

Gleneagles Plan of Action

Climate Change, Clean Energy and Sustainable Development

1. We will take forward actions in the following key areas:

- Transforming the way we use energy
- Powering a cleaner future
- Promoting research and development
- Financing the transition to cleaner energy
- Managing the impact of climate change
- Tackling illegal logging

Transforming the way we use energy

2. Improvements to energy efficiency have benefits for economic growth and the environment, as well as co-benefits such as reducing greenhouse gas emissions, preventing pollution, alleviating poverty, improving security of energy supply, competitiveness and improving health and employment.
3. At Evian, we agreed that energy efficiency is a key area for G8 action. And following agreement at the Sea Island Summit in 2004, the 3Rs (Reduce, Reuse, Recycle) initiative was launched in Tokyo this April – an important step towards encouraging more efficient use of resources and materials, which increases economic competitiveness whilst decreasing environmental impacts.
4. We also recognise the importance of raising consumer awareness of the environmental impact of their behaviour and choices including through international efforts such as the United Nations Decade of Education for Sustainable Development.

Buildings

5. To promote energy efficient buildings, we will:
- (a) invite the International Energy Agency (IEA) to review existing building standards and codes in developed and developing countries, develop energy indicators to assess efficiency, and identify policy best practices;
 - (b) encourage the work of existing partnerships such as the Renewable Energy and Energy Efficiency Partnerships in outreach to developing countries; and

- (c) develop domestic guidelines or standards for the procurement and management of public buildings in our respective countries.

Appliances

- 6. To encourage co-ordination of international policies on labelling, standard setting and testing procedures for energy efficiency appliances, we will:
 - (a) promote the application of the IEA's 1 Watt Initiative;
 - (b) ask the IEA to undertake a study to review existing global appliance standards and codes, building on its existing capacity on energy efficiency in appliances;
 - (c) extend the use of clear and consistent labelling to raise consumer awareness of energy consumption of appliances;
 - (d) work nationally and in co-operation with other countries to seek improvements in the efficiency and environmental performance of products in priority sectors; and
 - (e) explore the potential to co-ordinate standards with other countries, building on the examples provided by existing international bodies.

Surface transport

- 7. We will encourage the development of cleaner, more efficient and lower-emitting vehicles, and promote their deployment, by:
 - (a) adopting ambitious policies to encourage sales of such vehicles in our countries, including making use of public procurement as appropriate to accelerate market development;
 - (b) asking the IEA to review existing standards and codes for vehicle efficiency and identify best practice;
 - (c) encouraging co-operation on technology research, development and, where relevant, deployment in areas including cleaner gasoline and diesel technologies, biofuels, synthetic fuels, hybrid technology, battery performance and hydrogen-powered fuel cell vehicles;
 - (d) continuing our discussions on these issues at the United Kingdom's international conference in November on cleaner, more efficient vehicles; and
 - (e) raising consumer awareness of the environmental impact of their vehicle choices, including through clear and consistent labelling for relevant energy consumption, efficiency and exhaust emissions data, and

encouraging the provision of clearer information on the result of driving behaviour and choices for mode of transport.

Aviation

8. We will:

- (a) undertake a programme of collaborative work to explore and accelerate the potential for operational advances (including air traffic control and ground operations) that will continue to enhance safety, improve fuel efficiency and reduce emissions in air transport;
- (b) work with [the IPCC] to provide, as part of its forthcoming Fourth Assessment Report, an up-to-date assessment of the latest evidence on aviation's impacts on the climate;
- (c) support climate science research, aimed at improving our understanding of specific issues such as contrails and cirrus cloud effects, to inform technological and operational responses;
- (d) encourage co-ordination among our existing national research programmes on long-term technology developments with the potential to significantly reduce emissions.

