

Clean Asia Initiative

NEWSLETTER

Environmental Cooperation in Asia Promoted
by Ministry of the Environment, Japan

March 2010

vol. 1

Forward

More than one-half of the world's population lives in Asia, and East Asia, where economic growth has been particularly pronounced, is facing a number of environmental issues as environmental impacts, such as emissions of greenhouse gases, deforestation, and discharge of water pollutants, increase. There is a need to make progress in cooperation to enable the nations of Asia to maintain a clean environment while enjoying the benefits of economic growth and, furthermore, to achieve sustainable societies, with introduction of Japan's experiences and technologies to combat such feared environmental degradation. For this reason, the Ministry of the Environment of Japan has promoted environmental cooperation through advancing policy dialogue with the countries and sub regions in Asia.

Prime Minister Hatoyama has announced a long-term vision of an East Asian Community, and it is expected that environmental cooperation in the Asian region will grow even more important. In 2008, the first East Asia Summit Environment Ministers Meeting (EAS EMM) was held in Hanoi, where agreement was reached on Environmentally Sustainable Cities as a first priority area in the EAS cooperation.

Amid such developments, last year Japan utilized the Japan-ASEAN Integration Fund to provide ASEAN with

support for (i) holding ASEAN Environment Year 2009 and (ii) preparation of the ASEAN State of the Environment (SOE) Report. In addition, in March of this year it co-sponsored with four Asian nations an EAS-EMM High Level Seminar on the Environmentally Sustainable City. In the future as well, the Ministry of the Environment is eager to advance practical environmental cooperation further through promoting regional policy dialogue and exchange of opinion, with each country utilizing various opportunities such as the Tripartite Environment Ministers Meetings among China, Japan and Korea, ASEAN Plus Three Environmental Ministers Meeting, and EAS-EMM.

This newsletter has been started to publish for communicating broadly information on the various environmental-cooperation initiatives conducted in Asia by the Ministry of the Environment of Japan, and their results.

We hope that the collaboration and cooperation among the environmental conservation policies and environmental projects being advanced by national and local governments, research institutes, NGOs, regional and international organizations in the region and the activities conducted or supported by the Ministry of the Environment will be advanced, generate synergies, and contribute to improving the environment in the Asian region.

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Feature 1

Clean Asia Initiative

- Promoting regional environmental cooperation in Asia -

The Ministry of the Environment, Japan is promoting the Clean Asia Initiative (CAI) in order to enhance environmental cooperation in Asian region. The CAI aims to promote the establishment of a collaborative base for environmental cooperation in Asia with four pillars of environmental agenda: (i) promoting low-carbon/low-pollution society, (ii) promoting Sound Material-Cycle societies, (iii) promoting societies in harmony with nature, while adapting to climate change, and (iv) promoting environmentalism in the marketplace.

Asia holds more than half of the world's population lives in Asia, and many of them in mega-cities (cities with a population of over 10 million) that outnumber those in the rest of the world, and achieves remarkably high economic growth especially in East Asia. This growth, however, entails certain environmental problems including greenhouse gas emissions,

loss of biodiversity, air and water pollution and solid waste generation. In fact, transboundary movements of airborne contaminants and other cross border environmental problems have become apparent in Asian countries, as well as their own domestic environmental problems. Conservation of the environment in Asia as a region is now an important challenge that needs be addressed from a global perspective.

This situation has led the Ministry of the Environment of Japan to launch the CAI in 2008. Specifically, the CAI seeks to assist Asian countries having close relations with Japan achieve sustainable development through transfer of its experiences, technologies, and institutional systems to other Asian countries as a package while giving due consideration to their individual histories, traditions and cultures, thereby helping the countries leapfrog toward sustainable societies.





1

Promote low-carbon / low-pollution societies

Reduce Volume of Carbon Emissions and Damage Caused by Pollution in Asia

- Establish common understanding on low-carbon society through regional meetings such as the East Asia Summit Environment Ministers Meeting (EAS-EMM).
- Promote a co-benefits approach that aims to achieve the highest synergy between mitigation of environmental pollution and global warming by various means, including utilizing Clean Development Mechanism (CDM).
- Promote Environmentally Sustainable Transport (EST) through such as high-level government meeting of officials from Asian countries involved with traffic environment policy.
- Based on the experience in Japan combating pollution, provide support to countries in the areas including 1) environmental countermeasures and monitoring technologies, 2) regulatory system for environmental conservation, and 3) human resource development according to the situation / needs of individual countries.



