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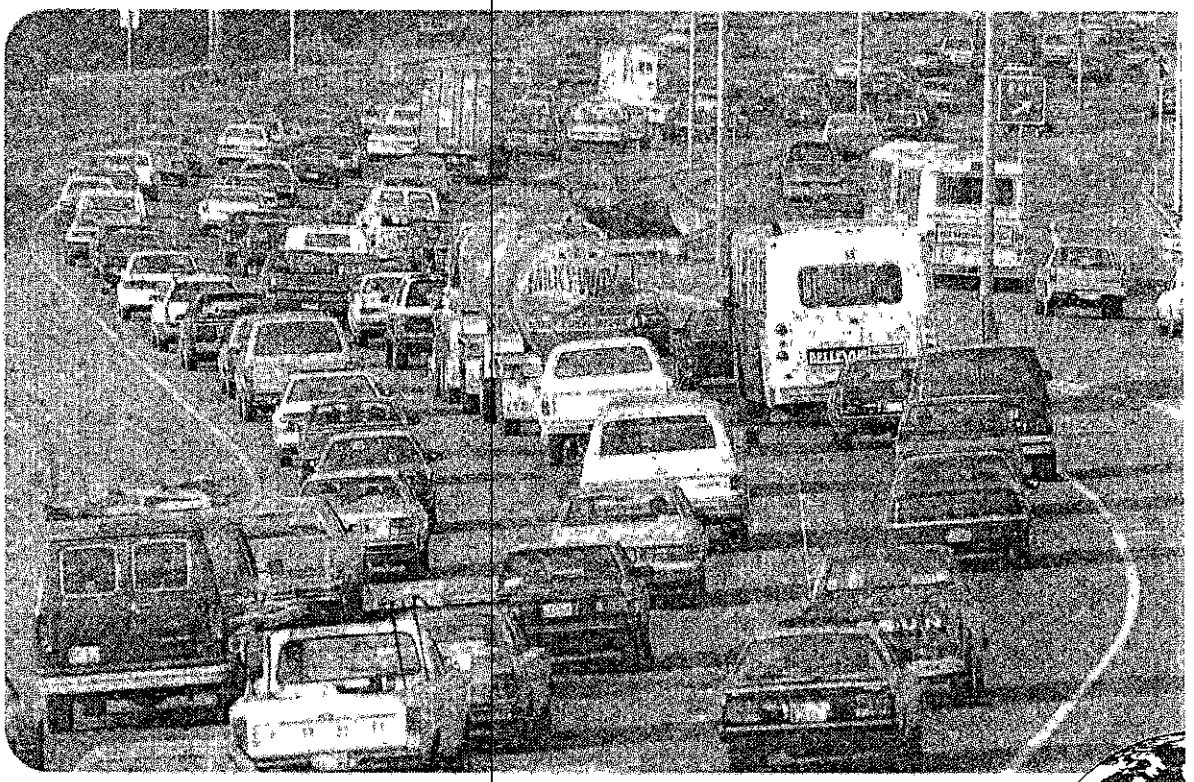


It's Time for a Deal

By John Prescott
Deputy Prime Minister
The United Kingdom
LONDON

In Kyoto, Japan in 1997, developed countries signed up to binding commitments to reduce their greenhouse gas emissions by 2012.

At the world climate conference in The Hague this month, we have an opportunity to show we were serious about those commitments by preparing the way for the Kyoto Protocol to enter into force. The United Kingdom, with its partners in the European Union, will make every effort to conclude a deal that will enable these commitments to be delivered by 2012, but without compromising the

more in some places. The overwhelming scientific consensus is that human activity is driving temperature changes and in due course will raise sea levels and give us more extreme

• Third, that developing countries are not doing enough. If we are to succeed in stabilizing global emissions at a safe level, then we shall need developing countries to join us. But the fact is that developing countries already are taking a lot of action that will limit their emissions growth. For example, it has been estimated that China's emissions would have been 50 percent higher without energy reforms But it is the more economically developed countries that have caused today's climate change, and we must therefore take the lead in tackling the problem. We will not convince developing countries to do more until they

NGTON POST NATIONAL WEEKLY EDITION

ATE CHANGE

for the Kyoto Protocol

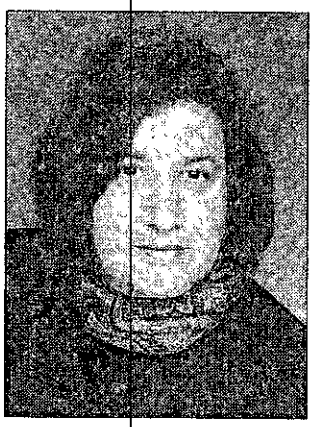
Thoughtful Solutions Needed

By Eileen Claussen
President, Pew Center on Global Climate Change
ARLINGTON, VA

Many of the government officials gathering this month for the climate change negotiations in The Hague are hoping to put the finishing touches on rules to implement the Kyoto Protocol. But getting those rules right is more important than getting them all completed.

Still unresolved on the eve of the meeting are a range of very complicated political and technical issues that will play a decisive role in determining whether we achieve our goal of stabilizing the earth's climate system. It is not a stretch to say that how we decide these issues will determine how we are judged by future generations.

Decision-makers in The Hague should remember that the Kyoto Protocol was designed as both a first step in reducing atmospheric concentrations of greenhouse gases and as a framework for long-term, cost-effective action. In other words, this is a treaty that will have to stand the test of time. Short-term political considerations—including the desire to resolve all remaining issues this year—should therefore take a backseat to the goal of creating a global system that is transparent, fair, environmentally effective, economically efficient, and as simple as possible



strain when and how the mechanisms can be used, this will simply increase the costs of complying with the Protocol. And the result might be a higher level of noncompliance, an outcome that no one should want.

2 Carbon Sequestration. The question here is whether and how countries should receive credit toward their emissions reduction targets for using agricultural lands and forests to store carbon. A related question is whether credit should be given for investments in sequestration projects in developing countries. The important role of soil and forest sequestration in stabilizing the global climate system cannot be denied. However, we have not yet defined what types of sequestration activities ought to count—or even how to count them.

3 Compliance. Yet another unanswered question is whether the Kyoto Protocol will include binding consequences for noncompliance. In other words, how will we penalize

port developing countries in their efforts to reduce emissions through capacity building, technology transfer, and funding for "adaptation" initiatives Decision makers in The Hague will have to respond seriously to these concerns at the same time as they are working on the more fractious issues of the Kyoto framework.

LOOKING AHEAD

As if resolving these immediate questions were not enough of a challenge, everyone concerned with this issue must also give serious thought to the future. After all, the 2008-2012 deadline for achieving the first round of emissions reductions under the Kyoto Protocol is fast approaching. And, even if these initial targets are met (an unlikely prospect), they represent only a first step toward the sustained and significant reductions in emissions that will be necessary to reduce the threat of climate change throughout the 21st century.

A crucial issue for the future, then, is to think about what kind of targets we will have to establish in the years after 2012 At the same time, we need to think about how to involve developing countries in these future global efforts in a more active way. Developing countries are struggling to lift their people to a higher standard of living, and doing so will mean absolute increases in energy use and emissions.

We will accomplish very little, if anything, by requiring developing countries to achieve short-term emissions reductions. The better approach is to craft an equitable and effective framework for future targets for

with the United States to achieve this.

The United States occupies a unique position: it is responsible for a quarter of the world's greenhouse gas emissions and has among the highest per capita levels of emissions in the world—more than twice that of the EU. The meeting in The Hague therefore offers an opportunity for U.S. leadership.

FALSE PREMISES AT HEART OF U.S. DEBATE

I have watched the U.S. debate on climate change with great interest, but I have been concerned to see that in a number of important respects this debate is being conducted on false premises:

• First, that the science is too uncertain to act now. There will always be things that we do not fully comprehend, but that should not be used as an excuse for putting off action. There is now increasing evidence that man-made emissions of greenhouse gases are indeed raising global temperatures. The century just past was the warmest in the last 1,000 years, and the 1990s was the warmest decade on record. Unless we limit our greenhouse gas emissions, average global temperatures are likely to increase by 2 to 6.5 degrees Fahrenheit by 2100, and

• Second, that reducing emissions would devastate the economy If we delay dealing with greenhouse gas emissions, the impacts of climate change in the future will be very costly Prudence dictates that we should act now and reduce our emissions at a reasonable cost. And there are plenty of win-win opportunities to develop new technologies and thereby make industry more efficient, create new jobs and open new markets. There is a developing market for climate-friendly products and services. Wasting energy is bad for business and bad for the environment.

Kyoto, in fact, allows developed countries effectively to "buy" emissions reductions abroad by engaging in emissions trading or by investing in projects that reduce emissions. Emissions trading was developed in the United States; now the rest of the world is following the U.S. lead. We plan to launch our own domestic emissions trading scheme in the UK next year. The flexibility offered by trading and the other market-based mechanisms in the Kyoto Protocol will help to reduce costs and will create new opportunities for business. But Kyoto will not be credible unless developed countries take significant domestic action to reduce their emissions.

time, the Kyoto Protocol's Clean Development Mechanism, which grants credits for emissions reductions achieved in developing countries, will create more opportunities for these countries to contribute to global efforts to reduce emissions

• Fourth, that using forests and farmland to store carbon somehow offers an easy way of deferring domestic action. Forests and other "carbon sinks" can only provide temporary storage for carbon. The sight of millions of acres of U.S. forests going up in flames this summer and releasing 40 million tons of carbon should be enough to convince us to proceed with caution and avoid creating loopholes that would undermine the environmental integrity of the Protocol. This is why the emphasis must be on real domestic action to reduce emissions.

