

VALUE FROM WASTE

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AGENDA

Why Waste?

Waste Context

Waste Management in NL

Examples of Waste Businesses

Ideathon Prompt

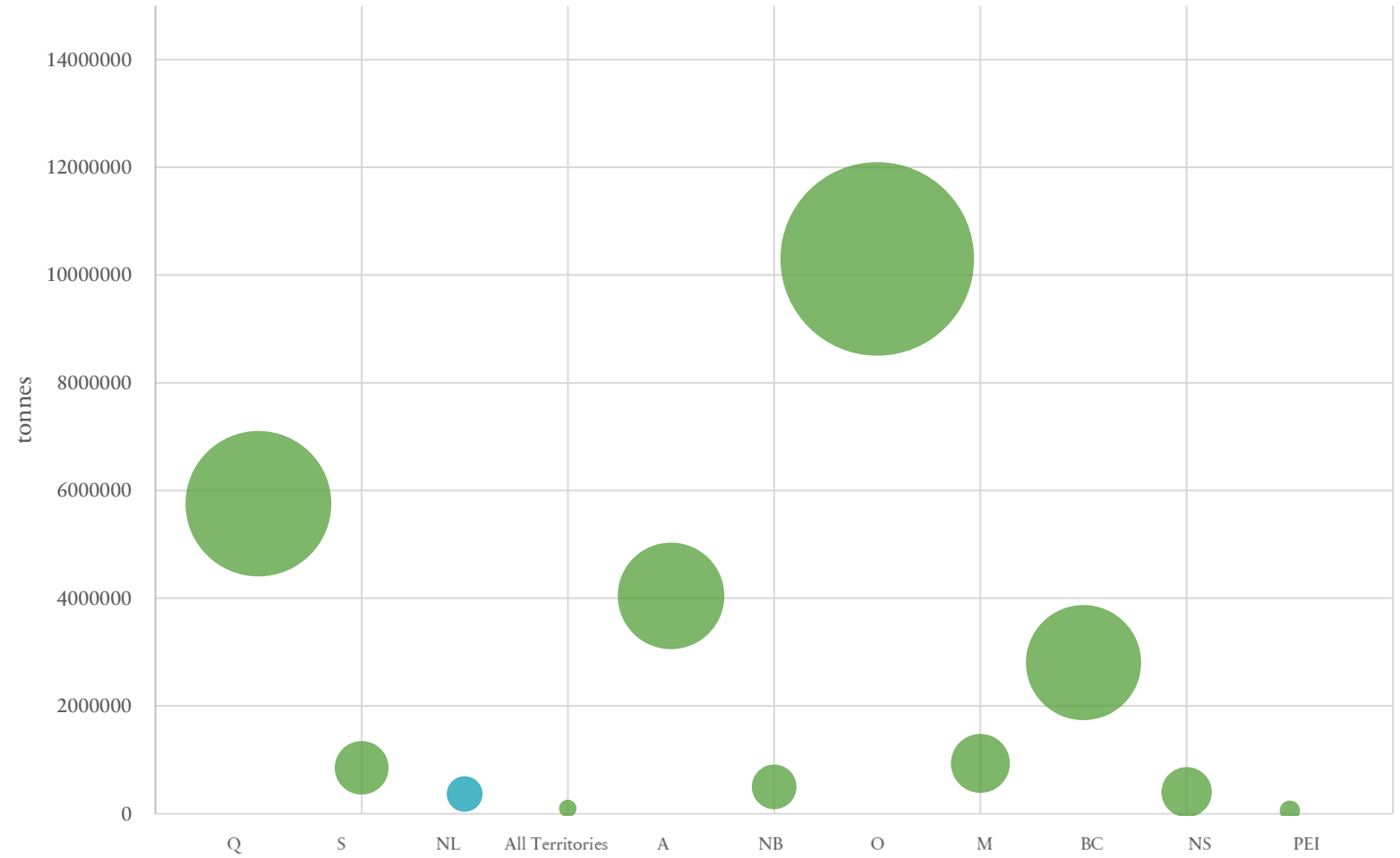


