The Kitakyushu City Digest Edition Basic Environment Plan

Subtitle: Environmental Capital & SDGs Realization Plan



Creation of a city with true wealth and prosperity, inherited by future generations

Fiscal 2017 to 2021





November 2017 City of Kitakyushu



Working towards regional revitalization and a sustainable society

The future depends on environmentally-oriented grassroots activism

It is up to us as citizens to sense the impending crisis facing humanity as a result of global environmental problems, to save resources for future generations and create a sustainable society.

The causes of climate change and problems with energy/resources along with their effects are directly linked to our daily lives. As such, we need to recognize that solutions to these issues begin with our personal daily lives, and to ensure that we further develop environmentally-oriented grassroots activism.

Kitakyushu has a proud legacy of its citizens, businesses and government coming together to overcome pollution.

The series of initiatives and efforts we make as individuals will change our city, Japan and the wider world. we as citizens of Kitakyushu should do all in our power to tell the world just how important the "environmentally-oriented grassroots activism can be in order to protect our planet for generations to come.".

A holistic understanding of the environment, economy and society

The creation of a sustainable society is not only about striking a balance between environmental conservation and economic development, but is deeply connected with solving a range of social issues relating to welfare, culture/tradition, education and the revitalization of communities.

In other words, if we are to improve sustainability, we need to build balanced social systems which integrate three aspects environment, economy and society.

In September 2015, the United Nations set out its SDGs (Sustainable Development Goals), and the above three aspects were brought together under a single goal. In Kitakyushu, which aims to be the world's environmental capital, citizens, businesses, NPOs, organizations and government must unite and continue striving to achieve these global targets.

Towards an era which pursues "true wealth and prosperity"

"True wealth and prosperity" in this case does not only mean economic or material wealth, but includes forms of spiritual wealth such as diversity, equality, peace of mind, hope, inspiration, purpose in life, kindness and pride. These are the unchanging conditions for people to live happily that go beyond national borders or generations.

Utilizing our city's rich natural environment and many eco-friendly industries and technologies, we continue to grow our legacy of proactively tackling environmental issues along with our citizens' environmentally-oriented grassroots activism. At the same time, we aim to be the world Capital of Sustainable Development and are striving to put in place a sustainable society, creating the kind of city where people want to live their entire lives, a place of security that helps people find a purpose in life.



OPurposes behind the drawing up of the Plan

In Kitakyushu, a range of concerned parties came together in October 2004 in an effort to establish the city as the environmental capital of the world, including citizens, NPOs, businesses and local government. On this occasion, they drew up the Grand Design on World Capital of Sustainable Development, an action plan to achieve this goal, and the philosophy and principles for action set out in this plan have since formed the basis of initiatives aimed to turn Kitakyushu into the environmental capital of the world. In October 2007, the Kitakyushu City Basic Environment Plan was drawn up based on the Kitakyushu City Basic Environmental Ordinance as a governmental plan to turn the Grand Design on World Capital of Sustainable Development into reality. As the plan expired in fiscal 2011, it was revised in fiscal 2012 and ran until its completion in fiscal 2016.

The Environment Basic Plan has been revised in line with the progress of the city's environmental policies since the revisions of fiscal 2012, as well as subsequent changes to the global situation, such as the Paris Agreement and SDGs.



ONature of the Plan

ODuration of plan From FY 2017 to FY 2021

(to make appropriate revisions to plans based on the PDCA cycle, etc.)

ORegions covered by the Plan

Covers mainly the City of Kitakyushu area, but undertaken through collaboration and coordination from broad-ranging perspectives, including overseas

Promise made by the citizens of Kitakyushu to the world's people, Earth and future generations



Vision for the activities of citizens, organizations, businesses, government, etc.

Realization as a governmental plan

Kitakyushu City Basic Environment Plan

is the realization of the Grand Design on World Capital of Sustainable Development as a governmental plan.

OBasic philosophy and 3 pillars

Creation of a city with true wealth and prosperity, inherited by future generations

"True wealth and prosperity"—we consider this as the overall synthesis of mental riches; this is not only economic and material riches, but also includes diversity, equity, safety, hopes, dreams, and aims in life, and tenderness and pride. This transcends boundaries and generations and is a requirement for the happiness of human beings.