2

Promote Sound Material-Cycle society

Ensure Efficient Sound Material-Cycle in Asia, Addressing Problems Related to Solid Waste Management

- Promote 3R (Reduce, Reuse, and Recycle) through such as “Regional 3R Forum in Asia”.
- Support development of human resources, introduction of technologies, and formulation of policies related to 3R policies in each Asian country.
- Strengthen countermeasures against improper transboundary movement of circulative resources.
- Promote data sharing and information exchange on solid waste management policies.
- Support comprehensive measures towards the creation of a low-carbon and sound material-cycle society.



3

Promote societies in harmony with nature, while adapting to climate change

Ensure Harmony with the Extensive Natural Environment of Asia, while Adapting to Climate Change

- Promote the sustainable use and management of resources in human-influenced natural environment on a global scale as the “Satoyama Initiative”.
- Strengthen international networks for conservation of coral reefs.
- Improve long-term monitoring of climate change impacts in Asia.
- Enhance community-level capacity to adapt climate change through partnerships with international environmental cooperation NGOs and NPOs.
- Support the Asia Pacific Climate Change Adaptation Network which enhances capacity of institutions working on adaptation in Asia-Pacific region.



4

Promote environmentalism in the marketplace

Make Societies in which the Environment and Economy are well Balanced

- Support “Eco-products Exhibition”, and Promote green purchasing and environmentally conscious supply chains in Asia region.
- Utilize private finance to disseminate environmental technologies and promote environmental considerations to project financing.
- Promote establishment of a research system concerning linkage between environment and economy.



Promote establishment of a collaborative base for environmental cooperation in Asia

Develop an Institutional Base for Effective Environmental Cooperation in Asia

It is essential to strengthen cooperation among Asian countries and related organizations to achieve “conservation of the global environment and sustainable development” in Asia through promotion of low-carbon / low-pollution society, sound material-

cycle society, societies in harmony with nature while adapting to climate change, and environmentalism in the marketplace. CAI, consequently, aims at “establishment of a cooperative base” among Asian countries and related organizations in Asia.

(1) Strengthen partnerships to ensure harmony with nature

Promotion of surveys, monitoring, and information sharing for the protection of national parks in Asian countries and cross-border migratory birds.

(2) Promote standardization and networking of environmental monitoring and countermeasures

Promote provision of relevant information which are efficient for policy planning through the enhancement of environmental monitoring in East Asia region, and the study on the situation of transboundary pollution and its future impacts by simulation models

(3) Promote environment-related human resource development and application

Support development of environmental leaders founded on the Vision for Environmental Leadership Initiatives for Asian Sustainability in Higher Education (Environmental Leadership Vision) , and promote transfer of policy scheme technology utilizing the Asia Pacific Integrated Model (AIM) .

(4) Strengthen the mutually supportive relationship between environment and trade

Promote the mutually supportive relationship between environment and trade through such as active participation in the debate in World Trade Organizations (WTO) over the liberalization of environmental goods and services.

Functions of the CAI Secretariat

The CAI Secretariat has been organized for the purpose of facilitating efficient management and integrated coordination of environmental cooperation in the Asian region. The secretariat is housed in the Institute for Global Environmental Strategies – IGES, and is charged with responsibilities to (i) strengthen collaborative relationships with relevant

foreign governments, international organizations and research institutes; (ii) contribute to inter-governmental policy processes on environmental cooperation; (iii) conduct survey and research on ongoing and potential environmental cooperation projects in East Asia; and (iv) develop communications activities directed toward further promotion of the Clean Asia Initiative.