FROM 2002 TO 2020 THE AMOUNT OF SOLID WASTE GENERATED IN CANADA INCREASED BY 17%

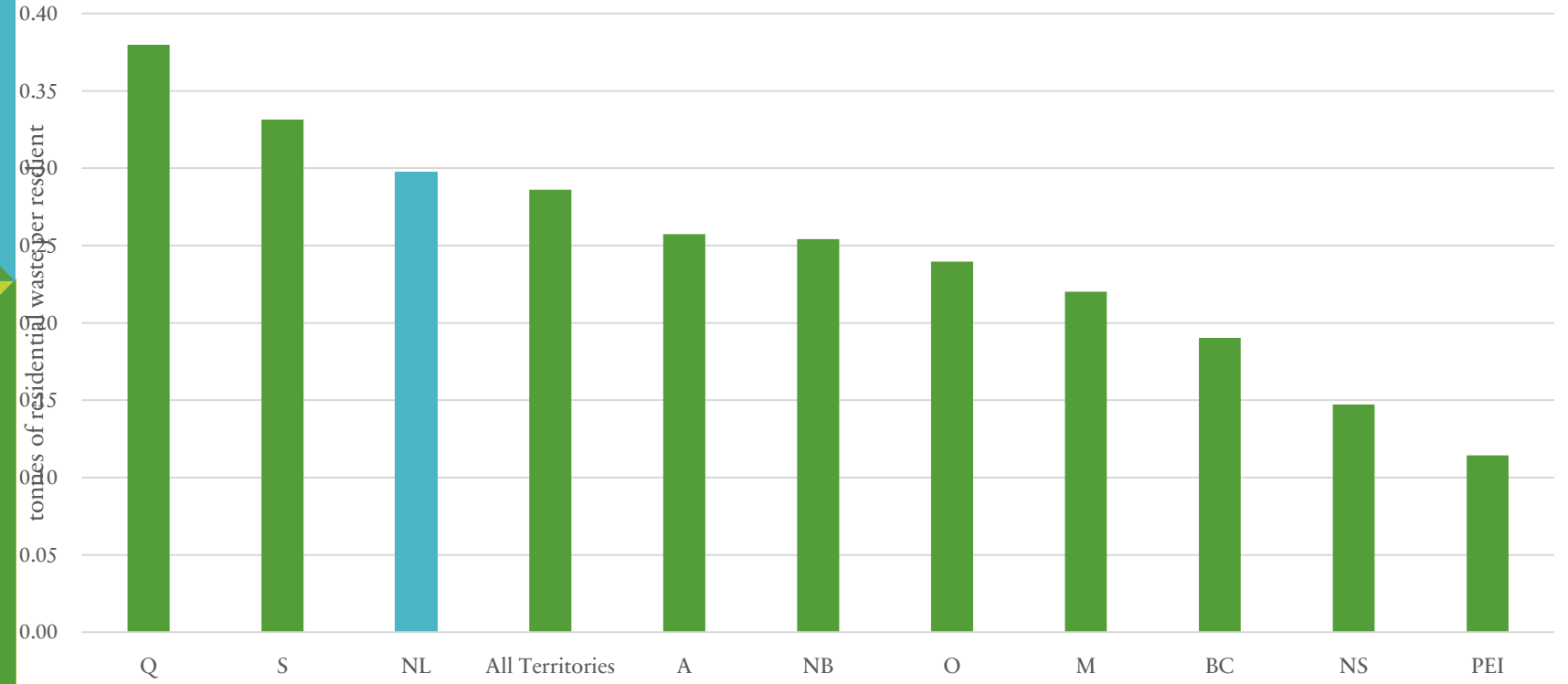
27.5% of this waste was
diverted while the remaining
72.5% was sent for disposal

