

# Thermostat Recovery Program BC Implementation

July - September 2010



# Program Operations

# Delivery of Switch the 'Stat Collection Channels

## 1. Contractor/Wholesaler Channel

- Summerhill Impact (SI) sends registered contractors and wholesalers the following material — a collection container (United Nations approved for shipping), an introductory letter, program instructions, information brochures to leave behind with their customers and a pre-paid courier waybill.
- We have identified and engaged HVAC contractors and wholesalers via letters, and coverage in industry publications.



# Delivery of Switch the 'Stat Collection Channels

## 2. Regional District/Municipal Collection

- We have engaged 16 Regional Districts within the first quarter of program operations
- Regional District reaction to the program has been mixed – we are open to any form of participation
- Program information and collection containers are being provided to interested regional districts – six have registered so far as collection sites
- We will document and track the number of thermostats that come back through this channel in Year 1 to judge the relative proportion of collection results.



# Delivery of Switch the 'Stat Collection Channels

## 3. Return to Retail Collection

- For the first time, residents will be able to return end-of-life thermostats to select The Home Depot locations in British Columbia
- Program reps will be available to answer questions and to collect old thermostats to be responsibly recycled
- Discounts on new energy saving programmable thermostats will be available
- Events on Saturday, November 6 and Sunday, November 7, 2010 between 9:00 am and 4:00 pm
- Store locations include Kelowna, Vernon, Kamloops, Prince George, West Bank

Cranbrook, Victoria,

Princeton (Terminal)



# Delivery of Switch the 'Stat Collection Channels

## 4. Send-back Channel

- This channel will be provided as an option for British Columbia residents living in remote areas.
- The Switch the 'Stat website includes an on-line request option where the public can request a shipping container with a pre-paid courier waybill to ship their individual old thermostat directly to the recycler.



# Material Management

The thermostats collected through Switch the 'Stat in BC will be sent to Tri-Arrow Industrial Recovery in Surrey, BC. There the thermostats will be counted, documented and materials will be separated into the following categories:

**Mercury Switches:** Mercury containing switches will be sent to Aevitas in Ayr Ontario, where the glass bulbs will be crushed, and mercury will be separated. The liquid mercury will be shipped to Bethlehem Apparatus in Bethlehem Pennsylvania for triple distillation. We have not yet decided on the final fate of the mercury recovered through the program, but the options are permanent storage, or selling it back to market for use in fluorescent lighting. I believe this is dependent on the program funders as well as the BC MOE.

**Plastics:** Merlin Plastics, New Westminster, Final Processing as pellet form plastic for resale in North America

**Metal:** ABC Recycling, Langley, Final Processing as rebar Nucor Steel, Seattle

**Electronics:** Electronics Recycling, Surrey, Final Processing as electronics recovery in International sales. No landfill disposal



# Outreach and Networking Activities

## Outreach

- May 2010 - Participation in the Recycling Council of British Columbia's annual conference
- July-August 2010 - Calls to various BC Regional Districts to gauge interest in participation in the Switch the 'Stat program
- September 2010 - Update and reprint of Switch the 'Stat brochure
- August-September 2010 - Outreach letters were sent to 400 new contractors in Ontario and British Columbia to boost participation in both provinces; these letters provided participants with program information and a registration form
- October 2010 - Follow-up calls to registered contractors and wholesalers
- October 20-22, 2010 - Attendance of the Coast Waste Management Conference provided opportunity to connect with waste management sector in BC
- October 25, 2010 - Meeting with HRAI BC Chapter Manager to discuss ways to further engage HRAI BC members



# Outreach and Networking Activities

## Networking

- May 2010 – An article about Switch the ‘Stat appeared in the May issue of the TECA news; a number of new BC registrations resulted from this article
- July 2010 – Switch the ‘Stat was added to the RCBC “Recyclepedia” to give BC residents detailed information on how to dispose of end-of-life thermostats; information on Switch the ‘Stat was also added to the “Recycling Program” section of the RCBC website
- July 2010 – Information on Switch the ‘Stat was included in the Vancouver's Sustainability Program e-newsletter
- July 2010 – Switch the ‘Stat included on RCBC’s monthly tip sheet
- September 2010 – BC Environment Minister Penner was interviewed on the Shell Busey radio show, and provided information on the Switch the ‘Stat program



