



Opportunities & Constraints to Increasing Waste Diversion

**FCM Sustainability
Conference
February 2008**

Presentation Outline

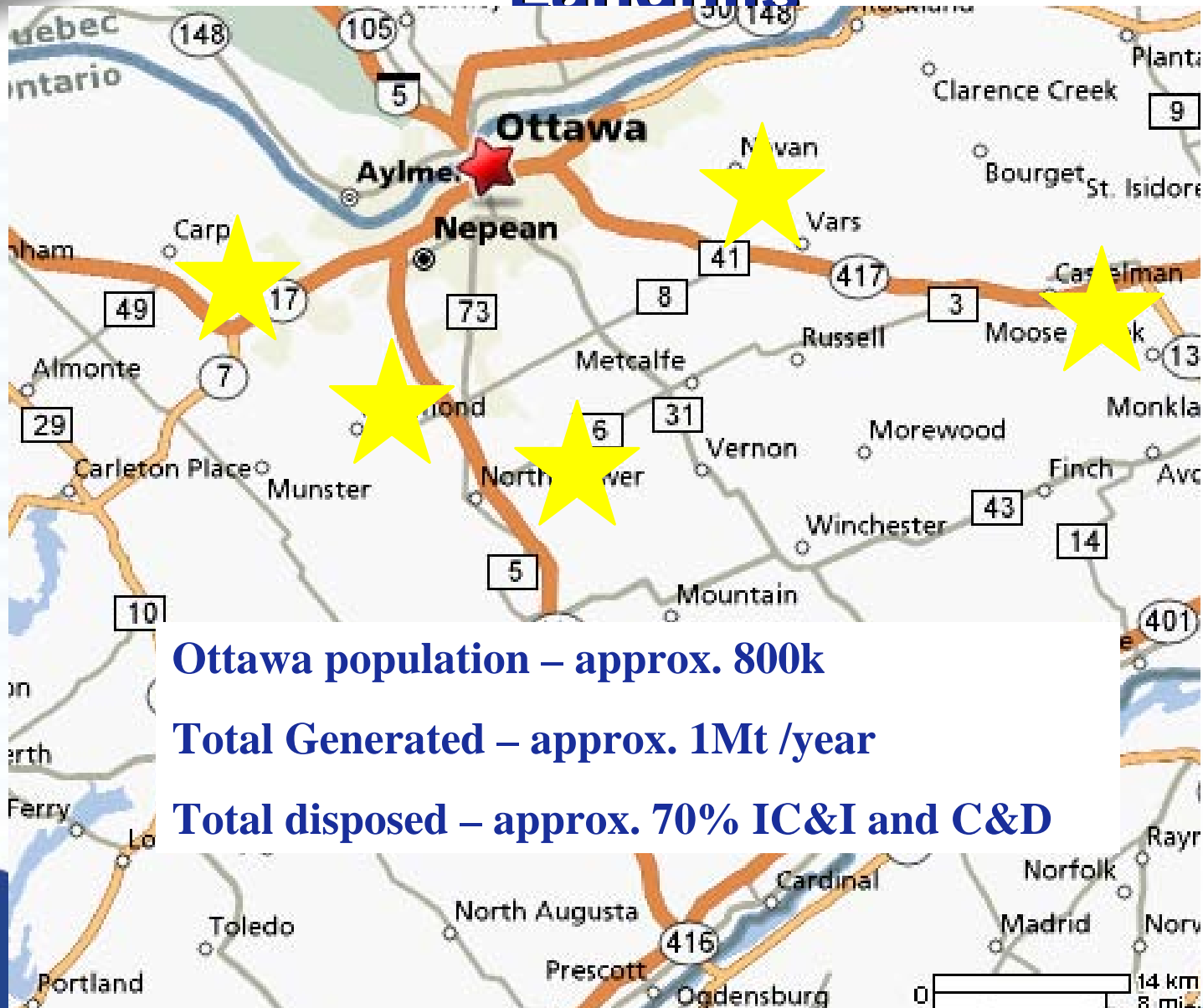
Using Ottawa as an example:

- Drivers to increasing diversion
- “Waste” as a commodity
- Opportunities for municipal intervention
- Program funding