Federal goal to reduce waste
by 30% by 2030

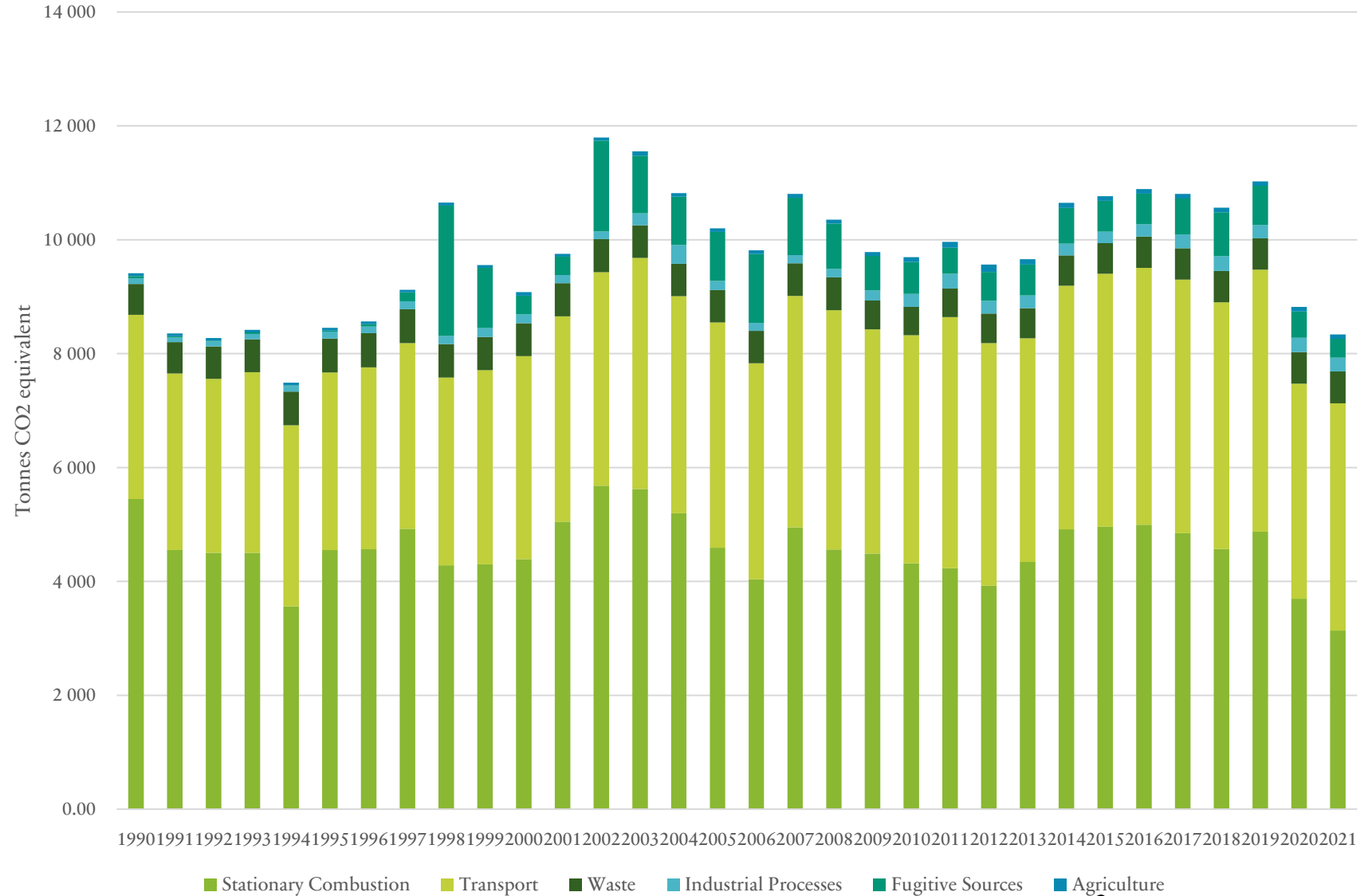
Waste per Province by Population



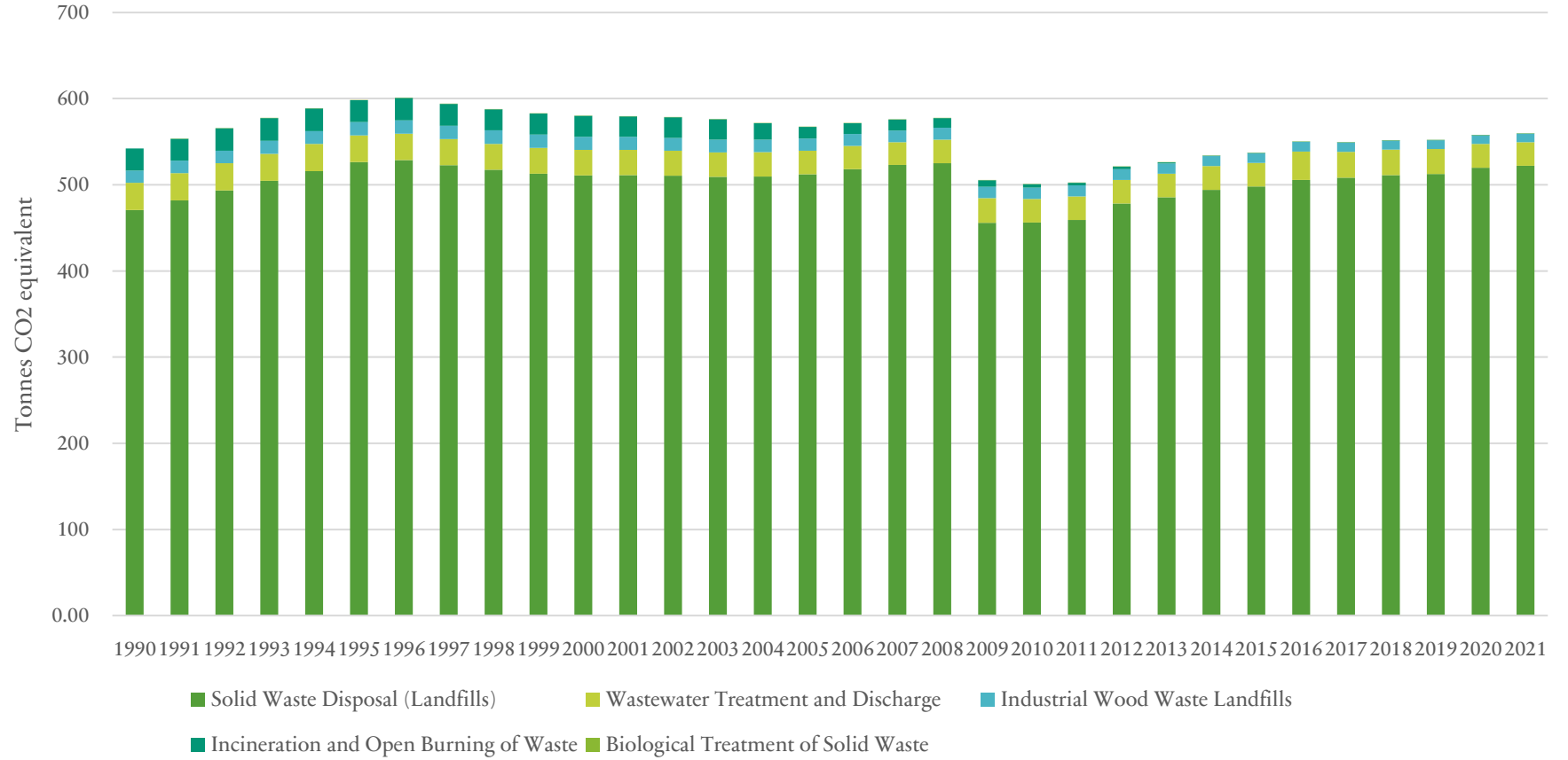
Breakdown of residential Waste per capita



NEWFOUNDLAND EMISSIONS



WASTE SPECIFIC EMISSIONS



WASTE TERMS

Circular Economy

Recycling

Biomass

Compost

Biodegradable

Solid Waste

Waste to Energy

Biochar

Tipping Fee

WASTE STREAMS



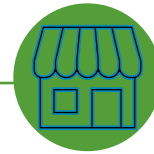
INDUSTRIAL

Forestry
Fishery
Agriculture
Mining
Energy
Construction



RESIDENTIAL

Homes
Apartment Buildings
Neighborhoods




COMMERCIAL

Retail Stores
Hotels
Restaurants
Commercial Office
Space



INSTITUTIONAL

Hospitals
Universities
Prisons
Government
Laboratories

The background features a large, light green semi-circle on the left side. In the top right corner, there is a thick ring divided into two segments: a green segment on the left and a blue segment on the right. On the bottom left, there is a green triangle pointing upwards. The text is centered in the lower half of the image.

**NEWFOUNDLAND AND
LABRADOR CONTEXT**



WASTE MANAGEMENT

MMSB

- Advance sustainable waste management in NL
- Crown corporation of Government of NL
- Waste Diversion and Public Education
- Collects analyzes and reports of provincial waste generation
- Work with industry partners
- Fund innovative waste diversion work

SERVICE BOARDS

- Handles waste collection and manages Waste Recovery Facilities
- Residential and commercial
- Self funded not for profits
- Implement waste pick up
- Manage waste disposal sites
- Oversee closure of community dumps and incinerators

RECYCLING AND COMPOST

- Highly variable across Newfoundland!
- Dependent upon Service Board offering
- No residential curbside compost option



**EXAMPLES OF
INNOVATIVE
WASTE
SOLUTIONS**

AQUACULTURE PLASTIC

- Significant volume of rigid plastic used in aquaculture industry
- Stranded around the province
- Innovative approach to shred plastic on site with a mobile shredder
- Utilize shredded plastic as feedstock for new products



WOOL PELLETS

- Use wool from sheep sheared for meat production – not the highest quality wool for fibre use
- No need to clean the wool
- Use a machine to turn waste wool into pellets



USE WOOL PELLETS TO ENRICH YOUR SOIL AND GARDENS



WATER RETENTION

Wool pellets can hold up to 20 times their weight in water. Wool holds onto atmospheric moisture and releases it when conditions turn dry. This can reduce the amount of watering while also protecting plant roots.



