Evolving Local Government Roles in Community Energy Management:

A Discussion of the Role of Local Governments in Providing Distributed Energy Efficiency and Renewable Energy Services in the State of North Carolina

May 2012
Evolving Local Government Roles in Community Energy Management

About the Environmental Finance Center

The Environmental Finance Center at the University of North Carolina, Chapel Hill is part of a network of university-based centers that work on environmental issues, including water resources, solid waste management, energy, and land conservation. The EFC at UNC partners with organizations across the United States to assist communities, provide training and policy analysis services, and disseminate tools and research on a variety of environmental finance and policy topics.

The Environmental Finance Center at the University of North Carolina, Chapel Hill is dedicated to enhancing the ability of governments to provide environmental programs and services in fair, effective, and financially sustainable ways.

Acknowledgements

Written by Jeff Hughes and Erin Riggs.

This report was made possible by a grant provided by Z. Smith Reynolds.

Editorial assistance was provided by Erin Weeks.

This report is a product of the Environmental Finance Center at the University of North Carolina, Chapel Hill. Findings, interpretations, and conclusions included in this report are those of the authors and do not necessarily reflect the views of EFC funders, the University of North Carolina, the School of Government, or those who provided review.

Cover photos courtesy of (clockwise from top right) Debbie Mous, Robert Linder, and Richard Dudley.
# Table of Contents

## I. Introduction  
4

## II. An Old Approach Applied to New Services: The Delaware Statewide Sustainable Energy Utility Model  
5
- Legal Authority  
5  
- SEU Services and Programs  
5  
- SEU Financing Mechanisms  
6  
- Summary  
7

## III. Examples of Local Government Distributed Energy Service Models in North Carolina  
8
- A. Local Government as a Catalyst for Distributed Energy Projects  
8  
  Raleigh Programs and Services  
8  
- B. Local Government as Provider of Low Income Housing Energy Efficiency Services  
9  
- C. Local Government as a Provider of Distributed Energy Finance Programs  
9  
  Legal Authority  
10  
  Carrboro’s Energy Efficiency Revolving Loan Fund  
11  
  Durham Neighborhood Energy Retrofit Program  
11  
- D. Local Government as Owner and Operator of Distributed Energy Infrastructure  
12  
  Statesville, NC  
12  
- E. Local Government as a Provider of Distributed Energy Services that Provide Economic Development Benefits  
13  
- F. Summary of Existing Roles  
13

## IV. New Models for the Future?  
13
- A. Creation of a Sustainable Energy Business Improvement District (BID)  
14  
  Legal Authority  
14  
- B. Local Stand-Alone Sustainable Energy Utility in North Carolina  
15

## IV. Potential Limitations in North Carolina Law  
16
- A. Public Enterprise Fund  
16  
- B. Public Purpose Clause  
16

## V. Conclusion  
17
Evolving Local Government Roles in Community Energy Management
I. INTRODUCTION

How far can a local government go to provide services with public benefits? Few question the role of local government in providing sewer or trash services to its citizens, but what about energy efficiency services? With public interest in conservation and sustainability at a high and growing, many states have begun to ask questions about the role of local government in providing services which rely on distributed, privately-owned assets, rather than centralized, publically-owned infrastructure.

North Carolina is one of many states in which there are currently state or local programs aimed at creating or incentivizing renewable energy and energy efficiency efforts. These incentives include tax credits, development fee discounts, utility rebate programs, utility rate discount programs, and loan or grant programs at both the state and local levels. These and similar programs have been structured and used in ways to encourage sustainable activities or purchases by residents—and this practice is largely accepted in all fifty states. Issues can arise, however, when a local government wants to go a step further and actually finance energy efficiency improvements or projects on private property.

New questions about the role of local government emerge from this scenario. What, for instance, can a local government feasibly do to replace an old, energy-inefficient refrigerator in a private citizen’s home, to help a family finance a solar hot water heater, or to aid a neighborhood in installing a small-scale wind turbine? Can the local government front the cost of installing solar panels on a church or nonprofit business if it improves energy efficiency, reduces the environmental by-products of energy production, and lowers electric bills for private citizens? If the local government engages in such a project, does it benefit an individual, a small group of private citizens, or, taken as part of the recent nationwide push for renewable energy and sustainability, does a small-scale project benefit the whole community in ways similar to a sewer line extension?

