



MORRISON HERSHFIELD

Current Waste Management System Review & 2011 SWMP Status Reporting

Presentation to PTAC on April 25, 2023



Meeting Outline

- Introductions
- Plan background and process
- Current system & performance
- Breakout session: vision, goals and guiding principles
- Review findings & issues and opportunities
- Discussion: emerging opportunities/ issues
- Next steps



Introductions



- Who are you?
- Organization?
- What motivated you to join PTAC?
- What do you love about the Sunshine Coast?

The Project Planning Consulting Team

- A Swedish Kiwi - in BC since 2012
- 15 years of environmental consulting
- Specializing in long-range planning
- Participated in over six BC Plans

Veronica
Bartlett



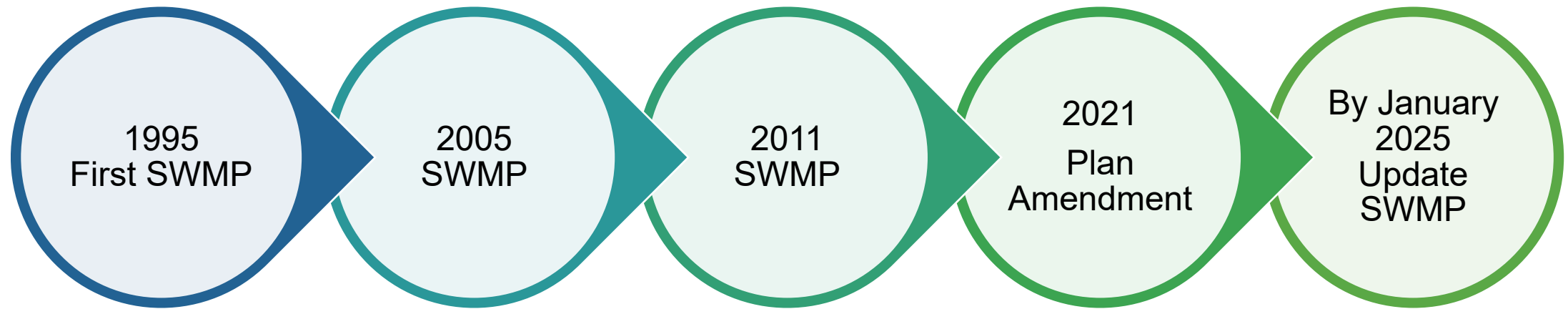
- Formerly Manager of Solid Waste at RDN – 24 years
- Led development of award winning RDN Zero Waste Program
- Consultant since 2013 specializing in planning and zero waste program design
- Participated in over 10 plans

Carey
McIver



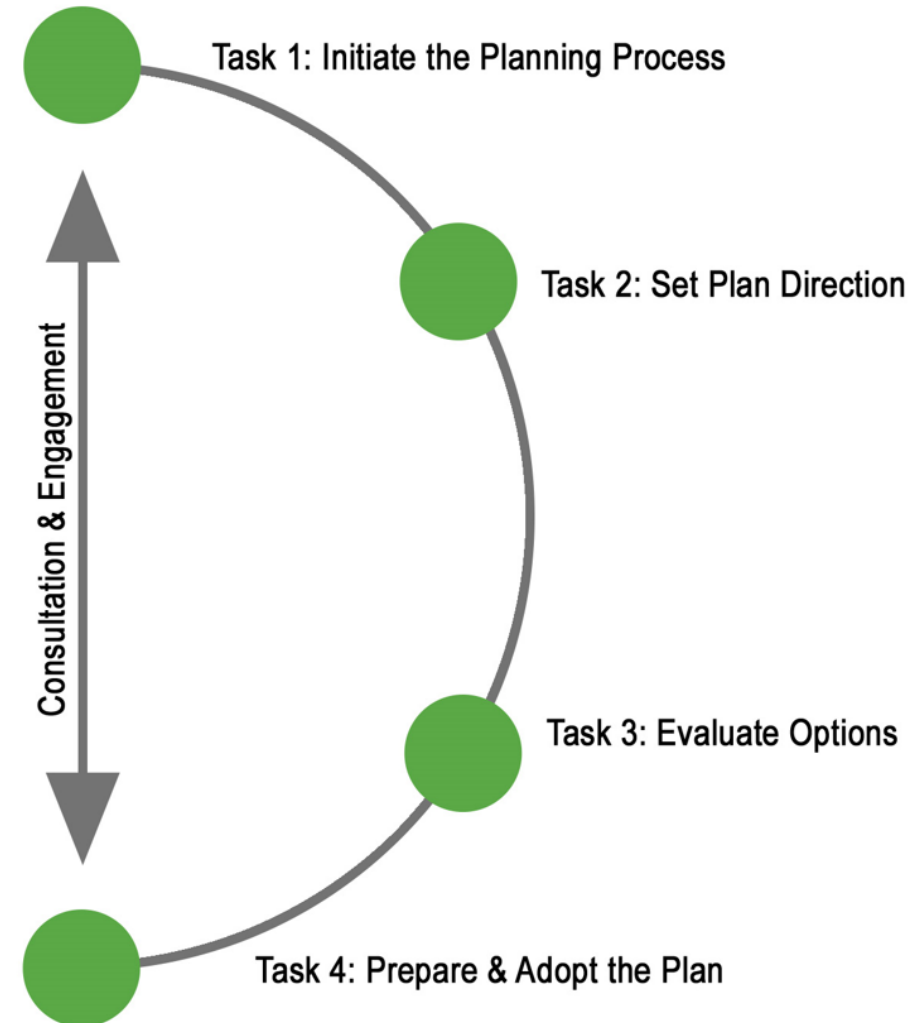
Plan Background

- Regional districts are required to have a solid waste management plan (SWMP).
- It describes how a region will manage garbage, recycling, organic waste programs and services for a ten-year period



