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NORTHWEST TERRITORIES

WASTE RESOURCE MANAGEMENT STRATEGY AND IMPLEMENTATION PLAN

Developed by the Departments of Environment and Natural Resources and Municipal and Community Affairs – June 2019

STRATÉGIE SUR LA GESTION DES DÉCHETS ET PLAN DE MISE EN ŒUVRE POUR LES TNO

Rédigé par le ministère de l'Environnement et des Ressources naturelles et le ministère des Affaires municipales et communautaires – Juin 2019
(Ce document comprend la traduction française de l'introduction.)

Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest


PREVENT AND
REDUCE
DIVERT
GREEN GNWT
IMPROVE FACILITIES
AND PRACTICES

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1.0 INTRODUCTION

Waste, and how we deal with it, can impact the quality of our land, air and water, as well as the health of wildlife, plants, ecosystems and people living in the Northwest Territories (NWT). Shifting the way we see waste from something to be buried in the ground to a valuable resource can help protect our environment and enhance our economy.

In its 2016-2019 Mandate, the Government of the Northwest Territories (GNWT) committed to developing a strategy to manage waste resources:

> *1.3.3 – We will develop a strategy to manage the resources and potential economic and environmental benefits derived from household, commercial and industrial garbage from private sector sources and in our municipalities.*

Developing a Waste Resource Management Strategy for the Northwest Territories – A Discussion Paper to Generate Dialogue, provided the basis for broad public engagement from November 2017 to March 2018. The feedback received from Indigenous and community governments, and stakeholders, including GNWT departments, federal departments, regulatory boards, professional associations, non-government organizations, industry, commercial operators, businesses and residents, shaped this Waste Resource Management Strategy and Implementation Plan (Strategy).

The Strategy will serve as a ten-year road map for improving waste resource management throughout the territory. A glossary of terms and a summary of relevant legislation and regulatory jurisdiction are provided at the end of this document.

Community governments:

For the purpose of the Strategy, 'community government' includes charter communities, hamlets, Tłı̨chǫ community governments, cities, towns, villages, self-governments and First Nations designated authorities.

1.0 INTRODUCTION

Photo: Pat Kane

Les déchets et la façon dont nous les gérons peuvent influencer la qualité de nos terres, de notre air et de notre eau, ainsi que la santé de la faune, de la flore, des écosystèmes et des résidents des Territoires du Nord-Ouest (TNO). En ne voyant plus les déchets comme des résidus à enfouir, mais comme des ressources précieuses, nous protégeons l'environnement et stimulons notre économie.

Dans le mandat qu'il s'est donné pour 2016 à 2019, le gouvernement des Territoires du Nord-Ouest (GTNO) s'est engagé à élaborer une stratégie pour gérer les déchets :

> *1.3.3 – Nous élaborerons une stratégie pour gérer les ressources et les bienfaits économiques et environnementaux potentiels pouvant être tirés des déchets ménagers, commerciaux et industriels, à partir de sources du secteur privé et dans nos municipalités.*

De novembre 2017 à mars 2018, un document de travail, *Élaboration d'une stratégie de gestion des déchets pour les Territoires du Nord-Ouest*, a donné lieu à d'importants échanges avec le public. Les commentaires recueillis auprès des gouvernements autochtones et des administrations communautaires, ainsi que d'intervenants comme des ministères du GTNO, des ministères fédéraux, des organismes de réglementation, des associations professionnelles, des organisations non gouvernementales et des acteurs de l'industrie comme des exploitants commerciaux, des entrepreneurs et des résidents ont façonné la Stratégie sur la gestion des déchets et son plan de mise en œuvre (la stratégie).

La stratégie servira de feuille de route décennale pour améliorer la gestion des déchets à l'échelle des TNO. Un glossaire et un résumé des lois et des compétences réglementaires figurent à la fin du présent document (anglais seulement).

2.0 PURPOSE

The Strategy aims to foster a shift away from a culture of waste. Valuable resources are being extracted, manufactured, transported, consumed and ultimately wasted. This shift aims to disrupt the current model of making, using and disposing of resources in order to protect our water, land, wildlife and climate.

This Strategy is needed because:

- the NWT trails behind Canadian provinces in preventing waste from reaching landfills;
- approximately 20% of Canada's methane[1] emissions come from landfills;
- illegal disposal of waste on public lands and stockpiles of hazardous waste at several municipal landfills need to be addressed;
- support is needed to improve proper containment and disposal at landfills to prevent contaminants from entering the surrounding environment; and
- improving our management of waste resources can prevent financial liabilities.

[1] Methane is a greenhouse gas that has approximately 25 times the warming potential of carbon dioxide.

2.0 PURPOSE

2.1 A Snapshot of Waste Management

2.1.1 Waste Disposal in the NWT Compared to Other Jurisdictions

In 2014, an estimated 41,513 tonnes of waste, or 946 kg per person per year, was disposed of in NWT landfills[2] from the residential and non-residential sectors (see Figure 1). This amount is nearly 2.5 times the waste disposed in Nova Scotia, and more than 1.3 times the Canadian average.

Defining the quantity of disposed waste from residential and non-residential sectors in the NWT – for example, waste from the construction industry, hospitals, schools and retailers – is challenging because waste is not weighed in any communities, except for Yellowknife and Inuvik.

In Canada, about 40% of waste disposed comes from the residential sector, while the other 60% is from the non-residential sector. Limited infrastructure in the NWT means some communities manage non-residential waste within the community landfill.

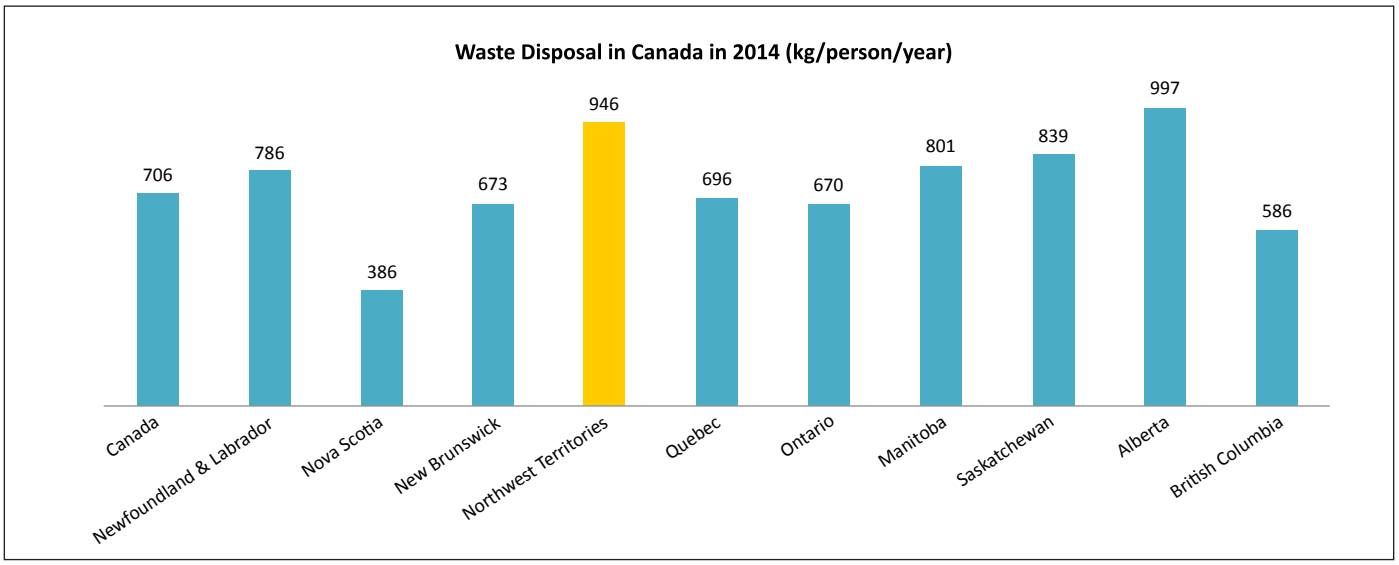

Figure 1: Waste Disposal in Canada from Residential and Non-residential Sources[3]

[2] Estimated based on data from the Study of NWT Waste Management Systems. Golder Associates. 2016.

