



Asia Center for Low Carbon Society(Asia Green Camp) Presentation Materials



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Establishment of Asia Center for Low Carbon Society: Background

History of Environmental Policy of Kitakyushu City

■ The First Phase (~1980)

Overcoming Pollution (Women's Groups, PPP)

■ The Second Phase (1980~)

International Cooperation (KITA, Two Summit Meetings, Awards)

■ The Third Phase (Early 1990s)

Toward a recycling society (Ecotown, PCB, Fees for waste collection, further waste separation)

■ The Fourth Phase (2005~)

Towards a Sustainable and Low Carbon Society
(Environmental Capital, Collaborating with Citizens, Environmental Model City)

Overcoming Pollution: Experience of Kitakyushu City

Schools were temporarily closed due to the worst air pollutions; even colon bacteria could not survive and the screws melted in the 'sea of death', Dokai. Kitakyushu residents overcame serious pollutions and have taken back blue sky and beautiful sea. The OECD environmental report mentioned that this city has changed from a gray city to a green city.



Worst Pollution in Japan: Elementary Schools were closed



「Sea of Death」 Screws melting; Not even Ecoli bacteria could not survive



Blue Skies



Sky and sea recovered; people enjoying the environment



The bay now

International Environmental Cooperation

Contribution to establishment of sustainable society

Trainees from 133 countries- 5366 people; dispatch of over 200 experts
Network of Asian Cities, Promotion of Environmental Projects



(財)北九州国際技術協力協会(KITA)



国連ESCAP環境と開発に関する閣僚会議2000)



Improvement of Environment through International Environmental Cooperation



Air Pollution(1994)



Present

Environmental Improvement in Dalian

Dalian was awarded Global 500 prize from United Nations Environment Programme in 2001



Waterworks in Phnom Penh
Improvement of water loss from
illegal extraction
72%(1993)→ 8%(2006)



Environmental pollutions
generated by kitchen waste
landfills (Then)



Wastes converted into compost



An expert from Kitakyushu

Composting in Surabaya Indonesia; this method has proliferated over twenty thousand households. Improvement of environment and Recycling

Local Resources (Network of International Cities)

Kitakyushu Initiative Network

62 cities in 18 countries

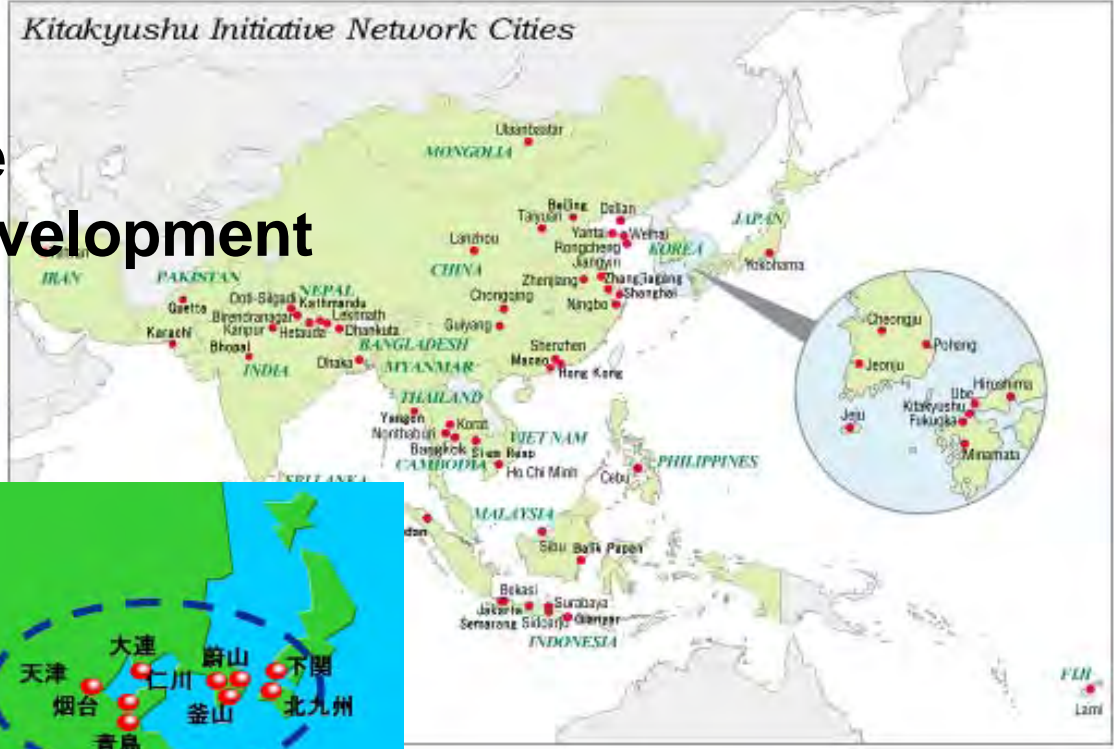
Establish the Platform of Asia Environmental Cities by reorganizing the network and introducing low carbon society to the Asian countries.

