



# ENEOS Holdings, Inc.

## Transition-Linked Bond Framework

May 2022

### 1. Introduction

ENEOS Holdings, Inc. (hereinafter "ENEOSHD") has established the Transition-Linked Bond Framework (hereinafter "the Framework"). Based on the Framework, ENEOSHD will issue transition-linked bonds to inform investors and market participants of as well as advance its efforts toward carbon neutrality.

#### 1.1 Overview of the ENEOS Group

The ENEOS Group (formerly the JXTG Group) was established as a result of the merger of the JX Group and the TonenGeneral Group in April 2017. In June 2020, with the change in trade names of JXTG Holdings, Inc. and JXTG Nippon Oil & Energy Corporation to "ENEOS Holdings, Inc." and "ENEOS Corporation", respectively, the JXTG Group changed its name to the "ENEOS Group".

Under the management of ENEOSHD, three principal operating companies are engaged separately in the energy business; the oil and natural gas exploration and production business; and the metals business.

#### 1.2 Reference to Principles and Guidelines

The Framework will communicate in a transparent manner on the key elements and core components recommended by the following principles and guidelines.

- ICMA Climate Transition Finance Handbook 2020
- Financial Services Agency; Ministry of Economy, Trade and Industry; and Ministry of the Environment, Japan Basic Guidelines on Climate Transition Finance May 2021
- ICMA Sustainability-Linked Bond Principles 2020
- Ministry of the Environment, Green Loan and Sustainability Linked Loan Guidelines 2020

<Alignment with the Four Key Elements of Climate Transition Finance>

Four Key Elements of Climate Transition Finance	Related Sections
1. Issuer's climate transition strategy and governance	2.1、2.2、2.3、2.4、2.5、2.6、2.7
2. Business model environmental materiality	2.1、2.2、2.3、2.4、2.6、2.7
3. Climate transition strategy to be 'science-based' including targets and pathways	2.5、2.6
4. Implementation transparency	2.2、2.6

<Alignment with the Five Core Components of Sustainability-Linked Bond>

Described in Chapter 3: "The Five Core Components of ICMA Sustainability-Linked Bond Principles".

ENEOSHD has obtained a third party opinion from Japan Credit Rating Agency, Ltd. regarding the alignment of the Framework with the Principles and Guidelines stated above.

2. Carbon Neutrality Strategy of the ENEOS Group

2.1 ENEOS Group Philosophy

# ENEOS Group Philosophy

## 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

<b>As a member of the community</b>	<p><b>High ethical standards</b> Based on our core principles of integrity and fairness, we conduct all of our business activities in accordance with our high ethical standards.</p> <p><b>Health, safety, and environment</b> We give the highest priority to health, safety and environmental initiatives, which are vital to the well-being of all living things.</p>
<b>Supporting day-to-day life</b>	<p><b>Focus on customers</b> 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.</p>
<b>For a vibrant future</b>	<p><b>Taking on challenges</b> Taking changes in stride, we rise to the challenge of creating new value while seeking innovative solutions for today and tomorrow.</p> <p><b>Moving Forward</b> 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.</p>

The ENEOS Group (hereinafter "the Group") is working to realize the ENEOS Group Philosophy by enhancing its core businesses, pursuing innovation and expanding its businesses globally. To this end, the Group is also working to develop employees with a strong sense of ethics and a willingness to take on challenges. Through these efforts, the Group aims to become one of the most prominent and internationally competitive energy and materials company groups in Asia.

