# Rio+20 Government of Japan Initiatives of the Ministry of the Environment, Japan

June 20, 2012

#### 1. Outline

The Ministry of the Environment of Japan recognizes the importance of the United Nations Conference for Sustainable Development (UNCSD: Rio+20), held 20 – 22 June 2012, and supports the Rio+20 outcome document. It proposes the "Initiatives of the Ministry of the Environment of Japan" in order for the internationally agreed outcome document to not just remain as an inspirational ideology but to be seen as an implementable set of concrete actions by regional and international communities.

To promote global sustainable development in Japan, we aim to create a low carbon society, which will cut greenhouse gas emissions by 80% by 2050, a sound material-cycle society based on 3Rs and a society in harmony with nature based on biodiversity. As a driving force to realize sustainable development, Japan proactively promotes greening the economy. In concrete terms, we promote an economic system in which those who invested in green business will gain benefits and clarify a standard for green investment and apply it for public investment while paying attention to international competition.

Also for the international community, Japan, having received international cooperation, promotes the creation of sound material-cycle society through 3Rs, and contributes to worldwide greenhouse gas emission reductions/absorption, and the conservation and sustainable use of biodiversity among other areas. In addition, taking advantage of Rio+20, Japan proactively promotes and supports wide networks and initiatives at the global as well as regional scale, recognizing such initiatives in the priority areas in the Asia-Pacific region as stipulated in Chapter V "Framework for Action and Follow-Up" ("Water", "Creation of Sound Material-Cycle Society", "Sustainable Cities and Transport", "Climate Change", "Biodiversity", "Education", inter alia) of the Rio+20 outcome document.

### The list of concrete initiatives

- I. Initiatives in the Asia-Pacific region
  - Clean Asia Initiative (CAI)
    - Water Environment Partnership in Asia (WEPA)
    - The Regional EST (Environmentally Sustainable Transport)
      Forum in Asia
    - Asia Pacific Adaptation Network (APAN)
    - Asia-Pacific Network for Global Change Research (APN)
    - The Regional 3R Forum in Asia
  - Low Carbon Asia Research Network (LoCARNet)
  - Strengthening monitoring framework of global carbon circulation through Greenhouse Gases Observing SATellite (GOSAT) etc.
  - Cooperation with the preparation of scenarios for climate change adaptation measures in the Asia-Pacific region by Asian Development Bank (ADB)
  - The Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes
  - The First Asia Parks Congress
- II. Global Initiatives
  - International Research Network for Low-Carbon Societies (LCS-RNet)
  - Development and promotion of the bilateral offset credit mechanism
  - The Satoyama Initiative
  - Japan Biodiversity Fund
  - Nagoya Protocol Implementation Fund
  - Global Partnership for Business and Biodiversity
  - 3R Initiative

#### Initiatives of the Ministry of the Environment, Japan Promotion of networks towards the world



#### 2. Implementation / Actions

The major examples of above mentioned specific and various initiatives which are conducted globally as well as in the Asia-Pacific region by the Ministry of the Environment of Japan. These main initiatives include the areas of "water," "sound material-cycle society," "sustainable cities and human settlements," "sustainable transport," "disaster risk reduction," "climate change," "biodiversity" and "education for sustainable development."

In Asia, the Ministry of the Environment of Japan promotes the Clean Asia Initiative. which has concrete policy objectives to: (1) realize low-carbon/low-pollution society, (2) realize sound material-cycle society, (3) realize societies in harmony with nature, while adapting to climate change, and (4) promote environmentalism in the market. It promotes policy dialogue, technical cooperation, joint research/study in order to transfer Japan's good experience/technology/organization/system as a package and will strengthen the promotion for further development so that Asian countries can avoid repeating the same mistakes such as industrial pollution. In other words, they can take advantage of "leapfrogging".

#### <u>Water</u>

The Ministry of the Environment of Japan promotes implementation of various networks and initiatives for integrated water resource management and environmental governance of water, with an aim to improve access to safe water and sanitation facilities as well as the sustainable use of water.

