

TO:	MAYOR J. LEHMAN AND MEMBERS OF COUNCIL
FROM:	S. BRUNET, B.SC. MANAGER OF BUSINESS PERFORMANCE AND ENVIRONMENTAL STAINABILITY
NOTED:	A. MILLER, RPP GENERAL MANAGER OF INFRASTRUCTURE, AND GROWTH MANAGEMENT
	M. PROWSE, CHIEF ADMINISTRATIVE OFFICER
RE:	THE FUTURE OF WASTE MANAGEMENT FOR THE CITY OF BARRIE - WASTE AND CIRCULAR ECONOMY FRAMEWORK
DATE:	MAY 25, 2020

The purpose of this Memorandum is to provide members of Council with information regarding the development of the City of Barrie Waste and Circular Economy Framework. This work has been underway for some time and, given the renewed attention on sustainability and resiliency, staff felt an update on this work is appropriate now.

The City is expecting a population increase of 36% reaching approximately 253,000 by 2041. Coupled with an increasing waste generation rate and a landfill site with a known limited lifespan, there is a need to take another look at the approach to waste management. Of the 4R's of waste management, REDUCE and REUSE need to have more focus before RECYCLE becomes a truly viable option. This would be in line with a circular economy approach that has received a great deal of attention in other jurisdications and legislation recently in Ontario when the provice passed (2016)more (https://www.ontario.ca/laws/statute/16r12ink to the legislation) that shifts to producer responsibility for waste. Council has passed a resolution indicating intent to transition to full producer responsibility May 1, 2024.

For reference, a Circular Economy is one that targets resource efficiency, waste reduction and emissions reduction through circular supply chains (supported by recover, reuse, repair and recycling concepts), product longevity (improving the lifecycle and value), new business models that promote the efficient use of goods and capital assets, and technological innovations.

### Existing Strategy

Waste management in the City of Barrie has largely been supported by the Sustainable Waste Management Strategy endorsed by Council in 2012. The purpose of the 2012 Strategy was to guide waste management into the future with the objective to increase waste diversion rates that would lead to the increased longevity of the Landfill site. This Strategy has moved the City of Barrie from a 2010 diversion rate of approximately 45% to an average of 50% waste diversion rate in 2019. Increased diversion rates coupled with further operational initiatives (Landfill Re-Engineering) have increased the projected Landfill life to approximately 2035. The existing Strategy, and all work done since then, emphasis that prolonging the landfill life is critical to any post closure option.

For the most part, the various waste management initiatives that have been undertaken by the City have focused on recycling strategies to increase diversion rates. The City of Barrie's diversion rate has trended similarly to most provincial municipalities; moderate early improvement and a current stagnated peak. Add to that an ever increasing shift to plastics that the Blue Box Program was not designed to accept and weak end-markets that do not promote the post-consumer sale of this material, resulting in landfill disposal, and it becomes clear that relying solely on recycling as a method for increased diversion rates is not sustainable.



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## Shift to a Circular Economy Framework

It is clear that a new forward looking vision is required: one that supports a circular economy.

As a first step, by leveraging the existing Sustainable Waste Management Strategy and current City initiatives, in conjunction with sector research, a gap analysis was conducted. The resulting work assisted in identifying a framework for addressing the gaps required to support a circular economy in the City of Barrie. This Framework will guide the development of a waste and circular economy strategy that will:

- 1. Support positive environmental outcomes;
- 2. Reducing reliance on raw materials;
- 3. Stimulate innovation; and
- 4. Support economic growth and competitiveness.

The Framework consists of 4 pillars centered on the objectives of a circular economy (Figure 1).



This framework is consistent with Provincial legislation and will position the City well with respect to changes within the curbside collection, landfill operations and diversion programs that must be in place by 2024.

### **Next Steps**

Having analyzed where we are and where we need to go, the next step will be to determine how we are going to get there.



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The development of a clear sustainable plan, one that guides the future of waste management while remaining resilient to future changes and continuing to bring value to Barrie's residents, will be the next step. We will be working to design a work plan with COVID19 limitations in mind, so that in the coming months the following will be completed:

- 1. Policy development based on the framework
- 2. An analysis and adjustment of current programs to better align with established policies
- 3. An Action Plan centred around policies.

Staff will be coming forward with a Staff Report detailing the Action Plan for Councils' consideration and approval with the intent for implementation to begin in 2021. In the meantime, staff will continue to work on preparing and implementing the various diversion program changes required by the province.