

ADEKA Group Initiatives for Climate Change Issues

Mar. 2, 2022

【TSE 4401】



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Integration of management and CSR

The ADEKA Group Fundamental CSR Policy

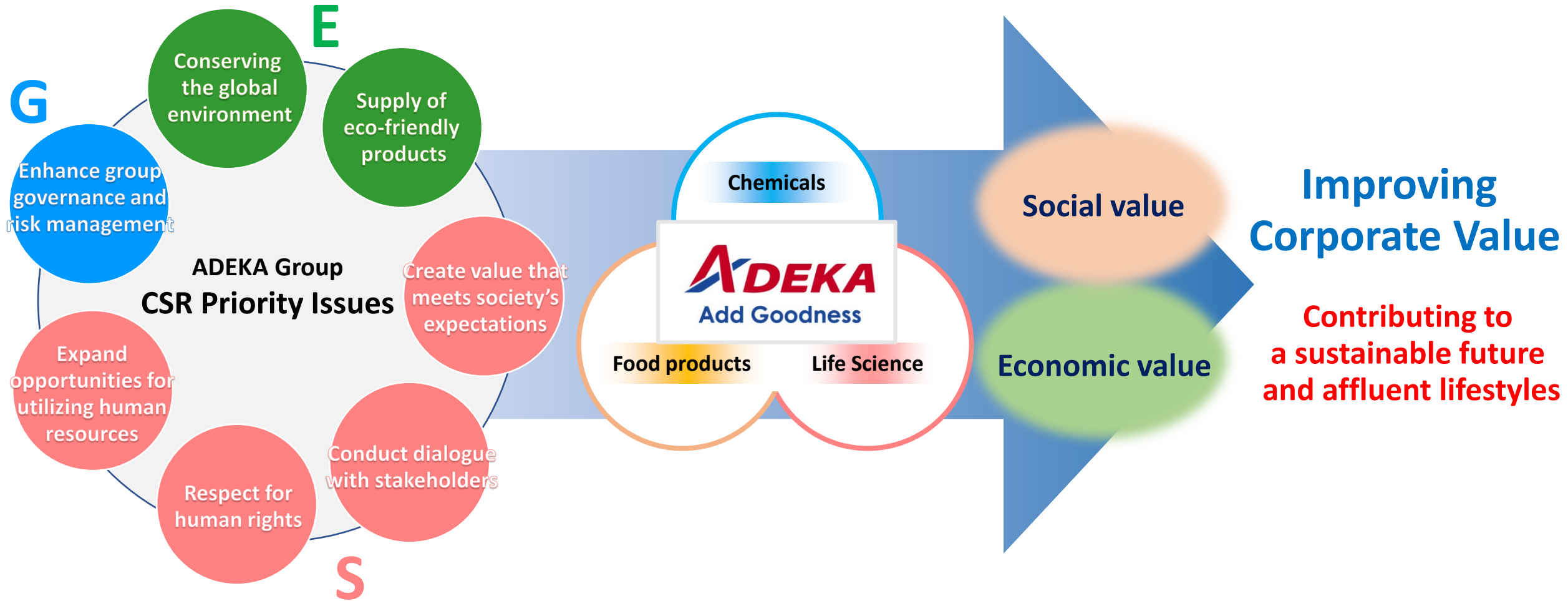
ADEKA Group contributes to the creation of a sustainable future by meeting stakeholders' expectations with technologies and reliability through fair and transparent corporate activities.



- **Management Policy**
 - Universal value and the raison d'être of the Group
- **Fundamental CSR Policy**
 - The basic stance on which the Group meets social expectations and aims to improve its corporate value
- **Our Vision : ADEKA VISION 2030**
 - The direction the Group should take to achieve its Management Policy
- **Mid-Term Management Plan : ADX 2023**
 - Specific measures to achieve our vision
- **Regular corporate activities**
 - Business plans for executing the ADX 2023
 - Specific activities of each division under the ADX 2023
 - Behavioral objectives of individuals based on the division-specific plan

See social issues as opportunities and promote the integration of management and CSR

