



**SCHOOL DISTRICT NO. 36 (SURREY)**

14225 – 56 Avenue, Surrey, BC V3X 3A3  
Phone: 604-596-7733 Fax: 604-596-4197

File: 0470-01 & 0550-20(c)

2011-04-29

Via E-mail: [climateactionsecretariat@gov.bc.ca](mailto:climateactionsecretariat@gov.bc.ca)

Climate Action Secretariat  
PO Box 9486  
Victoria, BC V8W 9W6

Dear Sirs:

**RE: CARBON NEUTRAL ACTION REPORT – 2010**

---

Attached please find the Carbon Neutral Action Report - 2010 from the Board of Education of School District No. 36 (Surrey).

If you require any additional information, please do not hesitate to contact me.

Yours truly,

Wayne D. Noye  
Secretary-Treasurer

WDN/lm

Encl.

cc: A. MacKinnon, Director, Energy Management & Sustainability  
P. Lukaszek, Manager, Green Schools, Ministry of Education [Paul.Lukaszek@gov.bc.ca](mailto:Paul.Lukaszek@gov.bc.ca)



BOARD OF EDUCATION  
of  
SCHOOL DISTRICT NO. 36 (Surrey)

Schedule 3(d)  
of the  
ADMINISTRATIVE MEMORANDUM  
(Regular)

MEETING DATE: 2011-04-28

TOPIC: CARBON NEUTRAL ACTION REPORT - 2010

---

The attached report was requested by the Ministry of Education for submission prior to 2011-04-30.

**IT IS THEREFORE RECOMMENDED:**

THAT the Board approve the 2010 Carbon Neutral Action Report and a copy of the report be submitted to the Ministry of Education prior to 2011-04-30.

Enclosures:



Submitted by:

W.D. Noye, Secretary-Treasurer

Approved by:

M.A. McKay, Superintendent



## SCHOOL DISTRICT No. 36 (SURREY) CARBON NEUTRAL ACTION REPORT 2010

### Executive Summary

The Board of Education of School District No. 36 (Surrey) is committed to safeguarding the quality of life of our students, staff and community. The Board recognizes its responsibility as a steward of the environment for the benefit of present and future generations.

In 2010, Surrey School District significantly reduced its carbon footprint through a coherent and aligned strategy of education, effective facilities management, and planning.

The district embarked on a process of developing an Energy Policy with guidelines designed to enhance the goal of carbon neutrality.

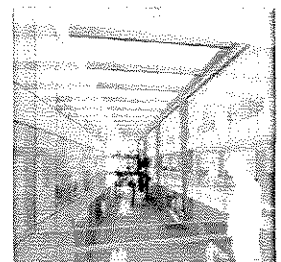
In Surrey School District the students and employees continue to adopt and advocate for more sustainable behaviours through participation in a diverse number of educational programs, workshops, and conferences.

In recognition of the ecological interdependence and shared responsibility inherent in the task of creating a culture of conservation, the Board continues to develop a robust network of partners including the City of Surrey and BC Hydro.

Surrey School District champions technical innovation as an energy conservation tool in a number of ways including:

- A new HVAC technology using a combination of displacement ventilation, "chilled beams", high efficiency boilers and geothermal field to provide heating and cooling for the new District Education Centre (DEC);
- PSECA funding for construction of solar walls at four secondary schools;
- LEED Gold standards for new construction which includes the use of geothermal fields to reduce heating and cooling loads at DEC, Woodward Hill Elementary School, and Adams Road Elementary School;
- Internet based displays of school energy consumption connected to all nineteen secondary schools and eight elementary schools that are accessible to school green teams.

Wayne D. Noye  
Secretary-Treasurer



## **2010 Greenhouse Gas Emissions**

The total greenhouse gas emissions from all sources covered by the *Greenhouse Gas Reduction Targets Act* (as reported in SMARTTool) are 20,102.32 tonnes of CO<sub>2</sub>e.

It was estimated that stationary fugitive emissions from cooling do not comprise more than 0.01% of Surrey School District's total emissions and an ongoing effort to collect or estimate emissions from this source would be disproportionately onerous. For this reason, emissions from this source have been deemed out-of-scope and have not been included in the total greenhouse gas emissions profile for the Board of Education School District No. 36 (Surrey).

