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## MAKING SUSTAINABILITY A LONG-TERM MUNICIPAL PRIORITY

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conomic development does not have to come at the cost of environmental development. The solution is sustainable development, which can be achieved by meeting the needs of the present without compromising the ability of future generations to meet their own needs.

This definition of sustainable development is nothing new. It comes from the United Nations Commission on Environment and Development meeting in Ottawa in 1987. Yet for more than 25 years it has been difficult for some to take these internationally recognized principles into council chambers and apply them to municipal budgets.

Not surprisingly, two successful examples of municipal sustainability come from Ontario, the host of that preeminent conference. It took vision to pursue sustainability, leadership to drive it, and a structured plan to produce 'green' initiatives in more ways than one. And it wasn't easy.

"You really had to stretch the imagination of how to financially meet the demands of the municipality," said Rick Bates, former Chief Administrative Officer (CAO) of Ramara, Ontario describing the annual battle of the municipal budget. "We were trying to make Ramara more efficient, but the biggest thing was the amount of money raised through taxation; there was not a lot there to provide beyond regular maintenance." At the same time Bates was leading an environmental mission to ensure Ramara would be viable, as he described it, "for our children and grandchildren." "And my role was to define (how to do) that," Bates recalls.

For Jim Coleman, Mayor of South River, Ontario, efficiency was also top of mind. Mayor Coleman was among the first in South River to apply sustainability to a vision for the Village's future. He recalls the types of questions he was considering during planning: "What is it going to be like around here in fifty years? What is the price of hydro or the price of oil going to be? How are we going to be heating our homes?"

These two leaders considered sustainability to be an important priority as proposals passed through their councils. This is the story of how they achieved that mix of developmental sustainability to advance the local economy, generate revenue, and protect the environment for generations to come.

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## I. START WITH A PLAN

Admittedly, South River had a head start with sustainability. A hydro-electric power generating station had been supplying power for the town until 1962 when the family-owned operation couldn't keep the station profitable. Dormant for almost forty years, ideas of hydro power began to flow again in 1999 when then Mayor Chris Hundley took the first step toward sustainability in South River. Hundley led the planning toward rebuilding the infrastructure of the station and by 2009 construction had begun. In June of 2010 the Village celebrated the commissioning of the South River Power Generation Plant, owned 100 percent by the Village of South River.

The plant supplies power to the grid as this was determined to be more profitable than applying it to power the Village itself. South River leadership agreed on the collective vision to approve this project knowing the return may not pay back until ten years or more into operation. Exceeding expectations, the South River Power Generation Corporation has now begun to pay back the Village's original loan several years earlier than anticipated. At this point in the process, with a forty year contract to supply power to the grid, South River has its sustainability cornerstone project firmly in place.

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## II. KNOW A GOOD THING WHEN YOU SEE IT

Mayor Coleman's term began in 2006, four years before the new hydro station was up and running, which gave him enough involvement in the hydro project to understand the value it brought the town and the environment. This initial success led his pursuit of the next sustainability project during subsequent long-term planning.

His first questions were simple: What sustainability projects will pay for themselves and possibly generate income? Which of these projects have federal or provincial funding available to get them started? Which of these projects can we accomplish given our natural environment?

Conversations with provincial representatives were an integral part of this stage of the Village's research and the answers to these questions unearthed South River's next sustainability project: a Geothermal Heating/Cooling System at the Village's Municipal Building.

Geothermal energy is energy generated by the earth's natural heat that conducts up from core to surface. Drilling would need to be done deep enough to access the geothermal heat and capture it, but that drilling also brought an unexpected hurdle. "It was difficult to find a firm to do the necessary drilling for this project. At the time there weren't a lot of companies equipped to do this type of work," Coleman recalls. His solution, though, was relatively simple: "You have to have partners."

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## III. DEVELOP PARTNERSHIPS

The Village of South River contracted an engineering firm experienced in geothermal work to oversee the entire project. Coleman's advice to other municipalities is to hire experts in the field to provide advice and to resolve issues that a municipality is not necessarily equipped to address. Thanks to a smart partnership, the finished geothermal product is now providing a cleaner, quieter energy source that's heating the municipal office in the winter and cooling it in the summer.

Another partnership brought a third eco-friendly project to light for South River. Local Authority Services (LAS) was created in 1992 by the Association of Municipalities of Ontario (AMO) as a not-for-profit organisation mandated to work with Ontario municipalities to help lower costs, raise revenue, and enhance staff capacity through co-operative procurement efforts, training, programs, and consulting services. Wayne Hartwell, Energy Efficiency Service Provider (EESP) with LAS, describes these services as an "extension of existing staff. I always work on the municipality's behalf and in their best interest."

