Local Sustainability
A menu of policy options for greening communities
Amanda Woodrum

Executive Summary

Our economy, our communities, our workforce, and our environment are at a crossroads. Past practices and policies of the conventional energy economy produced an economy with vast amounts of waste and low road economic development that left our workers behind, our communities impoverished, our residents dependent on fossil fuels imported from out of state, and our environment polluted.

Ohioans spent more than $54 billion on energy in 2008—created from fossil fuels purchased largely from outside Ohio. Our nation's energy productivity—the amount of goods and services we produce per unit of energy consumed—continues to trail both Japan and NW Europe, and is the lowest of all developed nations. Among states, Ohio ranks 30th for our level of energy productivity. As a result, more than $40 billion leaves our state each year to purchase fossil fuels from outside Ohio.   For a state beleaguered by a decade of economic downturn, these are dollars we cannot afford to waste. This is why the City of Oberlin, in partnership with Oberlin College and the city's municipal utility have launched "The Oberlin Project" to make Oberlin the greenest little city in the U.S., grow the local economy in the process, and become a national model for sustainable economic development. This report is meant to assist stakeholders participating in the Oberlin Project, and other communities interested in replicating their efforts.

Examine energy use and emissions. To develop a sustainability strategy, a community must first understand the way it uses energy and where its emissions come. According to a greenhouse gas inventory conducted for the city of Oberlin, its commercial and industrial sector account for the largest share of Oberlin's energy use (28 percent); local government combined with Oberlin's anchor institution, Oberlin College, amount to 1/3 of total energy use; transportation 24 percent; and 15 percent is used by residents in their homes. According to the same study, over half of Oberlin's emissions were due to electricity use. Of non-electricity related emissions, transportation-related energy use accounted for the next largest share (15 percent of the total). These numbers demonstrate that Oberlin needs a strategy to reduce emissions from the electric power sector, green its commercial and industrial sector, enable the college and local government to reduce energy use and lead by example, develop a sustainable transportation system, and promote energy savings opportunities among residents.

Reducing emissions in the electric power sector. In Ohio, nearly 70 percent of all energy generated at centralized electric power plants is lost during generation or transmission, resulting in a waste of scarce resources and unnecessary toxic and carbon emissions. Communities across the nation are using policy levers to encourage more distributed and efficient generation in the

electric power sector such as employing municipal power authority to promote clean energy development, setting renewable energy targets, conducting community outreach, providing technical assistance, organizing bulk purchasing for discounted rates, engaging in comprehensive long-term planning to guide local energy decisions; and streamlining permitting processes and utility interconnection standards. One of the most exciting policy developments is the utility use of CLEAN contracts (Clean Local Energy Accessible Now), or a feed-in tariff or FIT, a set of published rates at which a utility company buys clean energy from local developers.

Greening the commercial and industrial sector. Across Ohio, the commercial and industrial sectors combined account for half of all energy used and over $18 billion in energy expenditures (2008). By targeting this sector for energy savings, we can increase the productivity of our energy inputs, resulting in increased competitiveness, more jobs, and reduced emissions. To do so, cities are creating eco-industrial parks, where they bring together local businesses and manufacturers to share services, transportation infrastructure, energy, and waste streams; engaging in public awareness campaigns, creating revolving loan funds accessible by businesses for clean energy purposes, and incentivizing or requiring new or existing buildings to meet green building standards. Property Assessed Clean Energy (PACE) is an innovative approach using the public works assessment model, typically used for sewers, sidewalks, and other public improvements to finance clean energy projects.

Leading by Example: Local government and anchor institutions. The sector that has most successfully adopted sustainability measures so far is known as the MUSH market (Municipalities, Universities, Schools, and Hospitals). Local Governments and anchor institutions in the community, like Oberlin College, are leading by example. They are examining their own energy use, setting goals, developing strategies to reduce energy use and increase use of alternative energy, encouraging energy saving behavior among employees, faculty and students, and developing green, local, and efficient purchasing guidelines. Many cities and campuses are employing the use of power purchase agreements to purchase renewable energy systems, and Energy Service Companies (ESCOs) to capture energy savings.

Develop a more sustainable transportation system. While many of Ohio's transportation problems require state and regional solutions, there are steps local governments can take to make it easier and safer to walk, bike, use mass transit, and purchase more efficient and alternative-fueled vehicles. There are also ways to grow our communities in a more sustainable fashion: promoting rural products in nearby urban areas, supporting farms and the value-added processing of rural resources, and preserving natural land; investing in existing assets downtown and on Main Street, in existing infrastructure, and on places the community values; and encouraging low-impact development that utilizes natural landscaping for storm water management.

Promote energy savings opportunities among residents. The major barriers to clean energy upgrades in the residential market include uncertainty in length of ownership of home and ability to recoup costs; the fact that rental property owners may not pay utility bills; a lack of motivation, or ability, to undertake the hassle of learning, organizing, financing, and

implementing a project, and access to upfront funds to pay for efficiency investments. Successful efficiency programs address these barriers by making efficiency easy, engaging the community, subsidizing the cost of energy audits, offering rebates for clean energy products and services, and making low- to no-interest loans accessible with longer payback periods. With these goals in mind, well-informed contractor networks, community energy action groups, and "energy advocates" are being employed to engage their communities, increase participation rates, and walk consumers through the process. Some of the more innovative financing options involve repayment of equipment installation through the customer's utility or property tax bill.

Conclusion

Achieving the aggressive goals of the Oberlin Project will require a holistic approach addressing all energy-using and emissions-producing sectors. The same goes for any community that wants to become greener and cleaner. This document details many options, not all of which will make sense for every community. The next step in the research process will be to sort through the options, identify what makes sense for each particular community, assess the impact of those options, and identify any barriers to adopting particular policy options and potential solutions. A green job sketch and workforce development strategy also needs to be fleshed out as well to make sure that jobs created from green investments are good jobs accessible to local residents.