

Policy Proposal: Towards a New International Framework for the Post-Kyoto Protocol Era

15 September 2011
Keidanren

1. Introduction

Climate change is a global-scale issue affecting the very foundations of human existence. In Japan we have made efforts to reduce emissions of greenhouse gases (GHGs) and have achieved steady results. But there is a limit to how much the efforts made by restricted number of countries can achieve. While the Kyoto Protocol adopted in December 1997 was a significant step forward in terms of concrete action to stem climate change, it assigned reduction commitments only to a limited number of countries, and global GHG emissions have increased even after it came into effect.

Now is the time to create a single equitable international framework with all major emitters participating, including every one of the developed nations as well as the fast-growing developing and emerging economies, with a view to achieving a 50 percent reduction of global emissions by 2050, the goal agreed to at the 2008 G8 Hokkaido Toyako Summit.¹ The Cancun Agreements adopted at the 16th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP16) are to be applauded as an important foundation for such a framework.²

Divisions between countries have deepened, however, and with international negotiations stalled since COP16, an agreement on a new international framework is nowhere in sight. Responding to this situation, Keidanren has drawn up the following proposal, which we submit in the hope of avoiding a post-2012 lapse in mitigation efforts.

2. The Type of International Framework That Should Be Adopted: A Single Framework with All Major Emitters Participating

¹ At the July 2008 G8 Hokkaido Toyako Summit, the Group of Eight nations agreed that they would “seek to share with all Parties to the UNFCCC [United Nations Framework Convention on Climate Change] the vision of, and together with them to consider and adopt in the UNFCCC negotiations, the goal of achieving at least 50 percent reduction of global emissions by 2050.”

² The agreement adopted at COP16 (held in Cancun, Mexico, 29 November–10 December 2010), based on the Copenhagen Accord that eluded adoption at COP15 the previous year, is a comprehensive and balanced decision capable of serving as the foundation for a legal international framework from 2013 onward. Among other things, COP took note of emission reduction targets submitted by developing and developed countries and compiled as a UN document. The agreement succeeded in advancing the negotiations towards the establishment of an equitable and effective international framework with the participation of all major emitters, as Japan has been advocating.

A bottom-up “pledge and review system”³ based on the Cancun Agreements offers a realistic and valid approach to creating an equitable and truly effective international framework with all major emitters participating. Under this system, each country would make an international commitment to achieve its own mitigation targets, while the international community would assess and verify each country’s progress towards those targets.

The total GHG emissions of all countries with reduction commitments under the first commitment period of the Kyoto Protocol (2008–12), including Japan and Europe, amount to only 27 percent of aggregate global emissions, and that share is expected to drop to less than 20 percent by 2050. Simply to append a second commitment period and extend the Kyoto Protocol in its current form would lock this commitment group in place, leaving no mechanism to limit emissions by countries without reduction commitments. This would be a step backward in the fight against climate change. Moreover, in today’s global economy, imposing reduction commitments on one group of countries would only lead to an overall increase in global emissions through “carbon leakage,” as businesses shift production to countries that have no reduction commitments and are less effective in controlling emissions. For all these reasons, it is essential that we replace the Kyoto Protocol with a new framework.

In addition, given the current political and economic climate in the major emitting nations, it would be exceedingly difficult to secure their unanimous agreement to a legal framework that imposes reduction commitments from the top down, as the Kyoto Protocol does, and penalises countries that fail to achieve them. In the end, pursuing such a framework against all odds could lead to an extended lapse in national mitigation efforts.

The Copenhagen Accord, whose provisions were adopted by COP in Cancun, has already secured the participation of a group of countries accounting for more than 80 percent of global emissions, including the United States and China. Many have submitted their own mitigation targets and actions to the United Nations. A pledge and review system under which the international community reviews (assesses) each country’s efforts vis-à-vis its pledge (mitigation targets and actions) is an eminently practical approach that promises swift results in the fight against climate change.

In conjunction with such a framework, it will be necessary to establish and implement a suitable measurement, reporting, and verification (MRV) system⁴ to ensure the transparency and efficacy of mitigation efforts by developed and developing countries.

³ Pledge and review system: A system whereby each country voluntarily submits and commits itself to its own mitigation targets and action plan (pledge), and progress towards those targets is assessed internationally (review).

