fishery industry and the people of the local community in each candidate area. We aim to achieve mutual development with local communities by engaging sincerely with them in addition to converting local wind resources into clean energy.

Further, Cosmo Eco Power has cultivated high-level technological

capabilities which enable it to maintain its own wind turbines leveraging its 25 years of experience. It improves its technological capabilities by identifying the causes of problems and taking measures to steadily prevent their recurrence. We have to date introduced a system which stops wind turbines automatically when a lightning strike is detected, a system which predicts failures based on vibrations, and other systems. We strive to reduce wind turbine downtime by preventing failures, identifying errors and resetting turbines immediately using a 24-hour monitoring system. We have continued to steadily implement efforts to prevent and handle failures. As a result, Cosmo Eco Power is able to boast of industryleading availability of wind turbine.

In recent years, we have been engaging in joint research with FUJIFILM Corporation for the remote monitoring of offshore wind turbines for abnormalities caused by lightening strikes and other phenomena. We aim to improve the efficiency of maintenance and operation by enabling the remote monitoring of wind turbines to discover small scratches on their surfaces. There are new challenges in offshore wind power, such as the inspection of marine equipment and the size of wind turbines, which we never experienced previously. However, we will push forward with the application of IT, in addition to leveraging our experience to date, thus making maintenance one of the pillars of our competitiveness.



Initiatives and achievements under the medium-term management plan

Accelerating the growth of onshore wind power generation and advancing multiple offshore wind power generation projects

To promote renewable energy, which falls into the "New" of the basic Oil & New policy of the Sixth Consolidated Medium-Term Management Plan, we aim to achieve an onshore wind power generation capacity of 500,000 kW quickly. We are also advancing the development of offshore wind power generation sites for continued growth.

At present, the development of onshore wind power generation sites has been steadily progressing. In FY2021, we began operating the 48,000 kW Chuki Wind Farm in Wakayama Prefecture in April. In addition, in FY2022, we plan to start operating the 49,000 kW Kamiyuchi Wind Farm in Hokkaido and the 14,000 kW Oita Wind Farm in Oita Prefecture.

Further, we are steadily advancing our FIT-certified projects, such as the 90,000 kW Abukuma Minami Wind Farm in Fukushima Prefecture and the 39,000 kW Chuki No.2 Wind Farm in Wakayama Prefecture. In addition, in FY2021, there was an invitation for bids for 1 million kW onshore FIT projects, and we won bids for three projects totaling approx. 150,000 kW. Because of these initiatives, the early achievement of the 500,000 kW capacity target is now in sight, and we aim to achieve a capacity of at least 900,000 kW by 2030.

Additionally, we have also made great progress in offshore wind power generation. Specifically, the Vision for Offshore Wind Power Industry was created by a public-private council in 2020. In the Vision for Offshore Wind Power Industry, the government set goals of establishing new offshore wind power generation projects with a capacity of 10 million kW by 2030 and 30 to 45 million kW,

Offshore wind projects in progress



Process of selecting the operator in a general sea area and progress of each project



55 COSMO ENERGY HOLDINGS

including floating wind turbines, by 2040. Thus, significant growth in offshore wind power generation is anticipated.

Prior to these moves, the Cosmo Energy Group began moving forward with multiple offshore wind power generation projects, mainly on the Sea of Japan side of the Tohoku region. As a result, it is planned that the 140,000 kW wind farms off Akita Port and Noshiro Port in Akita Prefecture which are under construction at present will start operating within FY2022. In addition, as of July 2022, we are considering projects as an industry leader with an understanding of the local people in four of the eight sea areas that are designated as promotion zones or promising zones, including the project off the northwest coast of Aomori Prefecture the Sea of Japan (South Side) off the Coast of Aomori Prefecture off the Coast of Aomori Prefecture), the project in the Akita central sea area (off the coast of Oga City, Katagami City, and Akita City, Akita Prefecture), and the project off the coast of Yuza, Yamagata Prefecture (off the coast of Yuza Town, Yamagata Prefecture).

The operator of the project in each sea area is to be selected from applicants. We will make preparations for the public tender. With these initiatives, we will establish a foundation for offshore wind power generation business as well, aiming to achieve a wind power plant capacity of at least 600,000 kW by 2030.

The Cosmo Energy Group will achieve a wind power plant capacity of more than 1.5 million kW, including both onshore and offshore plants, by 2030, aiming to be the leading company in wind power generation.

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SUSTAINABILITY

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Special Interview

Taking initiatives for achieving decarbonization in earnest





We invited Mr. Eiichiro Adachi, the Senior Counselor of The Japan Research Institute, Limited, to talk with our president to exchange opinions about global sustainability issues surrounding Cosmo Energy Holdings.

----- Mr. Adachi has been active as an ESG analyst, working mainly on industrial surveys and corporate evaluation from the viewpoint of social responsibility. First, Mr. Kiriyama, would you tell us what you expect from this talk? Kiriyama: I was appointed as the first Manager of the Environmental Office and began to be involved with the issue of global warming around December 1997, when the 3rd Conference of Parties to the UN Framework Convention on Climate Change (COP3/Kyoto Protocol) was held in Kyoto. I later began to work under "Promotion of environmental measures" as one of the important tasks under our CSR activity policy, thus building the foundation of the Group. Recently, terms such as SDGs, ESG, and TCFD have been generalized, with companies announcing their carbon neutrality declaration. These and other moves make me feel that the world is changing rapidly. I hope that I can receive advice today for the Group to focus its efforts on sustainable management.

Adachi: I am greatly honored to be invited for this talk today. When I was a student, I studied ecological economics under Takeshi Murota, the economist. After joining the company, I have worked for a long time with a focus on environmental issues. What led me to think about the relationship of environmental issues with finance in this process was the fact that the National Westminster Bank in the United Kingdom announced its environmental policy in the early 1990s. I did some research and found that the bank sees environmental risk as a problem just as it considers the bad debt risk involved in financing a problem. I was surprised and very interested. I have since been engaged in industrial surveys and corporate evaluation for more than 20 years. In the meantime, I also gained valuable experience, such as participating as a Japanese expert in the creation of international standards related to social responsibility of organizations by the International Organization for Standardization (ISO).

Why should companies work on sustainability?
 Adachi: SDGs are booming in popularity in recent years.
 The 17 goals are divided into three layers. The bottom layer consists of goals related to the biosphere and the environment.
 The "Goal 6: Clean Water and Sanitation," "Goal 13: Climate
 Action," "Goal 14: Life below Water," and "Goal 15: Life on Land"

Representative Director and Group CEO Hiroshi Kiriyama

The Japan Research Institute, Limited Senior Counselor Eiichiro Adachi

are positioned in this layer. The second layer is for goals in the social sphere, or human society. This layer includes issues on "Goal 1: No Poverty," "Goal 2: Zero Hunger," and "Goal 4: Quality Education," among others. The top layer is for the economic sphere, which includes "Goal 8: Decent Work and Economic Growth" and "Goal 9: Industry, Innovation and Infrastructure." In this way, SDGs have a three-story structure. What is important here is the point that the economic goals cannot be achieved unless the social sphere as its base is sound, and the soundness of the social sphere is not realized unless the biosphere as the foundation remains sound. We have been working hard to achieve economic affluence, or goals on the third floor. However, this has caused great damage to the second and first floors. While being vaguely aware of this fact, we have been pretending not to see it. However, we can no longer ignore it. I think this is the fundamental reason why we discuss sustainability. Kiriyama: I totally agree with you. A long time ago, I read The Limits to Growth by the Club of Rome, learned the Gaia theory advocated by James Lovelock, and seriously thought how people and the Earth should exist given limited capacity. I think that the problem lies not only in global warming but has deeper roots. Unless the Earth is sustainable, humans cannot survive and neither can

companies. On the other hand, we must achieve growth in sales

and profits as corporate managers. This is the dilemma we face.

Adachi: I understand the dilemma. I think that, above all, energy companies are on the front lines of the issue. Mr. Mark Carney, the former governor of the Bank of England, uses the phrase, "Tragedy of the Horizon." I translate this phase as jikanjiku-no higeki (tragedy of the time axis). It means that the gap or contradiction between the current good and the future good tends to keep growing larger if it is left unaddressed. We humans have been engaged in economic activities with a belief that the current good will lead to the future good. Recently, however, we have noticed that the current good is not linked to the future good. And so tragedy of the time axis has begun to be actualized. Mr. Carney not only presented the problem but also referred to a solution. As a result, the Task Force on Climate-related Financial Disclosures (TCFD) was established. I think that your slogan, "Oil & New," exactly depicts what you are like now and what you will be like in the future. If I may be presumptuous enough to say this as somebody outside the company, I think balancing the Oil and New or the process of the transition will be a challenge.

— You have created and disclosed a roadmap for net zero carbon emissions by 2050. Could you tell us your views on the initiatives to achieve decarbonization. Mr. Kirivama? Kiriyama: Oil is a wonderful fuel with high energy density. Without oil, the prosperity that we enjoy today could not have been achieved. However, we cannot resist the flow, in which the world is shifting away from oil to other energy sources. In response, we have set six themes of priority initiatives for achieving carbon net zero and set goals of reducing (Scope 1 and 2) net greenhouse gas emissions by 30% (compared to the 2013 level) by 2030 and achieving carbon net zero by 2050. We will drive our conversion to zero-carbon energy while fulfilling our responsibility to maintain a stable energy supply. We are also determined to drive the expansion of the Renewable Energy Business focused on wind power, initiatives in next-generation energy, and the expansion of mobility services, among other things.

— Please tell us your opinion about our roadmap, Mr. Adachi. Adachi: I saw the roadmap disclosed by the Petroleum Association of Japan a little before you disclosed yours. I felt that they have taken extra steps in two points. First, they referred to the point that emissions cannot be reduced completely to zero even in 2050. Second, they referred to the point that changing business is not easy in Japan. I felt that it was a sincere, honest message. Further, with regard to your roadmap, I paid attention to the fact that you have clarified your target value to achieve by 2030. I believe that you will later consider and disclose an action plan for 2030. I have a suggestion about it. In Europe, there is an idea of establishing a taxonomy to clarify economic activities that are believed to contribute to building a sustainable society. A taxonomy is a system that clarifies whether something is black or white, or green or not green. Therefore, it seems that some Europeans who saw the roadmap of a Japanese company feel that the company has put off committing itself to solving the problem. In response, as you mentioned in your "responsibility to maintain a stable energy supply" earlier today, you should specifically show that fossil fuels are essential in part. This I believe will make your roadmap persuasive to a certain extent. For example, power supply is stopped in the event a disaster, such as a major earthquake. If all fire engines and ambulances are electric vehicles, their operations may be affected in such circumstances. There should be cases where gasoline vehicles are indispensable. The Cosmo Energy Group should be bold enough to say that "Oil will remain necessary until the last minute in this and that domains" after exhaustive consideration. That will lead you to gain support from society. This is my hypothesis.

Kiriyama: That is very informative. Oil is used as a power source of automobiles and other equipment, as a heat source of thermal power plants and other facilities, and as a raw material of chemical products. It will be very difficult to use something other than oil for all of these purposes. For example, roughly 85 million automobiles are produced in the world every year. If all of them are replaced with EVs, other problems will occur, such as shortages of lithium, cobalt, and other rare metals. Recently, we frequently see news reports on SAF. However, worldwide production of SAF is still below 1% compared to the demand for aircraft fuel. Having checked the reality in this way, we found that there are still many areas where it is impossible to replace oil with something else.

Adachi: In Europe, there is a phrase, "flight shame." Facing the headwinds associated with this phrase, KLM Royal Dutch Airlines issued a message, "Everyone, please think carefully before getting on a plane," despite being an airline company. You don't need to take an airplane to travel a short distance or to go to a place to which you can take a train. On the other hand, an airplane is convenient for a long-distance travel, and in cases when time is pressing. There are goods that only airplanes can transport. Airplanes are also useful in the event of a disaster. In this way, the roles that airplanes should continue to play are clarified, and SAF is used for fulfilling those roles. I think that such contents will make your message more persuasive to your stakeholders.

Kiriyama: I see. Indeed, CO_2 emissions decreased last year due to the COVID-19 pandemic. That happened because of the travel curbs. If it costs you 2 million yen to travel to New York, the number of people who take airplanes will be limited. If the price of gasoline exceeds 1,000 yen, opportunities to take a ride in a car will be reduced. However, I am not sure if this approach to control is right. We previously believed that using energy means being wealthy. We may need to replace this set of values with the virtue of honest poverty. Adachi: I think that the path to decarbonization involves three main triggers, that is, (1) tougher regulations, (2) lifestyle changes, and (3) technological innovation. We can say that Japan has a strong tendency to try to find solutions through technological innovation, without mentioning tougher regulations and lifestyle changes as much. The European Union (EU) announced the European Green Deal (EGD) in December 2019. On the first page, it says that it aims to "transform the EU into.. society... where economic growth is decoupled from resource use." I think that Japan should refer to tougher regulations and lifestyle changes a little more.

— Please tell us, Mr. Adachi, your views on our TCFD scenario analysis.

Adachi: You made a very careful, detailed analysis. I want to convey my respect for that. As of April 25, 2022, around 800 Japanese companies and organizations have expressed their support for the TCFD recommendations. Tokyo Stock Exchange requires Prime Market-listed companies to disclose business risks related to climate change in accordance with an international framework. Therefore, Japan will be the top runner in terms of disclosure following the TCFD recommendations. I feel, however, that Japanese companies have a strong mindset of seeking approval from the Tokyo Stock Exchange just by fulfilling the template. Very few Japanese companies start thinking in terms of the risks of climate change. You will not be persuasive if you only say that business opportunities are expected because you will change your business portfolio with a focus on renewable energy toward 2050. I think that the TCFD recommendations will also keep evolving. The International Financial Reporting Standards (IFRS) Foundation has established the International Sustainability Standards Board (ISSB). Recently, ISSB announced [draft] IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and [Draft] IFRS S2 Climate-related Disclosures. These drafts require companies to

disclose information about Scope 1, 2, and 3 emissions on an absolute basis, which are calculated by applying the GHG Protocol. This is the global trend, although many Japanese companies find it troublesome. I hope that, moving forward, you will analyze and evaluate risks in such a way that your unique strategy and spirit of innovation are clearly reflected in your disclosure based on the TCFD recommendations.

Kiriyama: To disclose Scope 3 emissions, we must calculate emissions from not only our company but from the supply chain, including the upstream and downstream portions. For example, we supply jet fuel to airline companies. If we bear responsibility for all CO_2 emissions, it will be a carbon-free fuel for airline companies. However, they also calculate CO_2 emissions, trying to reduce them. This means that it will be a double count. We sell renewable electricity, which is generated by using wind power, to RE100 member companies, and those companies also count their CO_2 emissions. This creates some confusion about how to count the emissions.

Adachi: I understand what you mean very well. On the other hand, speaking from the standpoint of standard creators, we are sure that we can accelerate this move toward net zero by setting this indicator, all the more because it will be double count.

— Could you explain about sustainability other than climate change, Mr. Kiriyama?

Kiriyama: Someone pointed out to me that Japanese companies try to drive initiatives based only on the "E" of ESG. We are actually proactive in taking initiatives on S and G as well. Perhaps we have to communicate more information about them. Above all, we will go even further in diversity and governance.

Adachi: I may sound as if I am turning everything upside down, but I have a feeling that the era when we talk about E, S, and G as three separate elements will soon be over. According to a recent report from the United Nations Development Programme, in 2020 there were several times as many refugees who lost



their lands due to climate change than there were people who were displaced due to war. Human rights problems are not limited to discrimination and forced labor. If the climate continues to change, even more people will be deprived of their homes and lives. In addition, infectious diseases will be more likely to occur. Conversely, thinking with S as the starting point, if the economic gap widens, developing countries will be able to use only cheap fuels, which will have a more serious impact on the environment. As suggested by the expression, "chain of wicked problems," problems in E, S, and G are linked. Rather than picking up and addressing items classified as E, S, or G one by one, I want companies to take actions with the idea of to what extent they are paying careful attention with material issues as the starting point.

Kiriyama: I agree. Material issues are related to each other, and some of them have the same roots. To eradicate poverty, people must be affluent. When they become affluent, they begin to use a lot of energy. This results in the occurrence of the global warming problem. Maybe we need to change the definition of affluence itself. I feel that capitalism has changed a lot recently. I think that corporate management will change in an era when more emphasis is placed on building a sustainable society than on producing profits.

Adachi: Actually, Japan has begun to see companies delisting themselves. I hear this is because being a listed company makes it difficult to make long-term business decisions. The number of listed companies has also been trending downwards internationally.

Kiriyama: I see. Thank you very much for having given us very valuable opinions today. You gave us many clues about how we should strike a balance between corporate management and sustainability.

During this talk held on May 13, 2022, sufficient measures were taken to prevent COVID-19 infections.