## 2.2 ESG Management of the ENEOS Group

### 2.2.1 Basic Policy for ESG Management

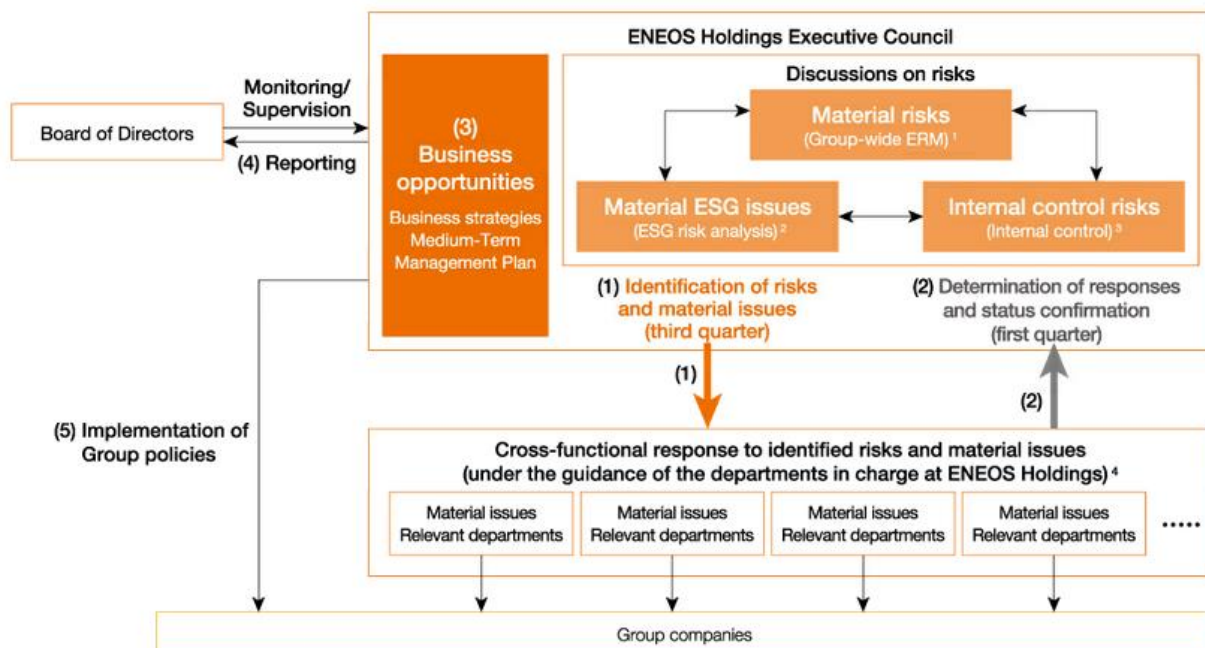
To achieve sustainable growth, our value must be recognized by building more credibility with our stakeholders through our response to social needs and the resolution of social issues. The Group has accordingly formulated the Basic Policy for ESG Management.

#### <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.

### 2.2.2 ESG Management Structure

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



## 2.3 Material ESG Issues

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

Following the identification procedures, 15 material ESG issues were identified for FY2021. 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.

### <FY2021 Material ESG Issues and Targets (KPIs)>

Categories	Material ESG Issues	Targets (KPIs)
Environmental	Contribution to the development of a low-carbon society	<ul style="list-style-type: none"> <li>Reduction in CO2 emissions: Reduce by 4.02 million tons compared to fiscal 2009</li> </ul>
	Contribution to the development of a recycling-oriented society	<ul style="list-style-type: none"> <li>Waste-to-landfill ratio: Maintain zero emissions (less than 1%)</li> </ul>
	Understanding and management of biodiversity risks	<ul style="list-style-type: none"> <li>Understand risks at manufacturing sites and examine responses</li> </ul>
	Understanding and management of water risks	<ul style="list-style-type: none"> <li>Serious environmental incidents: zero</li> <li>Serious legal compliance incidents: zero</li> <li>Understand risks at manufacturing sites and examine responses</li> </ul>
	Control of air pollutant emissions	<ul style="list-style-type: none"> <li>Serious environmental incidents: zero</li> <li>Serious legal compliance incidents: zero</li> </ul>
Social	Ensuring safety/ Health enhancement	<ul style="list-style-type: none"> <li>Zero serious occupational injuries (occupational fatalities)</li> <li>Achieve TRIR* of 1.0 or less *Number of occupational injuries of non-lost-time severity or greater per one million working hours</li> <li>Increase the cancer screening rate (recommendations)</li> <li>Achieve screening rate of 70% or higher for stomach cancer, colorectal cancer, breast cancer, and cervical cancer</li> </ul>
	Communication with stakeholders (investors, etc.)	<ul style="list-style-type: none"> <li>Effective engagement with investors and others</li> </ul>
	Compliance with international principles on human rights	<ul style="list-style-type: none"> <li>Implement human rights due diligence, including for subsidiaries</li> <li>Implement human rights training</li> </ul>
	Securing and developing human resources	<ul style="list-style-type: none"> <li>Implement effective training and evaluation based on human resource development plan</li> </ul>

