Q&A Regarding Discussion Draft

1. Why Cap and Trade?

- Cap and trade is an effective policy tool because it creates a price signal that will encourage companies to account for emissions in their business planning. Even a modest price signal will spur energy efficiency, the use and development of lower carbon energy options, and options to mitigate potent greenhouse gases such as methane.
- Although it is true that there is currently no "end-of-pipe" solution for greenhouse gases, a modest price signal in the short term can be coupled with effective technology incentives to drive the long-term breakthrough technologies that we need to address climate change. This could include carbon capture and sequestration, which is an "end-of-pipe" technology.

2. Won't cap and trade raise overall energy costs for consumers by taxing incumbent fossil technologies?

- The price cap mechanism in the draft would limit the overall increase in energy costs.
- Modeled impacts on consumer energy prices are modest.
- Compared to BAU, natural gas and electricity prices would be expected to rise by 4%-6% in 2020. (Source EIA Analysis 1/2007, Table 2)
- Gasoline prices would increase by approximately 6 cents per gallon. (Source EIA Analysis 1/2007, Table 2)

3. What is the impact of the discussion draft on overall economic growth?

- A properly designed cap and trade program such as the proposal plan would be a modest first step that will allow the U.S. economy to grow while sending a price signal that will spur energy efficiency, the use and development of lower carbon energy options, and options to mitigate greenhouse gases.
- From 2004 through 2020, the U.S. economy grows 62.89% under the proposed emission trading plan, compared to 63.08% under business as usual. (Source EIA Analysis 1/2007, Table 3)
- Under the proposed emissions trading program, 25.7 million jobs will be created between 2004 and 2025, compared to 25.8 million jobs under the reference case.

(Source EIA BLLMSS Runs, Table 18, Labor Force)

4. Will the proposal lead to fuel switching to natural gas at a time when natural gas prices are at an all time high?

- The proposed trading program will increase total natural gas consumption by 1% in 2030. (Source EIA Analysis 1/2007, Table 2)
- The proposal has no special impact upon the source of natural gas used in the U.S., which is forecast to come increasingly from international suppliers as consumption grows roughly 20% by 2030 regardless of any climate change program. (Source EIA Analysis 1/2007, Table 2)

5. What is the impact of the draft on our nation's use of coal?

- Coal use continues to increase under the emissions trading program, growing 17% over current (2004) levels by 2020, compared to 22% under business as usual. (Source EIA Analysis 1/2007, Table 2)
- The auction of some of the allowances as well as the sale of price cap allowances will provide incentives for the deployment of clean coal technologies such as integrated gasification and combined cycle (IGCC), as well as funding further R&D into new clean coal processes.

6. Won't a cap and trade program hurt U.S. competitiveness?

• No, the projected GDP impacts from the proposed program are very small. The proposal has features designed to protect the competitiveness of U.S. industry. For example, the proposal's price cap provision would cap the price of emission allowances. By making additional allowances available at a known price, the proposal effectively caps the costs imposed on the U.S. economy and on consumers. In addition, the proposal would distribute allowances to energy intensive industries to help compensate for higher energy prices arising from a mandatory program. Finally, the proposal explicitly ties the tightening of the target and the escalation of the price cap price to an assessment of the greenhouse gas mitigation efforts of our largest trade partners.

7. We just passed a comprehensive energy bill last year that will reduce greenhouse gases, shouldn't we give that legislation enough time to work?

 Although the 2005 Energy Policy Act had a number of provisions that could reduce greenhouse gases if they are fully funded and implemented, the law as a whole is not projected to have a significant impact on emissions. EIA modeled many EPact provisions in AEO 2006, and they project growth in emissions at a greater rate than is projected for our cap and trade proposal.

8. Why not give the Asia Pacific Partnership enough time to work?

• The Asia Pacific Partnership (APP) could be a significant part of the effort to address climate change if it is adequately funded and sustained over a number of years. A U.S. cap and trade program would complement that and other

- international efforts, not impede them. Indeed, U.S. "leadership by example" makes efforts like the APP more likely to succeed than not.
- The five year review provision of the proposed program will also provide leverage for convincing developing countries like China to take serious actions under the APP or other frameworks. The five year review provision conditions continued U.S. actions on commensurate actions by key trading partners and emitters including large developing countries.
- Technology development and deployment approaches such as the APP are more cost-effective when coupled with price signals to change market behavior.