Depending on the level at which a local government wants to take on such activities, the city in which it is located, and how the courts will interpret the current legislation that allows for such practices, the answer to all of these questions may be yes. In some cases, getting to a clear “yes” may involve clarification or modification of statutes. This report describes models on the state and local levels that have been used in other areas or that could potentially be used to implement local government sustainable energy efforts in the State of North Carolina.

In assessing how far a local government might go in promoting, implementing, and funding sustainability efforts in its community, the Delaware Sustainable Energy Utility provides a helpful starting point. This statewide model exemplifies a far-reaching option in which a quasi-governmental utility actually provides sustainable energy through numerous services and programs. Currently, as is discussed in this paper, the structure of the North Carolina statutes doesn’t provide for a program as extensive as the Delaware model at a local level; however, depending on the interest of a local government, there are potential legislative proposals that could be made to allow for a similarly structured utility program. Even without legislative changes, there are somewhat less extensive versions of the Delaware model that communities interested in this approach may implement right away.

1 The Database of State Incentives for Renewables and Efficiency website describes several of the programs
II. AN OLD APPROACH APPLIED TO NEW SERVICES: THE DELAWARE STATEWIDE SUSTAINABLE ENERGY UTILITY MODEL

On July 1, 2006, a Delaware legislative task force was created to examine the possibility of establishing a sustainable energy utility in the State of Delaware.² What has grown out of the task force’s work is the Delaware Sustainable Energy Utility (SEU), a nonprofit entity unrelated to any other public or private utility operating in Delaware.³ Its primary function is developing and supporting end-user markets for energy efficiency services and customer-sited renewable energy. The most important aspect of the SEU is that it serves as a single entity with which energy users can build a relationship in order to use less energy and generate their own energy cleanly.⁴ In contrast to a conventional energy utility, which provides energy, the SEU essentially provides efficiency and self-generation services for its users.

LEGAL AUTHORITY

In 2007, the Governor of Delaware signed into law “An Act to Amend Title 29 of the Delaware Code to Create a Sustainable Energy Utility in the State of Delaware.” This Act gave the legal authority to create the SEU and implement its programs. Relevant provisions of the bill provide for:

1. SEU use of competitive markets and leveraged private-financing to deliver cost-effective, end-use energy services designed to save Delawareans up to 30% of their annual energy usage;
2. SEU use of competitively-selected Implementation Contractors to deliver services utilizing performance-based contracts;
3. The creation of a Fiscal Agent to serve as the SEU “treasury”;
4. The creation of an Oversight Board to ensure that SEU meets responsibilities and performance targets;
5. The creation of the initial performance targets as well as evaluation and monitoring mechanisms to ensure that the energy savings are verifiable, and;
6. The creation of bonding authority for SEU with a cap of $30 million for an eight-year period. The bonds are to be used only to fund SEU contractors/programs. Repayment of the bonds can come in part from shared savings agreements with SEU customers and from sale of Renewable Energy Credits in local and regional markets.⁵

SEU SERVICES AND PROGRAMS

For residential customers, the SEU provides a range of services. One of its more minimal services is a light bulb discount program,⁶ which provides special discount pricing and instant coupons on select Energy Star qualified CFLs at retail locations throughout the state (as low as $0.98/bulb).⁷ Another program that involves more substantial investments is the “Home Performance with Energy Star Program.”⁸ This is a

---

² http://www.seu-de.org/
³ Id.
⁴ Id.
⁵ http://www.seu-de.org/docs/final_report_4-21.pdf
⁶ http://www.energizedelaware.org/
⁷ Id.
⁸ Id.
home improvement program, where homeowners can receive between $300 and $8250 in rebates when making eligible energy-saving home improvements. First, a homeowner has a comprehensive energy audit of his home conducted by a contractor certified through the Home Performance Program. This audit results in a home energy audit report for the homeowner, including recommended home improvements for energy saving, along with what the savings would be. If the homeowner decides to go through with the improvements, the contractor then completes them, making the improvements eligible for the rebates.9

Another opportunity, the “Green for Green” program, is available only for homes in Delaware’s designated growth areas. This program offers new home buyers in Delaware rebates of $3000 to $6000 when purchasing homes that have been upgraded to national green standards for energy efficiency, water conservation, indoor air quality, building materials, and other conservation-oriented, energy saving features.