Cosmo Energy Group's Sustainable Management

The Cosmo Energy Group Management Vision, "In striving for harmony and symbiosis between our planet, man and society, we aim for sustainable growth towards a future of limitless possibilities," incorporating our commitment and passion toward the sustainable growth of our Group and society. Harmony and Symbiosis and Creating Future Values, which are included in the Cosmo Energy Group Management Vision constitute the Basic Concept of Sustainability and show our determination to promote sustainability in our management.

To strengthen our sustainable management initiatives further, we have identified the ten most important material issues toward what we should be like in 2050. Based on these material issues, we are implementing the Consolidated Medium-Term Sustainability Management Plan (hereafter, the "Sustainability Plan"), in which we have set KPIs from an ESG perspective. For the climate change countermeasures as one of our most important material issues, we have announced our 2050 Carbon Net Zero Declaration and disclosed the roadmap for achieving it in May 2022. We are continuously encouraging sustainable management to achieve sustainable corporate value enhancement and solutions to social issues through our business activities.

Cosmo Energy Group Management Vision

In striving for harmony and symbiosis between our planet, man and society, we aim for sustainable growth towards a future of limitless possibilities.





Message from the Executive Officer in Charge

We aim to achieve net zero carbon emissions by driving sustainable management surely.

Takayuki Uematsu

While the sense of crisis regarding climate change has been growing and moves to achieve decarbonization have accelerated globally, we published our Carbon Net Zero Declaration in May 2021, vowing to reduce the greenhouse gases (GHG) emitted by our businesses to effectively zero by 2050. We have also published a roadmap toward net zero carbon emissions. Sustainability transformation of management itself is important for achieving this roadmap. The Sustainability Strategy Committee, which was established in April 2021 and is chaired by the president and CEO, met eight times in total in FY2021 and had lively discussions about ESG. All of us at the Cosmo Energy Group will work as one on climate change measures as one of our most important material issues.

For more than 20 years, we have been managing the Group with a focus on the environment by placing sustainable growth

Promotion Structure

We established the Sustainability Initiative Department in April 2020 and have since been working on sustainability management. In April 2021, we established the Sustainability Strategy Committee. In FY2021, this committee had eight sessions in total, including extraordinary sessions.

The management team members discuss non-financial agenda items and monitor the progress of KPIs. In addition, the Board of Directors makes decisions on, and supervises, long-term goals regarding ESG issues and the progress

Instilling the idea internally

Senior management explains the background behind ESG initiatives and their importance in internal training sessions.

At the same time, we use internal newsletters, an intranet website, and other media to proactively increase employee understanding of sustainability and ensure the idea takes root in the Group. In every issue of the internal newsletter there is a special feature on sustainable management. We are also engaged in other measures, such as the publishing of ESG episodes in an e-mail magazine. In FY2021, we held study sessions for senior management on two occasions to promote understanding of sustainable management. We will offer e-learning and workshops with the goal of providing guidance and deepening under-standing to increase our contributions to the solution of social issues through our businesses, as part of our efforts to improve sustainability literacy.

Representative Director, Senior Managing Executive Officer In charge of Sustainability Initiative Dept., Accounting Dept. and Finance Dept.

(sustainability), which is mentioned in the Cosmo Energy Group Management Vision, at the center of our corporate management. For us, sustainability is nothing less than the pursuit of sustainable value improvement and growth based on our vision. Therefore, under the current Consolidated Medium-Term Management Plan, we are steadily re-establishing our vision and reviewing our internal control system. By driving sustainable management, we will continue aiming for the sustainable improvement of our corporate value, thus fulfilling stakeholders' expectations.

The Seventh Consolidated Medium-Term Management Plan will start next fiscal year. Although we are operating in increasingly uncertain times, we will improve the resilience of management and formulate a medium-term plan that will contribute to sustainable growth with safe, stable energy supply.

of related initiatives, in response to the content of the Sustainability Strategy Committee's discussions. Beyond the above, we hold the meetings of the Sustainability Committee, which are managed and attended by the general manager of the Sustainability Initiative Department and the general managers of other departments and offices, and the Cosmo Energy Group Sustainability Liaison Committee, which promotes group-wide sustainable management.

Participating in the UN Global Compact

The Group participated in the United Nations Global Compact in 2006. Supporting the Ten Principles of the UN Global Compact related to human rights, labor, the environment, and anti-corruption, we apply a global perspective and demonstrate to society our commitment to the promotion of sustainable management, with the goal of continuing to improve our sustainability activities.



Engagement with the Environment

E

At the Cosmo Energy Group, we have included Harmony and Symbiosis with the Global Environment in the Basic Concept of Sustainability and taken an array of initiatives with the goal of becoming an environmentally friendly energy corporate group.

As the world's attention is being drawn toward initiatives reducing greenhouse gas emissions, we announced our 2050 Carbon Net Zero Declaration.

Here we introduce our energy-saving initiatives and other environmental measures and activities.

Reduction of greenhouse gas emissions

As a part of the sustainability plan, we set as a target a 2 million ton (26%) reduction in emissions by FY2030, compared to the FY2013 level, consistent with the orientation of the global community and the Japanese government toward realizing a sustainable society.

In addition, we are targeting a 16% reduction in FY2022, the final year of the plan, again compared to the FY2013 level, so that we are proactively engaged in the advancement of initiatives reducing CO₂ emissions. CO₂ emissions in FY2021 were 6.97 million tons, a decrease of 0.49 million tons from FY2013. (figures marked with \bigcirc have received an independent third-party assurance from KPMG AZSA Sustainability Co., Ltd.) The FY2013 net emissions figures in the Roadmap for Achieving Net Zero Carbon Emissions by 2050 on page 27 differ from the figures at right due to the scope of CO₂ data aggregation of in the transportation and other divisions.

Energy conservation at refineries

In FY2021, the energy consumption rate improved around 4% year on year due to the promotion of energy-saving activities (including the introduction of a system optimizing the utility balance) and the improvement of the plant operating rate attributed to the reduction of failures and the number of maintenance days. However, CO₂ emissions increased approx. 7% year on year due in part to the improvement of the plant operating rate mentioned above.

We will continue to strive for energy conservation both physically (high-efficiency equipment) and non-physically (energy-efficient operation).

Cosmo Energy	Group's C	CO ₂ Emissions	(10,000 to	n/CO ₂)*3*4*5
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	FY2013	FY2019	FY2020	FY2021	FY2022	
	Actual	Actual	Actual	Actual	Target	Vs.FY2013
Transportation division (crude oil, raw materials and products)	90	75	71	77	86	-4
Manufacturing division (petroleum and petrochemical products)	676	650	631	662	598	-78
Other (service stations, research centers, etc.)	4	2	3	2	4	0
Biofuel (with ETBE)*1	-7	-13	-14	-17	-15	-8
Expansion of the renewable energy business (wind power generation)*2	-16	-27	-25	-27	-46	-30
TOTAL	746	688	666	697	626	-120

*1 The amount due to biofuels is the CO₂ emissions reduction due to the contributions of ethyl tert-butyl ether (ETBE)-mixed gasoline, which is considered to have negative CO₂ emissions.
*2 Expansion of the renewable energy business has been calculated using the total power appearance value for each user. The for EV2022 use

generation volume multiplied by the alternative value for each year. The figure for FY2022 was calculated by using the FY2016 alternative value of 0.587 kg-CO₂/kWh. *3 Refer to the Cosmo Energy Holdings' sustainability website for the differences in the methods

of relate to the control a religy including a submitting website for allocate to the control and the functional for calculating CO₂ emissions in Cosmo Energy Group's CO₂ emissions and the Environmental Impact of Business Activities, disclosed on the website (Japanese). W CO₂ emissions associated with power consumption ware calculated using the emission factor.

*4 CO₂ emissions associated with power consumption were calculated using the emission factor of each electric power company. Basic emission factors were applied when calculating the data for FY2020 and before. These were replaced with adjusted emission factors in FY2021. The impact of this change on the CO₂ emissions data for FY2021 is minor.

*5 The FY2020 figures were corrected, reflecting the improvement of the accuracy of aggregation.

CO₂ Emissions and CO₂ Emissions per Unit of Crude Oil Equivalent Throughput

CO₂ emissions from three refineries (LH)

- CO2 emissions per unit of crude oil equivalent throughput (RH)



Two Maruzen Petrochemical projects adopted by NEDO as Green Innovation Fund Projects

Maruzen Petrochemical applied for the Development of Technology for Producing Raw Materials for Plastics Using CO₂ and Other Sources project, one of the Green Innovation Fund Projects offered publicly by NEDO* jointly with partner companies, and two projects were adopted in January 2022.

The goal of one of the projects is the practical utilization of naphtha cracking furnaces fueled by ammonia, which is under the research and development subject, "Development of advanced technology for naphtha cracking furnaces." Maruzen Petrochemical jointly submitted the project with Mitsui Chemicals, Inc., Toyo Engineering Corporation and Sojitz Machinery Corporation. Conventionally, naphtha cracking furnaces run on methane-based fuel. The goal of the project is to switch the furnaces to a fuel whose principal component is ammonia, which would reduce the amount of CO₂ emitted during combustion virtually to zero. The projected project period is ten years from FY2021 to FY2030. We aim to complete the feasibility demonstration of an entirely ammonia-fired commercial cracker in the final fiscal year for the achievement of implementation in society. The four companies, which have acquired knowledge and technological capabilities related to ethylene plants through plant operation and construction and the production of equipment, will work together in this project, aiming to enable society to implement entirely ammonia-fired cracking furnaces and contribute to the reduction of CO₂ emissions from the petrochemical industry as a whole. The other project is aimed at developing a chemical recycling

Conceptual diagram of the "Development of technology for producing chemicals from waste plastics and rubber" project



Encouraging the wind power generation business and contributing to the reduction of CO₂ emissions

Wind power is an eco-friendly, clean energy without the need for concern over the depletion of resources or CO₂ emissions. The total wind power generation capacity of Cosmo Eco Power Co., Ltd. in the Cosmo Energy Group reached 300,000 kW as of June 30, 2022, contributing to CO₂ emission reduction and to improvement in the energy self-sufficiency rate of Japan, which highly depends on imported energy. Our strategy is to continue new investment in onshore wind farms and to enter the offshore wind power generation business early. Through expansion of the wind power generation business, we aim to be beloved by the local community and to contribute to realizing a sustainable society.

technology which will enable the production of olefin through the direct decomposition of waste plastics. It is included in the research and development subject, "Development of technology for producing chemicals from waste plastics and rubber." The application was submitted jointly with Sumitomo Chemical Co., Ltd. The reduction of waste plastics and greenhouse gases emitted due to the use of fossil resources as raw materials in manufacturing has been a major global issue. Solutions to this issue include chemical recycling technologies that use waste plastics as raw materials as an alternative to fossil resources. Above all, the development of a technology for the high-efficiency recycling of polyolefin plastic, which is approx. 60% of the plastic waste in Japan, is strongly desired. In response, Sumitomo Chemical and Maruzen Petrochemical launched a joint initiative to establish a chemical recycling technology which will enable the high-efficiency, direct manufacturing of ethylene, propylene, and other raw materials of basic chemical products from polyolefin plastic through the application of the technologies and expertise they have cultivated to date. We will push forward with this initiative with the goal of quickly enabling society to implement this technology. The projected project period is ten years from FY2021 to FY2030. Through this project, we will strive to reduce CO₂ emissions and supply CO₂-free plant technologies and petrochemical products in the future, aiming to achieve the carbon neutrality of the entire supply chain, including our business partners.

* NEDO: New Energy and Industrial Technology Development Organization

$\mathrm{CO}_{\scriptscriptstyle 2}$ Emission Reduction by the Wind Power Generation



E Engagement with the Environment

Cosmo Zero Carbon Solution Released

Cosmo Oil Marketing has rolled out Cosmo Zero Carbon Solution, a product offering a one-stop solution helping companies and local municipalities introduce and effectively utilize renewable energy and EVs for a decarbonized society. It is proposed as a package including four services: (1) Cosmo Denki Business Green, (2) the installation of solar panels for in-house power consumption, (3) car leasing, and (4) EV car sharing. Enabling customers to drive leased EVs charged using green electricity, Cosmo Zero Carbon Solution enables them to reduce their CO₂ emissions easily and steadily without initial expenses. By expanding EV car sharing to residents and

Sales of Cosmo Denki (Electricity) Green

Cosmo Oil Marketing began to sell Cosmo Denki (Electricity) home-use electricity, in FY2019. Four Cosmo Denki (Electricity) home-use electricity plans are available to meet the diverse needs of customers. In recent years, the number of customers demanding environmentally friendly electricity has been increasing in response to growing concerns about the environment and increasing demand for renewable energy. In response, the company began to offer Cosmo Denki (Electricity) Green in December 2019. Cosmo Denki (Electricity) Green is virtually CO₂ emissions-free electricity^{*1} from renewable energy sources, which has environmental value. It enables customers to participate in the Cosmo Oil Eco Card Fund's eco-friendly projects such as environmental

corporations in the neighborhood, customers can reduce costs and contribute to local communities. In addition, in the event of a disaster, the EVs serve the local community as mobile storage batteries.

Cosmo Zero Carbon Solution is a package product of renewable energy originating from the Cosmo Energy Group's business and assets in mobility businesses which is provided as a one-stop solution. Taking advantage of this unique strength of Cosmo Zero Carbon Solution, we will help corporate customers and local governments solve their issues and implement initiatives to transition to a decarbonized society.

preservation and education.

Further, in October 2020, the company began to provide the Cosmo Denki Business and Cosmo Denki Business Green services to its corporate customers.*2 The company also offers a plan supporting the RE100 initiative, an international initiative whose goal is that 100% of the energy consumed by businesses comes from renewable energy sources. This plan utilizes the electricity generated at the Cosmo Eco Power wind farms.

*1 Electricity with its environmental value proven by non-fossil fuel energy certificates attesting that the electricity is derived from renewable energy, such as the wind used by Cosmo Eco Power to generate electricity.

*2 Cosmo Denki (Electricity) is offered with Cosmo Energy Group company Cosmo Energy Solutions serving as the electricity retailer and Cosmo Oil Marketing as its agency.

The switch to electricity that is virtually all from renewable energy sources achieved at a total of 603 facilities, including service stations directly operated by the Cosmo Energy Group

As the first step towards the Group's achievement of net zero carbon emissions, in May 2022 we completed the transition of all of the service stations operated by Cosmo Oil Sales to electricity that is virtually all from renewable energy sources. We initially planned to complete the switch over three to five years beginning in May 2021, when we announced this project. We actually completed it much earlier, about one year after the announcement. We are the first oil wholesaler in Japan to begin to switch to electricity that is virtually entirely from renewable energy sources, something we will do at more than 600 locations. Using the Cosmo Denki Business Green scheme, all of the service stations directly operated by Cosmo Oil Sales run*1 on electricity that is virtually all from renewable energy sources.

Cosmo Oil Sales, which is in charge of sales at service

stations, operates a total of 603 service stations, vehicle inspection stations, etc. across Japan that consume approx. 40 million kWh of electricity annually.*2 The annual CO2 emissions due to the power consumption of our service stations was 16,000 tons of CO2,*3

The Cosmo Energy Group will continue to work to help achieve a sustainable society by playing a leading role in the spread of renewable energy while also catering to its customer needs

Contributing to the decarbonization of the aviation sector with a next-generation aircraft fuel

In the aviation industry, ICAO*1 set the target of keeping the total CO₂ emissions from international aviation at or below the 2019 level from 2021 onward, at its general meeting held in 2016. The means of achieving this target include the use of SAF.*2 In Japan, ministries, agencies and private enterprises are working together to replace 10% of the fuel consumed by domestic air carriers with SAF by 2030.

In this environment, Cosmo Oil has set the target of supplying 300,000 KL of SAF per year by 2030. We will work

Biodiversity Initiatives

Oil development with consideration for the surrounding environment

Generally, oil exploration and production business entails risks that could affect the environment in terms of its exploration. development, and production processes. We see environmental preservation activities as a priority issue and are promoting initiatives to minimize environmental impact.

In the Hail development project, a detailed environmental impact assessment was conducted and approved by the government prior to the development. During the development, a system to inject wastewater, waste soil, sewage-containing water and other waste generated from drilling into the ground was established, and a zero-discharge operation was implemented. In addition, silt curtains were installed to prevent pollution of the ocean from dredging and disposed dirt as well as muddy water caused by the construction of an artificial island. Moreover, environmental monitoring of air, water quality, aquatic life, and birds is being conducted, which ascertained that the operation is conducted without environmental impact. We will continue to advance oil development with consideration for the surrounding environment.

Environmental protection activities in oil producing countries

On Mubarraz Island, where we have oil pre-treating, storage, and loading facilities, we are involved in wide-ranging environmental protection activities, including the planting of mangroves and other green development, the protection of coral in the sea, and the protection of osprey, a rare bird species.

On Mubarraz Island, water production equipment is used to produce fresh water from seawater. The fresh water is provided to employee residential facilities and crude oil processing facilities. Cosmo Energy Exploration & Production has been actively involved in green development on the island, which had previously been a desert island. In order to re-use precious manufactured freshwater, the company treats sewage-containing drainage water and uses it for watering planted trees.

