



Outline of the Sixth Basic Environment Plan

May 2024
Ministry of the Environment
Japan



Purpose and the mission of the Sixth Basic Environment Plan:

“In the 30th anniversary from the First Basic Environment Plan, opening hopeful future in the next 30 years,” and “critical 2030”

Environmental crisis

The triple global crisis of climate change, biodiversity loss, and pollution
The problems are increasing to a scale beyond the **biocapacity** of the earth (planetary boundary)

Necessity of a civilization shift and social transformation (Transformative Change)

“There is a growing need to reconsider our values **placing too much emphasis on the pursuit of material wealth**, and the prevailing **socioeconomic activities and lifestyles marked by mass-production, mass-consumption, and mass-disposal.**”
(The First Basic Environment Plan (1994))
✓ **Global limit of modern civilization** excessively depending on fossil fuels and other underground resources

So...

It is necessary to have a thorough knowledge of economic and social challenges

“The structural and essential problem that the **standard mass-production type industrial society**, which has been established in Japan over a period of more than a century, **no longer conforms with the trends of human civilization**”
(Economic White Paper 2000)

✓ The necessity of a shift from the old economic system designed to create a successful model enabling efficient economic activities based on “quantitative expansion,” “concentration,” and “homogenization.” Delay of utilization for intangible assets, etc.

Inherently interrelated

Possibility that the existence of the “**path dependency**” and the “**innovator’s dilemma**” of the socio-economic system is influencing responses to environmental crises

Present how the civilized economic society aimed at in the supreme plan that integrates all the environmental fields based on Article 15 of the Basic Act on the Environment (next step for the integrated improvements on environment, economy and society based and centered on the environment and natural capitals)
“Starting from environmental policies, simultaneously resolve various economic and social challenges together”

- Clearly specify the purpose as “environmental conservation and the **‘well-being/quality of life’ of individual citizens now and in the future** through it.” Clarify the attitude to stand closely by individual citizens.
- **Circulation and symbiosis based society** as a **VISION** (Environmental and Life Centered Civilized Society)
 - ✓ Civilization “**based on renewable resources, such as recycled resources and biomass resources,**” “where the economy and society can grow/develop by preserving biocapacity and improving the quality of the environment”
 - ✓ **Total reduction of environmental loads**; being a sound member of the ecosystem based also on a traditional view of nature; **concentric** idea extending from individual efforts to the global level; planetary health
- Realization of the “**new avenues for growth**” putting “**well-being/quality of life**” as the supreme value (improvement of market value + non-market value) → “**change ‘the way of CHANGE’**”
 - ✓ Set the “**advanced**” **natural capital** (natural capital as well as capital and systems that maintain, restore and enhance natural capital) at the center to realize a new, **material-cycle and high-added-value** socio-economic system utilizing **environmental value**
 - ✓ **Speed and scale** based on the best available science; **coevolution** of the government, market, and citizens (civil society, regional community); **Circular and Ecological Economy** as a ground to practice/implement the “new avenues for growth”
- **Integration/synergy of measures through priority strategies in six fields** (economic system, national land, community, life, science, technologies and innovation, and international cooperation)
- Further promote efforts in fields that can be considered as the point of origin for environmental administration, including the Problem of Minamata Disease.

Direction of development from the Fifth Basic Environment Plan (concepts)

- ✓ While following the thoughts maintained since the First Basic Plan, considering the current environmental, economic, and social crises, show the **next step for the Integrated improvements on Environment, Economy and Society (I2ES).**

Environmental crises being faced

- Activities of humankind are **exceeding the biocapacity**
⇒ Becoming a threat against one's own foundation of survival
 - ✓ As a result, humankind is **facing the "triple crisis,"** namely climate change, biodiversity loss, and pollution
- It is necessary to shift the socio-economic system into a **net-zero (decarbonization), circular, and nature-positive (nature restoration)** one (civilization shift: **social transformation**)
- Japan declares "**net-zero GHG emissions by 2050.**"

Economic and social review

- **Overall population decline, decreasing birthrate and rapidly aging demographics, overconcentration of the population in Tokyo and exhausted regional society**
- **Prolonged stagnation of the economy**
- The environment is already a **security challenge**, in terms of food, energy, resources, and geopolitical risks
- Irreversible changes of society caused by factors such as the COVID-19 pandemic and Russia's aggression against Ukraine

"Critical 2030" in all aspects, including the environment, economy, and society

The Fifth Basic Environment Plan

Vision
"Circulation and symbiosis based society"

- Centering on "circulation" and "symbiosis," which are the long-term goals since the First Basic Environment Plan, present a **sustainable "circulation and symbiosis based society" (Environmental and Life Centered Civilized Society)** aiming for **I2ES**.

Roles of environmental policy

- **Advocate the concept of the "new avenues for growth"** achieved through the creation of innovations across all perspectives, including those concerning socio-economic systems, lifestyles, as well as technologies.
- **Providing simultaneous solutions for economic and social challenges**

Basic concepts for the development of environmental policies

- Strategically establish a **focused, cross-cutting framework** that accounts for interlinkages
- Utilization of the concepts of **"Sustainable Development Goals" (SDGs)**

Circular and Ecological Economy

- Centered on the ideas of "circulation" and "symbiosis," present the idea of first forming a **self-reliant and decentralized** society, and then have various elements **complement each other** among neighboring communities making use of available **regional resources**

Based on the results of review

The Sixth Basic Environment Plan (direction of development)

- **Aim to realize the "well-being/quality of life"**
- Civilization "where economy and society can grow/develop by preserving biocapacity and improving the quality of the environment." **Reduction of total environmental load** and creation of a good environment
- Shift from a socio-economic system depending on underground resources to a **system based on renewable resources, such as recycled resources and biomass resources**
- Present the **"new avenues for growth"** that raises **both market value and non-market value**
- **Large-scale investment in natural capital that serves as a foundation and in the capital and system that support it, and adding high value to the entire economy utilizing "environmental value"**
- Ensuring the **speed and scale** of science-based efforts
- **Integration and synergy** of net-zero, circular economy, nature-positive, etc.
- **Coevolution** of the **government, market, and citizens** (civil society, regional community)
- Reducing environmental loads **throughout the global value chain**
- Position as a concept to be aimed at by regions. **Ground to practice/implement the "new avenues for growth"**

* Considering such basic directions, describe the priority strategies in six fields (economic system, national land, community, life, science, technologies and innovation, and international cooperation), focused points in individual environmental policies, and the system of environmental conservation measures.

1. Environmental crises being faced

① The earth is facing “triple crisis”

- ✓ Climate change: The average annual temperature of Japan and of the whole world in 2023 marked the highest in the recorded history (the era of global boiling)
 - The average temperature in the world increased by 1.45 °C from the pre-industrial era
- ✓ Biodiversity loss: The Sixth Mass Extinction (attributable to human activities, the speed of extinction faster than the mass extinction that occurred in the past)
- ✓ Pollution: 80% of wastewater throughout the world is discharged without treatment

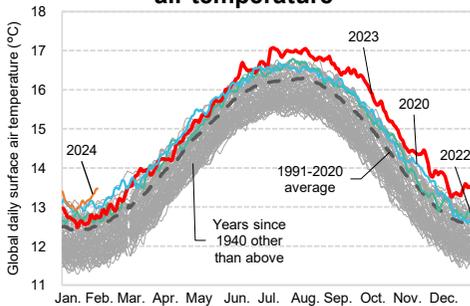
② Activities of humankind are exceeding the global biocapacity

- ✓ The problems are increasing to a scale beyond the biocapacity of the earth (planetary boundary)

③ Japan is at a crucial point towards becoming an environmentally-advanced country

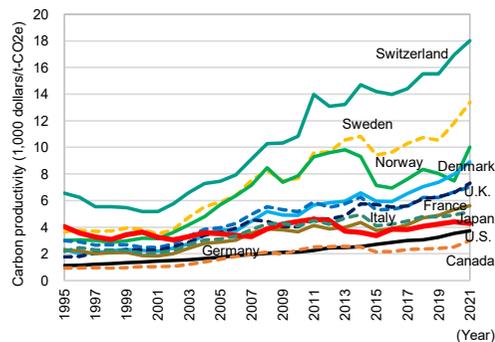
- ✓ Carbon productivity in Japan, which used to be at the world's top level, has declined significantly from the top.