	Diversity and inclusion	<ul style="list-style-type: none"> <li>Maintain rate of women among newly hired university graduates at 25% or higher</li> <li>Maintain employment rate of people with disabilities at 2.3% or higher</li> </ul>
	Work-life management	<ul style="list-style-type: none"> <li>Maintain annual paid leave days taken at 80% or higher</li> <li>Maintain 100% rate of return to work after childcare leave</li> </ul>
Governance	Appropriate structuring and operation of corporate governance	<ul style="list-style-type: none"> <li>Implement evaluations of the effectiveness of the Board of Directors</li> <li>Improve corporate governance based on the corporate governance code and analysis of the results of exercising voting rights at general meetings of shareholders</li> </ul>
	Compliance	<ul style="list-style-type: none"> <li>Conduct legal compliance inspections</li> <li>Implement training on important laws and regulations (Anti-Monopoly Act, etc.)</li> <li>Appropriate operation of the internal reporting system</li> </ul>
	Social responsibility in the supply chain	<ul style="list-style-type: none"> <li>Implement CSR procurement surveys at overseas sites in addition to domestic sites, where surveys have already been conducted</li> <li>Communicate the Group's procurement policies and procurement guidelines for business partners</li> </ul>
	Effective risk management	<ul style="list-style-type: none"> <li>Steady execution of the risk management process</li> </ul>

※Applicable companies: ENEOHD, principal group companies and NIPPO Corporation

### <Identification Procedure for Material ESG Issues>

#### Step1 Designate ESG risks to consider

Designate ESG risks by comprehensively examining various guidelines (GRI Standards, ISO 26000, US Sustainability Accounting Standards Council (SASB), etc.), assessment items of ESG assessment organizations, and the Sustainable Development Goals (SDGs)



#### Step2 Assess the designated ESG risks

Assess the degree of materiality of the ESG risks designated in Step 1 based on the assessment weightings of ESG assessment organizations



#### Step3 Identify material ESG issues

Identify the ESG risks assessed in Step 2 that exceed the assessment reference baselines as material ESG issues

## 2.4 Policy for Environmental Initiatives

As an energy and materials company group, the Group recognizes that 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 our intent, we established the following as our envisioned goals in our Long-Term Vision to 2040: become one of the most prominent and internationally competitive energy and materials company groups in Asia, create value by transforming our current business structure, and contribute to the development of a low-carbon, recycling-oriented society. In May 2020, we have also stated our intent to achieve carbon neutrality in our own emissions by 2040.

## 2.5 Assumption of Business Environment in 2040

The Group regularly analyzes long-term forecasts of energy demand based on the World Energy Outlook report, published annually by the International Energy Agency (IEA).

When developing its Long-Term Vision to 2040, the Group referred to the World Energy Outlook 2018 New Policies Scenario and Sustainable Development Scenario, which is based on the Paris Agreement. Using this information, the Group identified three long-term trends in the business environment: the development of a low-carbon, recycling-oriented society, digital innovation, and lifestyle changes.

By 2040, the Group envisions the mass introduction of renewable energy; the replacement of gasoline and diesel cars with electric vehicles (EVs), used for car sharing and energy storage; distributed energy resources with energy storage; and recycling technology and infrastructure for metals and plastic. Although we expect domestic fuel demand to decline to half the 2017 level, we also foresee a great increase in demand for hydrogen and renewable energy in line with the shift to a low carbon, recycling-oriented society.

In addition, with the progression of digital innovation, demand is expected to rise dramatically for copper, a base metal, raw materials for recycling, and high-performance and advanced materials required for digital devices.

## Changes in the Business Environment

### Development of a low-carbon, recycling-oriented society

- Ever-increasing global warming concerns (including extreme weather events and natural disasters worldwide)
- Rapidly decreasing cost of renewable energy and battery storage
- Natural resource conservation efforts worldwide (rare metals, plastic waste, etc.)

