

US EPA ARCHIVE DOCUMENT

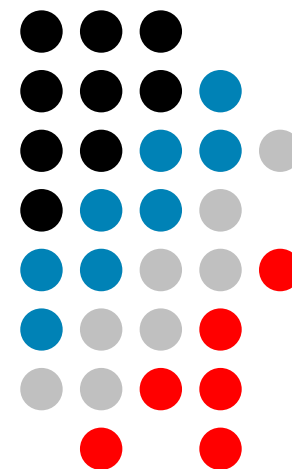


Clean Air Foundation Mercury Programs

Switch Out and Switch the 'Stat

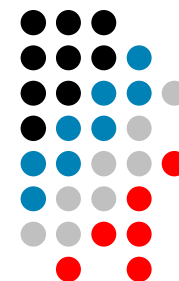
Binational Toxics Strategy – Mercury Workgroup

June 3, 2008



The Clean Air Foundation

Our Mandate

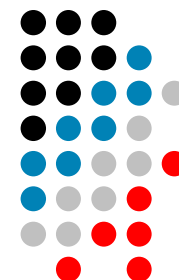


The Clean Air Foundation is a national not-for-profit organization, dedicated to developing, implementing and managing public engagement programs and other strategic approaches that lead to measurable emissions reductions to improve air quality and protect the climate.



The Clean Air Foundation

Our Partners



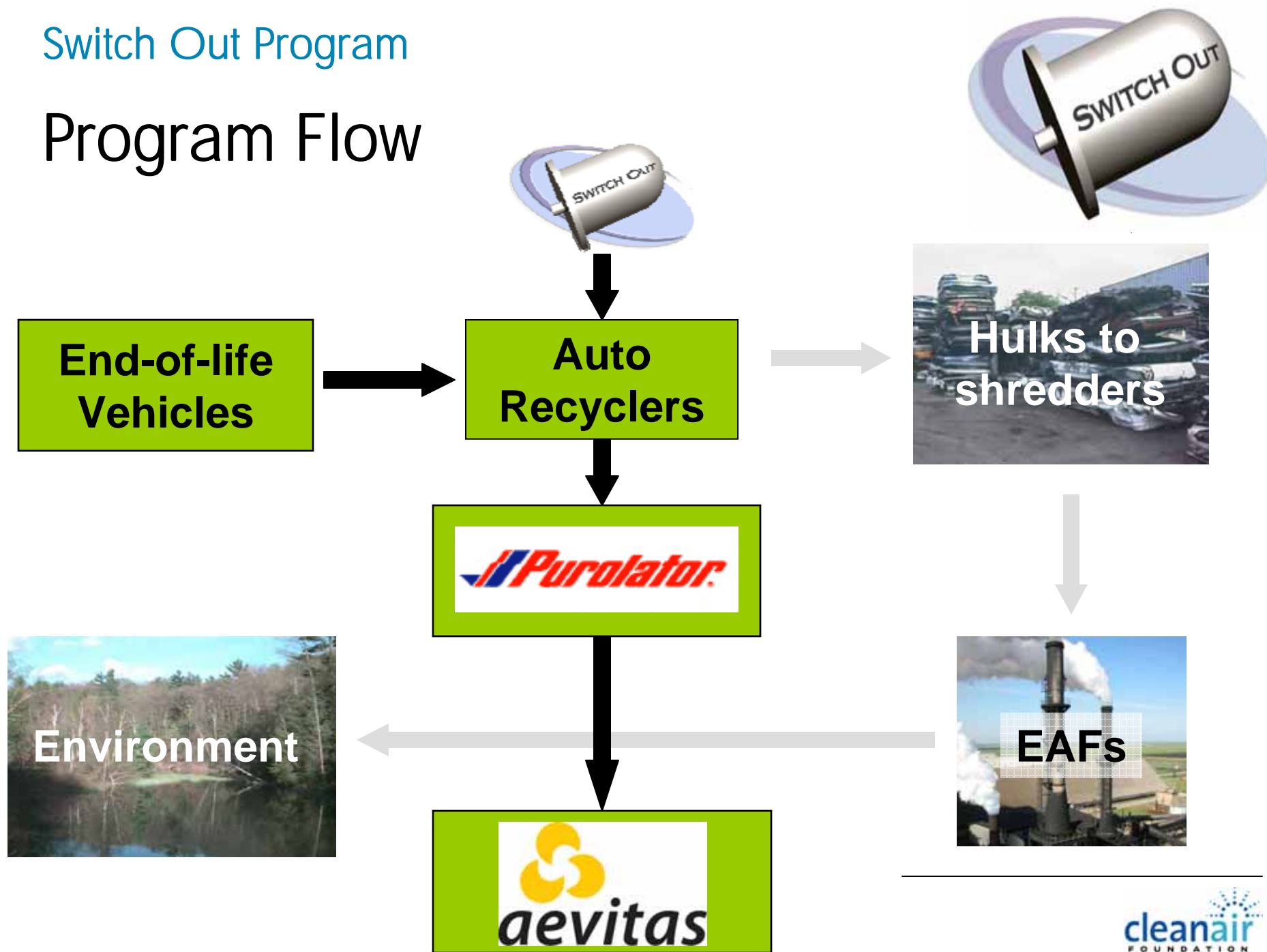
Switch Out Program

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
- 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.)



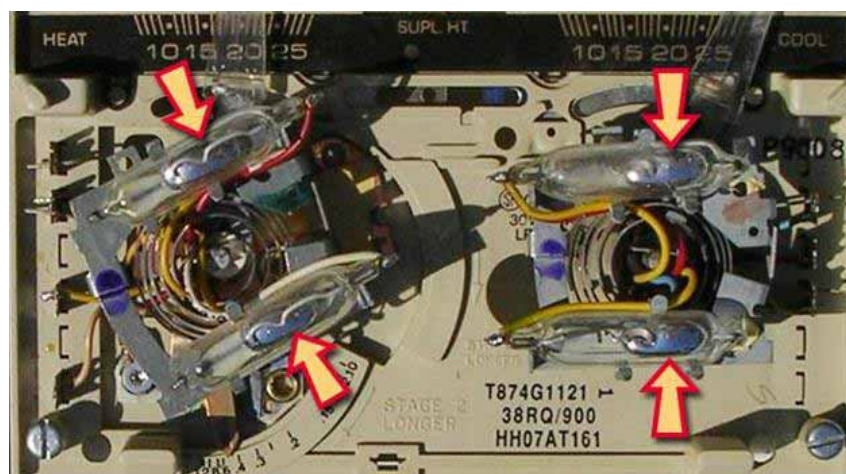
- Contractors remove older mercury-containing thermostats from homes and replace them with programmable thermostats
- Contractors place **intact** mercury-containing thermostats in collection bin
- When the bin is full, or when CAF conducts a collection “sweep”, contractors ship the bin using the pre-paid 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

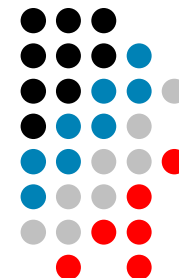
Switch the 'Stat Program

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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