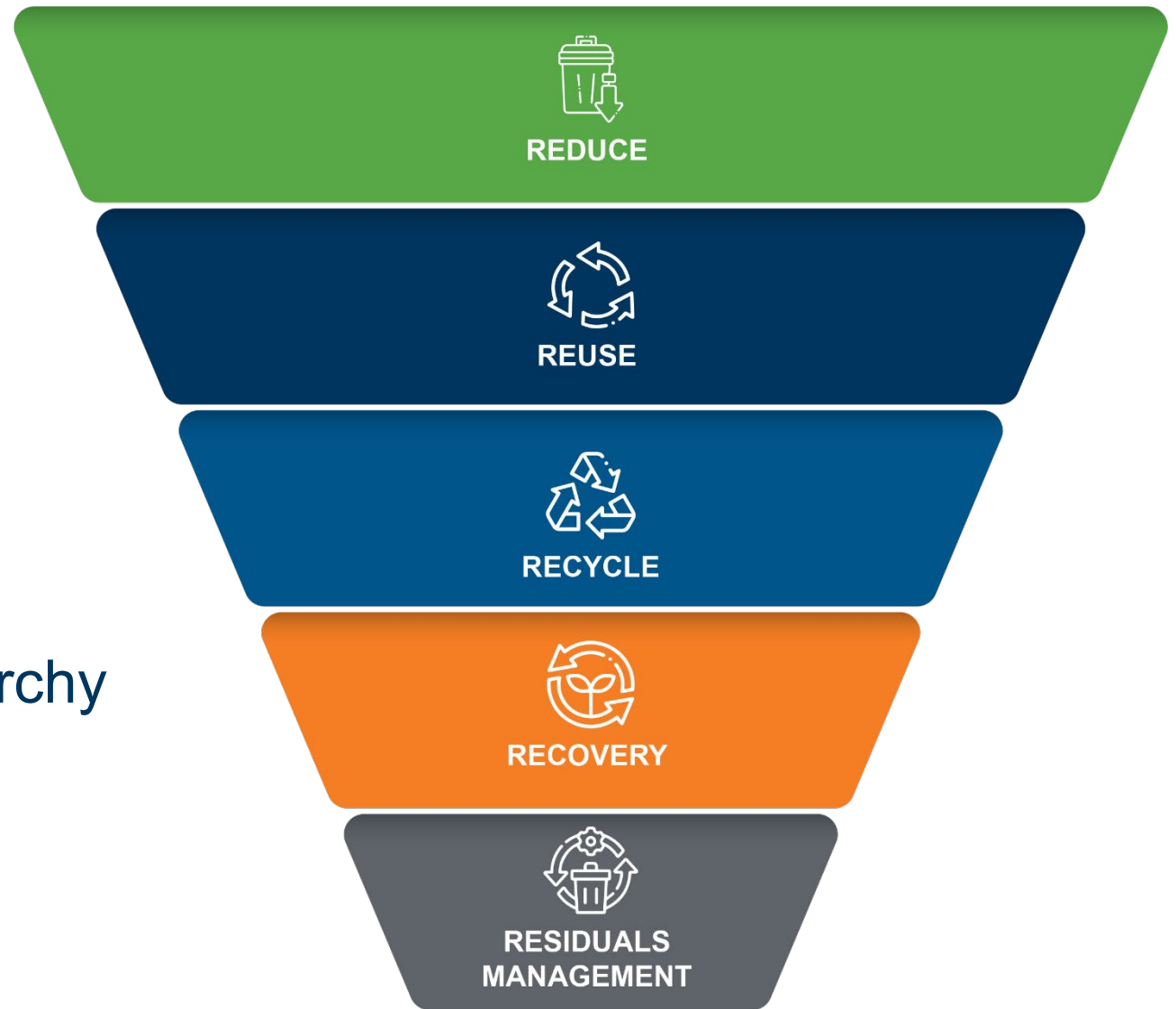
Plan Update Process

- The four-step process typically takes two years to complete
- Stakeholder engagement and public consultation is key to the entire process
- MH was engaged to support the Plan update

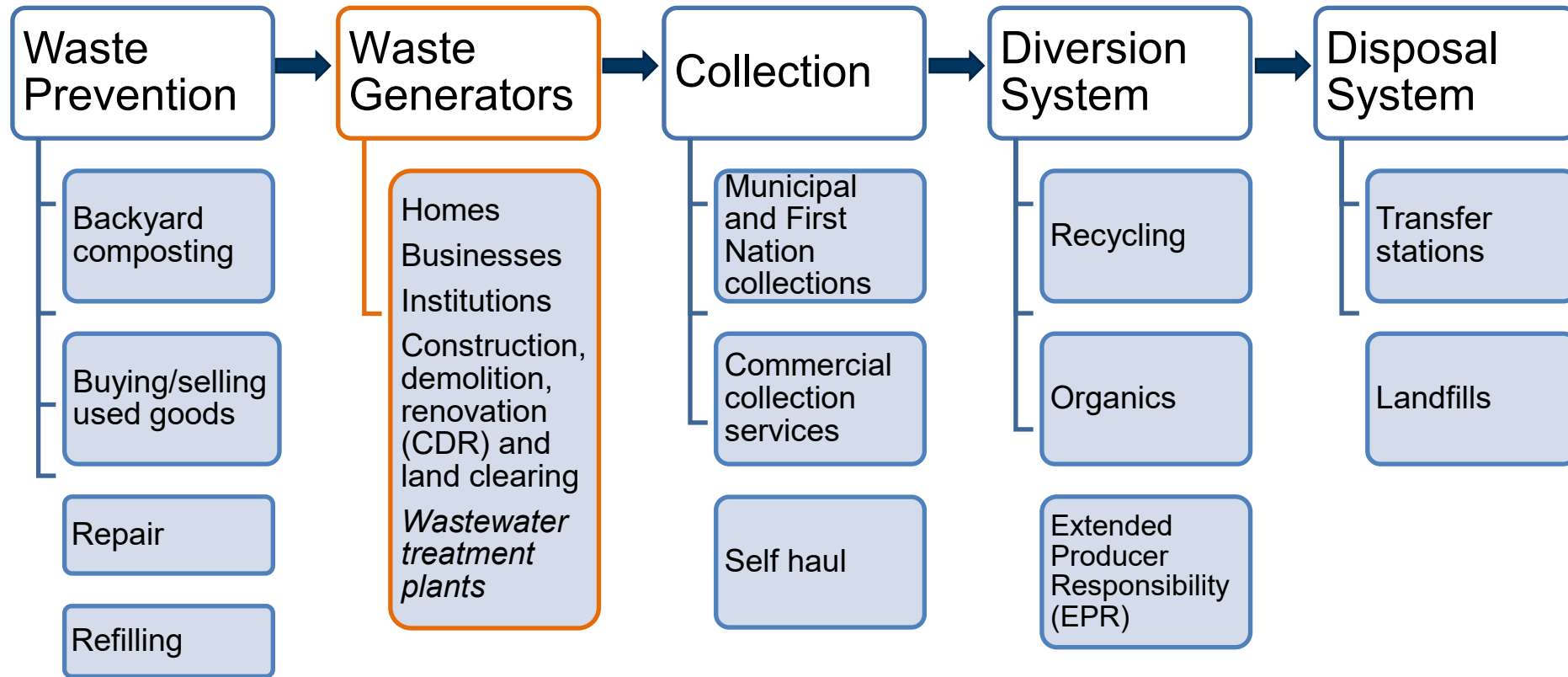


Current Waste Management System

The pollution prevention hierarchy
AKA the 'waste hierarchy'



System Overview



Community Programs for Waste Reduction & Diversion



- Waste Reduction Initiatives Program to support:
 - Community reuse and repair Composting and/or food waste reduction
 - CDR waste reduction, reuse, and recycling
 - Green waste reduction
 - Organizational recycling and waste reduction

Curbside Collection



Area	Recycling	Yard Waste	Food Waste	Garbage
District of Sechelt	Bi-weekly	Weekly	Weekly	Bi-weekly
shíshálh Nation Government District	Bi-weekly	Weekly	Weekly	Bi-weekly
Town of Gibsons	None	None	Weekly	Bi-weekly
Area A	<i>None - some residents have private collection services</i>			
Areas B, D, E, F	None	None	Weekly	Bi-weekly

Extended Producer Responsibility Programs

- Driven by the BC Recycling Regulation (legislation)
- Referred to as stewardship programs
- Requires the producers to set up collection and management system for products listed in the regulation
- Over 20 EPR programs in BC



Current Facilities



Organics and Recycling Drop-off



Organics

- Pender Harbour Transfer Station
- Sechelt - Salish Soils
- Gibsons - South Coast Residential Green Waste (no food waste or ICI organics)



