

After many months of input from the community, I have compiled a proposal which incorporates a multitude of common suggestions or themes. Anyone familiar with the ongoing discussion surrounding RECs in Oberlin will recognize a number of these ideas although they have never been melded into a single document. I have done my best to provide a general summary of each component and include a well-informed cost estimate. I do not believe this is a finished proposal but I hope it might provide a consensus on the direction in which we should proceed.

**Background:** Oberlin's municipal electric utility was established for the provision of light, heat, and power in 1927. It is entirely consistent then for the utility today not only to provide those services but to actively engage in their conservation thereby reducing costs for the rate payers. A utility that both sells and saves energy is known as an energy service company or ESCO. Oberlin Power (OMLPS) began operating as an ESCO in 2011 with the commencement of Efficiency Smart, an energy conservation program offered through American Municipal Power (AMP) predominantly focused on commercial customers. Around the same time, a local program began offering comprehensive ESCO services to residential customers known as Providing Oberlin with Efficiency Responsibly (POWER). Over the last five years, both of these programs have spurred \$8 million in lifetime energy savings. And while this sounds like a phenomenal success, fewer than 25% of OMLPS customers have taken advantage of the programs. The following proposal is intended to build upon our success in providing large and lasting cost reductions for all Oberlin electric customers.

### **Project Ideas**

**Commercial Efficiency Smart:** In 2014 Councilman Rimbart proposed that Efficiency Smart rebates for residential customers be matched dollar for dollar from the Sustainable Reserve Fund (SRF) effectively doubling the rebate amounts. That commitment should now be extended to commercial customers. Furthermore, the SRF rebate should be retroactive to the start of Efficiency Smart in 2011 so as not to disenfranchise early adopters to that program. The immediate cost of the SRF rebate would be \$311,566 and the projected annual cost would be \$100,000 per year.

**Commercial and Residential Energy Audits:** The first step in providing ESCO services is performing an energy audit to determine the most advantageous upgrades for each customer, typically with payback periods of fewer than 5 years. Each customer who signs up for an energy audit will receive \$100 when the audit is conducted but could opt to donate that payment to an Oberlin Community Foundation to support on-going energy advocate programs. Customers who apply for financial assistance from the Caring Fund will be encouraged to take advantage of the energy audit and \$100 offer. Residential audits will be performed by POWER while commercial audits will be coordinated with Efficiency Smart and Columbia Gas' Innovative Energy Solutions program. The projected annual cost to perform energy audits for 200 customers per year is \$80,000 .

**Residential Efficiency and Weatherization:** POWER has provided efficiency and weatherization services to approximately 30 homes each year through assistance from Columbia Gas and Oberlin's SRF. With an estimated 900 homes in significant need of attention it would take 30 years at the current rate. This program should be accelerated with the goal of assisting 150 homes per year (owned or rented) to complete the 900 homes within 6 years. The cost of this expanded contract with POWER would be approximately \$335,000 per year.

**LED Bulbs:** OMLPS has provided compact fluorescent light bulbs free to electric customers for a number of years. This program should continue and provide replacement LED bulbs to customers as part of the energy audit process. A budget of \$5000 per year should cover ~15 LED bulbs for 200 homes annually.

**Electric Water Heaters:** For over 25 years, Lorain Medina Rural Electric Co-op has offered an electric water heater program for its customers. The utility provided and installed the water heater at no cost to the home owner. OMLPS should offer a similar program and provide electric heat-pump water heaters at no up front cost to electric customers. This would provide an immediate \$2000 benefit to the household, provide low monthly operating costs, meet our Climate Action Plan goal of reduced carbon emissions through fuel switching, and increase electricity sales for the utility. The program cost would be offset \$250 from the Efficiency Smart program and another \$250 from the SRF. The customer would then pay \$10 per month in addition to their standard monthly electric bill in much the same way as customers pay an additional monthly fee for security lights. This \$10 would be deposited back into the SRF. With the goal of reaching 50 houses per year, the annual budget would be \$100,000. Of that \$100k, \$12,500 would be returned from Efficiency Smart and \$6000 would be returned from monthly billing for an annual program cost of \$81,500. In addition, the utility would increase electricity sales by ~\$200 per year for each participating household. This program should be administered by POWER as part of their comprehensive energy service offerings.