[3] Canadian Province data from Statistics Canada (2016) and NWT data from Golder Associates (2016).

Note: This chart is intended to provide a rough idea of the disposal rate in the NWT relative to the rest of the country. The total disposal rate for the NWT was estimated by Golder Associates in a study of waste management systems in the NWT completed in 2016, using 2014 data, and the remaining data were collected by Statistics Canada through its survey of the waste industry.

2.0 PURPOSE

The ultimate disposal of hazardous waste, generated inside and outside of communities, is tracked according to the *Guideline for Hazardous Waste Management*. The fate and impact of non-hazardous industrial waste generated outside of communities is not well monitored or understood.

2.1.2 The State of NWT Waste Management Facilities

There are 32 landfill sites in the NWT, one in each community, with the exception of the Kátł'odeeche First Nation, which accesses the solid waste management facility in Hay River. Eighteen of these landfill sites are situated on Commissioner's Land and the remaining are on community land. The majority of these were built in the 1980s and 1990s, and only one, the Yellowknife Solid Waste Facility, has an engineered lined cell. A snapshot of the state of landfill sites in the NWT compiled in 2014 is presented in Table 1.

Table 1: State of NWT Solid Waste Facilities – a Snapshot

The number of community landfills that have…	
An approved water licence	24
An approved operations and maintenance plan	12
Partial or full site access control	24
An electric fence (to deter wildlife from entering landfill)	5
Historical hazardous waste (stored at site for two or more years)	20
Minimal to no waste segregation (may contain some proportion of hazardous waste in non-hazardous waste cells)	8
The number of community landfills that are…	
Located within 500 m of nearest water body	13

The disposal of waste on public lands and stockpiles of historical hazardous waste at numerous municipal landfills throughout the NWT also need to be addressed. If these materials leak or spill, they may harm people, wildlife and the environment, and also cause significant financial liabilities for community and Indigenous governments, and for the GNWT.

Fences are an example of best management practices:

- electric fences can reduce instances of wildlife habituation to landfills, which reduces risks to wildlife and humans; and
- tall litter fences prevent waste from blowing off-site.

2.0 PURPOSE

Proper containment and disposal at appropriate facilities are needed. Permafrost thaw resulting from climate change could add further risk of mobilizing contaminants through the active layer and into groundwater. Financial resources and human capacity in most communities are limited and many landfills need improvements to meet modern environmental standards. More support is required to ensure waste is effectively managed to prevent contaminants from entering the surrounding environment.

Partial clean-up initiatives have occurred in a few communities through funding from the Waste Reduction and Recycling Initiative (WRRI), community funds and contributions from the Environmental Liabilities Fund.

Moving forward, solutions for improving the management of waste resources need to consider the diverse interests of all groups producing and managing waste as well as the unique challenges in the NWT, including our northern climate and the transportation logistics to many of our small remote communities.

Hazardous waste stockpiles are common in many NWT landfills. Their presence causes significant financial liabilities to governments, and if they leak or spill, they may harm people, wildlife and the environment.

3.0 BACKGROUND

Photo: Pat Kane

The Departments of Environment and Natural Resources (ENR) and Municipal and Community Affairs (MACA) worked collaboratively with community and Indigenous governments, and stakeholders, including GNWT departments, federal departments, regulatory boards, professional associations, non-government organizations, industry, commercial operators, businesses and residents, in developing the Strategy.

ENR and MACA are responsible for the development of the Strategy and leading its implementation. Key actions that the GNWT will carry out to achieve the goals of the Strategy are outlined in this document. However, successfully improving waste management in the NWT needs to involve many organizations and different levels of government as well as residents. Collaborative working relationships and partnerships are necessary to achieve the goals and implement the actions of the Strategy. This collaborative approach is reflected in the recommended actions outlined in the Strategy for community governments, environmental non-government organizations (ENGOs), private sector and other stakeholders to help meet shared objectives and priorities.

As noted on the following page, there are many linkages between the Strategy and existing GNWT strategies, action plans and policies. ENR and MACA will work jointly with other GNWT departments to support advancing priorities related to waste management in the NWT.

The cost of implementing the Strategy is an important consideration due to the small NWT population base, isolated communities and vast area. Waste resource management activities that may be easily achievable in the south may not be feasible in the NWT. External support and partnerships will be needed to successfully implement the Strategy.

We can overcome barriers with unique northern solutions by building on existing infrastructure, developing supportive legislation, increasing collaboration within the NWT and with neighbouring jurisdictions, and through investment in new technology.

Related Territorial Strategies and Action Plans

This Strategy links to several territorial initiatives:

The Land Use and Sustainability Framework (LUSF) outlines the GNWT's vision for managing land, water and resources in the public interest. The principles and NWT land interests laid out in the LUSF are at the heart of this Strategy.

Action Plan for Improving Support to Community Governments in the NWT – The Department of Municipal and Community Affairs released this Action Plan in response to the Office of the Auditor General of Canada's performance audit. One of the recommendations is directly related to providing support and capacity building to address community waste management requirements.

NWT Water Stewardship Strategy – The vision, the waters of the NWT shall remain clean, abundant and productive for all time, will be supported by improved waste management. Its Action Plan (2016-2020) outlines items directly related to waste management.

2030 NWT Climate Change Strategic Framework and 2019-2023 Action Plan – Links to waste management in the transition to a lower carbon economy (e.g. lowering Greenhouse Gas (GHG) emissions through composting organic waste and recycling).

NWT Agriculture Strategy – Promotion of locally produced foods, composting of organic waste and the production of waste-based products, such as fish fertilizer or compost, align with waste management goals. The Strategy also aims to ensure waste from growing commercial farms is properly managed.

Strategy for Revitalizing the Great Slave Lake Commercial Fishery Strategy – The Strategy addresses the proper management of any increase in fish waste associated from this growing industry and promotes the creation of valuable "waste"-based products, such as fish fertilizer.

Traditional Knowledge Policy Implementation Framework – Where pertinent to waste management practices in the NWT, the Traditional Knowledge Policy will be applied according to this framework.

Recreational Land Management Framework (RLMF)— The RLMF articulates the GNWT's goals and priorities with the planning, management, administration and issuance of leases for cabins and recreational uses. The Framework addresses the prevention and mitigation of environmental impacts of outdoor recreation, including proper management of solid waste.

4.0 GUIDING PRINCIPLES

The Strategy is guided by four guiding principles:

1. **Protection of the Environment**
   - Good waste management means waste is not contaminating the air, land and water.
   - Preventing waste, and reusing and recycling materials reduces environmental impacts.
2. **Economic Development and Prevention of Financial Liability**
   - Incorporating Circular Economy approaches that prevent and reduce waste, extend product life and increase diversion can help foster a green economy.
   - Improving waste management can minimize current and future waste management facility costs.
   - Cost effectiveness will be considered in approaches to improving waste management. This includes seeking partnerships that improve access to economies of scale and/or harmonization across jurisdictions.
3. **Environmental Stewardship**
   - Improving waste management is a shared responsibility. Communities, residents, governments, businesses and manufacturers all have a role in being part of the solution.
4. **Collaborative Approaches**
   - Improved outcomes will be achieved when stakeholders and community governments work together.
   - Developing partnerships among GNWT departments, stakeholders and community governments can produce efficiencies through shared infrastructure and logistical costs.