#### [Asia-Pacific region]

#### •Water Environment Partnership in Asia (WEPA)

The Water Environment Partnership in Asia (WEPA) is one of the initiatives registered by the Ministry of the Environment of Japan to the "Portfolio of Water Action", which was prepared as a result of the Ministerial Declaration of the International Ministerial Conference at the Third World Water Forum (WWF3). This initiative aims at resolving water pollution in the Asian monsoon regions and

sharing information regarding each country's environmental policies and technologies. Through learning lessons on advanced practices from each other, it attempts to improve water environmental management governance in each country, and in so doing, strengthen capacity of relevant policy makers.

Partner countries (13 countries) include Kingdom of Cambodia, People's Republic of China, Republic of Indonesia, Republic of Korea, and Lao People's Democratic Republic, Malaysia, Union of Myanmar, Federal Democratic Republic of Nepal, Republic of the Philippines, Democratic Socialist Republic of Sri Lanka, Kingdom of Thailand, Socialist Republic of Viet Nam, and Japan. WEPA has developed the WEPA Database, which consists of four areas: policy-related information, technologies for water environment conservation, information related to activities by NGOs and CBOs, and information sources. WEPA will also contributes to addressing water environmental problems in each country through improved water environmental governance by utilizing and promoting accumulated information and human networks.

# "Creation of a Sound Material-Cycle Society,

# **Sustainable Cities and Transport**"

Japan promotes the creation of a sound material-cycle society by sharing Japan's 3R initiative and promotes measures to realize environmentally sustainable transport (EST) through high level policy dialogues among Asian governments.

# [Global Initiatives]

#### •3R Initiative

The 3R Initiative aims to promote the "3Rs" (reduce, reuse and recycle) globally so as to balance environment and economy as well as to build a sound material-cycle society through the effective use of resources and materials. It was proposed by Japan and agreed upon at the G8 Sea Island Summit in June 2004 as a new G8 initiative. Kobe 3R Action Plan was agreed at the G8

Environmental Ministers Meeting in Kobe in 2008. Based on the Follow-up of G8 Kobe 3R Action Plan Report by OECD, the support for the Kobe 3R Action Plan was reaffirmed at the Deauville Summit in 2011.

This initiative is one of the G8 initiatives in which Japan has played a leading role. The importance of 3R has been well understood at global level through this initiative, and it will largely contribute to the transition to a green economy.

#### [Asia-Pacific region]

#### The Regional 3R Forum in Asia

The Regional 3R Forum in Asia was proposed by Japan and established in 2009 as the platform to promote 3R in Asian developing countries in cooperation with the governments, international organizations and donor communities. Under the framework of the Regional 3R Forum in Asia, the promotion of high level 3R policy dialogue and assistance in the 3R projects in each country, sharing the information to promote 3R, and networking among the concerned parties will proceed.

The forum is a Japan-led platform which contributes to promoting 3R and the transition to a green economy in the Asia-Pacific region where material resource consumption and waste is expected to increase in the near future.

# The Regional EST (Environmentally Sustainable Transport) Forum in Asia

The Ministry of the Environment of Japan, together with the United Nations, established the "Regional EST (Environmentally Sustainable Transport) Forum in Asia" in 2005. While taking into account the specific characteristics of the Asian region, the Ministry of the Environment of Japan has been actively contributing to realizing environmentally sustainable transport in the Asian region through high-level policy dialogues among participating countries.

Currently, the countries include 23 in total including 10 ASEAN countries, People's Republic of China, Republic of Korea, Mongolia, Russian Federation, 8 South Asian countries, and Japan. The Sixth Meeting of the Regional EST Forum in Asia was held in December 2011 in New Delhi, India. The Seventh Meeting of the Regional EST Forum in Asia will be held later in 2012.