Value pursued by ADEKA

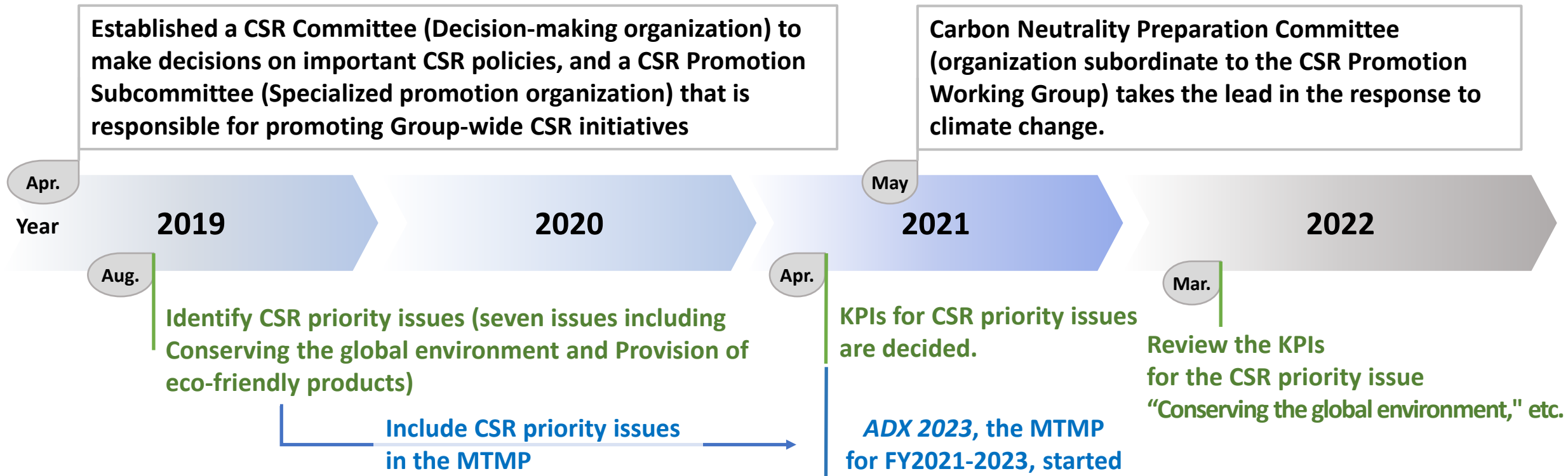


Maximize both social value and economic value

(the resolution of social issues) (the increase of profit and the size of the business)

⇒ **Help build a sustainable society and affluent lifestyles**

Past Activities



- "Long-term Strategy in Compliance with the Paris Agreement" (Jun. 2019) Advocated a decarbonized society as the final goal.
- Japanese government declared their target of reducing GHG emissions to virtually zero by 2050. (Oct. 2020)
- Climate change summit (Apr. 2021)
- Japanese government set a target of reducing GHG emissions 46% by 2030. (Apr. 2021)
- The Corporate Governance Code was revised. (Jun. 2021)

Our Operating Environment and Related Notes

Climate change issues: Find business opportunities through our responsibility as a business enterprise and our new efforts.

Business characteristics

Intermediate material manufacturer

- It is necessary to build relationships with upstream and downstream companies.
- The continuation of business operations is dependent on carbon neutrality.

The world towards carbon neutrality

Rapidly changing every day

- Japan pledged to achieve carbon neutrality.
(GHG emissions in 2030: 46% reduction compared with FY2013)
- Raising our GHG emissions reduction targets one after another.

