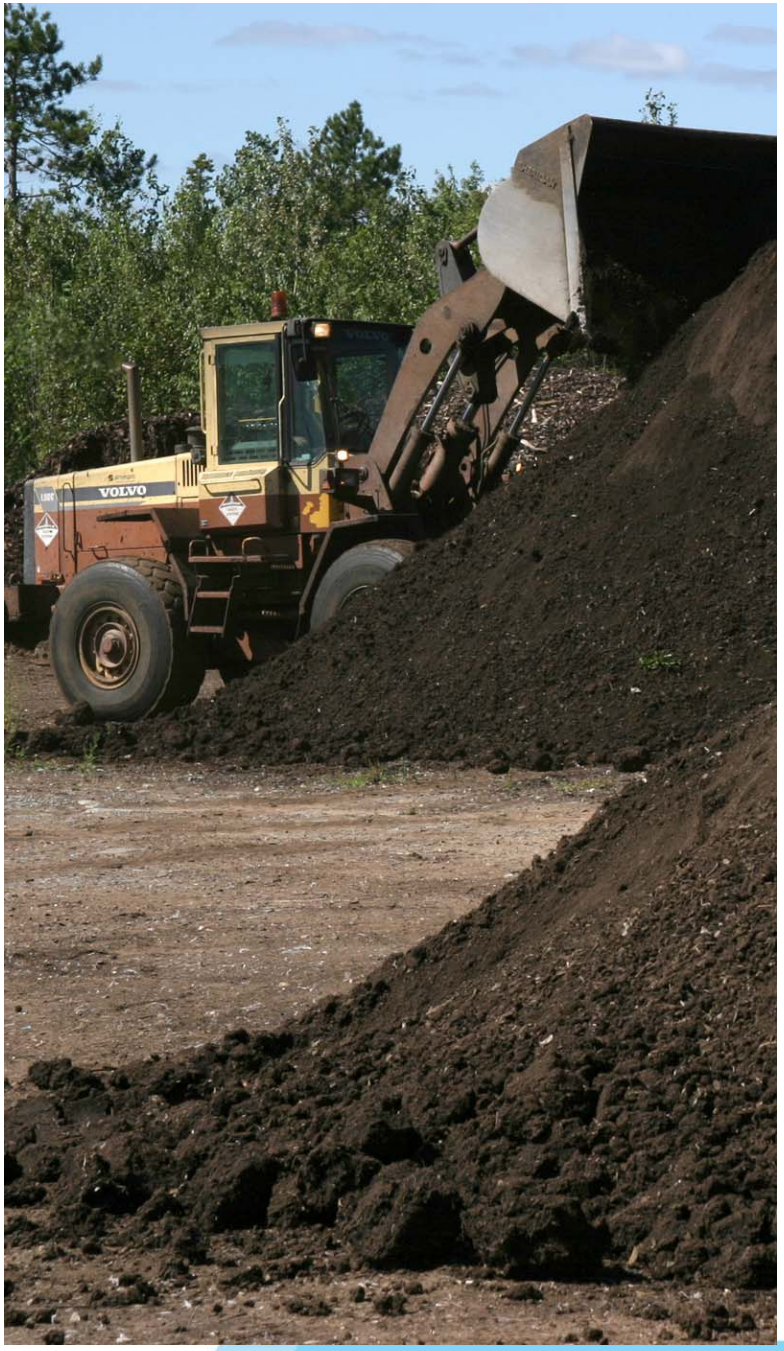
SUSTAINABLE PROCUREMENT SUMMIT:
Waste as a Resource in Construction & Renovation

September 21, 2018

Lynda.Rankin@Novascotia.ca

NOVA SCOTIA



Goals for the day

- Raise awareness of local companies that supply recycled products that can be used in construction and renovation projects.
- Explore how recycled products could meet government needs.
- Increase the procurement of local recycled products.

NOVA SCOTIA

Attendees Include:

- Provincial Procurement
- Provincial Depts. (TIR, DNR etc.)
- Municipal Procurement
- Universities/Institutions/Hospitals
- Municipal Waste Management
- Local manufacturers of recycled products
- Property Developers
- Construction Companies
- NGOs
- Industry Associations
- Divert NS

NOVA SCOTIA

Why was This Theme Chosen for the Summit ?

Consider that products made from locally recycled materials …

1. Fit with the Sustainable Procurement Policy.
2. Increased stewardship by improving recycling and close the loop.
3. Provide a potential path to additional LEED Points for recycled material and support for the local economy.