## **Offsets Applied to Become Carbon Neutral in 2010**

Total emission offsets have been applied to become carbon neutral for 2010. As required by section 5 of the Carbon Neutral Government Regulation, 226.66 tonnes CO<sub>2</sub>e of emissions resulting from the operation of school buses were reported as part of our greenhouse gas emissions profile in 2010. However, they were not offset as they are out-of-scope under section 4(2)(c) of the Carbon Neutral Government Regulation.

## **Emissions Reduction Activities**

### **Actions Taken to Reduce Greenhouse Gas Emissions in 2010**

The Facilities Department takes a planned approach to energy management, implementing projects as funding permits. Energy projects completed in 2010 include:

- ongoing lighting upgrades and retrofits at schools;
- installation of high efficiency boilers;
- improving the sequence of operations of unit ventilators controlled by DDC systems.

Two new elementary schools, Adams Road and Woodward Hill opened in 2010. Both schools were designed and built to LEED Gold standards to maximize energy efficiency. As well, major renovations and mechanical upgrades were completed at McLeod Road Traditional School, Old Yale Road Elementary School, KB Woodward Elementary School, and Mary Jane Shannon Elementary School.

A new 11, 650 square metre District Education Centre was completed with full occupancy by four hundred and seventy-five administrative staff, teachers, and students scheduled for August, 2011. The DEC will substantially reduce the district's impact on the environment. Built to LEED Gold standards, the building is projected to significantly reduce district gas and electricity costs.

The Board's commitment to education and behaviour change is reflected in support and coordination of programs such as Energy Detectives, Energy Connections and Energy Campaigns at the elementary level. In addition green teams are active at many elementary schools as well as fifteen of the district's secondary schools. Nine secondary schools are involved in the Clean Air Champions High School Climate Challenge and six other secondary schools participate in the B.C. Hydro Energy Ambassadors program. District secondary schools and learning centres coordinate sustainability initiatives through the iDEAS 36 secondary student leadership group. As well, many schools participate in the BC Green Games. 2010 provincial winners were:

Erma Stephenson Elementary  
Holly Elementary  
Fraser Heights Secondary

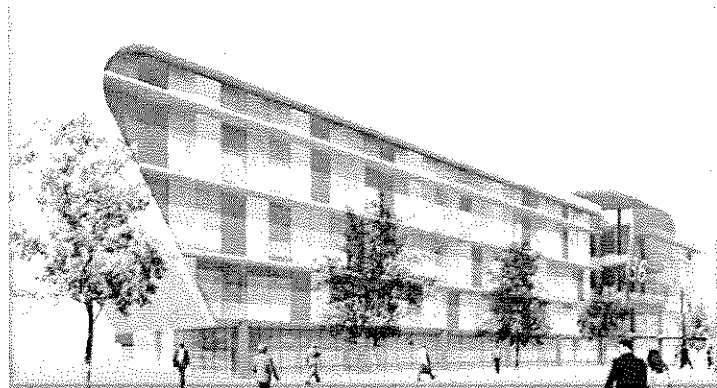
To encourage increased physical activity, reduced traffic congestion, and enhanced neighbourhood safety, the Board participated in the School Travel Planning project coordinated by the City of Surrey. Three elementary schools participated in the program which brought together community stakeholders to identify barriers to active transportation for each school and develop written action plans.

A Power Smart Partner since 2002, Surrey School District participated in an Energy Management Assessment which resulted in the establishment of a senior position, Director of Energy Management and Sustainability, to oversee district sustainability and environmental initiatives. A draft Strategic Energy Management Plan was developed in preparation for Board endorsement in the spring of 2011.

The journey towards sustainable energy conservation requires district-wide commitment and participation to ensure that daily activity and the associated energy management opportunities and challenges are understood, optimized and managed. An executive level District Energy Committee has been formed to integrate energy management into decision making across all schools, departments and facilities.

