




ENEOS REPORT
ESG DATA BOOK 2024

Editorial Policy	2
ENEOS Group Philosophy / ENEOS Group Code of Conduct	4
ESG Management	6
Environmental	21
Environmental Management	22
Prevention of Global Warming	29
The 3Rs (Reduce, Reuse, Recycle)	43
Management of Chemical Substances	51
Prevention of Environmental Pollution	54
Biodiversity	58
Our Response to Climate Change Risks and Opportunities (TCFD)	63
Social	72
Safety	73
Human Rights	80
Human Resource Development	89
Health	94
Healthy Work Environment	100
Quality	111
Supply Chain Management	115
Social Contribution	123
Governance	132
Corporate Governance Framework	133
Compliance	149
Data	154
Governance, Environmental and Social Data	154
Independent Practitioner's Assurance Report	167
Comparative Table with GRI Standards	168

Editorial Policy

This website was developed to inform stakeholders of specific challenges, approaches and initiatives of the ENEOS Group in terms of environmental, social and governance (ESG).

In the editorial process, we referenced the Global Reporting Initiative (GRI) Standards, a set of international reporting guidelines, and the Environmental Reporting Guidelines (2018 edition) published by Japan's Ministry of the Environment, as well as the assessment items of major ESG rating organizations. Each year, we continue to expand our disclosure of important ESG-related information.

We also publish the [Integrated Report](#)  , which includes information about our medium- to long-term growth strategy (value creation story). We encourage readers to use the Integrated Report in conjunction with this website.

Scope

This website covers ENEOS Holdings, Inc., ENEOS Corporation, ENEOS Xplora Inc.¹, JX Advanced Metals Corporation², ENEOS Materials Corporation, ENEOS Power Corporation, ENEOS Renewable Energy Corporation (hereinafter, "ENEOS Holdings and principal operating companies"), as well as other subsidiaries and affiliated companies, for a total of 748 companies. In cases where the scope is different from the above, the relevant scope is indicated.

1 The trade name in English was changed from JX Nippon Oil & Gas Exploration Corporation to ENEOS Xplora Inc. on January 1, 2025.

2 The trade name in English was changed from JX Metals Corporation to JX Advanced Metals Corporation on May 14, 2024.

Period Covered

This website covers fiscal 2023 (April 1, 2023 to March 31, 2024).

However, some information that pertains to April 2024 and later is also included.

Reporting/Disclosure Date

January 2025

(Previous issue: January 2024, next disclosure: January 2026)

Guidelines Used as Reference

- Global Reporting Initiative (GRI) Sustainability Reporting Standards
[Comparative Table with GRI Standards](#)
- Environmental Reporting Guidelines (2018 edition), Ministry of the Environment, Japan
- Recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)

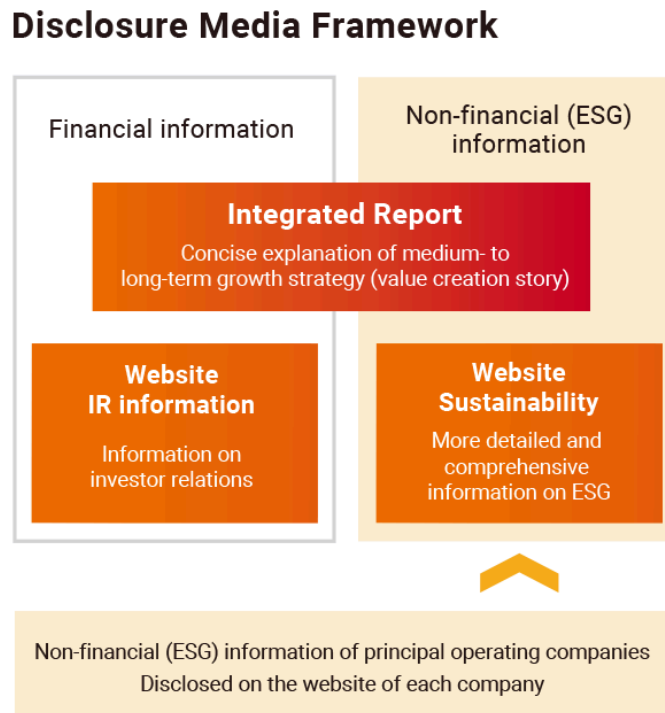
Enhancing Reporting Reliability

Environmental and social information for fiscal 2023 on this ESG Data Book website indicated with  has been assured by an independent practitioner to ensure objective and reliable reporting.

Inquiries

ENEOS Holdings, Inc.
Investor Relations Department
1-2 Otemachi 1-chome, Chiyoda-ku, Tokyo 100-8161, Japan
Website (inquiries)
<https://www.hd.eneos.co.jp/english/contact/> □

Disclosure Media Framework



ENEOS Group Philosophy

Note: The ENEOS Group Philosophy is also referred to as "the Group Philosophy" in this report.

Mission

**Harnessing the Earth's power
for the common good and for the day-to-day life of each individual,
we will contribute to the development of our communities
and help to ensure a vibrant future
through creation and innovation in energy, resources, and materials.**

Our Five Core Values

**As a member of
the community**

High ethical standards

Based on our core principles of integrity and fairness, we conduct all of our business activities in accordance with our high ethical standards.

Health, safety, and environment

We give the highest priority to health, safety and environmental initiatives, which are vital to the well-being of all living things.

**Supporting
day-to-day life**

Focus on customers

We strive to meet the expectations and evolving needs of our valued customers and of society as a whole through the stable provision of products and services while creating new value as only we can.

**For
a vibrant future**

Taking on challenges

Taking changes in stride, we rise to the challenge of creating new value while seeking innovative solutions for today and tomorrow.

Moving forward

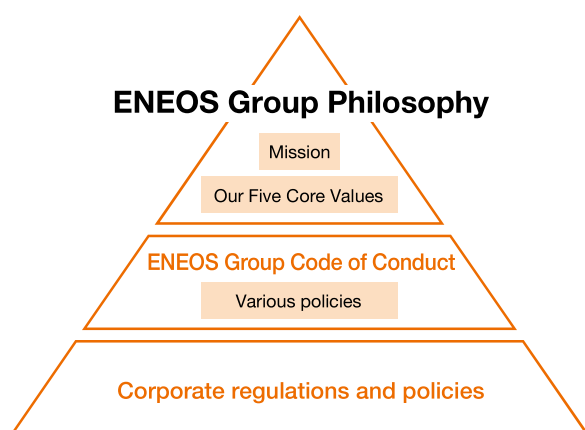
Looking to the future, we continue to grow, both as individuals and as a company, through the personal and professional development of each and every employee.

ENEOS Group Code of Conduct

The ENEOS Group Code of Conduct is also referred to as "the Group Code of Conduct" or "the Code of Conduct" in this report.

1. Positioning of ENEOS Group Code of Conduct

This ENEOS Group Code of Conduct (hereinafter referred to as the "Code of Conduct") is a set of standards that we, as the ENEOS Group directors, officers and employees, apply in order to realize the ENEOS Group Philosophy through our business activities and fulfill our social responsibilities. The Code of Conduct, as the foundation of all of our corporate regulations, shall serve as the cornerstone for making judgments in all of our business dealings.



2. Important Aspects in Living Up to the Code of Conduct

We, as the ENEOS Group directors, officers and employees, shall comply with this Code of Conduct when performing our duties.

When violations of this Code of Conduct are found, they shall not be overlooked, and each one of us must do what we can to deal with such issues.

Executives and supervisors shall fulfill their obligations according to their responsibilities so that all business operations are carried out in accordance with this Code of Conduct.

Ask yourself the following questions if you are in doubt as to what is the correct course of action in performing your day-to-day business operations.

- Is your conduct and the conduct of others around you in compliance with laws and regulations, the Code of Conduct, and high ethical standards?
- Can you unreservedly give an account of your conduct to the people around you, including your family and friends?
- Can you respond with confidence to questions about your conduct from third parties or the authorities, or reports by the media?

3. Applicable Scope of the Code of Conduct

In principle, this Code of Conduct is applicable to all directors, officers and employees who work at ENEOS Holdings, Inc., and its subsidiaries. We also encourage companies that are part of our value chain to comply with this Code of Conduct. These companies include, but are not limited to, suppliers of raw materials, logistics companies, construction companies, and sales companies.

4. Relation to National and Local Laws

We, as the ENEOS Group directors, officers and employees, respect this Code of Conduct, in addition to local laws and customs. National and local laws will take precedence over the Code of Conduct when the provisions of such laws are more rigorous than the Code of Conduct.

ENEOS Group Code of Conduct

1. Compliance
2. Safety and security
3. Environmental conservation
4. Health enhancement
5. Respect for human rights
6. Product and service quality
7. Equitable and fair transactions
8. Appropriate relationships with governments and public administrations
9. Avoidance of conflicts of interest
10. Corporate asset protection and management
11. Information management and disclosure
12. Establishment of a healthy work environment
13. Contribution to the development of civil society
14. Actions for violations and measures to prevent recurrence



The full text of the ENEOS Group Code of Conduct is available on our website.

<https://www.hd.eneos.co.jp/english/about/conduct.html>

ESG Management

Basic Approach

To achieve sustainable growth, we must achieve social recognition of our value by building more credibility with our stakeholders through our response to social needs and the resolution of social issues.

The ENEOS Group has accordingly formulated the Basic Policy for ESG Management.

Basic Policy for ESG Management

- ESG management at the ENEOS Group involves formulating management and business strategies based on risks and business opportunities and creating both economic value (profits) and social value (resolution of social issues) through our business in order to realize the ENEOS Group Philosophy.
- The ENEOS Group is a group of companies that strives to earn the trust of stakeholders through the implementation of ESG management in our business operations.

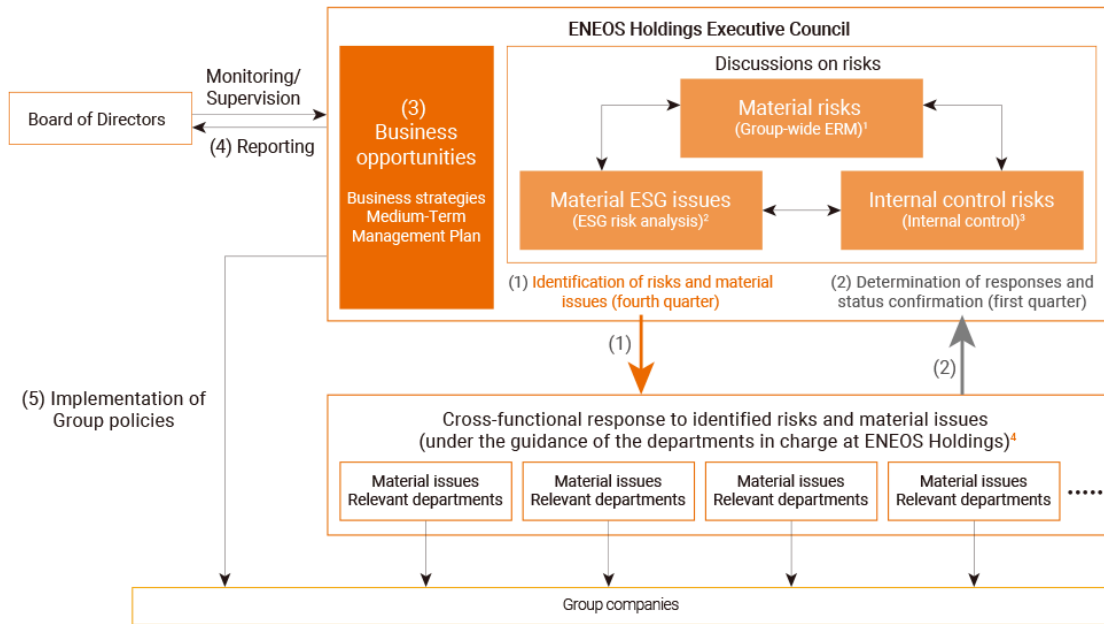
ESG Management Structure

Pursuant to its Basic Policy for ESG Management, the ENEOS Group has established a structure in which the ENEOS Holdings Executive Council, chaired by the CEO of ENEOS Holdings, analyzes management risks and business opportunities and confirms the status of responses to identified risks and material ESG issues.

Process for Identifying Risks and Material Issues and Confirming Response Status

1. Comprehensive discussions (held annually in the fourth quarter) (see (1) in diagram below)
The Executive Council comprehensively discusses the following matters to ensure effective discussion and quick decision-making.
 - Material risks identified through the enterprise risk management (ERM) system
 - Material ESG issues identified through ESG risk analysis
 - Internal control risks identified through the internal control system
2. Determination of responses and status confirmation (annually in the first quarter) (see (2) in diagram below)
Under the guidance of the departments in charge at ENEOS Holdings, the relevant departments and principal operating companies work together in a cross-functional manner to develop and implement responses for the identified risks and material issues.
The Executive Council confirms the status of responses for the previous fiscal year and determines the responses for the current fiscal year.
3. Discussion of business opportunities (as needed) (see (3) in diagram below)
The Executive Council discusses business opportunities when it deliberates on the Medium-Term Management Plan and fiscal year business plans, as well as the budgets based on these plans.
4. Reporting to the Board of Directors (as needed) (see (4) in diagram below)
The Board of Directors passes resolutions on management, the Medium-Term Management Plan and budgets, and also performs monitoring and supervision by receiving reports (twice a year, in principle) on risks and material issues determined by the Executive Council and on the status of responses.
5. Sharing with Group companies (as needed) (see (5) in diagram below)
We share and communicate the identified risks and material issues with all Group companies, and each Group company reflects them in their business strategies.

ENEOS Group ESG Management Structure



1 For details, see [Enterprise Risk Management \(ERM\)](#).

2 For details, see [Verifying and Identifying Material ESG Issues](#).

3 For details, see [Internal Control](#).

4 Example: Internal Control Department and Legal & Corporate Affairs Department work together to build and operate a comprehensive internal control structure

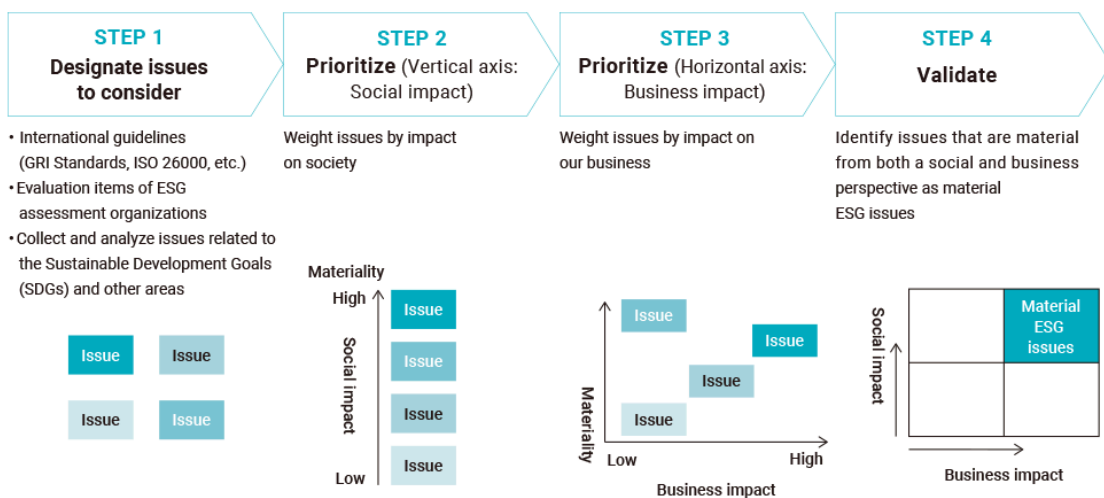
Verifying and Identifying Material ESG Issues

The ENEOS Group identifies material ESG issues every year based on various guidelines as well as the assessment items and weightings of ESG assessment organizations.

For fiscal 2024, we identified 10 material ESG issues using resources such as the Sustainability Accounting Standards Board (SASB) guidelines for each business area, prioritizing the degree of impact on society as well as the degree of impact on our business, taking into account factors such as our discussions and consideration of our Long-Term Vision and the third Medium-Term Management Plan.

In addition, departments responsible and KPIs are set for each material ESG issue, and the progress of KPIs and the results of measures for material ESG issues are reported to the Executive Council and the Board of Directors.

Identification Procedure for Material ESG Issues



Material ESG Issues Identified for Fiscal 2024

In descending order of assessment score

Category	Material ESG issues
Environmental	Contribution to the development of a decarbonized society
Social	Ensuring safety / Health enhancement
Governance	Compliance
Social	Compliance with international principles on human rights
Social	Retaining and developing human resources
Governance	Appropriate structuring and operation of corporate governance
Environmental	Appropriate understanding and management of biodiversity risks
Social	Diversity, equity and inclusion (DE&I)
Environmental	Contribution to the development of a recycling-oriented society
Social	Communication with stakeholders (investors, etc.)

Status of Responses to Material ESG Issues

For fiscal 2023, we set 16 specific targets (KPIs) for nine material ESG issues. Thirteen of the targets were achieved and three were not. For fiscal 2024, we have identified 10 material ESG issues and set 20 targets (KPIs), which we are taking steps to achieve.

Fiscal 2023 Response Status

Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Category	Material ESG Issues	Initiative	Target (KPI)	Results/Progress		Applicable companies
Environmental	Contribution to the development of a decarbonized society	Reduction in CO₂ emissions (reduction amount through independent efforts).	Reduction in CO ₂ emissions: Reduce emissions to 30 million tons or less	😊	Emissions: 25.41 million tons	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation, and their principal group companies (Total of 87 companies including overseas companies)
	Contribution to the development of a recycling-oriented society	Reduction in landfill disposal	Waste-to-landfill ratio: Maintain zero emissions (less than 1%)	☹️	1.2%	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation, and their principal group companies (Total of 64 companies including overseas companies)
Social	Ensuring safety / Health enhancement	Reduction in occupational injuries	Zero serious occupational injuries (occupational fatalities)	😊	Zero	ENEOS, ENEOS Xplora, JX Advanced Metals, and their group companies and contractor companies (Total of 59 companies including overseas companies)
			TRIR* of 1.0 or less *Number of occupational injuries per million working hours (non-lost-time occupational injuries + lost-time occupational injuries and fatalities)	😊	0.94	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)

Social	Ensuring safety / Health enhancement	Ensuring health of employees	Percentage of employees maintaining an appropriate weight Employees with BMI under 25: Maintain at 70% or higher	😬	69.7% (Some companies did not reach their targets)	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)
			Reduce the percentage of cigarette smokers Percentage of smokers: Reduce by at least 1.0% from the previous year	😬	Up 2.1% from the previous year (overall increase due to weak measures and environment not yet in place)	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)
	Communication with stakeholders (investors, etc.)	Engagement with external parties	Effective engagement with investors, etc. (total of 250 cases)	😊	Actively planned and conducted interviews with investors (412 meetings)	ENEOS Holdings
	Compliance with international principles on human rights	Human rights due diligence	Implement human rights due diligence	😊	Conducted third round of human rights due diligence	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)
		Human rights awareness	Implement human rights training	😊	Implemented	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)
	Retaining and developing human resources	Development of human resources capable of enhancing corporate value	Implement effective training and evaluation	😊	<ul style="list-style-type: none"> Implemented various training programs Evaluated the training content and reflected the results in the content for the next fiscal year onward 	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)

Social	Diversity and inclusion	Advancement of women in the workplace	Maintain rate of women among newly hired university graduates at 25% or higher	😊	27.3%	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)
		Advancement of employees with disabilities	Maintain employment rate of people with disabilities at 2.3% or higher	😊	2.57%	
Governance	Appropriate structuring and operation of corporate governance	Evaluation of the effectiveness of the Board of Directors	a. Implement evaluations of the effectiveness of the Board of Directors b. Conduct compliance training for officers	😊	a. Implemented evaluation of the effectiveness of the Board of Directors b. Conducted compliance training for officers with an outside attorney as a speaker	a. ENEOS Holdings b. ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (Total of 4 companies)
	Compliance	Legal compliance inspections	Conduct legal compliance inspections	😊	Implemented	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation, and their principal group companies (Total of 48 companies including overseas subsidiaries)
		Implement training on important laws and regulations	Provide legal training related to business needs and issues within the Group	😊	Implemented	
		Operation of whistleblower systems	a. Respond appropriately to whistleblowing b. Explore and implement outsourcing support to enable efficient response to whistleblowing	😊	a. Implemented appropriate whistleblower response b. Outsourced whistleblower contact services for quicker and more efficient response	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation, and their principal group companies (Total of 122 companies including overseas subsidiaries)

Fiscal 2024 Material ESG Issues and Targets (KPIs)

Category	Material ESG Issues	Initiative	Target (KPI)	Achievement (fiscal year)	Applicable companies
Environmental	Contribution to the development of a decarbonized society	Reduction in CO₂ emissions	Reduction in CO ₂ emissions: Reduce emissions to 29.50 million tons or less	2024	ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy, NIPPO Corporation, and their principal group companies (Total of 75 companies including overseas companies)
	Contribution to the development of a recycling-oriented society	Reduction in landfill disposal	Waste-to-landfill ratio: Maintain zero emissions (less than 1%)	2024	ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy, NIPPO Corporation, and their principal group companies (Total of 65 companies including overseas companies)
	Appropriate identification and management of biodiversity risks	Understand the degree of dependence and impact on natural capital	Understand the degree of dependence and impact on natural capital in main business sectors	2024	ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 6 companies)
Social	Ensuring safety / Health enhancement	Reduction in occupational injuries	Serious occupational injuries (occupational fatalities): zero	2024	ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy, and their group companies and contractor companies (Total of 70 companies including overseas companies)
			TRIR*: 1.0 or less *Number of occupational injuries per million working hours (non-lost-time occupational injuries + lost-time occupational injuries and fatalities)	2024	
			LTIR*: 0.0 for employees, 0.3 or less for employees of contractor companies *Number of lost-time occupational injuries and fatalities per million working hours	2024	

Social	Ensuring safety / Health enhancement	Ensuring health of employees	Percentage of employees maintaining an appropriate weight: 70% or higher of employees with BMI under 25	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)
			Reduce the percentage of cigarette smokers Percentage of smokers: Reduce by at least 1.0% from the previous year	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)
	Communication with stakeholders (investors, etc.)	Engagement with investors, etc.	Effective engagement with investors, etc. (total of 250 cases)	2024	ENEOS Holdings
	Compliance with international principles on human rights	Human rights due diligence	Follow up human rights due diligence conducted in fiscal 2023	2024	ENEOS Holdings
		Human rights awareness	Implement human rights training	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)
	Retaining and developing human resources	Retaining human resources capable of enhancing corporate value	<ul style="list-style-type: none"> Set KPIs to ensure an environment where employees can work comfortably and with pride <ul style="list-style-type: none"> Achieve steady improvement at ENEOS Holdings and ENEOS Identify issues, formulate and implement improvement measures and plans for each division (worksite), conduct monitoring and continuously implement improvement activities Conduct engagement surveys to identify issues and formulate measures 	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)

Social	Retaining and developing human resources	Developing human resources capable of enhancing corporate value	Establish a system to strategically allocate and develop management personnel through visualization of human resources	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)
	Diversity, equity and inclusion (DE&I)	Advancement of women in the workplace	Maintain rate of women among newly hired university graduates at 25% or higher	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Renewable Energy (Total of 6 companies)
		Advancement of employees with disabilities	Maintain employment rate of people with disabilities at 2.5% or higher	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Renewable Energy (Total of 6 companies)
Governance	Appropriate structuring and operation of corporate governance	Evaluation of the effectiveness of the Board of Directors	Implement evaluations of the effectiveness of the Board of Directors (including evaluations of improvement processes)	2024	ENEOS Holdings
		Training for officers	Conduct training for officers	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)

Governance	Compliance	Strengthening compliance activities	<ul style="list-style-type: none"> ● Assess the status of compliance activities of principal operating companies and share compliance measures through the ENEOS Group Compliance Committee ● Conduct legal compliance inspections 	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)
		Fostering compliance awareness	Implementation of compliance and legal training tailored to each company's business risks and internal issues	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)
		Operation of whistleblower systems	<ul style="list-style-type: none"> ● Respond to whistleblowing appropriately and promptly ● Build an effective whistleblower system through measures including a review of the Group whistleblower system 	2024	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, ENEOS Power, ENEOS Renewable Energy (Total of 7 companies)

Major Initiatives

Discussions by the Board of Directors

In fiscal 2023 and fiscal 2024, the following ESG-related matters were reported to the Board of Directors.

FY2023	FY2024 1H
<ol style="list-style-type: none"> Fiscal 2022 performance results, fiscal 2023 progress, and fiscal 2024 action plans Responses to specific issues <ul style="list-style-type: none"> Formulation of the Carbon Neutrality Plan Status report on carbon neutrality strategies Human rights due diligence results 	<ol style="list-style-type: none"> Fiscal 2023 performance results and fiscal 2024 action plans

Raising Awareness of the Group Philosophy and Code of Conduct

The ENEOS Group believes that understanding and implementation of the ENEOS Group Philosophy and the ENEOS Group Code of Conduct by all officers and employees plays an important role in the fulfillment of our social responsibilities. Therefore, we have implemented various measures to enable all officers and employees to reference the Group Philosophy and the Code of Conduct at any time in order to maintain their awareness.

In fiscal 2023, we held town hall meetings and established many other venues for dialogue between the management team and employees in order to raise greater awareness internally about the Commitment to Realizing the Group Philosophy, the Long-Term Vision, and the third Medium-Term Management Plan, announced in May 2023.

In fiscal 2024, in light of major changes to the Group's management structure as well as our reflection on the misconduct of top management that occurred in fiscal 2023, we plan to implement training and other measures to re-instill awareness of the Group Philosophy and the Code of Conduct throughout the Group.

Measures to Raise Awareness of the Group Philosophy and Code of Conduct

Purpose	Measures
Ensure awareness	Distribution of Group Philosophy cards and Code of Conduct handbooks
	Posters
	Digital signage in company workplaces
	Translation of Group Philosophy into 10 languages (English, Chinese [Simplified/Traditional], Korean, Spanish, Portuguese, German, Vietnamese, Thai, Indonesian) and distribution
Promote understanding	Training on Group Philosophy and Code of Conduct for newly hired employees and newly appointed managers
Monitoring	Confirmation (annual) using internal control and legal compliance inspections targeting all officers and employees



Code of Conduct handbook



Group Philosophy card

Stakeholder Engagement

The ENEOS Group conducts its business activities through its relationships with stakeholders, including shareholders, investors, customers, business partners and employees. We actively engage in dialogue with stakeholders and work to ensure that our business activities meet their expectations and requirements. The Group also solicits the views of outside experts and stakeholders regarding specific ESG-related themes and responds accordingly. To date, we have carried out engagement with outside experts and stakeholders as indicated in the table below entitled Engagement with Stakeholders. Separate from this engagement, in fiscal 2023, we held briefings for investors on the ENEOS Group Carbon Neutrality Plan and our initiatives to strengthen governance, and we also conduct periodic engagement with Climate Action 100+, a climate change action initiative of institutional investors. We will continue our engagement with outside experts and stakeholders in our contribution to the resolution of social issues.

ENEOS Group Stakeholders

Stakeholders	Activities	Main means of communication	Main contacts
Shareholders and Investors	ENEOS Holdings is committed to the prompt, proper, and fair disclosure of information to shareholders and investors in accordance with its Disclosure Policy.	<ul style="list-style-type: none"> General meetings of shareholders, briefings on financial results, briefings for individual investors, and ESG briefings Disclosure of information through the Integrated Report, the ESG Data Book, shareholder reports, and our websites 	<ul style="list-style-type: none"> Contact on the ENEOS Holdings website https://www.hd.eneos.co.jp/english/contact/ □ Contacts in the ENEOS Holdings investor relations division (phone, email, meetings, etc.)
Customers	The Group is committed to developing and delivering products and services that fulfill customer needs and expectations and earn customer trust and satisfaction.	<ul style="list-style-type: none"> Communications through marketing activities Provision of safe, reliable, and valuable products and services Disclosure of information on websites Inquiry channels through phone and websites 	<ul style="list-style-type: none"> Contact on the ENEOS Holdings website https://www.hd.eneos.co.jp/english/contact/ □ Contacts in Group company sales divisions (phone, email, meetings, etc.) ENEOS Customer Service Center (toll-free)
Business Partners	The Group makes purchasing information available to business partners on its websites, actively provides business opportunities, and strives to ensure fair business opportunities.	<ul style="list-style-type: none"> Communications through procurement activities Use of websites CSR procurement surveys (two-year cycle) 	<ul style="list-style-type: none"> Contact on the ENEOS Holdings website https://www.hd.eneos.co.jp/english/contact/ □ Contacts in Group company procurement divisions (phone, email, meetings, etc.) Human rights consultation contact points for suppliers
NPOs/NGOs	The Group has built cooperative relationships with NPOs and NGOs and actively undertakes environmental preservation and social contribution activities.	<ul style="list-style-type: none"> Collaboration on biodiversity preservation activities Collaboration on child-rearing support activities Verification from third-party perspective in human rights due diligence (every other year) Fiscal 2023: Conducted one third-party verification and interviews with suppliers and contractor companies 	<ul style="list-style-type: none"> Contact on the ENEOS Holdings website https://www.hd.eneos.co.jp/english/contact/ □
Local Communities / Global Society	The Group strives to engage in responsible corporate activities by responding to the needs and expectations of and engaging in active communication with the local communities in the areas where it conducts its business operations, as well as international society.	<ul style="list-style-type: none"> Information sessions for members of local communities, participation in and sponsorship of events Volunteer activities Establishment of support systems for oil-, gas-, and copper-producing countries Involvement in international initiatives 	<ul style="list-style-type: none"> Contact on the ENEOS Holdings website https://www.hd.eneos.co.jp/english/contact/ □ Contacts in business offices in areas where we conduct business operations (phone, email, meetings, etc.)

Stakeholders	Activities	Main means of communication	Main contacts
Employees	The Group considers employees to be critical stakeholders in its operations and has established various systems to ensure that each employee can work with peace of mind and to his or her full potential.	<ul style="list-style-type: none"> • Periodic dialogue between labor unions and management • Dissemination of information through the Group employee magazine and the company intranet • Periodic implementation of awareness surveys • Implementation of classification-leveled training • Solicitation of opinions, recommendations and requests for the company (annually) • Surveys on various measures (as needed) 	<ul style="list-style-type: none"> • Whistleblower systems (hotlines) Note: May also be used by employees of contractors • Periodic interviews with supervisors • Through labor unions

Engagement with Stakeholders

Fiscal year	Event	Speaker	Theme	For
FY2022	ENEOS Environment and Safety Forum	Director & CEO Senoh Ken, The Industry-Academia Collaboration Initiative Nonprofit Organization	"Circular economy created by business, business created by a circular economy: What is the essence of a circular economy?"	Officers and employees
FY2023	ENEOS Environment and Safety Forum	Professor Komatsubara Akinori, Department of Industrial and Management Systems Engineering, School of Creative Science and Engineering, Faculty of Science and Engineering, Waseda University	"Safe behavior on the living frontlines"	Officers and employees
FY2023	In-house presentations by outside directors	3 female outside directors Outside Director Oka Toshiko Outside Director Kawasaki Hiroko Outside Director (at the time) Mitsuya Yuko	"The ENEOS Group as seen by Outside Directors"	ENEOS Group employees

Participation in Initiatives and Organizations

Endorsement of the UN Global Compact (UNGC)

ENEOS Holdings (ENEOS, ENEOS Xplora, JX Advanced Metals, ENEOS Materials, and ENEOS Power) and ENEOS Renewable Energy participate in the UN Global Compact, supporting the compact's 10 principles in the four categories of human rights, labor standards, the environment, and anti-corruption.



The Ten Principles of the UN Global Compact

Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights; and	Principle 1
	make sure that they are not complicit in human rights abuses.	Principle 2
Labour	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	Principle 3
	the elimination of all forms of forced and compulsory labour;	Principle 4
	the effective abolition of child labour; and	Principle 5
	the elimination of discrimination in respect of employment and occupation.	Principle 6
Environment	Businesses should support a precautionary approach to environmental challenges;	Principle 7
	undertake initiatives to promote greater environmental responsibility; and	Principle 8
	encourage the development and diffusion of environmentally friendly technologies.	Principle 9
Anti-Corruption	Businesses should work against corruption in all its forms, including extortion and bribery.	Principle 10

Endorsement of Task Force on Climate-related Financial Disclosures (TCFD) Recommendations

In May 2019, we signed the TCFD recommendations, and we disclose information on climate change in accordance with the TCFD recommendations to the greatest extent possible. In addition, we have participated in the TCFD Consortium since its inception as a venue for discussing effective approaches to information disclosure.



Initiatives and Organizations We Participate In

The ENEOS Group endorses and participates in a number of other initiatives and organizations in addition to the UNGC and TCFD.

- Challenge Zero



- GX League



- IPIECA—a global oil and gas industry association for advancing environmental and social performance



- CDP



- Council for Better Corporate Citizenship (CBCC)



- Japan Business Initiative for Biodiversity (JBIB)



- Business for Nature Call to Action

- Human Capital Management Consortium

Communication with Industry Organizations

	Organization name	Position held by Group Executive, etc.
ENEOS	Petroleum Association of Japan	Vice-President
	Japan Petrochemical Industry Association	Director
	Japan Chemical Industry Association	Policy Coordinating Committee member, Labor Committee member, Technical Affairs Committee member
	Japan Hydrogen Association	Vice Chairman
ENEOS Renewable Energy	Renewable Energy Association for Sustainable Power supply (REASP)	Director
	Japan Wind Power Association (JWPA)	Director
ENEOS Xplora	Japan Energy Resources Development Association	Chairman
	Japan Natural Gas Association	Director
JX Advanced Metals	Japan Mining Industry Association (JMIA)	Managing Director
	The Sulphuric Acid Association of Japan	Vice Chairman
	Japan Copper and Brass Association (JCBA)	Director
	Japan Society of Newer Metals	Chairman
	Japan Catalyst Recovering Association	Chairman

Selection for Inclusion in ESG-Related Investment Indexes

(As of September 2024)

- FTSE4Good Index Series
- FTSE Blossom Japan Index
- FTSE Blossom Japan Sector Relative Index
- MSCI Nihonkabu ESG Select Leaders Index
- MSCI Japan Empowering Women Index (WIN)
- Morningstar Japan ex-REIT Gender Diversity Tilt Index
- S&P/JPX Carbon Efficient Index
- SOMPO Sustainability Index

- > [FTSE4Good Index Series](#) 
- > [FTSE Blossom Japan Index](#) 
- > [FTSE Blossom Japan Sector Relative Index](#) 



THE INCLUSION OF ENEOS Holdings, Inc. IN ANY MSCI INDEX, AND THE USE OF MSCI LOGOS, TRADEMARKS, SERVICE MARKS OR INDEX NAMES HEREIN, DO NOT CONSTITUTE A SPONSORSHIP, ENDORSEMENT OR PROMOTION OF ENEOS Holdings, Inc. BY MSCI OR ANY OF ITS AFFILIATES.

THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES AND LOGOS ARE TRADEMARKS OR SERVICE MARKS OF MSCI OR ITS AFFILIATES.

Environmental

Corporate activities are contingent upon a healthy global environment. Recognizing that preservation of the global environment is an important issue shared by all humankind, the ENEOS Group has included environmental conservation as a standard in its Group Code of Conduct and as part of its efforts to contribute to the development of a sustainable society through its business activities.
For environmental data, please refer to the [Data](#) page.

<div>Environmental Management</div> <div>Basic approach, structure and other information</div> <div>→</div>	<div>Prevention of Global Warming</div> <div>Basic approach and initiatives</div> <div>→</div>
<div>The 3Rs (Reduce, Reuse, Recycle)</div> <div>Basic approach and initiatives</div> <div>→</div>	<div>Management of Chemical Substances</div> <div>Basic approach and initiatives</div> <div>→</div>
<div>Prevention of Environmental Pollution</div> <div>Basic approach and initiatives</div> <div>→</div>	<div>Biodiversity</div> <div>Basic approach and initiatives</div> <div>→</div>
<div>Our Response to Climate Change Risks and Opportunities (TCFD)</div> <div></div> <div>→</div>	

Environmental Management

Basic Approach

As part of its responsibilities as a corporate group involved in the supply of energy and materials, the ENEOS Group maintains a proper understanding of the impact of its business activities on climate change risks and natural capital. Environmental conservation has been included as a standard in the ENEOS Group Code of Conduct, and the Group has also established a Long-Term Vision and a Carbon Neutrality Plan, and is implementing initiatives for the development of a sustainable society.

In May 2019, ENEOS Holdings signed a statement of support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and we are working to enhance and expand our disclosures concerning climate change. For details, see [Our Response to Climate Change Risks and Opportunities \(TCFD\)](#).

ENEOS Group Code of Conduct (excerpt)

3. Environmental conservation

- (1) We recognize that we are stewards of the environment and its limited resources. We strive to conserve biodiversity and natural capital, including, but not limited to, water, soil, and the atmosphere, and contribute to the development of a sustainable society.
- (2) We strive to promote renewable energy and energy conservation in order to contribute to the development of a decarbonized society.
- (3) We strive to contribute to the establishment of a circular economy by reducing, reusing and recycling, while using resources effectively and efficiently.
- (4) We strive to take actions to promote sustainable production and consumption for the benefit of society while taking the same actions throughout our value chain, including, but not limited to, resource development, procurement, production, distribution and sales.

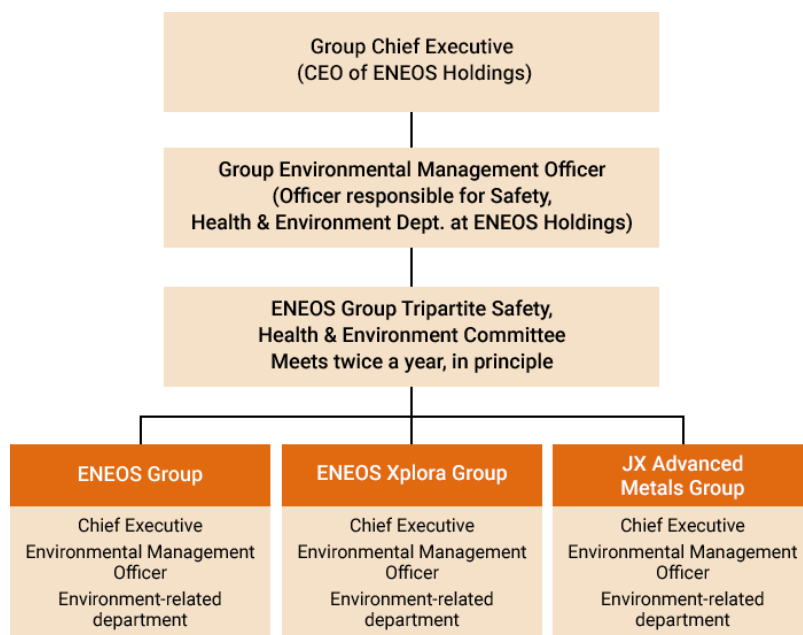
Structure

In order to facilitate environmental management based on the Group Code of Conduct, the Group has established an environmental management system (EMS) headed by the CEO of ENEOS Holdings as Group chief executive. Under this system, we regularly confirm the status of achievement of environmental targets and compliance with environmental laws and regulations, and report the status to the ENEOS Holdings Executive Council and the Board of Directors, ensuring that environmental management performance is monitored and supervised by both organizations.

In addition, 89 of the 138 business sites that have adopted the EMS have obtained ISO 14001 certification, a set of international standards for environmental management, for a certification rate of 64%.

We have established the ENEOS Group Tripartite Safety, Health & Environment Committee, chaired by the officer responsible for the Safety, Health & Environment Department at ENEOS Holdings. The committee meets, in principle, twice annually, where it deliberates on environmental targets, plans and performance of ENEOS Holdings and the Group's principal operating companies and shares information on the status of activities in an effort to improve Group-wide environmental issues.

ENEOS Group Environmental Management System (EMS)



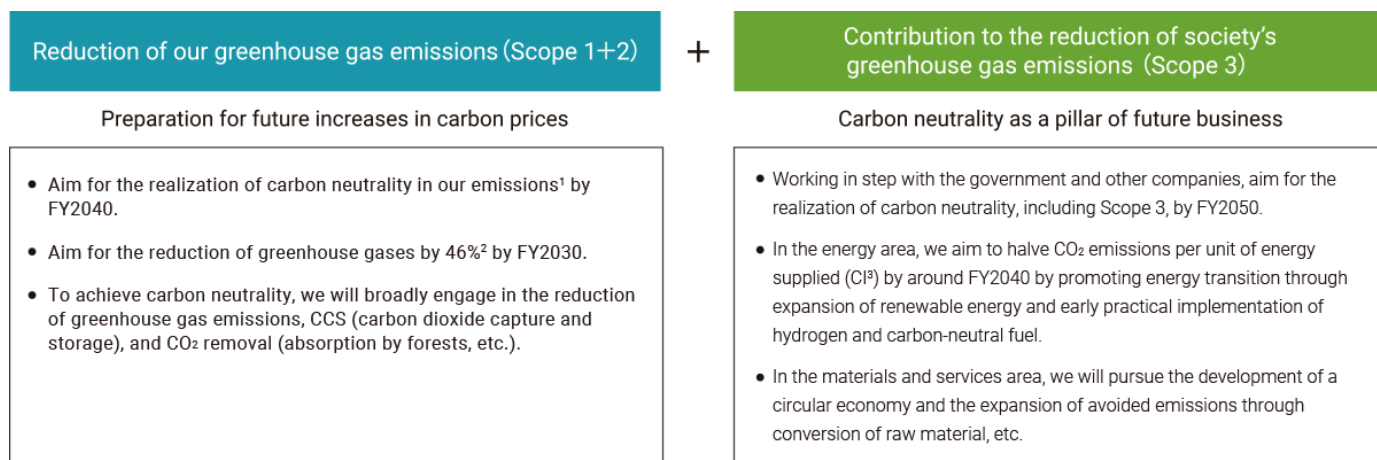
Plan and Targets

Carbon Neutrality Plan

In May 2020, the Group announced its intention to achieve carbon neutrality in its own emissions by fiscal 2040, and in May 2022 released its Carbon Neutrality Plan, taking into account domestic and international trends. In conjunction with the formulation of our third Medium-Term Management Plan (FY2023–FY2025), we formulated a new Carbon Neutrality Plan, which we announced in May 2023.

The new plan consists of two pillars; namely, reduction of our greenhouse gas emissions and contribution to the reduction of society's greenhouse gas emissions. With the first pillar, reduction of our greenhouse gas emissions, we aim to achieve carbon neutrality in Scope 1 and 2 by 2040 and minimize business costs (risks) in preparation for future increases in carbon prices. With the second pillar, contribution to the reduction of society's greenhouse gas emissions, we clearly state our aim to achieve carbon neutrality, including Scope 3, by 2050, promote energy transition and pursue the development of a circular economy in the materials and services area, which form the pillar (opportunities) of future business.

Overview of the Plan



1 Scope 1+2

2 Compared to the base year FY2013

3 Carbon intensity

Initiatives for the Realization of Carbon Neutrality

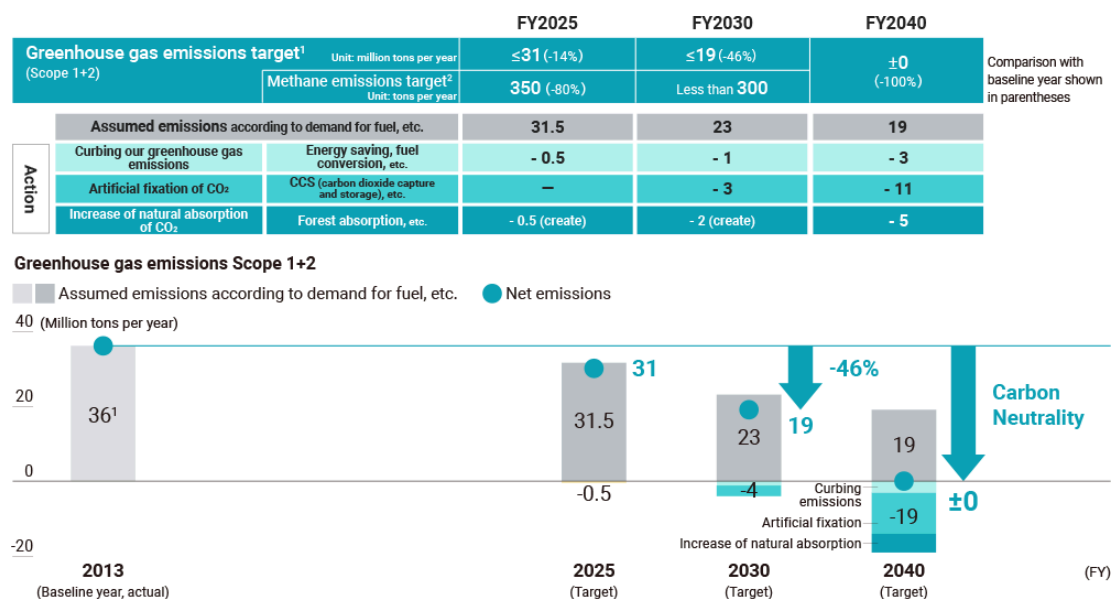
Policies on Initiatives for the Realization of Carbon Neutrality		ENEOS Measures
Reduction of our greenhouse gas emissions (Scope 1+2)	Curbing greenhouse gas emissions	<ul style="list-style-type: none"> Appropriate treatment of crude oil (according to demand) Efficiency improvement of manufacturing and businesses (energy conservation, fuel switching, utilization of renewable energy, etc.) Utilization of carbon credit
	Artificial fixation of CO ₂	<ul style="list-style-type: none"> CCS (carbon dioxide capture and storage) New methods such as BECCS¹ and DACCS² utilizing CCS
	Increase of natural absorption of CO ₂	<ul style="list-style-type: none"> Absorption by forests (afforestation and forest management, etc.) Other natural absorption methods (blue carbon and soil carbon fixation)
Contribution to the reduction of society's greenhouse gas emissions (Scope 3, avoided emissions)	Contribution to the reduction of emissions in the energy area	<ul style="list-style-type: none"> Pursuit of energy transition (hydrogen, carbon-neutral fuels, renewable energy, etc.)
	Contribution to the reduction of emissions in the materials and services area	<ul style="list-style-type: none"> Pursuit of circular economy (recycling, sharing, etc.) Expansion of supply of products contributing to avoided emissions

- 1 Bio energy with carbon dioxide capture and storage
2 Direct air capture with carbon dioxide capture and storage

Note:

For details of the ENEOS Group Carbon Neutrality Plan, see [our corporate website \(Measures to Realize a Carbon-Neutral Society\)](#). □

Roadmap for Reduction of ENEOS Group Greenhouse Gas Emissions



- 1 Greenhouse gas emissions in the base year (fiscal 2013): 36 million tons. Figure revised from the time of announcement in May 2022 (30 million tons) due to a change in the calculation method for domestic emissions from the standard under the Act on Promotion of Global Warming Countermeasures to the GX-ETS standard. There is no change to the target for transition-linked bonds (issued on June 15, 2022), but the greenhouse gas emission target for fiscal 2030 has been changed from 16 million tons to 19 million tons.

- 2 Methane emissions in base year (fiscal 2021): 1,600 tons

Roadmap for the Reduction of Greenhouse Gas Emissions of Society

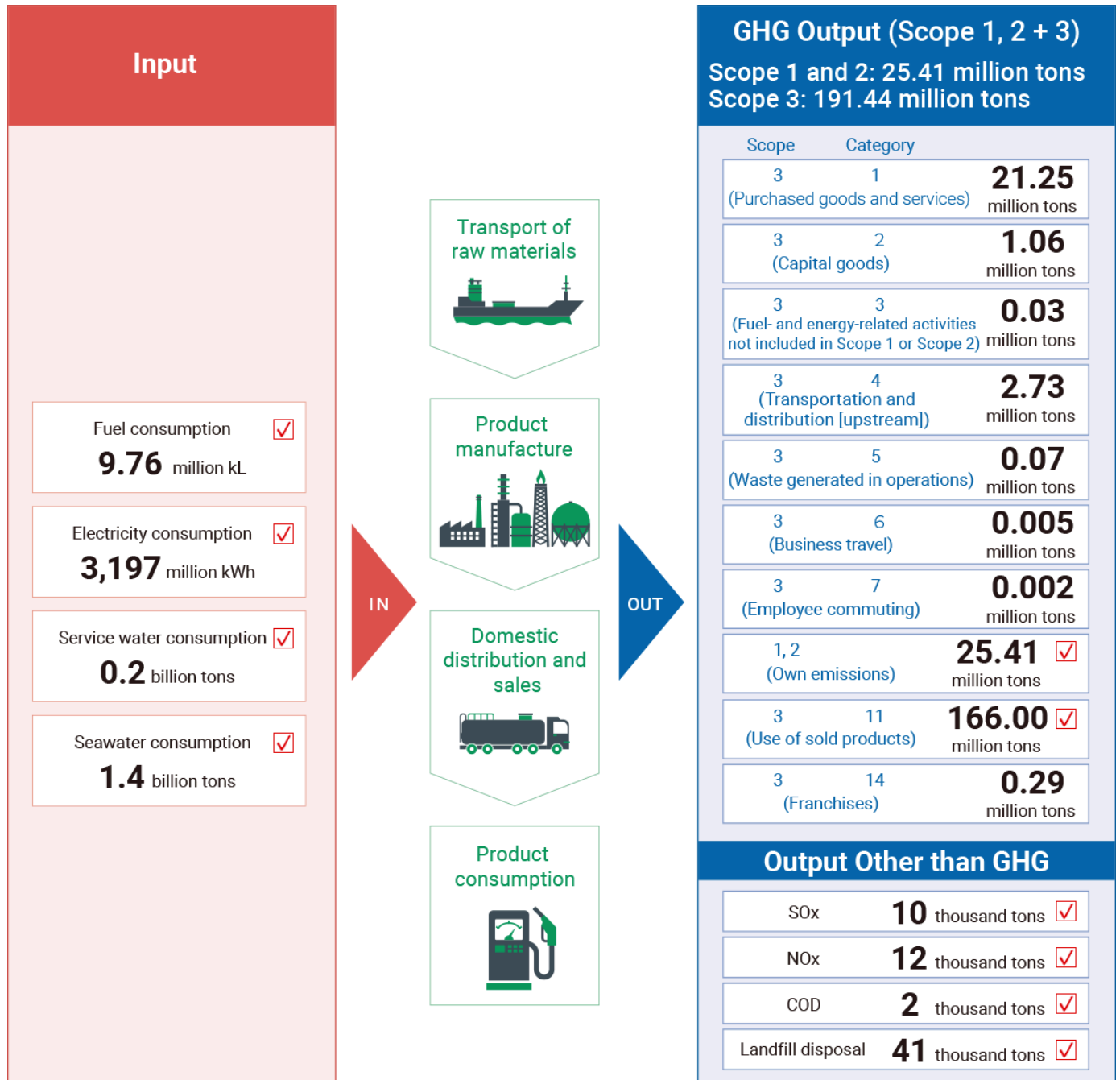
			FY2025	FY2030	FY2040	
Energy field	Promote energy transition	CI (Carbon intensity)	87 g-CO ₂ /MJ	81 g-CO ₂ /MJ	44 g-CO ₂ /MJ	
		CO ₂ -free hydrogen		Investment decision for commercialization	250 thousand tons	1–4 million tons
		Carbon-neutral fuels	SAF ¹	1st case investment decision	500–700 thousand KL	Domestic share: 50%
			Biofuel	—	Supply 10% mixing to high-octane gasoline ²	Supply 20% mixing to gasoline ²
			Synthetic fuel	Demonstration of 1 barrel/day-scale	Manufacture synthetic fuel 300 barrels/day	Manufacture synthetic fuel 10 thousand barrels/day or more
		Renewable energy Renewable energy total power generation capacity		2 GW	3 GW	6–8 GW
		CCS (for other businesses)		—	—	4–10 million tons
Materials and services field	Promote circular economy	Petrochemicals Non-fossil resource ratio ³	20-thousand-ton scale Start of waste plastic liquefaction business	20%	35%	
		Lubricants Recycling amount	Completion of demonstration	100 thousand KL	200 thousand KL	
		Copper smelting Recycling ratio	—	25%	50%	
		Final disposal ratio of waste		Less than 1.0%		
	Expansion of products which contribute to avoided emissions	Avoided emissions (materials) ⁴	750 thousand tons-CO ₂ e	1,500 thousand tons-CO ₂ e	2,000 thousand tons-CO ₂ e	

- 1 Sustainable aviation fuel, a low-carbon aviation fuel made from biomass, waste, and waste oil
- 2 Biofuel + Synthetic fuel
- 3 Input ratio of green raw materials (waste-plastic-recycled oil, bionaphtha, etc.) against the production volume of products derived from naphtha cracker
- 4 Assuming about 20–50 million tons-CO₂e of avoided emissions (for fiscal 2040) by hydrogen and carbon-neutral fuel

Overview of the ENEOS Group's Environmental Impact

For information about , see the [Editorial Policy](#).

Input-Output of the ENEOS Group (Results from Fiscal 2023)



Notes:

Fuel consumption, electricity consumption, and GHG emissions are calculated based on the Act on Promotion of Global Warming Countermeasures. Fuel consumption and GHG emissions are calculated taking into account electricity sold and heat sold. GHG emissions from electricity use were calculated using the emissions factors by electricity supplier.

Scope 3 emissions are calculated based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain ver. 2.6. Data covers ENEOS.

GHG emissions associated with "Category 11: use of sold products" are calculated based on the latest petroleum product sales volumes.

Since fiscal 2023, we have been reviewing the transportation and distribution calculation category.

The Group's GHG emissions (Scope 1 and 2) are calculated using the controlled approach in the GHG Protocol and cover main applicable organizations.

Major Initiatives

External Engagement Activities for a Decarbonized Society

The entire world must work together to achieve the Paris Agreement and the 1.5°C target, and government and policy will play an extremely large role in this. As such, the Company is involved with and contributes to the formulation of policy recommendations by actively participating in government initiatives, as well as economic organizations and trade associations and their activities.

