#### **2011 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 with the Province to reach carbon neutrality and environmental stewardship.

School District 5 continues to look for ways to improve energy efficiency in all aspects of District operations. Building retrofits, improvements to lighting systems and enhanced fleet operations are a number of areas the District is committed to addressing.

School District 5 is a leader among educational organizations moving towards carbon neutrality and we are committed to reducing the District's environmental footprint. As an educational entity it is our responsibility to ensure that students and staff are exposed to quality opportunities to learn about carbon neutrality, climate change and environmental stewardship.

#### 2011 Greenhouse Gas Emissions

In 2011 School District 5 has produced 3,381 tonnes of greenhouse gas (GHG) emissions. Emissions have been produced in the following proportions:

Emission Source	Tonnes of CO <sub>2</sub>
Mobile Fuel Combustion	820
Stationary Fuel and Electricity	2472
Supplies (Paper)	89
Fugitive Emissions	0

#### 2011 Carbon Neutral Offsets

Total emission offsets of 2,707 have been applied to ensure that School District 5 has fully met the requirements of Bill 44 and is Carbon Neutral for 2011.

As required by section 5 of the Carbon Neutral Government Regulation, 674 tonnes of  $CO_2$  emissions resulting from the operation of school buses were not reported as they are "out of scope" under section 4(2)(c) of the Carbon Neutral Government regulation.

## Emissions Reduction Activities 2011 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), 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, work towards optimal vehicle maintenance schedules designed to improve fuel efficiencies and has adopted a no idling policy to reduce unnecessary emissions.

#### 2011-2013 Greenhouse Gas Reduction Initiatives

School District 5 will continue to improve the energy efficiencies throughout our system in facilities and our fleet of vehicles. We are hopeful that the design and completion of our future Mount Baker Secondary School 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. Together we can make the changes necessary to become a "Green" school district.

William (Bill) Gook

Superintendent of Schools

Mayor

#### **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.

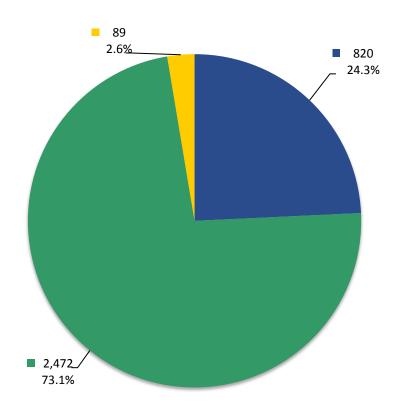
Action	Status (as of 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year
Mobile Fuel Combustion (Fleet and other mobile equip	oment)					
Vehicle fuel efficiency						
Replace vehicles with more fuel-efficient models	Ongoing/In Progress					
Replace larger vehicles with smaller models according to fleet "right-sizing" principles	Ongoing/In Progress					
Perform regular fleet maintenance specifically to improve fuelefficiency	Ongoing/In Progress					
Replace small maintenance vehicles with more fuel-efficient models	Ongoing/In Progress					
Stationary Fuel Combustion, Electricity and Fugitive En	nissions (Buildings)					
Appliances and electronic devices						
Replace refrigerators with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress					
Replace other appliances or electronic devices with ENERGY STAR models or source ENERGY STAR models for future purchases	Ongoing/In Progress					
Replace desk lamp incandescent bulbs with compact fluorescent (CFL) bulbs or source more efficient desk lamps for future purchases	In Development					
Behaviour change program						
Help staff reduce personal energy use through "workstation tune-ups"	Ongoing/In Progress					
Ask staff to unplug electrical equipment or switch off power bars when not in use	In Development					
Ask staff to close blinds at end of work day to reduce heating/cooling demands	In Development					
Encourage staff to use air dry setting on dishwashers	In Development					
Provide tips to staff on saving energy in the office while working outside of regular business hours	In Development					
Provide reminders for turning off lights (e.g., signs, stickers, messages)	Ongoing/In Progress		Signs and stickers placed in schools	Continue to raise awareness by placing stickers on light switches. Encourage staff and custodians to turn off lights in all unoccpied areas.	2009	No End Date (Continuous)
Other Stationary Fuel Combustion, Electricity, and Fugitive Emissions Actions						
Install motion sound sensor light controls in buildings	Ongoing/In Progress		Motion and sound sensor lights being installed in schools.	Continue to install in schools throughout the District.	2011	No End Date (Continuous)
Supplies (Paper)						
Paper Type						
Purchase 30% post-consumer recycled paper	In Development					
Purchase 40% post-consumer recycled paper	In Development					
Purchase 100% post-consumer recycled paper	In Development					
Printer/document settings						
Switch networked printers and photocopiers to automatic double- sided	Ongoing/In Progress					
Apply "print and hold" settings to networked printers to eliminate unclaimed print jobs	Ongoing/In Progress					
Reduce default margin size in standard document templates (e.g., letters, briefing notes, forms, etc.)	Ongoing/In Progress					-
Electronic media in place of paper						
Use electronic document library for filing common documents	In Development					
Post materials online that were previously printed	Ongoing/In Progress		All District communications posted on District website. Schools to post staff information in readily accessible server folder.	Continue to allow for electronic access to documents and increase type of document and number available at District and school level.	Started before 1995	No End Date (Continuous)
Behaviour change program						
Encourage staff to hold paperless meetings or presentations (i.e., no handouts)	Ongoing/In Progress		Direction from site managers to operate as paperless as possible	Continue to cut down on unnecessary paper usage; encourage digtal documentation.	2009	No End Date (Continuous)
Encourage re-use of scrap paper	Ongoing/In Progress		Expectation in all District facilities that scrap paper be re-used when possible.	Expectation is reinforced and re communicated throughout district.	Started before 1995	No End Date (Continuous)

