Federalism and Polycentric Governance

Marilyn A. Brown Professor of Energy Policy Georgia Institute of Technology



National Academy of Arts & Sciences Workshop May 20, 2011

Diffusion of Responsibility & the Intellectual Commons

- When individuals know that others have the potential to address a common problem, they often make the assumption that someone else will intervene and do nothing themselves.
- Something similar is happening in scientific and academic disciplines: an "intellectual commons" is developing.

The Problem of Scale

- The "diffusion of responsibility" may be addressed by tacking the problem of scale.
- The scale of policy implementation can be just as important as the choice of policy instrument.
- The division and authority for environmental protection between the federal/global and local/state governments has historically lacked a cohesive rationale.
- The same is becoming true of energy and climate policy.

Subsidiarity

- The principle of "subsidiarity" has dominated U.S. environmental and energy policy.
- It presupposes that whenever possible, problems should be addressed by local and state authorities.
- This principle is consistent with the federalist structure of the U.S. Government.
- In addition, it would appear to be applicable to many environmental problems, which tend to be local or regional in origin.
- However, many environmental and energy problems have both local and broader dimensions, which is why we have interstate water wars and global treaties that ban ozonedepleting substances.

The Matching Principle

- The division and authority between federal and state governments for addressing environmental protection, clean energy, and energy security lacks a cohesive rationale.
- To introduce refinement to the simple subsidiarity principle, a number of lawyers have developed the "matching principle."
- It suggests that the level of jurisdictional authority should "match" the geographic scale of the externality being addressed.
 - Local water contamination local policy action
 - Global climate change international policy action

The Matching Principle (cont.)

- Often policies fail to achieve their goals because of jurisdictional mismatch:
 - ✓ For instance, the federal government has intervened in problems that are local (such as air regulation in metropolitan areas).
 - ✓ In other instances, the federal government has not provided the coherence needed to prevent a chaotic mosiac of state laws (e.g., energy codes for new buildings and renewable portfolio standards).
 - ✓ Similarly, the federal government has abdicated its role when there is justification because of inter-state spillovers (such as climate change).

State Building Codes: A Chaotic Policy Landscape



More Chaos: Renewable Portfolio Standards



Over-Simplification

- Both the "subsidiarity principle" and the "matching principle" suffer from over-simplification: actions at the local/state and national/global scales create different sets of costs and benefits.
- The dilemma is that each different scale of action has unique benefits not generally available to the other.

State and Local Policies

- The *diversity* of local action encourages *innovation* by creating opportunities for policy experimentation.
 - It also enables more rapid response to changing needs.
- Local scales also promote *flexibility*, which enhances *administrative efficiency* given that state and local agencies are more agile and adaptive than federal or national agencies.
 - They are better able to tailor solutions to local needs and preferences.
 - Failure to take into account local conditions can lead to a one-size-fits-all prescription that is more often one-sizefits-nobody.

State and Local Policies (cont.)

- Promotes *accountability*
 - Allows for closer fit between policies and preferences
 - Affords the option to sort between jurisdictions
 - Benefit from "ecologies of scale."
- Charles Tiebout (1956)
 - Individuals are fully mobile to choose the jurisdiction in which they will live based on the taxes that a jurisdiction imposes on its residents as well as the services it provides.
 - People can sort between jurisdictions with the best mix of taxes and services.

Federal and Global Policies

- Federal and global action ensures *consistency*, so that states and localities are not at an economic disadvantage by the lack of similar policies elsewhere.
- Federal and global policies also benefit from economies of scale in technology delivery, data collection, R&D, etc., and can minimize transaction costs.

National and Global Policies (cont.)

- National and global action minimizes "free riders," leakage, and *spillover* effects.
 - ✓ State and local actions that restrict carbon-producing activities may encourage producers simply to shift to other locales with less restrictive policies: the "pollution haven" theory.
 - ✓ State and local actions can result in a "race to the bottom."
- Consider, for example, the 1200 MW coal plant proposed by LS Power (a New Jersey based company) to be built in Early County, Georgia, to serve Florida's growing demand for electricity.