Drivers for Diversion

- Increasing population, decreasing disposal capacity.
- Limitations on trans-boundary and inter-jurisdictional movement of waste.
- Movement towards sustainable resource management (legislative, public)
- Limitations of alternative approaches:
 - Financial
 - NIMBY

Ottawa Area Landfills

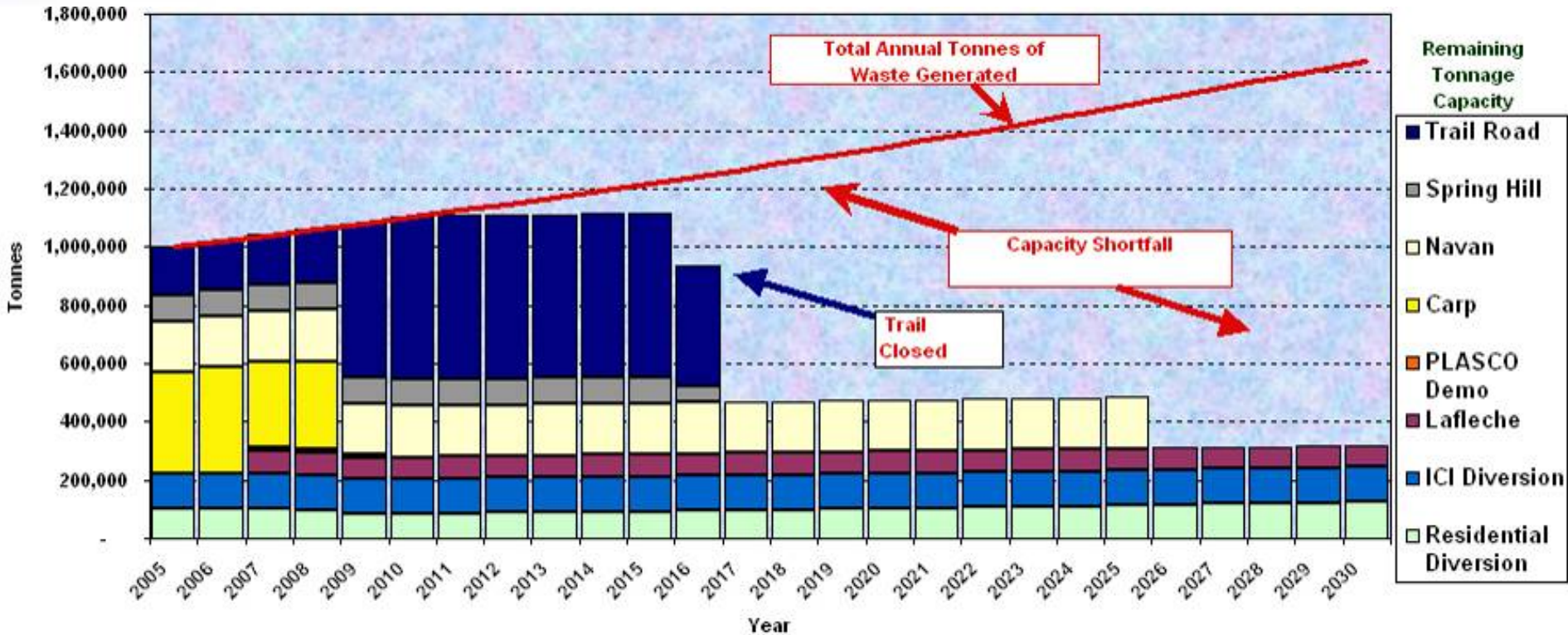


Ottawa population – approx. 800k

Total Generated – approx. 1Mt /year

