

**School District 5 Southeast Kootenay  
Carbon Neutral Action Report**

**Executive Summary**

In 2009 the Board of Education of School District 5 Southeast Kootenay and the province of British Columbia signed the British Columbia Climate action charter. School District 5 is committed to working closely the government agencies such as the climate action secretariat to reach carbon neutrality and to improve on our environmental stewardship.

School District 5 is committed to an ongoing process of energy improvement efficiencies. Building retrofits, improvement to lighting and heating systems, enhanced fleet operations and overall fossil fuel reduction are just some of the areas the District is committed to addressing.

School District 5 is working towards being considered a leader among school districts working towards carbon neutrality and those committed to reducing their carbon footprints. As an educational entity it is our responsibility to ensure all members of our organization have ample opportunity to learn about ways in which we can all strive for carbon neutrality and environmental stewardship.

### **2012 Green House Gas Emissions**

In 2012 School District 5 has produced 3,478 tonnes of greenhouse gas(GHG) emissions. Emissions have been produced in the following proportions:

Emission Source	Tonnes of CO2
Mobile Fuel Combustion	736
Stationary Fuel and Electricity	2666
Supplies(Paper)	76
Fugitive Emissions	

### **2012 Carbon Neutral Offsets**

Total emission offsets have been applied to ensure that School District 5 has fully met the requirements of Bill 44 and is carbon neutral for 2012.

As required by section 5 of the Carbon Neutral Government Regulation, 622 tonnes of CO2 emissions resulting from the operation of school buses were reported as they are “out of scope” under section 4(2) (c) of the Carbon Neutral Government regulation.

## **Emissions Reduction Activity**

### **2012 Greenhouse Gas Reduction Actions**

#### **Building Retrofitting**

SD5 is continuing to reduce emissions by maintaining and retrofitting our buildings and the heating, cooling, electrical and other facility systems. We have improved our lighting systems (motion/sound sensors, LED replacement), have made more efficient use of digital control systems, and we continue to address heat containment concerns by improving insulation values, weather stripping and exterior wall sealants.

Our transportation department continues to purchase more fuel efficient vehicles, works toward optimal vehicle maintenance schedules designed to improve fuel efficiencies and has adopted a no idling policy to reduce unnecessary emissions.

#### **2012-2014 Emissions Reduction Initiatives**

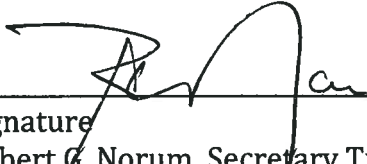
School District 5 will continue to improve the energy efficiencies throughout our system; in facilities and our vehicle fleet. We are hopeful that the design and completion of our future Mount Baker Secondary School and other capital building projects will attain LEED Gold or Platinum status.

The SD5 Climate Action Team is committed to working with staff and students to move toward further reducing our impact on our environment. Our goal is to engage all District staff and students in an ever-evolving process of awareness and concrete action. Our maintenance department is committed to an "efficiency first" policy when making improvements and upgrades to our facilities. Some of the initiatives taking place in our schools and other District buildings during this past year include:

1. Power saver on the computers, computer goes to sleep after 10 - 15 min when not being used. Shuts down after school.
2. Sensor for lighting in rooms. The lights go out after a period of time when unoccupied.
3. LED lighting to reduce the cost of electricity usage.
4. Toilets and urinals that use less water and will flush automatically to ensure a more hygienic environment.

5. DDC systems so we can regulate school temperatures and have better control on  
2the power that is used in our schools.

