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 Transformation P.27 Roadmap for Achieving Net Zero Carbon Emissions by 2050 Shaping a Decarbonized Society with Wind Power — Construction of Kamiyuchi Wind Farm Underway — P.29 Cosmo Energy Group's Digital Transformation (DX) P.31 P.33

Cosmo Energy Group's Brand Strategy

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

Sustainable management

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	3rd meeting	 Reporting and discussion of progress in non- financial KPIs in FY2021
2021	meeting	 Key points in response to the revised Corporate Governance Code

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



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

CARU DHABI MUSCON

-

hamed

Conclusion of the memorandum of understanding regarding the consideration of collaboration

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



entative Director

shi Kiriyama



CEO, Abu Dhabi Future Energy Company PJSC - MasdarMoha eel Al Ramah



• 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
- The supply target of SAF for 2030 has been set at 300,000 KL per year.

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

Renewable Energy Shaping a Decarbonized Society with 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 CO_2 emissions. It contributes not only to the reduction of CO_2 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



It is a large-scale project including the development of 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 struction personnel 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.



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).



Kamiyuchi 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

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.

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

rma	el transfor	usiness mode
litie	al capabil	Digita
Bui	Partnering	Development of digital know-how & expertise
n to	set reform	Minds
ake	ure they t	ensu
une		Chance
	Challe	enance

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.

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

Our values form the foundation for

Cosmo's unique quality.

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

Cosmo Energy Group Management Vision

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.

Corporate advertisements

風を、

All employees of the Cosmo Energy In any era, we maintain a stable supply of energy that supports Groupwill embody the four brand core people's lifestyles, and continue to help customers live comfortably in their own ways. values, thus improving the brand value. Brand essence What the brand promises to customers Custome Supplying Foresight Trust a sense of service **Brand core values** orientation security Values at the core of the brand Developing and Valuing customer service Safe operation providing various types of energy to meet the Stable production and stable supply and helping consumers and strong relationships capacity, and a high establish their own lifestyles needs of the times of trust with oil level of technologi by suggesting high valueand taking on producing countries as **Functional value** added services and methods and expertise as its challenges to increase its foundation foundation Physical and functional value of use the value of energy obtained from the brand Oil refining Petrochemica Renewable Energy Business Petroleum Business Petroleum sales In any era, we wish to remain a

Filling up your hearts, too.

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

COSMO BRAND AWARD 2021











TV commercial