Total disposed – approx. 70% IC&I and C&D

Projected Waste Capacity, Ottawa

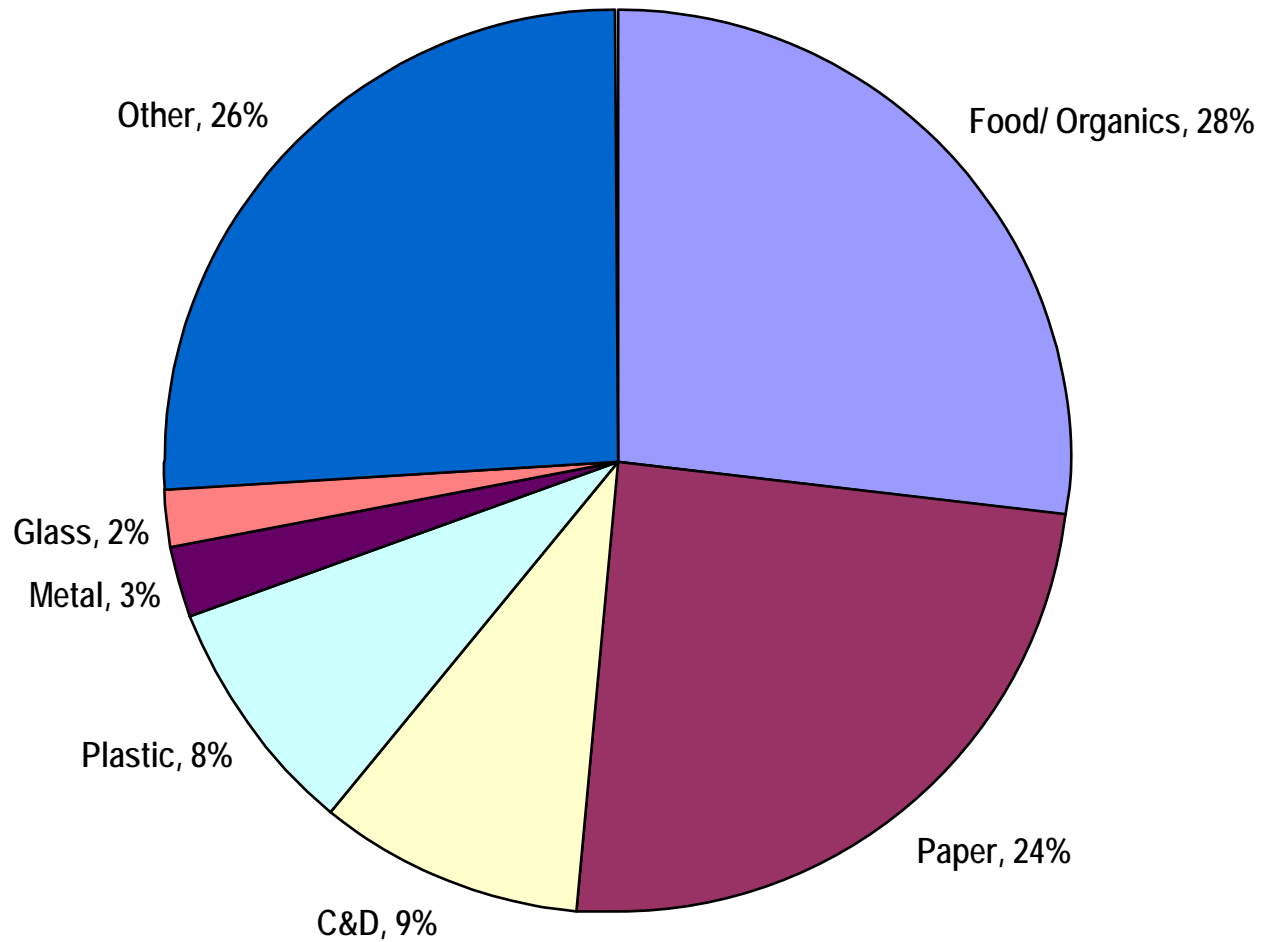


Assumptions: 1) Growth of residential diversion is at 2% with population growth 2) Estimated ICI diversion at 120,000 TPY 3) Lafleche continues to take 75,000 TPY from Ottawa 4) Waste Generated grows at 2% with population growth 5) Trail's C of A limit on intake is 563,000 TPY