### Digital innovation

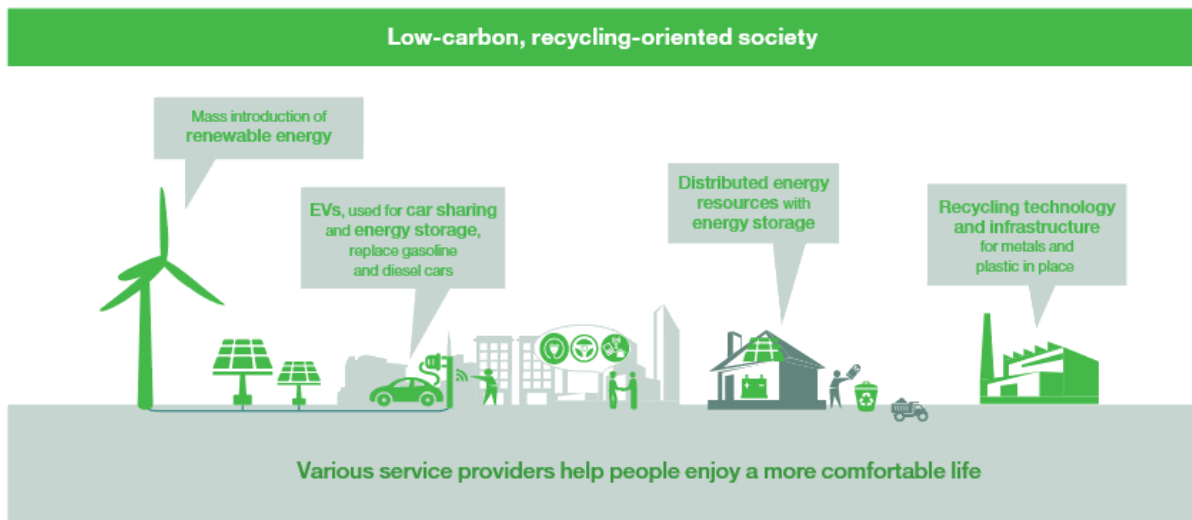
- Rapid progress of Internet society and blockchain technology
- Dramatic improvement in productivity with IoT, AI, robotics, etc.
- Electrification (shift to EVs, autonomous driving, etc.)

### Lifestyle changes

- Growing world economy, especially in Asia, and people seeking abundant life
- People active until 100 years old
- Congestion in urban areas and greater need for community development
- Growth of sharing economy, preference for experiences rather than material possessions