Organizations with a particularly strong relationship with the Company and influence over climate change policy are government bodies the Ministry of Economy, Trade and Industry (METI) and Ministry of the Environment (MOE), and trade associations the Japan Business Federation (Keidanren) and the Petroleum Association of Japan (PAJ). Through collaboration and advocacy with these government bodies and trade associations, we are working to ensure that policy, technological innovation, the orientation of society and customer needs are aligned toward the achievement of carbon neutrality by 2050.

External Engagement Initiatives, Activities and Results

Government	Stance	Achieve a decarbonized society and net-zero greenhouse gas emissions by 2050	
	Our initiatives	<ul style="list-style-type: none"> ● Involvement in and contribution to policy recommendations for the oil refining and marketing business, the electricity and gas business, the hydrogen business, the CCS business, the SAF business, and the synthetic fuels business in alignment with the government target of carbon neutrality by 2050 ● As Keidanren Chair of the Committee on Environment and PAJ Vice President, participate in deliberations of various councils, including those where energy and climate change issues are discussed, and proactively make policy recommendations ● As a member of the GX (Green Transformation) Implementation Council, chaired by the Prime Minister and deputy chaired by the Minister in charge of the promotion of GX implementation and Chief Cabinet Secretary, participate in the examination of measures necessary for the implementation of GX 	
	Our activities and results	METI	<ul style="list-style-type: none"> ● Based on the government's long-term CCS roadmap, pursued public-private initiatives for starting CCS businesses by 2030, and two of our projects (off the coast of western Kyushu and off the coast of northern Peninsular Malaysia) were selected for Japan Organization for Metals and Energy Security (JOGMEC)'s fiscal 2024 Engineering Design Work for Japanese Advanced CCS Projects ● Participation in the Hydrogen and Fuel Cell Strategy Council, the Public-Private Council to Promote the Introduction of Sustainable Aviation Fuel (SAF), the Public-Private Council to Promote the Introduction of Synthetic Fuels (e-fuels), and the Carbon Recycling Roadmap Study Group ● Our projects (hydrogen business, etc.) selected for the Green Innovation Fund Projects administered by the New Energy and Industrial Technology Development Organization (NEDO) ● Participation in the GX League*, where we actively made recommendations on ETS system design
		MOE	<ul style="list-style-type: none"> ● Actively promoting the commercialization of oil production from waste plastics
Keidanren	Stance	Unwavering commitment to work with the government toward carbon neutrality by 2050	
	Our initiatives	<ul style="list-style-type: none"> ● Take the lead in the implementation of policies related to energy and the environment and get involved in and contribute to the formulation of policy recommendations ● As Chair of the Committee on Environment, participate in deliberations of various councils and make policy recommendations 	
	Our activities and results	<ul style="list-style-type: none"> ● Participation in Challenge Zero, an initiative of Keidanren and the Japanese government to promote innovation for the achievement of a decarbonized society ● Stated support for voluntary emissions trading 	

PAJ	Stance	Contribute to the realization of carbon neutrality in society as a whole by aiming to achieve net-zero (carbon-neutral) CO ₂ emissions (Scope 1+2) associated with business activities and taking on the challenge of reducing CO ₂ emissions from our products (Scope 3) to net zero (carbon neutral) by 2050
	Our initiatives	<ul style="list-style-type: none"> ● As the largest company in the petroleum industry in Japan, take the lead in the implementation of policies related to the petroleum and energy industries as a whole, and get involved in and contribute to the formulation of policy recommendations ● As Vice President, lead petroleum industry discussions on climate change and disseminate information externally through monthly board meetings ● As Chair of the Carbon Neutrality Promotion Expert Committee, lead discussions on carbon neutrality in the petroleum industry
	Our activities and results	<ul style="list-style-type: none"> ● Stated support for voluntary emissions trading

A framework based on the basic concept of the Ministry of Economy, Trade and Industry. With an eye toward achieving carbon neutrality and social transformation by 2050, the GX League is a venue where companies that are taking on the challenge of GX and aim to achieve sustainable growth in society both in the present and future collaborate with government and academia.

Environmental Education

With the aim of raising environmental awareness even further, the Group distributes environmental newsletters, holds e-learning sessions and provides regular classification-leveled education, training and drills for all employees to instill awareness of the Group's basic environmental policies and various laws and regulations, and also to ensure basic knowledge of the environment.

Environmental Audits

All business sites that have obtained ISO 14001 certification are subject to regular internal audits based on the requirements of the standard in order to confirm and evaluate the effectiveness and conformance of their EMS activities. They also undergo an annual review by a third-party certification body to maintain their certification.

Preventing Environmental Accidents

As in fiscal 2022, there were no environmental accidents at our manufacturing sites in fiscal 2023.

Prevention of Global Warming

Basic Approach

The ENEOS Group is reducing CO₂ emissions across the entire supply chain in order to contribute to the development of a decarbonized society. To reduce our greenhouse gas emissions, we are focusing on energy conservation in our business activities. We are also helping to reduce the overall greenhouse gas emissions of society through the expansion of our renewable energy business, early practical implementation of hydrogen and carbon-neutral fuels, and development and sales of environmentally friendly products that have a lower environmental impact. For our company-wide initiatives to address climate change and TCFD-related information, see [Our Response to Climate Change Risks and Opportunities \(TCFD\)](#).

Structure

For information on our structure, see [Environmental Management](#). In May 2024, we established the Carbon Neutrality Promotion Committee, chaired by the CTO, to promote carbon neutrality across the Group. The committee updates the basic strategies in response to the business environment, while the operating companies formulate specific action plans based on these basic strategies.

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

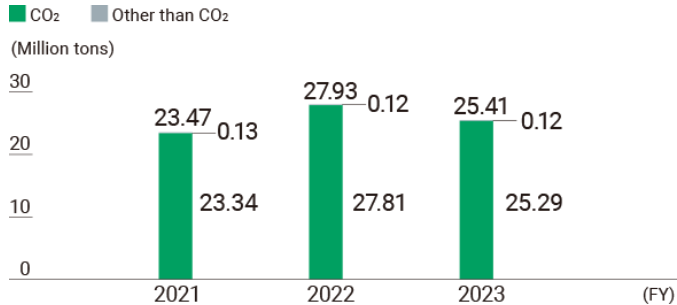
Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Contribution to the development of a decarbonized society	Reduction in CO ₂ emissions (Reduction amount through independent efforts)	Reduction in CO ₂ emissions: Reduce emissions to 30 million tons or less	😊	Emissions: 25.41 million tons

Results

For information about , see the [Editorial Policy](#).

Changes in Total GHG Emissions (Scope 1+2)



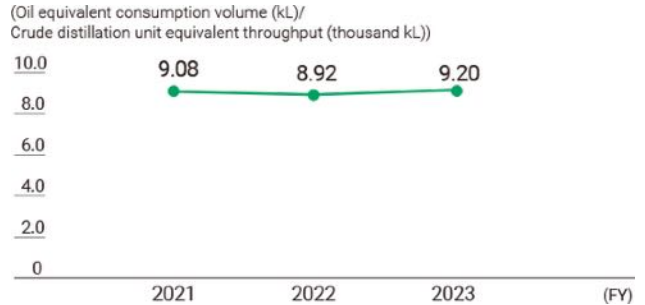
Notes:

Calculated in accordance with the Act on Promotion of Global Warming Countermeasures. From fiscal 2022, calculations take into account electricity sold and heat sold.

For detailed data, see [Data](#).

The Group's GHG emissions (Scope 1 and 2) are calculated using the controlled approach in the GHG Protocol and cover main applicable organizations.

Energy Consumption Intensity for Oil Refining



Note:

Covers the oil refining sites of the ENEOS Group.

Breakdown of GHG Emissions Other Than CO₂ (Fiscal 2023)

Items	Unit	Emissions
Total GHG emissions other than CO ₂	Tons	124,411
(1) CH ₄ (methane)	Tons	29,204
(2) N ₂ O (nitrous oxide)	Tons	93,029
(3) HFCs (hydrofluorocarbons)	Tons	1,711
(4) PFCs (perfluorinated compounds)	Tons	0
(5) SF ₆ (sulfur hexafluoride)	Tons	467
(6) NF ₃ (nitrogen trifluoride)	Tons	0

The main greenhouse gases other than CO₂ are CH₄, produced during crude oil and gas production, and N₂O, which is emitted from heating furnaces during the oil refining process.

We will continue working to lower these and other GHG emissions.

Carbon Neutrality Plan

Target

GHG Emissions Targets (Scope 1+2)

Applicable companies	Items	FY2023 results	FY2024 targets	FY2025 targets
ENEOS	GHG emissions	23.98 million tons	28.15 million tons or less	29.66 million tons or less
	Reduction in emissions from refineries, etc.	-0.57 million tons	-0.50 million tons	-0.51 million tons
	CCS	Selection of potential storage sites	Determination of storage sites	Detailed design
	Forest absorption Credits created*	Cumulative total of 0.23 million tons created	Cumulative total of 0.23 million tons created	Cumulative total of 0.54 million tons created
ENEOS Xplora	GHG emissions	0.71 million tons	0.63 million tons or less	0.62 million tons or less
	Methane emissions	802 tons	1,000 tons or less	350 tons or less
	CCUS	0.25 million tons	1.12 million tons or more	1.12 million tons or more
JX Advanced Metals	GHG emissions	0.72 million tons	0.72 million tons or less	0.72 million tons or less
Group total (Reduction compared to 2013)		25.41 million tons (-10.52 million tons)	29.50 million tons or less (-6.43 million tons)	31.00 million tons or less (-4.93 million tons)

*The amount of credits created for forest absorption is the estimated amount of CO₂ absorbed by the constituent project (annual average).

To reach these targets, we are focusing our efforts in three main areas.

- 1) Curbing Group greenhouse gas emissions by improving the energy efficiency of our manufacturing and business operations through energy saving, fuel conversion, and the use of renewable energy.
- 2) Using carbon dioxide capture and storage (CCS) for emissions remaining after the above measures are carried out, and storing the captured CO₂ underground.
- 3) Any remaining greenhouse gas emissions after the above two measures will be removed through forest absorption and other natural absorption methods.

Major Initiatives

Energy Conservation at Production Sites

The Group's refineries and plants are pursuing energy conservation through measures such as increasing the number and efficiency of heat exchangers and introducing higher efficiency rotary equipment.

The Group's GHG emissions (Scope 1+2)* in fiscal 2023 totaled 25.41 million tons, down from the previous fiscal year. In addition to improvements in the efficiency of operations, this decline was attributed to the reduction in refinery operations due to a decline in domestic demand and refinery troubles, along with a reduction in the operation of facilities for generating electricity to be sold due to fluctuations in electricity market prices.

Meanwhile, our crude oil refining energy consumption intensity worsened by 0.28 points from the previous fiscal year to 9.20 (oil equivalent consumption volume (kL)/crude distillation unit equivalent throughput [thousand kL]) due to the reduction in refinery operations.

In fiscal 2023, the Group invested around 0.61 billion yen in facilities for energy conservation. Going forward, we remain committed to pursuing greater energy conservation by introducing energy-saving technologies and optimizing operations at our refineries and smelters.

*Calculated in accordance with the Act on Promotion of Global Warming Countermeasures.

Introduction of CO₂-Free Electricity at Principal Metals Business Sites

Approximately 60% of the JX Advanced Metals Group's total CO₂ emissions (Scope 1+2) come from electricity. In fiscal 2020 it began introducing CO₂-free electricity* to reduce its CO₂ emissions. In fiscal 2023, the JX Advanced Metals Group completed the switch to CO₂-free electricity at most of its sites in Japan and overseas.

*Electricity derived from effectively non-fossil power sources that do not use fossil fuels and do not emit CO₂, and have an adjusted CO₂ emission factor of 0.00 t-CO₂/kWh. In addition to power generation from renewable energy such as hydro power, wind power, and solar power, nuclear power generation may also be included.

Initiatives in Research and Development

The Group is moving forward with research in the following fields in order to realize energy transitions.

In fiscal 2023, the ENEOS Group spent a total of around 32.1 billion yen on research and development.

- Technical development for the manufacture, storage, transport, and supply of CO₂-free hydrogen derived from renewable energy
- Technical development for the manufacture of synthetic fuels from CO₂-free hydrogen and CO₂
- Technical development for the manufacture of hydrogen and the optimization of storage battery operation plans, which contribute to the effective use of renewable energy
- Technical development and feasibility study on biofuels
- Technical development on recycling of plastic resources and used tires
- Rationalization and streamlining of oil refining processes using digital technology, etc.
- Development of environmentally friendly products (fuel-efficient automotive lubricants, etc.)

Initiatives of ENEOS Lab with Waseda University as a Joint Research Base

In November 2019, ENEOS concluded an agreement with Waseda University on comprehensive collaboration activities to promote innovation toward achieving a sustainable society. Through multi-disciplinary open innovation, from innovative technology to humanities and social sciences that indicate how the social implementation of technology should be, we are exploring the seeds that will contribute to the realization of a carbon-neutral society.

Development of Manufacturing Technologies for Synthetic Fuels Derived from Renewable Energy

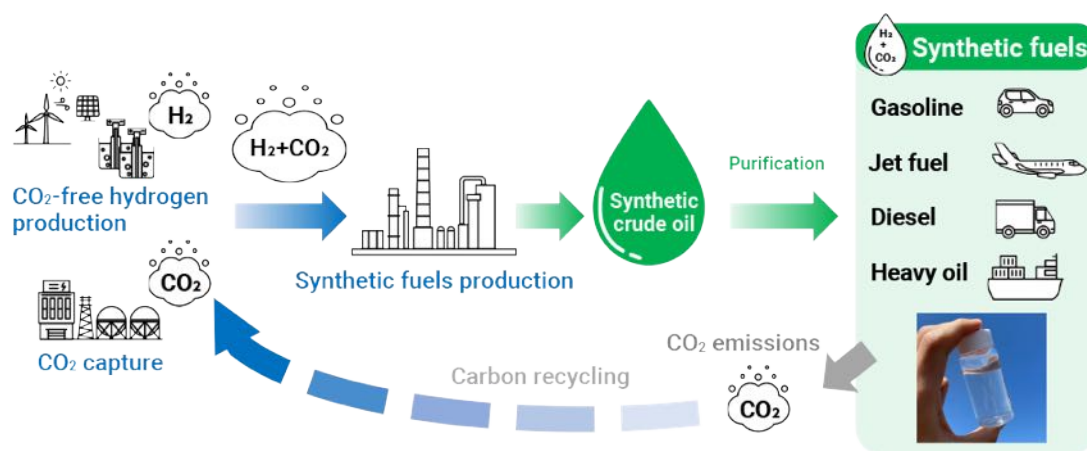
ENEOS is working on the development of manufacturing technology for synthetic fuels that can replace fossil fuels such as jet fuel, gasoline, and diesel to achieve carbon neutrality in a wide range of fields, such as aircraft and vehicle mobility and raw materials for chemicals and lubricants.

Synthetic fuels are carbon-neutral fuels produced using CO₂-free hydrogen derived from renewable energy and CO₂, which means that they can reduce CO₂ emissions throughout the product lifecycle. In addition, as their properties are equal to those of conventional fossil fuels, these synthetic fuels can be acceptable in existing vehicles, refinery facilities, and distribution routes, meaning they will play a vital role in realizing energy transitions.

ENEOS aims to establish manufacturing technologies for synthetic fuels early and their social implementation with the support of the Green Innovation (GI) Fund*, which was adopted in April 2022.

*A fund administered by the Japanese government that provides support to companies working to address management issues to help reach Japan's goal for carbon neutrality by 2050. The fund offers ongoing financial assistance over a 10-year period in areas ranging from R&D and demonstration projects to social implementation, covering fields in energy-related industries, including the hydrogen and ammonia fuel industries; transportation and manufacturing-related industries; and household and office-related industries.

Synthetic Fuels Production Process



Supporting Research on Hydrogen Energy Supply through the ENEOS Hydrogen Trust Fund

ENEOS established the ENEOS Hydrogen Trust Fund in March 2006 in order to help speed up the realization of a hydrogen society.

The fund is Japan's first public trust specializing in supporting research on the supply of hydrogen energy. The fund is large enough that a stable supply of research grants worth 50 million yen (up to 10 million yen per project) can be provided for around 30 years to support innovative and pioneering basic research into hydrogen energy supply systems. As of June 2024, the fund's assets total around 600 million yen, which will make it possible to provide stable grants for approximately 12 years going forward.

Developing Manufacturing Technologies for Bioethanol (Cellulosic Ethanol)

In the journey to carbon neutrality, bioethanol is expected to be used in various applications such as automobile fuels and raw materials for chemical products. In recent years, it has also attracted attention as a raw material for sustainable aviation fuel (SAF). On the other hand, the bioethanol produced around the world today comes mainly from food crops such as sugarcane and corn, raising concerns that it may compete with food.

ENEOS is developing technology for producing bioethanol (cellulosic ethanol) using cellulose resources that do not compete with food, such as woody biomass like pulp and used paper, as raw materials. At the end of 2023, ENEOS concluded a joint development agreement with TOPPAN Holdings Inc., aiming for commercialization through a project combining the preprocessing process developed by TOPPAN Holdings using hard-to-recycle used paper as a raw material and the ethanol continuous production process developed by ENEOS.

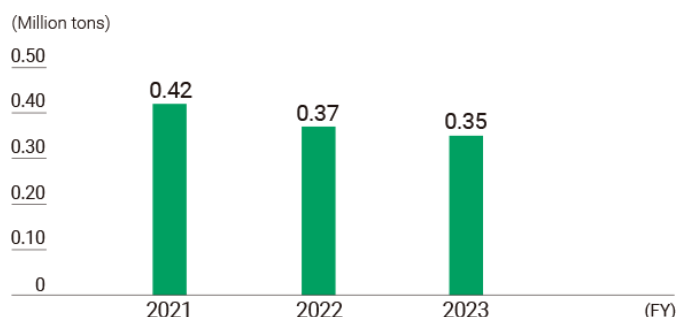
In addition, ENEOS Corporation, Suzuki Motor Corporation, Subaru Corporation, Daihatsu Motor Co. Ltd., Toyota Motor Corporation, Toyota Tsusho Corporation, and Matsuda Motor Corporation are jointly participating in the Research Association of Biomass Innovation for Next Generation Automobile Fuels to promote research on production technology for bioethanol fuels for automobiles.

Initiatives in Procurement and Logistics

With regard to marine transportation, which primarily involves the transport of crude oil to Japan, ENEOS is making active efforts to use oil tankers with superior delivery efficiency and fuel efficiency, and to improve fuel consumption by optimizing transportation routes and controlling navigation schedules and speeds.

Regarding land transportation, in addition to consolidating oil depots and improving the distribution efficiency of tank trucks, we are working to reduce fuel consumption through efforts such as insisting that drivers turn off their engines when stopped.

CO₂ Emissions from Domestic Transport ☒



Notes:

Scope: ENEOS

Domestic transport based on the Act on Rationalizing Use of Energy and Shifting to Non-fossil Energy (Energy Conservation Act)

Distribution Stage Initiatives

ENEOS is actively implementing power-saving measures at its service stations nationwide through efforts such as the installation of solar panels and the adoption of LED lighting.

Consumption Stage Initiatives ☒

The Group's CO₂ emissions from the use of sold products (Scope 3) in fiscal 2023 totaled 166.00 million tons.

The ENEOS Group is working to reduce CO₂ emissions at the consumption stage through the development and sale of environmentally friendly products, which contribute to a lower environmental impact. We have specified standards and procedures for certification of our environmentally friendly products and services and manage these appropriately.

Main environmentally friendly products

- Fuel-efficient/high-performance multipurpose lubricants
- Specialized fluids for electric vehicles and hybrid vehicles
- Natural gas and LNG
- High-performance cleaning agents
- Liquid crystal polymers
- Electricity generation using renewable energy

Sales of Carbon-Offset Natural Gas and LNG

In fiscal 2021, ENEOS began selling carbon-offset¹ natural gas and LNG through the use of CO₂ credits² from overseas forest protection projects, and is supplying these products to utility gas providers.

ENEOS's carbon-offset natural gas and LNG utilize CO₂ credits generated from forest protection projects to reduce greenhouse gas emissions on a global scale. ENEOS is also contributing to the creation of local employment and the protection of biodiversity through these efforts.

1 The CO₂ emitted in the process from extraction to combustion of natural gas is offset to virtually zero.

2 CO₂ credits attested by a highly reliable verification institution for CO₂ reduction effects generated by environmental conservation projects.

Working with Business Partners (CSR Procurement)

We implement CSR procurement, in which we take into account social impacts, such as effects on the environment, when purchasing materials and other goods and services.

For details, see [Supply Chain Management](#).

Visualizing CO₂ to Reduce Greenhouse Gas Emissions

We are working toward the visualization of greenhouse gas emissions in order to reduce these emissions in the Group and in society.

ENEOS established a CO₂ visualization system because it is important to determine emissions in a timely manner in order to reduce emissions at its refineries. We established this system to enable centralized management of company-wide emissions and calculation of emissions (carbon footprint: CFP¹) for each product. This is the first CFP calculation in the domestic petroleum industry that uses real data obtained at refineries.

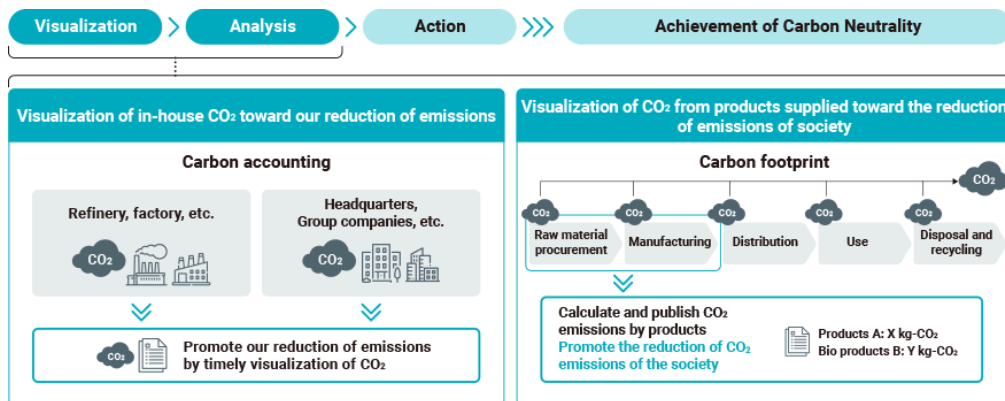
The system will be used to streamline statutory reporting, manage the implementation of plans through monthly forecasting and result management, and provide CFP data to customers. In 2024, we started providing CFP data for some products to customers, and we plan to gradually expand the scope of the applicable products.

The development of this system aims to achieve unified monitoring and management of carbon information on a per-product basis, analyze the impact that decarbonization initiatives in manufacturing has on CFP and visualize CFP at the new product planning stages, and create business opportunities by highlighting the environmental value of low-carbon products.

Our CFP data will be “cradle to gate²,” meaning it will cover all greenhouse gas emissions from raw materials procurement to product shipment. We will use the life cycle assessment (LCA) method³ to calculate emissions associated with material procurement and product manufacturing.

- 1 Carbon footprint of products (CFP) is a system for converting greenhouse gas emissions throughout the life cycle of a product or service, from the procurement of raw materials to manufacturing and beyond, to CO₂.
- 2 Refers to the process from raw materials procurement to production within the life cycle stages, comprising raw materials procurement, manufacturing, distribution, sales, use and maintenance, disposal and recycling.
- 3 LCA (life cycle assessment) methodology involves quantitatively evaluating the environmental effects of product manufacturing throughout the entire life cycle from procurement of raw materials to manufacturing, transport, use, and disposal.

ENEOS Group CO₂ Visualization




Businesses Helping to Address Climate Change

Advancement of Renewable Energy Power Generation Business

The Group has been advancing this business with the target of expanding the total capacity of our renewable power generation portfolio in Japan and overseas to over two million kW by the end of fiscal 2025. With the integration of ENEOS's renewable energy business into ENEOS Renewable Energy (ERE) in April 2023, we are seeking the further growth of our renewable energy business. Our renewable energy power generation capacity stands at approximately 1.27 million kW (as of June 2024, including projects under construction).

ERE is one of Japan's leading energy suppliers, with a high level of business development capability. Combining this with the Group's expertise in the energy business, we will further develop and speed up the business to become Japan's leading supplier of renewable energy and contribute to the realization of the 3E+S (energy security, economical efficiency and environment plus safety) of energy in a decarbonized society.

For information on our renewable energy power plants, see the [ERE website](#) .



JRE Oritsumedake South 1 Wind Farm



Uruma Mega Solar Power Plant



JRE Kamisu Biomass Power Plant

Planned Power Generation Projects

	Power generation project	Generation capacity*	Planned start of operation
Japan	Niigata First Mega Solar Power Plant	18 MW	December 2024
	JRE Oita Beppuwan Wind Farm	9 MW	February 2025
	Kudamatsu Fourth Mega Solar Power Plant	17 MW	November 2025
	JRE Sakata Wind Farm (replace)	21 MW	January 2027

*100% of generation capacity

Generation Capacity by Energy Source (As of June 2024)

Thermal ¹ (9 sites)	Oil, etc. (7 sites)	917 MW
	LNG(CCGT ²) (2 sites)	598 MW
Solar (90 sites)		898 MW
Hydro (1 site)		5 MW
Wind (12 sites)		179 MW
Biomass (2 sites)		91 MW
Total		2,645 MW

¹ Thermal capacity does not include refinery in-house power generation.

² Gas-fired thermal power plant with combined cycle gas turbines (CCGT)

Renewable Energy Power Generation (Fiscal 2023)

Solar	1,059,534 MWh
Hydro	23,336 MWh
Wind	364,611 MWh
Biomass	506,487 MWh
Total	1,953,969 MWh

The GHG emission factor* for ENEOS's electric power business in fiscal 2023 was 0.000506 t-CO₂/kWh (after adjustment; provisional figure).

*Greenhouse gas emission factor (after adjustment) for regular service offerings (excluding renewable energy/[FIT] services and CO₂-free electricity services).

Establishment of a Hydrogen Supply Chain

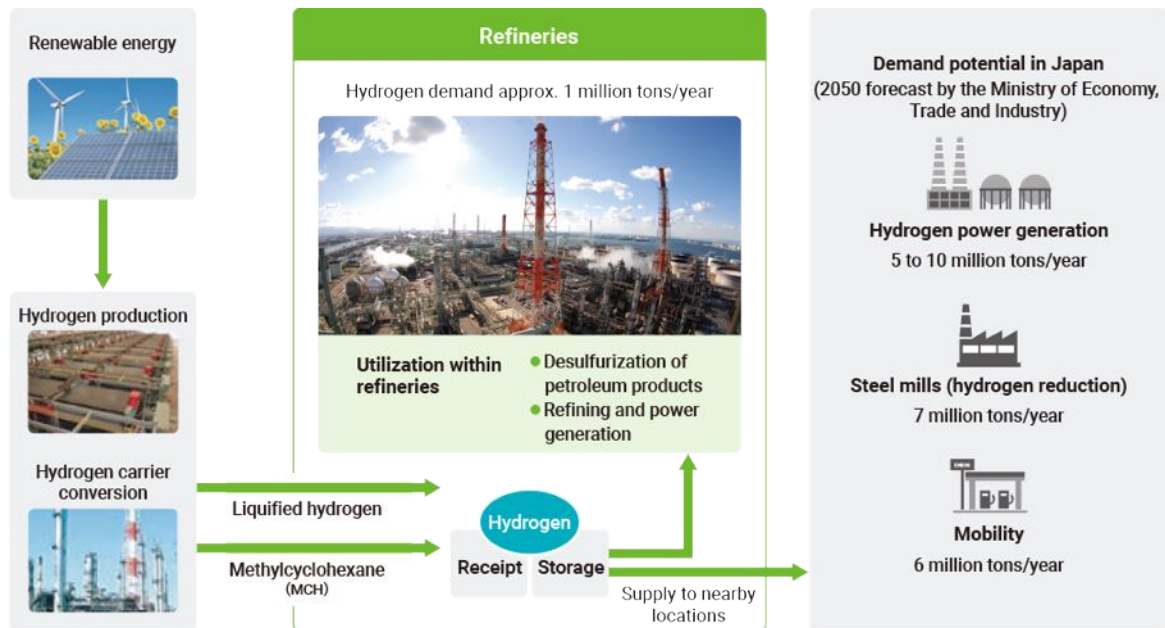
Hydrogen has the potential to contribute to decarbonization in a wide range of economic activities in power generation, transportation, and other industrial sectors. We see hydrogen as one of the promising next-generation energy sources that holds the key to achieving carbon neutrality. First, in the transportation sector, there are around 8,500 fuel cell vehicles (FCVs) (as of July 31, 2024), and approximately 160 hydrogen stations located nationwide in Japan. ENEOS operates 35 of these facilities (as of July 31, 2024). The growth of FCVs as commercial vehicles is expected due to factors such as their hydrogen refueling time and driving range. The Japanese government has prioritized support for commercial vehicles in its Basic Hydrogen Strategy, and we are also considering the development of hydrogen stations in line with this strategy. In addition, as part of our carbon neutrality efforts, at some hydrogen stations we have introduced water electrolysis on-site and are selling CO₂-free hydrogen using electricity derived from renewable energy. Furthermore, with an eye on the future mass consumption of hydrogen, including in power generation and industrial fields, ENEOS is implementing a number of collaborative projects with local governments and leading companies in Japan and overseas for the early establishment of a supply chain for transporting and supplying Japan with green hydrogen produced overseas, where there is abundant renewable energy and other resources. As part of this effort, we are focusing on methylcyclohexane (MCH), a hydrogen carrier, in order to transport green hydrogen from overseas to Japan in large quantities and with high efficiency. We are now working on the development of our proprietary Direct MCH[®] technology, which contributes to cost reduction (see the [news release](#) □ for details).

Additionally, ENEOS refineries have the potential to serve as hubs for the stable supply of hydrogen due to the fact that they already have expertise in safely handling large quantities of hydrogen, can utilize existing infrastructure, such as ports, piers and tanks, and are located near power plants and steel mills, which are expected to require large amounts of hydrogen. We will fully utilize these advantages in the development of a hydrogen supply chain.









Tokyo Harumi Hydrogen Station

| Building a Supply Chain for CO₂-Free Hydrogen Using Our Refineries as Hubs







Initiatives for the Development of a Hydrogen Supply Chain

Overseas

Project/Organization	Region	Overview
Development of a Japan-Australia CO ₂ -free hydrogen supply chain	Australia	<p>ENEOS is studying collaboration on the potential for the low-cost, stable supply of hydrogen produced from renewable energy with two Australian companies, Neoen Australia Pty Ltd and Origin Energy Limited.</p> <p>The projects will study more efficient production of methylcyclohexane (MCH) and maritime transport of MCH to Japan as a form of hydrogen storage and transport. For more information, see the following news releases.</p> <ul style="list-style-type: none"> • Neoen Australia Pty Ltd: news release  • Origin Energy Limited: news release 
Development of a CO ₂ -free hydrogen supply chain (derived from renewable energy) in Malaysia	Malaysia	<p>The project will manufacture several tens of thousands of tons of CO₂-free hydrogen in Sarawak, Malaysia using electricity derived from renewable energy generated at a hydroelectric power plant. Thereafter, the hydrogen will be converted to MCH and transported by chemical tanker to demand centers outside Malaysia.</p> <p>For more information, see the news release .</p>
Collaboration for development of a CO ₂ -free hydrogen and ammonia supply chain with Saudi Aramco	Saudi Arabia	<p>The project will conduct feasibility studies on a business for hydrogen manufacture from fossil resources produced and supplied by Saudi Aramco, a business for the capture and storage of CO₂ emitted during the manufacturing process, and the maritime transport of hydrogen to demand centers using ammonia or MCH.</p> <p>For more information, see the news release .</p>
Joint study agreement to evaluate development of a clean hydrogen supply chain between the UAE and Japan	United Arab Emirates	<p>The project will conduct a feasibility study on the utilization of by-product hydrogen from Abu Dhabi National Oil Company (ADNOC)'s refinery and petrochemical plant and blue hydrogen produced from natural gas. The hydrogen will be converted to methylcyclohexane (MCH) for export to Japan.</p> <p>For more information, see the news release .</p>
Equity participation for building a hydrogen supply chain between Japan and the U.S.	United States	<p>In order to verify the commercial feasibility of manufacturing cost-competitive clean hydrogen in the Gulf of Mexico and exporting MCH to Japan, we made an equity investment in MVCE Gulf Coast, LLC, a U.S. company.</p> <p>For more information, see the news release .</p>

Japan

Project (Location)	Overview
Selection for NEDO Green Innovation Fund	<p>The following four demonstration projects were selected by the National Research and Development Agency, New Energy and Industrial Technology Development Organization (NEDO) for its Green Innovation Fund  (available in Japanese only): (1) large-scale demonstration of an MCH supply chain; (2) direct MCH electrosynthesis (Direct MCH[®]) technology development; (3) hydrogen single fueled power generation equipment demonstration; and (4) demonstration project for the commercialization of a liquefied hydrogen supply chain. The demonstration project period is planned to last until the end of fiscal 2030 (end of fiscal 2029 for (4)).</p> <p>For more information, see the following news releases.</p> <ul style="list-style-type: none"> • News release  on demonstration projects (1) to (4) • Joint news release  with Kawasaki Heavy Industries, Ltd. and Iwatani Corporation on demonstration project (4) (available in Japanese only)
Full-scale study for large-scale hydrogen use in the Keihin Waterfront Area	<p>The study will focus on estimating demand from the perspective of hydrogen users, identifying trends in relevant technological development, and collaboration with hydrogen suppliers, equipment manufacturers and supply companies, mainly in the Kawasaki Port area.</p> <p>For more information, see the news release  (available in Japanese only).</p>

Exploring the utilization of hydrogen energy at Woven City with Toyota Motor Corporation (Susono City, Shizuoka Prefecture)	The project will involve the construction and operation of a hydrogen station, production of CO ₂ -free hydrogen at hydrogen stations, and supply of hydrogen from hydrogen stations to Woven City and FCVs. The project will also study in detail a hydrogen supply-demand management system. For more information, see the news release □ .
Development of hydrogen stations	There are around 160 hydrogen stations in Japan, 35 of which are operated by ENEOS (as of July 31, 2024). Aiming for the strategic development of hydrogen stations, ENEOS participates in the Japan Hydrogen Station Network Joint Company (Japan H2 Mobility, abbreviation: JHyM), which was established in February 2018 by automobile manufacturers, infrastructure companies, and financial investors. Through collaboration in this all-Japan consortium, ENEOS is working on the strategic development and efficient operation of hydrogen stations. For more information, see the news release □ (available in Japanese only).
Commercial sales of CO ₂ -free hydrogen (derived from renewable energy) produced at hydrogen stations (First in Japan; Asahi Ward, Yokohama City)	The project will market CO ₂ -free hydrogen produced by water electrolysis using electricity generated from solar panels installed at hydrogen stations and renewable-energy-derived electricity procured from the ENEOS Group. In fiscal 2021, the project introduced a hydrogen EMS for optimal control of water electrolysis unit operations based on the amount of renewable energy electricity generated and hydrogen demand. Going forward, the project will aim for the manufacture of CO ₂ -free hydrogen using low-cost electricity by collaborating with virtual power plants (VPP), which remotely control hydrogen EMS and various energy resources. For more information, see the news release □ (available in Japanese only).
Hydrogen utilization study at Haneda Airport and surrounding areas	We will investigate the hydrogen supply potential using a model where hydrogen produced overseas is imported to the Kawasaki coastal area and then transported to the vicinity of Haneda Airport, which is a demand area. We will also investigate the hydrogen demand potential by utilizing hydrogen for electricity, heat, and GSE vehicles in Haneda Airport facilities, and hydrogen utilization in the surrounding area. For more information, see the news release □ .
Study for the development of a large-scale green hydrogen supply chain in Hokkaido	In February 2024, we exchanged a memorandum of understanding for a study on the establishment of Japan's largest green hydrogen supply chain with Idemitsu Kosan Co., Ltd. and Hokkaido Electric Power Co., Inc. By around 2030, we aim to build a water electrolysis plant (100 MW or more) in the western Tomakomai area of Hokkaido, which will be the largest in Japan, capable of producing more than 10,000 tons of green hydrogen annually. In turn, we aim to build a supply chain that supplies the produced green hydrogen to local factories and other facilities by pipeline. For more information, see the news release □ .
Osaka Gas and ENEOS commence joint study for large-scale domestic production of e-methane using green hydrogen in the Osaka Bay area	For the large-scale domestic production of e-methane, we aim to supply green hydrogen produced overseas to Osaka Gas Co., Ltd. and to produce e-methane by methanating the CO ₂ and green hydrogen captured by the company in Japan, and to supply it as city gas. For more information, see the news release □ .
Collaborative study for utilization of CO ₂ -free hydrogen at the Mizushima Industrial Complex	ENEOS will study the receipt, storage, and supply of hydrogen at the Mizushima Refinery, aiming to supply the hydrogen needed for fuel use in the test furnace and steel mill at JFE Steel Corporation's West Japan Works (Kurashiki District). For more information, see the news release □

CCS Business

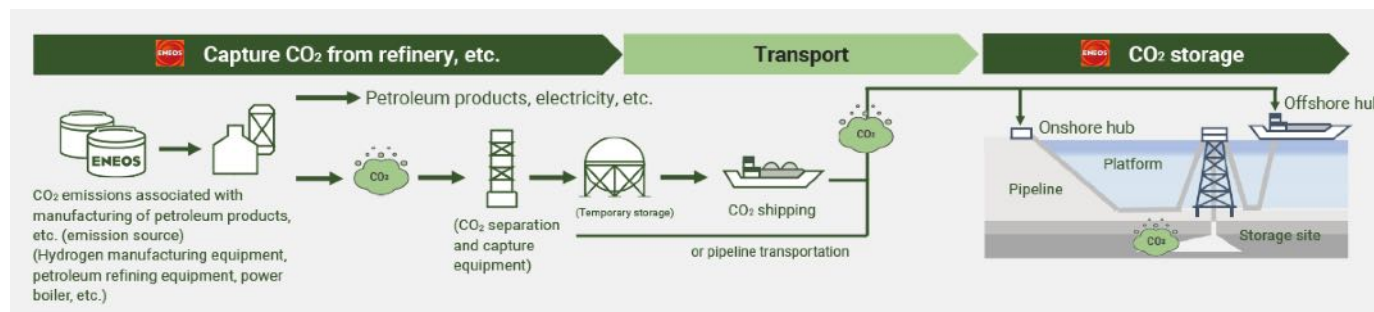
The Group is preparing to launch Japan's first large-scale CCS business in fiscal 2030 in cooperation with the government, which aims to achieve carbon neutrality by 2050, and various businesses that are actively working to achieve that goal.

In the Group's oil and natural gas E&P business, we commercialized a CCS/CCUS business in 2016 in Texas, USA, in which CO₂ captured from exhaust gas at a thermal power plant is injected underground. Therefore, we already have the necessary technology and knowledge for geological evaluation and CO₂ injection. While maximizing this expertise, we will collaborate with other companies to scale up operations and minimize costs, aiming for the full-scale implementation of CCS.

Activities in the CCS Business

Start	Operating companies	Activity details
February 2023	ENEOS, ENEOS Xplora	West Japan Carbon dioxide Storage Survey Co., Ltd. established jointly by three companies, Electric Power Development Co., Ltd. (J-POWER), ENEOS, and ENEOS Xplora, for the storage of CO ₂ in western Japan
March 2023	ENEOS Xplora	Acquisition of shares of Japan Drilling Co., Ltd., which has offshore drilling technology necessary for CO ₂ storage
August 2023	ENEOS, ENEOS Xplora	Selected along with J-POWER as a contractor for the Japan Organization for Metals and Energy Security (JOGMEC)'s fiscal 2023 "Study on the Implementation of Japan's Advanced CCS Project"
December 2023	ENEOS, ENEOS Xplora	Started joint study with Santos Limited for the establishment of a CCS value chain between Japan and Australia
March 2024	ENEOS Xplora	Started joint study with Chevron New Energies for the establishment of a CCS value chain
March 2024	ENEOS, ENEOS Xplora	Mitsubishi Corporation, PETRONAS CCS Solutions, ENEOS and ENEOS Xplora concluded a memorandum of understanding for a study on the establishment of an overseas CCS value chain for CO ₂ emissions from Tokyo Bay
September 2024	ENEOS, ENEOS Xplora	Our project off the coast of northern Peninsular Malaysia was selected by the Japan Organization for Metals and Energy Security (JOGMEC)'s fiscal 2024 "Engineering Design Work for Japanese Advanced CCS Projects"
October 2024	ENEOS, ENEOS Xplora	Our project off the coast of western Kyushu was selected by the Japan Organization for Metals and Energy Security (JOGMEC)'s fiscal 2024 "Engineering Design Work for Japanese Advanced CCS Projects"

Domestic CCS Value Chain of ENEOS



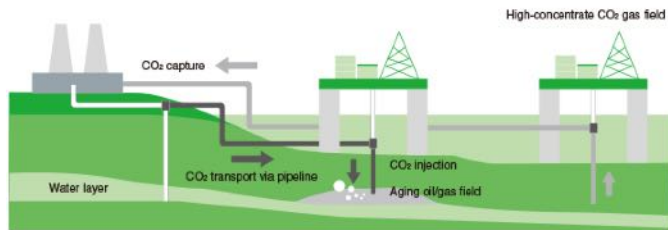
Oil and Gas E&P Using CO₂-EOR and CCS Technologies

ENEOS Xplora carries out its business activities with attention to the reduction of greenhouse gas emissions.

The company is taking part in a project in the state of Texas in the United States to increase output from a depleted oil field by injecting CO₂ captured from the flue gas of a thermal power plant. Since April 2017, a total of 4.30 million tons of CO₂ has been injected into the oil field through this project, greatly contributing to increasing oil output and lowering greenhouse gas emissions using CO₂-EOR (enhanced oil recovery) technology.

In March 2024, ENEOS Xplora signed a plan with Malaysia's state-owned oil company PETRONAS and PETRONAS Carigali Sdn. Bhd., a wholly-owned subsidiary of PETRONAS, for the production of five undeveloped gas fields containing high concentrations of CO₂ off the coast of Peninsular Malaysia, and also signed a joint operation agreement with PETRONAS Carigali. This is a combination of conventional development and CCS, in which CO₂ captured from gas fields is injected underground, with the aim of developing low-carbon oil and natural gas.

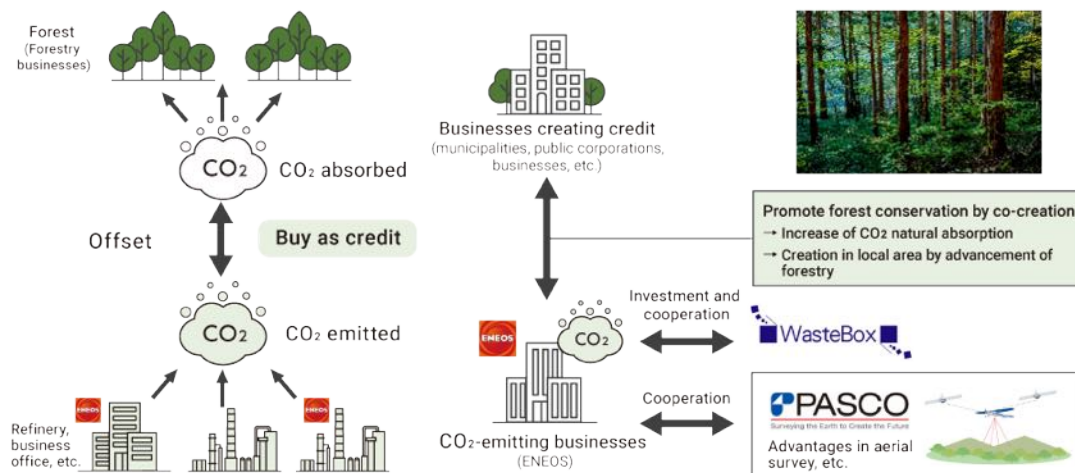
CO₂ Separation and Capture in a Gas Field in Malaysia



CO₂ recovery plant (state of Texas in the United States)

Forest Absorption (Increase of Natural Absorption of CO₂)

The Group utilizes natural absorption from forests and other sources as an important means of removing CO₂. In order to achieve carbon neutrality in our emissions by fiscal 2040, we are implementing initiatives to create and utilize forest-derived carbon credits in Japan and overseas.



Forest Absorption Projects

Region	Start	Details
Japan	January 2022	Signed a partnership agreement with Kumakogen Town, Ehime Prefecture for the creation of J-Credits*
	November 2022	Signed a partnership agreement with Niigata Public Corporation of Agriculture and Forestry for the creation of J-Credits
	November 2023	Signed a partnership agreement with Mori Town, Hokkaido, in collaboration with Nippon Life Insurance Company for the creation of J-Credits
	June 2024	Signed a partnership agreement with Wakayama Public Corporation for Forests and Greenery for the creation of J-Credits
Overseas	July 2023	Invested in Eastwood Climate Smart Forestry Fund I, a US forestry fund formed by the Sumitomo Forestry Group

* A system in which the Japanese government certifies the amount of CO₂ and other greenhouse gas emissions reduced through the introduction of energy-saving equipment and the use of renewable energy, as well as the amount of CO₂ and other greenhouse gases absorbed through appropriate forest management, as "credits"

The 3Rs (Reduce, Reuse, Recycle)

Basic Approach

The ENEOS Group is doing its part to develop a recycling-oriented society by reducing waste and recycling resources in its own activities as well as in society. The Group is expanding its recycling business, and applies the 3Rs—reduce, reuse and recycle—to ensure that it uses resources efficiently.

Structure

For information on our structure, see [Environmental Management](#).

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

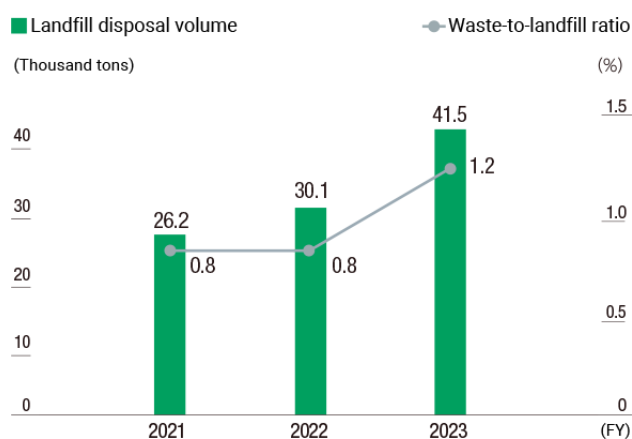
Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Contribution to the development of a recycling-oriented society	Reduction in landfill disposal	Waste-to-landfill ratio: Maintain zero emissions (less than 1%)	☹️	1.2%

Results

For information about , see the [Editorial Policy](#).

Landfill Disposal Volume and Waste-to-Landfill Ratio



Note:

For detailed data, see [Data](#).

Major Initiatives

Waste Reduction

The Group manages and recycles waste appropriately, with a target of maintaining zero emissions (waste-to-landfill ratio of less than 1%). In fiscal 2023, waste totaled 3,482 thousand tons and landfill waste totaled 41 thousand tons. The waste-to-landfill ratio was 1.2%, indicating that we did not achieve our zero-emissions target. Factors that contributed to the increases in total waste and waste-to-landfill ratio from the previous fiscal year included an increase in building demolition work and pavement repair work in construction projects.

Sludge is the most common waste generated by refineries and plants, accounting for about 40% of the total waste volume. We pursue recycling and reuse through initiatives for waste reduction, including using the collected particulate matter and sludge released from oil refineries as raw materials for cement, and the repeated use of neutralized sludge¹ at our smelting and refining facilities. In addition, we use LCA methodology² in evaluating the development of certain lubricant products.

- 1 Material generated by the neutralization reaction in the smelting process.
- 2 LCA methodology involves quantitatively evaluating the environmental effects of product manufacturing throughout the entire life cycle, from procurement of raw materials to manufacturing, transport, use, and disposal. LCA is an acronym for “life cycle assessment.”

Targets and Processes Surpassing Legal Requirements for Industrial Waste

In response to Keidanren’s (Japan Business Federation) call for the development of a recycling-oriented society, petroleum companies have been working on waste reduction and recycling at their refineries. The target for the petroleum industry in Keidanren’s Voluntary Action Plan for Establishing a Sound Material-Cycle Society is to maintain a waste-to-landfill ratio of 1% or less in fiscal 2025. ENEOS is striving to reduce the waste-to-landfill ratio by setting a target to maintain “zero emission plus” (waste-to-landfill ratio of less than 0.3%), which is more rigorous than the Keidanren target.

Responsible Management of Waste

We confirm whether waste emitted at our refineries is disposed of responsibly in accordance with our duty under the Waste Disposal and Public Cleansing Act. Each of our refineries systematically conducts audits of waste disposal contractors.

Increasing the Use of Recyclable Raw Materials

The Group is working to reduce its use of raw materials by streamlining production and expanding the use of recyclable raw materials. JX Advanced Metals promotes the effective use of resources by efficiently recovering copper, precious metals, and rare metals from recyclable raw materials, drawing from processes that utilize its smelting technology, developed over the course of more than a century. The company has established a long-term goal of increasing the use of recyclable raw materials in copper smelting to 50% (ratio in raw materials or ratio contained in products). In fiscal 2023, 230 thousand tons of the 1,627 thousand tons of raw materials used in the company’s business activities were recycled resources.

Launching 100% Recycled Electrolytic Copper Applying the Mass Balance Method

In January 2024, JX Advanced Metals announced that it will launch two types of 100% recycled electrolytic copper applying the mass balance method*: PCL100/mb (Partnered Closed Loop 100% mass balance method) and MR100/mb (Mixed Recycle 100% mass balance method) in fiscal 2024.

With PCL100/mb, the equivalent amount of copper contained in recycled raw materials, such as those derived from end-of-life products collected by the customer, is returned as 100% recycled electrolytic copper. MR100/mb supplies 100% recycled electrolytic copper from recycled raw materials collected from the market through the JX Advanced Metals Group’s recycled raw material collection network.

Both of these are the first attempts in the domestic copper refining and smelting industry. PCL100/mb in particular is an advanced proposal in which the company and its customers co-create solutions to the social issues of resource recycling and decarbonization.

JX Advanced Metals has also launched the “Cu again” project, an initiative aimed at the social implementation of 100% recycled electrolytic copper, to co-create domestic resource recycling with its customers.

* When raw materials with different properties are mixed, this method allocates these properties to certain parts of products according to the input ratio of the raw material with a certain property.



Human Resource Development in Nonferrous Smelting, Refining and Recycling

In recent years, the number of researchers and engineers in fields related to nonferrous smelting, refining and recycling has been steadily decreasing in Japan. In response, JX Advanced Metals has collaborated with the Institute of Industrial Science of the University of Tokyo to launch the Endowed Research Unit for Nonferrous Metal Resource Recovery Engineering (JX Metals Endowed Unit) to combine the forces of industry, academia and government to reenergize and raise the level of activity in the industry. The Unit is using industry-academia collaboration to advance various initiatives to cultivate human resources to develop and apply smelting and refining technologies in the nonferrous base metals and rare metals fields. In fiscal 2023, the Symposium on Challenges and Initiatives for Talent Acquisition and Development in the Domestic Manufacturing Industry was held in September. The symposium covered the current status of retaining and developing human resources by nonferrous metals companies and endowed courses, and featured a panel discussion.

Researching Rare Metal Recycling from Lithium-Ion Batteries

JX Advanced Metals began recycling rare metals contained in lithium-ion batteries in 2009.

In 2020, it installed bench-scale equipment (continuous small-scale testing equipment) at the Technology Development Center of Hitachi Works. Since then, JX Advanced Metals has been working on technological development for closed-loop recycling, where rare metals are recovered from used automotive lithium-ion batteries and reused as raw materials for new ones. To verify this technology, in May 2021 the company established JX Metals Circular Solutions Tsuruga Co., Ltd., which is conducting verification tests using recovery facilities for high-purity nickel sulfate (2021), high-purity cobalt sulfate (2022), and high-purity lithium carbonate (2023). These initiatives were selected in April 2022 for the Green Innovation (GI) Fund Projects¹ of the New Energy and Industrial Technology Development Organization (NEDO).

In August 2021, JX Advanced Metals established JX Metals Circular Solutions Europe GmbH (JXCSE) in Germany to advance the commercialization of lithium-ion battery recycling, with an eye on collaboration with European automakers. JXCSE has participated in the “HVBatCycle” research consortium, supported by Germany’s Federal Ministry for Economic Affairs and Climate Action (BMWK), since January 2022 through TANIÖBIS GmbH, a JX Advanced Metals Group company also based in Germany. As part of the consortium, JXCSE installed bench-scale equipment² on the TANIÖBIS premises in Goslar, where it began operations in March 2023 to verify closed-loop recycling using its technologies.

- 1 Projects in which the government provides continuous support for 10 years to companies and other organizations working on management issues toward carbon neutrality by 2050 in Japan, from R&D and demonstration to social implementation.
- 2 Bench-scale equipment (continuous small-scale testing equipment) that recovers high-purity rare metals from pulverized batteries (black mass) in various forms (liquids, salts, metals) by solvent extraction method.

Pursuit of a Circular Economy

The Group is promoting a circular economy¹ for the realization of a recycling-oriented society that does not rely on conventional resources.

The world is shifting from a linear economy² to a circular economy—from a mass production, mass consumption economy to an economy that recycles and reuses resources. A circular economy goes one step further than the 3Rs by considering the environment from the design stage, using maintenance to lengthen product life, and enhancing usage efficiency by incorporating leasing and sharing.

