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Sustainable Energy Policy for State and Local Governments

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Synonyms

Energy efficiency; Renewable energy; Sustainability; Sustainable energy

Definition

Sustainable energy is defined as sufficient measure for energy management undertaken by organizations to reduce energy usage, increase the use of renewable energy sources in operations to reduce operational costs, decrease environmental impact from energy use, and impact society positively.

Introduction: Sustainable Energy for Local and State Governments

The role of government is characterized by the ability to provide services to its constituents. As the societal paradigms shift, and sustainability

gains new grounds and becomes an integral part of the organizational structure and function of the local and state governments, the issue of sustainable energy management as the system of good governance and cost control became more prevalent. State and local governments use sustainable energy policies in pursuit of long-term sustainability goals and to enhance resilience and long-term strategies. Energy use and its collateral damage have come to the forefront of some local government as part of their efforts to improve their sustainability efforts. As the pressures intensify on organizations over the cost of energy consumption, climate change threats, and financial burden, sustainable energy management within the sustainability framework offers a focal point and opportunity for municipal and state government administrators. The effort to seek sustainable energy options in governmental operations is seen as an attempt to curb the cost of energy and to reduce energy demand.

Focusing on sustainable energy policies, programs, and projects at the local and state levels of government represents an inevitable challenge, but also a conceivable opportunity. The long-lasting impact on local and state governments and their delivery of services beyond the economic recession and downturn in the economy. In an era of unrelenting fiscal crises and permanent budgetary strains, cities and state government continue to struggle to provide essential services. As a result, cities and state government have begun utilizing sustainable energy practices,

policies, programs, and projects as an organizational instrument to avoid costs, lessen budgetary strains, and realize full benefits of being fiscally, environmentally, and socially sustainable.

The efficiency of the local government's operations can have a positive impact on the local community. By incorporating sustainable energy management and similar strategies into their plans, programs, and projects, cities may become more fiscally sustainable, and socially and environmentally responsible, and provide better governance. Through sustainable energy policies, organizations efficiently impact their bottom line and provide positive social change through reduction in energy consumption, production of renewable energy, and efficient management of energy. In explaining the concept of sustainability, Nersesian (2006) focused on renewable energy sources as an essential aspect of sustainability (p. 305). Moreover, Meyar-Naimi and Vaez-Zadeh (2012) and Chen (2011) provided the critical reviews of the new energy policymaking frameworks and analytical framework for energy policy evaluation, through analysis of the energy system components and their interactions. The relevant objectives of sustainable energy policies must be viewed through the lens of the federal energy policy framework, with the United States lacking the national energy policy (Friedman and Cooke 2011; Geri and McNabb 2011).

Local Governments Sustainable Energy Targets

Energy is the underlying denominator for many cities. While cities utilize varying energy strategies not only to cut costs but also as an attempt to increase the renewable energy in their overall energy consumption portfolio, there are several common elements to cities' sustainable energy strategies. Building awareness, support, and education of the importance of energy to the organization and community is one of the first steps in the successful implementation of sustainable energy policies. Another important aspect is the razor-sharp focus on energy efficiency and energy conservation. An increased renewable energy

investment or pursuit of renewables is the more recent development of local governments. The EPA provides a regular update on the top 30 local governments either purchasing or producing electricity (EPA 2017). The list is growing as is the amount of renewable energy produced and purchased by local governments. At the 2017 US Conference of Mayors annual meeting, the US mayors passed the resolution to target 100% renewable energy by 2035, and subsequently, over 250 cities passed resolutions supporting the 100% renewable energy targets (USCM 2017).

Conventionally, municipalities are most concerned with their annual budgeting and less with influencing and impacting the energy consumption or policy related to energy management. Among many other researchers, Brownsword et al. (2004), Cumo et al. (2012), Droege (2006), Houck and Rickerson (2009), Hughes (2009), Keirstead et al. (2012), Kim et al. (2006), Lin and Huang (2009), Lior (2010) Mathiesen et al. (2010) all demonstrated the impact, opportunities, and challenges sustainable energy at local government level and the society in general. Moreover, Johnston et al. (2013) provided examples of energy conservation, renewable energy, building and land planning, transportation, and other sustainability initiatives to promote fiscal and environmental soundness in Chicago, Ann Arbor, Vancouver, Houston, and other cities around North America. Local governments may use sustainable energy to assist them in reduction and avoidance of costs. Many communities use sustainable energy as an opportunity for savings, and ultimately for a more sustainable organization.

