

Statement of John P. Holdren
for Panel 1 of the Clean Coal Conference
Senate Committee on Energy and Natural Resources
March 10, 2005

Mr. Chairman, distinguished members of the Committee, ladies and gentlemen:

This country needs to expand coal use for electricity generation and for reducing dependence on oil and natural gas in other applications. But it also needs to take serious steps to reduce the risks from climate change. Reconciling these two objectives requires a three-pronged approach, as recommended in the recent report of the bipartisan National Commission on Energy Policy that I had the privilege of co-chairing:

- The first prong is to provide a market signal that begins to slow the growth of carbon emissions, but at a pace that doesn't force premature retirement of existing coal-fired generating capacity. The Commission's proposal for a carbon-emission permit system that starts in 2010, phases in gradually, and controls the permit costs with an initial "safety valve" price of \$7 per ton of CO₂ is designed to achieve this.
- The second prong is speeding up the commercialization of integrated gasification-combined-cycle multipurpose coal plants, which can produce liquid and gaseous fuels as well as electricity, which sharply reduce emissions of criteria air pollutants, and which offer the potential for affordable retrofit to capture CO₂. The Commission proposes \$400 million per year in federal early-deployment incentives over the next decade, in order to bring into operation 10 gigawatts of carbon-capture-capable IGCC plants.
- The third prong is accelerating the development and commercial-scale demonstration of the carbon capture and sequestration technologies needed to realize the potential of IGCC plants to drastically and affordably reduce their CO₂ emissions. For this purpose the Commission has proposed \$300 million per year in federal support over the next decade.

The Commission's analysis indicates that, under its proposals, U.S. coal use would increase from 1.1 billion tons in 2003 to 1.3 billion tons in 2020, while U.S. greenhouse-gas emissions in 2020 would be 540 million tons of CO₂-equivalent below the business-as-usual trajectory. I want to emphasize, further, that the Commission's proposals are revenue-neutral: the costs of all of the recommended R&D and the costs of the early-deployment incentives would be covered by the revenues from emission-permit sales. I note, finally, that a further benefit of pursuing U.S. leadership in clean coal technologies would be to advance their use in China and India, where large impending increases in coal use will imperil the whole world's capacity to limit climate-change risks unless the coal is used in ways that capture and sequester the resulting CO₂.

I thank you for your attention.