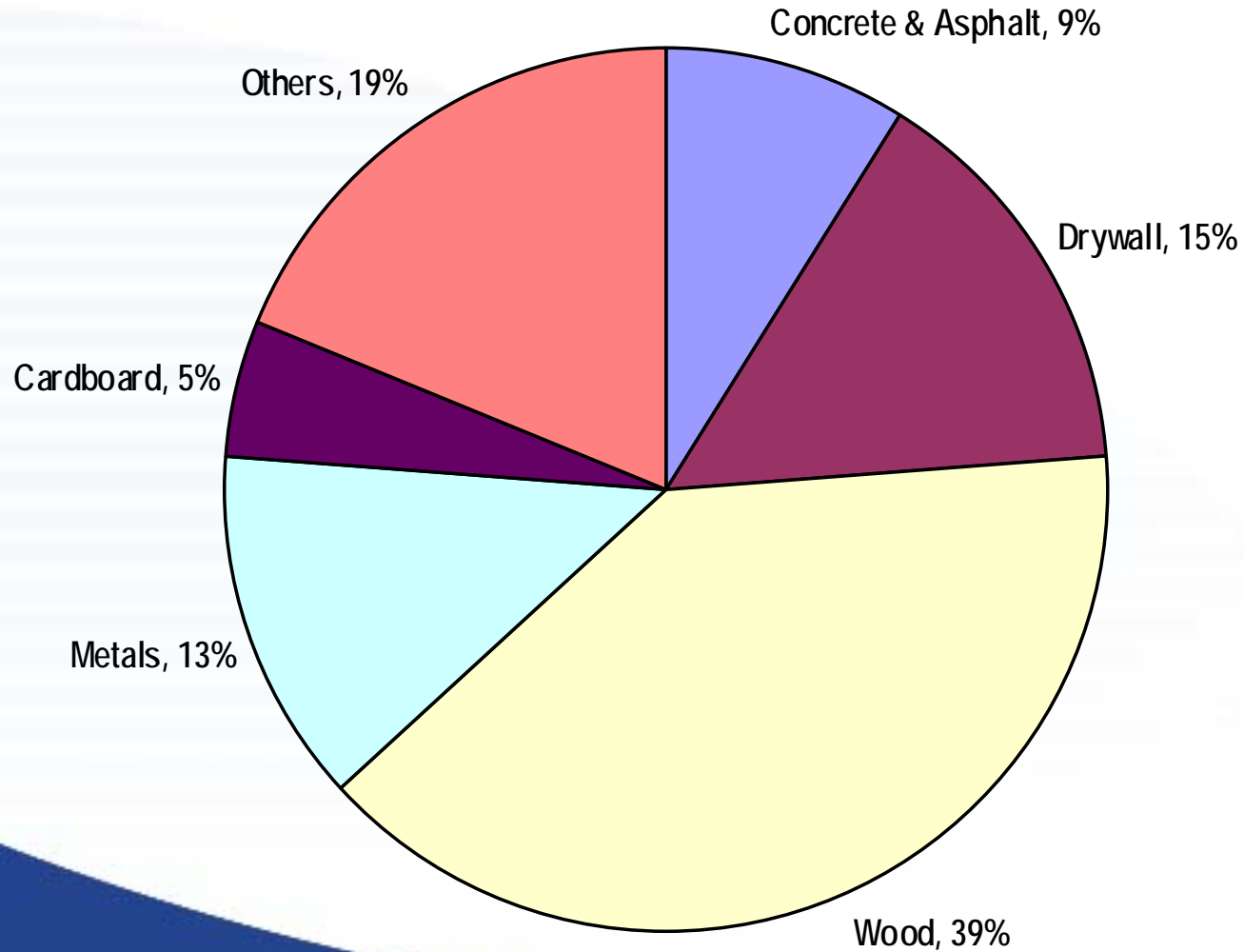
“Waste” as a Resource & Commodity

- What’s in the waste, and what is it worth?
- Extracting what’s valuable and getting it to market.
- Ownership and control of the waste.
- Price elasticity and the market place.