The Regional EST Forum in Asia is a platform to establish regional and global

actions as well as an initiative to promote environmentally sustainable transport in Asia. This Japan-led initiative has expanded beyond Asia, as the countries in South America have modeled this Asian EST forum and built a similar framework in their region. Japan will further promote this initiative in the future.

# Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes

The Ministry of the Environment of Japan focuses on the strengthening of collaboration with Asian countries for the main object of appropriate export and import of hazardous wastes as resources. The Government of Japan established the Asian Network for Prevention of Illegal Transboundary Movement of Hazardous Wastes (hereafter "the Asian Network") in 2004 and called for Asian countries to join the initiative. Participating countries are 11 Asian countries: Brunei Darussalam, Cambodia, China (including Hong Kong), Indonesia, Malaysia, Philippines, Republic of Korea, Singapore, Thailand, Vietnam, and Japan. Activities through the Asian Network include: organizing workshops, operating websites, and exchanging information among the countries concerned. The preventing measures on illegal import and export as well as Environmentally Sound Management (ESM) of hazardous wastes in Asian region have been discussed at the workshops of the Asian Network. The Asian Network will promote the measures to control hazardous wastes in the region and will contribute to draft the guidelines on ESM of hazardous wastes in the future.

# **Climate Change**

Japan promotes a network to encourage knowledge sharing and capacity development to achieve a low carbon society as a substantive component of green economy/growth and a society resilient to climate change. Also, Japan contributes to overseas emission reductions through Japan's advanced technologies.

#### [Global Initiatives]

International Research Network for Low Carbon Societies (LCS-RNet)

To realize a low carbon society world-wide, LCS-RNet, consisting of research institutes representing G8 and other nations, shares outputs of low carbon society scenario studies and integrates them and by doing so, promotes to generate new knowledge and demonstrates it to decision makers.

Currently, 16 research institutes from 7 countries, such as France, Germany, India, Italy, Japan, the Republic of Korea and the United Kingdom participate. Japan hosts the secretariat of this network.

#### • Development and promotion of the bilateral offset credit mechanism

Japan is proposing the bilateral offset credit mechanism which is to facilitate diffusion of leading low carbon technologies, products, systems, services, and infrastructure as well as implementation of mitigation actions, and contributing to sustainable development of developing countries. The purposes of the bilateral offset credit mechanism are to appropriately evaluate contributions to greenhouse gas emission reductions or removals from developed countries in a quantitative manner, through mitigation actions implemented in developing countries and use those emission reductions or removals to achieve emission reduction targets of the developed countries, and to contribute to the ultimate objectives of the UNFCCC. Japan will further accelerate the institutional design of this scheme with cooperation of host countries with a view to launch the scheme as early as possible after the year 2013, along with making efforts to secure transparency of the scheme in order to contribute to the discussion at the UNFCCC.

#### [Asia-Pacific region]

#### Low Carbon Asia Research Network (LoCARNet)

Based on the experience of the above LCS-RNet, Japan proposed the establishment of a research network of researchers and research institutes in the Asia region where rapid economic development and consequent increases in emissions of greenhouse gases are anticipated, at ASEAN+3 Environmental Minister Meeting (EMM) held in October 2011. At the "East Asia Low Carbon Growth Partnership Dialogue" in April 2012, Japan's Environment Minister Goshi Hosono declared the launch of the network called the "Low Carbon Asia

Research Network (LoCARNet)".

#### Asia Pacific Adaptation Network (APAN)

Asia Pacific Adaptation Network (APAN) is a network to promote climate change adaptation in the Asia-Pacific region, which was launched in 2009 by the United Nations Environmental Programme Regional Office of Asia Pacific (UNEP-ROAP) and Donors, with the declaration by the Prime Minister of the Kingdom of Thailand.

