Improving Nova Scotia's Waste Management Framework

April 6, 2022



AECOM





A story of successful 'diversion'

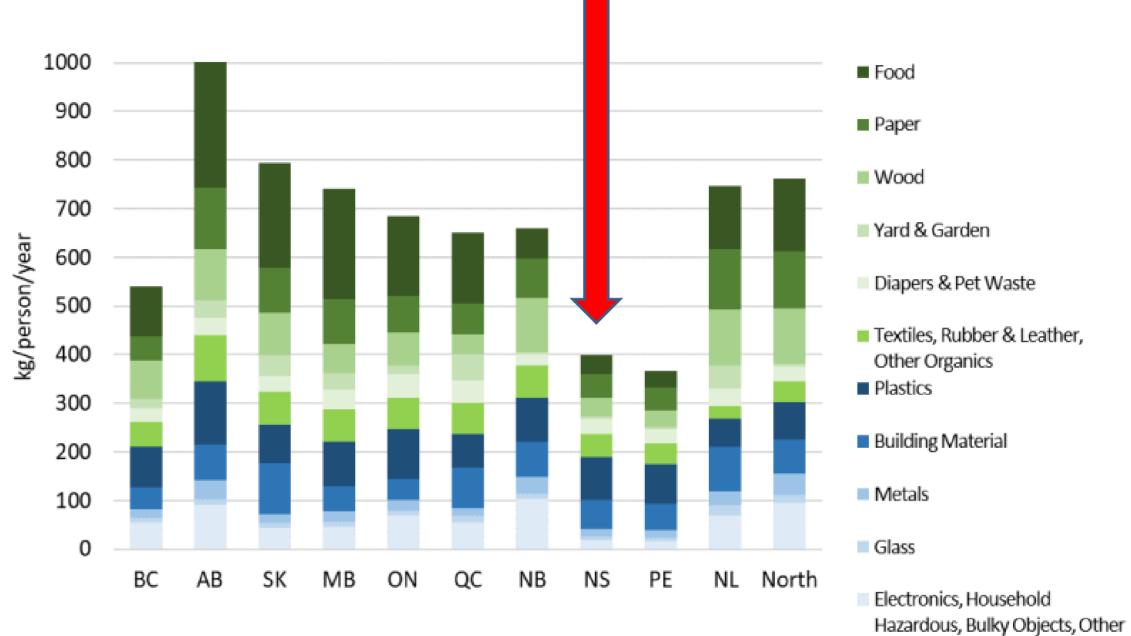


Figure 4.6 Per capita waste disposed, by material type (2016)

Source: Environment Canada and Climate Change, 2020

Materials Banned From Disposal Sites in Nova Scotia

Recycling and Waste

About Us

Regulations

Nova Scotia 's Strategy

Waste Resource Programs

Facilities

Municipal Collection Information

Divert NS

Other Resources

Links

- Desktop, laptop, and notebook computers, including CPUs, Keyboards, mice, cables and other components
- Computer monitors
- Computer printers, including printers that have scanning or fax capabilities or both
- Televisions
- Redeemed beverage containers
- Corrugated cardboard
- Newsprint
- Used tires
- Automotive lead-acid batteries
- Leaf and yard waste
- Post-consumer paint products
- Ethylene glycol (automotive antifreeze)
- Steel/tin food containers
- Glass food containers
- #2 HDPE non-hazardous containers (ice cream containers, plastic jugs, detergent) bottles, etc.)
- Low density polyethylene bags and packaging
- Compostable organic material (food waste, yard waste, soiled and non-recyclable) paper)

...but unable to take the next step towards achieving 300 kg / capita goal or to update regulations to add EPR ...



1996 Solid Waste Resources Management Regulations

waste. Not going to waste.

1995

ng Our Path Forward: blic discussion er about solid te regulation ova Scotia

> We want your input on the way solid waste is regulated in Nova Scotia.