Our lifestyles and work, everything we do, is connected to the world and the future. Living together with all the people in the world, the creation of a sustainable society—one in which "true wealth and prosperity" abounds—fulfills our promise to future generations.

We are in a position to ascribe the maximum standard for all actions in creating a city in which true wealth and prosperity abound, which will be passed on to future generations.

1. Living together, creating together

If we, every single one of us, make a move to change, our city will change. If our city changes, the world may also change. Society is a place where all people live and is also a place where treasures are created. With this new view, we believe that every single person has the right to take action to help the environment. This right originates in the social responsibility of every resident and business. We promise to take concrete action in consideration of the environment and aspire to raise our environmental consciousness to a world-class level.

2. Developing economically through a healthy environment

Taking positive actions to conserve the environment ensures the creation of a high quality of life. On a broader level, the production of environmental related industries serves to revitalize the local area and economy. The resulting economic growth leads to the achievement of an even better living environment and this positive environment, in turn, leads to the creation of new economic activity. This never-ending circle of environment and economy spurs on the creation of a sustainable society.

Through the conservation and creation of a good environment, we foster a local society in which new values appear, as well as the next generation of industries and technology in which the viewpoint of the community and environment are taken.

3. Enhancing the sustainability of the city

Cities have various functions, are highly convenient and foster an environment in which we can easily live; on the other hand, it is the focal point for consumption of resources and energy in large quantities and continues to have an adverse impact on the environment. In order to create a long-living and healthy city, sustainability must be increased, including promoting the conversion to smaller city structures which have a lower impact on the environment, promoting the effective use of renewable energy and potentially reusable resources, and increasing the longevity of urban infrastructure. Moreover, taking advantage of the rich natural surroundings, the development of beautiful townscapes should be promoted and as a result, an environmentally friendly city, in which the charm and pleasure of life resounds, can be created.



OContributing to SDGs that utilize Kitakyushu's inherent strengths

In September 2015, the United Nations adopted the 2030 Agenda, which sets out universal goals for the whole of the international community to tackle, both developed and developing nations, including 17 Sustainable Development Goals (SDGs).





- SDGs are universal, inclusive and indivisible
- Setting 17 SDGs to be achieved by 2030

This city has a history of having conducted a range of environmental initiatives, and is continuing to work towards uniting the environment, economy and society as a FutureCity based on the Grand Design on World Capital of Sustainable Development. Taking an active stance in upholding SDGs not only serves to further boost these initiatives but also has major significance in the sense of publicizing the city's initiatives both in Japan and overseas. Furthermore, it also contributes to regional revitalization.

Meanwhile, SDGs set a broad range of goals and targets relating to the environment, economy and society, but these include some that Japan and our city have already achieved to some degree. Also, there are some fields in which Kitakyushu is well placed to utilize its status as an industrial city, and conversely others where it is not so well placed.

Therefore, as a city we have already achieved some goals relating to the environment to a certain degree, but there are other areas in which we still face challenges or in which it is a case of whether or not we can draw on our strengths as a city. From this perspective, we need to consider different approaches for each case.



Kitakyushu's strengths

OPolicy targets

The city has set the following 4 policy targets that need tackling during the term of this plan as a matter of priority for achieving our basic philosophy and the 3 pillars underpinning this philosophy.



Also, in order to achieve these policy targets, we will set multiple basic measures for each policy target along with fields for implementation.



\bigcirc Overview and systems of plan

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Chapter 1 – F	Basic Philosophy of the Basic Environment Plan (creation of a city with true wealth and prosperity, inherited by future
generations)	
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	Section 3 - 4 Policy Targets and their Basic
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	Establishment of the "Kitakyushu Environmental Brand" Supported by All
Basic Mo	Citizens asure 1: Beneficial Cycle of Environmental Activities and Community Revitalization
	asure 2: Fostering Environmental Human Resources through ESD
	asure 3: Dealing with Environmental Risk Management through Dialog and Cooperation
	with Citizens
Basic Mea	asure 4: Establishing the Kitakyushu Environmental Brand through International Collaboration
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	rget 3) Building a World-leading Circular System
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	Environment, Economy and Society
Basic Mea	asure 1: Creation of a Safe and Stable Resilient City
Basic Mea	asure 3: Promotion of the Fostering of Environmental regional and International Business
Basic Mea	asure 4: Initiatives Aimed at the Achievement of SDGs and Environmental Governance

Chapter 1 – Basic Ideas behind the Plan's Implementation (Progress Inspections, Implementation of PDCA, Indicators, etc.) Chapter 2 – Methods for Progress Inspections during each Fiscal Year (Individual Projects, Evaluations of Indicators, Factor Analysis, etc.)

