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Environmental Stories to Watch *in* 2007

Remarks by Jonathan Lash on December 19, 2006

NATIONAL PRESS CLUB BRIEFING FOR JOURNALISTS

OPENING REMARKS

This is the fourth year that WRI has invited journalists to the National Press Club to talk about key environmental issues to watch in the coming year. With changes in Congress and increased public concern about energy and global climate change, there will be much to talk about in 2007.

I'm Jonathan Lash, President of the World Resources Institute. For those of you who don't know us, WRI is a global environmental think tank that works to avert climate change, protect ecosystems, allow public access to environmental information, and harness markets to expand opportunity and protect the environment. We are a think tank that goes beyond research to put ideas into action. We work with more than 300 partners in 80 countries, including companies, NGOs, and governments, to create solutions to environmental problems.

I'm going to talk about five issues to watch this year.

- The prospects for federal legislation to curb greenhouse gas emissions;
- Biofuels and the Agriculture Bill;
- A promising experiment to reduce pollution of the Chesapeake Bay;
- Fast moving developments in climate science and technology;
- Prospects for international action on climate change.

Joining me today are two colleagues. Dr. David Jhirad is WRI's Vice President for Research. Dr. Jonathan Pershing directs WRI's climate program. After my remarks, we will take questions. A copy of my powerpoint presentation and an audio transcript of today's briefing will be available at www.wri.org/newsroom.

Prospects for Federal GHG Legislation

During 2007, the debate on national legislation to control the pollution that causes global warming will start in earnest in the Congress. We will likely see energy legislation moving forward in both the House and Senate, and the adoption of some form of climate legislation during the next three years. We may see climate legislation during 2007 that, ironically, environmentalists will oppose because it's too weak.

The first factor that will likely drive the passing of legislation is the change in public attitudes. The mid-term election was not about the environment or climate change or energy — generally voters focused on the war, competence, and corruption — but exit polling revealed that heavy advertising by congressional candidates in key swing districts focused on energy and climate had a significant impact on independent voters. Recent polls show public attitudes on energy and climate shifting, in particular when the issues of energy security and climate change are linked.

Americans have been influenced by extreme events like Hurricane Katrina, and by Al Gore's movie, speeches, and lectures. Media coverage of global warming has increased from a trickle to a steady flow of science, business, and political coverage.

Another indicator of political change is the accelerating pace of local and state action. Early last fall, California passed the nation's strongest legislation to reduce greenhouse gas emissions by 20 percent. Political observers in California attribute the turnaround in Governor Schwarzenegger's lagging political fortunes to his endorsement of that legislation — he moved rapidly from lagging to leading in the polls.

It wasn't just California that took action. Three hundred fifty five cities have climate action plans. Twenty twostates require renewable power as part of their electrical energy mix. Eleven states have joined California in imposing stricter rules on automobiles than the Federal Government. Seven Northeast states that imposed their own cap on emissions from electrical generating plants in 2005 are soon likely to be joined by Massachusetts and Maryland.

These state and local actions are strong political indicators. Historically, on issues ranging from child labor to the environment, social change has

begun at the local and state levels. State experiments demonstrate solutions at a smaller scale, but invariably differ from one another. By creating a patchwork of differing state requirements, state action increases pressure on industry to support federal standards for the sake of consistency and predictability.

This is happening — leading companies are beginning to take independent action on climate change. Hundreds voluntarily measure and report their emissions of green house gases (GHGs). Most of America's largest companies ranging from Alcoa to Wal-Mart, are voluntarily reducing their emissions. Many companies now seek to become leaders in low carbon technologies, identifying climate constraints as drivers of tomorrow's markets, and building strategies around products that will help their customers reduce greenhouse gas emissions.

One illustration is General Electric. A year and a half ago GE said it would grow its sales of "Ecomagination" products from $10 billion to $20 billion in five years. Ecomagination products include everything from the highly-efficient compact fluorescent light bulbs being sold by Wal-Mart to the GEnx engines that power Boeing's newest and most fuel efficient aircraft. GE reports that orders for Ecomagination products already exceed $20 billion.

