

Agricultural Diversion Programs in Canada

Agricultural Waste to Resource Summit

March 6, 2018



Agenda

- Waste characterizations
- Waste diversion programs
- Case study – grain bag recycling in Saskatchewan
- Moving forward

Waste characterizations



Top commodities by province & territory



forage greenhouse crops eggs horticulture

caribou, wild berries dairy cattle

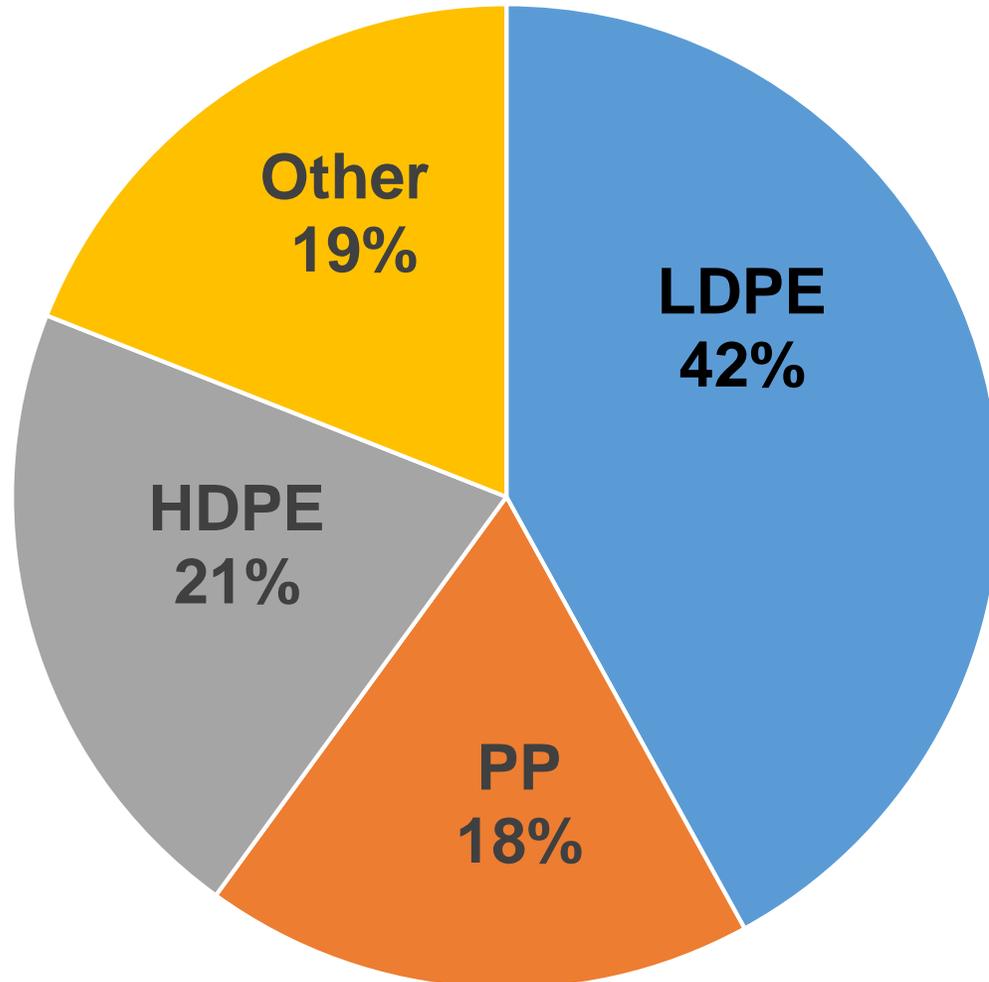
grains and oilseeds hogs poultry

Waste characterization studies



- Conducted in all provinces, excluding Quebec
- Variation based on commodities
- Estimated total: 25,700 tonnes