⁴ MRV system: A system by which reductions in greenhouse gas emissions can be *measured*, *reported* internationally, and then *verified*, thereby ensuring the transparency and accuracy of information regarding countries’ emission reduction actions. Under the Cancun Agreements adopted at COP16, developed countries would report progress towards emission reduction targets, etc., in accordance with enhanced measurement and reporting guidelines and would be subject to an international

3. Measures for Realising a Low Carbon Society of Global Scale

(1) Disseminate Best Available Technologies (BATs), Develop and Deploy Innovative Technologies

Technology holds the key to halving global emissions by 2050 while balancing environmental concerns and economic growth. If we are to cut GHG emissions dramatically even as the nations of the world pursue economic development, it is essential that we promote the widespread adoption of existing low-carbon technologies, products, and services, while simultaneously developing and deploying the kind of innovative technologies that will enable more drastic reductions in GHG emissions.

It is vital above all that Japan and other developed countries work to make ongoing improvements and to achieve maximum diffusion of best available technologies (BATs). At the same time, we need to create an environment that facilitates the transfer of such technologies to motivated developing countries.

Energy efficiency in Japan's key industries is among the highest in the world. It has been estimated that worldwide diffusions of Japanese BATs would yield a 6.3 billion ton cut in global emissions of carbon dioxide by 2020.⁵ Japan's public and private sectors must work together to realise this reduction potential. With an eye to enhancing energy demand management, it is desirable that Japan's unique energy conservation mechanisms, such as the Energy Saving Labelling programme, the energy manager qualification system, and the Top Runner programme, be introduced in developing countries, alongside the transfer of Japanese companies' proprietary low-carbon technologies.

From a long-term perspective, meanwhile, we need to persevere in our efforts to develop new breakthrough technologies. Because of the long lead time and huge investment often required for development of such technologies, from the basic research phase to development and deployment, there is a limit to what any one country can accomplish on its own. We recommend international joint research involving collaboration not only with other developed countries but with emerging economies as well. For this purpose, it is important to follow a shared international roadmap to the development of the foundational technologies required to halve emissions by 2050 and to cooperate on the promotion of research and development under the joint efforts of industry, government, and academia.

assessment process to ensure that information provided is comparable and reliable. In the case of developing countries, mitigation actions taken without international support would undergo MRV domestically in accordance with general guidelines (to be developed), then subject to international consultation and analysis (ICA), while actions taken with international support would be subject to international MRV in accordance with guidelines (to be developed).

⁵ See Keigo Akimoto and Mitsutsune Yamaguchi, "Posuto Kyoto no wakugumi toshite no sekutoraru apurochi—Gutaiteki naiyo to hyoka" (A Sectoral Approach as a Post-Kyoto Framework—Specific Content and Assessment), Ministry of Economy, Trade, and Industry FY2007 research report *Chikyu ondanka boshi no tame no seisaku no koka ni kansuru chosa* (A Study of the Efficacy of Policies to Prevent Global Warming) (March 2008), chapter 2, section 1.

From these standpoints, the Technology Mechanism adopted by the Cancun Agreements (comprising a Technology Executive Committee and a Climate Technology Centre and Network)⁶ is a measure designed to accelerate the development and transfer of technologies for mitigation and adaptation, and we hope it will be put into action without delay.

(2) Provide Bilateral and Multilateral Cooperation in the Areas of Financing and Technology

[1] Promotion of a Bilateral Offset Mechanism to Complement the Clean Development Mechanism (CDM)

As it exists now, the Kyoto Protocol's Clean Development Mechanism (CDM) raises a variety of obstacles to providing developing countries with the support they most need for climate-change mitigation efforts and related measures. The difficulty of receiving CDM approval for projects involving the kind of energy-efficient technology the developing countries seek, along with an excessively lengthy approval process, has prevented the transfer of technology from developed to developing countries from progressing as hoped under the CDM.

An effective complement to the CDM would be a bilateral offset mechanism, whereby Japan, through bilateral consultations with a developing country, could develop an energy-efficient/low-carbon project tailored to that country's needs and have a portion of the emission reductions achieved by technology transfer applied as Japan's contribution to our total reduction commitment. Efficacy would be further enhanced if this mechanism were implemented as part of a package including enhancement of policies and system design—such as the establishment of energy-efficiency standards in the recipient country—together with financing from such institutions as the Japan International Cooperation Agency (JICA) and Japan Bank for International Cooperation (JBIC).