Hartwell worked with South River's sustainability project leaders who continued asking those same important questions: what projects can help the environment while generating income to pay for themselves, but also fit within the local environment? Hartwell's answer to fit South River's needs was a streetlight system upgrade to light-emitting diode (LED) fixtures. Powering a municipality's streetlights can silently devour as much as 40 percent of a city's energy budget. LED fixtures, according to Hartwell, could reduce streetlight electricity consumption by 69 percent and bring down expenses on streetlight energy by 70 percent. Perhaps more valuable to South River was the related maintenance savings. Because LEDs can last up to five times longer than their existing streetlights, crews would not be required for what became regular trips to replace burnt-out bulbs.

This most-recent project involving 188 lights was completed in the summer of 2014 and is expected to achieve a payback period of six years. With 15 years of planning and successful steps taken toward sustainability, South River is an innovator of this municipal trend in unearthing energy-efficiency projects that are eco-friendly and generate income to advance fiscal sustainability. “If you can convert to a system that can sustain on its own and maybe generate income or bring costs down, it’s very important,” Coleman said of his municipality’s vision. “It’s planning ahead, far ahead.”

That planning has recently become even more valuable as municipalities consider their future in the face of today’s energy realities. “We’re trending up on providing energy-efficiency and sustainability solutions,” says Scott Vokey, Energy Services Manager with LAS. “It’s become more of an imperative for municipalities,” Vokey said citing electricity rate increases that average four to five percent each year. “There’s a convergence of interest in energy-efficiency because we’re identifying projects that can achieve both fiscal responsibility and eco-friendly goals at the same time,” Vokey concluded.

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#### IV. CASE STUDY: RAMARA

LAS also partnered with the leadership team in Ramara to prepare for the requirements of Ontario Regulation 397/11 under the Green Energy Act. This act required every municipality, among other public entities, to report on energy consumption starting in July 2013 and to prepare, publish, and implement an energy conservation and demand management plan by July 2014.

As part of its service to municipalities, LAS worked alongside municipal staff to conduct energy audits and identify Ramara’s biggest opportunities. Through this process Ramara identified and completed projects that resulted in significant favourable demand shifts at two wastewater treatment facilities and also included financial incentives. Like Coleman in South River, Bates was the visionary in Ramara who was setting sustainability as one of the town’s goals. “I’m one of these people who, when I get a plan in my head, I’ll do everything to push it,” Bates shared. “We wanted to see the greenhouse gas emissions reduced.”

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#### V. TAPPING RESOURCES

By the time 397/11 was announced, Ramara’s focus was already there, and Diane Duffy, Ramara Deputy Treasurer, was in the position of preparing Ramara’s energy plan for the Ministry of Energy. Duffy used a tool LAS had developed to help municipalities track their consumption to prepare for this reporting.

Ramara identified funding in the Province’s Feed-In Tariff (FIT) program and the federal Gas Tax Fund. These became catalysts to make Ramara’s sustainability project ideas possible. Canada’s Gas Tax Fund, which provides stable, long-term funding to local governments to help build or revitalize infrastructure, helped make the solar project a reality in Ramara. The FIT program offered a favourable rate, \$ .80/kWh, for the electricity generated which became the biggest reason Ramara took this solar step.

The Township of Ramara used \$210,000 of its federal Gas Tax Fund allocation toward the construction of three solar panels on the rooftops of three Township buildings. This solar system has the capacity to generate ten kilowatts per hour and generate approximately

\$40,000 in revenue from the sale of that electricity. For Ramara, that revenue holds the equivalent of raising taxes by nearly .6 percent.

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## VI. USING GREEN FOR GREEN

Ramara staff and Council decided that 50 percent of the revenue from the solar project would go to general coffers and 50 percent would be set aside to fund projects that help advance Ramara's environmental and fiscal sustainability goals. That meant one project identified during the earlier energy audits now had the funding it needed. The same LED streetlight upgrade South River pursued was projected to bring Ramara's savings to 69% on energy costs each year across its system of 447 streetlights. At this point in Ramara, just as in South River, sustainable projects addressing environmental needs and fiscal needs were used to fund additional sustainable projects for the municipality. "If we didn't have the solar panels, none of this would have happened," Duffy concludes.

### MAKING SUSTAINABILITY A PRIORITY

**Mission:** Make sustainability part of your municipality's mission.

**Leadership:** The people at the top must buy-in to keep the mission alive and consistent throughout municipal leadership.

**Partners:** You can't do it alone. Seek a provincial agency as well as private organisations that specialize in the work you're researching and want to accomplish.

**Start with One:** Though your mission may be far-reaching, focus on the first project that best fits your municipality's natural resources and current needs. Get one done.

**Let the First Fund the Second:** Set aside revenue from the first project to fund subsequent projects supporting your mission.

Both municipalities acted in almost parallel paths and shared many best practices in pursuing multiple sustainability projects. These two municipal examples demonstrate that with support, and given focus over time, sustainability can indeed be a part of your municipality's future.

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JON-ERIK DILLON is responsible for overseeing all sales and marketing for RealTerm Energy and brings more than 10 years of international business development experience to the organization. Previously, Jon-Erik co-founded successful start-ups Visio Energy Inc. and Real-Flex Business Parks which were actively involved in developing rooftop solar PV systems for the Ontario Feed-in Tariff market.