Changes in global daily surface air temperature



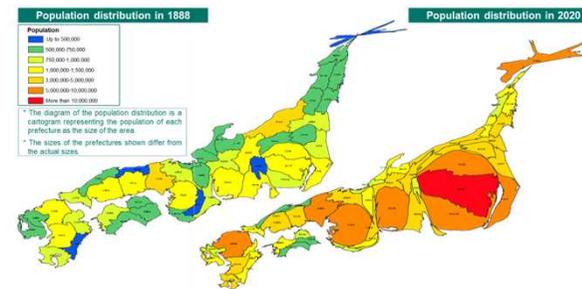
Source: Copernicus Climate Change Service, Copernicus: September 2023 – unprecedented temperature anomalies; 2023 on track to be the warmest year on record, October 5, 2023; C3S/ECMWF, Climate Reanalyzer, Daily Surface Air Temperature.

Changes in carbon productivity



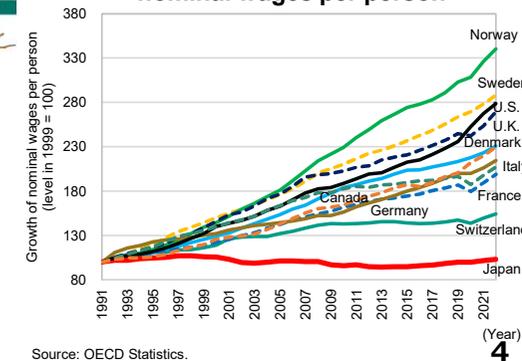
Source: OECD Statistics.

Changes in population distribution



Source: Figures for 1888 referred to the population of the Population Census included in the Long-Term Statistics Directory of Japan by the Ministry of Internal Affairs and Communications. The population up to 2020 referred to the Population Census by the Ministry of Internal Affairs and Communications.

Changes in the growth of nominal wages per person



Source: OECD Statistics.

2. Economic and social review

① Overall population decline and the overconcentration of the population in Tokyo

- ✓ The overall population decreased by 2 million in five years. The number of live births also marked an all-time low (759,000 in 2023)
- ✓ The ratio of those in Tokyo among the overall population increased significantly from 11.3% (1888) to 25.7% (1990), and further increased to 29.3% (2023) in the last 30 years

② Prolonged stagnation of the economy

- ✓ International ranking of GDP per capita declined from 2nd (2000) to 30th (2022)
- ✓ The growth of nominal wages per person has remained at a low level since 1991

③ Occurrence of the “fallacy of composition”

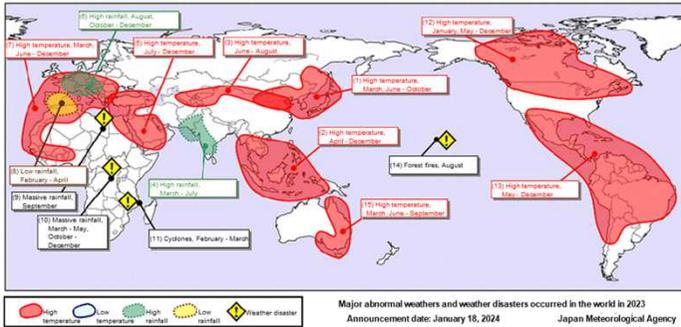
(companies’ activities that have a negative effect on the macro economy)

- ✓ While corporate savings are increasing, capital investment and personnel expenses for improving corporate earnings are reduced. This may be one of the factors for the prolonged stagnation of the economy.
- ✓ Among intangible assets, the ratio of “economic competencies,” such as human capital investment and marketing, which are strongly related to innovation, is small, and the ratio against GDP is also at the lowest level among advanced countries.

Case examples showing the “triple crisis” that the earth is facing

Climate change

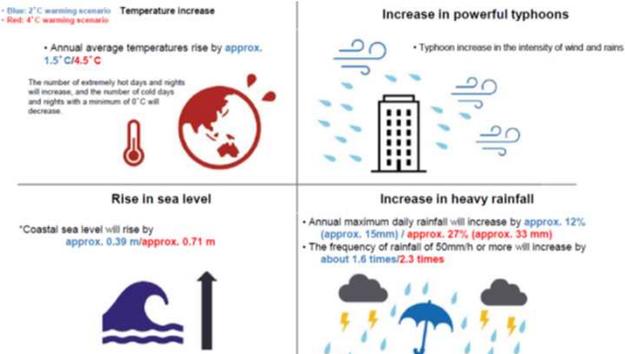
(1) Map showing the geographical distribution of the occurrence of abnormal weather in 2023



Source: “Abnormal Weather in the World in Each Year” from the website of Japan Meteorological Agency.

(2) Future forecast regarding the impact of climate change

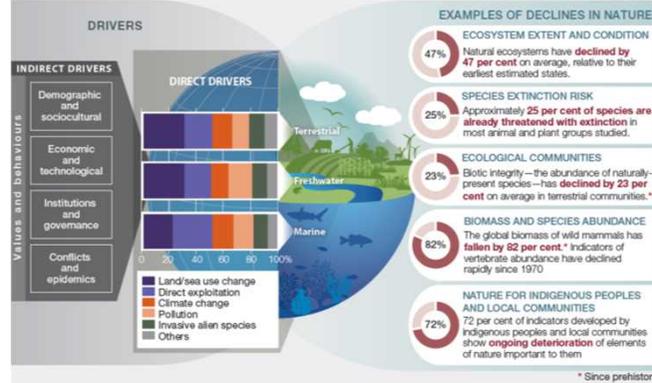
Comparing the weather conditions in Japan as of the end of 21st century and as of the end of 20th century, it is expected that the annual average temperature will increase, **the number of extremely hot days and sweltering nights will increase** (by about 2.8 days and about 9.0 days, respectively, under the 2-degree scenario / **by about 19.1 days and about 40.6 days, respectively, under the 4-degree scenario**), the sea level will rise along the Japanese coast, torrential rain will increase, and the intensity of typhoons near Japan will increase.



Source: Policy Bureau, Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Summary of the White Paper on Land, Infrastructure, Transport and Tourism in Japan, 2022.
Note: Prepared by MLT based on Climate change in Japan, Ministry of Education, Culture, Sports, Science and Technology & Japan Meteorological Agency, December 2020.

Biodiversity loss

(1) Factors for changes in biodiversity and global examples of nature deterioration

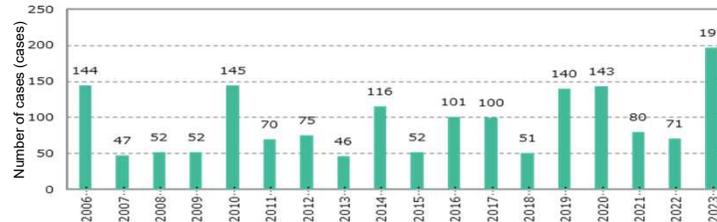


Source: IPBES, Summary for Policymakers of the IPBES Global Assessment Report on Biodiversity and Ecosystem Services, March 2020.

Note: The direct drivers (land/sea-use change; direct exploitation of organisms; climate change; pollution; and invasive alien species) result from an array of underlying societal causes. These causes can be demographic (e.g., human population dynamics), sociocultural (e.g., consumption patterns), economic (e.g., trade), technological, or relating to institutions, governance, conflicts and epidemics. They are called indirect drivers and are underpinned by societal values and behaviours. The colour bands represent the relative global impact of direct drivers on terrestrial, freshwater and marine nature, as estimated from a global systematic review of studies published since 2005. The circles illustrate the magnitude of the negative human impacts on a diverse selection of aspects of nature over a range of different time scales based on a global synthesis of indicators. Land- and sea-use change and direct exploitation account for more than 50 per cent of the global impact on land, in fresh water and in the sea, but each driver is dominant in certain contexts.

(2) Trend in the number of cases of human injury caused by bears.