Business Opportunities

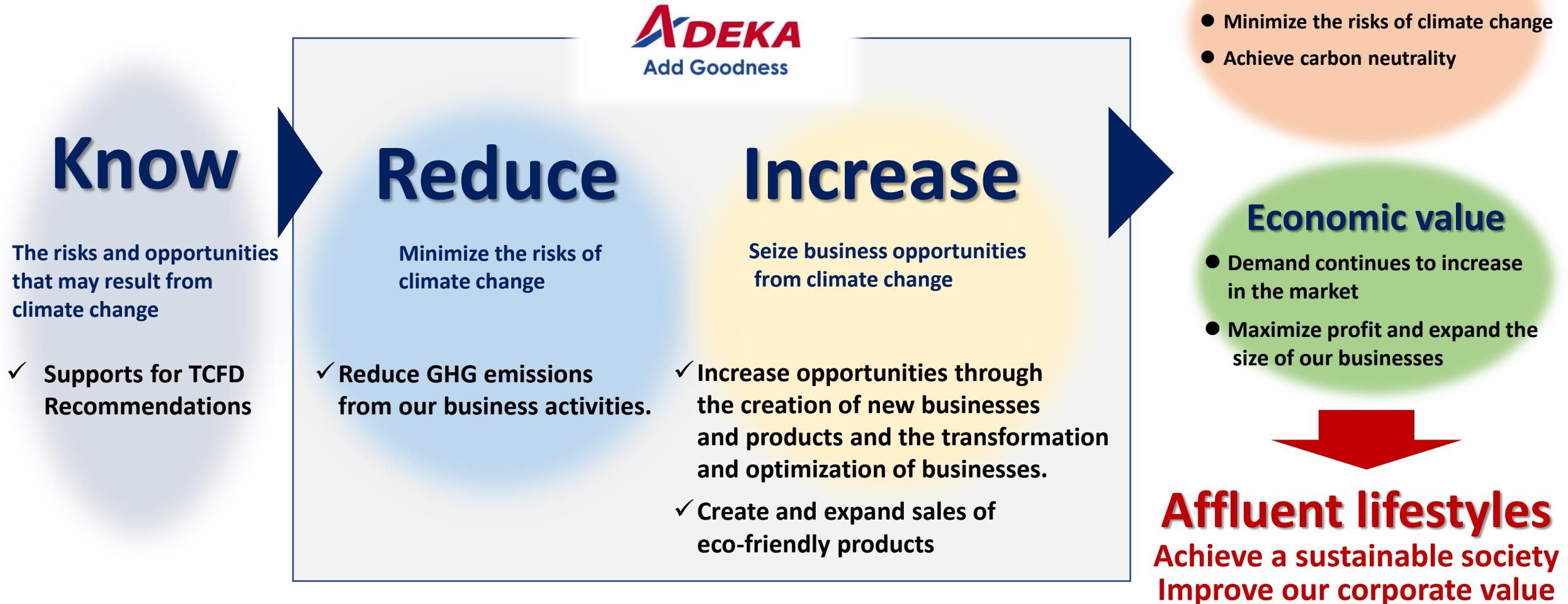
Keep on top of changing trends

- Changes in the world in pursuit of a decarbonized society
- Speedy efforts are needed.

Raise the GHG emissions reduction target and promote carbon neutrality

The purpose of tackling climate change

Seriously address climate change issues and **pursue and maximize both social value and economic value.**



Efforts to Achieve Carbon Neutrality

Raise the GHG emissions reduction target and increase efforts to achieve carbon neutrality by 2050

Formulate a carbon neutrality roadmap and raise the GHG emissions reduction target for 2030

Formulate a carbon neutrality roadmap

The ADEKA Group

aims to **achieve carbon neutrality by 2050** by (1) reducing the GHG emissions from its business activities and (2) contributing to the reduction of GHG emissions through the creation of technologies and products.

Review KPIs for the CSR priority issue: Conserve global environment

See the next page for a detailed explanation.

By 2030, reduce GHG emissions by

46% (compared with FY2013)



Existing target: **12%** reduction (compared with FY2013)

Express support for the TCFD (Task Force on Climate-related Financial Disclosures)

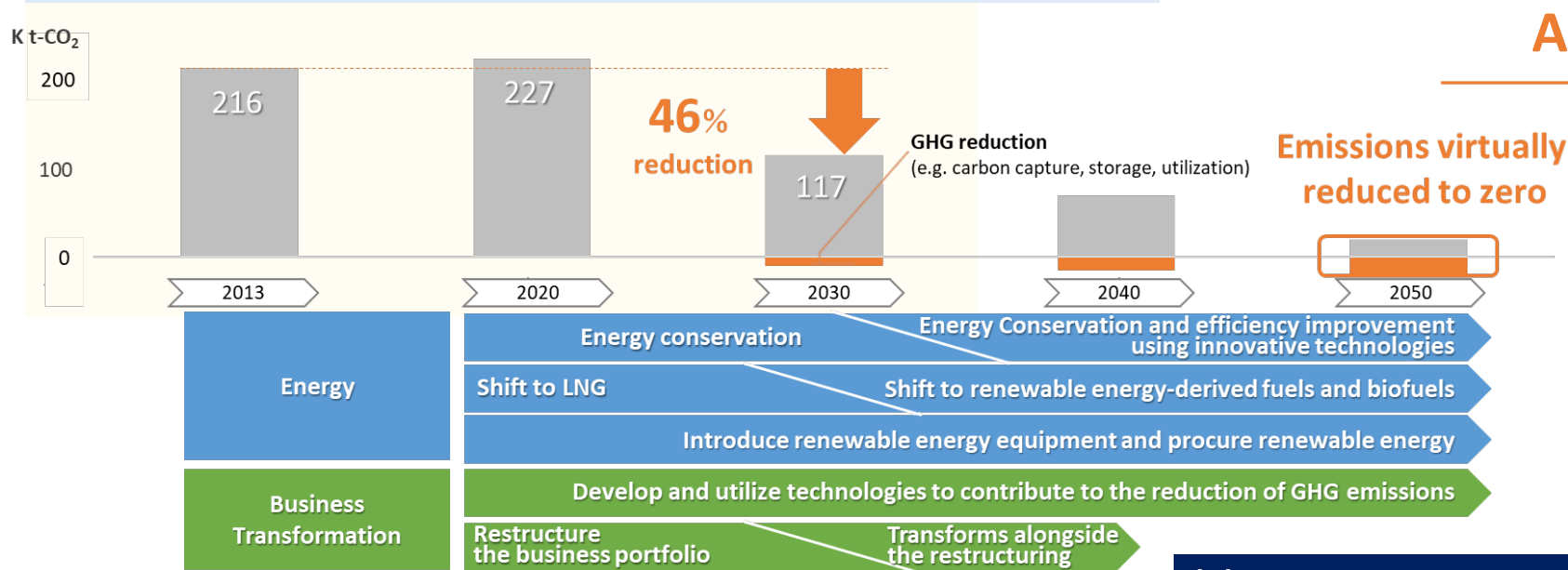
See the P12 for a detailed explanation.