Now is not the time to give up on what we agreed to at Rio but the time to show political will and do a deal in The Hague The EU has called for the Kyoto Protocol to enter into force by 2002. If we wait longer, we risk not being able to meet the Kyoto targets in time. This is our chance to make a modest start on dealing with the biggest environmental threat to the planet. ■

Loopholes in Treaty Could Harm the Environment

By Jennifer Morgan
Director, Climate Change Campaign
World Wildlife Fund
WASHINGTON

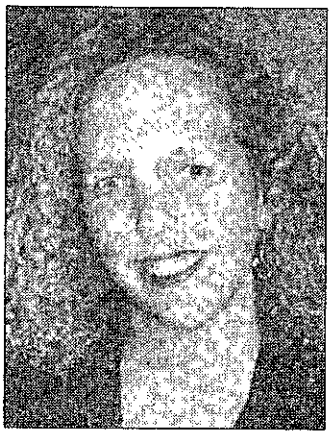
Last month, hundreds of scientists from the Intergovernmental Panel on Climate Change sounded the alarm that new, stronger evidence shows that not only has man-made pollution "contributed substantially" to global warming, but the temperature range of increase has nearly doubled.

Global warming is happening and will, without strong action, get worse. Humans are altering the planet at an unprecedented rate through the burning of coal, oil and gas in our factories, cars and homes. A recent WWF report reveals that up to 30 percent of the world's landscape could be fundamentally altered by climate change, with some countries such as Canada, Finland and Russia losing up to 70 percent of their current wildlife habitats. It is time to act.

The Kyoto Protocol, adopted in December 1997, requires industrialized countries to curb global warming emissions by 5 percent below 1990 levels by 2010. This essential first step will set the stage for a climate-safe future, with cleaner air and energy security as part of the bargain.

BEWARE OF LOOPHOLES

The pollution reductions called for in the Kyoto Protocol are achievable, and if done right, they will also benefit the economy and expand markets. A technological leader, the United States is on the cutting-edge of clean-energy technologies



that can help both Americans and businesses save money for future investment. Unfortunately, there remain elements in the Protocol that could be exploited and, as a result, could jeopardize any of these efforts to address climate change and reduce real emissions.

These problem elements include emissions trading; projects in developing countries to offset emissions reductions in industrialized countries; reliance on forests and agriculture to absorb pollution; and a potentially weak compliance system for the Protocol. If poorly

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Four key sets of issues remain in play as the negotiators come together:

1 The Kyoto Mechanisms. The Kyoto mechanisms were designed to allow countries to pursue the most cost-effective means of reducing their emissions—for example, by engaging in international emissions trading. But there are provisions being negotiated that would make the Kyoto mechanisms totally inoperable, and others that would seriously limit their use. If the negotiators are careless in defining the rules, or determined to con-

to the Protocol's success. Only by establishing and enforcing significant noncompliance penalties can we create a fair and efficient global system, and one that yields results.

4 Assistance to Developing Countries. Developing countries properly argue that the industrialized world is not doing enough to implement provisions of the United Nations Framework Convention on Climate Change. In that precursor agreement to the Kyoto Protocol, the United States and other nations pledged to sup-

lenge. maximizing the environmental benefits we are able to achieve while minimizing the costs of reducing and limiting our emissions.

Meeting the challenge of global climate change calls for no less than a second industrial revolution. We need to promote new technologies and new investments that will put the entire world on a path to clean economic development. And, in creating the global legal framework to make this happen, we need to make absolutely certain that we get it right. ■

ISSUE FORUM

From November 13-24 in The Hague, senior government officials from around the world are gathering for continuing talks on global climate change. The goal of the meeting—officially known as the Sixth Session of the Conference of the Parties (COP 6)—is to clear the way for the ratification of the 1997 Kyoto Protocol, which commits the United States and other developed nations to country-specific targets for reducing their greenhouse gas emissions. This Issue Forum looks at some of the technical and political issues that will be at the heart of the discussions in The Hague.

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handled, these elements will become a set of loopholes that could undermine the environmental integrity of the Protocol.

These loopholes could cut such a large chunk out of the targets that countries such as the United States would be able to comply with the Protocol on paper, while pollution continues to increase and the time runs out on our chance to stop global warming. However, if properly addressed, these elements could solidify the framework of the Protocol. The Sixth Conference of the Parties in The Hague is the deadline to finalize the rules for these elements. If the treaty is truly to be the first step, countries must close these loopholes and ensure that the downward trend of global warming pollution in developed countries is secured.

The United States, unfortunately, has been leading the charge to open up the loopholes in the Kyoto Protocol in a misguided effort to make the Protocol more "cost-effective." The United States proposes to meet up to half of its Kyoto target by counting on pollution absorbed by land-use practices. Many of these practices already are under way and do not represent any real reductions. This would ensure that the atmosphere sees little difference from the Kyoto Protocol.

If one adds in the U.S proposals to purchase credits for emissions that were reduced years ago due to the economic downturn of Russia and Ukraine, it is questionable how much carbon pollution in the United States will really decrease. This may make the Protocol cheap, but it sure won't be effective. The economic benefits of this plan are also unclear.

Many economic studies show that the United States could meet its Kyoto targets in a cost-effective manner while creating new jobs. How? By setting out to become a world leader in renewable energy and energy-efficiency technologies.

PROTECTING THE WORLD'S BIODIVERSITY

How the Kyoto Protocol is implemented could have a large and very direct influence on the world's biodiversity. One proposal is to offset carbon pollution from cars and power plants by planting or protecting trees This raises two concerns. First, trees and plants are not a permanent solution since they will release much of their stored carbon if struck by fires, pests, deforestation or climate change itself Second, the Protocol could actually create incentives to harm biodiversity. For example, if rigorous environmental standards are not included, old growth forests may be cut down to make room for tree farms planted to absorb large amounts of carbon. If countries are serious about tackling global warming without jeopardizing biodiversity, they must address these two issues.

Climate change is a legacy issue. According to recent polls, 80 percent of Americans support U.S. action to reduce global warming pollution. The climatevoice.org web site has facilitated the transmission of more than 2 million messages to heads of state around the world calling for cuts in emissions at home and a strong Protocol.

Now is the time to ensure that the Kyoto Protocol significantly reduces the pollution that causes global warming. Rules finalized in The Hague should protect both the atmosphere and biodiversity. It is not the costs to our economy that we need to worry about if we act, but the costs to the world's wildlife if we do not. ■

Rich Nations' Investments Heighten Climate Risk

By Crescencia Maurer, Senior Associate
World Resources Institute
WASHINGTON

As climate negotiators meet this week in The Hague, they—along with most everyone else—are paying little attention to a group of public institutions that are funneling billions of dollars to climate-threatening projects in developing countries.

Known as export credit agencies (ECAs), these institutions use public tax dollars to promote exports and build private capital projects in developing countries. The problem is that these projects are potentially contributing to long-term increases in atmospheric greenhouse gases, principally carbon dioxide emissions produced by burning fossil fuels.

From 1994 to 1999, ECAs provided $44 billion in loans, equity contributions, guarantees or investment insurance to support a variety of activities in developing countries. These included. construction of fossil-fueled power plants; development of oil and gas resources; expansion of energy-intensive manufacturing; construction of transportation infrastructure; and other climate-unfriendly activities. This $44 billion in public financing leveraged $60 billion more in private capital, bringing the total value of these ECA-supported investments to about $104 billion.

By comparison, the volume of ECA financing for projects that might be termed climate-friendly is paltry. During the same period, financing for renewable energy projects that received some form of ECA support was a mere $2 billion.

The countries responsible for the largest flows of ECA financing for energy-intensive investments in developing countries are the seven leading industrialized nations. Ironically, these industrialized countries are the same ones that express concern about how to address the issue of increasing greenhouse gas emissions from the developing world. And the most vocal of these countries is the United States.

The U.S Congress has said it will not ratify the Kyoto Protocol unless developing countries formally commit to reducing their emissions on a par with reductions made by industrialized countries. In an attempt to reduce U.S congressional opposition to the Protocol, the Clinton administration worked to obtain voluntary commitments to emission reductions from developing countries.

PROMOTING "BUSINESS AS USUAL"

The countries that are the chief recipients of ECA financing include some of the most rapidly growing sources of greenhouse gas emissions: Indonesia, China, India, Mexico and Brazil. These countries have opened their economies to attract investment, but they are also interested in developing their economies in an environmentally sound way. It is for this reason that they are the chief proponents of technology transfer that can accelerate development while minimizing long-term climate impacts.

But ECAs, the main public sector source of technology transfer, have been supporting development projects that represent business-as-usual. They may be building a newer capital base in developing countries, but they are not deploying taxpayer dollars to support private investment in the cleanest, most energy-efficient or climate-friendly infrastructure

The failure to pay attention to the climate implications of ECA financing is resulting in a significant policy perversity. In the climate negotiations, the United States and other industrialized countries are demanding one thing from developing countries (i.e., actions to limit increases in greenhouse gas emissions) while their ECAs do quite another thing by supporting energy-intensive projects.

Why has this situation not been apparent to climate negotiators? Because the majority of ECAs provide little meaningful information about their lending practices or the projects that make up their portfolios. Currently, what constitutes adequate environmental assessment remains entirely at the discretion of the individual agencies. For the most part, they have chosen not to place too many demands on themselves.

It is imperative that climate negotiators, civil society and the private sector work with their governments to close the loopholes that allow this policy perversity to continue. Otherwise, technology transfer and other efforts to link sustainable development and climate protection objectives will remain marginal rather than central themes of North-South relations. ■

IES AND CLIMATE CHANGE

An African Perspective

By Grace Akumu
Executive Director
Climate Network Africa
NAIROBI

According to the United Nations' Intergovernmental Panel on Climate Change (IPCC), climate change will have a more serious and destructive effect on the Africa region than anywhere else in the world. The reason is underdevelopment.

As if to prove the IPCC projections right, the recent flooding in Mozambique literally overwhelmed the capacity of the country's government to respond to the tragic loss of lives, as well as infrastructure. In fact, much of the intervention to assist Mozambique and its citizens came from industrialized countries. Even South Africa, the most viable economy on the continent, could not withstand climate change damages of a similar magnitude

When these types of natural disasters occur in industrialized countries, families rush to their vehicles, move to higher ground and return later The damages are generally limited to property losses, and almost no human lives are lost. Moreover, the damaged properties often are insured.