Plastic generated on-farm – Ontario, yearly



6,912 tonnes

LDPE

- silage, bale wrap
- mulch film, fertilizer bags, greenhouse film

HDPE

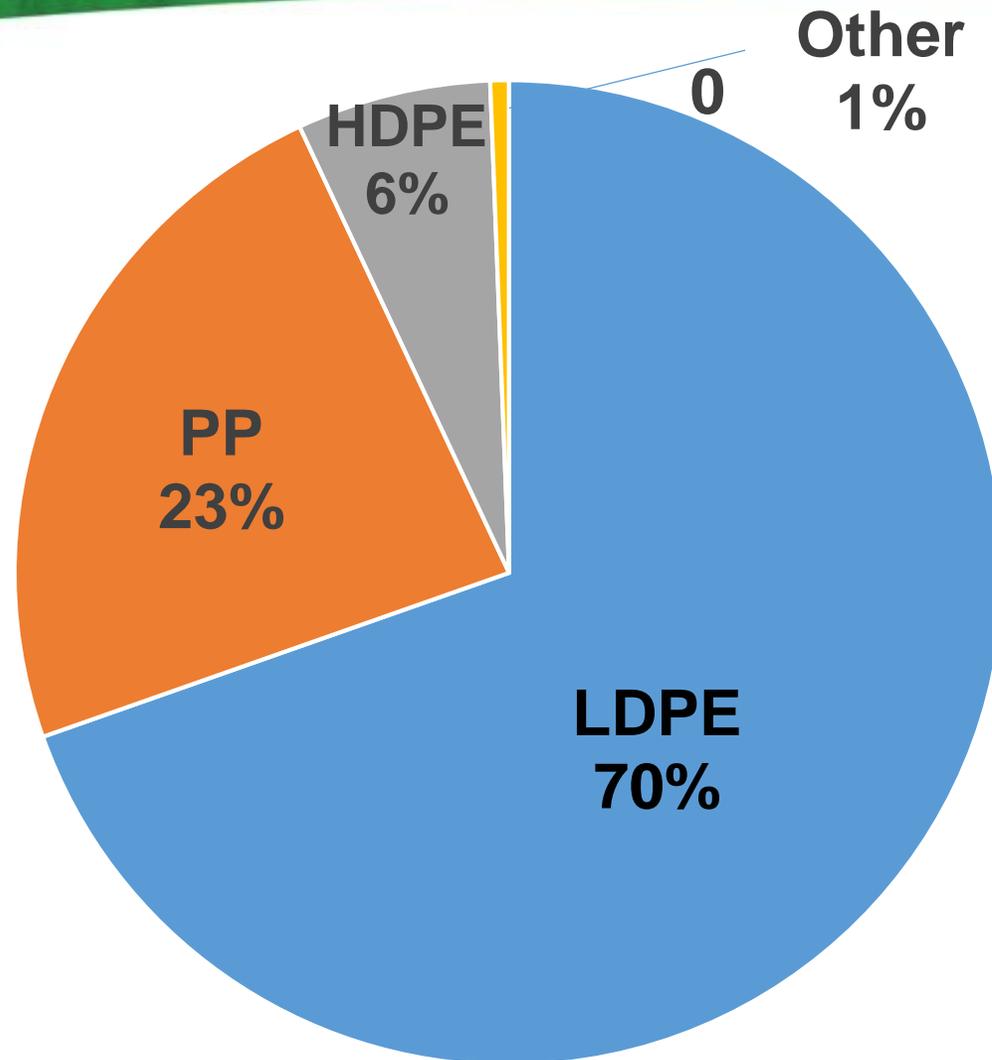
- sanitation, pesticide containers
- oil jugs, pails, drums

