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Let's Be Policy Driven, Not Politically Driven, in Energy and Climate Change

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Today, as Congress considers new incentives and subsidies to encourage the public and private sectors to work together to mitigate greenhouse gas emissions (without sacrificing economic prosperity), the public is well-advised to reconsider the recently passed legislation that established a viable climate policy for the United States.

On June 21, 2005, the Hagel-Pryor climate change amendment passed the Senate by a vote of 66-29. Senators Alexander, Landrieu, Craig, Dole, Murkowski, Voinovich, and Stevens were the original co-sponsors. When the House and Senate met in conference to work out the differences between their energy bills, the Senate policy was adopted in the Conference Report. The Conference Report passed both chambers and was signed into law by President Bush on August 8, 2005. As the law of the land, Title XVI of the Energy Policy Act of 2005 (EPACT 2005) is the current U.S. climate policy.

When confronting difficult issues, sound government policy is most successful when it draws on the strength of the private sector and is based on a solid factual foundation. EPACT 2005 sets a comprehensive and practical approach to address the issues of climate change by encouraging public-private partnerships for technological innovation. Public-private partnerships combine the institutional leverage of government with the innovation and efficiency of industry.

The heart of this approach is the use of greenhouse gas intensity (GHGI)[1] as the metric to measure how efficiently a nation (or an industry segment, or a company, or a community) uses carbon emitting fuels and technology in producing goods and services. Greenhouse gas intensity best captures the links between energy efficiency, economic development, and the environment because it recognizes the strong relationship between energy use and economic growth and the futility of trying to meet economic growth objectives while simultaneously using less energy year after year.

The climate policy options available to reduce greenhouse gas emissions can utilize the following three metrics:

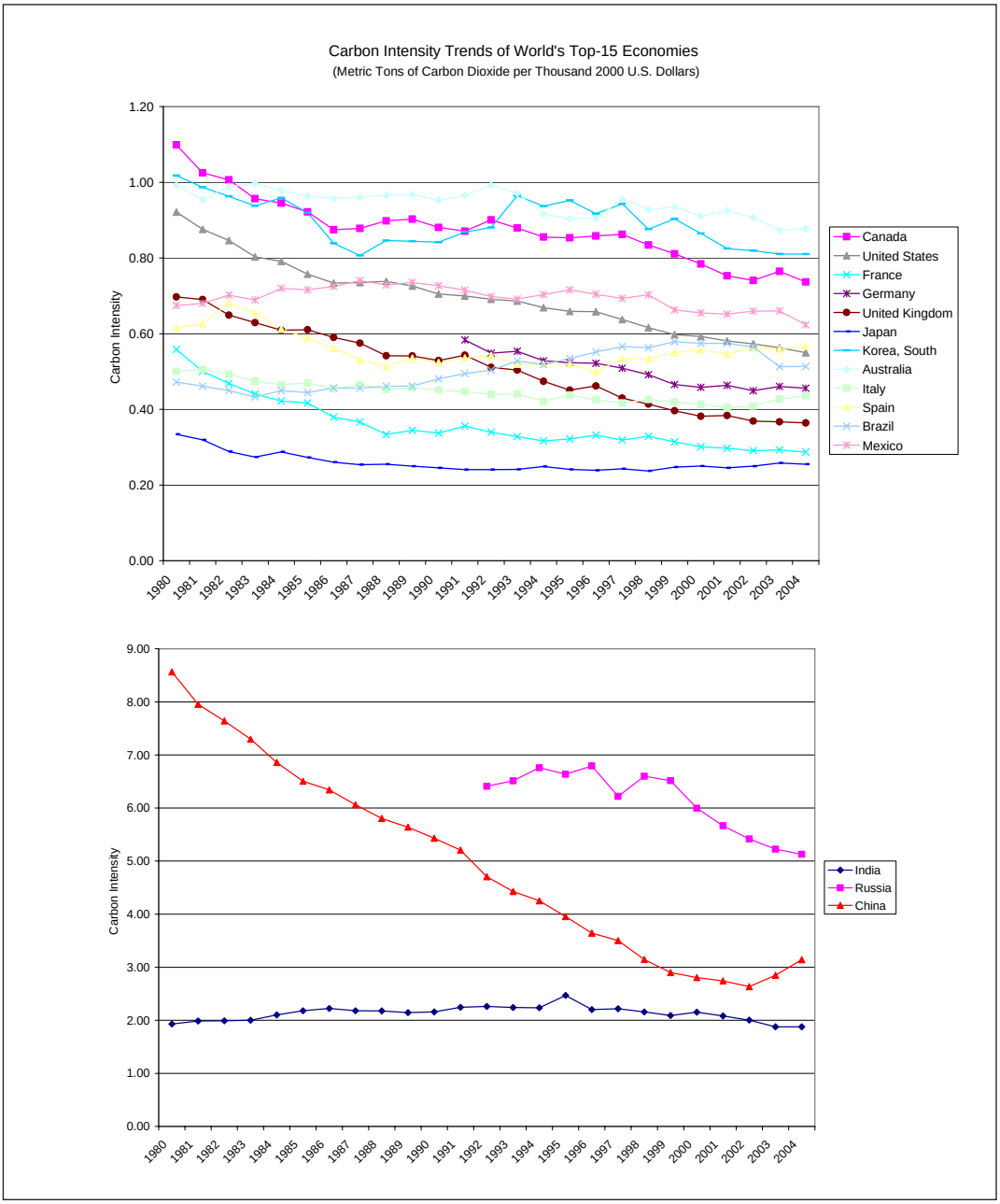
1. greenhouse gas intensity, or
2. an arbitrary enforceable cap followed by a trading system, or
3. per-capita emission for each living human on earth.