ORelationship between the Basic Environment Plan and SDGs

 $\sim~$ Goals of SDGs and their Relationship with the Basic Environment Plan $~\sim~$

	Ocol O. Fuel human a chieve food convitu and immediated autoities o
2 ZERO HUNGER	Goal 2: End hunger, achieve food security and improved nutrition a promote sustainable agriculture
<u> </u>	We will reduce food loss and promote the effective use of food banks, and will achieve sustainable agriculture that is kind to the environment so that all citizens can have access to nutritious and well-balanced meals, including children and senior citizens.
GOOD HEALTH	Goal 3: Ensure healthy lives and promote well-being for all
AND WELL-BEING	at all ages
-/w/•	We will reduce the number of traffic accidents by creating a compact city that is easy to get around, and will protect the health of citizens by guaranteeing clean air and water and ensuring that waste is disposed of properly using hygienic methods.
	Goal 4: Ensure inclusive and equitable quality education and
EDUCATION	promote lifelong learning opportunities for all
	We will establish our city as a hub for environmental learning and ESD (education for sustainable development) and will conduct such things as the World Environment Capital Examination. In addition, we will take an active stance in accepting trainees from overseas.
	Goal 6: Ensure availability and sustainable management of
B CLEAN WATER AND SANITATION	water and sanitation for all
V	We will ensure good water quality and sanitation in society by preventing water and soil pollution, having proper sewage treatment in place, and using appropriate methods to manage chemical substances. We will also safeguard water sources through the conservation of areas with water resources etc.
AFFORDABLE AND	Goal 7: Ensure access to affordable, reliable, sustainable and
CLEAN ENERGY	modern energy for all
	We will introduce diverse forms of renewable energy, like solar and wind power. In addition, we will make efforts to save energy through AI (artificial intelligence) and other means to allow citizens to use energy smartly.
B DECENT WORK AND ECONOMIC GROWTH	Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
Ĩ	We will nurture environmental businesses that can flourish both in Japan and overseas, with the aim of stimulating growth in such industries as wind power generation and recycling. In addition, we will encourage employers to hire young people, women and senior citizens, thus creating meaningful jobs for citizens.

	Goal 9: Build resilient infrastructure, promote inclusive and
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	sustainable industrialization and foster innovation
	We will create the foundations for future industries and technologies by putting in place environmentally-friendly, durable housing, renewable energy facilities, recycling plants and centers for environmental research.
11 SUSTAINABLE CITIES AND COMMUNITIES	Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
A ∎⊈≣	We will create a vibrant city that is compact and comfortable, one blessed with verdant surroundings and a strong resilience against natural disasters.
Goal 12: Ensure sustainable consumption and production p	
AND PRODUCTION	In order to ensure that citizens live rich and fulfilling lives without wasting things (resources), we will encourage people to purchase eco-friendly products, such as those made from recycled resources, to use these products carefully, and to pass them on to other for reuse/recycle them once they have finished using them. We will also strive to reduce food loss.
40 CLIMATE	Goal 13: Take urgent action to combat climate change and its impacts
T3 Action	We will make efforts (renewable energy, energy-saving etc,) to reduce CO2 emissions, a cause of global warming, and will take steps to lessen the impact of climate change (such as the increasing frequency of abnormal weather and impacts on crops).
14 LIFE BELOW WATER	Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
$\tilde{)}$	We will protect marine ecosystems by preventing seas from becoming polluted, protecting natural environments in seas and along coastlines, and using aquatic resources sensibly.
15 LIFE ON LAND	Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
<u> </u>	In addition to suitably managing our city's rich natural environment and forests, we will take steps to prevent invasive alien species and protect our diverse ecosystems.
17 PARTNERSHIPS FOR THE GOALS	Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development
8	Continuing on with our previous efforts to elicit international cooperation in the environment, we will support the transfer of technologies to developing nations and assist with training human resources. We will also strengthen partnerships between citizens, businesses and governmental bodies.

