



OUR PLANET

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KICK THE HABIT

Towards a low carbon economy

OUR PLANET

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reflections

by Achim Steiner,
UN Under-Secretary-General and
Executive Director, UNEP

World Environment Day (WED) 2008 uses the theme of Kick the CO₂ Habit to catalyze grassroots action on the challenge of this generation — climate change. It is more than a strong and catchy phrase. If we are to move the global economy to a greener and cleaner one, a sharp reduction in the inefficient use of fossil fuels allied to an increased up take of renewable energy must be at the centre of the international response. There are also powerful arguments in favour of the making the transition 'Towards a Low Carbon Economy', with ever clearer evidence that this represents a huge opportunity rather than a burden. The Intergovernmental Panel on Climate Change (IPCC), established by UNEP and the World Meteorological Organisation, concludes that greening the global economy might cost as little as a few tenths of global GDP annually over the next 30 years. It will also be a driving force for innovation, new businesses and industries and employment opportunities across the developed and developing worlds. There are already many encouraging signs. Earlier this year UNEP launched its climate neutral network (CN Net). Countries, including Costa Rica, Norway and New Zealand, our main host for the global WED celebrations in 2008, are among the early movers. These countries, alongside a growing number of corporations and cities, are demonstrating that reducing emissions and engaging in carbon markets brings not only environmental benefits, but social and economic ones too.

UNEP is also a part the CN Net initiative and part of a wider UN one that is working towards climate neutrality across the organization's buildings, missions and operations. It has the full support of Ban Ki-Moon, the UN Secretary-General, who has made climate change among his top priorities. During 2008, we will look to broaden participation in the CN Net to communities, non-governmental organizations, households and individuals. There are other promising signals, driven by the existing emissions reductions treaty, the Kyoto Protocol, and the promise of even deeper emissions reductions on the near horizon.

- Close to 60 countries have targets for renewables, including 13 developing countries, while around 80 have market mechanisms in place to encourage renewable energy development.
- Over 20 per cent of new investment in renewable energy is in developing countries, with China, India and Brazil taking the lion's share with 9, 5 and 4 per cent respectively in 2006.
- Renewables now provide over 5 per cent of global generation and 18 per cent of new investment in power generation.
- The Clean Development Mechanism of the Kyoto Protocol in 2006 mobilized investment in renewables and energy efficiency projects worth close to \$6 billion.
- Emissions trading, developing mostly as a result of the European Union's Trading Scheme, saw 362 million tonnes of CO₂ traded in 2005 worth around 7 billion Euros.



- UNEP, working with two Indian banks, has developed a household consumer credit market that has brought solar power to 100,000 people on the subcontinent. The initiative is now self-financing and set to be piloted elsewhere.
- The decision at the last climate convention meeting in Bali to include Reduced Emissions from Deforestation and Degradation (REDD) opens the door for forests to be more widely factored into efforts. The Government of Norway has announced it will provide \$2.7 billion over the next five years as incentives for REDD.

Adaptation funds are also beginning to flow for 'climate proofing' economies. There is now an urgent need to secure significant additional funds to assist developing and least developed economies. There is also a great deal of creativity being stimulated. A Solar Grand Plan for the United States that, by 2050, could supply almost 70 per cent of the country's electricity and 35 per cent of its energy needs has been proposed. Surplus electricity from solar would be used to compress air which would be stored in aquifers, caverns and so on and used to turn turbines at night.

In America alone \$40 billion worth of heat goes down the drain. A firm is making tiny pumps that extract the heat from warm washing-up water, to supplement a house's hot water supplies. Icelandic scientists are piloting a project to inject CO₂ into rock strata where it turns into limestone. In Kenya, researchers are isolating the enzymes termites use to convert woody wastes into sugars to put towards environmentally-friendly biofuel production.

So, WED 2008 does not come in a vacuum but is very much part of a global effort to de-carbonize societies that is touching and empowering all areas of private and public life. It is also a milestone along the Bali Road Map that is designed to guide the world to a decisive post-2012 emissions reduction regime by late 2009. Last year's WED successfully used the theme Melting Ice: A Hot Topic? to catalyze grassroots action by millions of people in close to 100 countries around the world on the climate change challenge. On this special UN day, let us send a loud and clear message that the global public wants the transformational changes already underway to continue and to accelerate — that each and everyone wants personal, corporate and political action to "Kick the CO₂ Habit".