Establishment of a platform of Asia Environmental Cities
Nominating one or two cities as leaders; their roles are to promote actively Low Carbon Society to their neighboring cities

The Organization for the East Asia Economic Development

Network of 10 cities from Japan, China, and Korea

Practical network for cooperative solutions to environmental issues such as ocean garbage and photochemical oxidant in wide area



Background of Asia Center for Low Carbon Society

Kitakyushu City Framework and Plan

Objective

Cultivating people and culture, a town with environment and technology, which connects with the world

The City's Branding

World's Environmental Capital

Build 'the World Environmental Capital' building further on the world recognized initiatives

Asia's Technology Capital

Establish 'the Asian Technology Capital' by enhancing R&D institutes and promoting new promising industries

Environmental Model City

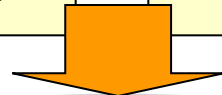
Authorized July 2008

Based on concept of stock-typed society
Creating a Low Carbon Society

Reduction of CO₂(2050) Goal

50% in urban areas

Equivalent to 150% in Asian Region

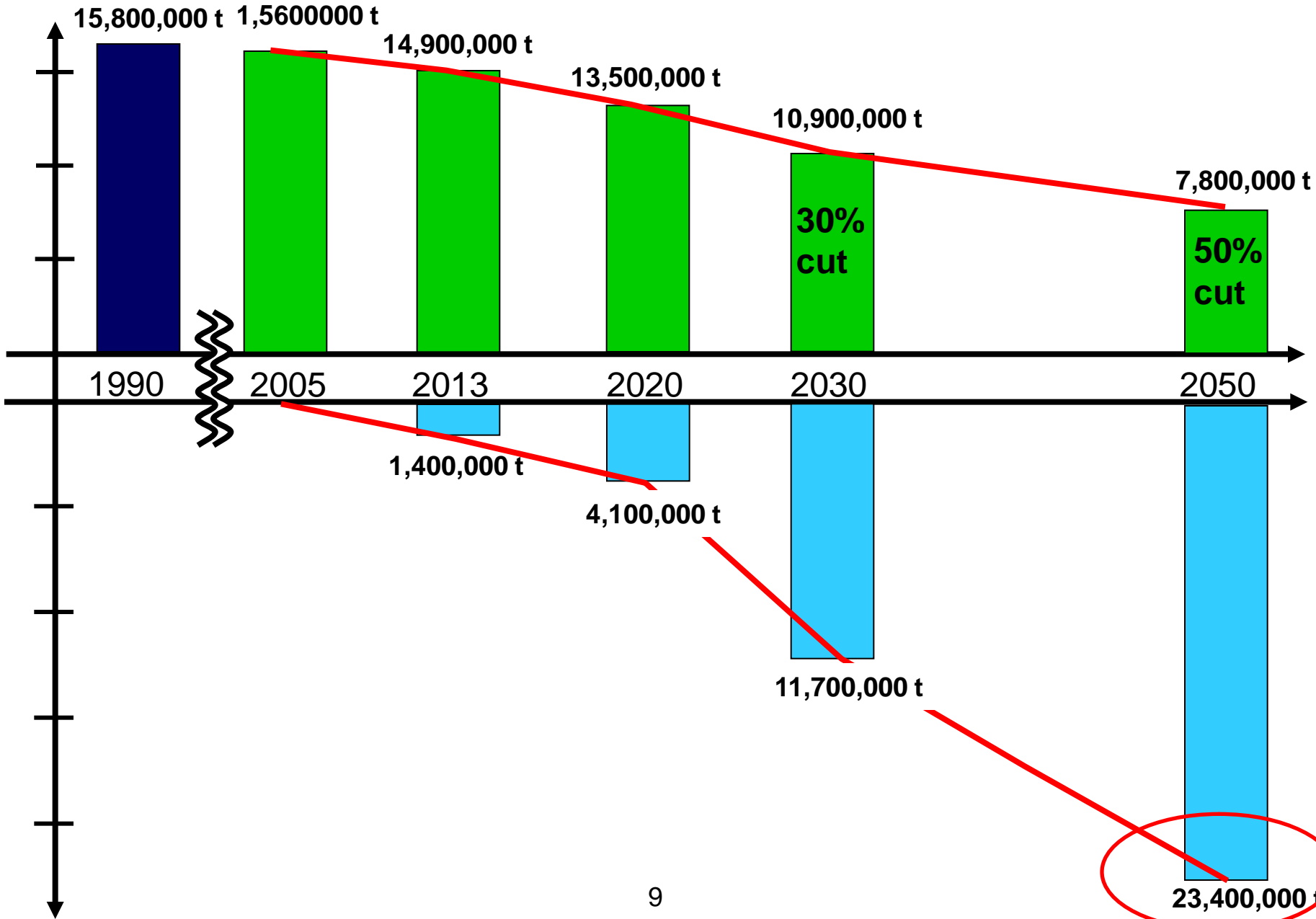


Compatibility of Environment and Economy

Reduction Target of Green House Gas

The amount of emissions from Kitakyushu City

The amount of reduction of Asia regions



Asia Center for Low Carbon Society (Overview of Green Camp)

The Center

What is Asia Center for Low Carbon Society...