In Africa, things are very different—and the financial and human costs of disasters are much greater. Moreover, it is not only flooding that has afflicted Africa in the recent past. Several African countries also have experienced severe drought with its attendant consequences, such as electricity and water shortages, land degradation, reduced food security, famine and malnutrition.

Adding to the drought-related problems is the fact that most of Africa's electricity is hydro-generated. As a result, the impact of drought on budding economies has been very negative. A number of countries have resorted to electricity rationing during the hard times, a situation that leads to profit losses as well as massive job cuts. The effects of drought and other weather-related crises also can be seen in the high incidence of diseases such as diarrhea, typhoid, cholera, malaria, pneumonia and the Rift Valley fever among African populations.

PRIORITIES FOR ACTION

In large part because of the disastrous effects of climate change on the continent, Africa strongly supports the United Nations Framework Convention on Climate Change (UNFCCC). African governments and nongovernmental organizations (NGOs) have been actively participating in the international deliberations on this issue, even despite the fact that industrialized countries are historically and presently responsible for climate change. The objective among Africans is to cooperate in implementing the framework according to a differentiated approach that reflects each country's capacity and ability to take action.

It is in this connection that NGOs such as Climate Network Africa have been actively engaged in building public

tion in the Kyoto Protocol. More specifically, we want to make sure Africa is positioned to benefit to the fullest from the treaty's Clean Development Mechanism, which allows industrialized countries to receive credit toward their emissions reductions for efforts undertaken in developing countries.

Due to extreme poverty conditions, it has not been possible to secure resources from African governments to engage in the policy analysis and advocacy that are necessary in order to move these issues forward. African governments, as well as NGOs, have to rely on bilateral and multilateral grants just to work on climate change-related activities.

PLEDGES FROM DEVELOPED COUNTRIES UNFULFILLED

What are Africans most concerned about? We believe that the industrialized countries that are responsible for climate change have been slow to fulfill their commitments under the UNFCCC. In that precursor agreement to the Kyoto Protocol, the United States and other countries pledged to transfer financial and technological resources to developing countries to help them adapt to the impacts of climate change. The same resources also could help Africa pursue a cleaner development path that does not exacerbate the problem of global warming.

Despite its poverty, Africa already is undertaking a range of activities to address the issue of climate change These include the diversification of energy sources, including increasing use of renewables such as solar and geothermal power. Some countries also are undertaking efficiency measures.

There is no question that with adequate financial and technological resources, Africa could contribute much more to the global effort to address this issue. And that would produce benefits not just for Africa

Climate Change and Africa

- With an annual per capita income of less than $300, Africa cannot afford to address the climate change issue without outside assistance.
- Africa's portion of total global energy consumption is just 2-3 per cent, much less than industrialized countries.
- Because of underdevelopment, Africa will be more severely affected by climate change than any other region in the world.

Climate Network Africa

From Anxiety to Action

By Dave Moorcroft
Manager, Climate and Energy
World Business Council for Sustainable Development
LONDON

Climate change is probably not one of those worries that keeps you awake at night. It is "fuzzy" and seems less pressing than many of the immediate problems that confront you day-by-day. But many people admit to being concerned about it and would put it on a list of issues that gives them a sense of unease about the future.

The uncertainty surrounding global warming and the impact of climate change cuts two ways. On one hand, estimates may be overstating the risks. But then again, the risks may be even greater than imagined. This makes the whole subject resemble a high-stakes gamble. And, like any high-stakes gamble, climate change is serious business. What's more, it cannot be resolved by any one nation working alone.

Progress in addressing this issue internationally is slow and cumbersome, and perhaps this is why many people are looking to the business world to provide leadership and action.

Today, many of the world's leading and forward-thinking companies are making public commitments to reduce greenhouse gas emissions and are backing them up with investments in resources and technology. Businesses are taking steps to increase energy efficiency, substitute cleaner fuels, and hasten the development and adoption of renewable energy technologies.

MOMENTUM BUILDING FOR CHANGE

The convergence of a number of underlying forces may build added momentum for positive action on this issue by business. One of these forces is the global reach of communications. The rapid dissemination of news and information provides consumers with unprecedented power to compare corporate performance and behavior across markets and national boundaries. And, as consumers become more and more aware of strains on the environment and the world's natural systems, they are demanding responsible stewardship from multinational companies.

Another important force that has the potential to transform business thinking and behavior on this issue is the global movement towards free markets. Central, planned economies have failed throughout the world, and many of those who previously put their faith in non-market ideologies are turning to the market system for solutions to environmental and other problems.

At the same time that these forces are transforming business, an explosion of new technologies provides a tremendous opportunity, in developed and developing countries alike, to think in new ways about the issues of development, climate protection and value creation

In the energy sector, micro-turbines, combined heat and power (also known as cogeneration), and other developments are working together to challenge the centralized model of power generation and long-distance electricity transmission while promising to reduce greenhouse gas emissions Zero-emission renewable energy technologies also are becoming increasingly viable, thanks to technological advances that have improved their efficiency, cost and scope of application.

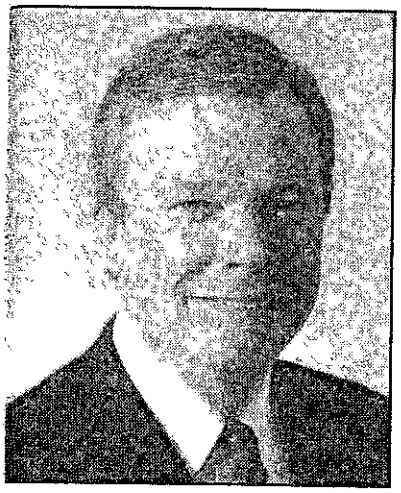
Other examples abound of how new technologies are creating new business opportunities while pointing the way to lower greenhouse gas emissions

In order for the international deliberations on climate change to serve as a catalyst in moving things forward, politicians will have to make the Kyoto Protocol operational in a practical, simple and cost-effective way. They will have to move beyond an acknowledgment of the importance of action by business and put in place a framework that stimulates investment and technology deployment in the marketplace.

As the world works to perfect this framework, it will be essential to pay attention to developing country issues. In particular, politicians must insure that the Clean Development Mechanism, which allows industrialized nations to receive credit toward their Kyoto targets for actions taken in developing countries, is big enough in scope and imagination to offer real benefits for investors and companies, as well as the citizens and governments of the host countries.

If the policy makers can get the framework conditions right, and if business continues to show vision and leadership, there is no doubt that a sense of progress will emerge. And perhaps that will alleviate some of the anxiety we all feel about the climate change problem. ■

Charting a New Course for the Environment—and the Economy



By Richard D. McCormick
Vice President, International Chamber of Commerce
PARIS

When the world's environment ministers gather this week in The Hague, they'll face a bundle of issues as tangled as the ancient Gordian knot How are we going to deal with global warming? Does the solution lie in government intervention, the marketplace or a combination of both?

The climate treaty that the negotiators hammer out will have a powerful impact on how we travel, work and live our daily lives. But the people who must do the most to implement the agreement remain on the sidelines.

Business has the skills, ideas and resources to play a major part in the solution to global warming. The only question is: Will governments enable us to do so?

CLEAR RULES NEEDED

Companies in many parts of the world are already significantly improving energy efficiency. Through research, investment and voluntary initiatives, they have introduced new processes and products that lower emissions Business can do more, but it must have clear rules and reasonable timetables to get there. The negotiators' goal in The Hague should be a solution that meets both environmental and economic needs.

If, instead, they choose a "quick-fix, look-good" deal that causes a dramatic and costly shift in the way industrialized countries use energy, they will risk undermining our global and national economies. And they will jeopardize the environment as well

As negotiators convene in The Hague, there have been only vague references to what the private sector will be called upon to do.

Governments often say they want the private sector's financial, technical and managerial know-how applied to reducing emissions and protecting the environment. But, so far, they haven't given business the criteria and definitions it needs in order to respond

PERFECTING KYOTO'S MARKET-BASED APPROACH

The market-based approaches that were built into the Kyoto Protocol in 1997 should be taken further. These "Kyoto mechanisms" acknowledged the role of the marketplace, calling for tools that would:

- foster commercially sound global use of environmental protection technologies;
- create an innovative system of emissions trading that would allow countries that do not use up their quotas to sell the remainder to others, and
- encourage industrialized countries to cooperate with developing countries in cutting-edge projects that reduce atmospheric pollution

Governments have a duty to deliver those rules and conditions clearly—and soon. They must acknowledge the significant economic and social costs of implementing the Kyoto treaty. And they must act to minimize those costs and maximize the opportunities for business to provide technological solutions

Three years after Kyoto, the rules remain unwritten. Even worse, diplomats appear to be engineering a set of tools far removed from market logic, shackled by high administrative and bureaucratic costs, and open to undue political influence from various national and international groups that seem to be armed with more fears than solutions.