Relationship between the Basic Environment Plan and SDGs

 \sim Corresponding Relationship between Measures Incorporated in the Basic Environment Plan and SDGs \sim

() Indicates the targets in SDGs that the city will contribute to through its initiatives

2 ZERO HUNGER	Building a World-leading Circular System • Promoting effective use of food-banks, reducing food loss and raising awareness of the No Leftovers Declaration (Contribute to [2-1], Ensure people have sufficient food, [2-2] Meet the nutritional needs of children and senior citizens) Future-oriented, Quality Urban Development and Integrated Improvement of Environment, Economy and Society (Contribute to: [2-4], Ensure sustainable food production systems) • Strengthening measures to deal with climate change • Food bank and food-loss reduction (As above) (Contribute to: [2-1], [2-2])
3 GOOD HEALTH AND WELL-BEING	Realizing an Ultra-low Carbon Society by 2050 and a Post-carbon Society further down the Road • Promotion of a compact city and public transportation (Contribute to: 3-6. Reduce deaths and injuries from road traffic accidents) Building a World-leading Circular System • Appropriate processing and management of chemical and hazardous substances (Contribute to: 3-9. Reduce deaths and illnesses from environmental pollution) Future-oriented, Quality Urban Development and Integrated Improvement of Environment, Economy and Society • Protection of air, water and soil environments (Contribute to: 3-9. Reduce deaths and illnesses from environmental pollution) • Protection of a compact city and public transportation (Contribute to: 3-9. Reduce deaths and illnesses from environmental pollution)
4 QUALITY EDUCATION	Developing Environmentally oriented Grassroots Activism and the Establishment of the "Kitakyushu Environmental Brand" Supported by All Citizens • Fostering environmental experts through environmental learning, ESD, World Environment Capital Examination, Eco Life Stage, etc. (Contribute to: 4-7.) Ensure that all learners acquire the knowledge and skills needed to promote sustainable development) • Accept trainees from Asia and other regions, advance overseas environmental education and promote other international environmental cooperation activities. Promotion of international environmental cooperation (Contribute to: 4-7)
6 CLEAN WATER AND SANITATION	Building a World-leading Circular System • Appropriate processing and management of chemical and hazardous substances (Contribute to: 6-3. Improve water quality) • Preserving ecosystems and species, and the Forest-Village-River-Sea (Contribute to: 6-6. Protect and restore water-related ecosystems) Future-oriented, Quality Urban Development and Integrated Improvement of Environment, Economy and Society • Protection of air, water and soil environments (Contribute to: 6-3)
7 AFFORDABLE AND CLEAN ENERGY	Realizing an Ultra-low Carbon Society by 2050 and a Post-carbon Society further down the Road • Introduction of large-scale renewable energy such as solar and wind, and building an industrial center for developing hydrogen technology and wind power generation industries (Contribute to: 7-2. Increase substantially the share of renewable energy) • Promotion of energy saving and management (Contribute to: 7-3. Improve energy efficiency) • Promotion of renewable energy and energy saving in the Asian region through the Asian Low-Carbon Center (Contribute to: 7-2.]7-3)
8 DECENT WORK AND ECONOMIC GROWTH	Realizing an Ultra-low Carbon Society by 2050 and a Post-carbon Society further down the Road • Promotion of development as a local energy base including renewable energy and energy management, etc (Contribute to: 8-1. Economic growth, 8-2. Achievement of higher levels of economic productivity) Building a World-leading Circular System • Advancement of Eco Industrial Town and recycling industries (Contribute to: 8-1, 8-2, 8-4. Improve global resource efficiency) • Utilize natural tourism resources (Contribute to: 8-9. Promote sustainable tourism) Future-oriented, Quality Urban Development and Integrated Improvement of Environment, Economy and Society • Promotion of the fostering of environmental industries and international business (Contribute to: 8-1, 8-2)
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	Realizing an Ultra-low Carbon Society by 2050 and a Post-carbon Society further down the Road • Building quality housing and material stock (Contribute to: 9-1.) Develop sustainable and resilient infrastructure) • Promotion of low-carbon and energy related industries (Contribute to: 9-4.) Improve sustainability using environmental technologies, 9-5.] Enhance scientific research and upgrade technological capabilities) Building a World-leading Circular System • Advancement of Eco Industrial Town and recycling industries (Contribute to: 9-4.] 9-5) Future-oriented, Quality Urban Development and Integrated Improvement of Environment, Economy and Society • Strengthening measures to deal with climate change and ecosystem-based disaster risk reduction (Contribute to: 9-1) • Development of environmental technology through collaboration with academic institutions, etc. (Contribute to: 9-5)