## Scenario in 2040

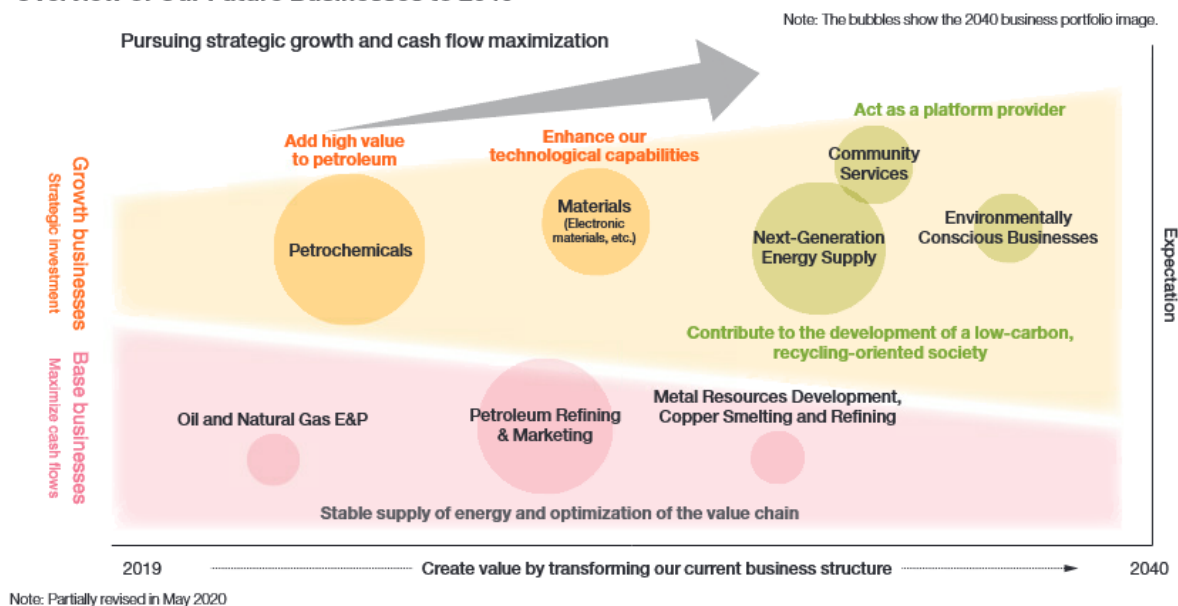


The Group is accelerating structural reforms to build a resilient business portfolio that will enable it to respond to risks and opportunities that have been identified and achieve sustainable growth.

In building our business portfolio, we have largely categorized the Group's businesses into growth businesses, where we will increase strategic investment, and base businesses. In petroleum refining and marketing, one of our base businesses, we will optimize the value chain and maximize cash flows through improved efficiencies and resilience while fulfilling our responsibility to provide a stable supply of energy. In our growth businesses, we will focus on five newly defined businesses where we will effectively concentrate our management resources.



## Overview of Our Future Businesses to 2040



Strategy & Governance    Materiality    Science-based    Transparency

### 2.6 Targets towards Carbon Neutrality

As a milestone toward its stated goal of achieving net zero in its own CO<sub>2</sub> emissions, the Group has developed the Medium-Term Environmental Management Plan for FY2020 to 2022, and has established long-term environmental targets to 2030.

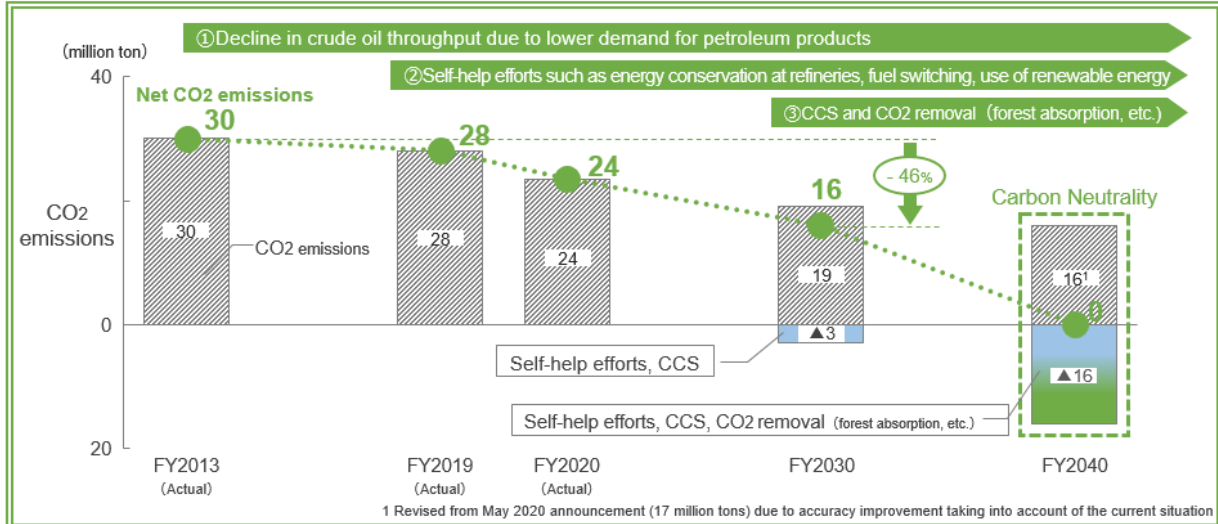
In light of the changes in domestic and global circumstances, such as the declaration of CO<sub>2</sub> emissions reduction targets by the Government of Japan and global discussions related to carbon neutrality standards, the Group revised its Carbon Neutrality Plan. While maintaining its domestic business, which is essential to a stable energy supply, the Group has set a target for a 46% reduction compared with FY2013 in Scope 1 and 2 net CO<sub>2</sub> emissions by FY2030, as well as a target for net zero Scope 1 and 2 CO<sub>2</sub> emissions by FY2040. In order to achieve these targets, the Group will utilize carbon offsets such as CCS and forest absorption. Furthermore, the Group will work together with the government and other companies toward the reduction of Scope 3 CO<sub>2</sub> emissions and the realization of carbon neutrality by FY2050.