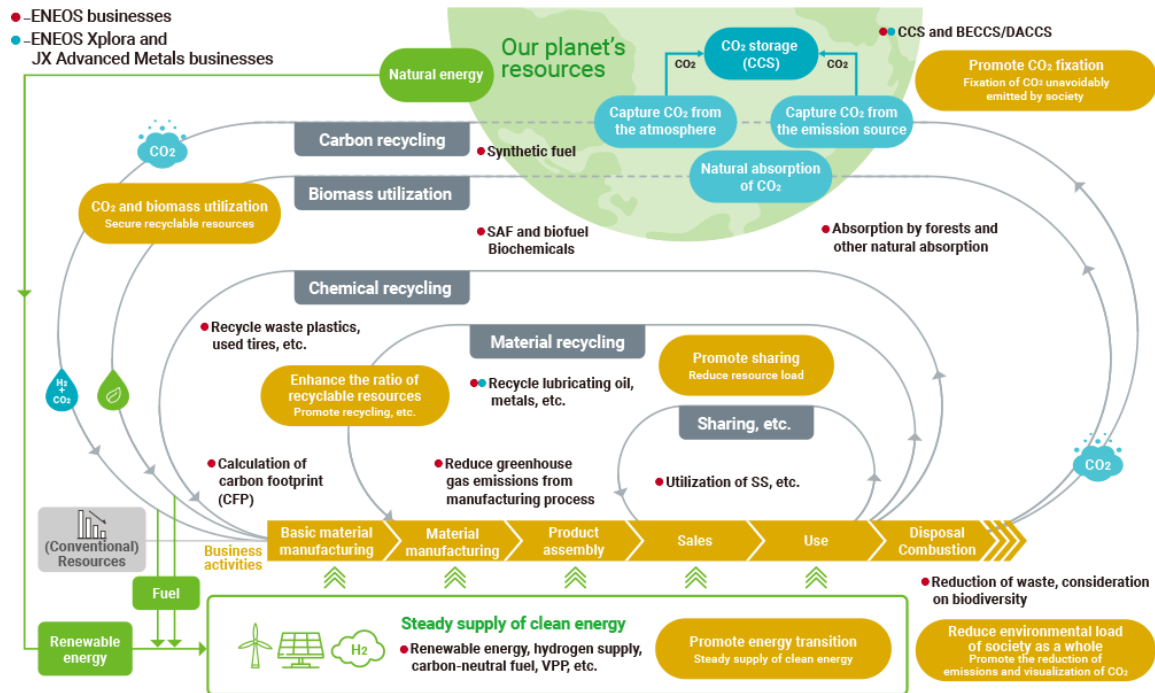
Products supplied to society generate CO₂ in each stage of the life cycle, from procurement of resources to manufacturing, sales, use, and disposal.

Creating a cycle where manufactured products are recycled instead of being disposed of can help to lower these CO₂ emissions.

The Group is helping to realize a circular economy, and by extension a carbon-neutral society, in the materials and services field by shifting to non-fossil raw materials and developing sharing businesses.

- 1 An economic system that seeks to recycle resources through their effective use in each stage of the value chain
- 2 An economic system where products flow in a single direction with resources being consumed and disposed without recycling or reuse

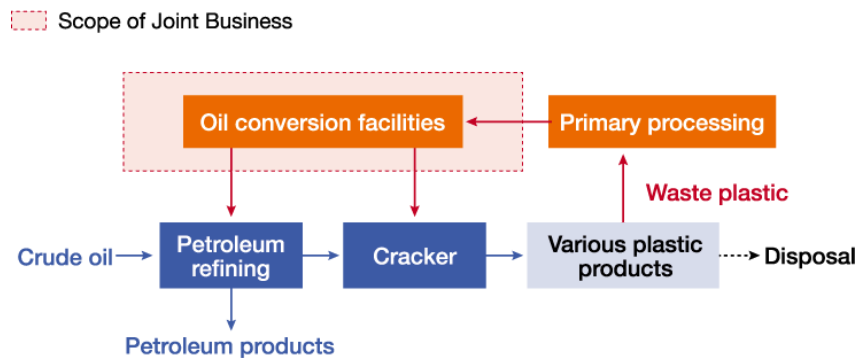
Efforts for a Circular Economy to Realize Circulating Society Independent from Conventional Resources



Joint Plastic-to-Oil Conversion Business (Chemical Recycling)

ENEOS is engaged in a joint plastic-to-oil conversion business with Mitsubishi Chemical Corporation at the Kashima industrial complex, site of the Kashima Refinery. The two companies are currently constructing a commercial chemical recycling facility with an annual processing capacity of 20,000 tons, which will be the largest-scale in Japan on a commercial basis. The recovered oil produced at the facility will be used as a raw material at both companies' petroleum refinery and naphtha cracker to produce recycled petroleum and plastic products.

Workflow of Plastic-to-Oil Conversion



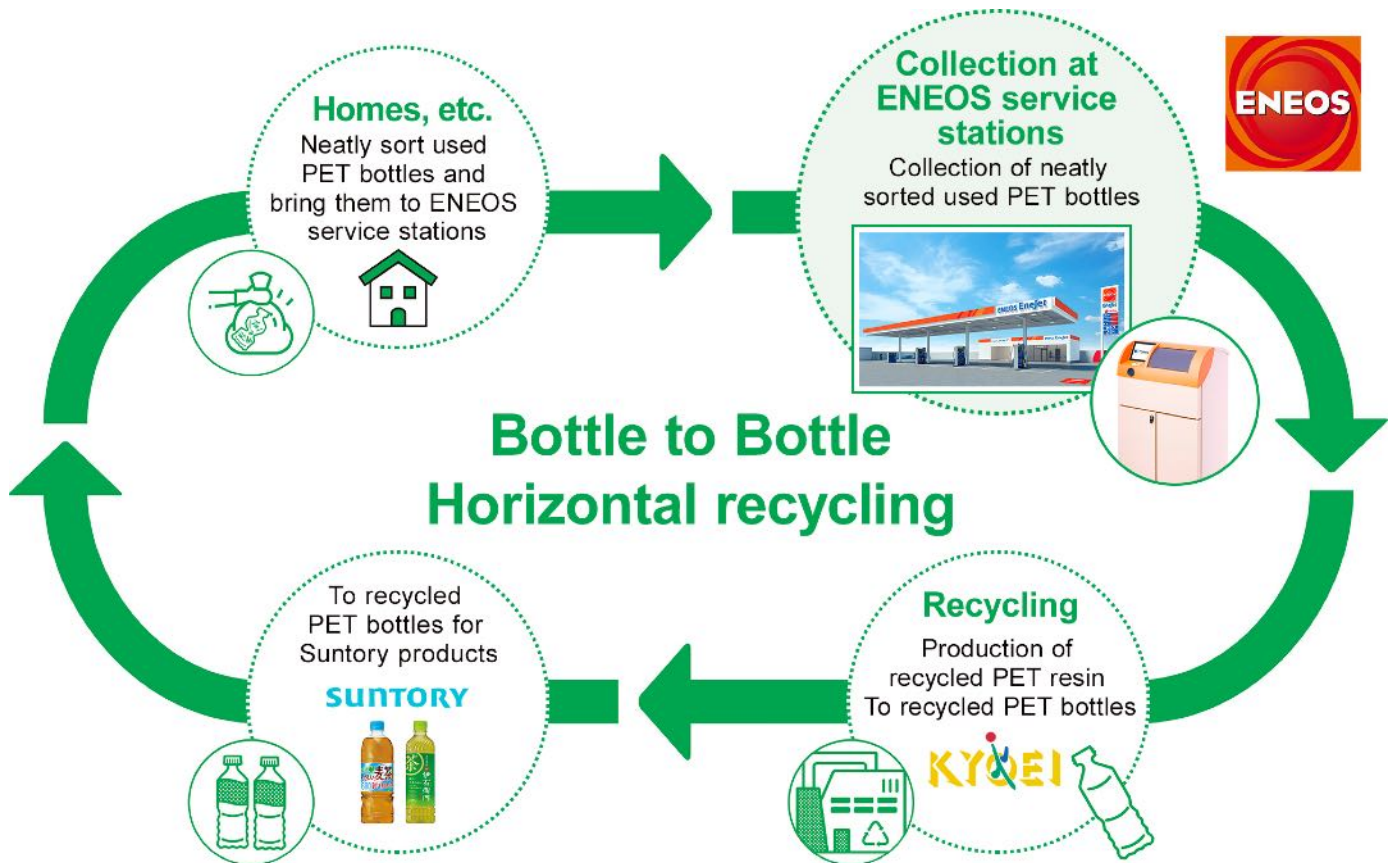
Recycling Synthetic Rubber from Used Tires (Chemical Recycling)

Synthetic rubber derived from petroleum is one of the main materials used when producing tires. ENEOS, in cooperation with Bridgestone Corporation, aims to establish chemical recycling technology to produce chemicals and other raw materials for synthetic rubber from cracked oil obtained from the precise pyrolysis of used tires. Looking to the future, ENEOS is committed to further improving resource recycling and reducing CO₂ emissions in the value chain of the tire/rubber and petroleum/petrochemical industries. In February 2022, this initiative was adopted as a Green Innovation Fund Project of the New Energy and Industrial Technology Development Organization (NEDO), a national research and development agency.

Collection of Used PET Bottles at Service Stations and Demonstration of Recycling Chains (Chemical and Material Recycling)

Since April 2023, ENEOS, in cooperation with Suntory Holdings Limited and Kyoei Sangyo Co., Ltd. has been conducting a demonstration test to collect and recycle used PET bottles at ENEOS service stations in Kawasaki City and Utsunomiya City. Through this test, we are verifying the feasibility of establishing a horizontal recycling chain for collecting used PET bottles through our service station network, as well as recycling, reprocessing, and re-commercializing the bottles.

Horizontal Recycling Chain for Used PET Bottles



Asphalt Pavement Utilizing Waste Plastics (Material Recycling)

A typical asphalt pavement is composed of about 95% (by weight) of stones and sand called aggregates, and asphalt, called a binder, holds these aggregates together.

ENEOS is working on the development of asphalt paving technology that replaces all aggregates with waste plastic. Demonstration tests are now underway at the new SOYORA Hamamatsu Nishiiba store opened by AEON RETAIL Co., Ltd. in Hamamatsu City, Shizuoka Prefecture in October 2023, and at the ENEOS Platform opened in Ushiku City, Ibaraki Prefecture in March 2024.

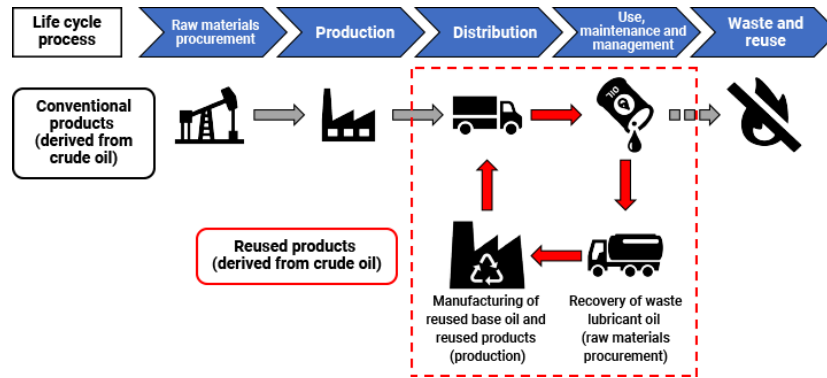
Through the use of waste plastics, which are difficult to use in material recycling and are mainly used for thermal recycling, our new asphalt pavement is expected to reduce CO₂ emissions by about 40% compared to conventional ones.

Using Waste Lubricants to Produce Lubricant Base Oil (Material Recycling)

ENEOS is working to commercialize a process for reusing waste lubricants in lubricant base oil. Recycling waste lubricants as base oil, which is the main base material for lubricant products, reduces CO₂ emissions from lubricants throughout the entire life cycle and helps to ensure a stable supply of base oil.

This demonstration project was selected for inclusion in the Demonstration Project for a Plastic Resource Circulation System toward a Decarbonized Society, run by the Ministry of the Environment. In this two-year demonstration project, which started in fiscal 2022, we succeeded in producing low-carbon base oil. In the technical study, we use used engine oil collected from the market with the cooperation of Toyota Motor Corporation as a raw material.

| Scope of Base Oil Reuse Business in the Lubricant Life Cycle

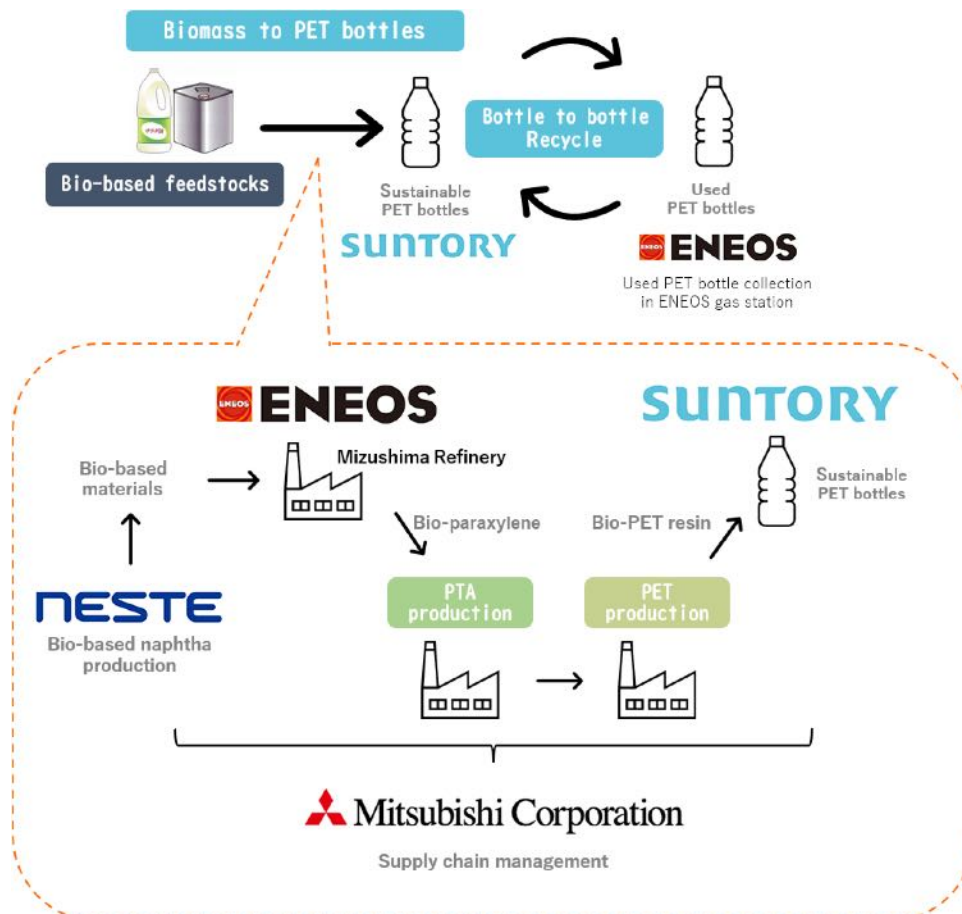


The World's First Initiative for Bio-Paraxylene Origin "Biomass to PET Bottles" (Effective Utilization of Biomass)

In August 2023, ENEOS reached an agreement with Suntory Holdings Limited and Mitsubishi Corporation to establish a supply chain for sustainable PET resin made from bio-paraxylene. ENEOS manufactures paraxylene, a raw material for PET bottles, and has been studying the possibility of supplying chemicals made from non-fossil raw materials. In the recently established supply chain, bio-paraxylene will be produced for the first time in the world on a commercial scale from biomass feedstock made from untapped resources such as used cooking oil, using the mass balance method*, at the ENEOS Mizushima Refinery. By realizing "biomass to PET bottles" through the use of bio-paraxylene, we will increase the "non-fossil resource ratio of petrochemical feedstocks," as stated in our Carbon Neutrality Plan.

* A method in which raw materials with specific characteristics, such as biomass raw materials, are mixed with non-biomass raw materials in the distribution and processing process from raw materials to finished products, and those characteristics are assigned to a portion of the product in proportion to the input of raw materials with those characteristics. A system that connects the value of the characteristics of raw materials to the final product by managing the balance of In and Out for each company in the supply chain.

| "Biomass to PET Bottles" Supply Chain



Battery Recycling Through Sharing Services (Sharing)

ENEOS service stations are working to recycle batteries. In 2022, we established Gachaco, Inc.^{*}, which provides battery sharing services for electric motorcycles. Gachaco has established battery exchange sites at 50 ENEOS service stations, mainly in Tokyo and Osaka, and is working to build a system for the recycling of batteries.

^{*} A joint venture of ENEOS Holdings, Honda Motor Co., Ltd., Kawasaki Motors, Ltd., Suzuki Motor Corporation, and Yamaha Motor Co., Ltd.

Smelting, Refining and Recycling Businesses

JX Advanced Metals is engaged in an integrated range of businesses related to nonferrous metals such as copper, precious metals and rare metals. These organically related businesses encompass resource development, smelting and recycling, and the provision of high-value-added materials, such as electronic materials. Smelting and recycling, which act as “veins” and “arteries” of this value chain, include the following three businesses.

- Smelting and Refining business: Recovery of metals by smelting and refining ore extracted from mines
- Recycling business: Recyclable raw materials are melted utilizing reaction heat from the smelting and refining process for the recovery of metals and reuse as raw materials
- Environmental Services business: Detoxification of industrial waste

Utilizing the key features and strengths of smelting and recycling, including zero emissions, proprietary treatment processes based on smelting and refining technologies, and a global collection network, JX Advanced Metals contributes significantly to the development of a sustainable, recycling-oriented society.

Key Features and Strengths of the Smelting and Recycling Businesses

1. Zero Emissions

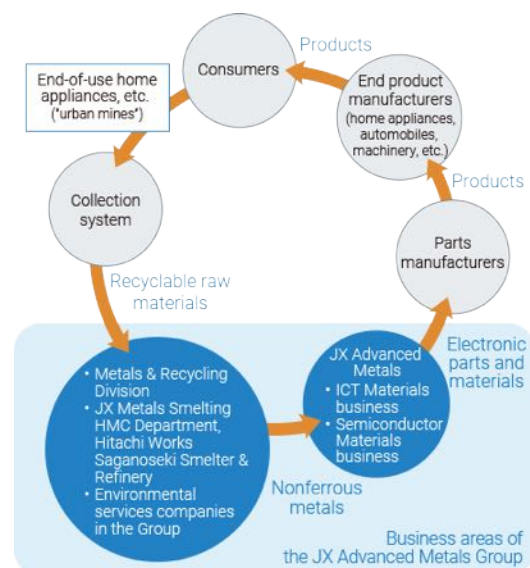
JX Advanced Metals is pursuing zero emissions, where no secondary waste that requires landfill disposal is produced, in both its smelting and refining business and its recycling business. Iron and other ferrous metals other than nonferrous metals are recovered as slag and used as raw materials for cement and other purposes. By preventing the generation of secondary waste, we are reducing our environmental impact.



HMC Department, Hitachi Works, JX Metals Smelting

2. JX Advanced Metals' Proprietary Treatment Processes Based on Smelting and Refining Technologies

JX Advanced Metals carries out recycling of nonferrous metals in its recycling business using efficient and reliable proprietary treatment processes based on technologies developed over many years through its operations at mines, smelters, and refineries. At the JX Metals Smelting Saganoseki Smelter & Refinery, which boasts Asia's largest treatment capacity for recycling copper and precious metals, energy is conserved by using the reaction heat generated during the copper concentrate smelting process for melting recyclable raw materials.



Resource-Recycling Initiatives in Pursuit of Zero Emissions

3. Global Collection Network

To advance its recycling business, JX Advanced Metals is focusing on boosting the collection of recyclable raw materials at its locations in Japan and overseas and increasing the processing capacity of its copper smelting and refining facilities. In fiscal 2021, a new collection site was established at JX Metals Smelting Saganoseki Smelter & Refinery (Oita Prefecture) to increase pre-processing capacity. Outside of Japan, in addition to existing collection and pre-treatment facilities in Taichung (Taiwan), along with collection support facilities in Arizona (United States) and Frankfurt (Germany), in fiscal 2022, JX Advanced Metals acquired eCycle Solutions Inc. (Canada), marking its entry into the collection, disassembly, and sorting business for electrical and electronics waste. Recyclable raw materials collected in Japan and abroad, along with raw materials collected by Group companies in Tomakomai (Hokkaido), Mikkaichi (Toyama Prefecture), and Shirakawa (Fukushima Prefecture), are sent to and undergo pre-processing in Hitachi (Ibaraki Prefecture) and at the Saganoseki Smelter & Refinery, and metals from these materials are recycled and recovered at the Saganoseki Smelter & Refinery.

Management of Chemical Substances

Basic Approach

Based on laws and regulations such as the Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Pollutant Release and Transfer Register Act), the ENEOS Group strives to properly manage chemical substances and reduce emissions of such substances. In addition, we are shifting to chemicals with lower impacts on health and the environment.

We are also committed to properly managing chemical substances not covered by these laws and regulations.

Structure

For information on our structure, see [Environmental Management](#).

Major Initiatives

Compliance with Laws and Regulations

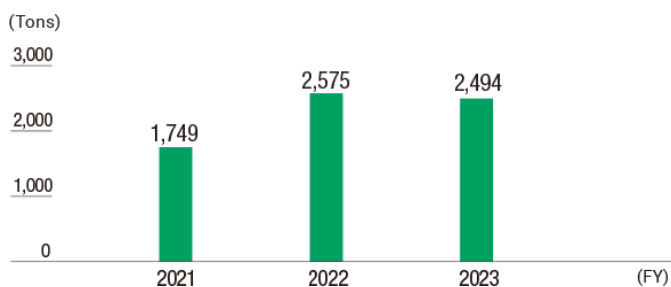
Management and Monitoring of Specified Chemical Substances under Japan's Pollutant Release and Transfer Register Act

The Group manages and monitors the release and transfer amounts of specified chemical substances, such as benzene, toluene, and xylene, which are found in gasoline, based on Japan's Pollutant Release and Transfer Register Act.

In fiscal 2023, the Group's releases totaled 2,494 tons, a decrease of 81 tons over the previous fiscal year, and transfers totaled 675 tons, an increase of 331 tons over the previous fiscal year.

For information about , see the [Editorial Policy](#).

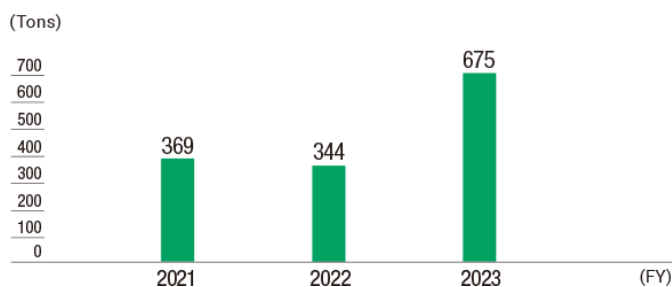
Release of Specified Chemical Substances



Note:

For detailed data, see [Data](#).

Transfer of Specified Chemical Substances



Management and Detoxification of PCB¹ Waste

The Group carries out storage notification and systematic treatment of PCB waste based on Japan's Act on Special Measures concerning Promotion of Proper Treatment of PCB Wastes (PCB Special Measures Act).

JX Nippon Tomakomai Chemical, which has been certified by the Minister of the Environment to provide low-concentration PCB waste treatment, carries out detoxification operations, thereby contributing to compliance with the Stockholm Convention on Persistent Organic Pollutants².

For more information, see [Low-Concentration PCB Waste Detoxification](#).

- 1 Polychlorinated biphenyl (PCB): Due to its excellent electric insulation properties, this chemical compound was used mainly in applications such as insulating fluids for transformers and capacitors, and carbonless copiers. However, its production and import are now prohibited.
- 2 A treaty regulating the production, use, and proper treatment of persistent organic pollutants, including PCB

Compliance with Domestic and International Regulations

Laws and regulations on the handling of chemical substances are being developed both in Japan and abroad to protect the environment, as well as safety and health. There are also cases where countries have newly implemented chemical substance registration systems or modified existing ones. The Group takes necessary steps, such as registering substances in chemical substance registration systems in accordance with regulations in Japan and abroad, including the REACH Regulation in Europe and the Act on the Regulation of Manufacture and Evaluation of Chemical Substances in Japan.

Guidelines on Chemical Substances in Our Products and Management of Chemical Substances

ENEOS has voluntarily established standards for managing the chemical substances used in its products. We have specified prohibited substances (such as most organochlorine compounds, mercury compounds, lead compounds, and phthalates) and substances that require monitoring (such as VOCs including toluene, xylene and the like) to better manage their use in products, and we are working to mitigate any harmful effects they may have. In addition, we provide essential product safety information to customers and others involved with our products using methods such as safety data sheets (SDS). In the event that we obtain new information about any hazards or environmental impacts of our products, we promptly update the relevant SDS to provide the latest information to customers and others.

Businesses that Contribute to Appropriate Management of Chemical Substances

Low-Concentration PCB Waste Detoxification

Since March 2014, when JX Metals Tomakomai Chemical received certification from the Minister of the Environment as the first low-concentration PCB waste detoxification facility in Hokkaido, the company has been working to improve its treatment capacity.

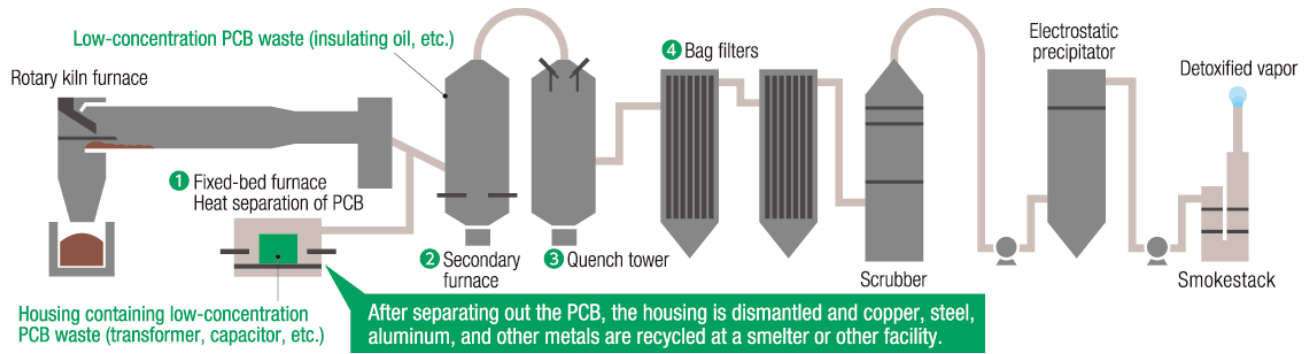
A deadline of March 31, 2027 has been prescribed by law for disposal of waste materials containing PCB. By that date, the owner must either dispose of such materials or have their disposal handled by an agent. However, there are only 25 incineration facilities in Japan, including JX Metals Tomakomai Chemical, capable of detoxifying not only low-concentration PCB waste materials but also the transformers, drums, and other housings that contain them, and there are eight companies that perform decontamination by means of cleaning processes. We are proceeding with the disposal of PCB waste with the aim of completing the disposal by the deadline.

Moving forward, we will maintain stable operations for the treatment of industrial waste as part of our efforts to contribute to the environmental conservation of local communities.



JX Metals Tomakomai Chemical rotary kiln furnace

Process for Complete Detoxification of Low-Concentration PCB Waste



Changes Since Initial Certification

	Treated items	Treatment capacity
March 2014 (certification by Minister of the Environment)	<ul style="list-style-type: none"> Transformers Metal scrap (drums, etc.) Waste oil containing low-concentration PCB 	Solids: 6 tons/day (3 batches of 2 tons each) Waste oil: 8.4 kL
March 2015	Waste materials from outside Hokkaido can be accepted without the need for advance consultation with local governments	
September 2015 (additional certification by Minister of the Environment)	Increased size of objects that can be treated Width: 2.5 meters / Depth: 1.5 meters / Height: 2.3 meters	
	Additional treated items <ul style="list-style-type: none"> Capacitors Metal coating scrap containing low-concentration PCB 	Increase in treatment capacity Solids: 12 tons/day (3 batches of 4 tons each)
March 2018 (certification by Minister of the Environment)	Additional treated item <ul style="list-style-type: none"> Inorganic sludge (concrete scrap) 	
September 2018 (certification by Minister of the Environment)		Increase in treatment capacity Solids: 13.7 tons/day Waste oil: 9.4 kL

Prevention of Environmental Pollution

Basic Approach

In addition to complying with relevant laws and regulations, the ENEOS Group works to maintain and conserve natural resources such as water, soil, and the atmosphere by curbing the further release of environmental pollutants, effectively utilizing water resources, and other measures. To prevent environmental pollution, we continuously work to mitigate risks by improving our facilities and conducting emergency response and other training drills covering items identified as serious concerns from an environmental perspective through the environmental management system (EMS) of each Group company.

Structure

For information on our structure (EMS), see [Environmental Management](#).

Major Initiatives

Establishment of and Compliance with Targets and Voluntary Standards More Rigorous than Statutory Requirements

ENEOS's refineries and plants voluntarily conclude pollution prevention agreements with local governments. In these agreements, we have set targets for the avoidance and reduction of environmental pollution and the quality of wastewater that are more rigorous than those stipulated by laws and regulations, and we comply with them.

In fiscal 2023, there were no serious leaks or discharges.

Prevention of Air Pollution

For information about , see the [Editorial Policy](#).

Reducing SOx Emissions

Sulfur oxides (SOx), which are known to cause acid rain, are released into the atmosphere mainly as a component of exhaust gases from combustion facilities.

The Group carries out measures such as using fuels with low sulfur content, removing SOx using flue gas desulfurizers, and managing emissions using voluntary standards.

SOx emissions in fiscal 2023 totaled 10 thousand tons, a slight decrease from the previous fiscal year.



Flue gas desulfurizer

Reducing NOx Emissions ✓

Nitrogen oxides (NOx), like SOx, are known to cause acid rain and are released into the atmosphere mainly as a component of exhaust gases from combustion facilities.

The Group carries out measures such as using low-NOx boilers at combustion facilities, removing NOx using flue gas denitrizers, and managing emissions using voluntary standards.

NOx emissions in fiscal 2023 totaled 12 thousand tons, a slight decrease from the previous fiscal year.



Flue gas denitrizer

Reducing VOC Emissions ✓

Volatile organic compounds (VOCs), which are thought to produce photochemical oxidants through a photochemical smog reaction with NOx and ultraviolet rays from sunlight, are released from places such as storage facilities for petroleum products.

The Group has installed VOC recovery equipment in storage facilities and truck loading facilities.

VOC emissions in fiscal 2023 totaled 11 thousand tons, a slight decrease from the previous fiscal year.

VOC Recovery

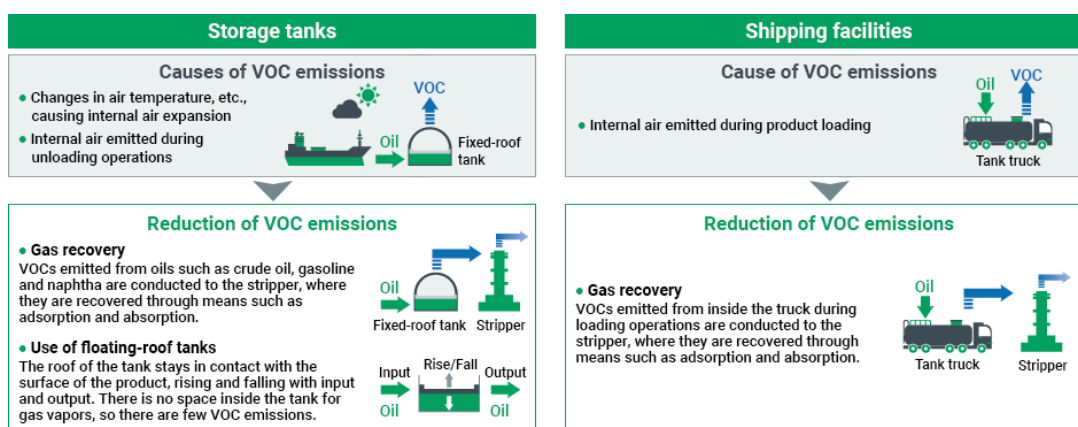
Volatile organic compounds (VOCs) containing hydrocarbons are released into the air whenever gasoline is pumped from tank trucks into storage tanks at service stations. These VOCs are not only a source of photochemical oxidants, but also cause irritating odors in neighboring communities and can adversely affect the health of both customers and employees.

Therefore, ENEOS has installed recovery equipment on the ventilation ducts of service station storage tanks, which enables tank trucks to recover these VOCs so that they are not released into the atmosphere.

The ENEOS Group's Kiire Terminal recovers, without releasing, the gases that have accumulated inside tankers when loading crude oil, and reuses the VOCs contained in these gases by absorbing them into the crude oil. Gases, including odor-causing ones, that are not absorbed are broken down.

The Group was the first in the world to implement this mechanism. This technology is contributing to the advancement of environmental conservation measures and the effective utilization of energy.

VOC Emissions and Reduction Measures at Refineries



Effective Utilization of Water Resources and Preventing Water Pollution

For information about , see the [Editorial Policy](#).

Effective Utilization of Water Resources

Each of the Group's principal business sites has established and operates an environmental management system (EMS), which they use to appropriately assess and address environmental impacts concerning water usage.

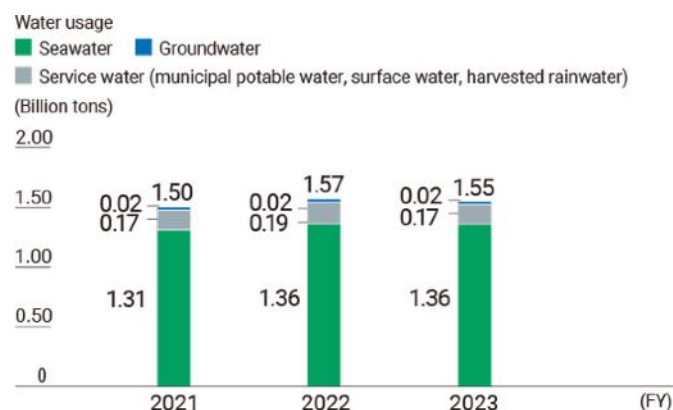
Water Usage

The Group uses water for purposes such as operating and cooling power generation facilities at refineries and smelters. Approximately 90% of this water is seawater.

In fiscal 2023, the volume of water used was 1.55 billion tons, and the water discharge volume was 1.45 billion tons.

The ENEOS Group recycles approximately 97% of the cooling water, which accounts for most of the water usage, at its refineries. To reduce the amount of water used, smelters that use seawater for cooling have partially switched to recycled water.

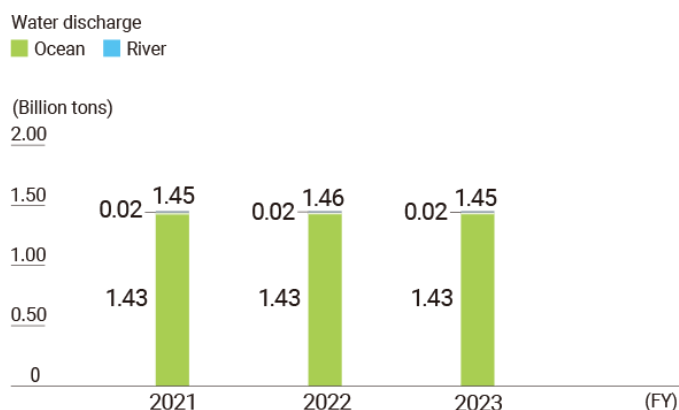
ENEOS Group Water Usage Volume



Note:

For detailed data, see [Data](#).

ENEOS Group Water Discharge Volume



Notes:

The amount of wastewater discharged into groundwater and wells, discharged into off-site water treatment facilities, and discharged for water use and other use are all zero.

Figures for each item have been rounded. As a result, the sum of the figures may not match the total.

For detailed data, see [Data](#).

Response to Water Risks

The Group uses tools such as the Aqueduct water risk mapping tool from the World Resources Institute (WRI) to verify whether our manufacturing sites are in areas of elevated water risk.

In fiscal 2021, we assessed water risks at our manufacturing sites (21 sites) and confirmed that there are no high-risk sites. In fiscal 2022, we reassessed 20 of these sites and newly assessed seven major overseas manufacturing sites.

As a result, PT. JX Nippon Oil & Energy Lubricants Indonesia was assessed as high risk in terms of "coastal nutrition potential" of water quality. However, the impact on water quality has been reduced at the plant because the environmental impact on the water quality of the discharge destination has been identified and a management system based on ISO 14001, including compliance with local regulatory standards, has been put into place. We do not expect any major impact that will affect the operation of the plant.

Additionally, at the Caserones Copper Mine in Chile, where there is a high risk of drought, approximately 80% of the water used in the production process is recycled. As an operating mine, it has the lowest level in Chile of water usage per ton of ore processed.

With efforts to conserve and manage water resources gaining attention worldwide, going forward, we will review the results of risk assessments every three years. In addition, in the event that new high-risk indicators are identified due to the expansion of the scope of data or other factors, we will obtain detailed information from external organizations and assess the impacts on our operations.

Reducing the Release of Water Pollutants

The Group manages and monitors pollutants in wastewater through regular maintenance of water treatment facilities based on voluntary standards that are more rigorous than laws, regulations, ordinances, and agreements, including Japan's Water Pollution Prevention Act. In addition to our efforts at refineries and smelters, we carry out continuous operations for the treatment of acid mine drainage at closed mines. In fiscal 2023, there were no violations of laws, regulations or voluntary standards concerning prevention of water pollution and no oil spills or other serious incidents at our manufacturing sites.

Management of Closed Mines

The JX Advanced Metals Group manages closed mines owned by itself, with the main operations of the detoxification of acid mine drainage (AMD) as well as the maintenance and protection of tailings and mine shafts.

AMD is strongly acidic and contains metals as a result of rainwater and other water coming into contact with ores remaining in the mines and tailings in the dams and surrounding altered rock. Therefore, the operation of treatment facilities must be maintained continuously. Additionally, the JX Advanced Metals Group is working to fortify tailings dams against the torrential rains caused by recent linear rainbands and the largest seismic motion. In this manner, the JX Advanced Metals Group is working to protect the natural environment through the management of its closed mines.



Stone tailings drainage at Toyoha Mine



Gallery inspection at Hanawa Mine

Preventing Marine Pollution

For the marine transport of oil, the ENEOS Group is required to comply with the International Convention for the Prevention of Pollution from Ships (MARPOL), an international convention developed by the International Maritime Organization (IMO) that includes regulations for the prevention of environmental pollution from oil and the prohibition of waste discharge into oceans and seas.

In addition to fully complying with this convention, we take further steps to prevent marine pollution, such as taking incinerator ash as defined in the convention back to land for proper disposal rather than discharging it into the ocean.

ENEOS established a new manufacturing method and a shipment system for low-sulfur marine fuel in accordance with the introduction of worldwide environmental regulations by the IMO in January 2020.

Soil Contamination Countermeasures

ENEOS performs systematic surveys on land that it owns that has the potential for soil or groundwater contamination, focusing particular efforts on property where refineries, oil depots, service stations and other facilities are located. If pollution is detected, we implement appropriate countermeasures to address it.

Additionally, as one of its business areas, Group company NIPPO Corporation implements soil purification measures that are optimized in accordance with the type and degree of pollution.

In fiscal 2023, there were no instances of soil contamination at ENEOS properties.

Biodiversity

Basic Approach

The operations of the ENEOS Group may impact the environment surrounding our operation and production sites. Given the nature of our business, we consider biodiversity conservation to be an important effort, as stated in the ENEOS Group Code of Conduct.

We carry out initiatives with attention to biodiversity in our business activities. These initiatives include the implementation of environmental impact studies when establishing new operation and production sites in order to obtain an accurate understanding of local ecosystems, including plants, birds and other animals, and marine life.

In addition, ENEOS, which has many production sites, has established the Energy Group* Guidelines on Biodiversity.

Energy Group*Guidelines on Biodiversity

Basic Stance

We will carry out initiatives with attention to biodiversity in every aspect of our business activities, under the recognition that our business activities are deeply related to the Earth's biodiversity.

Action Policy

1. We will ascertain and analyze the impacts of our business activities on biodiversity and strive to make improvements.
2. We will promote activities that contribute to biodiversity preservation, such as nature protection and environmental education.
3. We will disclose and share information on our efforts to preserve biodiversity.

* ENEOS and its Group companies

Structure

For information on our structure, see [Environmental Management](#).

Material Issues, Plans and Results

Understanding Biodiversity Risks

The Group has identified biodiversity risks as a material ESG issue and worked toward the target “understanding risks at manufacturing sites” in fiscal 2022. We utilize the Integrated Biodiversity Assessment Tool (IBAT), available to the general public, to understand risks at our manufacturing sites. Thus far, we have investigated the risks at a total of 27 sites¹, including overseas sites. As a result, we have verified that there are no protected areas within a five-kilometer radius of our manufacturing sites that fall under the categories of strict nature reserve, wilderness area, national park, or natural monument or feature (see table below for categories I a, I b, II, and III).

We will review the results of risk assessments every three years. In addition, in the event that new protected or conservation areas are identified due to the expansion of a site or other factors, we will obtain detailed information from external organizations and assess the impacts on our operations.

The results of these efforts are reported to the Executive Council and the Board of Directors at least once a year.

In fiscal 2023, we explored further identifying risks at our manufacturing sites and decided to work on “understand the degree of dependence and impact on natural capital.” To this end, in fiscal 2024, we plan to conduct a survey of our main business sectors using ENCORE², an online tool available to the general public.

- 1 ENEOS: 17 (11 in Japan, 6 overseas), ENEOS Xplora: 3 (1 in Japan, 2 overseas), and JX Advanced Metals: 7 (6 in Japan, 1 overseas).
- 2 Exploring Natural Capital Opportunities, Risks and Exposure: A tool to help organizations investigate their exposure to nature-related risks and understand their dependencies and impacts on nature.

International Union for Conservation of Nature (IUCN) Protected Area Categories

Category I a Category I b	Strict nature reserve Wilderness area	Protected areas that are managed for academic research or protection of wilderness
Category II	National park	Areas managed for protection of functioning ecosystems and recreation
Category III	Natural monument or feature	Areas managed for protection of special natural features
Category IV	Habitat/species management area	Areas managed for conservation by additional management
Category V	Protected landscape or seascape	Areas managed for landscape protection and recreation
Category VI	Protected area with sustainable use of natural resources	Areas managed for sustainable use of natural ecosystems

Major Initiatives

Participation in Initiatives

Endorsement of the Declaration of Biodiversity by Keidanren

ENEOS Holdings endorses the Declaration of Biodiversity by Keidanren, which states the aim of “building a society in harmony with nature and realizing a sustainable economy and society.”

Participation in the Japan Business Initiative for Biodiversity (JBIB)

ENEOS has been a member of the Japan Business Initiative for Biodiversity (JBIB), a consortium of businesses actively working to conserve biodiversity in Japan, since 2013.



Participation in Call to Action

In December 2020, ENEOS Holdings joined the Call to Action of the global coalition Business for Nature*.

The Call to Action calls on governments around the world to adopt ambitious policies to reverse nature loss in the decade up to 2030, under the concept that “healthy societies, resilient economies, and thriving businesses rely on nature,” with many enterprises around the world having declared their support to date.

* Spearheaded by organizations such as the World Economic Forum, the World Business Council for Sustainable Development and the International Chamber of Commerce, Business for Nature is a global coalition established with the aim of encouraging businesses to take action toward nature conservation and restoration and drawing on businesses’ aspirations for nature conservation and restoration to influence policy decision makers.

Participation in the 30by30 Alliance for Biodiversity

In April 2022, ENEOS Holdings joined the 30by30 Alliance for Biodiversity.

The 30by30 Alliance is a voluntary alliance launched in April 2022 by 17 organizations representing the industrial, private, and governmental sectors, including the Ministry of the Environment. Its objective is to reach the 30by30 target for Japan, which aims to conserve or protect 30% of land and sea areas by 2030, one of the proposed targets in the first draft of the post-2020 Global Biodiversity Framework.

In October 2023, the central greenbelt of the Negishi Refinery, one of the Group's manufacturing sites, was certified as a Nationally Certified Sustainably Managed Natural Site*, a Ministry of the Environment certification system for achieving the 30by30 target.

* A new system that began in fiscal 2023 to recognize areas where the Ministry of the Environment certifies that "biodiversity is being conserved through private sector initiatives," as the 30by30 target cannot be achieved solely through the inclusion of protected areas such as national parks.



Major Initiatives in Japan

The Group carries out activities at its manufacturing sites for the conservation of vibrant biodiversity as one way of participating in community efforts to protect biodiversity and maintaining ecosystem networks in large green areas around the sites. At our other business sites as well, we carry out environmental conservation activities suited to the surrounding environments.

We also carry out activities such as regular environmental training for employees and community contribution activities related to environmental conservation.

Status of Certifications Related to Biodiversity

Type	Scope	Acquired
ABINC certification ¹	Central greenbelt at ENEOS Negishi Refinery	February 2020
Nationally Certified Sustainably Managed Natural Site certification by the Ministry of the Environment	Central greenbelt at ENEOS Negishi Refinery	October 2023
OECM ² registration	Central greenbelt at ENEOS Negishi Refinery	August 2024

Green Area Management: Initiatives at the ENEOS Negishi Refinery

The ENEOS Negishi Refinery is one of Japan's largest oil refineries, with an area of 2.2 million square meters and a circumference of around 12 kilometers. The area in which it is located has a network of ecosystems with a diverse array of organisms inhabiting an expansive greenbelt that includes Sankei-en and Negishi Forest Park. The Negishi Refinery carries out activities for the conservation of biodiversity utilizing the greenbelt (approximately 60,000 square meters), a hub for the area's ecosystem network, at the center of the premises.

Ecosystem surveys were begun in fiscal 2013, and in surveys to date, the presence of over 150 types of living organisms has been confirmed.

In fiscal 2018, we began holding interactive events and using goat grazing to weed the greenbelt areas, further enhancing these areas with the expansion of these efforts. Since fiscal 2019, we have been stepping up maintenance and management of the green areas.

The Negishi Refinery was granted certification by ABINC¹ in February 2020. The refinery was certified as a Nationally Certified Sustainably Managed Natural Site in October 2023 and registered as an Other Effective area-based Conservation Measures (OECM²) site in August 2024.



Interactive event



Nature viewing event held at the refinery

- 1 ABINC certification is awarded on the basis of the JBIB Guidelines for Sustainable Business Sites and the JBIB Land Use Scorecard developed by the Japan Business Initiative for Biodiversity (JBIB).
- 2 Other Effective area-based Conservation Measures: Areas other than protected areas such as national parks that contribute to biodiversity conservation. The areas certified as “Nationally Certified Sustainably Managed Natural Sites” are registered in the international database as “OECMs,” except when overlapping with protected areas.



ABINC certification mark

Seaweed Bed Creation: Initiative at the ENEOS Sakai Refinery

The ENEOS Sakai Refinery is located in the Sakai-Semboku Coastal Industrial Zone in the inner part of Osaka Bay. Osaka Bay is an enclosed sea area, and the inner part of the bay has a water quality that makes it difficult for living things to thrive, as nutrients such as nitrogen and phosphorus flowing in from the land tend to stagnate, resulting in red tides.

In fiscal 2022, the refinery began working to create seaweed beds along its coastal area so that a variety of creatures can live in the waters. By creating seaweed beds, we can expect multi-dimensional effects such as improving water quality through the absorption of nutrients and the supply of oxygen, increasing places for the spawning and growth of marine life, and accumulating blue carbon through the photosynthesis of algae.

In 2024, the refinery joined the Members of the Osaka bay Blue carbon ecosystem Alliance (MOBA) (established by Osaka and Hyogo prefectures) and will continue working with neighboring organizations to advance this activity.



Installation of blocks for the epiphytic growth of algae

Forest Stewardship and Afforestation Activities

Group companies are involved in forest stewardship activities that contribute to the preservation of biodiversity.

ENEOS implements forest stewardship activities called ENEOS-no-Mori at six locations across Japan in partnership with local governments and the National Land Afforestation Promotion Organization (NALAPO).

Since 1998, ENEOS Xplora has implemented a forest stewardship project called ENEOS Xplora Nakajo Forest on and around the site of its Nakajo Field Office in Niigata Prefecture.

JX Advanced Metals is working to maintain and improve the natural environment by continually engaging in afforestation activities such as tree planting and thinning, mainly at the sites of its closed mines.



ENEOS-no-Mori activity



ENEOS Xplora Nakajo Forest afforestation activity



Tree planting in Nikko Ryuju-Satoyama Forest (Nanyo City, Yamagata Prefecture)

Initiatives at Closed Mines

The JX Advanced Metals Group believes that there is great potential to contribute to the conservation and restoration of biodiversity through the appropriate management of its closed mines as ecosystems. Most of the closed mines are forested areas, which play a part in the function of local ecosystems as water source cultivation and habitats for flora and fauna. The group has therefore begun to assess the ecosystems of the watersheds where its closed mines are located. Going forward, after formulating an ecosystem management plan that systematically outlines the ecosystems to be achieved at its closed mines and the efforts to be made toward that end, it will begin full-scale management of the ecosystems at these closed mines. In fiscal 2023, the JX Advanced Metals Group assessed its closed mines in terms of biodiversity and selected the Hitachi Mine and Yoshino Mine as model sites based on assessment results and other factors. At both mines, it conducted environmental DNA surveys* to understand the fish fauna in the watersheds in which the mines are located.

* Environmental DNA: A designation for in vitro DNA released from fish, amphibians, birds, and mammals.
Environmental DNA survey method: Extraction and detection of environmental DNA from water collected at the applicable sites. Detection methods can be broadly classified into those that target only a single species and those that detect specific taxonomic groups (e.g., fish) collectively.



Water collection in the watershed where Hitachi Mine is located

Providing Sustainable Seafood Menu Options at the Employee Cafeteria

Since 2019, the Company has been offering sustainable seafood* menu options once a month at the ENEOS Building employee cafeteria, used by the Company and its Group companies. In 2020, we began offering sustainable seafood menus at the employee cafeterias of some of our refineries. Through this initiative, we are working to raise awareness about biodiversity conservation and environmental conservation among Group employees through food, a part of everyday life.

* The seafood has met the MSC's global standard for sustainability or ASC's global standard for responsibly farmed seafood.



Ordering a menu item at the employee cafeteria

Major Initiatives Overseas

Measures for Ballast Water (Seawater)

Oil tankers from Japan bound for oil-producing countries carry ballast water (seawater) as weight to maintain stability for unloaded voyages. However, this ballast water contains microorganisms and plankton from Japanese waters that are carried to the waters of oil-producing countries, where, if released, they can disturb the balance of local ecosystems.

Since 2004, the Group has replaced this ballast water while still at sea, and installed water treatment systems* for ballast water on its new vessels in an effort to avoid disturbing the ecosystems of the coastal waters of oil-producing countries. In fiscal 2022, we completed installation of ballast water treatment systems on all of the Group's 15 tankers.

Furthermore, we release ballast water from ships using methods compliant with international treaties.

* Systems that keep the level of aquatic organisms in ballast water within certain standards prior to release.

Our Response to Climate Change Risks and Opportunities (TCFD)

Basic Approach

As an energy and materials company group, the ENEOS Group recognizes that its response to climate change involves both material management risks and opportunities. We believe that developing practical solutions to climate change will enable us to continuously generate profits into the future. As a clear expression of this intent, in our Long-Term Vision we state that we will take on the challenge of achieving both a stable supply of energy and materials and the realization of a carbon-neutral society.

Specifically, we aim to reduce our own greenhouse gas emissions (Scope 1+2) by 46% by fiscal 2030 compared to fiscal 2013 and achieve carbon neutrality by fiscal 2040. In order to achieve carbon neutrality, including Scope 3 emissions, by fiscal 2050, we will pursue energy transitions through energy saving at our refineries, plants, and smelters, and in the energy field, we will expand the use of renewable energy and work toward the early practical implementation of hydrogen and carbon-neutral fuels. In the materials and services field, we will pursue the development of a circular economy through efforts such as the conversion of raw materials and sharing services to increase the amount of avoided emissions.



To enhance and broaden its disclosures, the Company signed a statement of support for the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) in May 2019. The Company also endorsed the Challenge Zero initiative of the Japan Business Federation (Keidanren) in June 2020, and is working on the development of technologies to mitigate the impacts of climate change.

Additionally, with an eye on the realization of carbon neutrality by 2050 and social transformation, the Company participates in the Green Transformation (GX) League and actively makes recommendations for the design of the emissions trading scheme (GX-ETS). The GX League, a framework based on the basic concept of the Ministry of Economy, Trade and Industry (METI), was established as a forum for companies aiming to achieve sustainable growth in the present and future to collaborate with government and academia.



Overview of TCFD Disclosure Recommendations

Governance	Disclose the organization's governance around climate-related risks and opportunities.	Supplemental information	References
a Describe the board's oversight of climate-related risks and opportunities.	Incorporating climate change risks and opportunities into management strategies	Senior management manages the progress of management strategies	<ul style="list-style-type: none"> > Governance System for Climate Change > Message from the CEO—Integrated Report 2024 (PDF : 256KB) 
b Describe management's role in assessing and managing climate change-related risks and opportunities.			

Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	Supplemental information	References
a Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	b Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Identification of transition risks, opportunities, and physical risks, clarification of the time horizon, disclosure of quantitative impacts, and reflection of them in management strategies	> Financial Impacts of Climate Change-Related Risks and Opportunities
b Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.			> Financial Impacts of Climate Change-Related Risks and Opportunities > Scale of Investment Capital and Profits in the Long-Term Vision by Business Area
c Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.		Consideration of multiple scenarios, including 2°C or lower, when formulating strategies	> Carbon Neutrality Plan—Integrated Report 2024 (PDF : 145KB)  > Building a Business Portfolio That Addresses Risks and Opportunities
Risk Management	Disclose how the organization identifies, assesses, and manages climate-related risks.	Supplemental information	References
a Describe the organization's processes for identifying and assessing climate-related risks.	b Describe the organization's processes for managing climate-related risks.	Use of enterprise risk management (ERM) to identify and evaluate risks and opportunities, incorporate them into management strategies, and manage progress	> ESG Management Structure
b Describe the organization's processes for managing climate-related risks.			> Risk Management
c Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.			
Metrics and Targets	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	Supplemental information	References
a Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	b Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	Evaluation using the degree of impact and probability of occurrence as indicators	> ESG Management Structure > Risk Management
b Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.		Disclosure of Scope 1, 2 and 3 GHG emissions	> Environmental Management
c Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.		Disclosure of basic plan	> Carbon Neutrality Plan—Integrated Report 2024 (PDF : 145KB)  > Indicators and Targets

Governance System for Climate Change

In 2024, the Group established the Carbon Neutrality Promotion Committee, led by the CTO, to update basic strategies in response to changes in the business environment. The basic strategies discussed by the Carbon Neutrality Promotion Committee will be reflected in future medium-term management plans and other management strategies. The medium-term management plan and other management strategies are discussed by the ENEOS Holdings Executive Council, chaired by the ENEOS Holdings CEO, which deliberates on the Group's response to climate change, including in future business plans, and manages and evaluates the status of climate initiatives from a cross-functional perspective. The council reports the results of its deliberations, management, and evaluation to the ENEOS Holdings Board of Directors, which also monitors and supervises the council.

Deliberations in Fiscal 2023

Board of Directors and Executive Council

- Results of ESG activities in fiscal 2022 and identification of material ESG issues in fiscal 2024
- Formulation of the Carbon Neutrality Plan
- Status report on carbon neutrality strategies

Response to Climate Change and Link to Executive Remuneration

Remuneration for the Company's directors consists of a monthly remuneration in accordance with role, performance-linked bonuses, and share-based remuneration. The performance indicators on which share-based remuneration is based include greenhouse gas emissions reduction, along with operating profit excluding inventory valuation, ROE, and other financial indicators.

The inclusion of greenhouse gas emissions reduction reflects our commitment to reducing emissions and functions as an incentive for forming and implementing highly competitive business strategies from a medium- to long-term perspective.

Scenario Analysis

The Group conducted scenario analysis for the review of its Long-Term Vision. In conducting the analysis, we referenced STEPS¹, APS², and NZE³ of World Energy Outlook (WEO) 2022 by the IEA for long-term forecasts of world energy demand, and Representative Concentration Pathways (RCP⁴) of the IPCC for the assessment of physical risks such as changes in climate and sea levels. This resulted in the identification of risks and opportunities (see table below: Financial Impacts of Climate Change-Related Risks and Opportunities).

In revising our Long-Term Vision announced in 2019, we referenced multiple WEO scenarios, using the middle ground among them as the Group's base case. As a result, although the overarching direction of the social scenario in our Long-Term Vision will remain the same as the one in 2019, we believe uncertainty regarding this change toward decarbonization is greater than anticipated.

In the base-case scenario, risks include a decline in domestic fuel oil demand by around half in 2040 compared to 2019, while opportunities include the growth of the market for energy derived from decarbonized and recyclable resources and the generalization of environmental value trading. Additionally, demand is expected to grow for high-value-added services in mobility, such as EVs and car sharing, and lifestyle support for making life more convenient, as well as recycled resources, along with high-performance and advanced materials required for digital devices.

During the transition from fossil fuels to a portfolio centered on decarbonization, the Group will achieve both a stable supply of energy and the realization of a carbon-neutral society while keeping close watch over demand trends for fuel oil. The Group is maintaining its high degree of resilience in responding to multiple scenarios as it has a number of advantages that enable it to withstand change and is carrying out investments and demonstration projects, as well as verifying scenarios annually in accordance with the external and internal environments surrounding the Group⁵.

- 1 Stated Policies Scenario: A scenario that reflects government policies already announced
- 2 Announced Pledges Scenario: A scenario that assumes that countries will achieve their ambitious targets
- 3 Net Zero Emissions by 2050 Scenario: A scenario in which the world will achieve net zero in 2050
- 4 Representative Concentration Pathways: A scenario on rising temperatures based on a greenhouse gas concentration trajectory
- 5 Implemented by the Carbon Neutrality Promotion Committee, established in May 2024

Changes in Business Environment

Changes in Business Environment since the Formulation of the Second Medium-Term Management Plan

- Fluctuations in energy security
- Formation of a social consensus toward carbon neutrality
- Further progress in digital transformation



No change in major direction.

Agile response to changes in the external/internal environment.

Must take on the challenge of the energy transition.

Financial Impacts of Climate Change-Related Risks and Opportunities

We have developed and operate an [enterprise risk management \(ERM\)](#) system to identify and analyze Group management risks and ensure appropriate responses. Based on this process, we recognize that our response to climate change involves both material management risks and opportunities, which we have identified as shown in the table below.

We estimate financial impacts based on our own base scenario for transition risks and the IPCC RCP8.5 scenario* as the stress case for physical risks. These estimates include many potential risks, uncertainties, and assumptions, and changes in material factors may lead to significantly different outcomes.

* Intergovernmental Panel on Climate Change (IPCC) assessment scenario, in which the global average temperature rises by about 4°C by 2100 compared to the period from 1986 to 2005

Financial Impacts of Climate Change-Related Risks and Opportunities

	Category	Financial impact			
		Short term (2025)	Medium term (2030)	Long term (2040)	Assessment method
Transition risks	<ul style="list-style-type: none"> Higher costs for achieving carbon neutrality 	None	¥30 billion annually	¥120 billion annually	Amount of decline in operating profit if carbon credits were purchased for the entire reduction targets for 2030 and 2040 of 4 million tons and 19 million tons, respectively Carbon credit price (\$50/t-CO ₂ ¹) × quantity × exchange rate 1 Internal carbon price
	<ul style="list-style-type: none"> Declining demand for petroleum due to the accelerated proliferation of EVs, driven by technological innovation Declining demand for petroleum due to growing environmental awareness 	Limited impacts	Approx. ¥50 billion/year decline	Approx. ¥100 billion/year decline	Amount of decline in operating profit if domestic petroleum demand declined by approx. 20% in 2030 and approx. 50% in 2040 compared to 2019 (Calculated based on the fiscal 2025 income targets of the third Medium-Term Management Plan)
	<ul style="list-style-type: none"> Stranding of upstream oil assets 	Limited risk			Estimation of oil upstream asset reserves based on the number of extractable years discounted by current production

Physical risks	<ul style="list-style-type: none"> Increasing frequency and severity of wind and flood damage due to extreme weather events (major typhoons, etc.) and rising sea levels 	¥100 to ¥200 million/year			<p>Referenced the IPCC RCP8.5 scenario for estimation of the total amount of damage (decrease in operating profit) using WRI Aqueduct², etc. for 31 of our facilities and assets in Japan, such as refineries and smelters</p> <p>² A water risk assessment tool developed by the World Resources Institute</p>
	<ul style="list-style-type: none"> Rising sea levels caused by global warming 	Limited risk			Estimated from amount of increase (approx. 0.2 meters) in sea level around Japan as of 2040 as projected by Aqueduct
Opportunities	<ul style="list-style-type: none"> Increasing demand for renewable energy, hydrogen, and carbon-neutral fuels 	Careful planning and rollout phase	Up to ¥50 billion/year	Up to ¥200 billion/year	Profit estimated based on certain assumptions about the estimated market size, the Company's market share, and operating profit margin due to an expected increase in demand for renewable energy, hydrogen, and carbon-neutral fuels associated with advancements toward a decarbonized, recycling-oriented society
	<ul style="list-style-type: none"> Expansion of EV charging and environmentally friendly mobility services 	Careful planning and rollout phase	Up to ¥50 billion/year	Up to ¥100 billion/year	Profit estimated based on certain assumptions about the estimated market size, the Company's market share, and operating profit margin due to an increase in demand for EV charging, which is expected to grow with the development of a decarbonized society, and an expansion of business opportunities such as environmentally friendly mobility services
	<ul style="list-style-type: none"> Increasing demand for products that effectively reduce environmental impacts Increasing demand for materials made from recyclable resources 	¥100 billion/year	Up to ¥150 billion/year	Up to ¥200 billion/year	Profit estimated based on certain assumptions about the estimated market size, the Company's market share, and the operating profit margin due to the expected increase in demand for products that contribute to the reduction of greenhouse gas emissions and the expected increase in demand for materials derived from recyclable resources for a circular economy

Note:

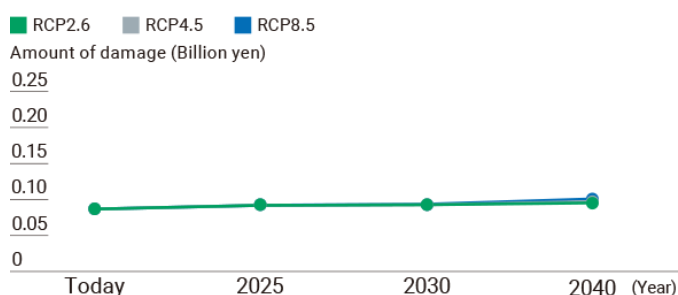
The above was developed in May 2023. It will be reviewed as appropriate in accordance with changes in various conditions surrounding the economy and the formulation of our medium- to long-term business strategies.

Assessment of Physical Risks

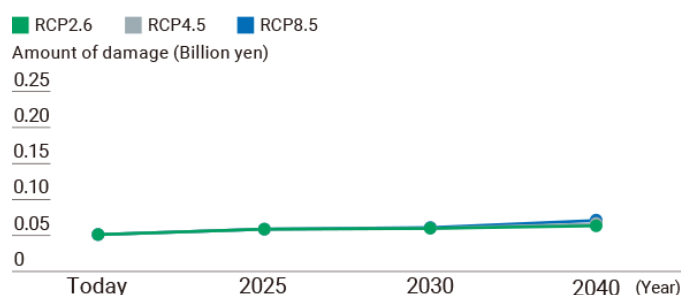
In assessing physical risks, we examined the risks from the objective perspective of Sampo Risk Management Inc., an external expert, referring to the IPCC RCP scenario. For the scenarios, we have adopted RCP8.5 (equivalent to a 4°C increase) as a stress case, and RCP4.5 (equivalent to STEPS in IEA WEO) and RCP2.6 (equivalent to APS) as cases that are close to our base-case scenario. As a result of simulating the amount of damage caused by flooding using WRI Aqueduct and other means for 31 of our facilities and assets in Japan, such as refineries and smelters, our current estimate of the average annual amount of damage in the stress case is over 100 million yen, and we expect the average annual amount of damage to be about 100 million to 200 million yen in 2040.

There is a tendency for damage to be greater in locations where storm surges are a concern due to large rivers in the vicinity or strong winds during the passage of typhoons. We are implementing measures to mitigate these risks to ensure that the overall impact is minimal.

Expected Annual Amount of Damage Due to Inland Flooding



Expected Annual Amount of Damage Due to Coastal Flooding



Building a Business Portfolio That Addresses Risks and Opportunities

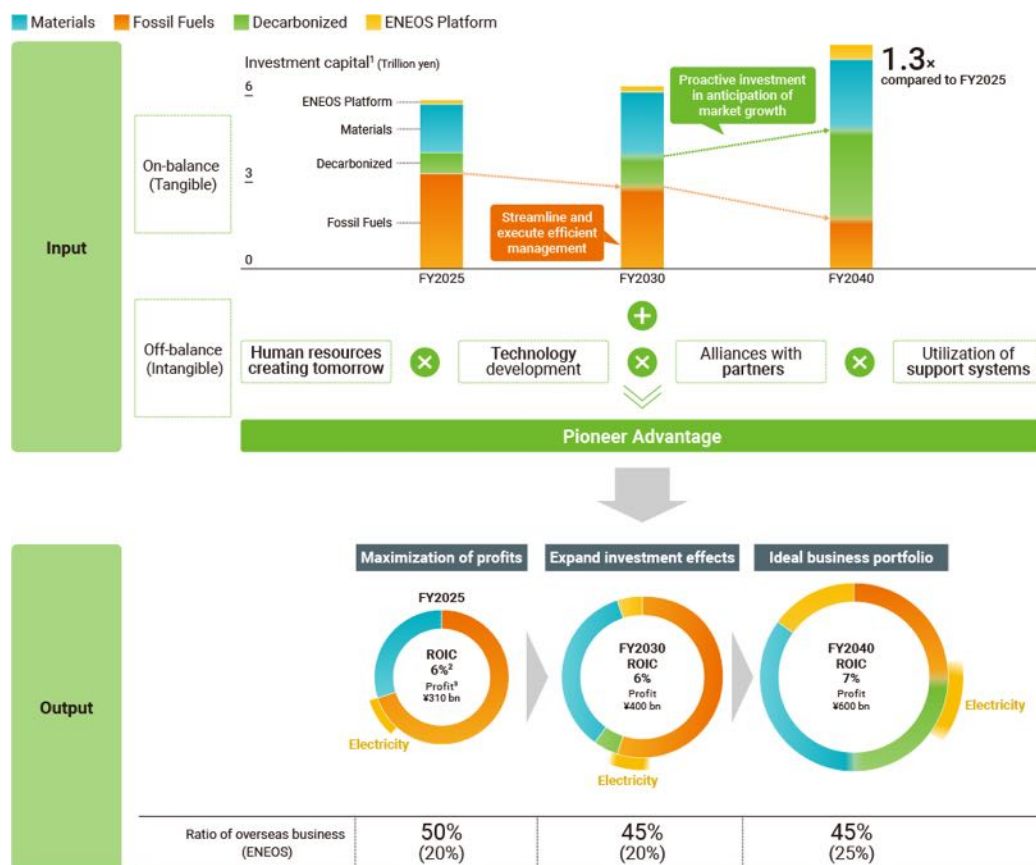
While it is certain that society will move toward carbon neutrality based on international trends and other factors, it remains unclear what the main source of carbon-neutral energy will be and when necessary technological breakthroughs will occur. Taking into account policy trends and other factors, we believe that the turning point will be around 2030. We have a high level of resilience that enables us to respond to any scenario, and we will continue working to establish our technological and strategic superiority toward the turning point, which will be around 2030.

We will make the necessary investments ahead of this turning point in 2030. We will focus on the development of intangible assets not booked on the balance sheet, such as technological development, collaboration with leading partners, utilization of support systems from the government, and human resources development.

Meanwhile, we will also streamline and improve the efficiency of our existing fossil-resource-derived energy businesses in line with the decline in demand in the domestic market. We will secure and develop human resources and other intangible assets during the third Medium-Term Management Plan to establish our advantage as a pioneer. We will also monitor the growth of the decarbonization market and expand capital investment in promising fields from 2030 onward. In terms of the scale of capital to be invested, we plan to increase the total amount by 1.3 times compared to fiscal 2025 by 2040. Currently, fossil energy accounts for more than half of the Group's earnings. Under the third Medium-Term Management Plan, we will implement various measures following the basic policies of "establish a solid earnings base," "accelerate execution of measures for energy transition," and "enhance the management base," to maximize earnings in our current business portfolio.

At the same time, by 2030, in addition to upfront investment in decarbonization, we will build a business foundation for EV charging and the ENEOS Platform to meet the needs of local communities and individuals. By around 2040, the "permeation" phase of the energy transition, we expect our earnings portfolio to comprise 50% decarbonized energy and fossil energy offset by CCS and other measures, and 50% materials and the ENEOS Platform.

Scale of Investment Capital and Profits in the Long-Term Vision by Business Area



1 Fixed asset balance by business + working capital of inventory, etc.

2 Including incubation businesses. The target for FY2025 is 7% or higher excluding the incubation businesses.

3 Profit attributable to owners of the parent

Internal Carbon Pricing System

We are advancing our shift to being a business that contributes to the reduction of carbon emissions by setting an internal carbon price of 50 dollars per ton* as a reference and identifying the impacts of both the risks and opportunities associated with changes in our CO₂ emissions. We have set specific CO₂ reduction values with the aim of accelerating the construction of a business portfolio that will enable us to achieve carbon neutrality. We will use these values as factors to guide investments in energy efficiency that will lower our carbon emissions and to encourage exploration of new investments that will advance our conversion to decarbonized energy. The internal carbon price will be updated as the business environment evolves.

* For ENEOS and ENEOS Xplora business areas

Realizing a Just Transition

In building our business portfolio for a decarbonized society, we believe that reducing social and economic burdens is essential to the continuity of social and economic activity during the transition period. The most effective way we can contribute to a just transition is by fully leveraging our strengths, including our refineries, supply chain and other existing assets, our highly professional and motivated human capital, and our close relationships with local communities, including local economies.

For example, in building a hydrogen supply chain, which is currently in progress, we can use our refineries, logistics, and service station network to establish a competitive advantage, which will enable us to minimize any adverse impacts on our employees or related companies as well as on the employment and labor conditions and people's livelihoods in local communities.

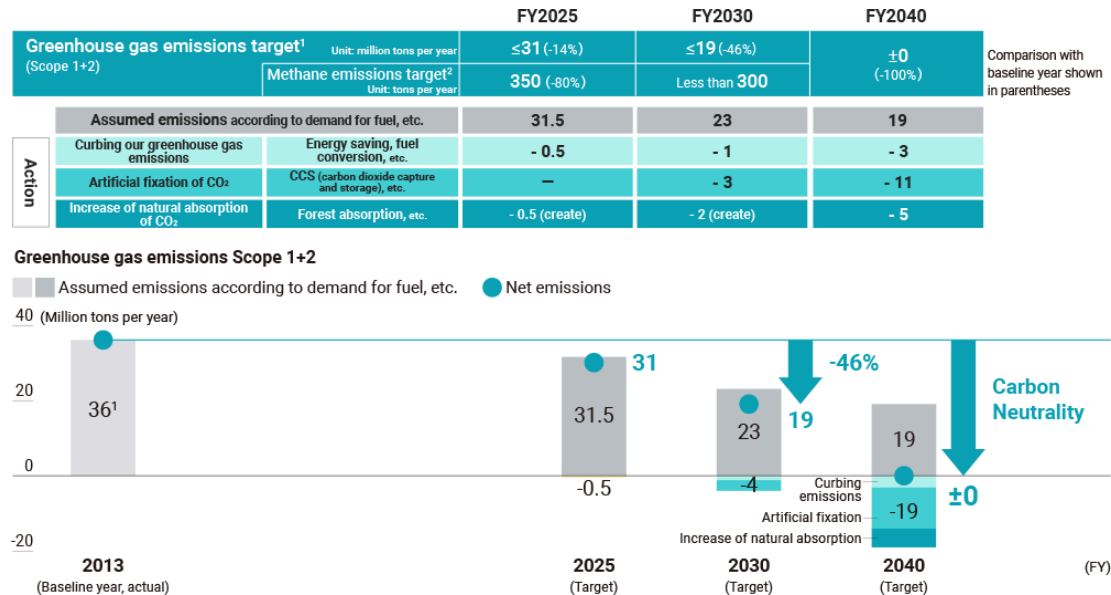
Our approach is aligned with the International Labour Organization's "Guidelines for a just transition towards environmentally sustainable economies and societies for all."

We also conduct human rights due diligence based on the United Nations Guiding Principles on Business and Human Rights every two years, and we will carry out regular reviews and implement appropriate measures as we pursue our initiatives during the transition.

Indicators and Targets

In its Carbon Neutrality Plan, the Group has set targets to achieve net zero emissions for Scope 1+2 greenhouse gases by fiscal 2040. In addition, working in step with the government and other companies, we aim to contribute to the realization of a carbon-neutral society by 2050. We have set interim targets for 2025 and 2030 for our own emissions, and for 2025, 2030, and 2040 for the portion that includes Scope 3. In setting these targets, we considered multiple scenarios, including those that align with the 1.5°C target in the Paris Agreement. For information on our results for reduction in GHG emissions, see [Prevention of Global Warming](#).

Roadmap for Reduction of ENEOS Group Greenhouse Gas Emissions

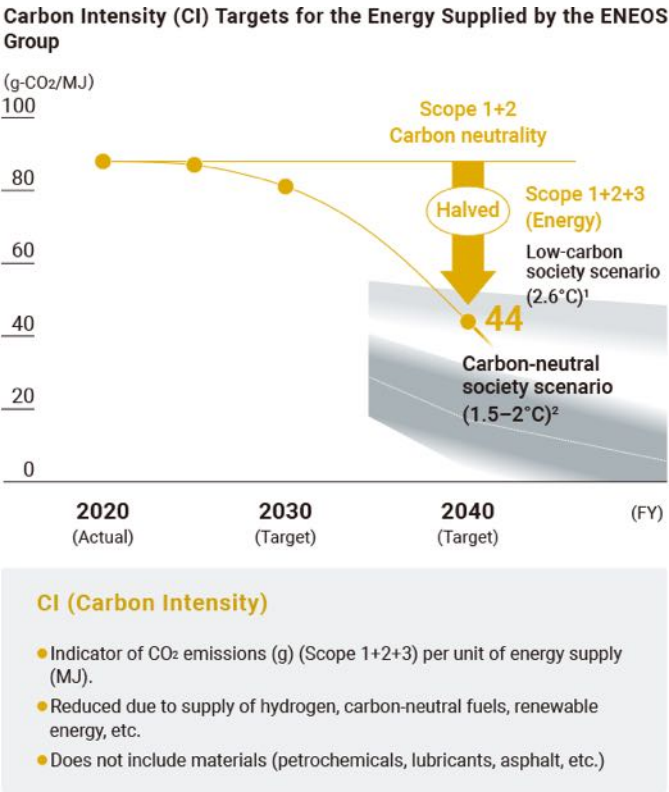


- Greenhouse gas emissions in the base year (fiscal 2013): 36 million tons. Figure revised from the time of announcement in May 2022 (30 million tons) due to a change in the calculation method for domestic emissions from the standard under the Act on Promotion of Global Warming Countermeasures to the GX-ETS standard. There is no change to the target for transition-linked bonds (issued on June 15, 2022), but the greenhouse gas emission target for fiscal 2030 has been changed from 16 million tons to 19 million tons.
- Methane emissions in base year (fiscal 2021): 1,600 tons

Roadmap for the Reduction of Greenhouse Gas Emissions of Society

			FY2025	FY2030	FY2040	
Energy field	Promote energy transition	CI (Carbon intensity)		87 g-CO ₂ /MJ	81 g-CO ₂ /MJ	44 g-CO ₂ /MJ
		CO ₂ -free hydrogen		Investment decision for commercialization	250 thousand tons	1–4 million tons
		Carbon-neutral fuels	SAF ¹	1st case investment decision	500–700 thousand KL	Domestic share: 50%
			Biofuel	—	Supply 10% mixing to high-octane gasoline ²	Supply 20% mixing to gasoline ²
			Synthetic fuel	Demonstration of 1 barrel/day-scale	Manufacture synthetic fuel 300 barrels/day	Manufacture synthetic fuel 10 thousand barrels/day or more
		Renewable energy Renewable energy total power generation capacity		2 GW	3 GW	6–8 GW
		CCS (for other businesses)		—	—	4–10 million tons
Materials and services field	Promote circular economy	Petrochemicals Non-fossil resource ratio ³		20-thousand-ton scale Start of waste plastic liquefaction business	20%	35%
		Lubricants Recycling amount		Completion of demonstration	100 thousand KL	200 thousand KL
		Copper smelting Recycling ratio		—	25%	50%
		Final disposal ratio of waste		Less than 1.0%		
	Expansion of products which contribute to avoided emissions	Avoided emissions (materials) ⁴		750 thousand tons-CO ₂ e	1,500 thousand tons-CO ₂ e	2,000 thousand tons-CO ₂ e

- Sustainable aviation fuel, a low-carbon aviation fuel made from biomass, waste, and waste oil
- Biofuel + synthetic fuel
- Input ratio of green raw materials (waste-plastic-recycled oil, bionaphtha, etc.) against the production volume of products derived from naphtha cracker
- Assuming about 20–50 million tons-CO₂e of avoided emissions (for fiscal 2040) by hydrogen and carbon-neutral fuel



1 ENEOS assumptions referring to IEA STEPS case
2 ENEOS assumptions referring to IEA APS/NZE case

Social

The ENEOS Group's mission is to harness the Earth's power for the common good and for the day-to-day life of each individual. To fulfill this mission, we contribute to resolving the challenges faced by internal and external stakeholders. For social data, please refer to the [Data](#) page.

<div><div>Safety</div><div>Basic approach, structure and initiatives</div><div>→</div></div>	<div><div>Human Rights</div><div>Basic approach, structure and initiatives</div><div>→</div></div>
<div><div>Human Resource Development</div><div>Basic approach, structure and initiatives</div><div>→</div></div>	<div><div>Health</div><div>Basic approach, structure and initiatives</div><div>→</div></div>
<div><div>Healthy Work Environment</div><div>Basic approach, structure and initiatives</div><div>→</div></div>	<div><div>Quality</div><div>Basic approach, structure and initiatives</div><div>→</div></div>
<div><div>Supply Chain Management</div><div>Basic approach, structure and initiatives</div><div>→</div></div>	<div><div>Social Contribution</div><div>Basic approach, structure and initiatives</div><div>→</div></div>

Safety

Basic Approach

As a corporate group responsible for the stable supply of energy and materials, the ENEOS Group believes that ensuring safe operations is the basis of our business survival and social credibility, as well as the source of our competitive edge.

Based on this understanding, safety has been prioritized in the ENEOS Group Philosophy, and our basic policy on safety and security has been stipulated in the ENEOS Group Code of Conduct.

Based on the above, each Group company has established its own safety policy in accordance with its business characteristics and assesses risks pertaining to occupational safety, thereby ensuring multiple layers of effective safety activities. Specifically, we aim to enhance our safety activities and safety training programs, in which the employees of our contractor companies also participate, and we have established preventive and emergency measures to cope with all manner of accidents, problems and natural disasters.

We check with our labor unions to make sure efforts are being made to maintain the facilities needed to ensure the health and safety of labor union members (Article 90 of the Ancillary Agreement to the Labor Agreement).

ENEOS Group Code of Conduct (excerpt)

2. Safety and security

- (1) We regard safety and security as the foundation of our business activities, set high safety and security standards, always ensure safety and security, and take appropriate measures to prevent any incidents and injuries.
- (2) We have established preventive and emergency measures to minimize damage to our business sites caused by natural disasters, including earthquakes. We also make every effort to protect the lives and safety of our directors, officers and employees, communities, and others concerned.
- (3) We shall not work under the influence of alcohol or drugs, when ill, or under other conditions where safety cannot be ensured.

ENEOS Group Safety Policies

Each ENEOS Group company has established a policy on occupational health and safety which states its commitment to prioritizing and fully ensuring the safety of its workers.

- ENEOS
We aim to ensure that nobody gets hurt and to eliminate accidents.
- ENEOS Xplora
Ensuring that Health, Safety and Environment (HSE) considerations are given prevailing status over our other business considerations.
- JX Advanced Metals
We place the highest priority on ensuring the health and safety of people working in all areas of business operations.

See the following for further details on the safety policies of the Group's principal operating companies.

- > [ENEOS Group Safety Philosophy and Policies](#) □
- > [ENEOS Xplora Health, Safety, and Environmental Policy](#) □
- > [JX Advanced Metals Group Basic Policy on Health and Safety](#) □

Structure

For information about our structure, see [ESG Management Structure](#).

We have established the ENEOS Group Safety, Health & Environment Council, chaired by the officer responsible for the Safety, Health & Environment Department at ENEOS Holdings. The council meets, in principle, twice annually, to share information on the status of occupational injuries and the implementation of safety activities at the Company and its principal operating companies, as well as to discuss and develop measures to prevent occupational injuries.

Operation of Safety Management System and Status of Certification

Each Group company has built safety management systems tailored to its respective business characteristics. Our companies are continuously making efforts to raise safety awareness and prevent occupational injuries through means such as implementing regular safety education and training, conducting investigations into the causes of incidents and formulating and implementing measures to prevent recurrence.

ENEOS has established and implemented its own safe operations management system (SOMS), which conforms to ISO standards, at all of its refineries and plants.

ENEOS Xplora has adopted its own HSE¹ management system (HSEMS), which conforms to ISO standards. Through HSEMS system management, the company has established an integrated safe operations framework that includes overseas business sites.

JX Advanced Metals is moving ahead with the acquisition of ISO 45001² and JIS Q 45100³ certification, and by March 2024, 13 domestic business sites had obtained certification. The remaining business sites, including those that have newly joined the JX Advanced Metals Group, plan to acquire certification in fiscal 2024 and beyond.

1 Acronym for “health, safety and environment”

2 An international standard for occupational health and safety management systems

3 JIS standard based on the international standard ISO 45001, with additional requirements particular to Japan

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Ensuring safety / Health enhancement	Reduction in occupational injuries	Zero serious occupational injuries (occupational fatalities)	😊	Zero
		TRIR* of 1.0 or less * Number of occupational injuries per million working hours (non-lost-time occupational injuries + lost-time occupational injuries and fatalities)	😊	0.94

Results of Major Initiatives for Ensuring Safety

The ENEOS Group prioritizes and is fully committed to the safety of its workers. We have set material targets for zero serious occupational injuries (occupational fatalities) and a total recordable incident rate (TRIR)* of 1.0 or less, and we implement comprehensive safety activities and safety training for employees, including those of contractor companies.

In fiscal 2023, we had zero serious occupational injuries (occupational fatalities) and TRIR of 0.94, thus achieving our material targets for the second year in a row. We believe that the achievement of these targets attests to the firm establishment of our safety activities.

However, 40 workers, including employees of contractor companies, sustained lost-time occupational injuries. This was an increase from the 29 workers in the previous fiscal year, and improvement is still necessary. As most of these injuries occurred in the course of work activities, we will examine and continue implementing our ongoing safety activities to reduce the number of injuries. We have also found that a certain number of accidents occur outside of work, such as when moving from one place to another. As a preventive measure for accidents that occur outside of work, we seek to raise safety awareness by sharing situation analysis and cause investigation results for individual incidents.

As a company group that provides work environments for a large number of employees, including those of contractor companies, we will continue to implement effective safety activities in accordance with the characteristics of our businesses as part of our efforts to eliminate occupational accidents.

*Total recordable incident rate (TRIR) is the number of occupational injuries per million working hours (non-lost-time occupational injuries + lost-time occupational injuries and fatalities)

For information about , see the [Editorial Policy](#).

Occupational Injuries

(Persons)

			FY2021	FY2022	FY2023
Number of occupational injuries	Directly hired employees	Fatalities	0	0	0
		Lost work time	17	12	19
		Subtotal	17	12	19
	Contractors (contractor companies, etc.)	Fatalities	0	0	0
		Lost work time	26	17	21
		Subtotal	26	17	21
Total			43	29	40

Note:


Scope of occupational injury statistics: ENEOS, ENEOS Xplora and JX Advanced Metals

Occupational Injury Frequency Rate*

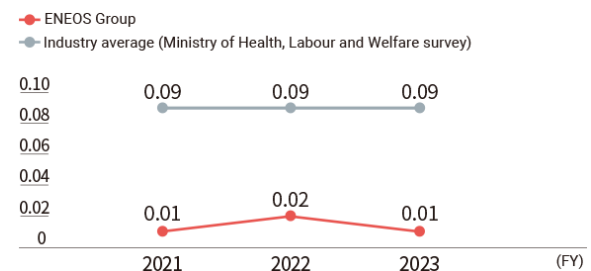


Notes:

Scope: The refineries, plants and business sites of ENEOS, ENEOS Xplora and JX Advanced Metals (For details, see [Data](#)).


Frequency rate: The number of injuries and fatalities per million cumulative hours worked; indicates the frequency of occurrence of occupational injuries. [Definition of terms by the Ministry of Health, Labour and Welfare](#)  (Available in Japanese only)

Occupational Injury Severity Rate*



Notes:

Scope: The refineries, plants and business sites of ENEOS, ENEOS Xplora and JX Advanced Metals (For details, see [Data](#)).

Severity rate: The aggregated number of working days lost per thousand cumulative hours worked; indicates the severity of occupational injuries. [Definition of terms by the Ministry of Health, Labour and Welfare](#)  (Available in Japanese only)

TRIR and LTIR

(Persons)

Item		FY2021	FY2022	FY2023
Total recordable incident rate (TRIR)	Directly hired employees	1.13	1.00	0.94
	Contractors (contractor companies, etc.)	2.13	2.59	2.45
Lost time injury rate (LTIR)	Directly hired employees	0.26	0.19	0.15
	Contractors (contractor companies, etc.)	0.72	0.51	0.45

Notes:

Scope: ENEOS Holdings, ENEOS head office and 11 refineries and plants, ENEOS Xplora head office and 4 business sites, JX Advanced Metals head office and 5 business sites (For details, see [Data](#)).

TRIR: Number of occupational injuries per million working hours (non-lost-time occupational injuries + lost-time occupational injuries and fatalities), excluding heat stroke (first aid)

LTIR: Number of lost-time occupational injuries and fatalities per million working hours

Major Initiatives

Increased Scope of Data for TRIR and LTIR

As part of the management of safety-related targets, the principal operating companies use TRIR and LTIR as indicators. In fiscal 2022, we decided to expand the scope of data for TRIR and LTIR.

In addition to the original scope of data, which includes company employees and employees of contractor companies at business sites under the direct control of the principal operating companies, the expanded scope of data will also cover the group companies of each of the principal operating companies. We started collecting data in fiscal 2024.

Safety Activities

Group companies are working to raise safety awareness and enhance safety management. Risks at production and manufacturing sites are managed using a PDCA cycle to identify hazards, assess risks and take necessary risk mitigation measures and assess their effectiveness.

Every year in July, ENEOS releases a video message on safety by its president to all employees, demonstrating the company's commitment to safety. At its refineries and plants, the company has implemented a behavior-based safety (BBS) system that is used to facilitate safe operations by focusing on individual behavior.

ENEOS Xplora has implemented various safety activities at its business sites both overseas and in Japan. For example, workers have stop work authority (SWA) so that anyone can halt work in the event of unsafe behavior. Furthermore, we encourage the active participation of frontline workers in safety to help raise the safety awareness of the entire workforce, through activities such as Unsafe Condition Unsafe Act (UCUX), where workers can point out or propose improvements at any time to resolve unsafe conditions or behaviors.

JX Advanced Metals conducts training to improve the skills of foremen at each business site and promotes the development of key frontline personnel, thereby continuously working to improve safety awareness and risk sensitivity through communication. In addition, by providing training to improve abilities for conducting workplace patrols, mainly for managers, the company is working to develop people who do not overlook dangers in the workplace.

Group-wide Safety Action Items

In order to prevent serious occupational injuries, we designated preventing falls, separating people from heavy machinery, and preventing heatstroke as the three safety action items for the three principal operating companies*. We established these action items in the ENEOS Group guidelines in February 2020.

Since fiscal 2021, we have reflected the three safety action items, positioned as common issues for the three principal operating companies, into the safety activities of each company. The principal operating companies are also sharing safety initiatives with their own group companies as part of their efforts to eliminate occupational injuries.

*ENEOS, ENEOS Xplora and JX Advanced Metals

Group-wide Safety Action Items

- Preventing falls
- Separating people from heavy machinery
- Preventing heatstroke

Hazard Simulation Training Using Virtual Reality

The ENEOS Group launched the ENEOS Group Safety Education Center in Hitachi City, Ibaraki Prefecture in 2013 to enable workers to learn about the hazards inherent in day-to-day operations through simulated experiences. Since fiscal 2017, the center has implemented a training program unique to the Group using virtual reality (VR) technology.

The program enables workers to feel what it is like to be involved in an accident and think about victims' psychological state, as well as accident causes and preventive measures.

Using VR technology, trainees can experience simulated accidents that cannot be safely replicated in the real world, such as steam explosions, being struck by heavy machinery, getting caught in rotating equipment, and falling from heights. These experiences improve their ability to detect workplace hazards to avoid or deal with when they occur. Since the launch of the program, VR experiences with scattering of chemicals, getting fingers caught in slings, grinder recoil, falling down stairs, electric shock, fire caused by static electricity, falls from temporary scaffolding, making



Virtual-reality training equipment

contact with heavy machinery, getting caught in conveyor belts, stepping through FRP tanks, electric added to the program, further enhancing the content of the training.

In fiscal 2023, 1,183 persons participated in training at the facility, bringing the total number since the start of the program to 10,000 persons.

We have also installed hazard simulation equipment at each of our production sites (ENEOS: 11 sites). Employees, including those from contractor companies, are required to undergo training using this hazard simulation equipment. With these and other efforts, we are working to ensure safety across the entire Group.

Using AI to Ensure Safety While Walking

In fiscal 2022, ENEOS introduced an AI-driven system for analyzing walking motion as a way to improve movement safety. The system uses a special device to measure a person's walking speed, stride length, center of gravity, and other elements to determine the level of safety in the walking motion. The system then uses the results to provide suggestions for exercises or other ways to improve safety while walking.

In fiscal 2023, we added one of these systems to enable analysis of more people.

Improving Human Skills

As human factors are a major cause of occupational accidents and injuries, we have focused for many years on training to arm employees with the knowledge and technical skills needed to implement procedures and rules without fail. In recent years, however, there is growing awareness in the manufacturing industry, referencing leading initiatives in the healthcare and airline industries, about the importance of stepping up initiatives to improve non-technical skills, including status confirmation of work environments and communication among workers, in addition to compliance with procedures and rules. Accordingly, we are incorporating knowledge and activities for the improvement of these non-technical skills.

In the ENEOS manufacturing division, we refer to these non-technical skills as human skills, which we have stipulated in the activity guidelines for improving human skills in the manufacturing division. In accordance with these guidelines, at all of our plants and refineries, top management shares the importance of human skills, and systems have been put into place for the implementation of various forms of education and training and the integration of the resulting skills into existing daily safety activities in the workplace. In this manner, we are working to improve the human skills of all employees in the manufacturing division to prevent human-factor-related accidents and occupational injuries.

Foundation for Safe and Stable Operations



Initiatives with Contractor Companies

At ENEOS refineries and other facilities, we provide training for all contractor company employees that are new to our work sites on site safety rules and share information about onsite facilities. When selecting contractor companies, in addition to evaluating the safety management aspects of work execution, we conduct regular evaluations of the status of their safety management after the start of the business relationship, identify areas for improvement and follow up on the implementation status.

Moreover, in order to ensure proper safety management of contractor companies, we require the primary contractor to submit and execute a safety management plan, establish KPIs for the contractor company, conduct regular monitoring and evaluations, and report on improvements.

Main Initiatives at Refineries and Plants for Earthquakes

The ENEOS Group implements various earthquake measures at its refineries and plants.

Measures to Protect Lives

As a precaution against earthquakes and tsunamis, we have voluntarily implemented seismic reinforcement of our onsite offices and production unit control rooms, with priority given to the protection of human life.

We have also designated locations and methods for evacuation in case of an earthquake or tsunami, and we carry out disaster preparedness drills every year.



Elevated warehouse (Sakai Refinery)

Measures for Seismic Reinforcement of Facilities

We are carrying out legally required seismic reinforcement work for tanks that store hazardous materials.

Upgrade work on floating-roof tanks subject to this requirement was completed before the statutory deadline. As for internal floating-roof tanks, which became subject to legislation in fiscal 2011, we completed seismic reinforcement work by the statutory deadline (end of fiscal 2023).

For high-pressure gas facilities, we have already completed seismic assessments following government instructions, as well as the retrofitting of spherical tanks with braces to increase earthquake resistance, taking into account the effects of the Great East Japan Earthquake. Seismic countermeasures for facilities of high importance were completed in fiscal 2021, marking the completion of our seismic reinforcement of high-pressure gas facilities.



Brace retrofitting on a spherical tank

Measures to Mitigate Damage from Disasters

We have installed seismographs at all of our refineries and plants as part of a system that automatically shuts down equipment in a prompt and safe manner in the event of an earthquake, depending on the intensity.

Countermeasures against Accidents and Malfunctions

Disaster Prevention Facilities

At our refineries, plants, and stockpiling terminals, we have established self-defensive organizations for disaster prevention and installed necessary disaster response equipment and facilities in preparation for potential accidents and disasters. We have also established a defensive organization for cooperative disaster prevention with nearby companies to improve the disaster preparedness of industrial complexes.



High-capacity foam water canon (Oita Refinery)

Oil Spill Countermeasures

We have multiple oil dikes surrounding our storage tanks and systems to prevent leakage from spreading offsite. In addition, to promptly respond to oil spills at sea, we have oil fences to prevent oil spills from spreading and oil recovery vessels in place.



Drill for oil spill at sea using oil fences and oil recovery vessels (ENEOS Kiire Terminal)

Fire Countermeasures

We have equipped our refineries and plants with fire extinguishing equipment, such as large chemical firefighting vehicles, high-altitude chemical water cannon vehicles, and high-capacity foam water cannon systems, for response in the event of a major fire. Our facilities also have disaster response vessels with firefighting capabilities to respond to fires at sea.



High-altitude chemical water cannon vehicles (Mizushima Refinery)

Disaster Drills

We regularly implement comprehensive disaster response drills for our self-defensive organizations for disaster prevention to ensure that we can respond in a quick and agile manner should an actual disaster occur. We also hold other drills, including joint disaster preparedness drills involving local fire departments as well as disaster response organizations from nearby companies and local communities.



Comprehensive disaster response drill with refinery self-defensive organization for disaster prevention and local government (Sendai Refinery)

Ensuring a Stable Supply

The ENEOS Group has established a backup system for ensuring a stable supply in the event of a major disaster that impacts the functions of production and shipping sites through collaboration with other production and shipping sites. We also conduct drills and training regularly to ensure that our sites can continue to function in the event of a disaster.

Human Rights

Basic Approach

As a corporate group with global business operations, the ENEOS Group believes that an important element in striving for sustainable development is respect for the human rights of all stakeholders, including employees.

The Group supports international norms such as the United Nations Guiding Principles on Business and Human Rights and the fundamental labor rights of the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work (freedom of association and the effective recognition of the right to collective bargaining, the elimination of all forms of forced or compulsory labor, the effective abolition of child labor, the elimination of discrimination in respect of employment and occupation).

We conduct our business activities with respect for the human rights not only of our employees, but of all stakeholders, including our suppliers, customers, business partners and members of local communities.

ENEOS Group Code of Conduct (excerpt)

5. Respect for human rights

- (1) We shall not infringe on human rights through our business activities. We respect internationally accepted human rights standards and diversity, acknowledging differences pertaining to gender, age, nationality, race, ethnicity, skin color, culture, thought, religion, belief, political opinions, sexual orientation, and the presence or absence of disability.
- (2) We shall not engage in any type of discrimination or harassment.
- (3) We shall not engage in any forms of forced labor or child labor.
- (4) We shall not engage in business transactions which may lead to the prolongation of conflicts, human rights violations, or inhumane acts.

Human Rights Policy

We have stipulated respect for human rights as a basic principle in the ENEOS Group Code of Conduct, and we have supplemented this principle with the Human Rights Policy. The Group asks all business partners involved in its business activities to understand and cooperate with this policy, and strives to ensure thorough awareness and compliance.

ENEOS Group Human Rights Policy

The ENEOS Group conducts its business activities under the ENEOS Group Philosophy, which states that we will contribute to the development of our communities and help to ensure a vibrant future through creation and innovation in energy, resources, and materials.

This policy was formulated as a guideline for promoting respect for human rights across the entire Group and fulfilling related obligations pursuant to the United Nations Guiding Principles on Business and Human Rights.

1. Basic Approach

The ENEOS Group fully recognizes that human rights must be respected in all of the countries and regions where it conducts its business activities.

2. Compliance with Applicable Laws and Regulations

The ENEOS Group complies with the laws, ordinances and regulations applicable in the countries and regions where it conducts its business activities. In addition, the ENEOS Group will pursue a method for respecting international principles on human rights in case of a contradiction between internationally recognized human rights and the laws and regulations of each country and region.

3. Respect for International Norms on Human Rights

The ENEOS Group supports and respects the International Bill of Human Rights (consisting of the Universal Declaration of Human Rights, International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights), which stipulates the fundamental human rights of all people, along with international norms on human rights such as the ILO Declaration on the Fundamental Principles and Rights at Work of the International Labor Organization, which sets forth fundamental labor rights, other conventions relating to the human rights of workers on wages and working hours, the Declaration on the Rights of Indigenous Peoples, and the Children's Rights and Business Principles. As a participant in the UN Global Compact, we support and respect the 10 principles of the UN Global Compact.

4. Fulfillment of Responsibility to Respect Human Rights

The ENEOS Group is committed to upholding human rights. If it is determined that our business activities cause or have caused adverse impacts on human rights, we will take appropriate action to remedy such impacts in accordance with our responsibility to respect human rights. As part of our efforts, the ENEOS Group will promote the following initiatives.

- Human Rights Due Diligence

The ENEOS Group will establish and continually implement a mechanism for human rights due diligence. Human rights due diligence refers to the continuous process of conducting preventive surveys and investigations, rectifying issues using appropriate means, and disclosing the progress and results of such externally, in order to prevent or mitigate possible adverse impacts on human rights caused by the company.

- Dialogue and Discussions

The ENEOS Group conducts in earnest dialogue and discussions with relevant stakeholders to ensure that it comprehends and addresses the impacts it has on human rights from the perspective of those affected.

5. Training

The ENEOS Group will provide appropriate training to its officers and employees to ensure that this policy is incorporated into the business activities of all companies belonging to the ENEOS Group.

6. Information Disclosure

The progress and results of initiatives for respect for human rights under this policy will be disclosed on our website and in reports, among other media.

7. Applicable Scope

This policy applies to all officers and employees of the ENEOS Group. All business partners involved in the ENEOS Group's business activities will be asked to cooperate with this policy.

8. Positioning

This policy supplements the provisions of the ENEOS Group Philosophy and the ENEOS Group Code of Conduct.

Structure

For information about our structure, see [ESG Management Structure](#).

Internal Structure for Business and Human Rights

Based on the third-party opinion received in human rights due diligence and the assessment results of the Corporate Human Rights Benchmark (CHRB), the Corporate Planning Department and the Human Resources Department of ENEOS Holdings are taking the lead in strengthening human rights initiatives across the Group.

An overview of these efforts is presented below.

Operations	Departments in charge (breakdown)
Human rights due diligence planning	Corporate Planning Department 1 general manager, 1 deputy general manager, 6 in group responsible
Various consultation contact points (human rights, people with disabilities, sexual minorities), human rights awareness (in-house training)	Human Resources Department 1 general manager, 1 deputy general manager, 11 in group responsible

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

Evaluation: 😊 Achieved/Steady progress 🙄 Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Compliance with international principles on human rights	Human rights due diligence	Implement human rights due diligence	😊	Conducted third round of human rights due diligence
	Human rights awareness	Implement human rights training	😊	Implemented

Major Initiatives

Participation in the UN Global Compact

The Group supports the UN Global Compact and works to realize its 10 principles in four areas, including human rights.

We also support the Japanese government's National Action Plan on Business and Human Rights (2020–2025), established in 2020, and are working to promote responsible corporate actions involving respect for human rights through its implementation.

Corporate Human Rights Benchmark (CHRB)

The ENEOS Group became subject to Corporate Human Rights Benchmark (CHRB) assessment* in 2019, and regularly engages in dialogue with CHRB to exchange opinions on business and human rights.

Since fiscal 2020, based on the assessment and dialogue with CHRB, we have been focusing our efforts on the consideration of human rights factors in supply chain management (see [Human Rights Due Diligence](#)).

Going forward, in order to sufficiently address the questions posed by CHRB, we will carry out initiatives on business and human rights and proactively disclose relevant information.

*See the CHRB website for assessment results.



Raising Awareness of Human Rights through Training and e-Learning

At our Group companies, we continue to provide human rights awareness training and e-learning for all officers and employees to raise awareness of human rights and prevent human rights violations in the workplace. The training promotes understanding of human rights violation risks specified in the National Action Plan on Business and Human Rights (2020-2025).

In fiscal 2023, ENEOS Holdings and ENEOS Corporation conducted a total of 5,828 hours of training on business and human rights and harassment prevention.

Policies, Principles, and Norms on the Rights of Indigenous Peoples

The Group supports and respects international norms on human rights with regard to the rights of indigenous peoples.

Main international norms on human rights that we support and respect

- United Nations International Bill of Human Rights (consisting of the Universal Declaration of Human Rights, International Covenant on Civil and Political Rights, and the International Covenant on Economic, Social and Cultural Rights)
- 10 principles of the UN Global Compact
- International Labour Organization (ILO) Declaration on the Fundamental Principles and Rights at Work
- ILO conventions relating to human rights of workers on wages and working hours
- United Nations Declaration on the Rights of Indigenous Peoples
- United Nations Children's Rights and Business Principles

Response to the UK Modern Slavery Act 2015

ENEOS Group company ENEOS Europe Limited has released a statement in response to the United Kingdom Modern Slavery Act 2015, which came into effect in October 2015.

See the following for more information.

> [FY2023-Anti-Slavery-and-Human-Trafficking-Statement.pdf \(eneoseurope.com\)](#) (PDF : 172 KB) 

Initiatives for Business and Human Rights

Human Rights Due Diligence

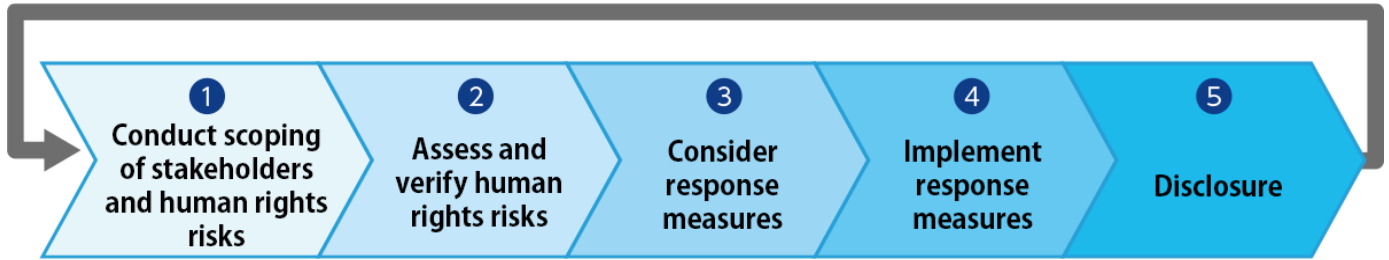
The Group has three procedures to comprehensively identify and address human rights risks: human rights due diligence, CSR procurement surveys in the supply chain, and a response flowchart for suspected human rights violations.

1. Human Rights Due Diligence for ENEOS Holdings and Group Companies

The ENEOS Group began carrying out human rights due diligence in accordance with the United Nations Guiding Principles on Business and Human Rights (UNGP) in fiscal 2019. The due diligence in fiscal 2019 and fiscal 2021, conducted with the cooperation of a third party, involved identifying and assessing the scope of human rights violation risks in our business activities, formulating improvement measures, and developing a training system. We received third-party verification for the due diligence conducted in these two fiscal years.

The third round of human rights due diligence, conducted in fiscal 2023, included several new Group businesses and identified human rights risks and issues in the associated businesses and supply chains. The due diligence was conducted with assistance from the Global Alliance for Sustainable Supply Chain (ASSC), a third party with a wealth of knowledge, and included desk surveys as well as interviews with suppliers and contractor companies. The results were used to assess and verify Group human rights risks, and we identified priority human rights risks and considered response measures. We will make improvements prior to the scheduled fourth round of human rights due diligence.

Human Rights Due Diligence Cycle



1. Conduct scoping of stakeholders and human rights risks

In the course of human rights due diligence, in which we reference Guidance on Human Rights Due Diligence of the Japan Federation of Bar Associations, Reference Material on Practical Approaches for Business Enterprises to Respect Human Rights in Responsible Supply Chains of the Ministry of Economy, Trade and Industry, and the opinions of NGOs, in addition to the UNGP, we conduct scoping of human rights risks to be assessed and verified (see table below).

Human Rights Due Diligence Issues for Confirmation

Stakeholders	Human rights issues	
Employees	Harassment	Management of working hours
	Discrimination	Health
	Safety	Work-life balance
	Freedom of association (right to organize, right to collective bargaining)	Fair and sound labor standards
Suppliers	Human rights violations by suppliers	
Customers/ Business partners	Quality defects (including contamination)	Inadequate provision of product information
	Improper management of chemical substances used in products	Information security (privacy)
Local communities	Environment (including environmental degradation, health impacts, and damage in local areas)	

2. Assess and verify human rights risks

For the human rights risks identified through scoping conducted in step 1, conduct self-assessments in each company/department to determine whether human rights violations have occurred through business operations. After self-assessments, request confirmation by outside experts and identify human rights risks requiring priority response.

22 Risk Areas Where Rights are Verified in Due Diligence

- Employment conditions
- Work hours and wages
- Discrimination in the workplace
- Forced labor
- Youth and child labor
- Occupational health and safety
- Environmental pollution
- Land use and property rights
- Freedom of association and the right to collective bargaining
- Local communities
- Employee privacy
- The rights of women and sexual minorities
- Harassment

- Corruption and bribery
- Security
- Migrant worker rights
- Freedom of expression
- Education and training
- Poverty
- Governance
- Product development/advertising/use of products and services
- Ethical sourcing

Business Areas Covered by Human Rights Due Diligence

- Oil and gas (including the upstream areas of ENEOS Xplora)
- Lubricants
- Renewable energy (Japan Renewable Energy, currently ENEOS Renewable Energy)
- High performance materials (ENEOS Materials)
- Metals (JX Advanced Metals)

Risk Selection Process in Human Rights Due Diligence

Step 1 Risk identification

Potential risks are identified through desktop research based on the following information.

- Internal information: value chain information from each department, results of CSR procurement surveys (conducted by the Procurement Dept. in fiscal 2018, fiscal 2019, and fiscal 2022), status of response to human rights due diligence issues in fiscal 2019 and fiscal 2021, and results of labor union interviews in fiscal 2019
- External information: sector and country risks



Step 2 Narrowing down of risks

For the potential risks identified in Step 1, the severity and likelihood of occurrence are quantified, and each value is weighted according to the Modern Slavery Index and third-party assessments.

Risks with high severity and likelihood of occurrence are defined as "human rights risks requiring attention."



Step 3 Response planning

Items to be addressed are selected by collecting opinions from each department on the risks from among the human rights risks requiring attention that have already been addressed and those that can be addressed in the future.