Japan has been making steady progress conducting feasibility studies and bilateral negotiations for such projects, with the focus on other Asian countries. Building on the outcomes of the Climate Change Programme Loan it extended to Indonesia,⁷ the Japanese government should continue promoting the transfer of Japanese corporate technology and expertise through Two Step Loans⁸ and other forms of support tailored to the needs of local businesses.

[2] Effective Financial Support

⁶ The Technology Executive Committee will recommend measures to accelerate the development and transfer of technologies to mitigate climate change and identify barriers to the same; the Climate Technology Centre and Network will support developing countries and facilitate networking between national and international organisations.

⁷ Climate Change Programme Loan: An ODA loan to the government of Indonesia to support its climate-change mitigation measures under Indonesia's National Action Plan Addressing Climate Change.

⁸ Two Step Loan: A two-stage loan that goes through the recipient country's development-related financial institutions.

a. Japan previously announced a plan to provide US\$15 billion in public and private short-term financing to support the efforts of developing countries and others that are working actively to mitigate climate change, and it has already provided US\$9.7 billion under this programme (as of the end of March 2011). The public and private sector must continue working together to provide as much assistance as possible, both to support developing countries working on emissions reductions and other measures to mitigate climate change and to aid those most vulnerable to the impact of climate change.

In offering such support, however, the government needs to provide the public with a clear explanation of the importance and efficacy of development aid programmes geared to mitigating climate change, mindful of the oft-repeated criticisms—particularly regarding aid provided through multilateral channels—that Japan’s contribution too often goes unrecognised and that the government is not accountable to taxpayers.

b. In terms of a multilateral framework for financial support, the Cancun Agreements call for the establishment of a Green Climate Fund (GCF),⁹ the design of which is currently being deliberated. In the future, the GCF is expected to play an important role in the securing of needed funding by developing countries implementing emission-reduction initiatives and by developing countries most vulnerable to the impact of climate change.

In designing the GCF, it will be important to include provisions for objective assessment of the environmental benefits brought by GCF funding in the recipient countries. In addition, the GCF must be designed so as to act as a catalyst for mobilising investment and financing from the developed nations. For this reason the GCF’s Transitional Committee should solicit the views of the business community, which possesses the necessary technology, on a mechanism for linking the GCF to an MRV system that quantifies reductions in GHG emissions and ensures transparency.

(3) Promote Capacity Building

Capacity building in developing countries is a vital key to ensuring the efficacy of the kinds of technical and financial cooperation outlined above. This means enhancing policies and systems aimed at mitigating climate change, developing skills and human resources, and providing social and economic infrastructure.

Japan has supported capacity building in various forms and contributed to sustainable development in developing nations, especially those in Asia, by drawing on its own wealth of experience and technical expertise. Now it is vital that we extend these efforts from Asia to other regions, to support and promote ownership of these challenges in developing nations around the world.

Keidanren intends to fully leverage the technology, know-how, and human resources of the Japanese business community to support the efforts of developing nations. More particularly, we will be taking active steps in concert with the Japanese government and

⁹ Green Climate Fund (GCF): A financial mechanism adopted under the Cancun Agreements. The Transitional Committee for the design of the GCF is currently deliberating such operational matters as governance, institutional framework, and options for mobilising private-sector funds.

in close dialogue with developing countries to (1) support the establishment of country-by-country plans and strategies for low-carbon development and (2) match the technological needs of developing countries with the technological “seeds” Japanese businesses can supply.

(4) Advance the 3Ls: Lighting Africa, Linking Africa, and Lifting Africa

At the Tokyo International Conference on African Development (TICAD) Ministerial Follow-up Meeting held in May 2011, the Japanese government unveiled an initiative for a “Low-Carbon Growth and Sustainable Development Strategy in Africa.”¹⁰ Now it is calling for positive action on a wide range of African aid projects (including geothermal and solar energy, electrification of regions without access to electricity, telecommunications, infrastructure, food, and water) built on the concept of the 3Ls: “lighting, linking, and lifting” Africa.

Specific cooperation programmes eyed for adoption include (1) development of geothermal resources in East Africa and use of related cutting-edge technology, (2) promotion of a green power supply through use of solar energy, (3) reduction of CO₂ emissions and electrification in areas without access to electricity, (4) support for improved energy efficiency in the steel industry, and (5) promotion of green investment in the cement industry. These are highly significant initiatives from the standpoint of alleviating poverty and pursuing sustainable development in Africa, and they need to be steadily translated into action.

