

School District #41 - 2009 Carbon Neutral Action Report

Executive Summary

Burnaby School District is entering its 10th year of energy conservation and continues to be a leader in K-12 School district energy reduction (over 40%). Our electrical intensity is the lowest of all Districts in BC at 46 kWh/m². The Environmental Sustainability Policy being approved this spring forms the foundation as the District moves our programs into a second decade of Environmental Stewardship.

- The mandate to become Carbon neutral and the district's sustainability objectives reinforces the District's action over the past decade and helps focus our future endeavours.
- The district continued through 2009 with its planned lighting and HVAC upgrades and is developing its next strategic 5 year plan of Facilities and Environmental Upgrades. Our LEED Gold construction program is being implemented with 2 of 3 sites opening in 2010.

Overviews

Actions Taken to Reduce Greenhouse Gas Emissions in 2009

The adoption of LEED Gold construction guidelines in our new building program required a far greater role for District staff in commitment of resources to meet design criteria. These designs will meet both goals of emission reduction and sustainability through design and management practices and procedures.

Our LEEDs facilities provide a dynamic teaching tool to be shared with our students through actual measurement and verification of utility consumption.

Six lighting, 2 HVAC, IT Power management and 3 DDC controls projects. See section A2 in Action Report

Staff and student education through BC Hydro programs and support of school based initiatives through the District's Webpage resource link.

Operational Changes in 2009

The District is in a major seismic upgrade program with numerous portable classrooms being used as temporary accommodation. These units are far less energy efficient and do have a negative impact on our carbon footprint.

Plans to Continue Reducing Greenhouse Gas Emissions 2010 – 2012

The district will continue to carry out lighting upgrades with 10 audits underway. HVAC upgrades are planned and Direct Digital Control (DDC) of both heat and lighting systems will be expanded.

- Becoming carbon neutral in 2010 is one element of our organization's sustainability goals to show leadership within our community.
- Reducing GHG emissions will not only help provide financial savings to the District but provide evidence of our commitment to reduce our carbon footprint for the benefit of future generations.
- District Link: <http://sd41.bc.ca/environment/index.htm>

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Actions Towards Carbon Neutrality							
The actions listed below contribute to a reduction in greenhouse gas emissions from sources for which public sector organizations are responsible under the carbon neutral government regulation of the <i>Greenhouse Gas Reduction Targets Act</i> .							
Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equipment)							
Vehicle fuel efficiency							
Replace vehicles with more fuel-efficient models	In Development			District is committed to purchase the most fuel efficient fleet within its limited resources and make that part of all future bid evaluations	Continuation within limited financial resources	2012	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	In Development			All fleet leases/purchases are reviewed and strategic plan for replacement is complete for "right sizing"	Budget challenges defers purchases/leases for several years	2012	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	100	% of vehicles are subject to regular maintenance for fuel efficiency	Redefining maintenance procedure	Measurement and verification of fleet performance	2008	No End Date (Continuous)
Behaviour change program							
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	15	% of current drivers are trained	Plans to expand program	Driver Training Program to be offered to all maintenance staff	2009	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Ongoing/In Progress			Being delivered through user group safety "tail gate" meetings	To be delivered through "Tail Gate" safety and training	2009	No End Date (Continuous)
Encourage carpooling in fleet vehicles	In Development			District staff have carpooled for some time and we are moving forward to formalize and support these actions	Formalize notice to carpool whenever possible	2010	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Quantifying and promoting existing action	Identifying opportunities to District staff through meeting and travel planning	2005	No End Date (Continuous)
Other Mobile Fuel Combustion Actions							
* The District has minimised it's fleet and pays travel time to employees who inturn use the most efficient transport available.	Ongoing/In Progress			No further action taken	With present budget challenges any vehicle in need of replacement will be reviewed for potenetal mileage paid instead of replacement of District fleet.	2006	No End Date (Continuous)
* Reduce travel through use of conference calls and webinars	Ongoing/In Progress			Outfitting more facilities with technolgy to conference call	Use new technology to support this practice	2009	No End Date (Continuous)
Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)							
Planning/management							
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Ongoing/In Progress			16 School Districts now have Energy Managers and all require ongoing reporting and actions to retain funding.	BC Hydro to expand the program	2008	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	1	% of buildings have a real time metering system installed	Minor installs in place as teaching tools for students	Expand program for critical equipment and education. BC Hydro looking to introduce real time primary metering	2008	No End Date (Continuous)
Owned buildings							