Industry

9. We will:

- (a) Work with the multilateral development banks (MDBs) to expand the use of voluntary energy savings assessments as a part of major investments in new or existing projects in energy intensive sectors;
- (b) invite the IEA to develop its work to assess efficiency performance and seek to identify areas where further analysis of energy efficiency measures by industry sector could add value, across developed and interested developing countries;
- (c) develop partnerships, including sectoral and cross-border partnerships, with industry to reduce the greenhouse gas emissions intensity of the major industrial sectors of our economies; and
- (d) continue to support the work of the UNFCCC clearing house on technology transfer *TT:Clear* in disseminating information on available technologies, and cooperate further on sharing information on best practices and national policies to encourage the deployment of energy efficiency technologies.

Powering a Cleaner Future

10. Reliable and affordable energy supplies are essential for strong economic growth, both in the G8 countries and in the rest of the world. Access to energy is also critical for poverty alleviation: in the developing world, 2 billion people lack access to modern energy services.
11. To respond to the scale of the challenges we face, [and reduce greenhouse gas emissions], we need to diversify our energy supply mix, including increased use of renewables. Fossil fuels will continue to be an important part of the global energy mix, and we will need to find ways to manage the associated air pollution and greenhouse gas emissions. We need to capitalise on all the opportunities available to improve the efficiency along the entire process chain, from extraction, to energy generation and transmission, and to maximise the large and untapped potential of lower-emitting alternative sources of energy.
12. We take note of the efforts of those G8 members who will continue to use [zero carbon] nuclear energy, to develop more advanced technologies that would be safer, more reliable and more resistant to diversion and proliferation [and who continue to work on managing the issues of nuclear waste and decommissioning]. We also note the efforts of those participating G8 members as they continue to develop the next generation of cleaner, safer nuclear energy systems through the Generation IV International Forum and advance the long-term goals of International Thermonuclear Experimental Reactor (ITER).

Cleaner Fossil Fuels

13. We will support efforts to make electricity generation from coal and other fossil fuels cleaner and more efficient by:
 - (a) supporting IEA work in major coal using economies to review, assess and disseminate widely information on energy efficiency of coal-fired power plants; and to recommend options to make best practice more accessible;
 - (b) inviting the IEA to carry out a global study of recently constructed plants, building on the work of its Clean Coal Centre, to assess which are the most cost effective and have the highest efficiencies and lowest emissions, and to disseminate this information widely; and
 - (c) continuing to work with industry and with national and international research programmes and partnerships on projects to demonstrate the potential of advanced fossil fuel technologies, including clean coal.

14. We will work to accelerate the development and commercialization of Carbon Capture and Storage technology by:
 - (a) endorsing the objectives and activities of the Carbon Sequestration Leadership Forum (CSLF), and encouraging the Forum to work with broader civil society and to address the barriers to the public acceptability of CCS technology;
 - (b) inviting the IEA to work with the CSLF to hold a workshop on short-term opportunities for CCS in the fossil fuel sector, including from Enhanced Oil Recovery and CO₂ removal from natural gas production;
 - (c) inviting the IEA to work with the CSLF to study definitions, costs, and scope for 'capture ready' plant and consider economic incentives;
 - (d) collaborating with key developing countries to research options for geological CO₂ storage; and
 - (e) working with industry and with national and international research programmes and partnerships to explore the potential of CCS technologies, including with developing countries.
15. We will encourage the capture of methane, a powerful greenhouse gas, by:
 - (a) supporting the Methane to Markets Partnership and the World Bank Global Gas Flaring Reduction Partnership (GGFR), and encouraging expanded participation; and
 - (b) working bilaterally to support an extension of the World Bank's GGFR Partnership beyond 2006.