1 Strengthen collaborative relationship with relevant foreign governments and international organizations relating to the environmental cooperation

- Maintain close information exchange and communication/coordination with the 16 member countries of the East Asia Summit (EAS) , other Asian countries and pertinent international organizations
- Promote the CAI activities among Asian countries, regional and international organizations and various environmental networks with the view to proposing joint programs/projects and otherwise promoting partnerships

2 Contribute to inter-governmental policy dialogues on environmental cooperation

- Contribute to the EAS Environment Ministers Meeting, ASEAN Plus Three Environment Ministers Meeting and other regional environmental policy dialogues as well as other regional environmental cooperation programmes, and conduct follow-up on the agreed actions

3 Survey and research on environmental cooperation

- Conduct survey and research on priority areas of environmental cooperation; understand the needs related to environmental cooperation and identify opportunities and challenges; and share information with pertinent experts

4 Communications activities

- Information dissemination through such as website, brochures, newsletter

- **CAI-related website:** <http://www.env.go.jp/earth/coop/coop/english/cai/about.html>



Feature 2

EAS-EMM High Level Seminar Held on Environmentally Sustainable Cities

- Toward sustainable city development in Asia -

From March 2 to 4, 2010, a High Level Seminar on the theme of Environmentally Sustainable Cities (ESC) was held in Jakarta, Indonesia under the framework of the **East Asia Summit Environment Ministers Meeting (EAS EMM)**. The seminar was concluded with a Chair's Summary which contains recommendations for promoting ESC in the region towards the upcoming 2nd EAS-EMM in Brunei Darussalam in late 2010.

The High Level Seminar, which was initiated by a proposal from Japan, was jointly organized by Japan, Indonesia,

Singapore and Australia and co-chaired by Japan and the host country Indonesia. The participants included high-level policy officials from EAS member countries (the ASEAN 10 countries, Japan, China, the Republic of Korea, India, Australia and New Zealand) as well as representatives from cities promoting environmentally sustainable cities in the region, international organizations, donor agencies, inter-city networks, NGOs and research institutes.



Participants of the High Level Seminar on Environmentally Sustainable Cities

Background of the High Level Seminar

The Inaugural EAS-EMM held in October 2008 in Hanoi, Viet Nam, agreed that 'environmentally sustainable cities' (ESC) to be the priority area for the EAS environmental cooperation. In the subsequent Officials Meeting held in August 2009 in Hua Hin, Thailand, Japan proposed an idea of holding a High Level

Seminar, which was welcomed by the participants. During the following Officials Meeting in October held in Singapore, four countries agreed to form an organizing committee on the High Level Seminar, and it was agreed that the seminar would be held in Jakarta, Indonesia in March 2010.



The objective of the High Level Seminar was to foster activities for the development of ESC in the region under the framework of the EAS EMM.

Four thematic sessions were organized, including i) Cities and Resource Efficiency and 3Rs; ii) Cities and Biodiversity; iii) Low carbon/Low Polluting Cities; and iv) Climate Change Adaptation and Sustainable Urban Development. Cities with innovative policies and approaches in these areas were invited to give presentations. The background and motivation behind their policies and approaches, as well as the outputs and impacts, were shared through actual case studies. Cities also related the challenges faced and measures taken to address them, as well as how to replicate and scale up

similar activities in other cities. Further, participants discussed how central governments could support these activities, and how external agencies such as international organizations, regional organizations and inter-city networks, could facilitate collaboration between city governments with other stakeholders utilizing existing programmes and frameworks.

The key outputs of presentations and discussions, as well as recommendations to foster activities for development of ESC in the region, were compiled into a Chair's Summary. This Summary will be presented in the upcoming 2nd EAS EMM in late 2010 to procure further support from Ministers in promoting collaborative activities related to ESC.

Gist of the recommendations outlined in the Chair's Summary of EAS EMM High Level Seminar on Environmentally Sustainable Cities

- Governments to strongly consider supporting ongoing efforts and existing networks to realize ESC;
- Governments to mainstream ESC in their respective development strategy;
- A broad roadmap towards ESC to be formulated under the framework of the EAS-EMM, reflecting the key outputs of the High Level Seminar, such as policy options and instruments, technologies etc;
- Five specific activities, namely:
 - i) an East Asian 'Model Cities' Initiative;
 - ii) a clearinghouse for ESC-related data and information;
 - iii) a Public and Private Sector Forum on ESC;
 - iv) An ESC Capacity Building Programme; and
 - v) An EAS ESC Awards – to be conducted in collaboration with development partners, including international organizations, for further elaboration at future meetings;
- The key outputs and recommendations in the Chair's Summary to be presented to the 2nd EAS-EMM, together with the progress of

- **High Level Seminar on Environmentally Sustainable Cities website:** <http://www.hls-esc.org/>



Regional 3R Forum in Asia inaugurated

–For the promotion of 3Rs in Asia –

The Inaugural Meeting of the Regional 3R Forum in Asia was held in Tokyo on November 11 and 12, 2009 to promote the 3Rs (reduce, reuse, recycle) in Asia, where rapid urbanization and population increase have been conspicuous.