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Development of Environmentally-oriented Grassroots Activism and the Establishment of the "Kitakyushu environmental brand" Supported by All Citizens



Basic Measure 1: Beneficial Cycle of Environmental Activities and Community Revitalization

[Priority fields for implementation]

- Promote awareness and support measures that prompt citizens and businesses to reexamine their lifestyle and business-style.
- Promote local community and NPO activities such as support for local recycling and cleanup campaign.
- Promote environmental activities in businesses in the overall supply chain through networking and cooperation.



"TEITAN Points" designed to promote citizens' environmental activities



Promotion of urban cleanup campaign activities in communities

Basic Measure 2: Fostering Environment Experts through ESD

- [Priority fields for implementation]
- Promote Education for Sustainable Development (ESD) and environmental learning for citizens including preschoolers and retirees. (Promotion of hands-on learning programs utilizing environmental learning facilities, natural fields etc., World Environment Capital Examination, accumulation of environmental human resource data, ESC (education for
- sustainable development) centering on Kitakyushu ESD Council, etc.)
 Further promote environmentally-oriented grassroots activism through cross-organizational cooperation between youth through the Kitakyushu Manabito ESD Station and Kodomo Eco Club.
- Reinforce the base to foster environment experts by strengthening networks among universities, research institutions etc., in the city.



Environmental learning for children





e World

World Environment Capital Examination

Basic Measure 3: Dealing with Environmental Risk Management through Dialog and Cooperation with Citizens

[Priority fields for implementation]

· Promote environmental risk dialogue.

- (Promotion of dialog between concerned parties on the possibilities of adverse effects on people and the ecosystem, implementation of rapid on-site responses in the form of awareness-raising and field measurements by the city from the perspective of facilitating smooth communication between concerned parties, promotion of dialog between experts and citizens/businesses, etc.)
 Provide appropriate information on the environment and fostering environmental literacy.
- * Literacy The ability to find and use the necessary information from materials provided. (Timely provision of reliable information, provision of specialist knowledge, such as information on environmental standards and risks through such media as the environmental information magazine TEITAN Press, etc.)
- Promote voluntary environmental risk management by businesses, implementing agreements, as well as utilizing awards and certification as a motivational tool for businesses.

Basic Measure 4: Establishing the Kitakyushu Environmental Brand through International Collaboration

[Priority fields for implementation]

- Strengthen strategic international environmental collaboration and the international environmental brand through collaboration with domestic and overseas institutions.
- · Create international networks by fostering overseas environmental personnel.
- Attract international conventions and domestic events in environment-related fields through the city government's united efforts.
- Promote networks between academia and business and use the city's strengths technologies and policies to establish a "Technology Capital of Asia" Brand.



G7 Kitakyushu Energy Ministerial Meeting

Realizing an Ultra-low Carbon Society by 2050 and a Post-carbon Society further down the Road

Aiming to be the top renewable energy user



Basic Measure 1: Transition to a Stock-based Society that Supports an Ultra-low Carbon Society

[Priority fields for implementation]

- Promote energy-efficient, low-CO2 industries and city planning. (Low carbonization that utilizes our strengths as an industrial city in the form of collaboration between factories and the city, development of soft service industries in the form of energy management, compact urban planning, etc.)
- Develop high quality regions and towns, residences and building stock, including solar power generation facilities, high efficiency energy facilities, net zero energy housing.
- Promote maintenance and good use of natural capital, including greening policies for urban areas and regional hubs, appropriate forestry management, measures to take care of neglected bamboo forests, and protection of natural scenery.
- Promote low-carbon development through stock management such as increasing the longevity of bridges and sewage facilities, consolidation and demolition of dilapidated facilities.



