



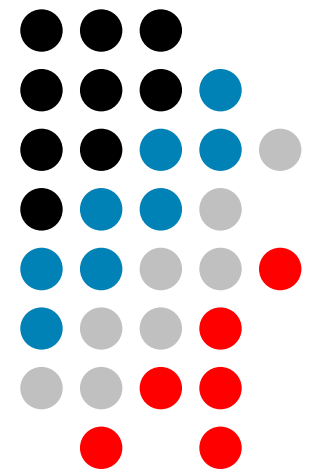
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# Clean Air Foundation Mercury Programs

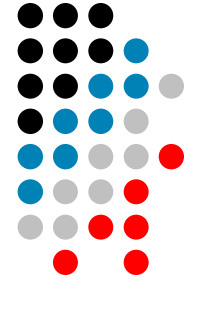
*Switch Out and Switch the 'Stat*

Binational Toxics Strategy – Mercury Workgroup

June 3, 2008



# Our Mandate

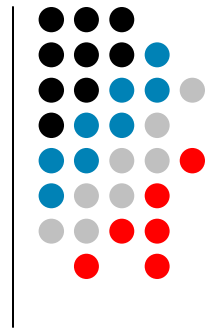


*The Clean Air Foundation is a national not-for-profit organization, dedicated to developing, implementing and managing public engagement programs and other strategic approaches that lead to measurable emissions reductions to improve air quality and protect the climate.*