**Sustainable Reserve Fund:** The Sustainable Reserve Fund is currently setup as a grants-based program allowing applicants to apply for funding to achieve increased energy savings. This program has been significantly underutilized largely due to the cumbersome application/review process and general lack of advertisement. Non-profit service-based electric customers such as our many churches, Oberlin Community Services, the Public Library, the Oberlin Early Childhood Center, and the Phyllis Wheatley Center (to name just a few) should be actively encouraged to apply for funding to accomplish their energy efficiency goals. This may include replacement of lighting, heating/cooling systems, weatherization, or other needs identified in the course of an energy audit. Assisting these non-profits in reducing their energy costs will have a greater impact considering the larger population those non-profits serve. The SRF approval process should be modified to empower the Electric Director to review and grant requests under \$50k while requests over \$50k would still require approval by City Council. A budget of \$100,000 per year would be a good starting point to address at least 30 churches and other non-profits over a five year period.

**Municipal Infrastructure:** Reducing electrical operating costs of our municipal infrastructure benefits all rate payers. First, a detailed energy audit of all the City facilities will identify the priorities for energy improvements. Obvious areas for improvement including lighting and HVAC systems. This should include upgrade projects such as the recently completed LED lighting in the police station and the on-going LED streetlight replacement project. Important to consider is that these upgrades should be paid for through REC sale proceeds, not the income tax or enterprise capital improvement funds. There is no need to raise electric rates or taxes to pay for these cost-saving improvements. Budgeting \$400,000 should be enough to accelerate the LED streetlight project and begin to address smaller varied projects throughout the City-owned properties. Other near-term projects may include lighting in parks, parking lots, electrical infrastructure in the Underground Railroad Center, and replacement of gas furnaces with electric heat pumps.

**Revolving Loan Fund for Efficiency Upgrades:** There are some efficiency upgrades such as replacement of HVAC systems, doors & windows, refrigeration equipment, transformers or other expensive improvements that have payback periods of more than 5 years but are still viable and

beneficial in reducing energy costs. Financing options should be made available to these customers through a revolving loan fund to remove financial barriers to implementation. Setup as a true revolving loan fund, there would be little long-term cost to the utility as these funds would eventually be repaid with nominal interest. This fund should be established with an initial amount of \$300,000 . While available to all electric customers, guidelines should establish a preference for economic multipliers such as increased attraction of additional investment, increased jobs, increased tax revenue, and ancillary benefits to encourage business growth and attraction.

**Energy Advocate:** One of the greatest benefits to the collaboration between OMLPS and POWER was the hiring of an Energy Advocate (Greg Jones). The role of the Energy Advocate is to be a personal point of contact with each customer interested in energy efficiency and act as a guide through the energy audit, upgrade process, and assist in filing necessary paperwork. The Energy Advocate has proven to be *essential* in promoting the residential efficiency program. We need a similar position to coordinate the commercial efficiency program. Rather than waiting for customers to initiate the process, the commercial Energy Advocate will be proactive in marketing the program and engaging with businesses to maximize their benefits. A reasonable budget for the commercial energy advocate including salary, benefits, office accommodations and marketing is \$150,000 annually.

### 6 Year Budget:

#### Expenditures

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
SRF Rebate 2011-Present	311566					
SRF Rebate 2016	100000	100000	100000	100000	100000	100000
Energy Audits	80000	80000	80000	80000	80000	80000
POWER weatherization	335000	335000	335000	335000	335000	335000
LED light bulbs	5000	5000	5000	5000	5000	5000
Heat-pump water heaters	100000	100000	100000	100000	100000	100000
SRF Grants	100000	100000	100000	100000	100000	100000
Municipal Infrastructure	400000	400000	100000	100000	100000	100000
Revolving Loan Fund	300000	100000	100000	100000	100000	100000
Com. Energy Advocate	150000	150000	150000	150000	150000	150000
	<u>\$1,881,566</u>	<u>\$1,370,000</u>	<u>\$1,070,000</u>	<u>\$1,070,000</u>	<u>\$1,070,000</u>	<u>\$1,070,000</u>

#### Revenue

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Previous Year's Balance	\$2,862,000	\$1,861,934	\$1,283,434	\$1,014,934	\$656,434	\$307,934
Efficiency Smart Rebates	12500	12500	12500	12500	12500	12500
Revolving Ln. Fund Repayments	30000	40000	50000	60000	70000	80000
Oberlin College REC Sales	24000	24000	24000	24000	24000	24000
3 Degrees REC Sales	800000	700000	700000	600000	600000	500000
Negawatt Sales	15000	15000	15000	15000	15000	15000
	<u>\$3,743,500</u>	<u>\$2,653,434</u>	<u>\$2,084,934</u>	<u>\$1,726,434</u>	<u>\$1,377,934</u>	<u>\$939,434</u>

**Conclusion:** We should provide the maximum benefit possible to Oberlin Power customers. The REC money we have come from wise investments in our energy choices. We can now multiply that investment by further investing in our homes, businesses, and community to provide *lasting* savings.