

Tuesday, December 06, 2005

[Click here for the InsideEPA.com Main Page](#)

Experts Say Data For Sustainability Policies Lacking, Getting Worse

The system to collect data necessary for EPA and other agencies to set policies for achieving sustainable development is currently unavailable, and prospectives for improvements are dim, according to experts convened by EPA's science program to help shape the agency's thinking on the emerging issue.

The lack of data for critical policy decisions is also underscored in a draft EPA "white paper" on research and regulatory priorities for nanotechnology materials, which is another emerging challenge for the agency.

The Office of Research and Development's one-day meeting Dec. 2 in Washington, DC -- "A Forum on Sustainability, Well Being, and Environmental Protection: What's An Agency To Do?" -- marked the latest effort by agency and outside experts to better understand what policies are needed to advance the goals of sustainable development. The term sustainable growth is widely used, but participants at the forum argued that it needs clarification through agreed-upon measures of environmental and socio-economic changes that can be used to determine whether environmental and related conditions are improving in a long-term or sustainable manner.

In remarks to forum participants, which included representatives from 10 federal agencies, EPA director for sustainable development Alan Hecht stressed the agency wants to find ways to link science to policy and make sustainability "operational," or "applied." Environmental sustainability requires an understanding of how economic activity interacts with ecological functions, he said. Hecht noted that EPA is exploring how it can obtain the right tools and metrics to evaluate whether its decisions contribute to promoting sustainable behavior as the agency moves forward in this policy arena.

Recent statements by EPA Administrator Stephen Johnson touting industry cooperation on environmental "stewardship," and the Bush administration's adoption of an overall "cooperative conservation" approach, reflect the growing emphasis on finding policies that simultaneously protect the environment and support economic growth. While as-yet-undefined, sustainable development policies are seen by experts as having far-reaching implications for how products are manufactured, how energy is produced and used, water conservation policies, and virtually every other aspect of the economy, even if those policies are not embodied in statutory mandates and command-and-control regulations. EPA is slated within days to release a position paper on environmental stewardship that will likely emphasize non-regulatory approaches.

At a Dec. 2 forum panel chaired by University of Maryland economist Herman Daly, a well-known critic of current economic models that do not account for environmental services, Anthony Janetos, vice president of The Heinz Center, noted that the Millennium Ecosystem Assessment involving more than 1,000 scientists concluded that approximately 60 percent of the earth's ecosystems are being used unsustainably. However, at present there is a lack of a comprehensive system to track changes in ecosystems to enable policy makers to act on conclusions about whether the systems are improving, declining, or staying the same, Janetos said. Such "accounting" is vitally important, Janetos said. He also noted that *Time* magazine, Home Depot, and other businesses recently engaged in life cycle analysis to determine their net releases of greenhouse gases, and Janetos argued that EPA could contribute to the essential "information base" for sustainability decisions through similar case studies.

Geoffrey Heal, a Columbia University professor of public policy and corporate responsibility, emphasized that "environmental protection is the essence of sustainability" and that human beings "have

to recognize our dependence on the environment” and measure our impacts on the earth’s biogeochemical cycles. Human activities are already impacting global climate, he said. Heal suggested that EPA and other agencies should determine where the most serious environmental impacts are occurring and that government should use taxes and other economic incentives to make it more expensive for those who cause damages.

Georgia Institute of Technology philosophy professor Bryan Norton said that “we need different indicators of how well we’re doing” than the current narrowly focused economic measures of wealth. Norton discussed a methodology he has developed for evaluating the effectiveness of policies in promoting sustainability. For example, in addition to asking whether policies are improving individual welfare by creating jobs, policy makers should ask whether policies are distributing wealth equitably, protecting ecological health and regional productivity, and protecting or enhancing global systems. Norton also emphasized the need for institutions to better enable political choices about “what’s really important,” the social goals for communities and societies, instead of focusing primarily, as economics does, on “efficient allocation” of capital and resources.

Kirk Hamilton, a World Bank economist who chaired a panel on measurement, noted, “If we can’t turn sustainable development into something measurable, we can’t make decisions about whether we’re on a sustainable path.”

In related developments, a draft EPA white paper on the agency’s research and regulatory priorities for nanotechnology materials underscores how limited information about the environmental and human health risks of the fast developing technology is posing difficult challenges for EPA regulators and researchers ([see related story](#)). The draft study illustrates the growing need for data in making policy decisions on an array of new technologies and challenges, such as nanotech and sustainability.

During a question and answer period at the sustainability forum, Theodore Heintz, a White House Council of Environmental Quality official who coordinates various federal government indicator development efforts, noted that indicators depend on consistent observations made over time, but added that “we lack a statistical reporting system” on fundamental biophysical elements of the environment, comparable to the consistently collected data on economic factors such as prices and employment. “We need to do it for the environment,” Heintz said, and pointed out that a report by the The Heinz Center found data were available for only 50 of 103 possible indicators.

Janetos added that a new Government Accountability Office report concluded that of the 50 indicators that had adequate data several years ago, one-fourth now lack adequate data, so the next report by The Heinz Center will contain even more areas without adequate data than in the past. “There’s a general deterioration of the fabric of measurement,” Janetos said.

Besides discussing the need for information collection systems to measure whether environmental conditions are improving or not, panelists and participants at EPA’s forum talked about the limitations of current cost-benefit analytical procedures that do not reflect major changes in economics that have created a more realistic understanding of how people actually make decisions about costs, benefits, and risks. They also discussed issues relating to the valuation of ecosystem services and ways to improve communication between analysts and the public.