3. Consider response measures

4. Implement response measures

Based on the results of the self-assessment and the opinions of outside experts, we considered and introduced response measures for priority human rights risks.

Priority Human Rights Risks and Response Measures

Human rights risk	Response measures and initiatives
1) Insufficient right to access to remedies at suppliers	<ul style="list-style-type: none"> ● Increase awareness of the supplier-related human rights contact points <p>Issue guidance through the company contact department about the supplier-related human rights contact points established in fiscal 2022 to ensure easy accessibility.</p>
2) Potential human rights risks concerning foreign workers in the supply chain	<ul style="list-style-type: none"> ● Understand actual conditions for foreign workers and formulate response measures <p>Although no specific issues were detected in the third round of human rights due diligence, efforts will be made to understand actual conditions in order to identify potential risks. If a possibility of a human rights risk exists, we will take action, such as conducting on-site audits, and formulate response measures.</p>
3) Potential human rights risks concerning forced labor in the supply chain	<ul style="list-style-type: none"> ● Continue investigating actual conditions concerning forced labor in the supply chain <p>Questions on the presence or absence of forced labor were included in the fiscal 2022 CSR procurement surveys. We will continue to assess conditions and conduct follow-up fact-finding if survey responses are not satisfactory.</p>

Situation in Fiscal 2023 and Future Plan

As of November 2024, there have been no serious human rights violations in the value chains of our main businesses. If a human rights violation occurs in the course of our business activities, we will take corrective steps and promptly implement remedy measures pursuant to laws and regulations and following the instructions of the relevant authorities, while also working to prevent recurrence.

Based on the results of the third round of human rights due diligence conducted in fiscal 2023, we plan to examine possible countermeasures, including for potential human rights risks, as part of our efforts to prevent human rights violations.

Third-Party Opinion

The Group has asked an international human rights NGO to conduct desk research for third-party verification of its human rights risk assessments.

For the third round of human rights due diligence, we commissioned the Global Alliance for Sustainable Supply Chain (ASSC) and received the following third-party opinion.

A portion of the third-party opinion

Human rights risk mapping has identified human rights issues (potential risks) with high likelihood of occurrence and severity in each business. However, since the current survey is based on desktop research, we suggest that the following initiatives be taken in the future to assess risks and locate issues with a high degree of accuracy.

It is also desirable to expand the scope of human rights due diligence in the future and confirm the status of human rights in new business and business processes.

- Interviews with each department and reflection of information obtained
- Implementation of self-checks
- On-site interviews, etc.

Risk Management

The company-wide risk management (ERM) system operated by the Group (see [Risk Management](#)) identifies various risks in the Group's operations, including those pertaining to human rights. In addition to our implementation of human rights due diligence, this serves as a framework for continuously assessing impacts on human rights.

2. CSR Procurement Surveys in the Supply Chain

We began conducting CSR procurement surveys in cooperation with our suppliers in fiscal 2018. By including the Group's human rights due diligence verification items in the surveys, we conduct similar human rights due diligence for our suppliers. Although no serious human rights risks have been identified to date, we have urged suppliers who need improvement to take corrective action. We will continue to monitor the status of improvements with regular checks every two years. For details, see [Supply Chain Management](#).

The Group's CSR procurement surveys have targeted primary suppliers and have been expanded to include suppliers selected based on importance to our business and ESG risks. We are also developing a mechanism for even more effective identification and response to human rights risks through such means as positioning the CSR procurement survey as part of our broader human rights due diligence and subsequently enhancing the human rights risk survey process.

In addition to these initiatives, the JX Advanced Metals Group is taking measures against conflict minerals. For details, see [Confronting the Issue of Conflict Minerals](#).

3. Response to Suspected Negative Impacts on Human Rights

In fiscal 2021, upon the directive of the Board of Directors, we developed the Human Rights Response Flowchart to facilitate timely identification and analysis of and measures to avoid and mitigate the impact of human rights violations involving the Group. The flowchart, which is aligned with the human rights due diligence framework of the UNGP, is used to determine responses in terms of the impacts of our business operations on human rights violations, mainly those committed by third parties.

To supplement the flowchart, in fiscal 2023 we added eight new points to confirm at the time of assessment and items to check concerning human rights. We use the flowchart to determine appropriate responses whenever human rights risks are detected, and we report to the Board of Directors on the status of those responses twice a year. We will continue our earnest response to human rights risks in our business activities.

Overview of Human Rights Response Flowchart

- Identification of human rights risks
Use desktop research, media reports, external findings, engagement with outside parties, etc., to determine whether there are any human rights violations by third parties and complicity in such violations.
- Examination of response measures
In the event of complicity in human rights violations, consider urging the party to remedy the situation or terminating the business relationship. Even in cases without complicity, the eight assessment and human-rights-related check items, including the severity of human rights violations, are used to ascertain risks from multiple perspectives, and subsequent preventive measures are discussed.

Based on this flowchart, we determined the following responses.

ENEOS Xplora completed the withdrawal from the Yetagun gas field project in the Republic of the Union of Myanmar

Upon careful consideration and discussion of the situation in the country, including its response to social issues, and project economics based on evaluation of the gas field, the company decided to withdraw from the project in April 2022. The withdrawal process was initiated and subsequently completed with the approval of the Myanmar government in April 2023.

Consultation Contact Points (Remedy Measures)


If it is confirmed that human rights have been impacted in our business activities, the Group will provide remedy to the affected parties in accordance with the ENEOS Group Code of Conduct and Human Rights Policy.

The Group has established whistleblower systems, human rights consultation contact points, and human rights consultation contact points for suppliers as internal contact points for consultation and reporting of issues, including human rights violations. These contact points accept anonymous reports and provide consultation on issues ranging from human rights issues that may occur in the course of day-to-day operations to serious human rights violations. The contact points are available in Japanese, English and other languages for employees in Japan and overseas.

Whistleblower systems of the Company and ENEOS, reports received are reported to officers by email once the investigation of a report begins, and the status of response is explained to the Audit and Supervisory Committee and corporate auditors regularly. We inform employees of this system through the Company intranet, and in e-learning training sessions held by the Legal & Corporate Affairs Department, we encourage employees to use the system.

Persons who contact the contact points are not in any way subjected to unfavorable treatment for seeking consultation or making reports. Retaliation against persons who make reports is strictly prohibited, and their privacy is rigorously protected. Employees who report matters to whistleblower systems and the human rights consultation contact points are not restricted from seeking remediation outside the company for those matters. Therefore, employees are also free to seek other remedies using the legal systems of their respective countries (Whistleblower Protection Act, etc.).

At the Company and ENEOS, generally, investigation of all reports are completed within one year.

See [Compliance](#) for the internal reporting workflow of compliance hotlines. See [Procurement](#)  (Available in Japanese only) on our corporate website for the human rights consultation contact points for suppliers.

Labor-Management Negotiations on Appropriate Labor Conditions

At least once every year, Group representatives meet with employee representatives (labor unions) to negotiate overall working conditions, including wages. The wages of newly hired employees greatly exceed the minimum wage in Japan. The percentage of employees covered by the collective bargaining agreement is 88.4%. (Refer to [Data](#) for the labor union participation rate of each Group company).

The Group respects the ILO's fundamental labor rights (freedom of association and the effective recognition of the right to collective bargaining, elimination of all forms of forced or compulsory labor, effective abolition of child labor, elimination of discrimination in respect of employment and occupation). Workers who exercise their rights are protected by the laws and regulations of each country.

In accordance with labor agreements, ENEOS discusses criteria with the labor union in advance in the event that a large number of union members are transferred due to the closure or downsizing equivalent to closure of a business site. Union members are officially notified at the time of external announcement of the closure or downsizing equivalent to closure of the business site. In addition, the content of discussions with the labor union and items to be notified in advance are mutually determined by labor and management.

The Company and ENEOS have established an overtime work limit of 35 hours per month and 360 hours per year at the head office, and 80 hours per month (up to six times per year) and 480 hours per year by concluding a separate agreement. We also take the health of employees into consideration by having them conduct self-checks if they work overtime in excess of 45 hours per month and by providing an interview with an industrial physician for those who have worked overtime in excess of 80 hours per month. Overtime work is monetarily compensated with an overtime work stipend and employees who work on holidays are compensated with a holiday work stipend. Those who work late at night between 10 p.m. and 5 a.m. the next day are compensated with a late-night work stipend.

Preventing Forced Labor and Child Labor

From a standpoint of completely eliminating forced labor and child labor, the Group supports and respects not only the laws of each country, but also international norms on human rights such as the United Nations International Bill of Human Rights, the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work, conventions relating to human rights of workers on wages and working hours, and the Children's Rights and Business Principles. As a signatory, we support and respect the 10 principles of the United Nations Global Compact—a point that is clearly stated in the ENEOS Group Human Rights Policy.

In addition, the ENEOS Group Code of Conduct clearly states that we will not use forced labor or child labor, and we are making thorough efforts to eliminate forced labor and child labor by conducting our business in accordance with this Code of Conduct.

Furthermore, in order to promote compliance with the Group Code of Conduct in the supply chain, we have established Group procurement policies and procurement guidelines that reflect the content of the Code of Conduct, and request suppliers to implement initiatives based on these policies. In order to ensure the effectiveness of our requests, the Group clearly states to suppliers that it emphasizes compliance with these policies and may review the details of transactions in some cases.

Additionally, we conduct CSR procurement surveys for suppliers, in which we have established survey items including child labor and forced labor, and urge suppliers to implement improvement measures as needed. We conduct these surveys every two years so that we can continue to monitor the progress of improvements.

Human Resource Development

Basic Approach

The ENEOS Group believes that an important challenge in the achievement of our growth strategy in a rapidly changing business environment is the development of creative, innovative human resources who can take on challenges on a global scale. In accordance with this approach, we have set out basic principles on human resource development in the Group Code of Conduct and the Group Basic Policy on Human Resources Development, and we have established consistent systems for each phase of human resource development, including hiring, assignment, evaluation, promotion, and training. In addition, each Group company pursues human resource development in accordance with its own business policies based on the Group Code of Conduct and the Group Basic Policy on Human Resources Development.

ENEOS Group Code of Conduct (excerpt)

12. Establishment of a healthy work environment

- (1) We strive to enable all personnel to carry out their business operations in the workplace with vigor, and to enable ourselves, our families and our colleagues to lead healthy and cultured lives by promoting health care and work-life balance.
- (2) We promote diversity in order to enable diverse individuals to maximize their abilities.
- (3) We strive to secure and maintain a pleasant work environment through interactive dialogue and ongoing communication.
- (4) We strive to train our people, and seek to enhance the abilities of ourselves and others.
- (5) We shall obtain the necessary confirmation and approval from the appropriate person(s) with authority before we commence any religious activity, political activity, or any similar activities during work.

ENEOS Group Basic Policy on Human Resources Development

We will continuously and systematically develop human resources to secure talent capable of tackling challenges globally with the spirit of creativity and innovation.

We will carefully develop employees with a strong awareness of the Group's mission and our five core values, a strong sense of ethics and a willingness to take on challenges.

We will develop human resources who will help us enhance corporate value over the medium to long term in order to strengthen our management foundation.

We maintain various functions and roles based on the business format and organization of the company. Each of these is indispensable to the operations of the company, and we will promote appropriate development efforts to ensure that all employees can contribute to the organization by maximizing their capabilities.

We will establish systems for actively supporting employees looking to grow themselves by promoting diverse development and growth tailored to each employee's aptitude.

We believe that supporting the growth of our diverse workforce will help to invigorate company organizations, thereby strengthening our competitiveness. We respect the individuality of each and every employee and support the self-led growth of employees tailored to their aptitude.

Structure

For information about our structure, see [ESG Management Structure](#).

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Retaining and developing human resources	Development of human resources capable of enhancing corporate value	Implement effective training and evaluation	😊	<ul style="list-style-type: none"> Implemented various training programs Evaluated the training content and reflected the results in the content for the next fiscal year onward

Major Initiatives

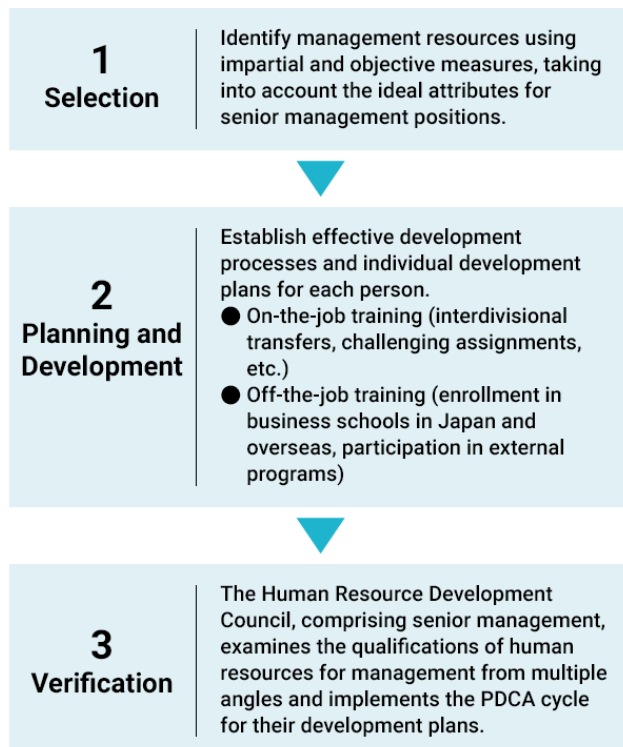
Each Group company implements development programs in accordance with its own business policies based on the Group Code of Conduct and the Group Basic Policy on Human Resources Development.

Developing Management Resources

With an eye on the future direction of its companies, the ENEOS Group must work to more systematically and strategically develop management resources as the future leaders of the Group in order to respond to the rapid changes expected to take place in the management environment going forward.

ENEOS Holdings and its principal operating companies are working on the development of these management resources as a common challenge facing the Group. We will work together to identify, at an early stage, employees suitable for management positions and provide comprehensive training to draw out their full potential as future senior executives.

Workflow for the Selection and Development of Management Resources at ENEOS



Main Human Resource Development Programs

ENEOS

Global human resources development

Training, which lasts about one month, is held in Malaysia for employees with advanced English skills to acquire cross-cultural skills that will enable them to respond quickly in overseas business settings. Language learning opportunities are also provided on a broad scale in Japan to improve employees' language proficiency.

Measures to promote career opportunities for female employees

Female employees are selected to take part in off-site training in order to develop candidates for executive positions. Seminars are held to raise awareness among supervisors and an external mentorship program is offered to support the career development of female employees.

M&A training

In order to develop human resources who can carry out the transformation of our business portfolio, we implement a program that teaches practical skills and knowledge, from the basics of M&A to how to formulate strategies.

Training Assignments at Venture Companies

In order to foster people who can take on the development of new businesses, employees are dispatched to venture companies for one year. Through practical experience in starting up businesses and working with entrepreneurs, participants hone their business development skills and mindset.

Trigger for the Future

In order for employees to gain new insights and further broaden their horizons, we hold a lecture program on themes aligned with the company's future direction.

360-degree feedback

Employees receive feedback from supervisors, peers, and subordinates about their behavioral characteristics to help them gain awareness of their own strengths and weaknesses, thereby promoting future career development and behavioral change. Survey results do not directly affect supervisor evaluation and treatment.

Evaluation feedback interviews and self-assessment interviews

Regular interviews are conducted with all regular employees to evaluate performance during the fiscal year and to share information about work issues and skill development opportunities in the next fiscal year. We have also established human resources systems to get an accurate understanding of employees' ambitions for long-term career design and skill development. Regular interviews are held to give the company and supervisors a better understanding of employees' wishes, helping to ensure optimal assignment, relocation, and development of employees (interviews held for all regular employees, who account for 90% of all employees).

Career Forum

Every year, we hold a Career Forum (online) to provide information on the work content and career paths of each department during the period when employees declare their wishes for long-term career design and skill development. Participants are able to gain a better understanding of what it is like to work in the departments they are interested in and clarify their future career aspirations.

ENEOS Xplora

Training by rank

Classification-level training and training to develop core resources are provided.

Overseas dispatches of young employees

We send employees, particularly young employees who have been with us for only a few years, to overseas branch offices for between three and six months with set core assignments. This allows them to learn about the actual practices of the ENEOS Xplora E&P (oil exploration and production) business and to contribute to local operations.

Career development interviews

Employees are interviewed at key points in their careers to enhance the effectiveness of career development over the medium to long term, matching employees' own wishes and the needs of the company. Based on the results, the company offers support for every individual to take on new challenges in order to achieve their future vision for themselves.

Employee training programs

Programs are offered throughout the year, mainly for young employees, to educate them about E&P business technologies, contracts, and economic calculations. Training is led by in-house instructors using curricula developed by the company.

JX Advanced Metals

New training system

As part of the human resources strategy linked to the JX Advanced Metals Group's Long-Term Vision for 2040, a new education system was established in fiscal 2023 and various types of training were implemented based on the Human Resources Development Policy, which includes providing opportunities for independent and self-motivated growth according to individual needs and developing human resources in a corporate culture that accepts diversity and encourages challenge.

Training by rank

Classification-leveled training and training to develop core resources are provided.

Overseas training

All management-track employees in their second year at the company as well as other employees in need of language training are sent abroad to study foreign languages for one to three months.

Note:

In fiscal 2023, we resumed dispatching employees whose overseas language training had been postponed due to the COVID-19 pandemic.

Career development interviews for young employees

Recognizing that human resources are the source of our organization's strength, regular human resources and division interviews with young employees are conducted as an effort to ensure the systematic development of these employees and enhance their proposal-making capabilities.

Energizing individuals and organizations

Efforts are made to strengthen human resource management and development, as well as establish an environment in which diverse human resources can work with enthusiasm.

Training Hours in Fiscal 2023

	Total training hours	Training hours per employee
ENEOS Holdings and ENEOS	24,869	2.8
ENEOS Xplora	7,659	20.8
JX Advanced Metals	46,751	14.4
Total	79,279	6.4

Note:

Number of hours of internal group training and external training organized by the human resources departments of ENEOS Holdings and the Group's principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals), aggregated for each employer.

Coaching Project for Organizational Culture Transformation

In light of the challenges it faces in its organization, ENEOS launched the Coaching Project for Organizational Culture Transformation in fiscal 2023. The purpose of this project is to transform the way we communicate, starting with division heads and leaders who will lead the next generation, to encourage more open and frank dialogue within the organization. We expect that this will improve the thinking and quality of supervisors, including division heads, and increase the self-motivation of members of the organization. Through this project, we aim to encourage every employee to take on challenges, which will ultimately maximize our performance as a company.

Development of Locally Hired Overseas Employees

ENEOS aims to boost the overseas expansion of its business operations by training locally hired overseas employees to become senior managers at its overseas sites.

To this end, the company dispatches employees hired locally overseas who are expected to play an active role to the ENEOS head office, where they experience head office operations firsthand.

In fiscal 2023, the ENEOS head office hosted three employees hired locally overseas.

Support for Employee Self-Development

In order to support the skill improvement and self-learning of employees who are motivated to learn, the Group provides open seminars, in which employees can choose to take training that meets their individual needs, for employees of principal operating companies and other Group companies.

ENEOS Learning Platform

ENEOS has established the ENEOS Learning Platform, an online learning support system for autonomous employee career development. Employees may select training courses and use the system freely for a certain period of time. The Company subsidizes 50% of the cost if certain requirements are met. One of the people strategies in the third Medium-Term Management Plan includes a target of at least 1,500 users of the system. In fiscal 2023, the system had 800 users. Comments about the system included, "I was able to choose from a variety of training programs and learn on my own."

Self-Innovation Support

JX Advanced Metals has established a program in which employees can apply for and participate in external training programs of their choice, and upon completion, the company reimburses half the cost (to a maximum of 500,000 yen per program). Employees can select from a wide range of programs, which motivates them more than before to take the initiative in their self-innovation.

Development of Digital (DX) Talent

For the establishment of a solid earnings base and the realization of energy transition, the Group will accelerate business transformation through digital transformation (DX) in the areas of base businesses, growth businesses, and carbon neutrality.

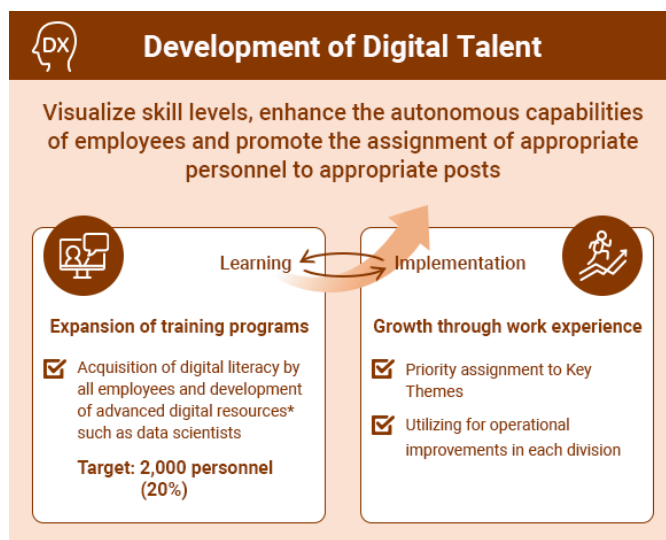
As a driving force to support these efforts, we will focus on the development of digital talent by enhancing the autonomous capabilities of employees and promoting the assignment of appropriate personnel to appropriate posts. In the third Medium-Term Management Plan (FY2023–FY2025), we have set a target to develop 2,000 advanced digital resources, which is approximately 20% of our total workforce. As of the end of fiscal 2023, a total of 1,900 advanced digital resources had been developed.

In addition to the development measures for digital talent that were implemented during the second Medium-Term Management Plan (FY2020–FY2022), from fiscal 2023 ENEOS has introduced new level certification (four levels, from 1 to 4) and three types of digital resources. Through these efforts, we are visualizing the development status and strengthening DX implementation and practical skills.

By providing e-learning to all employees to enable them to acquire digital literacy, we aim to ensure that all personnel are digitally literate human resources (Level 1). In addition, as a measure to develop advanced digital resources (Levels 2 to 4), we have established three types: Business Designer¹, DX Coordinator², and Data Analyst³, and we are pursuing the development of human resources who will play a central role in DX by combining training and work experience for each type.

In addition, the DX Promotion Committee, chaired by the CDO and comprising officers responsible for DX, discusses matters such as level certification and utilization in an effort to accelerate the development of digital talent.

In fiscal 2023, we focused on the development of Level 2 human resources. We supported the setting of development targets for these human resources in each department and developed an environment where managerial staff from each department can actively utilize them. In fiscal 2024 and beyond, we will continue the development of Level 2 human resources and begin certification of Level 3 human resources who have gained practical experience.



* Personnel with practical experience and knowledge for promotion of DX, and can demonstrate value as a core of DX projects in their area of responsibility

- Consistently involved in and contributes to the planning of business transformation / business models, the launch and monetization of new businesses, and the overall promotion of DX. As of the end of fiscal 2023, around 280 Business Designers had been developed.
- Engages those involved and builds appropriate cooperative relationships while ensuring the materialization of products, services, and measures, as well as quality, cost and delivery (QCD). As of the end of fiscal 2023, around 360 DX Coordinators had been developed.
- Formulates hypotheses for business transformation and new business creation, and uses data to verify hypotheses and derive suggestions. As of the end of fiscal 2023, around 720 Data Analysts had been developed.

Health

Basic Approach

The ENEOS Group believes that focusing on the health of our employees and their families results in a vibrant, productive workforce, bringing vitality to our organization. This in turn is the driving force for the achievement of our growth strategies and the source of our competitiveness. Accordingly, we have stipulated health enhancement as a standard in the Group Code of Conduct and are promoting health management to contribute to employees' personal health management and improvement.

ENEOS Group Code of Conduct (excerpt)

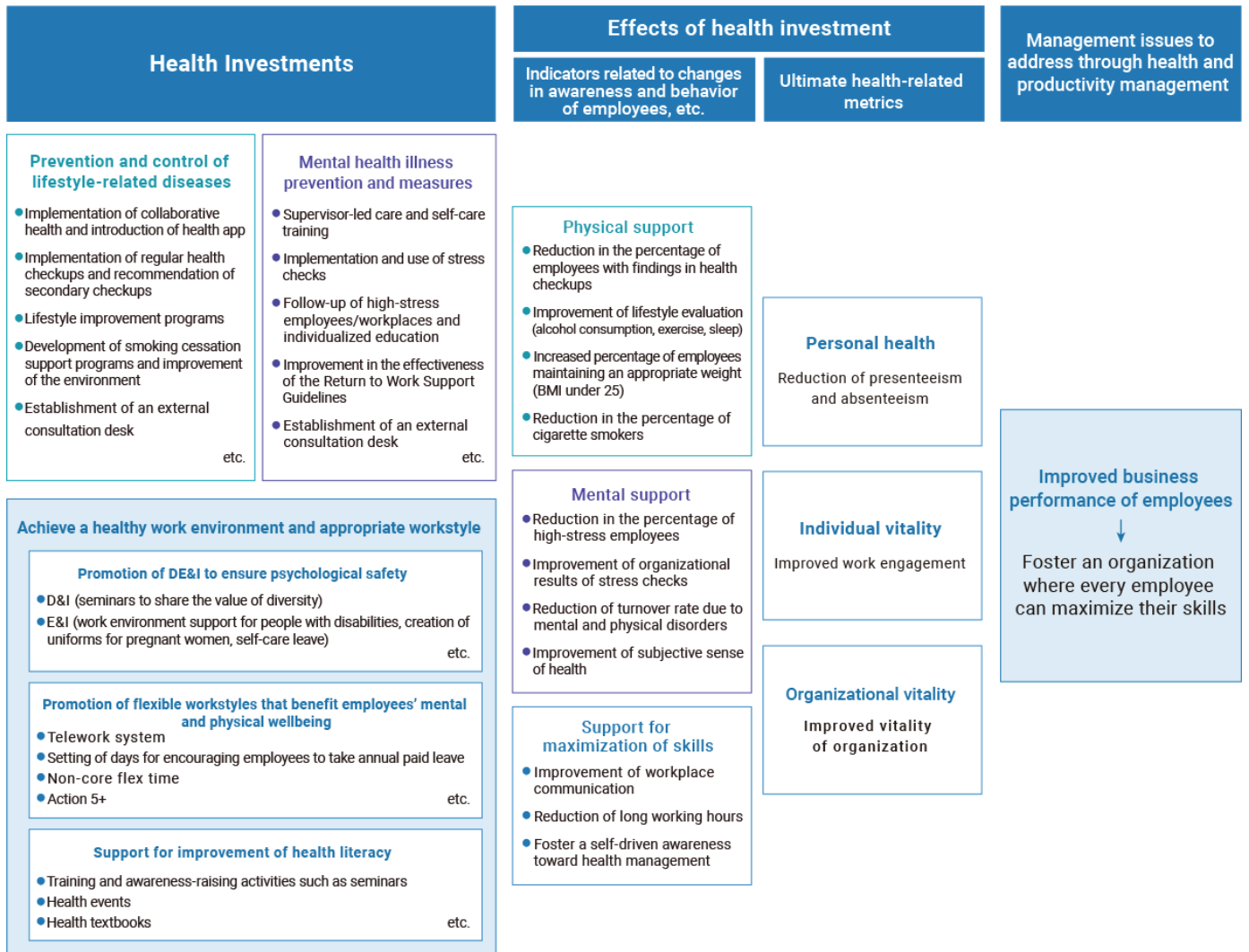
4. Health enhancement

- (1) Health is the core element of our business continuity and development. We take active measures to maintain and enhance the mental and physical health of individuals employed by our group companies.
- (2) We endeavor to identify and evaluate health disorders related to our business activities and promote measures to reduce such risks. We also collect and provide information to external sources in order to ensure the sustainable development of occupational health.

ENEOS Group Health Declaration

The ENEOS Group's mission is to contribute to the development of our communities and help to ensure a vibrant future through creation and innovation in energy, resources and materials. Health, safety and environment is one of our five core values in the ENEOS Group Philosophy. We believe that focusing on the health of our employees and their families results in a vibrant, productive workforce, which is the source of our competitiveness, as well as the vitality of our organization, and is the driving force for the achievement of our growth strategies. Accordingly, we will actively promote health and productivity management, an initiative to maintain and improve the physical and mental health of our valued employees.

Overview of Health and Productivity Management



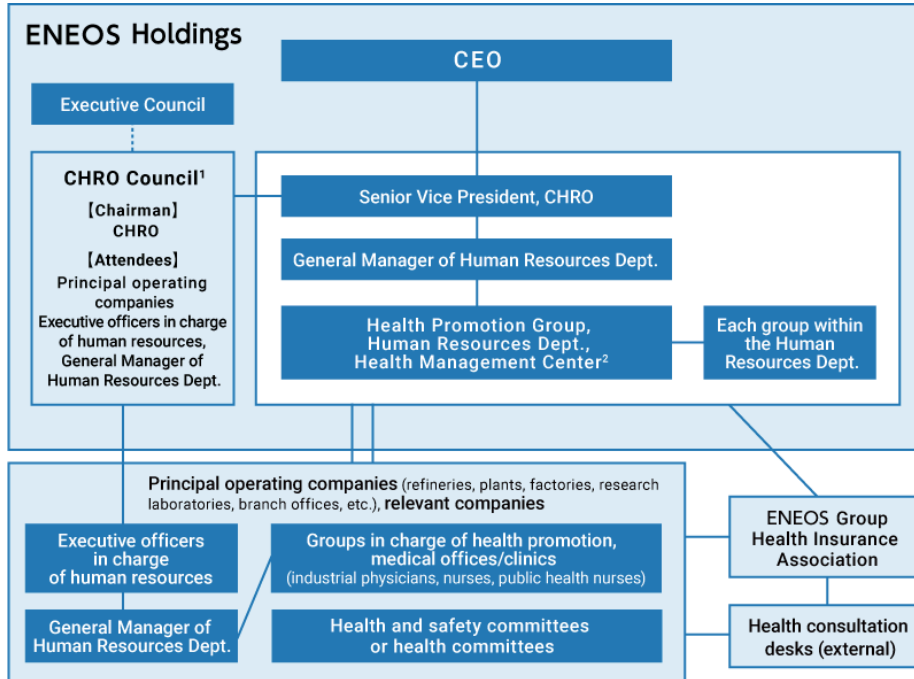
Structure

For information about our structure, see [ESG Management Structure](#).

In order to promote health and productivity management, we have established a Support Structure for Health and Productivity Management and established a secretariat within the Human Resources Dept. We are now implementing various initiatives in collaboration with the Health Insurance Association, relevant companies, and business sites.

At our sites in Japan, meetings of health and safety committees or health committees are convened each month for discussions on health between the companies and labor unions or employee representatives.

Support Structure for Health and Productivity Management



- 1 Shares the ENEOS Group's health management policy, confirms the initiatives of each company, and monitors the progress of the initiatives.
- 2 The Health Management Center consists of industrial physicians (three psychiatrists as well as cardiology, gastroenterology, and neurology), nurses, and public health nurses.

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

Evaluation: 😊 Achieved/Steady progress 😞 Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Ensuring safety / Health enhancement	Ensuring health of employees	Percentage of employees maintaining an appropriate weight Employees with BMI under 25: Maintain at 70% or higher	😞	69.7% (Some companies did not reach their targets)
		Reduce the percentage of cigarette smokers Percentage of smokers: Reduce by at least 1.0% from the previous year	😞	Up 2.1% from the previous year (overall increase due to weak measures and environment not yet in place)

Major Initiatives

Employee Health Management

In addition to ensuring that 100% of employees in Japan and overseas undergo regular health checkups, the ENEOS Group¹ is working to prevent employees from developing lifestyle-related diseases, and has set targets to reduce the percentage of cigarette smokers² and maintain the percentage of employees maintaining an appropriate weight (BMI under 25) at 70% or higher³. For employees working overseas or traveling for business, we offer vaccinations against epidemics and infectious diseases, in addition to building medical support systems. In accordance with the purpose of Japan's Health Promotion Act, we are working to thoroughly eliminate the risks from passive smoking.

In fiscal 2023, we maintained the 100% participation rate in regular health checkups. The percentage of cigarette smokers increased by 2.0 percentage points from the previous fiscal year, and the percentage of people maintaining an appropriate weight was 69.7%, just short of the 70% target. We will continue working to attain the targets in fiscal 2024. Specifically, measures to counter the rising trend in the percentage of cigarette smokers will include environment-related improvements and measures to increase individual awareness in parallel with smoking cessation programs. Furthermore, for employees diagnosed with medical issues, we ensure follow-up care through efforts such as encouraging these employees to undergo further testing as needed.

- 1 Data from ENEOS Holdings and principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals)
- 2 Fiscal 2023 target: Reduce the percentage of cigarette smokers by at least 1.0% from the previous year
- 3 Fiscal 2023 target: Maintain the percentage of employees maintaining an appropriate weight (BMI under 25) at 70% or higher

Health Management Indicators

For fiscal 2024, we have set two targets, for the percentage of employees maintaining an appropriate weight (BMI) and the percentage of cigarette smokers, which we have maintained since the previous fiscal year.

We use BMI as an indicator for the prevention of lifestyle-related diseases, which is the main measure for preventing all diseases. A BMI above 25 can more than double the risk of lifestyle-related diseases, such as dyslipidemia, diabetes and hypertension. We have set a target to maintain the percentage of employees maintaining an appropriate weight (BMI under 25) at 70% or higher, and we are supporting their efforts by providing guidance on health issues following regular health checkups.

We use the percentage of cigarette smokers as an indicator for our ongoing efforts to thoroughly eliminate the risks from passive smoking. As smoking is a major cause of lung cancer and a risk factor for many other diseases, a company-wide ban on smoking will undoubtedly contribute to the enhancement of employee health. The ENEOS Group Health Insurance Association has also been implementing a smoking cessation support program since fiscal 2020; thus, we have determined that this is also a useful indicator in terms of cooperation with the association. We aim to reduce the percentage of smokers by at least 1.0% each year, ultimately reducing the smoking rate to 20% or less.

Mental Health Measures

To help prevent mental health issues, the Group makes effective use of a stress check system.

The system improves employee awareness of stress. For individual follow-up for those facing high levels of stress, we offer sessions with occupational physicians. Additional measures include systems for counseling with external counselors*.

Based on the results of stress checks, we also conduct group analysis within the organization and provide training, advice and assistance for improvements in high-stress work environments.

In fiscal 2023, we continued to provide individual consultation and feedback for the stress check results of managers, and conduct follow-up as needed through training or individual consultations with external counselors and the subsequent development of action plan sheets.

From fiscal 2024, we have introduced a system that allows each employee to attend seminars planned based on the results of individual stress checks at any time. By voluntarily attending seminars as part of primary prevention, we are working to reduce the number of employees newly taking leave due to mental illness. In addition, even if employees take leaves of absence due to mental health issues, we have developed a Return to Work Support Program so that employees can return to work with peace of mind. Through this program, we offer support that is closely tuned to the needs of each individual.

* Counseling by external counselors is available to all employees.

Health Measures for Employees Traveling and Working Overseas

To prevent illness in employees traveling and working overseas, the Group actively implements measures such as vaccinations for employees traveling to certain destinations as recommended on the website of Japan's Ministry of Health, Labour, and Welfare's Quarantine Information Office.

ENEOS has stockpiled supplies at its overseas sites, according to the same standards used at our sites in Japan, as a safety measure for infectious disease epidemics. Since fiscal 2021, we have conducted stress checks for employees working overseas as a first line of defense against mental health disorders and to encourage employees to be aware of their stress levels. Going forward, we will continue to conduct stress checks annually.

As a measure against malaria, ENEOS Xplora has formulated standards for travel to malaria-prone regions. The standards state that the company will bear the cost of anti-malaria medication for employees traveling overseas under certain conditions, and take appropriate measures if an employee is infected. Additionally, in order to prevent physical and mental health issues caused by overwork of employees working overseas, employees whose monthly overtime hours exceed a certain threshold are required to submit a self-check sheet, and are then interviewed by an industrial physician or undergo a telephone health consultation as necessary.

JX Advanced Metals centrally manages the health information of expatriates through a health management support system, and actively encourages them to manage their health before, during, and after travel to their assigned destinations. Stress checks for expatriates are also conducted to prevent mental health issues. In addition, industrial physicians confirm the results of medical examinations and other information for accompanying family members before relocation, and support them so that they can continue to receive medical care in local areas as necessary.

Industrial Hygiene at Refineries and Other Production Sites

To prevent health hazards to workers at refineries and other production sites, the Group trains industrial hygienists for each site and carries out industrial hygiene activities.

At ENEOS, these activities include the implementation of measures against exposure to chemical substances and noise. In addition, the labor unions confirm our efforts to provide and maintain the equipment needed to ensure the health and safety of labor union members.

The JX Advanced Metals Group conducts work environment measurements and assessments and implements necessary improvements based on the results in order to prevent health hazards to workers, regardless of whether or not the worksite belongs to a contractor.

Measures Against Exposure to Chemical Substances

ENEOS conducts risk assessments using individual samplers to test for exposure to specific chemical substances that pose health risks in the work environments of refineries and other facilities. Based on the results of these assessments, we implement appropriate countermeasures to mitigate such risks as part of our efforts to prevent impacts on the health of employees.



Employee testing for exposure to chemical substances using individual samplers

Measures Against Exposure to Noise

ENEOS is taking measures against exposure to occupational noise in its refineries, plants and other business sites to prevent noise-induced hearing loss.

Comprehensive noise measurements are carried out in all areas of refineries and other business sites where production equipment is located to identify areas with noise levels of 85 decibels or higher and 95 decibels or higher, the reference values for preventing noise-induced hearing loss. Based on these measurements, we have developed workplace maps that indicate areas with high noise levels.

We have also established rules for all refineries whereby workers are required to wear appropriate ear protection, such as ear plugs or earmuffs, depending on noise levels. For areas with noise levels of 95 decibels or higher, we are implementing even more rigorous measures by requiring double protection using both ear plugs and earmuffs.



Noise measurement

Health Indicators

Trends in Health Indicators of Principal Operating Companies

	Health indicators		Fiscal 2021	Fiscal 2022	Fiscal 2023
1	Regular health checkup rate		100.0%	100.0%	100.0%
2	Smoking rate		22.8%	22.0%	24.1%
3	Percentage of employees maintaining an appropriate weight (BMI under 25)		70.3%	70.9%	69.7%
4	Percentage of employees taking part in habitual exercise ¹		37.7%	34.6%	27.4%
5	Cancer screening rate	Stomach cancer	68.4%	68.7%	66.3%
		Colorectal cancer	73.8%	78.0%	74.8%
		Cervical cancer	37.6%	46.8%	43.9%
		Breast cancer	46.4%	58.0%	53.4%
6	Secondary checkup rate		—	—	63.9%
7	Stress check rate		95.3%	93.4%	94.9%
8	Percentage of high-stress employees		—	8.4%	8.9%
9	Absenteeism ²		1.3 days	1.4 days	1.9 days

Note:

Data from ENEOS Holdings and principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals)

- Habitual exercise is defined as exercising for at least 30 minutes at a time at least twice a week and continuing this for at least one year.
- Definition of absenteeism: The number of days of absence and leave of absence per employee per year.
Measurement method: Total number of days of absence and leave of absence due to personal injury or illness of all employees ÷ Number of employees (X days/person)

External Evaluation of Our Health Management

The Company and its principal operating companies participate in the Ministry of Economy, Trade and Industry's Survey on Health and Productivity Management, which uses objective indicators to assess enterprises' health enhancement initiatives. We have been certified for seven consecutive years, since fiscal 2017, as a Health and Productivity Management Outstanding Organization in recognition of our outstanding health and productivity management practices undertaken in collaboration with insurers.

The Company's health management initiatives are introduced in external seminars and informational magazines in order to promote the growth of health and productivity management.



Healthy Work Environment

Basic Approach

The ENEOS Group promotes the management of work-life balance as a way for all employees to increase their motivation and creativity and perform at their full potential.

The Group believes that creating environments where employees accept a person's individuality (diversity & inclusion), regardless of differences pertaining to gender, age, nationality, race, ethnicity, skin color, culture, thought, religion, belief, political opinions, sexual orientation, gender identity, gender expression, presence or absence of disability, and familial or personal circumstances, and everyone is given equal opportunity (equity) will lead to the creation of new value throughout the organization and the growth of the Group.

Based on this belief, we have stipulated basic principles for the establishment of a healthy work environment in the Group Code of Conduct, and we implement various measures accordingly.

ENEOS Group Code of Conduct (excerpt)

12. Establishment of a healthy work environment

- (1) We strive to enable all personnel to carry out their business operations in the workplace with vigor, and to enable ourselves, our families and our colleagues to lead healthy and cultured lives by promoting health care and work-life balance.
- (2) We promote diversity in order to enable diverse individuals to maximize their abilities.
- (3) We strive to secure and maintain a pleasant work environment through interactive dialogue and ongoing communication.
- (4) We strive to train our people, and seek to enhance the abilities of ourselves and others.
- (5) We shall obtain the necessary confirmation and approval from the appropriate person(s) with authority before we commence any religious activity, political activity, or any similar activities during work.

Structure

For information about our structure, see [ESG Management Structure](#).

We are responding to various issues in a more agile manner under our ESG management structure. Specifically, we are implementing measures such as workstyle reforms, workplace and career advancement initiatives for female employees and employees with disabilities, and the expansion of systems to promote work-life balance. We are also raising awareness about diversity, equity, and inclusion through in-house training for all personnel, including officers.

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Diversity and inclusion	Advancement of women in the workplace	Maintain rate of women among newly hired university graduates at 25% or higher	😊	27.3%
	Advancement of employees with disabilities	Maintain employment rate of people with disabilities at 2.3% or higher	😊	2.57%

Major Initiatives

Improving the Organizational Climate

In response to the misconduct of the Company's former president that occurred in 2023, we have been working urgently to restore the trust of employees and improve the organizational climate that allows employees to work comfortably.

TSUNAGU Project: Improving the Organizational Climate that Allows Employees to Work Comfortably and with Pride

In January 2024, the Company and ENEOS launched a project led by three executive vice presidents (at the time) and two outside directors for improving the organizational climate that allows employees to work comfortably and with pride. In addition, prior to the launch of the project, the CEO of the Company and the president of ENEOS sent a message to employees, expressing their commitment to re-establishing an organizational climate where employees can work comfortably and with pride.

The project began by engaging a third party to conduct interviews and a survey targeting around 11,000 employees in order to gain an accurate understanding of the work atmosphere. To promptly resolve the issues identified by the survey, we set goals for the short, medium, and long term, and formulated improvement measures.

In fiscal 2024, as one of the short-term measures, we established and have been thoroughly implementing the "Three Principles for everyone to work in peace," a set of rules to ensure mutual, constructive communication while maintaining an attitude of respect for others. Furthermore, we will conduct regular surveys of all employees to confirm the status of implementation of the three principles at each workplace. At the same time, we will launch a mechanism to provide bottom-up feedback on the degree of implementation by managers and establish an effective PDCA process.

Note:

For details of these initiatives, please see [Integrated Report 2024 "TSUNAGU Project" for Improvement of Organizational Climate \(PDF: 58KB\)](#) .

Diversity, Equity, and Inclusion

The Group promotes diversity, equity, and inclusion (DE&I) for the maximization of the talents of its diverse workforce, the creation of new value throughout the organization, and the growth of the Group.

In addition to initiatives related to individual themes such as the advancement of women in the workplace, the retention of employees with disabilities, and the understanding of sexual minorities, we are focusing on promoting diverse workstyles and expanding systems to support work-life balance in terms of childcare, family care, and illness. We believe that if each and every employee understands, takes ownership of, and promotes DE&I, individual behavior will change, which in turn will lead to greater achievements in the organization. To this end, we are raising awareness among all employees and conducting training for management while implementing activities throughout the Group.

Basic Approach to Diversity, Equity, and Inclusion

- We aim to increase the motivation and creativity of all employees and enable them to maximize their talents by fostering a corporate culture where each and every employee understands the importance of diversity, equity, and inclusion, and where employees respect each other, help each other, and grow together.
- Through the promotion of diversity, equity, and inclusion, we aim to ensure the diversity of the organization and employees and foster a culture that embraces different ways of thinking and ideas and encourages thorough discussion based on mutual trust. This will enable us to promptly and accurately meet the ever-changing needs of customers and society and create new social value.
- We will continue to contribute to the realization of a society in which all stakeholders, including employees, can actively participate by promoting diversity, equity, and inclusion in Japan and overseas.

Advancement of Women in the Workplace

To support the career planning and growth of female employees, the Group is working to reform individual workstyles and awareness among employees, their supervisors and members of their workplaces, and is developing and expanding systems for all employees to achieve work-life balance. Group companies also have their own action plans for the advancement of women in the workplace based on the Act on Promotion of Women's Participation and Advancement in the Workplace. We have also set numerical targets for the hiring percentage of female university graduates and the number of female employees promoted to managerial positions, and we implement various measures to promote the active participation and career advancement of female employees.

Targets for Action Plan on the Advancement of Women in the Workplace

- ENEOS
 1. Ensure that the ratio of women among newly hired university graduates from fiscal 2023 to fiscal 2025 is at least 50% for administrative positions and at least 20% for engineering positions
 2. Change the behavior and mindset of employees, focusing on management, toward the promotion of diversity
 3. Aim to have 100 female managers* (from group managers to officers) by April 2026

* Including female managers seconded to main Group companies
- ENEOS Xplora
 1. Maintain the percentage of female workers at 20% of the workforce
 2. Promote thorough awareness of diversity and inclusion within the company
 3. Increase the hours of participation in training for career advancement for female employees by 20% per person compared to the previous plan
- JX Advanced Metals
 1. Increase the number of women in managerial positions to 30 or higher by March 31, 2026 (non-consolidated basis)
 2. Ensure that employees take at least 80% of their annual paid leave
 3. Continuously enhance and implement recruitment activities to increase the number of female employees and develop a workplace environment for increasing recruitment
 4. Examine and implement ways to inform employees about work-life balance support systems and encourage their use to ensure that our diverse workforce can utilize these systems based on their individual needs

Note: Formulated pursuant to the Act on Promotion of Women's Participation and Advancement in the Workplace and the Act on Advancement of Measures to Support Raising Next-Generation Children.

Promoting Female Employees to Managerial Positions

ENEOS's action plan under the Act on Promotion of Women's Participation and Advancement in the Workplace targets having 100 female managers (from group managers to officers) by April 2026. ENEOS is working to develop women in managerial positions, including through external management training programs for women and by fostering career awareness through dialogue with internal and external role models. As of April 2024, the Group had 58 female managers, with two serving as executive officers, five as department general managers or equivalent, five as department deputy general managers or equivalent, and 46 as group managers or equivalent.

At ENEOS Xplora, the number of women in leadership positions, excluding officers, was 11 as of April 2024.

JX Advanced Metals aims to increase the number of women in leadership positions (manager or equivalent) to at least 30 between April 2023 and March 2026. As of April 2024, the company had 21 women in leadership positions.

Employment Status of Female Employees

(As of March 31, 2024)

Category	Number of female employees	Percentage of total
Newly hired employees	120	16.0%
Employees	1,646	13.6%
Leadership positions	158	5.6%
Directors*	4	40.0%
Average years of service for female employees	15.3 years (Difference in average years of service between male and female employees: 1.9 years)	

Note:

Data on number of female directors is from ENEOS Holdings; other data is for ENEOS Holdings and principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals).

* Data on number of female directors is as of June 26, 2024.

Training and Seminars for the Advancement of Women in the Workplace

ENEOS holds the following training and seminars to further promote the advancement of women in the workplace.

Training for Managers

As part of our efforts to provide positive work environments for a wide variety of employees, we hold diversity management training for our executives and managerial staff at the team leader level and above.

Training for Female Employees

We are supporting the formation of networks of female employees so that they can think about and envision their own careers. As part of this effort, we have introduced an external mentorship program for female employees who aspire to managerial positions, with the aim of alleviating issues and anxieties in thinking about their careers and encouraging their growth. In fiscal 2023, as in fiscal 2022, we also held networking events for female employees working as operators at manufacturing sites. The events included lively group discussions about the unique rewards and challenges of working in the operating division and participants' visions for their future careers.



Networking session for female operators

ENEOS Receives Highest "Eruboshi" (L Star) Certification

In October 2020, ENEOS received the highest of three "Eruboshi" (L Star) certifications from the Minister of Health, Welfare and Labour as an enterprise fully compliant with the standards of the Act on Promotion of Women's Participation and Advancement in the Workplace.



Promoting Mid-Career Hires to Managerial Positions

To facilitate its business portfolio transformation, the Group is working to transform its human resources portfolio in accordance with the third Medium-Term Management Plan (FY2023–FY2025). As part of this effort, we are increasing the hiring of experienced professionals with expertise and knowledge that we currently do not have in-house. ENEOS is also training and promoting experienced professional hires to managerial positions, aiming to increase the number of these employees in managerial positions.

As of March 31, 2023, ENEOS had 585 mid-career hires, 113 of whom were in managerial positions. We will continue to utilize experienced mid-career hires in order to acquire human resources with new ideas and abilities.

At ENEOS Xplora, the number of mid-career hires was 61, with 12 in managerial positions.

At JX Advanced Metals the number of mid-career hires was 954, with 99 in managerial positions.

Note:

Figures indicate the number of employees hired mid-career and those in managerial positions since fiscal 2017.

Promoting Foreign National Employees to Managerial Positions

The Group plans to strengthen its overseas business as it accelerates its energy transitions toward 2040. As one of the measures to retain and develop human resources who will play leading roles in our efforts, we are focusing on hiring foreign nationals and increasing their appointment to managerial positions.

As of March 31, 2024, ENEOS had 58 employees of foreign nationality, of which three were in managerial positions. At ENEOS Xplora, the number of employees of foreign nationality was six, with four in managerial positions, and at JX Advanced Metals the number of employees of foreign nationality was 26, of which five were in managerial positions.

In addition to the above, there were a total of 609 employees of foreign nationality serving in managerial positions at our overseas subsidiaries.

Promoting Career Opportunities for Employees with Disabilities

The Group promotes active participation by employees with disabilities by providing assignments based on individual characteristics and aptitudes rather than grouping individuals at specific worksites. The Group also engages counselors and others to support employees with disabilities in worksite adaptation.

At the end of fiscal 2023, the percentage of employees with disabilities was 2.57%, higher than the legal requirement of 2.3%. Looking ahead, we will continue our efforts to hire and enhance our support structure for people with disabilities.

In addition, we are a signatory and participant in The Valuable 500, an international initiative that supports the advancement of people with disabilities.



Re-employment of Retired Employees

The Group has put in place a re-employment system for employees who have the desire and motivation to continue working after mandatory retirement. This system provides these employees with further opportunities to share their valuable knowledge, skills, and experience with the company.

In fiscal 2023, the number of employees re-employed after retirement was 653.

Note:

Data from ENEOS Holdings and principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals).

Promoting the Active Participation of Senior Employees

Senior personnel with a wealth of knowledge and experience play an invaluable role in transforming and improving our base businesses in accordance with the third Medium-Term Management Plan. Retaining human resources is becoming increasingly critical, and as part of these efforts we have developed a system that enables more active participation by senior employees.

ENEOS ensures appropriate treatment of employees rehired after mandatory retirement through a system in which ranking (grade) and salary are based on the magnitude of the role they play in our operations. Even after reemployment, we expect many of these rehired retirees to fulfill roles equivalent to those of the current generation of managers, and have accordingly established a new role grade equivalent to the manager level.

ENEOS Xplora has applied the same system as the one for its general employees, which has eliminated imbalances in job responsibilities and treatment. In October 2022, JX Advanced Metals raised the mandatory retirement age from 60 to 65 and applies the same salary increases and promotion system for rehired retirees as it does for general employees.

Creation of Local Jobs

The Group is actively engaged in employing local staff at our overseas business sites.

Number of Locally Hired Staff at Overseas Sites (Fiscal 2023)

(Persons)

ENEOS	1,157
ENEOS Xplora	368
JX Advanced Metals	2,217
Total	3,742

Ikuboss Corporate Alliance Membership and Activities

ENEOS has been a member of the Ikuboss Corporate Alliance*, established by NPO Fathering Japan, since fiscal 2017. Within the company, we are sharing the ideal attributes for supervisors required in an increasingly diverse workplace and pursuing various initiatives to develop suitable human resources.

In fiscal 2023, we conducted diversity management training for managerial staff, who lead diverse team members, to acquire knowledge and skills on management that supports each individual and leadership that enhances psychological safety. The purpose of this training is to help participants learn from the perspective of how to unite team members with various attributes and make them the strength of the organization, and then put what they have learned into practice in the workplace. Voluntary training was also conducted as a follow-up for the participants in the training. The participants brought their own workplace issues and awareness to the table, and each participant shared their thoughts and opinions.

Main Points

Diversity management training (e-learning) for all managerial staff

- Importance and side effects of inclusion
- Factors that impede inclusion
- How to increase inclusion

Inclusive leadership training (voluntary training)

- Awareness of the power relationship between minorities and majorities
- Sharing of awareness and group discussions on workplace issues

* An "ikuboss" is a boss (executive or manager) who thinks about the work-life balance of staff under his or her supervision. Ikubosses support the careers and lives of their staff, while delivering results to the organization and enjoying their own work and private lives. The Ikuboss Corporate Alliance is a network of companies that are actively working to change the mindsets of their management staff as part of their efforts to foster ikubosses in this new age.

ENEOS Ikuboss Declaration

1. We will work to reduce total annual working hours to enable our entire workforce to reach their full potential despite time constraints due to life events.
2. We will promote diversity, equity, and inclusion centered on the advancement of women in the workplace in order to pursue business reforms under a flexible mindset.
3. We value work-life balance and will support bosses who actively enjoy life and encourage those around them to do the same.
4. We will foster Ikubosses as drivers of these initiatives.

Initiatives for Sexual Minorities

The entire Group is working to foster an organizational culture that correctly understands and accepts sexual minorities.

