District heating not a good fit here, says delegate

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By Jennifer Stone

CLARINGTON -- Implementing district heating here would be no easy task, says a man who spent years working for a company which sold technology for such a system.

Ivan Bateman worked for Sweden-based Alfa Laval in Peterborough, marketing heat exchangers used in district heating. But few were ever sold here, as "there were no district heating systems in Ontario."

Recent speakers at Clarington council, including Durham Regional Chairman Roger Anderson, have touted district heating as part of the benefit of a proposed incinerator. An array of potential recipients of the heat have been floated. Mr. Anderson has spoken of potentially running pipe over 40 kilometres, from the proposed Courtice incinerator site to provide district heating to a proposed residential development in Seaton, north of Pickering. A representative of Sweden's embassy told council in February using hot water produced by the incinerator to heat the Oshawa GM plant would be a "piece of cake."

Not necessarily, Mr. Bateman said.

There are significant differences between Sweden and Canada which make district heating much more difficult to implement, he said.

For example, infrastructure is an issue. Where in Sweden the infrastructure has grown incrementally, that's not the situation in Canada, said Mr. Bateman.

"In Sweden, the systems grew over a period of years and the infrastructure grew over a period of years," he said.

Putting district heat in place would entail a two-pipe system, with proper equipment to treat and keep the water clean. Boosters would be required along the line to maintain appropriate heat. Then, there's the question of technology required by recipients of the heat, Mr. Bateman said.

"You either refit homes and offices with different types of radiators or you start from scratch," by constructing new buildings with the technology in place, he said.

The other issue is population density, Mr. Bateman said. Pumping and heat loss make district heating to places far from the source difficult. Sweden is both densely populated and has a relatively high percentage of multi-residential dwellings, compared to Canada, he said.

"We are low density, so we are not good candidates for district heat," Mr. Bateman said.

Another issue is the requirement of a steady stream of fuel. Sweden actually imports garbage from other European countries and when necessary turns to biofuel -- wood chips - to keep incinerators running, Mr. Bateman said. They must run constantly to ensure heat supply.

"Anyone who wants to insert a waste incinerator will want to have a cast-iron contract and know he's going to get (the waste) when he needs it," he said.

Also at play is recycling, said Mr. Bateman.

"By increasing recycling, you are going to seriously decrease the thermal value of your waste" since plastics and other recyclable materials provide the best sources of heat, he said.