In addition, we have been planting mangroves around Mubarraz Island for 30 years. This initiative, the Mangrove Planting Program, was recognized by the World Association

to build an SAF supply chain in Japan by striving to diversify raw materials, manufacturing processes, and other elements, such as the commercialization of SAF made from used cooking oil from refineries (selected by NEDO in July 2021*3) and considering manufacturing using Alcohol to Jet (ATJ) technology, which uses ethanol as the raw material

*1 ICAO: International Civil Aviation Organization *2 SAF: Sustainable Aviation Fuel

3 Selected by the New Energy and Industrial Technology Development Organization as a Development of Production Technologies for Biojet Fuels and Development of a Supply Chain Model through Demonstration Project.

In addition, Cosmo Energy Exploration & Production began zero-flaring operations in which all the associated gases from crude oil production are reinjected into the oil reservoir for the first time in the Middle East in 2001. This technology, which enables both environmental protection and the improvement of the oil recovery rate, is closely connected to CCS and CCUS which inject CO_2 into the ground for storage and use. Leveraging our operational experience and technologies, we will strive to develop and apply decarbonization technologies to achieve net zero carbon emissions by 2050.



Installation of silt curtains



Zero-discharge operation

for Waterborne Transport Infrastructure (PIANC) as a program which contributes to creating a natural ecosystem and preventing coastal erosion. We were granted official status as a Supporter of Working-With-Nature in July 2021. We were internationally recognized as "having advanced, comprehensive thinking focused on achieving business objectives while respecting the nature" in our oil exploration and production sites. With this honor, we will continue our

business activities which work with nature.



Mangrove planting



Mangrove pool

^{*1} Excluding CO2 emissions from the use (consumption) of fuel oil and other products sold at

^{*2} As of May 31, 2022, the number of services stations among the 603 directly operated lities was 589 *3 As of the end of FY2021 Figure as of the end of FY2021 from the page of the Group's



We are making efforts to provide a workplace that enables diverse employees to be empowered and facilitates value creation. Goals and KPIs have been set for specific measures in the sustainability plan. Here we present the Cosmo Energy Group's human rights and human resources initiatives.

Respect for human rights

At the Cosmo Energy Group, we have been engaged in activities protecting human rights guided by the Cosmo Energy Group Code of Conduct. In FY2021, we established our Human Rights Policy which conforms to the Guiding Principles on Business and Human Rights, which is a global standard. Every year, we provide

Human Resources Policy

At the Cosmo Energy Group, we understand that human resources are management resources and it is important to maximize their value to achieve the Cosmo Energy Group Management Vision, "In striving for harmony and symbiosis between our planet, man and society, we aim for sustainable growth towards a future of limitless possibilities." To achieve this, we express our determination to utilize human resources and improve their capabilities in the Cosmo Energy Group Code of Conduct. We have established our Human Resource Policy based on the Management Vision and the Code of Conduct. We implement a range of measures for developing human resources guided by this policy.

e-learning training on corporate ethics and human rights to Group employees, aiming to contribute to the achievement of the Cosmo Energy Group Management Vision and the sustainable development of society by engaging in business activities with a commitment respecting human rights.

Promoting Promoting participation and advancement for diverse human resources resources

Encouraging employees to demonstrate their We clarify the roles, job responsibilities, and purposes required of individual employees and reward employees who fully demonstrated their capabilities. capabilities through a iob-oriented system

We will continue to develop employees committed to the profit and growth of the Group as a whole and who can Promoting self-directed identify and address issues on their own growth

We clarify iob-related goals and action plans based on Promoting the challenges in development that each employee must overcome, thus encouraging autonomous career formation and behavior changes and the evaluation of their growth. nt of individuals

Range of measures based on the Human Resources Policy

Human resources development

Promoting participation and advancement for diverse human resources

We create new value by enabling our human resources to demonstrate their diverse values, knowledge and skills as organizational strengths. We are striving to establish workstyles which enable achievements with the highest efficiency by combining commuting and teleworking, aiming to build an environment that enables diverse human resources to achieve maximally.

2 Encouraging employees to demonstrate their capabilities through a job-oriented system

We have introduced a job-oriented system for managers, under which we clarify their roles, responsibilities and goals and strive to enhance their expertise. We also focus our efforts on strengthening the development of human resources with a high level of expertise, such as expertise in the field of digital transformation.

3 Promoting self-directed growth

We have established human resource development measures with the goal of establishing an environment which permits employees to improve their capabilities and skills in a selfdirected manner. In addition, we have introduced a job challenge system, working to build an environment where employees can think about their careers in a self-directed manner, grow daily with a willingness to take on challenges, and develop their careers in their desired workstyles.

4 Promoting the enhancement of individuals

In addition to the above, we are enhancing management training based on our understanding that it is essential to develop human resources by setting appropriate goals and assigning appropriate tasks to each individual employee with a diverse background and support them in forming careers in a self-directed manner, to enhance the individual

Promoting diversity

1 Women's empowerment

To ensure the diversity of our human resources, we prioritize the empowerment of women. We have set the targets of having 6% of managers and 50% of new graduate hires who are women by April 1, 2023. As of April 1, 2022, women are 50% of newly hired employees and 5.9% of managers. We implement workstyle reforms including the introduction of flex time and telework systems, provide more support for the balance of work and childcare than is legally required, and work to increase awareness of gender equality. At the same time, we are proactively recruiting women and assigning them to a wider range of jobs. In recognition of these initiatives, we were granted the Nadeshiko Brand designation for FY2021 as an enterprise which is outstanding in the promotion of the active participation of women.

2 Balancing work and childcare

Recognized for initiatives to encourage employees to balance work and childcare, Cosmo Oil* became Japan's first oil wholesaler to obtain Platinum Kurumin certification in 2018. The percentage of employees who return to work after childcare leave continues to be 100%. In addition, to increase employee awareness of gender equality, we encourage male employees to participate in childcare. We provide a seminar on balancing childcare and work, have partially converted childcare leave into paid leave, introduced childbirth leave, and inform individual male employees of our programs. As a result, the rate at which childcare leave is taken by male employees, which was 13% in FY2017, rose to 62% in FY2021. We give employees on leave the opportunity to do e-learning and have employees talk with their superiors before and after leave. We also provide training to superiors. Thus, we are committed to taking measures to ensure that childcare does not put the brakes on employees' career development.

* The certification was granted to Cosmo Oil because employees of Cosmo Energy Holdings and the core companies are temporarily assigned from Cosmo Oil

3 Advancement of people with disabilities

We will continue to prohibit discriminatory treatment, provide reasonable accommodation, enhance our consulting system, improve the environment, and encourage the development of a barrier-free mindset by enhancing our awareness-raising activities that promote the understanding of people with disabilities, based on the notion of inclusivity, in which diverse employees work in the same workplace, not to mention respect for the independence and dignity of people with disabilities. As of June 1, 2022, the percentage of employees with disabilities was 2.34%.

Promoting new work styles

Following the period when many employees worked from home, we reaffirmed the importance of management and communication. We created Guidelines on New Workstyles, which detail workstyles in the COVID-19 and post-COVID-19 eras based on environmental changes. We position productivity (speed, efficiency, and achievements) as the most important point and attach importance to and pursue the improvement of productivity. Further, we promote measures to optimize working hours to improve

Employees' wellness management

We have established our wellness management policy based on our belief that employees' wellness in mind and body and an environment that allows them to maximize their abilities are indispensable to the safe, reliable supply of high-quality products and services, and promoting the wellness of employees leads to increased corporate value. We focused our efforts on preventive measures, such as prohibiting smoking during work and the introduction of special holidays for complete medical checkups and follow-up examinations. As a result, we were recognized under the Certified Health and Productivity Management Organization Recognition Program (large enterprise category) for the fourth consecutive year in 2022.

6.0 5.9 _3.4 3.2 2.5 April 2018 April 2019 April 2020 April 2021 April 2022 April 2023 target)

Percentage of Female Managers

* The data above covers the professional staff employed by Cosmo Oil, including people dispatched to other companies.Managers are those ranked in a position who have subordinates or those in a similar rank, but without subordinates.

The percentage of managers was calculated on April 1 of each fiscal year. The base date of calculation was previously March 31, the end of each fiscal year. We changed it to April 1 of each fiscal year to reflect the most recent achievements, such as new hires and p and retroactively adjusted the figures for the past fiscal years

4 Active participation of senior employees

Under our policy of expecting employees to continue working actively even after reaching the mandatory retirement age of 60, we apply the same job ranks, remuneration, and appraisal systems that applied before mandatory retirement during the period of reemployment. We also promote senior employees to line managers based on their capabilities and achievements. For employees who are unable to work full time due to their circumstances, we have introduced a program that permits them to work three or four days a week, thus enabling them to work more flexibly.



productivity, including encouraging employees to work mornings, to take a day for relaxation (no-after-hours workday), and to turn off the lights in the workplace at 8:00 pm (to discourage nonessential, after-hours work) and improving business efficiency. In FY2021, both total annual work hours and annual paid leave acquisition rate improved from the previous fiscal year. Our goal is to have each one of our diverse employees select a workstyle in a selfdirected manner and work in good health with high productivity.



Please see our website for the system chart and details of the initiatives. https://ceh.cosmo-oil.co.jp/csr/social/employee6.htm


In 1997, we began to send out the message "Filling Up Your Hearts, Too." More than 20 years have passed since then, but our hope remains the same. Let us present the Group companies' initiatives to fill the hearts of our customers through the everyday supply of energy.

Enhancing customer satisfaction (diagnosis of fulfillment of three promises)

Cosmo service stations strive to fill the hearts of customers based on the three brand promises to deliver comfort, peace of mind, and trust to customers. Three times a year (twice in FY2020), a mystery examiner from an outside investigatory agency explores services at service stations (SS) and provides an evaluation from the customer's view-point. The SS are encouraged to re-acknowledge the customer's viewpoint and provide more satisfying services.

Diagnosis of the three promises is a dual-axis evaluation: operation items and impression items (highest rating of "A" for either). The percentage of SS with an AA or A rating for both operation items and impression items decreased 0.8 percentage points to 48.1% in FY2022 compared to the previous year. We will aim to raise the ratio of AA-rated SS to fill the hearts of more customers.





- products and services.
- Cosmo Oil service station staff will be responsible for their Trust answers to customers' queries

Ratio of AA-rated Service Stations in Evaluation



Promoting the installation of charging equipment for EVs

Cosmo Oil Marketing is a frontrunner in the car life business. For example, the company was the first oil wholesaler to launch a car leasing business for individuals at service stations. In addition, the company is creating services for the coming EV society, to ensure that customers' car lifestyles can be fulfilling as promised by the Sixth Consolidated Medium-Term Management Plan "Oil & New."

As a specific initiative for the realization of the above, the company is working together with e-Mobility Power, Inc. ("eMP") to install rapid charging equipment for EVs at Cosmo Oil Marketing's

Development of EV car sharing and mobility businesses

Cosmo Oil Marketing is creating new EV mobility services. In April 2021, the company began providing EV car sharing services at Cosmo Oil Sales' Self Pure Shinjuku Chuo service station. Electricity from virtually 100% renewable energy sources— the wind power electricity generated by Cosmo Eco Power — is supplied to the rapid charging equipment, enabling customers to charge EVs with virtually CO2-free electricity. Additionally, EVs do not emit any CO₂ while in use. Thus, the car sharing services are friendly to the environment.

In June 2021, we signed a capital and business alliance agreement with ASF Co., Ltd., which plans, develops, manufactures, and sells EVs. Through this alliance, we will provide light (kei) EVs from ASF via the Cosmo My Car Lease and Yasashi (friendly) Car Sharing services, which are existing Cosmo Oil services. Further, we also provide EV car leasing and sharing services through Cosmo Zero Carbon Solution which we launched in September 2021.

Initiatives at Cosmo Oil service stations

1 Petroleum refi lling service for customers with disabilities

At some of our service stations, we help customers who are physically challenged refuel their cars. We will continue to expand this service to more of our service stations.

2 Lease of vehicles for persons with disabilities and for nursing care

Cosmo My Car Lease provides lease of vehicles for persons with disabilities and in nursing care to ensure a better car ownership experience.

affiliated service stations and develop related services. At present, charging services from eMP's network are available via the rapid charging equipment for EVs installed at services stations. We have installed rapid charging equipment for EVs at approx. 20 affiliated service stations. We will expand the equipment to several dozens of service stations by the end of FY2022.

We will continue to develop mobility services that support a sustainable society, to deliver car life services that are more diverse and more convenient than ever, and earth- and people-friendly.

We will continue to introduce more EVs to cater to customer needs, and develop our existing mobility business to achieve carbon neutrality in the future, as we work to achieve continued growth and continue to contribute to the environment.





S Engagement with Customers

Engagement with Customers and Local Communities

The Cosmo Energy Group seeks to proactively communicate with customers and local communities based on Harmony and Symbiosis between Companies and Society, one of the ideas laid out in our Basic Concept of Sustainability.

Cosmo Oil Eco Card Fund

Since 2002 the Cosmo Energy Group has been issuing the Eco Card as a membership card for ¥500 per year, with an additional feature to contribute to environmental activities. There are 62,000 cardmembers as of July 2022. Sources of funding for the Cosmo Oil Eco Card Fund are donations from customers, that is, Eco Cardmembers, subscribers to the Cosmo Denki Green plan, and people donating through the Carlife Square app, as well as the Group. In FY2021, the fund supported 17 projects operated by 15 organizations.

The impact of COVID-19 spread to our environmental activities, forcing us to downsize some planned activities. However, there were projects which achieved great things even in the adverse circumstances, such as the project in Kiribati, in which we accepted local residents who had lost employment opportunities as new participants in our mangrove planting activities.

In 2022, Cosmo Oil Eco Card Fund celebrated its 20th anniversary, and we announced the Medium- to Long-Term Vision. In the next 20 years, we will continue to develop our relationships with our members, partner organizations, and the

Cosmo Waku Waku Camp

The Cosmo Waku Waku Camp (started in 1993), which is a core social contribution activity, is a three-day camp for elementary school students who have lost one or both of their parents in a traffic accident. In FY2021, we had to cancel the camp to prevent the spread of COVID-19. Instead, we distributed the Welcome to the Earth! picture book to 246 children who had lost one or both of their parents in a traffic accident. We created this picture book as part of Cosmo Earth Conscious Act, our activities for promoting the protection and conservation of the global environment, together with Tokyo FM and members of the Japan FM Network Association (JFN). Children who read the picture book shared comments such as, "I want to cherish the Earth because it belongs to

wide range of people in society and address climate change, the protection of ecosystems, and other issues with them guided by our slogan, "Living on the Earth Forever."







Cosmo Oil Eco Card Fund Annual Report 2022 Planned to be published around the end of September 2022 https://ceh.cosmo-oil.co.jp/kankyo/eco/report.html

everyone," and "I was touched to know that many lives are connected to each other."

We also donated a total of 1,879 copies of the book mainly to the local governments of areas where the Cosmo Energy Group has business locations. The books were distributed to local kindergartens, elementary schools, libraries and other facilities via local governments.

We will continue to provide children with opportunities to appreciate the natural environment. At the same time, we will ensure the program leads to the increase of employee awareness, including the development of new values and the promotion of diversity.

COSMO ecolozoo, a website for environmental communication

At the Cosmo Energy Group, we are pushing forward with environmental businesses including the wind power generation business. We have also continued environmental contribution activities that we create with customers for many years, such as the Cosmo Oil Eco Card Fund and the Cosmo Earth Conscious Act.

To increase more customers' familiarity with our environmental activities, we published the COSMO ecolozoo website for environmental communication in December 2021. Through this website, we share environmental news that

attracts public attention, introduce our environmental activities in an easy-to-understand manner, and call for participation in environmental protection activities. Using this website as a starting point, we will expand the circle of environmental activities, thus increasing our contributions to the protection of the global environment.



COSMO ecolozoo website

https://ecolozoo.cosmo-energy.co.jp/

Cooperating with the Emirate of Abu Dhabi in the field of education and the promotion of understanding between Abu Dhabi and Japan

Since September 2011, together with the Ritsumeikan Trust, we have been operating a Japanese language education program at Applied Technology High School, a royal high school in the Emirate of Abu Dhabi. We send three Japanese language teachers to the school and financially support the program. As of August 2021, a total of 161 students have completed the three-year program, and 19 of them have come to Japan to study at universities.