Residential Recycling

- Gibsons - Gibsons Recycling
- Sechelt - Salish Soils
- Pender Harbour – GRIPS

The Sechelt Landfill

- Only operational landfill for garbage disposal
- Accepts some recyclables and waste for landfill disposal
- The landfill is expected to reach capacity in mid-2025
- The SCRD started to investigate options in 2021

Landfill
Expansion

New Landfill

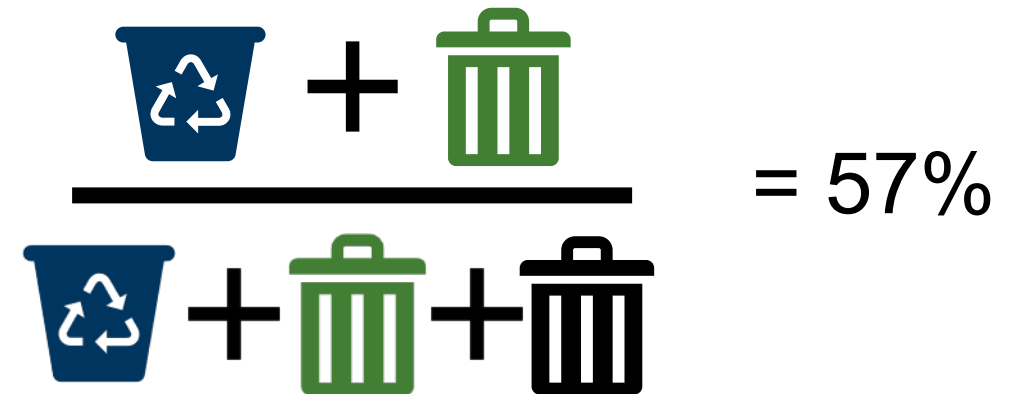
Transfer
Station and
Waste Export

Waste-to-
Energy

How is the Region Performing

- The SCRD diversion rate has increased from 51% in 2011 to 57% in 2021
- The diversion rate does not provide a good benchmark
- The SCRD's 2022 disposal rate of 379 kg/capita

$$\frac{\text{Tonnes Diverted}}{\text{Tonnes Diverted} + \text{Tonnes Disposed}} = \text{Diversion Rate}$$

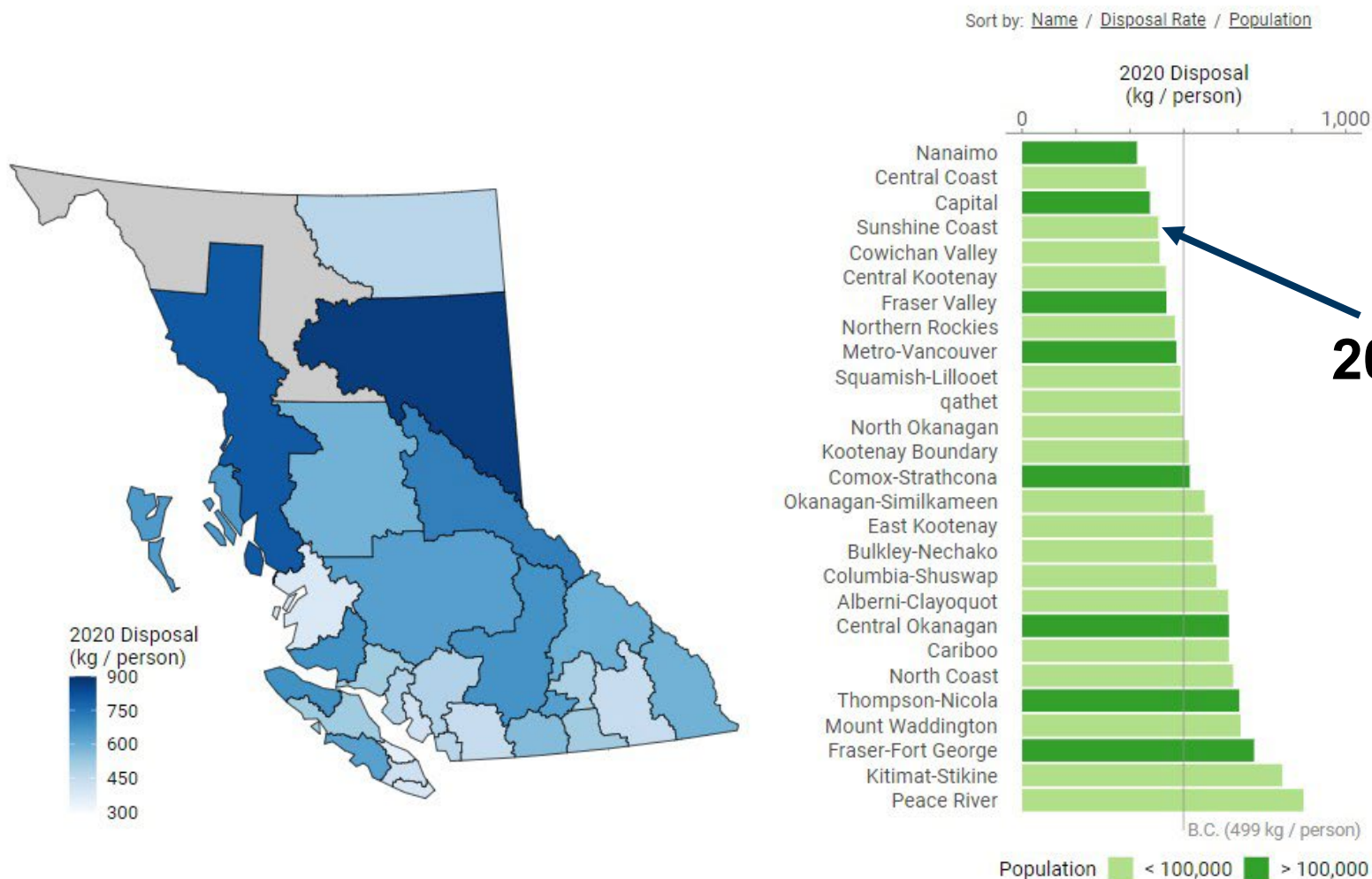


The diagram shows a fraction where the numerator consists of one blue recycling bin icon followed by a plus sign and one green trash bin icon. The denominator consists of one blue recycling bin icon, a plus sign, one green trash bin icon, and another plus sign followed by one black trash bin icon. To the right of the fraction bar is an equals sign followed by 57%.

$$\frac{\text{Recycling Bin} + \text{Green Trash Bin}}{\text{Recycling Bin} + \text{Green Trash Bin} + \text{Black Trash Bin}} = 57\%$$

