

Institute for Global Environmental Strategies (IGES)

Kitakyushu Urban Centre Research & Activity Profile

Published in 2023

Journey to Creating Sustainable Cities



Zero
Carbon



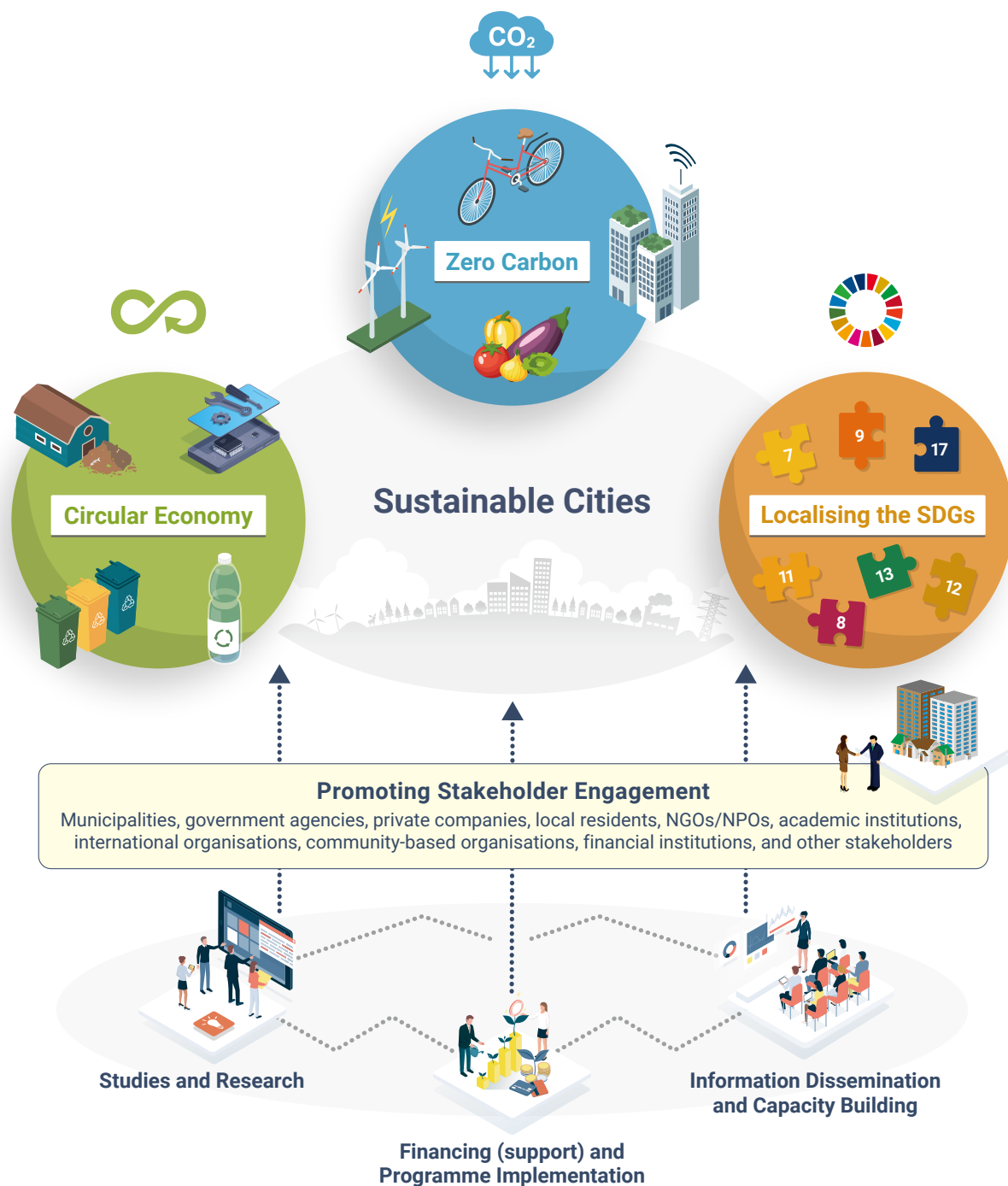
Circular
Economy



Localising
the SDGs



Acting as a Regional Hub in Three Areas: Zero Carbon, Circular Economy and SDGs to Realise **Sustainable Cities**



About the IGES Kitakyushu Urban Centre (KUC)

KUC is one of five satellite offices of the Institute for Global Environmental Strategies (IGES). We conduct research and promote programmes with a primary focus on zero carbon, circular economies, and the Sustainable Development Goals (SDGs) and aim to act as a regional hub for these three areas in close collaboration with local and national authorities, private companies, universities, civic groups, international organisations and other stakeholders.