In addition, we began to admit the children of UAE nationals to a Japanese school in 2006. The first batch of these students will be second-year university students this year. 6 of the

Cosmo Group companies' communication with local communities **Cosmo Eco Power**

The Cosmo Energy Group participates in the Aomori-wo Tabeyo Project ("Let's enjoy food from Aomori" project), which is aimed at developing the agricultural and fishing industries of Aomori Prefecture, where Cosmo Eco Power engages in the wind power generation business. The Aomori-wo Tabeyo Project is implemented jointly with local farmers, fishery operators, retail stores, a local logistics company and a university, with the goal of realizing the local production of food for local consumption. We have been delivering and and promoting the appeals of delicious vegetables and fruits produced with strong dedication and fishery products to local people as gifts from the rich nature of Aomori

The Group's initiatives

· Support for building a logistics network

We built a locally circular logistics network, in which service stations in Aomori Prefecture are used as consolidation points, by forming an alliance with a local logistics company. Fresh local agricultural and fishery products are picked up at service stations and other facilities and then delivered to local retail stores, markets and similar facilities, where the tasty products of Aomori are provided to local people



Logistics system

Maruzen Petrochemical

By clarifying its attitude as a good corporate citizen underpinned by the desire to create a rich society, based on its corporate mission, Maruzen Petrochemical is continually engaged in various initiatives to contribute to the development of local communities. The company's Chiba Plant, Denka Co., Ltd., and Showa Denko Materials Co., Ltd. invite children from Goi Elementary School for a visit to the companies' plants every year. In FY2020 and FY2021, due to the COVID-19 pandemic, the tours were canceled and only commemorative gifts were given to the children. In addition, upon request from the

graduates now study at high schools and universities in Japan, and high school students were selected as ambassadors for the Japan Pavilion at Expo 2020 Dubai (held from October 2021 to March 2022).

We hope that these initiatives will help UAE students deepen their understanding of Japanese language and culture and enable them to develop into human resources who can be a bridge between the two countries, leading to the continued development of the multi-layered cooperative relationship between the Cosmo Energy Group and the Emirate of Abu Dhabi and between the country and Japan.

Prefecture. This fiscal year, we also engaged in an initiative using bullet trains to transport fresh agricultural and fishery products from Aomori to other prefectures, where they were sold in Sanchoku-ichi (an event selling products delivered directly from the producing area).

Under the slogan, "Let's be the energy for delivering the happiness of local people," we connect fresh agricultural and fishery products from Aomori to the thoughts of people, supporting the development of the agricultural and fishing industries and regional revitalization.

Support for sales promotion

We supported the promotion of sales of agricultural and fishery products from Aomori with TV commercials and a special website. We also engaged in activities communicating the appeals of the rich nature and agricultural and fishery products of Aomori to the members of Cosmo's Carlife Square app and the Eco Card all over Japan. We also supported sales of the products in markets, Sanchoku-ichi and at other stores.



Aomori Sanchoku-ichi (JR Omiya Station)

Economic Division of the Ichihara-shi government, the manager of the company's General Administration Section presented information about the Goi complex to first-year students at Chiba Prefectural Ichihara High School, in a talk aimed at increasing their knowledge about Ichihara.

In FY2020 and FY2021, we were forced to cancel many annual events held jointly with local communities due to the COVID-19 pandemic. However, we will continue to engage with and contribute to local communities while ensuring that our operations continue safely and stably.



The Cosmo Energy Group has made safe operations and the stable supply of energy one of its most important material issues.

We have intentionally included ensuring safety measures in the governance items as an important foundation for improving our corporate value. We have set KPIs in the sustainability plan and are reinforcing our safety management structure.

Safe operations and stable supply

Chapter 1 of the Cosmo Energy Group Code of Conduct states, "We are determined to be a safe, accident-free corporate group." Our Consolidated Medium-Term Sustainability Management Plan includes targets of preventing work-related accidents and preventing major accidents in "Priority issue G: Ensuring safety measures," and we have been proactive in implementing safety measures.

We investigated the causes of accidents and took comprehensive measures to prevent their recurrence. As a result, there were no major work-related accidents or major accidents in FY2021. In addition, while the number of workrelated accidents increased to 159 in FY2020, it decreased to 113 in FY2021. Our steady safety measures led to a reduction in work-related accidents. Our refineries and plants achieved zero serious accidents, including zero serious labor-related accidents. In FY2022 Cosmo Oil, which possesses refineries, is continuing to execute safety management procedures by using the frequency rate* of lost-worktime accidents and injuries, the rate of unplanned stoppages, and the number of days of stoppage of incoming and outgoing shipments as management indicators. In addition, the company strives for safe operations and stable supply by establishing good workplaces and work environments and by managing the Operational Management System (OMS).

* Frequency rate represents the number of casualties from work-related accidents and injuries in one million work hours and indicates the frequency of occurrence of accidents and injuries.

Number of work-related accidents at the Cosmo Energy Group	FY2	019	FY2	020	FY2021		
	Accidents requiring time off from work	Accidents not requiring time off from work	Accidents requiring time off from work	Accidents not requiring time off from work	Accidents requiring time off from work	Accidents not requiring time off from work	
Accidents during work	13	85	33	95	20	60	
Accidents during commuting	11	13	12	19	12	21	
TOTAL	12	22	15	59	11	3	

(Supplement) Accidents during work include ones that occurred at subcontracting companies.

Quality assurance: enhancing the quality assurance structure

With the objective of the economical, stable supply of safe products that fulfill customers' requirements for quality, Cosmo Oil has a Sustainability Committee to decide on a quality assurance policy and encourage related activities. The Sustainability Committee worked with the Sustainability Strategy Committee of Cosmo Energy Holdings to establish the quality assurance structure of the Cosmo Energy Group.

Cosmo Oil engaged in quality management activities by setting the prevention of serious product (quality) accidents as a KPI. In FY2021, our refineries and plans continued to record

no serious quality-related issues and no shipments of nonconforming products.

It was revealed that proper testing methods and inspection items were not applied for certain products from the Cosmo Energy Group. We announced it on July 13, 2022. We took corrective measures for this matter immediately after it was revealed. We confirmed that it raised no issues with the quality of products that had already been shipped. We will ensure thorough training, review our management of testing methods, and enhance audits, aiming to prevent a recurrence of the problem.

Certified as a certified business operator (tokutei nintei jigyosha/ super nintei jigyosha)

In August 2022, the Yokkaichi Refinery obtained super nintei jigyosha (tokutei nintei jigyosha) certification. In this special certification program, the Ministry of Economy, Trade and Industry certifies businesses which have achieved high-level voluntary safety activities, through activities such as the utilization of IoT

Benefits of being certified

Category	Conventional certification program	Super Nintei certification program
Period of continuous operation	Fixed(2 years/4 years)	Arbitrary with an upper limit of 8 years (The business operator is allowed to set the period on their own in accordance with risks.)
Completion inspection/safety inspection methods	Methods specified by the Minister of Economy, Trade and Industry	Wider inspection method options (To be determined by the business operator)
Equipment renewal (Same specifications)	Prior permission required	Prior permission not needed in a wider range

The benefits described above enable more flexible, efficient business operation than before. They also lead to greater international competitiveness. It also has great meaning that we obtained the certification of the Chiba Refinery, which has the largest refining capacity among Cosmo Oil's refineries and is located close to the Greater Tokyo Area, and of Yokkaichi Refinery, which has been operating for more than 78 years. At Cosmo Oil's refineries, we have been carrying out and continuously improving safety management activities to achieve a level of safety that exceeds the global standard, with an Operation Management System (OMS) that is the foundation of our operating base, in our efforts to improve our safety capabilities. We will continue to take actions to remain a safe, accident-free corporate group as set forth in the Cosmo Energy Group Code of Conduct, as we work to eliminate imperfections. At the same time, we will contribute to the enrichment of customers' lives through safe operations and a stable energy supply.

Operational Management System (OMS)

Cosmo Oil adopted an Operations Management System (OMS) in 2016 to achieve safety operation and stable supply that are superior to the global standard. OMS is an operation system that serves as a basis for the operation of a refinery. Activities under

Ensuring safety measures by Group companies

Cosmo Eco Power

Cosmo Eco Power, which is engaged in the wind power generation business, performs regular check-ups, responses to malfunctions or issues, and 24-hour remote monitoring to operate wind farms safely and efficiently. Based on past records and experience, we estimate potential issues and timing and focus on preventive maintenance comprising the replacement of certain components ahead of any long suspension in operation.

Maruzen Petrochemical

Maruzen Petrochemical declares in its management principles that "Our goal is to be the number one company in safety" and believes that safety is its top priority and its corporate mission. The company also pledges in its Action Standard (CC10), which it has established, to strive to predict risks of accidents or and big data, high-level risk assessment, and the third-party evaluation of safety capabilities. Yokkaichi Refinery is the second in the Group to be certified under the program, following Chiba Refinery that was certified in April 2021.





Yokkaichi Refinery, which was certified as a super nintei jigyosha in August 2022



Use of drone technologies

OMS are based on the keywords/key phrase of "persevering," "risk-based," and "continuous improvement."

Through OMS activities, we will strive to prevent failures and improve the level of operation and maintenance.

incidents and prevent their occurrence, thereby continuing operation with zero accidents or incidents.

The entire company, including Chiba Plant and Yokkaichi Plant, is promoting concerted safety management efforts focused on process safety, disaster prevention, labor, and logistics, which are called "the Number One Safety Activity."

In response to the COVID-19 pandemic that began in 2020, the company has been taking thorough safety management measures while controlling infections. Thus, it has completed large-scale regular maintenance without trouble and has maintained safe, stable operations. The company will meet the expectations of all stakeholders by giving top priority to safety at all times and continuing safe, stable operations.

Strengthening Corporate <u>Governance Structure</u>

G

The Cosmo Energy Group's most important material issues, the foundation for business continuity, include ethics and integrity, risk management and compliance. We will work to sincerely address material issues and reinforce our governance structure to improve our corporate value. We have set KPIs in the sustainability plan, under which we promote the development of a corporate culture of integrity and reinforce our internal systems and compliance structure.

Risk management

At the Cosmo Energy Group, the Sustainability Strategy Committee deliberates measures to address risks related to the Group as a whole, collects information about initiatives taken by Group companies to address risks, and discusses the progress of initiatives (two times a year), to ensure each Group company's safe, constructive operation of business. The results of deliberation and discussion are reported to the Board of Directors and shared with Group companies via the Sustainability Liaison Committee.

Core operating companies and semi-core companies have their own sustainability promotion committees and similar specialized organizations, which promote measures to address the risks faced by the Group companies including their affiliates and manage the progress of their safety activities by proposing safety measures. Similar risk management is also promoted within the affiliates of each Group company, and their initiatives are reported to the Sustainability Strategy

Cosmo Energy Group (CEG) priority risks

At the Cosmo Energy Group, we have set the enhancement of selection of priority risks and responses as a KPI for risk management, which is a priority issue in the Consolidated Medium-Term Sustainability Management Plan. In FY2021, the priority risks that the Cosmo Energy Group as a whole should take on were defined as CEG priority risks. We selected the five risks at right and have been steadily acting to address them. Committee via the core operating companies or semi-core companies supervising them.

Thus, the risk management of the Group as a whole is being enhanced through strong Group governance and the autonomous initiatives of each company.

Risk Management System



FY2021 priority risks	Actions taken in FY2021
Media-response training in emergencies	Provide training.
Systematic preparations related to infection and the strengthening of countermeasures	Respond flexibly to the COVID-19 infection status and official announcements by the government, etc.
Measures to enhance earthquake BCP	Hold drills. Promote the visualization of the situation.
Elimination of harassment	Provide training to line managers.
Elimination of work-related accidents	Begin operating a crisis reporting app to strengthen management.

Compliance: corporate ethics promotion structure

At the Cosmo Energy Group, actions to be taken and rules to be observed by all officers and employees in their daily operation to achieve the sustainable growth established in the Cosmo Energy Group Management Vision, are set forth in the Cosmo Energy Group Code of Conduct. To improve the ethics of each individual employee, we develop, implement, and assess measures, including corporate ethics and human rights training for all employees of the Group.

The Cosmo Energy Group Corporate Ethics Consultation Helpline, through which employees' misconduct such as violation of laws and corporate rules, as well as ethical issues can be reported or discussed anonymously, was formed within the Corporate Ethics Office and at an outside law firm. In FY2021, the Helpline received 24 inquiries (17 inappropriate actions and 7 cases of consultation on harassment).

On the Harassment Consultation Helpline, outside experts respond to consultations on workplace interpersonal issues, including sexual or power harassment. Counseling by outside experts is expected to have a positive impact in preventing mental disorders and helping people find prompt solutions in work environments.

In response to the revision of the Whistleblower Protection Act, we provide regular training to responsible people. Further, details of the reported and discussed issues and responses

Sustainable procurement

At the Cosmo Energy Group, we believe that fulfilling social responsibilities throughout the supply chain, including responsibilities related to compliance with laws and regulations, fair trade, respect for human rights, and environmental consideration, is essential for achieving the Cosmo Energy Group Management Vision, and we revised our Sustainable Procurement Policy in February 2022. This is a basic policy on the social responsibilities that we should fulfill to engage in supply chain-wide efforts to realize a sustainable society, based on the Cosmo Energy Group Management Vision and the Cosmo Energy Group Code of Conduct.

In its purchasing activities, Cosmo Energy Holdings and its core operating companies are promoting initiatives to

Information disclosure: inclusion in ESG indices

Cosmo Energy Holdings has been included in the FTSE4Good Developed Index for 21 consecutive years since 2003 when the Company was adopted. It was the first Japanese oil company to have that distinction.

The Company was also selected as a constituent of the FTSE Blossom Japan Index, which the Government Pension Investment Fund (GPIF) has adopted as an Environmental, Social and Governance (ESG) investment index for Japanese equities for the seventh consecutive year. Cosmo Energy Holdings was also selected for the sixth consecutive year* as a constituent of the SOMPO Sustainability Index, a proprietary index created by Sompo Asset Management based on a combination of ESG assessments and stock valuation. * Including constituents of the SNAM Sustainability Index up to FY2019 are regularly forwarded to directors who are members of the Audit and Supervisory Committee of the Company for the continual improvement of the whistleblower system and the work environment. In FY2021, there were no incidents involving a serious compliance violation at the Group.*

* Violations that are considered a crisis that is likely to have a significant negative impact as defined in the internal rules



Number of Inquiries Received

* In FY2017, the Harassment and Human Rights Consultation Helpline was eliminated and integrated into the Cosmo Energy Group Corporate Ethics Consultation Helpline.

eliminate business transactions with antisocial forces, in addition to green procurement in which the green degree evaluation, as well as conventional quality, price, and delivery factors, are comprehensively evaluated. In the period of the Consolidated Medium-Term Sustainability Management Plan, we collaborate with suppliers who agree with these initiatives, in our efforts to achieve sustainable development. In FY2021, we evaluated our suppliers in accordance with the Cosmo Energy Group's Sustainable Procurement Policy and the CSR-based Purchasing Guidelines that were formulated by Cosmo Oil. We will continue to ask suppliers for their understanding and agreement, and request that actions be taken in compliance with the Guidelines.



L'és

G Strengthening Corporate Governance Structure

Corporate Governance

Basic governance structure and business execution system

The Cosmo Energy Group transitioned to a holding company structure in October 2015 and became a company with an audit and supervisory committee structure to increase the ratio of outside directors and strengthen the audit and supervisory functions of the Board of Directors.

With the aim of clearly separating management oversight and business execution, the Company has adopted an executive officer system. As a result, some authority has been transferred to executive officers to enable the Company to respond promptly to changes in the business environment and carry out swift decision-making.

Board of Directors

The Board of Directors is composed of six directors (excluding directors who are Audit and Supervisory Committee members) (four men including one independent outside director and two women including one independent outside director) and three directors who are Audit and Supervisory Committee members (two men including one independent outside director and one woman who is an independent outside director). It decides important matters such as the basic management policy and supervises the execution of business duties. To enhance the supervisory function of the Board of Directors and realize fair and highly transparent management, the Company has appointed four independent outside directors. Independent outside directors have immediate access to the necessary information.

Audit and Supervisory Committee

The Audit and Supervisory Committee is composed of three members in total (one full-time and two part-time members), including two independent outside directors, and uses the internal control system to audit and supervise the business execution of directors as well as the state of execution of other business duties in general that are related to the management of the Group. The Chairperson is an independent outside director.

Executive Officers' Committee

The Executive Officers' Committee comprises major executive officers, including the Chief Executive Officer, and directors that are full-time Audit and Supervisory Committee members, and functions as an advisory body to the President. The committee makes decisions concerning the execution of business in accordance with management policies determined by the Board of Directors.

Nomination and Remuneration Advisory Committee

The Company has established the Nomination and Remuneration Advisory Committee, which is an advisory body to the Board of Directors, to ensure transparency and objectivity in the selection of director candidates and the compensation determination process. The committee comprises five members in total, namely, one internal director and four independent outside directors, and deliberates on the nomination and remuneration of executive officers. The Chairperson is an independent outside director.



Executives' remuneration plan

The Company has introduced a remuneration plan linked to business performance for its directors (excluding outside directors and directors who are Audit and Supervisory Committee members) and executive officers. Generally, the goal of this plan is to provide them with an incentive to increase medium- to long-term business performance, corporate value and shareholder value, and share the economic interests of the shareholders sustainably, encouraging the directors and executive officers to willingly take on challenges, and ensuring transparency and objectivity in the compensation determination and evaluation processes.