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NOVA SCOTIA

2011: EPR, improved regional plans

SOLID WASTE REGULATION PUBLIC DISCUSSION

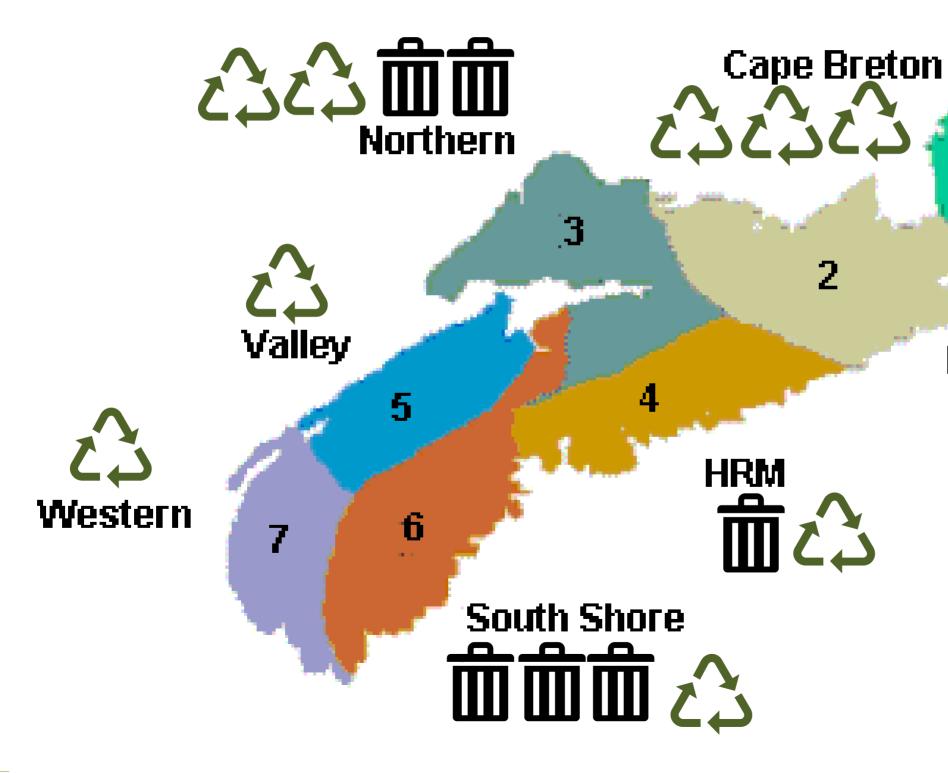
what we hearc

WINTER 2015



2015: EPR for **PPP and SWMP**

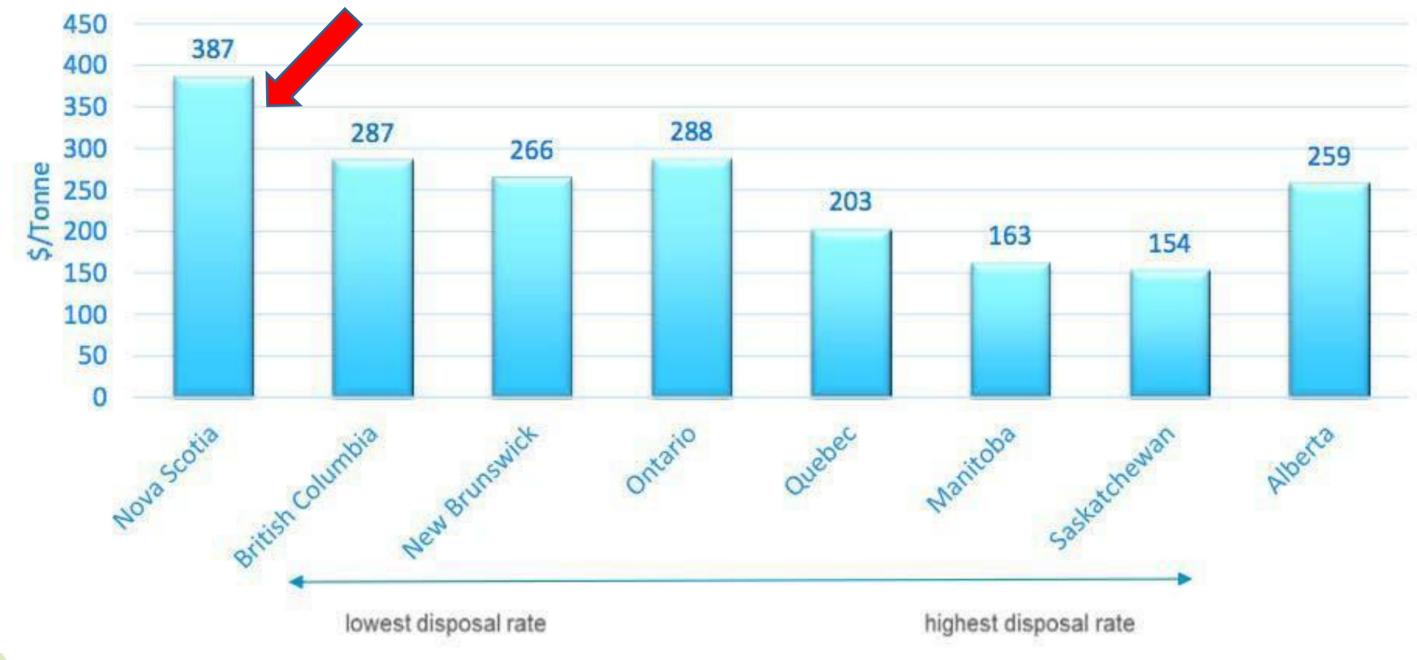
7 Waste Sheds / Planning Regions 7 Landfills & 9 MRFs