3. Carbon neutral roadmap

(1) Reducing GHG emissions from our business activities

2030 Target (Scope 1+2) **46% reduction** (FY2013 Comparison)



ADEKA Group
2050
Achieve carbon neutrality

(2) Contributing to the reduction of GHG emissions through the creation of technologies and products

- Examine GHG emissions throughout the supply chain
- Develop and provide sustainable products.
- Promote the sustainable procurement of raw materials
- Optimize and increase the environmental friendliness of logistics etc.

Measures for the Carbon Neutrality Roadmap

Gather ideas for achieving carbon neutrality by 2050 from all ADEKA

2050 : Achieving **Carbon Neutrality**

2030 : Reduce CO₂ emissions by **46%** compared to 2013 (Scope 1+2)

(1) Reduce GHG emissions from our business activities

Energy

- Promote energy conservation
- Facilitate the shift to renewable energy
- Introduce and procure renewable energy equipment

Business Transformation

- Restructure and transform the business portfolio for the reduction of GHG emissions
- Discuss the use of internal carbon pricing

(2) Contributing to the reduction of GHG emissions through the creation of technologies and products

- Examine GHG emissions throughout the supply chain
- Promote the sustainable procurement of raw materials
- Optimize and increase the environmental friendliness of logistics

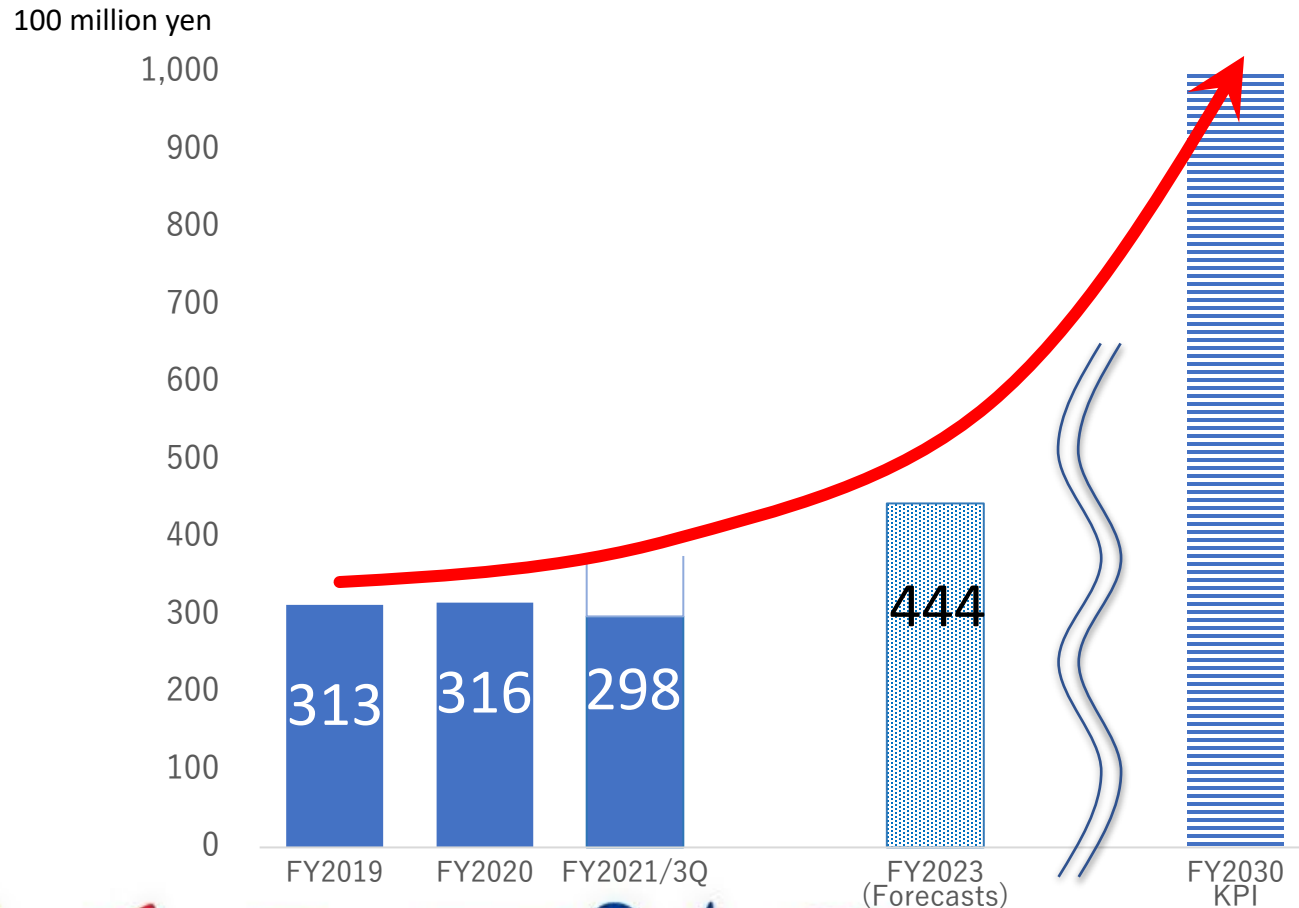
Reduce GHG emissions and contribute to the decarbonization of society by providing eco-friendly products and technologies.