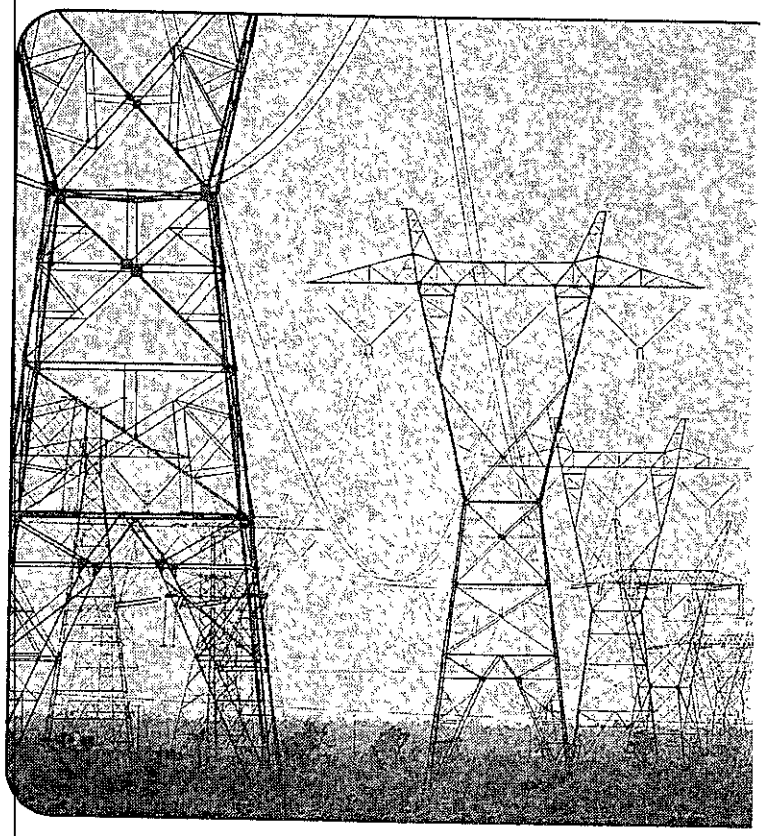
The Hague meeting must reverse this trend. Otherwise, diplomats and ministers will not have honored their governments' 1997 commitments

Business can play a major role in helping governments to meet their Kyoto commitments, but only if given the flexibility to introduce cost-effective, market-based solutions For the sake of the environment, we should all hope this will be the outcome in The Hague. ■

MEMO FROM THE PRESIDENT DESIGNATE OF

Our Historic Opportunity to Protect the

By Jan Pronk
Environment Minister,
The Netherlands
THE HAGUE



Recent years have seen a decline in scientific skepticism about climate change and climate policies. Scientists have ascertained that climate change is caused at least partly by mankind and that precautions must therefore be taken to deal with the problem. This precautionary principle is at the heart of both of the international agreements addressing this issue: the 1992 United Nations Framework Convention on Climate Change and the 1997 Kyoto Protocol

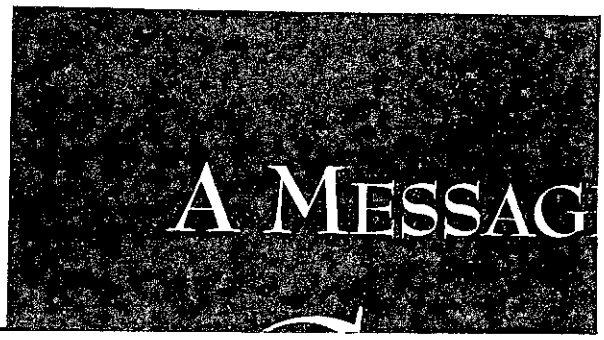
The Kyoto Protocol is a historic milestone in international climate policy. It contains quantified agreements on limiting emissions of greenhouse gases and is the first document in which industrialized countries have committed themselves to emissions reductions of this kind. The aim is to reduce worldwide emissions by more than 5 percent by 2010 (compared to 1990 levels). This will call for an enormous effort, since the emissions of the industrialized world would otherwise increase by around 20 percent over the same period.

The Protocol is unique for other reasons as well. For example, it provides for the creation of a legally binding international enforcement regime so that emissions can be monitored to reveal whether countries are meeting their commitments. The Protocol also permits international trading in emissions. This means that industrialized countries will be able to meet their commitments to reduce emissions by funding measures and projects outside their own borders. This has created a new market in emissions trading for carbon dioxide, nitrous oxide, methane and other greenhouse gases.

Economists calculate that the costs of emissions reductions under the Kyoto Protocol will be market mechanisms and the new market in greenhouse gases. And the environment would be the loser as well, as emissions continued to increase and climate change accelerated.

Negotiations are certainly not over yet. Methods for cutting national emissions must be transparent and credible. In addition, it has yet to be decided how to support the developing countries that are hardest hit by the effects of climate change. Such support is vital, both for credibility (supporting the notion that "the polluter pays") and in order to enable these countries to be energy-efficient themselves

At The Hague, we must



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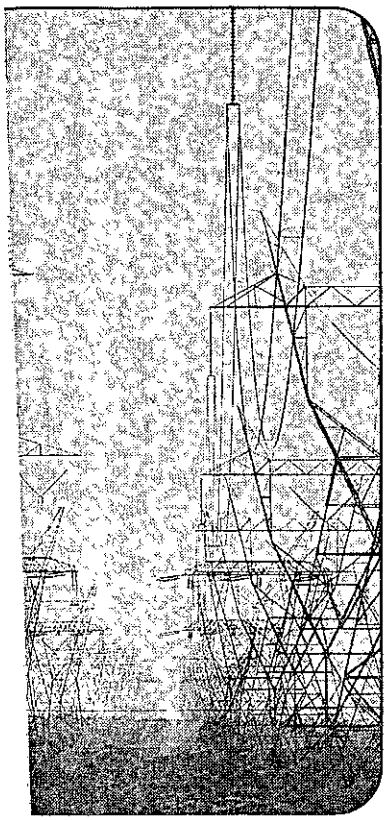


achieve an outcome that takes into account the interests of individual countries but that gives priority to those of the global climate. Ratification and implementation of the Kyoto Protocol are the first step. It is time for us to show what market mechanisms and public policy, working together, can do for the environment. ■

ON THE WEB

For more information about global climate change and some of the organizations and individuals represented in this special advertising section, see the following websites:

Climate Network Africa
http://lion.meteo.go.ke/cna

Energy Foundation
www.energyfoundation.org

Intergovernmental Panel on Climate Change
www.ipcc.ch

International Chamber of Commerce
www.iccwbo.org

Pew Center on Global Climate Change
www.pewclimate.org

United Nations Framework Convention on Climate Change
www.unfccc.de

U.S. Environmental Protection Agency—Global Warming
www.epa.gov/globalwarming

World Business Council for Sustainable Development
www.wbcsd.org

World Resources Institute
www.wri.org/climate

World Wildlife Fund—Climate Change Campaign
www.worldwildlife.org/climate

GE TO BIG BUSINESS.

Economists calculate that the costs of emissions reductions under the Kyoto Protocol will be fairly easy to recover. Most of the required measures are investments in energy efficiency that would be necessary in any case. And trading in emissions and the use of agricultural and forestry policies to store carbon will reduce the costs still further.

MUCH MORE WORK TO DO

But before we get too excited, Kyoto is not a panacea. The aims of international climate policy go far beyond the negotiated reductions. In the United Nations Framework Convention on Climate Change, which was negotiated at the 1992 Earth Summit in Rio de Janeiro, the international community agreed that dangerous human interference with the climate system must be prevented. Scientists predict that fulfilling this agreement will require a reduction of around 70 percent in greenhouse gases.

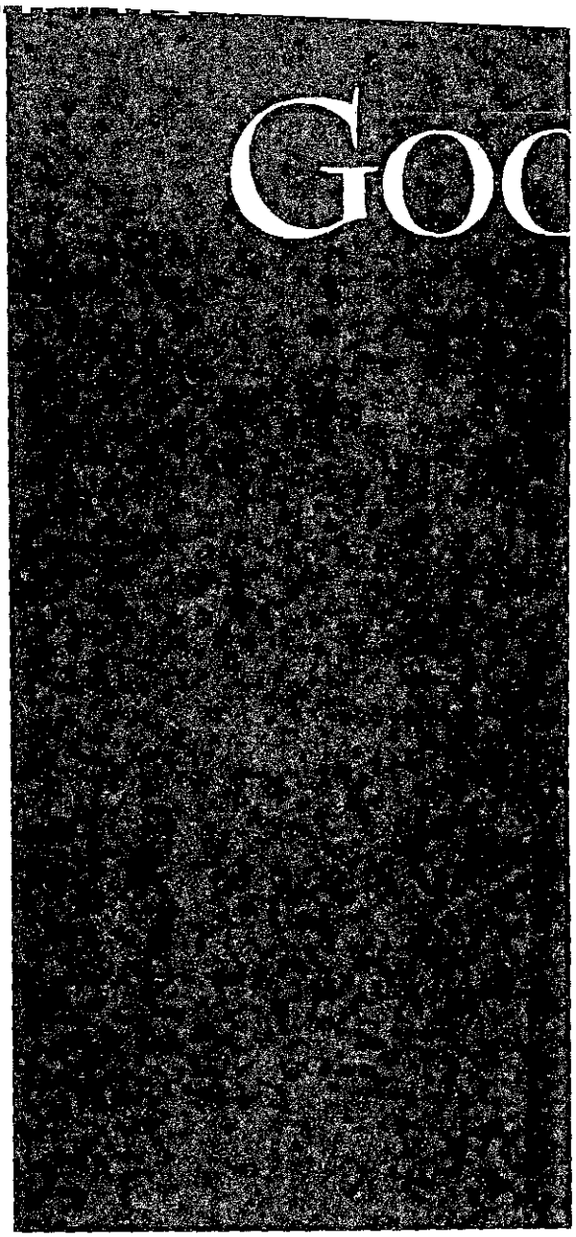
As we all know, it takes time to turn a large oil tanker around. The same is true of the greenhouse effect. Our economies still are driven largely by fossil fuels, which pour greenhouse gases into the atmosphere when they are burned, producing continuing climate change. You cannot change the entire structure of an economy from one year to the next.

At the same time, however, the day of reckoning for our Kyoto commitments is coming ever closer. If we act now, we can still meet them. But not if we wait much longer. The Kyoto Protocol is due to enter into force in 2002, ten years after the Earth Summit. This is the chance for the industrialized countries to demonstrate that they take the issue of climate change very seriously.

STARTING OVER NOT AN OPTION

The conference in The Hague this month must be the last one before countries begin the process of ratifying Kyoto. There are occasional calls to start the climate negotiations afresh, but that would squander the progress already made. Negotiations take time, and much has been invested to get this far. We have agreed on our targets. Now we need to agree on the instruments for achieving them.

Flexibility on all sides in the negotiations is far better than starting all over again. Nobody would benefit from that. Industry



While some corporations deny that global
exists, others are doing something to fi

The companies listed above have all com
large-scale reductions in their greenhouse ga

That means retrofitting assembly lines. M
production processes. Installing high efficien
turbines and lighting. Switching to cleaner f
turning waste into heat.