Environmental Reporting BC

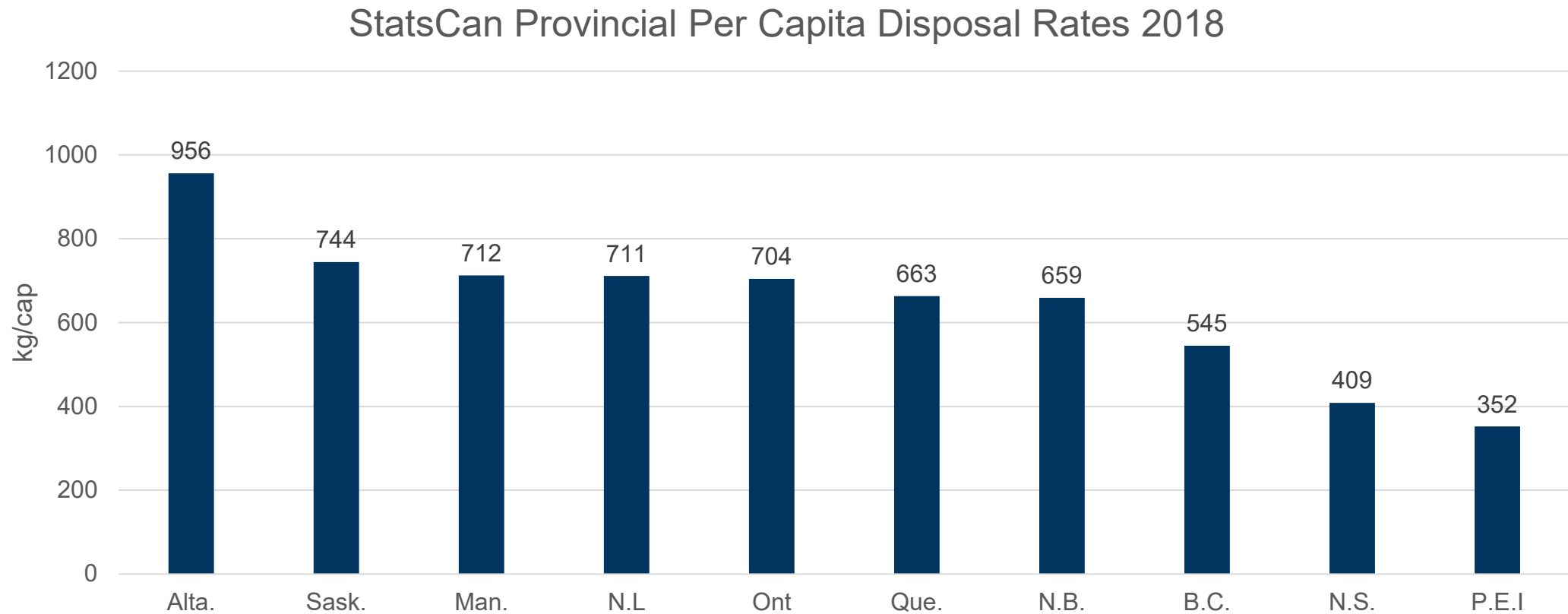
2020 Regional District Disposal Rates



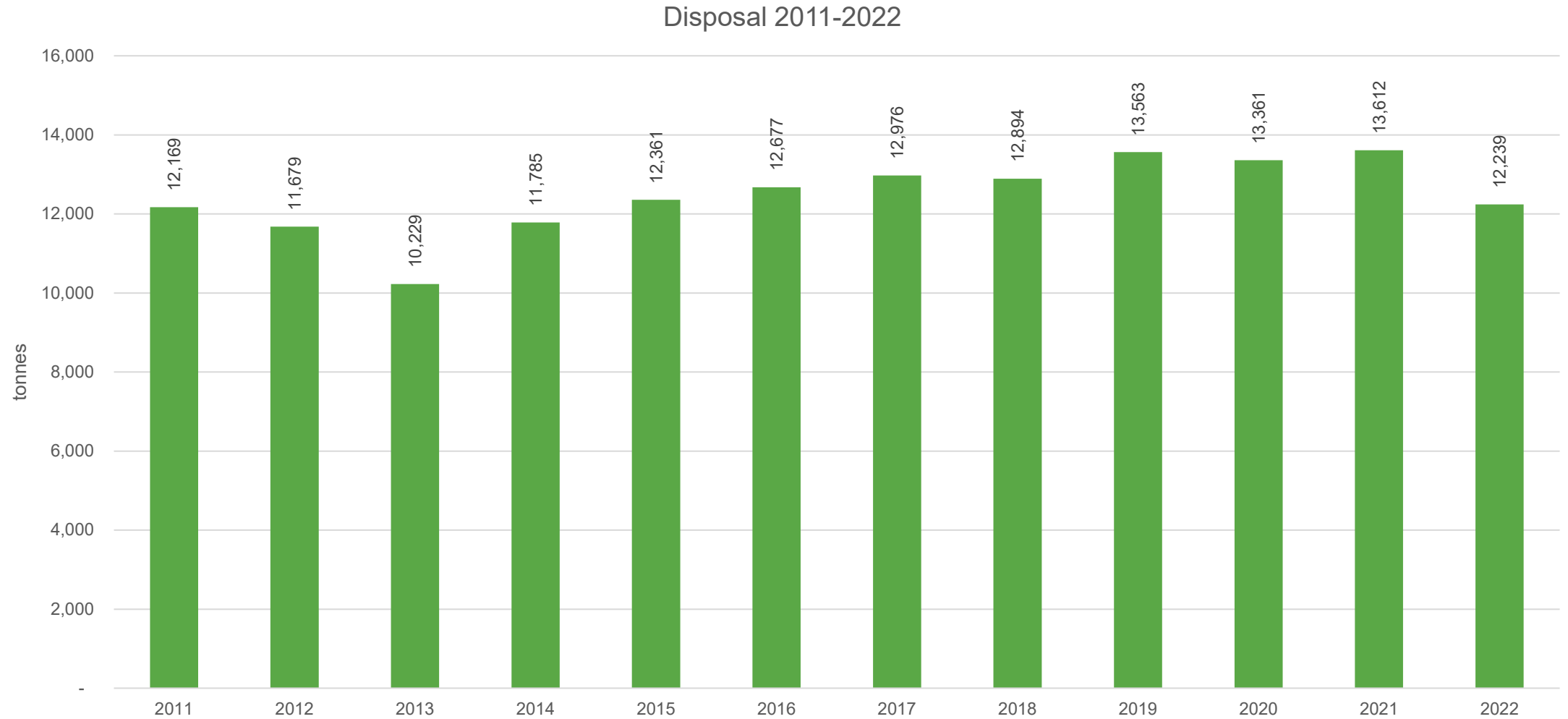
2020 Performance:
SCRD: 421 kg per capita