Photo: Pat Kane

5.0 A VISION FOR WASTE MANAGEMENT

Photo: Ray Chiasson

All NWT communities dispose most of their waste directly to a landfill. A major focus of the Strategy is to shift away from this disposal model to a Circular Economy – an alternative to the linear economy of production and consumption that produces significant volumes of waste.

5.1 What is a circular economy?

The circular economy incorporates approaches that avoid waste and mimic natural cycles by:

- preventing waste through innovative business models and improved design;
- maximizing a product's life through enhanced re-use and repair; and
- improving recycling when materials are at their end of life.

Moving toward a circular economy will mean putting more effort into preventing the creation of waste, such as using business models that are focused on service rather than products, and buying more durable goods with minimal packaging.

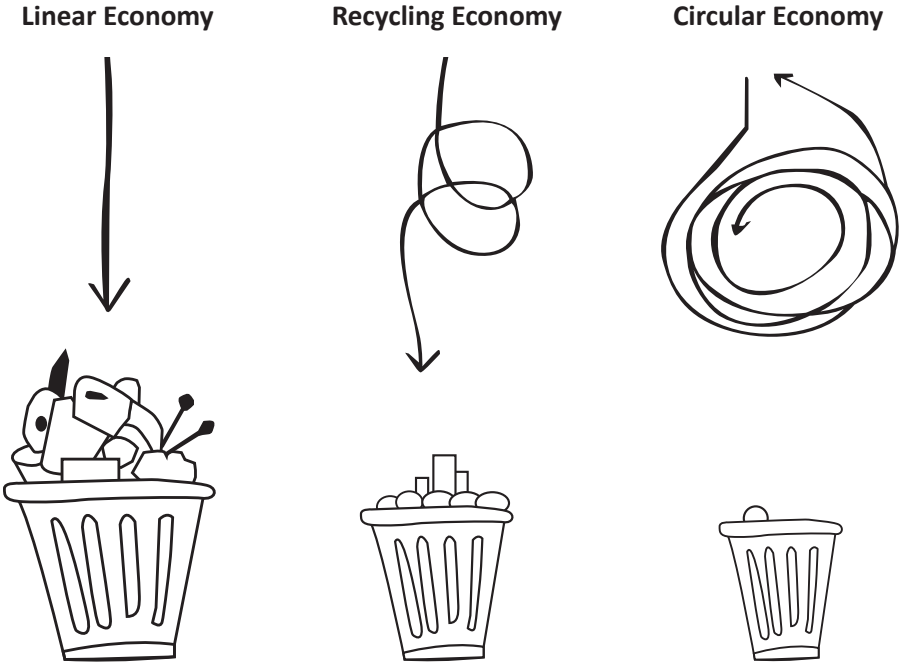

Figure 2: Linear, Recycling and Circular Economies (source: LWARB[4])

[4] LWARB is the London Waste and Recycling Board (https://www.lwarb.gov.uk/)

5.2 Waste Management Hierarchy

The Waste Management Hierarchy is a key element of the Circular Economy, as it shows the priorities we place on waste management options. The hierarchy is a foundation of the NWT's Waste Resource Management Strategy.

The Waste Management Hierarchy illustrates a shift in how we view waste in the NWT; the more we can move up the hierarchy to prevention and reduction, the better it is for the environment, wildlife, communities, human health and the economy.

1. Source Reduction means not producing waste in the first place.
2. Waste Diversion refers to reusing, recycling and composting materials instead of throwing them away.
3. Residual Waste Management addresses how we deal with everything that is thrown away to prevent contamination to the environment, and to improve safety and reduce the liabilities associated with waste management facilities.

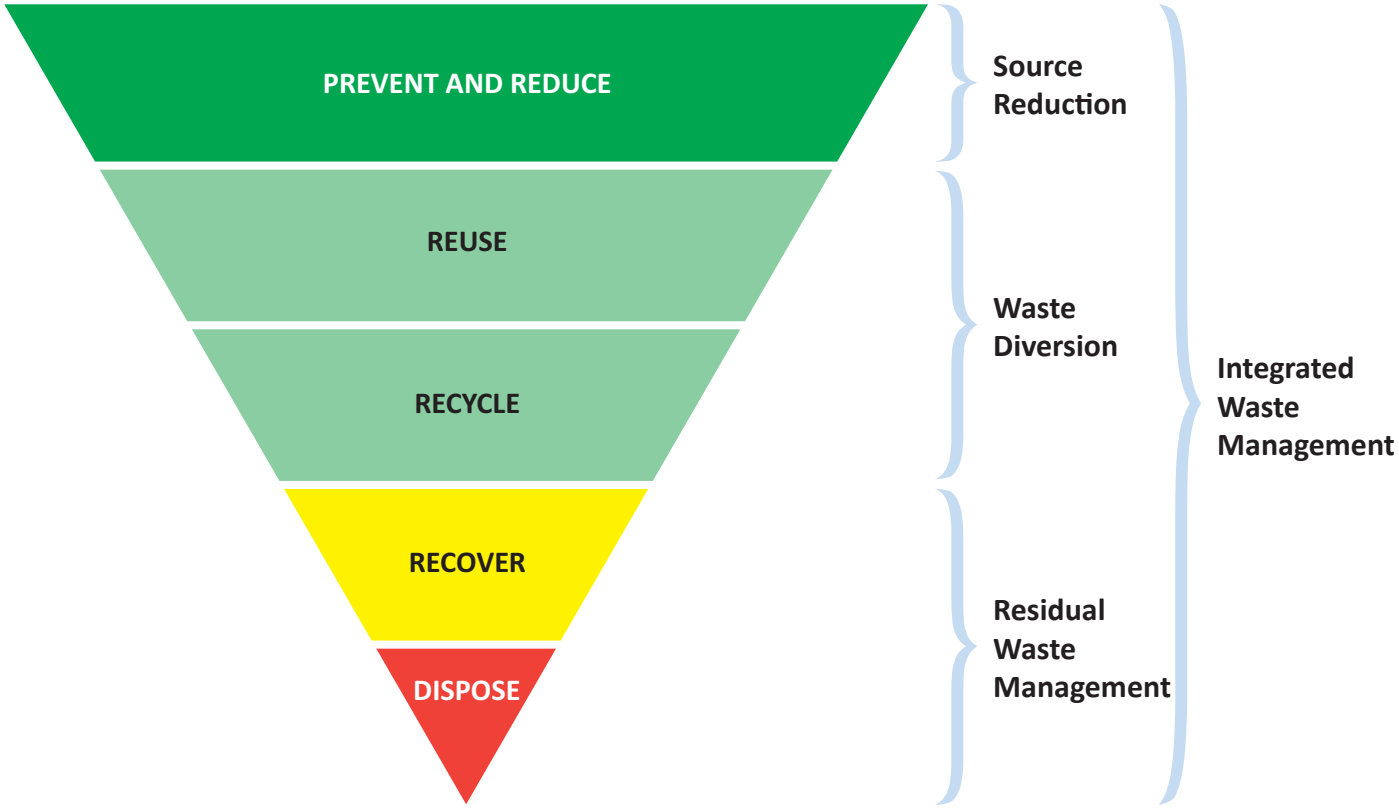

Figure 3: Waste Management Hierarchy

5.0 A VISION FOR WASTE MANAGEMENT

5.3 GNWT Commitments under National Initiatives

The Canadian Council of Ministers of the Environment (CCME) is the primary minister-led intergovernmental forum for collective action on environmental issues of national and international concern. While not a governing body, it is composed of environment ministers from the federal, provincial and territorial governments.

The Council seeks to achieve positive environmental results, focusing on issues that are Canada-wide in scope and that require collective attention by a number of governments. Since environment is constitutionally an area of shared jurisdiction, it makes sense to work together to promote effective results.