The Japanese business community intends to cooperate in these 3L projects in every way possible.

(5) Transfer Low-Carbon Technologies Via a Platform for Environment-Friendly Technologies (WIPO Green)

To make maximum use of private sector vitality in promoting the development and global diffusion of low-carbon technologies, we need to foster an environment to accelerate the “intellectual creation cycle,” that is, creation, protection, and utilisation of intellectual property.

To this end, the Japanese business community has developed WIPO Green,¹¹ an initiative for creating a database of environmental technologies that can be transferred to developing countries, which we have submitted to the international community. With the

¹⁰ The Third TICAD Ministerial Follow-up Meeting was held in Dakar, Senegal, on 1-2 May 2011. It was attended by approximately 500 participants representing 68 countries, 42 regional and international organisations, and 16 NGOs, as well as the private sector. Representing the Japanese business community was Keidanren’s Akio Dobashi, chairman of the Committee on Sub-Saharan Africa. In a joint communiqué, the participants acknowledged the value of building a shared medium- and long-term vision to promote sustainable and low-carbon growth in Africa and they agreed to commence work to prepare a “Low-Carbon Growth and Sustainable Development Strategy in Africa.”

¹¹ Japan Intellectual Property Association and the World Intellectual Property Organization (WIPO) are currently floating this proposal at the international level.

help of WIPO Green, we are determined to foster a business-based approach to the transfer of low-carbon and other environmental technologies while protecting intellectual property rights.

Meanwhile, however, a large number of developing countries have endorsed proposals for the compulsory licensing or buyout of intellectual property rights in order to accelerate the spread of low-carbon technologies around the world. We believe that maintaining appropriate protections for intellectual property rights is vital to promoting the development of low-carbon technologies and facilitating their transfer. For this reason we oppose any compulsory licensing or buyout of intellectual property rights.

(6) Pursue the Sectoral Approach

In implementing the kinds of initiatives discussed above, it will be important to make many concrete, sector-specific proposals and recommendations.

The Japanese business community, particularly sectors such as steel, electric power, and cement, have voluntarily transferred technology and expertise and carried out training programmes in developing countries and emerging nations in close cooperation with these countries' public and private sectors through the Asia-Pacific Partnership on Clean Development and Climate (APP).¹²

In September this year, the APP was absorbed into the Global Superior Energy Performance Partnership (GSEP), which expands the regional scope of those programmes to outside the Asia-Pacific.¹³ The Japanese business community will continue to take an active part in bottom-up sectoral efforts through GSEP.

4. Japan's Medium-Term Emission Reduction Targets

Japan is drastically revising its energy policy in the wake of the disaster triggered by the March earthquake and tsunami. This will naturally mean rethinking the nation's medium-term targets for reduction of GHG emissions.

Before adopting new medium-term targets, we need to conduct an open and transparent national debate and deliberate the issue with an eye to ensuring international equity, feasibility, and a reasonable public burden. From the standpoint of international equity, we will need scientific and objective comparisons and verification methods, including the

¹² Asia-Pacific Partnership on Clean Development and Climate: A regional partnership launched in July 2005, comprising seven nations (Japan, Australia, Canada, China, India, South Korea, and the United States) that together account for more than half of the world's energy-related CO₂ emissions. Through eight public-private sectoral task forces, the APP has undertaken a variety of cooperative initiatives oriented to the development, diffusion, and transfer of clean and efficient technology for effective reduction of GHG emissions.

¹³ Global Superior Energy Performance Partnership: GSEP was formed at the initiative of Japan and the United States to succeed the APP as a framework for public-private partnership. Among its goals is the development of international certification programmes for energy management in commercial buildings and industrial facilities, which account for about 60 percent of the world's energy consumption.

identification of appropriate indicators. From the standpoint of feasibility, we will need to subject each mitigation action to dispassionate cost-benefit analyses, add economically and socially feasible measures one at a time, and verify cost and benefit as we implement them.

