

Partners for Climate Protection

Greenhouse Gas Reduction Initiative of the Month

Saskatoon's Composting Initiatives



Municipal Profile

Population: 202,340

PCP Member since: 2004

Background

The City of Saskatoon's Energy and Greenhouse Gas Management Plan, adopted in June 2007, sets out the city's framework for reducing corporate and community greenhouse gas (GHG) emissions by 10 per cent and six per cent, respectively, below 1990 levels, by 2013. As part of the plan, the city aims to reduce emissions from solid waste by diverting materials, such as organics and recyclables, from its landfill. The two initiatives featured in this article – compost depots and the sale of residential backyard composters – are helping to meet these goals.

Implementation and Approach

Compost Depots: In 2001, Saskatoon opened its first compost depot on the east side of the South Saskatchewan River. However, actively building and turning windrows (rows of dry leaves) did not take place until 2006; a second depot on the west side of the river was opened in 2007. The depots are open to the public but are primarily used by the city's Parks Department and by commercial haulers to drop off leaf and yard waste free of charge.*

Roland Rusnell, an environmental technologist with the city, says that having a depot on both sides of the river means less travel time for Parks Department staff. "Before the depots opened, all the waste was being hauled across town to the landfill."

The city secured lease arrangements with its own land branch for the two sites. "We used very little capital money," notes Rusnell, adding that his department worked with other city departments to provide equipment and operating time. The city has four contracts to operate the two depots, and all contracts are under \$100,000 per year. "We also made a deal with the Saskatchewan Waste Reduction Council (SWRC) to train the staff working at the depots."



Shredding leaf and yard waste at the Saskatoon compost depot. Photo courtesy of the City of Saskatoon.

**The city does not accept food wastes at the compost depots, nor does it offer a curbside organics program. Residents can, however, opt into a curbside leaf and yard waste collection program at a subscription cost of \$40/year.*

The finished compost is used in landscaping around municipal buildings, as erosion control along hillsides and slopes along riverbanks.

Composter Sales: Meagan Hinthier, the city's environmental coordinator, says that Saskatoon first began selling subsidized residential composting bins in 2001. "Residents have always been eager to purchase the bins, so sales were held each year until 2004 and then again between 2008 and 2010."

In May 2010, the city held a one-day sale, where the majority of the bins were purchased, and also sold them at the compost depots between July and November. Residents who opt to purchase a composter through a local retailer, rather than from the city, are provided with a \$10 mail-in rebate coupon.

Results

In 2006, fewer than 400 tonnes of leaf and yard waste were collected at the first depot; by 2009, that figure had jumped to more than 17,500 tonnes for both depots. "We have been doubling the tonnage for the last few years, so I estimate that the organic diversion for 2010 will be about 30,000 tonnes," says Rusnell. Based on the 2009 diversion rate, methane emissions have been reduced by about 2,677 tonnes (equivalent to more than 56,000 tonnes of CO₂). Hinthier notes, however, that the overall GHG reduction is higher, since the figure doesn't include the savings associated with having fewer trucks on the road.

Rusnell says that diverting leaf and yard waste from the landfill has raised the city's overall waste diversion rate from 10 per cent to 23 per cent.

In 2010, 658 composter bins (*pictured at right*) were sold to residents, representing an emissions reduction of about 7.1 tonnes. "Residents are very supportive of the program," says Hinthier, adding that people lined up for three hours in the freezing rain to purchase a bin at the city's sale in May 2010. The city also funded the SWRC's Master Composting program. A total of 39 master composter volunteers provide presentations and workshops on home and community composting.



*The Earth Machine Composter
Photo courtesy of the City of
Saskatoon*

Lessons Learned

The city was able to use its own municipal resources to site, build and operate the compost depots without spending much capital. "The Parks Department offered up some funding that it would otherwise have spent taking the leaf and yard waste to the landfill," says Rusnell. "We also had to set up a communications strategy early to advertise the sites and make people aware of them."

Success, however, can breed challenges. "So far we've operated the depots on a shoestring budget and have used internal resources as much as possible," says Rusnell. "But the depots have become so popular, and we are collecting so much, that we will need to look at other funding avenues."

Hinthier says sales of composters have gone very well. He notes, however, that the rebate program was underused. "Resources may be better spent marketing home composting education programs and materials," she says. Hinthier advises other municipalities that are considering selling composters to residents, to engage with local retailers and to ensure the municipality has ample storage for extra containers.

Future Direction

The city is hoping to expand the depots, so it can take food wastes, as well as leaf and yard waste. “We would need to change our operations substantially,” says Rusnell, “so we’re looking at covered composting and funding.” For now, the city plans to relocate one of its depots for easier access, expand its residential leaf and yard waste subscription program, and develop a marketing program to sell the compost and mulch to the public.

Rusnell also says the city is considering charging commercial haulers and the city’s Parks Department for using the site. Currently, users may drop off the waste free of charge. “Users would have to pay tipping fees at the landfill if it weren’t for the compost depots, so we are laying the groundwork that the service won’t be free forever.”

Further Information

Roland Rusnell
 Environmental Technologist
 City of Saskatoon
Roland.Rusnell@Saskatoon.ca
 306-975-3183

Meagan Hinthier,
 Environmental Coordinator
 City of Saskatoon
Meagan.Hinthier@Saskatoon.ca

Click [here](#) to download a copy of the city’s *Energy and Greenhouse Gas Management Plan*.

The Partners for Climate Protection (PCP) program is a network of Canadian municipal governments that have committed to reducing greenhouse gases and acting on climate change. PCP is the Canadian component of ICLEI’s Cities for Climate Protection (CCP) network, which involves more than 900 communities worldwide. PCP is a partnership between the Federation of Canadian Municipalities (FCM) and ICLEI – Local Governments for Sustainability. PCP receives financial support from FCM’s Green Municipal Fund™.