Bears are repeatedly appearing in large numbers every few years, affected by the amount of nuts ripening in autumn. **Particularly in FY2023, the number of cases of human injury was the highest on record since FY2006. Bears are entering areas where people live and threatening their safety and security.**



Source: “Information and Measures Concerning Bears,” website of the Ministry of the Environment (MOE).
The number of cases of human injury in FY2023 is a preliminary figure as of February 29, 2024

Pollution

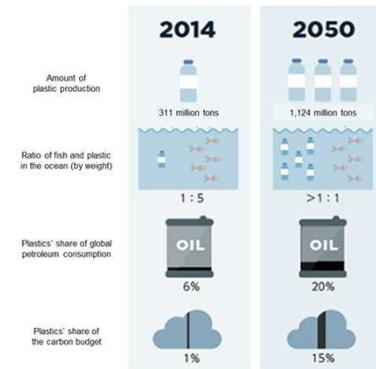
(1) The Problem of Minamata Disease is not over yet

May 1956	Official confirmation of Minamata Disease
March 1959	Two Acts concerning water quality control comes into effect
May 1965	Official confirmation of Niigata Minamata Disease
June 1967	First lawsuit on Niigata Minamata Disease is filed (ruling in favor of the plaintiff made in September 1971 [final judgment])
September 1968	The Ministry of Health and Welfare and the Science and Technology Agency releases the official consensus of the government that the cause of Minamata Disease is the methylmercury compound contained in water discharged from the facilities of Chisso Corporation and Showa Denko
June 1969	First lawsuit on Kumamoto Minamata Disease is filed (ruling in favor of the plaintiff made in March 1973 [final judgment])
December 1969	Enforcement of the Act on Special Measures Concerning the Relief of Pollution-related Health Injury (Relief Act)
July 1973	A compensatory arrangement is concluded between Chisso Corporation and the patient group (agreement is concluded between Showa Denko and the patients group in June)
September 1974	Enforcement of the Act on Compensation for Pollution-related Health Damage
July 1977	The Environmental Agency announces the “Judgment Conditions for Acquired Minamata Disease (1977 Judgment Conditions)”
February 1979	Enforcement of Act on Temporary Measures Concerning Promotion of Administrative Work on Certification of Minamata Disease
November 1991	Report from the Central Council on Environmental Pollution Control, “How Minamata Disease should be Controlled in the Future”
September 1995	Decision of the “Resolution of the Problem of Minamata Disease” (final settlement) by the three ruling parties
December 1995	Cabinet Understanding on “Measures Concerning Minamata Disease”
May 1996	Withdrawal of 10 lawsuits under dispute (only lawsuit in Kansai continues)
October 2004	Supreme court decision on the Minamata Disease Kansai Lawsuit (the national government and Kumamoto Prefecture lose)
April 2005	Ministry of the Environment releases “Future Measures Concerning Minamata Disease”
July 2006	50th anniversary of the official confirmation of Minamata Disease
July 2009	Promulgation of Law concerning with Special Measures for Compensation of Minamata Disease
April 2010	Cabinet Decision on the Policy of Relief Measures under the Law concerning Special Measures for Compensation of Minamata Disease
July 2012	Acceptance of applications for acts on special measures based on the Policy of Relief Measures under the Law concerning with Special Measures for Compensation of Minamata Disease ends
April 2013	Supreme court decision on administrative lawsuits concerning the certification of Minamata Disease (in one case, Kumamoto Prefecture loses, and in one case, the high court decision ruling in favor of Kumamoto Prefecture is reversed and remanded)
October 2013	Diplomatic conference for the adoption and signing of the Minamata Convention is held in Kumamoto City and Minamata City
March 2014	Ministry of the Environment announces the “Comprehensive Deliberation on the Certification of Minamata Disease Based on the Act on Compensation for Pollution-related Health Damage” (materializing notification)
July 2014	The Provisional Examination Board for the Certification of Minamata Disease implements examination based on the materializing notification
August 2014	Result of the judgment of acts on special measures
May 2015	50th anniversary of the official confirmation of Niigata Minamata Disease
August 2017	Enforcement of the Minamata Convention on Mercury

Source: MOE.

(2) Exacerbation of marine plastic pollution and its impact on biodiversity

Increase of the amount of plastics and petroleum consumption according to the BAU scenario



Source: Annual Report on the Environment, the Sound material-cycle society and Biodiversity in Japan 2020.

Basic concepts and structure of the Sixth Basic Environment Plan [Part 1]

The necessity of coping with environmental crises (global boiling, etc.) and various economic and social challenges

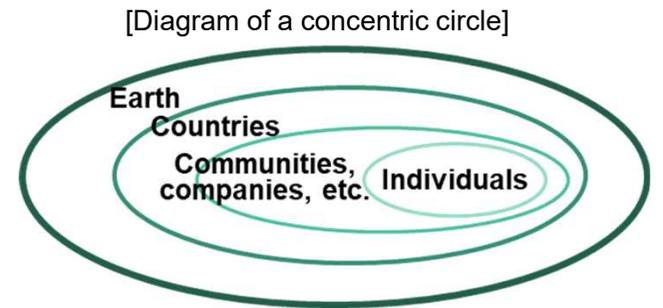
Purpose
 “Improvement of the **quality of life, level of happiness, well-being and economic welfare of individual citizens now and in the future**” and “contribution to the welfare of humankind” through “**environmental conservation**”

Vision

“Circulation and symbiosis based society”
 (civilization that can grow/develop by **preserving biocapacity** and improving the quality of the environment)

<p>[Circulation] (≈ science)</p> <ul style="list-style-type: none"> Ensuring a sound material cycle in natural systems, including carbon and other base elements Shift from a socio-economic system depending on underground resources to one depending on “renewable resources, such as recycled resources and biomass resources” Reduction of total environmental load and creation of a good environment 	<p>[Symbiosis] (≈ philosophy)</p> <ul style="list-style-type: none"> Based on the traditional natural view of nature in Japan, promote humankind to be a sound member of the ecosystem Unification of the health of humans and the earth (planetary health) Awareness/efforts of individuals, efforts of community/companies, economy and society of the whole country, and the future of the planet as a whole draw a concentric circle
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[Article 1 of the Basic Act on the Environment]
 The purpose of this Act is to promote policies for environmental conservation in a comprehensive and systematic manner so as to **ensure wholesome and cultured living of the people present and in the future**, as well as to **contribute to the welfare of humankind**.



* Communities and companies include local governments, regional communities, companies, and groups such as NPOs and NGOs.

Policy

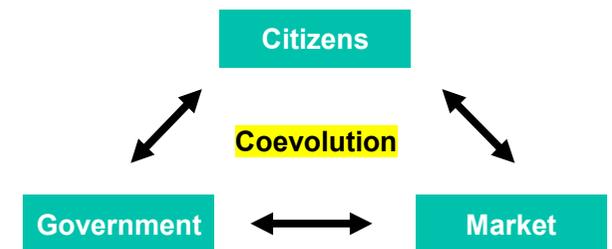
“**New avenues for growth**” that bring about “**well-being/high quality of life**” (**market value + non-market value**) in future years: **Six viewpoints** regarding “change ‘the way of CHANGE’” (1. stock, 2. long-term perspective, 3. inherent needs, 4. intangible assets and spiritual happiness/wealth, 5. community and inclusivity, 6. focus on self-reliance and decentralization)

- Maintaining, restoring, and enhancing natural capital (environment)**, which is the **stock**, will be the **foundation** of “new avenues for growth”
- Adding high value to the entire economy utilizing “**environmental value**,” which is an intangible asset, etc.

[Coevolution of the government, market, and citizens]

Policies development

- Ensuring the **speed and scale of science-based efforts** (also coping with “critical 2030”)
- Integration and synergy** of measures, such as net-zero, circular economy, and nature-positive measures.
- Coevolution** of the government, market, and citizens (civil society, regional community)
- Practice and implementation** of “new avenues for growth” through establishment of the **Circular and Ecological Economy**



* Considering such basic directions, describe the priority strategies in six fields (economic system, national land, community, life, science, technologies and innovation, and international cooperation), focused points in individual environmental policies, and the system of environmental conservation measures.

**“New avenues for growth” (1):
Change “the way of CHANGE,” putting highest priority on “well-being/quality of life” [Part 1, Chapter 2]**



Shift of superior objectives: **“Improvement of the quality of life, level of happiness, well-being and economic welfare of individual citizens now and in the future” (market value + non-market value)**

Shift of architecture (structure)

Idea of Article 1 of the Basic Act on the Environment

<Superior objectives common to I12ES; Starting from environmental policies, simultaneously resolve various economic or social challenges together>