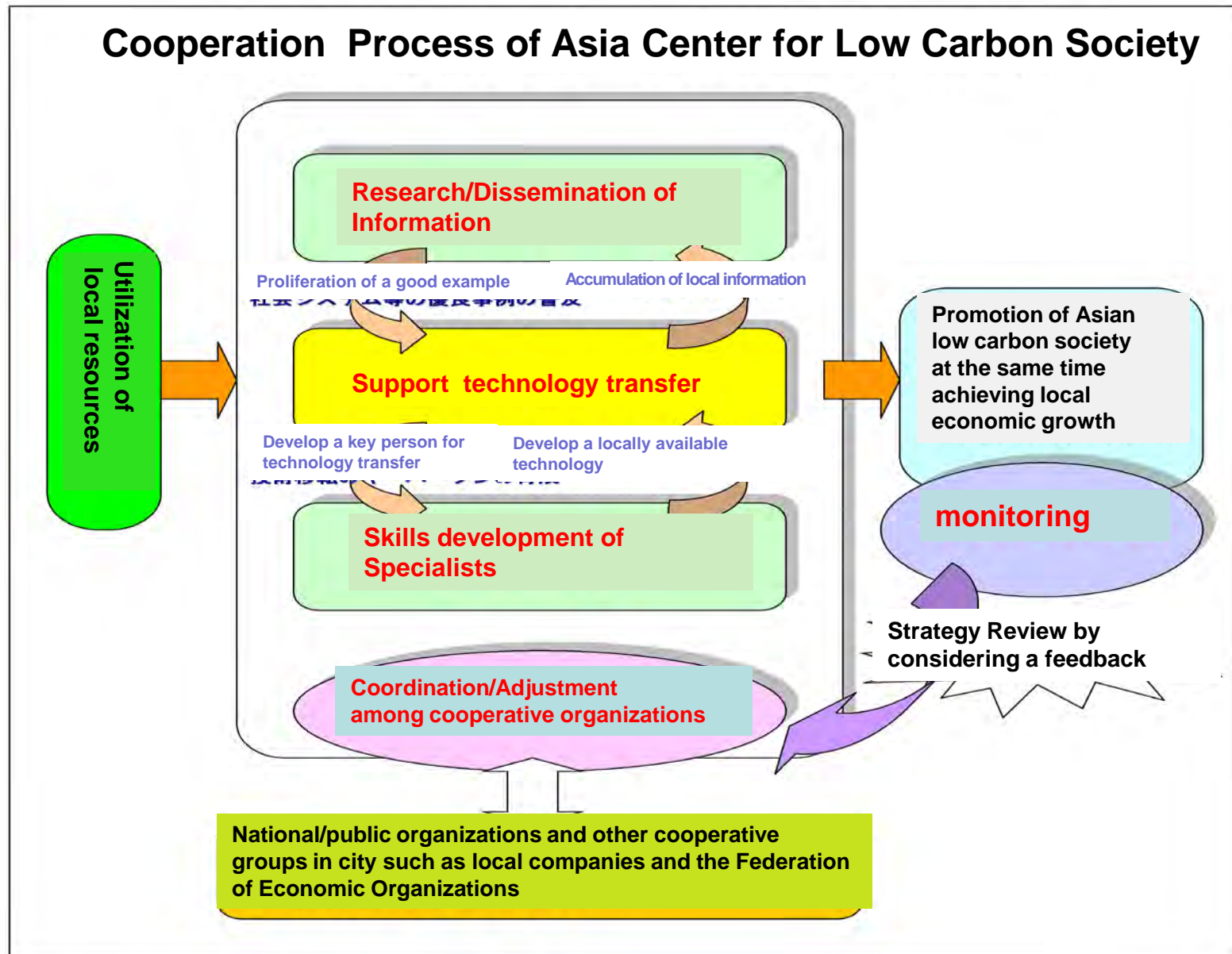
One of the leading projects of this
Environmental Model City

Establishment of Asia standard by putting together
Japanese environmental technologies
at the same time promoting Asia low carbon society
through environmental businesses