Another area where business is taking the lead is in the investment world. Citigroup and WRI cooperated on research examining how companies are responding to the risks and opportunities that climate change presents for businesses. Citigroup published the findings and recommended twelve leading companies to their high net worth clients. As Deep Throat told Bob Woodward, "follow the money."

Corporate leaders have begun to speak out to endorse mandatory federal legislation. What would have been unthinkable six or seven years ago, and

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On January 22, the U.S. Climate Action Partnership — a new coalition of business and environmental groups — called on Congress for legislative action on climate change. The coalition consists of market leaders Alcoa, BP America, Caterpillar, Duke Energy, DuPont, FPL Group, General Electric, Lehman Brothers, PG&E, and PNM Resources, along with four non-governmental organizations — Environmental Defense, Natural Resources Defense Council, Pew Center on Global Climate Change, and World Resources Institute. More information on the coalition and its recommendations can be found at www.us-cap.org.

surprising even two or three years ago, is now commonplace as companies seek clear rules so that they can make informed investment decisions. When Senators Domenici and Bingaman held a hearing on climate legislation last summer, seven companies — all but one of those that testified — said it was time for national legislation. You will see much more of that in the coming year as companies see action as necessary and inevitable and speak out for predictability and coherence in the requirements they have to respond to.

Even the early jockeying among possible presidential candidates signals change. Take a look at their websites. Most say climate action is needed,

Democrats take Senate

110th Senate: D-49 R-49 I-2

Committee	Current D Chair	LCV Score	Ranking Member *(Minority Party)*	LCV Score
Leader	Harry Reid (NV)	75	Mitch McConnell (KY)	7
EPW	Barbara Boxer (CA)	89	James Inhofe (OK)	5
ENR	Jeff Bingaman (NM)	68	Pete Domenici (NM)	13
Commerce	Daniel Inouye (HI)	52	Ted Stevens (AK)	13
Agriculture	Tom Harkin (IA)	82	Saxby Chambliss (GA)	4
Finance	Max Baucus (MT)	66	Charles Grassley (IA)	22
		avg: 72		avg: 11

Democrats take House

110th House: D-233 R-202

Committee	Current D Chair	LCV Score	Ranking Member *(Minority Party)*	LCV Score
Leader	Nancy Pelosi (CA)	92	John Boehner (OH)	2
Energy & Commerce	John Dingell (MI)	71	Joe Barton (TX)	7
Nat. Resources	Nick Rahall (WV)	65	Don Young (AK)	9
Transport & Infra	James Oberstar (MN)	72	John Mica (FL)	8
Science	Bart Gordon (TN)	63	Ralph Hall (TX)	15
Govt. Reform	Henry Waxman (CA)	90	Thomas Davis (VA)	40
Agriculture	Collin Peterson (MN)	39	Bob Goodlatte (VA)	10
Ways & Means	Charles Rangel (NY)	80	Jim McCrery (LA)	7
		avg: 72		avg: 12

and several — both Republican and Democrat — proudly point to what they've already done. Energy and climate will play in 2008, and presidential candidates will want to make sure they aren't left behind.

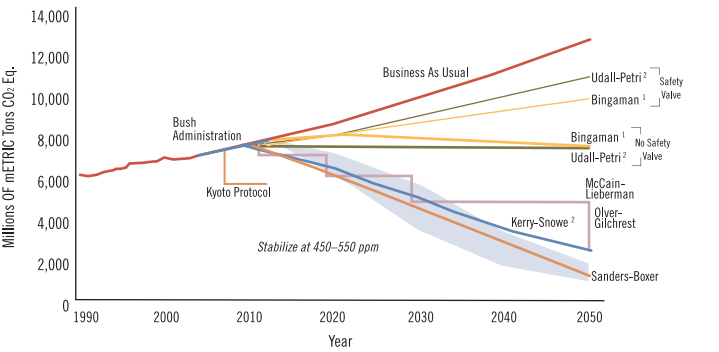
Finally, the most obvious contributor to the increased likelihood of federal legislation is the change in leadership in the Congress.

The two charts on the opposing page represent the 110th Congressional chairpersons and ranking members' LCV (League of Conservation Voters) ratings. The ratings are a cumulative measurement of a congressional member's stance on environmental legislation and voting history on environmental issues as determined by LCV. The ratings are done on a *1–100* scale, with a higher score representing a more environmentally friendly stance.

