

◆ Cosmo Energy Holdings (Security code: 5021)  
ESG Presentation: Main questions and answers

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-This document contains forward-looking statements. Care instructions are provided at the end of the document.

1. Date and time : Monday, December 16, 2024 10:30 to 11:30 (JST)
2. Attendees : 72 persons
3. Main questions and answers :

Q1: Explanation that the roadmap for reducing GHG emissions will be reviewed based on discussions in the Strategic Energy Plan. Where are the points to review?

Given that the Strategic Energy Plan is based on multiple scenarios, I would like to ask you how you are considering how to follow up on a realistic solution while showing ambitious targets as a company.

A1: The discussion of GX-ETS and the Strategic Energy Plan is noteworthy. The key point is how the composition of energy sources (such as renewable energy, nuclear power, etc.) will be, and what the national emissions target will be. We would like to scrutinize what we should aim for and what we can certainly do in line with the Strategic Energy Plan. In addition, GX-ETS will be required to regulate CO2 emissions reductions and will therefore be loaded. In the revision of the roadmap, we would like to set targets by looking at both the Strategic Energy Plan and GX-ETS.

Q2: Regarding DX, Cosmo's DX initiatives are listed on p. 25. There is a real sense that the refinery's efforts are producing results. Looking to the future, are there any large projects that will impact the profit and loss statement, or projects that will contribute to increased corporate value? I want to know which projects have high expectations as management.

A2: Recently, refinery projects have had the greatest impact. "Digital Twin" is written as one word, but there are many problems that can be solved behind it. First, the urgent issue facing Japan is the decline in the labor force, and in our case, the shortage of on-site personnel. Second, the issue is how much skills can be passed on to advanced engineering technologies in the future. These are important issues for Cosmo as well. From now on, we want to expand the data acquisition range and improve the real-time performance. The utilization of the generation AI is also examined. "Refinery Digital Twin" has achieved a certain level of results, but I think it has considerable potential for marketing science. The use of the app has expanded, and daily customer movements have been known. If we can understand customer's lifestyle, we will be able to see the communication activities of the community. Currently, we are in the process of orchestrating the data used by each department. From there, We believe that the range of usage will continue to increase by placing context in the data.

Q3: How long will it take to discuss financial perspectives (yen basis) rather than non-financial perspectives (GHG perspective, ton-based) about the "Roadmap for Zero Carbon Nets" in GX field?

At first, should the company consider incorporating this into financial discussions? Looking at the Strategic Energy Plan and GX-ETS, does the company think that if a mechanism like carbon pricing is adopted as a national policy, it will lead to discussions from a financial perspective, or should the company adopt a financial perspective regardless of national trends?

A3: We are having discussions within the company about where we should place our focus. It is important to keep in mind the most recent Strategic Energy Plan and GX-ETS that will be announced by the government.

In addition to the long-term vision, since the next fiscal year is the final year of the medium-term management plan, we are discussing how far we can show in the next medium-term management plan.

At this time, I apologize for not being able to answer clearly, but We would like to present some financial information.

Q4: Refinery digitization is a field where DX accumulates data, so I think it is an area that is easy to handle. On the other hand, when it comes to the personal realm of creating new businesses and marketing, it also feels that talented individuals who have been successful in their own way are not cooperative in DX areas.

How do you want to incorporate the skills and non-language data that you are assigning into your DX and apply them to your businesses?

A4: We created the Corporate DX Promotion Department, but Corporate DX Promotion Department is just an enabler, and the main drivers are the businesspeople. At the time of project execution, it leads, supports, or accompanies the project. The big difference is 'to run together toward the goal.' As a company with a long history in the refining business, the process tends to become fixed, and sometimes the question 'Why are you doing the collection in the first place?' is lacking. Therefore, we support it while accompanying the process. While a certain amount of knowledge is necessary, there is a one-step difference between 'understanding' and 'withdrawing and outputting.'

The HR department has also helped us, and unique talents are assigned to each department. While discussing with such individuals, we ask, 'Is the conventional method the best?' If there is any room for improvement, changes are being made in a favorable direction. The points we are advancing with the HR department are differentiating us from other companies.

Q5: Regarding refinery DX, refineries handle explosives, so controlling them remotely is difficult due to safety concerns. What is your view on this issue in the medium to long term, particularly from the perspective of reforming working styles in HRX?

A5: We inspected many foreign refineries, and some have facilities without operators. The timing of the system's introduction in digitization is important, and it is difficult to digitize the system of a refinery built 50 years ago all at once. Legally, it is difficult to remotely control everything, and I think there is strength in 'seeing on the ground.' Personally, I would like to start with 'co-existence,' where we support what is necessary for safe operation digitally, and then use the information we haven't collected until now to enhance people's decision-making. We aim to improve the accuracy of forecasts.

Q6: Regarding SAF, I believe a council is being held through public-private partnerships, but is it in the interest of achieving ROIC > WACC? Or when will the timing lead to performance?

A6: We are unable to discuss specific figures regarding costs and selling prices, but we are also monitoring national trends. The extent to which expansion is promoted will be determined through internal discussions.

Q7: Can we consider the implementation of large-scale capital expenditures related to SAF manufacturing as something still in the future?