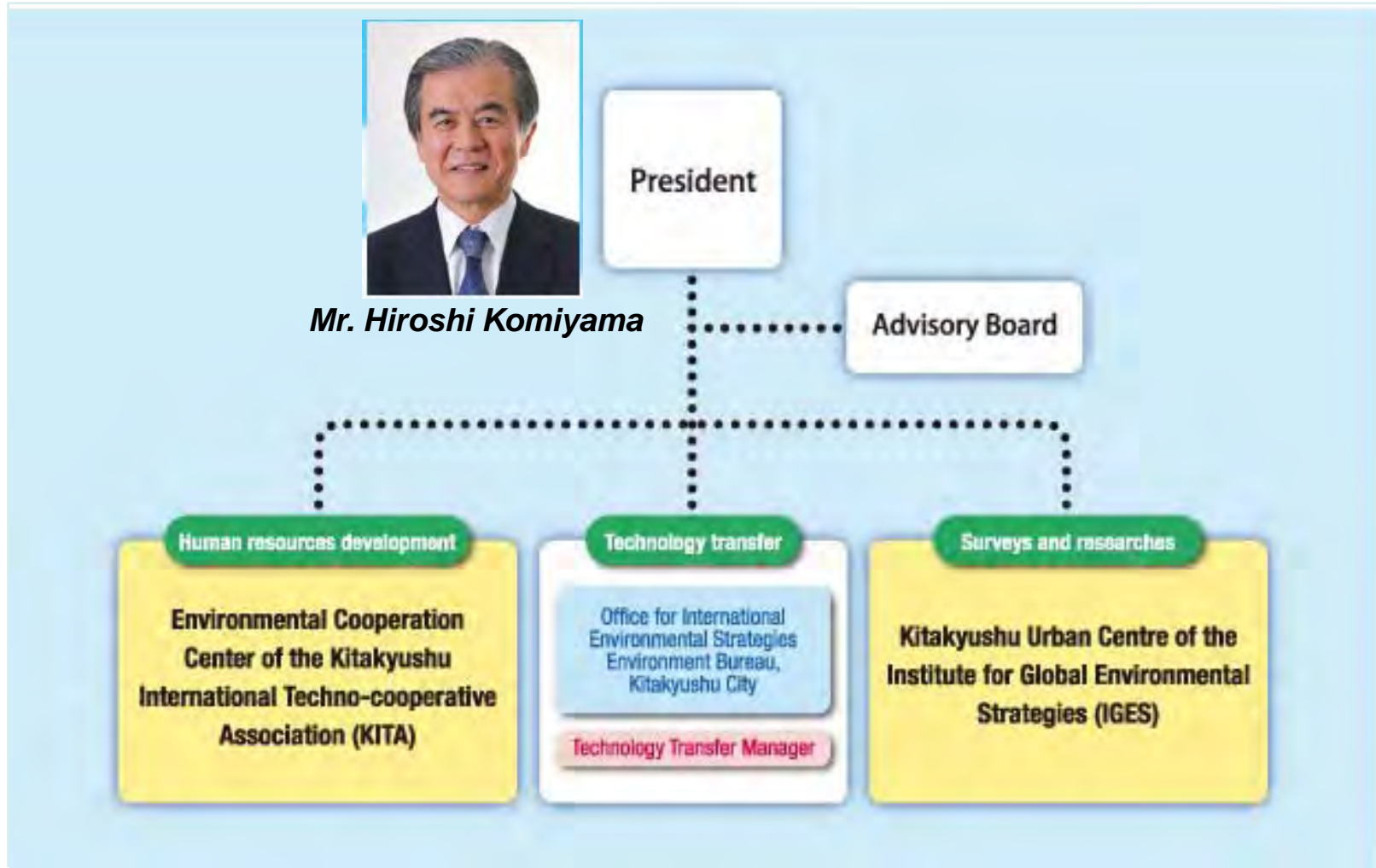


Function and Organization Structure of Asia Low Carbon Society (Asia Green Camp)

Cooperation Process of Asia Center for Low Carbon Society

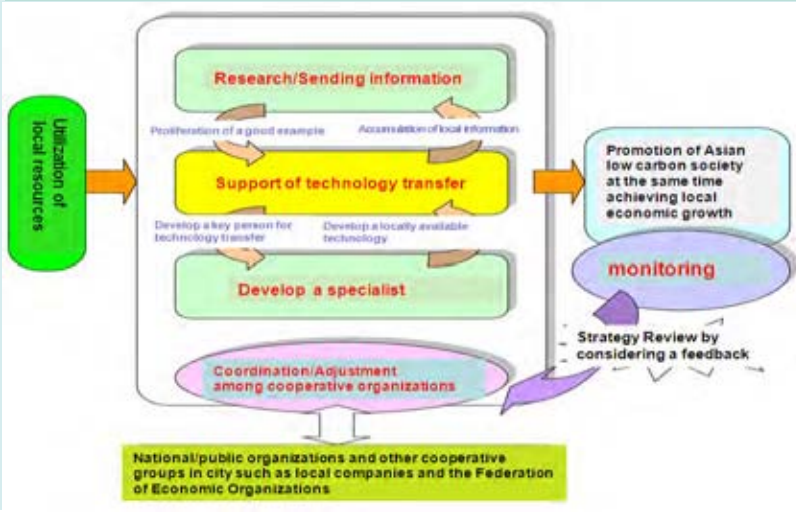


Function and Organization Structure of Asia Low Carbon Society (Asia Green Camp)



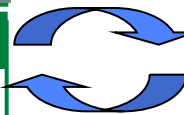
Project Overview by Asia Low Carbon Center

Cooperation Process of Asia Center Low Carbon Society



Our roles and functions!!