Will Congress take serious action on climate change? That's very much my hope. Serious action means stopping the rapid growth in U.S. GHG emissions and putting the nation on a path of steady reductions.

We have charted the reductions claimed by bills offered during the last Congress. You can see there are real differences. Red is the path we are on now — "business as usual". Blue is what the Bush Administration claims for its voluntary programs. Some of the proposals would, at best, stabilize emissions (and we think that claim is questionable), while others would in

Comparison of Climate Change Proposals in 110th Congress, 1990 to 2050



Source: World Resources Institute, 2007.
Notes: 1. Discussion draft; 2. Submitted in 109th Congress.

fact require significant and on-going reductions over time. The names attached to the most aggressive bills are worth noting. Congressman Waxman of California and Senator Boxer of California introduced bills to achieve on a national level something like what California has already committed to do on a state level. Both are in positions of leadership in the upcoming Congress, again demonstrating that California's action is having a real effect on this election of bills being introduced.

I ask you to think about this graph from two points of view. First, imagine that you are the CEO of a company trying to decide whether to make an investment in a carbon-intensive technology — a new power plant for example. How do you decide whether it will be more profitable to build a high emissions coal fired plant, or a zero emission solar installation if you don't know whether GHG emissions will be cheap — as they would be under the weakest bills — or expensive?

Then, try thinking about this spread from the point of view of the environment. The weakest bills (appropriate colors), which have price caps, are likely to be strongly opposed by environmental advocates because they won't achieve real reductions. They may, however, be supported by those who seek to avoid strong action and prefer legislation that creates a comforting façade of action without the reality — Potemkin legislation, a dangerous illusion.

The U.S. politics of climate legislation are largely about cars, coal, and competition. About 28 percent of U.S. emissions come from the transportation sector and about another 29 percent come from burning coal for energy. These are old technologies. Even recent power plants use 40-year-old technology. The internal combustion engines that power our cars and trucks are variations on a century old technology.

In order to make significant reductions, these technologies have to change. To force a change on that scale, to two of the core technologies that quite literally drive our world, will require a serious legislative signal. That's the difference between the bills that show continuing declines in emissions and the bills that stabilize. Those that just stabilize won't provide significant enough pressure to move us away from these technologies.

Opponents used the fear of global competition, and of China in particular, as the club to beat the Kyoto Protocol to death in the Senate. President Clinton

never submitted the Protocol for ratification and President Bush walked away from it. The argument was that if the U.S. ratified the Kyoto Protocol and agreed to reduce GHG emissions while China did not, U.S. companies would be unable to compete. A crucial question in the coming debate will be whether GHG reductions are seen as merely a premium we pay to protect the environment, or as a driver of technological innovations that will allow the U.S. to remain competitive in the global market in a climate constrained future.

One last observation on legislation: I pointed out early on that the connection between global climate change and energy security is politically powerful. Polls show large majorities of Democrats and Republicans support action that would both address climate change and energy security. That's a political comfort zone, to be advocating security and environment. There are big overlaps between measures which would reduce emissions of greenhouse gases and reduce importation of oil and gas from countries whose stability or intentions we're unsure of. But the overlap isn't complete, and there are some measures that might be taken to promote energy independence that would be bad ideas for climate change.

An illustration is the liquefaction of coal to create motor fuel. Coal liquefaction significantly increases greenhouse gas emissions in the production fuel and does nothing to reduce emissions from the use of the fuel. It might reduce oil imports, but at a very high environmental cost *unless it included technology to capture and store the CO_2.*

Biofuels and the Agricultural Bill

Congress will debate an Agricultural Bill in 2007 and that will provide an occasion to visit the subject of subsidies for corn based ethanol. The growing use of a gasoline-ethanol mixture called E85 has raised corn prices, gladdened farmers, and attracted investors. Ethanol subsidies provide Congress an opportunity to send money to farmers in the Midwest, including the presidential caucus state, Iowa, while talking about environmental and energy security benefits. It's a political trifecta, and it will have huge momentum in the upcoming Congress.