For non-residential customers to the SEU, the main opportunity available is the “Efficiency Plus Business” program.10 This program offers businesses, nonprofits, institutions, and other public-sector organizations energy efficiency incentives and loans. The options provided are prescriptive and custom incentives, direct loans, or co-funding for qualified energy audits. The prescriptive incentives apply only to existing buildings which meet performance specifications. The measures include lighting, HVAC and water heating, motors and drives, appliances, and specialty equipment. The custom measure incentives apply to existing buildings or new construction and include measures such as major industrial process renovations, projects involving multiple building systems, motor replacements, water/wastewater system improvements, building control systems, and exhaust air heat recovery. The business loans for public sector projects are up to $250,000 per project at a 3.5% interest rate for up to 10 years. The business loans for private and nonprofit sector buildings are up to $250,000 per project at a 5% interest rate for up to 7 years. Additionally, the program offers co-funding for qualified energy audits up to $2000.11

Additionally, the SEU has programs for the public and nonprofit sectors.12 The main opportunity for these customers is the “Performance Contracting Program,” which is directed at schools, universities, municipalities, hospitals, and other nonprofits and privately-held institutions. Through this program, energy and water use for the facilities is assessed, and the SEU then provides the necessary contracts and funding so that an entity can implement efficiency improvement projects with minimal financial risk. The program uses Energy Service Companies (ESCOs) who have been pre-qualified by the SEU, and these companies guarantee energy savings enough to cover annual payments for project costs for a contract term of 15 to 20 years.13

SEU FINANCING MECHANISMS

9 Id.
10 Id.
11 Id.
12 Id.
13 Id.
The SEU programs and services are supported by the $30 million dollar bonding authority, which is “special purpose” bonding and does not add to Delaware’s General Obligation bonding. To pay off the bond debt and increase the program possibilities for the SEU, the utility uses revenue from three principal sources:

A. **Shared Savings Agreements** with customers:
   Once the SEU makes the energy efficiency investment for the customer, then the customer enters into a shared savings agreement and is required to share 33% of the estimated savings created by the investment for a period of three to five years. After the investment cost is paid off, the customer then enjoys 100% of the savings.

B. **Partial Proceeds from sale of Renewable Energy Credits**:
   A Delaware resident who sites a renewable energy system on his property is eligible for funds to cover the difference in incremental cost of a conventional energy supply system and the renewable system. In return, the SEU will collect 25% of the proceeds of sale of Renewable Energy Credits from that system.

C. **Green Energy Fund** monies:
   Delaware already has a Green Energy Fund, which is funded by revenue from electricity sales of its main electricity provider, Delmarva Power. The SEU task force recommended an increase in the rate, which would result in an increase of approximately 18 cents to the monthly bill of the typical utility customer, but which would provide the SEU with extra funds particularly during the early starting of the utility.

**SUMMARY**

Like many other state and local programs, the Delaware statewide model effectively does away with the ever-present first cost barrier disincentive to upgrade to more energy efficient living. The extra expense that it costs to change over to new light bulbs or appliances, and the upfront costs of installing solar or wind power are picked up by the SEU and then as the energy usage goes down, both the private individuals and the SEU benefit. The real innovation with the SEU model, however, is that while it operates as a quasi-governmental public purpose-driven entity with access to low cost capital, it follows market principles and is self-supporting. This utility model is commonplace for many services, such as water and sewer, which rely on centralized infrastructure, but is unusual for services that rely largely on distributed, privately-owned assets. The SEU does what the typical utility does—it aggregates customers and provides economically efficient aggregated services—but these services do not come out of a single government owned pipe.

By its design, the SEU makes its financial gains from less energy use rather than more, and is thus able to reinvest the savings into more reductions—benefiting all parties involved. It is governed differently than a municipality would be, and therefore, in looking at how a local government in North Carolina might strive to accomplish similar goals as the SEU, it is necessary to look at what is possible under current North Carolina law.

---

15 *Id.* at 8.
16 *Id.* at 10.
17 *Id.* at 12
III. EXAMPLES OF LOCAL GOVERNMENT DISTRIBUTED ENERGY SERVICE MODELS IN NORTH CAROLINA

At this time in North Carolina, there are several possible roles that a local government might take to promote or finance renewable energy or other sustainability services within their jurisdiction. In recent years, the State legislature has enacted legislation to create more options for local governments engaging in these activities; however, the further a local government moves toward the SEU type model, in which energy efficiency services operate under an umbrella of a stand-alone the utility, the less clear the existing legislative authority is in the State.