This Strategy sets the stage for GNWT action on two CCME initiatives: the Canada-wide Strategy on Zero Plastic Waste and the Aspirational Canada-wide Waste Reduction Goal.

5.0 A VISION FOR WASTE MANAGEMENT

Canadian Council of Ministers of the Environment (CCME)

Canada-wide Strategy on Zero Plastic Waste (ZPW Strategy)

In 2018, as part of its G7 presidency, Canada launched an Ocean Plastics Charter, under the theme of ocean health and marine litter. The charter advances ambitious targets and solutions for global action. Domestically, federal, provincial and territorial governments have worked together to create the CCME Canada-wide Strategy on Zero Plastic Waste to lay out actions that are important to Canada and are consistent with areas presented in the Ocean Plastics Charter.

The GNWT has endorsed the ZPW Strategy and will work toward achievements in the following ten result areas:

1. All plastic products are designed for greater durability, reuse and recycling.
2. The responsible use and recycling of single-use products is significantly increased.
3. Expanded collection systems keep all plastic products in the economy and out of the environment.
4. Strong domestic markets and varied end uses drive demand for recycled plastics.
5. Canada's recycling capacity is world-leading and can process and recover value from all types of plastic waste.
6. Canadian households, businesses and institutions are empowered to prevent and manage plastic waste responsibly.
7. Plastic pollution generated by aquatic activities is significantly reduced.
8. Effective research and monitoring systems inform decision-making and measure performance.
9. Effective capture and clean-up of plastic pollution protects Canada's environment, shorelines and waterways.
10. Canadian leadership has accelerated global action to address marine litter and plastic pollution.

Aspirational Canada-wide Waste Reduction Goal

In November 2018, ministers endorsed a Canada-wide aspirational waste reduction goal, meant to encourage and highlight waste reduction progress in Canada.

This Strategy will help us work toward achieving the aspirational goal to reduce the amount of waste disposed in Canada by:

- 30% by 2030; and
- 50% by 2040[5].

In the Northwest Territories, this means reducing the amount of waste disposed from 946 kg per capita to:

- 662 kg per capita by 2030; and
- 473 kg per capita by 2040.

[5] Reduction targets are based on 2014 baseline disposal data.

6.0 GOALS AND OBJECTIVES

Photo: Pat Kane

The Strategy is a ten-year road map for improving waste resource management throughout the territory under four overarching goals based on the waste management hierarchy (Figure 3). It will foster a shift in how waste is viewed and managed in the NWT. Our aspirational goal is to reduce waste disposed in solid waste facilities by 30% by 2030.

The Strategy is divided into four goals, which are further broken down into objectives. The implementation plan (Section 7) provides a further break-down into actions, organized into three over-arching themes, that will allow us to achieve the objectives.

Under each goal, a number of target materials have been identified. A number of considerations factored into the decision to prioritize a material as a target for the purpose of the Strategy. Such considerations included:

- the degree to which the material is toxic or hazardous to the environment or public safety;
- the material's impact on landfill lifespan (e.g. large bulky materials that will fill a landfill quickly compared to small items that have limited impact on landfill lifespan);
- materials identified as concerns or problematic by community governments or GNWT departments (e.g. many communities identified managing tires as a challenge);
- whether the material is included in Canada-wide strategies to which the GNWT is party to (e.g. the CCME Canada-wide Action Plan for Extended Producer Responsibility (2009) or the CCME Canada-wide Strategy on Zero Plastic Waste (2018));
- the material's contribution to GHG emissions and climate change; and
- other attributes that might make a material a nuisance (e.g. concerns about plastic waste in the environment or being consumed by wildlife; wildlife attractants).

A material may also be included as a target material if its management is likely improved by a simple and/or readily implemented solution.

This section provides an overview of the Strategy's four goals:

1. **Prevent and reduce waste at source**
2. **Divert waste from disposal**
3. **Improve waste management facilities and practices**
4. **Lead by example – greening the government**

6.0 GOALS AND OBJECTIVES

Goal 1: Prevent and reduce waste at the source

Goal 1 embraces Step 1 of the Waste Management Hierarchy and takes aim at preventing waste from being produced in the first place.

Objectives

A. Provide public education resources and information necessary to reduce the amount of waste generated
B. Prevent waste through regulated or voluntary programs and initiatives

Target Materials: *food waste, household hazardous waste, single-use items, packaging, reusable materials (such as construction, renovation and demolition (CRD) materials)*

6.0 GOALS AND OBJECTIVES

Goal 2: Divert waste from disposal

Once efforts have been made to prevent and reduce waste, diverting waste from disposal by increasing reuse and recycling will benefit the economy and help protect the environment. This goal addresses Step 2 of the Waste Management Hierarchy (Figure 3) and is aimed at diverting waste from being disposed to landfills.

Objectives

A. Establish new waste diversion programs and initiatives
B. Improve existing waste diversion programs and initiatives

Target materials: *organics; electronics (expanded list of electronic and electrical products, such as audio-visual equipment and small appliances); household hazardous waste (HHW), packaging and printed paper (PPP); used oil; paint; tires; large appliances; scrap metal; construction, renovation and demolition (CRD) material; batteries; mercury-containing products*

Waste diversion is increasingly being driven across Canada through Extended Producer Responsibility programs that shift responsibility for waste management to producers. Ideally, this shift in responsibility encourages improved design of products that are less toxic, modular and more easily repaired, refurbished or recycled, since the producers need to manage their products at the end of their consumer life.

Extended Producer Responsibility (EPR) versus Product Stewardship Programs

EPR is a policy approach to managing waste in which a producer's responsibility, physical and/or financial, for a product is extended to the post-consumer stage of a product's life cycle. EPR and product stewardship[6] programs are very similar in that they shift the end-of life management and associated financial burden away from communities and tax payers to producers and consumers. In product stewardship programs, government is still involved in the administration of the programs. To consumers, an EPR and a product stewardship program can look similar, but since producers directly influence program funding, cost, design and operations in EPR programs, it can create an incentive for improving product design for the environment.

[6] All GNWT recycling programs (the Beverage Container Program and the Electronics Recycling Program) are product stewardship programs.

6.0 GOALS AND OBJECTIVES


Photo: Pat Kane

Goal 3: Improve waste management facilities and practices

Improving how we manage waste[7] at solid waste management facilities (Step 3 on the Waste Management Hierarchy (Figure 3)) will require modernizing these facilities to minimize negative environmental impacts and costs resulting from contaminated land and water. This goal also includes minimizing the footprint of land used for solid waste facilities, preventing waste and debris from being blown or deposited off-site, and preventing wildlife attraction to solid waste facilities. Stockpiles of hazardous waste at solid waste facilities will also be addressed.

Landfill vs. (Solid) Waste Management Facility

These terms are often used interchangeably, with landfill being the most common. A landfill is a facility where waste is buried. A waste management or solid waste management facility is one that may contain a landfill and other infrastructure such, as a baling facility, a household hazardous waste drop off area, a reuse area and a transfer station. This is for temporary storage of materials before they are consolidated and sent for recycling or proper disposal.

Objectives

A. Eliminate hazardous waste stockpiles and transition to temporary collection and storage
B. Develop and apply waste management policies, standards and regulations
C. Improve, promote and deliver training that encourages best practices, policies, standards and regulations
D. Raise awareness and foster stewardship among residents, communities and the industrial, commercial and institutional (ICI) sector to be part of the solution to improving waste management
E. Identify priority actions based on reducing risks to human health, wildlife and the environment
F. Gather information to facilitate decision-making at waste management facilities
G. Keep our communities clean and reduce litter

Target materials: *municipal solid waste, hazardous waste, end-of-life vehicles, contaminated soil, litter*

[7] The Strategy is focused on solid waste management, but does include some liquid wastes that would be found in solid waste facilities (e.g. used oil, solvents). It does not address sewage waste.