See the next page for an explanation of eco-friendly products

Eco-Friendly Products

2030 KPIs for CSR priority issues (quantitative targets)

Net sales of eco-friendly products:
Increase to triple the level of 2019



Eco-friendly products

Products that contribute to reducing the environmental load throughout their lifecycles from the resource collection to disposal

13 eco-friendly products



- Nucleating agent for automobile components
- Intumescent-type flame retardant
- Stabilizer for heavy metal removal
- Products with RSPO and other certifications (food)
- Products for the reduction of food waste
- Lubricants for the reduction of friction
- Materials for the reduction of SOx
- Water-based coating materials
- Adhesives materials
- Ultraviolet curable materials
- Recycled materials
- Battery materials
- Soil conditioner

4 . Supports for TCFD Recommendations

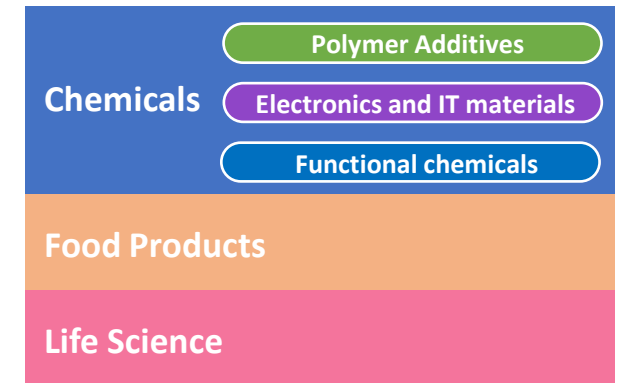
Identify new needs of society and pursue both social value and economic value

ADEKA and its consolidated subsidiary NIHON NOHYAKU (TSE 4997) have expressed support for the TCFD (Feb. 2022)



In 2022, we will conduct a scenario analysis of functional chemicals and life science (NIHON NOHYAKU).

- In line with the TCFD recommendations, we are analyzing and evaluating the impact of climate change on our business activities and formulating measures to address this impact. Subjects of our analyses of the changes in our business environment (scenarios) resulting from climate change have gradually increased.
- A detailed explanation will be provided via an array of materials such as the Corporate Governance Report.



■ TCFD (Task Force on Climate-related Financial Disclosures)

The TCFD is established in 2015 by the Financial Stability Board (FSB) at the request of the Group of Twenty (G20). In the final report published in June 2017, it was recommended that companies and organizations analyze and evaluate the impacts of climate change and then disclose governance, strategies, risk management, indicators and goals. Please refer to the TCFD web site for details.