A. Local Government as a Catalyst for Distributed Energy Projects

One role local governments have taken to achieve sustainability goals has been as the catalyst for energy efficiency and renewable projects on public facilities. This can be done by a local government partnering with a private utility provider and making space or personnel available, freeing up public funds that can be used on public projects, or encouraging the public to become involved. This is exemplified by the City of Raleigh, which has recently partnered with Progress Energy Carolinas on several energy efficiency projects. In these and other programs, Raleigh has been at times a catalyst and most often an enabler for sustainable energy programs in the community.

RALEIGH PROGRAMS AND SERVICES

The first of these projects, Raleigh’s LED City Initiative, which started in 2007, began with the installation of LED lighting in the municipal parking garage building, and more recently has moved into the installation of LED street lighting. Another project, NC Get Ready, is focused on preparing the city of Raleigh for electric vehicles. In 2009, Raleigh signed on to this national project and has partnered with Progress Energy and Advanced Energy with the goals being to facilitate resolution of issues with electric transportation, educate potential electric vehicle consumers, establish a charging station network, develop relationships with the manufacturers of the electric vehicles, and explore the opportunities for economic growth through the electric vehicle sector.

Additionally, in 2009, the Raleigh City Council approved the first utility-scale solar power project located on local government property in North Carolina. The project itself was, at the time, the largest solar array project from Progress Energy Carolinas. The privately-built and owned facility was constructed on the roof of the Neuse River Waste Water Treatment Plant in Raleigh, and the output from the solar array is sold to Progress Energy for distribution to customers. Raleigh’s allowance of this facility on local government property benefits both the public and private sectors by enabling the use of renewable energy as a step forward.

19 Id.
22 Id.
Evolving Local Government Roles in Community Energy Management

toward a cleaner environment, and by providing for the creation of power that is more energy efficient and thus more inexpensive for private consumers.

A local government like Raleigh acting as an enabler of sustainable energy for public facilities has several benefits. Raleigh funding goes to infrastructure on public property even though it may not be owned by the city. This means that the legislative authority upon which they rely is much clearer than it is for municipalities trying to fund privately owned infrastructure on private property. Raleigh uses staff time and resources, but projects are designed to provide economic benefits to tax payers. Thus, Raleigh is much more distanced from the financing of these products than the Delaware SEU.

B. Local Government as Provider of Low Income Housing Energy Efficiency Services

Another role that local governments might take is less directed at energy efficiency for its own sake and is instead directed toward bettering low-income housing by making such housing more energy efficient. This benefits both the local jurisdiction by minimizing the amount of energy being wasted community wide, and additionally benefits the lower income homeowner or renter by lowering his or her overall utility bills. The power for a local government to do this comes from its power to engage in Community development programs and activities. For a city, the authority is laid out in G.S. 160A-456(a)(1), which states:

Any city is authorized to engage in, to accept federal and State grants and loans for, and to appropriate and expend funds for community development programs and activities. In undertaking community development programs and activities, in addition to other authority granted by law, a city may engage in the following activities:

(1) Programs of assistance and financing of rehabilitation of private buildings principally for the benefit of low and moderate income persons, or for the restoration or preservation of older neighborhoods or properties, including direct repair, the making of grants or loans, the subsidization of interest payments on loans, and the guaranty of loans;

Although this authority is broad in the context of what can be done to help in these particular cases, it is limiting in that it is specifically targeted at low-income housing or older neighborhoods or properties.

A local government acting in this role might take on a community weatherization program to attempt to improve low-income housing by directly repairing seals or installing insulation, or could potentially fund the installation of energy star appliance upgrades or low-flow toilets. Many local governments in North Carolina are likely already engaged in such programs, but for those who are not, and who are still interested in implementing some type of distributed energy efficiency service, this is a great starting point with clear legislative authority.

C. Local Government as a Provider of Distributed Energy Finance Programs

As is described in the Delaware SEU model, another role a local government may want to take in becoming involved in the provision of distributed sustainability services to its community is to actually fund or finance the efforts in some way. Unlike the catalyst role, in which a government may foster the development of

24 For Cities, G.S. 160A-456(a)(1); For Counties, 153A-376(b)
25 For Cities, G.S. 160A-456(a)(1); For Counties, 153A-376(b)
sustainability efforts through partnership and provision of various resources, a local government creating an energy finance program would go further and actually provide funds to individuals and organizations to pay for distributed services. In the Delaware model, the SEU has funds to loan to private residences, businesses, or municipal buildings so that those entities may install new renewable energy projects or may retrofit existing property to reach goals of sustainability. In North Carolina, there exists legislation that would allow a local government to establish funding mechanisms to implement a loan structure similar to the Delaware model.