Jono Zero Carbon District



Regeneration of degraded forests through the proper forest management

Basic Measure 2: Socioeconomic, Technological, Lifestyle Innovation and Industrial Cluster Development to Realize an Ultra-low Carbon Society

[Priority fields for implementation]

- Promote the development of ultra-low carbon technologies and industrial clusters by utilizing renewable energy, hydrogen, ICT/AI, human engineering and highly functional materials, etc.
- Promote a low carbon lifestyle and business-style through regulatory and economic approaches.

(Promotion of initiatives by businesses based on energy-saving methods etc., promotion of incentive systems like TEITAN Points, initiatives taken by city hall to save energy and resources, etc.)

• Study the feasibility of financial policies such as environmental finance.

Basic Measure 3: Comprehensive Formation of a Future Energy Base

[Priority fields for implementation]

- Promote development as a local energy base. (Introduction of offshore wind power, solar power, biomass power generation, high-efficiency thermal power generation etc., promotion of energy-saving, construction of comprehensive hub for wind power industry, etc.)
- Promote the use of hydrogen energy. (Demonstration in Hibikinada district and Higashida district, spread of hydrogen stations and fuel-cell vehicles, etc.)
- Promote local smart energy management. (Expansion and smart use of local energy companies, utilization of new energy management technologies, etc.)
 Promote human resources and technology development in the field of environment. (Development of human resources to support industries relating to wind power generation through training and seminars, support for the development of technologies in collaboration with universities and businesses, etc.)





Renewable energy installation and expansion

Become a comprehensive hub for industries relating to wind power generation



Hydrogen energy in action



Local energy companies

Basic Measure 4: Realization of Ultra-low Carbon Societies at the Asian level

[Priority fields for implementation]

Promote international cooperation toward the realization of ultra-low carbon societies in Asia through cooperation with KITA (Kitakyushu International Techno-cooperative Association), IGES (Institute for Global Environmental Strategies) and other related institutions and businesses based in Kitakyushu.

• The Kitakyushu Asian Center for Low Carbon Society plays a pivotal role in helping private businesses to expand "low-carbon movements" overseas.



Basic Measure 1: Promotion of the "3Rs Plus" Initiative and Advanced Recycling Activities and Improvement of Resource Recycling Ratio

[Priority fields for implementation]

- Promotion of reducing waste, reusing commodities and advanced recycling. (Reduce waste from households and businesses, reduce food loss, thorough sorting of waste, promotion of 3Rs initiative among industrial waste operators, recycling of solar panels, etc.)
- Reduce CO2 and energy consumption by improving the efficiency of resource use in waste processing, and promoting the use of waste power generation and thermal usage.
- Actively promote the use of recycled and renewable resources. (Promotion of the use of recycled materials in construction work, promotion of the use of compost etc. deriving from food waste, awards and public awareness activities, use of resources and energy like unused biomass, etc.)
- Secure appropriate processing. (Raising awareness of rules for putting out trash, support for business operators emitting waste, prevention of illegal waste dumping, proper disposal of marine litter, etc.)

Basic Measure 2: Facilities and Technological Development to Support Circular Systems and the Creation of a Recycling-oriented Industrial City

[Priority fields for implementation]

- Promote regional collaboration to improve waste management and facilities that support stable and efficient waste processing and circular systems.
- \cdot Create an advanced industrial recycling Eco Industrial Town where industry and region coexist.

(Sophisticated recycling of solar panels drawing on our track record in the Kitakyushu Eco Industrial Town Project, examination of technological and financial support for improving/nurturing companies treating industrial waste, etc.)

• Build networks in the environmental industry and form a resource recycling research center in cooperation with universities etc.

Aim at creating an international resource recycling center for electric and electronic waste, which would be difficult to recycle in developing countries, along with miscellaneous scrap and other precious recyclable resources, which would otherwise be sent overseas.