Renewable energy

16. We will promote the continued development and commercialisation of renewable energy by:
 - (a) promoting the International Action Programme of the Renewables 2004 conference in Bonn, starting with a Conference at the end of 2005, hosted by the Chinese government, and supporting the Renewable Energy Policy Network (REN 21);
 - (b) welcoming the work of interested parties, including in partnerships, to take forward the Johannesburg Plan of Implementation, including the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Mediterranean Renewable Energy Partnership (MEDREP);
 - (c) working with developing countries to provide capacity-building assistance, develop policy frameworks, undertake research and

development, and assess potential for renewable energy, including bioenergy;

- (d) [launching a Global Bioenergy Partnership to support wider, cost effective, biomass and biofuels deployment, particularly in developing countries where biomass use is prevalent following the Rome International Workshop on Bioenergy;]
- (e) welcoming the establishment and further development of the range of IEA implementing agreements on renewable energy.

Electricity Grids

17. We will work with the IEA to:

- (a) draw together research into the challenges of integrating renewable energy sources into networks and optimising the efficiency of grids, and produce a report; and
- (b) identify and link "Centres of Excellence" to promote research and development in the developed and developing world; and
- (c) promote workshops during 2006/07 aimed at evaluating and promoting means to overcome technical, regulatory and commercial barriers.

Promoting networks for research and development

- 18. We recognise the need for increased commitment to, international cooperation in and coordination of research and development of energy technologies. We will continue to take forward research, development and diffusion of energy technologies in all the fields identified in the Evian Science and Technology Action Plan.
- 19. We express our support for research and development of technologies and practices that use hydrogen as an energy carrier. We encourage continued support for the work of the IEA and International Partnership for the Hydrogen Economy (IPHE) to co-ordinate research efforts in this area.

20. We take note of the Energy Research and Innovation Workshop held in Oxford in May 2005, and will:

(a) work with the IEA to:

- build on the work already underway through its implementing agreements to facilitate cooperation and share energy research findings;
- reinforce links with the international business community and developing countries;
- create an inventory of existing collaborative efforts to facilitate exchange on their effectiveness; and

(b) raise the profile of existing research networks and encourage broader participation where appropriate; and

(c) seek ways to improve the current arrangements for collaboration between developed and developing countries, and enhance developing country participation in existing networks.

Financing the transition to cleaner energy

21. Positive investment climates and effective market models are critical to the uptake of new technologies and increased access to energy for economic growth. We recognise that there are a range of tools to support a market-led approach to cleaner technology and energy resources and that each country will select those appropriate to its national circumstances.

22. We will:

(a) support a market-led approach to encouraging energy efficiency and accelerating investment and the deployment of cleaner technologies which will help transition to a low-emission future;

(b) adopt market-based policy frameworks which support re-investment in capital stock turnover, remove barriers to direct investment and provide clear and consistent long-term signals, including pricing and regulatory signals, to provide confidence in the value of investments to reduce emissions of greenhouse gases and / or pollutants;

(c) We will promote dialogue on the role, suitability and timing of various policy approaches within the context of each country's national circumstances, including:

- Developing long-term sectoral, national or international policy frameworks including goals or targets;
- Market-based instruments including fiscal or other incentives for the development and deployment of technologies, tradable certificates

and trading of credits for reductions of emissions of greenhouse gases or pollutants; and

- Project-based and voluntary offset mechanisms.

23. Those of us who have ratified the Kyoto Protocol will

- (a) Work to strengthen the implementation of the market mechanisms (including Joint Implementation, international emissions trading and the Clean Development Mechanism). These mechanisms have a wider potential to help deliver our goals;
- (b) explore ways to link credits from Joint Implementation and Clean Development Mechanism and those from different emissions trading systems, with a view to exploring synergies for global emissions reduction;
- (c) use our best endeavours to ensure that the CDM Executive Board and related institutions to support emissions trading are adequately funded by the end of 2005;
- (d) explore options including institutional reform to streamline the operation of the market mechanisms and provide greater certainty for their longer-term role.]

24. [We acknowledge the valuable role of the Global Environment Facility in facilitating cooperation with developing countries on cleaner, more efficient energy systems and look forward to a successful replenishment this year.]