**Our District will continue to explore the myriad ways in which we can reach  
our goal of carbon neutrality.**



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Signature

Date

Robert G. Norum, Secretary Treasurer  
School District No.5 (Southeast Kootenay)

## School District 05 Southeast Kootenay - 2012 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	Steps Taken	Steps Planned	Start Year	End Year
<b>Mobile Fuel Combustion (Fleet and other)</b>					
<b>Behaviour change program</b>					
Provide fleet driver training to reduce fuel use	Ongoing/In Progress	Driver training offered in October 2012.	We will offer more training in 2014-2015	2012	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	We have continued to educate new District staff about anti-idling and we have continued to remind parents and staff about our policy in and around schools.	We will continue with this program in the coming school year.	2010	No End Date (Continuous)
Encourage carpooling in fleet vehicles	Ongoing/In Progress	We have continued to make carpooling a part of our District culture.	We will continue on with our policy and encourage a greater degree of carpooling when appropriate.	2008	No End Date (Continuous)
Promote alternatives to fleet vehicle travel where possible (e.g., bicycles, public transit, walking)	Ongoing/In Progress	We encourage our staff to ride their bikes or carpool to school. We will continue to replace our bus fleet with the most fuel efficient vehicles available.	We will continue to encourage our staff to ride their bikes or carpool to school. We will continue to replace our bus fleet with the most fuel efficient vehicles available.	2008	No End Date (Continuous)
<b>Vehicle fuel efficiency</b>					
Replace vehicles with more fuel-efficient models	Ongoing/In Progress	We have purchased energy efficient vehicles that get at least 40 MPG. We are committed to purchasing the most fuel efficient vehicles for our fleet.	We will continue to purchase energy efficient vehicles that get at least 40 MPG. We are committed to purchasing the most fuel efficient vehicles for our fleet.	2008	No End Date (Continuous)
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress	We purchased 4 newer energy efficient vehicles this year that get at least 40 MPG and selling off 6 less efficient vehicles.	We are committed to purchasing more energy efficient vehicles and to replacing larger vehicles with smaller vehicles provided they can perform the same function.	2012	No End Date (Continuous)
Perform regular fleet maintenance to improve fuel-efficiency	Ongoing/In Progress	We will continue with our scheduled maintenance program.	We will continue with our scheduled maintenance program.	2008	No End Date (Continuous)
<b>Stationary Fuel Combustion, Electricity</b>					
<b>Behaviour change program</b>					
Help staff reduce personal energy use through ""workstation tune-ups""	Not Yet Evaluated				No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Not Yet Evaluated				No End Date (Continuous)
Ask staff to unplug electrical equipment or switch off power bars when not in use	Not Yet Evaluated				No End Date (Continuous)
Ask staff to close blinds at end of work day to reduce heating/cooling demands	Ongoing/In Progress	Staff are encouraged to close blinds at the end of each working day.	We will continue to educate new and existing staff as to this procedure.	2008	No End Date (Continuous)
Encourage staff to use air dry setting on dishwashers	Ongoing/In Progress	We have continued to encourage staff to use the air dry setting on our dishwashers in all of our facilities.	We will continue to encourage staff to use the air dry setting on our dishwashers in all of our facilities.	2011	No End Date (Continuous)
Provide tips to staff on saving energy in the office while working outside of regular business hours	Not Yet Evaluated				No End Date (Continuous)
Encourage use of stairs instead of elevators	Ongoing/In Progress	We encourage the use of stairs in all of our facilities.	We will continue to encourage the use of stairs in all of our facilities.	2008	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	We have equipped all district computers with software that will automatically shut the computer down after one half hour of inactivity.	We will continue to make this feature mandatory in 2013 and subsequent years.	2012	No End Date (Continuous)
Implement server virtualization	Ongoing/In Progress	Please see above.	We will complete the process of moving our servers to VM's.	2012	No End Date (Continuous)
Apply auto-sleep settings on computer monitors and CPUs	Ongoing/In Progress	Auto sleep was initiated on most computers this year.	All new computers will be equipped with auto sleep.	2011	No End Date (Continuous)