So, let me just raise a couple of issues about E85 ethanol. First of all, the subsidies. There's a 51-cent-a-gallon direct subsidy; there are protectionist tariffs that exclude cheaper ethanol from Brazil made from sugarcane; and there is

a loophole in the fuel economy standards that allows the automobile manufacturers to claim a fuel economy credit if they build cars that can use E85, even if those cars never drive within 500 miles of a filling station that sells E85. And the environmental benefits are limited. So much energy is used in the production of corn based ethanol that the GHG emissions are only about 20 percent less than for a car burning straight gasoline. Only about a few hundred filling stations out of tens of thousands nationwide sell E85. They are concentrated, not surprisingly in the big corn producing states.

While E85 could reduce use of gasoline and help in backing out foreign oil, the potential is limited. Even if you dedicated every acre in the country that we now use for growing corn to making ethanol you would produce only 12 percent of current U.S. gasoline demand.

Despite the ads you saw last year from one automaker, "yellow" is not "the new green," and corn based ethanol is more effective as a way to help farmers than as a way to reduce GHG emissions.

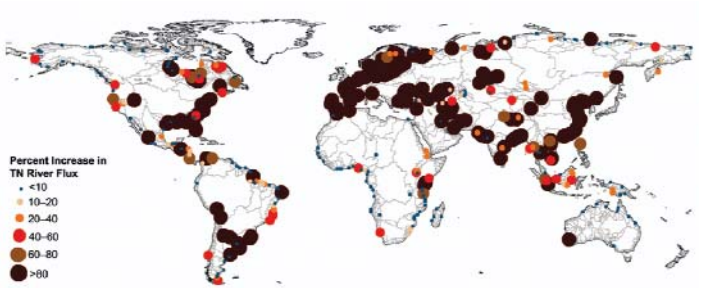
Agriculture and "Dead Zones"

At the mouth of the Mississippi River, in the Chesapeake Bay, in the Baltic Sea, and in hundreds of sites around the world, pollution of waterways is creating coastal dead zones where marine life cannot survive. Human activities, mostly agriculture and the burning of fossil fuels, have also disrupted the nitrogen cycle. As agricultural production has increased to feed a global population that almost quadrupled during the Twentieth Century, humankind doubled the flow of nitrogen into the environment and tripled the flow of phosphorous. Half of all the nitrogen fertilizer ever used has been used in the last two decades.

This map shows the location of the world's most serious dead zones. The entire East Coast of the United States is at risk in the summertime. The Chesapeake Bay, a place where I spend a good deal of time as a fisherman and sailor — has recently begun to suffer dead zones as a result of this nitrogen and phosphorous influx. This is a direct result of rapid development and intensive agriculture on the Bay and in the Potomac and Susquehanna watersheds.

In 2007, several states — Pennsylvania, Virginia, and West Virginia, and, I hope, Maryland — may launch a program to give farmers the opportunity

The World's Most Serious Dead Zones



to sell pollution reduction credits through a trading system like the successful sulfur dioxide pollution reduction trading program used to reduce acid rain in the 1990's.

WRI pioneered this nutrient trading system that enables farmers to make money doing the right thing environmentally. I think you'll see Pennsylvania taking the lead in a first-in-the-world large scale water pollution trading program that offers real hope not only for the Chesapeake but for other states and countries trying to deal with their own dead zones.

Science and Technology

2006 was a year of both new climate science and climate anecdotes. The news that the Greenland ice sheet was melting much more quickly than expected startled many, as did Europe's exceptionally warm fall and nearly snowless early winter.

The big year for Atlantic hurricanes that had been predicted did not, thankfully, come about, but, in fact, the total number of tropical storms, counting Pacific typhoons, was 42, just below 2005's 47. It included four Category four and five typhoons with devastating effects in the Pacific.