Favors Local/	Local/Regional	Federal/Global
Regional Policy		
Diversity	Encourages innovation and	Stifles innovation and
	experimentation in designing	experimentation, is prone
	policy and enables more	to diseconomies of
	rapid response to	scale, and changes
	changing needs	slowly
Flexibility	More flexible and able to	More uniform and rigid;
	adapt to local conditions;	tends to fail to account
	promotes administrative	for local conditions
	efficiency	
Accountability	Allows for closer fit between	Promotes "rent seeking"
	policies and preferences	behavior, which wastes
	and affords option to sort	resources trying to garner
	between jurisdictions	local advantages

Favors Federal/ Global Policy	Local/Regional	Federal/Global
Consistency	Building national markets for technology solutions is difficult when policies are vary; local controls over major carbon emitters are often limited	Standardization minimizes transaction costs and policy uncertainties; captures long-distant influences on major emitters
Economies of Scale	Inefficient due to redundancies of R&D efforts and data collection systems	Better matched to promote economies of scale and avoid redundancies
Spillovers	Vulnerable to free ridership and emissions leakage	Minimizes free ridership and emissions leakage



U.S. Energy & Climate Policy: Moving Slowly from the Local to the Federal Scale

Polycentric Governance

- incorporates multiple scales and multiple stakeholder groups at once (e.g., government regulators, business stakeholders, and civil society)
- Harnesses the benefits of federal/global and local/state action together instead of having them trade off

Examples of Polycentric Governance

- Denmark's electricity system
- Germany's feed-in tariff
- Brazil's Proálcool Program and Promotion of Flex-Fuel Vehicles
- Singapore's Urban Transport Policy
- Bangladesh's Grameen Shakti
- The Toxics Release Inventory in the United States

The Virtues of Polycentric Governance

- Complementary back-up institutions (at higher and lower levels) that can help offset some of the imperfections at any one level.
- Achieve better outcomes than either a highly centralized or fully decentralized system.

The Virtues of Polycentric Governance

- Polycentrism captures the "flexibility" benefits of local/state action as well as the "uniformity" and "equity" benefits associated with federal/global action.
- It accepts that multiple jurisdictions with overlapping duties can offer citizens more choice in setting modes of regulation (capturing the "simplicity" and improved "accountability" from local action);
- Yet it still requires that local actors subscribe to a common set of goals and to broader enforcement, minimizing "transaction costs" and the "dilemmas of collective action."
- When multiple actors at a variety of scales must compete in overlapping areas, they can often promote innovation as well as cooperation and citizen involvement.

The Challenges of Polycentric Governance

- It requires the coexistence of local, national, and international laws and programs, assessing similar topics
- Divergent rules and programs can lead to redundancy of regulation, inefficiency, and confusion as people try to figure out which laws apply to them.
- It can extend the time needed for policy resolution, because disgruntled parties can always go to the other levels of government for relief.
 - ✓ By creating overlapping jurisdiction, regulators and policymakers can blame deficiencies on other levels of government.
 - ✓ This can give them more ability to create smokescreens, to shirk their responsibilities , and to hope that disgruntled citizens will not discern the proper target for their ire.

Conclusions

- Polycentrism could mitigate the "diffusion of responsibility" effect by creating important roles for multiple scales of action and multiple stakeholders.
- It would reduce the risk of creating an intellectual commons problem by empowering social, political, and intellectual leaders from a variety of places to contribute to clean and secure energy systems.

For More Information

- Marilyn A. Brown and Benjamin K. Sovacool. 2011. Climate Change and Global Energy Security (MIT Press), forthcoming–August.
- Benjamin K. Sovacool and Marilyn A. Brown. 2009. "Scaling the Policy Response to Climate Change," *Policy & Society: Journal of Public, Foreign and Global Policy,* Vol. 27: 317-328.