Old socio-economic system/Reasons for the challenges of environment, economy and society, including prolonged stagnation	Direction of innovation focusing on “well-being/quality of life”	Direction of the Sixth Basic Environment Plan
Excessive attention to the achievements of flow (GDP, etc.)	Prioritizing stock	Improvement and maintenance of natural capital as a stock, as well as capital and systems desirable for the maintenance, restoration and enhancement of natural capital (also refer to the idea of “social common capital”)
<u>Short-term</u> and egoistic view (insufficient investment toward the future, holding down personnel expenses)	Long-term perspective, intergenerational equity, altruistic view	Vast amount of investment considering the inherent needs of citizens now and in the future from a long-term perspective. Perspective of transition. Intergenerational equity and international cooperation centered on the environment.
Occurrence of “path dependency” and “innovation dilemma” based on the viewpoint of suppliers	Focusing on consumers and ordinary people. Responding to inherent needs.	Focusing on the inherent needs and demand side of individual citizens including the future generations. Standing on the best science available as inherent needs.
Pursuit of material affluence and quantitative expansion (low ratio of intangible assets, etc.)	Shift from material affluence to spiritual happiness/wealth Focusing on intangible assets (human capital, marketing, research and development, DX, etc.)	Prioritize also the spiritual happiness/wealth, and pursue high-added-value economy utilizing intangible assets, including environmental value (shift from the society based on mass production, mass consumption and mass disposal, prioritizing quality over quantity)
<u>Deterioration</u> of social capital and <u>community</u>	Enhancement of social capital, restoration of community, inclusive nature	Pursuit of the Circular and Ecological Economy (restoration of regional communities including Minamata and Fukushima), relief of the victims in Minamata, etc., and a just transition
Overconcentration of the population in Tokyo, large-scale centralized systems, and excessive dependency on food, water, energy, etc. from abroad	Correction of overconcentration, introduction of a self-reliant and decentralized system	Multi-layered and multi-polar national land structure (decentralized national land utilizing natural capital and digital technology, compact + network), promotion of local production for local consumption of food, energy, etc., ensuring economic security

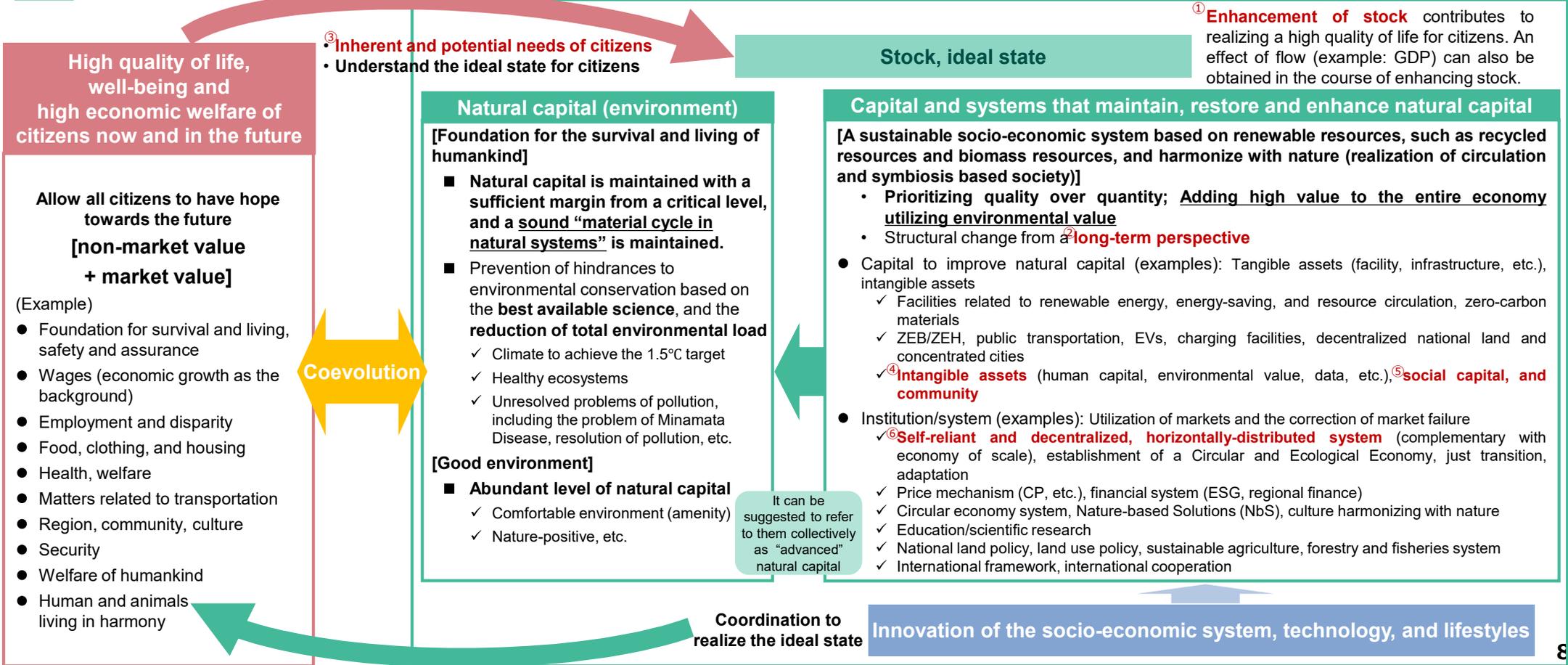
Particularly deeply involved with the “standard mass-production type industrial society”

“New avenues for growth” (2): Image of the “New avenues for growth” setting “well-being/quality of life” as a goal [Part 1, Chapter 2]

Set “well-being/quality of life” as a superior objective

Perspective of “Change the Way of CHANGE”

- ① **Focusing on stock:** In addition to flow, an improvement of stock is essential
- ② **Focusing on a long-term perspective:** Investment from a long-term perspective is important, instead of being near-sighted
- ③ **Focusing on inherent needs:** It is necessary to cope not only with the seeds of the supplier side but also with the inherent needs of citizens
- ④ **Focusing on intangible assets:** It is essential to enhance investments in intangible assets to add high value
- ⑤ **Focusing on community:** It is necessary to keep a balance between the nation, market, and community
- ⑥ **Pursuing a self-reliant and decentralized society:** Shift from an overconcentrated, large-scale centralized socio-economic system



③ **Inherent and potential needs of citizens**

- **Understand the ideal state for citizens**

① **Enhancement of stock** contributes to realizing a high quality of life for citizens. An effect of flow (example: GDP) can also be obtained in the course of enhancing stock.

Coevolution

Coordination to realize the ideal state

New avenues for growth (3) Mechanism to realize “well-being/quality of life” [Part 1, Chapter 2]