We are also engaged in capacity building and supporting the transfer and implementation of Japan's exceptional environmental technologies and expertise overseas in collaboration with Kitakyushu and other municipalities in Japan and cities overseas. Moreover, we also organise lectures and talks at schools and for community groups and collaborate with local companies and organisations to help build sustainable societies.

Kitakyushu Urban Centre Key Areas of Activity in Recent Years



The Institute for Global Environmental Strategies (IGES) Organisational Profile

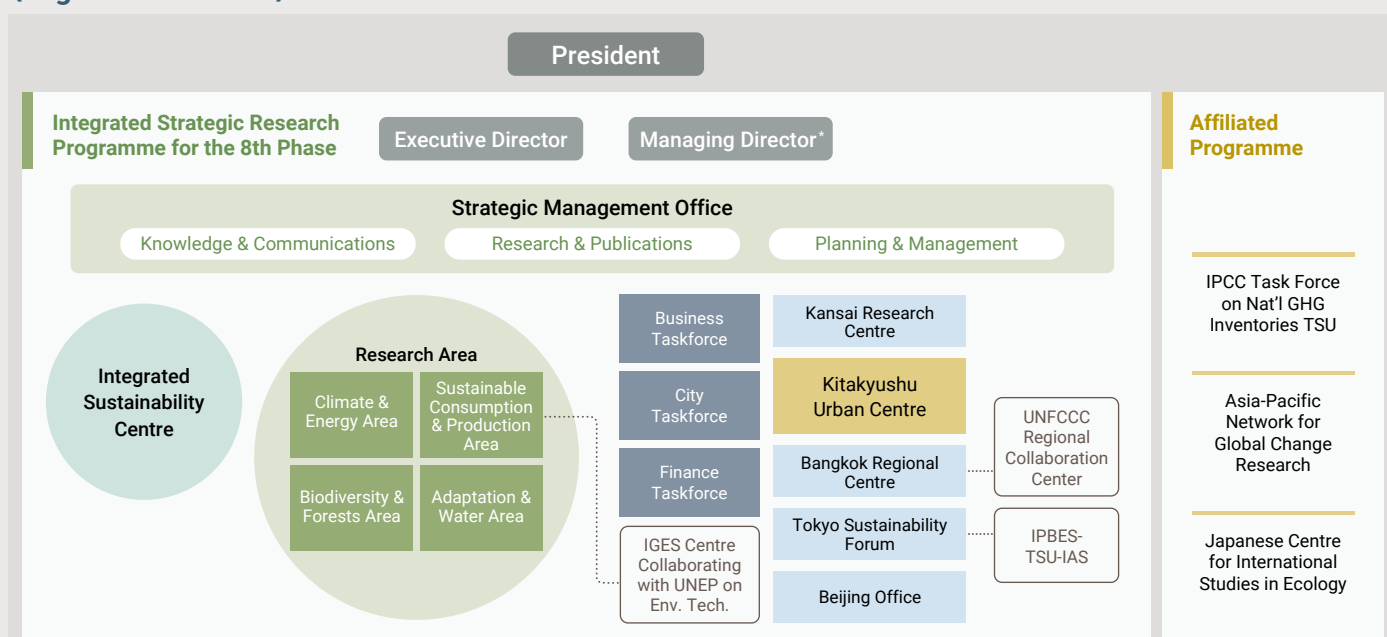
Background

January 1995	Proposal to establish the Institute for Global Environmental Strategies (IGES; a private consultative body of the Prime Minister)
April 1998	Establishment of the Institute for Global Environmental Strategies
October 1999	Establishment of the Kitakyushu Office
April 2010	The Kitakyushu Office is renamed the Kitakyushu Urban Centre
April 2012	IGES transitions to become a public interest incorporated foundation

	No. of employees	Non-Japanese Staff (Out of total staff)
Strategic Research	163	46
Projects for Public Interest other than Strategic Research	22	7
General Administration	19	0
Total	204	53