LEGAL AUTHORITY

In the 2009 session, the North Carolina General Assembly passed House Bill 1829, which in part clarified the authority of local governments to finance energy programs. The language of the bill acknowledges that a county or city plays an integral role in furthering the purpose of promoting and encouraging renewable energy and energy efficiency in the State of North Carolina by promoting or encouraging renewable energy and energy efficiency within the county’s territorial jurisdiction. The bill thus allows a county or city to establish a program to finance the purchase and installation of distributed generation renewable energy sources or energy efficiency improvements that are permanently affixed to residential, commercial, or other real property.

Additionally, the bill provides for financing of the energy program by allowing a county or city to establish a revolving loan fund or a loan loss reserve fund. A government funded revolving loan program generally refers to a loan fund, where the loan repayments and interest feed back into the fund, such that, in theory, the fund can continue indefinitely. The loan loss reserve fund approach is designed to encourage private financial institutions to expand their energy lending by using a small amount of public funds to share the risk of loan defaults with private lenders. The process involves depositing public funds into a reserve account that can be tapped by lenders to cover a portion of losses resulting from their new energy loan programs. The annual interest charged for the use of funds from a revolving fund created under HB 1829 cannot exceed 8% per annum, and the term cannot be greater than 20 years. The county or city may also establish other local government energy efficiency and distributed generation, renewable energy source programs funded through federal grants, or may use state and federal grants and loans along with general revenue for financing a program.

In regard to the extent of services a local government could help fund under this authority, the bill allows for funding “renewable energy sources” or “energy efficiency improvements” on the property of residences, commercial businesses, or other real property, which presumably includes government buildings or anything not falling under residential or commercial. This is a broad delegation, and as defined by statute, “renewable energy source” includes a wide array of sources, including:

...a solar electric, solar thermal, wind, hydropower, geothermal, or ocean current or wave energy resource; a biomass resource, including agricultural waste, animal waste, wood waste, spent pulping liquors, combustible residues, combustible liquids, combustible gases,

26 CITE to HB 1829
27 Id.
28 Id.
29 Id.
30 Id.
energy crops, or landfill methane; waste heat derived from a renewable energy resource and used to produce electricity or useful, measurable thermal energy at a retail electric customer’s facility; or hydrogen derived from a renewable energy resource.

It is worth acknowledging that the language allows for the development of distributed generation “renewable energy” sources or “energy efficiency” improvements.

Additionally, the financing structure does not give local governments bonding authority to generate start up capitalization funds for their loans programs, thereby limiting the size of the funds to what can be supported by grant funds and existing local government reserves and revenues.

**CARRBORO’S ENERGY EFFICIENCY REVOLVING LOAN FUND**

Since the enactment of HB 1829, Carrboro, North Carolina has created a funding mechanism for energy efficiency purposes. In the fall of 2010, having received federal funds from the Better Buildings Program Grant, Carrboro created a Revolving Loan Fund to make funds available to businesses and nonprofits to improve their energy efficiency.  

The goals of the loan program are to reduce energy consumption by a minimum of 15-20% and to reduce energy bills for local businesses. The loans are available only for businesses and nonprofits in Carrboro’s town limits with 50 employees or fewer, and the loans are available on a first-come, first-served basis. Additionally, the loan applicants must provide their previous 12 utility bills and agree to continue submitting their utility bills for three years after the work is complete so the town can measure the performance of the retrofits.

**DURHAM NEIGHBORHOOD ENERGY RETROFIT PROGRAM**

In addition to allowing for the creation of a Revolving Loan Fund, HB 1829 also allows a city or county to establish “other local government energy efficiency and distributed generation renewable energy source finance programs funded through federal grants.” In 2010, Durham started a program using federal funding called the Durham Neighborhood Energy Retrofit Program (NERP). The program provides subsidized professional retrofits including sealing up air leaks, adding insulation and installing programmable thermostats within targeted neighborhoods. The professional cost for such retrofits is estimated to be about $800 to $2000, but the city is providing them for $200 or $300 to qualifying homes. This subsidization program serves the interests of the individuals, the neighborhood, and the city as a whole through its goals of better educating and equipping residents with the tools they need to reduce energy use.