1. Support of technology transfer to Asia at the same time establishing a new business models and technology
2. Development of a key person and an environmental specialist and implement of mutual training
3. R&D on environmental preventions in Asian cities; providing a support information from public sector, and sending information about technology transfer
4. Monitoring and Feedback on low carbon projects in Asia countries



Providing Support to Private Businesses

1. Support of overseas sales promotion by enhancing business cooperation to offer a flexible technology and service
2. Support of technology improvement and change under cooperation of academia and business sectors in order to adjust with local situations
3. Support of research on business possibility with regard to business expansion to Asian regions
4. Mediation for an overseas experimental place which the center has a connection with other cities
5. Advice for applying for a public subsidy
6. Provide environmental business information from JBIC and financial support from a local finance industry to expand a business overseas
7. Support of seeking a local partner company and liaising with local government
8. Establishment of companies database which have technologies for low carbon society in order to promote a cooperation among companies

Team All Japan

The center accordingly plays a liaison role among local and companies out of town in order to conduct an effective technology transfer

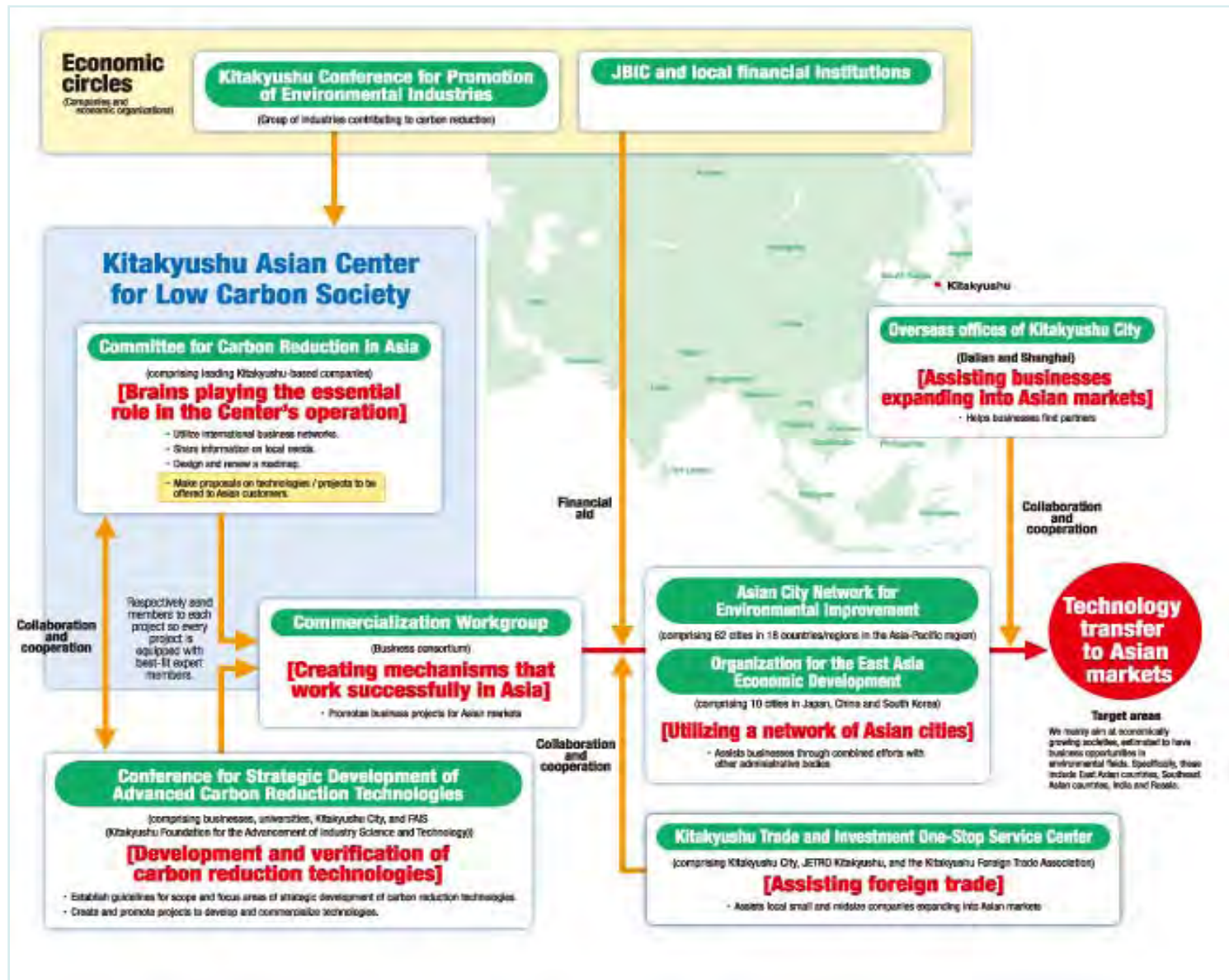
Our Strategies of technology transfer