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Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Establish energy performance baseline for owned buildings	Complete	100	% of owned buildings have an established energy performance baseline	Ongoing reviews of existing 10 year program. Prioritizing performance upgrades, modification of palnt replacements.	Ongoing reviews of existing 10 year program. Prioritising performance upgrades, modification of palnt replacements.	2000	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	5	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	3 schools registered for LEED Gold under our new and replacement building program	Attain LEED certification for 3 schools and continue this process for all future new buildings.	2009	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	10	% of owned buildings have undergone energy retrofits since start year indicated	Incorporated in design for 5 sites undergoing seismic upgrades	To be incorporated for all future seismic upgrades	2009	No End Date (Continuous)
Retrofitting owned buildings							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	25	% of retrofits (captured above) had heating, cooling, and ventilation systems upgrades	5 sites had boiler replacement or hybrid modifications performed	5-10 plant upgrades planned dependent on funding	2006	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	60	% of retrofits (captured above) had lighting systems upgrades	5 sites received upgrades. 15 audits approved	15-30 lighting upgrades + 15 audits planned dependent on funding	2004	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	70	% of retrofits (captured above) had control system upgrades or adjustments	7 sites received partial and 2 total DDC upgrades.	5-20 DDC upgrades and replacements planned dependent on funding	2006	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	In Development			Cost prohibative at this time. Plan to carry out under replacement projects only.	District Capital plan calls for potential 3 school replacements. Ministry support required	2012	No End Date (Continuous)
Install an on-site renewable energy demonstration project	Ongoing/In Progress	8	% of retrofits (captured above) had on-site renewable energy components	2 sites planned for Photovoltaic arrays. 1 for geothermal field. 2 planned solar DHW heating arrays.	Installation, commissioning and peformance reporting on 2 Photovoltaic, 2 Solar DHW arrays and a geothermal heating plant. New building to contain similar applications	2012	No End Date (Continuous)
IT power management							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	100	% of computers shut down automatically outside of regular business hours	Purchased and installed software for auto shutdown for final 4000 units	Commisioning of software and ongoing review of shutdown schedules	2004	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Complete	100	% of computers have auto-sleep settings applied	None		2003	No End Date (Continuous)
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	In Development			Printer assessment planned to improve deployment strategy	Printer & Copier assessment underway	2009	2011
Apply auto-sleep settings on printers, copiers, fax machines, and/or multi-function devices	Ongoing/In Progress	60	% of devices have auto-sleep settings applied	IT carried out set up for Auto sleep where possible	During present Printer & Copier assessment the capacity of inventory and actions will be determind for deployment of program	2009	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	27	% of computers are ENERGY STAR rated	EPEAT standards existing for all new computer purchases. Significant refresh program began in secondary and administration offices.	Refresh program continues	2009	No End Date (Continuous)
Appliances and electronic devices							

