Value Creation Process

External environment

- Tighter environmental regulations
- Climate change
- Resource depletion
- Poverty
- Child labour/ forced labour
- Health care crisis
- Technological innovation
- Growing ESG awareness

Panasonic Energy will utilize its diverse capital, including its human resources and technology, to promote solutions to social issues with our strengths at the core and achieve sustainable enhancement of corporate value.

Our Will
Doing what humankind requires

Our Vision
Energy that changes the future

Inputs P.19

[Human capital]
Strengthening of human resources

[Natural capital]
Strengthening responses to resource and environmental issues

[Social and relationship capital]
Sustainable and resilient supply chain

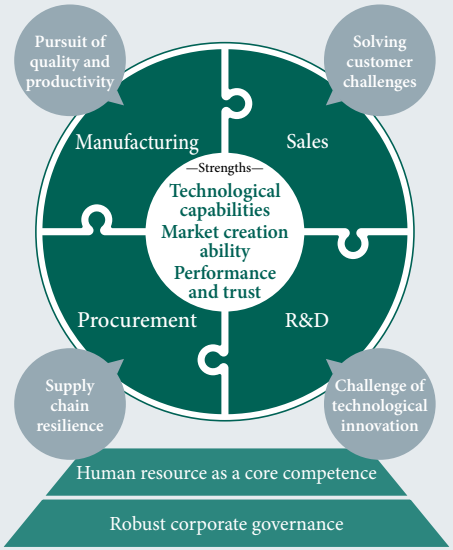
[Intellectual capital]
Strengthening R&D to improve battery performance and reduce environmental impact

[Manufactured capital]
Improvement of productivity, pursuit of quality and product safety

[Financial capital]
Generation of operating cash flow and expansion of investment for growth

Business activities P.24

Building a strong management foundation and promoting solutions to social issues with our strengths at the core

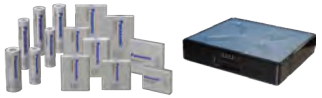


[Related materiality]
- Promoting human capital management and respecting human rights
- Responsible supply chain
- Thorough compliance
- Corporate governance

Outputs P.20

Mobility Energy
Reduce CO_2 emissions by supporting electrification of mobility

Energy Solutions
Contributing to a safe and secure social infrastructure that does not stop even in emergencies



Energy Device
Providing convenient and comfort-able living with eco-friendly batteries

[Related materiality]
- Providing energy for the pursuit of happiness
- Achieving decarbonization
- Realizing a circular society

Value proposition P.21

Our Mission
Achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict

Further capital reinforcement for sustainable corporate value enhancement

Source of Value Creation: the six capitals (inputs)

We regard human capital, natural capital, social and relationship capital, intellectual capital, manufactured capital, and financial capital as the six critical components of corporate value, which we are always working to improve.

Enhancing human resources

[Human capital]

To expand our business in Japan and overseas, we aim to increase the number of employees, focusing on technical and manufacturing human resources. In addition, we will enhance our business competitiveness by developing systems and environments and fostering an organizational culture in which each and every employee can thrive. We also focus on improving the wellbeing of our employees by promoting health and safety activities and "Health and Productivity Management".

Consolidated Group employees	Overseas personnel	Work-related fatalities
Approx. 19,000 →	70% →	0 →

Strengthening responses to resource and environmental issues

[Natural capital]

We will reduce our CO_2 emissions and contribute to the reduction of CO_2 emissions in society as we move towards decarbonization. We are also stepping up our efforts to maximize the positive impact and minimize the negative impact on both achieving decarbonization and the realization of a circular society to use limited resources efficiently and reduce our environmental footprint.

Zero-CO_2 factories*1	CO_2 avoided emissions*2	Factory recycling rate*3
14 sites worldwide ↑	12.71 million tons →	98% →

*1 Factories that have achieved virtually zero CO_2 emissions by promoting energy conservation, introducing renewable energy, and using carbon credits.
*2 The amount of CO_2 emissions reduced by customers and society through the use of our products compared to the baseline level without our products.
*3 Factory waste

Sustainable and resilient supply chain

[Social and relationship capital]

We will work with various stakeholders to fulfill our social responsibilities with regard to human rights, labour, health, and safety while also establishing a robust supply chain for stable supply by promoting recycling and local procurement of battery materials.

Rate of implementation of self-assessments related to human rights and labour

100% →

Strengthening R&D to improve battery performance and reduce environmental impact

[Intellectual capital]

In addition to improving battery performance such as higher capacity, we will focus on minimizing the use of rare metals by transition to cobalt-free and less-nickel batteries, thereby contributing to a reduction in environmental impact. We will also focus on the development of lightweight batteries for the electrification of future aircraft.