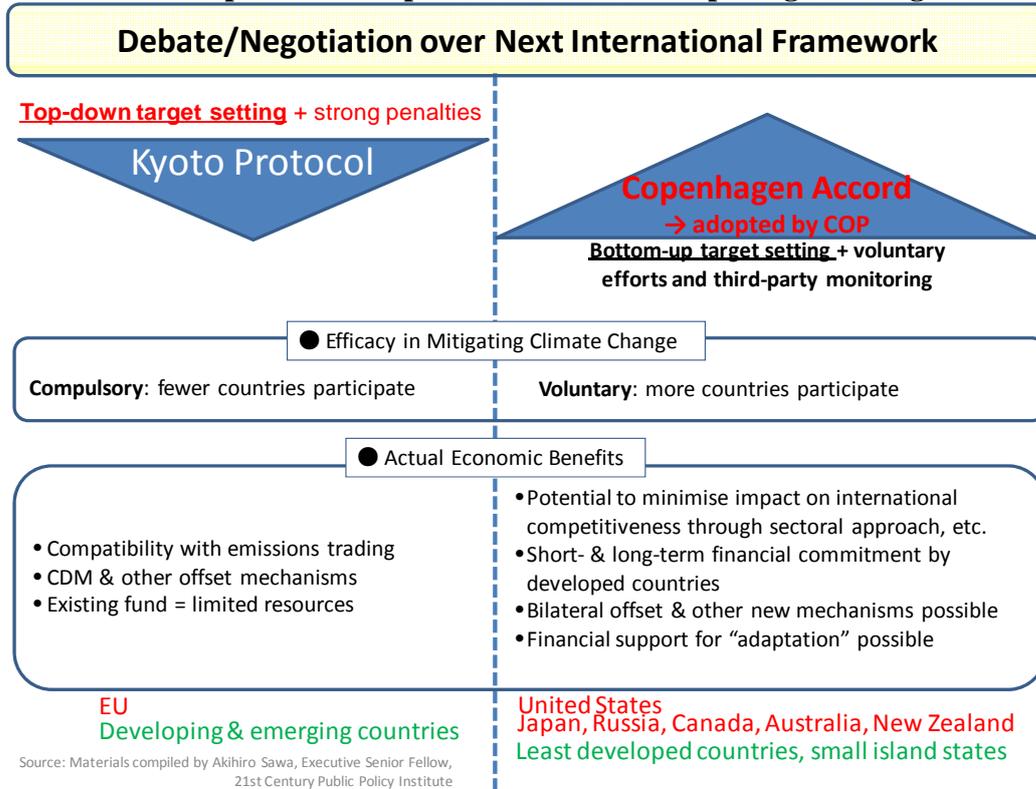
The key condition for the revision of our energy policy and medium-term targets is ensuring compatibility with our growth strategy and the energy demand needed to achieve that strategy.

5. In Conclusion

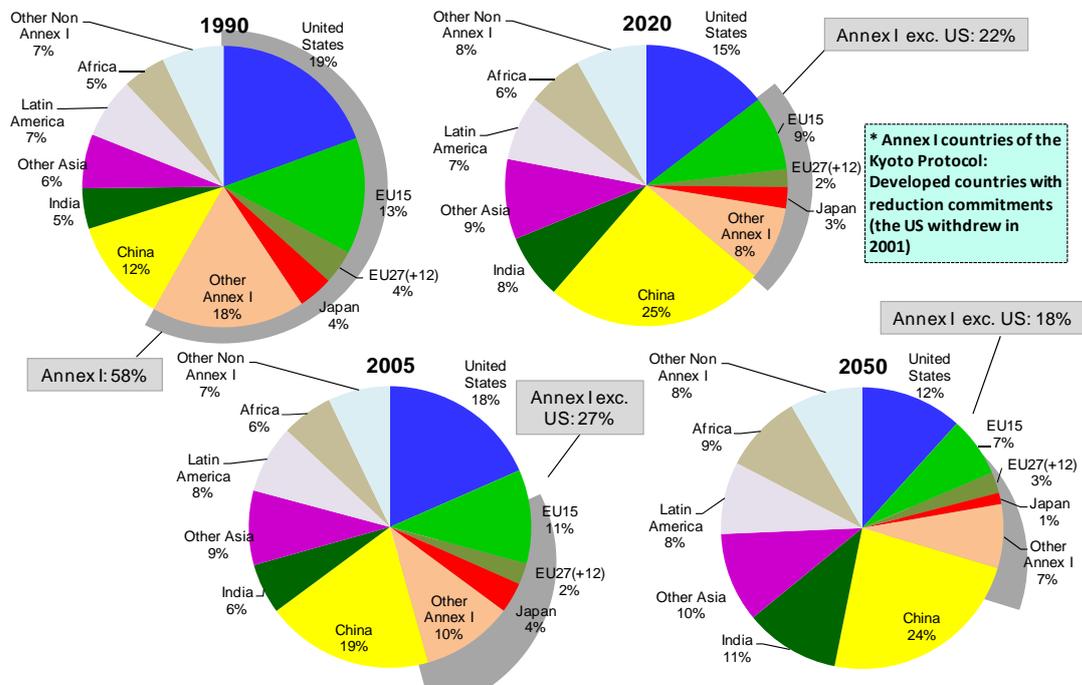
Keidanren will continue to uphold its Commitment to a Low Carbon Society, building on the world-leading low-carbon technologies Japan has developed over the years and setting the goal of having Japanese industry play a pivotal role, through this technology, in the drive to halve global GHG emissions by the year 2050.