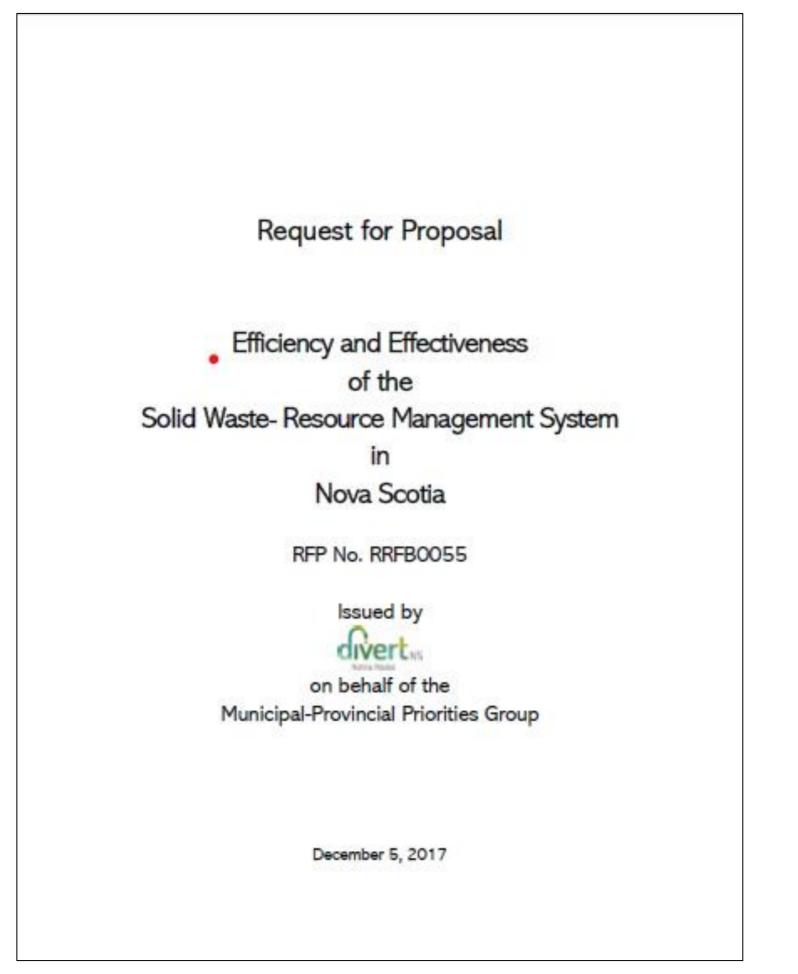


Source: Nova Scotia Environment, n.d.

