

Long-time RFF Director Establishes Endowed Chair

As a Department of Interior official in the early 1970s, Darius Gaskins first availed himself of what he calls RFF’s “creative intellectual capital.” His long association with RFF since that time has inspired him to provide \$2 million to support an endowed chair that will bear his name.

“Time after time throughout my career, RFF research has expanded my thinking in useful ways,” Gaskins said in an interview with *Resources*. “RFF sparks innovative thinking about the tradeoffs between development and environmental quality, and we need that today more than ever.”

Gaskins was a member of the RFF Board from 1990 to 2002, serving as chair during most of that period. He currently is a partner at Norbridge, Inc., a consulting firm in Concord, Massachusetts, and his resume lists an array of leadership positions in government and industry. These include terms as president and CEO of Burlington Northern Railroad, chairman of Leaseway Transportation Corporation, chairman of the Interstate Commerce Commission, and appointments within the Department of Energy, Civil Aeronautics Board, and Federal Trade Commission.

“Much of RFF’s valuable work has become so ingrained within the academic and policy communities that it almost isn’t given proper credit,”

Gaskins says. He recalls that commodity and natural resource issues were buried within the Department of the Interior when he worked there in the early 1970s. “It was accepted wisdom among resource economists that RFF was the font of seminal work in this area, but at that time policymakers didn’t realize how significant the role RFF played really was,” he says.

Providing continuity for such work is the impetus behind Gaskins’ creation of the new chair, which will not

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be restricted to any particular discipline within RFF. He regards a major impact of his tenure on the RFF Board as presiding over a broadening of the research agenda to one that today encompasses a wide spectrum of key policy issues—and without single-source funding.

“It is absolutely vital that RFF have the wherewithal to soberly confront the environmental and energy challenges ahead—without too much dependence on government or industry support,” he says. “Without independent and credible funding to support this kind of objective research, the nation and the world will be subject to political and emotional pressures that can lead in directions that aren’t prudent.”

Gaskins’ career—spanning from his days as a West Point graduate and professor of economics at the University of California, Berkeley—has reinforced his general optimism about the world’s ability to meet the resource and environmental challenges ahead. “You can cite lots of unresolved problems—water policy in the American West, climate change, energy supplies, fuel standards, growth and sprawl—that the political system seems unable to tackle. But I am convinced that good, hard thinking by RFF scholars is precisely what we need to successfully confront the inevitable crises that will arise,” he says. ■

Environmental Power to the People in Asia

Ruth Greenspan Bell

Environmental protection is largely stalled in the developing world, especially in Asia. Numerous sophisticated studies have pointed out the harm inflicted by persistent air pollution. Donors have committed funds and sponsored law-drafting activities. But beyond such exercises, many of which seem to produce academic papers but little else, good results are few and far between. Most Asian countries have seemingly adequate environmental laws, government ministries with official responsibility for reducing pollution, and often plans to adopt extremely complex environmental instruments like emissions trading. But lasting change seems rare. How can this logjam be broken?

Perhaps the most encouraging news is to be found in increasing environmental activism. Citizens and NGOs are using tools at hand to bring these problems into public view and seek workable solutions. What is particularly interesting is that this activism is taking place in countries that historically haven't encouraged citizens to speak out.

With the support of the U.S. Agency for International Development, I was able, in partnership with Barbara Finamore of the Natural Resources Defense Council, to study the growing trend toward environmental public participation in Asia. Against all odds,

especially traditional attitudes of deference to governments and authority, activists are taking cues from the U.S. experience of the 1960s and 1970s and finding ways to draw public attention to festering environmental problems.

How they do this depends very much on the circumstances in their own countries. At times, citizens and NGOs use lawsuits to achieve their goals, with varying results. Chinese lawyer Wang Canfa sues polluters, seeking damages for the impacts of their pollution. He does this in a country that has never been under a rule of law and where even today judges have great difficulty acting independently of the state.

One successful example of this method was the court case brought by M.C. Mehta in Delhi, India, that ultimately resulted in the switch from heavily polluting fuels to compressed natural gas in commercial vehicles. This case involved all levels of society from NGOs to the Supreme Court, which mandated the change after years of wrangling from the different

sides. (For more information on this project, see *Resources*, fall/winter 2004, and www.rff.org/clearingtheair.) As a result, NGOs have brought lawsuits in numerous Southeast Asian countries that mimic M.C. Mehta's groundbreaking Indian litigation.

Not every result has been as happy as the one in Delhi. In some countries, the litigants are learning that even a court order is not sufficient to change longstanding practices of polluters. The Lahore, Pakistan, High Court, for example, has gone back to the drawing board, as it were, to develop multi-stakeholder processes that all involved hope will find solutions that can work.