BC Average: 499 kg per capita

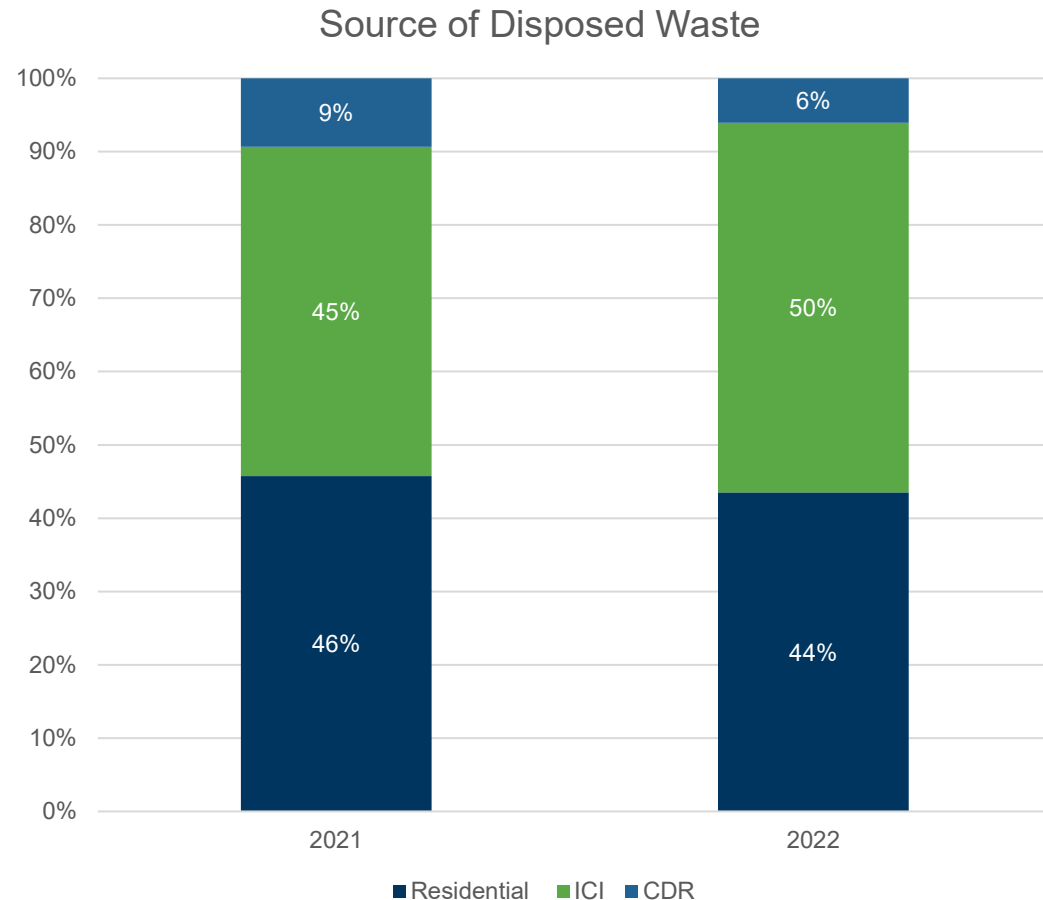
Provincial Disposal Rates 2018



SCRD's Disposal



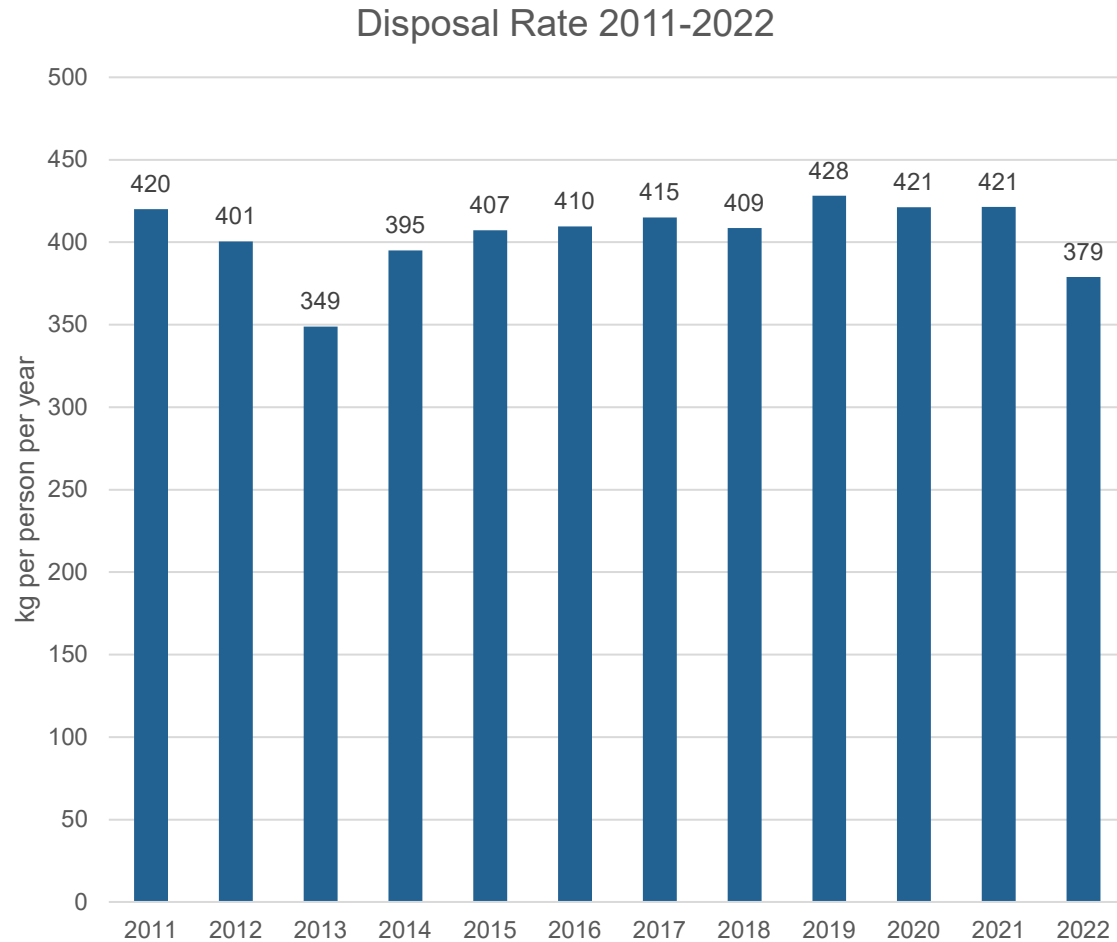
SCRD's Disposal



2022 highlights:

- Half of the disposed waste was generated by the commercial sector
- The residential sector: 44%
- The CDR sector: 6%

SCRD's Disposal Rates



- The disposal rate dipped in 2022 to 379 kg per capita per year

What's in the Landfilled Waste?