(As of 30 June 2023)

〈Organisation Chart〉



* Acting Managing Director (as of Oct. 2022)

Strengthening the Initiatives of Zero Carbon Cities

Realising Decarbonised Societies through City-to-City Collaboration at the International Level

Efficient and effective solutions to different challenges can be identified by encouraging exchange between cities on decarbonisation. We promote decarbonisation in cities overseas by supporting opportunities for exchange between cities in Japan and other countries. We also help in developing human resources through inspection tours and trainings, in addition to promoting the transfer of technology packages that contain the environmental management know-how of municipalities in Japan and business-focused solutions.



Collaboration between Hai Phong and Kitakyushu to Create a Zero-Carbon City

The largest port city in the northern part of Viet Nam, Hai Phong has a long history of collaboration with its sister city of Kitakyushu in a number of different areas, including the field of environmental technology. We are supporting the projects of both cities through the City-to-City Collaboration for Zero-Carbon Society programme as they work to achieve carbon neutrality by 2050.

Specifically, we are assisting in the creation of a carbon neutral scenario for 2050 to support Hai Phong in developing policies for decarbonisation, and promoting research activities based on the characteristics of industrial clusters in both cities to support the certification of industrial parks in Hai Phong as 'eco-industrial parks' ^{*1}, utilising the knowledge of Kitakyushu, which is home to one of the largest eco-towns in Japan.

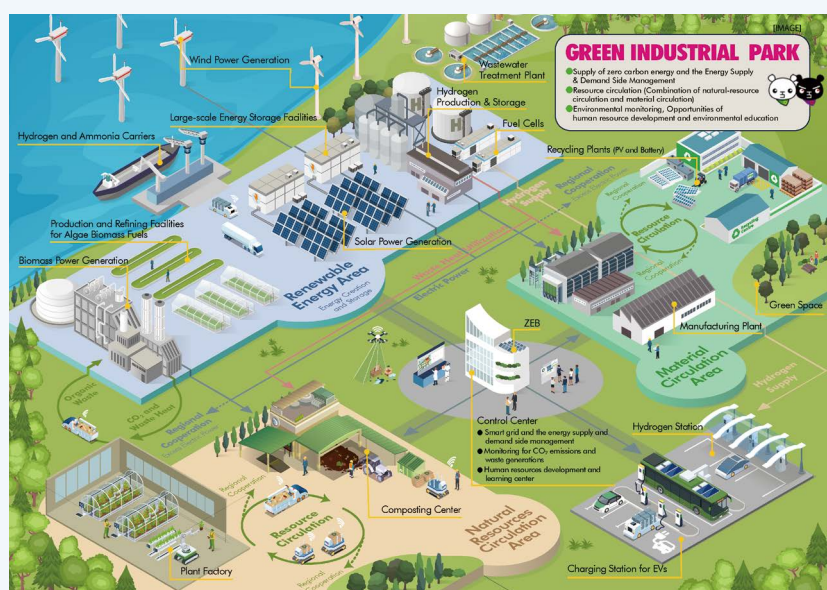


Image of an eco-industrial park (courtesy of the City of Kitakyushu)

Promoting International City-to-City Collaboration Projects

We promote and provide administrative support for the Ministry of the Environment's 'City-to-City Collaboration for Zero-Carbon Society' ^{*2} programme and promote the overseas deployment of the exceptional decarbonisation technologies of Japanese municipalities and companies by participating in research developed under this project.



City-to-City Collaboration workshop



^{*1} Eco-industrial parks: Industrial parks that can achieve high levels of productivity while reducing environmental impacts through resource efficiency, cleaner production and symbiosis with industry.

^{*2} City-to-City Collaboration for Zero-Carbon Society programme: Launched in FY 2013, with nearly 20 projects adopted each year. To date, 45 cities and regions from 13 countries and 20 municipalities in Japan have taken part in the programme (as of FY2022).

What is a 'zero-carbon city'?

Zero-carbon cities are local authorities that have announced their decision to reduce carbon dioxide emissions to net zero by 2050 (= decarbonisation/carbon neutrality)^{*3}. As of June 2023, 973 municipalities across Japan have declared their commitment to become zero-carbon cities as they work to create sustainable cities.