6.0 GOALS AND OBJECTIVES

Goal 4: Lead by example – Greening the GNWT

Government has an opportunity to lead by example through greening government initiatives. Greening government means making changes to business practices, procurement decisions and building management practices to reduce GHG emissions, energy and water use, and solid waste. The GNWT has a large purchasing power and making greener purchasing decisions can increase the demand for environmentally-friendly products and services across the NWT, which could lead to a greener economy.

Objectives

A. Prevent and reduce waste at GNWT meetings and events
B. Establish and empower departmental green teams
C. Model optimal waste reduction, diversion and sound disposal practices through pilot projects
D. Develop and implement a strategy and action plan to minimize the environmental impacts of GNWT operations and provide environmental leadership

Target materials: *construction, renovation and demolition materials, packaging and printed paper, single-use items*

7.0 IMPLEMENTATION PLAN

Photo: Pat Kane

The following tables provide more detail of how goals and objectives will be achieved. In addition to actions the GNWT will take over the next ten years, there are also suggested actions that could be taken by communities, organizations and associations, and the ICI sector to help meet shared priorities and objectives. The actions are organized under the three themes described below.

The Climate Lens

The changes to our northern climate, and our commitments to reduce GHGs, requires us to look at all of our waste management decisions through this lens. The climate lens identifies actions that increase our resiliency to climate change (such as preserving natural wetlands, not disturbing permafrost and locating infrastructure on higher ground that are less prone to flooding and coastal erosion) and reduce our GHG emissions (such as composting organics). The potential GHG emissions or reductions also need to be considered in the actions outlined in this Strategy.

1. Knowledge – includes actions related to education, research, outreach, training and the development of resources for increasing knowledge required for achieving the goals.
2. Legislation, Regulations, Policies and Compliance – includes actions related to the creation of legislation, regulations, bylaws and policies as well as any compliance and enforcement activities to support existing or new legislation, regulations and/or bylaws.
3. Program Development and Implementation – includes actions related to the development and operation of new or existing programs to support sound waste resource management.

Timelines for the purpose of the Strategy are presented in short-, medium- and long-term time frames. Short-term actions should occur within one to three years, medium-term actions can be expected to be completed within four to six years, and long-term actions are anticipated to be completed over seven to ten years. Some actions may have deliverables throughout the life of the Strategy, and these are listed in multiple time frames.

SHORT TERM (1 – 3 YEARS)

MEDIUM TERM (4 – 6 YEARS)

LONG TERM (7 – 10 YEARS)

Table 2: Implementation Plan

Goal 1: PREVENT AND REDUCE WASTE AT THE SOURCE

OBJECTIVES

A. Provide tools and information necessary to reduce the amount of waste generated
B. Prevent waste through regulated or voluntary programs and initiatives

Target materials:
- food waste
- hazardous waste
- single-use items
- packaging
- reusable materials (such as construction, renovation and demolition (CRD) materials)

Knowledge

GNWT

Education and Outreach Programs/Campaigns (**SHORT-ONGOING**)
- Develop and implement outreach programs and campaigns to:
  - Increase awareness of the environmental and economic benefits of improved waste management (in the context of a circular economy).
  - Encourage environmental stewardship and the adoption of behaviours that prevent and reduce waste.
  - Improve awareness and participation in NWT waste reduction programs.
  - Encourage behaviour changes with respect to reducing waste.
  - Prevent local food waste.
  - Promote food re-distribution programs (e.g. Food Rescue).

Local Government Education
- Develop resources to support community waste reduction initiatives (in collaboration with communities based on needs). (**ONGOING**)
- Develop waste reduction resources for communities (e.g. procurement options for reducing waste). (**ONGOING**)

Industry, Commercial and Institutional (ICI) Sector
- Develop resources to help the ICI sector (e.g. restaurants, retailers, schools) reduce their waste. (**ONGOING**)

Knowledge

Community Governments
- Provide input into what types of resources/tools/training and what content would be helpful for communities.
- Promote and use resources that are developed.
- Share success stories with GNWT/other communities/public.

Northwest Territories Association of Communities (NWTAC)
- Promote /disseminate applicable resources or reference materials provided by the GNWT to community governments and staff.

Non-Government Organizations and other associations:
- Promote/help disseminate information provided by GNWT and/or community governments.
- Share success stories.

Industrial Commercial and Institutional Sector
- Educate staff and public on waste reduction opportunities.

GNWT ACTIONS

Legislation, Regulations, Policies and Compliance

GNWT

- Evaluate prohibiting or instituting fees on problematic materials (e.g. single-use items). (**MEDIUM**)
- Support the development of national policies and programs aimed at preventing waste and addressing problem materials by participating on national working groups. (**ONGOING**)

Program Development and Implementation

GNWT

Construction, Renovation and Demolition (CRD) Waste

- Work with the ICI sector to explore and implement options to reduce CRD waste (e.g. design for future deconstruction). (**LONG**)

SUGGESTED ACTIONS FOR OTHER PARTIES

Legislation, Regulations, Policies and Compliance

Community Governments

- Consider creating local incentives/disincentives for ICI sector to reduce waste.

Program Development and Implementation

Community Governments

- Support local initiatives/programs that prevent and reduce waste (e.g. reuse initiatives, local salvaging opportunities).
- Promote waste reduction through procurement choices.

Industrial Commercial and Institutional Sector

- Develop and implement business waste reduction initiatives.

Table 2: Implementation Plan

Goal 2: DIVERT WASTE FROM DISPOSAL

OBJECTIVES

A. Establish new waste diversion programs and initiatives
B. Improve existing waste diversion programs and initiatives/ efforts

Target materials:

- organics
- electronics (expand program to include additional electronic and electrical products)
- household hazardous waste (HHW)
- packaging and printed paper (PPP)
- used oil
- paint
- tires
- large appliances
- scrap metal
- construction, renovation and demolition (CRD) material
- batteries
- mercury-containing products

Knowledge

GNWT

Education and Outreach Programs/Campaigns (**ONGOING**)

- Develop and implement outreach programs and campaigns to:
  - Improve awareness and participation in NWT waste diversion programs.
  - Encourage composting (backyard and centralized composting) and beneficial use of compost to increase residential and ICI organics diversion, including diversion of waste paper and wood chips.
  - Encourage waste diversion in the ICI sector.
  - Promote and increase the use of recycled materials and products.

Knowledge

Community Governments

- Assist with promoting GNWT waste diversion programs.
- Partner with GNWT programs by collecting designated materials, such as tires or scrap metal, for new programs.
- Promote home composting.