1. Introduction of technology which fits with local conditions
2. Establish value-added business by adding packaged technology and service which fit with local conditions
3. Social technology transfer; establishment of social rules, urban planning and public awareness
4. R&D on building a new business model which benefits the next generations

Establishment of Asian Standard Technologies

Collaboration with traditional and cutting-edge technologies through technology transfer and interexchange

Doing Environmental Business in Asia by utilizing the Asia Low Carbon Center



Cities in Asia

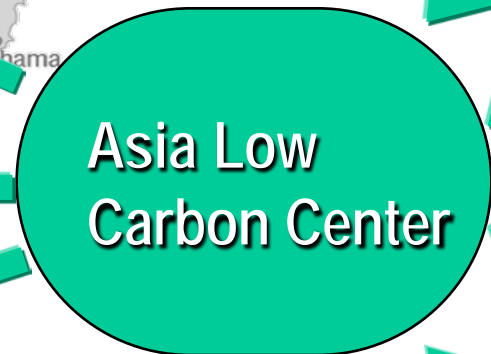
Reduction of CO2,
Reduction of Pollution
and Improvement in QOL



WIN-WIN
Situation

Kitakyushu City

Local Businesses going outward
Asia, contributing to the regional
economy.



Transfer of
Environmental
and Social
Technology

Corporates
低炭素技術
低炭素製品等

Citizens
NPO
環境意識
低炭素生活等

Academia
低炭素化技術
低炭素システム等

authorities
政策形成
制度づくり等

The Focal Point of
Asia's Low Carbon
Innovation

Packaged Model1

Energy businesses

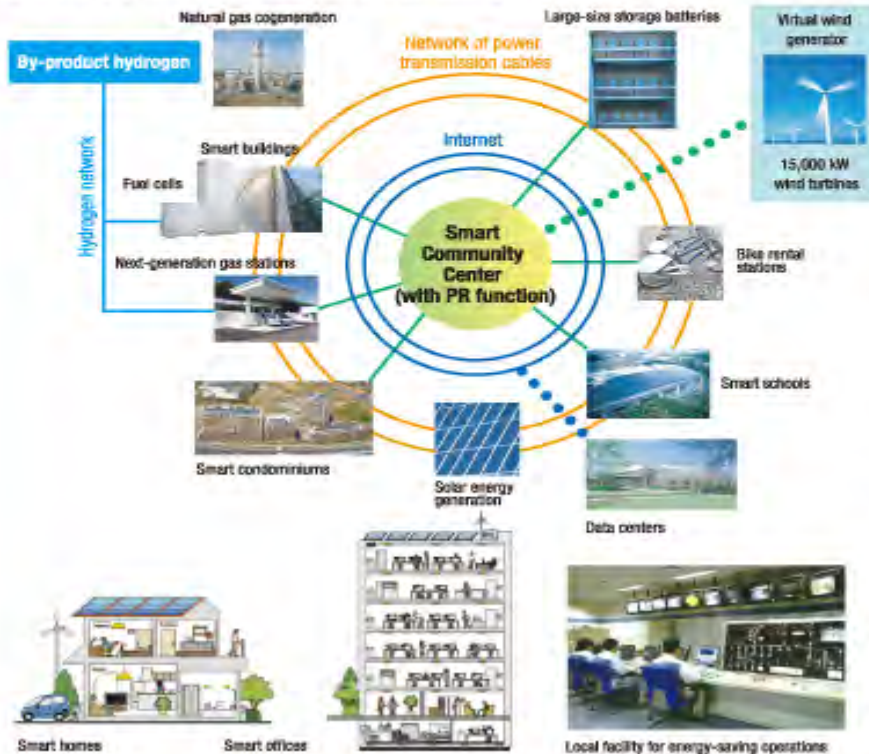


Power Generation Projects

ENERGY

● Yahata-Higashida Smart Community Plan

This Plan aims to construct and verify a "smart community model," which has the ability of minimizing GHG emissions while concurrently improving convenience for people's lives. As part of this plan, the world's first verification experiment was carried out, in which hydrogen generated at a plant as a by-product is supplied to diverse facilities through a pipeline.



