Climate Change – The Way Forward

Remarks of:
John M. Wootten
Vice President
Environment & Technology
Peabody Energy

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Concerns that the continued use of fossil fuels will in some way cause adverse changes to the world's climate can be addressed through the judicious balancing of energy, economic, and environmental policies. Fossil fuels are projected to supply the majority of the nation's energy needs for the foreseeable future. Much has been done to reduce the environmental impacts of energy production. Research, development and adaptation of advanced technologies to minimize and sequester emissions or atmospheric concentrations of greenhouse gases released from the consumption of fossil fuels offers the promise of achieving the nation's energy, economic, and environmental goals in concert.

The occurrence of human-induced climate change is a long-term global issue that should not be addressed with short-term, limited policies that put environmental polices in conflict with energy and economic needs. The Kyoto Protocol is one such short-term policy that contains emission reduction targets that are unrealistically harsh, economically punitive and simply will not be met.

President Bush has correctly refused to regulate carbon dioxide under the Clean Air Act and Peabody Energy supports that decision. He has also rejected ratification and implementation of the Kyoto Protocol, while indicating a willingness to negotiate a new agreement to address the potential for interference with the climate caused by the

continued use of fossil fuels under the Framework Convention on Climate Change. The U.S. has ratified the Framework Convention and, as a result, does have obligations to use its best efforts to reduce greenhouse gas emissions.

Peabody supports the decision to move beyond these limited policy options. The climate debate should move to more productive policy development that, over the long run, will result in greater emissions reductions with far less economic cost. Peabody supports a new approach to balance energy, economic and climate change concerns. The new approach can be economically justified in and of its own right, regardless of whether the concerns over the continued use of fossil fuels prove to be true or not true.

Sound climate change policy must acknowledge first that there remains great uncertainty in the scientific understanding of climate, and second that imposition of immediate constraints on emissions from fossil fuel use is not warranted. Peabody believes that climate policy must include solutions that are economically justified in the near term as well as those that can be rationally implemented over the longer term. These might include policies to:

- Recognize the importance of carbon sequestration by accelerating research into capture and storage of carbon from emission streams and through development of technologies to promote carbon storage through protection and expansion of forests and emphasis on soil management practices;

- Promote research, development and commercialization of technologies to produce and use energy more efficiently;

- Expand research to find ways to adapt to change. In some instances this may be more economically attractive than alternative paths such as emissions reductions;

- Emphasize cost-effective voluntary programs to reduce or sequester all greenhouse gas emissions, from all sources be they domestic or international;

- Encourage participation in voluntary programs by local communities and governments on all levels;

- Provide tax or other incentives to offset financial and technical risks associated with moving early commercial applications of advanced technologies from the demonstration stage to commercial use;

- Identify and then take steps to remove financial and/or regulatory barriers that prevent new lower emitting technologies from being deployed;

- Continue and accelerate research to find the answers to the many outstanding scientific questions about climate that limit our understanding of the possibility of or the reasons for future climate change;

- On an international front, support negotiation of an agreement, under the auspices of the 1992 Framework Convention on Climate Change, which is global and focuses on technology development, on information sharing and on removal of financial and political barriers that prevent the transfer of technology throughout the globe. Such an international agreement must address the needs of developing nations, including their desire to build their domestic capabilities and grow their economies.

Sound climate change policy will **NOT:**

- *Impose short- or long-term mandatory caps* on greenhouse gas emissions; or

- *Impose taxes or regulations* on the emissions of greenhouse gases; or

- *Be limited* to a small group of industries (on a national basis) or a small group of nations (on a global basis).

RECOMMENDATIONS

Peabody supports an approach to climate change that focuses on research to answer the outstanding scientific issues on: development and commercialization of advanced and more efficient technologies; economically sensible voluntary actions; measures to adapt to change; and an international approach that is directed to technology, information and continued economic opportunity. In short we support economically justified near-term actions while we develop innovative long-term solutions. We believe that policies can be put into place that:

- **Recognize the importance of carbon sequestration by accelerating research into capture and storage of carbon from emission streams and through development of technologies to promote carbon storage through protection and expansion of forests and emphasis on soil management practices.**

  Over the long term, if climate change is an issue and if greenhouse gases must be sharply lower than today, sequestering carbon will be necessary. This is long term and the federal government should provide funding and accelerate carbon sequestration research. The Department of Energy has begun a limited carbon sequestration research program directed at capture and storage of carbon from emission streams, which should be expanded. Research is ongoing to develop the zero emissions power plant of the future. Again, this research effort should be expanded. Sinks, i.e. forests and land use practices, offer another opportunity to sequester carbon. These concepts are important to include in climate policy as we move forward.