GNWT ACTIONS

Legislation, Regulations, Policies and Compliance

GNWT

Policy, Legislation, and Regulation Enhancement and Development

- Update and amend the *Waste Reduction and Recovery Act*, (WRRA) to enable an extended producer responsibility (EPR) framework. (**SHORT**)
- Create and enforce standards, guidelines and/or regulations for compost facilities and compost quality. (**SHORT**)
- Prioritize materials to be addressed by new diversion programs. (**SHORT**)
- Create regulations and supporting policies for new diversion programs. Target of 3-5 programs implemented or expanded.
  - Possible target materials include: packaging and printed paper, tires, large appliances, paint, used oil, batteries, audiovisual equipment, small appliances, household hazardous waste. (**LONG**)
- Review and, where appropriate, amend existing GNWT regulated diversion programs to improve efficiency and effectiveness. (**ONGOING**)

Regulated Waste Reduction and Diversion Programs

- Continually improve compliance and enforcement with NWT-wide programs regulated under the WRRA. (**SHORT** and **ONGOING**)

Program Development and Implementation

GNWT

Regional Collaboration/Community Assistance

- Conduct a feasibility study to explore the potential for regional facilities. (**SHORT**)
- Implement new/expanded regulated diversion programs. (**MEDIUM-LONG**)
- Collaborate and partner with community governments, and the ICI sector, in coordinating regionally to remove recyclable materials not addressed by regulated programs. Actions may include:
  - Develop a territory-wide backhaul program to lower the logistical, financial and technical challenges faced in the north. (assess feasibility – **SHORT**; implement – **MEDIUM-LONG**)
  - Facilitate cost sharing or bulk purchasing between communities for contracting specialized equipment, services or materials required to manage items like scrap metal. (**MEDIUM**)
- Provide information to local governments and businesses about available markets for recycling materials and opportunities to adopt Circular Economy models to encourage the use of waste as a resource. (**ONGOING**)
- Partner with communities to facilitate the development of community-wide composting programs (centralized and backyard composting). (Target 3-5 communities – **MEDIUM**; Additional communities – **LONG** and **ONGOING**)

Market Development

- Explore opportunities to assist ICI sector to create value from local waste (through up-cycling or industrial ecology). (**SHORT**)
- Assist businesses and institutions to use others' waste as valuable resources or inputs to their products and services. (**ONGOING**)

SUGGESTED ACTIONS FOR OTHER PARTIES

Legislation, Regulations, Policies and Compliance

Community Governments

- Develop and operate compost facilities that are consistent with applicable standards/regulations.

Program Development and Implementation

Community Governments

Collaboration

- Collaborate with the GNWT to support the development and implementation of GNWT programs and initiatives.
- Coordinate with GNWT to remove materials from community solid waste facilities.
- Facilitate diversion of materials from solid waste facilities by helping to create inventories, segregate materials and prepare materials for removal.
- Develop and implement local recycling programs and initiatives.
- Develop a composting program.
- Support other local initiatives/programs that divert waste (e.g. food re-distribution programs, fix-it or repair events, resource libraries for tools, toys, etc.).

Industrial Commercial and Institutional Sector

- Implement waste diversion and recycling programs in the workplace.
- Promote waste reduction through procurement choices.
- Adopt Circular Economy models to collaborate with businesses to close loops.

Table 2: Implementation Plan

Goal 3: IMPROVE WASTE DISPOSAL FACILITIES AND PRACTICES

OBJECTIVES

A. Eliminate hazardous waste stockpiles and transition to temporary collection and storage
B. Develop and apply waste management policies, standards and regulations
C. Improve, promote and deliver training that encourages best practices, policies, standards and regulations
D. Raise awareness and foster stewardship among residents, communities and the ICI sector to be part of the solution to improving waste management
E. Identify priority actions based on reducing risks to human health, wildlife and the environment
F. Gather information to facilitate decision-making at waste management facilities
G. Keep our communities clean and reduce litter

Target materials:

- municipal solid waste
- hazardous waste
- end-of-life vehicles
- contaminated soil
- litter

Knowledge

GNWT

Municipal Education/Training

- Develop resources to help community governments communicate about operations at solid waste sites. (**SHORT**)
- Enhance and deliver training programs for staff at municipal waste management facilities to build knowledge and capacity to improve waste management, including hazardous waste. (**MEDIUM**)
  - Explore options for creating an operator certification program.
  - Explore feasible options for delivering northern-specific training locally.
  - Establish a program advisory committee to ensure the School of Community Government education and training material is consistent with best practices.
- Provide support and expert knowledge to communities to implement best practices. (**ONGOING**)

Hazardous Waste

- Provide communities with comprehensive technical guidance and resources on various forms of hazardous waste management (in collaboration with communities, based on needs). (**ONGOING**)

Reporting/Communication

- Provide updates and report on progress using existing networking opportunities. (**ONGOING**)
- Participate in regular meetings with community governments, regulatory boards and relevant stakeholders to discuss any questions or problems with waste management and identify solutions. (**SHORT**)

Litter Reduction

- Introduce a territorial anti-litter campaign. (**MEDIUM**)

Knowledge

Community Governments

Public Education

- Use available resources to communicate with residents and the ICI sector to foster desirable waste management practices.

Training

- Support staff to participate in training.
- Provide input into the development and evaluation of training methods and materials.

Reporting/Communication

- Report back on improvements made to waste management practices.

Litter Reduction

- Identify areas of concern and help educate residents about illegal disposal/littering.
- Implement community clean-ups.

Northwest Territories Association of Communities (NWTAC)

- Promote/disseminate resources to community governments and staff.

GNWT ACTIONS

Legislation, Regulations, Policies and Compliance

GNWT

Standards

- Work with GNWT departments to identify and address regulatory gaps related to waste management, including gaps associated with growth and management of agriculture and fisheries. (**SHORT**)
- Work with other agencies to establish standards and/or guidelines for solid waste management facilities:
  - Compost facility standards (**SHORT**)
  - Siting (**MEDIUM**)
  - Design (**MEDIUM**)
  - Operation and maintenance (**MEDIUM**)
  - Hazardous waste (**MEDIUM**)
  - Closure (**MEDIUM**)
  - Monitoring and reporting (**MEDIUM**)
- Promote new standards to ensure awareness of designers and operators. (**MEDIUM**)

Hazardous Waste

- Develop and promote best practices for management of hazardous waste. (**SHORT**)

Enforcement

- Develop and implement a revised inspection, compliance promotion and enforcement process for communities and the ICI sector. (**MEDIUM**)

Community Assistance

- Develop resources for communities with respect to best practices in landfill management. (**SHORT**)
- Develop and implement a plan that includes support for community governments in meeting their regulatory requirements. (**SHORT**)

Legislative Amendments

- Amend the Environmental Protection Act to include anti-littering, disposal of waste on public land and other general waste management provisions. (**SHORT**)

Program Development and Implementation

GNWT

Standards/Practices/Programs

- Create a risk rating of waste management facilities across the NWT to identify priority actions. (**SHORT**) (Follow up on priorities identified – **LONG**)
- Clean Up Clean Start: partner with communities to:
  - Clean Up (remove stockpiles of hazardous waste) (**SHORT-MEDIUM-LONG**)
  - Clean Start (implement best management practices) (**SHORT-MEDIUM-LONG**)
- Work with communities to begin using an asset management system to promote preventative maintenance. (**SHORT-MEDIUM**)

Hazardous Waste

- Help communities and the ICI sector access available services to manage hazardous waste in a timely manner, including coordination of transportation and disposal/recycling of hazardous waste. (**ONGOING**)
- Assist communities with HHW collection. (**ONGOING**)
- Assess the feasibility of managing materials such as contaminated soil or asbestos at community or regional waste management facilities. (**SHORT-MEDIUM**)

Measurement/Reporting

- Conduct periodic drone surveys to assess volume at solid waste facilities. (**SHORT** and **ONGOING**)
- Work with communities to improve tracking of waste to better understand the quantity and type of waste disposed and diverted. (**MEDIUM**)

SUGGESTED ACTIONS FOR OTHER PARTIES

Legislation, Regulations, Policies and Compliance

Community Governments

- Implement best practices for management and operations of solid waste facilities.
- Reference up-to-date standards in contracts when work is being done on landfill facilities.
- Develop, communicate and approve rules for what is/is not accepted at solid waste facilities, including any tipping fees. (e.g.by-laws, Band Council resolutions).
- Evaluate the enactment of local waste reduction and/or illegal dumping bylaws.

Water Licence Compliance

- Ensure staff orientation and training includes information on regulatory requirements.
- Participate in GNWT and/or land and water board workshops on annual reporting and SNP sampling.
- Implement established landfill standards.