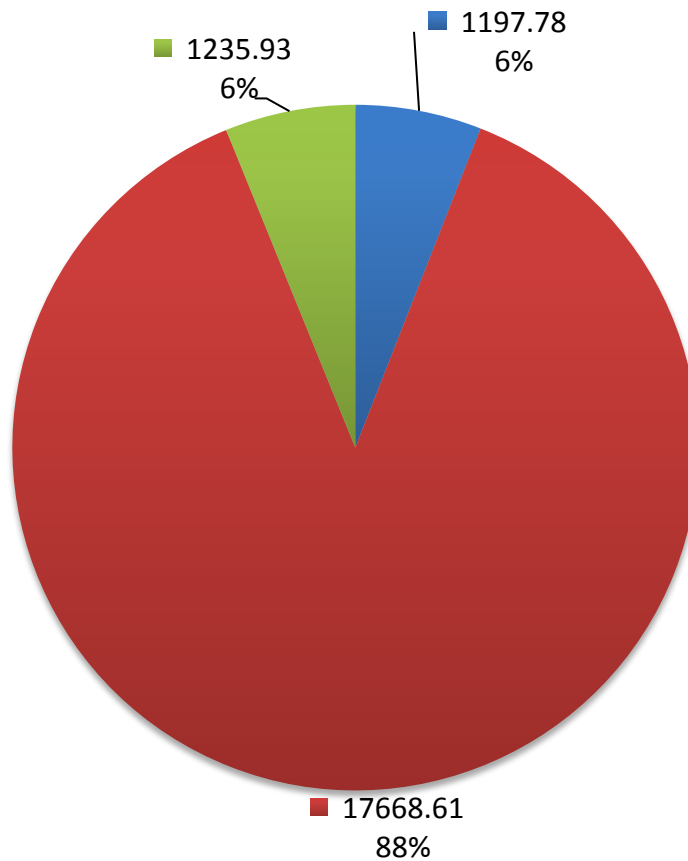
## Plans to Continue Reducing Greenhouse Gas Emissions 2011 – 2013

- We are in the process of seeking Board approval of an Energy Policy and a long term strategic energy management plan.
- We will implement phase one of a multi year Continuous Optimization program at ten sites. This program will provide continuous analysis and reporting of building energy performance while increasing occupant awareness of energy efficiency.
- We will pilot computer power management software at one secondary school, one elementary school and DEC.
- We will conduct a BC Hydro energy study at one secondary school.
- We will showcase school sustainability initiatives at the iDEAS 36 student leadership conference.
- We will establish an inter-jurisdictional committee with the City of Surrey to coordinate and highlight school energy conservation activities.
- We will launch an environmental website to provide resources and opportunities for student, staff, and community feedback.
- We will continue participation in the School Travel Planning program.
- We will participate in the BC Hydro Outreach pilot to increase employee awareness and engagement with energy conservation.
- We will establish a coherent network of green teams and site champions.
- We will seek out technical innovation and implement projects such as solar walls.
- We will eliminate copy paper made from virgin material from our purchasing catalogues.
- We will reduce the number of legacy computers, printers and fax machines.
- We will implement Live Meetings at DEC and encourage paperless meetings.



# Board of Education of School District # 36 (Surrey)

## Greenhouse Gas Emissions by Source for the 2010 Calendar Year (tCO<sub>2</sub>e\*)



**Total Emissions: 20102.32**

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion and Electricity (Buildings)
- Supplies (Paper)

### Offsets Applied to Become Carbon Neutral in 2010

Total offsets purchased: **19875.66**. Total offset investment: **\$496,891.50**. Emissions which do not require offsets: **226.66** \*\*

\*Tonnes of carbon dioxide equivalent (tCO<sub>2</sub>e) is a standard unit of measure in which all types of greenhouse gases are expressed based on their global warming potential relative to carbon dioxide.

\*\* Under the *Carbon Neutral Government Regulation of the Greenhouse Gas Reduction Targets Act*, all emissions from the sources listed above must be reported. As outlined in the regulation, some emissions do not require offsets.