NOVA SCOTIA

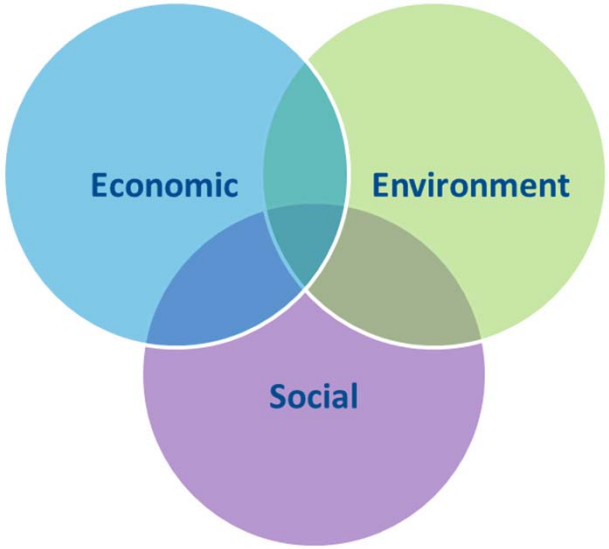
Sustainable Procurement Policy

NOVA SCOTIA

Fit with Sustainable Procurement Policy

- Sustainable Procurement Policy since 2009. It
  - promotes best value, and
  - contributes to sustainable prosperity for Nova Scotia

- The Public Procurement Act (2011) further promotes this approach across the greater public sector.



What Types of Impacts is NSG Considering ?

Economic

Fiscal Responsibility
Life Cycle Costing
Local Economy

Environment

Toxics Use Reduction
Waste Reduction
GHG Reduction

Social

Health and Safety
Inclusiveness & Fair Wage
Health Promotion

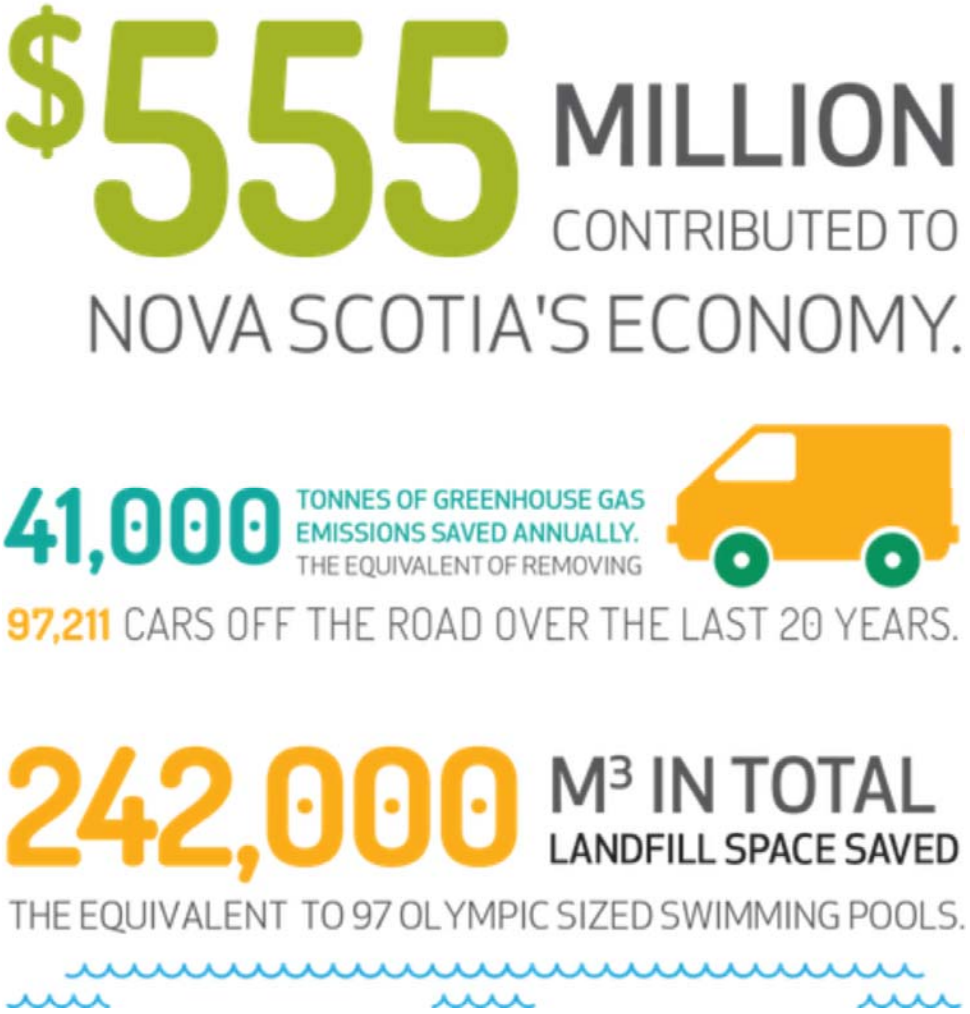
NOVA SCOTIA

Stewardship

NOVA SCOTIA

Nova Scotia Has World Class Solid Waste Legislation

of diversion



NOVA SCOTIA


Recycling is only as good as our ability to find markets for the materials …

Where are the Markets?