Specifically, APAN promotes sharing knowledge, experience, and information among various stakeholders such as decision makers and practitioners in developing countries, NGOs, and donors. So far, Japan has supported APAN financially and technically along with the UNEP-ROAP, the Asian Institute for Technology (AIT), the Government of Sweden, the Stockholm Environmental Institute (SEI) and the Asia Development Bank (ADB), and established the hub in Bangkok and the sub-regional nodes in Central Asia, South Asia, Southeast Asia, the Pacific region and East Asia, with networking the hub and the sub-regional nodes.

From now on, APAN aims at more practical activities based on this network structure with enhancing collaborative relationship with other networks based on this network.

Since last year APAN has established a partnership with the US Agency for International Development (USAID), and Japan plans to support adaptation in the Asia Pacific region from the perspective of knowledge management through cooperative support together with donor organizations of various countries.

#### Asia-Pacific Network for Global Change Research (APN)

Based on the White House Conference on Science and Economics Research Related to Global Change held in 1990 and the 1992 US-Japan Global Partnership Plan of Action, Asia-Pacific Network for Global Change Research (APN) was established in 1996 with the objective to improve the scientific capacity on global change related to sustainability as per climate change and biodiversity. Currently 22 countries participate and the Ministry of the Environment of Japan is the largest donor. Hyogo Prefectural Government, the US, New Zealand and Korea, among others also support the network. APN implements international joint research through competitive funding and capacity building in developing countries and it intends to promote its activities in the Asia Pacific region. Japan hosts the secretariat. A similar framework was established on the American continent led by the US.

#### Strengthening the Monitoring System of Global Carbon Cycle by GOSAT

In 2009, Japan launched the Greenhouse Gases Observing Satellite (GOSAT) and for three years, as the only greenhouse gas observing satellite in the world, has successfully achieved the expected tasks. The achievements such as the global observation of uniform quality by the single censor in the GOSAT, the reduction of gaps of previous observations, and the reduction of the estimation error as per emissions and absorption at the level of sub-continent in the future, are contributing to global warming and climate change science. This summer it is scheduled for the release of a product of GOSAT (quantity of absorption and emission in the subcontinent) and this product will contribute to the climate science and policy processes such as the UNFCCC. Furthermore, Japan will continue to develop the successor of the GOSAT to be launched in the fiscal year 2016 in order to utilize it for extraterrestrial measurement and verification of the total CO<sub>2</sub> emissions from the major emitters, along with efforts to establish a framework of collaborative validation and utilization of international data.

# Cooperation with the Asia Development Bank (ADB) for the development of scenarios for climate change adaptation measures in the Asia-Pacific region

In areas vulnerable to climate change, it is extremely important to formulate adaptation measures based on the scientific knowledge in climate change and its impacts. The Asia Development Bank (ADB) has called for metrological organizations, research institutes, and aid agencies of each country to build a foundation for sharing climate scenarios for developing countries in the Asia Pacific region. Japan will support and actively participate in this initiative, contributing through its scientific knowledge and technologies.

# **Biodiversity**

Towards the achievement of the Aichi Biodiversity Targets that were adopted at the tenth meeting of the Conference of the Parties (COP 10) to the Convention on Biological Diversity, Japan contributes to the realization of the world in harmony with nature through various actions including supporting capacity building of developing countries etc. and promoting the *Satoyama* Initiative.

# [Global Initiatives]

# •The Satoyama Initiative

Under the vision to realize societies in harmony with nature, this is an initiative to internationally promote biodiversity conservation and sustainable use and management in human-influenced natural environments. This initiative is intended for socio-ecological production landscapes such as farmlands and secondary forest that people have developed and maintained sustainably. The Ministry of the Environment of Japan and United Nations University Institute of Advanced Studies (UNU-IAS) jointly initiated the *Satoyama* Initiative. The vision of the *Satoyama* Initiative is to realize societies in harmony with nature, comprising human communities where the maintenance and development of socio-economic activities (including agriculture and forestry) align with natural processes. By managing and using biological resources sustainably and thus properly maintaining biodiversity, humans will enjoy a stable supply of various natural benefits well into the future.

