

Electronic Products Stewarding: Partnerships for Sustainable Solutions

Grantor: The Thomas Sill Foundation

Grantee: EPSOM

Summary: Funding a new model for promoting stewardship of electronic waste

As technological advances are made, new products are faster, lighter, cheaper and more powerful. But when you buy a new computer or cell phone, what happens to the old ones? This is a growing problem, in part because there are mountains of obsolete consumer electronics, and in part because many of these products contain hazardous metals, like lead, mercury and cadmium.

When the Thomas Sill Foundation of Winnipeg became a partner in an innovative pilot project to collect and recycle electronic products waste, there was little in the way of a road map to anticipate what lay ahead. But the investment the Sill Foundation made in time and in volunteer hours has paid off. In Manitoba, knowledge is increasing about promising options for addressing a growing environmental problem.

In 2001, Manitoba Conservation estimated that almost 2,000 tonnes of products containing toxic heavy metals (computers, batteries and televisions, for example) were ending up in Manitoba's residential waste stream every year. There is high potential for environmental damage as these products decompose. Unwanted



chemicals leach into the groundwater. The large amount of non-decomposing plastics in waste also pose a serious concern for longterm landfill use. Manitoba Conservation proposed that the province create incentives to ensure that producers and retailers of products take responsibility and become stewards for the products when they are no longer of use to consumers.

While Manitoba Conservation had identified e-waste as a problem, many questions about it were unanswered. What products would be collected? Could they be reused or would they have to go for recycling? How much would it cost? Several companies had expertise in refurbishing computers, but there were increasing amounts of non-viable electronics not being managed properly. No commercial recycling company had the capacity to recover the complex array of ingredients in hazardous household products like electronics. The provincial government was interested in developing a demonstration project for recycling e-waste with a non-profit organization, so it approached the Thomas Sill Foundation. “We were thought of as the unlikely experts in this project,” laughs Bob Filuk, President of the Foundation. Yet it was a logical choice.

The Thomas Sill Foundation is an 18 year old foundation, based in Winnipeg. Thomas Sill, a chartered accountant and clever investor, had no heirs. When he died in 1986, in his will, he bequeathed all his money “to create an entity

for charitable purposes.” His former partners in the accounting firm to which he devoted his life took on the responsibility of managing the new Foundation. Thomas Sill became the largest benefactor in Manitoba’s history and the Foundation is one of the largest charitable foundations in the province.

In 1995, the Thomas Sill Foundation established Gifts-In-Kind, Manitoba (GIK), a incorporated charity, which, for a donation receipt, takes in corporate surplus and sells it at a reasonable price to non-profit organizations in the community. Commodities include office furniture, toys, office supplies – and computers. GIK occupies a warehouse of about 10,000 square feet, and employs a full-time coordinator plus someone to be in the warehouse two days a week when charitable organizations can view and pick up merchandise. In 2003, there were between 350 and 400 charities in the program. Each pays a nominal membership fee based on the organization’s size. “But the first year is free,” says Filuk, “so they can try us out.” Costs recovered from administration fees charged are insufficient to cover the program’s expenses, so the Thomas Sill Foundation annually grants \$100,000 to run GIK. “It is all quite labour intensive,” says Filuk. But he



believes it is worth it. He estimates that the retail value of all the products received would total over one million dollars in 2003 and roughly \$5 million since the program started. GIK now supplies about 35-45 computers weekly to various registered non-profit organizations across the province through GIK's Recycle Technology Program. Because of the Foundation's positive experience with GIK, it was a natural partner for the Province's demonstration project to recycle computer hardware.

Electronic Products Stewardship of Manitoba (EPSOM) was initiated in 2002 as a partnership between the Province of Manitoba, Natural Resources Canada, Manitoba Hydro and the Thomas Sill Foundation. EPSOM's immediate mandate was a demonstration project to collect, reuse and recycle unwanted consumer electronics in ways that caused no environmental damage and reduced greenhouse gas emissions. The partners hoped that the demonstration project would provide the information needed to establish a basis for practices and methods that could be used to develop a sustainable electronic stewardship program in Manitoba. The Thomas Sill Foundation, which managed the EPSOM project, contributed \$25,000 cash and \$40,000 in-kind.

With winter looming, the partners scheduled a weekend in October 2002 to collect unwanted electronics at six Winnipeg sites. EPSOM's Directors had anticipated that about 30-50 tonnes of unwanted electronic products would

be collected. They were inundated when 93.5 tonnes were brought to the collection sites, filling 13 semi-trailers. "The public response was enormous, says Rod McCormick, a Policy Analyst in the Pollution Prevention division of the Manitoba Government. "It was very gratifying." This huge response clearly showed the current need for an appropriate place to get rid of unwanted products. However, it also added an array of costs and challenges to the project. Immediately, another warehouse had to be rented to accommodate the excess.

In total, there were 5,535 items collected. By weight, televisions, computers, monitors and computer peripherals made up 80% of the discarded products. The remaining 20% were comprised of various electronic items from VCRs and speakers to tape decks and turntables. The monitors and picture tubes that the project recycled contained 3,172 pounds of lead. Almost 3% of items were identified as viable for reuse. These were refurbished and offered to non-profit organizations.

"Most of the stuff has been sitting and accumulating in people's basements; they themselves did not want to throw it in the landfill but

didn't know what to do with it," says Filuk. Thus, people need to be encouraged to get rid of these products in a timely way, through regular collection opportunities.

The main benefit of the EPSOM project so far has been the knowledge it has generated. "We had no idea what people would get rid of," says McCormick. "It leaves us with information we need to design something long-term. We are just at the beginning of the learning curve." The project demonstrated that consumers were enthusiastic about diverting products from the municipal waste stream. "We learned that people want to do the right thing," says Brendan Carruthers, Environmental Education Coordinator with Manitoba Hydro. "People are realizing that landfills are not an endless pot of gold."

Appropriate recycling of electronic waste is expensive, at \$455 per tonne, but as people become more proficient, the costs may come down. The project provided some very good baseline data that will help people learn to be more proficient the next time, says McCormick. It also enhanced local expertise on how to manage these materials better in the future.

Its commitment not only of funds but also of volunteer energy and time has been critical in getting the project going and in creating a useful new model for managing a 21st century problem.

EPSOM has promoted the concept of product stewardship as an appropriate response to electronic waste. In part, this public/private/community partnership project has resulted in the creation of a new industry-led entity, Electronic Products Stewardship (EPS) Canada. EPS is a coalition of private companies whose purpose is to find sustainable solutions for dealing with electronic waste. At the outset of the EPSOM project, the private sector had been antagonistic toward the idea of taking any responsibility for electronic waste. Through EPSOM, each sector came to appreciate other perspectives. EPS Canada is now working towards the development of a National Stewardship Program.

The Thomas Sill Foundation was an unlikely but certainly essential partner. Its commitment not only of funds but also of volunteer energy and time has been critical in getting the project going and in creating a useful new model for managing a 21st century problem.

For more information contact the Foundation at 204-947-3782 or visit their Web Site at www.thomassillfoundation.com.