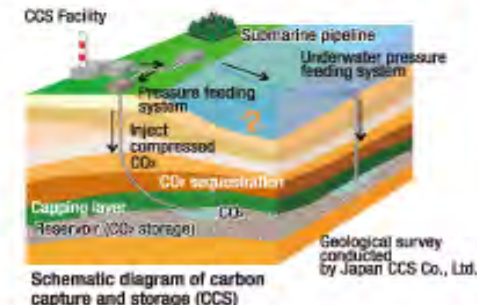
● Project for Improving Fossil Fuel Efficiency

- Integrated coal gasification combined cycle (IGCC)
- Integrated coal gasification fuel cell combined cycle (IGFC)
- Research and development of CCS (carbon capture & storage) technologies



Electric Power Development Co., Ltd.

The northern part of Kyushu has Paleogene strata over a large area, and this particular geographic formation is considered to have a high potential for CO₂ sequestration. To confirm such potential, a geographic survey has been conducted in Wakamatsu-ku.



Packaged Model1 (Continued)

Water businesses

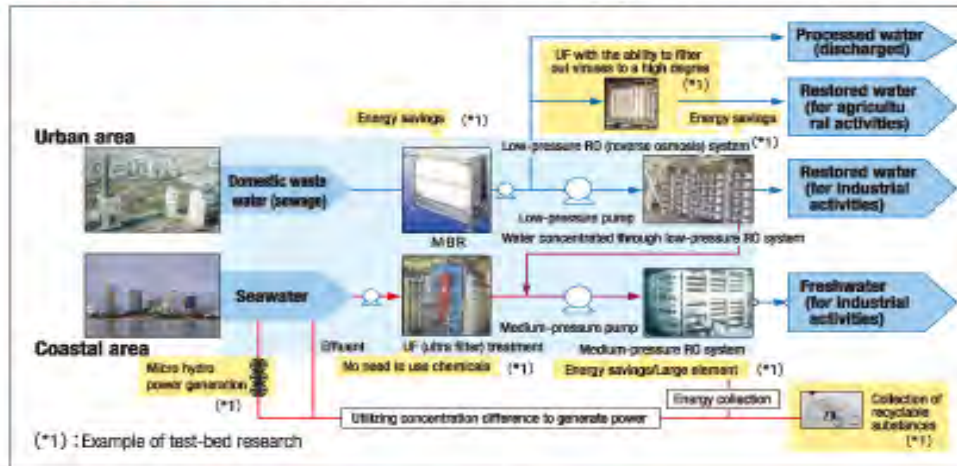


Water Projects

WATER

Water Plaza

Water purification verification plant equipped with an integrated system combining membrane filtration of sewage with a seawater desalting system (Hiagari Sewage Treatment Plant)



- Purification capacity for sewage
1,000 m³ / day
- Purification capacity for seawater
400 m³ / day

Assistance for Phnom Penh, Cambodia

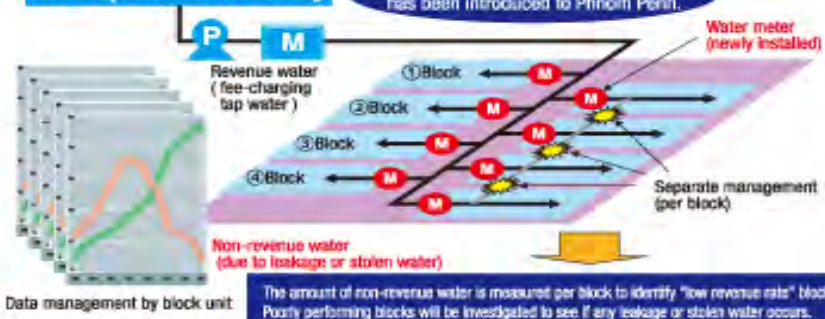
Improved maintenance/management of piping system

[Technology transfer] The block system employed by Kitakyushu has been introduced to Phnom Penh.

[Block system for water distribution] The piping network, with a total pipe length of 1,300 km, is divided into 41 blocks for separate management and maintenance of each block, so as to ensure energy efficiency.

The rate of non-revenue water has decreased.
72%(1993) → 8%(2006)

Water purification facility



Packaged Model2

Recycle businesses



Recycling Projects

RECYCLE

● Kitakyushu Eco-town Project



Estimated economic effect (25 projects)

- Direct investment approx. 60 billion yen
- Created employment approx. 1,300 persons

Reduced CO₂ emissions
approx. 200,000 tons/year



Recycling of OA equipment



Recycling of home electrical appliances



Recycling of motor vehicles

● Our recycling initiative has led to the materialization of the Japan-China collaborative project for promoting recycling-oriented urban design (eco-town collaboration).