After careful consideration of the implications of all three, Congress enacted into law in the EPACT 2005 the use of GHGI as the metric. GHGI links economic forces with innovation to deliver a solution to greenhouse gas reduction. Implementing this policy makes clear that actions will be taken to grow the economy with greater efficiency. We need better technologies for energy production, transportation, manufacturing, agriculture, and electric power generation, etc., that emit less carbon. We then measure the progress in GHGI trends.

GHGI is the appropriate metric because it considers the economic impact of changes in emissions while advancing better technology. This provides all segments of our economy — and the developing nations — a fair and sustainable approach to

growth. Consider these GHGI numbers from DOE's Energy Information Agency: the current U.S. GHGI is 0.5, the EU 0.4, China's GHGI, however, is 3.0, and India's is 2.0, all in metric tons of CO_2 per thousand dollars.[2] These numbers make it clear that significant long-term reductions in greenhouse gas emissions require the involvement of developing countries. Ten years ago, the U.S. and the EU were at 0.7 and .45 GHGI, respectively. This shows a positive trend that, with implementation of the provisions in Title XVI of the U.S. EPACT 2005, could be accelerated. As shown in Figures 1 and 2, the greenhouse gas intensity for the

Figures 1 & 2



Source: Energy Information Administration, International Energy Annual 2004, "Table H.1gco2 World Carbon Intensity."

world's top 15 economies show that for most countries the GHGI has been decreasing since 1989 through 2004, with the exception of a recent up-turn for China. In reference to the figures, the 'best' place to manufacture a pair of tennis shoes (based on GHGI) would be Japan (GHGI = 0.25), the 'worst' would be Russia (GHGI = 5.0)

Domestically our goal should be to meet the EU's GHGI, adjusted for important demographic differences. This would demonstrate real movement toward long-term greenhouse gas reduction. We need to provide mechanisms and incentives to move the large international emitters' GHGI measurements downward to 'western' levels. Only when the large emitting nations measure GHGI within a few percentages points will the world see the GHG emissions slow, and then set the stage for reduction if justified by science.

A look at the details of EPACT 2005 shows the potential effectiveness of U.S. climate policy. Title XVI promotes public private partnerships in the U.S. for demonstration projects that deploy GHGI reduction technologies. Coupled with the loan guarantees in Title XVII this technology deployment can become reality — if Congress and the Administration put their minds to it. Title XVI offers a comprehensive, voluntary approach to addressing the issue of climate change by connecting domestic and international economic, environmental, and energy policies.

The domestic section of the climate policy promotes the adoption of technologies that reduce greenhouse gas intensity by:

- authorizing loan guarantees for projects that deploy technologies that reduce greenhouse gas intensity;
- establishing a Climate Coordinating Committee to assess, approve and fund projects; and
- directing the Secretary of Energy to lead an inter-agency process to implement a national climate change strategy.

The international section of the climate policy promotes the adoption of technologies that reduce greenhouse gas intensity in developing countries by:

- providing the Secretary of State with new authority for coordinating assistance to developing countries for demonstration projects and technologies that reduce greenhouse gas intensity;
- establishing an inter-agency working group to promote the export of greenhouse gas intensity reducing technologies and practices from the United States;
- directing the U.S. Trade Representative to negotiate the removal of trade-related barriers to the export of greenhouse gas intensity reducing technologies; and
- authorizing fellowship and exchange programs for foreign officials to visit the United States and acquire the expertise and knowledge to reduce greenhouse gas intensity in their countries.

With this authorization language signed into law, lawmakers, through the appropriations process, can provide such sums as deemed necessary to accelerate the deployment of GHGI-reducing technology domestically and internationally. Is Congress going to implement this policy through funding, or just talk politics? Will the Administration speed the development of implementing regulations and policies?

The three options for climate policy all cost money; there is no 'free lunch'. Implementing the current policy in the public appropriations process provides the transparency all other climate policy approaches lack.

The current international approaches to global climate change overlook the essential role of developing countries as part of the solution. The EPACT 2005 also gives the U.S. Secretary of State new authority to coordinate assistance to developing countries for projects

and technologies that reduce their GHGI levels. This establishes the U.S. leadership role for climate change solutions.

The developing nations need energy to grow. Even the U.S. needs more energy to meet the demands of our growing population. We are the only developed country with a continuing population growth, due mainly to immigration. Should we close our borders to meet some arbitrary, politically set emission cap? Any climate change policy must recognize the need for more energy. In the end, long-term success will come from stimulating increased energy efficiency and new lower carbon emission systems; not from actions that set up a system to continually constrain energy supplies.

EPACT 2005 established our climate policy with positive options for protecting the environment without sacrificing economic performance in the U.S., or in other nations. All nations act in their own best interests, therefore any single-nation mandatory program is doomed to failure. Real success requires expanding the availability of cleaner energy sources and improving the efficiency of our energy production and consumption through new technologies. This is a long-term challenge as is the climate change risk.

As Senator Chuck Hagel (R-NE) has stated on the floor of the Senate, "Climate change does not recognize national borders." Establishing a politically driven U.S. carbon-trading program will result in little gain. Climate change is a shared responsibility for all nations, and we, the largest carbon-emitting nation, can set the example. EPACT 2005 provides the policy that sets the example, and provides an integrated, positive and forward-looking technology solution for the climate change challenges. Focusing on politically popular solutions that are too narrow, or that limit energy growth, may resolve one problem just to create or exacerbate another problem somewhere else.

Notes

1. GHGI = carbon dioxide emissions/economic output
2. ***http://www.eia.doe.gov/pub/international/iealf/tableh1gco2.xls***.