This remuneration system consists of basic remuneration that is fixed remuneration, annual incentive remuneration, and medium- to long-term incentive remuneration. The annual incentive remuneration (bonuses) is based on a performance evaluation conducted using the percent of the target consolidated ordinary income (excluding the impact of inventory valuation) of ¥100 billion that is achieved each fiscal year, the evaluation of initiatives for achieving ESG targets,

Revision of the annual incentive plan

The Nomination and Remuneration Advisory Committee continues to discuss the remuneration plans that would be desirable for the Cosmo Energy Group and its shareholders. In FY2022, the Company revised the annual incentive plan to be able to continue to forge ahead to achieve sustainable growth, a goal set in the Cosmo Energy Group Management Vision, amid the significant changes in the business environment. As a result of the revision, the following evaluation categories were added. The ratio for the annual incentive plan in FY2022 has been set as follows. The portion linked to consolidated ordinary income excluding the impact of inventory valuation constitutes 80%, the portion linked to the evaluation of initiatives for achieving ESG targets is 10%, and the portion linked to the evaluation of the performance of individuals constitutes 10%

Executives' Remuneration Plan



(performance-linked coefficient: 0-200%

Corporate Governance Structure

and the evaluation of the performance of individuals based on the perspective of nominating management members. For the medium- to long-term incentive remuneration, the

performance-linked coefficient is determined based on the ratio of the Company's Total Shareholder Return (TSR) to the Tokyo Stock Price Index (TOPIX) growth rate and consolidated net debt-to-equity ratio, so that the incentive scheme reflects the outcome of the management's efforts.

Regarding the remuneration system, a ratio of 4:3:3 has been established for basic remuneration: annual incentive remuneration (when all indicators are fully achieved): mediumto long-term incentive remuneration (when stock price conditions are fully achieved).

The medium- to long-term incentive remuneration is a stock remuneration plan that uses a trust system. It increases management motivation based on an awareness of increasing corporate value over the long term as directors and executive officers share changes in shareholder value with shareholders

Evaluation of initiatives for achieving ESG targets

The evaluation of initiatives for achieving ESG targets is reflected in remuneration to encourage directors and executive officers to address the material issues identified in FY2021 with a sense of urgency and sincerity in the promotion of sustainable management. Indicators for the evaluation of initiatives for achieving ESG targets will continue to be discussed as an important issue regarding executives' remuneration plans in light of the next consolidated medium-term management plan starting in FY2023 and other factors.

Evaluation of the performance of individuals based on the perspective of nominating management members

Taking advantage of the characteristics of the Company's Nomination and Remuneration Advisory Committee, which deliberates on the nomination and remuneration of executives, the Company ensures the evaluations of individual directors and executive officers based on performance evaluations and multilateral evaluations from the perspective of nominating management members are reflected in their remuneration. Comprehensive qualitative evaluations are conducted with the goal of enabling the contributions of individuals, which are not seen in the performance figures of the Company as a whole to be reflected in their remuneration

1 Remuneration linked to business performance is not applicable to directors who are outside directors or Audit and Supervisory Committee members *2 Linked to the ratio of the Company's TSR to the TOPIX growth rate as well as to the consolidated net debt-to-equity ratio for FY2020-FY2022



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G Strengthening Corporate Governance Structure

Evaluation of effectiveness of the Board of Directors

Method of evaluation

All members of the Board of Directors answered an anonymous questionnaire. Some of the questions asked in FY2021 differed from those in FY2020, reflecting factors including the actions that have been taken based on the results of the FY2020 evaluation of the Board of Directors' effectiveness. Furthermore, new questions concerning the Nomination and Remuneration Advisory Committee, an advisory body to the Board of Directors, were added. Specifically, directors were asked to score for quantitative evaluation such aspects as the composition, roles and operation of the Board of Directors, the Board's efforts with respect to the Corporate Governance Code, the new initiatives pursued during the fiscal year and the effectiveness of the Board of Directors, as well as the composition, roles and operation of the Nomination and Remuneration Advisory Committee. The questionnaire also included many free comment sections for directors to provide their thoughts on each of these aspects, including the perceived challenges and suggestions on the means of improvement.

The Secretariat of the Board of Directors and the Nomination and Remuneration Advisory Committee compiled and analyzed the responses to the questionnaire all the directors had submitted. The Board of Directors and the Nomination and Remuneration Advisory Committee then evaluated the results and discussed their approach to future initiatives.

Overview of the evaluation results

Based on the analysis and evaluation of the questionnaire results, we have concluded that the effectiveness of the Company's Board of Directors is generally ensured and that the Board is continuously striving to improve its effectiveness as demonstrated by the following findings:

- The Board of Directors consists of an appropriate number of directors, its composition is more diverse than in the past and it serves as a venue for the free and open exchange of opinions.
- Amid the accelerating social trend toward decarbonization, the Board of Directors was able to deepen its discussions from a medium- to long-term perspective. It also successfully enhanced its monitoring function by conducing more rigorous reviews of the Medium-Term Management Plan and of investments.
- In addition to the above, the Board of Directors made improvements by hearing reports to the Board of Directors from the Nomination and Remuneration Advisory Committee on the status of its activities and by expanding the scope of coverage of the effectiveness evaluation of the Board of Directors, which were issues in the FY2020 evaluation of the effectiveness of the Board of Directors.

Future issues and our policies on pursuing initiatives

The following initiatives will be pursued to further enhance the effectiveness of the Board of Directors.

- 1 Continuously consider the Board of Directors' authority and the agenda items for discussion that would be in line with the Purposes of the Board of Directors.
- 2 Consider systems to enable independent outside directors to further exercise their functions.

Our policies in pursuing these initiatives are described below.

1 Continuously consider the Board of Directors' authority and the agenda items for discussion that would be in line with the Purposes of the Board of Directors.

In FY2020, our Board of Directors redefined its purposes. To align with those purposes, in FY2021, the Board held more discussions on sustainability and on the direction that we should take over the long term. Furthermore, the Board implemented initiatives including hearing reports from the presidents of our core operating companies on such topics as their management issues and deliberating on them. In FY2022, we will be formulating our seventh Medium-Term Management Plan starting from FY2023, and therefore, more extensive discussions by the Board of Directors on the formulation of the Medium-Term Management Plan are planned. In addition, to further strengthen the Board's supervisory function, a review of its authority will also be discussed.

Purposes of the Board of Directors

- The Board of Directors shall strive for the Group's sustainable growth and enhancement of corporate value over the medium to long term.
- The Board of Directors shall endeavor to comply with laws and regulations and permeate corporate ethics. On the premise of these, it shall emphasize on decision on a major direction of the Company, engagement with stakeholders (including information disclosure) and supervision of execution, for speedy business management.

(2) Consider systems to enable independent outside directors to further exercise their functions.

Following the FY2022 General Meeting of Shareholders, plans call for four of the nine members of the Board of Directors to be independent outside directors. As a means of enabling independent outside directors to further exercise their functions, consideration will be given to creating such systems as those that would increase opportunities for directors to exchange information amongst themselves as well as with the management team.

Evaluation of the Nomination and Remuneration Advisory Committee

Evaluation through questionnaires and internal analysis confirm our Nomination and Remuneration Advisory Committee to be effective as detailed below:

- The Committee is appropriately structured in terms of number of members, proportion of outside members and diversity, and allows for free and open exchange of opinions.
- The Committee takes into account information provided by consultants and recent trends both inside and outside the company when holding discussions.
- Nominations and remuneration are both determined through appropriate processes.

Furthermore, the key achievements made by the Committee are as detailed below.

- Changes to the composition of directors have been made so that more than one-third of the board members are now independent outside directors.
- ESG and individual targets have been added to the remuneration KPI's for executive officers, in order to further deepen the mindset of sustainable management
- The structure of the Nomination and Remuneration Advisory Committee have been enhanced to further improve the objectiveness and transparency.

The Committee is committed to further raise its effectiveness and the company's governance in the areas of director nomination and remuneration.

Election and dismissal of CEO

In electing a president, the active president selects a candidate from among multiple candidates based on information from a multilateral human resource evaluation, including the evaluation of their conformity to the Group's human resource requirements, and the results of performance evaluations conducted every fiscal year. Then, the president submits a proposal to the Nomination and Remuneration Advisory Committee. The Nomination and Remuneration Advisory Committee checks the appropriateness of the president's proposal and submits their recommendation to the Board of Directors.

Policy and procedure for succession planning

Regarding succession planning, the Cosmo Energy Group positions the development of successors to the president as one of the most important strategies supporting the Group's sustainable growth. The basic policy is to ensure the transparency and objectiveness of candidate selection and develop successors who possess the capabilities and qualities that are appropriate for the president of the Group through appropriate job assignment, the provision of opportunities to receive external training and other initiatives.

In the successor development period, successor candidates are subject to multilateral human resource evaluations, including the evaluation of their conformity to the Group's human re-source requirements, as well as annual performance evaluations. At the same time, support for their future development is provided in a well-planned manner by considering and assigning job assignments based on how

Activities of the Nomination and Remuneration Advisory Committee in FY2021

In FY2021, the Nomination and Remuneration Advisory Committee met eight times and mainly deliberated the following agenda items.

	Matters deliberated/evaluated (regarding nomination)	Matters deliberated/evaluated (regarding remuneration
May 12, 2021	 Reports on the latest environment pertaining to the roles and functioning of the Board of Directors 	 Consideration of the revision of the FY2021 executives remuneration plan Confirmation of the content of remuneration disclosure
June 14, 2021	 Confirmation of the need to change human resource requirements Confirmation of the content of executive officers' targets 	 Consideration of the revision of the remuneration plan Determination of the amount of stock remuneration
June 24, 2021	 Election of members and chairperson of the Nomination and Remuneration Advisory Committee 	
July 29, 2021	Consideration of the future composition of directors	
October 14, 2021	 Confirmation of the current process related to successor nomination, etc. 	
December 22, 2021	 Performance evaluation of the executive officers of Cosmo Energy Holdings and the three core operating companies Confirmation of the results of multilateral evaluations of executive officers 	 Reports on the environment surrounding management remuneration Examination of the appropriateness of the current remuneration policy
January 19, 2022	 Appointment of Executives of Cosmo Energy Holdings and the three core operating companies 	• Deliberation of the revision of the remuneration plan
March 23, 2022	 Creation of FY2022 skills matrix Revision of the rules of the Nomination and Remuneration Advisory Committee and election of its members Confirmation of activities in the next fiscal year 	 Deliberation of the revision of the remuneration plan Confirmation of activities in the next fiscal year

In addition, every fiscal year, the Nomination and Remuneration Advisory Committee deliberates on the necessity of submitting a proposal regarding the dismissal of the president for discussion at the Board of Directors, in light of human resource requirements, performance standards, and other criteria. If the committee, following deliberation, believes it is necessary to submit such a proposal to the Board of Directors, the Board of Directors decides whether to dismiss the president based on the recommendation of the Nomination and Remuneration Advisory Committee.

each candidate has developed, providing them with opportunities to receive external training and other initiatives. The Nomination and Remuneration Advisory Committee is provided with information about multilateral human resource evaluations and the results of the annual performance evaluations and continues to evaluate the appropriateness of the successor candidates and the succession plan.

In the selection of the final successor candidate, a person with the capabilities and qualities that are sufficient and appropriate for the Group's president is selected by the president from among multiple candidates, and the president submits the proposal to the Nomination and Remuneration Advisory Committee. The Nomination and Remuneration Advisory Committee deliberates on the appropriateness of the content of the president's proposal and submits their recommendation to the Board of Directors. fey 2º

G Strengthening Corporate Governance Structure

Directors and Executive Officers (As of July 1, 2022)

Hiroshi Kiriyama

position)

Representative Director, Group CEO



1979.4 Joined Daikvo Oil Co., Ltd. 2013.6 Cosmo Oil Co., Ltd. Director, Senior Executive Officer

2015.10 Director, Senior Managing Executive Officer of the Company 2016.6 Representative Director, Executive Vice President 2017.6 Representative Director and President Representative Director, Group CEO (current

le has been responsible for supply and demand, and He has been responsible for supply and demand, and corporate planning departments for a long time, has participated in decisions on a variety of alliances in Japan and overseas, and possesses abundant expertise and experience in overall corporate management. In addition, he has been managing the Group as President and Representative Director since June 2017. Above all, in recent years, he has achieved results even in an environment of fluctuating crude oil prices, declining demand for oil, and other adverse conditions.



Takayuki Uematsu

Representative Director Senior Managing Executive Officer

- 1992.11 Joined Cosmo Oil Co. Ltd
- 2015.6 General Manager, Finance Dept.
- 2015.10 General Manager, Finance Dept. of the Company
- 2016.6 Executive Officer, General Manager, Finance Dept. 2018.4 Managing Executive Officer

2018.6 Director, Senior Executive Officer

2020.6 Representative Director, Senior Executive Officer

2021.4 Director, Senior Managing Executive Officer (current position)

He joined the Company after working for a foreign financial He joined the Company after working for a foreign financial institution, and has since been demonstrating his expertise mostly in the department of finance. Having begun to serve as Director, Senior Texecutive Officer in 2018 and as Representative Director, Senior Managing Executive Officer in 2021, he has been in charge of the Corporate Communication Dept., the Accounting Dept., and the Finance Dept., and has contributed to improving the corporate value of the Company through initiatives including branding and investor relations activities. tor relations activities.

Junko Takeda Directo

Senior Executive Officer

1990.4 Joined Cosmo Oil Co., Ltd.

2015.10 General Manager, Human Resource and General Affairs Dept 2017.4 General Manager, Planning & Management Dept.

2019.4 Director, Executive Officer 2020.4 Executive Officer, General Manager, Human Resource Dept. of the Company

2022.4 Managing Executive Officer

2022.6 Director, Senior Executive Officer (current position)

After experiencing sales, corporate planning, human After experiencing sales, corporate planning, human resource, and other departments, she was responsible for the management of the refining business as Director and Executive Officer in charge of corporate planning and human resources at Cosmo Oil in 2019. She thus contributed to driving business efficiency improvements and enhancing productivity. In 2020, she was appointed Executive Officer and General Manager of Human Resource Dept. of the Company. She has since been promoting diversity and divingn personal afficiency time of the Group standity. diversity and driving personnel affairs of the Group, steadily roducing results.

Takuya Kurita

Independent Outside Director

1984.4 Joins Ministry of Construction (now Ministry of Land, Infrastructure, Transport and Tourism).
 2007.9 Counsellor, Cabinet Secretariat

- 2009.7 Director, Urban Renewal Promotion Division, Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
 2011.7 Counselor, the Headquarters for the Reconstruction from the Great East Japan Earthquake
- 2012.2 Counselor, Reconstruction Agency 2013.8 Director, Personnel Division, MLIT
- 2015.7 Director-General, City Bureau, MLIT 2018.7 Director-General, Policy Bureau, MLIT
- 2020.7 Vice-Minister, Land, Infrastructure, Transport and Tourism, MLIT 2021.7 Resigned from Vice-Minister, Land, Infrastructure, Transport and Tourism, MLIT
- 2021.10 Corporate Advisor, Sumitomo Mitsui Trust Bank, Limited
- (current position) 2022.6 Independent Outside Director of the Company (current position)

2022.2.6 Independent Utilise Director of the Company (current position) He joined Ministry of Construction (now known as Ministry of Land, Infrastructure, Transport and Tourism, or MLIT) in 1984. He was appointed the Director of the Urban Renewal Promotion Division, City and Regional Development Bureau, of MLIT in 2009 and contributed to the development of the Japanese economy through urban development. In 2011, he was responsible for national land policy as the Counselor of the Headquarters for the Reconstruction from the Great East Japan Earthquake. He was appointed the Vice-Minister of Land, Infrastructure, Transport and Tourism, MLIT in 2020 and retired in 2021.





- Director Full-time Audit and Supervisory Committee Member 1993.8 Joined Cosmo Oil Co., Ltd.
- 2012.6 General Manager, Internal Auditing Office 2015.10 General Manager, Internal Auditing Office of the Company
- 2016.4General Manager, Accounting Dept.2016.6Executive Officer, General Manager,
- Accounting Dept. President, Representative Director, Eco Power Co., Ltd. (currently Cosmo Eco Power Co., Ltd.)
- 2020.6 Director of the Company (Full-Time Audit and Supervisory Committee Member) (current position) Outside Director (Audit and Supervisory Committee mber), KYOEI TANKER CO.,LTD. (current position)

He joined the Company after working for a general electronic component manufacturer and has been engaged mainly in the accounting department. After his appointment as an executive officer of the Company, he has continued to contribute to the management of the Group. For example, since 2018, he has been leading the wind power generation business at the company now known as Cosmo Eco Powe Co., Ltd.

Keiichi Asai

Independent Outside Director, Audit and Supervisory Committee Member 1978.4 Joined Mitsubishi Corporation

- 2009.4 Executive Officer, Head of CEO office, Energy Group, Mitsubishi Corporation
- 2013.4 Director and Vice President, Lithium Energy Japan 2014.9 Representative Director, President and Chief Executive Officer, KH Neochem Co., Ltd.
- 2021.6 Outside Director of the Company (Audit and Supervisory Committee Member) (current position) 2022.6 Independent Outside Director, Sun Frontier Fudousan Co., Ltd. (current position)

After joining Mitsubishi Corporation, he worked in petroleum business departments including oil sales, supply and demand, and refining. He was also assigned to the United States and India, where he was consistently involved in ses in the energy sector.

