## **Environment and Climate Change**

## **Climate Change**

22. We reconfirm the significance of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) as providing the most comprehensive assessment of the science and encourage the continuation of the science-based approach that should guide our climate protection efforts. We reaffirm our commitment to take strong leadership in combating climate change and in this respect, welcome decisions taken in Bali as the foundation for reaching a global agreement in the United Nations Framework Convention on Climate Change (UNFCCC) process by 2009. We are committed to its successful conclusion. Enhanced commitments or actions by all major economies are essential for tackling climate change. Therefore, we endorse the positive contribution of the Major Economies Leaders Meeting to the UNFCCC.

23. We are committed to avoiding the most serious consequences of climate change and determined to achieve the stabilization of atmospheric concentrations of global greenhouse gases consistent with the ultimate objective of Article 2 of the Convention and within a time frame that should be compatible with economic growth and energy security. Achieving this objective will only be possible through common determination of all major economies, over an appropriate time frame, to slow, stop and reverse global growth of emissions and move towards a low-carbon society. We seek to share with all Parties to the UNFCCC the vision of, and together with them to consider and adopt in the UNFCCC negotiations, the goal of achieving at least 50% reduction of global emissions by 2050, recognizing that this global challenge can only be met by a global response, in particular, by the contributions from all major economies, consistent with the principle of <u>common but differentiated responsibilities</u> and respective capabilities. Substantial progress toward such a long-term goal requires, inter alia, in the near-term, the acceleration of the deployment of existing technologies, and in the medium- and long-term, will depend on the development and deployment of low-carbon technologies in ways that will enable us to meet our sustainable economic development and energy security objectives. In this regard, we emphasize the importance and urgency of adopting appropriate measures to stimulate development and deployment of innovative technologies and practices.

24. Making progress towards the shared vision, and a long-term global goal will require mid-term goals and national plans to achieve them. <u>These plans may reflect a diversity</u> of mitigation and adaptation approaches. Sectoral approaches are useful tools among

others for achieving national emission reduction objectives. We look forward to discussing this issue with leaders of other major economies tomorrow and to continuing the discussions among the major economies and in the UNFCCC negotiations over the coming months. We <u>recognize</u> that what the major developed economies do will differ from what major developing economies do, <u>consistent with the principle of common but</u> <u>differentiated responsibilities and respective capabilities</u>. In this respect, we <u>acknowledge</u> our leadership role and each of us will implement ambitious economy-wide mid-term goals in order to achieve absolute emissions reductions and, <u>where applicable</u>, first stop the growth of emissions as soon as possible, reflecting comparable efforts among all developed economies, <u>taking into account differences in</u> <u>their national circumstances</u>. We will also help support the mitigation plans of major developing economies by technology, financing and capacity-building. At the same time, in order to ensure an effective and ambitious global post-2012 climate regime, all major economies will need to commit to meaningful mitigation actions to be bound in the international agreement to be negotiated by the end of 2009.

25. Sectoral approaches can be useful tools to improve energy efficiency and reduce GHG emissions through <u>dissemination of existing and new technologies</u> in a manner <u>compatible with economic growth</u>. We ask the IEA to enhance its work on voluntary sectoral indicators through improved data collection, complemented by business initiatives.

We emphasize the importance of expeditious discussions in the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO) for <u>limiting or reducing GHG emissions in the international aviation and maritime sectors</u>, bearing in mind the distinct processes under the UNFCCC toward an agreed outcome for the post-2012 period.

26. We recognize the importance of setting mid-term, aspirational goals for energy efficiency. In national goals and objectives, as well as in country specific action plans, we will maximize implementation of the IEA's 25 recommendations on energy efficiency.

We welcome the recent decision to establish the International Partnership for Energy Efficiency Cooperation (IPEEC), of which the terms of association will be determined by the end of this year, as a high level forum for enhancing and coordinating our joint efforts to accelerate the adoption of sound energy efficiency improvement practices.

We invite all interested countries to join those efforts.

27. We <u>promote</u> clean energy, given its importance in tackling climate change and for the enhancement of energy security, by setting national goals and formulating action

plans followed by appropriate monitoring. We <u>believe</u> that there are significant and growing economic and employment opportunities in this sector.

We <u>recognize</u> the important role of renewable energy in tackling climate change and in the long term reducing our dependency on fossil fuels.

We <u>underscore</u> the <u>importance of sustainable biofuel production and use</u>. The same should apply for the broader use of biomass for fuel, heat and electricity. We <u>support</u> the work of the "Global Bioenergy Partnership" (GBEP) and <u>invite</u> it to work with other relevant stakeholders to develop science-based benchmarks and indicators for biofuel production and use. We <u>are committed to</u> continuing research and development of second generation biofuel technologies.

28. We <u>witness</u> that a growing number of countries have expressed their interests in nuclear power programs as a means to addressing climate change and energy security concerns. <u>These countries regard nuclear power as an essential instrument in reducing dependence on fossil fuels and hence greenhouse gas emissions.</u> We <u>reiterate that</u> safeguards (nuclear nonproliferation), nuclear safety and nuclear security (3S) are fundamental principles for the peaceful use of nuclear energy. Against this background, an international initiative proposed by Japan on 3S-based nuclear energy infrastructure will be launched. We <u>affirm</u> the role of the International Atomic Energy Agency (IAEA) in this process.

29. <u>Recognizing</u> the linkage between the potential impacts of climate change and development, mitigation and adaptation strategies should be pursued as part of development and poverty eradication efforts. A successful global response to climate change requires a partnership between developing and developed countries. Developing countries' efforts to put in place appropriate national mitigation and adaptation plans to build low carbon, <u>climate resilient economies</u>, should be supported by scaled up assistance from developed countries.