Under this Commitment, participating industries have pledged to contribute proactively and independently to the creation of a low carbon society of global scale through (1) maximum use of best available technologies (BATs) in business operations, (2) development and deployment of world-leading products and services for consumers, (3) transfer of technology and expertise overseas, and (4) development of innovative technologies.

Reference 1. Comparison of Top-Down and Bottom-Up Target Setting

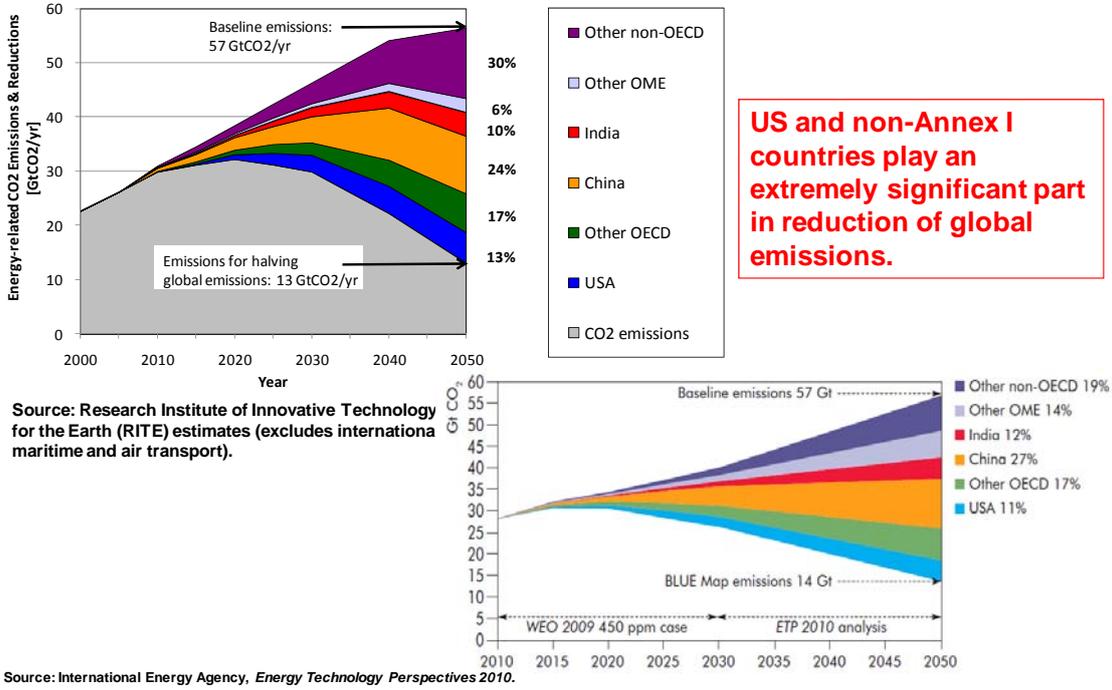


Reference 2. Long-Term Projected Change in Contribution to Global GHG Emissions by Country