Ottawa IC&I Waste Composition

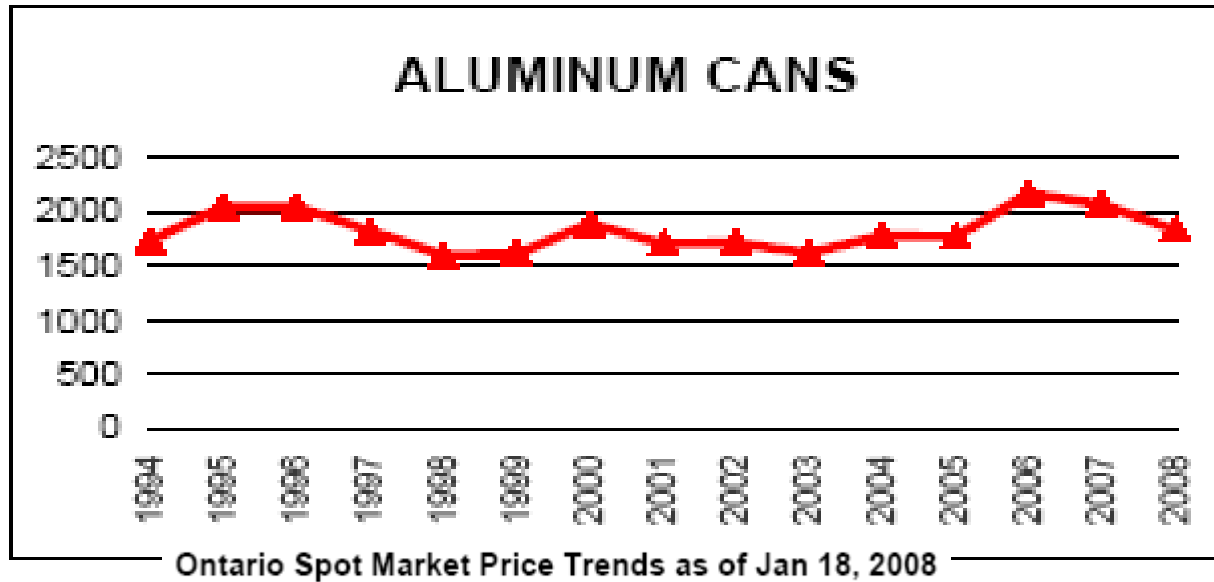


Ottawa C&D Waste Composition

