

Appendix 1 – Waste Management Strategic Plan Background and Long List Development Process

Background

The Waste Management Strategic Plan (the Plan) will guide Waste Management's strategic direction for the 25-year planning period, focusing on cost-effective, accessible, and innovative ways to use waste as a resource in a circular economy, while demonstrating leadership in sustainability and mitigating environmental impacts. The Plan is comprised of three phases:

- (i) Phase One: Assessment of System – 'Where We Are' (Phase One).
- (ii) Phase Two: Development of Direction and System Options – 'Where We Want To Go' (Phase Two).
- (iii) Phase Three: Preferred System – 'How We're Getting There' (Phase Three).

Phase One

Phase One engagement, designed to facilitate insight into what is important to Niagara region residents, is complete and included:

- Two (2) public and three (3) sector specific open houses in May 2024
- Separate public and Industrial, Commercial, and Institutional (IC&I) on-line surveys open from May 6, 2024 to May 31, 2024

Draft mission and vision statements, goals, and guiding principles were created by analyzing the data collected through the engagement. Mission and vision statements from comparator municipalities and Niagara Region, including the Region's priorities, were also assessed. Common themes were explored in working sessions with Niagara Region staff and the project consultant, GHD, leading to the creation of unique statements that reflect the long-term aspirations of the community.

Phase Two

Phase Two began on June 24, 2024, with a workshop for both WMPSC and Public Works Committee (PWC) members. Facilitated by GHD, the workshop provided members the opportunity to discuss the draft mission, vision, guiding principles, goals, and evaluation methodology. Additionally, members reviewed the results from Phase One engagement and examined examples of options categorized by goals for the long

list. Following the workshop, Long List options (Appendix 2 – Long List), for potential inclusion in the Plan, and an evaluation methodology to streamline this initial list, were then developed.

Long List Development

The broad Long List of potential options to support accomplishment of the goals, and ultimately the vision was derived from:

1. **Current state of waste management:** Including existing policies, programs, and contracts
2. **Regulatory Framework:** Current requirements and anticipated changes
3. **Input from Interested Parties:** Gathered during Phase One engagement, including input from the public, Local Area Municipalities (LAMs), Niagara Region staff, non-governmental organizations (NGOs), Urban Indigenous organizations, and business and industry groups.
4. **Jurisdictional Scan:** Based on other jurisdictions and industry best practices.

Long List Evaluation

GHD worked with Regional staff to narrow the initial Long List of Plan options to a Short List for further Phase Two consultation. The steps below define the Long List evaluation methodology.

1. Grouping Options

The Long List options were grouped into seven (7) categories reflecting waste management:

- Community Engagement & Education
- Policies & By-Laws
- Waste Reduction & Reuse
- Waste Collections & Operations
- Drop-Off Depots
- Processing & Disposal Infrastructure
- Innovation

2. Initial Evaluation

Each Long List option was evaluated against three (3) questions:

- Can the Region implement the option on its own?

- Does the option have a relatively low order of magnitude cost to implement (resources and dollar value), flexibility in how it is implemented, or can be accommodated within the Region’s existing operating budget?
- Is the option easily linked to one or more of the overall goals of the Plan?

If answers to all three questions were “Yes”, the option automatically moved to the Short List of items for further analysis. If one (1) or more of the answers were “No”, further investigation was conducted using a Triple Bottom Line analysis.

3. Triple Bottom Line Analysis

The traditional Triple Bottom Line analysis used equally weighted social, environmental, and financial criteria to ensure a balance of attributes for sustainable outcomes. The criteria, aligned with the vision, guiding principles and goals, were:

- Financial
- Environmental
- Social

Each of the Criteria above were further subdivided into Indicators (e.g., costs, climate impacts, safety, and health impacts).

4. Scoring and Comparison

Each option requiring the Triple Bottom Line analysis was scored on all Indicators and the scores were aggregated at the Category level. Category scores were then combined to get an overall score.

