

EU-Japan Business Round Table

WPE “Innovation, Environment and Sustainable Development” 2009 Recommendations

(Final as of July 3, 2009)

The newly founded Working Party “E” (WPE) now combines three subjects, which are interdependent: sustainable development is only possible with an increased safeguarding of the environment and innovation. Innovation and adequate policies of the public sector and the action of the private sector will be of extreme importance in the future, considering the current Megatrends in future development in this century. The major Megatrends related to the environment and sustainable development mentioned above, will be

- ◆ climate change, mitigation and adaptation,
- ◆ population growth and demography,
- ◆ water and food security,
- ◆ availability and cost of energy and other natural resources,
- ◆ urbanisation,
- ◆

having a significant influence on the security situation in Asia and the rest of the world.

It is quite often said the current pace of innovation will not be sufficient and “Leapfrogging” should be attempted, promoted and with high priority be supported whenever the chance for “Leapfrogging” occurs. Asia in particular, will be the region of highest importance with regard to sustainable development of the world as we know it today. 8 billion people will inhabit the world in 2025, of which 4.8 billion will live in Asia and 2 billion in Asian cities.

(Source: <http://www.un.org/esa/population/unpop.htm>)

As soon as the current financial crisis is past, the growth rates of Asia will be the highest of the world again. It is thus of outstanding importance that Japan as the nation with the highest technological competence in Asia and the European Union increase their cooperation with regard to innovation, environment and sustainable development.

1. Innovation and Climate Change

Innovation is required to mitigate climate change and its consequences as far as possible and to help especially developing countries to adapt to the upcoming environmental changes.

Innovation for mitigation is of crucial importance to

- ◆ increase the efficient use of energy, wherever possible,
- ◆ find new and more efficient ways to increase the supply of electricity from an environmentally friendly and affordable sources, including new technologies for the storage of energy,
- ◆ develop wherever possible completely new production processes in pharmacy and chemistry, but also in other industries, which are based on biological principles and energy-optimised,
- ◆ accelerate the development of new products, which are based on renewable resources or nearly fully recyclable, such as bio-plastics,
- ◆ develop and advance innovative concepts for mobility, which are energy efficient, and an attractive alternative to the current concepts based on fossil fuels.

E-EJ-1.1: The European Commission and Government of Japan should devise strategies and mechanisms to support Leapfrogging in energy efficiency by providing incentives for the development of disruptive technologies such as for instance price-worthy LED lamps for households and public installations in developing and developed countries.

Innovation supporting the adaptation to the consequences of climate change must consider

- ◆ changing patterns of rainfall and water availability for human consumption and agriculture, requiring new technologies for water treatment, irrigation and innovation in crops,
- ◆ the threat to biodiversity and accelerated extinction of species,
- ◆ required changes in the construction of buildings and infrastructure to prevent catastrophic consequences from increasingly violent weather phenomena and rising sea water levels.

E-EJ-1.2: The European Commission and Government of Japan should strongly

support the private sector in innovation related to climate change with adequate policy frameworks and incentives to invest into the development of new concepts and technologies, which may not be sufficiently profitable.

E-EJ-1.3: There is a clear need to enhance the cooperation between the industries and research institutions of the technologically most advanced economies. However, also triangular cooperation between Japan, the EU and developing or emerging economies should be actively promoted for burden sharing and cost reduction. The European Commission and Government of Japan should take steps in this direction jointly and accordingly.

2. Addressing global warming

Very intensive international negotiations towards the upcoming 15th Conference of Parties (COP15) to the United Nations Framework Convention on Climate Change (UNFCCC) and the 5th Meeting of the Parties to the Kyoto Protocol (COP/MOP5) aimed at establishing international framework on climate change beyond 2012 to be held in Copenhagen this December (Post-2012 Framework) are taking place. Also in the midst of global recession, “green policy” has been started to be implemented in many countries as economic stimulus measures to enhance activities towards low-carbon economies. This year, the Working Party members place special emphasis on recommendations on global warming, which are focusing on a Post-2012 Framework and reflecting the latest discussions, to the European Commission and the Japanese government.

2.1 Post-2012 Framework

E-EJ-2.1a: Participation of all major greenhouse gas emitting countries

- ◆ It is vital to have all major emitting countries participate in the Post-2012 Framework in a responsible manner. Without the participation of major emitters, any international agreement will not be effective in reducing climate change and its fairness will be compromised as well.
- ◆ Developing countries should be open towards flexible and diverse approaches taking into account the national circumstances of each country.

E-EJ-2.1b: Agreement on long-term targets

- ◆ The ultimate objective for prevention of global warming, as UNFCCC describes, is to stabilize GHG concentration in the atmosphere at a level that would not endanger the climate system in the long run. Therefore it is important to agree on the reduction volume for stabilizing GHG concentration, based on scientific evidence and share reasonable and feasible long-term targets of reducing and deterring GHG emissions.

E-EJ-2.1c: Sectoral approach

- ◆ **Japanese position:**

It is effective to set the targets by assessing the emission reduction potential of each sector (industries, transport/automotive, business/commercial, households) based on best available technology and aggregating them with cooperation among the major developed countries to ensure comparability for each country. A sectoral approach has the advantage of ensuring equity among countries, enhancing technology transfer and also helping to encourage participation of developing countries.

