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President's Committee on Science and Technology Finds Soaring Worldwide Energy Demand 'Potentially Disastrous' Unless U.S. Makes Clean Technology and Efficiency Investments

Investments Would Yield Huge Foreign Markets, Avoid Environmental Risk

Washington, D.C. -- A report released today by the President's Committee of Advisors on Science and Technology (PCAST) concludes that projected growth in energy usage worldwide could be 'potentially disastrous' for the environment and calls for greater public and private investment by the United States in clean energy technology, in cooperation with international partners.

At the same time, the report, notes that U.S. firms would greatly benefit from such investments, helping them capture much of the \$10 trillion which will be spent worldwide for energy supply technologies over the next 20 years.

Dr. John Holdren of Harvard University and Chair of the PCAST Energy Panel said, "The world faces more severe air pollution, greater oil insecurity, heightened threat of global climatic changes, and increased nuclear proliferation risks unless we increase investments in international cooperation on clean energy technology and efficiency now."

The Panel found that world energy demand is likely to soar in the next century to four times today's level. Reductions in projected energy demand would not happen, the panel said, unless innovation to increase energy end-use efficiency and to improve energy supply technologies is both rapid and global.

Dr. Neal F. Lane, Assistant to the President for Science and Technology and Co Chair of PCAST, said, "Tremendous export markets will develop for advanced fossil fuel, renewable, and other clean energy technologies in the very near future. U.S. firms can position themselves to capture a much larger portion of those markets if government and industry make the right decisions now."

Overall, the report finds that the choices the U.S. makes today on research, development, and deployment opportunities will influence the evolution of the global energy system for many decades, and have a tremendous impact on efforts to fight global warming, air pollution, oil insecurity and other problems energy use will cause.

The report was prepared in response to a request from President Clinton to identify ways to improve the U.S. program of international cooperation on energy R&D to best support our nation's priorities and address the key global energy and environmental challenges of the next century.

The PCAST panel which produced the report identified four sets of initiatives to help address these problems, requiring an additional government investment of about \$250 million per year in FY2001, increasing to \$500 million more per year in FY2005. The recommended initiatives include:

• Strengthening energy-related education and training; supporting regional centers for energy research and employment; promoting energy sector reform that attracts private capital while protecting the public interest; and creating mechanisms to assist competitive demonstration, cost-reduction, and financing of advanced energy technologies;

• Developing and promoting technologies to halve the energy use of new buildings, build the factories of the 21st century, improve the efficiency of small vehicles and buses, and increase cogeneration of electricity and heat;

• Developing and promoting cleaner energy supply technologies, particularly biomass, wind, solar, and other renewable energy sources, more efficient fossil fuel systems, technologies to capture and store carbon, and nuclear fission and fusion; and

• Improving management of the Federal portfolio, including greater use of external peer review.

The PCAST panel responsible for the report is made of a diverse group of experts from industry, academic, and non-governmental organizations with a variety of backgrounds and perspectives. In addition to energy expert John Holdren, the report panel included PCAST members John Young (former CEO of Hewlett-Packard Co. and PCAST Co-Chair), John M. Deutch (Massachusetts Institute of Technology), Lilian Shiao-Yen Wu (IBM); industry representatives Richard Balzhiser (President Emeritus of the Electric Power Research Institute), Larry Papay (Vice President of Bechtel), Maxine Savitz (Allied Signal Ceramic Components), Bruce Stram (VP of Enron Energy Services); and others from diverse backgrounds, John P. Boright (National Research Council), William Chandler (Battelle Pacific Northwest National Laboratory), Howard Geller (American Council for an Energy Efficient Economy), John H. Gibbons (Assistant to the President for Science and Technology, ret.), Nathan Rosenberg (Stanford University), and Robert Williams (Princeton University). Despite this diversity, these members and PCAST were unanimous in the recommendations.

A summary of the report: Powerful Partnerships: A Synthesis of a Report by PCAST can be accessed at: http://www.ostp.gov/.

The full PCAST report can be found at: Powerful Partnerships: The Federal Role in International Cooperation on Energy Innovation can be accessed at: http://www.ostp.gov/.