

## UTILITY ACCOUNT MANAGEMENT

- With nearly \$65 million invested in renewable energy and energy conservation, and with the key performance evaluation of the City Manager and Sustainability Officer directly tied to the financial performance of those investments, careful measurement and analysis of energy information has become a top organizational priority. Not only does this program assist in monitoring past performance, it assures future capital investments will be made with more complete information and improve the financial performance on the entire RE/EC investment portfolio.
- Our Utility Management Program is in first position for collecting utility data on our new technologies, renewable energy, etc. This data is critical to staff and city management to check the pulse on what is happening and if there are results tied to specific capital improvements. Humans install this infrastructure, manage the projects, take meter readings and manage the data input process, so mistakes can sometimes happen at any step of the process. We want to be attentive to these mistakes so that the taxpayer “Pays for what they use, and uses what they pay for”. Since this data is something that is being monitored for consumption trends, anomalies, and outright mistakes, the need for our city staff to understand the process from meter installs and service to transmission, bill processing and payment remains important. Staff can often look at billing trends, but an analyst who can do field recons oftentimes finds things that represent large mistakes and savings. If that analyst can also participate in the management decisions on future planning and consumption practice management, then they are getting some of the best information produced by the field, evaluated by a knowledgeable source for integrity and then applied to city management strategies for savings and long term improvements.
- Our Utility Account Management Program has yielded us over \$1.8 MM in refunds, \$200K/year in on-going savings and has cleaned up years of cobwebs on accounts that could have remained the tax payer’s burden, had audits, regular grooming and attention to detail been overlooked. With an inventory of over 4000 accounts that constantly change, the need to investigate consumption trends will often pay the salary of the person on staff doing the investigations. When smart meters take over, 12 meter readings per

year will go as high as 35,000 readings per year (for 15 minute interval meter readings). Outside vendors/consultants often will offer auditing services for a fee that is usually about 50% of the amount refunded.

- Utility Management Software is something that is beneficial for some, but burdensome for others. If the data you already pay for is manipulated, collected by building type and presented using software as a service, the vendor selling this service can sometimes give you a picture of consumption in a way not previously available. In many cases, the basic management of consumption data can be managed using a basic database and studied by your staff analysts. We have seen demonstrations of several “dashboard” type software packages and even purchased one type. As data management become more important for tracking payback on capital upgrade and improvement projects, this type of “dashboard” system seems to be spreading into many computer systems. In many cases, it may not be necessary, but we remain undecided on a specific type of software.

## RECYCLING PROGRAM

- Recycling – For the 50 things we recycle, a handful actually yield a net profit. The recycling business is something that changes often, due to the business model adopted by vendors, by the unit prices for materials and the volume of materials generated by municipal sources. If we pay to get rid of something, we call that revenue negative, if it goes away for free, we call that revenue neutral and if money comes our way, we typically call that revenue positive. We see materials switch between these three statuses and eventually, most materials can always find a buyer, but to generate sufficient volume for payback is often a challenge. In the last 25 years, we have seen some materials commoditized faster than others, due to advances in technology, in source separation techniques and in ways for vendors to process and ship materials the most economical way possible. Small cities can sometimes aggregate materials to achieve minimum thresholds, but the following one principle of recycling often haunts many generators: The more times you handle a material, the less profitable it becomes.
- As a result, we look to use our lay down yards, staging areas and city land to the highest and best use, not typically for materials that yield

\$0.05/# or less. If we can go to source separated material, many recycle vendors will set containers for free and haul them with their own work force, saving us labor costs. If we use our own land to aggregate materials, we look at the opportunity cost of theft, security, weather protection and the requirement to manage the arrival and departure of any materials onto city land. Those costs never add up if we can recycle something offsite, or as the materials are generated by a project. Oftentimes, we will use a case by case analysis for putting a set of recycle instructions on a project for things like our street light retrofits or a building upgrade. Our fallback position is to affirmatively express in the bid documents that we would like to see a contractor take advantage of recycling for any and all materials with the goal of them reducing their price and being competitive.

- For materials that are regulated and require environmental manifesting, recycling is often more challenging and requires technical know-how to identify ways to reduce what is produced and examine long term liability issues, containerization, etc. Our most profitable materials recycled are scrap metals, cardboard and paper. Certain materials are kept as revenue neutral with an offset agreement – i.e. If a vendor takes all of our wood pallets for free, they have to take every one, not just the good ones so that we can keep our yards clean. That example is something we would end up spending money on if we commoditized the material rather than made it revenue neutral.