NATURAL FERTILIZER

Wool pellets slowly break down in your garden, releasing their nutrients back to the soil. Wool is very high in nitrogen and carbon and will also add calcium, magnesium, iron, sulphur and other nutrients.



RECYCLING NUTRIENTS & REDUCING WASTE

Our wool pellets are diverting wool waste from landfills and returning these nutrients back to the soil.



AERATION

Wool pellets will expand in water and will add aeration to your soil, increasing oxygen levels.



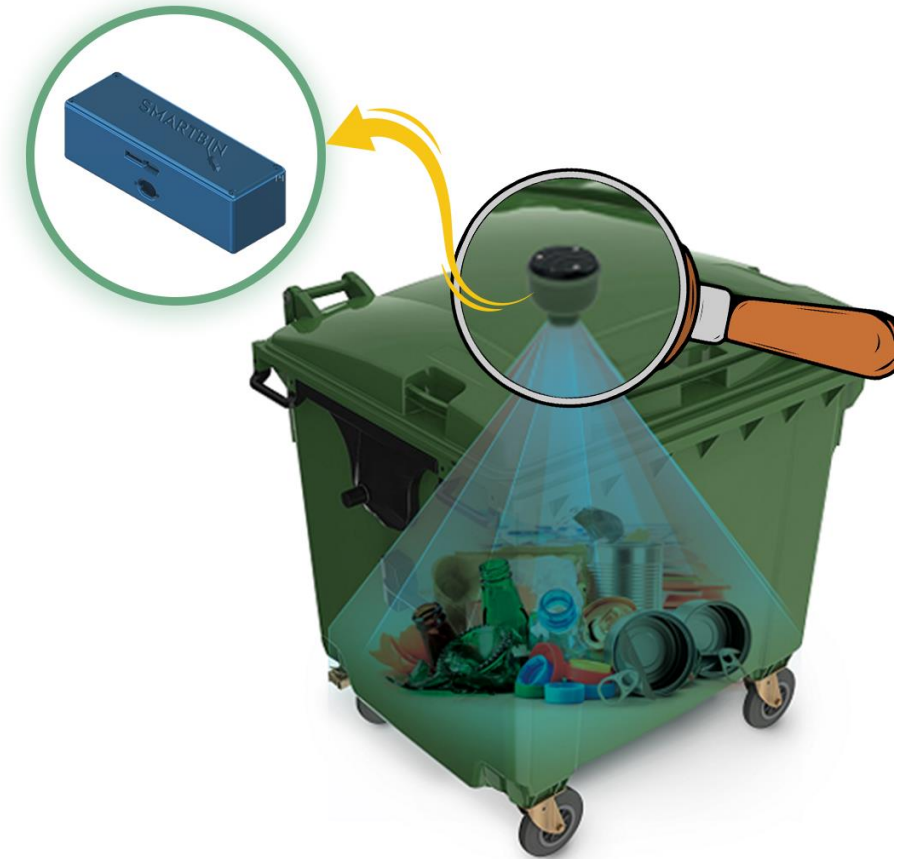
SLUG & PEST REPELLENT

Wool is a natural repellent to slugs, some pests and weeds. When used around the base of your plants it can keep them protected and safe.

- Pellets are sold at local garden/hardware stores
- Diverts wool from landfill
- Improves growing conditions for gardeners

SMART BIN

- Hardware and software solution to optimize waste management
- Sensors on trash bins indicate when bin is close to full to signal when trash should be collected
- Overlap between waste reduction and emissions reduction through fewer trucks on the road
- Route optimization allowing for reduced emissions and labour cost



IDEATHON PROMPT:

From an NL perspective, determine a problematic waste stream and develop an innovative solution for reducing and/or repurposing the waste material

SOLUTIONS CAN...

Do something with waste
Mitigate the production of waste
Reuse and extract value from waste
Policies that can facilitate the above

Needs to be at a scale that it could be an
enterprise
Digital or analogue solution