These actions aren't just motivated by alt

Sponsored by the National
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This message does not n

D START.

ALCAN

BP

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JOHNSON & JOHNSON

KODAK

POLAROID

SHELL

SUNCOR ENERGY

l warming
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Modifying
ncy motors,
fuels. And
ltruism.

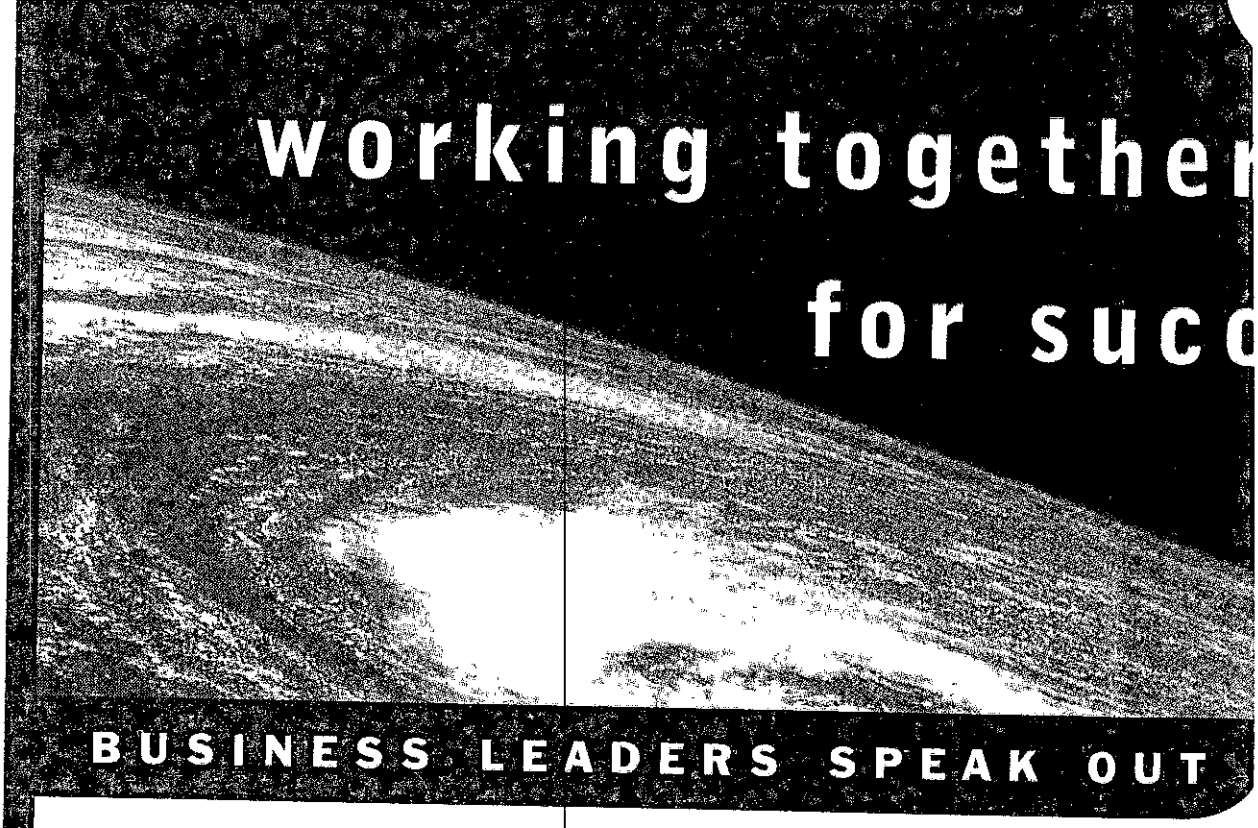
Smart companies recognize that reducing emissions equals competitive advantage, through cost savings, increased productivity and enhanced consumer loyalty.

These actions by corporations are a good start, but even the best-willed companies cannot fight global warming alone.

Now nations must move ahead with strong programs to cut global warming pollution and protect the only planet we have.

l Environmental Trust, Natural Resources Defense Council
cerned Scientists. Paid for by the Energy Foundation.

necessarily represent the opinions of any listed companies.



"ABB backs several international initiatives that promote concrete action on the global environmental agenda. Moreover, we provide a wide range of solutions that meet the aims of the Kyoto Protocol. By developing our own carbon marketplace and by closely following the emerging emissions market, we in ABB help our customers get the full benefit of our energy-efficient and energy-saving products and services."

Göran Lindahl
President and CEO
ABB

"Aluminum, because of its superior strength to weight ratio, durability, and recyclability will play a major role in reducing greenhouse gas emissions over the full life cycle of products."

Alain J. P. Belda
President and CEO
Alcoa

"In the context of the US acceptance of the Kyoto Protocol, implementation of the flexibility mechanisms in a fully open and unfettered manner is essential. Left to its own devices, trading markets can achieve objectives very efficiently."

Dr. E. Linn Draper, Jr.
Chairman of the Board, President and CEO
American Electric Power

"We appreciate the important balance between supplying vital products and services, such as medical therapies, and using resources in a sound, efficient manner. All of us — governments, industries, citizens — must do our part to leave a legacy for future generations to enjoy."

Harry M. Jansen Kraemer, Jr.
Chairman and CEO
Baxter International Inc.

"We can't ignore mounting scientific evidence on important issues such as climate change. The science may be provisional. All science is provisional. But if you see a risk you have to take precautionary action just as you would in any other aspect of business."

Sir John Browne
CEO
BP

"Holnam is committed to reducing CO_2 genera manufacturing and is pursuing several energy initiatives to achieve this goal. The company is ment agencies and construction material spec public policies that would allow the use of em cement products."

Paul Yhouse
President and CEO
Holnam Inc.

"Ontario Power Generation is committed to re house gas emissions. We will be part of the so these emissions through our actions and word option to meet our emissions targets — includ energy efficiency improvements, emissions tra sequestration."

Ron Osborne
President and CEO
Ontario Power Generation

"We work to minimize climate change risks th and innovation. Every day, we are reducing gre sions through our customer energy efficiency p efficient natural gas-fired and wind-powered el facilities, clean air vehicles, pipeline efficiency and carbon sequestration and landfill-to-gas pr

Robert D. Glynn, Jr.
Chairman, CEO and President
PG&E Corporation

"Rohm and Haas Company is committed to e operations and products meet present needs mising the ability of future generations to me Energy use reduction is part of that commitme Houston Plant, our largest energy user, surpasse 15% reduction in energy consumption per pou five years ahead of schedule. We are using th from that achievement to make further gains throughout the company."

Raj Gupta
Chairman and CEO
Rohm and Haas Company

together for success

SPEAK OUT

"Holnam is committed to reducing CO_2 generated during cement manufacturing and is pursuing several energy and market-based initiatives to achieve this goal. The company is working with government agencies and construction material specifiers to implement public policies that would allow the use of environmentally friendly cement products."

Paul Yhouse
President and CEO
Holnam Inc.

"Ontario Power Generation is committed to reducing global greenhouse gas emissions. We will be part of the solution to managing these emissions through our actions and words. We will use every option to meet our emissions targets — including nuclear energy, energy efficiency improvements, emissions trading, and carbon sequestration."

Ron Osborne
President and CEO
Ontario Power Generation

"We work to minimize climate change risks through technology and innovation. Every day, we are reducing greenhouse gas emissions through our customer energy efficiency programs, new highly efficient natural gas-fired and wind-powered electric generating facilities, clean air vehicles, pipeline efficiency improvements; and carbon sequestration and landfill-to-gas projects."

Robert D. Glynn, Jr.
Chairman, CEO and President
PG&E Corporation

"Rohm and Haas Company is committed to ensuring that our operations and products meet present needs without compromising the ability of future generations to meet their needs. Energy use reduction is part of that commitment. Recently, our Houston Plant, our largest energy user, surpassed our goal of a 15% reduction in energy consumption per pound of production, five years ahead of schedule. We are using the momentum from that achievement to make further gains in Houston and throughout the company."

Raj Gupta
Chairman and CEO
Rohm and Haas Company

"Think industry isn't concerned about climate change? Think again. More and more business leaders agree that something must be done. They're not just talking. They're taking responsibility. Investing in answers. Showing what works. And they're proving that we all need to be a part of the solution — businesses, governments, nongovernmental organizations and citizens. Working together, we can make a world of difference."

Eileen Claussen
President
Pew Center on
Global Climate Change

ABB

AIR PRODUCTS

ALCOA

AEP
AMERICAN ELECTRIC POWER

Baxter

BOEING

"I think there are few more challenging and worthwhile jobs in the world today than meeting the energy needs of a developing world in a sustainable way; few more stimulating than using technology and management innovation to solve fundamental problems — like tackling climate change — where creativity is embraced and applied."

Sir Mark Moody-Stuart
Chairman
Royal Dutch/Shell Group

"Toyota created the world's first mass-produced hybrid electric vehicle, the Prius, as one of several diverse approaches to a cleaner car, cleaner air, and a cleaner environment."

Tag Taguchi
President
Toyota Motor North America

"America consumes more than its share of the world's energy. Corporations and individuals must reduce this, and UTC will do its part. Our goal is the smallest possible footprint on the earth."

George David
Chairman and CEO
United Technologies Corporation

"At Weyerhaeuser, we believe that global climate change is an important international issue. We are continuously improving our energy efficiency in manufacturing. We are participating in industry initiatives aimed at developing new technologies that will provide more energy from biomass. Our sustainable forestry practices and improved utilization of the timber we harvest also help to ensure that what we do contributes to solving the climate change challenges we face."

George Weyerhaeuser Jr.
Senior Vice President, Technology
Weyerhaeuser Company

"We have been a member of the Business Environmental Leadership Council of this respected organization since its founding. And we agree with its thesis that enough is known about the climate change issue to justify taking innovative actions now that can have a positive impact on the problem."

Jeff Fettig
President and CEO
Whirlpool Corp.