Number of patents held

9,100 ↑

Improvement of productivity, pursuit of quality and product safety

[Manufactured capital]

While working to improve productivity at each site through human resource development and the promotion of automation, we are promoting quality innovation with product safety as the top priority. In addition, we will make efficient capital investments to expand production capacity to meet the growing demand for electric vehicles (EVs).

Manufacturing sites worldwide	Number of serious product accidents	Capital investment
20 sites →	0 →	¥292.1 billion ↑

Generation of operating cash flow and expansion of investment for growth

[Financial capital]

We will improve our ability to generate future operating cash flows by strengthening our profitability structure through productivity improvements and streamlining and by increasing production capacity. We will also seek to improve capital efficiency.

Total assets	Operating cash flow
¥1,373.5 billion ↑	¥139.3 billion ↑

ROIC

14.6% ↑ (**0.4%** excluding the impact of the U.S. Inflation Reduction Act [IRA] tax credit)

All figures in the table are results for fiscal 2024.

Panasonic Energy's Contributions (outputs)

Panasonic Energy contributes to society every day through our cutting-edge technologies and diverse products, which are used in various scenes of life.

In-vehicle Business	Industrial and Consumer Business	
Contributing to reduce CO_2 emissions by supporting electrification of mobility	Contributing to a safe and secure social infrastructure that does not stop even in emergencies	Providing convenient and comfortable living with eco-friendly batteries
Mobility Energy Business Division	Energy Solutions Business Division	Energy Device Business Division

Space

The recovery capsule of the asteroid probe Hayabusa 2 uses a lithium primary battery that is resistant to environmental changes.

Illustrations: Akihiro Ikeshita

Data centers

Safe, long-lasting, and highly reliable storage battery systems based on Li-ion batteries are used as a backup power source.

Commercial buildings

Nickel-metal hydride batteries, which are characterized by their long life, are used in guide lights and emergency lights.

Hospitals

A variety of batteries, such as nickel-metal hydride batteries and lithium primary batteries, are used in medical devices that require high safety and reliability.

Houses

Dry batteries are used in familiar products such as remote controls and clocks. In addition, long-term, reliable lithium primary batteries are used in state-of-the-art gas and water smart meters. Furthermore, Li-ion batteries are used for household storage batteries.

Solar cell systems

Nickel-metal hydride batteries are used as rechargeable batteries for solar-powered ocean buoys, which can be used in harsh environments with large temperature differences.

Cars

Li-ion batteries, which are characterized by their high-capacity and safety, are used as a power source for electric vehicles. Also, nickel-metal hydride batteries are used for the TCU, which is the system that communicates between the car and the external network, and e-call, which is an emergency reporting system for vehicles.

Bicycles

Electric-assist bicycles use Li-ion batteries, which are characterized by their high-capacity, small size, and light weight.

In-vehicle Business + Industrial and Consumer Business

Industrial and Consumer Business

Panasonic Energy's Value Proposition (outcome)

Panasonic Energy achieves sustainable value creation by providing a variety of value to stakeholders and collaborating with them.

Realization of a lower environmental impact society

By promoting the electrification of mobility, including EVs, we will make a significant contribution to the decarbonization of society. We also aim to realize a circular society that reduces consumption of natural resources by expanding recycling and reducing waste.

Value proposition

Achieving decarbonization

- Increasing avoided CO_2 emissions
- Reduction of CO_2 emissions during battery production

Realizing a circular society

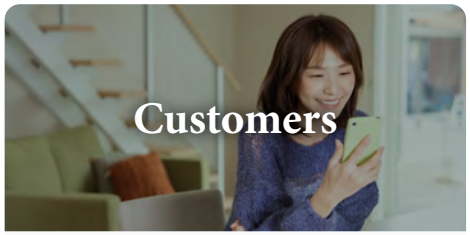
- Reduced consumption of natural resources
- Waste reduction

Providing energy for the pursuit of happiness

- Contributing to safe and secure lifestyles
- Contributing to learning among children

Major Initiatives

- Reduction of CO_2 emissions at our own factories
- Use of in-house and external renewable energy
- Reduction of CO_2 emissions through technological innovation
- Promotion to utilize recycled materials
- Research and development to promote recycling/reuse
- Promotion of social contribution activities



Supply of safe and reliable battery products

By supplying safe and reliable battery products to our customers, we contribute to the popularization of EVs and support social infrastructure (such as IoT, data centers, medical care, and gas and water meters), thereby helping to make our daily lives more convenient and comfortable.