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Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			Purchasing policy that all purchases of electrical appliances be Energy Star rated	Weighting within all Request for Proposals (RFP's) to be increased for higher energy rated devices.	2010	2012
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Ongoing/In Progress			Last of incandescent bulbs replaced in office/classroom	Service areas that still have incandescent lighting will be replaced CFL's upon failure	2010	2012
Behaviour change program							
Help staff reduce personal energy use through "workstation tune-ups"	In Development				Planned for implementation in 2010	2010	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Investigation of Smart Power Bars. Trials on various product lines	Trial study and potential implementation of Smart Power Bars that shuts down when no amperage drawn for preset time period.	2010	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Custodial procedure at all locations when not done by staff.	Continue practice	2001	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development				Planned for implementation in 2010	2010	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress	10	No. School sites with reminder stickers	BC Hydro provided stickers to place at various schools through it's Powersmart Programs (Energy Detectives, Energy Ambassador,..etc)	Ongoing programs with BC Hydro	2008	No End Date (Continuous)
Promote hot water conservation	Ongoing/In Progress			Solar Hot Water planned for Bby South Sec School	Solar DHW plant at Bby South and Byrne Creek to be installed in 2010. Monitored and verification to follow with additional installs	2009	No End Date (Continuous)
Supplies (Paper)							
Paper Type							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	16	% of total paper purchased contains 30% recycled content	Increased use of recycled content from 13 to 16%	To eliminate all non-recycled paper	2010	2012
Purchase 100% post-consumer recycled paper	Ongoing/In Progress	1	% of total paper purchased contains 100% recycled content	None	Committed to use/purchase 100% recycled paper with a goal of 20% of total purchase.	2010	No End Date (Continuous)
Printer/document settings							
Switch networked printers and photocopiers to automatic double-sided	Complete	100	% of network printers or photocopiers are set to automatic double-sided	Printers and Photocopiers set to auto double-sided		2009	2009
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress	30	% of network printers have 'print and hold' settings applied	Ongoing and applied where possible	Program to be finalized when present audit is complete	2009	2012
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress			Carried out where possible	Ongoing	2008	No End Date (Continuous)
Electronic media in place of paper							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	50	% of staff workstations with software installed	Grew existing portals and users by 30% in 2009	Program to expand to all employees	2010	No End Date (Continuous)

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Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Use electronic document library for filing common documents	In Development			Review of product applications	Formalize document structure for various departments and go to tender for program delivery	2009	2012
Post materials online that were previously printed	Ongoing/In Progress			Tenders and support documents posted on District webpage	Tenders to be posted on District Website with no paper issued	2009	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Complete			Completed final groups		2008	2009
Behaviour change program							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	50	% of staff currently have received collaborative software training	Grew users and training by 30% in 2009	Traing to expand to all employees	2010	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress			Started for Board Trustee meetings	Program to be expanded through planned implementation of notebooks for staff	2009	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			Print shop no longer stocks note pads and reuse of scrap is encouraged	Ongoing promotion of action	2009	No End Date (Continuous)
Other Paper Supplies Actions							
Employee statements issued by Web.	Ongoing/In Progress	98	% of staff receive earning statement via Web.	Moved employee groups to paperless pay statements	Move payroll and HR forms to Web ie; Timecards, Tax T4's, Job Postings.	2010	2012
Web purchasing requisitions to eliminate paper based system	In Development			Planning for implementation of Web requisition system	Pilot and implementation of Purchasing requisition system	2010	2012

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Actions to Reduce Provincial Emissions and Improve Sustainability

The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act*. Public sector organizations can optionally use this section to report on actions that will help British Columbia meet its provincial greenhouse gas reduction targets, engage the public, and improve environmental sustainability across all aspects of their organization.

Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)		Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Business Travel							
Virtual meeting technology							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	In Development			Pilot project with 6 admin users through Skype and Iwizzard	Development and implementation of project. Delivery to Admin and then other 50 active sites as budget is approved.	2011	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	1	% of staff have access to a desktop web-camera	10 units installed under trial program	Development and implementation of project. Delivery to Admin and then other 50 active sites as budget is approved.	2010	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	20	% of meeting rooms have access to video-conferencing equipment	VC used at District admin, Resource centre, all secondary and 2 elementary schools through permanent installs or portable units	Planned purchase and installations to all active sites.	2011	No End Date (Continuous)
Behaviour change program							
Train staff in web-conferencing	Ongoing/In Progress	12	% of staff are trained web-conferencing	12 Admin sites trained	Implement District wide	2010	2012
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	1	% of staff are trained in video-conferencing or have access to technical support	Our Global Learning Team has a classroom and delivers instruction and form there support to all location	Resources to be added as required	2010	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	In Development				Now resources are in place for the program is will be expanded and offered District wide	2010	No End Date (Continuous)
Education, Awareness, and Engagement							
Team-building							
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress			District Policy #7.70 Environmental Sustainability drafted August 2009. Planned participation at school and administration levels. Green Team template issued. Monthly sustainability meetings held for secondary school students and teachers.	Board approval and distribution of Policy #7.70 Environmental Sustainability. Ongoing meetings of sustainability groups with 2010 Student Environmental Sustainability Forum March 25 2010.	2009	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress			District Energy Manager and Director of Instruction	District Energy Manager and Director of Instruction will continue to support teachers, support staff, students in environmental sustainability initiatives.	2009	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress			BC Hydro - Energy Detectives, Energy Ambassadors, Urban Gardening, Evergreen Foundation, BC Green Games, Youth-4-Action	BC Hydro - Energy Detectives, Energy Ambassadors, Urban Gardening, Evergreen Foundation, BC Green Games, Youth-4-Action, March 25 2010 Student Environmental Sustainability Conference, BC Hydro Energy Connectors	2008	No End Date (Continuous)
Awards/Recognition							
Establish a sustainability/green awards or recognition program	In Development			\$1,000 Award given to Inman School as the highest energy conserver of the past 12 months to start our Green program	The district will establish school grants (\$100.00) to support school-based green team initiatives.	2010	No End Date (Continuous)
Staff Professional Development							

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Action	Status (as of 12/31/09)	Performance to Date (as of 12/31/09)	Steps Taken in 2009	Steps Planned for 2010 -2012	Start Year	End Year
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		Monthly meetings of the District Sustainability Committee	Monthly meetings of the District Sustainability Committee, March 25, 2010 Student Sustainability Conference, teachers and students attend a variety of BC Hydro and Metro Vancouver professional development sessions.	2009	No End Date (Continuous)
Staff awareness/education						
Provide education to staff about the science of climate change	In Development			Planned through Environmental Sustainability Forum	2010	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		The district-website has an environmental sustainability section	Environmental sustainability sections (staff and general) of the District Website to be expanded. Water metering being installed at all sites over a several year program for measurement. Verification and conservation programming	2009	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		Webpag eveloped in 2009 and to be a Dynamic tools for ongoing program delivery	Continual enhanceemnt to Website	2009	No End Date (Continuous)
Client/public awareness/education						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		Provided through our students in the classroom and at monthly meetings.	Ongoing	2008	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		Provided through our students in the classroom and at monthly meetings.	Ongoing	2008	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		Ongoing	Ongoing	2008	No End Date (Continuous)
Other Sustainability Actions						
Water conservation						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		14 of 56 Water Meters installed. District has traditionally payed per student and City requires a committed percentage installed prior to metering switch. Measure and Manage approach by the District. 3 LEED Gold applications made.	Complete Water meter installations at all sites. Attain LEED Gold certification at 3 schools and all future construction projects.	2008	No End Date (Continuous)
Put in place a potable water management strategy to reduce potable water demand of building-level uses such as cooling tower equipment, toilet fixtures, etc. and landscape features	Ongoing/In Progress		Waterless urinals installed at 2 location and occupancy controls for water dispensing under trial. Several occupancy controlled handwash stations installed.	Expand waterless urinal installs . Low flow and occupany control WC's and fixtures installed at LEEDs locations and other district locations where fiscally possible.	2009	No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress		Design complete on 3 LEED Gold sites	Stormwater mangement completion at 3 LEEDs locations	2009	2011
Waste reduction/diversion						
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress		Segregation of Waste through City waste Management Program	Further review of segregation and waste management programming planned.	2000	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress		Hazard wastes are minor in schools (Science Labs) and are collected and disposed of through certified contractors	Adjust practice to meet current legislation/regulations	1990	No End Date (Continuous)
Procurement (non-paper supplies)						