Scope of the TCFD Scenario Analysis and Related

Scope of the scenario analysis (areas of business)

- ◆ **Functional chemicals (Chemicals)**
- ◆ **Life Science (NIHON NOHYAKU CO.,LTD.)**

■ GHG emissions, financial impact and other factors are considered

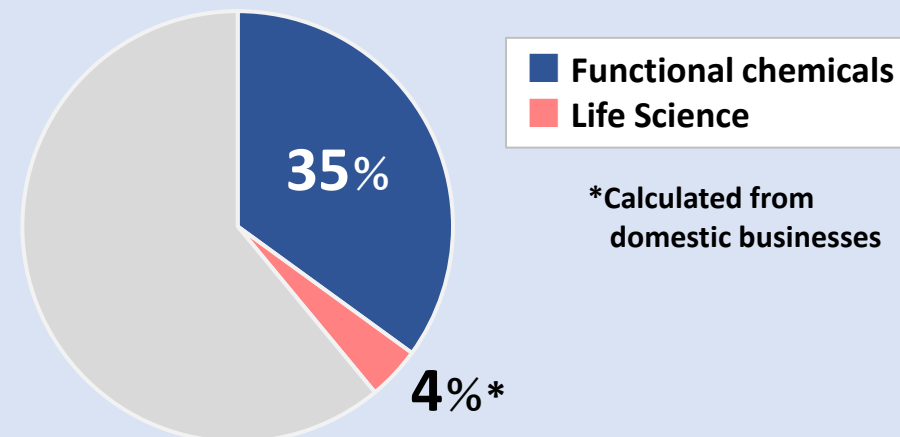
- ✓ Percentage of our GHG emissions
- ✓ Contribute to net sales and operating income in the future
- ✓ Impact on climate change throughout the product lifecycle
- ✓ Raw fuel and energy (electric power) impact product manufacturing

Eligible period

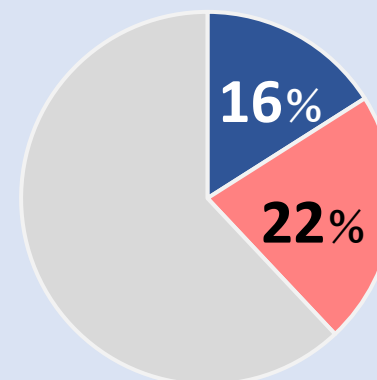
From now to 2050

% of each of the target businesses (FY2020)

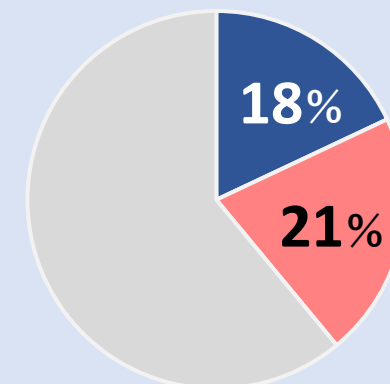
GHG emissions rate (Scope1,2)