"Wisconsin Electric is hopeful that COP-6 will result in international agreement on both industrialized and developing country participation as well as flexible, mutually agreeable rules for greenhouse gas market mechanisms."

Richard A. Abdoo
Chairman of the Board,
President and CEO
Wisconsin Energy Corporation

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MAYTAG
ONTARIO POWER GENERATION
PG&E Corporation.
ROHM HAAS
SUNOCO
TOYOTA
United Technologies
Weyerhaeuser
Whirlpool
Wisconsin Electric

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"CH2M HILL applies our expertise in waste, energy and water management in keeping our own house in order — we seek sustainable solutions not only for clients, but for ourselves. Through our corporation-wide sustainable practices program we're pursuing concrete measures to mitigate the impact of our own business on the global environment. With measures such as meeting 5% of certain regional power loads with renewable energy and adding alternative fuel vehicles to our fleet, CH2M HILL is dedicated to environmental stewardship — not just as a corporate business, but as a global citizen."

Ralph Peterson
President, CEO
CH2M HILL LTD

"DTE Energy promotes a wide range of global climate initiatives, including landfill methane gas recovery, tree planting and new technology development. We encourage others to join us in supporting the environment."

Anthony F. Earley
CEO
DTE Energy

"At DuPont we are preparing our company for what we see as a long journey to a more climate-friendly and environmentally sound global economy. While we have already reduced our global greenhouse gases by nearly 60 percent, we have committed to take the next leap forward, setting new goals for 2010: reducing global carbon-equivalent greenhouse gas emissions by 65 percent, using 1990 as a base year; holding total energy use flat, using 1990 as a base year; and using renewable resources for ten percent of our global energy use."

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Dr. Kenneth L. Lay
Chairman and CEO
ENRON

"The choices we make today about how to generate electricity will depend on whether we take into account the true cost of new generation. These include external environmental costs and the uncertain costs from small changes in CO_2 levels that may produce substantial effects on the climate."

J. Wayne Leonard
CEO
Entergy

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PEW CENTER
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The Economics series has focused on how large-scale macroeconomic models assess the costs associated with climate change policies. Future analysis will look at how firms can integrate solutions to mitigate climate change while engaging in competitive business practices. Pew Center authors include Dale Jorgenson of Harvard University and IPCC lead authors Jae Edmonds, Chief Scientist and Technical Leader of Economic Programs at the Pacific Northwest National Laboratory and John Weyant, Director of the Energy Modeling forum at Stanford University

Environmental Impacts Series

The Environmental Impacts series assesses the current state of knowledge concerning the science of climate change and its likely consequences on humans and the natural environment. Authors of the Environmental Impacts series are experts in the fields of atmospheric science, agriculture, water resources, coastal areas, human health, ecosystems, and forests. They include climate model expert Tom M.L. Wigley of the National Center for Atmospheric Research as well as IPCC authors and contributors to the National Assessment, including Richard M. Adams of Oregon State University, Peter H. Gleick of the Pacific Institute for Studies in Development, Environment and Security, and John Reilly of the Massachusetts Institute of Technology. Other contributors to the discussion of the environmental impacts of climate change are Stephen Schneider of Stanford University and Joel Smith of Stratus Consulting.

The policy series focuses on effective and equitable policy alternatives both in the United States and abroad. John Gummer of Sancroft International and a member of the British Parliament led a review of five European Union national climate change programs. In-country experts have served as primary authors for the report series on the electric power sector in developing countries. Other policy reports have focused on early action in the United States, carbon sequestration, and the market mechanisms contained in the Kyoto Protocol.

Solutions Series

The Solutions series provides individuals and organizations with practical tools to evaluate and reduce their greenhouse gas emissions. The first report in this series offers guidelines for conducting inventories. Future Solutions topics will include the verification of greenhouse gas emissions and reductions and an assessment of policies to reduce greenhouse gas emissions through home appliance choices.

For a complete list of reports see **www.pewclimate.org**

The Pew Center's Business Environmental Leadership Council was formed in May 1998 with the belief that climate change demands serious solutions to which business can contribute, both in the marketplace and the public policy arena. The guiding principles of the Business Environmental Leadership Council are:

- We accept the views of most scientists that enough is known about the science and environmental impacts of climate change for us to take actions to address its consequences.

- Businesses can and should take concrete steps now in the U.S. and abroad to assess opportunities for emissions reductions, establish and meet emissions reduction objectives, and invest in new, more efficient products, practices, and technologies.

- The Kyoto agreement represents a first step in the international process, but more must be done both to implement the market-based mechanisms that were adopted in principle in Kyoto and to more fully involve the rest of the world in the solution.

- We can make significant progress in addressing climate change and sustaining economic growth in the United States by adopting reasonable policies, programs and transition strategies.

The Pew Center receives no financial assistance from the companies of the Business Environmental Leadership Council (BELC). However, the contribution of each member of the BELC to the Center is significant. The members of the BELC demonstrate leadership in many ways, including taking voluntary steps to reduce greenhouse gas emissions. An Executive Committee advises the Center on its activities and priorities and reviews all Center-sponsored reports.

The Business Environmental Leadership Council consists of major companies representing diverse sectors with combined annual revenues in excess of $600 billion and employing more than 1.7 million people worldwide:

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intel
ALCOA
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MAYTAG
AEP AMERICAN ELECTRIC POWER
ONTARIO POWER GENERATION
Baxter
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BOEING
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bp
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CH2MHILL
SUNOCO
DTE Energy
TOYOTA
DUPONT
United Technologies
ENRON
Weyerhaeuser
Entergy
Whirlpool
GP Georgia-Pacific
Wisconsin Electric A WISCONSIN ENERGY COMPANY

The Pew Center

The Pew Center is a non-profit, non-partisan, and independent organization dedicated to providing credible information, straight answers, and innovative solutions in the effort to address global climate change. The Pew Center publishes reports on domestic and international policy, economics, environmental impacts and practical solutions relating to climate change. To facilitate dialogue among business, government, and non-governmental organizations, the Center hosts conferences and workshops on selected topics that have included: Early Action, Innovative Policy Solutions and Conducting Greenhouse Gas Emissions Inventories. Finally, Pew Center staff participates in meetings on international climate change issues, including the on-going negotiations of the United Nations Framework Convention on Climate Change.

The Center's Business Environmental Leadership Council, comprised of major companies representing diverse sectors with combined annual revenues in excess of $600 billion and employing more than 1.7 million people worldwide demonstrates leadership in addressing the challenge of global climate change by assessing opportunities for emissions reductions, establishing and meeting emissions reduction objectives, and investing in new, more efficient products, practices and technologies.

Strategies for the Global Environment

Strategies for the Global Environment is the umbrella organization for the Pew Center on Global Climate Change and the Pew Oceans Commission. Strategies is a tax-exempt organization under Internal Revenue Code section 501c(3).

Strategies for the Global Environment Board of Directors

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PEW CENTER ON Global CLIMATE CHANGE

the Basics

Pew Center on Global Climate Change
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Phone (703) 516-4146
Fax (703) 841-1422
www.pewclimate.org

October 2000

cli

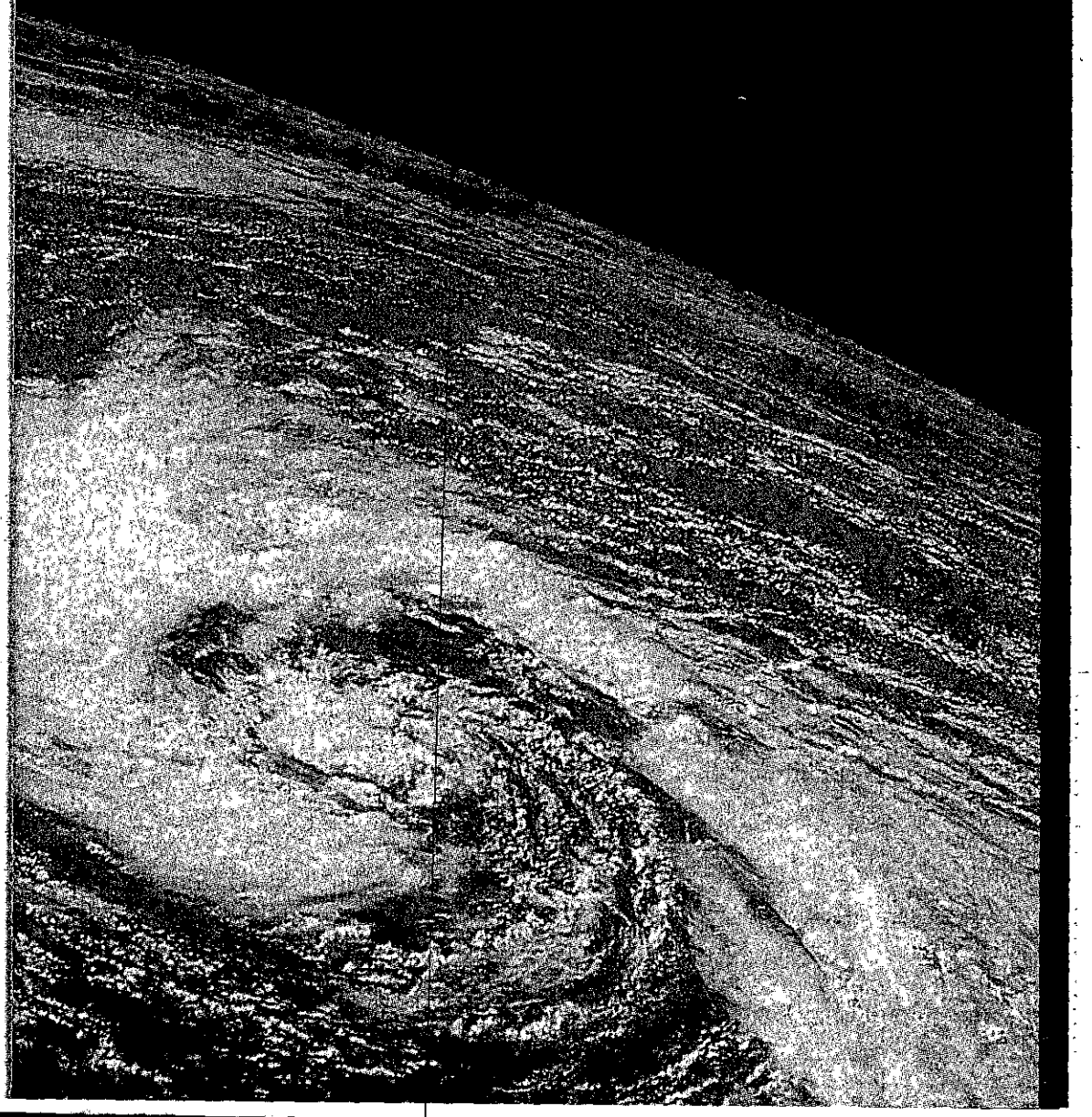
The debate on climate change can run hot and cold like the weather itself. These rhetorical extremes obscure the fact that a growing number of companies and countries are taking serious and effective steps to address the problem of climate change.