PP

- twine, woven bags (feed & seed)
- plant pots, inserts, flats, liners, sleeves



Plastic generated on-farm – Maritimes, yearly



2,124 tonnes

LDPE

- bale, silage wrap
- fertilizer packaging, mulch film

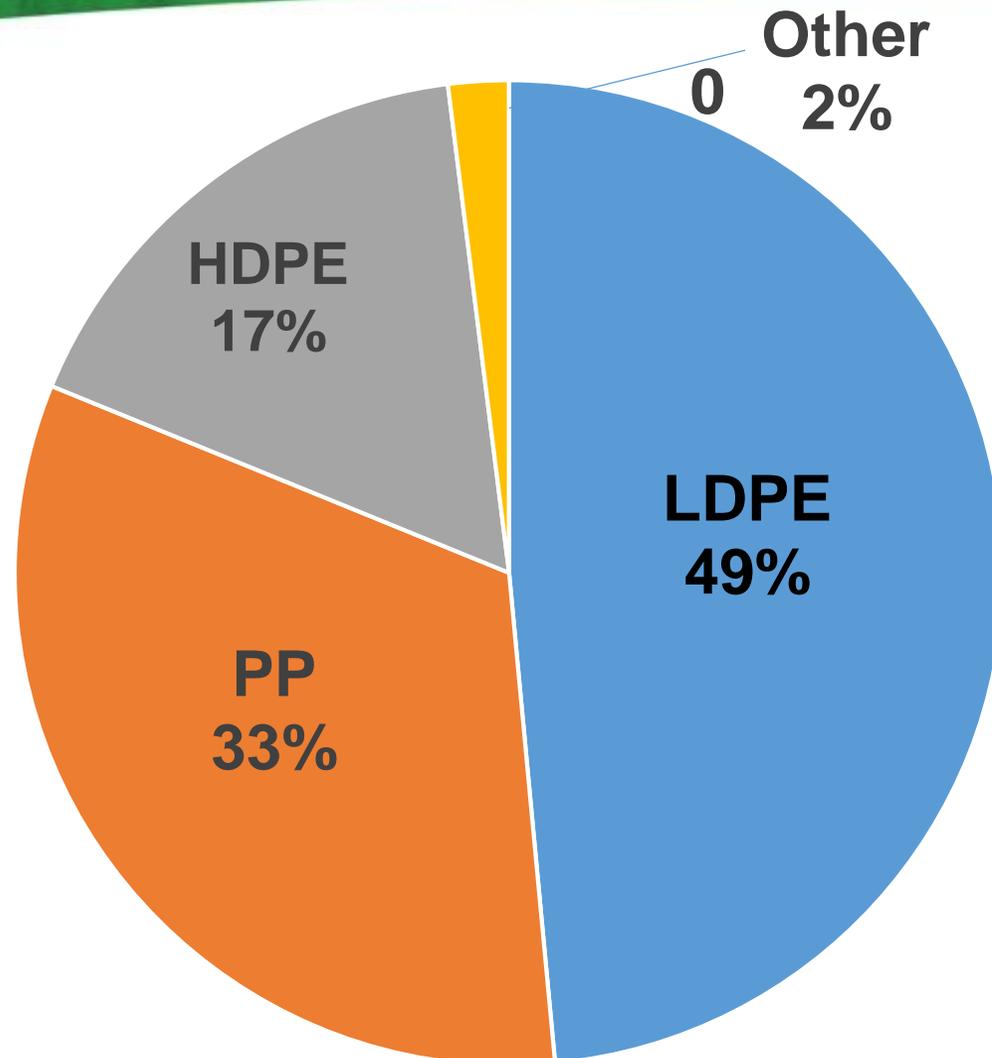
PP

- woven bags (feed, seed, fertilizer)
- twine (hay and greenhouse use)

HDPE

- sanitation, pesticide containers
- net wrap

Plastic generated on-farm – Nova Scotia, yearly



710 tonnes

LDPE

- bale/silage wrap
- mulch film and row covers

PP

- fertilizer bags, feed bags
- twine

HDPE

- sanitation & pesticide containers
- net wrap

Waste diversion programs

existing & emerging



Cleanfarms: industry-led, funded



Very specialized programs



**pesticide
containers**

1989



**obsolete
pesticides**

1998



**pesticide
bags**

2006

2009

**obsolete animal
health meds.**



2013

**fertilizer
containers**



2015

**seed
bags**



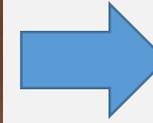
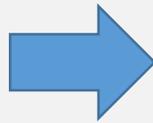
2016

2018

**grain
bags**



Container recycling



2016 collection figures (small containers)