Executive Officers





Shigeru Yamada Directo

- Senior Executive Officer 1988.4 Joined Cosmo Oil Co., Ltd.
- 2015.6 General Manager, Supply Dept. 2018.4 Executive Officer, General Manager, Corporate Planning Dept. of the
- Company 2020.4 Managing Executive Officer

2020.6 Director, Senior Executive Officer (current position)

He has mainly worked in the sales, supply and demand, He has mainly worked in the sales, supply and demand, and corporate planning departments, and has extensive knowledge and experience across the Group's business domain. He was appointed Executive Officer and General Manager of the Corporate Planning Dept. in 2018 and as Director and Senior Executive Officer in 2020, having steadily produced results in initiatives toward achieving the Sixth Medium-Term Management Plan, promotion of Group management, overall control related to capital and business alliances and development of new business projects and alliances, and development of new business projects, and

Ryuko Inoue

- Independent Outside Director
- 1981.4 Joined Ministry of Agriculture, Forestry and Fisheries (MAFF)
 2003.1 Minister, Embassy of Japan in Italy, Permanent Representative of Japan to Food and Agriculture Organization of the United Nations (FAO) and World Exact Decompose (MED)
- Food Programme (WFP) 2016.4 Deputy Director General, Agriculture, Forestry and Fisheries Research Council, MAFF
- 2017.7 Retired MAFF
- 2017.11 Registered as attorney-at-law Of Counsel, Atsumi & Sakai (current position)
- 2019.6 Outside Director, Nippon Steel Trading
- Corporation (current position) 2021.6 Independent Outside Director of the Company (current position)

At Ministry of Agriculture, Forestry and Fisheries, she was involved in food security in Japan and other countries, the development of agriculture, forestry, and fisheries into growth industries, and other tasks. In addition she has been working actively as a lawyer since she registered as an attorney-at-law in 2017. She has also been working as an outside director of Nippon Steel Trading Corporation since 2019.









rasi	ако такауатта
	ndent Outside Director, Audit and isory Committee Member
1980.4	Joined Shiseido Co., Ltd.
2009.4	General Manager, Social Affairs and Consumer Relations Department
2010.4	General Manager, Corporate
	Social Responsibility Department
2011.6	Full-time Audit & Supervisory Board Member
2015.6	Outside Director, Nippon Soda Co., Ltd. Outside Director, The Chiba Bank, Ltd. (current position)
2016.6	Outside Audit & Supervisory Board Member, Mitsubishi Corporation
2017.6	Outside Audit & Supervisory Board Member, Yokogawa Electric Corporation (current position)
2019.6	Independent Outside Director of the Company (Audit and Supervisory Committee Member) (current position
	experience as General Manager of the Consumer ion Center, General Manager of the Corporate Social

Vaauka Takavama

ponsibility Department and other positions at Shiseido Responsibility Department and other positions at Shiseldo Co., Ltd., as well as being appointed Audit & Supervisory Board Member and Advisor of the same company. She has also served as Outside Director and Outside Audit & Supervisory Board Mem-ber for several listed companies. Sh is an Outside Director who has been a Member of the Audit and Supervisory Committee since 2019. s. She

Noriko Rzonca

Senior Executive Officer, CDO in charge of Corporate DX Strategy Dept., Corporate inication Dept. and IT Initiative Dept.



Gota Sakai Executive Officer

General Manager of Corporate Planning Dept

Yoshihiko Sato General Manager Secretariat Office

Tomoki Iwai General Manager, Accounting Dept

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G Strengthening Corporate Governance Structure

Status of Attendance at Board of Directors' Meetings and the Skills Matrix of Directors and Executive Officers (June 23, 2022)

Status of attendance at meetings of the Board of Directors/Audit and Supervisory Committee/ Nomination and Remuneration Advisory Committee Number of Nomination and Name Gender Position Attribute Committee membership, etc. years as Audit and Supervisory Other t Remuneration Board of Directors Committee Petroleum Business (Oil) director* Advisory Committee (Renev Ener Number of Attendance Number of Attendance Number of Attendance atte Chair of the Board of Directors Hiroshi Representative Male Full-time Member of the Nomination and 100% 8/8 times 100% Ο 7 vears 9/9 times 0 Kiriyama Director, Group CEO Remuneration Advisory Committee Representative Takayuki Director Senior 0 Male Full-time 100% 4 years 9/9 times -Uematsu Managing Executive Officer Director Shigeru Ο Male 0 Senior Executive Full-time 2 years 9/9 times 100% Yamada Officer (Newly appointed) Appointed in June Director Junko Takeda Female Full-time Ο -Senior Executive 2022 Officer Part-time, outside Independent Outside Member of the Nomination and Female 100% Ryuko Inoue 8/8 times Director independent 1 years Director Remuneration Advisory Committee director*3 (Newly appointed) Part-time, outside Appointed Member of the Nomination and in June 2022 0 Takuya Kurita Male Independent Outside independent Remuneration Advisory Committee Director director*3 Director Full-time Audit and Toshiyuki Member of the 16/16 Male Full-time 9/9 times 100% 100% Ο 0 2 years Audit and Supervisory Committee Supervisorv times Mizui Committee Member Independent Outside Member of the Nomination and Part-time, outside Yasuko Director, Audit and 16/16 Female 9/9 times 100% 100% 8/8 times 100% 3 vears Remuneration Supervisory Committee Member Takayama independent director* times Advisory Committee Chairman Chairman of the Nomination and Independent Outside Remuneration Part-time, outside Director, Audit and 13/13 Ο Male Advisory Committee 0 Keiichi Asai 1 years 8/8 times 100% 100% 6/6 times 100% Supervisory Committee independent director*3 times Member of the Audit and Supervisory Member Committee Senior Executive Noriko Female Full-time Officer Rzonca CDO (Delegated) General Manager of Corporate Gota Sakai Male Executive Officer Full-time 0 -Planning Dept. Executive Officer Yoshihiko (Delegated) (Newly appointed) Ο Male Full-time -Executive Officer General Manager, Secretariat Office Sato (Newly appointed) Executive Officer (Delegated) General Manager, Accounting Dept. Male Full-time Ο Tomoki Iwai

*1 The number of years as a director only consider the period after the establishment of Cosmo Energy Holdings in October 2015. They were calculated by counting the period from October 2015 to the date of the General Meeting of Shareholders in June 2016 as one year. If the calculation of the number of years were to include the years served at Cosmo Oil Co., Ltd., the predecessor of CEO, Mr. Hiroshi Kiriyama would have served 9 years because he was appointed as a director in June 2013.

*2 Figures are for the period from April 1, 2021 to March 31, 2022. *3 The requirements for independent officers/auditors based on the regulations of Tokyo Stock Exchange have been fulfilled.

	a	na experience	e. it is not an e	exhaustive list	of all of the c	apabilities of	each director.
		Experti	se and f	eatures			
an oil v) rable gy s/new ess)	Sustainability (ESG)	Finance/ accounting/ tax affairs	Legal affairs/ compliance/ risk management	Personnel affairs/human resource development/ diversity	PR/IR/brand marketing	Global mindset	Manufacturing/ technology/ DX/IT
)	0	-	-	-	0	-	-
	-	0	-	-	0	-	-
)	-	-	0	-	-	-	-
	-	-	0	0	-	-	-
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)	-	0	-	-	-	-	-
	0	-	0	0	0	-	-
)	-	-	-	-	-	0	-
	-	-	-	-	0	0	0
	-	-	-	-	-	0	0
	-	-	-	-	-	0	-
	-	0	-	-	-	-	-

*The expertise and features of each director disclosed here mainly include their outstanding knowledge and experience. It is not an exhaustive list of all of the capabilities of each director.



Theme 1

Roles that outside directors are required to play

Takayama: While measures to address social issues, including responses to climate change and other SDGs, are attracting attention, I feel that expectations of outside directors have been growing. I understand that, for the Group to remain sustainable amid rapid moves towards decarbonization, an important task is to change the portfolio of our energy business. Outside directors are required to fulfill the so-called aggressive function by helping the executive team take proactive initiatives to control risks appropriately and contribute to improving corporate value. I also think that making it possible to fulfill accountability to institutional investors and other stakeholders, so as to manage the company in a fair, highly transparent manner, is an important role for outside directors. Asai: A textbook definition of the role that outside directors are required to play is to supervise the execution of business. I think it is to evaluate management by examining whether an achievement was appropriate or not in light of the management strategy or plan. On the other hand, just as Ms. Takayama used the word "aggressive" just now, I feel that we also have the duty to provide support to ensure efficient, fair management while the management team members work to make innovative changes happen constantly. Maintaining a balance between the execution and supervision of business is important for long-term improvement of corporate value. And I think that outside directors should serve as a monitoring board that builds and maintains a better relationship with the executive team through explanations from each internal department and individual consultations with

them. The last year has seen significant changes in the Group's management environment, including the COVID-19 pandemic that has yet to come to an end, Russian invasion of Ukraine, and the dissolution of the capital relationship with MIC. In these circumstances, we will continue to give appropriate advice to the management team by understanding prevailing trends. Inoue: Although what I will say overlaps what you have both said, I think the role of outside directors is to achieve sustainable growth of the company and improvement of its corporate value through three activities of (1) showing the broad direction of corporate strategy, etc., (2) supporting appropriate risk taking, and (3) supervising directors and others in a highly effective manner. It is also important to take ESG measures, respond to COVID-19, geopolitical risks, and suchlike, and give consideration to opinions of minority shareholders and other stakeholders. At present, the economic society is experiencing a period of great change, including rising resource prices. I therefore believe that advice from outside directors based on their careers, experience, and expertise, in addition to the vast experience we have accumulated internally, will be useful. In my case, I have limited knowledge about corporate management. However, I think that my experience as a lawyer and government official enables me to help identify problems by recognizing facts from documents and reports and to consider various issues from legal and international perspectives and in light of the relationship between companies and the government, for example. Kurita: I was appointed at the General Meeting of Shareholders that was held on June 23, 2022. Because I worked for the

Roundtable Talk of Outside Directors

Aggressive Management and Defensive Governance



Ministry of Land, Infrastructure, Transport and Tourism until then, I have no experience in corporate management. I was given a role as an outside director, so I intend to fulfill my responsibility while learning. I believe that, in a sense, my role is to express my frank opinions by thinking from the standpoint of a person who was in a completely different world from the world of corporate management. Regarding the outside directors' monitoring function that you mentioned earlier today, I think I can leverage my experience. Efficiency is required of people engaged in corporate management because they must fulfill shareholders' expectations while producing profits. On the other hand, in the world where I worked for a long time, we were required to have the fairness that Ms. Takayama mentioned. I hope to skillfully maintain a balance between these two elements in contributing to determining what the company should be like.

Growth and challenges in Theme 2 corporate governance

Takayama: The Cosmo Energy Group became a company with an audit and supervisory committee structure in 2015, when it transitioned to a holding company structure. I am in my fourth year as an outside director, and I feel that the governance structure has been enhanced and growing more effective with each year by properly implementing the PDCA for evaluation of effectiveness of the Board of Directors, the Nomination and Remuneration Advisory Committee, and the audit and Supervisory Committee. At the Board of Directors, which is at the center, discussions are becoming livelier, with an increasing number of agenda items submitted based on

Independent Outside Director, Audit and Supervisory Committee Member Yasuko Takavama

Independent Outside Director Takuya Kurita



Theme 4 Initiatives to address ESG issues, mainly including response to the climate change Theme 5 Stakeholder Engagement

> The Seventh Consolidated Medium-Term Management Plan that will start in FY2023

medium- to long-term strategies and perspectives. I feel that, moving forward, we will need to delegate the authority regarding deliberations on individual proposals and decisions on businesses to execute to the executive team, taking advantage of the fact that we are a company with an Audit and supervisory committee structure. When the Group transitioned to a holding company structure, there was strong centrifugal force, with which core operating companies continued to improve performance autonomously while maintaining independence. Conversely, at present, unifying force is working under the holding company structure. This is my understanding. To mobilize employees under the Cosmo brand and strengthen the Group governance system, control of each operating company is strengthened and auditing function is also enhanced, through two lines in the Three Lines Model*. I want to support the Group in its pursuit of an appropriate balance between centrifugal force and unifying force and help it develop into its ideal form. Asai: First, I would like to review the growth. In April 2021, the Sustainability Strategy Committee was established. In FY2021, this committee met eight times in total and had fulfilling discussions about many ESG agenda items, including identification of material issues and information disclosure in line with the TCFD recommendations. The Nomination and Remuneration Advisory Committee, which I chair, also met eight times. Its achievements included increasing the ratio of independent outside directors and introducing ESG assessments to executive officers. In addition, a meeting body consisting only of outside directors (Executive Session) also met. I feel that these moves represent significant growth. On the other hand, a task for the future is to further clarify the



Developing into its ideal form with an appropriate balance between centrifugal force and unifying force

Independent Outside Director, Audit and Supervisory Committee Member Yasuko Takayama

roles of the supervisory team and executive team. I think that we need to shift from the Japanese-style advisory model to the monitoring model as the global standard. **Inoue:** I was appointed as an outside director in June 2021, so it is difficult for me to evaluate corporate governance comprehensively in comparison with what it was like previously. However, I have the impression that sound corporate governance is functioning thanks to a corporate climate that permits internal and external officers, employees, and other people to engage in free discussions. As Mr. Asai told us earlier today, it is noteworthy that the Sustainability Strategy Committee was established as a meeting body overseeing activities related to sustainability, which is extremely important for an energy company, and internal control. Regarding tasks for the future, there has been an increasing number of matters to watch out for amid major changes taking place in the world, such as information security, cybersecurity, and economic security. I think that we need to continue discussions about management structure and risk items for risk management. Kurita: When I took up the position of outside director, I listened to people from departments in the core operating companies of the Cosmo Energy Group. What I felt then was their strong awareness of ESG and sustainability. I think they have been making considerable efforts, feeling responsible to clarify the position of the company in society all the more because it is an energy company that deals in oil. Attending a meeting of the Board of Directors, I was surprised that discussions were more animated than I had expected, which is related to what Ms. Inoue said earlier today. I had the impression that each member was deeply aware of his or her role and made remarks with responsibility, completely unlike a

perfunctory process of just determining things. *Three Lines Model: A model developed by dividing a company's risk management and control activities largely into three lines (roles), which was published by the Institute of Internal Auditors (IIA)

Theme 3 Progress in the Sixth Consolidated Medium-Term Management Plan "Oil & New"

Takayama With respect to the field of "Oil" in "Oil & New," profitability has been improved mainly in the Petroleum

Business, resulting in greater earnings power. As a result, the Group's financial situation has become sound, and it achieved its management goals such as net worth and net D/E ratio earlier than planned. I view this as a great achievement. In the field of "New," the Renewable Energy Business is in progress, with a focus on the wind power generation business. I would therefore like to continue monitoring it so that the business portfolio can be changed as soon as possible. During the period of the Sixth Consolidated Medium-Term Management Plan, changes took place in society at a speed that could not be imagined in 2017, when the plan was formulated. Reflecting this, the Cosmo Energy Group made the 2050 Carbon Net Zero Declaration in May 2021 in response to the 2050 Carbon Neutral Declaration that was published by the Japanese government in October 2020. The Group created a roadmap for achieving net zero carbon emissions and disclosed it in May 2022. The Group has also identified four material issues for sustainable value creation. I understand that it is important whether it can solve the issues by appropriately distributing management resources, such as people, goods, and money, in a period that includes the period for the Seventh Consolidated Medium-Term Management Plan. Asai: Under the Sixth Consolidated Medium-Term Management Plan, the Group was able to improve its financial situation by gaining earnings strength and improving profitability in a difficult business environment. Above all, the high operating rate of refineries and the growing sales volume achieved in the Petroleum Business are not seen among other companies in the industry. This demonstrates that the Group has been making the capital investments needed to ensure safety and achieving a considerably high level of risk prediction and crisis management since the Great East Japan Earthquake. In addition, the fact that the Group has secured supply to Kygnus Sekiyu is an absolute advantage. As a result, the Group announced a dividend increase and share repurchases in May as shareholder return measures for 2022. I believe that it has reached a level that is comparable to other companies. I expect the Group to be able to further strengthen its relationship with stakeholders under the Seventh Consolidated Medium-Term Management Plan. The Group achieved its management goals at the end of

FY2021 and gained earnings strength. This will permit it to carefully consider our strategy this year toward the Seventh Consolidated Medium-Term Management Plan. I believe that the overall Group will be able to shift to an aggressive approach under the Seventh Consolidated Medium-Term Management Plan. As an outside director, I would like to help the Group create a robust management plan in both financial and nonfinancial aspects, while further strengthening branding and DX. **Inoue:** I also give the Group high marks for achieving its management goals under the Sixth Consolidated Medium-Term Management Plan before the final fiscal year. While this is attributable in part to the environment, including the rising crude oil prices, I believe that this achievement also resulted from the Group's efforts to advance structural reform and address ESG issues amid social changes caused by the COVID-19 pandemic. I hope that, under the Seventh Consolidated Medium-Term Management Plan that will start in FY2023, the Group will pursue aggressive management and develop its energy business as a foundation of people's lives, building on a strong financial footing. In my previous position, I was involved in agriculture, forestry, and fisheries. I deeply understood from this experience that it is important to use oil as a power source in agriculture and fisheries. I think that while giving consideration to environmental issues is essential, it is important to support people's lives while valuing the Group's presence related to oil.