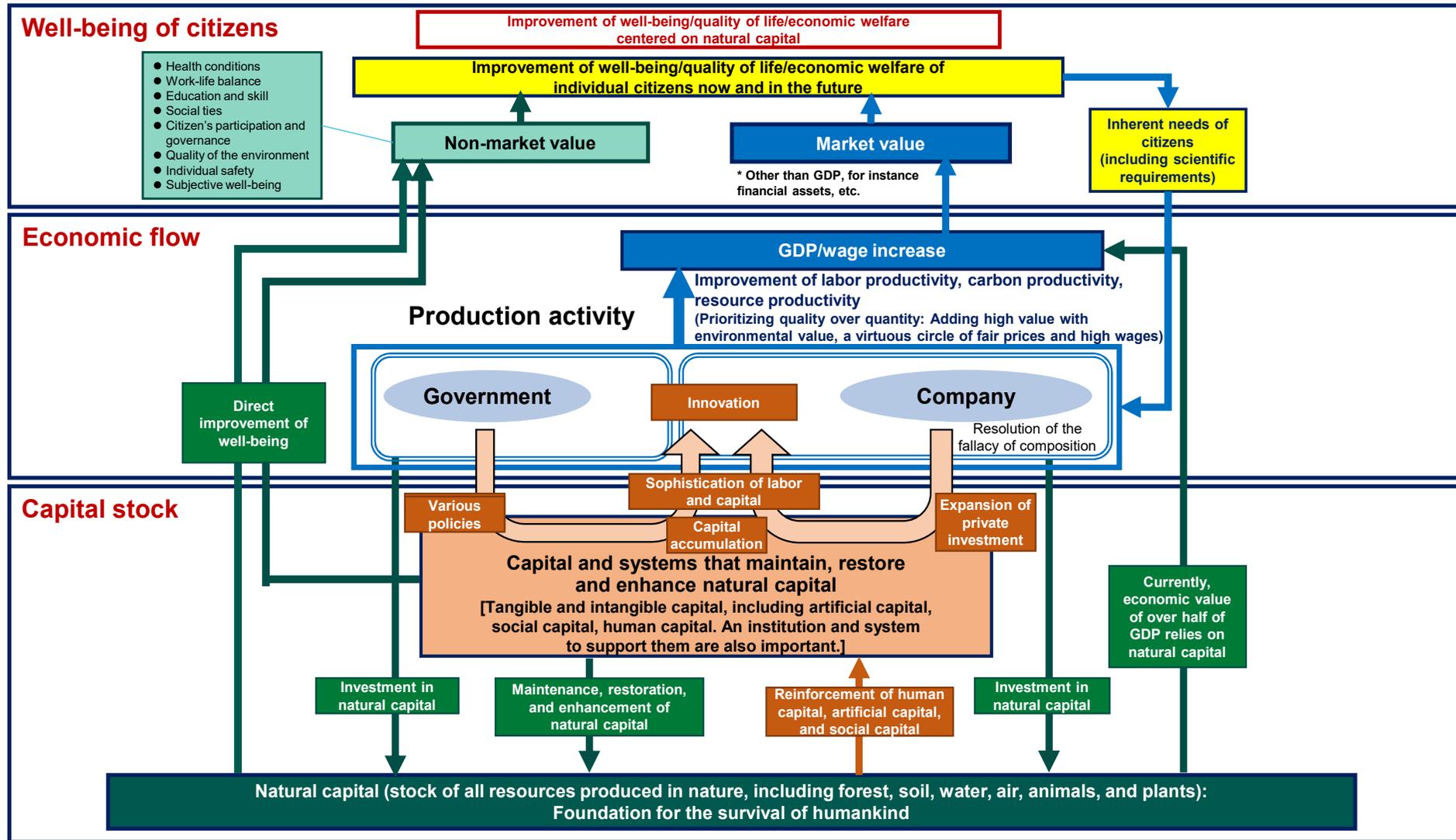
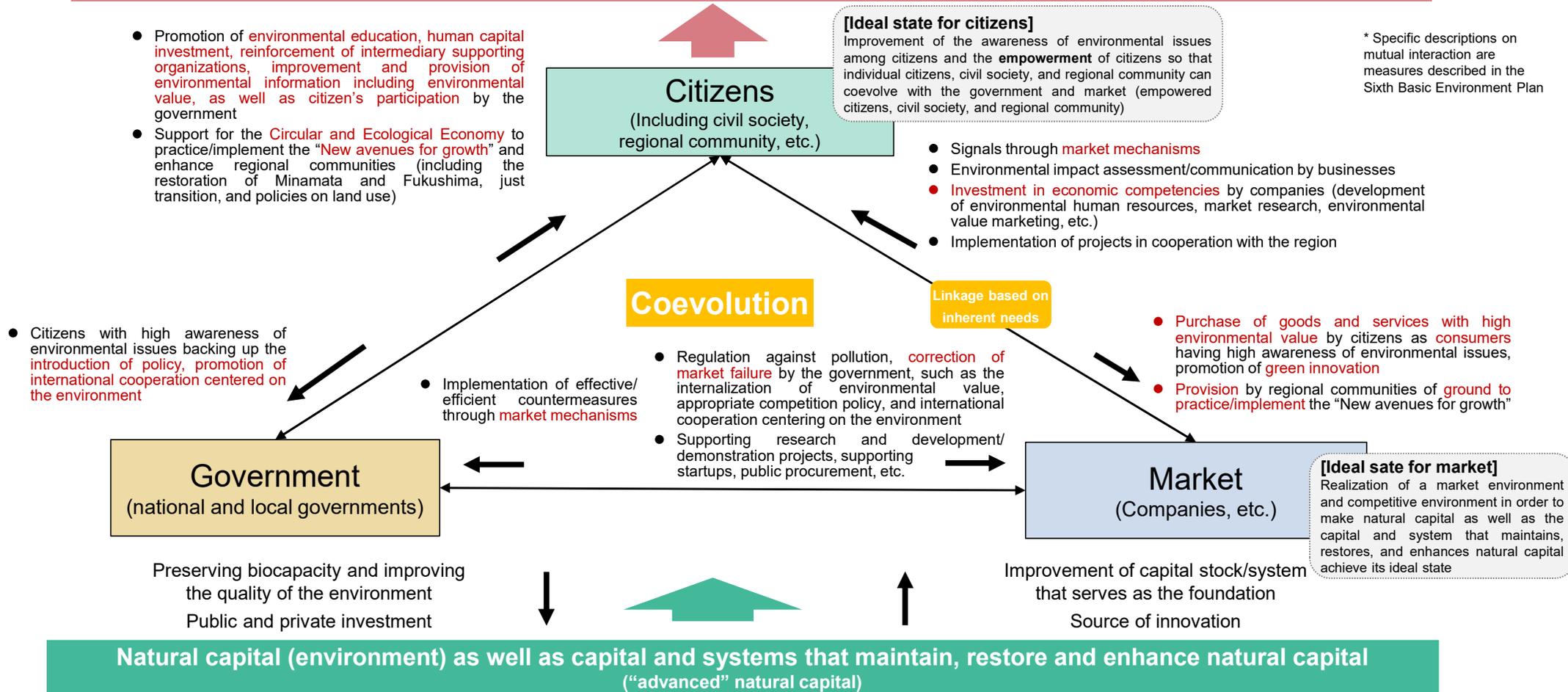


Image of the realization of “well-being/quality of life” through the coevolution of the government, market, and citizens [Part 1, Chapter 2]



Improvement of well-being/quality of life/economic welfare of individual citizens now and in the future



Source: Prepared based on Philippe Aghion, Céline Antonin, Simon Bunel, *Le pouvoir de la destruction créatrice* (MURAI, A. trans., November 25, 2022) and Raghuram Rajan, *The Third Pillar: How Markets and the State Leave the Community Behind* (TSUKITANI, M. trans., July 20, 2021).

Priority strategies: six strategies for the advancement of I2ES [Part 2]

1. Formulation of a green **economic system** for realizing sustainable production and consumption that lead to “New avenues for growth”

Expansion of investment in tangible and intangible capital that work to maintain, restore, and enhance natural capital; Adding high value to the entire economy utilizing environmental value

- **Expansion of investment that maintains, restores and enhances natural capital**
 - Maximum introduction of renewable energy in harmony with local communities
 - ✓ Securing an amount necessary for realizing net-zero by 2050, and reaching the level on a par with other advanced countries
 - ✓ Discussing systems for environmental considerations regarding offshore/onshore wind power generation
 - Investment contributing to realizing the nature-positive concept
 - Human capital investment contributing to the enhancement of environmental education, development of environmental human resources, and “just transition”
- **Adding high value to the entire economy utilizing environmental value**
 - Improvement of an environmental information base and information disclosure
 - Coevolution of consumption behavior and corporate behavior centering on environmental value (visualization by each product, expansion of investment in intangible assets, such as market research and marketing)
- **Greening of the entire economy through financial and taxation systems**
 - Promotion of sustainable finance
 - Implementation of Pro-Growth Carbon Pricing Concept, greening of the tax system, etc.

2. Improvement of value of **national land** as stock on the foundation of natural capital

Use of national land to maintain, restore, and enhance natural capital; Self-reliant and decentralized national land structure; Realization of cities/regions where citizens can realize “well-being/quality of life”

- **Use of national land to maintain, restore and enhance natural capital**
 - Realization of the nature-positive by achieving the 30 by 30 target, restoration of degraded ecosystems
 - Formulation of an expansive ecosystem network
- **Promotion of self-reliant and decentralized national land structure**
 - Utilization of renewable energy that is the regional natural capital (establishment of “local production for local consumption” model, improvement of resilience)
 - Promotion of the initiatives of Nature-based Solutions (NbS)
- **Realization of cities/regions where citizens can realize “well-being/quality of life”**
 - Promotion of the compact-plus-network in cities
 - Adding high value to residences and buildings as a stock
 - Preservation and creation of a beautiful landscape
- **Comprehensive use of national land based on the characteristics of the region**
 - Perspectives of the landscape approach, etc.
- **Development of an information base regarding renewable energy, assessment, ecosystem, etc.**

3. Development of **regional communities** as a ground to practice/implement I2ES

Developing sustainable regional communities that make the maximum use of regional natural capital (Circular and Ecological Economy); Maintenance, restoration, and enhancement of regional natural capital

- **Providing simultaneous solutions for regional environment and economic/social challenges**
 - Promotion of regional decarbonization
 - Realization of nature-positive utilizing regional natural capital
- **Enrichment of intangible assets that support the Circular and Ecological Economy**
 - Maintenance and restoration of the regional community network utilizing regional culture and sports
 - Practical support by intermediary supporting organizations and horizontal development thereof
 - Development of environmental human resources in the region
- **Greening of regional economy**
 - Promotion of regional finance focusing on ESG
 - Support for regional energy companies and small and medium-sized enterprises (SMEs)
- **“Just transition” to realize a sustainable community**
- **Regeneration of lost environments and reconstruction of regional communities**
 - “Moyai-naoshi (rebonding)” in Minamata
 - Future-oriented perspective in Fukushima

Priority strategies: six strategies for the I2ES [Part 2]

