Sustainable Healthy Cities

A National Science Foundation-supported Sustainability Research Network (SRN)

JOURNAL BRIEF: What Affects Local Government Climate Policy Adoption?

Sustainable Healthy Cities Journal Brief - 2018, No. 2 - Local Climate Policy Adoption

This brief is adapted from the following peer-reviewed journal article: Yi H., Feiock R., & F. Berry. (2017). "Overcoming Collective Action Barriers to Energy Sustainability: A Longitudinal Study of Climate Protection Accord Adoption by Local Governments." *Renewable and Sustainable Energy Reviews,* 79: 339-346.

Study Intent and Research Question

Why do US cities voluntarily adopt climate change action plans or accords when they could easily "free load" on the climate actions of other jurisdictions? A study of 376 cities in Florida over the course of 5 years helps understand trends in why cities might adopt climate action plans despite the carbon reduction benefits of such plans being "non-excludable"—meaning everyone benefits, not just residents of the jurisdiction.

Key Background Information

Collective action theory (Feiock, 2009; Olson, 1965) predicts that local governments will not voluntarily invest in climate protection efforts. Instead, it predicts cities will "free load" on the efforts of other jurisdictions. This is becuase the global contribution of one city's actions are small, and the benefits generated are non-excludable, as carbon reduction benefits everyone on the planet, not just local residents.

Some motivations commonly thought to influence the adoption of local climate action plans include:

1)Localized benefits (e.g. local pollution reduction, green industry recruitment, etc.) (Bestill, 2001).
2)Policy response to interest groups (e.g. influential local or state-level constituencies, both public and private) (Portney, 2004).
3)Career benefits to local politicians (e.g. electoral incentives for indicating pro-sustainability policy position) (ICMA, 2007).

Key Findings

The study identifies factors that make it more likely or less likely that a local government will adopt a climate protection policy. The study also identifies factors that have no significant effect one way or the other.

MORE LIKELY TO ADOPT

•The likelihood that a city will adopt a climate protection policy increased with the size of the city.

•Cities that spend more on local economic development planning and industrial recruitment efforts were more likely to adopt climate protection policies.

•Cities with neighboring jurisdictions that have adopted a climate protection policy were more likely to adopt a climate protection policy of their own.

•The higher the degree of environmental support concentrated in a city—as measured by sales of environmentally themed license plates—the more likely that city was to have adopted a climate protection policy.

LESS LIKELY TO ADOPT

•If a city elects city council members according to a district or ward based system, in contrast to city-wide or at-large elections of council members, it was less likely to adopt climate protection policies.

NO EFFECT ON ADOPTION

•Differences in race and level of education of the city's population did not have a significant effect—positive or negative—on whether a city was likely to adopt climate protection policies.

•Whether a city operates its own municipal utility, in addition to whether a city is structured with strong executive authority in the hands of mayor directly (strong mayor form

of government) or in the hands of a city manager (weak mayor form of government), did not have a significant effect—positive or negative—on whether a city was likely to adopt a climate protection policy.

•Local environmental conditions specific to a jurisdiction, like level of air pollution or miles of coastline, did not significantly effect—positively or negatively—whether a city was likely to adopt a climate protection policy.

Policy and Practice Implications

There is evidence to suggest that climate protection policies are compatible with pro-growth local economic development agendas, as climate plan adoption is more likely in larger cities and in cities with higher spending on economic development.

Geographic electoral accountability for city council members—via a district or ward based electoral system—does does not lend itself to supporting policy decisions that take into account collective interests. This creates a city-wide 'problem of the commons'. Jurisdictions wishing to realistically address certain city-wide concerns, may need to entertain an alternative decision making mechanism or forum for certain climate policy domains.

Policy diffusion from neighboring jurisdictions is a main driver of city-level climate protection policy adoption. This suggests a peer pressure effect, either as a function of shared policy learnings or municipal competition.

Cities cannot reasonably assume that *individual* adoption of climate policies will have consequentual impact globally. But they can use climate policies as an entrepreneurial strategy to signal credible commitment on their part. They can also use climate policies to apply political pressure on surrounding governmental entities and the state to adopt climate protection policies.

Policy & Governance

Environmental Sustainability

Further Reading and References

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About the Sustainable Healhty Cities Network

The Sustainable Healthy Cities Network is a U.S. National Science Foundation supported sustainability research network focused on the scientific advancement of integrated urban infrastructure solutions for environmentally sustainable, healthy, and livable cities. We are a network of scientists, industry leaders, and policy partners, committed to building better cities through innovations in infrastructure design, technology and policy. Our network connects across nine research universities, major metropolitan cities in the U.S. and India, as well as infrastructure firms and policy groups to bridge research and education with concrete action in cities.

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