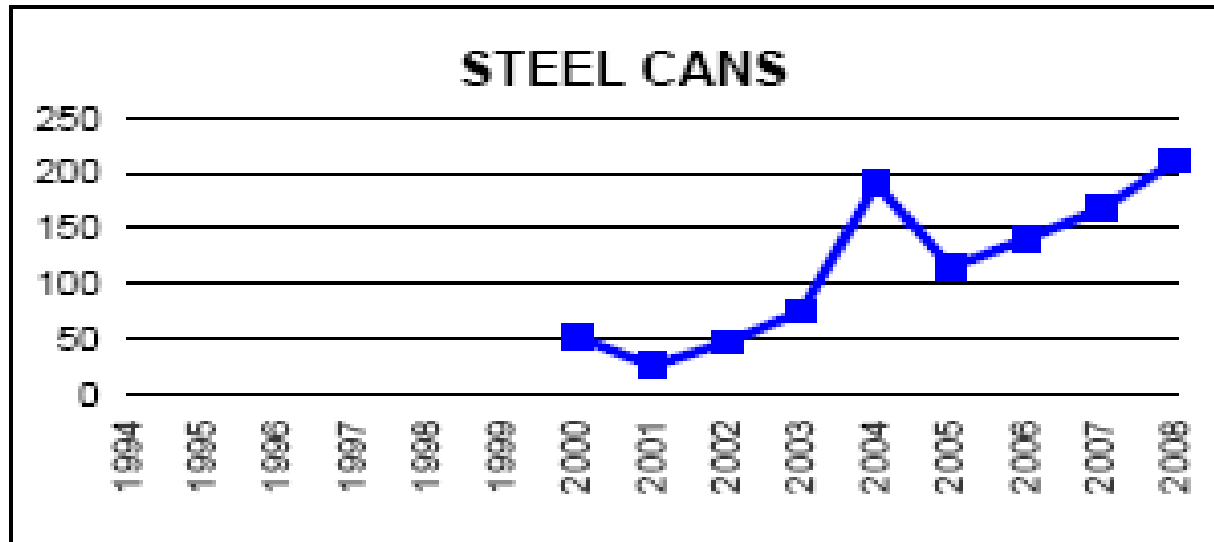


Price Trends

CND/tonne

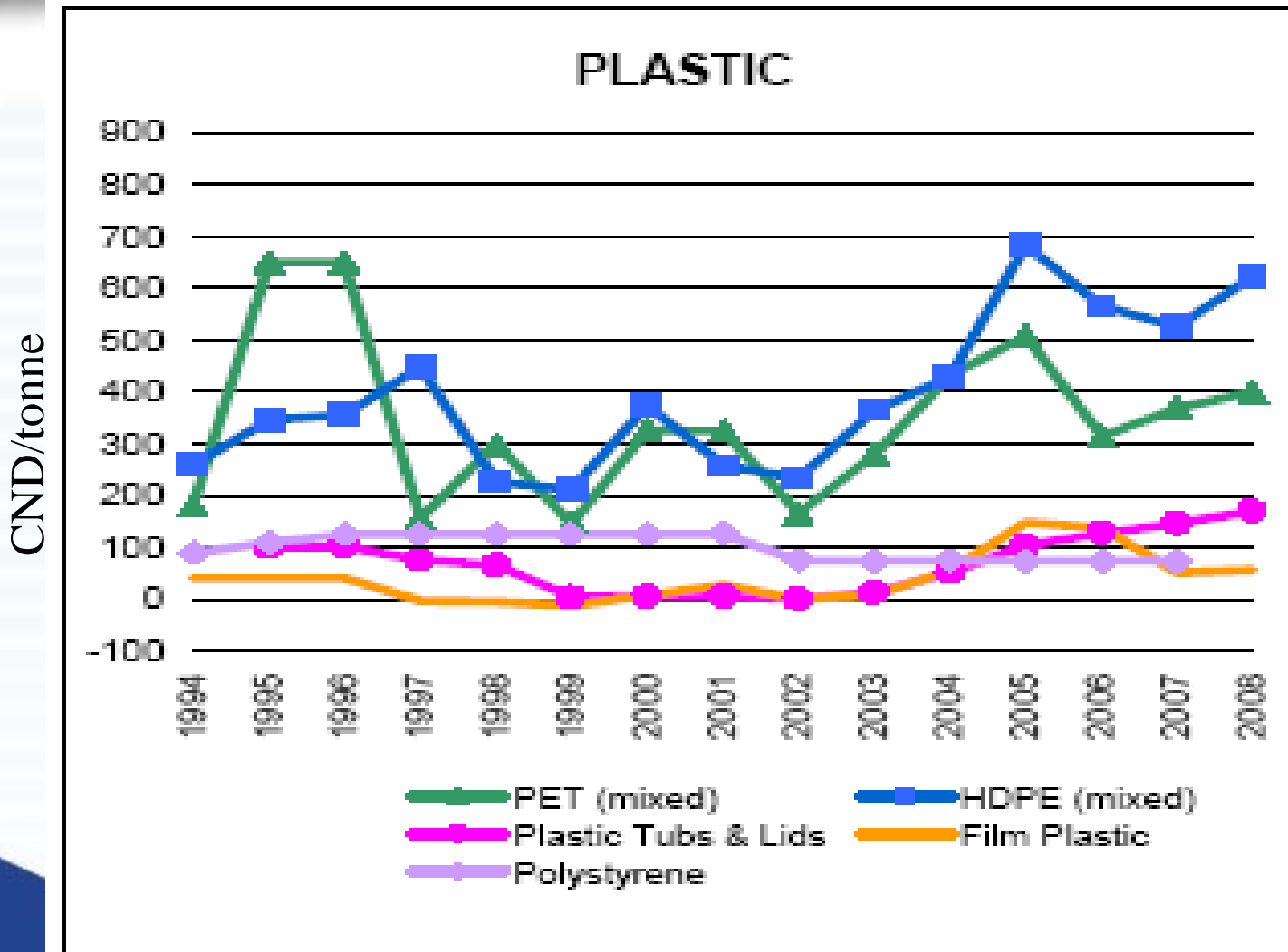


CND/tonne