4. Realization of a safe and secure, as well as healthy and prosperous **life** where citizens can realize “well-being/quality of life”

5. Development, demonstration, and social implementation of **science, technologies, and innovation** supporting “New avenues for growth”

6. Contribution to national interests and the welfare of humankind through the promotion of strategic **international** cooperation centered on the environment



Realization of a safe and secure life where citizens can realize “well-being/quality of life”; Creation of a good environment

Development/demonstration and social implementation of environmental technologies based on inherent needs; Realization of green innovation; Accumulation and improvement of scientific knowledge

Strategic promotion of international cooperation centered on the environment as a country relying on natural capital abroad

- **Essential efforts to protect human lives and the environment**
 - Environmental conservation of water, air, and soil
 - Promotion of measures against heat illness
 - Promotion of measures against marine litter (plastic pollution)
 - Enhancement of wildlife management and the promotion of measures against invasive alien species
 - Chemicals control integrating “planetary health”
 - Sustainable management of nitrogen and phosphorus
- **Creation of a good environment for a prosperous life**
 - Realization of the “virtuous cycle of protection and use”
 - Promotion of the preservation and management of wildlife
- **Transformation of lifestyles to aim to realize a prosperous life**
 - Reduction of food loss and waste, promotion of sustainable fashion
 - Interactions with nature, promotion of lifestyles utilizing ideas like nudge theory
 - Sharing scientific findings with citizens

- **Creation of demand by promoting the improvement of awareness of green innovation and behavioral change among citizens**
 - Awareness and behavioral change through DECOKATSU (National Movement for New and Prosperous Lifestyles toward Decarbonization)
 - Third-party assessment and information disclosure of environmental technologies
 - Utilization of digital technologies, including AI and IoT (Internet of Things)
- **Technological breakthrough led by inherent needs**
 - Development and demonstration of technology to improve energy efficiency
 - Support for “phase-free technology”
- **Accumulation of scientific knowledge and the development and provision of basic information**
- **Development and demonstration of state-of-the-art technology and the promotion of social implementation**
 - Scientific consideration of adaptation and mitigation measures
 - Optimization of chemicals management from a scientific point of view
 - Development and demonstration of “environment/life technologies” and social implementation thereof
- **Support for startups in the field of environment**

- **Contributions to international rule-making through what is often referred to as the “environmental diplomacy”**
 - Contribution to achieving the 1.5°C target in climate change
 - Contribution to international discussions regarding biodiversity
 - Promotion of chemicals management based on GFC (Global Framework on Chemicals)
 - Contribution to developing an international legally binding instrument on plastic pollution
 - Contribution to international rule-making in corporate activities
- **Supporting developing countries in the field of environment**
 - Contribution to the decarbonization of developing countries through the Joint Crediting Mechanism (JCM)
 - Making the reduction efforts of each country more transparent with GOSAT
 - Supporting vulnerable countries in terms of losses and damages
 - International cooperation on the water and air environment
- **Response for economic security**
 - Thorough resource circulation in the international value chain
- **Overseas development of outstanding efforts in Japan**
 - Exerting synergy between environmental policies
 - Promotion of “de-chlorofluorocarbon”

Effective implementation of the Basic Environment Plan

Six priority strategies [Part 2]

(economic system; national land; community; life; science, technologies and innovation; and international cooperation)



Focused measures in each area

○ **Climate change measures**

Consideration of the review of the Plan for Global Warming Countermeasures once every three years

○ **Establishment of sound material-cycle society**

Formulate the Fifth Fundamental Plan for Establishing a Sound Material-Cycle Society by the summer of 2024 and accelerate transition towards a circular economy

○ **Securing biodiversity and living in harmony with nature**

Put forward various measures following the five basic strategies described in the National Biodiversity Strategy and Action Plan of Japan 2023-2030
Realize the "nature-positive" mission, which means to halt and reverse biodiversity loss by 2030

○ **Environmental conservation of water, air and soil, and environmental risk management**

Protection of human lives and the environment, creation of a good environment, enhancement of scientific findings, human resources development, and the development and succession of technologies
Promotion of international cooperation, chemical substances management, environmental health measures (promotion of measures on Minamata disease, etc.)

○ **Various Basic Measures**

Environmental impact assessment, environment research and technology development, environmental education, ESD, collaborative efforts, environmental information, etc.

○ **Reconstruction after the Great East Japan Earthquake and responses to future large-scale disasters**



System of environmental conservation measures [Part 3]

Effective implementation of the Basic Environment Plan [Part 4]

- Cooperation with other plans:
Preservation of the environment should be in accordance with the fundamental direction of the Basic Environment Plan.
- Checkup of the comprehensive progress From FY2025 to FY2028



Revision of the Basic Environment Plan (FY2029)

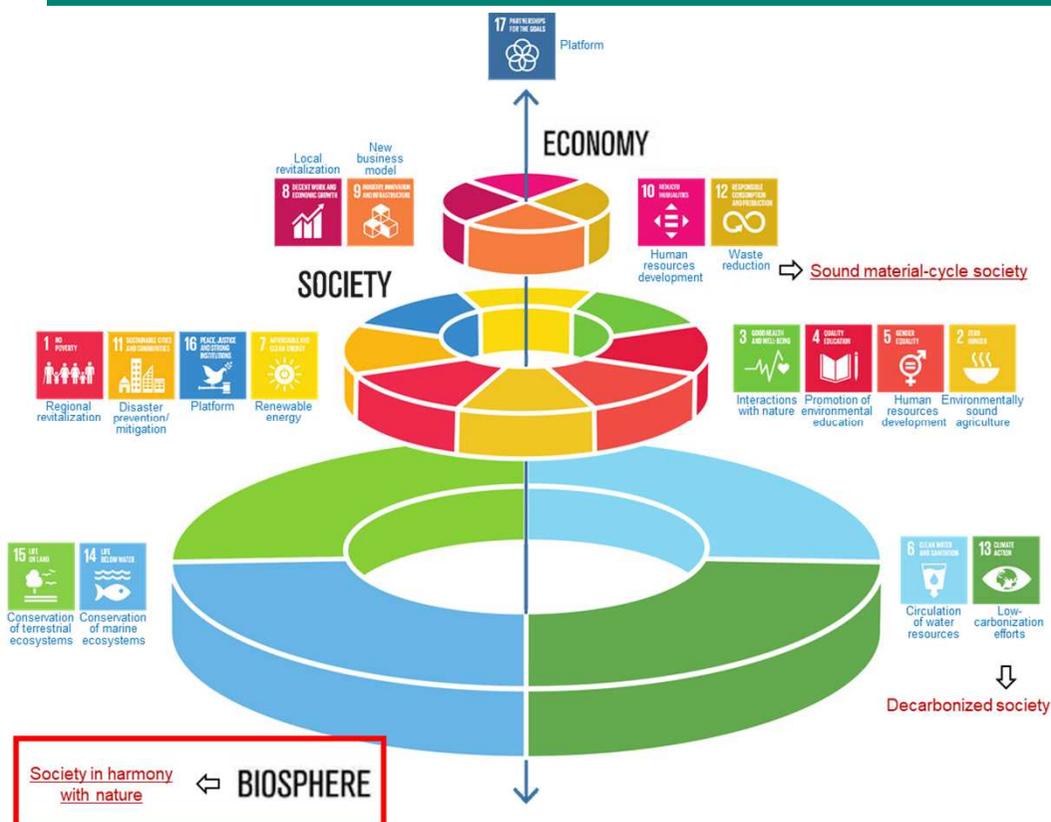
(References)

The environment and natural capital form the foundation for the survival of humankind and our socio-economic activities



The environment is the foundation for the survival of humankind, and society and the economy are able to exist on such foundation. If the level of natural capital falls below the critical level due to increased environmental loads, the survival of humankind itself will be threatened, which is a critical problem that should be addressed way before the improvement of well-being.

The SDGs wedding cake



Description in the Sixth Basic Environment Plan

[Part 1, Chapter 1, Section 3]

- ✓ “Environmental crises are increasingly becoming visible recently and are leading to entrenched awareness throughout the world that economic and social activities come into existence on the foundation of natural capital (environment), and that damage to natural capital exerts harmful effects on economic and social activities, as symbolized in the SDGs wedding cake model.”
- ✓ “The relationship between the environment and economy is no longer an adversarial one, and the environment and economy that exists on the foundation of the environment are something that should ‘be synchronized’ and ‘coevolve.’”