Extending the Circle of Decarbonisation from Kyushu to Other Parts of Japan and Beyond

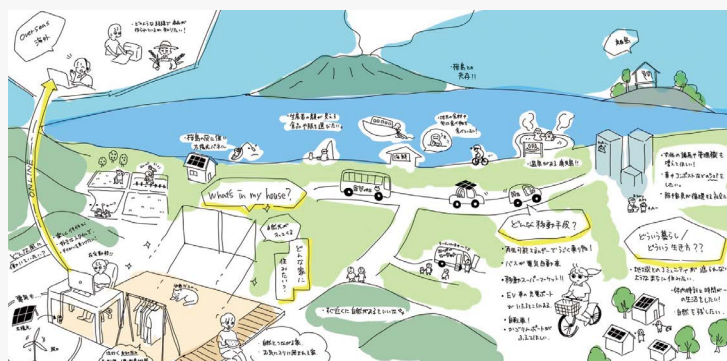
Collaboration between local authorities and stakeholders in the community (e.g., residents and businesses) is an indispensable part of efforts to take tangible actions to decarbonise the region. We are promoting decarbonisation in Kyushu's zero-carbon cities by assessing the needs of municipalities, raising awareness among a diverse set of local stakeholders, and developing human resources.



Organisation of Workshops for the General Public on 1.5°C Lifestyles

To achieve the Paris Agreement's 1.5°C target^{*4}, CO₂ emitted from activities in our daily lives (Lifestyle Carbon Footprint (LCFP)^{*5}) must be reduced by 67% on average across Japan by 2030 and 91% by 2050.

We design and organise workshops that are open to the public in cooperation with municipalities and local organisations to promote and raise awareness on lifestyles that can reduce CO₂ emissions while also improving the quality of life (1.5°C Lifestyle). Workshops have been held in the cities of Kagoshima and Kitakyushu, providing opportunities to link community voices to local policies and tangible actions, and plans are in place to extend this to other regions.



△ Graphic recording (illustration of discussions) of Kagoshima's future vision created through the workshop



△ Presentations at the workshop in Kagoshima



△ Discussions at the workshop in Kagoshima



△ Graphic recording (illustration of discussions) summarising discussions at the workshop in Kitakyushu



△ Eco-cooking at the workshop in Kitakyushu



△ Discussions at the workshop in Kitakyushu



△ Eco-cooking menu using seasonal daikon radish

^{*3} Decarbonisation and carbon neutrality: Refer to a state in which greenhouse gas emissions and sinks are in balance. Greenhouse gases here include carbon dioxide, methane, dinitrogen monoxide and chlorofluorocarbons. (Source: Act on Promotion of Global Warming Countermeasures).

^{*4} 1.5°C target: UN Paris Agreement target to limit the increase in the average global temperature to 1.5°C above pre-industrial levels.

^{*5} Lifestyle Carbon Footprint (LCFP): Greenhouse gas emissions generated over the lifecycles of products and services used by household consumers (from resource extraction, material processing, product manufacturing, distribution and use, to disposal).

Creating a Society with Efficient Recycling of Limited Resources

The linear economic system of mass production, consumption and disposal has devastating impacts on the environment. It results in waste generation, pollution and biodiversity loss. We collaborate with international organisations, municipalities, universities, businesses and other stakeholders to support the formulation of policies at the local level and develop tangible projects to accelerate the transition to a circular economy (CE).



Activities Overseas

Co-creation of Circular Economy Systems

We actively collaborate with organisations to globalise and localise the circular economy. Our research findings and advocacy efforts promote an inclusive and comprehensive circular economy, shared at international conferences and dedicated events. Working closely with stakeholders, we support their transformation towards sustainable practices.



△ Presentation at an international conference

Development of an Island-Wide Recycling Model for Waste Plastics on Koh Samet, Thailand

We initiated a project on the development of a closed-island recycling model for collection and recycling of waste plastic generated on Koh Samet, a tourist destination in Rayong Province, Thailand. This project includes the association of organisation for decision making with local stakeholders and a demonstration project converting waste plastic to recycled oil.



△ Plastic waste scattered along the shoreline



△ Koh Samet, Thailand



What is the 'circular economy'?

