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Editorial

Sustainability at the U.S. Environmental Protection Agency: 1970–2020

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ABSTRACT

Perhaps reflecting the minor role that sustainability plays in EPA's statutory mission, the agency has adapted to changing environmental issues in an often slow and uneven manner to make sustainability a key element of its environmental policy. This article uses the words of past and present EPA administrators to identify major themes contributing to sustainability and assesses how a regulatory agency created to address pollution control has evolved to face new problems resulting from population increases, urbanization, and global economic growth. EPA can enhance its role in promoting sustainability by *redefining relationships* with the regulated community, *defining and measuring* sustainable outcomes, *using science* to support sustainable decision-making, and *promoting stewardship and collaborative problem solving*. Between now and 2020, as key environmental questions relate ever more closely to sustainability, EPA can draw upon the best of its experience, knowledge, and resources to play a central role in leading the public and private sectors towards sustainability.

1. Sustainability redux

Over its 36-year history, EPA has adapted to changing environmental issues and is slowly moving to make sustainability a key element of environmental policy. Progress over this history has been uneven and sometimes disjointed, as is evident from policy reviews and internal EPA analysis. Kraft and Vig (2003), for example, have written of the "fits and starts" of U.S. environmental history and Bryner's (2000) comparative analysis of sustainable development in a dozen countries and the EU characterizes the U.S. as "disinterested" in sustainability. Other critics have judged that EPA's past sustainability initiatives have all fallen short of what was needed. Farrell (1999) judged that EPA's sustainable development challenge grant (SDCG), established in 1995, was ineffective "because of the fact that sustainability touches on many issues outside of the EPA's reach." Farrell concluded that "the federal government's approach to sustainability is piecemeal and proceeding largely separately in each department. The government efforts could be substantially improved by coordinated actions, and one approach would be to create a sustainability-related grants program as on the model of the SDCG."

Past progress on sustainability has been limited, perhaps reflecting the minor role that sustainability plays in EPA's statutory mission. As an agency report to Congress (EPA, 1993) noted, "EPA has developed its programs and projects primarily to fulfill statutory mandates that do not specify sustainability as an objective." Despite this, Dernbach's extensive review of U.S. sustainability outcomes (2002) concluded on an optimistic note:

> The United States has not responded in a way that corresponds to the seriousness of the problems we face or to the opportunities provided by sustainable development. Nevertheless, the legal and policy tools are available to put the United States on a direct path to sustainability to our great advantage and without major dislocations—if we can muster the will and vision to use them.

Using the words of EPA administrators past and present (see Table 1), we identify major themes that contribute to sustainable development and reflect what the current EPA Administrator Steve Johnson (2005c) sees as progress "from pollution control to pollution prevention to sustainability." Our goal is not to defend EPA policies or gloss over criticism of the agency. Instead, we choose to look inward and assess how a regulatory agency created to address pollution control has evolved over the past 36 years and is now prepared to face a new set of problems resulting from population increases, urbanization, and global economic growth.

Table 1 – U.S. EPA administrators

1970–1973	William D. (Bill) Ruckelshaus
1973–1977	Russell E. (Russ) Train
1977–1981	Douglas M. (Doug) Costle
1981–1983	Anne M. Gorsuch
1983–1985	William D. (Bill) Ruckelshaus
1985–1989	Lee M. Thomas
1989–1993	William K. (Bill) Reilly
1993–2001	Carol M. Browner
2001–2003	Christine Todd Whitman
2003–2005	Michael O. (Mike) Leavitt
2005–Present	Stephen L. (Steve) Johnson

2. U.S. EPA: 1970–2006

2.1. *Collaborating with the regulated community*

EPA has come a long way in how it interacts with its stakeholders, especially with the regulated community. Although EPA continues its regulatory and enforcement role, its relationship with the regulated community has been progressing from confrontation to collaboration.