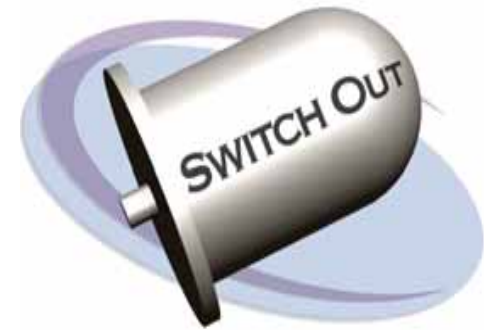
# The Clean Air Foundation

## Our Partners



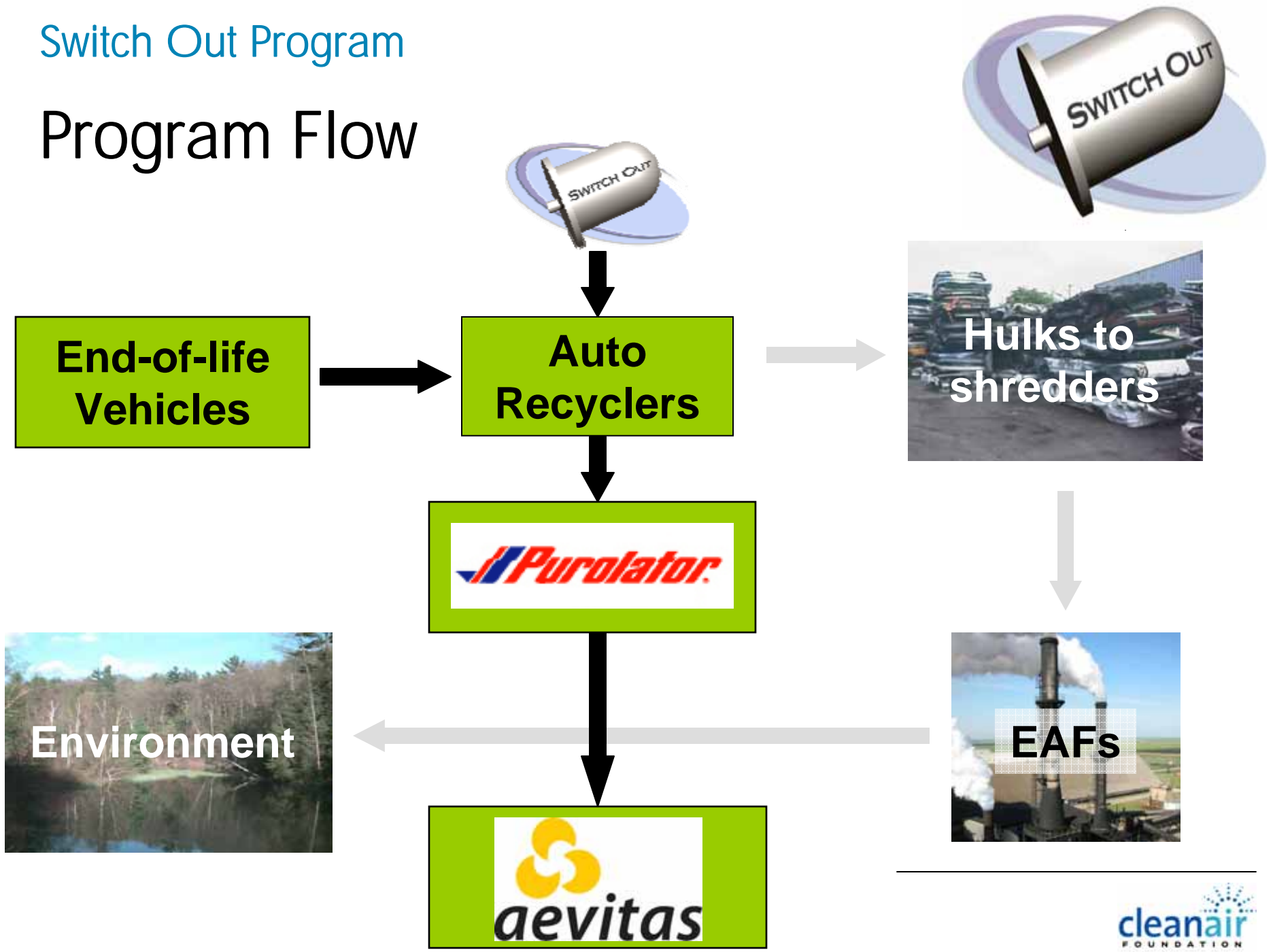
## Switch Out Program

# Background



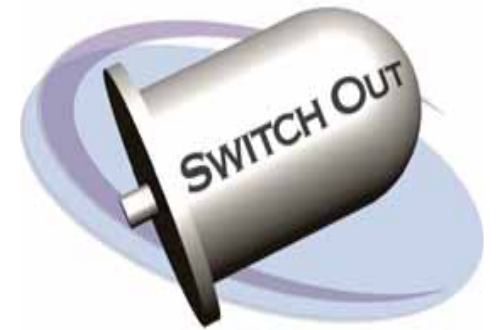
- Automotive mercury switch collection program
- *Switch Out* started in Ontario in 2001 in partnership with the Automotive Recyclers of Canada (ARC) and the Ontario Automotive Recyclers Association (OARA)
- Program now operating in British Columbia, Alberta, Ontario, Quebec and the four Maritime provinces
- In each province where *Switch Out* is active, CAF administers the program, manages the collection and transportation infrastructure, and works on strategic program development
- The regional/provincial automotive associations participate in the promotion and local delivery of *Switch Out*

# Switch Out Program Program Flow



## Switch Out Program

# Results to Date



- There are 448 automotive recyclers participating in *Switch Out*
- Since 2001, *Switch Out* has collected more than 189,000 mercury convenience lighting switches across Canada
- More than 160 kilograms of mercury safely captured
- Approximately one gram of mercury in each convenience lighting and ABS sensor switch
- Approximately 3.6 million mercury switches in vehicles (2003 model year and older) still on Canadian roads today
- That is more than 3,000 kilograms of mercury still to be recovered

## Switch Out Program

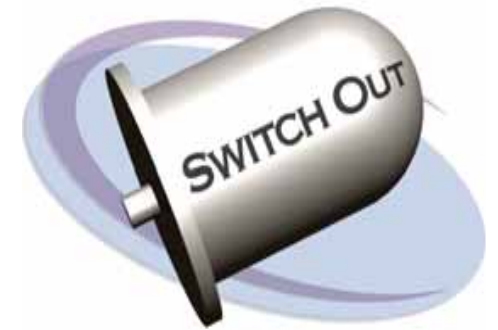
# Pollution Prevention (P2) Plan



- In December 2007, Environment Canada published “Pollution Prevention Plans in respect of Mercury Releases from Mercury Switches in End-of-Life Vehicles”
- Mandates automotive manufacturers and steel producers to fund and implement a national mercury switch recovery program (for both convenience lighting and ABS switches)
- Mandates steel producers to implement a mercury-free procurement policy
- Plans must be prepared and implementation started by June 27, 2008 and fully implemented by December 12, 2011
- The regulation requires a 90 per cent capture rate within four years

## Switch Out Program

# Elements of P2 Plan



The P2 requires the following elements:

- Steel mills participate until December 2017 and auto manufacturers participate for 15 years after the last model year in which mercury switches were installed by that manufacturer
- Establish and maintain funding
- Promotion and communication
- Steel mills implement purchasing policies for mercury-free scrap and verify that all end-of-life vehicle suppliers are participating in the national program
- Meet annual targets – 90 per cent capture within four years
- Public reporting of targets, timelines and results
- Annual program review
- Annual evaluation of fate of mercury



## Switch Out Program

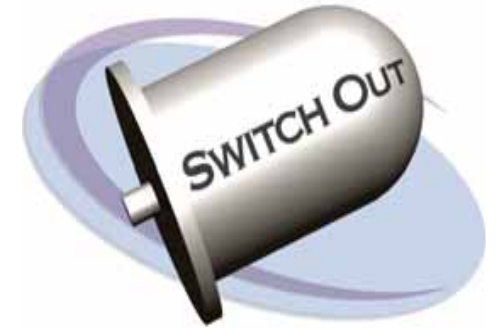
# National Program



- In April 2008, CAF signed a contract to deliver the federally-mandated, industry-funded National Vehicle Mercury Switch Recovery Program
- Funding provided by the Canadian Steel Producers Association (CSPA) and Canadian Vehicle Manufacturers' Association (CVMA) for the next three years
- National program will build on the existing *Switch Out* program to expand and operate throughout the 13 provinces and territories in Canada
- National program includes an advisory committee - ARC, CAF, CSPA, CVMA and Canadian Association of Recycling Industries (CARI)