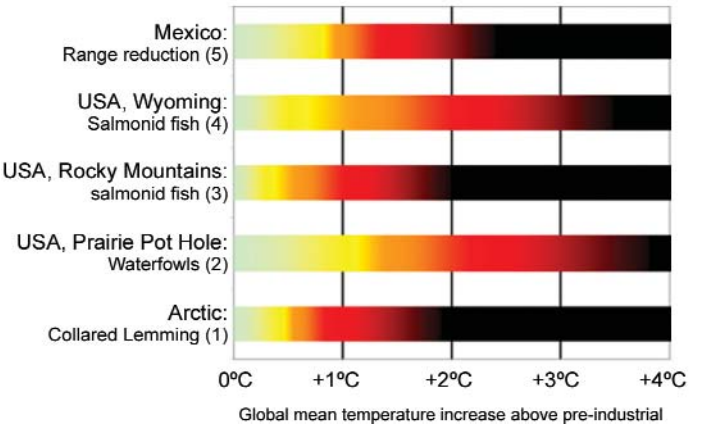
There has never been more certainty that climate change is happening, and that it's happening now. I urge you to look for the most significant reaffirmation of this consensus early this year, when the Intergovernmental Panel on Climate Change releases its fourth assessment report.

People aren't merely interested in what's happening, but why. Cognizant of that, WRI publishes an annual summary of the year's climate science findings, to help better explain the science behind the natural world's single most significant natural phenomenon. This year's edition, Climate Science 2006, will be featured on www.wri.org.

While there is consensus about the fact of human caused warming, scientists have been cautious about saying at what point the buildup of GHGs and the resulting warming become unacceptably dangerous. Now, that's beginning to change. There is an emerging consensus — partly scientific, partly political — that two degrees centigrade warming is probably the threshold for extremely dangerous and troublingly unpredictable consequences.

You can see here that at one degree centigrade the consequences for different biological systems are all in the no significant effect (yellow) or small impact (orange) zone, and by two degrees centigrade almost all of the biological systems are in the severe impact (red) zone. That, along with a number of other factors, is driving an evolving consensus that a range of greenhouse gas concentrations in the atmosphere, between 450 parts per million and 500 parts per million, is probably the limit of what we can

The Effect of Temperature on Ecosystems



accept. This is, by the way, the range that those GHG reduction bills we looked at earlier with the steepest reductions aim at.

We're likely to see important technological announcements in the coming year. The most important is the superior alternative to corn based ethanol, cellulosic ethanol, which breaks down the basic cellulosic structure of any kind of plant matter to produce fuel. That can either be an enzyme-based process or a heat-based process. In the coming year, we're very likely to see announcements of progress in that area.

The second is with regard to nanotechnology and the storage of electrical energy. It is quite possible there will be announcements about new batteries with many times the capacity of the best existing chemical storage batteries. It looks like there may be breakthroughs on the cost of thin film solar cells that will make it possible to sell solar photovoltaic energy at prices below the prices of conventional fossil fuel energy.

Finally, the Department of Energy is likely to announce the selection of three sites for experimental carbon capture and storage facilities. These are facilities that will capture the CO_2 from coal combustion and inject it underground for permanent storage. This technology is the "polio vaccine" for coal. If proven, it could enable countries like the United States and China, who between them have 1,200 coal fired power plants planned to build, to use their coal without increasing global emissions.

Venture capitalists are watching all this with great attention. This is another place to heed the admonition to follow the money. Enormous amounts of money have begun flowing into green energy technologies in recent years. It's an area that John Doerr, one of the founders of Kleiner Perkins, called "the mother of all investment opportunities — bigger than the information revolution." Funds are being pumped into the technologies that I just discussed and many others.

On the other hand, if you were to follow the money in the U.S. federal budget, you would see no sign of increasing commitment to low carbon technologies. Research investments have been low and have stayed low. A change in this would be a good indicator of whether the U.S. is getting serious about addressing climate change.

International Action on Climate Change

Global warming is the product of emissions from every nation in the world. Every molecule of carbon dioxide (CO_2,) whether it's North America or Asian has the same impact in the atmosphere.

The top two countries in terms of GDP, population, and emissions are the United States and China. The world cannot effectively address global warming without us. Europe is already a participant in the Kyoto Protocol, as is Japan. The key to the future will be decisions made in Washington and Beijing.

Fortunately, though, we will certainly see continued action in Europe. A new round of emissions targets is being set under the European Emissions Trading System.

We talked earlier about the prospects for U.S. action. I'd like to look at what's happening in China. Recently it was announced that China would pass the U.S. in terms of emissions much earlier than expected: by 2009. This doesn't mean, though, that China will, in 2009, become the chief perpetrator of climate change. In terms of per capita emissions, the United States is far ahead of China. The average American uses seven times more energy and twelve times as much gasoline as the average Chinese. Additionally, China's fuel economy standards are far stronger than those in the United States.