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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	Steps Taken	Steps Planned	Start Year	End Year
Remove stand-alone printers, copiers, and/or fax machines and install multi-function devices as part of a print management strategy	Ongoing/In Progress	We have taken out many stand alone printers this year in an effort to further centralizing printing throughout our district.	We will continue to reduce the number of stand alone printers in our district facilities.	2008	No End Date (Continuous)
Apply auto-sleep settings on printers, fax machines, and/or multi-function devices	Ongoing/In Progress	All newly purchased or leased printing devices are equipped with auto sleep settings.	We will continue to purchase or lease printing devices that are equipped with auto sleep settings.	2008	No End Date (Continuous)
Replace computers with ENERGY STAR models during regular computer upgrades	Ongoing/In Progress	We are implementing a replacement program that will entail replacing the bulk of our computers with Energy Star model laptops.	All future computer purchases and leases will be Energy Star efficient models whenever possible.	2012	No End Date (Continuous)
<b>Owned buildings</b>					
Establish energy performance baseline for owned buildings	Not Yet Evaluated				No End Date (Continuous)
Register for performance labelling/certification for operations and maintenance of owned buildings (e.g., LEED EB:O&M)	Not Yet Evaluated				No End Date (Continuous)
Register for performance labelling/certification for commercial interiors of owned buildings (e.g., LEED CI)	Not Yet Evaluated				No End Date (Continuous)
Perform energy retrofits on existing, owned buildings	Ongoing/In Progress	As stated above Motion sensor lighting has been installed in most District buildings. LED's have replaced traditional lights in some areas.	We will continue to look for opportunities for energy saving through retrofitting.	2011	No End Date (Continuous)
<b>Planning/management</b>					
Reduce office space (square meters) per employee	Ongoing/In Progress	Please see above.	We will continue to look at making the most from the office and school space available to us.	2008	No End Date (Continuous)
Install a real time metering system (e.g. Pulse, Reliable Controls, Houle Controls)	Ongoing/In Progress	Please see above.	We will continue to use the Delta model and upgrade the system when necessary.	2008	No End Date (Continuous)
<b>Retrofit details for owned buildings</b>					
Upgrade mechanical systems (heating, cooling, ventilation) during retrofits	Ongoing/In Progress	As stated above we have upgraded 5 furnaces in three of our schools this year.	We will continue to upgrade equipment as necessary.	2008	No End Date (Continuous)
Upgrade lighting systems during retrofits	Ongoing/In Progress	As stated above we have now completed a process of putting most of our lighting on sensors.	Any new structures that we use will be equipped with motion sensor lighting in the future.	2010	No End Date (Continuous)
Upgrade/adjust control systems during retrofits	Ongoing/In Progress	Please see above.	No new steps are planned at this time.	2012	No End Date (Continuous)
Improve building insulation (including windows) during retrofits	Completed (in Reporting Year)	Please see above.		2012	2012
<b>Supplies (Paper)</b>					
<b>Behaviour change program</b>					
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress	We will continue to encourage our staff to hold paperless meetings and attempt to cut down on frivolous paper usage.	We will continue to encourage our staff to hold paperless meetings and attempt to cut down on frivolous paper usage.	2009	No End Date (Continuous)
<b>Electronic media in place of paper</b>					
Use electronic document library for filing common documents	Ongoing/In Progress	During 2012 our District continued to add to our extensive electronic cache of digital documentation.	As stated above, we are committed to reducing the amount of hard copy documentation we produce and consume by making more extensive use of digital documentation.	2008	No End Date (Continuous)
Switch to an electronic payroll notification system in place of paper pay stubs	Ongoing/In Progress	Please see above.	We will continue to use our electronic payroll system.	2008	No End Date (Continuous)
<b>Printer/document settings</b>					
Switch networked printers and photocopiers to automatic double-sided	Ongoing/In Progress	We have continued to encourage double sided printing whenever possible.	We will continue to encourage double sided printing whenever appropriate.	2008	No End Date (Continuous)