# Board of Education of School District # 36 (Surrey) - 2010 Carbon Neutral Action Report

## 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 *Greenhouse Gas Reduction Targets Act*.

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Mobile Fuel Combustion (Fleet and other mobile equipment)</b>						
<b>Vehicle fuel efficiency</b>						
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	95 % of vehicles are fuel- efficient models	Replace vehicles according to vehicle replacement plan with a focus on better fuel efficiency	Continue policy of purchasing vehicles identified by manufacturer's specifications as fuel efficient	2006	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	55 % of vehicles down-sized since start year indicated	Purchased 8 right sized vehicles, policy of minimizing fleet through purchase of multifunctional vehicles	Continue policy of minimizing vehicle assets, reducing capital investment, and improving fuel efficiency while meeting operational demands	2006	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	Ongoing annual fleet maintenance	Ongoing annual fleet maintenance	2005	No End Date (Continuous)
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress	55 % of small maintenance vehicles are fuel-efficient	Replace vehicles according to vehicle replacement plan with a focus on better fuel efficiency	Continue purchase of vehicles identified by manufacturer's specifications as fuel efficient	2006	No End Date (Continuous)
<b>Behaviour change program</b>						
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	10 % of current drivers are trained	Training provided	Provide ongoing training	2010	No End Date (Continuous)
Introduce anti-idling policy and/or raise anti-idling awareness for fleet drivers (e.g., signs, stickers, messages)	Completed in 2010		Policy in place		2010	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Completed in 2010		Facilities staff carpool in fleet vehicles to sites		1995	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress		Ride-Share SD 36 website implemented	Expand employee awareness training through BC Hydro Outreach Pilot, encourage alternatives to fleet vehicle travel through varied district communications	2005	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity and Fugitive Emissions (Buildings)</b>						
<b>Planning/management</b>						
Enrol in a building energy benchmarking program (e.g., GREEN UP)	Completed in 2010	100 Signed an Energy Manager Agreement for Power Smart Partners effective May 2010.	Created new position of Director Energy Management and Sustainability. Funding approved for phase one of a Continuous Optimization Program at 10 sites. Developed proposal for a multi building framework involving 28 sites.	Install Energy Management Information Systems (EMIS) at 10 sites and collect baseline data. Explore funding approval for phase 2 and 3 at an additional 18 sites including DEC.	2010	No End Date (Continuous)
Reduce office space (square meters) per employee	Ongoing/In Progress	100 is the current average rentable square meters per employee	Construction of DEC completed and planning completed for the consolidation of 7 departments in 1 building.	Consolidation of 7 departments into DEC by August 2011	2008	2011
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	23 % of buildings have a real time metering system installed	Continuing installation of electrical power metres that connect to a central monitoring package that archives historical data	Implement Continuous Optimization Program at 10 sites and add gas meters as funding allows	2005	No End Date (Continuous)
<b>Owned buildings</b>						