Kurita: The Sixth Consolidated Medium-Term Management Plan had a slogan, "Oil & New." I was in a world that dealt with things such as social capital and infrastructure. Both "Oil" and "New" constitute part of the infrastructure that is important for society. What will the Group be like in 2030 and 2050? I think that the Group, which has gained earnings strength, is free to chart its own vision for future. In this sense, the period for the next Seventh Consolidated Medium-Term Management Plan, which was prepared from a longterm perspective as a plan for several years included in the long term, will be an extremely important period in the process of achieving the Group's vision. I would like to join discussions with an awareness of the challenges.

An internal consensus has been reached on ESG issues.

Independent Outside Director, Audit and Supervisory Committee Member Keiichi Asai

Theme 4 Initiatives to address ESG issues, mainly including response to the climate change

Takayama: Mr. Kurita told us earlier today about a "strong awareness of ESG and sustainability." In 2001, the Group established an organization named the Environmental Office. Its first manager was President Kiriyama, and it was at that time that the Group established its Management Vision, "In striving for harmony and symbiosis between our planet, man and society, we aim for sustainable growth towards a future of limitless possibilities." The Group began to have strong awareness of environmental problems more than 20 years ago. I understand that the Group is forward looking on this point. The point that I evaluate most highly regarding the Group's initiatives on ESG issues is the fact that it has open discussions by involving management team members from Group companies, as well as people from departments in charge of driving initiatives, and reaches a firm consensus. I think this is a great advantage because the level of effectiveness differs greatly depending on the presence or absence of consensus. However, I feel that there are still many issues to address in the domain of "S," including human resources, human rights, and diversity. I therefore think it is important to enhance initiatives in terms of quality in the future. In addition, information disclosure is a major theme of ESG at present, and the way in which information should be disclosed is being debated, both in Japan and overseas. However, I think we don't have to be confused by superficial changes. You cannot disclose information without content. Therefore, as an outside director, I would like to watch how each ESG issue is addressed, giving support as necessary.

Asai: I was surprised to learn that the company signed the UN Global Compact as early as in 2006, when the SDGs had yet to be entrenched in Japanese society. We can say that the company is extremely pioneering, from a historical perspective as well, in that it has been addressing the Ten Principles of the UN Global Compact including those on the environment and human rights. Climate change countermeasures are the most



important issue for the Group. In the roadmap disclosed in May 2022, the Group set targets of reducing CO₂ emissions by 30% by 2030 and to zero by 2050. The Sustainability Strategy Committee identifies risks and opportunities after scenario analysis, and the vision, issues, and opportunities have been made clear in the process. An internal consensus has been achieved on ESG issues. I think this point has profound significance and I think the Group deserves high marks for it. Regarding "S" that Ms. Takayama pointed out earlier today, discussions are taking place about employees' wellness management. I think it is good that the Group intends to treat ESG issues exhaustively to develop the infrastructure. I believe that the Group has been a step ahead of other companies in the industry. I also feel that its employees have high awareness of ESG. I see the Group as a pioneering oil company.

Inoue: Regarding environmental measures, I highly evaluate the leadership of President Kiriyama, who intends to shift from the fossil fuel business, which will shrink in the future, to the Renewable Energy Business with a focus on wind power generation. I feel that the corporate climate of having free discussions by involving employees, internal directors, and outside directors has been an advantage.

Shifting my perspective to a somewhat distant place, the Ukrainian crisis has led to heated debates over the treatment of nuclear power and fossil fuels in EU nations, which have been playing the leading role in addressing environmental issues. The usefulness and convenience of oil may attract increased attention from the viewpoint of stability of energy supply. I personally think that environmentally friendly technologies, of the kind the Group has accumulated, can contribute to relations with developing nations that need oil to achieve economic development. Emissions trading and carbon credits are being discussed in Japan, and I think that measures being taken by the Group with an awareness of the issues will be helpful in future development.

Kurita: When I saw President Kiriyama last year, I learned that Cosmo Eco Power has been working on wind power generation since the early 2000s. I thought that the company was highly motivated about ESG issues. In addition, the Ministry of Land, Infrastructure, Transport and Tourism, where I used to work, is responsible for disaster prevention and mitigation, and its affiliated agencies include the Japan Meteorological Agency and Japan Coast Guard. It is a crisis management organization that will not be respected if its personnel to not act in the event of an emergency. As may be related to employees' wellness management that Mr. Asai mentioned earlier, I feel that, to maintain stable energy supply at all times, it is necessary to consider the health management of each employee from a management perspective and to act strategically in the medium to long run with an awareness of the issues.

Theme 5 Stakeholder Engagement

Takayama: At the company I worked for, I was engaged for many years in communications with diverse stakeholders, including general consumers, business partners, government, shareholders, and employees. Society has shifted from its previous shareholder centrism to a stakeholder-oriented approach. I feel daily that how to maintain a balance between the interests of stakeholders is extremely important. We were appointed with a mandate from shareholders and institutional investors, so we should value opportunities for dialogue with those people. This is because these opportunities are beneficial, allowing us to have first-hand knowledge of how investors view the company and what they expect of the management team. They are valuable opportunities for us to confirm our standpoints based on this knowledge and think about from what perspective we should make recommendations to internal people. I would like to continue participating in opportunities for dialogue as much as possible and listen proactively to the voices of investors. I think that outside directors play two major roles in engaging with stakeholders. One concerns outside-in communication. We have a duty to seriously take into account investors' expectations and concerns about management and reflect them in supervising management and in making decisions. The other concerns inside-out communication. We have a duty to explain the internal management and governance statuses to investors in a way that is both careful and easy to understand. I would like to stand between the executive team and investors and serve as a mediator or interpreter, thus fulfilling my responsibility to strengthen the relationship of trust between the company and its stakeholders.



Independent Outside Director Ryuko Inoue

By knowing the direction of the company, each employee will come to work with confidence.

Independent Outside Director Takuya Kurita

Asai: We have many stakeholders, including shareholders, customers, directors, employees, and local communities. It is difficult, both physically and in terms of time, to engage in a deep dialogue with all of these stakeholders. Ultimately, it is important to start investor relations and stakeholder relations activities from the viewpoint of what shareholders demand and how the company should take advantage of that demand. Personally, I hope to hold talks with not only investors but also with analysts. I think this is important because analysts point out what neither executive team members nor supervisors may be able to see. It is medium- to long-term shareholders who have the strongest demands for improvement in corporate governance. They are important partners of the company. Ms. Takayama described our roles as "outside-in and inside-out communications." I think that the perspective of our potential partners, including major institutional investors, is also important. I would like to know, for instance, what they expect of the Group and what we should do to partner with them. In terms of requests from shareholders, the medium- to long-term improvement of corporate value and sustainable growth are essential.

Inoue: As Mr. Asai said, what I think we should be careful about is how to listen to them, not to mention the importance of strategic dialogues with different stakeholders. Both people and organizations tend to listen only to what they want to hear. Fortunately, the Group has dialogues based on facts and data, such as by finding facts using external specialists, conducting questionnaires, and observing the moves made by other companies. I feel that these efforts serve as a deterrence to listening only to what we want to hear. I think it is important to engage with stakeholders proactively based on facts and data in this way.

Theme 6 The Seventh Consolidated Medium-Term Management Plan that will start in FY2023

Takayama: I sense that it is extremely difficult to create a medium- to long-term vision in the face of so many uncertainties, with changes in the world speeding up and slowing down and moving forward and backward. I think what is most important in this environment is to do what we should

each ence.

> do in a careful manner. The central theme of the Seventh Consolidated Medium-Term Management Plan is the integration of non-financial and financial aspects. I hope that we can disclose information, including the series of processes of developing and implementing plans by linking these two aspects effectively, in a way that is easy to understand. Asai: Under the Sixth Consolidated Medium-Term Management Plan, the focus of discussion was what to do about the growth driver of "New" in "Oil & New." One of the key points of the Seventh Consolidated Medium-Term Management Plan is to what extent the Group can actually monetize the wind power generation business, which was positioned as the growth driver. I hope that unique measures with selling power, as seen in the Petroleum Business, will be developed. What should the Group actually do to generate profits from oil and renewable energy, as two mainstay businesses in the period of transition to decarbonization? How can the Group satisfy all stakeholders by generating profits on a par with those from oil while pursuing its social mission and purpose? I think that the Group is very much in the process of metamorphosing from a cocoon to a butterfly. **Inoue:** I expect that the Japanese and global economies will remain difficult. What is important in these circumstances is how to continue improving corporate value and how to achieve sustainable growth. I think that people in an organization will be even more important than before, because we are in an era of rapid change. I am very keen to focus on this point.

COSMO 2022

Kurita: I think that, to maintain stable energy supply in the medium and long run, the Group needs to clarify its vision, including its corporate philosophy. The government office that I belonged to had many people involved with the Group, and it is a vertically long organization. As Ms. Takayama and Mr. Asai mentioned earlier, there are two aspects; that is, making the Consolidated Medium-Term Management Plan public and announcing it internally to employees. Knowing the direction of the company, they will feel proud of it and each one of them will come to work with confidence. I felt that the Seventh Consolidated Medium-Term Management Plan will also work in this way.

11-Year Selected Financial and Operating Data

			—									
	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2021
For The Year											(Millions of yen)	(Thousands of U.S. dolla
Dubai crude oil price (US\$ /barrel)	110.1	107.0	104.6	83.5	45.7	46.9	55.9	69.3	60.3	44.5	78.1	_
Foreign exchange rate (¥/US\$)	79.1	83.0	100.2	109.9	120.1	108.4	110.9	110.9	108.8	106.0	112.4	_
Net sales	¥ 3,109,746	¥ 3,166,689	¥ 3,537,782	¥ 3,035,818	¥ 2,244,306	¥ 2,292,280	¥ 2,523,106	¥ 2,770,365	¥ 2,738,003	¥ 2,233,250	¥ 2,440,452	\$ 19,939,966
Cost of sales	2,918,238	2,989,274	3,369,007	2,944,919	2,154,615	2,079,727	2,282,710	2,539,936	2,586,244	2,000,584	2,061,600	16,844,514
Selling, general and administrative expenses	127,937	124,992	129,060	129,346	119,433	120,370	128,526	135,775	137,865	131,376	143,548	1,172,878
Operating income (loss)	63,570	52,422	39,715	-38,447	-29,742	92,182	111,868	94,653	13,893	101,289	235,303	1,922,574
Impact of inventory valuation ²	25,200	15,264	16,068	-116,177	-68,703	39,400	21,044	-10,788	-52,179	20,740	72,324	590,932
Operating income (loss) excluding the impact of inventory valuation	38,370	37,158	23,647	77,730	38,961	52,782	90,824	105,441	66,072	80,549	162,979	1,331,642
Ordinary income (loss)	61,420	48,439	41,847	-49,640	-36,121	81,448	116,850	96,654	16,285	97,370	233,097	1,904,547
Ordinary income (loss) excluding the impact of	36,238	33,173	25,778	66,537	32,644	42,048	95,806	107,442	68,464	76,630	160,773	1,313,616
inventory valuation Petroleum	-17,181	-38,960	-41,394	22,067	5,784	1,770	37,776	24,964	4,378	53,317	93,225	761,708
Petrochemical	2,075	3,343	3,692	-6,977	4,291	22,177	30,441	15,344	5,185	-3,319	13,617	111,262
Oil exploration and production	52,023	60,688	58,141	47,538	18,637	9,347	18,251	56,900	45,030	13,859	44,761	365,725
Renewable Energy Business ¹⁰			_	_	_				_	4,134	3,483	28,462
Others	-679	8,102	5,339	3,909	3,932	8,754	9,338	10,233	13,869	8,637	5,686	46,459
Profit (loss) before income taxes	35,381	-2,536	49,443	-44,599	-43,797	78,565	109,274	95,966	13,913	93,648	211,593	1,728,844
Profit (loss) attributable to owners of parent ³	-9,084	-85,882	4,348	-77,729	-50,230	53,235	72,813	53,132	-28,155	85,910	138,890	1,134,816
Capital expenditures	27,933	83,429	41,243	70,396	82,775	120,302	109,085	80,380	87,872	79,624	57,064	466,250
R&D expenses	3,791	3,765	3,271	3,077	3,104	4,269	4,540	4,096	4,448	3,975	4,803	39,244
Depreciation and amortization ⁴	50,601	44,953	35,330	32,399	30,713	37,769	42,130	54,225	57,606	57,530	58,045	474,266
Cash flows from operating activities	43,616	-20,950	35,837	163,384	18,427	47,625	192,634	90,450	111,733	167,445	108,361	885,376
Cash flows from investing activities	-25,805	-80,481	-61,007	-30,126	-32,839	-112,038	-96,432	-84,521	-84,230	-84,584	-67,511	-551,608
Cash flows from financing activities	11,606	104,695	12,555	-178,920	32,499	9,626	-76,757	-20,480	-24,675	-80,570	-42,040	-343,492
At Year-End											(Millions of yen)	(Thousands of U.S. dolla
Total assets	¥ 1,675,070	¥ 1,743,492	¥ 1,696,831	¥ 1,428,628	¥ 1,409,615	¥ 1,525,679	¥ 1,688,288	¥ 1,702,270	¥ 1,639,765	¥ 1,709,017	¥ 1,938,408	\$ 15,837,965
Non-controlling interests ⁵	20,506	26,475	29,214	40,326	94,665	108,063	117,468	120,785	123,047	124,173	127,771	1,043,967
Net worth	316,931	230,456	231,927	167,194	108,046	164,722	238,677	281,065	239,792	324,946	456,200	3,727,430
Total current assets	920,412	967,148	921,790	621,578	516,254	561,604	657,160	641,731	572,619	605,808	867,983	7,091,945
Total current liabilities	744,275	816,611	799,199	603,860	555,519	655,473	800,146	764,734	706,080	752,488	954,675	7,800,277
Net interest-bearing debt6	598,773	713,190	723,257	597,701	666,179	727,258	635,763	644,663	628,317	556,379	503,330	4,112,516
Number of outstanding shares (thousands) ⁷	847,705	847,705	847,705	847,705	84,770	84,770	84,770	84,770	84,770	84,770	84,770	_
Per Share Data ⁸											(Yen)	(U.S. dol
Profit (loss) attributable to owners of parent	¥ -10.72	¥ -101.39	¥ 5.13	¥ -91.77	¥ -594.85	¥ 633.32	¥ 865.80	¥ 630.69	¥ -334.84	¥ 1,025.86	¥ 1,658.64	\$ 13.55
Diluted profit attributable to owners of parent	_	_	_	_	_	_	_	594.03	_	861.16	1,389.40	11.35
Net assets	374.15	272.07	273.81	197.39	1,286.03	1,958.91	2,837.90	3,333.81	2,853.14	3,882.72	5,446.39	44.50
Cash dividends	8.00	_	2.00	_	40.00	50.00	50.00	80.00	80.00	80.00	100.00	0.82
Ratios												
Return on assets (ROA) (%)	-0.6	-5.0	0.3	-5.0	-3.5	3.6	4.5	3.1	-1.7	5.1	7.6	_
Return on equity (ROE) (%)	-2.8	-31.4	1.9	-39.0	-36.5	39.0	36.1	20.4	-10.8	30.4	35.6	_
Equity ratio (%)	18.9	13.2	13.7	11.7	7.7	10.8	14.1	16.5	14.6	19.0	23.5	_
	43.1	48.3	50.9	48.5	53.7	50.6	41.5	40.8	41.5	35.7	30.1	_
Debt-to-total capital ratio (%)												

1 U.S. dollar amounts are converted from Japanese yen for the convenience of readers at the rate of ¥122.39 to US\$1.00, the approximate exchange rate prevailing on March 31, 2022.

2 "Impact of inventory valuation gain (loss)" from FY2009 is based on the book value depreciation method as dictated by ASBJ (Accounting Standards Board of Japan) Statement No.9, "Accounting Standard for Measurement of Inventories."

3 Up to FY2014, "Net income (loss)" is presented.

4 Depreciation and amortization includes cost recovery under production sharing. In FY2011 and FY2012, depreciation and amortization includes recovery of recoverable accounts under production sharing as well as depreciation applicable to fixed assets idled as a result of the fire at the Chiba Refinery caused by the Great East Japan Earthquake.