As many of the business leaders and public officials responsible for these progressive actions join together in a first-of-a-kind conference in Washington, DC, we want to bring you their important stories.

These first steps to address climate change are encouraging, but they also highlight the distance we must go as an international community to reverse the present course. Everyone has a role to play, including countries — large and small; businesses that produce and consume energy; and citizens who make daily decisions that affect energy use and carbon emissions.

Our hope is that the Pew Center can help facilitate this effort by

mate change: action and nnovation



bringing together diverse players; conducting scientific analyses that help us understand the problems better; and identifying solutions that are cost effective, global, equitable and allow for economic growth.

As these pages demonstrate, cooperation and innovation can lead to real solutions — solutions that hopefully will mitigate both the rhetorical and weather extremes associated with climate change.

We welcome your feedback and participation in this important endeavor.

Eileen Claussen

President

Pew Center on

Global Climate Change

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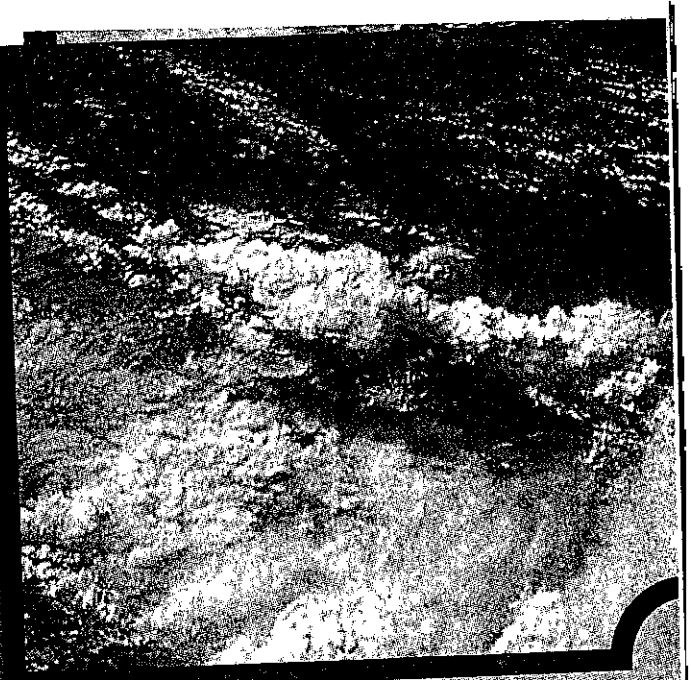

The earth is warming. The 1990s were the hott
decade of the entire millennium and 1997, 19
and 1999 were three of the hottest years ever.

The growing scientific consensus is that
warming is largely the result of emissions of ca
dioxide and other greenhouse gases from hum
activities including industrial processes, fossil f
combustion, and changes in land use, such as
estation. Projections of future warming sugges
global increase of 2°F to 7°F by 2100, with wa
in the U.S. expected to be even higher. In addi
warming, increases in sea level and changes i
precipitation, including more frequent floods a
droughts, are likely. These changes, over time,
referred to broadly as "climate change."

Unaddressed, climate change will have
icant impacts across the U.S. and around the
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coastal communities are already facing, inclu
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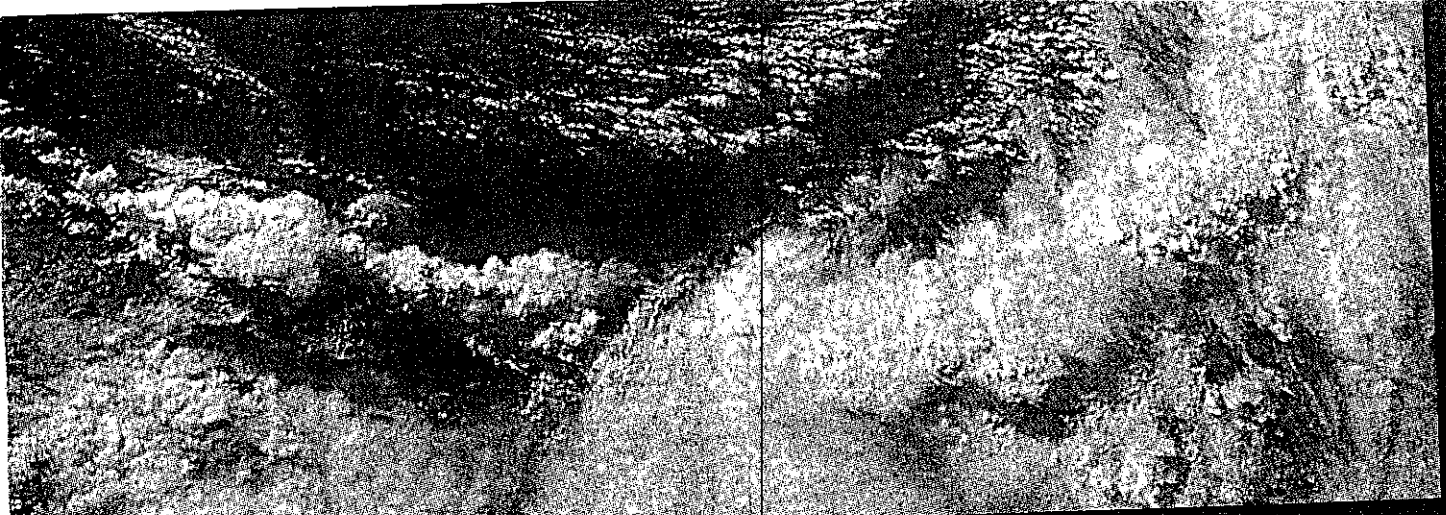


WHAT'S AT STAKE

The earth is warming. The 1990s were the hottest decade of the entire millennium and 1997, 1998, and 1999 were three of the hottest years ever.

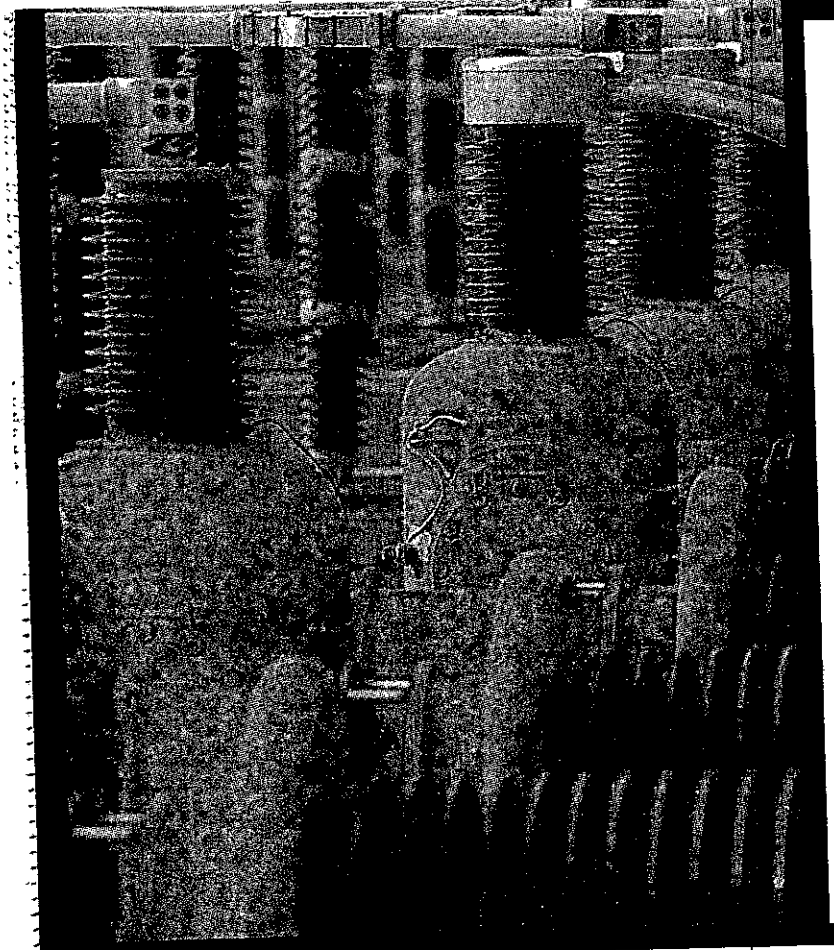
The growing scientific consensus is that this warming is largely the result of emissions of carbon dioxide and other greenhouse gases from human activities including industrial processes, fossil fuel combustion, and changes in land use, such as deforestation. Projections of future warming suggest a global increase of 2°F to 7°F by 2100, with warming in the U.S. expected to be even higher. In addition to warming, increases in sea level and changes in precipitation, including more frequent floods and droughts, are likely. These changes, over time, are referred to broadly as "climate change."

Unaddressed, climate change will have significant impacts across the U.S. and around the world. For instance, sea-level rise will add to stresses coastal communities are already facing, including erosion, storms, and pressures from development. In the arid and semi-arid western U.S., relatively modest changes in precipitation can have large impacts on already limited water supplies.