We also learned about other approaches beside legal proceedings. In Indonesia, an independent research organization, Pelangi, undertook a study to determine why the country's more than 75 air pollution control regulations were not more effective in improving air quality. They used interviews, panels, and focus groups to both collect and spread information and a public dialogue and radio campaign to



disseminate their findings. The next phase of their work will try to broker legal and practical solutions.

We were able to invite a number of these Asian practitioners to Manila in December 2003, as part of an annual, 600-expert, region-wide gathering, the Better Air Quality meeting. In addition to a rare opportunity to share experiences, the purpose of the meeting was to start a discussion about whether it was possible to transfer lessons from those efforts between these countries and these experts, each of whom come from very different political and legal cultures. The workshops featured six case examples, which we grouped into three categories from the 80 examples that we had collected from 17 countries.

I hope that future such regional meetings will continue to pay more attention to environmental public participation and spotlight efforts to model good public involvement processes and techniques. The audience for these important discussions should not be confined to NGOs, but should also include government, industry, and academics. Each of these stakeholders needs to learn to work together toward more effective environmental regulation.

Asian environmental advocates would also benefit greatly from a continuing process that would allow them to share experiences and better understand the techniques and skills that are being used by their neighbors. Sharing can improve environmental public participation in each of their countries and perhaps deliver the lasting results everyone is seeking. ■

Regulatory Risk Influences Utilities' Strategy, Cinergy Chief Says

Regulatory uncertainty puts a premium on flexibility when electric utilities make decisions on fuels and technologies, said James E. Rogers, chairman and chief executive officer of Cinergy Corp., at RFF's most recent Policy Leadership Forum.

The electric utilities, he said, bear a greater "stroke-of-the-pen" risk than any other industry—the risk that a sudden change in state or federal regulation can sharply change the economics of their operations. Cinergy burns 30 million tons of coal a year to provide power to two million consumers in the Midwest.

The company will use coal gasification technology for its next expansion, Rogers reported. While gasification

presently is somewhat more expensive than burning pulverized coal, he explained, the technology can be adapted to comply with the more demanding pollution regulations that may be imposed in the future.

In Congress, legislation on utility emissions is caught in a deadlock over whether new limits on three pollutants—sulfur dioxide, nitrogen oxides, and mercury—should be accompanied by restrictions on carbon dioxide, the most important of the gases causing global warming. At least in the short term, federal regulation of this gas seems unlikely. But to prepare for different rules in the longer future, Rogers said, Cinergy has set a goal of a five percent reduction in carbon emissions over the next 10 years, the equivalent of taking half a million cars off the road per year.

"I live with the vision we will live in a carbon-constrained world some day," he observed. With the coal gasification technology it is possible—although not inexpensive—to remove and sequester carbon dioxide rather than emitting it into the sky. ■

James E. Rogers, speaking at the RFF Policy Leadership Forum.



Measuring Superfund's Success

Superfund cleanup efforts have been among the nation's most controversial and most visible environmental initiatives since the program began in the 1980s. Defining success for the program continues to be a vexing problem because of the lack of established criteria and up-to-date and dependable data. Even for sites on the National Priorities List (NPL), such information can be scattered throughout many places on the Internet or hard to come by at all.

In a new report, RFF Senior Fellow Katherine N. Probst and Research Assistant Diane Sherman address these issues and outline a systematic approach for organizing and disseminating the critical data to stakeholders. The report, *Success for Superfund: A New Approach for Keeping Score*, was funded by the Environmental Protection Agency's (EPA) Office of Solid Waste & Emergency Response.

To correct the lag in accurate and timely information, the authors recommend implementation of three separate Internet tools that would be easily available to the public:

- a one-page report card, summarizing key information about a site, such as status of cleanup activities and major contaminants present;
- a standardized six-page Scorecard that expands on the report card data, with more information on com-

