Project to Improve Waste Statistics

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Delivering insight through data for a better Canada

Project to Improve Waste Statistics

- The Environment Statistics Program

- Measuring plastics and plastic waste

- Changes to existing surveys

Environment Survey Program at Statistics Canada

- Environment division conducts surveys in following areas:
    - Environmental protection expenditures (business)
    - Environmental goods and services, revenues (business)
    - Farm management (business)
    - Agricultural water use (business)
    - Industrial water use (business)
    - Waste management (government and business)
    - Household environmental practices and behaviours (household)

Project to Improve Waste Statistics

- Context
  - Ocean Plastics Charter
  - Canada-wide Strategy on Zero Plastic Waste
- Need to measure plastics and plastic waste
- We are in the very early stages of the project

How to measure?

- Consultations
  - Need the input of experts in the field
  - Will be reaching out to some of you over the course of the next few months
- Changes to the Waste Management Industry Survey
  and the Households and the Environment Survey
- Changes to other StatCan surveys and use of existing data sources; modeling using Accounts/SUTs

Three categories of plastics and plastic waste

Single use disposable plastics

Plastic packaging

Durable plastics

Single use disposable plastics

- How to define "single use disposable"?
    - Intended by producer to be used only once and with a usable life span of under one year?

- What products belong here?
    - Work has started with ECCC on developing a taxonomy of plastic goods.
    - Overlap with packaging materials
    - Include both domestic and imported goods?

- Possible measurement tools
    - Supply/Use tables may be used to model/measure production and final consumption.
    - Changes to the Households and the Environment Survey could allow us to gather qualitative data at the household level.

Packaging plastics

- How and where to measure the domestic production, use, diversion (recycling or re-use) and disposal of packaging materials.

- Only plastics, or should we measure all packaging materials like the National Packaging Survey did in the late 1990`s?

Durable plastics

- How to define "durable"?
  - Starting point: Intended by producer to have a usable life span of over one year

- What products belong here?
  - Similar to single use plastics, a taxonomy is required to account for items such as:
    - Vehicle plastics, electrical and electronic products, furniture, polymer-based textiles
  - Domestic production at a fine level of detail will be challenging.
  - How to handle imports?
  - End-of-life: how much is disposed of vs. recycled?

- Possible measurement tools
  - Supply/Use tables may be used to model/measure production and final consumption.

Measurement challenges

Two important steps before accurate measurement can be made:

1. Definitions/classifications
   - We have to know what it is we are measuring
   - Standard industry classifications or product codes either too broad or don't map well to plastics

2. Determine best point in product cycle to take measurement
   - What is the process/path through the economy?
   - This will assist in determining measurement points
     - Production?
     - Intermediate and final consumption?
     - Recycle/disposal?
   - Need to understand the flows of plastics through the economy (material flows)

Statistics Canada / Statistique Canada

Canada

Product stewardship and end-of-life processing

- WMIS currently only measures essentially "final" stop in waste management
  - Disposal at landfills and incinerators
  - Processed materials coming out of MRFs

- What is happening post-MRF?
  - Need to reach recycled material brokers
  - What about post-MRF (e.g., use as a feed stock or in a re-manufacturing process)
  - How much is ultimately finding its way to disposal/export?

- Missing some EPR data
  - Will become more important in coming years
  - Almost essential in terms of dealing with a complex material like plastic, in terms of its integration into so many products

Next steps…

1 **Proposed changes to surveys**

- Waste Management Industry Survey – details on disposal / diversion
- Household Environment Survey – behaviour-related content

Other data collection approaches

- Statistics Canada Physical Flow Accounts
- Administrative data sources
- Establish partnerships with stewardship organizations
- Waste characterisation studies

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Waste Management Industry Survey

Estimating types and amounts of diverted residues going to landfill

Expand sample to include brokers who buy/sell recycled materials

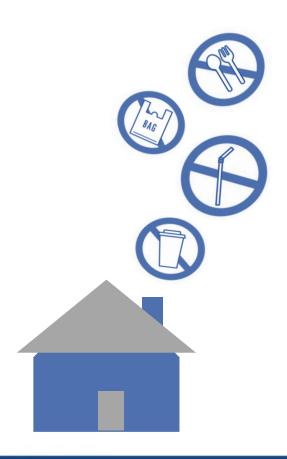**Enhance waste / recycling export questions**

Modeling to produce off-year estimations

Households and the Environment Survey

- Content review scheduled for next year

- Will be considering changes to the content based on the needs of the plastics reduction initiative and other waste-related household behaviours

- Hope to collect statistics that will feed into some qualitative indicators
  - For example, the proportion of households who report a behaviour that is linked to plastic waste reduction

Thank-you!

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