At ENEOS, we are working to create a workplace where everyone, regardless of gender, can work in their own way and maximize their abilities. Through e-learning and seminars, we promote understanding of sexual diversity and the correct way to communicate to prevent SOGI harassment¹ and outing. In addition, we formed ENEOS ALLY, an in-house group that promotes understanding and support for sexual minorities, helping to ensure psychological safety in the workplace.

In November 2023, as in the previous year, work with Pride² awarded ENEOS the Gold Award, their highest honor, based on their “PRIDE Index,” an evaluation index on programs related to sexual minorities within businesses and organizations.



- 1 Discriminatory words or actions related to sexual orientation or gender identity. SOGI stands for “sexual orientation and gender identity.”
- 2 A private organization that supports the promotion and instillment of diversity management concerning sexual minorities within business organizations.

Raising Awareness among Employees

We conduct e-learning to inform and raise awareness among employees about the importance of diversity, equity, and inclusion.

Publication of Women’s Empowerment Newsletter

In order to make diversity, equity, and inclusion a more familiar topic to all employees, ENEOS sends out messages from executive management to employees and publishes the Women’s Empowerment Newsletter for its manufacturing sites, where there are few female employees. In fiscal 2023, the newsletter featured articles on topics such as the advancement of women in the workplace, the promotion of diversity, equity, and inclusion, and networking sessions held for female operators working at manufacturing sites.

Engagement Survey

ENEOS conducted an engagement survey in fiscal 2022 with the aim of improving employee engagement through the visualization and improvement of issues and problems between the company and employees. In fiscal 2023, we conducted a comprehensive survey from a standpoint of improving profitability. Through the survey, we checked motivation for work and maximization of abilities and how employees perceive their careers, and are using the findings to consider subsequent measures. From fiscal 2024 onward, as part of our human capital management, we plan to conduct the survey after reviewing the indicators to be checked.

ENEOS Xplora plans to conduct an engagement survey in fiscal 2024.

JX Advanced Metals conducted an employee awareness survey in fiscal 2022, which it will continue to conduct once every other year.

In-House Presentations by Female Outside Directors

Three of the Company’s female outside directors conducted in-house presentations from November 2023 to January 2024. The presenters, who are active in the business world, spoke on topics including the future of the Group’s management and business growth, the mindset for individual career development, and how to demonstrate leadership.

Over 1,500 employees attended the three sessions in person and online and learned about attitudes for business transformation and leadership, and the importance of inclusion in organizational management.



Presentation in November 2023

Work-Life Management

In accordance with the basic approach below, the Group aims to reduce total annual working hours and encourage the taking of annual paid leave to increase the motivation and creativity of each and every employee and enable them to maximize their abilities.

Work-Life Management Guidelines

- To allow adequate time for each and every employee to achieve a good balance between work and private life, we promote the reduction of total annual working hours and encourage the taking of annual paid leave by improving productivity and workflow.
- We work to ensure the establishment and utilization of effective human resource systems and programs, so that even employees limited in their workstyles by circumstances such as childcare and family care can achieve sustainable career development and performance.
- We raise employee awareness to promote understanding of the importance of work-life management.

Proper Management of Total Annual Working Hours

The Group defines those regulations related to Japan's Labor Standard Act, such as working hours, rest periods, days off, and leave, as human resource regulations.

We have developed a mechanism for the proper calculation and management of working hours in order to reduce total annual working hours (reduce overtime work and encourage the taking of annual paid leave), including for managerial staff.

1. Prevention of prolonged working hours
Implement Action 5+, an internal program that prohibits working on Sundays and between the hours of 10 p.m. and 6 a.m. IT systems issue reminders to those working prolonged hours and their supervisors. Additionally, robotic process automation (RPA) is used to automatically aggregate data on working hours and distribute it to the relevant human resources staff at all business sites daily.
2. Visualization of overtime hours
Post the working hours of all workplaces monthly on our intranet.
3. Training to encourage changes in mindset/behavior
Hold training sessions for managers at the deputy general manager level on closely managing working hours in their organizations. Implement e-learning for managers at the section manager level and below and non-managerial employees on working hours and rest periods based on the Labor Standards Act.

Encouraging Employees to Take Annual Paid Leave

The Group promotes various initiatives at our Group companies to encourage employees to take annual paid leave.

Major Measures

1. Formulation of plans for taking annual paid leave: At the start of each year, each employee draws up a schedule for taking paid leave for the year.
2. Designation of first extended holiday (five consecutive days or more) and second extended holiday (three consecutive days or more): Employees are encouraged to designate two extended holidays for the year using their annual paid leave.
3. Designation of memorial day (one day per year): Fostering a culture where employees set one day a year of their choice to take annual paid leave.
4. Designation of days where employees are encouraged to take annual paid leave (around 2 days/year): The Company designates weekdays, adjacent to national holidays, when employees are encouraged to take annual paid leave.
5. Availability of annual paid leave in half-day increments: Encourages flexible use of annual paid leave.
6. Managerial staff serve as role models in actively taking annual paid leave.

Status of Annual Paid Leave in Fiscal 2023

Number of days granted	22.0
Number of days taken	20.3
Usage rate	92.6%

Note:

Data from ENEOS Holdings and principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals).

Review of Operational Efficiency and Unnecessarily High Quality of Work

By promoting vigorous workstyles and work-life management through workstyle reforms, ENEOS Holdings and ENEOS are working to secure and develop talent as well as enable employees to engage in higher-value-added work. Specifically, our initiatives target work efficiency and the maximization of results through a best mix of on-site work and telework (working from home). To this end, when delegating work to others or when starting one's own work, we encourage employees to mutually clarify deadlines, workloads, and work responsibilities. In addition, we previously required employees using telework to come to the workplace at least one day per week, but we have eliminated this requirement to encourage more autonomous workstyles.

Major Systems for Promoting Work-Life Management

The Group has developed systems to promote work-life management at Group companies.

Major Systems for Work-Life Management at Group Companies

	System	Implemented at
Childbirth/ Childcare	Special time off for spouse's childbirth (paid)	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals
	Childcare leave (until the child reaches the age of 2; first 14 days are paid)	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (unpaid*)
	Time off for child rearing (paid)	ENEOS Holdings, ENEOS, ENEOS Xplora
	Time off to care for an ill child (paid)	ENEOS Holdings, ENEOS (taken in 1-hour increments), ENEOS Xplora (taken in 1-hour increments), JX Advanced Metals (unpaid*)
	Time off for expectant mothers to receive health guidance (paid)	ENEOS Holdings, ENEOS, ENEOS Xplora
	Time off for childcare (paid)	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals (unpaid*)
	Support for babysitter use	ENEOS, JX Advanced Metals
	Childcare subsidies	ENEOS, JX Advanced Metals
	Daycare at business sites	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals
	Counseling services for pregnancy, childbirth and childcare	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals
	Return-to-work grant	JX Advanced Metals
	Childcare concierge service	JX Advanced Metals

	System	Implemented at
Family care	Family care leave (730 days; first 14 days are paid)	ENEOS Holdings, ENEOS, ENEOS Xplora (365 days; first 14 days are paid), JX Advanced Metals (unpaid*)
	Time off for family care (paid)	ENEOS Holdings, ENEOS (taken in 1-hour increments), ENEOS Xplora (taken in 1-hour increments), JX Advanced Metals (unpaid*)
	Family care leave benefit/allowance	ENEOS, JX Advanced Metals
	Home helper subsidies	ENEOS, JX Advanced Metals
	Family care subsidies	ENEOS, JX Advanced Metals
	Telephone family care consultation service	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals
	Re-hiring system for retirement due to family care	ENEOS Xplora
General	Telework (working from home) system	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals
	Flextime system	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals
	Reduced work hours system	ENEOS Holdings, ENEOS, ENEOS Xplora, JX Advanced Metals
	Study abroad (at own expense) leave of absence system	ENEOS
	Spouse accompaniment leave of absence (retirement) system	ENEOS Holdings, ENEOS
	Spouse accompaniment job transfer system	ENEOS Holdings, ENEOS
	Job transfer deferment system	ENEOS Holdings, ENEOS
	Leave system for supporting continuation of career	ENEOS Xplora
	Reduced work days system (employees re-hired after mandatory retirement)	ENEOS Xplora
	Cumulative annual paid leave	JX Advanced Metals
	Return-to-work system	JX Advanced Metals

Notes:

Data from ENEOS Holdings and principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals).
The systems listed above are company systems, which are separate from public systems.

* Accumulated days of annual paid leave can also be used to take leave for family care and childcare (paid leave).

Utilization of Major Systems in Fiscal 2023

Number of employees taking childcare leave	347 (of which 293 are male)
Percentage of male employees taking childcare leave	70.8%
Percentage of employees returning to work after taking childbirth or childcare leave	99.7%
Retention rate 12 months after returning to work	94.7%
Number of employees taking family care leave	3

Note:

Data from ENEOS Holdings and principal operating companies (ENEOS, ENEOS Xplora, JX Advanced Metals).

Telework

ENEOS Holdings and ENEOS have introduced a telework system to enable employees to work in a variety of ways that take into account their individual circumstances. We are also promoting telework, and we give employees the option of using both telework and office work as they see fit to maintain and improve individual and organizational productivity. Currently, the percentage of head office staff using telework is around 30%.

Shareholding Association System

The ENEOS Group has established an employee shareholding system to help employees build their wealth. Through the shareholding association, employees of Group companies can acquire shares of ENEOS Holdings.

Quality

Basic Approach

The ENEOS Group believes that the provision of high-quality, safe, and reliable products and services that provide customer satisfaction and the provision of accurate and easy-to-understand information are important elements in gaining the trust of our customers and achieving sustainable growth. Based on this approach, we have stipulated basic principles on quality in our Group Code of Conduct. Each Group company has established its own quality assurance system and quality policy based on the Group Code of Conduct and the nature of its business. Group companies work to continuously improve quality from a customer-oriented perspective based on these policies.

ENEOS Group Code of Conduct (excerpt)

6. Product and service quality

- (1) We always conduct our business activities with a spirit of innovation and a willingness to take on challenges.
- (2) We strive to contribute to the solution of domestic and international social issues and gain customer satisfaction and trust by developing and providing innovative technology and useful products and services.
- (3) We comply with domestic and international standards for the products and services we provide. We perform quality control and risk management, covering areas such as safety, security, environment and health. We also strive to provide a stable supply of goods and services, even in the event of emergencies.
- (4) We always provide our customers with appropriate and clear labels and explanations on our products and services, and we respond promptly and sincerely to customer inquiries.
- (5) In the event of malfunctions in our products or services, we strive to conduct exhaustive investigations and implement measures to prevent recurrence.

Energy Group* Quality Policy

We seek to earn the trust and satisfaction of our customers by adopting a customer-oriented perspective and adhering to the following.

1. Provide products and services that are safe and can be used with peace of mind;
2. Continuously strive to enhance the quality of our products and services; and
3. Provide accurate information that is easy to understand.

* ENEOS and its Group Companies

JX Advanced Metals Group Basic Quality Policy

The JX Advanced Metals Group hereby sets forth, and acts in observance of, this Basic Quality Policy in order to contribute to the development of a sustainable society while recognizing that its social mission is to stably supply nonferrous metals and materials.

1. Grasp the requirements of customers and society correctly in order to offer products and services that customers can trust and that satisfy their needs.
2. Improve and maintain quality in all processes from development, design, and production to delivery, while paying due attention to safety and environmental conservation.
3. Establish a quality management system, carry out continual improvements, and develop human resources.
4. Comply with all pertinent laws and regulations of Japan and other countries, and provide customers and society with accurate information on quality.

Structure

For information about our structure, see [ESG Management Structure](#).

Within the Group, Group companies conduct activities based on their quality policies and use monitoring to manage risks, including regularly overseeing, assessing, and sharing information about the status of quality-related initiatives.

Many of our business sites in Japan and overseas (see table below) have obtained ISO 9001 certification, a global standard for quality management systems.

Business Sites with ISO 9001 Certification

ENEOS	Domestic	Head office; Sendai Refinery; Kawasaki Refinery; Negishi Refinery; Sakai Refinery; Mizushima Refinery; Marifu Refinery; Oita Refinery; Yokohama Plant; Wakayama Plant; Sodegaura Terminal; Kashima Refinery, Kashima Oil Co., Ltd.; Chiba Refinery, Osaka International Refining Company, Limited; ENEOS Wakayama Petroleum Refining Co., Ltd.; Sankyo Yuka Kogyo K.K. (head office, refinery); ENEOS NUC Corporation (head office, Kawasaki Plant); EMG Lubricants Godo Kaisha; Anatec Service Co., Ltd
	Overseas	ENEOS USA Inc.; JX Nippon Oil & Energy Vietnam Co., Ltd.; ENEOS (Thailand) Ltd.; ENEOS (Guangzhou) Lubricants Corporation; PT. JX Nippon Oil & Energy Lubricants Indonesia
ENEOS Xplora	Nakajo Field Office	
JX Advanced Metals	Domestic	Head office (Marketing Dept., Functional Materials Division); Isohara Works (main plant, Isohara Sub-plant); Kurami Works; Hitachi Works (Copper Foil Dept.); Ichinoseki Foil Manufacturing Co., Ltd.; Kitaibaraki Precision Co., Ltd. (head office, Isohara Plant, Isohara Sub-plant); JX Advanced Metals Coil Center Co., Ltd. (Kurami Office, Tatebayashi Office); JX Metals Trading Co., Ltd. (Takatsuki Plant, Kurami Office, Kurami Office Warehouse); JX Metals Smelting Co., Ltd. (Saganoseki Smelter & Refinery, Hitachi Refinery); JX Metals Resources Exploration & Development Co., Ltd. (head office, Odate Sales Office, Kurashiki Office); TANIJOBIS Japan Co., Ltd. (head office, Mito Plant); Tokyo Denkai Co., Ltd.; Toho Titanium Co., Ltd. (Headquarters, Chigasaki Plant, Hitachi Plant, Yahata Plant, Wakamatsu Plant, Kurobe Plant); Japan Copper Casting Co., Ltd. (Saganoseki Plant); Furuuchi Chemical Corporation; JX Metals Smelting Logitech Co., Ltd.
	Overseas	Nippon Mining & Metals (Suzhou) Co., Ltd.; Nikko Fuji Precision (Wuxi) Co., Ltd.; JX Nippon Mining & Metals Dongguan Co., Ltd.; Nikko Metals Taiwan Co., Ltd. (Longtan Works, Guanyin Works); JX Metals Philippines, Inc.; Materials Service Complex Malaysia Sdn. Bhd.; Materials Service Complex (Thailand) Co., Ltd.; JX Metals Korea Co., Ltd.; TANIJOBIS GmbH (Goslar); TANIJOBIS Smelting GmbH & Co. KG (Laufenburg); TANIJOBIS Co., Ltd. (Map Ta Phut)
NIPPO	Head office, Hokkaido Branch, Tohoku Branch, Kanto Daiichi Branch, Kanto Daini Branch, Hoku-shinetsu Branch, Chubu Branch, Kansai Branch, Shikoku Branch, Chugoku Branch, Kyushu Branch, Architect Department	

Major Initiatives

Initiatives at Manufacturing Sites

Thorough preventive measures are carried out at the Group's refineries and plants to eliminate quality-related issues and prevent recurrence.

Standardization of Quality Management and Assurance Procedures

ENEOS has established quality assurance procedures for quality assurance systems and operations covering all of our products and services. In addition, all ENEOS refineries and plants have obtained ISO 9001 certification.

Furthermore, we have developed a proprietary Quality Management System that is specifically focused on requirements for managing the quality of petroleum and petrochemical products, based on ISO 9001. We have implemented this system at all of our refineries and plants, and are carrying out activities to expand it throughout the supply chain.

One of the features of this system is the performance of quality management risk assessments and risk reduction measures to prevent quality-related issues from occurring. Employees learn quality management risk analysis methods, enabling them to identify risks and take appropriate measures to address them, thus contributing to the achievement of proactive, highly effective quality management.

For product quality design and the establishment of manufacturing standards, in addition to fulfilling legal requirements, standard specifications such as those prescribed by JIS, and the contractual requirements of customers, we have developed an extensive database of our abundant experience and knowledge, thus giving due consideration to the prevention of issues in the use of our products by customers and providing reliable, high-quality products.

Information Sharing About Quality Complaints and Issues

Information about quality complaints and issues that have occurred at ENEOS refineries and plants is shared via databases with other refineries and plants, and company-wide measures to prevent recurrence are discussed and implemented, thus contributing to the future prevention of quality-related issues.

Inspection of Quality Management Systems

ENEOS carries out inspections of the quality management systems of its refineries and plants based on the Quality Management System. These inspection activities include internal audits conducted by each plant or refinery and audits implemented by the head office Quality Assurance Department. Inspections identify the strengths and weaknesses of each location, and the results are shared throughout the company, enabling us to strengthen the quality management systems at each site and make further improvements to the Quality Management System.

In the inspection activities conducted in fiscal 2023, we found no irregularities, including irregularities in terms of information and labeling, in product safety and quality in fiscal 2023. We will continue to strengthen our quality assurance systems by utilizing and improving upon the Quality Management System.

Quality Audits

At ENEOS, in accordance with company procedures, each department conducts self-audits, while independent departments that supervise and manage quality assurance perform quality audits. In this way, we conduct regular audits of the quality control work and activities for the products and services of each department. Through these efforts, we strive to properly maintain and manage the quality of products and services while carrying out continuous improvement.

JX Advanced Metals has developed an internal quality audit program based on guidelines for conducting internal quality audits and in accordance with management needs and risks. Through this program, the Quality Control Department conducts quality control inspections and each site conducts voluntary inspections. The results of internal quality audits are analyzed and reported to the Quality Management Meeting, which is made up of top management, and are reflected in the continuous improvement of the quality management system.

Quality Control Education

ENEOS systematically conducts training for each department on matters necessary to ensure the quality of its products and services and their continuous improvement, and also provides training on laws, regulations, contracts and internal rules. It also holds training sessions for quality assurance personnel and in-house seminars with highly specialized content, such as compliance with laws and regulations related to chemical substance management, to help promote quality assurance activities.

The JX Advanced Metals Group is thoroughly disseminating its Basic Quality Policy through e-learning and other means. It also provides quality control training for all employees to raise the level of quality control. For this quality control training, JX Advanced Metals has prepared various training programs, which range from introductory courses to advanced courses according to the level of the participants, and which employees are encouraged to take systematically according to job function and year of employment. These programs have become an established part of employee training.

Initiatives at Distribution Sites

At ENEOS, as part of our quality management efforts at distribution sites, we work with freight companies to ensure that all procedures, from product loading to unloading, are carried out safely and without error.

We are working to prevent accidents through facilities improvements, by continuing with installation of equipment to prevent the mixing of products on tank trucks that transport gasoline, kerosene and diesel, as well as through operational initiatives, such as having both customers and truck drivers present during unloading.

When transporting packaged lubricant products by truck, we work to prevent transport-related issues by having both customers and truck drivers check the destination, product name, packing condition, quantity and appearance during unloading, and also encourage the practice of pointing and calling.

Initiatives at Service Stations

At ENEOS, we work with operators to improve product quality management and customer satisfaction at our service stations.

Product quality management initiatives, including regular inspections of weighing devices, underground tanks and other facilities, are implemented at our service stations. We have also developed a quality management manual to ensure proper day-to-day management to prevent mixing of water and oil products and to improve knowledge and skills in order to ensure quick and appropriate response to product quality issues should they occur.

Initiatives at the Customer Service Center

ENEOS receives valuable feedback from our customers through the ENEOS Customer Service Center. The Center accepts enquiries and complaints about ENEOS by telephone and email, and responses are coordinated with the relevant departments. The Center responds to enquiries with clear, courteous explanations and addresses complaints promptly and in good faith.

The Center shares enquiries and complaints received from customers with the relevant departments via a dedicated IT system to facilitate responses. This dedicated IT system enables the Center to understand the status of responses at any time. If a response is delayed, the system automatically prompts the relevant department to implement a response immediately.

Customer feedback received through the Center is tabulated and analyzed and a report is issued, which is shared with officers and the relevant departments, helping to prevent the recurrence of complaints. In fiscal 2023, we received a total of 23,677 enquiries from customers.

In addition, we have introduced a chatbot service on our website that uses artificial intelligence (AI) to respond to customer inquiries, thereby providing support 24 hours a day, 365 days a year, including outside the business hours of the ENEOS Customer Service Center. To ensure that we provide information that meets customer expectations, we regularly update the responses based on the inquiries received.

Advertising Activities

The Company and ENEOS comply with laws and regulations in carrying out advertising activities. In addition, for our communication activities using social media, we have established the [Social Media Policy](#) and the [Social Media Official Accounts Guidelines](#) to ensure appropriate use so as not to infringe on the rights of others, in an effort to achieve better communication with our customers.

In fiscal 2023, there were no cases of violations of advertising regulations or voluntary standards in our corporate advertising activities.

Supply Chain Management

Basic Approach

At the ENEOS Group, we work to fulfill our social responsibilities across the entire supply chain by cooperating with suppliers of raw materials, logistics companies, construction companies, sales companies and others involved in our business activities, while carrying out initiatives for compliance, environmental preservation, human rights and labor, and health and safety.

In accordance with this approach, we have established basic principles on procurement in the Group Code of Conduct and the Group Procurement Policy, based on which we are implementing a number of initiatives. Based on the Group Code of Conduct and the Group Procurement Policy, Group companies have established their own procurement guidelines for business partners in accordance with their business characteristics, and carry out their procurement activities accordingly.

ENEOS Group Code of Conduct (excerpt)

3. Applicable Scope of the Code of Conduct

In principle, this Code of Conduct is applicable to all directors, officers and employees who work at ENEOS Holdings, Inc., and its subsidiaries. We also encourage companies that are part of our value chain to comply with this Code of Conduct. These companies include, but are not limited to, suppliers of raw materials, logistics companies, construction companies, and sales companies.

ENEOS Group Procurement Policy

All executives and employees of the ENEOS Group shall comply with this policy when they engage in procuring the goods and services necessary for business operations.

We also request that our suppliers understand this policy and guidelines and cooperate with us in following them.

1. Social Responsibility

The ENEOS Group will conduct procurement activities based on the ENEOS Group Code of Conduct, Human Rights Policy, and other policies in each sector.

2. Selection of Business Partners

When selecting suppliers, the ENEOS Group will make fair and impartial judgments based on respect for human rights principles in Japan and overseas, and consideration for the environment, quality, and delivery times.

3. Mutual Trust

The ENEOS Group emphasizes doing business with suppliers on an equal footing and aims to build mutually trusting relationships.

4. Information Management

The ENEOS Group shall appropriately manage information obtained through its procurement activities.

Procurement Guidelines for Business Partners of Principal Operating Companies

> [ENEOS](#) □

> [JX Advanced Metals](#) □

Structure

For information about our structure, see [ESG Management Structure](#).

Major Initiatives

CSR Procurement

The Group works with suppliers to promote procurement in which factors such as compliance, environmental impact reduction, human rights and labor, and health and safety are taken into account.

To ensure responsible procurement, employees in charge of procurement receive training to raise their awareness of the ENEOS Group Philosophy, the ENEOS Group Code of Conduct, procurement policies and applicable laws and regulations.

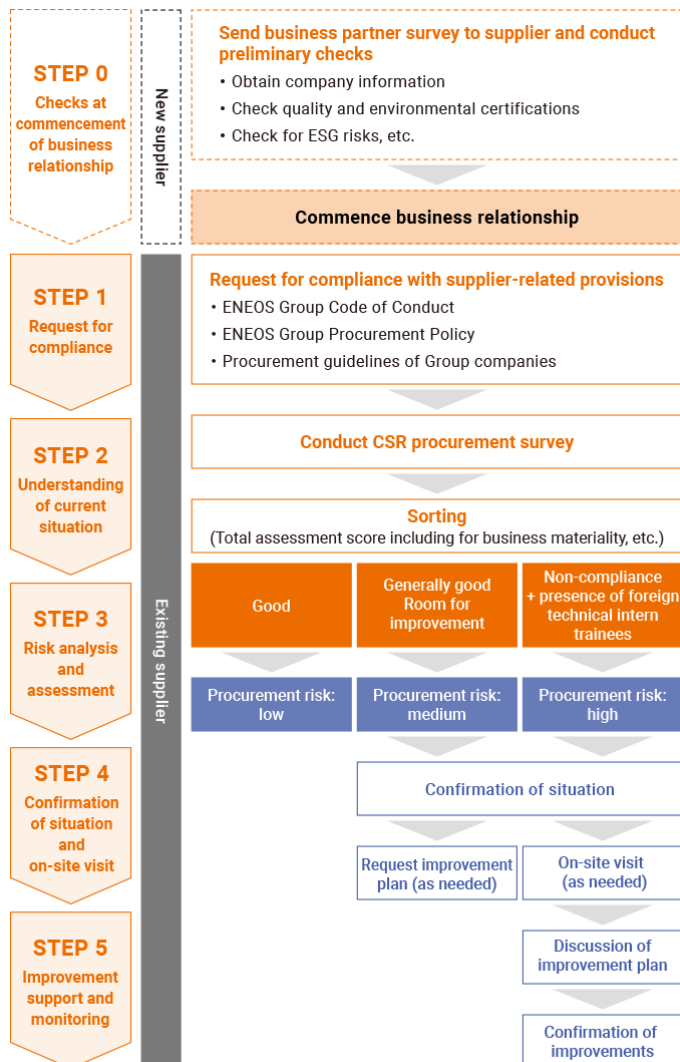
In contracts, which are the basis for purchasing transactions, and in the procurement guidelines for business partners established by each Group company, suppliers are asked to implement initiatives in 12 areas, including compliance, environment and human rights. The procurement guidelines also contain provisions for setting wages that at least meet minimum wage standards and payment of premium wages (overtime and holidays). All Group companies are required to comply with these guidelines.

In fiscal 2023, based on the results of human rights due diligence and the Corporate Human Rights Benchmark (CHRB) assessment, we continued to focus efforts on “consideration of human rights factors in supplier selection.” For details, see [Human Rights Due Diligence](#).

Specific Actions to Support Living Wages for Suppliers

The procurement guidelines contain provisions for setting wages that at least meet minimum wage standards and payment of premium wages (overtime and holidays). All Group companies are required to comply with these guidelines.

CSR Procurement Workflow



Checks at Commencement of Business Relationships with New Suppliers

When selecting a new supplier, the Group first confirms that the supplier has no relationship with anti-social forces. In addition to confirming the supplier's financial position and performance, we conduct a comprehensive risk assessment by asking the supplier to complete our business partner survey, which includes items related to quality and environmental certifications, as well as ESG risks.

CSR Procurement Survey of Suppliers

The Group conducts CSR procurement surveys of its main suppliers to identify potential risks in the supply chain.

Through this survey, we assess risks related to environmental and social issues (human rights, labor, health and safety, etc.). For suppliers whose responses indicate the presence of risks, we conduct more detailed checks of those risks. In fiscal 2022, we revised the previous CSR procurement survey. In addition, before conducting CSR procurement surveys, we held briefing sessions for the suppliers to be surveyed. As a result, the response rate from ENEOS's and JX Advanced Metals' main suppliers exceeded 80%.

In fiscal 2023, based on the results of the survey, we conducted on-site surveys for the purpose of reducing supplier risks and communicating with suppliers, and in cases where improvements were necessary, we discussed improvement plans with the relevant suppliers and requested corrective measures.

CSR Procurement Survey Process

1. Selection of main suppliers

We select survey respondents based on our criteria for main suppliers. Main suppliers are selected based on the importance of the transactions in terms of sector*, transaction value, and substitutability, as well as factors such as past CSR procurement survey results, incident history, and ESG risks. In fiscal 2022, only domestic suppliers were subject to the survey.

* Suppliers with relatively high ESG risks from which we have ordered manufacturing materials, equipment, and construction that are of high importance to our business

2. Implementation of CSR procurement survey

We hold briefings on the importance of CSR procurement and our ESG initiatives with the selected suppliers, and then ask them to respond to the CSR procurement survey. Referencing the RBA¹ VAP² audit standards, the survey consists of 67 questions covering eight categories³: compliance and fair and equitable transactions, provision of products and services, information management, supply chain, environment, human rights and labor, health and safety, and dialogue and cooperation with local communities (see the table below). Items are classified into two categories: those related to the internal management structure, such as the clear documentation of policies and the identification of responsible parties, and those related to the status of activities, mainly those that can be quantified, such as the volumes of contaminated materials discharged and the number of occupational injuries.

- 1 Responsible Business Alliance. An industry coalition for ensuring responsible conduct in global supply chains within the electronics industry established in 2004. The RBA established the RBA Code of Conduct to ensure that working environments are safe, that workers are treated with respect and dignity, and that companies are environmentally conscious and responsible in their business activities. RBA member companies are required to abide by the RBA Code of Conduct. As of June 2024, the RBA has more than 230 member companies.
- 2 The Validated Assessment Program (VAP) is an audit program in which a third-party auditor confirms compliance with the RBA Code of Conduct. VAP audits are conducted to ascertain whether compliance requirements are met in accordance with the VAP standards, which consist of labor, health and safety, environmental, ethics, and supply chain management.
- 3 JX Advanced Metals' CSR procurement survey consists of a total of 80 questions covering nine categories, including risk management.

3. Tabulation of survey responses and risk assessment

Survey responses are tabulated and scores are calculated for each question, enabling us to assess the management structure and status of activities of the supplier.

4. Improvement support and monitoring

We ask suppliers for which risks have been identified to submit improvement plans. After that, we monitor the progress of their improvements.

CSR Procurement Survey Composition (Total of 67 Questions)

Category	Item (summary)	Number of survey items	Breakdown of individual items	
Compliance and fair and equitable transactions	1) Thorough compliance 2) Fair and equitable transactions 3) Early detection and prevention of legal violations 4) Protection of intellectual property rights	12 questions	(1) Management structure	7
			(2) Status of activities	5
Provision of products and services	Appropriate provision of products and services	5 questions	(1) Management structure	3
			(2) Status of activities	2
Information management	Appropriate information management and information disclosure	4 questions	(1) Management structure	1
			(2) Status of activities	3
Supply chain	Supply chain management and supervision	1 question	(1) Management structure	1
			(2) Status of activities	-
Environment	1) Reduction of environmental impacts 2) Reduction of GHG emissions and energy consumption 3) Prevention of pollution, management of chemical substances, and reduction of waste	17 questions	(1) Management structure	6
			(2) Status of activities	11
Human rights and labor	1) Respect for human rights and protection of worker rights 2) Discrimination/harassment in hiring or at work 3) Forced labor and child labor 4) Wages 5) Working hours and leave	19 questions	(1) Management structure	5
			(2) Status of activities	14
Health and safety	Ensuring safety and health enhancement	8 questions	(1) Management structure	3
			(2) Status of activities	5
Dialogue and cooperation with local communities	Dialogue and cooperation with local communities	1 question	(1) Management structure	-
			(2) Status of activities	1

Risk Analysis and Assessment

Risk assessment involves the analysis and assessment of supplier responses to the CSR procurement survey according to four levels of criteria. The following table contains a summary of assessment criteria and ENEOS's response to the assessment findings. Suppliers receiving the lowest assessment of "non-compliant" are identified as "high-risk suppliers" and are subject to intensive follow-up. From fiscal 2022, suppliers who responded that they accept foreign technical intern trainees are also subject to follow-up interviews.

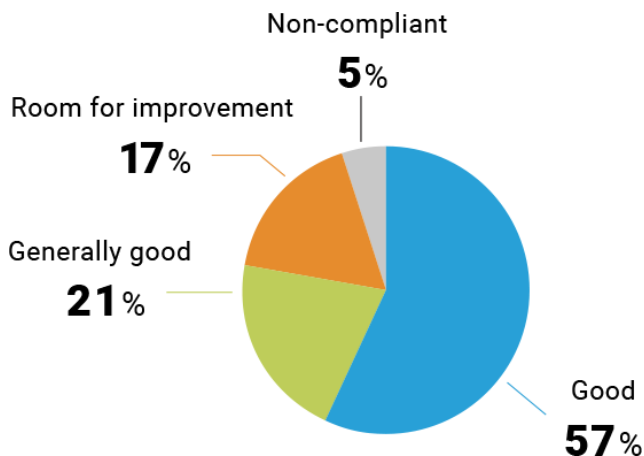
Risk Assessment Criteria and Response

Assessment	Explanation	ENEOS's response
Good	Overall, sufficient measures are being implemented.	Each supplier receives a report on the survey results. Assessment results, including areas for improvement, are communicated to suppliers and information, such as the assumed risks for each category and information on relevant international guidelines, is provided.
Generally good	Measures are being implemented for a relatively large number of items; risk is low.	
Room for improvement	Measures are not being implemented for some items; risk is moderate.	
Non-compliant	Items such as receiving adverse dispositions from government bodies, failing to confirm the facts and implement measures to prevent recurrence of violations, and the occurrence of serious occupational injuries are identified; risk is extremely high.	High-risk supplier. In addition to the response above, issue request for improvement and conduct monitoring, along with individual follow-up.

CSR Procurement Survey Results

Since fiscal 2018, we have selected a total of 1,385 suppliers to complete the CSR procurement survey, with responses received from 1,306. Around 80% of suppliers who completed the survey were assessed as "good" or "generally good." We also checked for child labor and forced labor, human rights risks of particular focus in the supply chain, but have not found any suppliers of concern in this regard.

CSR Procurement Survey Results (total of 1,306 suppliers)



Improvement Support and Monitoring

Since fiscal 2023, we have been conducting on-site surveys with the aim of reducing supplier risks and expanding communication opportunities. We visit the sites of suppliers who are judged to have high procurement risks according to the results of the CSR procurement survey or are important for our business, where we conduct on-site inspections, check documents, and conduct interviews, to investigate the management system and the status of initiatives related to CSR procurement. The items to be checked were developed with reference to the RBA VAP audit standards.

As a result of the on-site surveys, we have classified items that need to be improved into “critical non-compliance” and “other non-compliance” and requested corrective measures from suppliers (see the table below). For suppliers who are judged to have “critical non-compliance,” we discuss the direction of corrective action, which leads to support for improvement.

In fiscal 2023, we visited three companies. We plan to continue conducting these on-site surveys, not only to confirm the status of responses, but also as opportunities to communicate directly with suppliers.

Classification of Non-Compliance and Deadlines for Corrective Action

Classification of non-compliance	Deadline for submission of corrective action	Approval of corrective action	Completion of corrective action	Applicable items (examples)
Critical non-compliance	Within 1 week of discovery	Within 10 days of discovery	Within 90 days	Violations of human and labor rights (forced labor, child labor, discrimination, etc.), inhumane treatment, serious occupational injuries, environmental damage that has a significant impact on communities, etc.
Other non-compliance	Within 3 weeks of receipt of the survey report	Within 6 weeks of receipt of the survey report	Within 180 days of receipt of the survey report	Other insufficient initiatives in light of the Group’s Code of Conduct and procurement guidelines.

Initiatives for Foreign Technical Intern Trainees

According to survey results, we conduct additional interviews with suppliers who responded that they employ foreign technical intern trainees to confirm that there are no issues with the legal compliance and employment status of the supervising organization and the host company.

Training and Awareness Activities

Supplier Briefings

The Group holds supplier briefings for suppliers subject to the CSR procurement survey with the aim of promoting understanding of the CSR procurement policy, the method for conducting the survey, and key points in conducting the survey.

In fiscal 2023, we invited approximately 200 companies to the briefings, where we shared the importance of CSR procurement, the Group’s ESG management, and the purpose and content of the CSR procurement survey to deepen their understanding of CSR procurement. In addition, with regard to human rights, which has become an increasingly important social issue, we explained the ENEOS Group Human Rights Policy, which is the Group’s basic approach to human rights, and our human rights initiatives, and requested suppliers’ understanding of and compliance with the policy.

Training for Employees Involved in Procurement

In order to promote responsible procurement throughout our supply chains, we believe it is important for the Group’s employees to understand CSR procurement. In fiscal 2022, in preparation for the on-site surveys to be conducted the following fiscal year, we held two study sessions for employees involved in procurement. In the first session, the participants learned about the CSR Procurement Guidelines, the content of the survey, and the content related to the implementation of the on-site surveys. In the second session, participants deepened their understanding of the procedures for conducting on-site surveys and the matters that should be confirmed during on-site surveys, referring to the RBA’s auditing standards.

Membership in Sedex and EcoVadis

In fiscal 2019, ENEOS became a member of both Sedex and EcoVadis, ratings providers for supply chain sustainability.

Confronting the Issue of Conflict Minerals

“Conflict minerals” is the general term for minerals that are mined (illegally, in most cases) in conflict-affected regions, providing a source of funds for local armed groups. The use of these minerals may lead to increasing human rights abuses and inhumane acts. In response to the international trend for stronger information disclosure and monitoring by stakeholders, industry organizations relevant to the JX Advanced Metals Group (including the LBMA¹, LPPM², and RBA) have established monitoring programs for eliminating conflict minerals, and require each business operator to undergo investigations and external audits.

- 1 London Bullion Market Association. An industry association composed of financial institutions and others that deal in gold and silver ingot. Inclusion on this association's Good Delivery List is viewed as a guarantee of high quality and reliability.
- 2 London Platinum and Palladium Market. An industry association composed of financial institutions and others that deal in platinum and palladium ingot. Inclusion on this association's Good Delivery List is viewed as a guarantee of high quality and reliability.

Initiatives for the Copper, Gold, Silver, Platinum and Palladium Supply Chains

JX Metals Smelting, a producer of gold, silver, platinum and palladium ingot, has established and operates a management system for supply chain due diligence that calls for confirmation of the origin of raw materials, risk assessments, and confirmation of distribution routes. The operational status is reported to the LBMA and the LPPM after undergoing an external audit by a third-party organization designated by these associations.

As a result of following these procedures, JX Metals Smelting's gold, silver, platinum and palladium ingot are included on the Good Delivery Lists of the LBMA and the LPPM. Gold is also included on the RMAP Conformant Smelters list established by the RBA and GeSI¹. This indicates that we are taking appropriate steps for the elimination of conflict minerals.

For copper ingot, we have established a management system for supply chain due diligence that calls for confirmation of the origin of raw materials, risk assessments, and confirmation of distribution routes. This system began operation in fiscal 2022. The status of its operation is monitored through external audits by a third-party organization through the procedures for obtaining the Copper Mark² certification.

- 1 Global e-Sustainability Initiative. A global trade association of information and communications businesses focused on achieving digital sustainability.
- 2 A framework established in 2019 to demonstrate the responsible production of the copper industry and its contribution to the SDGs advocated by the United Nations. The Copper Mark certification is granted after independent third-party organization assessments covering compliance with environmental, human rights, community, governance, and other standards. Even after certification, performance is assessed every three years.

Initiatives for the Tantalum Supply Chain

As a smelter of tantalum, which is designated as a conflict mineral, TANI OBIS GmbH, a producer of tantalum powder in the JX Advanced Metals Group, conducts supply chain due diligence in accordance with international standards and strives to prevent complicity in human rights violations in conflict-affected and high-risk areas.

The company's supply chain management has been certified by RMI¹, an international framework for responsible mineral procurement, and it has been recognized as an RMAP² Conformant Smelter.

- 1 Responsible Minerals Initiative. Part of the Responsible Business Alliance (RBA), RMI promotes due diligence in the supply chains for conflict minerals and provides certification programs related to compliance.
- 2 Responsible Minerals Assurance Process. A certification program for responsible sourcing of minerals established by RMI.

Initiatives with Distribution Companies

ENEOS shares its environmental and safety policies and targets for each fiscal year with the contract transport providers responsible for transporting its products in an effort to increase awareness of the environment and safety.

We also promote driving in an eco-friendly manner by holding the Ecodrive & Safety Workshop in partnership with vehicle manufacturers and encouraging participation in the Ecodrive Activity Concours hosted by an external organization. In addition, we are actively engaged in safety awareness activities, such as holding a safe delivery contest to improve tank truck drivers' driving techniques and unloading work, and sharing good practices of transport companies at meetings of safety managers. In fiscal 2024, meetings of safety managers will be held in each district with the aim of stimulating case study sharing.

JX Advanced Metals continues to work on an appropriate response to the review of contracts with logistics companies, such as separating driving from non-driving ancillary work and considering and introducing fuel surcharges, to confirm its compliance with labor-related laws and regulations and laws and regulations related to the motor truck transportation business.

Through our initiatives to achieve sustainable logistics and distribution, we seek to increase the productivity of the entire supply chain, thus contributing to the fulfillment of our responsibility to provide a stable supply of energy and materials.

Support for the White Logistics Movement

ENEOS has supported the White Logistics movement since 2019 and JX Advanced Metals has supported the movement since 2020. This movement seeks to improve the productivity of truck transport, increase the efficiency of logistics and distribution, and ensure comfortable work environments for women and seniors. Both companies have submitted voluntary action declarations under this movement.

In addition, based on the revision of various laws and regulations aimed at reforming workstyles and improving logistics efficiency, we are responding to the associated “2024 logistics issues.”

In March 2018, ENEOS revised transport fees to improve the treatment of drivers and started early efforts to shorten working hours. The company revised transport fees in April 2024 and promptly responded to the recent wage increase momentum.

JX Advanced Metals investigated the waiting and handling times for cargo and is working to reduce them. The company is also taking measures to avoid placing an excessive burden on drivers, such as speeding up transportation requests to secure lead times for logistics companies.

ENEOS’s Voluntary Action Declaration and Initiatives

1. Proposals and cooperation for improving logistics and distribution
2. Separation of trunk route transport and collection/delivery transport
3. Encouraging use of expressways
4. Deliveries that avoid peak rush hour
5. Continuation of fuel surcharges
6. Suspending or stopping transport operations during extreme weather

JX Advanced Metals’ Voluntary Action Declaration and Initiatives

1. Proposals and cooperation for improving logistics and distribution
2. Separation of driving from other tasks
3. Consideration of modal shift for CO₂ reduction
4. Agreements on fuel surcharges
5. Consideration of legal compliance in selection of contract counterparties
6. Safety measures during loading and unloading
7. Suspending or stopping transport operations during extreme weather

Social Contribution

Basic Approach

The ENEOS Group believes that promoting dialogue, cooperation and collaboration in the areas where we conduct our business operations to build robust relationships of trust with local communities is an important element in the continuation of our business activities and the realization of sustainable development.

Based on this belief, we have established basic principles on social contribution in the Group Code of Conduct. We are also contributing to the economic and social development of the communities in which we operate, both in Japan and overseas, by utilizing local companies, employing local staff and carrying out a variety of other activities.

ENEOS Group Code of Conduct (excerpt)

13. Contribution to the development of civil society

- (1) We respect the environment, culture and customs in all of our business locations, and communicate, cooperate and collaborate with local communities, local governments, and civic groups, among others.
- (2) We contribute to the development of civil society through social contribution activities.

Structure

For information about our structure, see [ESG Management Structure](#).

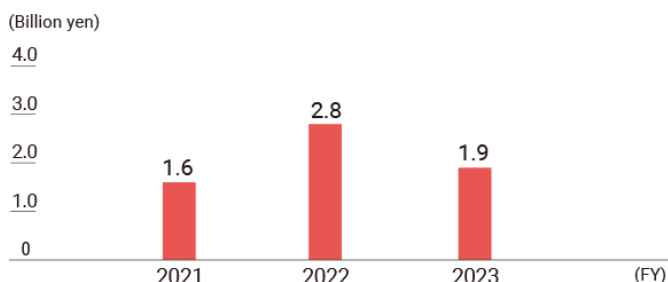
Results of Activities

Expenditures for Social Contribution Activities

In fiscal 2023, the total expenditure by the Group for the implementation of social contribution activities in Japan and overseas, plus donations of money and goods, was approximately 1.9 billion yen.

While actively engaging in dialogue with local communities, we will continue to implement social contribution initiatives, which include activities involving the entire Group and activities unique to each Group company.

Expenditures for Social Contribution Activities



Note:

Figures indicate the sum of expenditures for social contribution activities and donations of money.

Major Initiatives

Initiatives in Vietnam

The Group continues to support the development of youth in Vietnam, one of the countries where we have operations, through a variety of social contribution activities.

Support for Construction of School Buildings

To date, ENEOS Xplora has provided donations in Vietnam for the construction of schools and supported vocational training facilities to enable young people with disabilities resulting from the effects of defoliants to participate in society. The company also continues to provide these schools with teaching materials, equipment and supplies.

Support for Construction of School Buildings

2002	Muong Phang Elementary School in Dien Bien Province
2005	Vocational training facility in Quang Tri Province
2007	Thanh Tuyen Junior High School in Ha Nam Province
2008	Binh An Junior High School in Ha Tinh Province
2009	Trieu Dai Elementary School in Quang Tri Province
2011	Vocational training facility in Ha Tinh Province
2012	Nguyen Binh Khiem High School in Hai Phong City
2013	Nguyen Truong To Elementary School in Ba Ria Vung Tau Province
2014	Trieu Dai Elementary School in Quang Tri Province (additional classrooms)
2015	Xuat Tac Kindergarten in Thai Nguyen Province
2016	Hoa Mai Kindergarten in Ba Ria Vung Tau Province
2017	Nguyen Ba Ngoc Elementary School in Dak Nong Province
2018	Trieu Trung Junior High School in Quang Tri Province
2023	Vocational training facility in Quang Tri Province (repairs)

Educational Support

Since 2006, ENEOS Xplora has provided scholarships to students in need through the Ho Chi Minh Association for Education Promotion, a public institution working to improve education in Vietnam. In 2023, scholarships were awarded to 33 students.

We have also made a donation of 100,000 US dollars to PetroVietnam University, established in 2011 by PetroVietnam, the state oil company of Vietnam, as a petroleum university whose goal is to develop human resources to lead the petroleum industry. Since then, we have continued to provide scholarships and funding for operations, hosted interns from the university, and provided guidance for the preparation of graduation theses.



Graduation and new school term commencement ceremony at PetroVietnam University (fiscal 2023)

Bouquet of Children's Stories Contest by ENEOS and MOGU

ENEOS Group company ENEOS Vietnam Co., Ltd. (ENEV) sponsors the Bouquet of Children's Stories Contest by ENEOS and MOGU, a contest for children's stories that began in 2018 as an event commemorating the 45th anniversary of diplomatic relations between Japan and Vietnam. The contest, which is the first children's story creation contest in Vietnam, was held for the sixth time in fiscal 2023.

In fiscal 2023, 3,110 submissions were received across the three categories of elementary school, junior high school, and general. In the junior high school category, Mr. Dao Khuong Duy (12) won the Grand Prize for *Happy Flight*.

Proceeds from sales of *A Bouquet of Children's Stories*, a compilation of all 18 award-winning stories, are donated to fund picture book promotion activities.

In fiscal 2024, ENEV continues to support the growth of picture books in order to foster healthy minds among children in Japan and Vietnam.



Awards ceremony for the children's story contest

Initiatives in Malaysia

As a project operator in Malaysia, ENEOS Xplora implements a variety of social contribution activities, and also provides support for local cultural and sporting events.

In fiscal 2023, the company provided sponsorship for a tree-planting program at a nature reserve in Miri, Sarawak, and the annual Sarawak Regatta held in Sarawak.



Sarawak Regatta

Initiatives in Japan

New Initiative in Fiscal 2023

Environmental Conservation Activity: Midoriumu Action produced by ENEOS

In February 2024, we launched a new environmental activity called Midoriumu Action. Through both the “real” and “digital” domains, this activity aims to realize a sustainable society in which environmental conservation activities are well known and practiced daily. This will be achieved by creating opportunities for people to take an interest in the environment and to promote environmental activities beyond the boundaries of organizations and companies.

As a venue to foster awareness of environmental contributions, in the real domain we have created a place for environmental conservation activities centered on tree planting (Activity Site No. 1: Seisen University), and in the digital domain we provide a community website* where people can interact with various people interested in the environment and hold online events.



Tree planting with Midoriumu Action (Seisen University)

[Community website](#) □ (Available in Japanese only)



Community website app



App/Icon

iPhone



Android



Baseball Classes and Basketball Clinics

The Group runs baseball classes and basketball clinics throughout Japan. The sessions target elementary, junior high school, and high school students, and are coached by active players as well as retired players from the ENEOS baseball team and the ENEOS Sunflowers women's basketball team.

Baseball Classes

Following our baseball classes in fiscal 2022, in fiscal 2023, we held a total of 10 on-site baseball classes for elementary, junior high, and high school students, with 474 participants. Baseball team managers, coaches, and current players served as instructors, not only coaching the students on techniques but also conveying their passion for the game.

Basketball Clinics

Following our basketball clinics in fiscal 2022, in fiscal 2023, we held a total of 65 clinics for elementary, junior high, and high school students, reaching a cumulative total of 2,437 participants. Previous and current players served as instructors, not only teaching techniques, but also conveying the fun of basketball.



Baseball class (fiscal 2023)



Basketball clinic (fiscal 2023)

Sponsorship Agreements with the Japanese Olympic Committee

ENEOS has signed a sponsorship agreement with the Japanese Olympic Committee (from June 2022 to the end of December 2024) with the aim of creating a healthy society (realizing well-being through sports).

Through this agreement, we are providing support to 19 sports organizations in order to achieve the goals of creating sports opportunities for all people, creating a physically and mentally healthy society through the development of the next generation, and creating an environment where people can engage in sports safely and with peace of mind.

Support for Disabled Sports

Sponsorship for the Japan Wheelchair Basketball Federation

ENEOS has had a women's basketball team for many years. With the aim of promoting sports through basketball and fostering the next generation, we have sponsored the Japan Wheelchair Basketball Federation since 2006. We will continue to support the operation of various tournaments and activities that aim to raise awareness and promote the growth of wheelchair basketball and strengthen the development of the next generation of players.

Sponsorship for the Japan Dream Baseball League

ENEOS has had an amateur baseball team for many years. With the aim of contributing to the promotion of sports and the development of the next generation through baseball, we have sponsored the Japan Dream Baseball League since 2007.

One of the league's tournaments, the National Dream Baseball Tournament, held since 1993, is the largest baseball tournament for people with disabilities in Japan. In fiscal 2023, 16 teams selected from among the 38 member teams based on their regional qualifying results competed for the national championship. ENEOS employees and youth baseball team members, numbering around 190 people, attended the games to cheer for the players.



A group of supporters cheering for the players

Sponsorship Agreements with the Japanese Para Sports Association and the Japanese Paralympic Committee

ENEOS signed sponsorship agreements with the Japanese Para Sports Association and the Japanese Paralympic Committee (contract period: June 2022 to December 31, 2024) with the aim of supporting the growth of para-sports and the development of para-athletes in their activities worldwide. In connection with these sponsorship agreements, we have entered into partnership and sponsorship agreements with para-sports organizations and para-athletes as shown in the table below (contract period: March 2023 to March 2025).

Partnership/Sponsorship Agreements with Para-Sports Organizations and Para-Athletes

Group/Athlete	Contract program
Japan Para Athletics	Official partner
Japan Wheelchair Tennis Association	Official partner
Otani Momoko (wheelchair tennis)	Individual sponsor
Chokai Renshi (wheelchair basketball)	Individual sponsor
KANAGAWA VANGUARDS (wheelchair basketball team of which Chokai Renshi is a member)	Official partner

Scholarship Support for Children Living in Child Welfare Facilities

The ENEOS Group provides financial assistance so that children living in child welfare facilities can enroll in university or other institutions of higher education through the ENEOS Scholarship Program, established by the Japan National Council of Social Welfare (JNCSSW). In fiscal 2023, support was provided to 564 children, bringing the total number of recipients since the scholarship program was established in fiscal 2003 to 9,332.

Performances by Recipient of the ENEOS Children's Culture Award

ENEOS presents outreach performances featuring performers from the Kazenoko Theatre Company, recipient of the 11th ENEOS Children's Culture Award in 1976, to provide children living in the communities where we operate with opportunities to nurture a rich sensitivity and imagination. In fiscal 2023, we held a total of six performances at six locations (Sendai, Kawasaki, Sakai, Wakayama, Mizushima, and Marifu), bringing inspiration and excitement to many children.



Outreach performance by Kazenoko Theatre Company

Copper Study Workshops

JX Advanced Metals actively implements next-generation education activities for children, the future leaders of society, to learn about the importance, attractiveness and possibilities of nonferrous metals, including copper. JX Advanced Metals supports the Shiba Nature University, a program for elementary school students hosted by the Shiba Regional City Office of Minato City, and as part of this effort, we held a copper study workshop in July 2023. It was the fifth time the workshop had been held.

On the day of the workshop, a total of 40 people, comprising 19 groups of students and their guardians, took part in quizzes and watched videos about copper, and also participated in an experiment on cleaning 10-yen coins* with seasonings and an experiment on heat conduction using different types of metal rods to learn about the characteristics of copper and how it is useful in our lives. We also took the opportunity to show the students the SQUARE LAB, where we showcase our technology and products.

*10-yen coins are made from copper.



Copper study workshop

Ball Coaster Exhibit at Hitachi Civic Center

In April 2024, JX Advanced Metals donated a ball coaster with the theme of copper resource recycling to the Hitachi Civic Center Science Station in Hitachi City, Ibaraki Prefecture. The ball coaster depicts the process of mining copper ore from copper mines, producing electrolytic copper at a smelter, processing it into electronic materials used in semiconductors, smartphones and other applications, and recycling from end-of-life products.

On April 27, 2024, an event was held at the Science Station to commemorate the opening of the new exhibit. At the event, we conducted an experiment on cleaning 10-yen coins with seasonings and a quiz about copper to enable local children to experience the properties of copper up close.



Ball coaster with the theme of copper resource recycling

ENEOS Xplora International Student Scholarship

Since launching the ENEOS Xplora International Student Scholarship for international students studying in Japan in fiscal 2015, ENEOS Xplora has continued to assist international students from Papua New Guinea and Indonesia, which are involved in the company's crude oil and LNG production business.

Support for the ENEOS TonenGeneral Research/Development Encouragement & Scholarship Foundation

Through the ENEOS TonenGeneral Research/Development Encouragement & Scholarship Foundation, ENEOS presents scholarships to undergraduate and graduate students studying science and technology and provides research grants to young researchers in order to contribute to the development of industry and industrial technologies.