UNEP promotes

environmentally sound practices
globally and in its own activities.

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paper, using vegetable-based inks and other
eco-friendly practices. Our distribution policy
aims to reduce UNEP's carbon footprint.

Cover photo © ANTHONY WEST/ Corbis. Kick the Habit is the theme of this year's World Environment Day on 5 June, a call for worldwide action against global warming. Climate change is the defining issue of our era — in order to address this, countries, companies, communities and individuals must focus on reducing their greenhouse gas emissions and kicking the carbon habit. There are many paths to low carbon economies and lifestyles, from energy efficiency and alternative energy sources to forest conservation and eco-friendly consumption.

people

Dr. **BALGIS OSMAN-ELASHA**, the winner of the Champions of the Earth award for Africa,



is a senior scientist from Sudan who is at the forefront of global research on climate change. A leading author of the Intergovernmental Panel on Climate Change (IPCC) reports, she has produced groundbreaking work on global warming in Africa, with an emphasis on northern and eastern Africa. Dr. Osman-Elasha's work is of vital relevance given the strong links between climate change and conflict in Sudan. The award also recognizes Dr. Osman-Elasha's efforts to educate Sudanese university students about climate change, thus raising awareness among the country's new generation.

The 2008 Champion of the Earth for Asia and the Pacific comes from Bangladesh, a country highly vulnerable to climate change and flooding.

Dr. **ATIQ RAHMAN**, Executive Director of the



Bangladesh Centre for Advanced Studies is an eloquent advocate for sustainable development. He has transformed the NGO into a leading think-tank on sustainable development issues in South Asia. As one of the most highly respected and referenced specialists in his field, with extensive publications

on environment and development in Bangladesh, Dr. Rahman has helped to raise awareness of the hazards of global warming throughout Asia.

One of His Serene Highness **PRINCE ALBERT II**'s first acts as sovereign of Monaco was to sign the Kyoto Protocol — an eloquent indication of his longstanding commitment to the environment. Prince Albert II, the 2008 Champion of the Earth for Europe, has been a prominent voice on environmental issues since the early 1990s. Prince Albert's involvement in raising awareness on climate change includes leading an expedition to the North Pole in 2006 to draw attention to the consequences of global warming. The Prince



Albert II of Monaco Foundation, which he created in 2006, works to protect the environment and promote sustainable development. Prince Albert is also a patron of the Billion Tree Campaign, which successfully led to the planting of more than a billion trees across the planet in 2007.

For the last 30 years, **TIMOTHY E. WIRTH** — the 2008 Champion of the Earth for North America — has been an advocate for the environment in the United States. During his time as US Under Secretary of State for Global Affairs, Mr. Wirth — a



strong supporter of the Kyoto Protocol — was instrumental in raising awareness and calling for policy action on global warming. As the president of the UN Foundation and Better World Fund, Mr. Wirth has established the environment as a key priority, and is mobilizing resources to address crucial issues from biodiversity to climate change and renewable energy. Mr. Wirth was also a steadfast advocate on environmental issues during his time as a member of the US Senate, when he authored the Colorado Wilderness Bill as well as other successful legislation on energy, conservation and environmental protection.

H.E. **LIZ THOMPSON**, the Champion of the Earth for Latin America and the Caribbean, has become one of the recognized leaders on environmental issues in Small Island Developing States. During her time as Minister of Energy and the Environment of Barbados, she enacted a range of progressive policies for sustainable development and environmental protection. She also became a key voice raising awareness of global warming in Barbados and has played a role in environmental awareness and protection across the Caribbean



region. She has encouraged Small Island Development States to diversify their economies, undertake sustainability assessments, and promote community-based programmes that have positive environmental impacts.

H.E. **ABDUL-QADER BA-JAMMAL** has had a truly pioneering influence on environmental protection in Yemen — a country which faces acute challenges from water scarcity to desertification. During his time as Minister and then Prime Minister, he established Yemen's Ministry of Water and Environment and Environment Protection Authority and implemented a series of groundbreaking environmental policies in Yemen



and the region. The 2008 Champion of the Earth for West Asia has also orchestrated conservation efforts for the Socotra archipelago, a site of global importance for biodiversity, and established a state agency for the development of Yemeni islands with a focus on the conservation of marine resources.