## School District 05 Southeast Kootenay - 2012 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

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
<b>Business Travel</b>					
<b>Behaviour change program</b>					
Train staff in web-conferencing	Ongoing/In Progress	Staff are and will continue to be trained in web conferencing.	We will continue to train staff in the use of web conferencing.	2008	2008
Encourage staff to consider virtual attendance/presentation at events where possible	Not Yet Evaluated				No End Date (Continuous)
Encourage carpooling to meetings	Ongoing/In Progress	Carpooling is always strongly encouraged in our organization.	We will continue to strongly encourage carpooling.	2008	No End Date (Continuous)
<b>Policy and budgeting</b>					
Create a low-carbon travel policy or travel reduction goal	Not Yet Evaluated				No End Date (Continuous)
<b>Virtual meeting technology</b>					
Install web-conferencing software (e.g., Live Meeting, Elluminate, etc.)	Ongoing/In Progress	We have continued to use web conferencing whenever possible.	We will continue to use web conferencing in the coming years.	2008	No End Date (Continuous)
Make desktop web-cameras available to staff	Ongoing/In Progress	All of our computers are equipped with web cams.	New computers purchased will be equipped with web cams.	2008	No End Date (Continuous)
Install video-conferencing units in meeting rooms or provide mobile video-conferencing units	Ongoing/In Progress	We have made use of video conferencing for many years.	We will continue to make use of video conferencing whenever possible.	2008	2008
<b>Education, Awareness, and Engagement</b>					
<b>Awards/Recognition</b>					
Establish a sustainability/green awards or recognition program	Not Yet Evaluated				No End Date (Continuous)
<b>Staff Professional Development</b>					
Support green professional development (e.g., workshops, conferences, training)	Not Yet Evaluated				No End Date (Continuous)
Include green options in employee performance measurement system	Not Yet Evaluated				No End Date (Continuous)
<b>Staff awareness/education</b>					
Provide education to staff about the science of climate change	Not Yet Evaluated				No End Date (Continuous)
Provide education to staff about the conservation of water, energy, and raw materials	Not Yet Evaluated				No End Date (Continuous)
Provide green tips on staff website or in newsletters	In Development	We are sending out green tips via email but we need to do this more consistently.	We will become more consistent in our delivery of green information to our organization.	2011	No End Date (Continuous)
Provide sustainability education during new staff orientation	Not Yet Evaluated				No End Date (Continuous)
<b>Team-building</b>					
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	In Development	We will continue to work on developing District and school teams.	We will continue to work on developing District and School teams.	2011	No End Date (Continuous)
Provide resources and/or dedicated staff to support teams	In Development	We have a dedicated person on staff to initiate the development of our teams.	We will continue to support our dedicated staff support person.	2011	No End Date (Continuous)
Providing behaviour change education/training to teams (e.g., community-based social marketing)	Not Yet Evaluated				No End Date (Continuous)
<b>Other Sustainability Actions</b>					

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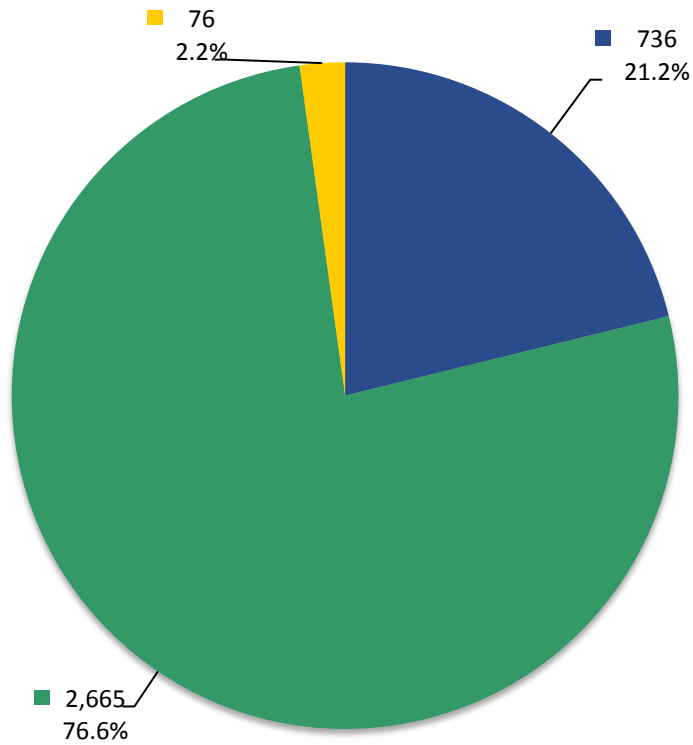
### Actions to Reduce Provincial Emissions and Improve Sustainability