Value proposition

In-vehicle area

- Safety with zero recalls attributable to our batteries
- Increased cruising range due to higher capacity
- Widespread use of EVs due to lower costs

Industrial and consumer areas

- High safety and reliability
- High-capacity and long life
- Improved living convenience through miniaturization and wireless operation
- Provision of power supply in the event of a disaster

Major Initiatives

- Material development
- Improvement of volumetric energy density
- Product safety management
- Improvement of production capacity
- Up one layer and new market development
- Stable supply of products

Growing together by solving social issues

With our collaboration partners, we work together to maintain and improve the quality of purchased products, realize competitive prices, and respond to market changes based on mutual trust and cooperation. We also grow together while studying to solve social issues.

Value proposition

- Resolution of social issues through collaboration
- Partnership that continues to grow together
- Maintenance and improvement of product quality
- Realization of competitive prices
- Response to market changes

Major Initiatives

- Local procurement of materials
- Promotion of procurement of materials with low environmental impact
- Compliance with CSR Guidelines
- CSR risk reduction through voluntary assessment
- CSR education and training
- Support for suppliers
- Human rights due diligence
- Responsible minerals procurement
- Promotion of joint research through industry-academia collaboration
- Promotion of projects in cooperation with national governments

Improving employee well-being

We strive to enhance the wellbeing of our employees by creating a work environment in which each and every employee, with their diverse values, can work with high engagement and vitality in a safe, secure, and healthy environment.

Value proposition

- Resonance with Mission, Vision, and Will (MVW)
- Personnel system to accelerate challenge and growth
- Various personalized training programs
- Securement of diverse and talented human resources
- Respect for each individual's personality, experience, and values
- Creation of safe and secure workplaces
- Employee health promotion

Major Initiatives

- Transitioning to job-based human resource management
- Formulation and encouragement of the Seven Paths to Transformation
- Implementation of Forest Conference, an approach to promoting Mission, Vision, and Will (MVW)
- Raise the wage level
- Conduction of internal forums
- Measurements to increase job satisfaction and workplace flexibility
- Enhancement of leave systems
- Thoroughly strengthen measures to prevent industrial accidents
- Acquisition of certification in the White 500 (goal)

Material Issues for Value Creation (Materiality)

We have identified material issues (materiality) that we must address from an environmental, social, and governance (ESG) perspective in order to contribute to a sustainable society.

Materiality identification process

Panasonic Energy identified seven material issues using the following four steps.

Step 1 List social issues

We listed 71 social issues that are candidates for materiality.

Step 2 Evaluate their importance from the perspective of Panasonic Energy

For each item on the list of social issues, we evaluated its impact on our business and relevance to our policies from Panasonic Energy's perspective.

Step 3 Evaluate their importance from a stakeholder perspective

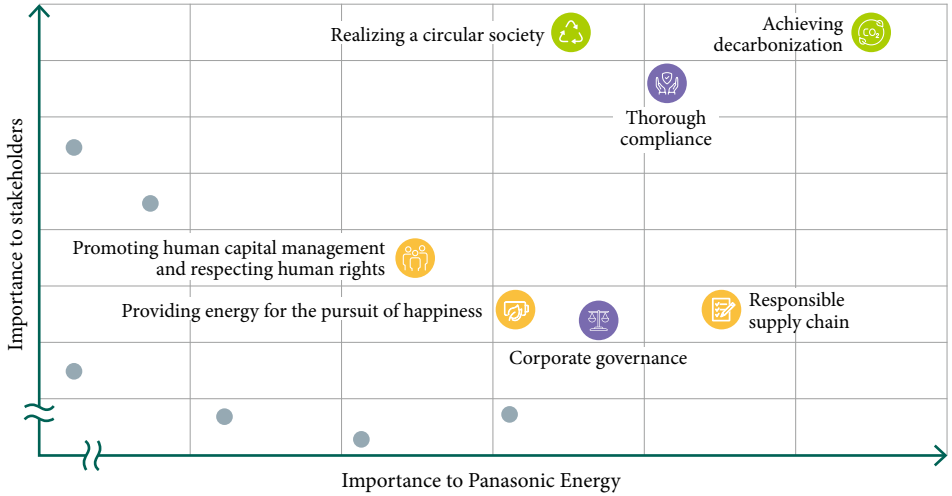
For each item on the list of social issues, we evaluated its importance from the perspective of all stakeholders, based on the opinions we have obtained through dialogue with stakeholders to date and the interest of investors and certifying organizations.