By setting a carbon neutral goal for New Zealand, Prime Minister **HELEN CLARK** is blazing new trails in the fight against climate change. Helen Clark's policy initiatives to make her country greener have earned her the UNEP Special Prize in this year's Champions of the Earth awards. The Prime Minister's policies promote renewable energy and energy efficiency across key sectors of the economy, with initiatives including the New Zealand Emissions Trading Scheme and the Energy Efficiency and Conservation Strategy. Helen Clark's government is also achieving substantial advances on environmental protection, from forestry and agriculture to improving public awareness and boosting private sector involvement in



sustainability. Aptly enough, New Zealand will be hosting this year's World Environment Day on 5 June with the slogan 'Kick the Habit! Towards a Low Carbon Economy'.

Climate Change: A Global Issue

Message from New Zealand's
Prime Minister Rt Hon Helen Clark



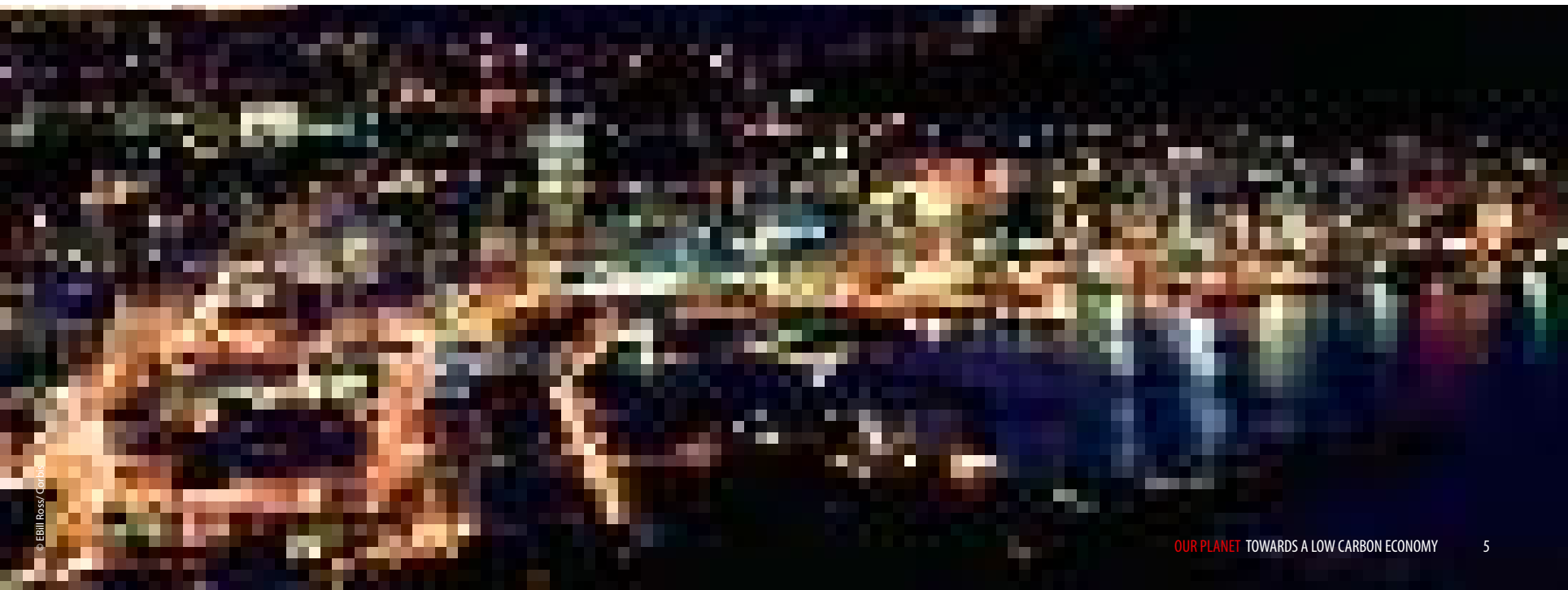
It was with great pleasure that New Zealand accepted the invitation to host World Environment Day 2008. Climate change is the single biggest environmental issue facing the world today and I am honoured New Zealand has been invited to host this year's event.