While the possibilities for a local government in promoting sustainability under HB 1829 are diverse, there is still a lack of clarity in exactly how far a government might go, given the public purpose requirement in the constitution discussed below. It is not clear how small-scale a municipality could go in financing energy

[32] Id.
[33] Id.
[34] Id.
efficiency improvements while still satisfying the constitutional requirement, and the exact range of acceptable “energy efficiency improvements” is also not clear. Changing out lighting or replacing an energy inefficient appliance would not likely fall under a “renewable energy source,” given that the change is not permanently affixed to the property. The question thus becomes whether or not those changes fall under “energy efficiency improvements,” which could be funded by the local government financing mechanism.

D. Local Government as Owner and Operator of Distributed Energy Infrastructure

Under G.S. §160A-312(a), “A city shall have authority to acquire, construct, establish, enlarge, improve, maintain, own, operate, and contract for the operation of any or all of the public enterprises...”38 In regards to energy systems, “public enterprise” includes “Electric power generation, transmission, and distribution systems

Municipalities in North Carolina have a lot of potential to provide renewable energy as a distributor or generator if that local government is a North Carolina Public Power community. There are more than 70 public power communities serving more than 500,000 residential, commercial and industrial customers in the state.39 There are numerous possibilities in the realm of sustainability efforts for a public power community. The revenue from electricity sales in these communities goes toward operation of the system, and then to improving community services or quality of life.40 Because a municipally-owned utility does not have to pay a dividend to shareholders, the benefits all stay with the residents of a community.41 The community therefore has an active role in the activities of its electric systems, and each municipality sets its own policies upon which the public can speak out at city or town meetings.42 Incorporating goals of energy efficiency or renewable energy into the entire power system is a community effort, and the limits are greater defined by how far a community is willing to go with its power.

STATESVILLE, NC

Statesville was the first public power community in the State of North Carolina and has been providing power to its citizens since 1889.43 Statesville engages in financing distributed energy efficiency improvements on private assets. Like many other energy providers, both private and government, their rationale is that those investments provide direct financial returns or impact to centralized generation and distribution systems. Currently, residential customers in Statesville are eligible for a $400 rebate for installing an energy efficient heat pump or for a $150 rebate for installing a new electric water heater. This use of the public utility money to help private individuals fund sustainable energy investments seems much closer to Delaware’s role in its SEU. It is worth noting, however, that even in the Statesville situation, the municipally-owned utility is providing renewable energy in conjunction with the provision of traditional power. The question of whether a local government could own only renewable energy facilities and sell power from those facilities—without also providing traditional power—does not yet have a clear answer.

39 http://www.ncpublicpower.com/AboutUs/FAQ.aspx
40 Id.
41 Id.
42 Id.
E. Local Government as a Provider of Distributed Energy Services that Provide Economic Development Benefits

Finally, an interested local government might provide some form of distributed renewable energy services that produce economic development benefits. Like other roles discussed, the authority for this mechanism is not specifically directed at energy efficiency services; rather, the authority comes from the local development statutes, which invest a local government with the power to “make appropriations for the purposes of aiding and encouraging the location of manufacturing enterprises, making industrial surveys and locating industrial and commercial plants in or near such city or in the county.” These appropriations can be funded through property taxes and other funding that is not restricted by law. The authorizing statute states that one way a municipality may do this is to provide land for bringing in a business or “to develop the land by installing utilities, drainage facilities, street and transportation facilities, street lighting, and similar facilities; may demolish or rehabilitate existing structures; and may prepare the site for industrial or commercial uses.” Through this language, it seems possible that a local government could, either directly or through a loan, provide a business with energy efficiency upgrades or initial energy efficiency installations for a new facility. Although this is bettering the individual business directly, it is being done for the greater purpose of economic development in the municipality.

F. Summary of Existing Roles

<table>
<thead>
<tr>
<th>Roles</th>
<th>Primary Authority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalyst for Distributed Energy Projects</td>
<td>Miscellaneous statutes including community redevelopment or economic redevelopment sections</td>
</tr>
<tr>
<td>Provider of Low-Income Energy Efficiency Services</td>
<td>Housing Authority Powers</td>
</tr>
<tr>
<td>Provider of Energy Finance Programs</td>
<td>HB 1829</td>
</tr>
<tr>
<td>Operator of Energy System that includes Distributed Energy Services</td>
<td>Public Enterprise Statutes</td>
</tr>
<tr>
<td>Provider of Distributed Energy Services that create Economic Development Benefits</td>
<td>Economic Development Statutes</td>
</tr>
</tbody>
</table>

IV. NEW MODELS FOR THE FUTURE?

44 G.S. 158-7.1(a)
45 G.S. 158-7.1(b)(1)
Above are the existing roles local governments in North Carolina are taking in providing distributed energy efficiency and renewable energy services, but there are two potential roles a local government might take that would bring it closer to the Delaware model. The first appears to be an existing possibility with supporting legislation already in place, but the second model, the most far-reaching, would likely require legislative changes before it could be implemented.

