DOE to Host International Conference on the Future of Energy Transportation Technologies

U.S. Energy Secretary Spencer Abraham announced last month that the Department of Energy (DOE) will host an International Conference on the Future of Energy Transportation Technologies in Detroit in the fall of 2002. Details about the timing and location of the conference are forthcoming. Secretary Abraham made the announcement during a meeting with energy ministers from the Group of Eight (G-8) industrialized nations.

The conference will provide a forum to discuss transportation research issues in a collaborative manner. The conference agenda is expected to include sessions on the following topics:

- *Energy-efficient vehicles:* Options for improving energy efficiency include advanced engines, if emissions can be controlled; engine-hybrid vehicles; and electric vehicles. Improved energy-efficiency performance is to be achieved while simultaneously maintaining safety and reducing polluting emissions.
- *Lower-emission two-wheelers:* Urban air quality in many developing countries is significantly affected by low-efficiency and highly polluting two-stroke internal-combustion engines on two- and three-wheeled vehicles. Options for discussion include greater use of higher-efficiency engines, electric-powered systems, and fuel-cell systems.
- *FreedomCAR:* The Bush administration initiative to develop hydrogen-fueled, fuel-cell-powered cars and light trucks is expected to reduce dependence on oil and to eliminate vehicular pollution and greenhouse-gas emissions. Key technical challenges include low-cost hydrogen production—either central or at refueling stations; development of hydrogen infrastructure; high-density hydrogen storage; and low-cost, high-performance fuel cells.
- *Alternative Fuels:* A variety of alternatives to oil are in use, ranging from ethanol in Brazil to natural gas in Argentina. In deploying alternative fuels, numerous lessons have been learned that are expected to be useful to exchange with other countries as they explore their domestic resources for transportation fuels. In particular, more research is desired on biomass-derived fuels. Additionally, biomass-derived fuels is expected to hold benefits for the rural economy. Similarly, lessons learned are also potentially important for hydrogen.

Also during the G-8 Energy Ministerial meeting, co-chairs Secretary Abraham and Canadian Minister of Natural Resources Herb Dhaliwal released a statement of discussions on issues of common interest, including the following on research and development: "We believe that continued research, development, demonstration, and deployment of a broad array of energy technology options will play an essential role in diversifying the energy mix and reducing the environmental impacts of energy production and use, thereby making a vital contribution to sustainable development."

The G-8 members will explore areas where existing cooperation among their countries in energy science and technology may be strengthened, particularly in the areas of emerging renewable energy, energy efficiency, and cleaner energy technologies. They will also review ways in which technical information is exchanged and disseminated both among G-8 members and between developed and developing countries, "with a view toward improving that exchange in order to accelerate the contribution of technology."

House Science Committee Chair Supports Funding for MEP

House Science Committee Chair Sherwood Boehlert, R-N.Y., released a statement last month in support of restoring funding to the Manufacturing Extension Program (MEP) at the National Institute of Standards and Technology (NIST).

"I want to add my voice to those of my colleagues who are supporting full funding for the Manufacturing Extension Program," he said. "As one of the authors of the legislation that created this program, I am particularly committed to seeing it continue."

Boehlert said that the rationale for the MEP program is as valid today as it was when it was created, "Many small and medium-sized businesses, particularly manufacturers, simply don't have the wherewithal or the know-how to keep up with the latest advances in technology. The MEP program has successfully helped businesses apply and adapt the latest technology and that has increased economic growth."

MEP is a network of not-for-profit centers in over 400 locations that provides technical and business assistance to smaller manufacturers. More information can be obtained at the NIST Web site: www.nist.gov.

House Passes Bill Strengthening Science at the EPA

A bill designed to ensure that the best possible science is used by decision makers at the Environmental Protection Agency (EPA) was passed unanimously on April 30 by voice vote by the House of Representatives. The Strengthening Science at the EPA Act, H.R. 64, was introduced by Rep. Vernon Ehlers, R-Mich., chair of the House Subcommittee on Environment, Technology, and Standards.

The bill creates the position of deputy administrator for science and technology at the EPA. The new deputy would be responsible for coordinating scientific research among the scientific and regulatory arms of the agency and ensuring that sound science is used in regulatory decisions. The bill would also convert the position of assistant administrator at the Office of Research and Development to chief scientist, who would serve a five-year term.

Ehlers introduced H.R. 64 in response to a National Academy of Sciences' comprehensive report detailing specific improvements needed in response to the ongoing debate about the role science plays in regulatory decision-making at the EPA.

The bill next goes to the Senate for consideration.

National Science Board Report Assesses International R&D Investments

Dramatic increases in research and development (R&D) investments during the past decade, largely from industry, have contributed to the United States' standing as a global "economic powerhouse," according to *Science and Engineering Indicators 2002*, a biennial report of the National Science Board to the president. The report said that the impact of international developments may increase.

The report shows that the United States finances 44% of total worldwide investment in R&D—equal to the amount financed by Japan, the United Kingdom, Canada, France, Germany, and Italy combined.

According to the report, other nations are increasing their R&D investments and focusing on such areas as the physical sciences and engineering, which receive comparably less funding in the United States. Those changes, *Indicators* concludes, could lead to the creation of new centers for research excellence abroad and return to those home countries more of their U.S.-trained scientists and engineers. The report acknowledged the many contributions of non-U.S.-born scientists to U.S. economic vitality, but added "the country's international economic competitiveness ultimately rests on the U.S. labor force's own capacity for innovation and productivity." □

https://doi.org/10.1557/mrs2002.141 Published online by Cambridge University Press