## Board of Education of School District # 36 (Surrey) - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Establish energy performance baseline for owned buildings	Ongoing/In Progress	8	% of owned buildings have an established energy performance baseline	Planning for C.OP and a BC Hydro Energy Study	Opportunity Assessments completed for an Energy Study and a multi building framework C.OP	2007	No End Date (Continuous)
Achieve LEED NC Gold certification at a minimum for new construction or major renovations	Ongoing/In Progress	0	% of owned buildings are certified LEED NC Gold or LEED NC Platinum	DEC building scheduled to achieve LEED Gold certification	2 new schools and DEC building scheduled to achieve Leed Gold by 2012	2008	No End Date (Continuous)
Incorporate integrated design process into new construction or during renovations of owned buildings	Ongoing/In Progress	10	% of buildings built or renovated since start year indicated used the integrated design process	1 out of 10 new building projects using integrated design process. No renovation projects use integrated design.	Encourage integrated design process and identify opportunities to incorporate into new construction	2008	No End Date (Continuous)
Complete energy retrofits on existing, owned buildings	Ongoing/In Progress	38	% of owned buildings have undergone energy retrofits since start year indicated	Continued energy retrofits as funding allowed	Initiate a BC Hydro Continuous Optimization Program at 10 sites and conduct a BC Hydro Energy Study at 1 secondary school. Seek funding approval for phase 2 and 3 C.OP at an additional 18 sites	2004	No End Date (Continuous)
<b>Retrofitting owned buildings</b>							
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	14	% of retrofits since start year indicated had heating, cooling, and ventilation systems upgrades	Boiler retrofits to high efficiency boilers	Boiler retrofits to high efficiency condensing boilers, unit ventilator upgrades - - complete replacement and hybrid systems, air handling units put on variable frequency drives, unit ventilator upgrades	2004	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	90	% of retrofits since start year indicated had lighting systems upgrades	Lighting fixture, ballast and bulbs retrofitted to higher efficiency	Ongoing lighting system upgrades	2004	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had control system upgrades or adjustments	Adjustments to boiler controls, fan setting, temperature set points	Multi buiding Continuous Optimization Program developed for 2011-2017 - phase one implementation at 9 secondary schools and DEC; additional control system upgrades dependent on funding	2004	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Ongoing/In Progress	100	% of retrofits since start year indicated had insulation improvements	Building envelope upgrade at Johnston Heights Secondary	Building envelope upgrades identified in Capital Plan	2005	No End Date (Continuous)
Install an on-site renewable energy demonstration project	Ongoing/In Progress	0	% of retrofits since start year indicated had on-site renewable energy components	Completed PSECA application for Solar Air at 4 secondary schools	Install a solar gym wall at 4 secondary schools	2011	No End Date (Continuous)
<b>IT power management</b>							
Install power management software which shuts down computers outside of regular business hours	Ongoing/In Progress	0	% of computers shut down automatically outside of regular business hours	Continued working with BC Hydro. Continued Windows 7 rollout. Scheduled a test of Faronics Power Save software at 1 secondary, 1 elementary, and DEC.	Continue working with BC Hydro. Continue Windows 7 rollout. Complete and report on test of Power Save software at selected sites.	2010	2011
Implement server virtualization	Ongoing/In Progress	90	% of servers have been virtualized since start year indicated	All new/replacement servers are virtualized. Continued planning for relocation of Data Centre to new DEC building and the additional server virtualization.	Complete relocation of Data Centre to new DEC building and the resulting additional server virtualization.	2008	2011
Apply auto-sleep settings on computer monitors and CPUs	Completed in 2010	100	% of computers have auto-sleep settings applied	Auto-sleep functionality complete in 2010. All new/replacement computers have auto-sleep.		2005	2010
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices	Ongoing/In Progress	75	% reduction in printers, copiers, and/or fax machines since start year indicated	Planned the implementation of multi-function devices and the elimination of personal printers, copiers, and fax machines in the DEC building.	Complete the implementation of multi-function devices and the elimination of personal printers, copiers, and fax machines in the DEC building.	2007	No End Date (Continuous)

## Board of Education of School District # 36 (Surrey) - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	99	% of computers are ENERGY STAR rated	All new/replacement computers purchased in 2010 are Energy Star rated.	Continue to replace computers with Energy Star models during regular computer upgrades and replacements.	Started before 1995	No End Date (Continuous)
<b>Appliances and electronic devices</b>							
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress	41	% of fridges are ENERGY STAR rated	15 new/replacement fridges purchased are Energy Star rated	New/replacement fridges are Energy Star rated	2005	No End Date (Continuous)
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress			Draft Sustainable Purchasing Policy developed	New/replacement electronic devices and appliances are Energy Star rated	2005	No End Date (Continuous)
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	Ongoing/In Progress			Only compact fluorescent bulbs are being orderd	All new purchases will be compact fluorescent bulbs	2010	No End Date (Continuous)
<b>Behaviour change program</b>							
Help staff reduce personal energy use through "workstation tune-ups"	Completed in 2010	100	% of current staff have completed a workstation tune-up	Continued implementation of standard image for all computers		2008	No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Ongoing/In Progress			Draft Energy Policy developed, education campaigns at schools	Implement Energy Policy, expand green teams and site champions, implement occupancy engagement as part of pulse meter displays	2002	No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress			Custodians close blinds at the end of each day	Custodians close blinds at the end of each day; implement employee awareness campaign as part of BC Hydro Outreach Project	2000	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress			Draft Energy Policy and Regulation developed; audits, action plans, and presentations by school Green Teams	Expand Green Teams at schools, provide resources, green tips and feedback mechanisms through district website and other varied communications	2010	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development				Develop Green Teams at DEC and schools, provide resources and feedback mechanism through link on district website	2011	No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress			Healthy Active Living programs in schools	Plan to implement at DEC following consolidation of 7 departments and nearly 500 employees from various buildings	2011	No End Date (Continuous)
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress			Reminder stickers on light switches added to new schools as they come on line, education campaigns and programs at schools	Continue student education programs, introduce employee awareness programs, communicate energy saving messages, promote events such as Earth Day, provide resources	2005	No End Date (Continuous)
Promote hot water conservation	In Development				Plan to implement at DEC following consolidation of 7 departments and nearly 500 employees from various buildings	2011	No End Date (Continuous)
<b>Supplies (Paper)</b>							
<b>Paper Type</b>							
Purchase 30% post-consumer recycled paper	Ongoing/In Progress	16	% of total paper purchased contains 30% recycled content	Offered as alternative to non-recycled paper	Planning and analysis to expand this initiative as part of a paper reduction strategy	2009	No End Date (Continuous)
Purchase 100% post-consumer recycled paper	In Development	1	% of total paper purchased contains 100% recycled content	Analysis of cost completed	Planning and analysis to expand this initiative as part of a paper reduction strategy	2009	No End Date (Continuous)