http://www.csr.org/pdf/pricesheet/2008/01_2008.pdf

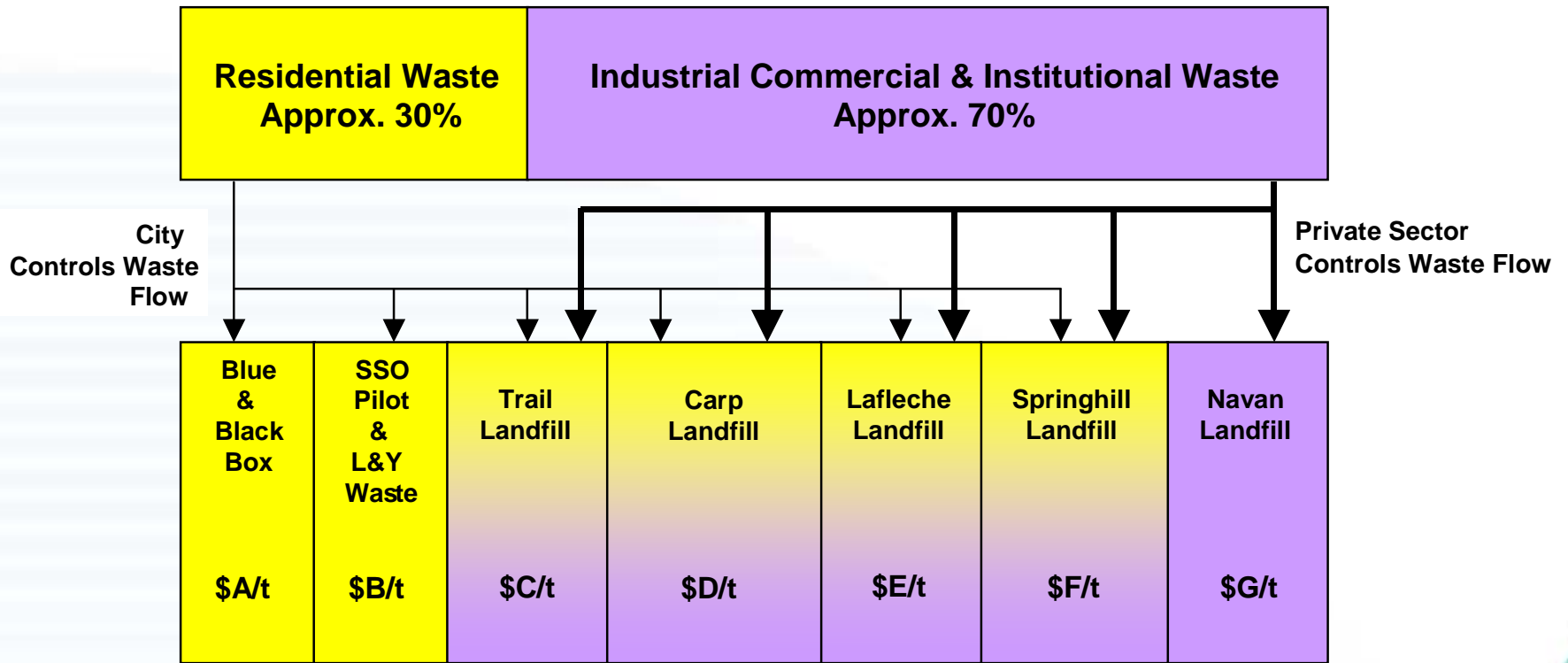
Price Trends cont.