30. <u>Recognizing</u> that poorer countries are among the most vulnerable to the adverse impacts of climate change, we will continue and enhance cooperation with developing countries, in particular least developed countries (LDCs) and <u>small island</u> developing states, in their efforts to adapt to climate change including disaster risk reduction. To address this issue, we <u>commit to support urgent</u> actions to mainstream adaptation into broader development strategies and <u>encourage</u> developing countries themselves to integrate adaptation into their development policies. The early start of activities under the UNFCCC Adaptation Fund should make an important contribution in this respect. We <u>call on</u> the multilateral development banks and other development agencies to support countries in this endeavor.

31. We will establish an international initiative with the support of the IEA to develop roadmaps for innovative technologies and cooperate upon existing and new partnerships, including carbon capture and storage (CCS) and advanced energy technologies. Reaffirming our Heiligendamm commitment to urgently develop, deploy and foster clean energy technologies, we recognize and encourage a wide range of policy instruments such as transparent regulatory frameworks, economic and fiscal incentives, and public/private partnerships to foster private sector investments in new technologies. We strongly support the launching of 20 large-scale CCS demonstration projects globally by 2010, taking into account various national circumstances, with a view to beginning broad deployment of CCS by 2020.

To accelerate these and other efforts, we are committed to increasing investment in both basic and applied environmental and clean energy technology research and development (R&D), and the promotion of commercialization <u>including through direct</u> <u>government funding and fiscal measures</u> to encourage private sector investment. In this respect, G8 members have so far pledged over the next several years over US\$ 10 billion annually in direct government-funded R&D. We also <u>agree</u> to take various policy and regulatory measures to provide incentives for commercializing these technologies.

We <u>note</u> the opportunity to promote research on complementary technological approaches which may contribute towards maintaining a stable climate.

To respond to the growing demand for Earth observation data, we will <u>accelerate</u> efforts within the Global Earth Observation System of Systems (GEOSS), which builds on the work of UN specialized agencies and programs, in priority areas, <u>inter alia</u>, <u>climate change and water resources management</u>, by strengthening observation, prediction and data sharing. We also support capacity building for developing countries in earth observations and promote interoperability and linkage with other partners.

32. Substantial finance and investments will be needed to meet the urgent challenges of mitigation, adaptation and access to clean energy in developing countries. While the main sources of finance will be the private sector, public resources are essential to help the poorest and to leverage private resources, notably by financing incremental costs and can be very effective in inducing emissions reduction when national policies provide incentives for low carbon investment. In this regard, we welcome and support the establishment of the Climate Investment Funds (CIF) including the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF), administered by the World Bank. G8 members have thus far pledged approximately US\$ 6 billion as an ODA contribution to the funds and welcome commitments from other donors. The CIF will scale up public and private finance. They will have broad-based and inclusive governance mechanisms and, as an interim measure, fill an immediate financial gap for urgent actions until a new financial architecture under the post-2012 regime is effective. The CTF will aim to promote low-carbon economies by helping to finance deployment in developing

countries of commercially available cleaner energy technologies through investments in support of credible national mitigation plans that include low-carbon objectives. The SCF will help more vulnerable countries develop climate-resilient economies and take actions to prevent deforestation, and <u>could provide</u> helpful lessons <u>in the context of</u> <u>discussions on post-2012 financing arrangements</u>. These funds will complement existing multilateral efforts, including the Global Environmental Facility (GEF), which plays the key role as the main financial instrument of the UNFCCC and which we are committed to reinforcing. We also welcome various bilateral financial initiatives taken by G8 members, including public/private partnerships capable of generating additional investment. We expect such financial assistance to be delivered in a coordinated manner and encourage active engagement by developing countries in an effective post-2012 framework.

33. Market mechanisms, such as emissions-trading within and between countries, tax incentives, performance-based regulation, fees or taxes and consumer labeling can provide pricing signals and have the potential to deliver economic incentives to the private sector. We also <u>recognize</u> that they help to achieve emission reductions in a cost effective manner and to stimulate long-term innovation. We intend to promote such instruments in accordance with our national circumstances and share experience on the effectiveness of the different instruments. In this regard, we welcome the Action Plan for Climate Change to Enhance the Engagement of Private and Public Financial Institutions adopted by our Finance Ministers.

34. Efforts in the WTO negotiations to eliminate tariffs and non-tariff barriers to environmental goods and services <u>should be enhanced</u> with a view to disseminating clean technology and skills. <u>Additionally</u>, consideration should be given to the reduction or elimination of trade barriers on a voluntary basis on goods and services directly linked to addressing climate change. We also agree to encourage initiatives contributing to climate change mitigation including purchasing and investment policies and practices that promote and support the cleaner and more efficient products and services that can contribute to lower carbon emissions.

35. We <u>welcome</u> the final report of the Gleneagles Dialogue on Climate Change, Clean Energy and Sustainable Development. We also welcome the reports submitted by the IEA and the World Bank on their work related to the Gleneagles Plan of Action and continue to cooperate with those organizations. We <u>value</u> the useful exchange of views both between member countries and also business and civil society participants and acknowledge the role that further exchanges of this nature can play in supporting action on climate change and the UNFCCC process.

We <u>note</u> the significant progress made by the multilateral development banks on the Clean Energy Investment Framework (CEIF) agreed at Gleneagles and <u>welcome</u> their joint level of ambition to mobilize public and private investments of over US\$ 100 billion up to 2010 from within existing resources. We <u>call upon</u> these Banks to build on the CEIF to develop comprehensive strategies to guide the integration of climate change into their development work and to set specific targets for low carbon investments like renewable energy.