Common Materials in Residuals

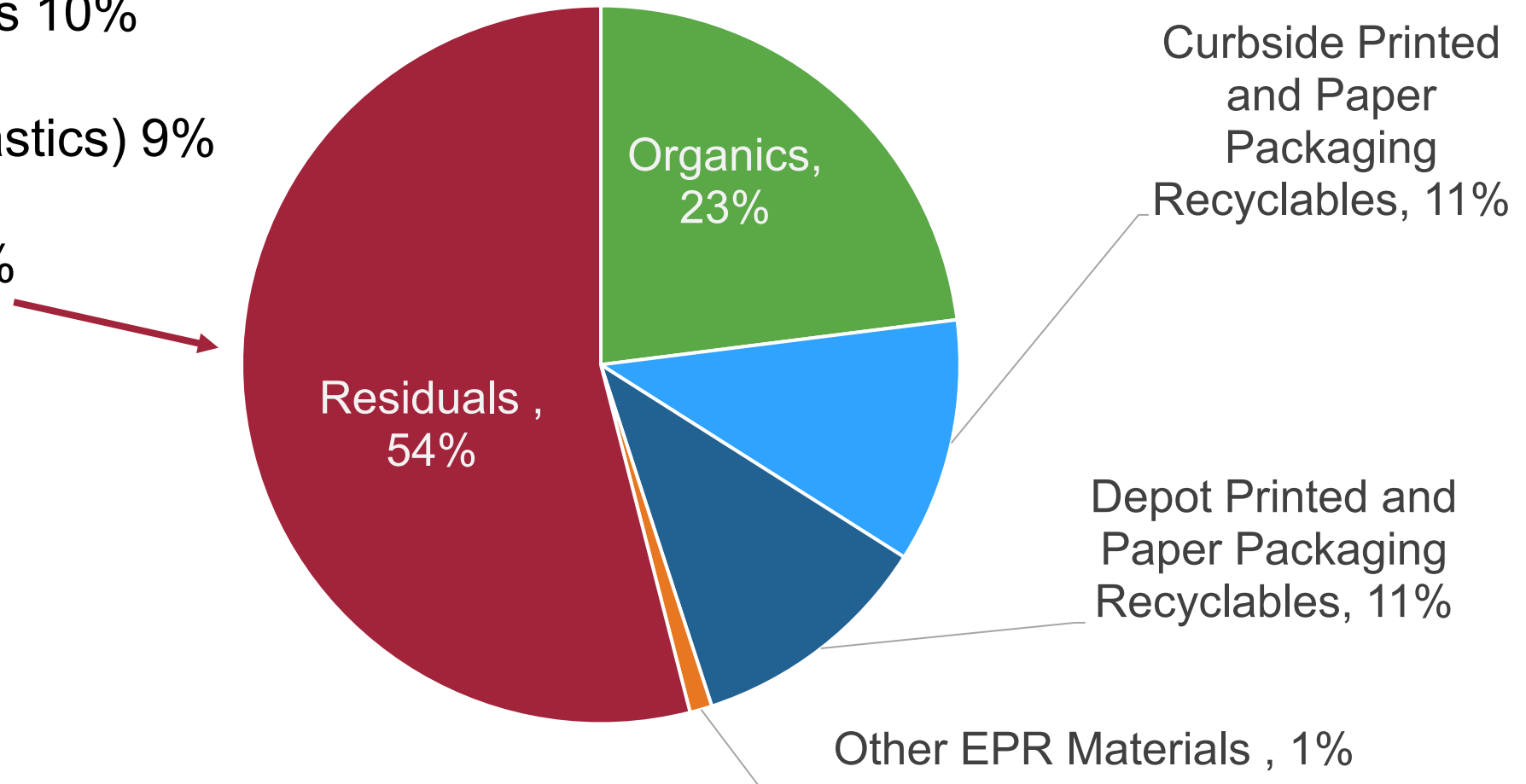
Building materials 10%

Textiles 7%

Furniture (not plastics) 9%

Pet waste 5%

Other plastics 5%



What's in the Landfilled Waste from Residents?

- The 2022 residential waste composition compared to that in 2014/15:
 - A 17% decrease of residential organics (28% was organics in 2022)
 - A 2% increase of residential recyclables being landfilled (14% was depot printed and paper packaging in 2022)
- 55% of the materials in residential landfill stream can still be diverted in 2022

What's in the Landfilled Waste from Self-haul & Commercial Customers?

- The 2022 waste composition compared to that in 2014/15 for landfilled waste from self-haul & commercial customers
 - A 4% increase in organics being landfilled (up to 20% was organics in 2022)
 - A 1% decrease in recyclables (10% curbside recyclables, and 9% depot recyclables)
- 40% of the materials in self-haul and commercial stream can still be diverted in 2022

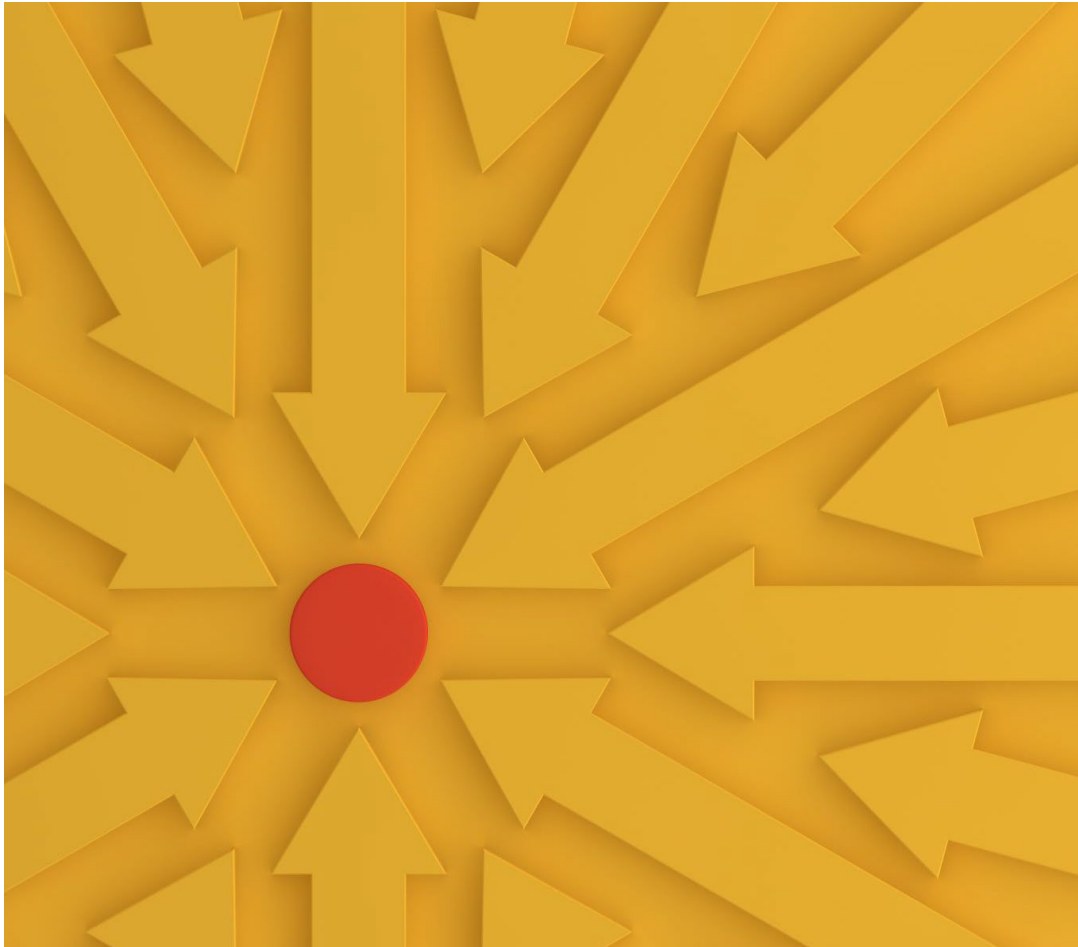
What's Left in the Landfilled Waste?



Building materials (wood and metal waste)

- Residential self-haul and commercial waste contains 4% of building materials
- Residential curbside waste stream contains 7% building materials
(12% of the curbside waste stream from Areas D, E, F)

The Vision and Goals in SCRD's Previous Plans



- Since 1992 - Provincial guidelines for preparation of SWMP's have required development of environmental guiding principles and regional objectives
- Since 2016 - Updates to the guide established new guiding principles

Provincial Guiding Principles 1994



1

The consumption of material and energy resources is set at a level which is ecologically sustainable.

