

**Name the innovation.**

Automated Garbage Collection versus Manual Garbage Collection.

**Why is it innovative?**

Manual garbage collection has always been an ergonomic nightmare. There are typically no standards for the garbage bins, thus some are very large and heavy. Some bins are difficult to grip, there may be no handles. Our staff was beset with time loss injuries to shoulders, backs and necks. Also, sharp objects inside bags could cut or puncture the worker's skin. We brought in automated garbage trucks, and distributed standardized garbage bins to all residences. We were not the first Municipality to take this action, but we were one of the first! Automated Garbage Collection has been started in a few places in Alberta and Saskatchewan but Prince George is pretty much the 1<sup>st</sup> in BC.

**How has it reduced workplace risks?**

The automated trucks eliminate many of the risks. The trucks have one driver who controls a robotic arm. This arm picks up a garbage bin, empties it, and places it back on the ground. There is nobody riding on the back bumper, and no lifting involved. Nobody has to touch the garbage bins! Our injury rate in the Solid Waste Division was high, the 16 workers were missing about 200 days per year. We have not had a day of lost time in the Division in two years! People want to be at work and no employees lost their jobs due to this automation as all the staff were trained up to take on these new positions. The machine is doing all of the work and employees are actually wearing ties to work.

**Is the information current?**

Yes, our fleet was automated about two years ago. The automation started with just ¼ of the collection and now covers all of Prince George. The Machines use finely tuned robotics and move similar to human beings and so far even in our winter weather challenges have proved to be very adaptable.

**Does it translate new ideas into practice?**

Yes. The technology is quite new. Our solid waste collection has dramatically changed since implementation. One truck can safely service about 800 houses per day now; previously we exposed workers to high risks and serviced about 350 houses per day, per truck. Garbage collection has gone up significantly due to the booming economy with changes to what formerly was a 14% vacancy rate and is now only a 3% vacancy rate. Eventually the hope is to extend the service to include a recycling collection.