While China has given no sign that it is willing to take on mandatory, internationally driven limitations on its emissions, it has developed a set of energy efficiency measures and mandates. These measures and mandates are part of a response to their own priorities, not to global priorities, that nevertheless serve to place China ahead of many other nations in terms of climate policy. As a part of these efforts, China is developing green technology industries, which brings us back again to the question of whether we're going to see global climate change simply as a cost or whether this is a question of how to seize opportunities to sell the technologies that will be demanded by tomorrow's markets.

QUESTIONS FROM JOURNALISTS

QUESTION: You mentioned earlier presidential candidates taking positions on climate change. Do you expect any of the presidential candidates to sign the Kyoto Protocol if they become president?

MR. LASH: I would not expect the U.S. to enter the Kyoto Protocol in its first phase. I would expect the U.S., regardless of what happens in 2008, to seriously reenter the negotiations in 2009 and begin discussions of what obligations it might take for the second phase of Kyoto in 2012. I don't know how that negotiation will proceed with respect to whether it is called the Kyoto Protocol or the Copenhagen Agreement or something else. As soon as the United States takes on mandatory obligations domestically, all of our incentives shift, and we will have an enormous interest then in assuring that the rest of the world responds and that the U.S. system and the international system fit together in terms of the carbon trading regimes.

QUESTION: There have been plenty of rumors in the past few months that President Bush could do a Nixon to China on climate change in his State of the Union address — Do you think that there will be a conservative push to get in what we would call one of the weaker bills — the ones with less requirements — with, perhaps, White House acquiesence or even support — before the administration leaves office, to innoculate against one of the stronger bills later?

MR. LASH: Yes, that's the fear of Potemkin legislation. I do think the President will talk about climate change in his State of the Union address. I suspect that the Administration will offer a collection of measures, which when you look at them closely are all voluntary or are technology initiatives that aren't yet funded, and I do expect to see a strong push by some of the industries that would prefer not to seriously address the climate issue to see legislation either with a cost cap or without mandatory provisions passed in the upcoming Congress. That would be quite divisive. I don't think it will pass.

QUESTION: I am from Bangladesh, a very densely populated country where climate issues have been of great concern. Can you speak to what role, if any, smaller nations play in fighting climate change?

MR. LASH: Not only is Bangladesh facing problems because of population pressures, but, of course, it's a very low lying country, so increased storms and sea level rise endanger over 100 million people, I believe. Because of the nature of the international process on climate change, even those nations that are not large emitters can be significant players. We ultimately have to find an agreement that includes Europe, North America, and the G-77. And in that, it's quite possible that a nation like Bangladesh would be a significant player. It seems inevitable that any international agreement would include incentives for countries that while they're not large scale emitters now, are rapidly growing. In fact, the Kyoto Protocol included something called the clean development mechanism, which is moving billions of dollars into investments in clean technology in developing countries. Unfortunately, that's still much too little and the transaction costs of making those agreements under the clean development mechanisms are quite high.

MR. PERSHING: I notice two different things. The first one is with regard to the clean development mechanism. The current expenditures are on the order of US$2–$3billion, but the expectation is by 2012 we might have as much as US$30 billion. That begins to be the same size as official development assistance, and that's a significant sum of money. Probably more significant is the expectation for foreign direct investment and the investment there, if we take the total that might be expected for example in European Emissions trading regime and other systems like that, might measure several hundred billion dollars. At that point, new technologies begin to move into countries not just in the U.S. and in Europe, but globally — in India, in Bangladesh, in Central Africa.

QUESTION: I was curious about your comments about ethanol and how cool you were to it. What sort of changes would you like to see in the U.S. transportation sector?

MR. LASH: First and most obviously, improved efficiency in the fleet. It's the cheapest, it's the fastest. It's a thing we can do that has no environmental negative effects. Secondly, there certainly will be changes in the technology. We don't yet have significant sales of advanced diesels in the United States, but that's a significant option. Those things are available now.

QUESTION: What do you think the prospects are for changing the cap and trade standards or for somehow using hybrids or fuel efficiency diesels?

