

Town-wide conversion to LED streetlights set to take step forward

By Brock Weir

An Aurora-wide initiative to convert existing streetlights to a new LED lighting system is set to take a step forward this week.

Council is due to approve moving forward with an audit that will include an evaluation of Aurora's existing lighting situation, designs for new lights and fixtures, financial options and a final costing before it is up for further Council consideration.

Although the budget for the audit is \$85,000, the full conversion, once completed, is expected to cost just over \$2.5 million.

Based on expected operating savings of \$280,000 under the new system, the Town expects a full payback on this investment in under a decade.

"LED street lighting is a viable option for reducing energy consumption and environmental impacts related to greenhouse gas production as well as reducing operating costs to the Town," said Ilmar Simanovskis, Aurora's Director of Infrastructure and Environmental Services.

Mr. Simanovskis noted that the Town's current high pressure sodium lighting is "reliable and relatively efficient", but replacing them with LED models would provide a number of improvements including a longer lifetime for each light of up to 20 years, reducing replacement maintenance by 80 per cent, a better comparison to natural light, an energy savings, and providing lights free of lead and mercury.

Councillors gave a tentative thumbs-up to moving ahead with the audit this week, keen on the cost savings this program is likely to bring.

"We know energy costs in Ontario are the most expensive in North America and it is imperative we find ways to reduce our consumption of energy," said Councillor John Abel. "This is a great initiative."

While Councillor Wendy Gaertner said she too was "definitely in favour" of the program, she and Councillor Harold Kim raised concerns over the recommendation to "sole source" the audit outside of a competitive bid process performed within Town Hall. Instead, staff are recommending that plans move forward with RealTerm Energy, a partner selected through a competitive process by Local Authority Services (LAS), a division of the Association of Municipalities of Ontario.

"It is important to recognize there are a lot of players in this market and it is a very dynamic market," said Mr. Simanovskis of the LED industry, noting prices are also dynamic. "When we looked at retendering [the LED program] and we looked at the cost-savings potential, as well as the effort to go through an additional process internally, and not having the expertise internally to do an evaluation in a wholesome way, you need to also consider what LAS was doing: they have a panel of industry experts that are actually supporting the evaluation process. There is a lot of expertise behind how this model was created. We will benefit by leveraging that experience."

101 Ontario municipalities are already participating in the program, he added.

"[This audit] is actually a detailed design of streetlights for the entire town. By going to that level of detail, which is why there is a cost to the initial design, they have to take each fixture, do a photometric analysis of each fixture, design the fixture, figure out what the lighting requirements are for each lamp pole in the entire Town and, from that, they get an accurate assessment of what the savings truly are. Then they will come back to us with a financial report which would be the next step to this Council saying: here are the financial results and the energy savings down to the watt."

Following that step, it will then be up to RealTerm to enter into negotiations with PowerStream on a rate reduction based on these

estimated savings.