Source: CSR, Ontario Spot Market Price Trends, as of January 18, 2008

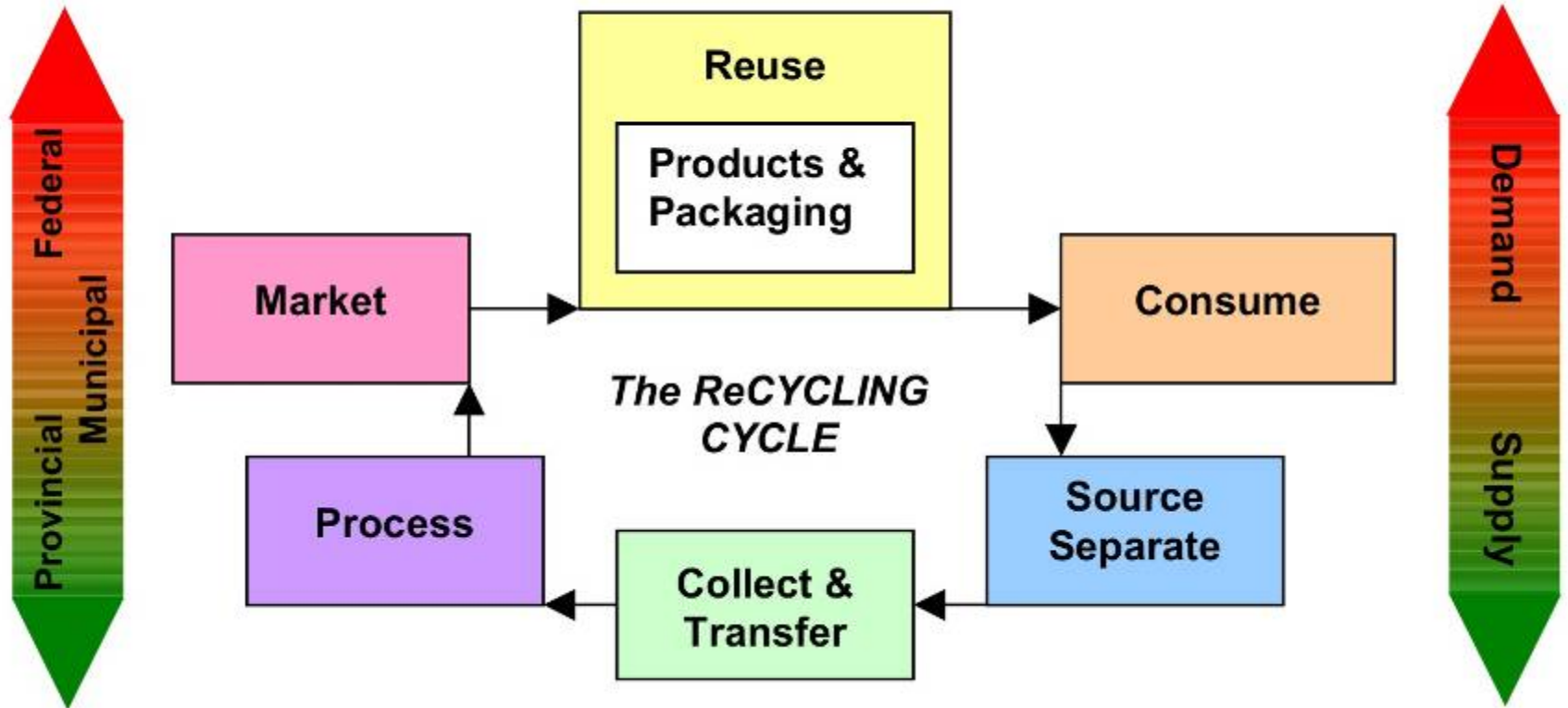
http://www.csr.org/pdf/pricesheet/2008/01_2008.pdf

Waste Flow in Ottawa



Ownership and control over the waste.
If you build “it”, will the waste come your way?

The Recycling Cycle



Extracting what's valuable and getting it to market.

Price Elasticity and Market Variability

- Provincial landfill bans
- Flow control
- Market for compost
- Proximity to markets
- Proximity to alternatives

Opportunities for municipal intervention

Ottawa's IC&I study:

- Mandating diversion
- Enabling diversion
- Leading by example

Group 1: Mandatory Diversion

Top 3 options:

- Impose **levies** on loads containing target recyclable materials.
- Enact **3Rs by-laws** at municipal level
- **Ban** landfill disposal of target materials.

Group 2: Enabling Options

Top 3 options:

- Promotion & education programs
- Provision of technical support
- Strategic partnerships

Group 3: Leadership Options

Top 3 Options:

- Enhanced service delivery at municipal facilities.
- Green procurement by the City.
- Waste Diversion Certification and Awards Program.

Program Funding

Ottawa's residential waste management program had a 2006 operating cost of \$44.5 million, and was funded via five mechanisms:

- Fixed **fee** for service applied to residential dwellings for residual waste management (42.2%)
- Property **tax** applied to all tax classes (28.1%)
- **Revenue** from recycled goods (16.4%)
- **Transfer** from Waste Diversion Ontario (8.1%)
- **Tipping fees and royalties** from operation of the two municipal landfills (5.2%)

New programs will require new monies; and the mechanisms to raise those funds.

Questions ?