- ◆ **EU position:**

The monitoring and reporting of emissions for industry sectors in developing and advanced developing economies should be extended and harmonised to enable compliance checks and the development of future international sector approaches. Potentially, plants within a sector approach that reduce below a certain emission benchmark per production unit could receive incentive in the form of tradable credits. However, while sectoral approaches could be suitable tools for improving carbon efficiency, it is doubtful whether they can prevent market distortions.

E-EJ-2.1d: Establishment of medium-term targets and policies to achieve them

- ◆ It is essential that the establishment of medium-term targets ensure fairness and feasibility agreed by each country and each sector attempting to make these targets as fair as possible.
- ◆ While developed countries should set national total emissions targets, it is appropriate that major emitting developing countries set targets pertaining to the ratio of GHG emissions to GDP or intensity targets by each sector, because high economic growth is expected in the years ahead in those

countries.

- ◆ The specific situations of individual countries can vary significantly. It is thus essential that different policy approaches are acceptable to achieve the medium-targets.
- ◆ A cap-and-trade emission trading scheme

Japanese position:

It is difficult to set fair and equitable caps using a cap-and-trade emission trading scheme. EU and Japan should carefully assess whether the scheme contributes to effective reductions in global emissions, enabling companies to compete and develop on equitable terms in global markets whilst promoting the development of innovative technologies to prevent global warming in the long term.

EU position: A cap-and-trade emission trading scheme can be a cost efficient way of reducing greenhouse gas emissions, if carefully designed. In particular the effects of direct and indirect costs of such a scheme on the competitiveness of companies must be mitigated in order to prevent carbon leakage.

E-EJ-2.1e: Position on the base year

Japanese position: medium-term targets should be negotiated on the basis of targeted emissions volume and rate of reduction or improvement compared not only to the current base year 1990 but also to multiple base years including 2005 not to favor particular countries since there are differences among countries in respect to changes in energy supply conditions, reduction efforts in the past, and so forth.

EU position: The European side favors to maintain the setting of 1990 as the base year for calculations.

E-EJ-2.1f: Promotion for development of technology and technical assistance

- ◆ Dissemination of existing low-carbon technologies and development of breakthrough technology is essential for significant GHG reduction in the long term.
- ◆ To reduce GHG emissions on a global scale, initiating measures equally in developing countries is essential. Addressing global warming in major developing countries such as China and India where rapid and continued increase in GHG emissions is occurring will be a particularly big challenge. With consideration for protection of intellectual property rights, an

innovative framework to promote technology transfer is necessary and specialized function should be set up in which the public and private sectors participate and materialize the way to provide public financial assistance and promote technical support based on the knowledge and experience of private experts. Existing barriers to technology transfer should be reduced and eliminated through this scheme by encouraging provision of public fund, transferring and disseminating technology to developing countries practically.

- ◆ Underlining the statements made on the necessity of intensifying innovation, we strongly ask the European Commission and the Japanese government to introduce policies which maximize cooperation between EU and Japanese companies as well as research institutions and universities active in technology development and business investment. EU and Japan should actively promote the joint development of innovative technologies toward practical use by sharing technological roadmaps, strengthening partnerships, and increasing investment in research and development.

2.2 Other recommendations on addressing global warming

E-EJ-2.2a: Promoting clean energy

- ◆ To reduce GHG emissions, it is essential to promote reducing reliance on fossil fuels across the economy. The increased use of electric vehicles and heat pumps may increase the dependency on electricity. It is therefore of particular importance to reduce the dependency on fossil fuels in power generation.
- ◆ Nuclear power generation should be promoted among clean energies. It is vital to strengthen efforts to ensure safety and restore citizens' trust for the use of nuclear energy.
- ◆ Increased utilization of renewable energy, such as solar, wind, hydro and biomass energy is essential. These energy sources offer new business and employment opportunities. Challenges resulting from current high cost and instability in electric grids should be overcome.
- ◆ Increased research and development is required in order to develop appropriate energy storage solutions to make even better use of the often fluctuating renewable energies. EU and Japan should encourage their private sectors to intensify cooperation and define appropriate instruments to enhance cooperation between universities and research & development

institutions.

E-EJ-2.2b: Continuation of “green policy”

- ◆ In the midst of global recession, many countries have expanded fiscal expenditure on “green policy” programs as economic stimulus measures. The Japanese government has set “the low-carbon revolution” as one of the measures in the FY2009 supplementary budgets which states the development and introduction of solar power, fuel-efficient vehicles and highly efficient energy equipments. Also, new preferential tax scheme for environment-friendly vehicles has been introduced this April to increase consumer demand and corporate investments.
- ◆ The Japanese government’s efforts towards a low-carbon society/economy are highly appreciated. However, since GHG emissions from the residential sector have been increasing continuously in Japan we request these measures not be temporary economic stimulus but continuous steps to raise public awareness to reduce carbon dioxide emissions by the Government of Japan..
- ◆ Reduction of GHG emissions must be promoted through the total life-cycle basis in current and future “green policy”.