# Japan Biodiversity Fund

The Japan Biodiversity Fund was established by Japan in the Secretariat of the Convention on Biological Diversity (CBD), in support of the achievement of the Aichi Biodiversity Targets. Japan contributed 5 billion yen in total in Fiscal Year 2010 and 2011 to the fund for its activities.

This fund has provided capacity building assistance to developing countries especially formulating and revising their National Biodiversity Strategies and Action Plans, and Japan continues to promote these endeavors.

# Nagoya Protocol Implementation Fund

Japan established the Nagoya Protocol Implementation Fund (NPIF) at the World Bank in order to facilitate the early entry into force and promote implementation of the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS), and contributed 1 billion Japanese Yen in the Fiscal Year 2010. NPIF supports developing countries to develop domestic measures regarding ABS.

#### •The Global Partnership for Business and Biodiversity

It is an international framework to promote private sector engagement in biodiversity conservation led by the Secretariat of the Convention on Biological Diversity. It aims to support the establishment of initiatives regarding business and biodiversity as per country and region, to promote the participation of businesses in biodiversity conservation, and to share good practices among businesses. The first conference of this partnership was co-organized by the Secretariat of the Convention on Biodiversity, Keidanren Nature Conservation Committee, IUCN and the Ministry of the Environment in Tokyo in December last year and Japan continues to cooperate with this partnership for the further development.

# [Asia-Pacific region]

#### •The First Asia Parks Congress

Asia Parks Congress will be organized in Japan (in a city in Tohoku) in 2013 to decide on action plans for protected areas in Asia and to promote activities for achieving the Aichi targets and the Plan of Work on Protected Areas under the Convention on Biological Diversity. Governmental agencies and experts from Asian countries will attend the congress and discuss regional cooperation related to protected areas to achieve the Aichi targets.

The Asia Parks Congress will be organized in cooperation with IUCN and others as a part of regional cooperation to achieve the Aichi targets, which would be a good reference for other countries. Japan commits to continue to make efforts to strengthen regional cooperation.

In particular, the Green Reconstruction Project of Sanriku Fukko (reconstruction) National Park would lead to the realization of the vision of the Aichi targets 'world in harmony with nature' and it is a progressive initiative in which protected areas contribute to reconstruction from natural disasters and Japan further intends to send out the lessons learned to the world.

# **Education for Sustainable Development**

Japan proposes that the importance of Education for Sustainable Development (ESD) should be emphasized, in order for each citizen to play a leading role as a participant in a sustainable society. Japan will work together with each country and the international community on promoting and sharing efforts regarding ESD and cultivating sustainable citizens.

Japan also promotes human resource development towards a sustainable society and preparation of environmental education programs and disseminates them for the Final Year Meeting of the Decade of Education for Sustainable Development (DESD) to be held in 2014 in Japan.

#### [Global Initiatives]

Enhancement of efforts regarding Education for Sustainable
 Development (ESD) In 2002, 'the Decade of Education for Sustainable

Development ( DESD ) ' proposed by Japan was adopted at the UN. This

indicates countries around the world concentrate on measures to promote Education for Sustainable Development (ESD) for 10 years for 2005 – 2014.

As a proponent of DESD, Japan needs to actively contribute to promote ESD. Japan will promote international cooperation regarding ESD through funding the project such as networking of Regional Centre of Expertise on Education for Sustainable Development (RCE) implemented by the United Nations University (UNU).

#### [Asia-Pacific region]

# Final-Year Meeting of the Decade of Education for Sustainable Development (DESD)

To accelerate human resources development in the environmental sector

Japan promotes the management of the Promotion of Sustainability in Postgraduate Education and Research Network (ProSPER.Net) for networking several leading higher education institutions committed to ESD.

Japan also enhances the efforts of domestic environmental education such that Japan can present exemplary actions and take leadership at the Final Year Meeting of the Decade of Education for Sustainable Development (DESD) to be held in 2014 in Japan.