2

The regional solid waste stream is reduced to the greatest extent possible, in accordance with the 3Rs hierarchy, and consistent with local resources and the nature of the regional solid waste stream.

3

The goal of environmental policy is zero pollution and the strategies for achieving that goal are in accordance with the precautionary principle.

4

Individuals and firms are enabled to make environmentally sound choices about consumption of resources and generation of waste through provision of appropriate information, including user-pay and market-based incentives wherever possible.

5

Reduction policies and strategies are developed through public consultation and are socially acceptable and cost-effective, based on full accounting of costs and benefits, both monetary and non-monetary.

2005 SWMP

Principles

- System must be environmentally sound
- System must be financially affordable and provide sufficient long-term disposal capacity
- System must be operated in accordance with the user pay principle
- System must be responsive and flexible to the needs of residents.

Vision

- Solid waste services are environmentally sound, sustainable and financially stable.
- Programs are developed using past experience, education, innovation
- Services are user pay, accessible, responsive, flexible, convenient and affordable
- The ultimate goal is zero waste

Objectives

- Provide clear information on strategies and programs to reduce solid waste according to 5R's
- 50% reduction in per capita disposal by 2010
- Implement best possible practices that will facilitate meeting or exceeding this target in an economically affordable fashion

2011 SWMP

Principles

- Provide clear information on strategies and programs to reduce solid waste according to the 5R's hierarchy
- Zero waste goal pragmatic and visionary
- System must be financially affordable and provide sufficient long term disposal capacity
- GHG reduction must be an integral part of Plan implementation

Vision

- Zero Waste.
- Social and Environmental Sustainability
- Financial Sustainability
- GHG Reduction

Objectives

- Strive to achieve zero waste
- Be consistent with goals of Community Energy and Emissions Plan
- Be financially affordable and provide sufficient disposal capacity
- Programs must be financially self-sustaining (user-pay)
- System must be responsive and flexible
- GHG reduction

Provincial Guiding Principles 2016



- 1 Promote zero waste approaches and support a circular economy
- 2 Promote the first 3Rs (Reduce, Reuse, Recycle)
- 3 Maximize the beneficial use of waste materials and manage residuals appropriately
- 4 Support polluter and user-pay approaches and manage incentives to maximize behavior outcomes
- 5 Prevent organics and recyclable from going into garbage wherever practical
- 6 Collaborate with other regional districts wherever practical
- 7 Develop collaborative partnerships with interested parties to achieve regional targets set in plans
- 8 Level the playing field within regions for private and public solid waste management

RDN Guiding Principles 2018



1

Promote the Zero Waste Hierarchy of highest and best uses and support a circular economy.

2

Maximize use of waste materials and manage residual waste appropriately

3

Support polluter and user-pay approaches and manage incentives to maximize behavior outcomes

4

Prevent organics and recyclable from going into garbage

5

Collaborate with other regional districts wherever practical

6

Develop collaborative partnerships with interested parties to achieve regional targets set in plans

7

Level the playing field within regions for private and public solid waste management

Plan Guiding Principles 2021



1. Zero Waste
2. Carrying Capacity
3. Moving up the Hierarchy
4. Informed Planning and Decision Making
5. Climate Change
6. Tools for Change
7. Consistent and Equitable Servicing
8. User Pay
9. EPR
10. Partnerships
11. Local Solutions
12. Level the Playing Field
13. Safety

Less is
more>

Services + Solutions for Reducing Waste

Breakout Session



- Vision, goals & guiding principles
- Questions:
 - Are these locally relevant?
 - Do we want to change any wording to reflect local needs or do we want to add a principle?

Review Findings



- 2011 SWMP Status Reporting
- Gap analysis to identify issues and opportunities

Review Findings – Gap Analysis

- Most strategies have been completed
- The SCRD has developed and implemented a Regional Organics Diversion Strategy
- Lowered disposal rate and improved diversion
- Disposal capacity is limited



Overview - Issues & Opportunities

Waste Prevention & Diversion

- Limited curbside recycling collection in some areas
- Improved regulatory requirements for ICI diversion
- Action to prevent single-use plastics
- Opportunity for local recyclers
- More provincial product stewardship programs
- Explore alternative recycling options for landfilled waste

CDR Sector & Non-Sector-Specific

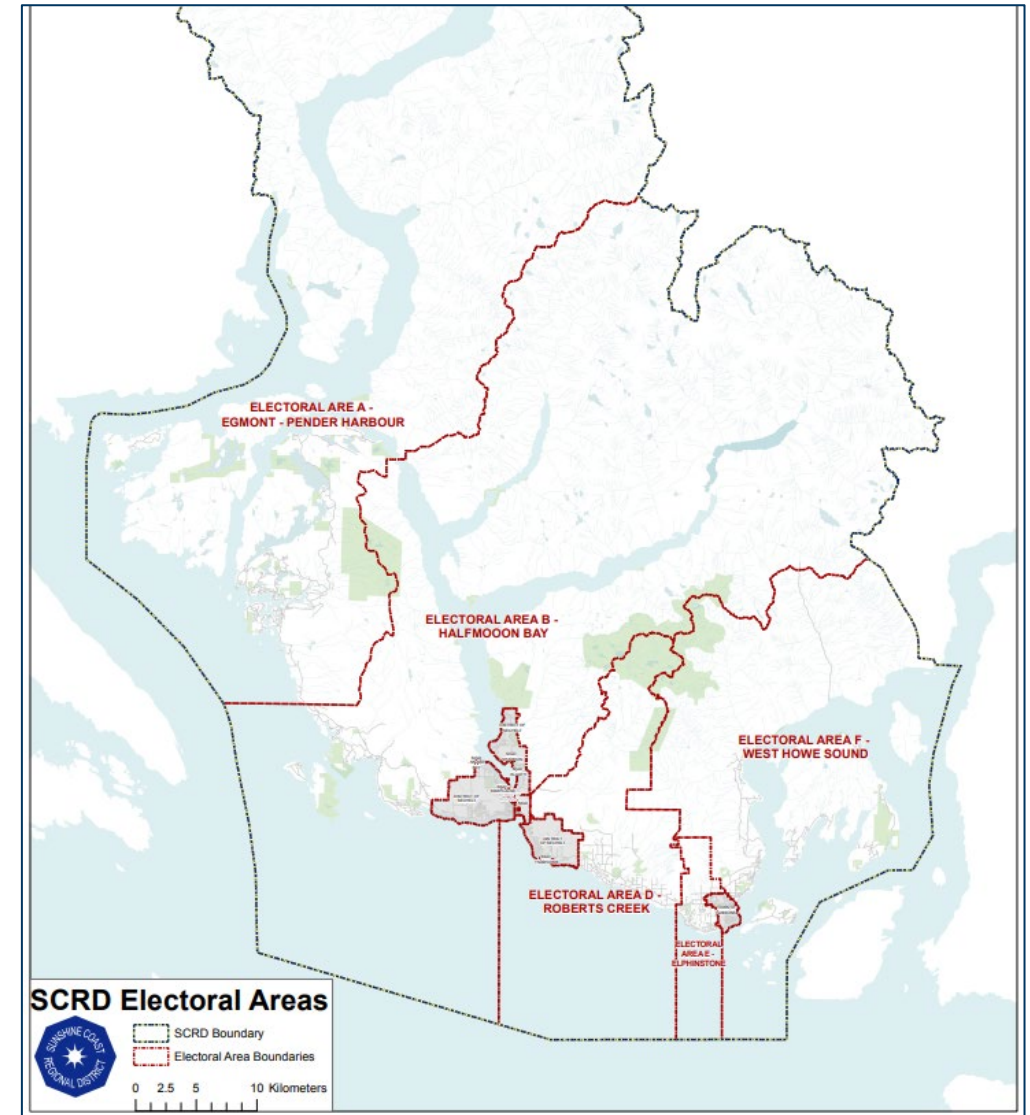
- Diversion of construction, demolition and renovation wastes
- Illegal dumping and marine debris
- Invasive species management