The circular economy (CE) is an economic system where products are reused, repaired, refurbished, remanufactured or recycled, and are shared far more efficiently. These practices maximise the value of material resources and products, and reduce the need to extract resources, consume energy and generate waste. Resources are sourced and circulated sustainably to minimise negative impacts on the environment.



Activities in Japan

Kitakyushu Circular Economy Vision Promotion Council

As a member of the Kitakyushu Circular Economy Vision Promotion Council, established in June 2022, we are engaged in activities to realise Kitakyushu's vision of a circular economy. In January 2023, the council introduced the Dutch circular economy business model to members in collaboration with the Holland Circular Hotspot, a hub organisation promoting the CE in the Netherlands. The video presentation is also available on the Kitakyushu SDGs Training website.

Kitakyushu SDGs Training Programme

sdgs-kitakyushu.iges.jp

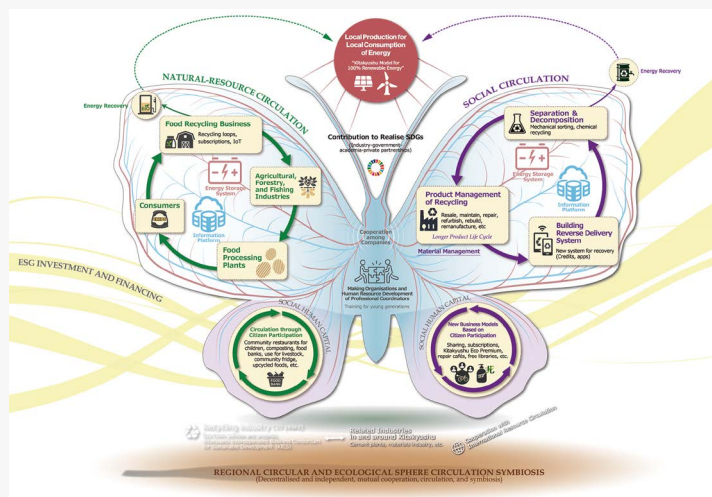


Diagram of the Kitakyushu Circular Economy Vision

Video presentation

Improving Waste Collection and Transport in Davao City, Philippines

Although waste collection is a commonly accepted aspect of daily life in Japan, there are still many areas in Davao, Philippines that are not well served, with garbage found on roads and in public spaces. Collection routes and boxes for recyclable waste have been set up and city clean-up activities are being promoted through the Japan International Cooperation Agency (JICA) Partnership Program.



Basic survey

Supporting the Development of an Action Plan to Reduce Marine Plastic Litter in Cambodia

In Cambodia, basic collection, transportation and management of waste are poorly supervised, and marine plastic litter is causing environmental problems due to increasing amounts of plastic waste discharged into rivers in recent years. We assisted the Japan-ASEAN Integration Fund (JAIF) in developing an action plan for the Cambodian government to reduce marine plastic by analysing the composition of waste and investigating hotspots in three cities, particularly in rural areas where information is limited.



Analysing the composition of waste

Identifying Solutions to Local Challenges Utilising the SDGs

The Sustainable Development Goals (SDGs) are contained in the UN plan of action ('Transforming our world: the 2030 Agenda for Sustainable Development') that the entire world agreed to in 2015. The SDGs aim to achieve 17 goals and 169 specific targets in countries around the world by 2030. The philosophy of the Goals to 'leave no one behind' requires the cooperation of all stakeholders, including local authorities, businesses, schools, organisations and the general public.



Activities Overseas



A Territorial Approach to the SDGs in Collaboration with OECD

The Organisation for Economic Co-operation and Development (OECD, head office: Paris, France) selects cities and regions* around the world that are actively engaged in promoting the SDGs to take part in 'A Territorial Approach to the SDGs' peer-learning programme. We are involved in creating reports with recommendations for Kitakyushu, collecting good practices from around the world (toolkit), and developing an online tool comparing the SDGs indicators.