Canada-wide ~ 1.97 million kilograms

Maritimes ~ 54,000

Nova Scotia ~ 14,000

Seed & pesticide bag collections

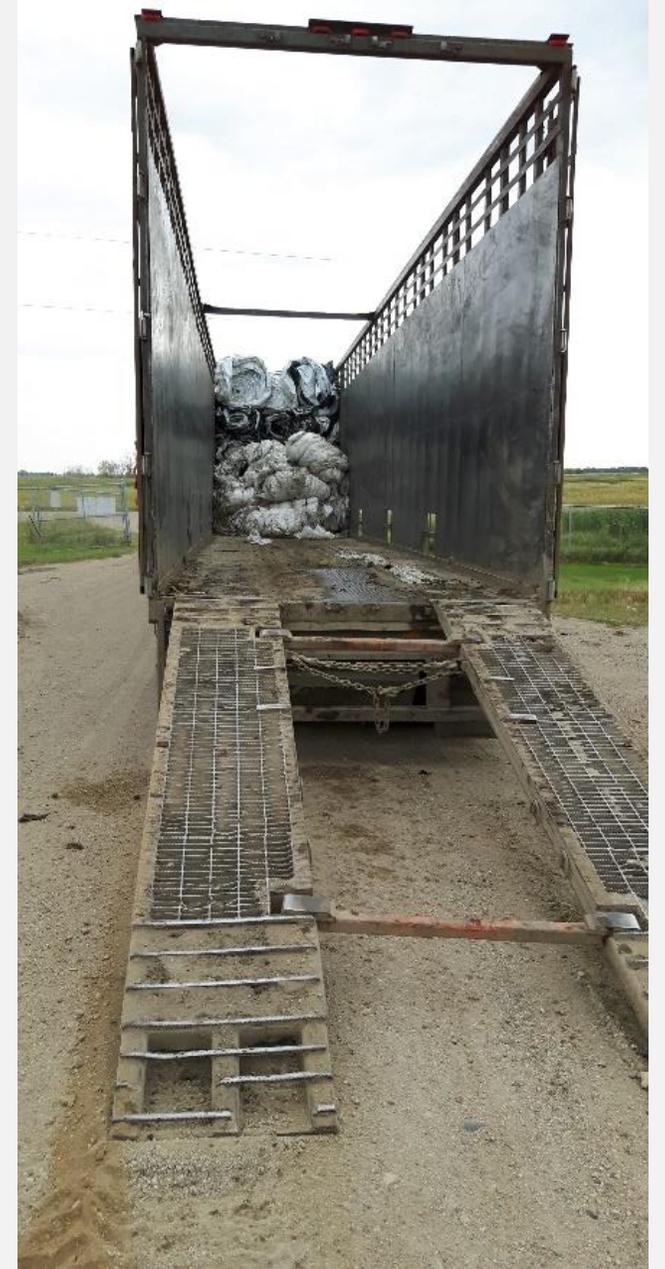


2016 collection figures (small containers)
Eastern Canada ~ 296,000 kilograms
Maritimes ~ 13,000

Manitoba



Manitoba



Ontario



Ontario



Ontario: farmer-driven



Ontario: farmer-driven



Prince Edward Island



SILAGE & BOAT SHRINK WRAP
will be accepted **FREE OF CHARGE**
at Waste Watch Drop-Off Centers