Residual Waste Management

- Siting of a potential new landfill
- Rising cost of landfill operations – system funding

Limited Curbside Recycling Collection in Some Areas

- Limited curbside collection in:
 - Area A (no curbside collection)
 - Area B,D,E and F (no curbside recycling collection)
 - Town of Gibsons (no curbside recycling collection)



Improved Regulatory Requirements for ICI Diversion

- Review options to mandate waste diversion of recyclable materials
- Need to improve enforcement of the organics disposal regulation (e.g., clear bags, increased resourcing)



Other Waste Prevention & Diversion Issues/ Opportunities

- Action to prevent single-use plastics
- Opportunity for local recyclers
- More provincial product stewardship programs (e.g., furniture, textiles, and books)
- Explore alternative recycling options for landfilled waste

More EPR Needed?

EPR Five-Year Action Plan 2021-2026

Household Single Use Items and more packaging

- Regulated in 2021
- Operational January 1, 2023 by Recycle BC
- e.g., straws, cutlery, party supplies, food storage containers, freezer bags, bubble wrap, etc.

Regulate more products 2023

- Mattresses and foundations
- More aerosols, pressurized cylinders, fire extinguishers
- More batteries
- Medical sharps

Industrial, Commercial and Institutional Packaging

- ICI Packaging Baseline Report Complete
- Currently establishing rural and remote working group
- Identify policy approach by 2025

Diversion of CDR and Land Clearing wastes

- 2011 SWMP Initiative 13 Deconstruction and Salvaging – Not Started
- No action has been taken on implementing financial incentives and faster permit processing periods
- The SCRD, member municipalities, and the sNGD to address construction, demolition & renovation, and land clearing waste together

Non-Sector-Specific Issues/ Opportunities

- Illegal dumping and marine debris
 - Need for better data
 - Need for disposal program for boats and RVs
- Invasive species management
 - Limited options for destroying invasive species

Residual Waste Management

- A new landfill or waste export is costly
- The tipping fees need to fund disposal costs
- Tipping fees will be influenced by the remaining useful life of the current landfill and the selected long-term waste disposal option



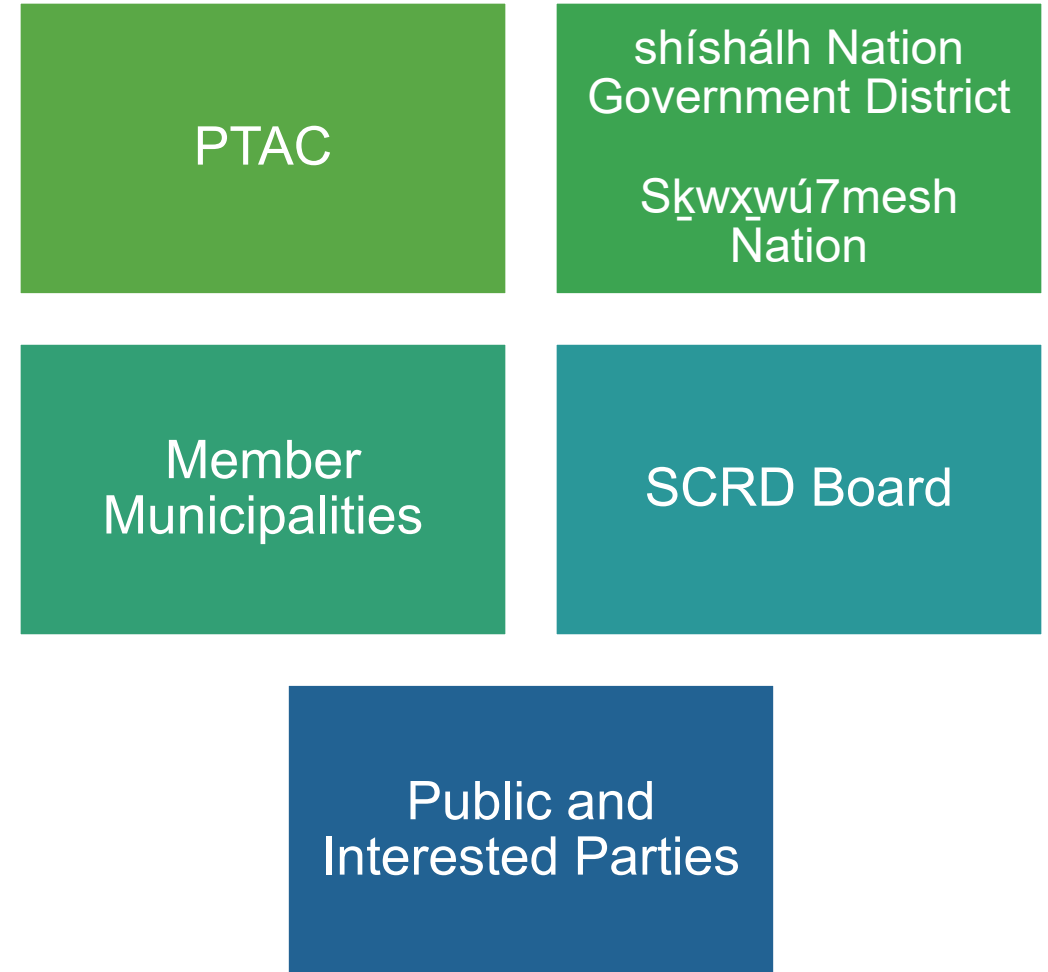
Discussion Session

- Emerging Issues & Opportunities
- Questions:
 - Do you have anything to add to these topics?
 - Have we missed anything significant?



Next Steps

- A Communication & Engagement Plan will identify the overall approach to engagement



Next Steps

2. Set Plan Direction

- Establish PTAC
- Seek public feedback on issues and opportunities (Engagement Period 1)

3. Evaluate Options

- Hold PTAC meetings to discuss/ evaluate options
- Identify preferred options in Draft Plan



1. Initiate Process

- Assess the current system
- Develop Communications and Engagement Plan

4. Prepare & Adopt the Plan

- Undertake public consultation on Draft Plan via survey, meetings, etc., (Engagement Period 2)
- Address feedback and finalize the Plan

Next Steps

Future meeting topics

- Engagement approach, evaluation criteria and early feedback from the public (June 6)
- Waste Prevention & Diversion Strategy Options (Fall 2023)
- Disposal options and system financing (2023/24)
- Draft SWMP (2024)



Questions? Comments?

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