A7: It is difficult to determine the extent to which SAF demand will expand at the present time, and at this time it is undecided about large-scale manufacturing.

Q8: I think airlines are moving toward achieving the goal of 'replacing 10% of their fuel oil use with SAF,' but can SAF be procured from abroad? Should it be domestically produced?

A8: Replacing 10 percent with SAF will impose SAF requirements on suppliers (the primary distributors) rather than airlines. We do not intend to operate at a deficit, so we will consider whether it is better to manufacture in-house or import it. Since airlines have no obligation to procure domestically, they may use trading companies and other means to import it, so we will make our decision with this in mind.

Q9: Regarding TCFD disclosures, the 'Financial Impact Assessment under Climate Change Scenarios' estimated that the cost increase would be approximately ¥80 billion under the 1.5°C carbon pricing scenario in 2030. When this becomes a reality, the burden will increase, but will it be covered by the customer unit price or by Cosmo?

A9: We are in the process of discussing how to balance the promotion of business and social demands in preparation for the next medium-term management plan. In the future, we would like to discuss how we can present some of the medium- to long-term strategies.

Q10: I believe the government is discussing carbon pricing within the working group. There are likely requests from various industries to 'share some of the burden of carbon pricing.' In the petroleum industry, if you have a perspective on carbon pricing, could you refer to the forecast in the TCFD disclosures? Alternatively, if the benchmark method or grandfathering is used, it is likely that a mechanism will be created that provides some flexibility for the industry.

A10: As in the latter case, we are encouraging them to consider the nature of the industry—that is, being a 'high-emissions company.' We are watching the situation closely in the future.

[Questions to Independent Outside Director]

Q11: What ESG initiatives do you believe are leading to increased corporate value, and what issues are you treating? Regarding governance, two new members were appointed, and the company shifted to a system with half of the board consisting of independent outside directors. What points do you think have progressed?

A11: Corporate governance-related initiatives have contributed to an increase in corporate value. Diversity has improved due to an increase in the number of female directors and the introduction of a system with half of the board consisting of outside directors. The number of skilled individuals in corporate management has increased, and monitoring functions have improved. In addition, medium- to long-term discussions have increased. The company is also actively involved in discussions regarding the next medium-term management plan starting in FY2026.

On the other hand, there is a sense of challenge in dealing with climate change. There are two key objectives: maintaining high utilization by increasing the gasoline share, ensuring stable supplies, and reducing GHG emissions. In the transition to a new field, the external climate differs greatly from when Vision 2030 was formulated. Key factors include Ukraine, the Middle East, and the Trump administration.

In addition, there are changes in risks, such as cyber-attacks on existing energy facilities, mass power consumption at data centers, instability in the supply chain of rare metals, and price volatility due to insufficient investment in oil, gas, and coal. A major issue is whether we can achieve restructuring in the new area so that we can secure profits as quickly as possible.

Q12: Cosmo has taken the lead in the petrochemical business, and the renewable energy business is consistently on the verge of implementing capital-efficiency measures. How have outside directors and the Board of Directors contributed to and engaged in these changes? Additionally, I would like to hear about the discussions on growth and your perspective as an independent outside director.

A12: In 2022, the Board of Directors was reformed. I feel that the decision-making process of the Board has been accelerated by delegating substantial authority for business execution to the executive management side. Outside directors were not necessarily asked for 'oil and energy' expertise; rather, they were appointed to provide advice on Cosmo's growth from both a management and strategic perspective.

On the other hand, some outside directors also have expertise in energy, and Cosmo's Board of Directors has both an advisory and a monitoring function. These functions work well depending on the project, and free and open discussions are held at the Board meetings.

In terms of 'next growth,' Cosmo has established a third-place position in the wind power generation industry. Outside directors shared the view that 'establishing early earnings in new areas' is an important issue, while also considering asset sales, replacements, and M&A, such as the cases of BP and JERA. As an outside director, I would like to play a role in supporting the realization of a 'Resilient Cosmo' that can respond to changes in the environment.

Q13: I initially thought that management would relax as major shareholders changed and pressure from the capital markets shifted, but in fact, it has improved. Is the culture being changed? We would like to understand what can be done to maintain the high level of discipline in the future, and whether there are any points to consider for maintaining that discipline even after President Yamada's eventual replacement.

A13: One year has passed since we responded to the activists, and there were concerns about whether returns and governance would become lax or if a sense of tension could be maintained under the current system. Iwatani Corporation became a new major shareholder, but we have been able to engage in dialogue with them in the business

world. I believe this has fostered a 'positive tension toward enhancing corporate value' that is different from the response to the activists. I feel that the company is focusing on business restructuring in this context.

As an example, the structural reform of the petrochemical business was also able to be decided relatively early. In the past, for better or worse, Cosmo's internal atmosphere had been somewhat relaxed, and at times frustrating, but now I feel that the tension has been maintained and employees' awareness of their efforts has clearly changed. The response to requests from outside directors has also accelerated. In terms of returns, the cumulative total return ratio over the three years of the medium-term management plan was 60%. To achieve this again this year, I continue to ask the executive team to consider return measures, including share buybacks, with a sense of satisfaction and purpose.

End

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As a result, actual results may differ materially from the information described and included herein due to a variety of external factors.