Japan proposed the inauguration of the Regional 3R Forum in Asia at the East Asia Summit Environment Ministers Meeting held in Hanoi in October 2008 and this proposal was endorsed by the participants. The Inaugural Meeting of the Regional 3R Forum in Asia consisted of the Asian 15 countries (Bangladesh, Brunei Darussalam, Cambodia, China, Indonesia, Japan, Republic of Korea, Lao PDR, Malaysia, Mongolia, Myanmar, the Philippines, Singapore, Thailand, and Viet Nam), 16 related international organizations, and experts

in the 3Rs and waste management. From Japan, the Minister of the Environment, Sakihito Ozawa, participated in the meeting along with Mohammed Hasan Mahmud, Honorable Minister, Ministry of Environment and Forests, Bangladesh, and Dato' Seri Kong Cho Ha, Honorable Minister, Ministry of Housing and Local Government, Malaysia. At the meeting, the participants had lively discussions on issues concerning the 3Rs and efforts for settling these issues in Asia, including the state of and issues concerning the management of various types of waste, the state of countries that had been in the process of formulating national strategies for the 3Rs, efforts of international organizations to support developing countries, and efforts of researchers, industrial sectors, local governments, and NGOs.

Objectives

The objectives of this forum include the facilitation of high-level policy dialogues, facilitation of improved dialogue and cooperation among countries, international organizations, and donor communities to implement 3R projects, dissemination

of best practices, tools, technologies, and policy instruments of the 3Rs, strengthening networks of stakeholders such as national and local governments, and experts, and proliferation of national 3R strategies in Asia.

Long- and short-term priority issues

Long-term priority issues and short-term priority issues were decided on for further 3R promotion.

- Mainstreaming the 3Rs in the national development agenda in each country
- Mobilizing financial resources in cooperation with bilateral and multilateral aid agencies for the implementation of 3R measures and activities at both the national and local levels
- Developing human resources to overcome waste management issues
- Promoting better understanding on the overall benefits of the 3Rs, including the co-benefits
- Developing industrial capacity for sound recycling, including the formation of eco-industrial zones
- Developing and transferring environmentally sound technologies for waste management and the 3Rs
- Strengthening information sharing and research networking related to the 3Rs



Participants in the Inaugural Meeting of the Regional 3R Forum in Asia

Planned activities

The following activities are planned under the Regional 3R Forum in Asia.

- Hold high-level policy dialogue on a regular basis
- Facilitate 3R projects through close cooperation with donor agencies
- Strengthen cooperation with existing information/research networks related to the 3Rs
- Promote 3R business feasibility studies involving both public and private sector financing and participation
- Promote international collaborative, advanced policy-relevant scientific research on sound material cycles in Asia
- Support capacity building through means such as international training programmes focusing on the 3Rs for human resource development

The "Tokyo 3R Statement: Towards the Establishment of the Regional 3R Forum in Asia" was agreed by the participants at the inaugural meeting. In addition, Dato' Seri Kong Cho Ha, Honorable Minister, Ministry of Housing and Local Government, Malaysia, proposed to be the host country for the next meeting in Malaysia next year, which was welcomed by the participants.

- **Regional 3R Forum in Asia website:** http://www.env.go.jp/recycle/3r/en/forum_asia/index.html





Development of Environmentally Friendly Motor Vehicles

As the number of motor vehicles owned shows marked growth around the world, the relationship between human beings and motor vehicles is strengthening to the extent that today's society has been called an automotive society. However, an automotive society is closely related to the issue of global warming, for example by leading to increased emissions of greenhouse gases such as carbon dioxide. Under such conditions, progress is being made in Japan on development of vehicles that are gentle on the earth's environment, through means such as improving fuel consumption and developing hybrid vehicles. In this column, we will summarize briefly trends in vehicle fuel consumption and new vehicle types such as hybrids in Japan.