Gross Waste Management Operating Costs By Province



Source: Nova Scotia Environment, 2017



- Impacts of coming changes
- Muni's role in future systems, including EPR

Net systems costs and revenues



Divert NS, on behalf of Municipal-Provincial Priorities Group

Efficiency and Effectiveness of the Solid Waste Resource Management System

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Date: September 9, 2019 Project #: 60568061 (440)

https://divertns.ca/sites/default/files/resea rchreportsfiles/2021-09/MunicipalEfficiencyEffectivenessStudy.p df

Finding #1: Disconnect in roles and responsibilities a root problem

Government of Nova Scotia

Final decision maker in setting legislation and regulation.

	Nova Scotia Environment Drafts and enforces waste-resource legislation and regulation; established regions; created and directs Fund; created Divert NS; develops EPR agreements	Departmer Drafts and er Intermunic
	Regional Chairs Committee Are conduits of information to and from provincial bodies	
	7 Regions Obligation to implement SWMP to meet provincial 50% target; are conduits for information sharing; no authority over muni's	Nova Scotia For Signatory to Pa of munici
	Sub-regional planning (Regions 1, 2, 3)	
Where decisions	are **50 municipal units**	

Determine budgets, invests, ensure waste and recycling services exist, and creates & enforces bylaws

Regional Coordinators / Solid Waste Managers

Implement programs, enforce, P&E

Pubic

Make decisions about their participation in the system, and how they will vote in elections

Blue = decision makers Beige =influencers

actually made

ent of Municipal Affairs

enforces legislation regarding icipal Services Agreements

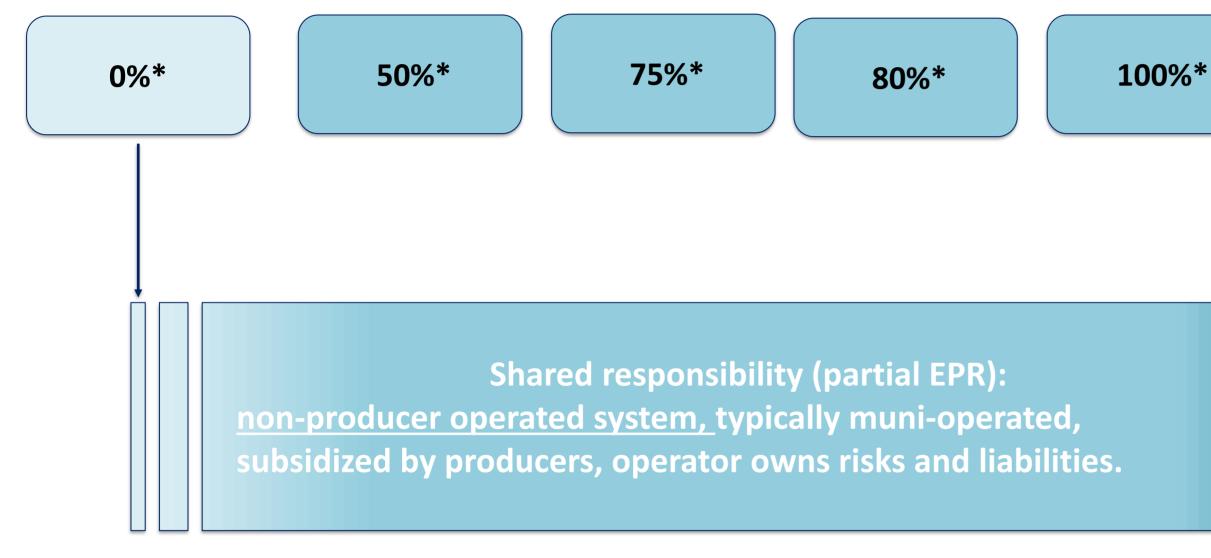
Federation of Municipalities

Partnership Framework, voice cipalities for government

Decision making hierarchy

Finding #2: Role, costs and opportunities for municipalities would vary by the EPR model chosen.