[Part 1, Chapter 2, Section 2]

- ✓ “In building a sustainable society, which is referred to as a circulation and symbiosis based society in this Basic Plan, it is important to understand the premise that a sound and rich environment is the basis for socio-economic activities, and ensure that efforts to promote economic growth and the improvement of social infrastructure do not increase environmental loads...(the rest omitted)”
- ✓ The foundation for “New avenues for growth” is to recognize the perspective explained above, and to try at first to maintain, restore, and enhance natural capital as a stock. If the level of natural capital falls below the critical level (socio-economic activities of humankind exceed the global biocapacity or regional biocapacity, such as in the case of pollution), there is a risk that the foundation for the survival and living of humankind itself will be at risk.”

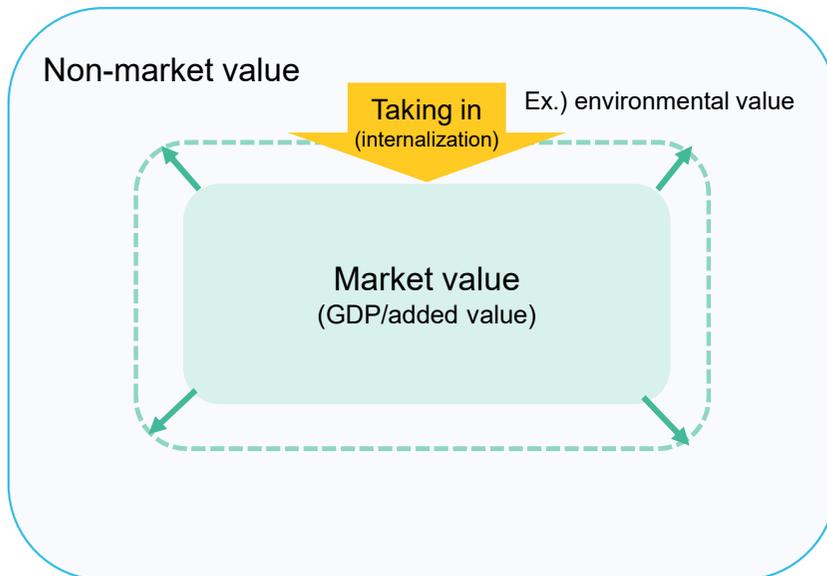
[Part 1, Chapter 2, Section 3]

- ✓ “As for the relationship among the different goals of SDGs it could be understood that the environment is the foundation for the existence of sustainable socio-economic activities.”

< The Sixth Basic Environment Plan >

“This ‘**well-being/quality of life**’ is made up by market value and non-market value, and both will be increased also by promoting synergetic effects. **(This includes the internalization of non-market value, which is external, into market value.)**”

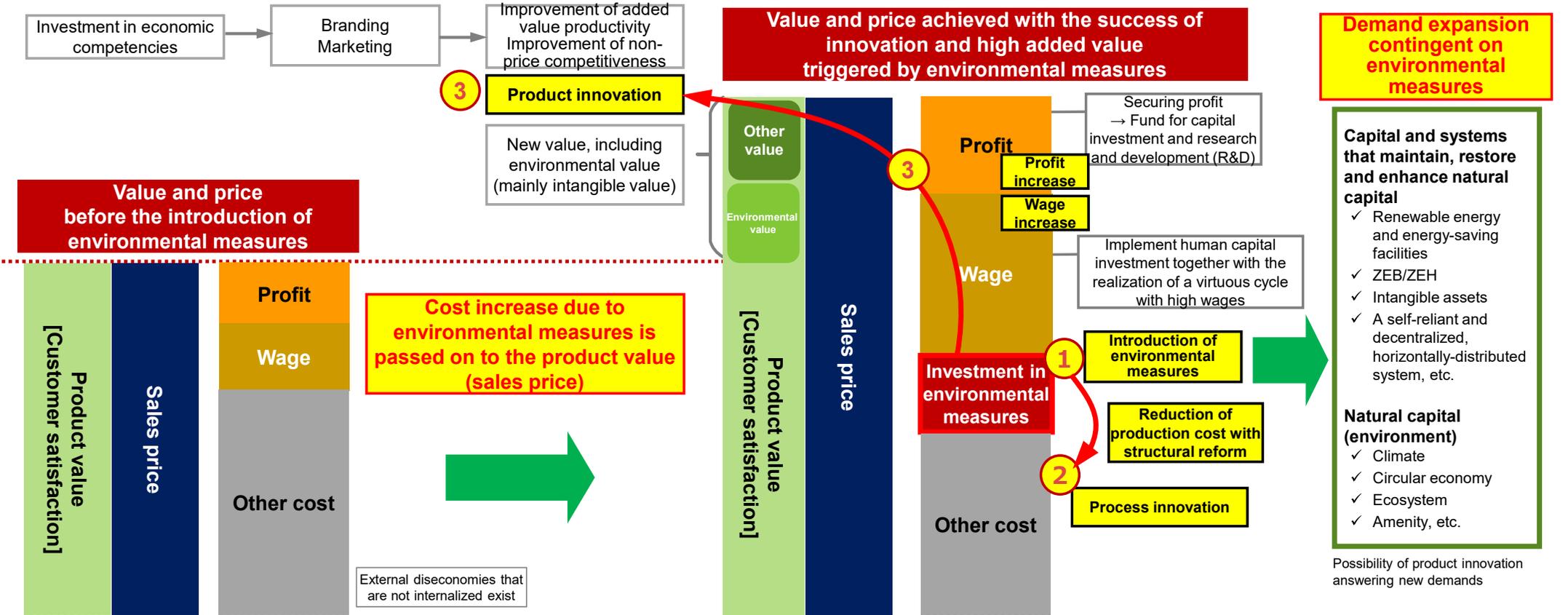
“Momentum for **adding high value to the entire economy** will be created by **transforming environmental value**, which is an intangible asset, **into added value.**”



- In order to realize absolute decoupling and cope with the population decrease, **“qualitative” growth** instead of quantitative expansion is essential. It is necessary to create **unprecedented, new added value**
- Based on the inherent needs of citizens now and in the future, **focus on both market value and non-market value by placing the well-being/quality of life (the entire economic welfare) as the dominant concept.**
- **Taking in (internalize) non-market value, such as environmental value and landscape value, as an unprecedented, new added value into market value** (= internalization of external economy) leads to an increase of the markup rate/unit value of goods and services, and it is expected that a virtuous cycle with high wages can be realized.
 - ✓ Realize innovation by taking in completely new value.
 - ✓ It is also important to simultaneously implement measures to change the awareness of consumers (CP, investment in economic competencies, including education, training, and marketing).
- However, non-market value that cannot be converted into market value continues to exist, which must be handled with care as is.
 - ✓ Also regarding environmental value, which is the foundation for the survival of humankind, only some of it can be evaluated as market value.

Adding high value to the entire economy utilizing environmental value (image)

- When the environmental measures are introduced (①), there are cases where process innovation (energy-saving, etc.) makes progress (②). (Investment in environmental measures creates new demand)
- When non-price competitiveness increases with product innovation, etc. and succeeds in adding high value leveraged by environmental value (③), it will work positively on the economy.
- With the introduction of new value, such as environmental value, profits and wages increase, realizing a virtuous cycle of adding high value and achieving high wage.



Source: Material for Comprehensive Policy Subcommittee, Central Environment Council (June 30, 2023). Cited and edited from "Policy Recommendation for the Significant Reduction of Greenhouse Gas in the Long Term and Simultaneous Solution of Economic and Social Challenges" by the Council on Long-Term Strategy on Climate Change, Ministry of the Environment (February 26, 2016)

Efforts for “adding high value to the entire economy utilizing environmental value” (example)

With “environmental value” being evaluated in the market and products and services with high environmental value being selected by consumers, “new avenues for growth” through “adding high value to the entire economy” are aimed at. Examples of measures to achieve this are as follows:

(1) Visualization/information provision of environmental value

- Labeling the energy-saving performance of equipment, organic agricultural products, forest certification, etc.
- Improved demonstration of energy-saving performance of residences and buildings at the time of selling and renting
- Promotion of efforts on CFP based on carbon footprint guidelines
- Formulation of rules to calculate and demonstrate GX value (pursue internationally-harmonized rule-making)
- Certification of the Design for Environment (DfE) of products based on the Plastic Resource Circulation Act

(2) Awareness and behavioral changes of consumers

- National movement to create a new, prosperous life leading to decarbonization
- 
- Promotion of investment in intangible assets, such as marketing, branding, human resources development to understand the inherent needs of citizens and diffuse the concept of environmental value
 - “Afu No Wa” project to promote sustainable production and consumption of food and agriculture, forestry and fisheries