* Bonn (Germany), Southern Denmark (Denmark), Flanders (Belgium), Viken (Norway), Kópavogur (Iceland), Córdoba (Argentina), Paraná (Brazil), Rhine-Neckar Metropolitan Region (Germany), Autonomous Province of Bolzano (Italy), others

References

- (Above left) OECD, A Territorial Approach to the Sustainable Development Goals in Kitakyushu, Japan, <https://www.oecd.org/publications/a-territorial-approach-to-the-sustainable-development-goals-in-kitakyushu-japan-12db268f-en.htm>
- (Above right) OECD, OECD Toolkit for A Territorial Approach to the SDGs, <https://www.oecd.org/cfe/oecd-toolkit-for-a-territorial-approach-to-the-sdgs-2913bae2-en.htm>
- (Bottom) OECD, Measuring the Distance to the SDGs in Regions and Cities, <https://www.oecd-local-sdgs.org>

Designing the Kitakyushu SDGs Certificate Programme (provisional title)

Kitakyushu has launched and implemented various programmes and activities to encourage SDG initiatives by companies in the city. As part of this support, Kitakyushu is considering the establishment of the 'Kitakyushu SDGs Certificate Programme' (provisional name) with the aim of supporting company efforts to reach higher and incorporate the SDGs into their corporate culture (i.e., the development and implementation of an SDGs management system). We were tasked with designing this certification system for the city, and drew up a blueprint through the organisation of study committees with experts and meetings to exchange ideas with financial institutions.



What does 'localising the SDGs' mean?

We are working on localising, or making the SDGs, now a universal language, more widely known in local communities in a readily-understood and accessible way, as well as using the Goals as a means of solving local problems.



Activities in Japan

Kitakyushu SDGs Training Programme

Selected as an 'SDGs Future City' by the Japanese government, Kitakyushu is attracting attention from areas within and outside Japan for its initiatives as an advanced SDGs city. In response to an increasing number of requests for information in English, we have organised the 'Kitakyushu SDGs Training' programme in English every year since 2019 in collaboration with the NPO Satoyama. Participants from the general public are invited to take part in this programme, share information from the field and brainstorm about SDGs actions taking place in Kitakyushu and Kyushu.

Held online in 2021 and 2022, the fourth training programme in March 2023 was held in person with the participation of ten university and graduate students from across the country. The students visited local authorities, companies, fishery associations and other stakeholders in Kitakyushu and Goto (Nagasaki Prefecture), two zero-carbon cities where Kyushu's first commercial offshore wind power projects are being launched, to learn about actual sites where the environment has served as a catalyst for economic and social development.



^ Inspection tour of the offshore wind turbine "Haenkaze" in Goto, Nagasaki

Kitakyushu SDGs Training Programme

sdgs-kitakyushu.iges.jp

User-friendly and Interactive Programmes on the SDGs

We organise lectures and workshops in Japanese or English on the SDGs for schools, companies, organisations, civic centres and local authorities, according to the intended use. We can offer workshops using the following facilitation techniques and lectures tailored to various topics. Please feel free to contact us for more information.

2030 SDGs Card Game

This card game simulates a world in which the economy, environment and society interact and aims to transform human behaviour through awareness.

2030sdgsgame.com

> Workshop on the 2030 SDGs Card Game



Sustainable World BOARDGAME

In this board game, players take on the roles of different actors in society and travel around Japan to achieve both the 17 Goals and their own personal goals, with a limited annual budget and time.

future-tech-association.org/sdgs-activity

> Sustainable World BOARDGAME



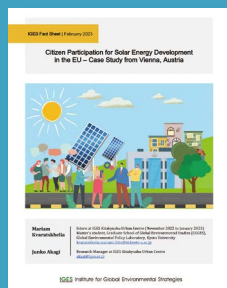
LEGO®SERIOUS PLAY®

This innovative play uses LEGO® bricks to visualise innate ideas, stimulate the imagination and encourage communication. It can be used for developing strategies and visions, team building and personal development.

seriousplay.jp



^ Workshop on LEGO® Serious Play®



Citizen Participation for Solar Energy Development in the EU – Case Study from Vienna, Austria

February, 2023 | English

Author: Mariam KVARATSKHELIA, Junko AKAGI

Publisher: Institute for Global Environmental Strategies

In the transition towards sustainable energy systems, the EU has actively encouraged the public to participate in the uptake of solar energy, and people-centred approaches, which place the general public at the heart of the energy transition process, have gained major momentum. This factsheet summarises the concept of citizen participation and presents a best practice example from Vienna, Austria to emphasise how important public involvement has become in the development of inclusive solar energy systems.