## Board of Education of School District # 36 (Surrey) - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Printer/document settings</b>							
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	35	% of network printers or photocopiers are set to automatic double-sided	New multi-function devices purchased in 2010 have default set to automatically print double-sided	Continue implementing multi-function devices in DEC and schools and set default to automatically print double-sided	2009	No End Date (Continuous)
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress	0	% of network printers have 'print and hold' settings applied	Planned implementation of "print and hold" settings on multi-function devices installed at DEC.	Implementation of print code setting (secure print and hold) on multi-function devices installed at DEC	2011	No End Date (Continuous)
<b>Electronic media in place of paper</b>							
Install collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	1	% of staff workstations with software installed	Planned expansion of the use of SharePoint as part of district's Unified Communications strategy.	Implement district-wide SharePoint 2010 as part of Unified Communications strategy.	2008	No End Date (Continuous)
Use electronic document library for filing common documents	Ongoing/In Progress	10	Electronic document library for as-built drawings and specifications.	Planning for expanding this initiative to other Departments	Provide electronic document library at DEC as part of the SharePoint implementation	2004	No End Date (Continuous)
Post materials online that were previously printed	Ongoing/In Progress	10	Materials posted on First Class and on the district website	District website refined and expanded; planning for Sharepoint implementation and Unified Communications strategy	Implementation of Unified Communications strategy at DEC with incremental rollout to schools	2004	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff to use collaborative software for electronic editing (e.g. SharePoint, Groove, etc.)	Ongoing/In Progress	5	% of staff currently have received collaborative software training	Planning use of and training for SharePoint as part of Unified Communications strategy	Implement district-wide SharePoint 2010 as part of Unified Communications strategy.	2010	No End Date (Continuous)
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	In Development			Planning to incorporate this initiative for staff meetings in the DEC building	Implement paperless meetings at DEC and encourage expansion of the practice at schools	2008	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress			Green Team action plans at various schools	Expansion of Green Teams; adoption of Energy Policy and Regulation	1995	No End Date (Continuous)