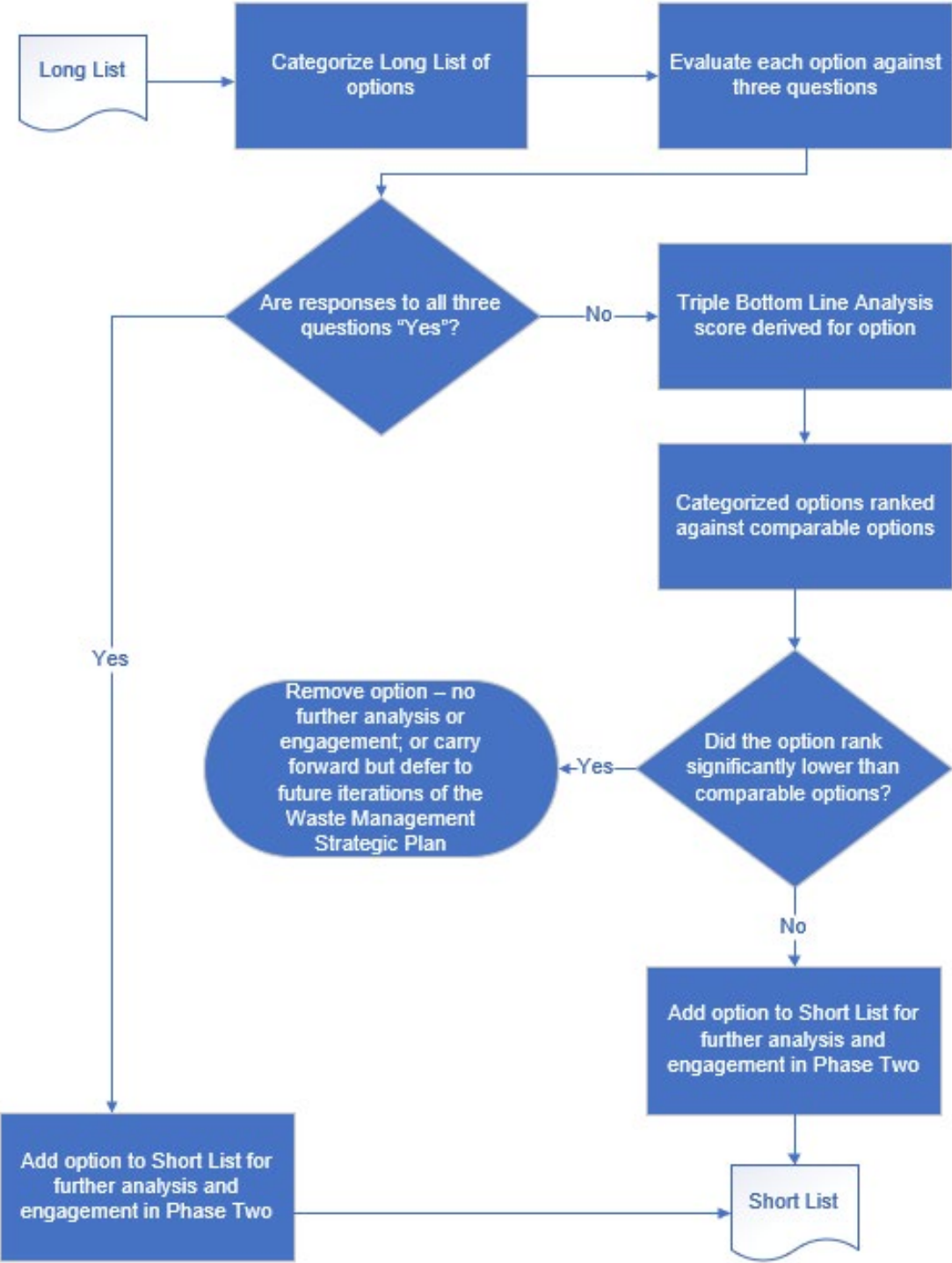
5. Decision Making

Options with a Triple Bottom Line score were compared against other options within the same Waste Management category (Step 1). The results determine if:

- The option should be carried to the Short List for further analysis.
- The option should not be carried forward in the Plan.
- The option should be carried forward in the Plan, but deferred to future iterations (i.e., a viable option, but not within the first five years of the Plan)

Figure 1 below illustrates the Long List evaluation process.

Figure 1: Long List Evaluation Methodology



As described in the memo, the Short List of options will be the focus for the remainder of Phase Two engagement and analysis.