9. GHG intensity has already been reduced by 1.7% in 2003, 2.1% in 2004 and 3.1% in 2005. Why not continue a voluntary approach?

- We need an effective policy tool to create a price signal that will encourage companies to account for emissions in their business planning. Even a modest price signal will spur energy efficiency, the use and development of lower carbon energy options, and options to mitigate potent greenhouse gases such as methane.
- Furthermore, while it is true that emissions intensity can fluctuate from year-to-year based on economic conditions, fuel prices and other factors, we ultimately care more about the longer-term trends for emissions intensity than short-term changes. EIA's AEO 2006, which takes administration climate change proposals into account, forecasts an average GHG emission intensity improvement of 1.6% between 2005 and 2030.

10. The Acid Rain Program and other trading programs have distributed virtually all allowances to regulated companies for free based on historic fuel use or emissions. Why not use this approach?

- Economic research has shown that allowances needed to compensate regulated industry for lost profits represent only a portion of the total allocation. In a competitive sector such as the petroleum industry, the cost of allowances can be passed on to consumers in higher energy prices, potentially producing a "windfall" for energy producers. Because of this pass through of costs, the number of allowances required to compensate these producers for lost profits is well below expected emissions. Thus, under the proposal, allowances are allocated in a manner that recognizes and roughly addresses the disparate costs imposed by the program. Allowances are not allocated solely to regulated entities because these entities do not solely bear the costs of the emissions trading program.
- 11. The European Union (EU) has been experiencing difficulties with its trading plan: carbon prices have been volatile; uncertainty has hindered new investments; and some companies have received large windfalls at the

expense of consumers. How will the draft avoid the problems currently being experienced by the EU?

- There are several critical structural differences between the EU system and the proposal:
 - o The price cap provision will limit the price volatility that has characterized the EU Emission Trading Scheme (EU ETS).
 - Our proposal has architecture that provides longer-term certainty to companies. This would allow them to make sensible investment decisions. In contrast, the EU program will reduce the cap by an unknown amount every five years. There is also uncertainty about what will happen after the five year Kyoto period is over in 2012.
 - Our proposal is economy-wide and would draw upon the most costeffective options across all economic sectors. In contrast, the EU approach only covers electric power and certain industrial sectors.
 - O Unlike the EU ETS, our proposal only provides a small portion of allowances to regulated entities (coal producers, oil refiners, and gas processors) for free. As discussed above, these regulated entities can pass on most of the costs of the allowances in their fuel prices. In Europe, the nearly 100% free allocation of allowances to regulated entities has resulted in significant windfalls in the electricity sector. For example, a recent study commission by the U.K. government found that this allocation scheme provided the electricity sector with a nearly \$1 billion windfall in 2005. Similar windfalls have been documented in Germany and the Netherlands.
- Finally, while it is true that the EU ETS has had a rocky start, the program is still in a pilot phase that is designed to develop the institutions and data necessary to run a successful program. Many of the difficulties they are experiencing are startup problems. We have the benefit of learning from their experiences.

12. The discussion draft does not actually reverse greenhouse gas emissions and therefore will do little if anything to address this global problem.

- As the 2005 Sense of the Senate Resolution on climate change expressed the
 risks associated with global warming justify the adoption of mandatory limits
 on greenhouse gas emissions. The Senate further expressed that a climate
 change program should be market-based and slow, stop, and reverse the
 growth of such emissions at a rate and in a manner that does not significantly
 harm the United States economy; and will encourage comparable action by
 other nations.
- While the discussion draft does not include long-term reduction targets, we believe that it provides a basic framework for real Senate action on global warming that will put our nation on a trajectory that will lead to real reductions in the future. A first step is needed now to move our energy

system into a sustainable and predictable future, to avoid destructive interference with the world climate system, and to maintain long-term U.S. competitiveness and economic prosperity.