Sales ratio



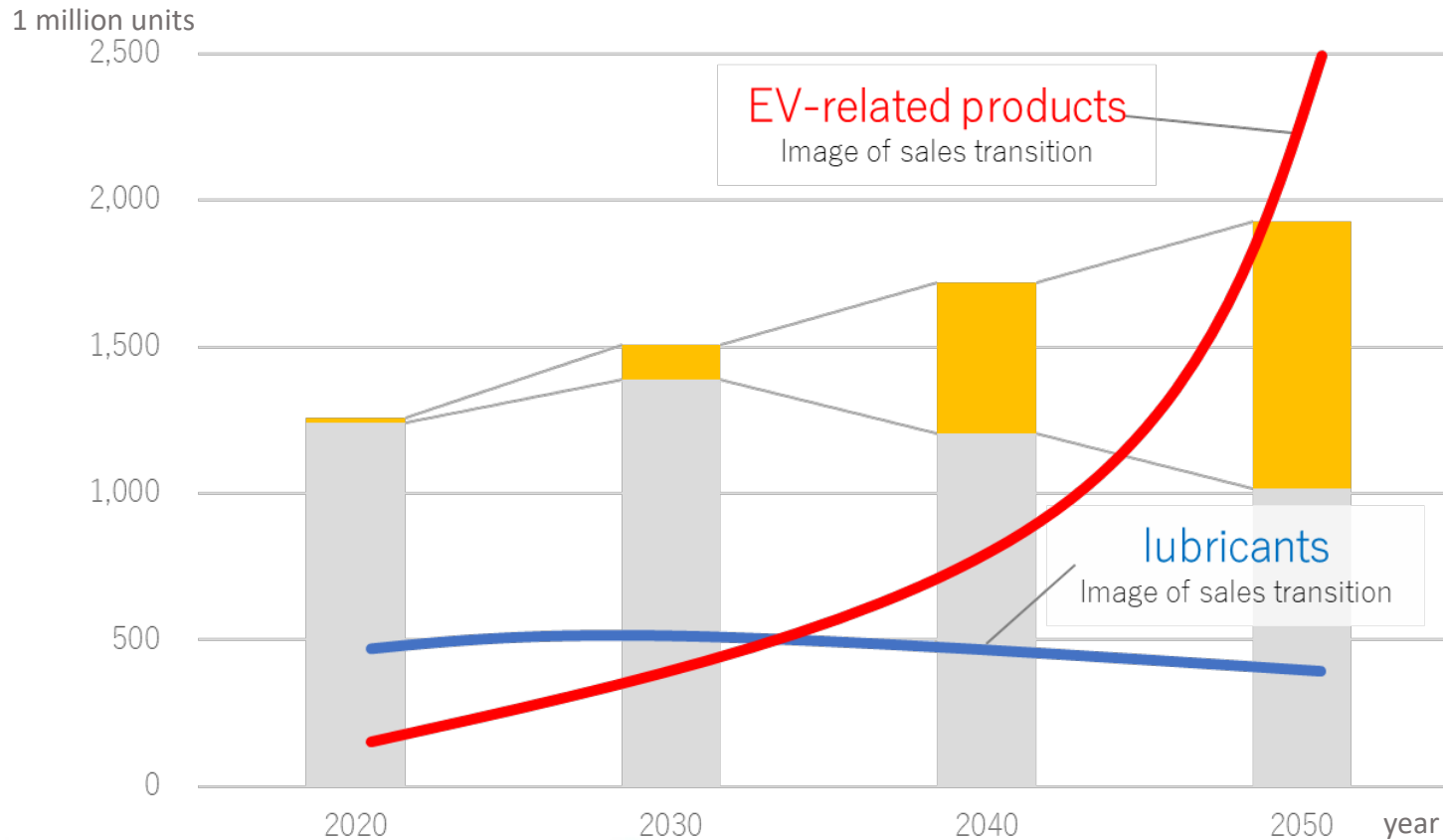
Operating profit ratio



■ The case study the impact of risks and opportunities based on a scenario analysis of functional chemicals.

Concerning the ADEKA SAKURA-LUBE series of lubricants for engine oils, we fear a drop in demand due to more automobiles' being electric powered, which is a transition risk.

Meanwhile, an increase in the No. of EVs sold is expected to lead to the expansion of our EV-related products such as structural adhesives. The impact of transition opportunities will greatly work in our favor.



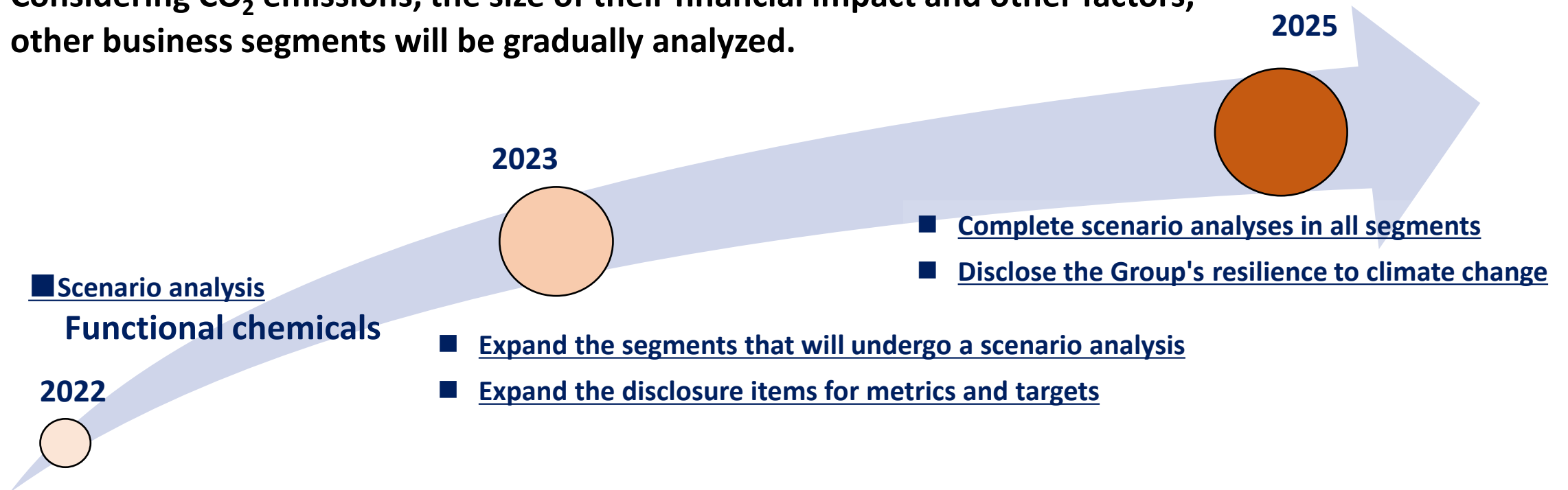
- No. of EV owned
- No. of internal combustion cars owned (PHVs, hybrid vehicles, non-electric vehicles)
- Trend in the net sales of our EV-related products
- Image of sales of our lubricants