● Automotive employment in Japan

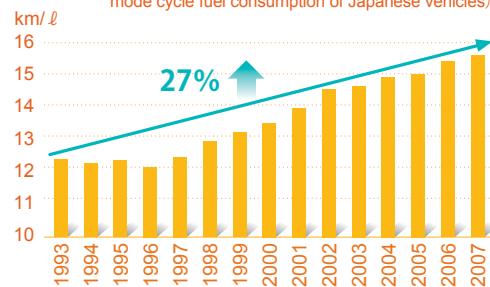
Roughly 20%*1 of greenhouse-gas emissions in Japan come from the transportation sector, and this sector has an important position in Japan's measures to combat global warming. At the same time, since about 8% (5.15 million persons) of all employed population of Japan (64.12 million persons)*2 is employed in automotive fields, efforts such as simply enhancing restrictions on the transportation sector could have a major impact on the Japanese economy.

For this reason, to adapt to the issue of climate change resulting from factors such as emissions of greenhouse gases, improvements have been made to automotive technologies, including improvements in fuel consumption and development of hybrid vehicles. As the number of vehicles in the Asia region also is increasing rapidly, technological innovations related to motor vehicles can be said to be essential to achieving development that maintains a healthy balance between the economy and the environment.

*1 Ministry of Land, Infrastructure, Transport and Tourism of Japan, Unyu bumon no chikyu ondanka taisaku ni tsuite ("Measures to counter global warming in the transportation sector"); URL: http://www.mlit.go.jp/sogoseisaku/environment/sosei_environment_tk_000006.html
 *2 Japan Automobile Manufacturers Association, Jidosha kanren sangyo to shugyo jinko ("Automotive industries and employment"); URL: http://www.jama.or.jp/industry/industry/industry_1g1.htm

Fig.1: Trends in fuel consumption by gasoline-powered vehicles

(Comparison of Japanese new cars in each year by average 10-15 mode cycle fuel consumption of Japanese vehicles)



* Note: See *Gasorin joyosha no 10/15 modo nenpi heikinchi no sui* ("Trends in 10-15 mode cycle fuel consumption of gasoline-powered vehicles"), from the Ministry of Land, Infrastructure, Transport and Tourism of Japan.

● Historical trends in fuel efficiency of Japanese vehicles

As shown in Fig. 1, in 2007 the average fuel efficiency of motor vehicles produced in Japan had risen by 27% per liter of gasoline or 3.4 kilometers/liter when compared to the 1993 figure. While fuel efficiency varies with actual road conditions, the fact that driving distance grew by 3.4 kilometers per liter of gasoline over just 15 years is a surprising one. That is, if a vehicle purchased in 1993 and one purchased in 2007 each made one trip around the globe (approximately 40,000 kilometers), the vehicle purchased in 2007 would save approximately 704 liters of gasoline, equivalent to approximately 1.633 tons of carbon-dioxide emissions, vs. the vehicle purchased in 1993. In addition, since the fuel-consumption standard for 2015 is 16.8 kilometers/liter, further improvements in fuel efficiency are expected to be made in the future.

● The appearance of new vehicle types, such as popular hybrid cars

Aside from increasing the fuel efficiency of gasoline-powered vehicles, new types of environmentally friendly vehicles, such as hybrids and electric cars, are being developed to replace gasoline-powered ones. Generally speaking, a hybrid car has two or more power units on board. In most cases, these consist of an electric motor and a gasoline or diesel engine. These vehicles are characterized by how they improve fuel efficiency by using the electric motor to accelerate at low speeds, since traditional engines have low levels of fuel efficiency at low speed, and then switch to the engine when the vehicle has reached a speed at which the engine would be more efficient. While the fuel efficiency of a hybrid vehicle varies with driving conditions, it is greatly improved over that of a gasoline-powered vehicle, with some hybrids being developed that more than double the average fuel efficiency of gasoline-powered vehicles. However, some room remains for future improvements, on points such as price and vehicle weight issues resulting from having two power units.

In addition to hybrids, a large number of other new vehicle types, such as plug-in electric vehicles, which have attracted attention in recent years, natural-gas-powered vehicles, which already are seeing practical use, and fuel-cell electric vehicles, which get their electric power from the electrochemical reaction between hydrogen and oxygen, are under development and introduced to the marketplace. As such, it appears likely that progress on environmentally friendly motor vehicles will continue in the future as well.

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