## Board of Education of School District # 36 (Surrey) - 2010 Carbon Neutral Action Report

### 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 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Business Travel</b>							
<b>Policy and budgeting</b>							
Create a low-carbon travel policy or travel reduction goal	In Development			In Planning	Create low-carbon travel policy	2011	2012
<b>Virtual meeting technology</b>							
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	1	% of computers have web-conferencing software installed	Elluminate available as a download. Bandwidth adjustments ongoing to facilitate web conferencing. Unified Communications strategy incorporating SharePoint in planning and development. Microsoft Lync is being explored.	Implement Unified Communications strategy with capability of web-conferencing at DEC. Plan incremental district-wide rollout.	2009	No End Date (Continuous)
Make desktop web-cameras available to staff	In Development	20	% of staff have access to a desktop web-camera	Macs (2006 and newer) all have software installed but district wide-area network is not enabled.	Some desktop web-cameras will be introduced at DEC as part of the incremental rollout of SharePoint	2011	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	0	% of meeting rooms have access to video-conferencing equipment	Installed the data and power in most meeting and training rooms at DEC to facilitate video-conferencing	Pilot video-conferencing at DEC and encourage district-wide adoption of video-conferencing technology	2011	No End Date (Continuous)
<b>Behaviour change program</b>							
Train staff in web-conferencing	In Development	1	% of staff are trained web-conferencing		Implement web-conferencing training at DEC and schools	2011	No End Date (Continuous)
Train staff in video-conferencing or provide technical support for video-conferencing set-up	Ongoing/In Progress	0	% of staff are trained in video-conferencing or have access to technical support	Plan implementation of Unified Communications strategy at DEC	Implement video-conferencing training at DEC	2011	No End Date (Continuous)
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress			Increasing number of staff participate in virtual attendance at events	Explore expansion of virtual conferences as part of the SharePoint implementation	2007	No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress			DEC building completion will allow for consolidation of departments	DEC building will be centralized site for the majority of district meetings	2011	No End Date (Continuous)
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Ongoing/In Progress			Construction of DEC building	Ongoing encouragement for staff to use alternative means of transportation; expand awareness of SD 36 Ride-Share website	2008	No End Date (Continuous)
<b>Education, Awareness, and Engagement</b>							
<b>Team-building</b>							
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Ongoing/In Progress			Energy Policy in process. District Energy Committee created. Climate Action Teams at all 15 secondary schools involved in High School Climate Challenge or Energy Ambassadors. Remaining secondary schools and many elementary schools have Green Teams. Planning for Green Team at DEC underway.	Board approval of Energy Policy. Develop plan and guidelines for Green Teams at DEC and all schools.	2005	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	Ongoing/In Progress			Director of Energy Management and Sustainability position created.	Provide resources and plan for the development of a coherent network of green teams at all sites.	2007	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Ongoing/In Progress			Education and training provided through BC Hydro education programs, BC High School Climate Challenge and others.	Continue education programs and introduce employee awareness training through participation in the BC Hydro Outreach pilot.	2009	No End Date (Continuous)



## Board of Education of School District # 36 (Surrey) - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)	Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
<b>Awards/Recognition</b>						
Establish a sustainability/green awards or recognition program	Ongoing/In Progress		Various school based awards and recognition programs in addition to BC Green Games and iDEAS 36 student leadership program	Ongoing school participation in BC Green Games and student and teacher workshops. Consider more formalized district recognition.	2005	No End Date (Continuous)
<b>Staff Professional Development</b>						
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress		Annual Pro-D for all staff involved in management of Facilities and new construction. District participation in a range of activities including UBC Summer Institute for Sustainability and the BC Hydro Power Smart Forum.	Expand workplace awareness through participation in the BC Hydro Outreach pilot and other programs.	2000	No End Date (Continuous)
<b>Staff awareness/education</b>						
Provide education to staff about the science of climate change	Ongoing/In Progress		Energy Connections workshops provided through BC Hydro. Support development of environmental curriculum and groups such as the Surrey Green Teachers Network.	Implement interactive sessions with staff through the BC Hydro Outreach pilot. Promote and support a variety of initiatives such as City of Surrey Earth Day and the WWF Earth Hour. Distribute environmental resources and curriculum.	2005	No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Ongoing/In Progress		A wide range of workshops, training, conferences and other learning opportunities are made available to staff.	Implement interactive sessions with staff through the BC Hydro Outreach pilot. Expand opportunities for staff education.	2005	No End Date (Continuous)
Provide green tips on staff website or in newsletters	Ongoing/In Progress		Green tips provided in a number of district communications formats.	Implement an Energy Conservation website as part of the district adoption of SharePoint and Unified Communications.	2005	No End Date (Continuous)
<b>Client/public awareness/education</b>						
Provide education to clients/public about the science of climate change	Ongoing/In Progress		Environmental curriculum resources developed and shared. Diverse learning opportunities such as High School Climate Challenge and Energy Ambassadors offered.	iDEAS 36 Student Leadership Conference showcases the activities of school green teams and provides educational opportunities from partners such as Metro Vancouver, the City of Surrey, Clean Air Champions, and BC Hydro.	2005	No End Date (Continuous)
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		Environmental curriculum resources developed and shared. Diverse learning opportunities such as High School Climate Challenge and Energy Ambassadors offered.	Coordinate energy conservation education opportunities in partnership with the City of Surrey, BC Hydro and other stakeholders.	2005	No End Date (Continuous)
Provide green tips on client/public website or in newsletters	Ongoing/In Progress		Green tips provided in a number of district communications formats including school and staff newsletters.	Implement district energy conservation website	2005	No End Date (Continuous)
<b>Other Sustainability Actions</b>						
<b>Water conservation</b>						
Establish a water conservation strategy which includes a plan or policy for replacing water fixtures with efficient models	Ongoing/In Progress		1 elementary addition designed to have water efficient fixtures	Future new schools (none approved since 2005/06) to have water efficient fixtures	2003	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	In Development		Remote controlled irrigation system installed on all sports fields	New sports fields will have remote potable water management strategy applied	2007	No End Date (Continuous)
Introduce a stormwater management landscape strategy (e.g., vegetated roofs, permeable paving, rain gardens, bioswales)	Ongoing/In Progress		Provided for all new construction projects	Planned for all future projects; included in all site renovation projects subject to available AFG funding	2003	No End Date (Continuous)
<b>Waste reduction/diversion</b>						