Product Stewardship Spectrum

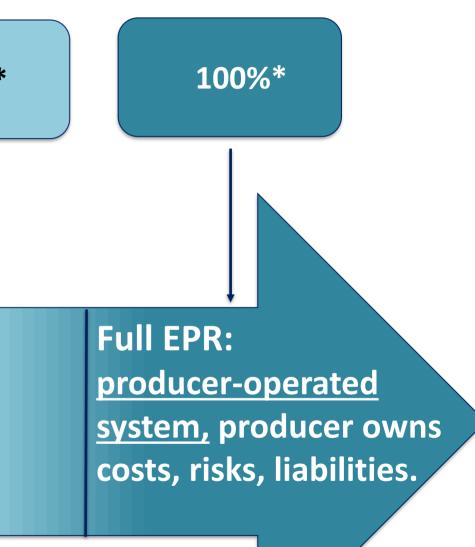


e.g., government responsibility

per cent of producer funding obligation *

Tomchyshyn London,, Recycling Council of Alberta 2017

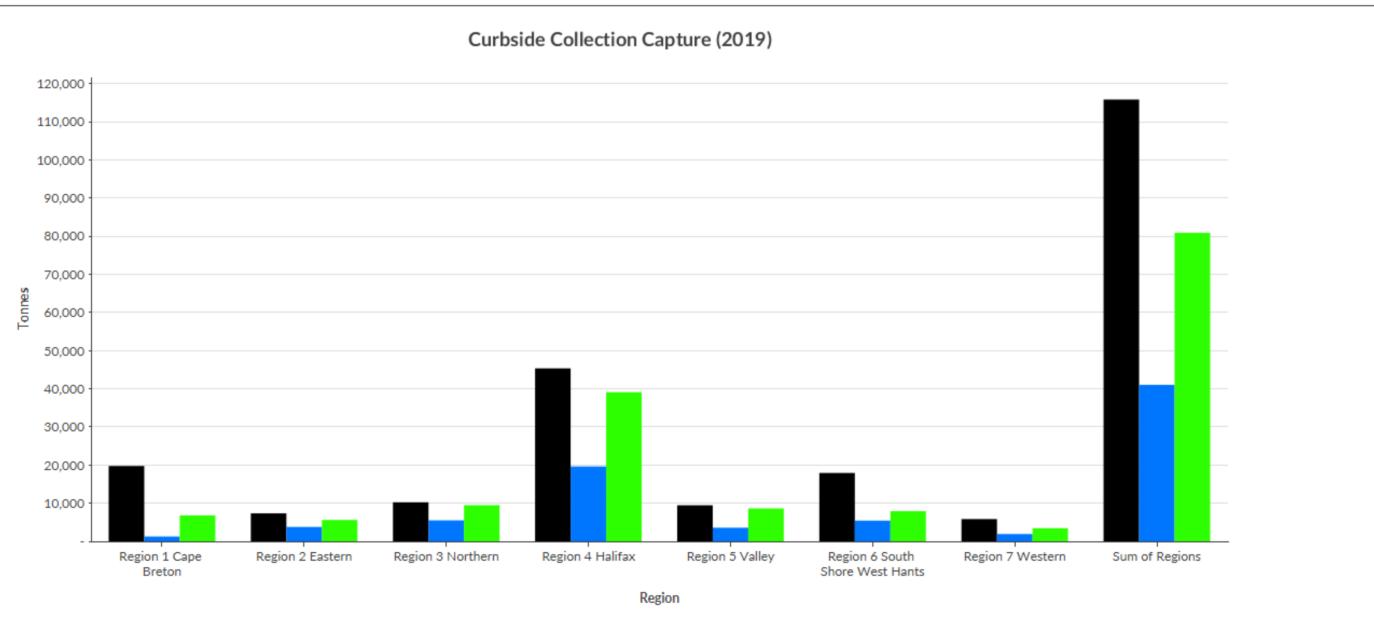




Finding #3: Nova Scotia collects a lot of data in its Datacall but not 'good or useful data'

- **1.** Any cost savings will vary by choices made across regions
- 2. Nova Scotia needed a model to activate their provincial data so that it could be used for local planning –e.g., 'what if' scenarios and forecasting - requires high-value data
- 3. An output of the work: a base model in Quantrix that could be updated (see examples)