2.1.1. *Regulatory flexibility and negotiation*

EPA has been exploring regulatory flexibility since its inception. Administrator Doug Costle (2001, speaking in a 1996 interview) realized that "command and control" regulation would only go so far and would not allow for adaptation to changing circumstances. In 1979, Costle introduced the "bubble policy" for controlling stationary sources of pollution, allowing industry to increase pollution at one point within a plant if reductions were achieved elsewhere in the facility.

During the late 1980s, especially while the Clean Air Act of 1990 was being developed, EPA increased its appreciation of the value of consulting with industry while formulating regulations. The agency learned that firms subject to regulations possess relevant expertise and understanding. Administrator Bill Reilly (1990a,b) observed that "regulatory negotiations are extremely productive at getting a result that works for everybody" and emphasized the need to listen to industry, whose leaders "often have a better, more intimate grasp of how to achieve [environmental goals], than we do." Regulatory flexibility and negotiation provide means for EPA to work with the regulated community and other stakeholders toward achieving sustainable outcomes through pollution prevention, increased efficiencies, and systematic thinking.

2.1.2. *Voluntary programs and partnerships*

Reilly (1995d) noticed that both industry and EPA gained from participation in voluntary programs:

> [Industry] learned some things technologically that helped them save money, make money, reduce pollution, and to allow the EPA workforce to understand that without compromising either your regulatory responsibilities or your enforcement responsibilities, you can work cooperatively with people who, most of them, have the same objectives you do. And you can learn from them.

In the 1990s, EPA began working with the regulated community to find voluntary ways to go beyond mandated standards. Programs such as the Safer Pesticide Initiative, the 33/50 Program, Green Lights, the Environmental Leadership Program, Design for the Environment, and the Energy Star Computers Program provided incentives for the regulated community to voluntarily improve environmental results to a level above compliance standards. By 2005, over 80 voluntary partnership programs had cropped up throughout the agency, providing new solutions for addressing problems that compliance and enforcement were not adequately meeting.

During the mid-1990s, more public and private organizations were adopting environmental management systems (EMS), which advance sustainability by creating a structured and systematic approach for improving overall environmental performance and stewardship in areas such as product design, resource conservation, and energy efficiency. Federal government support for EMS was formalized by Executive Order 13148 of April 21, 2000 (Clinton, 2000). Administrators Christine Todd Whitman (2002) and Johnson both issued formal EMS policy guidance statements that, in Whitman's words, "encourage organizations to design and implement EMS that improve compliance, prevent pollution, and integrate other means of improving environmental performance." Johnson (2005a) noted that EMS plans "do not replace the need for regulatory and enforcement programs, but they can complement them."

The late 1990s was a time of building partnerships with the regulated community—an approach that evolved from arguments and debates over reforming traditional regulatory approaches. Project XL (for eXcellence and Leadership) used regulatory flexibility to improve better environmental results while maintaining accountability. Through the Sustainable Industry Program (now known as Sector Strategies), the agency developed innovative approaches to work with industrial sectors, and its National Environmental Performance Track program recognized environmental leaders in several industries.

Steve Johnson has continued former Administrator Mike Leavitt's successes in making collaborative problem solving an important element of EPA's governance agenda. The related concept of cooperative conservation, as outlined in Executive Order 13352 (August 26, 2004), requires EPA and four other agencies to actively engage all stakeholders in implementing conservation and environmental projects (Bush, 2004). In 2006, Johnson recognized that environmental protection and improvement have come about not just through the efforts of EPA and its state partners, but also through all parts of society working together. Collaborative approaches are integral in moving toward a sustainable future.

2.2. *Assessing risk*

Risk assessment began to play a critical role in a new era of environmental problems beginning in the late 1970s. As EPA started grappling with issues like cancer rates from exposure to toxic chemicals, the hole in the ozone layer, and human-caused global warming, the agency realized it had to set priorities and to communicate real risks to the public. The use of ecological information to determine risk expanded during the 1980s. Ruckelshaus (1983) noted the need for change:

> A climate of fear now dominates the discussion of environmental issues. The scientific community can help alleviate