## Board of Education of School District # 36 (Surrey) - 2010 Carbon Neutral Action Report

Action	Status (as of 12/31/10)	Performance to Date (as of 12/31/10)		Steps Taken in 2010	Steps Planned for 2011 -2013	Start Year	End Year
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Ongoing/In Progress			Garbage is separated from cardboard and paper	Planning to pilot an organic waste program at 2 elementary schools and possibly DEC	2010	No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress			Program in place for disposal of hazardous waste	Consideration of a reduction strategy	2000	No End Date (Continuous)
<b>Procurement (non-paper supplies)</b>							
Incorporate minimum recycled content standards into procurement policy for consumable, non-paper supplies (e.g., writing instruments, binders, toner cartridges, etc.)	In Development				Draft Sustainable Purchasing Policy under consideration	2011	No End Date (Continuous)
Establish green standards for goods that are replaced infrequently and/or may require capital funds to purchase (e.g., office furniture, carpeting, etc.)	In Development				Draft Sustainable Purchasing Policy under consideration	2011	No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Ongoing/In Progress			Green cleaning products are presently being used	Ongoing review of new versions of sustainable cleaning products	2008	No End Date (Continuous)
<b>Building construction, renovation, and leasing</b>							
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Ongoing/In Progress			Ongoing LEED Gold target for new construction	Consider formalizing in policy	2005	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	Requirement of feasibility study as part of the Capital Plan requirement for new construction	Ongoing feasibility studies incorporate lifecycle costing	2003	No End Date (Continuous)
<b>Indoor air quality</b>							
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	In Development			Scent-free policies in place at a number of sites	Consider development of a scent-free policy	2011	2013
Incorporate low volatile organic compounds (VOCs) standards into procurement policy for products such as paints, carpets, and furniture	Ongoing/In Progress			Draft Sustainable Purchasing Policy developed; incorporated into Leed Gold standards for new construction and practice followed by maintenance (with the exception of urethane for wood flooring)	Consider adoption of Sustainable Purchasing Policy	2005	No End Date (Continuous)
<b>Commuting to and from home</b>							
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress			SD 36 Ride-Share website established. 3 elementary schools participated in School Travel Planning pilot.	Expansion of School Travel Planning - 7 elementary schools will have participated by end of 2011-12.	2002	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress			Showers and locker facilities at 19 secondary schools	Showers and locker facilities available at DEC	2011	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress			Secure bicycle storage at some schools and and planned for DEC	Secure bicycle storages available at DEC	2011	No End Date (Continuous)