Step 4 Deliberate and identify

After sorting out our thoughts on ESG management and what we aim to achieve, we identified seven material issues through multiple rounds of deliberations between the officers, including the Representative Director, and staffs of the relevant departments.

Materiality matrix

We evaluated social issues from two perspectives: their importance to Panasonic Energy and their importance to our stakeholders, and plotted the most important of these issues in the materiality matrix below.



Seven identified material issues and specific examples of initiatives

- Materiality relating to the environment (E)
- Materiality relating to society (S)
- Materiality relating to governance (G)

Realizing a circular society

P.46

- Building a recycling-oriented supply chain
- Development of recycling-oriented products
- Waste reduction
- Promotion of recycling

Promoting human capital management and respecting human rights

P.53

- Ensuring occupational safety and health
- Promotion of human resource development
- Promotion of Diversity, Equity & Inclusion (DEI)
- Prevention of discrimination and child/forced labour

Corporate governance

P.62

- Strengthening the functions of the Board of Directors and management team
- Ensuring transparency

Achieving decarbonization

P.40

- Reduction of greenhouse gas (GHG) emissions
- Contribution to reducing CO_2 emissions in society
- Effective use of renewable energy
- Local procurement

Providing energy for the pursuit of happiness

P.48

- Contributing to a safe and secure society
- Eradication of poverty and hunger
- Contributing to local communities

Responsible supply chain

P.60

- Responsible procurement of minerals
- Respect for human rights in the supply chain
- Supply chain management

Thorough compliance

P.66

- Pursuit of quality and product safety
- Compliance with laws and regulations
- Ensuring information security

Process for Enhancing Corporate Value

We have broken down the factors that contribute to increasing corporate value into three categories: created value, growth potential, and cost of capital. Note that we also promote both financial and non-financial initiatives from each of these perspectives. We are promoting initiatives to ensure that all measures based on "two-pillars" management will enhance financial performance and ESG management to support non-financial performance, which will lead to enhance corporate value. Taking two material issues of ESG management, such as "achieving decarbonization" and "realizing a circular society," certain measures such as reducing CO_2 emissions in battery production, contributing to CO_2 reduction through products, and establishing a recycling model for batteries will contribute to "enhancing created value" as a solution to the climate change and resource depletion faced by society as a whole. At the same time, the technological capabilities and partner relationships fostered in this process can be seen as drivers of "enhancing growth potential" in the future. We believe that the combined effect of each materiality or measure leads to an increase in corporate value.

Our Mission

Achieving a society in which the pursuit of happiness and a sustainable environment are harmonized free of conflict

Enhancing corporate value

Maximizing contributions

Enhancing created value ↑

Sustainable growth through future transformation

Enhancing growth potential ↑

Strengthening management foundation

Reducing capital costs ↓

Corporate value calculation formula

Corporate value ↑ = (Created value ↑) / (Capital cost ↓ − Growth potential ↑)

Materiality
In-vehicle Business Strategy
Industrial and Consumer Business Strategy

"Two-pillars" management

We will maximize our contributions by supporting social and lifestyle infrastructure in the industry and consumer businesses, which drive profitability and by reliably meeting robust demand in the in-vehicle business, which drives growth. P.26

- Enhancing competitiveness
  - Enhancement of productivity
  - Commercialization of next-generation products
  - Creation of added value through systemization
- Investment for growth
  - Expansion of production capacity
- Supply chain resilience
  - Promotion of local procurement
  - Promotion of recycled material use / Establishment of battery recycling scheme
- Providing energy for the pursuit of happiness P.48
  - Supplying energy to areas without electricity
  - Contributing to the happiness of people's lives through business
- Achieving decarbonization P.40
  - Contribution to CO_2 reduction through products
  - CO_2 reduction in battery production through use of renewables
  - CO_2 reduction through collaboration with partners and technological innovation
- Realizing a circular society P.46
  - Waste reduction from the factory
- Promoting human capital management and respecting human rights P.53
  - Enhancing human resource competitiveness
  - Improving employee wellbeing
  - Strengthening human rights due diligence
- Responsible supply chain P.60
  - Expansion of audits and support to suppliers
  - Thorough compliance with CSR guidelines
- Thorough compliance P.66
  - Fostering a culture of emphasis on laws / regulations
  - Establishment of a system for early detection of incidents
- Corporate governance P.62
  - Enhancing the effectiveness of the Board of Directors
  - Promotion of accurate risk management

ESG management

We have set target KPIs and activities for each of the seven material issues with the goal of achieving results. The ESG Committee checks the state of progress and implements a PDCA cycle to make improvements. P.38