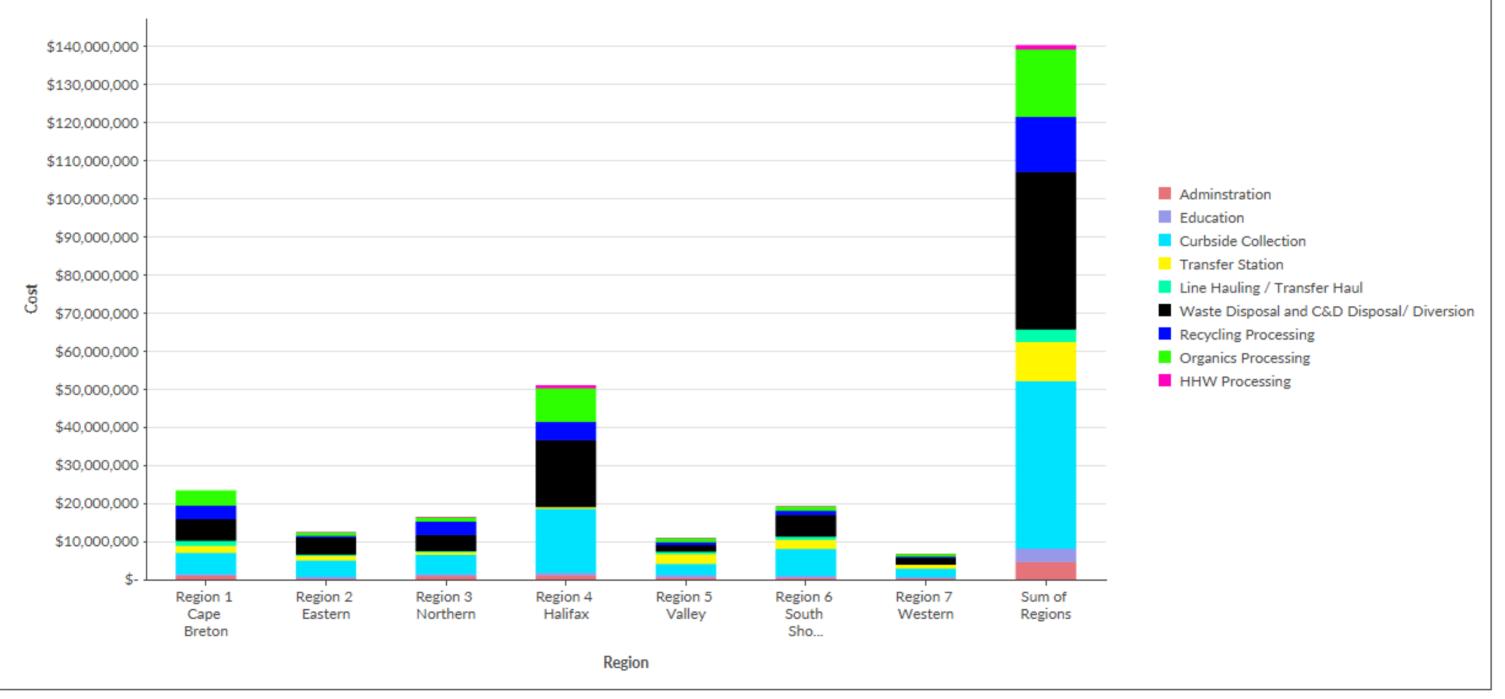
Financial Modelling – **Municipal Collection Capture**



The projected volume of waste captured by municipal curbside collection = ~ 238,000 tonnes.