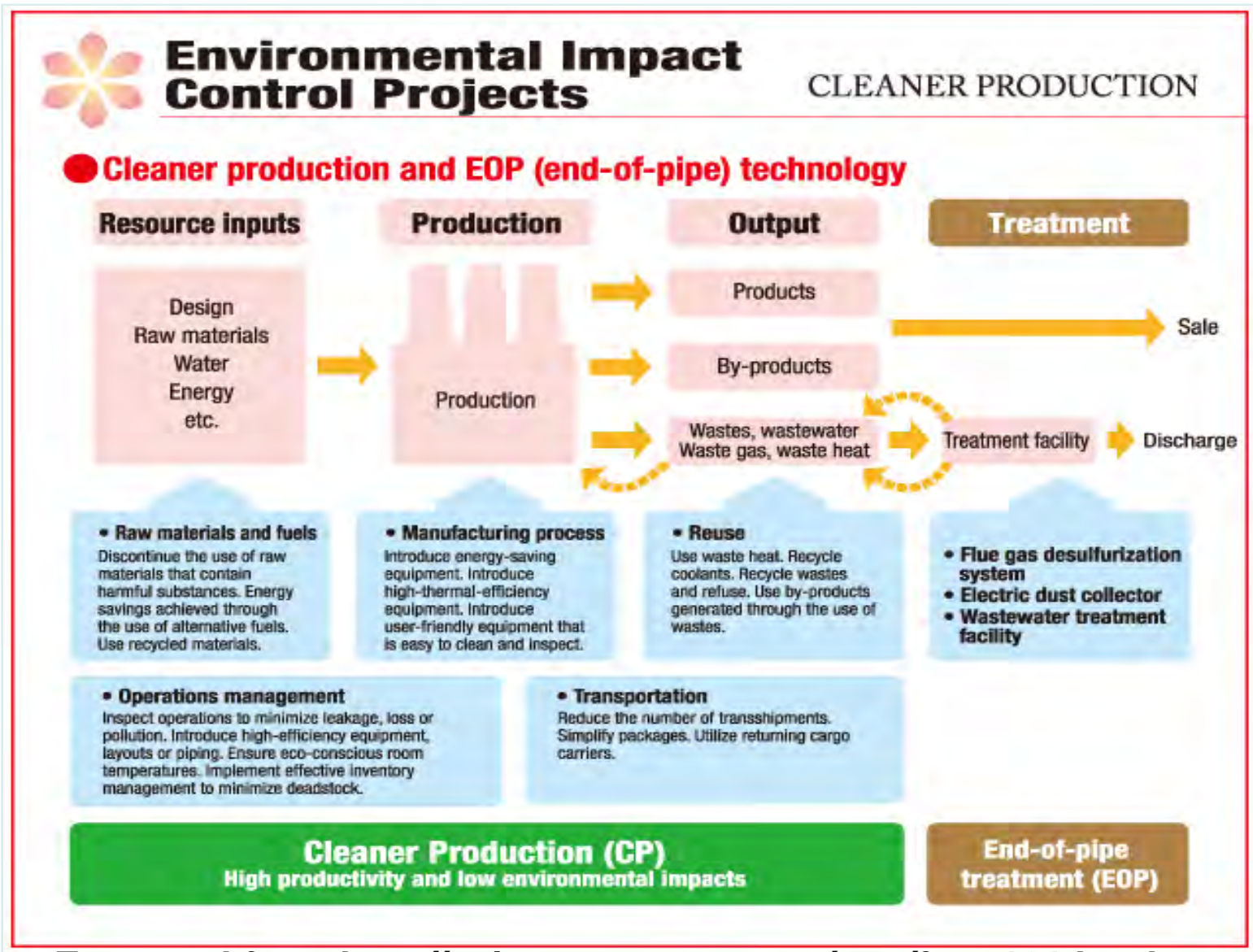
- Qingdao:
(FY2007 to 2008)
- Tianjin:
(FY 2008 to 2009)
- Dalian:
(FY2009 to 2010)



Kitakyushu and Tianjin delegates exchange memoranda on Eco-town Collaboration Project
(at the Prime Minister's Official Residence)

Packaged Model2 (Continued)

Cleaner Production



MOU between Kitakyushu City and UNIDO

1. The Conclusion of memorandum



Mutual Agreement to realize
low carbon societies in
developing Countries



日 時 : 2010年6月14日(月)

場 所 : 北九州市本庁舎 プレゼンルーム

UNIDO : カンデ・ユムケラー事務局長

北九州市 : 北橋健治市長

2. Memorandum overview

◆ Mutual cooperation for establishment of low carbon society in developing countries, mainly Asian countries.

1. Enlightenment of 'Eco-Town Conception' to revive Waste industries.

2. Capacity development on environmental technology and waste recycle service

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**Inquiries and Visits
Welcomed!**

[http://www.asiangr
eencamp.net/](http://www.asiangr
eencamp.net/)