The efforts of ENEOSHD are aligned with the 2050 Carbon Neutrality Declaration of the Government of Japan, the Sixth Strategic Energy Plan, and Technology Roadmap for Transition Finance in the Oil Sector. We believe that our efforts will contribute to the mitigation of climate change, which is recognized as a global issue.

ENEOSHD will review its long-term strategies, including its assumptions of the business environment and the Medium-Term Management Plan, from time to time in case of material changes in its assumptions of the external environment and other factors.

## Carbon Neutrality Plan (Announced on May 13, 2022)

<b>Scope 1, 2</b>	<ul style="list-style-type: none"> <li>✓ In order to achieve 46% reduction in CO<sub>2</sub> emissions, we aim to start CCS businesses by the end of FY2030.</li> <li>✓ Realization of carbon neutrality through self-help efforts, CCS and CO<sub>2</sub> removal (forest absorption, etc.)</li> </ul>
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<b>Scope 3</b>	<ul style="list-style-type: none"> <li>✓ Working together with the government and other companies for the realization of Carbon Neutrality by the end of FY2050</li> <li>✓ Pursuing energy transition through expansion of renewable energy and early commercialization of hydrogen, SAF and synthetic fuels</li> </ul>
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### 2.6.1 Environmental Vision (FY2040)

<b>Environmental Vision (Fiscal 2040)</b>	The ENEOS Group aims to be carbon neutral in its own CO <sub>2</sub> emissions in fiscal 2040. We will achieve this by strengthening and expanding businesses that impose a low environmental burden and strengthening environmentally conscious businesses.
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\*Developed in May 2020. To be reviewed for consistency with the Carbon Neutrality Plan revised in May 2022.

### 2.6.2 Long-term Environmental Targets (FY2030)

<b>Long-term environmental targets (Fiscal 2030)</b>	We aim to reduce CO <sub>2</sub> emissions by 10.17 million tons in fiscal 2030, compared to fiscal 2009, by pursuing energy conservation measures in business activities and pursuing sales and development of environmentally friendly products*, including renewable energy, while also pursuing environmentally conscious businesses and contributing to the development of a low-carbon, recycling-oriented society.
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\*Developed in May 2020. To be reviewed for consistency with the Carbon Neutrality Plan revised in May 2022.

### 2.6.3 Medium-Term Environmental Management Plan (FY2020~FY2022)

#### Medium-Term Environmental Management Plan

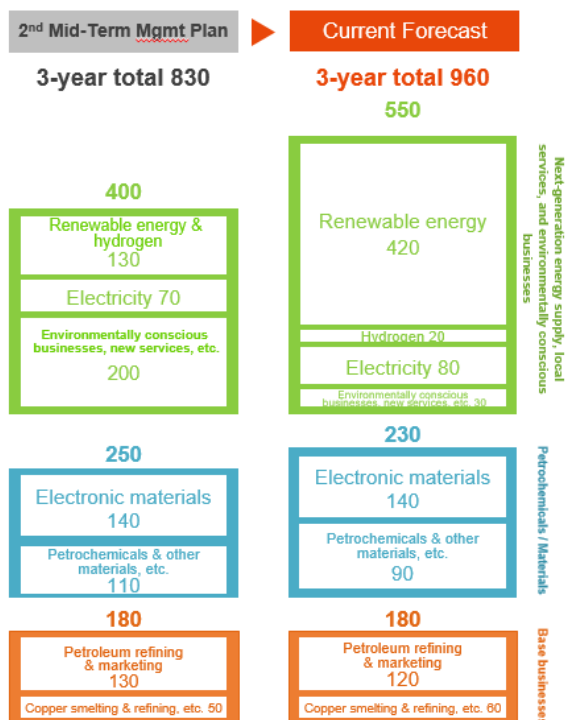
Key themes	Basic initiatives	Concrete measures aimed at 2022
Contribution to a low-carbon society	Pursuit of energy conservation measures in business activities CO <sub>2</sub> recovery in business activities (Scope 1 and Scope 2)	<ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions by <b>2.16 million tons</b> compared to fiscal 2009 by pursuing energy conservation</li> <li>CCS/CCUS initiatives</li> </ul>
	Reduction of CO <sub>2</sub> emissions in the supply chain (Scope 3)	<ul style="list-style-type: none"> <li>Reduce CO<sub>2</sub> emissions of customers by <b>1.2 million tons</b> compared to fiscal 2009 by promoting sale and development of environmentally friendly products*</li> </ul>
	Develop businesses in hydrogen and renewable energy	<ul style="list-style-type: none"> <li>Develop hydrogen station business</li> <li>Develop renewable energy business</li> <li><b>Total reduction of 920,000 tons</b> from biomass, solar power, wind power, and other forms of renewable energy</li> </ul>