25. We will invite the World Bank and other multilateral development banks (MDBs) to increase dialogue with borrowers on energy issues and put forward specific proposals at their annual meetings to:

- (a) make the best use of existing resources and financing instruments and develop a framework for energy investment to accelerate the adoption of technologies which enable cleaner, more efficient energy production and use;
- (b) explore opportunities within their existing and new lending portfolios to increase the volume of investments made on renewable energy and energy efficiency technologies consistent with the MDBs' core mission of poverty reduction;
- (c) work with interested borrower countries with significant energy requirements to identify less greenhouse gas intensive growth options which meet their priorities; and ensure that such options are integrated into Country Assistance Strategies.

- (d) develop local commercial capacity to develop and finance cost-effective projects that promote energy efficiency and low-carbon energy sources.
- 26. We will continue to work through our bilateral development programmes, in line with our national priorities, to promote more sustainable energy policies worldwide.
- 27. [We will work with Export Credit Agencies with a view to enhancing the economic and financial viability of cleaner energy projects, thereby increasing the volume of support for such business.]
- 28. We will work through multi-stakeholder partnerships to develop the policy, regulatory and financing frameworks needed in the major developing countries to provide a commercially attractive balance of risk and reward to private investors.

Managing the impact of climate change

- 29. [We are already seeing the impacts of climate change, for example in Africa, in small island developing states, the Arctic and other regions.] We reaffirm the importance of the Intergovernmental Panel on Climate Change and welcome the extensive analysis of research being undertaken to complete its Fourth Assessment Report by 2007.
- 30. All countries need further access to information and to develop the scientific capacity that will allow their governments to integrate climate, environmental, health, economic and social factors into development planning and resilience strategies. We note that Africa's data deficiencies are greatest and warrant immediate attention.
- 31. We note the work of the UNFCCC in supporting developing countries to improve their capacity for adaptation and mitigation, including through the Special Climate Change Fund, Least Developed Countries Fund and the adaptation priority of the Global Environment Facility
- 32. We look forward to further discussions on how development and energy strategies can be strengthened to build resilience to climate impacts, including at the Millennium Review Summit in September 2005.

Monitoring and Data Interpretation

- 33. The G8 made a commitment at Evian to strengthen international cooperation on global Earth observations. We will continue to exercise leadership in this area, and welcome the adoption of the 10-year implementation plan for development of the Global Earth Observation System of Systems (GEOSS) at the Third Earth Observations Summit which took place in Brussels in February this year. We will:

- (a) move forward in the national implementation of GEOSS in our member states;
- (b) support efforts to help developing countries and regions obtain full benefit from GEOSS, including from the Global Climate Observing System (GCOS) such as placement of observational systems to fill data gaps, developing of in-country and regional capacity for analysing and interpreting observational data, and development of decision-support systems and tools relevant to local needs;
- (c) in particular, work to strengthen the existing climate institutions in Africa, through GCOS, with a view to developing fully operational regional climate centres in Africa.

Risk Management

30. We will:

- (a) Invite the World Bank to develop and implement "best practice" guidelines for screening their investments in climate sensitive sectors to determine how their performance could be affected by climate risks, as well as how those risks can best be managed, in consultation with host governments and local communities; and
- (b) invite other major multilateral and bilateral development organisations to adopt the World Bank guidelines, or develop and implement similar guidance.

Tackling illegal logging

- 31. We recognise the impacts that illegal logging has on the livelihoods of many in the poorest countries in Africa and elsewhere, on environmental degradation, biodiversity loss and deforestation and hence global sustainable development. We particularly recognise the importance of global carbon sinks, including the Congo Basin and the Amazon.
- 32. We agree that working to tackle illegal logging is an important step towards the sustainable management of forests. To tackle this issue effectively requires action from both timber producing and timber consuming countries.
- 33. We endorse the outcome of the G8 Environment and Development Ministerial conference on illegal logging. To further our objectives in this area we will take forward the conclusions endorsed at that meeting, with each country acting where it can contribute most effectively.