Basic Measure 3: Appropriate Processing and Management of Chemical and Hazardous Substances

- [Priority fields for implementation]
- Facilitate appropriate processing of PCB.
- (Thorough guidance and monitoring for JESCO Kitakyushu Facility, promotion of enhanced initiatives among other municipalities, account for and dispose of all volumes of low-concentration PCB waste, etc.)
- Facilitate appropriate management of mercury, asbestos etc. (Emission regulations, recovery, correct disposal, etc.)
- Facilitate management of chemical substances. (Promote management by businesses, gain a clearer understanding of harmful substances within the city, etc.)
- Take an active step to control CFCs (Freon gas). (Promotion of proper disposal based on laws, etc.)

Basic Measure 4: Securing Natural Recycling and Preserving Biodiversity

[Priority fields for implementation]

- Protect ecosystem habitats and species.
- (Prevent the deterioration of ecosystems at the hands of development activities through environmental assessment systems etc., collect information on ecosystems in collaboration with related institutions, conserve rare species, etc.)
- Advance the preservation of the Forest-Village-River-Sea (Take correct measures to deal with invasive alien species like red imported fire ants, conserve water resources, prevent damage by birds and animals, promote the idea of local production for local consumption, etc.)
- Collect and integrate extensive natural environment information while fostering environmental experts and creating networks in a proactive manner.

(Environmental surveys, construction of GIS database, formation of networks with experts, etc.) • Make use of rich natural tourism resources through study tours and eco-tourism.



Plant a Million Trees Project



Hibikinada Biotope



Sone Tidal Flats



Hiraodai Limestone Plateau

Future-oriented, Quality Urban Development and Integrated Improvement of Environment, Economy and Society



Basic Measure 1: Creation of a Safe and Stable Resilient City

[Priority fields for implementation]

- Protect air, water and soil environments through monitoring and guidance based on legislation.
- \cdot Take steps to implement appropriate assessments and control measures to prevent pollution.
- Undertake measures to tackle climate change.

(Implementation of predictive simulations on impacts in cooperation with the national government etc., implementation of initiatives in collaboration with related bureaus, etc.)

• Strengthen the city's ecosystem-based disaster risk reduction including utilization of decentralized and self-reliant energy and disaster waste management.



On-site inspections of project areas



Water quality surveys

Basic Measure 2: Realization of an Environment and Society-friendly Comfortable City

[Priority fields for implementation]

- Conserve the city's landscape by utilizing stock and realize a pleasant townscape (Reuse of good public building through the introduction of stock management methods, promotion of long-term maintenance of roads, bridges etc., proper conservation and use of historical buildings, measures to deal with vacant buildings, etc.)
- Promote a compact city and public transportation system, which is senior citizen and disabled-friendly.
- Aim at securing a welfare safety net and community revitalization.
 (Support for foodbank activities, encouraging people to use secondhand items, etc.)

Basic Measure 3: Promotion of the Fostering of Environmental industries and International Business

[Priority fields for implementation]

- Promote a regional-economic circulation zone and employment in those industries for youth, women and senior citizens. (Promotion of economic circulation within the region by reducing energy expenditure outside the region, active use of locally recycled items, encouragement of employment at local business, including the environmental industry, etc.)
- Promote sustainable production and consumption.
 (Promotion of Kitakyushu Eco-Premium, encouragement to gain certification like EcoAction 21, promotion of the idea of local production for local consumption, support for nurturing green consumers, etc.)
- Aim at environmental technology development, the creation of new industries and productivity improvements in collaboration with FAIS (Kitakyushu Foundation for the Advancement of Industry, Science and Technology) and Kitakyushu City University, etc.
- Promote the overseas expansion of environmental industries through JCM and other overseas international cooperation projects.



Kitakyushu Eco-Premium Certification



Product PR at expositions

Basic Measure 4: Initiatives Aimed at the Achievement of SDGs and Environmental Governance

[Priority fields for implementation]

- Promote an urbanization model in working toward attaining SDGs (Collaboration with the national government and other municipalities, support for initiatives by businesses within the city, provision of information, etc.)
- Promote environment governance in working toward attaining SDGs (Horizontal integration within city hall, enhanced cooperation with external organizations, such as research institutes, etc.)



Holding Symposiums on SDGs



Promoting SDGs through TEITAN Points

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