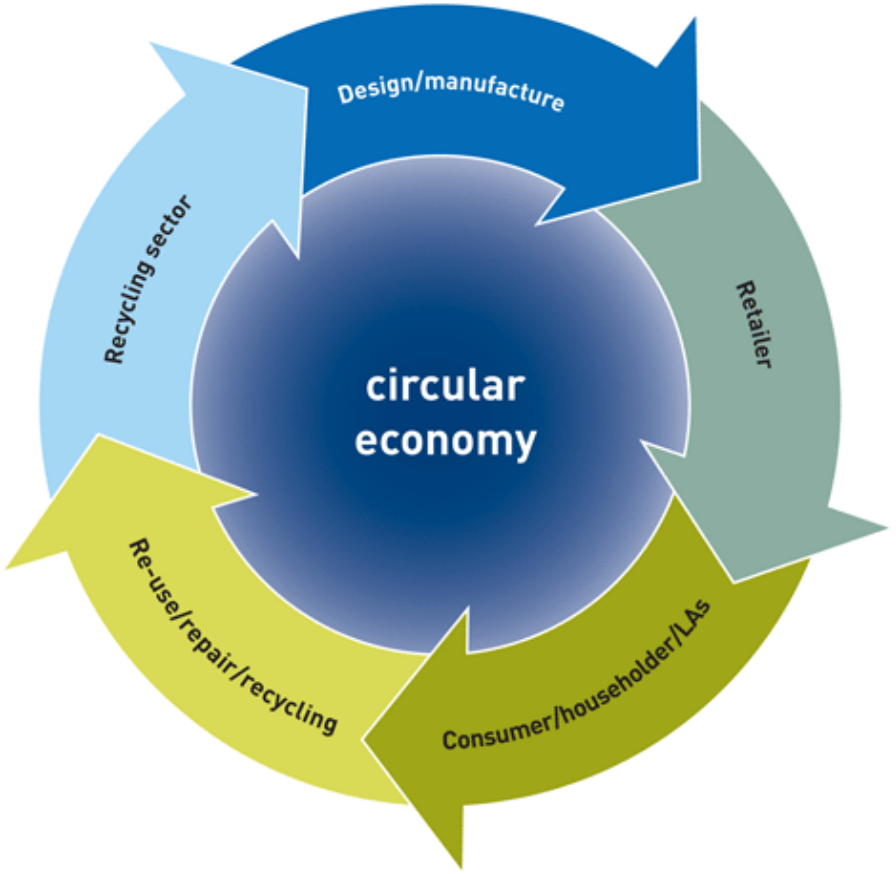
- China - world's biggest importer of recycled materials
- In 2016 alone > 7.3 million metric tons of waste materials imported from developed countries.
- January 1, 2018 - market closed to imports due to a high rate of contamination in the materials (impurities to hazardous waste)

NOVA SCOTIA

For recycling to be at its best we must move to a circular economy and use products made from diverted materials

Shift to a More Circular Economy

- Keep resources in use for as long as possible.
- Extract the maximum value.
- Recover, and regenerate materials into new products at the end of each service life.



NOVA SCOTIA


Environmental problem or economic development opportunity?

Added Value in LEED Projects

NOVA SCOTIA

Materials and Resources (MR) Credits

There are points available in LEED v.4 for using materials with recycled content

Several credits in the MR section include a location valuation factor, which adds value to locally produced products and materials. The intent is to incentivize the purchase of products that support the local economy.

NOVA SCOTIA

Products and Materials

NOVA SCOTIA

Example:
Tire Derived Aggregate (TDA)

- Nova Scotians responsibly recycle approximately 1 million used tires every year.
- Unwanted tires are collected from more than 880 registered tire retailers across Nova Scotia
- A local processor who converts them into TDA