5 Up to FY2014, "Minority interests" is presented.

6 Up to FY2012, "Cash and deposits" and "Short-term investment securities"are deducted from "Interest-bearing debt." From FY2013, "Cash and deposits" is deducted from "Interest-bearing debt." In FY2015, "Cash and deposits" and "Securities" are deducted from "Interest-bearing debt." 7 On October 1, 2015, Cosmo Energy Holdings Co., Ltd. was established as the whollyowing parent company of Cosmo Oil Co., Ltd. through the share transfer. To one common share of the former Cosmo Oil, 0.1 common share of the holding company was allocated (for example 1,000 Cosmo Oil shares to 100 Cosmo Energy Holdings shares).

8 "Per share data" from FY2015 are data for one share of Cosmo Energy Holdings, according to the allocation of 0.1 share of the holding company to 1 share of the former Cosmo Oil.

 The ratio from FY2019 is calculated on the basis that 50% of the ¥30 billion hybrid loan made on March 31, 2020 is included in equity.

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0 The Renewable Energy Business, which had previously been included in other business, was separated into its own segment in FY2020.

Consolidated Balance Sheet

	FY2020	FY2021		
Assets	(Millions of yen)	(Millions of yen)		
Current assets				
Cash and deposits	¥ 52,972	¥ 80,328		
Notes and accounts receivable - trade	234,635	_		
Notes receivable - trade	_	2,635		
Accounts receivable - trade	_	280,050		
Merchandise and finished goods	122,152	166,942		
Work in process	351	58		
Raw materials and supplies	126,923	209,023		
Accounts receivable - other	46,143	66,055		
Other	22,746	62,928		
Allowance for doubtful accounts	-116	-40		
Total current assets	605,808	867,983		
Non-current assets				
Property, plant and equipment				
Buildings and structures, net	244,331	241,907		
Oil storage depots, net	35,781	35,755		
Machinery, equipment and vehicles, net	208,999	200,511		
Land	315,483	315,353		
Leased assets, net	737	2,384		
Construction in progress	50,295	40,105		
Other, net	9,803	10,598		
Total property, plant and equipment	865,433	846,616		
Intangible assets				
Software	10,557	11,102		
Other	33,785	33,083		
Total intangible assets	44,343	44,185		
Investments and other assets				
Investment securities	122,402	118,719		
Long-term loans receivable	1,030	802		
Long-term prepaid expenses	3,169	2,953		
Net defined benefit asset	5,471	5,081		
Cost recovery under production sharing	13,018	1,322		
Deferred tax assets	40,287	42,858		
Other	8,234	8,126		
Allowance for doubtful accounts	-310	-298		
Total investments and other assets	193,303	179,566		
Total non-current assets	¥ 1,103,080	¥ 1,070,369		
Deferred assets				
Bond issuance cost	128	56		
Total deferred assets	128	56		
Total assets	¥ 1,709,017	¥ 1,938,408		

	112020	112021
Liabilities	(Millions of yen)	(Millions of yen
Current liabilities		
Notes and accounts payable - trade	¥ 266,695	¥ 325,780
Short-term loans payable	175,692	195,485
Current potion of bonds	17,700	_
Current portion of convertible bond-type bonds with share acquisition rights	_	60,000
Commercial papers	37,200	82,300
Accounts payable - other	92,953	102,254
Accrued volatile oil and other petroleum taxes	108,368	84,457
Income taxes payable	11,030	33,457
Accrued expenses	4,415	3,434
Provision for bonuses	6,348	8,926
Provision for directors' bonuses	352	867
Other	31,732	57,713
Total current liabilities	752,488	954,675
Non-current liabilities		
	000 6	2.000
Bonds payable	3,000	3,000
Convertible bond-type bonds with share acquisition rights	60,000	-
Long-term loans payable	315,759	242,873
Deferred tax liabilities	35,415	40,801
Deferred tax liabilities for land revaluation	5,100	5,107
Provision for special repairs	27,001	37,560
Provision for environmental measures	866	864
Net defined benefit liability	2,992	2,879
Provision for executive remuneration BIP trust	847	1,360
Asset retirement obligations	19,993	22,621
Other	36,431	42,690
Total non-current liabilities	507,408	399,761
Total liabilities	1,259,897	1,354,437
Net assets		
Shareholders' equity		
Capital stock	¥ 40,000	¥ 40,000
Capital surplus	82,843	82,843
Retained earnings	211,977	343,377
Treasury shares	-2,019	-1,902
Total shareholders' equity	332,802	464,318
Accumulated other comprehensive income		
Valuation difference on available-for-sale securities	4,938	4,610
Deferred gains or losses on hedges	-85	-536
Revaluation reserve for land	-21,123	-21,139
Foreign currency translation adjustment	5,873	7,691
Remeasurements of defined benefit plans	2,540	1,255
Total accumulated other comprehensive income	-7,855	-8,118
Non-controlling interests	124,173	127,771
Total net assets	449,120	583,971
Total liabilities and net assets	¥ 1,709,017	¥ 1,938,408

FY2020	FY2021
(Millions of yen)	(Millions of yen)
¥ 266,695	¥ 325,780
175,692	195,485
17,700	—
_	60,000
37,200	82,300
92,953	102,254
108,368	84,457
11,030	33,457
4,415	3,434
6,348	8,926
352	867
31,732	57,713
752,488	954,675

Consolidated Statements of Income and Comprehensive Income

_	FY2020	FY2021
	(Millions of yen)	(Millions of yen)
Net sales	¥ 2,233,250	¥ 2,440,452
Cost of sales	2,000,584	2,061,600
Gross profit	232,666	378,852
Selling, general and administrative expenses	131,376	143,548
Operating profit	101,289	235,303
Non-operating income		
Interest income	368	157
Dividend income	740	798
Rent income on non-current assets	1,543	1,141
Share of profit of entities accounted for using equity method	-	2,650
Foreign exchange gains	883	-
Other	2,979	2,900
Total non-operating income	6,515	7,648
Non-operating expenses		
Interest expenses	7,225	6,402
Share of loss of entities accounted for using the equity method	447	-
Foreign exchange losses	-	1,243
Other	2,761	2,208
Total non-operating expenses	10,434	9,854
Ordinary profit	97,370	233,097
Extraordinary income		
Gain on sales of non-current assets	1,973	305
Gain on sales of investment securities	839	796
Subsidy income	340	1,339
Insurance income	421	2,012
Other	258	549
Total extraordinary income	3,833	5,003
Extraordinary losses		
Loss on sales of non-current assets	3	123
Loss on disposal of non-current assets	6,721	11,313
Impairment loss	267	12,232
Loss on valuation of investment securities	267	2,829
Other	296	9
Total extraordinary losses	7,555	26,507
Profit before income taxes	93,648	211,593
Income taxes - current	21,567	62,410
Income taxes - deferred	-17,137	4,115
Total income taxes	4,430	66,525
Profit	89,218	145,067
Profit attributable to non-controlling interests	3,307	6,177
Profit attributable to owners of parent	¥ 85,910	¥ 138,890

Consolidated Statements of Cash Flows

Cash flows from operating activities	(Millions of yen)	(Millions of yen
Profit before income taxes	¥ 93,648	¥ 211,593
Depreciation	53,564	53,953
Interest and dividend income	-1,108	-956
Interest expenses	7,225	6,402
Share of loss (profit) of entities accounted for using equity method	447	-2,650
Decrease (increase) in notes and accounts receivable - trade	-20,191	-47,380
Recovery of recoverable accounts under production sharing	3,966	4,092
Decrease (increase) in inventories	-15,086	-126,575
Increase (decrease) in notes and accounts payable - trade	33,637	58,382
Other, net	26,357	-9,576
Subtotal	182,461	147,284
Interest and dividend income received	4,147	5,622
Interest expenses paid	-7,235	-6,489
Other, net	-367	3,105
Income taxes paid	-11,560	-41,161
Net cash provided by (used in) operating activities	167,445	108,361
Cash flows from investing activities		
Purchase of property, plant and equipment	-72,503	-45,375
Payments for disposal of property, plant and equipment	-5,418	-4,193
Proceeds from sales of property, plant and equipment	6,298	13,573
Payments for purchases of intangible assets and long-term prepaid expenses	-11,422	-8,858
Other, net	-1,538	-22,658
Net cash provided by (used in) investing activities	-84,584	-67,511
Cash flows from financing activities		
Net increase (decrease) in short-term loans payable	8,050	16,754
Proceeds from long-term loans payable	36,100	-
Repayments of long-term loans payable	-40,123	-76,875
Proceeds from issuance of bonds	-26,000	-17,700
Net increase (decrease) in commercial papers	-48,800	45,100
Cash dividends paid	-6,778	-6,777
Dividends paid to non-controlling interests	-2,095	-2,344
Other, net	-924	-197
Net cash provided by (used in) financing activities	-80,570	-42,040
Effect of exchange rate change on cash and cash equivalents	-1,269	4,528
Net increase (decrease) in cash and cash equivalents	1,021	3,338
Cash and cash equivalents at beginning of period	43,295	44,518
Increase (decrease) in cash and cash equivalents due to changes in the scope of consolidation	-757	-
Increase in cash and cash equivalents from merger with non-consolidated subsidiaries	959	208
Cash and cash equivalents at end of period	¥ 44,518	¥ 48,066

FY2021	
(Millions of ye	en)

FY2020 (Millions of yen)

Major Indicators

EBITDA excluding the Impact of Inventory Valuation

EBITDA excluding the Impact of Inventory Valuation

250,000 (Millions of yen)



	112017	112010	112013	112020	112021
					(Millions of yen)
Operating income excluding the impact of inventory valuation	¥ 90,824	¥ 105,441	¥ 66,072	¥ 80,549	¥ 162,979
Depreciation and amortization ¹	42,130	54,225	57,606	57,530	58,045
EBITDA excluding the impact of inventory valuation ²	132,954	159,666	123,678	138,079	221,024

EV2010

EV2010

EV2020

EV2021

1 Including "Recovery of recoverable accounts under production sharing" 2 EBITDA excluding the impact of inventory valuation = Operating income excluding the impact of inventory valuation + Depreciation and amortization

EV2017



-40 FY2017 FY2018 FY2019 FY2020 FY2021

FY2017 FY2018 FY2019 FY2020 FY2021 (Millions of yen) Profit (loss) attributable to ¥ 53,132 ¥ -28,155 ¥ 85,910 ¥ 72,813 ¥ 138,890 owners of parent Total assets 1,709,017 1,938,408 1,688,288 1,702,270 1,639,765 Net worth 238,677 281,065 239,792 324,946 456,200 Return on assets (ROA1) (%) 7.6 4.5 3.1 -1.7 5.1 Return on equity (ROE²) (%) 36.1 20.4 -10.8 30.4 35.6

1 ROA = Profit (loss) attributable to owners of parent/Average total assets at beginning and end of the fiscal year × 100 2 ROE = Profit (loss) attributable to owners of parent/Average shareholders' equity at beginning and end of the fiscal year × 100

FY2018

¥ 90,450

-84.521

-20,480

40.667

FY2019

111,733

-84.230

-24.675

43.295

¥

FY2020

¥ 167,445

-84.584

-80.570

44.518

FY2021

(Millions of yen)

¥ 108,361

-67,511

-42.040

48.066

FY2017

¥ 192,634

-96,432

-76.757

55.148

Consolidated Cash Flows

Cash flows from operating activities Cash flows from investing activities Cash flows from financing activities

Cash flows from operating activities

Cash flows from investing

Cash flows from financing

Cash and cash equivalents at

activities

activities

the end of year

200,000 (Millions of yen)

ROA and **ROE**



Total Assets, Net Worth Ratio, and Net Debt-to-Equity Ratio¹



	FY2017	FY2018	FY2019	FY2020	FY2021 (Millions of yen)
Total assets	¥1,688,288	¥1,702,270	¥1,639,765	¥1,709,017	¥1,938,408
Net interest-bearing debt ²	635,763	644,663	628,318	556,379	503,330
Net worth	238,677	281,065	239,792	324,946	456,200
Net worth ratio (%)	14.1	16.5	14.6	19.0	23.5
Net debt-to-equity ratio (times)1	2.3	1.98	2.41	1.59	1.04

1 Calculated on the basis that 50% of the ¥30 billion hybrid loan made on March 31, 2020 is included in equity. 2 Total interest-bearing debts net of cash and deposits etc. as of the end of the period

Share Information (As of March 31, 2022)

General meeting of shareholders	every June
Shareholder registration agent	Sumitomo Mitsui Trust Bank, Limited
Number of common shares issued	84,770,508 shares

Number of Shares by Type of Shareholders and their Trend



Number of Shareholders by Type and their Trend



Primary Shareholders (As of March 31, 2022)

Name of shareholders	Number of shares held (Thousands)	Investment Ratio (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	9,130	10.77
Custody Bank of Japan, Ltd. (Trust account)	5,860	6.91
CITY INDEX ELEVENTH Co., Ltd	4,386	5.17
The Kansai Electric Power Co., Inc.	1,860	2.19
MSIP CLIENT SECURITIES	1,829	2.15
Cosmo Energy Holdings Client Stock Owner-ship	1,696	2.00
GOLDMAN SACHS INTERNATIONAL	1,678	1.98
Mizuho Bank, Ltd.	1,600	1.88
Aioi Nissay Dowa Insurance Co., Ltd.	1,580	1.86
MUFG Bank, Ltd.	1,580	1.86

The shareholding ratio is calculated by deducting the number of treasury shares from the total number of outstanding shares. The treasury shares do not include those shares owned by the trust bank through the Board Incentive Plan (BIP) Trust

Record date for term-end dividend payment	March 31
Number of shares per trading unit	100 shares
Stock listing	Tokyo Stock Exchange, First Section*

* Prime Market as of the date of publication

- Japanese financial institutions and securities firms (including trust accounts) - Other Japanese companies and corporations (including treasury stock) Foreign investors
- Japanese individuals and others

41.5	40.9	41.3	40.4	41.9
36.5	38.0	36.4	39.1	31.5
12.8	12.2	13.7	13.1	13.6
9.2	8.9	8.6	7.4	12.9
March 31, 2017	March 31, 2018	March 31, 2019	March 31, 2020	March 31, 2021

- Japanese financial institutions and securities firms (including trust accounts)
- Other Japanese companies and corporations (including treasury stock)
- Foreign investors - Japanese individuals and others

96.7	96.6	96.8	96.9	96.7
\approx	$\sim\sim$	$\sim\sim$	\sim	\approx
1.7	1.6	1.6	1.5	1.6
1.2	1.3	1.2	1.2	1.3
0.4	0.5	0.4	0.4	0.4
March 31,	March 31,	March 31,	March 31,	March 31,
2017	2018	2019	2020	2021

Corporate Data (As of March 31, 2021)

Company Name	Cosmo Energy Holdings Co., Ltd.		
Securities Code	5021		
Head Office	1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8302 Phone +81-3-3798-3180		
Established	October 1, 2015		
Capital	¥40 billion		
Type of Business	Management of subsidiaries involved in oil businesses ranging from upstream to downstream and others		
	April 1, 1986 Cosmo Oil was established through tripartite merger of Daikyo Oil Co., Ltd., Maruzen Oil Co.,Ltd., and former Cosmo Oil (Cosmo Refining)		
Corporate History	October 1, 1989 Asian Oil Co., Ltd. was merged into Cosmo Oil.		
	October 1, 2015 Cosmo Energy Holdings Co., Ltd. was established.		
Main Banks	Mizuho Bank, Ltd.; MUFG Bank, Ltd.; and Sumitomo Mitsui Banking Corporation		

Key Data of the Cosmo Energy Group

Number of SS Operators	209
Branches	Eastern Japan, Kanto, Chubu, Kansai, Western Japan
Refineries	Chiba, Yokkaichi, Sakai

Period covered	Fiscal year from April 1, 2021 to March 31, 2022 (including some information for FY2022)
 Report boundary 	Cosmo Energy Holdings Co., Ltd. and major consolidated subsidiaries and affiliated companies * The section on sustainability covers mainly Cosmo Energy Holdings and 43 Group companies, which share the Consolidated Medium-Term Sustainability Management Plan, but includes data on the employees of Cosmo Oil, data for the three core operating companies, and data only for some companies. The scope of coverage for these data is provided individually in appended notes.
 Month and year of publication 	Month of issue: November 2022 Next publication scheduled for November 2023 (to be issued every year)
Editorial Policy	In editing the report, we referred to the International Integrated Reporting Framework of the International Integrated Reporting Council (IIRC).
 Cosmo Report, IR website, and sustainability website 	Cosmo Report (booklet) is designed to be easily read, and details are available on the Company's IR website and sustainability website. Sustainability activity reporting is focused on priority issues while using the Global Reporting Initiative (GRI) Standards. The links to Cosmo Energy Holdings' official websites are as follows:
	IR website https://ceh.cosmo-oil.co.jp/eng/ir/
	Sustainability website https://ceh.cosmo-oil.co.jp/eng/csr/
Caution concerning forward- looking statements	This report contains forward-looking statements about our plans, strategies, and performance. These descriptions are based on judgements that were made based on currently available information. Please note that our actual business results may differ materially from these initial forecasts due to various external factors.