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Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	Ongoing/In Progress			LEED Gold standards reviewed for all sites	After installations of systems and furnishing for LEED Gold locations (3) a review of performance to be followed by implementation, where applicable across the District.	2009	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress			All cleaning products reviewed for LEED compliance. Waste bin liner trial at 6 locations	Implement the deletion of plastic bin liners in elementary school classrooms (600,000 per year) to help improve performance landfills. Trial and implement toilet tissue dispensers and single sheet paper towel dispensers. LEED training for Custodial product schedule for spring 2010. LEEDkui	2009	No End Date (Continuous)
Require a minimum purchase of sustainable, and organic food and beverages supplied by contracted food suppliers or caterers	Ongoing/In Progress	50	% of the combined total food and beverage purchase (in cost) meets these requirements	Healthy Food Program delivered throughout the District and through all contracted services	Further expansion of Healthy Food program	2009	No End Date (Continuous)
Building construction, renovation, and leasing							
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress			Requirement of LEED Gold for 3 sites in design/construction	New construction wil comply with LEED Gold requirements	2008	No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Ongoing/In Progress	100	% of business cases incorporating lifecycle costing since start year indicated	CAMS Program in delelopement through MEd	CAMS audits underway and lifecycle requirements to be addressed by Government	2011	No End Date (Continuous)
Indoor air quality							
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress			Ongoing	Furniture VOC rerquirements to be addressed	1999	No End Date (Continuous)
Commuting to and from home							
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress			Incorporated in the design of 3 LEED Gold school locations	Installation of showers and lockers at new school sites Showers to be part of New Board Office Future Schools and upgardes to incorporate these items	1990	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress	90	% of sites with Bicycle Storage	None	Bycycle stoarge at 3 new locations	2010	2012
Other Sustainability Actions							
Stationary Bicycles to generate electricity	Ongoing/In Progress	3	Units purchased and used throughout the District for demonstartion purposes	Purchase and program introduced	Ongoing demonstartion program to students	2009	No End Date (Continuous)
Power Meter Installations	Ongoing/In Progress	3	Units purchased and used throughout the District for localized management of power distribution	Purchase and program introduced	Program to be expanded	2009	No End Date (Continuous)
Solar Hot Water Heaters	Ongoing/In Progress	2	Design complete on 2 sites	Design complete on 2 sites	Installation of 2 systems and development of future projects based on commissioning and evaluation of the current installations	2008	No End Date (Continuous)

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Photovoltaic Arrays	Ongoing/In Progress	2	Design complete on 2 sites	Design complete on 2 sites	Installation of 2 systems and development of future projects based on commissioning and evaluation of the current installations	2009	No End Date (Continuous)
Reduction of plastic bags in waste management	Ongoing/In Progress	6	Trial sites have no plastic bin liners in any any waste bins	6 schools trial of plastic bin liner removal was completed and proven to be successful in reduction of plastic to landfills	District wide implementation of the removal of plastic bin liners. 400,000 per year district wide not going to landfill sites.	2009	No End Date (Continuous)
Low flow washrom fixtures and occupancy control activators	Ongoing/In Progress	6	Sites have partial fixture upgrade installation	6 Sites have partial fixture upgrade installation	Program to be expanded	2009	No End Date (Continuous)
Water Meter Installation	Ongoing/In Progress	16	Meters installed. Program to replace per student billing with actual metered billing to measure, report and manage consumption	8 Installation. City initial support in the program	City approval and expansion of program to all schools.	2008	2012