# Website Updates

During July and August 2010, a number of content changes and updates were made to [www.switchthestat.ca](http://www.switchthestat.ca). These changes include:

- Addition of a dynamic “mercury counter” to display updated collection results
- Content updated to reflect the program funding changes as of July 1, 2010
- ON/BC/MB stewardship plans and approvals posted
- Partners and Funders section updated with manufactures that have currently signed onto the program
- “Participate” section updated to include new collection channel options
- Map of drop off locations added, option for residents to search by postal code
- Participant section updated, and tied into database to ensure all participating contractor information is up to date and accurate.



# Website Updates

- Participants are now mapped and searchable by Regional District



# Program Resources

- In September 2010, the Switch the 'Stat program brochure was updated with recent collection results and funding information



**Make the right switch!**

**SWITCH THE 'STAT'**

This is a mercury switch – something that still exists in millions of older mechanical thermostats. Mercury is highly toxic and dangerous to the health of people and wildlife.

Switching to newer and more energy-efficient programmable thermostats and responsibly disposing of older mercury-containing thermostats reduces energy consumption and prevents mercury from contaminating our air, soil and water.

Old mechanical thermostats have one to four switches, each containing approximately 2.5 grams of mercury.

Mercury is a potent neurotoxin and it only takes **one gram** to **contaminate an eight-hectare lake** to the point where the fish are not edible for a full year.

If you dispose of your old thermostat with your household waste, you are sending mercury to landfill.

If you participate in **Switch the 'Stat**, you will conserve energy, save money, and prevent mercury releases to the environment.

**Step 1:** With the help of your participating **Switch the 'Stat** contractor, switch to a newer, more energy-efficient programmable thermostat.

**Step 2:** Responsibly dispose of your old mercury-containing thermostat through your local **Switch the 'Stat** contractor. A recycling facility will dismantle the thermostat, recycle the parts, and prevent the mercury from contaminating air, soil and water.

For more information, go to [www.switchthestat.ca](http://www.switchthestat.ca), e-mail [switchthestat@summerhillgroup.ca](mailto:switchthestat@summerhillgroup.ca) or call 416-922-2448.

Switch the 'Stat program partners:

**HRAI** **CEP**

Official mark of the Ontario Power Authority  
THESE ARE PROTECTIVE AND MONITORING DEVICES ON YOUR BEHALF.  
ENVIRONMENTAL CHECKS CERTIFIED. PACKAGED CHLORINE FUEL PIG APPROVED POWER.



# Program Results

# Collection Targets & Q1 Results

The table below provides the five-year collection targets for British Columbia:

Year	Estimated Number of Thermostats Available for Collection	Target Number of Thermostats to be Collected	% Capture
Year 1 (July 2010–June 2011)	13,500	3,375	25%
Year 2 (July 2011–June 2012)	13,500	5,400	40%
Year 3 (July 2012–June 2013)	13,500	7,425	55%
Year 4 (July 2013–June 2014)	13,500	8,775	65%
Year 5 (July 2014–June 2015)	13,500	10,125	75%

Between July 1<sup>st</sup> – September 30<sup>th</sup> we have collected 214 mercury thermostats, 442 mercury switches (approximately an additional 126 thermostats), and 5 electronic thermostats. This represents a total of 1.1 kg of mercury recovered.





**Upcoming 2010 Switch the 'Stat  
Program Activities**



# Other Upcoming 2010 Program Activities

- 2011 – Switch the ‘Stat will be included in municipal calendars across British Columbia to let residents know about the program and thermostat disposal options



# Ongoing Outreach Strategy

- We are currently working with HRAI, CIPH and TECA in British Columbia on a strategy to engage the members of each association to actively participate in Switch the 'Stat
- We will continue to advertise in industry publications, and participation in industry meetings (via presentations and tradeshow).
- Working with other stewardship agencies on joint marketing projects
- Continuing Regional District engagement