- **Promote and provide funding for research into, and then development and commercialization of, technologies to produce and use energy more efficiently.**

  While reductions in emissions may be accomplished in the near term through voluntary actions, over the medium to long term permanent emission reductions

will depend upon development and application of more energy-efficient, cost-effective technologies. U.S. climate policy should include a provision for accelerated research, though federal – private partnerships, to develop these technologies and then find a way to move them quickly into the marketplace both here and abroad. Climate policy should include the appropriate tax and financial incentives to accelerate the movement of proven technologies into the commercial marketplace. The climate proposals introduced in the 106th Congress as referenced above included programs for research and then development and deployment of new, energy-efficient technologies.

- **Expand research to find ways to adapt to change. In some instances, this may be more economically attractive than emissions reductions.**

  Little emphasis is placed on adapting to changes caused by climate or for other reasons. Many times it is much less costly to adapt to change rather than to try to stop change. Climate policy should establish a specific program within the Department of Energy for research on the best ways to adapt to changes caused by changes in climate.

- **Emphasize cost-effective voluntary programs to reduce or sequester all greenhouse gas emissions, from all sources be they domestic or international and encourage all to participate.**

  In 1993, following ratification of the 1992 Framework Convention on Climate Change many U.S. companies, and some industry sectors as a whole, began to develop programs to increase operating efficiencies, put new technologies in place and implement business practices aimed at lowering greenhouse gas emissions. These programs, which are ongoing, are voluntary, cost effective and efficient. And, they are having results. Recently the Department of Energy released a report showing that U.S. greenhouse gas emissions are more than 200 million tons lower annually than if industry had not taken these voluntary actions.

This program could be expanded to include more businesses and to include all levels of government. A way forward was suggested by the climate proposals introduced in the 106th Congress, S. 882, S. 1776 and S. 1777, which call for an expansion of these voluntary programs and an expansion of information and education about the programs.

Voluntary programs offer the flexibility to be cost effective, to encourage innovation and cooperation, are more efficient, allow orderly turn over of capital stock and to achieve energy and environmental objectives faster – and at lower cost - than command and control regulatory regimes.

Progress is measured through a reporting system set up under Sec. 1605(b) of the 1992 Energy Policy Act. The legislation referenced above expanded this program, and this should be done to encourage more businesses to become involved in reporting on their successes in reducing or avoiding greenhouse gas emissions.

- **Provide tax or other incentives to offset financial and technical risks associated with moving early commercial applications of advanced technologies from the demonstration stage to commercial use**.

  There are both technical and financial risks associated with commercialization of first-of-a-kind technologies although most times these new technologies are more efficient and reduce emissions of criteria pollutants (SO2, NOx and particulate matter) as well as CO2. Due to the risks, industries (especially the electric generating industry) are reluctant to make the very large capital investments required to bring these new technologies on line. Tax policies can be changed to provide incentives to offset part of this risk. This will reduce the cost and accelerate commercialization of these new technologies. Tax policy must be part of a U.S. climate action plan, and an example can be found in S. 60, the National Electricity and Environmental Technology Act, introduced in the 107th Congress by Senators Byrd and McConnell. This proposal accelerates commercialization of clean coal technologies, which will lower greenhouse gas emissions. The

concept can be extended to other technologies that lower or sequester emissions.

- **Identify and then take steps to remove financial and/or regulatory barriers that prevent new lower-emitting technologies from being deployed.**

  There are many conflicting regulations that slow, or even prevent, new lower-emitting technologies from being used by industry. Nowhere is this statement more true than in the regulation of the electric utility industry. At this point, electric generators are faced with a large number of environmental regulatory initiatives (existing and pending). These regulations, especially New Source Review requirements, are preventing the electric generating industry and also other industries such as petroleum and steel from adopting new lower-emitting technologies. Climate policy should identify these barriers and remove them.