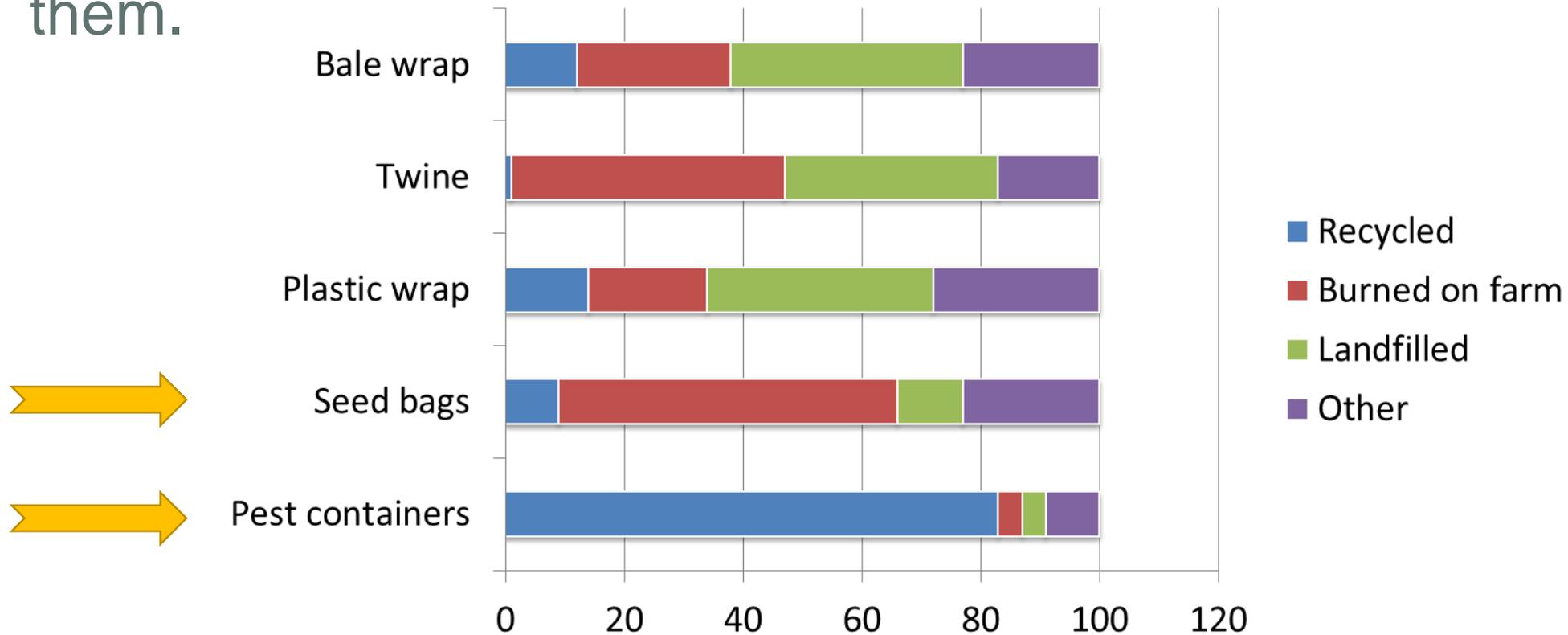


Ag waste diversion programs - summary

- When convenient, accessible programs are available, farmers use them.

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Source: Ontario study, 2012

Ag waste diversion programs - summary

- When convenient, accessible programs are available, farmers use them.
- Pockets of ag plastics recycling have started
- Challenges unique to agriculture
- Innovation

Saskatchewan – grain bag recycling

it's a marathon



Grain bags



Background

Government funded pilot projects: 2011 – 2018

- 2016: 973,088 kilograms

Prep work: 2011 – 2014

- waste studies, market research, extensive consultations

The Agricultural Packaging Product Waste Stewardship Regulations

- regulation passed: August 2016
- industry-funded program: 2018

Recommendation: do something and do it right

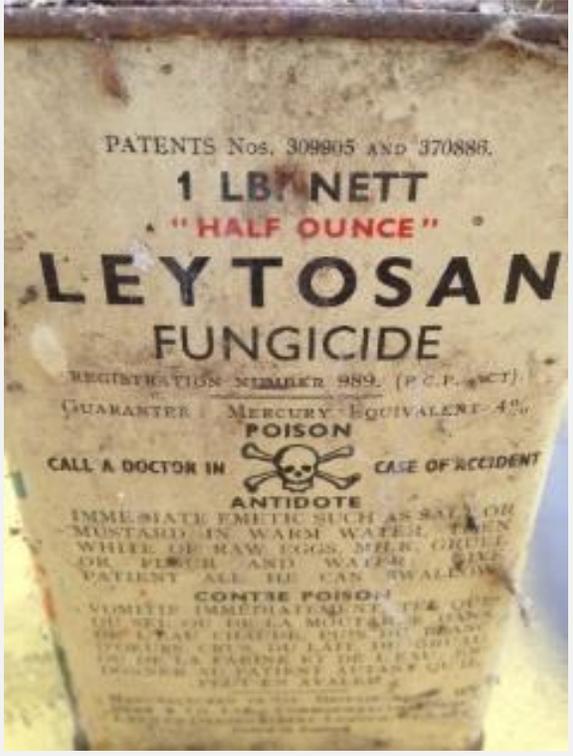
- Level playing field
- Deliver value
 - transparency, accountability, traceability
 - pilot programs
- Be upfront about program costs
 - Environmental Handling Fee (EHF)
- Stewardship is a conversation

Keep talking

‘Farming looks mighty easy when your plow is a pencil and you're a thousand miles from the corn field.’

Dwight D. Eisenhower

Obsolete pesticide & animal health med. collections



Nova Scotia: November 5 – 16, 2018