Droughts and floods, rising sea-levels, melting ice, degrading eco-systems, loss of biodiversity and other impacts of climate change pose the potential for problems on a global scale requiring nations to collaborate to develop solutions. Countries around the world are recognising their roles in finding creative ways to face up to unprecedented challenges.

New Zealand is very aware of its responsibility to act. We take pride in our clean, green identity as a nation and we are determined to take action to protect it. We appreciate that protecting the climate means behaviour change by each and every one of us.

In early 2007 I issued the challenge for New Zealand to become a truly sustainable nation and even to aspire to be carbon neutral. Our government has launched a comprehensive set of policies for sustainability, including an emissions trading scheme, energy strategies (including energy efficiency and conservation), and programmes to help householders and businesses become more sustainable. These are designed to meet the challenges and grasp the opportunities of climate change. During 2008 we will build on these.

Every year World Environment Day focuses us all on the critical importance of protecting our environment. It provides an opportunity to learn from the experience of others. My hope for World Environment Day 2008 is that it will motivate governments, businesses, and communities around the world to take the actions necessary to bring about lasting improvements, and by these actions ensure the ability of the planet to sustain future generations.



unique challenge

Angela Merkel talks to *Our Planet*

Why did you decide, from the start of your Chancellorship, to put a high priority on addressing climate change? How important in this was your background as a scientist and your experience as Environment Minister in the 1990s?

Climate change is a key issue for the future that confronts each and every one of us. Not in ten or twenty years' time, but right now. How will climate change alter our personal environment? Is our home safe? Can we take any precautions? What energy sources should we choose? More and more people in the world are asking themselves these questions.

Climate change is also an ethical challenge. We must allow future generations the things we claim for ourselves. They too must have the chance of an environment worth living in.

Climate change has long been a personal concern of mine. Certainly my experience as Federal Environment Minister left its mark. The World Climate Conference, which I chaired in Berlin in 1995, and the negotiations in Kyoto in 1997 were decisive points for me. The Kyoto Protocol was the correct first step towards international climate protection. We must make sure further steps follow — in particular, a follow-up agreement to the Kyoto Protocol in 2009.

How great, in your view, is the threat of dangerous climate change and how urgently does action need to be taken to combat it?

I am convinced we will need to make crucial decisions very soon indeed on the course to be taken. By the middle of this century we must have reduced global greenhouse gas emissions by at least half compared with the 1990 level. Doing so will pay off in economic terms too. We know that investment in sensible climate protection is worthwhile. The cost of doing nothing is greater than the cost of investment in climate protection. But the longer we wait, the more expensive it will be.

From the security aspect as well, there is a need to change our approach now. The consequences of climate change become more and more of a security problem when the repercussions become life-threatening for many people. For instance, I am greatly worried by the danger of global migratory flows owing to water shortages. UNEP estimates that in 20 years' time 1.8 billion people could be at risk of absolute water shortages.

What is your assessment of the outcome of the Bali negotiations? What now needs to be done to build on it?

Bali took us a good way forward on some key issues: we have a comprehensive negotiating mandate for a follow-up agreement to the Kyoto Protocol and a clear timetable up to 2009. All states are involved — industrial countries, emerging economies and developing countries. Now it is a matter of taking the negotiations forward rapidly and in a concentrated manner.

What are the chances of reaching a new agreement, measuring up to the scale of the challenge, by the end of 2009? What elements should it contain?

We have a good basis from which to start, because the international community has made it clear that it is willing to face up to the challenge. Now the aim must be to decide on concrete measures to limit climate change. We must lay down who has to make what contribution towards reducing greenhouse gases, towards the better spread of climate-friendly technologies, towards adapting to climate change and, not least, towards the financing of necessary measures.

It is important for the success of the negotiations that all states understand this: combating climate change contributes to sustainable development

and does not — as is occasionally claimed — endanger economic progress, particularly in emerging economies and developing countries.

I am convinced that the agreement must build on a shared vision of future climate protection endeavours, and contain clear targets for reductions by industrial countries and verifiable contributions by emerging economies. To this end, we must stipulate how climate protection measures by the developing countries should be credited under this international agreement. Industrial countries must help developing countries in their efforts — for instance via cooperation in the field of technology.