NPL Site Report Card – Mockup

Information last updated: 7/1/2003

Site name: ABC Corporation Landfill	Type of industrial operation (if applicable)				
EPA region: 3	Landfill				
ID: XYZ123456789	Site in environmental justice community? Yes				
Mega site? No	Site sacred to tribal community? No				
Federal facility? No	Sensitive ecosystem? No				
National Priority List (NPL) proposal date: 2/25/1990					
NPL final listing date: 1/5/1991					
Current human exposure under control? Yes					
Contaminated groundwater migration under control? Insufficient data					
Current status of each Operable Unit (OU)					
OU 01 - Remedial investigation/ feasibility study finished (responsible parties-lead: ABC Corporation Landfill Group, City of XX), Remedial design underway (responsible parties-lead: ABC Corporation Landfill Group, City of XX)					
OU 02 - Remedial investigation/ feasibility study finished (EPA-lead), Remedial design underway (responsible parties-lead: ABC Corporation Landfill Group, City of XX)					
OU 03 - Remedial investigation/ feasibility study underway (EPA-lead)					
Construction complete status: Not construction complete					
Construction complete date or estimated date: <i>Estimated 2015</i>					
Major contaminants					
Metals (arsenic, lead, chromium); nitrate; Volatile Organic Compounds - VOCs (benzene, toluene, ethyl benzene, xylene), cyanide, Polycyclic Aromatic Hydrocarbons - PAHs, pesticides					
Estimated size of population living on-site: 0					
Estimated size of population working on-site: 25					
Estimated size of population within 1 mile site buffer zone: 1,500					
Source of drinking water for population living on-site or within site buffer zone:					
Previously municipal water supply, but currently bottled water					
Risk reduction accomplishments	Groundwater	Soils	Sediments	Surface water	Air
Exposure reduced	No	No	Not applicable	Not applicable	Not applicable
Exposure controlled	Yes	Partial	Not applicable	Not applicable	Not applicable
Exposure eliminated	No	No	Not applicable	Not applicable	Not applicable
Contamination reduced	No	No	Not applicable	Not applicable	Not applicable
Contamination contained	No	No	Not applicable	Not applicable	Not applicable
Contamination eliminated	No	No	Not applicable	Not applicable	Not applicable
Are institutional controls a component of remedy at site? Yes					
Have institutional controls been implemented? Yes					
Date of last five-year review: Not applicable					
Date of next five-year review: Not applicable					
Is remedy functioning properly? Not applicable					
Total cleanup costs to date: \$3,151,000					
Total expected future cleanup costs: \$32,259,000					
Expected total costs of cleanup: \$35,410,000					

pleted, ongoing, and future actions, drinking water and groundwater, risk-reduction accomplishments, and post-construction activities; and

- a Superfund Annual Report that summarizes information on progress for all NPL sites and contains other indicators of program performance.

The authors conclude that if EPA provided more reliable, consistent, accessible, and transparent information about the Superfund program, it

might then be possible to create more realistic expectations about what can and cannot be achieved. The debate about Superfund needs to “take place in the context of facts, not a war of anecdotes,” they say.

For more information on this report and to read about Probst's other research on Superfund, visit www.rff.org/rff/Superfund.cfm. ■

Finding a Cost-Effective Policy to Promote Renewable Energy Sources

Karen Palmer and Dallas Burtraw

Electricity generators that burn fossil fuels such as coal are responsible for close to 40 percent of all U.S. carbon dioxide emissions, a pollutant believed to contribute to global warming. One way to reduce these emissions would be to generate more electricity using renewable energy sources, such as windmills or geothermal plants that emit no carbon dioxide. However, despite growing popularity in parts of Europe, renewables are not expected to make substantial inroads into electricity generation in the United States, largely due to their relatively high costs.

To help promote renewables, governments at several levels have proposed or enacted various policies. One important federal policy has been the Renewable Energy Production Credit (REPC), a tax credit for electricity generated using specific types of renewables. This policy expired at the end of 2003 but is likely to be reauthorized in this session of Congress.

At the state level, a popular policy tool is a renewable portfolio standard (RPS) that requires a minimum percentage of electricity be produced using renewable technologies. In some states, the RPS includes a tradable credit provision, which means that every kilowatt of electricity generated using an eligible renewable technology results in the creation of a trad-

able renewable energy credit. With a trading provision, companies can comply either by generating with renewables that they own, by purchasing electricity directly from renewable generators, or by purchasing renewable energy credits. Currently 16 states have renewable portfolio standards, which vary in targets and timetables, what types of renewables are included, and whether or not trading is allowed.

In a new report, *Electricity, Renewables, and Climate Change: Searching for a Cost-Effective Policy*, we evaluate the extent to which these approaches encourage greater use of renewables. Applying RFF's simulation model of regional electricity markets, we analyze how different policies affect technologies and fuels used to produce electricity, the price of electricity, its social cost, and the level of carbon dioxide (CO₂) emissions.

The results of our study indicate that an REPC policy is a potent tool for encouraging renewables generation, but that it is more costly than an RPS and not as effective at reducing CO₂ emissions. An RPS policy could increase renewables from a three percent share to a 15 percent share by 2020 without major increases in electricity prices; after that threshold, however, renewables become much more expensive. The higher the RPS target, the greater the carbon emis-

sions reductions ensuing from the policy. However, renewables tend to replace natural gas generation more readily than coal, leading to less reduction in CO₂ emissions than if only coal use was decreased.

In researching this report, we also learned that a policy that caps annual emissions of CO₂ from electricity generators is a more cost-effective tool for reducing carbon emissions than either an RPS or an REPC. A carbon cap also leads to expanded use of renewables.

Our results suggest that the appropriate policy depends upon the objective. With a narrowly defined goal of trying to promote renewables, an RPS may be the most cost-effective approach, holding carbon emissions constant. However, if one is trying to achieve climate policy goals, a carbon-focused policy is preferred. If policymakers are trying to reach both goals, perhaps the two approaches should be combined.

For more information on our work on renewable energy, see our website, www.rff.org/renewables, where you can download the report. ■