A. Creation of a Sustainable Energy Business Improvement District (BID)

Under current North Carolina law G.S. 160A-536 (a)(2), a municipality can establish a special tax district, called a Business Improvement District (BID), that encompasses its central downtown area to raise money to fund “downtown revitalization.” As it currently stands, the focus for many BIDs is aimed at services such as increasing security in the downtown or creating community activities to bring people downtown, thus benefiting the commercial entities. However, it would seem that a municipality could also create a BID for the purpose of making the downtown sustainable and a target for sustainable businesses. In essence, a municipality would be creating a special tax district in which they would undertake investments and upgrades to the entities in the BID in order to make them more sustainable.

LEGAL AUTHORITY

The authority to create a sustainability-oriented BID with the most services would likely come from G.S. 160A-536(a)(2), which states:

(a) The city council of any city may define any number of service districts in order to finance, provide, or maintain for the districts one or more of the following services, facilities, or functions in addition to or to a greater extent than those financed, provided or maintained for the entire city

(2) Downtown revitalization projects

There is authority for other sustainability-oriented projects, such as street lighting or water and sewer upgrades, that fit in other parts of 160A-536(a), but it seems for the more far-reaching services a city may like to provide, such as retrofitting buildings or installing solar panels on downtown facilities, the “downtown revitalization projects” provision is the best option. The list of what can be included is not exhaustive, and it allows for relatively broad interpretations. Services provided could potentially include installation of solar panels, creation of green roofs, upgrades to water heaters or air conditioning units, as well as other more innovative sustainability projects on downtown buildings. Additionally, within the BID, the municipality could implement other green services, such as a more comprehensive recycling program or a green street lighting program.

In order to finance the projects in a BID, a municipality has five options:

**General Fund Dollars** include property tax proceeds, local sales and use tax proceeds, and other unrestricted revenue sources

---

Special Assessments only would apply to authorized capital projects, and would be a special assessment on real properties in the BID that benefit from the projects.\(^{50}\)

Public Enterprise Funds would only apply if the capital project relates to one or more of the municipality’s public enterprises.\(^{51}\)

BID Tax Revenue proceeds may be used by a municipality for activities that generally fit into the list provided in the statute (though the list is not exhaustive), including projects that further the public health, safety, welfare, and convenience by promoting the economic health of the central city or downtown area, which is where a sustainability project could likely fit.\(^{52}\)

Borrowing Money options include General Obligation Bonds, Revenue Bonds, Installment Purchase Financings, Special Obligation Bonds, or Project Development Financings.\(^{53}\)

For a local government most interested in starting with a downtown model of sustainability rather than moving directly into the private residential sector, a BID could be a great starting point. It is far more limited than something like the SEU model, because a municipality would be limited to projects falling under the definition of “downtown revitalization,” and would further be limited by a much smaller territorial boundary.

B. Local Stand-Alone Sustainable Energy Utility in North Carolina

The second potential future role a local government in North Carolina might take is to actually set up a local version of the Delaware model. Determining whether a local government in North Carolina can take that extra step requires some exploration of the current legislation and constitutional provisions of the State; however, creating such a utility structure would provide the local government interested in providing decentralized distributed services with a clearer line of authority. Different practices or allowances in the State discussed above indicate that interested local governments can already link renewable energy services to their current provision of power. A citizen has options to receive rebates or incentives from their energy provider. To realize the Delaware model, however, a local government would need to have the authority to provide only the distributed energy efficiency and/or renewable energy services without being a fully-fledged public power authority. There may be local governments that do not have the authority, resources, or interest in being a full power provider but that are interested in taking a lead role in distributed sustainable energy services in the way the Delaware SEU has. Delaware’s only commodity is distributed sustainable energy services—the SEU does not actually provide power. Knowing the legislative and constitutional limitations can help an interested local government in determining how to move toward that SEU local model.

---

\(^{50}\) http://sogweb.sog.unc.edu/blogs/localgovt/?p=4273


\(^{52}\) N.C.G.S. §160A-536(b) (2011).