Has the world taken adequate steps to address adaptation to climate change? What needs to be done?

Only if we have a clear idea of how far we want to reduce greenhouse gas emissions can we estimate how much of an effort will be needed to adapt. It is already clear, however, that the least developed countries, in particular, will be hard hit by climate change. We are already familiar with many of the effects of climate change: more extreme weather conditions, new health risks, problems with the cultivation of agricultural products or shortages of drinking water.


In Bali we succeeded in setting up an adaptation fund for the developing countries. It is intended to help them take preventive measures against the worst effects of climate change. The future climate protection agreement will need to contain further financial instruments, because experts estimate that many billions of euros might be needed each year for adaptation.

What has Germany done to combat global warming? What more do you plan to do, and how will it be achieved?

In Germany we have cut greenhouse gas emissions by more than 18 per cent since 1990. We want to continue to play a leading role in climate protection. So on 5 December 2007 the Federal Government adopted the first part of an integrated energy and climate programme. The programme is an ambitious one and includes, in particular, measures to expand co-generation of heat and power and renewable energies in the electricity sector, the promotion of renewable energies for heating and measures to improve the energy efficiency of buildings. A total of €2.6 billion is available for this in 2008. Thanks to this programme, Germany is establishing an important platform from which to cut its greenhouse gas emissions by 40 per cent (as compared to 1990 levels) by 2020.

What do you believe to be the chances that humanity will succeed in avoiding dangerous climate change?

Tackling climate change poses a unique challenge. We can only meet it if all states work together. That is why climate policy also opens a window for international cooperation. In technical and economic terms, many of the requirements for reducing greenhouse gases are already in place. Examples of this include efficiency technologies such as heat insulation and energy-saving bulbs, or renewable energies which are becoming more and more affordable. Such innovations are already contributing to economic growth and thus to the creation of new jobs.

In other areas, however, there is still a great deal to be done. We must rethink the way we produce energy and goods. We need a new way of living, with new economic opportunities, which enhances our quality of life while using up fewer resources. If we pursue the principle of sustainable development in both the industrial and the developing countries, then we can prevent climate change from becoming a danger threatening life all over the world. 

verbatim



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“It is clear that a failure to address climate change is a failure to protect children. Those who have contributed least to climate change — the world’s poorest children — are suffering the most. If the world does not act now to mitigate and adapt to the risks and realities of climate change, we will seriously hamper efforts to reach the Millennium Development Goals (MDGs) by 2015 and sustain development progress thereafter.”

David Bull, UNICEF UK Director

“Producing biofuels is a crime against humanity”

Jean Ziegler, the UN’s special rapporteur for the right to food

“While many are worrying about filling their gas tanks, many others around the world are struggling to fill their stomachs.”

World Bank President Robert Zoellick

“Biofuels aren’t the villain that threatens food security. On the contrary... they can pull countries out of energy dependency without affecting foods.”

Brazilian President Luiz Inacio Lula da Silva

“Energy must not be a barrier to our comfort. Our emerging middle class... demands lots of energy and it is our job to ensure comfortable supply.”

Vsevolod Gavrilov, the official in charge of Russia’s Kyoto obligations

“The climate debate has become a series of disconnected discussions. It’s odd how intelligent people can continue to argue like this in the face of such stark evidence. (...) We run the risk of the greatest policy failure in the history of mankind.”

UNEP Executive Director Achim Steiner

“Africa’s future need not be entrenched in vulnerability and hopelessness in the face of climate change. I believe Africa has extraordinary potential and opportunity to contribute to sustainable development and thereby set an example for the rest of the world.”

Balgis Osman-Elasha, senior climate change scientist from Sudan who was awarded UNEP’s 2008 Champions of the Earth award

“We can all take practical steps to be more energy-efficient and we all have lots to learn in the coming years on how to improve our carbon footprint on the planet.”

Ellen MacArthur, solo round-the-world sailor

“The world we have created today as a result of our thinking thus far has created problems that cannot be solved by thinking the way we thought when we created them.”

Albert Einstein

5

percentage of total global of carbon dioxide emissions produced by shipping
— *Institute for Physics and*

numbers

2

tonnes of CO₂ that the average UK

1.21

30

percentage growth in the Earth’s population since 1987. Global economic

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