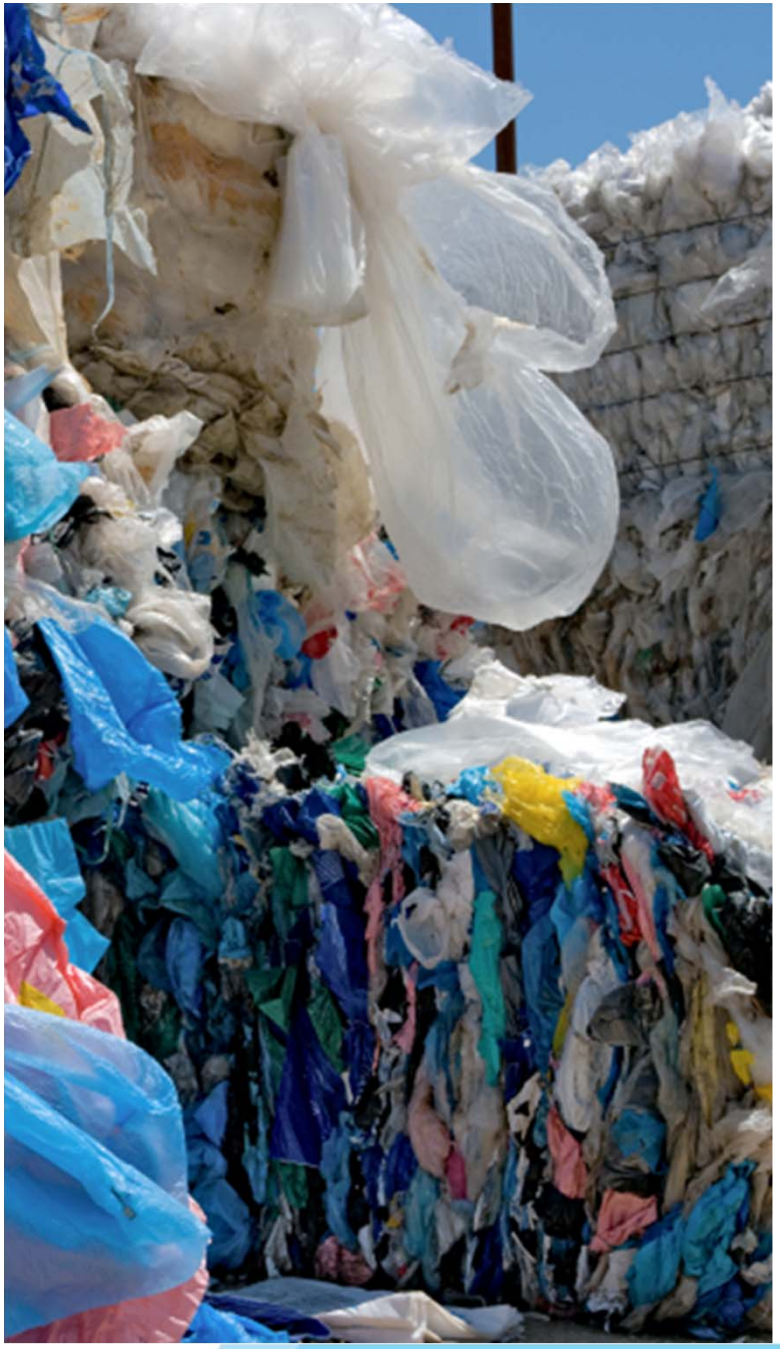
- TDA can be used for
  - lightweight fill
  - retaining wall backfill
  - insulation layer
  - drainage layer
  - other

NOVA SCOTIA

Example: Shingle Sand

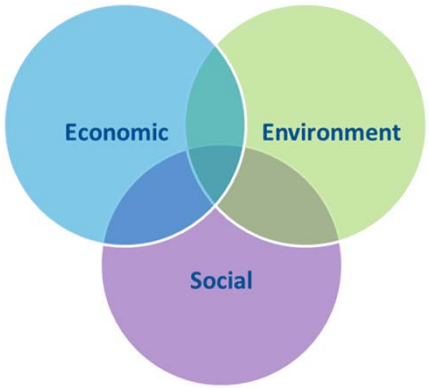
- Approximately 50,000 tones asphalt shingles p/a.
- Shingle sand can replace virgin sand in hot mix.
- Asphalt with recycled sand can be used for pavement for
  - roads (meets TIR specs),
  - trails, etc.

NOVA SCOTIA



Example:
Plastic Lumber (Film Plastic)

- A local processor converts film plastic into plastic lumber.
- A local social enterprise uses plastic lumber to build outdoor furniture and other products e.g., waste sorting stations, raised garden beds etc.



NOVA SCOTIA

40,000 Bags

are used to make the plastic resin for this picnic table

… and the table

can be at end of life

NOVA SCOTIA

Other Products and Materials

PAPER

- Blown in Insulation & mulch for hydroseeding)

PAINT

- Recycled Paint

GLASS

- Glass aggregate –drainage, filtration, septic media

PLASTIC

- Weeping tile piping made from recycled plastic

COMPOST

Local Market is Developing – There are Opportunities for Strategic Procurements

Critical Success Factors

- Specifications
- Lead time
- Sources of Supply
- Inventory & Production Capacity
- Location of manufacturing
- Delivery times & costs
- Public procurement rules (Trade agreements)

NOVA SCOTIA


Every dollar you spend
is a vote cast
for
the world you want