Support for the Tonen International Scholarship Foundation

Through the Tonen International Scholarship Foundation, ENEOS provides scholarships for international students studying at Japanese graduate schools as a way to promote friendship between Japan and other countries and contribute to greater society.

Forest Stewardship Activities in ENEOS-no-Mori and Other Places

The Group is involved in various forest stewardship activities at each of its Group companies. ENEOS carries out tree thinning, removal of undergrowth, and other forest stewardship activities at six ENEOS Forests (total area: 24.88 hectares) across Japan in partnership with local governments, the National Land Afforestation Promotion Organization and others. A total of 741 employees and their families participated in fiscal 2023.

Since 1998, ENEOS Xplora has worked to preserve the pine forest (coastal shelter forest) located on and around the site of its Nakajo Field Office in Niigata Prefecture.

In fiscal 2023, which marked the 13th anniversary of ENEOS Xplora Nakajo Forest, a total of 69 people, including directors, employees and their families, along with local residents, took part in activities for the first time in four years, after COVID-19 was downgraded to an infectious disease. JX Advanced Metals promotes reforestation activities in cooperation with local forestry associations and other groups, especially at the sites of its closed mines.

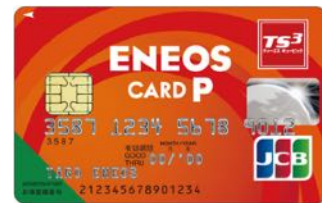


ENEOS-no-Mori forest stewardship activity

Promoting Afforestation through the ENEOS Credit Card

Since ENEOS credit cards were first issued in October 2001, ENEOS has donated part of the spending on these cards at ENEOS service stations to the National Land Afforestation Promotion Organization. These funds are being used to help support a host of environmental programs run by the organization, including human resources development for afforestation, afforestation work, the revitalization of tropical forests and the prevention of desertification.

In fiscal 2023, approximately 51 million yen were donated, bringing total donations through this initiative to about 750 million yen.



ENEOS credit card

Volunteering for Sports Classes

The ENEOS Sakai Refinery and Mizushima Refinery hold sports classes for local children as a contribution to the development of the next generation. The instructors are volunteers representing the refineries' sports teams (non-work activities), in which employees participate.

In fiscal 2023, the Sakai Refinery tennis team invited elementary school students with no tennis experience to the refinery's tennis courts, where it held the Phoenix Kids Tennis Class. The Mizushima Refinery soccer club conducted a soccer outreach school as part of physical education classes at nearby elementary schools.

Through these activities, children are able to learn about the joy of sports, and the employees who serve as instructors also feel a sense of enjoyment and fulfillment.



Phoenix Kids Tennis Class



Soccer outreach school

Joint Disaster Drills with Local Governments

At ENEOS oil refineries and depots, disaster drills are conducted in collaboration with local governments, fire departments and other relevant groups, using scenarios of a major disaster or an accident at a refinery.

In addition to carrying out practical drills to strengthen systems for cooperation in the event of a disaster, the company works to ensure that local residents can live their lives with peace of mind.

Dialogue with Local Communities

The Group has established venues for regularly interacting with local communities (local governments, schools, local community members, etc.), including tours of refineries and plants, dialogue sessions and networking sessions, in order to continue activities rooted in the community. In dialogue sessions with local communities, we explain the Group’s environmental and safety initiatives, and through regular dialogue, we strive to deepen mutual understanding. In addition, we disseminate necessary information in a timely manner through community newsletters and other means in an effort to ensure mutual understanding and build relationships of trust with local communities.

Introduction of Volunteer Activity Leave System

ENEOS has established a special leave system that allows employees to take up to three days off during the year to participate in company-approved volunteer activities (system introduced in April 2019). In fiscal 2023, a total of 17 employees took the leave for a total of 29 days off.

Support for Disaster-Affected Areas

The Group supports communities and persons affected by major disasters. In fiscal 2023, we donated 30 million yen through the Japanese Red Cross Society to support the people and areas affected by the 2024 Noto Peninsula Earthquake.

Assistance Provided in Fiscal 2023

January	Donation to support those affected by the 2024 Noto Peninsula Earthquake	30 million yen
---------	--	----------------

Governance

The ENEOS Group works to strengthen corporate governance and promote compliance in order to increase our corporate value through highly transparent management and fair business practices.

Corporate Governance Framework →

Compliance →

Corporate Governance Framework

Basic Approach

ENEOS Holdings has established the ENEOS Group Philosophy as the foundation for the Group's business activities, and works to realize the Philosophy through the establishment and appropriate execution of corporate governance to achieve sustainable growth and enhance the corporate value of the ENEOS Group over the medium to long term.






Corporate governance of the ENEOS Group is structured and executed as follows.

Basic Policy on Corporate Governance

To achieve sustainable growth and increase the corporate value of the Group over the medium to long term, the Company established the Basic Policy on Corporate Governance of ENEOS Group with the objective of establishing and operating a corporate governance framework for the conduct of transparent, fair, timely, and decisive decision-making in the Group's management.

The policy describes systematically and comprehensively the Group's basic approach to corporate governance as well as its establishment and operation, taking into consideration the Corporate Governance Code established by the Tokyo Stock Exchange.

The policy, published on the Company's website, is our commitment to all stakeholders, including shareholders of ENEOS Holdings, Group customers, business partners, employees, and local communities.

- > [Basic Policy on Corporate Governance of ENEOS Group \(PDF : 234KB\)](#) 
- > [\(Exhibit 1\) ENEOS Group Code of Conduct](#) 
- > [\(Exhibit 2\) Medium-Term Management Plan](#) 
- > [\(Exhibit 3\) Basic Policy on Internal Control System \(PDF : 149KB\)](#) 
- > [\(Exhibit 4\) Standards for Consideration of Independence of Independent Directors \(PDF : 92KB\)](#) 
- > [\(Exhibit 5\) Disclosure Policy](#) 
- > [\(Exhibit 6\) Shareholder Return Policy and Capital Policy \(PDF : 145KB\)](#) 
- > [Corporate Governance Report \(Available in Japanese only\) \(updated January 6, 2025\) \(PDF : 231KB\)](#) 

Basic Matters on the Establishment and Operation of Corporate Governance

1. Business management as the holding company

The Company takes charge of formulating the ENEOS Group Philosophy, ENEOS Group Code of Conduct, basic management policies such as medium-to long-term management plans and budgets (hereinafter referred to as "Basic Management Policies"), allocating management resources and overseeing the management of each subsidiary from the perspective of optimizing the value of ENEOS Group as a whole.

2. Management structure of the Company and the Principal Operating Companies

ENEOS Group is a group of companies whose principal business consists of six business fields: energy business, oil and natural gas exploration and production business, metals business, high performance materials business, electricity and city gas business, and renewable energy business. In order to strongly advance portfolio management under the Company's strong leadership, ENEOS Group has established a structure, under which the Company serves as a holding company and six operating Companies which promote each principal business are placed thereunder.

The Principal Operating Companies: ENEOS Corporation, ENEOS Xplora Inc., JX Advanced Metals Corporation, ENEOS Materials Corporation, ENEOS Power Corporation, and ENEOS Renewable Energy Corporation shall respectively establish business execution structure where their autonomy, agility, and independence are further enhanced depending on their business characteristics under the Basic Management Policies specified by the Company.

3. Organization

The Company is a company with audit and supervisory committee.

4. Board of Directors

The Board of Directors of the Company consists of more than one inside directors and outside directors, which is chaired by an outside director. With such composition, the Board of Directors of the Company shall manage the Company in accordance with the following policies.

- (1) Focus on deliberation and decision of the Basic Management Policies and oversight of the execution of operations.
- (2) As an effort to improve agility of the execution of operations, delegate part of decision-making on the execution of material operations to the CEO of the Company through a director.
- (3) With respect to the material matters such as appraisal of return on investment, risks, progress of execution of material operations of the Company and the Principal Operating Companies, the Board of Directors shall receive reports from persons such as the CEO of the Company and the President of each Principal Operating Company, verify its consistency with the Basic Management Policies and oversee such matters.

5. Audit and Supervisory Committee

- (1) The Audit and Supervisory Committee shall carry out audits with a high degree of effectiveness and objectivity conduct audits with a Chairman of an outside director in an organized and systematic fashion through appropriate collaboration between the full-time audit and supervisory committee members, who are given the strong power to gather information, and the audit and supervisory committee members who are outside directors, who have a high degree of independence, in addition to a wealth of knowledge and experience.
- (2) The Audit and Supervisory Committee shall oversee the execution of operations through each audit and supervisory committee member exercising the voting right that he or she has as a director at the Board of Directors meetings as well as exercising the right to state his or her opinion on personnel affairs and compensation of directors who are not audit and supervisory committee members.

6. Outside directors

To take advantage of a wealth of knowledge and experience of outside directors and to ensure transparency and objectivity in decision-making, the Company shall take the following measures:

- (1) in determining the Basic Management Policies at the Board of Directors of the Company, request outside directors to be involved, from the stage of consideration and to fully discuss it from multiple points of view; and in decision-making on and overseeing execution of material operations, fully verify its consistency with the Basic Management Policies, taking opinions of outside directors into account; and
- (2) in determining personnel affairs and remuneration of directors at the Board of Directors of the Company, ensure transparency of the decision-making process by consulting with the Nomination Advisory Committee and the Compensation Advisory Committee, a majority of whose members are outside directors, and which are chaired by an outside director.

7. Executive officers, Group Chief Officers, and the Executive Council

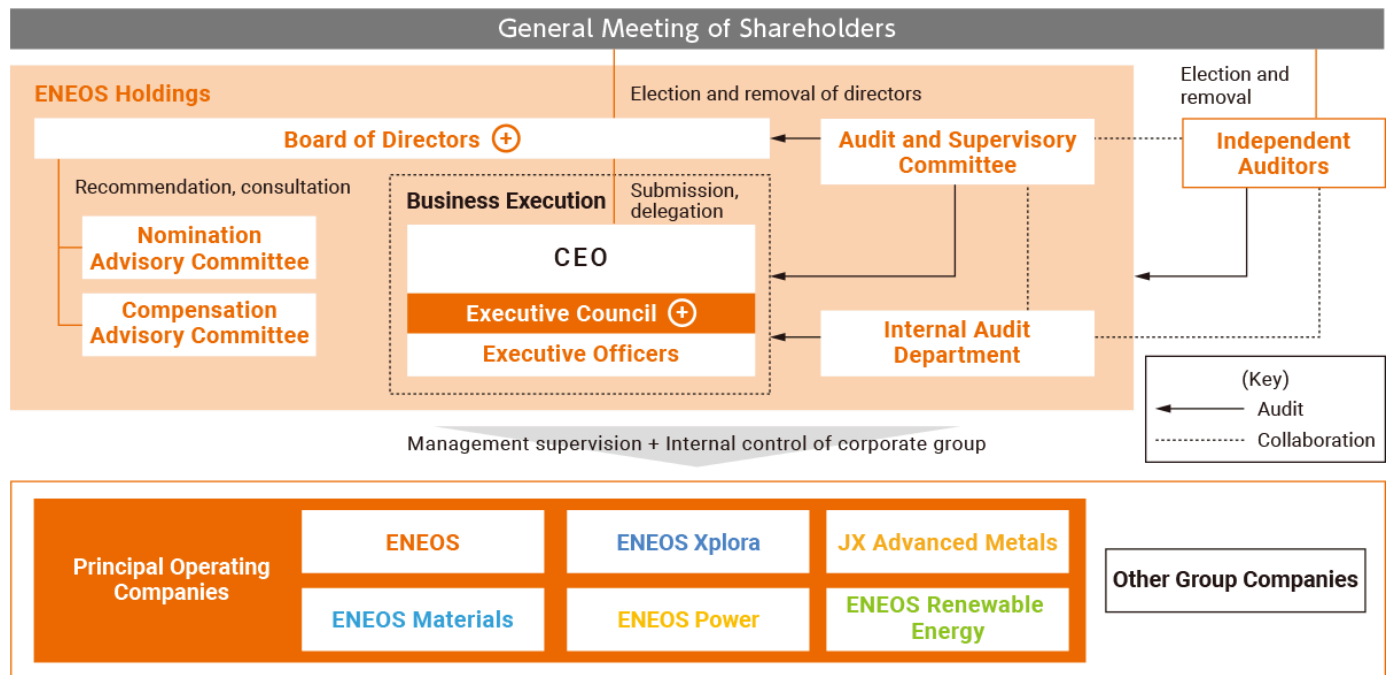
- (1) The Company shall appoint executive officers who execute operations agilely pursuant to a decision of the Board of Directors.
- (2) In order to enhance group governance, the Company shall appoint Group Chief Officers as the roles by which strengthening collaboration among the Principal Operating Companies, optimizing resource allocation, etc.
- (3) For the CEO to execute operations, the Company shall establish the Executive Council as a consultative body for matters to be decided by the CEO, which shall consist of the CEO, the Executive Vice Presidents, the Senior Vice Presidents who have been appointed by the CEO, and the President of each Principal Operating Company, and have the Executive Council make decisions through careful deliberations.
- (4) A full-time audit and supervisory committee members shall attend the Executive Council, grasp a process of important decision-making, and the status of execution of operations, and share such process and status with other audit and supervisory committee members.

8. Corporate governance framework of Principal Operating Companies

- (1) Each Principal Operating Company is a company with audit and supervisory committee or company with board of corporate auditors (as defined in the Companies Act of Japan). Each Principal Operating Company has a Board of Directors to enable directors to oversee each other's performance of duties. Each Principal Operating Company shall fully analyze the risk of the business and verify the conformity of the execution of operations performance to the Basic Management Policies. The Company shall dispatch, if necessary, its full-time audit and supervisory committee member to the Principal Operating Companies as a part-time director who is an audit and supervisory committee member or a part-time corporate auditor, and cause such director or corporate auditor to audit the execution of the duties by the directors of the Principal Operating Company.
- (2) Any decision-making regarding the matters related to the execution of operations of a Principal Operating Company (including matters on the execution of material operations of a subsidiary of such Principal Operating Company) shall be made by such Principal Operating Company.
- (3) Each Principal Operating Company shall report to the Company the status and other matters established by the Company regarding the execution of material operations.
- (4) In order to appropriately monitor the Board of Directors of the Principal Operating Companies or audit the execution of the duties by the directors of the Principal Operating Companies, the Company shall dispatch, if necessary, its Executive Vice Presidents or Senior Vice Presidents to the Principal Operating Companies as part-time directors who are not audit and supervisory committee members or part-time directors, or part-time director who are audit and supervisory committee members or part-time corporate auditors of the Principal Operating Companies.

Structure

Corporate Governance Framework



Corporate Governance Framework at a Glance (As of June 26, 2024)

Item	Details
Organization format	Company with an audit and supervisory committee
Number of directors who are not Audit and Supervisory Committee members*	6 (2 inside, 4 outside)
Number of directors who are Audit and Supervisory Committee members*	4 (1 inside, 3 outside)
Total number of directors	10 (3 inside, 7 outside; 4 female directors)
Percentage of outside (independent) directors	70%
Percentage of female directors	40%
Chairman of the Board of Directors	Outside director
Term of directors who are not Audit and Supervisory Committee members	1 year
Term of directors who are Audit and Supervisory Committee members	2 years
Adoption of executive officer system	Yes
Decision-making body for the appointment and dismissal of directors	General Meeting of Shareholders
Decision-making body for the upper limit of director remuneration	General Meeting of Shareholders

Item	Details
Institution assisting the CEO's decision-making	Executive Council
Voluntary advisory committees for the Board of Directors	Nomination Advisory Committee and Compensation Advisory Committee (1 inside director, 4 outside directors; chairman: outside director)
Term of Independent Auditors	1 year

At the most recent General Meeting of Shareholders (14th Ordinary General Meeting of Shareholders), two directors who are Audit and Supervisory Committee members received 10% or more opposing votes; however, the Company considers there is no issue regarding two directors' independence and they are expected to provide the Company with guidance and advice on its management, and the Company disclosed such opinion.

Overview of the Nomination Advisory Committee and Compensation Advisory Committee and Fiscal 2023 Results

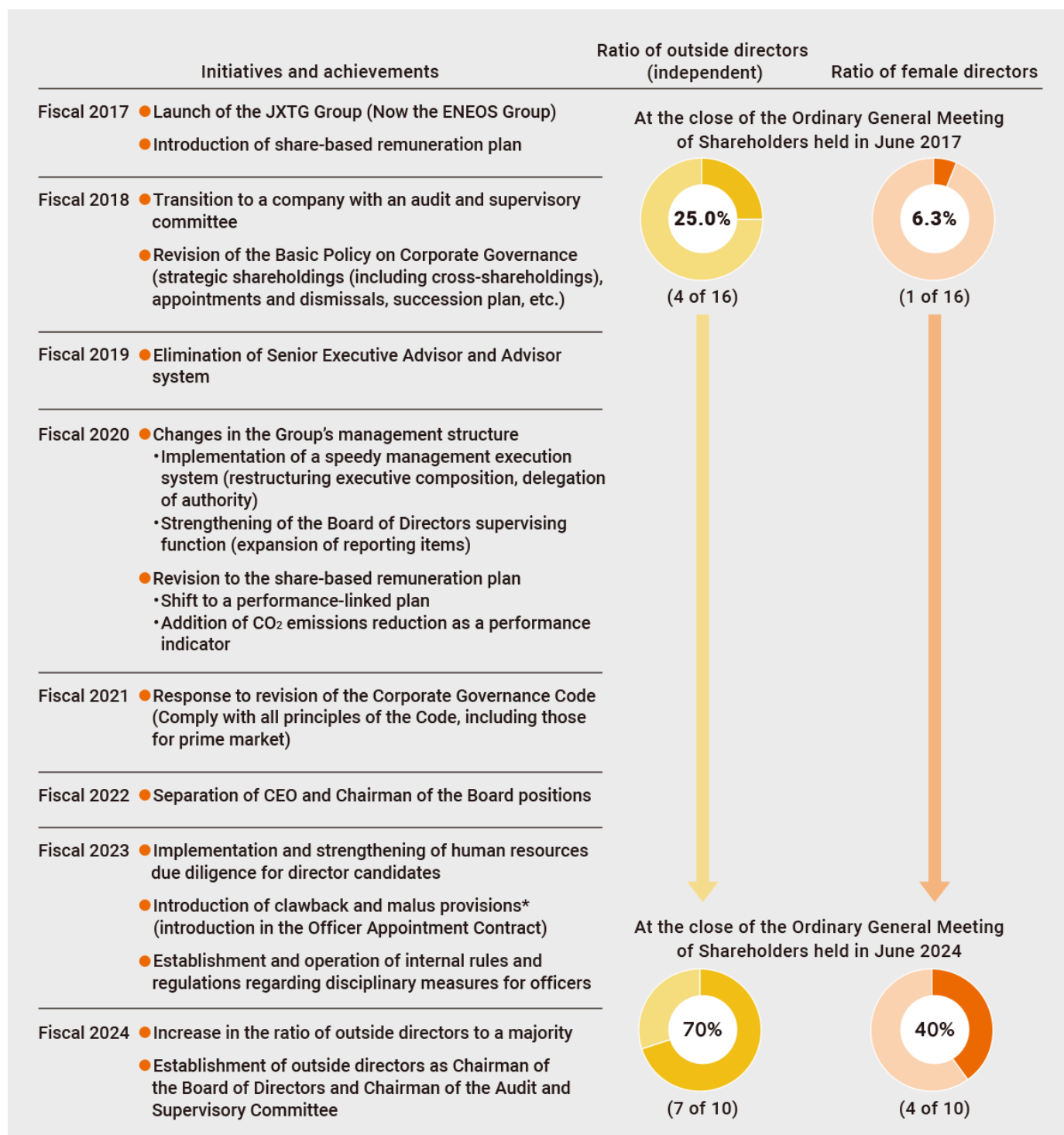
	Nomination Advisory Committee	Compensation Advisory Committee
Overview	To ensure the transparency of the process for determining the director candidates of the Company, the Nomination Advisory Committee, the majority of whose members are independent outside directors, has been established to provide advice to the Board of Directors about personnel matters involving the Company's directors (including appointment and dismissal). The Nomination Advisory Committee is composed of five directors, four of whom are outside directors ^{1,2} , and one of the outside directors on the committee acts as chairman. The Company's Board of Directors receives advice from the Nomination Advisory Committee regarding succession planning for the Company's chairman of the Board and CEO and for the CEOs/presidents of the principal operating companies.	To ensure the transparency and objectivity of the process for determining the remuneration and other benefits for directors and executive officers, the Compensation Advisory Committee, the majority of whose members are independent outside directors, has been established to provide advice to the Board of Directors. The Compensation Advisory Committee is composed of five directors, four of whom are outside directors ^{1,2} , and one of the outside directors on the committee acts as chairman. The Board of Directors requests the Compensation Advisory Committee to advise on policies for determining remuneration and other benefits for directors and executive officers, as well as the executive remuneration plan and remuneration amount.
Chairman	Outside director (Kudo Yasumi) ³	Outside director (Kudo Yasumi) ³
Purpose	Ensure the transparency of the process for determining director candidates	Ensure the transparency and objectivity of the process for determining the remuneration and other benefits for directors and executive officers
Results for fiscal 2023	The committee met seven times and deliberated on matters including the officer structure from fiscal 2024 onward, the process for appointing directors, and the succession plan.	The committee met six times and deliberated on matters including performance-linked remuneration indicators during the period of the third Medium-Term Management Plan and the executive remuneration system after the revision of the Group management structure.

1 Composition of the Nomination Advisory Committee and the Compensation Advisory Committee as of June 26, 2024

2 To ensure constructive discussion between outside directors, who supervise management from an independent and objective perspective, and inside directors, who have the greatest familiarity with the status of management, etc. in the Group, the Nomination Advisory Committee and the Compensation Advisory Committee are each comprised of outside directors who are not Audit and Supervisory Committee members and the CEO.

3 For director profiles, see [Executives](#) □ .

Strengthening Corporate Governance



*Clawback provision: A clause requiring the return of all or part of officer remuneration after payment in the event of a material compliance violation.
 Malus provision: A clause preventing the vesting of all or part of officer remuneration before payment in the event of a material compliance violation.

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress
Appropriate structuring and operation of corporate governance	Evaluation of the effectiveness of the Board of Directors	a. Implement evaluations of the effectiveness of the Board of Directors b. Conduct compliance training for officers	😊 a. Implemented evaluation of the effectiveness of the Board of Directors b. Conducted compliance training for officers with an outside attorney as a speaker

Major Initiatives

Evaluation of the Effectiveness of the Board of Directors

Since fiscal 2016, the Company's Board of Directors has conducted annual evaluations of its effectiveness, which serve as a basis for improvement. In November 2023, the Board of Directors surveyed all directors, including outside directors, to evaluate the Board's effectiveness in fiscal 2023. In addition, in fiscal 2022 we engaged a third-party organization to update the survey questions to ensure the objectivity and transparency of the evaluations. The same survey questions were used in fiscal 2023 to identify any ongoing issues and the status of improvements. The results of the evaluation and analysis were reported at the Board of Directors meeting on March 27, 2024.

Evaluation Items

1. Composition and operation of the Board of Directors
2. Role of the Board of Directors
 - Presentation of major directions, such as corporate strategies
 - Establishment of a supportive environment for appropriate risk-taking by management
 - Highly effective supervision from an independent standpoint
3. Dialogue with shareholders

All of the survey questions received mostly positive responses, and the average scores for all items and for individual major items improved for both inside and outside officers compared to fiscal 2022, indicating that the Board of Directors generally continues to be effective.

The results also indicated areas with relatively low evaluations and areas where further improvement is needed. We are accordingly working toward implementation of the following.

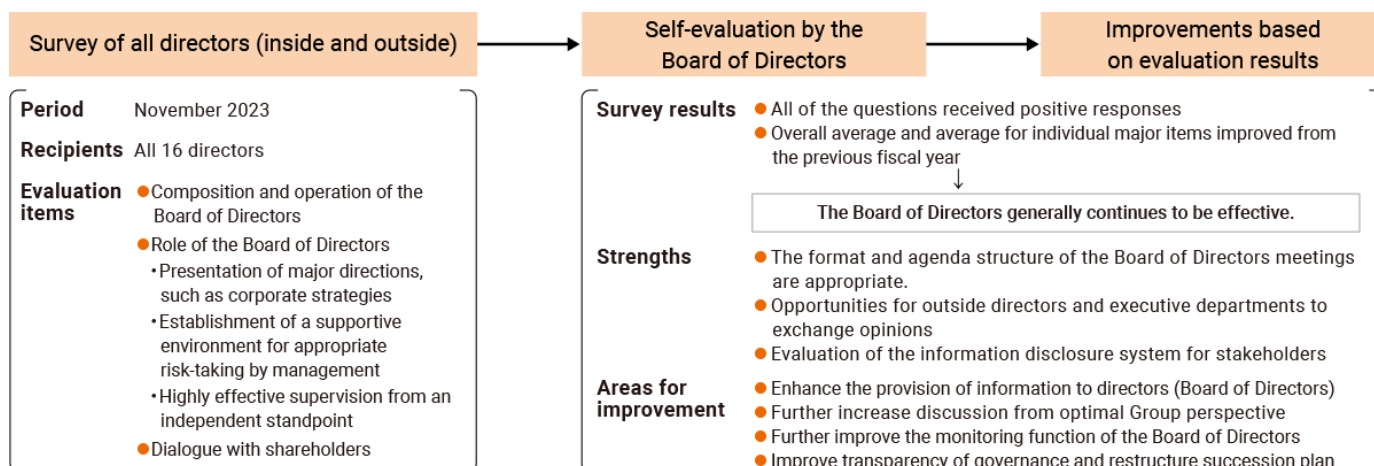
1. Enhancing the provision of information to outside directors by sharing the content of Executive Council discussions and through worksite and business site inspections tours, and other activities
2. Broadening discussions on the Group's overall management strategies and capital policies under the new Group management structure, and further strengthening the leadership role of the chairman of the Board of Directors to stimulate more active discussion from the optimal perspective for the entire Group
3. Further improving the monitoring function of the Board of Directors by providing outside directors with information on risks and investments from a wide range of perspectives
4. Continue improving the transparency of governance (ratio of outside directors on the Board of Directors over 50%, outside director serving as chairman of the Board of Directors) and restructuring the succession plan for the enhancement of the ENEOS Group

The following initiatives were implemented to "further strengthen the oversight function" and "raise the quality of discussions and explanations by the Board of Directors," which were identified as issues to address in the fiscal 2022 Board of Directors effectiveness evaluation.

1. Introduced human resources due diligence and rules and regulations regarding disciplinary measures for directors and director candidates, and ensured objectivity and transparency in the officer appointment and dismissal process. Additionally, in light of the misconduct of the former president in December 2023, we have revised the director selection process, and we are working to enhance the normative awareness of officers and strengthen the behavioral management and monitoring of directors.
2. To stimulate discussions among the Board of Directors, in principle, outside directors and executives meet before and after Board of Directors meetings to exchange opinions on specific business policies and other matters.
3. Discussed the Group's overall management strategy from fiscal 2024 onward under the new Group management structure.

In addition, the Company's Audit and Supervisory Committee conducted an evaluation of the effectiveness of the Company's audit activities in fiscal 2023. Issues are communicated among the Audit and Supervisory Committee members and will be reflected in the audit plan for fiscal 2024, as we seek to construct an effective auditing system.

Process for Evaluation of Effectiveness



Policy for Appointing Director Candidates

The Board of Directors is composed of an appropriate number of members to enable free and constructive discussion and exchange of opinions, with members appointed in consideration of Board diversity and the knowledge, experience, and abilities of each member. The Company appoints independent outside directors* to a majority of director positions. As of June 26, 2024, the percentage of outside independent officers was 70%. To ensure objectivity and fairness in the selection of director candidates, excluding outside director candidates, a third-party entity evaluates the candidates from various perspectives and appropriate considerations (human resources due diligence and director candidate interviews). Prior to appointment, the Nomination Advisory Committee deliberates the evaluation results and reports to the Board of Directors.

As for directors who are not Audit and Supervisory Committee members, the Company appoints persons with high standards of business ethics, superior strategic thinking and judgment capabilities, and flexible attitudes toward change, as well as the ability to supervise decision-making and management from the viewpoint of what is best for the Group as a whole. Two or more of the directors are independent outside directors.

As for directors who are Audit and Supervisory Committee members, the Company appoints persons with high standards of business ethics, a certain level of specialist knowledge in legal affairs, finance and accounting, etc., as well as the ability to appropriately audit the execution of duties by directors and the ability to appropriately supervise the execution of business. The majority of these directors are independent outside directors.

*Outside directors who have satisfied the Company's "Standards for Consideration of Independence of Independent Officers"

Support System for Outside Directors

Each of the four outside directors who are not Audit and Supervisory Committee members and the three outside directors who are Audit and Supervisory Committee members meet the independence standards based on the rules of the Tokyo and Nagoya stock exchanges, on which the Company is listed. The Company sends materials regarding the agenda of meetings of the Board of Directors to the outside directors, in principle, at least three days prior to meetings, and also provides explanations to the outside directors about important agenda items before the meetings. To enhance the auditing function by all Audit and Supervisory Committee members, including outside directors, the Company has established the Office of the Audit and Supervisory Committee, which is clearly independent from the chain of command for divisions responsible for business execution (including personnel evaluations). Full-time staff members have been assigned to the office to assist with the duties of the Audit and Supervisory Committee members. In addition, an organization with full-time staff members has also been established within the Legal and Corporate Affairs Department to assist outside directors who are not Audit and Supervisory Committee members with business execution.

Training for Directors and Corporate Auditors of Principal Operating Companies

The directors of the Company and principal operating companies and the corporate auditors of principal operating companies have the duty of working toward the realization of the Group Philosophy, the sustainable growth of the Group, and the achievement of increased corporate value over the medium to long term. To that end, to enhance necessary knowledge and skills, the Company and its principal operating companies provide opportunities for directors and corporate auditors to receive training related to the Companies Act, internal control systems, accounting and taxes, business strategies, and organizations. In addition, the Company pays expenses related to self-study initiatives. When outside directors are appointed, the Company provides explanations of basic matters regarding the Group's businesses and, after their appointment, offers business presentations and worksite inspection tours to deepen their understanding.

Results for Fiscal 2023 and Forecast for Fiscal 2024

Topic	Intended for	Fiscal year	Content of training
Respect for human rights, compliance	Inside directors	2023 2024	Group Philosophy and Code of Conduct, prevention of human rights violations and harassment, etc.
Corporate governance	Newly appointed	2023 2024	ENEOS Group corporate governance
Internal control	Newly appointed	2023 2024	ENEOS Group internal control systems
Finance and investor relations	Newly appointed	2023 2024	Current status and issues regarding ENEOS Holdings' financial affairs, opinions of institutional investors, etc.
ENEOS Holdings and principal operating companies	Newly appointed directors (outside directors)	2023 2024	Basic knowledge about ENEOS Holdings and its principal operating companies
Worksite inspection tours	Outside directors	2023	(ENEOS) Kashima Refinery, (ENEOS Xplora) Nakajo Field Office, (ENEOS Materials) Kashima Plant
		2024 (Planned)	(ENEOS) Central Technical Research Laboratory, etc., (ENEOS Power) Goi Thermal Power Plant

Determination of Director Remuneration

Directors Who Are Not Audit and Supervisory Committee Members (Excluding Outside Directors)

The policy on remuneration for individual directors who are not Audit and Supervisory Committee members (excluding outside directors) is determined as follows.

1. Remuneration consists of the monthly remuneration, bonus, and share-based remuneration.
2. Remuneration is determined by whether the person belongs to the Company or a principal operating company, whether the person is full-time or part-time, whether the person is a director or executive officer, etc.
3. Bonuses are linked to performance within a fiscal year, and are paid after the given fiscal year.
4. Share-based remuneration is linked to the achievement of the Medium-Term Management Plan, etc., and is paid after a certain duration from the end of the fiscal year in which the duties have been executed and after the given medium-term management plan has been completed.
5. The consolidated business results, remuneration levels of executives in other companies, composition ratio, etc. are taken into consideration when determining the remuneration level, composition ratio, performance indicators, etc.

Remuneration for directors who are not Audit and Supervisory Committee members (excluding outside directors) is designed to be around 40% of the total for monthly remuneration, around 30% of the total for bonuses, and around 30% of the total for share-based remuneration when the performance targets, etc. are achieved. In addition, the Company may request that remuneration and other compensation be returned and/or forfeited in accordance with the provisions of the Officer Appointment Contract and rules and regulations regarding disciplinary measures for officers. The maximum amount of the remuneration and compensation subject to return and/or forfeit is the total amount for four fiscal years.

Outside Directors Who Are Not Audit and Supervisory Committee Members

The policy on remuneration for individual outside directors who are not Audit and Supervisory Committee members is to provide a monthly remuneration only in consideration of their roles of providing guidance and advice to Company management and supervising management from an independent and objective perspective.

The policy on remuneration for individual directors who are not Audit and Supervisory Committee members of the Company is determined by resolution of the Board of Directors after deliberation and recommendation by the Compensation Advisory Committee, which consists of a majority of outside directors and is chaired by an outside director. The Board of Directors allows the Audit and Supervisory Committee to select one member to attend meetings of the Compensation Advisory Committee so that the Audit and Supervisory Committee may adequately exercise the right to state opinions related to the remuneration of directors who are not Audit and Supervisory Committee members at General Meetings of Shareholders.

Directors Who Are Audit and Supervisory Committee Members (Including Outside Directors)

Remuneration for directors who are Audit and Supervisory Committee members consists of a monthly remuneration only in consideration of the independence of their roles based on discussions among directors who are Audit and Supervisory Committee members. The parameters of the remuneration are shown in the following table.

Upper Limit of Remunerations for Directors

Category	Type	Upper limit of remuneration	Resolution of the General Meeting of Shareholders (GMS)	Number of receivers (Persons)
Directors who are not Audit and Supervisory Committee members	Monthly remuneration and bonuses	No more than 1,100 million yen per one (1) fiscal year (of which no more than 200 million yen is allocated to outside directors who are not Audit and Supervisory Committee members)	The 8th ordinary GMS (June 27, 2018)	13
	Share-based remuneration	In every three (3) fiscal years, <ul style="list-style-type: none"> the upper limit the Company put in on reserve for trust: 1,500 million yen the upper limit of the number of shares given to eligible persons: 6 million shares (6 million points) * (Including those to be awarded to executive officers who are not directors)	The 10th ordinary GMS (June 25, 2020)	6
Directors who are Audit and Supervisory Committee members	Monthly remuneration	No more than 200 million yen per one (1) fiscal year	The 8th ordinary GMS (June 27, 2018)	5

Note:

Those eligible for share remuneration include executive officers but do not include outside directors and overseas residents.

Remunerations for Directors (Fiscal 2023)

Category	Total amount (Million yen)	Details of remuneration (Million yen)	Number of receivers (Persons)	Details of remuneration (Million yen)	Number of receivers (Persons)	Details of remuneration (Million yen)	Number of receivers (Persons)
		Monthly remuneration		Bonuses		Share-based remuneration	
Directors who are not Audit and Supervisory Committee members (Outside directors)	688 (54)	396 (54)	12 (4)	187 (-)	4 (-)	106 (-)	5 (-)
Directors who are Audit and Supervisory Committee members (Outside directors)	119 (50)	119 (50)	7 (4)	- (-)	- (-)	- (-)	- (-)
Total (Outside directors)	807 (104)	515 (104)	19 (8)	187 (-)	4 (-)	106 (-)	5 (-)

Notes:

1. The information in the table includes the amount of remunerations for one (1) outside director who was not an Audit and Supervisory Committee member, two (2) directors who were Audit and Supervisory Committee members (including one [1] outside director who was an Audit and Supervisory Committee member) who retired upon the conclusion of the 13th Ordinary General Meeting of Shareholders held on June 28, 2023, and two (2) directors who were not Audit and Supervisory Committee members who retired on December 19, 2023.
2. Includes the amount of bonuses received for fiscal 2023 after the conclusion of the 14th Ordinary General Meeting of Shareholders.
3. Monthly remuneration, bonus, and share-based remuneration subject to confiscations, reductions, or voluntary returns, announced on June 9, 2023, and December 19, 2023, are not included in the above table. However, because monthly remuneration had already been paid for October through December 2023 (total of 18 million yen) to one Director who was not an Audit and Supervisory Committee member and who retired on December 19, 2023, the amount is included in the above table, but the Company has received a full refund of the amount.
4. Bonuses and share-based remuneration are applicable to performance-linked remunerations. In addition, share-based remuneration is applicable to non-monetary remunerations.
5. The share-based remuneration amounts indicated in the table are the average price per share of the Company purchased through the trust that the Company established multiplied by the number of standard points awarded to the Director in the fiscal year and the performance-linked coefficient. Whereas the performance-linked coefficient used to calculate share-based remuneration for April 2023 to June 2023 is 68%, the performance-linked coefficient used to calculate share-based remuneration for July 2023 to March 2024 is temporarily assumed to be 100% because it will be determined after the end of fiscal 2025.

Matters Concerning Bonuses

Bonuses are linked to performance within a single fiscal year and can fluctuate between 0% and 200% (target: 100%) depending on the level of achievement of the performance targets. Bonuses are determined by multiplying the monthly remuneration by the base number of months (8 months) and the percentage of target achieved.

The indicators that affect shareholder returns and the indicators that reflect actual performance should be used when calculating the percentage of target achieved. Therefore, “profit attributable to owners of parent” and “profit attributable to owners of parent after adjustment” of the Company’s consolidated results, and “operating profit” and “operating profit after adjustment” of the Energy business results are used as performance indicators with a weight of 25% each.

The fiscal 2023 performance target for the bonus calculation process was set based on the fiscal 2023 results forecast (disclosed in May 2023), and the resulting percentage of target achieved was 152%. The results of each performance indicator to calculate the percentage of target achieved are as follows.

Results for Each Performance Indicator for Bonuses

Performance indicators	Weight	Results in FY2023
Profit attributable to owners of parent	25%	288,100 million yen
Profit attributable to owners of parent after adjustment	25%	279,300 million yen
Operating profit of the Energy business	25%	253,000 million yen
Operating profit of the Energy business after adjustment	25%	215,600 million yen

Note:

“Profit attributable to owners of parent after adjustment” and “operating profit of the Energy business after adjustment” are calculated by adding or subtracting temporary gain/loss, such as gain/loss on valuation of inventory, gain/loss on sale of fixed assets and shares, and loss by disasters, to or from profit attributable to owners of parent and operating profit of the Energy business.

Matters Concerning Share-based Remuneration

Share-based remuneration is linked to performance over three successive fiscal years and can fluctuate between 0% and 200% (target: 100%) depending on the level of achievement of the performance targets. The share delivery points (one share per point) are determined by multiplying the standard points, awarded according to the eligible person’s role, by the performance-linked coefficient. Eligible persons shall receive payment of money and the Company’s shares through the trust established by the Company, according to the share delivery points, after the elapse of three years from the award of standard points for each year.

When calculating the performance-linked coefficient, the Company uses the following performance indicators and evaluation weightings for the following reasons: to further strengthen the link between medium- and long-term management strategies and the remuneration system for eligible persons, to cultivate the eligible persons’ incentive to contribute to the enhancement of corporate value and their awareness of shareholder-oriented management, and to promote initiatives, such as preserving the environment, for building a sustainable society.

Each of the performance targets is set based on the third Medium-Term Management Plan, and the results and percentage of target achieved will be determined after the end of fiscal 2025.

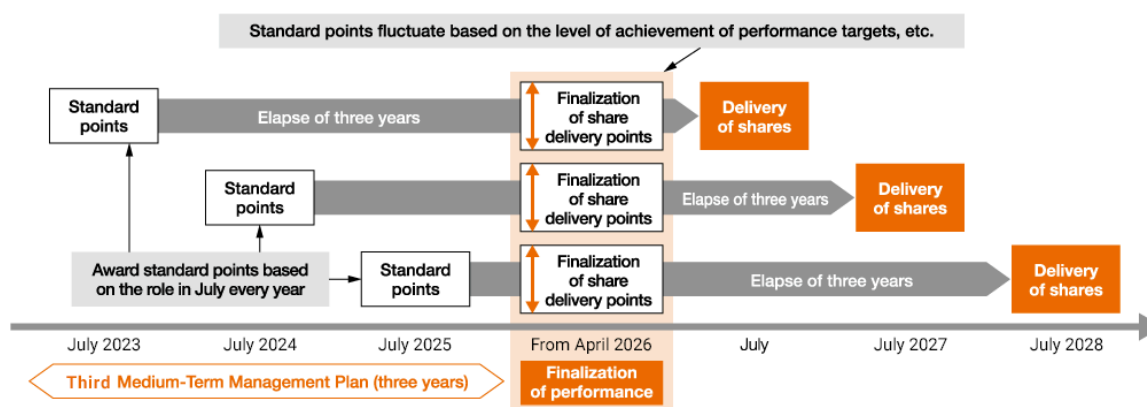
Results for Each Performance Indicator for Share-based Remuneration

Profit for the year excluding inventory valuation	Free cash flow	Reduction of GHG emissions	Net D/E ratio	ROE	ROIC
20%	20%	10%	10%	20%	20%

Notes:

1. Profit for the year excluding inventory valuation, free cash flow, and reduction of GHG emissions reflect the consolidated results and the results of the Energy business, given a weight of 50% each.
2. Of the amount of profit for the year excluding inventory valuation, the percentage achieved for results of the Energy business is calculated after excluding incubation projects (projects that are not suitable for evaluation as a business, such as those currently in the demonstration phase) and finance income/expense, etc.
3. The percentages achieved for profit for the year excluding inventory valuation, and free cash flow are calculated using the accumulated results from fiscal 2023 to fiscal 2025.
4. The percentage achieved for reduction of GHG emissions is calculated using the results of fiscal 2025 (compared with fiscal 2013).
5. The percentage achieved for net D/E ratio is calculated using the results as of March 31, 2026.
6. The percentages achieved for ROE and ROIC are calculated using the results of fiscal 2025.
7. The percentage achieved for ROIC is calculated after excluding incubation projects.

Flowchart of Share Remuneration with Regard to the Period of the Third Medium-Term Management Plan



Selection of Independent Auditor

The selection, dismissal, or non-reappointment of the Independent Auditor is resolved every fiscal year in accordance with the policy established by the Audit and Supervisory Committee. Prior to the resolution, the Independent Auditor is evaluated once a year in accordance with the standards established by the Audit and Supervisory Committee.

The Audit and Supervisory Committee has resolved to reappoint the current Independent Auditor as it has been confirmed that there are no issues pertaining to the evaluation items, that the Independent Auditor has sufficient systems and ability to handle the Company's audit work, and that there are no grounds for dismissal or non-reappointment.

The rotation of executive Representative Partners of the current Independent Auditor has been implemented appropriately, and they have not been involved in the Company's audit operations for more than seven consecutive fiscal years. The head Representative Partner has not been involved in the Company's audit operations for more than five consecutive fiscal years.

Governance of Listed Subsidiaries

The Company maintains ENEOS Corporation, ENEOS Xplora Inc., JX Advanced Metals Corporation, ENEOS Materials Corporation, ENEOS Power Corporation, and ENEOS Renewable Energy Corporation, its principal operating companies, as wholly owned subsidiaries or specially controlled companies, and maintains other Group companies as wholly owned subsidiaries, listed subsidiaries, listed affiliates, or other types of entities based on the need to maintain or expand its businesses. The policy of the Board of Directors is to regularly examine the appropriateness of maintaining a company as a listed subsidiary or listed affiliate from the perspective of improving the Group's overall corporate value and capital efficiency, to consider the reasonableness of maintaining the listed company status, and to deliberate on the effectiveness of the listed subsidiary's governance system.

The following policies concerning the authority to appoint and dismiss independent outside directors of listed subsidiaries have been adopted to ensure an effective governance system that gives due consideration to the interests of general shareholders of listed subsidiaries.

- (1) Exercise of Appointment Authority
 - A. More than one-third of directors shall be independent outside directors. If difficult to immediately put into effect, a mechanism will be introduced for a committee made up primarily of independent outside directors to discuss and consider important business transactions involving conflict of interest.
 - B. Prerequisites for Independent Outside Directors
 - i. Strong professional ethics, excellent strategic thinking and judgment, flexibility to change, and the ability to make decisions and supervise the management of a listed subsidiary
 - ii. Not employed by a company in the ENEOS Group within the past 10 years
 - iii. Ability to contribute to raising the corporate value of the listed subsidiary, taking into account the protection of the common interests of shareholders, including general shareholders, from an independent perspective
- (2) Exercise of Dismissal Authority

Voting rights shall be exercised to dismiss an independent outside director if any of the following conditions occur and in accordance with the decision of the Board of Directors of the relevant listed subsidiary.

 - i. A serious violation of laws or regulations that materially damages the reputation of the ENEOS Group or a listed subsidiary group
 - ii. Malicious intent or gross negligence in the execution of duties that causes significant damage to the ENEOS Group or a listed subsidiary group
 - iii. Actions that cause significant damage to the interests of general shareholders

Policy on Strategic Shareholdings

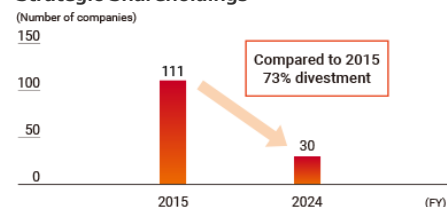
In accordance with the Basic Policy on Corporate Governance of ENEOS Group, in principle, the Company shall not hold shares in listed companies. As an exception, the Company may hold shares in listed companies as strategic shareholdings, as described below.

- 1) Shares in companies which engage in any important businesses of ENEOS Group
- 2) Shares in companies which ENEOS Group judges necessary to maintain or enlarge business of ENEOS Group

The Company has divested 73% of its strategic shareholdings since the above policy was adopted in November 2015. In fiscal 2023, the Company sold shares (valued at 20,573 million yen)* of five companies and did not acquire any new strategic shareholdings.

*Includes partial divestment of shareholdings

Strategic Shareholdings



Method of Verifying the Rationality of Possession

With respect to exceptionally holding strategic shareholdings, the Company shall periodically assess whether or not to hold each individual strategic shareholding, specifically examining whether the purpose is appropriate and whether the benefits and risks from each holding cover the company's cost of capital at the Board meeting of the Company.

Board of Directors Verification of the Appropriateness of Individual Strategic Shareholdings

The Company assessed whether or not to hold each individual strategic shareholding, specifically examining whether the purpose is appropriate and whether the benefits (transactional profits, dividends, benefits difficult to quantify) and risks from each holding cover the company's cost of capital at the Board meeting of the Company in November 2023.

Risk Management

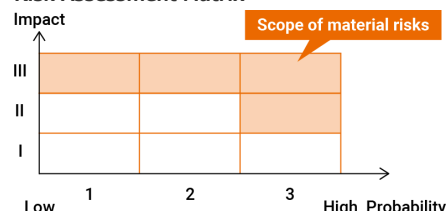
The ENEOS Group has established the Basic Policy on Internal Control System for the development and implementation of a system for ensuring the appropriateness of our business operations.

Enterprise Risk Management (ERM)

The Company has developed and operates a risk management system to identify and analyze Group management risks and ensure appropriate responses.

Risks (tangible and intangible) are identified, taking into account risks identified up to the previous fiscal year, as well as increased risks and potential new risks arising from changes inside and outside the Company, and are assessed for materiality based on the degree of impact, probability and urgency. Risks that are indicated by assessment results as requiring a response from the Group are designated as “material risks” by resolution of the Executive Council, which is chaired by the CEO of the Company. Relevant departments are assigned for response to material risks, and monitoring is carried out by reporting the status of response to the Executive Council.

Risk Assessment Matrix



Impact

Impact	Qualitative criteria
III	Potential for significant impact on the entire Group, immediate implementation of countermeasures required
II	Potential for some degree of impact on the entire Group, consideration of specific countermeasures required
I	Potential for minimal impact on the Group as a whole, response can be implemented by individual Group companies

Probability and Urgency

	Probability (standard)	Urgency (standard)
3 (High)	Has already occurred or is very likely to occur	Response required within 1 year
2 (Medium)	Not very likely to occur, but could occur in the medium term	Consideration of response required for the medium term (up to 3 years)
1 (Low)	Very unlikely to occur in the short or medium term	Consideration of response required for the long term (over 3 years)

Risk Management System at Principal Operating Companies

The Group’s principal operating companies maintain and operate their own risk management systems, which are tailored to their specific business content and characteristics. The departments in charge of risk management at the Company and the principal operating companies cooperate and share risk information with each other. If a company identifies, through its risk management process, a risk that could significantly impact the management of the Group, ENEOS Holdings and the company work together to respond to the risk.

Internal Control

The Internal Control Department has developed and operates the internal control system for the ENEOS Group. The system links the internal controls stipulated in the Companies Act and the Financial Instruments and Exchange Act, and the internal controls of each Group organization. As part of this system, the Group has formulated internal controls based on the COSO Framework* for independent management by each organization. Introduction of the internal controls has been completed for the Company and Group companies.

From fiscal 2024, with the increase in the number of principal operating companies to six, we will utilize information technology to improve the efficiency of the internal control system as part of our efforts to improve the effectiveness of the internal control and risk management systems.

*Committee of Sponsoring Organizations of the Treadway Commission (COSO) is an internal control framework released by the commission and adopted by countries around the world.

> [Basic Policy on Internal Control System \(PDF : 149KB\)](#)

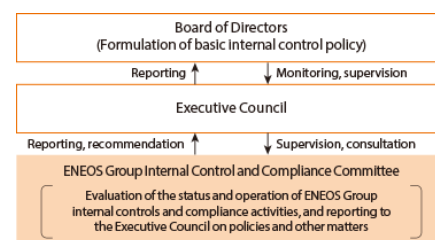


Internal Control System

Comprehensive Internal Control Structure

The Company has established the ENEOS Group Internal Control and Compliance Committee, chaired by the officer responsible for the Internal Control Department and the Legal & Corporate Affairs Department. The committee works to continuously improve the internal control system for the Group. Until fiscal 2023, the committee confirmed and evaluated the status and operation of the internal control system once a year and reported its findings to the Executive Council. In fiscal 2024, with the increase in the number of principal operating companies to six, we will review the system to improve monitoring effectiveness.

Every April, the committee reports to the Board of Directors on the status and operation of the internal control system and on specific points of policies for initiatives for the fiscal year. The Board of Directors appropriately monitors and supervises the internal control system for the Group and fulfills its duty of accountability by providing an overview of the operation status in the Business Report section of the Report document accompanying the Convocation Notice of the General Meeting of Shareholders.



Comprehensive Internal Control and Compliance Structure

Image represents the structure through fiscal 2023.

Risk Assessment of Business Activities

The Group has internal rules and regulations for addressing the risks in its business activities. For the screening of new investments, in addition to country risks and foreign exchange rate risks, we analyze and evaluate ESG-related risks, including environmental risks such as those related to the scope of response to biodiversity and environmental regulations; risks in the procurement of raw materials, including water; and human resources risks, including those related to human rights and occupational health and safety, and we take appropriate actions when necessary.

In addition, when reviewing proposed major investments, we perform screenings based on the stage-gate system. The process from initial examination to execution of an investment project is divided into multiple stages of examination, and deliberations are conducted at each stage. During the deliberations, we clarify various risks, including ESG-related risks, using sensitivity analysis, case analysis, along with cold-eye review by a third party and other means, and work to minimize these risks. For important investments, follow-up is carried out after a certain period of time to clarify impacts on the initial outlook caused by environmental changes or other factors and to determine whether to continue with the project.

Crisis Management

In the event of a crisis situation that could significantly affect the management of the Group, the Company responds quickly and appropriately in accordance with the ENEOS Group Rules for Responding to Crises and Emergencies and has systems in place to minimize any damage that may occur. The Group's basic stance on crisis situations is to place the highest priority on protecting human life, issue information promptly and implement centralized information management, quickly determine, execute, and follow up the most effective response measures, implement transparent and smooth communications, and prevent recurrence.

With the Crisis Management Department as the standing organizational unit, in the event of a crisis situation, we maintain a system enabling immediate reporting on conditions and the status of response measures from the site of an incident. Depending on the magnitude of the crisis, we may set up a response headquarters, led by the president, and organize response teams at the head office and at the site of the incident to ensure agile and effective response.

Infectious Disease Prevention Measures

The Group's basic policy is to (1) place the highest priority on respect for human life and make every effort to protect against and prevent the spread of infectious diseases to the Group's officers, employees and their families, and (2) engage all Group companies in maintaining a continuous supply of our products, which support the functioning of society. In the event that management is significantly affected by an infectious disease epidemic, a system is in place to set up a response headquarters, led by the president, to ensure the prompt determination and execution of countermeasures.

ENEOS has business continuity plans at its head office, branch offices, refineries, and other sites to ensure that we can fulfill our responsibility of providing a stable supply of petroleum products, even during an epidemic. To protect employees from infection and prevent the spread of disease, we systematically stockpile surgical masks, goggles, alcohol-based disinfectants, and other items at our business sites in Japan and overseas. We also maintain a system and an IT environment that enable employees to work from home.

Information Security

Company information is an important asset of the Group, and we work to prevent the improper use, disclosure, or leakage of this information in accordance with the ENEOS Group Basic Rules for Information Security. The Group also strives to maintain information accuracy and reliability and to prevent falsification or mishandling while ensuring that information is available to authorized users when needed.

In addition, the Company and ENEOS have developed personal information protection procedures and established rules to ensure compliance with the Personal Information Protection Act and the appropriate handling of personal information to protect people's rights.

Following the leak of personal customer information at ENEOS in fiscal 2021, we carried out a Group-wide inspection of legal compliance focused primarily on the protection of personal information and conducted e-learning training for all employees of the Company and ENEOS in fiscal 2022 and again in fiscal 2023.

At the Company and ENEOS, when a leak of personal information is detected, it is immediately shared among the relevant departments and reported to the Personal Information Protection Commission as necessary. In such cases, we conduct prompt root cause analysis and response to prevent the spread of damage. We are also working to prevent recurrence through efforts such as providing training on personal information protection laws to all employees. We will continue working to strengthen our personal information management systems to ensure appropriate management.