While some of the effects of climate change may be positive, such as longer growing seasons in the northern U.S. and Canada, crop yields in the southern U.S. are likely to decline. And even these positive impacts are unlikely to be sustained as the globe continues to warm. Many developing countries are even more vulnerable to the adverse impacts of climate change and less able to adapt. As nations continue to grow more interdependent, the U.S. may not be immune from impacts experienced elsewhere.

Most projections of future impacts do not address what could happen if warming continues beyond 2100, which is inevitable if steps to reduce emissions are not taken, or if the rate of change accelerates. The possibility of catastrophic events also cannot be ruled out.

Even if we are able to reduce emissions of greenhouse gases, some further warming is unavoidable. We must plan and take action now to adapt to the changes we will face as our climate changes.



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John Prescott

Deputy Prime Minister United Kingdom

Climate change is serious. Its impacts will be felt at home and around the world. More Mozambiques. More droughts for American farmers.

We can tackle climate change through gain — not pain. Measures that deliver cleaner air, less traffic congestion, and warmer homes. In Britain, business recognizes it can make industry more efficient and bring new jobs.

The Kyoto Protocol is the only show in town. I will do everything I can to make it work. In November this year the world has a unique opportunity to break the deadlock. It is the duty of all leaders to seize that chance and avert the worst effects of climate change. If we fail, it may take years to get back to this stage. We are close to a historic agreement. All we need now is the political will to go that final step.

Robert Hill

Minister for the Environment and Heritage, Australia

Australia is already well advanced in implementing its domestic response to achieve its Kyoto target.

The Australian Government has now committed almost A$1 billion to greenhouse gas reduction programs and has established a national office to administer these programs. Our efforts have a strong emphasis on promoting leading-edge renewable energy technology, increasing the uptake of renewable energy, and improving energy efficiency in Australian industry.

A key initiative is new investment of A$400 million which will target large-scale abatement opportunities across the economy. Industry and other sectors will be able to put forward competitive projects that will achieve substantial reductions in Australia's net emissions. We are also making good progress on domestic emissions trading — having released a series of four discussion papers, we are now moving toward more detailed consideration of design options.

Based on their belief that climate change presents a serious risk that demands a serious response, businesses and governments around the world are designing and implementing innovative programs to reduce greenhouse gas emissions.

Government responses to the challenge have included domestic emissions trading experiments, innovative energy and industry-sector policies, and other efforts. Meanwhile, businesses around the world are setting their own emissions reduction targets, developing internal trading programs, and making bold commitments to energy conservation and the use of renewable power.

The vision and the leadership of these companies and governments place them at the leading edge of the global effort to meet this challenge. Not only are they providing some initial ideas about what works to reduce emissions, but they are proving that action to address this issue can be compatible with economic growth and success in the global marketplace.

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Jan Pronk
Minister of Housing, Spatial Planning and the Environment The Netherlands
President Designate of The Sixth Conference of the Parties (The Hague)

Fair, efficient and credible: Does the Kyoto Protocol represent the wrong policy answer to the right scientific question? Those who say so at least agree that the right question is being asked. Scientists have confirmed it: climate change is man-made. It is a threat to the future of mankind. The right question to ask is: how can it be prevented?

The Kyoto Protocol is a step in the right direction. It must be implemented fairly, efficiently and credibly. Fairly means those who have produced the largest CO_2 emissions must act first, but others will have to follow. Efficiently means the private sector must play an important part. Credibly means the CO_2 reduction targets must be met, and preparations for further action must be made. That is the agenda for The Hague.

Rodney F. Chase
Deputy Chief Executive Officer
BP Amoco

If we accept the case for action on climate change, it's clear we can't wait for an international negotiation process to achieve consensus any more than we can wait for the scientists to reach complete and final agreement.

So I think the time is right for an opening up of the issue — to encourage experimentation and engage a much wider section of society in the search for cost-effective solutions.

Just as the corporate sector has been one of the driving forces behind the movement towards free trade over the last 50 years, so now I think the corporate sector can help develop the solutions to climate change. There is much that can be done.

So overall we believe we can meet our greenhouse gasses target in a cost-effective way. And we also believe that in taking the actions to meet our target we will end up with a stronger, fitter corporation.

PEW CENTER ON Global CLIMATE CHANGE

www.pewclimate.org

BUSINESS

"Greenhouse gas abatement is one of the most significant environmental challenges facing the world today, and the one we can do the most about. ABB is working to reduce our own emissions and those of our customers by using more eco-efficient products, systems and services. Environmental care is good citizenship and good business."

Göran Lindahl
President and CEO
ABB Group

"Climate change is a challenge facing both businesses and policymakers. Legislation on early action represents a common-sense approach that can begin the process of lowering emissions along a gradual, cost-effective glide-path. At AEP we believe there is considerable merit to beginning this process now, not only as a climate change insurance policy, but also to propel our economy to greater heights."

Dr. E. Linn Draper, Jr.
Chairman of the Board,
President and Chief Executive Officer
American Electric Power

"As a company that provides critical medical therapies to people with life-threatening conditions, we know the balance between supplying vital products and services and using resources in a sound, efficient manner. If we are to address the harm of climate change, all of us — governments, industries, citizens — must do our part. It's urgent that we work together now to leave a legacy for future generations to enjoy."

Harry M. Jansen Kraemer, Jr.
Chairman and Chief Executive Officer
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"CH2M HILL has a long history of environmental stewardship and in adopting the practices of sustainability dating back to our heritage as a water, wastewater, and environmental

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Ralph Peterson
President and Chief Executive Officer
CH2M Hill

"Environmental performance is part of an all-encompassing internal drive toward true sustainable growth. As a company, DuPont believes that action is warranted, not further debate. We also believe that the best approach is for business to lead, not wait for public outcry or government mandates. From our experience of the past ten years, we know that integrating environmental considerations into our business strategies enhances our ability to achieve sustainable growth."

Charles O. Holliday
Chief Executive Officer
DuPont

"Enron supports market-based initiatives that create efficient, cost-effective and environmentally sound energy systems. As a company, we are taking steps to provide the world with clean energy solutions and implementing systems to manage greenhouse gas emissions. Our belief in the synergies between state-of-the-art energy management practices and sound environmental policies have translated into effective pre-construction measures for our new headquarters building, which we expect will save $10 million and reduce greenhouse gas emissions by 34,000,000 lbs. (or 17,000 tons) per year."

Dr. Kenneth L. Lay
Chairman and CEO
ENRON

The Pew Center's Business Environmental Leadership Council consists of 21 companies with combined annual revenues of more than $550 billion. The companies of the Business Environmental Leadership Council are united in several beliefs:

1. We accept the views of most scientists that enough is known about the science and environmental impacts of climate change for us to take actions to address its consequences.

2. Businesses can and should take concrete steps now in the U.S. and abroad to assess opportunities for emissions reductions, establish and meet emissions reduction objectives, and invest in new, more efficient products, practices and technologies.

3. The Kyoto agreement represents a first step in the international process, but more must be done both to implement the market-based mechanisms that were adopted in principle in Kyoto and to more fully involve the rest of the world in the solution.

4. We can make significant progress in addressing climate change and sustaining economic growth in the United States by adopting reasonable policies, programs and transition strategies.

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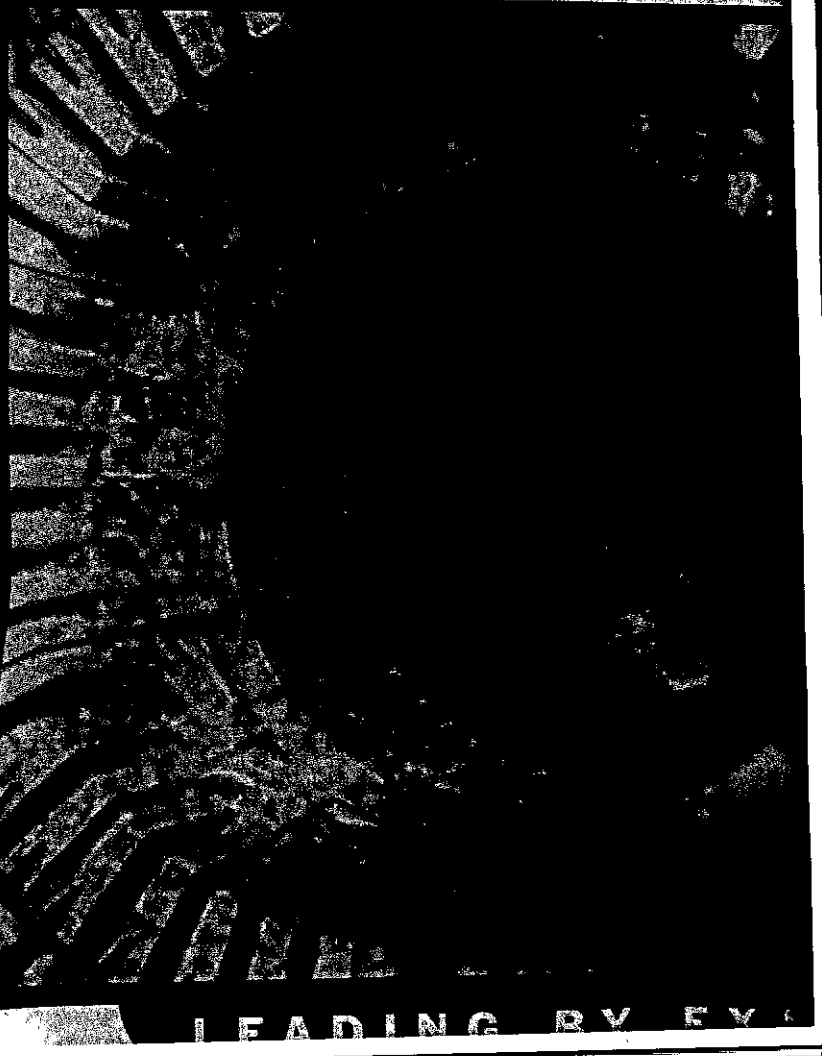

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