Total CO<sub>2</sub> emission reduction target: 4.28 million tons in fiscal 2022

### 2.6.4 Capital Investment Plan (FY2020~FY2022)

According to the 2nd Mid-Term Management Plan for FY2020~FY2022, among a total capital investment of ¥1,600 billion, ¥960 billion will be used for strategic investment for growth businesses including next-generation energy supply, local services, and environmentally conscious businesses, etc.

#### ● Breakdown of Strategic Investment (unit: ¥bn)



#### ● Key Strategic Investment Projects

**Renewable Energy**

- ✓ **Acquisition of JRE (Japan Renewable Energy)**
  - Achieved the 2nd Mid-Term Mgmt Plan target of 1GW in renewable energy generation capacity<sup>2</sup>
  - Aim to further build up generation capacity by leveraging JRE's business development expertise

<sup>2</sup> Incl. power plants under construction

**Electronic Materials, Petrochemicals/Materials**

- ✓ **Enhancement of production capabilities for Advanced Materials (electronic materials)**
  - Reinforce production capacity for sputtering targets for semiconductors and treated rolled copper foil to capture rapidly increasing demand
- ✓ **Acquisition of JSR's elastomers business**
  - Aiming to quickly create business synergies by combining JSR's technology and ENEOS' elastomer-related R&D technology

Realization of improvement in corporate value by fostering and enhancing growth businesses

## 2.7 Participation in External Initiatives

- UN Global Compact (UNGC)  
Four Group companies (ENEOSHD, ENEOS, JX Nippon Oil & Gas Exploration, and JX Nippon Mining & Metals) 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.
- Task Force on Climate-related Financial Disclosures (TCFD)  
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.
- Challenge Zero
- CDP
- Council for Better Corporate Citizenship (CBCC)
- Alliance to End Plastic Waste (AEPW)
- World Business Council For Sustainable Development (WBCSD)
- International Council on Mining & Metals (ICMM)
- Japan Business Initiative for Biodiversity (JBIB)
- IPIECA—a global oil and gas industry association for advancing environmental and social performance
- Extractive Industries Transparency Initiative (EITI)
- Business for Nature Call to Action

### 3. The Five Core Components of ICMA Sustainability-Linked Bond Principles

The five core components outlined under the ICMA Sustainability-Linked Bond Principles (1.Selection of Key Performance Indicators (KPIs), 2.Calibration of Sustainability Performance Targets (SPTs), 3.Bond characteristics, 4.Reporting, 5.Verification) of the Framework are as follows.

#### 3.1 Selection of Key Performance Indicators (KPIs)

The KPI of each transition-linked bond to be issued based on the Framework is as follow. The KPI contributes to the achievement of carbon neutrality of the Group by 2040.

**KPI: The Scope 1 and 2 net CO<sub>2</sub> emission of the ENEOS Group**

<Definition>

The total amount of direct CO<sub>2</sub> emissions (Scope 1) from the business activities of the ENEOS Group (\*1) and indirect CO<sub>2</sub> emissions (Scope 2) resulting from energy use (electricity, thermal, etc.) in its business activities, excluding carbon offsets (\*2), within the specified fiscal year.