Cybersecurity Measures

In order to protect its important information and systems from cyberattacks, which have become stealthier in recent years, the Group has established the ENEOS Group Cybersecurity Council, chaired by the president of the Company. The council checks the status of cybersecurity measures, and also determines and implements cybersecurity measures using a top-down approach.

In addition, the IT Security Basic Procedures for ENEOS Group have been established and communicated to Group companies to ensure that cybersecurity countermeasures are carried out across the entire Group. The procedures require the appointment of IT cybersecurity managers to implement and oversee IT security measures at each Group company. The procedures also stipulate that disciplinary action is to be taken in the event that an employee violates the procedures and causes damage to the company.

For employees, as ongoing initiatives, the ENEOS Group conducts drills and issues reminders on the handling of suspicious emails, and also provides Group-wide security training using curricula translated into multiple languages.

Protection of Intellectual Property

The ENEOS Group Code of Conduct states that all Group companies will properly maintain, manage, and protect corporate tangible and intangible assets along with new discoveries made in the course of business activities, as well as respect the intellectual property rights of third parties.

ENEOS Group Code of Conduct (excerpt)

7. Equitable and fair transactions

- (3) We respect the intellectual property rights of third parties.

10. Corporate asset protection and management

- (1) We properly maintain, manage, and protect corporate tangible and intangible assets.
- (2) We shall not use corporate tangible and intangible assets for purposes other than business activities.
- (3) We protect new discoveries or inventions made in the course of business activities as corporate intellectual properties.

ENEOS manages and uses intellectual property appropriately in accordance with internal rules on intellectual property ("Regulations on Inventions and Devices"). Given the importance of intellectual property to our current business strategies, we actively manage intellectual property to contribute to our business development. To ensure respect for third-party intellectual property rights, the relevant departments work together on measures related to intellectual property and steps are taken to raise employee awareness of intellectual property rights.

| Number of registered patents (As of March 31, 2024)

	Japan	Overseas	Total
Number of registered patents	3,852	6,041	9,893

Note:

Data from ENEOS and JX Advanced Metals

The Future Creation Invention Encouragement Award and the Future Creation Invention Contribution Award at the 2024 National Commendation for Invention

ENEOS, along with Yokohama National University and De Nora Permelec Ltd., received the Future Creation Invention Encouragement Award and the Future Creation Invention Contribution Award¹ at the Reiwa 6 (2024) National Commendation for Invention². The invention for which these three parties were awarded is an “invention of highly durable apparatus and method for producing organic hydride as hydrogen carrier” (Patent No. 6758628).

Direct MCH[®] is a technology for producing an organic hydride methylcyclohexane (MCH) directly from toluene by the electrochemical reaction using electricity derived from renewable energy. MCH is a hydrogen carrier with potential uses as a renewable energy storage and transport media. The technology reduces costs compared to conventional methods and is expected to contribute to the realization of a carbon-neutral society. The award-winning invention, which significantly reduces the decline in production efficiency of electrolyzers over time, contributed to the success of the green hydrogen supply chain demonstration between Japan and Australia³ in 2023.



The 2024 National Commendation for Invention awards ceremony

- 1 The Future Creation Invention Encouragement Award is given for inventions judged to be particularly outstanding from among those that have demonstrated effects or are expected to have significant effects in the future. The Future Creation Invention Contribution Award is given when the invention is made by a corporation.
- 2 The National Commendation for Invention is administered by the Japan Institute of Invention and Innovation. The award, which is the most prestigious award related to intellectual property in Japan, was created to contribute to the enhancement of science and technology and the development of industry in Japan.
- 3 This demonstration was conducted as part of Green Innovation Fund Projects of Direct MCH electrosynthesis technology development commissioned by the New Energy and Industrial Technology Development Organization (NEDO).

Compliance

Basic Approach

The Group is committed to thorough compliance and has designated high ethical standards as a core element of the Group Philosophy and the Group Code of Conduct.

ENEOS Group Code of Conduct (excerpt)

1. Compliance

- (1) We ensure compliance with laws, contracts, and corporate regulations and follow social norms and customs in an appropriate manner.
- (2) We shall neither ignore nor participate in any compliance violations.

Structure

The ENEOS Group Internal Control and Compliance Committee has been established under the Executive Council to ensure the implementation of effective and efficient internal control and compliance. Through 2023, the committee, comprising relevant officers and department general managers, regularly confirmed the performance of and issues related to the Group's internal control and compliance activities and deliberated policies for future activities (see [Comprehensive Internal Control Structure](#)).

With regard to the compliance system, in April 2024, we established the ENEOS Group Compliance Committee, chaired by the CCO. The committee meets once a quarter to confirm the status of compliance activities at each principal operating company and to strengthen and advance the implementation of Group compliance measures and the sharing of information.

Material Issues, Plans and Results

Fiscal 2023 Targets, Results and Progress

Evaluation: 😊 Achieved/Steady progress ☹️ Not achieved

Material ESG Issue	Initiative	Target (KPI)	Results/Progress	
Compliance	Legal compliance inspections	Conduct legal compliance inspections	😊	Implemented
	Implement training on important laws and regulations	Provide legal training related to business needs and issues within the Group	😊	Implemented
	Operation of whistleblower systems	a. Respond appropriately to whistleblowing b. Explore and implement outsourcing support to enable efficient response to whistleblowing	😊	a. Implemented appropriate whistleblower response b. Outsourced whistleblower contact services for quicker and more efficient response

Major Initiatives

Internal Control and Legal Compliance Inspections

We conduct internal control and legal compliance inspections annually as a voluntary initiative at each work site.

We inspect each business operation to ascertain compliance with Group-wide rules (internal control standards) and whether the corporate culture values integrity and ethics. In addition, given the rapidly changing management environment, we use a risk control matrix to ascertain whether risks have been appropriately identified and assessed, and whether effective controls for these risks have been developed and implemented.

We also utilize interviews of all staff by managers to identify compliance issues, including questions and concerns, in order to prevent legal violations and to identify and correct any issues at an early stage.

The Group identified approximately 640 compliance issues, questions, and concerns in fiscal 2023. None of the issues significantly impacted management. The Group resolved 80% of the issues within the fiscal year and is taking steps to promptly address the remaining 20% of unresolved issues.

The compliance inspection systems at the Company and ENEOS were revised in April 2024 to allow departments and business sites to conduct inspections more autonomously and effectively by enabling each department or business site to inspect the status of compliance under the direction of the officer in charge and in accordance with its own specific risks.

Compliance Violations

Deficiencies under the High Pressure Gas Safety Act at ENEOS

In fiscal 2023, the Ministry of Economy, Trade and Industry cited deficiencies under the High Pressure Gas Safety Act and on June 9, 2023, revoked certification of ENEOS Corporation as an Accredited Completion Inspection Executor for the Ukishima North Area and Ukishima South Area of the Kawasaki Refinery (including certification of the Ukishima North Area as a Specified Accredited Completion Inspection Executor under the Regulation on Safety of Industrial Complexes). To prevent recurrence of a similar situation, ENEOS is implementing prevention measures, including steps to ensure a high level of safety awareness and strengthen the safety management system. As part of these efforts, the company is implementing measures such as training on the High Pressure Gas Safety Act and overall compliance for all refinery staff, including staff at business sites certified to handle high-pressure gas.

We are also working to restore trust as quickly as possible by broadening and strengthening compliance initiatives throughout the Group.

Compliance Training

Strong awareness among all officers and employees is an important element in achieving thorough compliance. To this end, we issue ENEOS Group Philosophy cards and ENEOS Group Code of Conduct handbooks to all personnel and regularly provide compliance training for officers and employees. We will continue to provide training based on select topics as part of our ongoing efforts to ensure thorough compliance.

Compliance Training Conducted in Fiscal 2023 (Partial List)

- Company-wide training on the necessity of compliance, competition laws, anti-bribery, the Act on the Protection of Personal Information, and insider trading regulations
- Harassment prevention training and training on the Subcontract Act and prevention of disguised contracting for branch offices, refineries, and plants
- Anti-monopoly law training for sales departments
- Compliance awareness training for officers (human rights and compliance training, mandatory participation in compliance training for employees)

Establishment and Operation of Whistleblower Systems

To enable prompt detection and corrective action in the event of legal violations, the Company and some of its subsidiaries maintain compliance hotlines for their employees and those of contractor companies. The compliance hotlines are part of whistleblower systems aligned with the Whistleblower Protection Act.

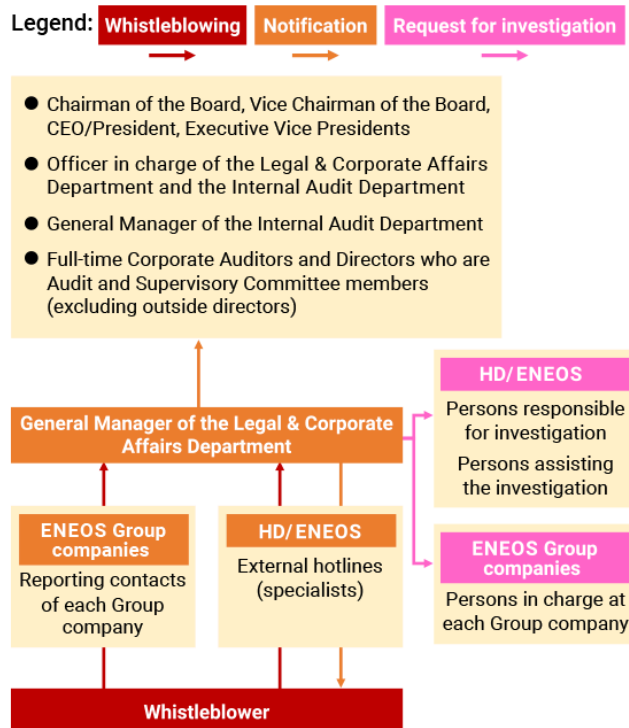
In October 2023, the Company and ENEOS's internal whistleblower contact was replaced with a centralized whistleblower contact operated by an external company specializing in these services. Outsourcing whistleblowing operations enables faster response and improved convenience for users, while also enabling us to maintain the quality of our operations. This structure facilitates appropriate response by allowing users to identify themselves or remain anonymous and depending on the case, enabling whistleblowing through contact points established at each ENEOS Group company. We have also introduced whistleblower systems, including some with multilingual capabilities, for overseas subsidiaries where we have ownership of more than 50%.

Based on internal regulations, when whistleblowing is received, the content is reported to the relevant officers, including the chairman and CEO, and an investigation is launched under the responsibility of the general manager of the Legal & Corporate Affairs Department. The investigation results and any necessary corrective and recurrence prevention measures are reported to the officers. Individuals who identify themselves when conducting whistleblowing are also informed of the investigation results.

To ensure that employees do not hesitate to use the system, they are informed through the intranet, posters, and training that the identity of those conducting whistleblowing is strictly confidential and that whistleblowing can be conducted even if the employee is not sure if the matter constitutes a legal violation.

In fiscal 2023, the Group recorded 341 reports via its whistleblower systems.

Whistleblowing Workflow



Reporting Contact Structure and Measures to Prevent Retaliation

The Legal & Corporate Affairs Department is responsible for the design and operation of the whistleblower systems of the Company and ENEOS. Members of the Legal & Corporate Affairs Department may also use the system. The ENEOS Group Basic Policy on Internal Reporting System stipulates that whistleblowers shall not be subject to any disadvantageous treatment for using the whistleblower systems, and information related to whistleblower reporting shall be treated as strictly confidential in accordance with the information security guidelines of each ENEOS Group company.

Compliance with Competition Laws

The Group maintains a policy that the entire Group must thoroughly comply with competition laws in Japan and other countries. We have put into place necessary company rules, and all officers and employees work under a clear commitment by management to ensure compliance with competition laws. Specifically, we have established the ENEOS Group Competition Law Compliance Policy, which strictly prohibits officers and employees from engaging in any activity, including cartels, that violates competition laws of any country. The policy clearly states that no activity that would violate competition laws shall be justified by any reason of business custom, the authority or position of the violator, maintaining or expanding business or making profits.

The legal divisions of the Company and ENEOS check each department every year for planned interactions with business competitors, assess those interactions for competition law risks, and request the submission of meeting records detailing the interactions. Through these and other efforts, we work to prevent competition law violations before they occur.

We also conduct competition law compliance training for officers and employees on a regular and ongoing basis.

Operation of the Competition Law Compliance Policy

The Group has established and published the ENEOS Group Competition Law Compliance Policy pursuant to the basic principle of compliance with competition laws set out in “7. Equitable and fair transactions” in the ENEOS Group Code of Conduct. This policy clearly states the Group’s commitment to comply with competition laws.

We will communicate this policy to and require compliance of all those within the scope of application of the ENEOS Group Code of Conduct. In addition to implementing this policy within the Group, we will also request that the companies and others that make up our value chain also cooperate with this policy.

ENEOS Group Competition Law Compliance Policy  

Prevention of Bribery and Corruption

The Group participates in the United Nations Global Compact, and puts the 10 principles, including anti-corruption, into practice. We have established and published the ENEOS Group Anti-Corruption Policy, which clearly states that the Group will not engage in corrupt practices. With regard to anti-corruption, the Group does not tolerate bribery in any form. We have internal regulations in place to prevent bribery at our Group companies, and all officers and employees actively work under a clear commitment by management of all Group companies to prevent bribery. ENEOS requires overseas subsidiaries where it has ownership of more than 50% to establish and comply with anti-bribery guidelines.

The Company, ENEOS, and its overseas subsidiaries have a mechanism to check for bribery involving travel expenses, business entertainment, gift giving, and donations, taking into consideration the laws and regulations of each country.

We also implement third-party due diligence procedures to prevent our involvement in bribery through a third party such as an agent, agency, or distributor.

Employees can access relevant internal regulations at any time via the Company intranet or other means. They also undergo various forms of compliance training on the prevention of bribery. In this manner, we are working to raise employee awareness of this important issue.

Internal controls, legal compliance inspections, and internal audits are used to continuously monitor whether these mechanisms are functioning properly. The results of monitoring are reported to the Company’s Board of Directors.

The Company, ENEOS, and its overseas subsidiaries also maintain risk screening systems for domestic and overseas business partners using services provided by specialized vendors, and conduct risk checks in a timely manner. In addition, we conduct risk surveys at the commencement of business relationships with new business partners, and if risks are indicated, we take necessary risk mitigation measures and determine whether or not to commence the business relationships. We also have a system in place to promptly detect and rectify problems through our whistleblower systems.

In fiscal 2023, there were no serious violations and no fines, administrative monetary penalties or settlements imposed regarding corruption or bribery. In addition, no internal disciplinary action was taken in connection with corruption or bribery.

Operation of the Anti-Corruption Policy

Based on the basic rules on the prevention of bribery and corruption established within “7. Equitable and fair transactions” and “8. Appropriate relationships with governments and public administrations” of the ENEOS Group Code of Conduct, the Group formulated and published the ENEOS Group Anti-Corruption Policy, which clearly stipulates that the Group will not engage in corrupt practices.

Going forward, we will continue to raise awareness of and require compliance with this policy within the scope of application of the ENEOS Group Code of Conduct. In addition to applying this policy within the Group, we will request the cooperation of companies in our value chain as well.

ENEOS Group Anti-Corruption Policy  

Political Contributions

The Group thoroughly complies with Japan’s Political Funds Control Act. The Group prohibits contributions to individual politicians as prohibited by law and monetary donations to specified political groups or political parties exceeding the legally permitted threshold.

In fiscal 2023, the Group did not make any political contributions (donations).

Honoring Tax Liabilities

Companies have a corporate social responsibility to appropriately honor their tax liabilities in the countries and areas in which they conduct their business activities. Therefore, we have formulated the ENEOS Group Tax Matters Policy to ensure that tax liabilities are appropriately honored throughout the entire Group.

Tax Matters Policy  

Timely and Proper Disclosure of Company Information

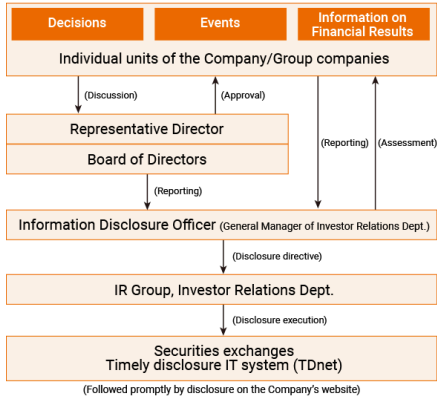
The Company is fully aware that the timely and proper disclosure of corporate information is a key element of healthy capital markets. Accordingly, the Company makes efforts to ensure prompt, appropriate, and fair disclosure of information to shareholders and other investors with the aim of promoting transparency in management.

Systems are in place to obtain, manage, and disclose information on the Company, as well as information on ENEOS Group companies, quickly and accurately. Information that is subject to the Timely Disclosure Rules is made public through the timely disclosure system (TDnet) provided by the Tokyo Stock Exchange and others, and the same information is made available on the Company's website. Information that is not subject to the Timely Disclosure Rules is disclosed proactively based on basic policies and disclosure standards.

The Company has prepared Rules for the Prevention of Insider Trading, and systems have been created to communicate regulations regarding insider trading throughout the ENEOS Group.

Disclosure Policy  [>](#)

Disclosure Framework and Workflow



Data

Governance

	Item	FY2021	FY2022	FY2023
Board of Directors	Number of meetings	14	14	14
	Number of members	16	From April 1: 16 From June 28: 17 From August 12: 16	From April 1: 16 From December 19: 14
	Number of independent outside directors	6	6	6
	Average attendance rate (%)	100.0	98.3	100.0
Audit and Supervisory Committee	Number of meetings	15	15	17
	Number of members	5	5	5
	Number of independent outside directors (Audit and Supervisory Committee members)	3	3	3
	Average attendance rate (%)	100.0	98.7	98.8
Compensation Advisory Committee	Number of meetings	3	6	6
	Number of members	5	5	5
	Number of independent outside directors	3	3	3
	Average attendance rate (%)	100.0	100.0	96.7
Nomination Advisory Committee	Number of meetings	6	7	7
	Number of members	5	5	5
	Number of independent outside directors	3	3	3
	Average attendance rate (%)	100.0	94.1	97.1

Environmental

- The environmental information covers a total of 139 business sites at 72 companies in the principal operating companies the ENEOS Group, the ENEOS Xplora Group, the JX Advanced Metals Group, as well as other operating companies (ENEOS Group: 55 business sites at 29 companies; ENEOS Xplora Group: 4 business sites at 1 company (operator business); JX Advanced Metals Group: 80 business sites at 41 companies; other operating companies: 1 company), however, the companies covered vary depending on the information. The companies covered are indicated in the “Scope of data” column.
- The environmental information indicated with ☒ for fiscal 2023 has been assured by an independent practitioner.

Energy Consumption ☒

	Unit	FY2021	FY2022	FY2023	Scope of data
Energy consumption (crude oil equivalent)	Million kL	10.07	11.80	10.62	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation
Fuel consumption (crude oil equivalent)	Million kL	8.52	10.79	9.76	
Electricity consumption	Million kWh	4,430	3,527	3,197	

Note:

Calculated in accordance with the Act on Promotion of Global Warming Countermeasures. From fiscal 2022, calculations take into account electricity sold and heat sold.

Energy Consumption Intensity ☒

	Unit	FY2021	FY2022	FY2023	Scope of data
Energy consumption intensity for oil refining	Oil equivalent consumption volume (kL)/ Crude distillation unit equivalent (thousand kL)	9.08	8.92	9.20	Petroleum refining business of the ENEOS Group

GHG Emissions (Scope 1 and Scope 2) ☒

	Unit	FY2021	FY2022	FY2023	Scope of data
CO ₂ emissions	Million tons	23.34	27.81	25.29	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation
(1) Scope 1	Million tons	19.92	25.55	23.14	
(2) Scope 2	Million tons	2.37	1.19	1.25	
(3) Non-energy-derived CO ₂	Million tons	1.05	1.07	0.90	


	Unit	FY2021	FY2022	FY2023	Scope of data
GHG emissions other than CO ₂	Tons	129,611	116,656	124,411	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation
(1) CH ₄	Tons	47,431	30,320	29,204	
(2) N ₂ O	Tons	81,652	85,929	93,029	
(3) HFCs	Tons	352	223	1,711	
(4) PFCs	Tons	0	0	0	
(5) SF ₆	Tons	176	184	467	
(6) NF ₃	Tons	0	0	0	
Total GHG emissions	Million tons	23.47	27.93	25.41	

Notes:

GHG emissions indicate emissions of greenhouse gases from consumption of electricity, fuel, etc., as well as oil refining and oil and gas production, converted to CO₂ equivalent.

Calculated in accordance with the Act on Promotion of Global Warming Countermeasures. From fiscal 2022, calculations take into account electricity sold and heat sold. GHG emissions from electricity use were calculated using the emissions factors by electricity supplier.

GHG Emissions (Scope 3)

Category		Unit	FY2022	FY2023	Scope of data
1	Purchased goods and services	Million tons	22.69	21.25	ENEOS
2	Capital goods	Million tons	0.67	1.06	
3	Fuel- and energy-related activities not included in Scope 1 or Scope 2	Million tons	0.04	0.03	
4	Transportation and distribution (upstream)	Million tons	2.62	2.73	
5	Waste generated in operations	Million tons	0.08	0.07	
6	Business travel	Million tons	0.004	0.005	
7	Employee commuting	Million tons	0.002	0.002	
9	Transportation and distribution (downstream)	Million tons	0.37	-	
11	Use of sold products 	Million tons	183.42	166.00	
14	Franchises	Million tons	0.29	0.29	
GHG emissions		Million tons	210.19	191.44	

Note:

From fiscal 2023, we are reviewing some of the calculation categories for transportation and distribution.

Air Pollution Load

	Unit	FY2021	FY2022	FY2023	Scope of data
(1) SOx	Tons	11,201	11,171	9,556	ENEOS, JX Advanced Metals, NIPPO Corporation
(2) NOx	Tons	13,237	13,315	11,821	
(3) Soot	Tons	885	941	801	
(4) VOC	Tons	11,873	12,117	11,114	ENEOS, ENEOS Xplora

Notes:

VOC data for the ENEOS Xplora Group covers the Nakajo Field Office and the Petra Nova Office.

Data for the JX Advanced Metals Group covers 49 business sites at 33 companies (fiscal 2023).

Water Use and Discharge

	Unit	FY2021	FY2022	FY2023	Scope of data
Water used (1) + (2) + (3) + (4) + (5)	Million tons	1,499.22	1,567.98	1,545.56	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation
(1) Service water (municipal potable water)	Million tons	3.85	4.02	3.97	
(2) Service water (surface water)	Million tons	167.28	183.34	168.21	
(3) Harvested rainwater	Million tons	0	0	1.45	
(4) Groundwater	Million tons	19.51	20.20	16.50	
(5) Seawater	Million tons	1,308.58	1,360.42	1,355.44	
Water discharged (1) + (2)	Million tons	1,445.08	1,455.86	1,452.74	
(1) River discharge	Million tons	15.50	24.29	24.97	
(2) Sea discharge	Million tons	1,429.58	1,431.56	1,427.77	

Note:

Data for the JX Advanced Metals Group covers 49 business sites at 33 companies (fiscal 2023).

Water Pollution Load ☒

	Unit	FY2021	FY2022	FY2023	Scope of data
COD	Tons	1,260	2,486	2,277	ENEOS, ENEOS Xplora, JX Advanced Metals

Notes:

Data for the ENEOS Xplora Group covers the Nakajo Field Office.

Data for the JX Advanced Metals Group covers 49 business sites at 33 companies (fiscal 2023).

Release and Transfer of Chemical Substances (PRTR) ☒

	Unit	FY2021	FY2022	FY2023	Scope of data
(1) Released	Tons	1,749	2,575	2,494	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation
(2) Transferred	Tons	369	344	675	

Notes:

Data for the ENEOS Xplora Group covers the Nakajo Field Office.

Data for the JX Advanced Metals Group covers 16 business sites at 10 companies (fiscal 2023).

Waste ☒

	Unit	FY2021	FY2022	FY2023	Scope of data
Total waste	Tons	3,209,760	3,691,031	3,481,738	ENEOS, ENEOS Xplora, JX Advanced Metals, NIPPO Corporation
Landfill disposal volume	Tons	26,243	30,085	41,498	
Waste-to-landfill ratio	%	0.8	0.8	1.2	

Note:

Data for the JX Advanced Metals Group for total waste covers 49 business sites at 33 companies (fiscal 2023) and for landfill disposal volume and waste-to-landfill ratio covers 45 business sites at 29 companies (fiscal 2023).

Environmental Accidents

	FY2021	FY2022	FY2023
Number of environmental accidents	0	0	0
Monetary penalties	Nil	Nil	Nil

Social

- Social information covers ENEOS Holdings, the ENEOS Group, the ENEOS Xplora Group, the JX Advanced Metals Group and other operating companies, however, the companies covered vary depending on the information. The breakdown of the totals by company is shown in the table below.
- The social information indicated with ☒ for fiscal 2023 has been assured by an independent practitioner.

Employees

Item		Total	ENEOS Holdings	ENEOS	ENEOS Xplora	JX Advanced Metals
Number of employees (by employment status)						
Male	Full time	10,655	593	6,958	306	2,798
	Fixed term	207	8	30	30	139
	Non-fixed term (regular employees)	10,448	585	6,928	276	2,659
	Other than full time	50	6	38	0	6
	Fixed term	33	1	27	0	5
	Non-fixed term	17	5	11	0	1
	Subtotal	10,705	599	6,996	306	2,804
	Full time	1,694	295	934	61	404
	Fixed term	48	19	4	1	24
	Non-fixed term (regular employees)	1,646	276	930	60	380
Female	Other than full time	35	0	4	2	29
	Fixed term	8	0	3	0	5
	Non-fixed term	27	0	1	2	24
	Subtotal	1,729	295	938	63	433
	Percentage of female employees	13.9	33.0	11.8	17.1	13.4
	Temporary staff	726	0	650	7	69
	Male	452	0	417	3	32
Female	Female	274	0	233	4	37
	Percentage of temporary staff	5.5	0.0	7.6	1.9	2.1
Total		13,160	894	8,584	376	3,306

Item		Total	ENEOS Holdings	ENEOS	ENEOS Xplora	JX Advanced Metals
	Foreign nationals	90	15	43	6	26
	Male	50	5	24	4	17
	Female	40	10	19	2	9
	Mid-career hires	1,600	—	585	61	954
Number of locally employed staff at overseas sites		3,742	0	1,157	368	2,217
	Managerial staff	609	0	182	79	348

Item		Total	ENEOS Holdings	ENEOS	ENEOS Xplora	JX Advanced Metals
Number of employees (by category), average age and average years of service						
Managerial staff (regular employees)		2,845	355	1,836	149	505
Male		2,687	303	1,756	142	486
Female		158	52	80	7	19
Percentage of female managerial staff		5.6	14.6	4.4	4.7	3.8
Age	Up to 29 years old	0	0	0	0	0
	30–49 years old	1,213	162	687	73	291
	50 years old and over	1,632	193	1,149	76	214
Average age		49.9	49.5	50.4	49.1	48.6
Average years of service		24.1	24.1	25.7	20.8	19.1
Foreign nationals		12	0	3	4	5
Mid-career hires		224	—	113	12	99
Non-manual staff (regular employees)		9,249	506	6,022	187	2,534
Male		7,761	282	5,172	134	2,173
Female		1,488	224	850	53	361
Age	Up to 29 years old	2,636	104	1,803	42	687
	30–49 years old	4,490	245	2,756	123	1,366
	50 years old and over	2,123	157	1,463	22	481
Average age		38.4	41.1	38.3	36.4	38.1
Average years of service		14.8	15.5	16.7	10.1	10.6
Total		12,094	861	7,858	336	3,039
Average age (regular employees)		41.1	44.5	41.1	43.8	39.8
Average age – male		41.3	45.2	41.3	44.1	40.1
Average age – female		40.0	43.1	39.9	42.3	37.8
Average years of service (regular employees)		17.0	19.0	18.8	16.4	12.0
Average years of service – male		17.2	19.3	19.0	13.0	12.5
Average years of service – female		15.3	18.5	17.0	17.1	8.6

Item		Total	ENEOS Holdings	ENEOS	ENEOS Xplora	JX Advanced Metals
Number of new hires (regular employees, incl. mid-career hires)						
Male	Up to 29 years old	337	—	187	11	139
	Percentage of regular employees as of March 2024	2.8	—	2.4	3.3	4.6
	30–49 years old	245	—	178	11	56
	Percentage of regular employees as of March 2024	2.0	—	2.3	3.3	1.8
	50 years old and over	46	—	8	1	37
	Percentage of regular employees as of March 2024	0.4	—	0.1	0.3	1.2
	Subtotal	628	—	373	23	232
	Percentage of regular employees as of March 2024	5.2	—	4.7	6.8	7.6
	Up to 29 years old	90	—	53	5	32
	Percentage of regular employees as of March 2024	0.7	—	0.7	1.5	1.1
Female	30–49 years old	29	—	7	6	16
	Percentage of regular employees as of March 2024	0.2	—	0.1	1.8	0.5
	50 years old and over	1	—	0	0	1
	Percentage of regular employees as of March 2024	0.0	—	0.0	0.0	0.0
	Subtotal	120	—	60	11	49
	Percentage of regular employees as of March 2024	1.0	—	0.8	3.3	1.6
	Total	748	—	433	34	281
	Percentage of regular employees as of March 2024	6.2	—	5.5	10.1	9.2

Item			Total	ENEOS Holdings	ENEOS	ENEOS Xplora	JX Advanced Metals
Employee turnover (regular employees)							
Male	Up to 29 years old		84	2	66	0	16
		Percentage of regular employees as of March 2024	0.7	0.2	0.8	0.0	0.5
		30–49 years old	144	10	87	3	44
		Percentage of regular employees as of March 2024	1.2	1.2	1.1	0.9	1.4
		50 years old and over	207	24	159	1	23
		Percentage of regular employees as of March 2024	1.7	2.8	2.0	0.3	0.8
	Subtotal		435	36	312	4	83
	Percentage of regular employees as of March 2024		3.6	4.2	4.0	1.2	2.7
	30–49 years old		25	1	14	2	8
		Percentage of regular employees as of March 2024	0.2	0.1	0.2	0.6	0.3
		50 years old and over	18	7	8	0	3
		Percentage of regular employees as of March 2024	0.1	0.8	0.1	0.0	0.1
		Subtotal	77	12	40	3	22
		Percentage of regular employees as of March 2024	0.6	1.4	0.5	0.9	0.7
Female	Total		512	48	352	7	105
	Percentage of regular employees as of March 2024		4.2	5.6	4.5	2.1	3.5

Item		Total	ENEOS Holdings	ENEOS	ENEOS Xplora	JX Advanced Metals
Employment rate of persons with disabilities		2.57	—	2.54	3.30	2.57
Number of employees re-employed after mandatory retirement		653	56	443	29	125
Paid annual leave	Average number of days of paid annual leave granted	22.0	—	22.1	22.0	21.7
	Average number of days of paid annual leave taken	20.3	—	21.2	18.3	18.5
	Usage rate of paid annual leave	92.6	—	95.9	83.0	85.3
Number of employees taking family care leave		3	—	2	0	1
Childbirth / childcare	Number of employees taking childcare leave	347	—	304	7	36
	Male employees	293	—	255	7	31
	Percentage of male employees taking childcare leave	70.8	—	95.9	70.0	22.5
	Percentage of employees returning to work after giving birth or taking childcare leave	99.7	—	99.7	100.0	100.0
	Percentage still employed 12 months after returning to work	94.7	—	94.3	83.3	100.0
Labor unions	Number of members	10,689	No labor unions	7,284	No labor unions	3,405
	Membership rate	99.9	No labor unions	99.8	No labor unions	100.0
Participation rate for regular health checkups		100.0	100.0	100.0	100.0	100.0

Notes:

Employees of ENEOS Holdings are seconded from operating companies and belong to joint departments of ENEOS Holdings and ENEOS. Employees of ENEOS do not include employees belonging to joint departments.

The number of new hires, the number of mid-career hires, the employment rate of persons with disabilities, the number of days of paid annual leave granted/taken, the number of employees taking family care leave, and the taking of leave for childbirth and childcare for ENEOS Holdings are accounted for at employees' companies of origin.

The number of mid-career hires represents the number of employees hired mid-career since fiscal 2017.





Training Hours in Fiscal 2023

	Total training hours	Training hours per employee
ENEOS Holdings, ENEOS	24,869	2.8
ENEOS Xplora	7,659	20.8
JX Advanced Metals	46,751	14.4
Total	79,279	6.4

Note:

Number of hours of internal group training and external training organized by the human resources departments of ENEOS Holdings and the Group's principal operating companies, aggregated for each employer.

Occupational Injuries

Item		FY2021	FY2022	FY2023	Scope of data		
Number of occupational injuries (persons) 							
	Directly hired employees	Subtotal	17	12	19	ENEOS, ENEOS Xplora, JX Advanced Metals	
		Fatalities	0	0	0		
		Lost work time	17	12	19		
	Contractors (contractor companies, etc.)	Subtotal	26	17	21		
		Fatalities	0	0	0		
		Lost work time	26	17	21		
	Total		43	29	40		
	Occupational injury frequency rate 		0.37	0.22	0.20		11 ENEOS refineries and plants, 4 ENEOS Xplora business sites, JX Advanced Metals head office and 5 business sites
	Occupational injury severity rate 		0.01	0.02	0.01		
Number of lost working days due to occupational injuries (days) 		125	459*	290			

Notes:

Number of contractors in "Number of occupational injuries" is for reference.

Scope of data for occupational injury frequency rate, occupational injury severity rate, and lost working days due to occupational injuries: Employees directly employed by 11 ENEOS refineries and plants, 4 ENEOS Xplora business sites (Vietnam, Kuala Lumpur, Nakajo, and Petra Nova) and the JX Advanced Metals head office and 5 business sites (Hitachi, Isohara, Kurami, Tsuruga, and Saganoseki).

*Number of lost working days as of August 31, 2023.

Item	FY2021	FY2022	FY2023	Scope of data
Total recordable incident rate (TRIR)				ENEOS Holdings, ENEOS head office and 11 refineries and plants, ENEOS Xplora head office and 4 business sites, JX Advanced Metals head office and 5 business sites
Directly hired employees	1.13	1.00	0.94	
Contractors (contractor companies, etc.)	2.13	2.59	2.45	
Lost time injury rate (LTIR)				
Directly hired employees	0.26	0.19	0.15	
Contractors (contractor companies, etc.)	0.72	0.51	0.45	

Notes:

TRIR: Number of occupational injuries per million working hours (non-lost-time occupational injuries + lost-time occupational injuries and fatalities)

LTIR: Number of lost-time occupational injuries and fatalities per million working hours

Scope of data for TRIR and LTIR: ENEOS Holdings, ENEOS head office and 11 refineries and plants, ENEOS Xplora head office and 4 business sites (Vietnam, Kuala Lumpur, Nakajo, and Petra Nova), JX Advanced Metals head office and 5 business sites (Hitachi, Isohara, Kurami, Tsuruga, and Saganoseki)

TRIR excludes heat stroke (first aid). (Number of cases of heat stroke [first aid] involving directly hired employees and contractors: 10 in fiscal 2021, 23 in fiscal 2022, and 38 in fiscal 2023)

ENEOS Group Safety Education Center Training Participation

	FY2021	FY2022	FY2023	Scope of data
Number of participants	570	1,013	1,183	ENEOS, ENEOS Xplora, JX Advanced Metals, affiliated Group companies, contractor companies, etc.

Independent Practitioner's Assurance Report

December 4, 2024

Mr. Tomohide Miyata,
Representative Director, CEO,
ENEOS Holdings, Inc.

Tomoharu Hase
Representative Director
Deloitte Tohmatsu Sustainability Co., Ltd.
3-2-3, Marunouchi, Chiyoda-ku, Tokyo

We have undertaken a limited assurance engagement of the environmental information and the social information indicated with ☒ for the year ended March 31, 2024 (the "Sustainability Information") included in the "ENEOS REPORT ESG DATA BOOK 2024 (PDF)" (the "Report") of ENEOS Holdings, Inc. (the "Company").

The Company's Responsibility

The Company is responsible for the preparation of the Sustainability Information in accordance with the calculation and reporting standard adopted by the Company (as described on the site of Editorial Policy and Data, and indicated with the Sustainability Information of the Report). Greenhouse gas quantification is subject to inherent uncertainty for reasons such as incomplete scientific knowledge used to determine emissions factors and numerical data needed to combine emissions of different gases.

Our Independence and Quality Management

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. We apply International Standard on Quality Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, and accordingly maintain a comprehensive system of quality management including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Sustainability Information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements ("ISAE") 3000, *Assurance Engagements Other than Audits or Reviews of Historical Financial Information*, issued by the International Auditing and Assurance Standards Board ("IAASB"), ISAE 3410, *Assurance Engagements on Greenhouse Gas Statements*, issued by the IAASB and the *Practical Guideline for the Assurance of Sustainability Information*, issued by the Japanese Association of Assurance Organizations for Sustainability Information.

The procedures we performed were based on our professional judgment and included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. These procedures also included the following:

- Evaluating whether the Company's methods for estimates are appropriate and had been consistently applied. However, our procedures did not include testing the data on which the estimates are based or reperforming the estimates.
- Performing interviews of responsible persons and inspecting documentary evidence to assess the completeness of the data, data collection methods, source data and relevant assumptions applicable to the sites.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

Limited Assurance Conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Sustainability Information is not prepared, in all material respects, in accordance with the calculation and reporting standard adopted by the Company.








The above represents a translation, for convenience only, of the original Independent Practitioner's Assurance report issued in the Japanese language.






Comparative Table with GRI Standards













Statement of Use	The ENEOS Group has reported the information cited in this GRI content index for the period from April 1, 2023 to March 31, 2024 with reference to the GRI Standards.
GRI 1 used	GRI 1: Foundation 2021

Universal Standard

GRI 2: General Disclosures 2021

1. The organization and its reporting practices		Where to find	
2-1	Organizational details	> Corporate Data 	-
		> ENEOS Group Locations Across the World 	-
2-2	Entities included in the organization's sustainability reporting	> Editorial Policy	P2
		> Annual Securities Report (Available in Japanese only) 	-
2-3	Reporting period, frequency and contact point	> Editorial Policy	P2
		> Annual Securities Report (Available in Japanese only) 	-
2-4	Restatements of information	> Data	P154
2-5	External assurance	> Independent Practitioner's Assurance Report	P167
2. Activities and workers		Where to find	
2-6	Activities, value chain and other business relationships	> Business Segments 	-
		> ENEOS Group Locations Across the World 	-
		> ENEOS REPORT Integrated Report 	-
		> Supply Chain Management	P115
2-7	Employees	> Data	P159
2-8	Workers who are not employees	> Data	P159

3. Governance		Where to find	
2-9	Governance structure and composition	> Corporate Governance Framework	P133
		> ESG Management Structure	P6
2-10	Nomination and selection of the highest governance body	> Corporate Governance Framework	P133
		> ENEOS REPORT Integrated Report 	-
		> Corporate Governance Report (Available in Japanese only) (PDF : 231KB) 	-
		> Basic Policy on Corporate Governance of ENEOS Group (PDF : 234KB) 	-
2-11	Chair of the highest governance body	> Corporate Governance Framework	P133
2-12	Role of the highest governance body in overseeing the management of impacts	> ESG Management Structure	P6
		> Corporate Governance Framework	P133
		> Risk Management	P145
		> Our Response to Climate Change Risks and Opportunities (TCFD)	P63
2-13	Delegation of responsibility for managing impacts	> ESG Management Structure	P6
2-14	Role of the highest governance body in sustainability reporting	> ESG Management Structure	P6
2-15	Conflicts of interest	> Corporate Governance Framework	P133
		> Corporate Governance Report (Available in Japanese only) (PDF : 231KB) 	-
		> Basic Policy on Corporate Governance of ENEOS Group (PDF : 234KB) 	-
2-16	Communication of critical concerns	> Risk Management	P145
		> Compliance	P149
2-17	Collective knowledge of the highest governance body	> Corporate Governance Framework	P133
2-18	Evaluation of the performance of the highest governance body	> Evaluation of the Effectiveness of the Board of Directors	P138

2-19	Remuneration policies	> Determination of Director Remuneration	P140
		> ENEOS REPORT Integrated Report 	-
		> Corporate Governance Report (Available in Japanese only) (PDF : 231KB) 	-
		> Basic Policy on Corporate Governance of ENEOS Group (PDF : 234KB) 	-
2-20	Process to determine remuneration	> Determination of Director Remuneration	P140
		> ENEOS REPORT Integrated Report 	-
		> Corporate Governance Report (Available in Japanese only) (PDF : 231KB) 	-
		> Basic Policy on Corporate Governance of ENEOS Group (PDF : 234KB) 	-
2-21	Annual total compensation ratio	-	-
4. Strategy, policies and practices		Where to find	
2-22	Statement on sustainable development strategy	> ENEOS REPORT Integrated Report 	-
2-23	Policy commitments	> ENEOS REPORT Integrated Report 	-
		> ENEOS Group Philosophy 	-
		> ENEOS Group Code of Conduct 	-
		> ENEOS Group Policies 	-
		> ESG Management	P6
		> Human Rights	P80
2-24	Embedding policy commitments	> ENEOS REPORT ESG DATA BOOK (ESG Management, Environmental, Social, Governance)	P6, P21, P72, P132
		> ENEOS REPORT Integrated Report 	-
2-25	Processes to remediate negative impacts	> Human Rights (Consultation Contact Points (Remedy Measures))	P87
		> Quality (Initiatives at the Customer Service Center)	P114
2-26	Mechanisms for seeking advice and raising concerns	> Compliance	P149
		> Human Rights (Consultation Contact Points (Remedy Measures))	P87

2-27	Compliance with laws and regulations	> Compliance	P149
		> Preventing Environmental Accidents	P28
		> Data	P158
2-28	Membership associations	> Participation in Initiatives and Organizations	P18
		> Communication with Industry Organizations	P20
5. Stakeholder engagement		Where to find	
2-29	Approach to stakeholder engagement	> Stakeholder Engagement	P17
2-30	Collective bargaining agreements	> Labor-Management Negotiations on Appropriate Labor Conditions	P88
		> Data	P159

| GRI 3: Material Topics 2021

		Where to find	Sector Standard reference number	
3-1	Process to determine material topics	> ESG Management		P6
3-2	List of material topics	> Verifying and Identifying Material ESG Issues		P7
3-3	Management of material topics	> Verifying and Identifying Material ESG Issues		P7
		> ESG Management Structure	11.1.1 11.2.1 11.3.1 11.4.1 11.5.1	P6
		> Environmental Management	11.6.1 11.8.1 11.9.1	P22

Topic Standards/Sector Standards

Topics with reference numbers in the Sector Standard column (GRI 11: Oil and Gas Sector 2021) have been selected as material ESG issues.

ECONOMIC

GRI 201: Economic Performance 2016		Where to find	Sector Standard reference number	
201-1	Direct economic value generated and distributed	> Annual Securities Report (Available in Japanese only) 		-
201-2	Financial implications and other risks and opportunities due to climate change	> Annual Securities Report (Available in Japanese only) 		-
		> Our Response to Climate Change Risks and Opportunities (TCFD)		P63
		> Environmental Management		P22
201-3	Defined benefit plan obligations and other retirement plans	-		
201-4	Financial assistance received from government	-		
GRI 202: Market Presence 2016		Where to find	Sector Standard reference number	
202-1	Ratios of standard entry level wage by gender compared to local minimum wage	-		
202-2	Proportion of senior management hired from the local community	-		
GRI 203: Indirect Economic Impacts 2016		Where to find	Sector Standard reference number	
203-1	Infrastructure investments and services supported	> Social Contribution		P123
203-2	Significant indirect economic impacts	-		
GRI 204: Procurement Practices 2016		Where to find	Sector Standard reference number	
204-1	Proportion of spending on local suppliers	-		
GRI 205: Anti-Corruption 2016		Where to find	Sector Standard reference number	
205-1	Operations assessed for risks related to corruption	> Compliance (Prevention of Bribery and Corruption)		P152
205-2	Communication and training on anti-corruption policies and procedures	> Compliance		P149
205-3	Confirmed incidents of corruption and actions taken	> Compliance (Prevention of Bribery and Corruption)		P152

GRI 206: Anti-Competitive Behavior 2016		Where to find	Sector Standard reference number	
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	> Compliance		P149
GRI 207: Tax 2019		Where to find	Sector Standard reference number	
207-1	Approach to tax	> Honoring Tax Liabilities		P152
207-2	Tax governance, control, and risk management	-		
207-3	Stakeholder engagement and management of concerns related to tax	-		
207-4	Country-by-country reporting	-		

ENVIRONMENTAL


GRI 301: Materials 2016		Where to find	Sector Standard reference number	
301-1	Materials used by weight or volume	> Overview of the ENEOS Group's Environmental Impact		P26
301-2	Recycled input materials used	> Increasing the Use of Recyclable Raw Materials		P44
301-3	Reclaimed products and their packaging materials	-		
GRI 302: Energy 2016		Where to find	Sector Standard reference number	
302-1	Energy consumption within the organization	> Overview of the ENEOS Group's Environmental Impact	11.1.2	P26
		> Data		P155
302-2	Energy consumption outside of the organization	-		
302-3	Energy intensity	> Energy Conservation at Production Sites	11.1.4	P32
		> Data		P155
302-4	Reduction of energy consumption	> Energy Conservation at Production Sites		P32
		> Data		P155
302-5	Reductions in energy requirements of products and services	-		

GRI 303: Water and Effluents 2018		Where to find	Sector Standard reference number	
303-1	Interactions with water as a shared resource	> Effective Utilization of Water Resources and Preventing Water Pollution	11.6.2	P56
		> Overview of the ENEOS Group's Environmental Impact		P26
303-2	Management of water discharge-related impacts	> Effective Utilization of Water Resources and Preventing Water Pollution	11.6.3	P56
303-3	Water withdrawal	> Effective Utilization of Water Resources and Preventing Water Pollution	11.6.4	P56
		> Data		P157
303-4	Water discharge	> Effective Utilization of Water Resources and Preventing Water Pollution	11.6.5	P56
		> Data		P157
303-5	Water consumption	> Effective Utilization of Water Resources	11.6.6	P56
GRI 304: Biodiversity 2016		Where to find	Sector Standard reference number	
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	> Biodiversity	11.4.2	P58
304-2	Significant impacts of activities, products, and services on biodiversity	> Biodiversity	11.4.3	P58
304-3	Habitats protected or restored	> Biodiversity	11.4.4	P58
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	> Biodiversity	11.4.5	P58
GRI 305: Emissions 2016		Where to find	Sector Standard reference number	
305-1	Direct (Scope 1) GHG emissions	> Overview of the ENEOS Group's Environmental Impact	11.1.5	P26
		> Prevention of Global Warming		P29
		> Data		P155
305-2	Energy indirect (Scope 2) GHG emissions	> Overview of the ENEOS Group's Environmental Impact	11.1.6	P26
		> Prevention of Global Warming		P29
		> Data		P155

305-3	Other indirect (Scope 3) GHG emissions	> Overview of the ENEOS Group's Environmental Impact	11.1.7	P26
		> Prevention of Global Warming		P29
		> Data		P156
305-4	GHG emissions intensity	-		
305-5	Reduction of GHG emissions	> Prevention of Global Warming	11.2.3	P29
		> Data		P155
305-6	Emissions of ozone-depleting substances (ODS)	-		
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	> Prevention of Air Pollution	11.3.2	P54
		> Data		P157
GRI 306: Waste 2020		Where to find	Sector Standard reference number	
306-1	Waste generation and significant waste-related impacts	> The 3Rs (Reduce, Reuse, Recycle)	11.5.2	P43
		> Management of Chemical Substances		P51
306-2	Management of significant waste-related impacts	> The 3Rs (Reduce, Reuse, Recycle)	11.5.3	P43
		> Management of Chemical Substances		P51
306-3	Waste generated	> The 3Rs (Reduce, Reuse, Recycle)	11.5.4	P43
306-4	Waste diverted from disposal	> The 3Rs (Reduce, Reuse, Recycle)	11.5.5	P43
306-5	Waste directed to disposal	> The 3Rs (Reduce, Reuse, Recycle)	11.5.6	P43
		> Overview of the ENEOS Group's Environmental Impact		P26
GRI 308: Supplier Environmental Assessment 2016		Where to find	Sector Standard reference number	
308-1	New suppliers that were screened using environmental criteria	-		
308-2	Negative environmental impacts in the supply chain and actions taken	> Supply Chain Management (CSR Procurement)		P116

SOCIAL

GRI 401: Employment 2016		Where to find	Sector Standard reference number	
401-1	New employee hires and employee turnover	> Data		P162
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	-		
401-3	Parental leave	> Healthy Work Environment (Work-Life Management)		P107
		> Data		P164
GRI 402: Labor/Management Relations 2016		Where to find	Sector Standard reference number	
402-1	Minimum notice periods regarding operational changes	> Human Rights (Labor-Management Negotiations on Appropriate Labor Conditions)		P88
GRI 403: Occupational Health and Safety 2018		Where to find	Sector Standard reference number	
403-1	Occupational health and safety management system	> Operation of Safety Management System and Status of Certification	11.9.2	P74
403-2	Hazard identification, risk assessment, and incident investigation	> Safety (Major Initiatives)	11.9.3	P76
403-3	Occupational health services	> Industrial Hygiene at Refineries and Other Production Sites	11.9.4	P98
403-4	Worker participation, consultation, and communication on occupational health and safety	> Health (Structure)	11.9.5	P96
403-5	Worker training on occupational health and safety	> Safety (Major Initiatives)	11.9.6	P76
403-6	Promotion of worker health	> Health	11.9.7	P94
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	> Safety	11.9.8	P73
		> Industrial Hygiene at Refineries and Other Production Sites		P98
403-8	Workers covered by an occupational health and safety management system	> Safety	11.9.9	P73
403-9	Work-related injuries	> Results of Major Initiatives for Ensuring Safety	11.9.10	P74
		> Data		P165
403-10	Work-related ill health	> Industrial Hygiene at Refineries and Other Production Sites		P98

GRI 404: Training and Education 2016		Where to find	Sector Standard reference number	
404-1	Average hours of training per year per employee	> Human Resource Development	11.10.6 11.11.4	P89
		> Data		P165
404-2	Programs for upgrading employee skills and transition assistance programs	> Human Resource Development	11.7.3 11.10.7	P89
404-3	Percentage of employees receiving regular performance and career development reviews	> Human Resource Development (Main Human Resource Development Programs)		P91
GRI 405: Diversity and Equal Opportunity 2016		Where to find	Sector Standard reference number	
405-1	Diversity of governance bodies and employees	> Corporate Governance Framework	11.11.5	P133
		> Healthy Work Environment (Diversity, Equity, and Inclusion)		P101
		> Data		P159
405-2	Ratio of basic salary and remuneration of women to men	> Annual Securities Report (Available in Japanese only) 	11.11.6	-
GRI 406: Non-Discrimination 2016		Where to find	Sector Standard reference number	
406-1	Incidents of discrimination and corrective actions taken	> Initiatives for Business and Human Rights		P83
GRI 407: Freedom of Association and Collective Bargaining 2016		Where to find	Sector Standard reference number	
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	> Supply Chain Management (CSR Procurement)		P116
GRI 408: Child Labor 2016		Where to find	Sector Standard reference number	
408-1	Operations and suppliers at significant risk for incidents of child labor	> Human Rights (Preventing Forced Labor and Child Labor)		P88
		> Supply Chain Management (CSR Procurement)		P116
GRI 409: Forced or Compulsory Labor 2016		Where to find	Sector Standard reference number	
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	> Human Rights (Preventing Forced Labor and Child Labor)		P88
		> Supply Chain Management (CSR Procurement)		P116

GRI 410: Security Practices 2016		Where to find	Sector Standard reference number	
410-1	Security personnel trained in human rights policies or procedures	-		
GRI 411: Rights of Indigenous Peoples 2016		Where to find	Sector Standard reference number	
411-1	Incidents of violations involving rights of indigenous peoples	-		
GRI 412: Human Rights Assessment 2016		Where to find	Sector Standard reference number	
412-1	Operations that have been subject to human rights reviews or impact assessments	> Initiatives for Business and Human Rights		P83
		> Supply Chain Management (Confronting the Issue of Conflict Minerals)		P121
412-2	Employee training on human rights policies or procedures	> Human Rights (Raising Awareness of Human Rights through Training and e-Learning)		P83
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	-		
GRI 413: Local Communities 2016		Where to find	Sector Standard reference number	
413-1	Operations with local community engagement, impact assessments, and development programs	> Social Contribution		P123
		> Initiatives at the Customer Service Center		P114
413-2	Operations with significant actual and potential negative impacts on local communities	-		
GRI 414: Supplier Social Assessment 2016		Where to find	Sector Standard reference number	
414-1	New suppliers that were screened using social criteria	-		
414-2	Negative social impacts in the supply chain and actions taken	> Supply Chain Management (CSR Procurement)	11.10.9	P116
GRI 415: Public Policy 2016		Where to find	Sector Standard reference number	
415-1	Political contributions	> Compliance		P152

GRI 416: Customer Health and Safety 2016		Where to find	Sector Standard reference number	
416-1	Assessment of the health and safety impacts of product and service categories	> Quality (Initiatives at Manufacturing Sites)		P113
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	> Inspection of Quality Management Systems		P113
GRI 417: Marketing and Labeling 2016		Where to find	Sector Standard reference number	
417-1	Requirements for product and service information and labeling	> Guidelines on Chemical Substances in Our Products and Management of Chemical Substances		P52
		> SDS 		-
417-2	Incidents of non-compliance concerning product and service information and labeling	> Inspection of Quality Management Systems		P113
417-3	Incidents of non-compliance concerning marketing communications	> Quality (Advertising Activities)		P114
GRI 418: Customer Privacy 2016		Where to find	Sector Standard reference number	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	> Information Security		P147