(3) Creation of demand

- Green procurement by the government and municipalities
- Creation of demand in the region through measures such as the Decarbonization Leading Areas and priority measures
- Adding high value to the use of national parks through the experience of being impressed and learning with the utilization of attractive natural environments, and upgrading the base for use

(5) Carbon pricing

- Improvement of the relative competitiveness of GX-related products/businesses through the Pro-Growth Carbon Pricing Concept

(4) Incentive

- Support at the early stage of introduction (insulation of residences, high-efficiency water heater, electric vehicle, ZEB/ZEH, etc.)
- In addition, consider the evaluation of GX values, etc. using an auxiliary scheme

(6) Regulation and systems

- Making it obligatory for residences and buildings to comply with energy-saving standards and raising the standards in a stepwise fashion
- Improvement of the energy-saving performance of equipment through the leading runner approach of the Energy Conservation Act

Review of the Basic Environment Plans



		The First Basic Environment Plan 1994-2000	The Second Basic Environment Plan 2000-2006	The Third Basic Environment Plan 2006-2012	The Fourth Basic Environment Plan 2012-2018	The Fifth Basic Environment Plan 2018-2024
International	Society/economy	<p>Economic growth of developing countries and the poverty issue</p> <ul style="list-style-type: none"> Progress of economic growth in developing countries The poverty issue arises in some developing regions 	<p>Globalization of the world economy</p> <ul style="list-style-type: none"> Progress of the globalization of economy On the other hand, the poverty issue arises in developing regions 	<p>Rapid economic growth in regions like BRICs</p> <ul style="list-style-type: none"> Problems, such as water shortages, become serious in developing countries Increase in international movement of resources and waste 	<p>Rapid economic growth in regions like BRICs</p> <ul style="list-style-type: none"> Increase of environmental loads due to economic growth Prosperity, such as the level of happiness, is being considered 	<p>Increase of the influence of the international economy on Japan</p> <ul style="list-style-type: none"> Economic development of African and Asian countries Decreased presence of Japan
	Environment	<p>Necessity of international efforts in environmental conservation</p> <ul style="list-style-type: none"> Global warming, ozone depletion, air pollution, etc. Necessity of understanding environmental issues at the global scale 	<p>Global-scale environmental problems caused by global warming</p> <ul style="list-style-type: none"> Global-scale problems on environment, resources, and energy Necessity of making international frameworks and rules 	<p>Global-scale environmental problems becoming increasingly serious</p> <ul style="list-style-type: none"> Expansion of environmental problems beyond national borders Environmental problems becoming increasingly complicated and serious 	<p>Increase of environmental loads throughout the world</p> <ul style="list-style-type: none"> Environmental pollution and health damage in developing countries Continued loss of biodiversity 	<p>Environmental problems spreading beyond national borders</p> <ul style="list-style-type: none"> Marine pollution including microplastics Global pollution becoming increasingly serious
Domestic	Society/economy	<p>Decreasing birthrate, rapidly aging demographics, overall population decline, and the maturing of the economy and society in Japan</p> <ul style="list-style-type: none"> Expansion of the scale of municipalities with the natural decrease in numbers in mountainous, agricultural and fishing villages Possibility of economic stagnation due to the decrease in the labor force population Progress of the shift of industry towards software, service, and information areas Possibility that man-kilometers and ton kilometers of transportation increase significantly Household consumption may increase stably 	<p>Possibility of socio-economic change through technological innovation in the area of information and communications</p> <ul style="list-style-type: none"> Possibility of the reduction of environmental load according to population decrease Population regression to the 23 wards of Tokyo and population outflow from underpopulated areas Lifestyle based on mass production, mass consumption and mass disposal Increased contact with nature and improved awareness regarding volunteer activities Various impacts of technological innovation in the area of information and communications Low level of social capital related to environmental conservation 	<p>In the course of coping with the negative legacy of the bubble economy, new socio-economic problems appear</p> <ul style="list-style-type: none"> Outstanding long-term debt is at the worst level among advanced countries Possibility of the deterioration of the quality of national land as a stock Possibility of economic growth through addressing environmental problems Diffusion of contact with nature and post-materialism 	<p>Importance of sustainability being recognized anew with the occurrence of the Great East Japan Earthquake</p> <ul style="list-style-type: none"> Negative impact of the population decrease on economic growth Occurrence of uncontrolled developments in farmlands in suburb areas Possibility that national land management becomes insufficient due to underpopulation Market share of Japanese companies in the field of environment declines Values and awareness of sustainability change with the occurrence of the Great East Japan Earthquake 	<p>Facing complex crises and issues related to environment, economy, and society</p> <ul style="list-style-type: none"> Serious impact of demographic changes on environmental conservation Environmental conservation and economic revitalization based on regional resources Recognition of the effectiveness of a decentralized energy system Reconstruction of the economy of Japan through the Fourth Industrial Revolution Japan is an "advanced nation in terms of facing various challenges"
	Environment	<p>Surfacing of environmental problems through socio-economic activities</p> <ul style="list-style-type: none"> Countermeasures against pollution and the conservation of natural environments that achieved notable results Lifestyle based on mass production, mass consumption and mass disposal taking root Occurrence of lifestyle-related pollution in cities with the concentration of socio-economic activities in cities Decrease of nature in cities and the emergence of regions where it is difficult to maintain the ability of environmental conservation in farmlands, etc. 	<p>Environmental problems occurring from socio-economic activities becoming increasingly serious</p> <ul style="list-style-type: none"> Air pollution becoming increasingly serious with the increase in the volume of automotive traffic Improvement of the water environment not progressing. Ground subsidence caused by the use of groundwater at the time of drought and for snow melting Shortage of final disposal sites and air and water pollution caused by persistent chemical substances Expansion of urban areas and developed lands, decrease of natural forests and secondary forests, and the accumulation of the negative legacy on the environment that may affect the future generations 	<p>Increase in energy use and environmental loads due to changes in lifestyles</p> <ul style="list-style-type: none"> Increase in energy use in business and household sectors and the resulting deterioration of the thermal environment High density of pollution and noise problems due to the concentration of population in cities Shortage of the remaining capacity of final disposal sites, problems of illegal dumping Occurrence of water pollution and the generation of algae and red tide caused by domestic wastewater 	<p>Facing the threat to ecosystems caused by global warming and problems such as resource circulation</p> <ul style="list-style-type: none"> Threat to ecosystems caused by global warming Recycled use is increasing, and a shift to the resource-saving system is progressing Efforts to reduce generation and promote reuse among 3R are still insufficient Measures for water quality improvement and measures against soil pollution are insufficient Issue of the treatment of waste caused by the Great East Japan Earthquake 	<p>Necessity of resolving problems, such as biodiversity loss due to global warming and resource circulation</p> <ul style="list-style-type: none"> Necessity to further reinforce efforts to increase resource productivity Biodiversity loss due to uncontrolled developments and environmental changes Concerns on the degradation of human welfare due to biodiversity loss While the environmental quality is improving, the issue of water and air remains
Society aimed by the Basic Environment Plan		<p>There is a growing need to reconsider our values placing too much emphasis on the pursuit of material wealth, and the prevailing socioeconomic activities and lifestyles marked by mass production, mass consumption and mass disposal. Measures will be promoted comprehensively to establish a desired relationship between people and the environment by setting the long-term goals of "circulation," "coexistence," "participation," and "international efforts."</p>	<p>Society should guarantee citizens a high-quality life as far as possible, not only in terms of the environment, but also in terms of economy and society. Socio-economic growth and the quality of life should be evaluated from the three perspectives mentioned above, and the development of policy must also be committed by taking into view these three perspectives.</p>	<p>The "sustainable society" we should aim for is a society where a sound and affluent environment is conserved from global to local levels, and where individual citizens can realize happiness through such environment and hand down such lifestyle to future generations (sound, beautiful, and prosperous environmentally-advanced country).</p>	<p>On the premise that the risk to human health and ecosystems is sufficiently reduced and safety is secured, each of the three environmental challenges, i.e. "low carbon", "circulation" and "harmony with nature," is to be achieved in an integrated manner with the participation of all major stakeholders, thereby ensuring a sound and affluent environment from global to local levels.</p>	<p>It is necessary to establish a circulation and symbiosis based society (Environmental and Life Centered Civilized Society) by making full use of ICTs and other science and technologies, thereby ensuring minimal environmental impacts while continuously achieving economic growth to realize the sound circulation of materials and natural life, as well as to maintain and restore a sound ecosystem to promote the symbiosis between nature and human beings and symbiosis between different regions, and realize low-carbonization with measures including those mentioned above.</p>