\*1 The ENEOS Group: Principal operating companies (ENEOS, JX Nippon Oil & Gas Exploration, JX Nippon Mining & Metals) and other group companies

\*2 Carbon offsets: Domestic carbon dioxide capture and storage (CCS) and forest absorption

<Historical KPI Performance (FY2018~FY2020) (\*3)>

	FY2018	FY2019	FY2020
①CO <sub>2</sub> emissions (Scope 1 and 2) (million tons)	28.30	26.66	22.49
②Carbon offsets (million tons of CO <sub>2</sub> )	2.60	3.00	3.14

\*3: Carbon offsets from FY2018 to FY2020 include sales of renewable energy and environmentally friendly products. As the definition of carbon offsets is different from that of \*2, the data above are for reference only.

#### 3.2 Calibration of Sustainability Performance Targets (SPTs)

The SPT of each transition-linked bond to be issued based on the Framework will be either of the two SPTs stated below. The SPT and observation period will be specified in the documentation, which are to be Amended Shelf Registration Statement and Shelf Registration Supplements, of each transition-linked bond.

**SPT1: 46% reduction compared with FY2013 in Scope 1 and 2 net CO<sub>2</sub> emissions of the ENEOS Group by FY2030 (\*4)**

**SPT2: Net zero Scope 1 and 2 CO<sub>2</sub> emissions of the ENEOS Group by FY2040**

\*4: Equivalent to a 16-million-ton reduction (as of May 2022)

※Observation Periods

SPT1: April 1, 2030 ~ March 31, 2031

SPT2: April 1, 2040 ~ March 31, 2041

### 3.3 Bond Characteristics

The bond characteristics will be specified in the documentation, which are to be Amended Shelf Registration Statement and Shelf Registration Supplements, of each transition-linked bond.

The SPTs of the issued transition-linked bonds are not subject to any post-issuance change in SPTs made by ENEOSHD. However, they may be subject to recalculation based on specific circumstances, such as unexpected potential events having a material impact on the calculation methodology of KPI, the calibration and assumptions of SPTs and KPI scope. The events may include, but not limited to, M&A activities, drastic changes in the regulatory environment or extreme events, etc. The details of recalculation will be disclosed on ENEOSHD's website.

The failures to achieve SPTs will result in either of the two events stated below.

#### (1) Donation

If the external verification reports of the SPTs achievement within the observation periods have not been provided by the determination dates, specified amount of donation will be made to eligible organizations by the maturity dates. Eligible organizations are Public-interest Incorporated Associations, Public-interest Incorporated Foundations, international organizations, municipality certified NPOs, municipalities and other equivalent organizations for the purpose of environmental conservation. The eligible organizations where the donation will be made will be decided through necessary procedures by the determination dates of the SPTs.

#### <Determination Dates and Donation Amount>

SPTs	Reference Dates	Determination Dates	Amount
SPT1	March 31, 2031	December, 2031	0.25% of the issued amount
SPT2	March 31, 2041	December, 2041	0.25% of the issued amount

#### (2) Purchase of Carbon Credits / Renewable Energy Certificates

If the external verification reports of the SPTs achievement within the observation periods have not been provided by the determination dates, specified amount of carbon credits or Renewable Energy Certificates will be purchased by the maturity dates. If purchase of carbon credits or Renewable Energy Certificates is not available due to force majeure events such as changes in carbon market regulations, donation will be made instead.

#### <Determination Dates and Purchase Amount>

SPTs	Reference Dates	Determination Dates	Amount
SPT1	March 31, 2031	December, 2031	0.25% of the issued amount
SPT2	March 31, 2041	December, 2041	0.25% of the issued amount

**3.4 Reporting**

ENEOSHD will report on the following information. The reference period of each reporting is the fiscal year preceding the fiscal year of that reporting. The reports will be published on ENEOSHD's website.

No.	Information to be Reported	Reporting Frequency
①	Performance of the KPI within the reference period	Annually until the final determination dates, starting from the fiscal year following the year of issuance of each transition-linked bond
②	Performance against the SPTs within the reference period	
③	Up-to-date information of climate transition strategies relative to the KPI and SPTs	
④	Donation or purchase status if ENEOSHD failed to achieve the specified SPTs	Timely

**3.5 Verification**

Performance of the KPI will be verified by independent external verifier on an annual basis until the final determination dates. The verification results will be published on ENEOSHD's website.