



## Global Warming and Sustainable Development

Like no other environmental issue, global warming threatens the well being of both developed and developing countries. While global warming is conspicuous by its near exclusion in the preparations for the World Summit on Sustainable Development (WSSD), energy--an issue intimately linked to global warming--is prominent on the WSSD agenda, and it needs to be addressed with global warming in mind. More than two billion people in the world today do not have access to sufficient energy and energy services to meet their basic needs. The world community is faced with the daunting challenge of providing all these people with access to clean and affordable energy services without exacerbating the problem of global warming. This can be accomplished only by dramatically reducing the world's reliance on fossil fuels and increasing the use of clean, renewable sources of energy and new technologies to make energy use more efficient.

Emissions from fossil fuels are the main contributors to environmental and health problems at the local, regional, and global levels. Today, approximately 80 percent of all energy used in the world comes from burning of fossil fuels. At the same time, an ever-expanding catalogue of energy-saving technologies, as well as reliable and cost-effective sources of renewable energy, is available to policy makers, energy producers and energy consumers. In every part of the world, these technologies make sense from both economic and environmental perspectives.

Now, when developing countries are rapidly increasing their energy usage, is the time to help them build new systems that are clean, efficient, affordable and sustainable. Continued reliance on coal and other fossil fuels to meet their burgeoning needs would be extremely costly, in the near term

because of the inevitable health and environmental problems associated with fossil fuel emissions, and in the longer term because global warming inevitably will require the replacement of dirty energy systems with climate-friendly ones.

The impacts of global warming are likely to hit developing countries hardest. In Africa, global warming threatens availability of fresh water, food security and productivity of natural resources. Waterborne and vector-borne diseases pose a special threat to regions with inadequate health infrastructures. Coastal zones could be severely damaged by erosion and sea-level rise, while areas prone to desertification will experience intensification of that problem. Boreal Asia is threatened by degradation of the permafrost, increased surface runoff, and more frequent and intense forest fires. Tropical monsoons and cyclones could become more intense, threatening Asia's crop production, biodiversity and human health. Latin America, with its high concentrations of biodiversity and dependence on natural resources, faces similar threats. Low-lying regions everywhere are threatened with inundation by sea-level rise.

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PROBLEMS AT THE LOCAL, REGIONAL,  
AND GLOBAL LEVELS.**

The United States and other industrialized countries have tried to blame developing countries for their own inaction on global warming. In fact, recent data shows that the gap between industrialized and developing country emissions may be widening. Only after industrialized countries take the

lead in addressing global energy and climate problems (problems largely of their own making, it should be noted), can developing countries be expected to follow. Industrialized countries must provide leadership by adopting policies to reduce greenhouse gas emissions, develop needed technology, and provide new and additional resources to help developing countries achieve sustainable development while managing their own emissions.

The United Nations estimates that developing countries require annual investments in their energy systems of US\$100 billion to US\$300 billion. Meeting this need without further jeopardizing the earth's climate system will require the concerted efforts of many private and public organizations. Industrialized countries must expand the financial resources they provide to developing countries through bilateral channels and special funds like the Global Environment Facility. They should also make new resources available to the private sector, including for the implementation and monitoring of "type 2" partnerships.

We urge all countries participating in the WSSD to undertake the following actions:

- Bring the Kyoto Protocol into force in 2002 or early 2003. The culmination of many years of hard work, the Kyoto Protocol provides a comprehensive and flexible framework that can meet the needs of all countries. Leadership by industrialized countries during the first commitment period will assure the full engagement of developing countries in the future. No country can be allowed to go its own way, and refusal to participate constructively within the Kyoto framework should be met with stern sanctions by the international community.

- Make available the financing and infrastructure to bring basic, clean and affordable energy services to the two billion people without adequate access to energy and energy services. Industrialized (OECD) countries should double their ODA-budgets, including the 2003 GEF replenishment, for sustainable energy services. These budgets should concentrate on sustainable energy policies, capacity building programs and clean technology projects. In particular, industrialized countries should immediately pay their arrears to the Global Environment Facility and agree to increase the 2003 replenishment by at least US\$500,000.

- Increase the share of renewable energy sources globally to 10% by 2010 and improve energy efficiency in all countries by at least 2% per year. Currently, only a miniscule amount of the electricity produced in developing countries comes from sustainable, renewable technologies (which do not include large-scale hydro or nuclear power). As much as 30% of produced electricity is lost even before it reaches end users. Thus, the capacity for improvement in the electricity sector alone is vast. Similar improvements can be made in industry, transport, agriculture and other key sectors.

- Target 20% of energy sector financing by international financial institutions and export credit agencies (ECAs) to renewable energy development and energy efficiency programs. During the 1990s the World Bank spent twenty-five times as much developing fossil fuels as it spent on clean energy technologies. Financing by other development banks was no better. While 20% financing of clean energy is an easily attainable goal for the near term, the long-term objective for these institutions should be to phase out fossil fuel projects completely and shift that financing to clean energy.

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- Phase out harmful subsidies and tariff barriers and erect helpful ones. Each year industrialized countries squander hundreds of billions of dollars supporting consumption of fossil fuels through tax credits, deferrals and exemptions, export credits, infrastructure, government research and myriad other measures. Tariff barriers to importation of clean energy technologies

force consumers to add to these subsidies. These measures should be eliminated or, better, shifted to support clean energy technologies.

- Help developing countries research, develop and manufacture efficient and renewable energy technologies and create a favourable regulatory and fiscal framework for these technologies. New technologies frequently fail in developing countries simply because replacement parts and trained technicians are in short supply, or because the technology is not suitable for the particular needs of the country. One solution is to help developing countries create and manufacture their own technologies. This requires new regulatory and fiscal policies that encourage private sector investment and fully account for the cost of energy production.

- Support local energy centers that can promote access to sustainable energy, disseminate information and serve as a focus for capacity building and job creation. Centers of excellence will allow developing countries to address their own energy problems consistent with their goals and strategies for sustainable development.

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