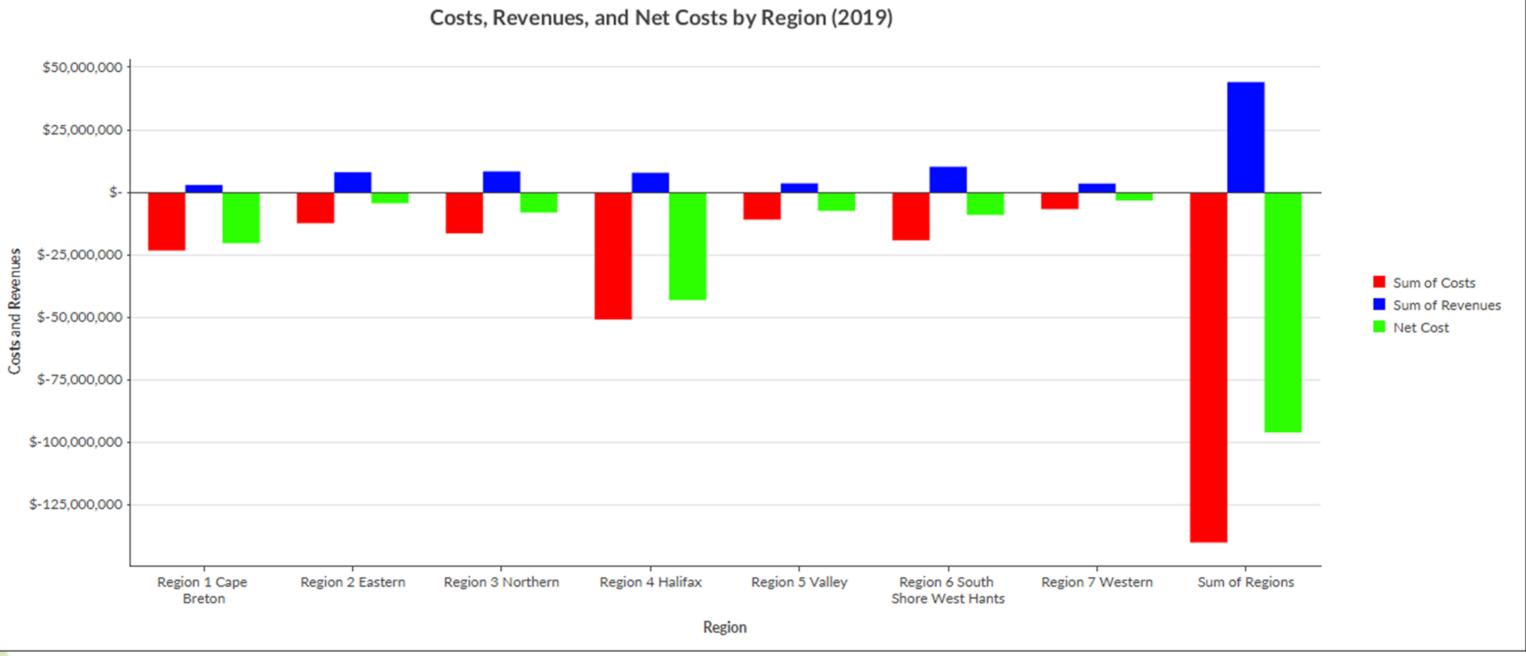
Financial Modelling – System Costs

Cost Summary by Region (2019)



In 2019 the estimated cost of Nova Scotia's public waste management system: ~ \$140 million

Financial Modelling –Net Cost

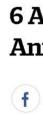


Costs were ~ \$140 million; revenues \$44 million; and net costs \$96 million

2 years later

- Report was used to build the case for EPR
- NS now consulting on a 'full' EPR model
- No closures in landfills or MRFs... yet...
- Was an 'uprising' in one Region, driven by a local decision maker, now settled

Nova Scotia
Nova Scotia pre plastic, paper a
f 🔰 🛛 🥶 in
Extended producer respor
Taryn Grant · CBC News · F





eparing to make producers pay for nd packaging waste



nsibility transfers costs from municipalities to industry

Posted: Dec 10, 2021 4:08 PM AT | Last Updated: December 10, 2021



Nova Scotia

6 Annapolis Valley communities are suing Annapolis County over waste dispute



'No municipal disagreement should find itself in a court of law,' says Kings County Mayor Peter Muttart

Pam Berman · CBC News · Posted: Sep 06, 2019 6:00 AM AT | Last Updated: September 6, 2019



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Thank you!

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