■ Notes on trial calculation

※ Future increases and decreases in demand for the relevant products and services are analyzed on the assumption that the increases and decreases in demand would be proportional to the current net sales (while the current market share is maintained).
 Based on data about forecasts of the number of automobiles owned, the shift to EVs, etc. in accordance with the IEA (International Energy Agency; IEA ETP2017) scenarios, calculate the size of the risks and opportunities related to lubricants utilizing the forecast increases or decreases in the number of automobiles with internal-combustion engines, considering them to be the potential cause for demand for the relevant products.

Sophisticate TCFD Action and Scenario Analysis

- ① Incorporate analysis and evaluation results in the functional chemical segment into business strategies and discuss concrete action plans, KPIs and other matters.
- ② Considering CO₂ emissions, the size of their financial impact and other factors, other business segments will be gradually analyzed.



Identify changes and use the power of our Excellent Value; products, technologies and services to contribute to the creation of a society sustainable



Promote carbon neutrality, efficiently use resources, reduce food waste and achieve a circular economy

Quickly identify trends in the external environment and provide our products, technologies and services with higher added value through our technologies, services and human resources, in addition to providing materials.

KPIs for ADEKA Group CSR Priority Issues (As of March 2022)

Priority Domains/ 2030 Goals	CSR Priority Issues	KPIs in 2030	KPI upward revision
E	<i>Environment</i>	Gather ideas from all members of ADEKA to achieve carbon neutrality by 2050 2030: Reduce CO₂ emissions by 46% from 2013 (Scope 1+2)	
	Supply of eco-friendly products	Net sales of eco-friendly products increase to triple the level of 2019	
<ul style="list-style-type: none"> Minimize the environmental impact of operations and make a substantial contribution through eco-friendly products. 			
S	Create value that meets society's expectations	Number of ADEKA Innovative Value (AIV) certifications: twice the number in 2019	
	Conduct dialogue with stakeholders	Establish methods and opportunities for communication with each stakeholder	
	Respect for human rights	Establish and disseminate ADEKA Group Human Rights Policy	
	<i>Human rights and human resources</i>	Expand opportunities for utilizing human resources	<ul style="list-style-type: none"> Promote Diversity and Inclusion (D&I): <ul style="list-style-type: none"> Human Resource Portfolio: Female manager percentage of 10% (non-consolidated) Diversity of personnel in management positions Develop Climate: Increase employee satisfaction, D&I-related educational training, etc. Promote Health Management: Obtain certification for Health & Productivity Management Outstanding Organization (White 500)
<ul style="list-style-type: none"> Respect the human rights of individuals throughout the supply chain and enable all Group employees to work actively. 			
G	<i>Governance</i>	Enhance group governance and risk management	<ul style="list-style-type: none"> Penetration the Group Code of Conduct and the strengths unique to ADEKA Implement Group BCP
<ul style="list-style-type: none"> A group governance system in place and have a business continuity plan in case of an emergency. 			

The forecast performance and business plans specified in this document have been prepared based on information available as of the date of publication, as well as on various prerequisites; therefore, the actual results may differ from these forecasts or plans depending on various factors that may arise hereafter.

In the event of any discrepancy between the Japanese original and this English translation, the Japanese original shall prevail.

The logo for ADEKA features a stylized letter 'A' on the left, composed of two overlapping shapes: a red one on top and a blue one on the bottom, both slanted to the right. To the right of this 'A' is the word 'DEKA' in a bold, red, italicized sans-serif font. The entire logo is centered horizontally.

ADEKA

Add Goodness