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

Action	Status	Steps Taken	Steps Planned	Start Year	End Year
<b>Adaptation to Climate Change</b>					
Assessed whether extreme weather events and/or long term changes in climate will affect the organization's business areas	Not Yet Evaluated				No End Date (Continuous)
Integrated considerations of extreme weather events and/or long term changes in climate into the organization's decision making.	Not Yet Evaluated				No End Date (Continuous)
<b>Building construction, renovation</b>					
Establish a policy to reuse materials where possible and divert construction and demolition debris from landfills and incineration facilities	Not Yet Evaluated				No End Date (Continuous)
Incorporate lifecycle costing into new construction or renovations	Not Yet Evaluated				No End Date (Continuous)
<b>Commuting to and from home</b>					
Introduce telework/work from home policy	Not Yet Evaluated				No End Date (Continuous)
Offer staff a compressed work week	Not Yet Evaluated				No End Date (Continuous)
Encourage commuting by foot, bicycle, carpool or public transit	Ongoing/In Progress	Our District encourages car pooling and many staff ride together to work.	We will continue to encourage our staff to car pool.	2008	No End Date (Continuous)
Provide shower or locker facilities for staff/students who commute by foot or by bicycle	Ongoing/In Progress	Many of our facilities have showers and lockers for staff use.	We will continue to provide shower facilities and ensure they are a part of any future building.	2008	No End Date (Continuous)
Provide secure bicycle storage	Ongoing/In Progress	Most of our facilities have secure bicycle storage.	We will continue to provide secure bicycle storage in our present and future facilities.	2008	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.)	Not Yet Evaluated				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.)	Not Yet Evaluated				No End Date (Continuous)
Implement sustainable purchasing program for cleaning products, disposable paper products and trash bags	Not Yet Evaluated				No End Date (Continuous)
<b>Waste reduction/diversion</b>					
Put in place an operations policy to facilitate the reduction and diversion of building occupant waste from landfills or incineration facilities	Not Yet Evaluated				No End Date (Continuous)
Implement a hazardous waste reduction and disposal strategy	Ongoing/In Progress	We have a procedures in place to recycle and dispose of all hazardous and recyclable materials.	We will continue to dispose of all hazardous materials in a safe and timely manner. We will also recycle our computer parts at the appropriate facilities.	2008	No End Date (Continuous)
<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	Our plan is to replace aging water systems with efficient models. Our toilets are being replaced with sensor models.	We will continue with our plan to replace aging water systems with efficient models. Our toilets are being replaced with sensor models.	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	Not Yet Evaluated				No End Date (Continuous)



**School District 05 - Southeast Kootenay  
Greenhouse Gas Emissions by Source  
for the 2012 Calendar Year (tCO<sub>2</sub>e\*)**



**Total Emissions: 3,478**

- Mobile Fuel Combustion (Fleet and other mobile equipment)
- Stationary Fuel Combustion (Building Heating and Generators) and Electricity
- Supplies (Paper)

**Offsets Applied to Become Carbon Neutral in 2012 (Generated May 28, 2013 3:27 PM)**

Total offsets required: **2,856**. Total offset investment: **\$71,400**. Emissions which do not require offsets: **622** \*\*

\*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.