iges.or.jp/en/pub/citizen-participation-solar-energy/en DOI: 10.57405/iges-12727



Kagoshima 1.5°C Lifestyle Workshop

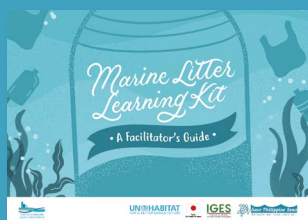
December, 2022 | Japanese

Author: Junko OTA, Junko AKAGI, Kagoshima City, hataori LLC

Publisher: Institute for Global Environmental Strategies

This is a report on the 'Kagoshima 1.5°C Lifestyle Workshop' held in Kagoshima City from August to October 2022. The workshop was held over a period of about three months for young people living in Kagoshima Prefecture in order to promote the 1.5°C Lifestyle, a way of life which reduces greenhouse gas emissions and improves the quality of life through shifts in individual lifestyles. This publication provides an overview of the event and a record of participants' ideas on the 1.5°C Lifestyle.

iges.or.jp/en/pub/kagoshima-15-lifestyle-workshop/ja DOI: 10.57405/iges-12891



Marine Litter Learning Kit: A Facilitator's Guide

September, 2022 | English

Author: Koji TAKAKURA, Kohei HIBINO, Vesna LAVTIZAR, Anna R. OPOSA, Virginia MARINEL F.SALAZAR

Publisher: UN Habitat Regional Office for Asia and the Pacific (ROAP)

The Marine Litter Learning Kit: A Facilitator's Guide is designed for educators and facilitators who organise environmental education programmes that focus on marine litter. It is applicable for various learner profiles and learning conditions and allows facilitators to choose appropriate activities for their target audience. The guide also uses the learning-by-doing approach with hands-on activities and games for learners.

iges.or.jp/en/pub/hocci-mlk-un-habitat/en



Mechanism to Customize a Suitable Extended Producer Responsibility Model for Plastic Packaging Waste in the Philippines

August, 2022 | English

Author: Vella ATIENZA, Shiko HAYASHI, Vesna LAVTIZAR

Publisher: UN Habitat Regional Office for Asia and the Pacific (ROAP)

This paper presents different EPR (Extended Producer Responsibility) models and their application to plastic waste management in selected Asian countries, and looks at approved EPR bills, proposed EPR mechanisms from the private and non-government sectors, and similar existing EPR schemes by other organisations. The paper also discusses recommendations for a collaborative framework for an EPR mechanism in the Philippines.

iges.or.jp/en/pub/epr-paper/en



Performance of Takakura Composting Method in the Decentralised Composting Center and its Comparative Study on Environmental and Economic Impacts in Bandung City, Indonesia

July, 2022 | English

Author: Kohei HIBINO, Koji TAKAKURA, Sudarmanto Budi NUGROHO, Ryoko NAKANO, Ria ISMARIA, Tati HARYATI, Deti YULIANTI, Eric ZUSMAN, Junichi FUJINO, Junko AKAGI

In the International Journal of Recycling of Organic Waste in Agriculture, Volume (Issue): 12

The Takakura Composting Method (TCM) is a simple and cost-effective aerobic composting method using locally available materials that has been widely introduced in Indonesia and other countries. This study tracked the progress of scaling the TCM up to 1 tonne/day of organic waste input at a decentralised composting centre in Bandung City, Indonesia. A comparative study was conducted to assess the environmental and economic impacts using data on the performance of the TCM.

iges.or.jp/en/pub/ijrowa2023-12/en DOI: 10.30486/IJROWA.2022.1945234.1379



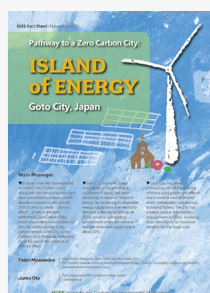
Drawing a Future Vision for Environmental Industries in Kitakyushu —Report by the Kitakyushu Circular Economy Study Group—

February, 2022 | Japanese

Author and Publisher: Kitakyushu Circular Economy Study Group

More than 20 years have passed since Kitakyushu Eco-Town put down roots in the city. The Kitakyushu Circular Economy Study Group conducted a series of studies and discussions on Kitakyushu Eco-Town's features and challenges with the aim of drawing up a future vision for environmental industries in Kitakyushu. This report compiles information on required actions, Kitakyushu's environmental assets and potential, and visualises future challenges with the application of a backcasting approach, looking towards the 2030 and 2050 Goals.