#### **Actions to Reduce Provincial Emissions and Improve Sustainability**

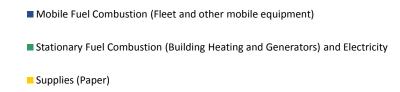
The actions listed below contribute to a reduction in greenhouse gas emissions from sources that fall outside of the reporting requirements defined in the carbon neutral government regulation of the *Greenhouse Gas Reduction Targets Act.* Public sector organizations can optionally use this section to 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 12/31/11)	Performance to Date (as of 12/31/11)	Steps Taken in 2011	Steps Planned for 2012 -2014	Start Year	End Year			
Business Travel									
Policy and budgeting									
Create a low-carbon travel policy or travel reduction goal	In Development								
Behaviour change program									
Train staff in web-conferencing	Ongoing/In Progress								
Train staff in video-conferencing or provide technical support for video- conferencing set-up	Ongoing/In Progress								
Encourage staff to consider virtual attendance/presentation at events where possible	Ongoing/In Progress								
Encourage carpooling to meetings	Ongoing/In Progress		Directive from District to car pool when possible.	Continue to encourage carpooling.	2007	No End Date (Continuous)			
Encourage alternative travel to meetings (e.g., bicycles, public transit, walking)	Completed in 2011		School buses used for transport in place of personal vehicles.						
Education, Awareness, and Engagement									
Team-building									
Create Green, Sustainability, Energy Conservation, or Climate Action Teams with executive endorsement	Completed in 2011								
Provide resources and/or dedicated staff to support teams	Completed in 2011								
Providing behaviour change education/training to teams (e.g., community-based social marketing)	In Development								
Staff Professional Development									
Support green professional development (e.g., workshops, conferences, training)	Ongoing/In Progress								
Client/public awareness/education									
Provide education to clients/public about the science of climate change	Ongoing/In Progress		Students educated about climate change in science curriculum.	Continuation of curriculum based climate change education	2004	No End Date (Continuous)			
Provide education to clients/public about the conservation of water, energy, and raw materials	Ongoing/In Progress		Students educated about conservation in science curriculum.	Continuation of curriculum based conservation education	2004	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								
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		Continue to place automatic flushing sensors is washroom facilities	Continuation of retrofitting washroom fixtures.	2006	No End Date (Continuous)			
Indoor air quality									
Enforce a scent-free policy (e.g., no strong perfumes, deodorants, etc.)	Ongoing/In Progress		School by school exploration of scent free policy.	Continuation of exploration of scent free policy.	2009	No End Date (Continuous)			

# School District 05 - Southeast Kootenay Greenhouse Gas Emissions by Source for the 2011 Calendar Year (tCO₂e\*)



#### **Total Emissions: 3,381**



#### Offsets Applied to Become Carbon Neutral in 2011 (Generated May 18, 2012 11:54 AM)

Total offsets required: 2,707. Total offset investment: \$67,675. Emissions which do not require offsets: 674 \*\*

<sup>\*</sup>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.

<sup>\*\*</sup> 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.