Program Development and Implementation

Community Governments

Operations

- Implement best practices in landfill operation and maintenance.
- Manage assets; acquire equipment and remove/divert materials.

Hazardous Waste

- Implement best practices and remove hazardous waste regularly.
- Participate in Clean Up Clean Start by allocating time, resources, equipment and infrastructure.

Measurement/Reporting

- Improve tracking of quantity and content of waste disposed at solid waste facilities.

Table 2: Implementation Plan

Goal 4: LEAD BY EXAMPLE – GREENING GOVERNMENT

OBJECTIVES

A. Prevent and reduce waste at GNWT meetings and events
B. Establish and empower departmental green teams
C. Model optimal waste reduction, diversion and sound disposal practices through pilot projects
D. Develop and implement a strategy and action plan to minimize the environmental impacts of GNWT operations and provide environmental leadership

Target materials:

- construction, renovation and demolition (CRD)
- packaging and printed paper
- single-use items

Knowledge

GNWT

Planning

- Develop a Greening Government Strategy and Action Plan. (Develop plan – **MEDIUM**; Implement plan – **LONG**)
- Create policies and procedures that promote greening government, including preventing waste and improving waste management from GNWT projects, programs and operations. (**MEDIUM**)
- Empower and support departmental green teams. (**ONGOING**)
- Support departmental green teams by allowing members to allocate time to work on greening government initiatives. (**ONGOING**)

Action

- Promote green actions by GNWT staff. (**ONGOING**)
  - Promote and enforce applicable procurement, leasing, construction/deconstruction policies.
  - Use reusable cutlery and dishes in meetings and at events.
  - Compost and recycle in the office and at events, where possible.

Knowledge

Community Governments

- Evaluate options for greening operations and implement as appropriate.
- Share success stories with GNWT/other communities/public.

GNWT ACTIONS

Legislation, Regulations, Policies and Compliance

GNWT

Policies

- Develop and implement policies under the Greening Government Strategy. Strategy will improve waste management practices and policies associated with GNWT owned/operated assets. (**MEDIUM**-**ONGOING**)

  Policies would target objectives such as:
  - Demonstrating leadership in how waste is managed from large GNWT projects (e.g. construction, demolition, renovation) by ensuring waste is diverted and materials are salvaged where possible.
  - Requiring GNWT events to be zero-waste.
  - Eliminating use of bottled water at GNWT organized events, meetings and conferences.
  - Reducing waste at GNWT-sponsored events.
  - Creating standard clauses in leases and consistent operational procedures for GNWT-owned buildings to ensure all departments have full and equal access to waste diversion programs available in their community.
  - Managing GNWT assets considering their full life-cycle (e.g. decisions regarding procurement and asset management should consider impacts on other GNWT budgets associated with properly managing the end-of-life phase of assets).
  - Creating a GNWT-wide procurement policy that favours more sustainable products.

Program Development and Implementation

GNWT

Reduction

- Equip all departments and regional offices with reusable dishes and ensure they are used for meetings and public events. (**MEDIUM**)

Reduction/Diversion/Improved Management

- Pilot waste reduction, diversion and sound management of waste in GNWT projects. (**SHORT**-**MEDIUM**)
- Implement changes to policies, programs and operations based on successful pilot projects (**ONGOING**)

Diversion

- Review and implement progressive waste reduction/diversion practices in all government operations as identified in the Greening Government Strategy. (**LONG**)

SUGGESTED ACTIONS FOR OTHER PARTIES

Legislation, Regulations, Policies and Compliance

Program Development and Implementation

8.0 PRIORITY ACTIONS

The GNWT has identified a list of priority actions from Table 2 as those that will be targeted as the Strategy implementation progresses (see Table 3). The timelines[8] associated with the actions below indicate the deadline for which the action is anticipated to be complete.

A long-term deadline may reflect that an action needs significant time, resources and/or prior actions to occur in order to be completed. Work toward completing such actions may begin in the short-term.

Table 3: Priority Actions

SHORT TERM (1 – 3 YEARS)	MEDIUM TERM (4 – 6 YEARS)	LONG TERM (7 – 10 YEARS)
Amend Legislation – *Environmental Protection Act* and *Waste Reduction and Recovery Act*	Implement or expand 3-5 waste reduction or diversion programs	
Develop, deliver and improve outreach and education campaigns to support programs and initiatives under all goals		
Assist 5-10 communities to implement the Clean Up, Clean Start program, including removal of hazardous waste		Continue expanding Clean Up, Clean Start
Develop a waste management facility operator certification program		
Create and adopt standards for compost facilities and compost quality	Co-develop and adopt standards for waste management facilities	
	Support compost programs (centralized or backyard) in 3-5 communities	
Explore feasibility of developing a territory-wide backhaul program	Develop and implement territory-wide backhaul program	
Pilot waste reduction, diversion and sound management of waste in GNWT projects	Develop a Greening Government Strategy	Implement Greening Government Strategy

[8] Timelines for the purpose of the Strategy are presented in short-, medium- and long-term time frames. Short-term actions should occur within one to three years, medium-term actions can be expected to be completed within four to six years, and long-term actions are anticipated to be completed over seven to ten years.

9.0 MEASURING AND REPORTING ON PRIORITY TARGETS

Measuring our progress and reporting back on it are important to ensure we remain ontrack, continue to improve our results and provide transparency. A summary of activities completed or underway will be provided on an annual basis. After five years of implementation, we will report on our progress and renew and/or revise the implementation plan as needed going forward. A final evaluation will be completed after ten years.

Actions will be assigned measurable targets as they are implemented (e.g. as part of developing a new diversion program for a given material type, ENR will establish target diversion rates for the program and monitoring will be conducted as part of program operations).

In addition to targets established during the implementation phase, progress reports on this Strategy will include the following metrics:

1. Number of communities with compost programs
2. Number of territory-wide diversion programs (and progress relative to individual program diversion targets) (Target: 3-5 new/expanded programs by 2029)
3. Overall quantity of materials diverted from disposal through territory-wide programs
4. Quantity of waste disposed in community solid waste facilities
5. GHG emissions reductions estimates resulting from waste reduction and diversion programs
6. Number of communities from which hazardous waste was removed (Target: 5-10 by 2025)
7. Volume/mass of hazardous waste and/or scrap metal removed from solid waste facilities
8. Improvements to solid waste facilities:
   a. Number of facilities with gates/locks
   b. Number of communities with segregation
   c. Number of facilities with functional electric fences
9. Number of communities in compliance with their water licences
10. Number of communities serviced by a territory-wide backhaul program
11. Volume of material removed through territory-wide backhaul program
12. Number and type of greening government policies developed, including targets, if appropriate