MR. LASH: We eventually have to have a fuels discussion in this nation. It ought to be conducted in terms of the economics and environmental benefits of the alternatives, and there are a number of alternatives other than turning corn into ethanol using a lot of natural gas for the process. I mentioned cellulosic ethanol earlier. DuPont and BP have an experiment with an enzyme that enables them to produce butanol, which BP is already adding to gasoline in the United Kingdom. I've seen five or six other technologies and I don't spend a lot of time looking. We'll eventually find a way to create biofuels, biodiesel, and so forth. But I don't think this first one out of the gate is going to be the winner.

A consequence of the change of party control in the Congress is that Congressman Dingle is once more chairman of the Energy and Commerce Committee. For those of you who don't know him, he is from Michigan and has been the staunchest friend of the automobile industry and a long time opponent of mandatory environmental or fuel economy standards. That certainly presents a difficulty.

On the other hand, the U.S. automakers are in significant financial difficulty, and a technology program could become a vehicle for helping them compete more effectively. My hope is that sometime in the next three years, we'll see a combination of regulation and subsidy that will enable them to compete more effectively.

QUESTION: Could you tell me a little bit about the internal dynamics of decisions being made in Beijing, in particular, what sort of decisions could be made that could limit carbon emissions?

MR. LASH: The honest answer to the first part of your question is no. I wouldn't purport to be able to tell you anything about the internal dynamics. I remember being in a meeting with Premier Zhu Rongji seven or eight years ago. He surprised us very much by saying we understand the globe is warming and we understand that we will suffer early and serious consequences. He pointed to recent floods and storms. He said that environmental problems will be a huge obstacle to Chinese development and that we want to address those issues, but we don't see the United States as serious about those issues yet.

So, I can only offer a hope that when the U.S. gets serious and when this becomes a question of moving on to post-fossil age technologies that there will be competition in that area and the potential for agreement between the U.S., Europe, and China. The conditions for that just aren't in place, although, as I said, they're doing much more than you would know if you didn't follow it closely.

MR. PERSHING: I would add just a few things. The first one is that the energy sector in China beginning in 2002 was deregulated, and one of the consequences of that is that some of the activity moved from Beijing into power plant decision-making at the local level, in some cases cities and in some cases provinces. That somewhat shifted the balance of these decisions. But those provinces are often extremely concerned about the local phenomenon, and this is a point that I think is quite significant. We're seeing an increased level of attention to two issues: one is to air pollution and the second is to the cost of imported fuel. And the consequence in the discussions we've had with the Chinese have suggested that those two at least as much, and probably much more, than climate change will drive decisions. But the outcomes are things like efficiency. The outcomes are things like a move to natural gas. The outcomes are in some cases significant investment in alternative energy supply. So I think stay tuned on those developments.

MR. JHIRAD: I think it's important to point out that the Chinese automobile standards are much more rigorous than ours and they're likely to be ratcheted up even further because the big story is the amount of imported oil consumed by over one hundred million additional cars in the next 15 years. The Chinese are very concerned about oil imports, and very concerned about the effect on the cities. In fact, some analysis that we've done with the Chinese shows that you can cut oil imports by a factor of three or four over the next fifteen years through high efficiency standards for automobiles and heavy investment in smaller hybrids and in mass transportation. And the Chinese are very concerned about the energy security implications of continuing on the present path.

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Our mission is to move human society to live in ways that protect Earth's environment and its capacity to provide for the needs and aspirations of current and future generations.

Because people are inspired by ideas, empowered by knowledge, and moved to change by greater understanding, WRI provides — and helps other institutions provide — objective information and practical proposals for policy and institutional change that will foster environmentally sound, socially equitable development.

WRI organizes its work around four key goals:

- **People and Ecosystems.** Reverse rapid degradation of ecosystems and assure their capacity to provide humans with needed goods and services.
- **Climate, Energy, and Transport.** Protect the global climate system from further harm due to emissions of greenhouse gases and help humanity and the natural world adapt to unavoidable climate change.
- **Markets and Enterprise.** Harness markets and enterprise to expand economic opportunity and protect the environment.
- **Governance and Access.** Guarantee public access to information and decisions regarding natural resources and the environment.

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