iges.or.jp/en/pub/kitakyushu-circular-economy/ja



Pathway to a Zero Carbon City: Island of Energy, Goto City, Japan

November, 2021 | English

Author: Fedor MYASOEDOV, Junko OTA

Publisher: Institute for Global Environmental Strategies

The Island of Energy is a compilation of zero-carbon initiatives by Goto City in Nagasaki Prefecture. This fact sheet contains successful examples of how the city has increased its renewable energy supply ratio over electricity demand to 56% by promoting the co-existence of floating offshore wind power with fisheries and working with local energy companies to give back to the community.

iges.or.jp/en/pub/goto-city/en DOI: 10.57405/iges-11816



Commitment to Net Zero Carbon Emissions by 2050 by Local Governments in the Kyushu Region of Japan —Background, Current Situation, and Challenges —

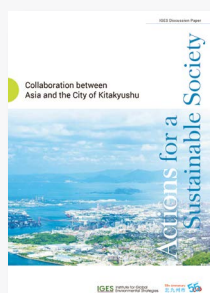
January, 2021 | English

Author: Junko OTA, Junko AKAGI

Publisher: Institute for Global Environmental Strategies

This publication provides a summary of the background, current situation, and challenges that drove 31 prefectures and municipalities (local authorities) in Kyushu to declare their commitment to becoming zero-carbon cities, with a look at national and international trends on net zero-carbon societies. The report compiles information on internal developments in each municipality, the actual status of awareness-raising activities for local stakeholders, and the challenges they face.

iges.or.jp/en/pub/kyushu-zero-carbon-en/en DOI: 10.57405/iges-11193



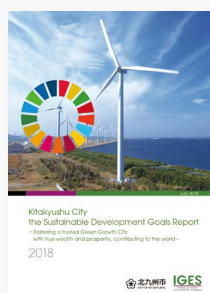
Actions for a Sustainable Society —Collaboration between Asia and the City of Kitakyushu

July, 2018 | Japanese, English

Author: Junko AKAGI, Yatsuka KATAOKA, Shiko HAYASHI, Kohei HIBINO, Junko OTA, Fritz Akhmad NUZIR | Publisher: Institute for Global Environmental Strategies

Kitakyushu has continued to maintain its position as a leader in city-to-city collaboration in Japan in terms of the number of partner cities and target areas, length of cooperation, and recognition from the international community. This report features a summary of the background and factors that enabled Kitakyushu to conduct, expand, and enhance activities on a continuous basis and discusses future developments in city-to-city collaboration.

iges.or.jp/en/pub/actions-sustainable-society-collaboration/en DOI: 10.57405/iges-6655



Kitakyushu City the Sustainable Development Goals Report

July, 2018 | Japanese, English

Author: Junko OTA, Kaori HOSODA, Shiko HAYASHI, Junichi FUJINO, Yatsuka KATAOKA

Publisher: Institute for Global Environmental Strategies

This Sustainable Development Goals report on Kitakyushu City is structured around the 'Handbook for the Preparation of Voluntary National Reviews: 2018 Edition' and was presented at the 2018 UN High-level Political Forum by three Japanese municipalities (Kitakyushu City, Toyama City, Shimokawa Town) and New York City, as the world's first report at the local government level. This policy report introduces a case study on Kitakyushu City, a leading implementer of the SDGs in Japan, and seeks to contribute to the sharing of good practices on the SDGs with others engaged in the implementation of the Goals in urban areas around the world.

iges.or.jp/en/pub/kitakyushu-city-sustainable-development-goals/en
DOI: 10.57405/iges-6569





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iges.or.jp/en/about/research-units/kitakyushu-urban-centre

KUC Facebook Page



facebook.com/iges.kuc

Kitakyushu SDGs Training Programme



sdgs-kitakyushu.iges.jp



JR Kyushu > 15-minute walk from Yahata Station on the JR Kagoshima Line

Nishitetsu Bus > 3-minute walk from Kokusaimura Koryu Center (International Village Center)

5-minute walk from Nishihonmachi 4-chome Minami

Cover photo: International Village Center (courtyard)

The Institute for Global Environmental Strategies (IGES) is an international research institute conducting practical and innovative research for realising sustainable development in the Asia-Pacific region.

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