10.0 NEXT STEPS

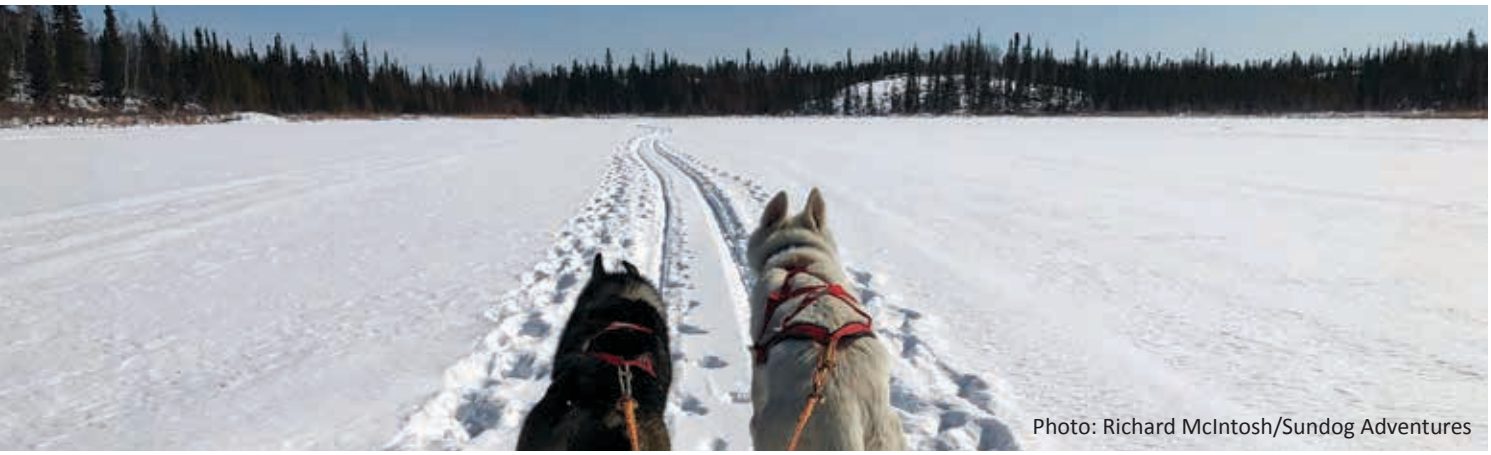

Photo: Richard McIntosh/Sundog Adventures

As a small jurisdiction with limited resources, the establishment of external partnerships and obtaining federal support is imperative to the success of this Strategy. In particular, the GNWT will work with communities to access funds from the federal Investing in Canadian Infrastructure Program, which has committed $37.5 million over ten years toward infrastructure projects that would result in improvements of solid waste sites in NWT communities.

ENR and MACA will work closely with other departments using existing budgets to begin implementing the Strategy. As we move through implementation, any identified incremental funding requirements will be addressed through the regular business planning process.

Photo: Pat Kane

11.0 GLOSSARY

Indigenous governments – governments that have negotiated, or are in the process of negotiating, self-government agreements with the GNWT and the Government of Canada.

Bulky waste – waste types that are too large to be accepted by regular waste collection. This includes discarded furniture, large appliances and plumbing fixtures.

Circular economy – an alternative to a traditional *linear economy* (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them while in use, then recover and regenerate products and materials at the end of each service life.

Community government – a corporation established under or continued by the *Charter Communities Act*, the *Cities, Towns and Villages Act*, and the *Hamlets Act*, *Tłı̨chǫ Community Government Act*, or Recognized First Nations Councils delivering municipal type services to the residents (in Municipal and Community Affairs terms – Designated Authorities).

Construction, renovation and demolition waste (CRD) – waste that includes wood, scrap metal, drywall, concrete, brick and various packaging materials and can make up as much as 25% of the solid waste going to landfill. It comes from residential and non-residential waste sources.

Extended producer responsibility (EPR) – a policy approach to managing waste in which a producer's responsibility, physical and/or financial, for a product is extended to the post-consumer stage of a product's life cycle. EPR shifts the cost of managing the end-of-life phase of a product away from tax-payers to producers and consumers.

First Nations (designated authorities and reserves) – nine NWT communities where a community government is governed by a First Nations' Band Council, on or off-reserve, and is recognized by the Minister of Indigenous and Northern Affairs Canada. The First Nations are the primary authority in a community to deliver municipal services.

Green economy – is defined as an economy that aims at reducing environmental risks and ecological scarcities, and that aims for sustainable development

11.0 GLOSSARY

without degrading the environment.

Hazardous waste – includes materials that are toxic, corrosive or flammable (e.g. oil, paints, batteries, solvents). They can be very harmful to the environment or human health. They come from residential and non-residential waste sources.[9]

Non-residential or ICI waste – is waste generated by industrial (e.g. construction, agriculture, resource development), commercial (e.g. retailers, accommodation and food services, commercial fishers) and institutional (e.g. government, schools, hospitals) sectors. It can also include hazardous waste. This is also referred to as ICI waste (industrial, commercial and institutional).

Organic waste – is waste that includes food waste and various compostable materials. It comes from residential and non-residential waste sources.

Product stewardship – a policy approach to managing waste that shifts the cost of managing the end-of-life phase of a product away from municipalities and tax payers to producers and consumers, but in which manufacturers and importers are neither directly responsible for program funding or operations.

Recyclable materials – materials for which recycling markets are well developed. Some examples include beverage containers, electronics, paper, cardboard, metal, glass and some plastics.

Residential waste – waste generated by both single-family households and multi-family buildings. It typically consists of about 40% recyclable materials, 40% organic materials, 10% bulky goods and 10% other materials.

Frequently Used Abbreviations and Acronyms

GHG	Greenhouse Gas
ICI	Industrial Commercial and Institutional
CRD	Construction, Renovation and Demolition
GNWT	Government of the Northwest Territories
ENR	Department of Environment and Natural Resources
MACA	Department of Municipal and Community Affairs
O & M	Operations and Maintenance
NWTAC	Northwest Territories' Association of Communities
WRRI	Waste Reduction and Recycling Initiative

[9] The *Guideline for Hazardous Waste Management* provides more specific information regarding what is considered to be hazardous waste in the NWT.

11.0 GLOSSARY

Regulatory Jurisdiction for Waste Management in the NWT

Community Governments and First Nations Designated Authorities provide services and programs that serve a municipal purpose, including treatment and disposal of sewage and garbage. They are governed by territorial or federal legislation.

GNWT provides support and funding to community governments and First Nations Designated Authorities (MACA), develops guidance on aspects of waste management (MACA/ENR), develops and manages territorial recycling programs (ENR), provides guidance to ensure hazardous waste is managed to prevent the discharge of contaminants into the environment (ENR), and inspects municipal and industrial solid waste facilities (ENR/Department of Lands).

Federal government plays a role in regulating hazardous substances and providing Canada-wide guidance on various aspects of waste management and planning.

Regulatory boards issue water licences and land use permits for municipal and industrial solid waste facilities in the NWT and develop guidance documents in coordination with stakeholders, community and Indigenous governments specific to waste management.

11.0 GLOSSARY

Applicable Legislation

The *Waters Act provides* the GNWT with authority related to the permitting and use of water and the disposal of waste in bodies of water in the territory. Regulation of water use in the NWT is a shared responsibility with the land and water boards established under the *Mackenzie Valley Resource Management Act* (MVRMA) and the Inuvialuit Water Board. This act does not apply to federal areas within the Mackenzie Valley.

The *Mackenzie Valley Resource Management Act* (MVRMA) is a federal act that provides for an integrated system of land and water management, including the establishment of land and water management boards, in the Mackenzie Valley.

The *Waste Reduction and Recovery Act* authorizes the Commissioner in Executive Council to create regulations to designate materials, create programs and require manufacturers, distributors or retailers to comply with programs established in respect of waste reduction and recovery. The Commissioner may also prohibit the distribution of a material which causes a significant impairment to the natural environment that cannot otherwise be prevented or mitigated in the NWT.

The *Environmental Protection Act* (EPA) prohibits a person from discharging or permitting the discharge of a contaminant into the environment in the NWT. A contaminant can include noise, heat, vibration or substance. It empowers the Minister of ENR to define what is considered a nuisance discharge, and to develop and administer policies, standards, guidelines and codes of practice relating to the preservation, protection or enhancement of the environment.

The following four acts include procedures for developing and implementing by-laws and options for the delivery of public utilities such as waste management:

- *Charter Communities Act*
- *Hamlets Act*
- *Cities, Towns and Villages Act*
- *Tłı̨chǫ Community Government Act*

The *Community Planning and Development Act* establishes procedures for developing a community plan and zoning by-laws that relate to the physical development of a municipality, having regard to sustainability, the environment and the economic, social and cultural development of the community.


DETTAH RECYCLING CENTRE