- **Continue and accelerate research to find the answers to the many outstanding scientific questions about climate change that limit our understanding of the possibility of future climate change.**

  Despite many years and dollars devoted to research on the science of climate change and the many advances made in the state of our knowledge, many questions remain outstanding. Climate policy should accelerate research efforts concentrating on factors that seriously limit our understanding such as the effects of clouds, aerosols, sea ice, deep ocean circulation and natural climate variability. The expansion of the U.S. Global Climate Change Research Program is an example of the way to expand the research of climate change.

- **On the international front, support negotiation of an agreement, under the auspices of the 1992 Framework Convention on Climate Change, which is global and focuses on technology development, on information sharing and on removal of financial and political barriers that prevent the transfer of technology throughout the globe. Such an international agreement must**

address the needs of developing nations, including their desire to build their domestic capabilities and grow their economies.

Any international agreement should be based on the initial 1992 Framework Convention on Climate Change and can build upon the work done to develop information and reporting systems under the FCCC. A new international agreement should establish a means for global cooperation to: develop and globally deploy new energy efficient technologies; promote carbon sequestration and better land use practices; find ways to assist countries to adapt to changes in climate. An international agreement should also focus on identification and the removal of financial and political barriers that prevent dissemination of technology and importantly should include the participation of every country that is part of the FCCC. Any international agreement should focus on long-term goals, and not on short-term targets. Such an agreement should promote open markets and accelerate capacity building in developing countries.

Much work has already been done to find ways to accelerate technology transfer, for example the OECD Climate Technology Initiative and the Technology Cooperation Agreement Pilot Program established to help implement Article 4.5 of the 1992 Framework Convention. These types of programs can form a basis from which to expand.

The way forward to address climate change and, more specifically, greenhouse gas emissions from fossil fuel combustion must include R&D, technology development and voluntary actions. Sequestration of carbon will be an essential component of the way forward if the scientific, engineering and economic issues can be resolved satisfactorily. That challenge falls directly on many of you attending this conference. So, let me conclude by wishing you success in delivering the promise that sequestration holds for the continued use of fossil fuels. Thank you.

Peabody

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Vice President
Environment & Technology
Peabody Energy

To:
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Where Are We?

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- Fossil fuels are projected to supply majority of energy needs for foreseeable future
- Energy supplies in the US are tight and prices have increased
- Much has already been done to reduce the environmental impacts of using fossil fuels
- Bush Administration has correctly refused to regulate CO2 as a pollutant or implement the Kyoto Protocol
- Congress has introduced energy bills and CO2 control measures, but no clear consensus exists to set limits on carbon
- The public is concerned about the economy and energy but does not appear ready to accept higher prices or use less energy to limit carbon
- Climate science remains uncertain, but there appears to be time to develop a response to the potential for climate change

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Where do we need to go?

- Need a new approach to climate change
- New approach must balance economic, energy and climate change concerns
- New approach must recognize:
  - uncertainty in science
  - immediate constraints on emissions not warranted
  - solutions must include:
    - voluntary actions,
    - use of sinks,
    - technology development,
    - incentives for action, and
    - transfer of technologies to developing countries

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What should be in a New Policy?

- Recognize the importance of carbon sequestration by accelerating research
- Promote R&D and commercialization of technologies for producing energy efficiently
- Expand research of adaptation technologies
- Emphasize voluntary reductions and sequestration activities
- Provide tax incentives to offset technical and financial risks of early commercial applications of advanced technologies

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More of what should be in a New Policy

- Identify and remove barriers that discourage emission reductions or sequestration projects
- Accelerate research on science of climate and potential for adverse changes
- Negotiate a new agreement that is global, encourages economic development, and stimulates technology transfer and capacity building

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What should not be in a New Policy!

- Mandatory targets and time tables
- Flexibility mechanisms that require establishment of baselines or caps
- Taxes or regulations that limit carbon emissions
- Programs that focus on only a limited number of sources or industries.

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How do we get there?

- Industries must use best efforts to achieve voluntary reductions in greenhouse gases
- Public and private sectors must commit sufficient funding to R&D and commercial demonstrations of advanced technologies
- Public sector must provide incentives to share technical and financial risks with private sector
- Legislative and regulatory actions must allow time for technology development and deployment without forcing premature replacement of assets