## Switch Out Program

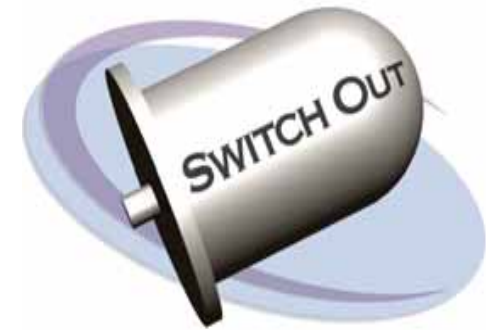
# 2008 Goals



- Capture 120,000 mercury switches across Canada in 2008
- This represents 103 kilograms of mercury
- Represents a recovery rate of 35% of the switches coming off the road in 2008
- Program expansion across Canada – Saskatchewan, Manitoba and the Territories

## Switch Out Program

# Next Steps



- Work with ARC and provincial associations that are already participating in the program and engage those that aren't to increase collection among participating recyclers
- Work with CARI and ARC to recruit and inform recyclers outside provincial associations about CSPA's mercury-free scrap requirement
- Update existing program materials and add information about the removal and collection of mercury switches from ABS – provide information, training and updated dismantler's guide

## Switch the 'Stat Program

# Background



- Thermostat exchange program – promotes the installation of programmable thermostats and ensures recovery of mercury-containing thermostats
- Began as a pilot program in Ontario in 2006, and became an ongoing program in April 2007
- Delivery partners are Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI), Aevitas and Purolator
- Funding partners are Ontario Ministry of the Environment, Ontario Power Authority (OPA), Enbridge Gas Distribution, Union Gas and Imperial Oil Foundation

Switch the 'Stat Program

# Program Logistics



Contractors and wholesalers can register through:

- Our website – [www.switchthestat.ca](http://www.switchthestat.ca)
- Cool Savings Rebate Program (OPA/HRAI)

Clean Air Foundation sends contractors and wholesalers:

- A collection bin
- Instructions
- A pre-paid Purolator waybill
- Brochures for their customers

## Switch the 'Stat Program

# Program Logistics (cont.)



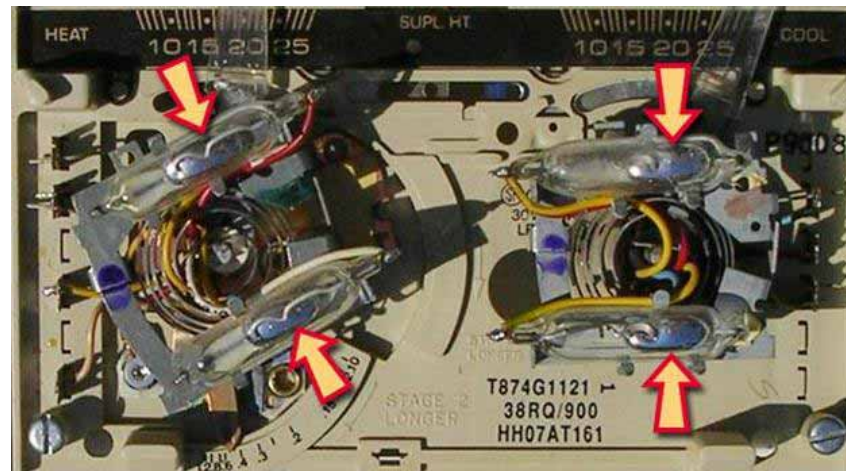
- Contractors remove older mercury-containing thermostats from homes and replace them with programmable thermostats
- Contractors place **intact** mercury-containing thermostats in collection bin
- When the bin is full, or when CAF conducts a collection “sweep”, contractors ship the bin using the pre-paid Purolator waybill
- Purolator picks up the bins from the contractors/wholesalers and ships them to Aevitas
- At Aevitas, thermostats are counted, dismantled and recycled; mercury is removed and stored safely; and the number of thermostats collected by each contractor is reported back to CAF

## Switch the 'Stat Program

# Mercury in Thermostats



- Each thermostat contains one to four switches
- Each switch contains approximately 2.5 grams of mercury
- **Up to 10 grams of mercury inside every thermostat!**



## Switch the 'Stat Program

# Results to Date



- Since 2006, Switch the 'Stat has collected more than 10,600 mercury thermostat switches in Ontario
- More than 27 kilograms of mercury safely captured
- There are more than 1,100 contractors and wholesalers participating in the program



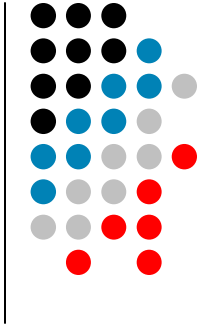
## Switch the 'Stat Program

# Next Steps for 2008



- Our collection goal for 2008 is 10,000 mercury-containing thermostat switches
- New UN-certified pails for collection
- Planned expansion into other provinces

# Contact Information



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