States Renewable Energy Portfolio and Targets

Since Carley's (2009) review of the states' renewable energy policies effective, most states have been increasing their efforts to support renewable energy production and consumption. Most aggressive states utilize Renewable Portfolio Standards (RPS), which demands utilities to incorporate a certain percentage of renewable energy sold in their portfolio. While RPS varies

from state to state, Durkay (2017) lists 29 states and the District of Columbia with the mandatory Renewable Portfolio Standards (RPS). The states of Hawaii and California have the most aggressive RPS, both with the 100% renewable energy target by 2045 with Hawaii setting up a target in 2015 and California in 2017. Vermont is another state with an RPS of 75% by 2032. Each state with the RPS has an incremental goal and specific percentages required to be met by utilities in the meantime.

Additionally, eight states have a voluntary renewable energy target. Finally, in addition to RPS, most of the state legislation include energy efficiency and energy consumption reduction goals as part of the requirements and in part to assist in achieving renewable energy targets. Reducing energy consumption enables a more natural attainment of the renewable energy target. While most policies behind RPS in states are due to increased constituents' demands for clean energy, and the economic development benefits from renewables, there are other motivating factors for adopting stricter mandates state-wide for renewables. For instance, Yi and Feiock (2012) found the positive correlation between the supply-side policies and the demand-side policy innovation driving the adoption of the RPS at state levels of government.

Measuring the Sustainable Energy Impact

The critical focus of sustainable energy policies at local government levels is reducing the negative impact of environmental damage from consumption of energy produced by fossil fuels. In addition to well-documented benefits of sustainable energy in local governments' operations and communities, cities require lowering annual Greenhouse Gas Emissions and meeting ecological and social goals (Burch 2010; Byrne et al. 2006; Lin and Huang 2009; MacKay 2009).

While social benefits are not immediately evident from the sustainable energy management,

they may be inferred in the quality of life benefits. Energy is a significant cost driver for the entire organization, and by efficiently addressing energy cost, the city assures savings and reduces costs of operations, opening for reinvestment into the community. Ultimately, leading sustainable energy management practices can be applied it in the community, building successful programs and partnerships with other organizations using energy audits in homes and energy efficiency improvements.

The issue of using finite sources to power the energy needs of our society is as pertinent in the modern world as the impact of globalization, and increased competition for fossil fuels and other resources threatens the social and environmental balance of the world as a whole. The holistic system of interconnected elements of economics, sustainability, and energy-related resources represents a prospect to positively impact cities in a broader context of positive social change. It is imperative for organizations to be financially sustainable. However, it is also essential that they measure and report the overall environmental, governance, and social impacts beyond their economic gains (Alibašić 2017). The measurement of sustainable energy efforts is particularly imperative for the local and state governments, as they provide an immediate impact for their constituents through service provision. As cities and communities across the globe attempt to implement sustainability program, policies, and projects, the future generations of policymakers need to be proficient in sustainability-related issues from the outset regardless of their desired career paths. Local governments involved in sustainability are committed to protecting environmental and social resources when seeking delivery of services most efficiently and efficiently. By actively pursuing sustainable energy options, including investments in the reduction of energy consumption, renewable energy production, and energy management, organizations attempt to impact their economic bottom line positively, and influence potential positive social and environmental outcomes, thus affecting positive social change.

Conclusion

Local and state governments seek renewables, energy efficiency, and sustainable energy management to address budgetary constraints, constituents' demands, sustainability targets, and ongoing changes in energy markets. Cities and state governments use sustainable energy as a dynamic approach to long-term planning and countering negative economic, environmental, and social aspects of energy production and consumption. Sustainable energy policies and corresponding planning and policy implementation hold a promise of cleaner, more robust economic development driven energy production, with less cost and more benefits. Positive outcomes related to the successful deployment of sustainable energy platforms in cities have a ripple effect on communities and states, and vice versa.

Cross-References

- ▶ [Climate Resilience](#)
- ▶ [Economics](#)
- ▶ [Energy](#)
- ▶ [Ethics](#)
- ▶ [Management](#)
- ▶ [Organizations](#)
- ▶ [Sustainability](#)

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