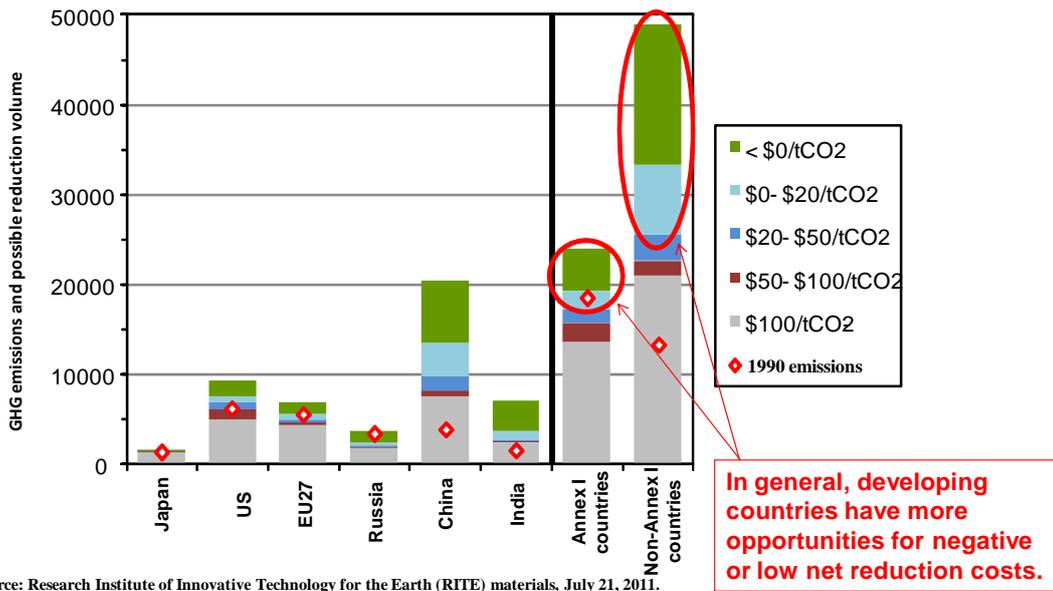
Source: Research Institute of Innovative Technology for the Earth (RITE) materials, 21 July 2011

Reference 3. Baseline CO₂ Emissions and Reductions Required to Halve Global Emissions, by Region

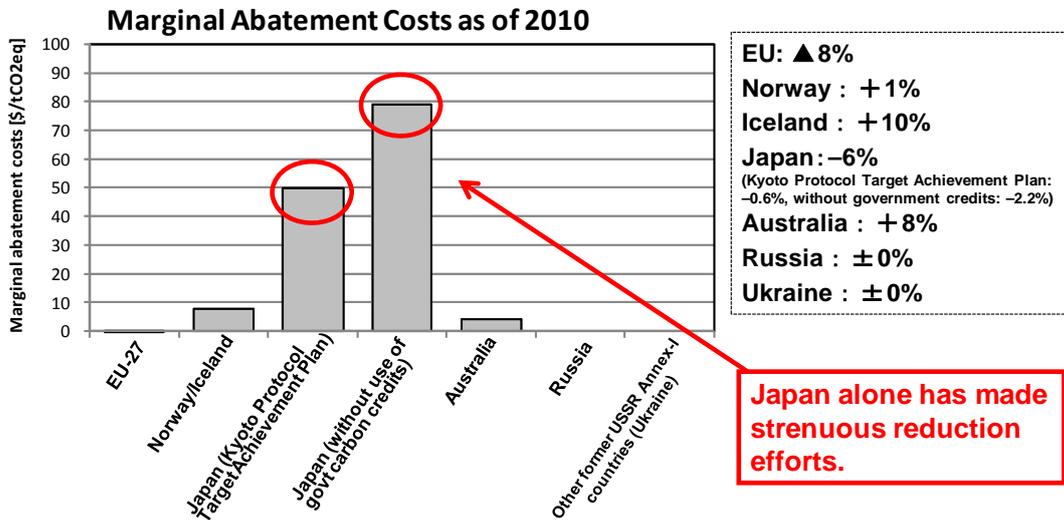


Reference 4. GHG Emissions Reduction Potential, 2020, by Marginal Abatement Cost

Potential Emissions Reductions in 2020, Assuming Frozen Technology (emissions levels in the hypothetical case that efficacy of mitigation actions is completely unchanged between 2005 and 2020)



Reference 5. Marginal Abatement Costs among Developed Countries under Kyoto Protocol



- ◆ For Japan, marginal abatement cost of the Kyoto Protocol Target Achievement Plan is approximately US\$50/tCO₂ eq.; without the use of government carbon credits, it would rise to about US\$80/tCO₂ eq.
- ◆ The EU-27 is able to achieve its target at a marginal cost of about US\$0/tCO₂ eq. (owing to large potential for reduction in former communist bloc countries).

Source: Research Institute of Innovative Technology for the Earth (RITE) materials, 21 July 2011.