\(^{53}\) N.C.G.S. §159, Art. 4; N.C.G.S. §159, Art. 5; N.C.G.S. §153A, Art. 9A; N.C.G.S. 160A, Art. 10A; N.C.G.S. §160A-20; N.C.G.S. §159I; N.C.G.S. §159, Art. 6
IV. POTENTIAL LIMITATIONS IN NORTH CAROLINA LAW

As exemplified by the existing possibilities above, a local government has numerous options in moving forward with promoting or funding sustainability practices in its community. However, reaching the point of actually replacing that refrigerator in a citizen’s home or installing a neighborhood wind turbine remains problematic, particularly due to a couple of existing statutory and constitutional provisions in North Carolina.

A. Public Enterprise Fund

A local government has power to fund the cost of public enterprises, including power generation under North Carolina law. Under the Public Enterprise Statutes, generally, a local government has the “full authority to finance the cost of any public enterprise by levying taxes, borrowing money, and appropriating any other revenues therefor, and by accepting and administering gifts and grants from any source on behalf thereof.”\(^{54}\) Using these funds for distributed energy services, however, is challenging.

Local governments have exercised authority to fund sustainable distributed water services (e.g. rebates for water efficient toilets) through the Public Enterprise Statutes. Although that is good news for the water-saving efforts of local governments, the statutes don’t provide the same broad language to define what is allowed to be funded for power generation. For energy purposes, the definition of “public enterprise” includes “Electric power generation, transmission, and distribution systems.”\(^{55}\) For a local government in North Carolina to utilize the public enterprise funds to provide and finance distributed sustainable energy services, a broadening of this language would likely be necessary. A similar broadening of language has already been done for the stormwater and wastewater definitions in the public enterprise statute. In the 2000 legislative session, the NC legislature approved a broadening of the definition from “structural and natural stormwater and drainage systems of all types” to “stormwater management programs designed to protect water quality by controlling the level of pollutants in, and the quantity and flow of, stormwater and structural and natural stormwater and drainage systems of all types.”\(^{56}\) This modified language opens the door for a municipality to engage in more decentralized projects with stormwater fees to protect water quality. Similarly, in 1979 steps were taken to change the wastewater public enterprise statutes and add language that allows for the management of decentralized systems, including septic tanks, to be considered a public enterprise.

A similar adjustment in the energy system definition could allow local governments to more easily use public enterprise funds to engage in distributed services to limit energy consumption or waste, thus accomplishing sustainable energy goals.

B. Public Purpose Clause

Assuming a modification of the public enterprise laws would allow a local government to use those funds for distributed renewable energy services, or even using the financial mechanisms allowed under HB 1829,\(^{57}\) the local government would have the power to fund the cost of energy systems.

---

\(^{56}\) NC HB 1602 (2000).
there is still a potential barrier in the North Carolina Constitution that could limit the government’s spending power. The Public Purpose Clause, found in Section 2(1) of Article V states:

“The power of Taxation shall be exercised in a just and equitable manner, for public purposes only, and shall never be surrendered, suspended, or contracted away.”

Although the language specifically says “taxation” must be exercised for public purposes only, the North Carolina Supreme Court has interpreted that language to require that all public funds must be used to benefit the public generally and may not be used exclusively for the benefit of particular persons, interests, or estates.

Obviously, the more a local government becomes involved in financing an energy efficiency improvement or sustainable service on an individual’s property or for a small group of citizens, the more potential conflict there seems to be between that spending and the public purpose clause; however, the specific definition of what constitutes a “public purpose” has not been determined by the North Carolina Supreme Court, and therefore such small-scale private sustainability projects may not pose any substantial conflict with the Constitutional requirement. The determination is yet to be made, but it would seem particularly important in the creation of any energy efficiency or sustainability program to define the purpose of the program in terms of the greater benefits to the community (reduction of energy use overall, reducing greenhouse gases, boosting community economic benefits by supporting a business or apartment building, etc.).

V. CONCLUSION

Depending on the desire of the municipality to move forward with marketing sustainability and providing distributed sustainable services, there are several options available at this point. From being the enabler of community-wide efforts to “green” downtown street lighting to handing a check to supplement the cost of a citizen’s new energy star refrigerator, North Carolina local governments have several routes to follow to make their communities more sustainable in the areas of energy and water consumption. Between current legislation, potential legislative changes to broaden the use of Public Enterprise funds, and the open possibility for interpretation by the courts, North Carolina communities can lead the nation in moving toward providing distributed sustainability services to their residents.
