

Florescent Lamp Recycling & Mercury Recovery Stewardship Project



Recycling Council of Ontario (RCO)
www.rco.on.ca

Who is the RCO

- **Not for Profit Environment Organization** whose mandate is to eliminate waste
- **Members** represent a variety of stakeholders including; municipalities, brandowners/manufacturers, industry associations, small/medium size businesses, other ENGOs, academics, consultants, other sister provincial organizations

RCO's Work

- Educate and inform all members of society about the consequences of waste
- Conduct research to quantify and analyze the need for waste diversion programs and policies
- Support the development of effective environmental policies and programs
- Partner with stakeholders to facilitate a focus on waste reduction

Florescent Lamp Diversion Pilot Project (May 2005)

- **Funded by the Mercury Recovery Board**
- **RCO – managed the project**
- **Partner – Grand Erie District School Division**
Managed logistics of storing, tracking the tubes and ensuring delivery to recycler
- **FLR – recycled the tubes, tracked quantities, recover and recycle by-products**

Fluorescent Lamp Disposal at GEDSB

- GEDSB facility/staff survey revealed spent lamps were disposed in the regular garbage
- RCO completed a survey of 15 other school divisions in urban and rural settings around the province, all reported disposing of lamps with regular waste.

Florescent Lamp Purchase & Disposal at GEDSB

- Supplied on a 5 – year contract by Dominion Supplies
- GEDSB spends approximately \$25,000 annually on lamps
- GEDSB disposes of approximately 10,000 lamps (116,000 mg of mercury) annually through the regular disposal methods

3 Month Pilot Project with RCO

- GEDSB facility staff were asked to properly store spent lamps as they were randomly replaced
- RCO coordinated pick up of the tubes through FLR and GEDSB
- *Important to note that GEDSB was retrofitting some of their facilities during the pilot program*

Mercury and Lamp Components Diverted from Landfill

Lamps collected during the Pilot project

Random Replacement – 390 lamps

(4524 mg of mercury)

Retrofit – 5568 Lamps

(69,112.80 mg of mercury)

1743.9 kg of glass

21.77 kg of aluminium

27.34 of phosphor

Pilot Key Outcomes

- Ask GEDSB to adopt a permanent program to divert fluorescent lamps from landfill
- Issue a challenge to other school divisions in Ontario to recycle spent lamps
- Develop a provincial-wide voluntary stewardship program to divert all spent lamps from landfill

The Stewardship Model

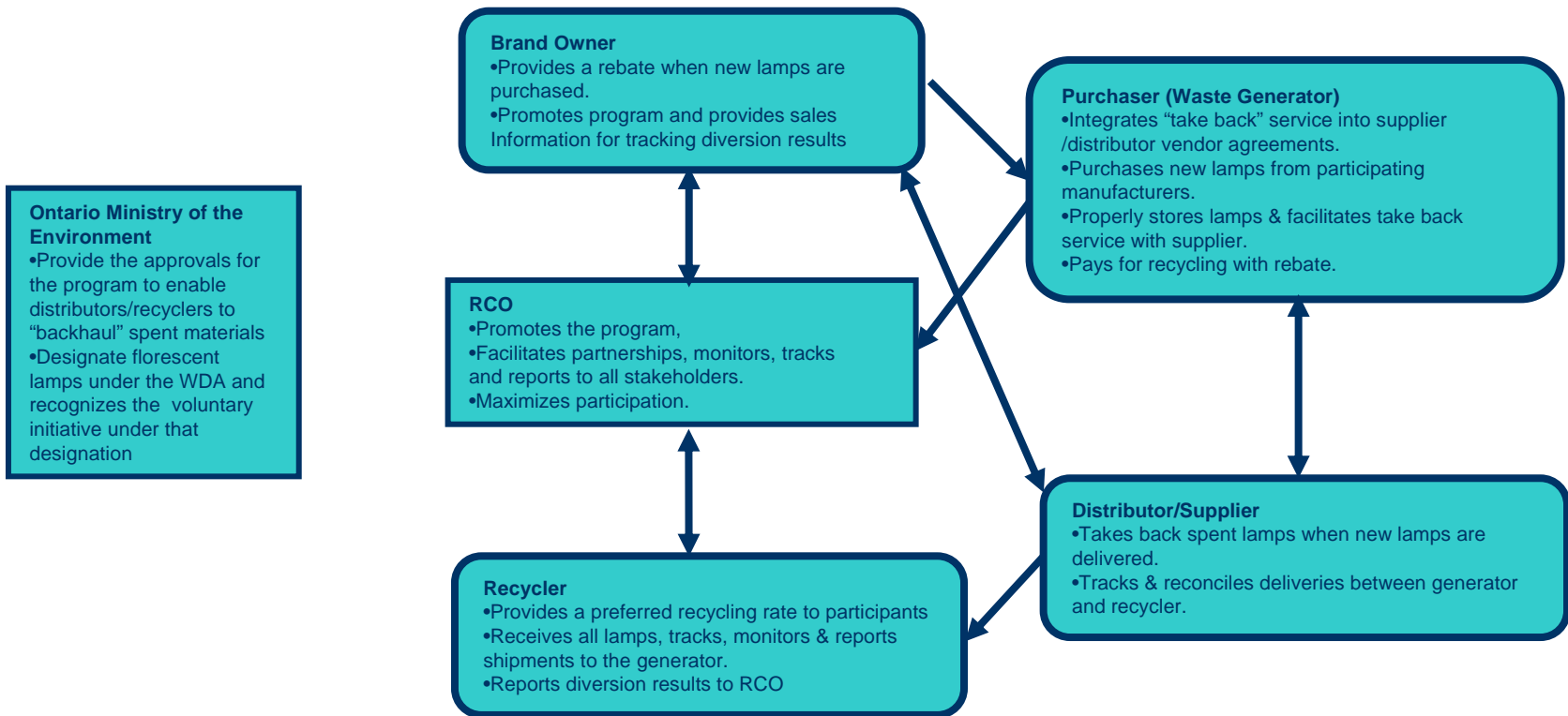
Rolled out in 2 Phases

- Phase 1 – Focus on IC&I Generator
- Phase 2 – Expand to residential markets

Key Model Characteristics

Model is financed by brand owners and generators. Distributors/Suppliers provide transport to recycler. RCO promotes, monitors and reports.

Stewardship Model for Fluorescent Lamps



Pilot Project to Test the Stewardship Model

Partners

- RCO, Toronto District School Board, Panasonic, Ontario Ministry of the Environment

Scope

- 600 facilities, 5 months

Timing

- August 2006

Stewardship Pilot Next Steps

1. Finalize all necessary government approvals
2. Agreement between RCO, FLR and TDSB
3. Redraft TDSB supplier/distributor contract
4. Develop communications for facility managers

Key

The pilot program must fairly test all aspects of the proposed stewardship model.

Scope of the Opportunity

- In Canada ; an estimated 60 – 70 million spent lamps are generated annually
- Each lamp contains on average, 11.6 mg of mercury
- 60 million lamps = 1,535 lbs of mercury



Thank You!

The Recycling Council of Ontario

Jo-Anne St. Godard

www.rco.on.ca

416.657.2797