



2011 Annual Report

The BCSEA has had a very busy year, in which our three major projects and our policy work have continued to move forward, while we have also devoted considerable attention to some internal housekeeping matters to ensure that we are following best governance practices for a non-profit society.

Climate Change Showdown

Our Climate Change Showdown program encourages team work within the classroom and at home, as Grades 4 to 7 students work with their families to reduce their energy use while learning about positive



The winning grade 4/5 class at Jessie Wowk Elementary, Richmond.

and negative environmental consequences of their behaviours. The Showdown includes climate change games that are played in the classroom, a video, and guided worksheets and storytelling methods to learn about climate change. The students take the Showdown Contest home with actions to reduce their greenhouse gas emissions, while having fun and a chance to win prizes.

The program is delivered to Grade 4-7 classrooms by a team of highly committed Environmental Educators. In the

school year that ended in June 2011 the Showdown was delivered to 7,650 students in 298 workshops, resulting in changed behaviour that reduced GHG emissions by 3,728 tonnes.

In addition to the GHG reductions, 3,922 old light bulbs were replaced with CFLs, 1,139 low-flow efficient shower-heads were installed, 2,062 homes turned down their thermostats at night, 2,181 homes turned off or unplugged their electronics, and 2,304 homes tried washing their clothes in cold water. In total, since it was formed, Our Climate Change Showdown program has reached 50,000 BC school students.

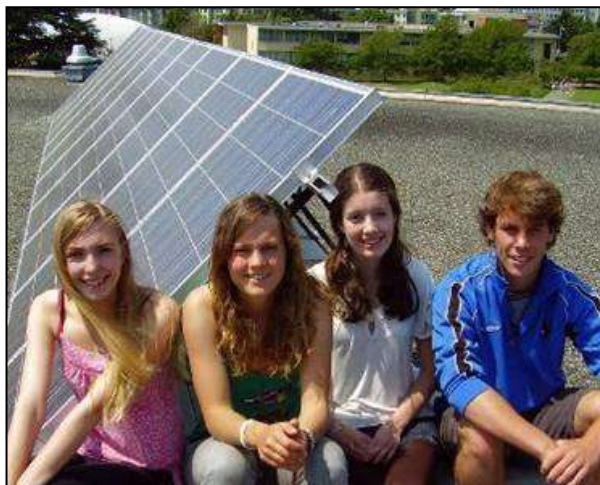
The Climate Change Showdown is funded by municipal, utility and government contributions, and led by Renate Sitch, our very worthy Program Manager, assisted by her team of 15 Environmental Educators throughout the province.

SolarBC

Our three-year SolarBC pilot project wound up in March 2011, and evolved into a new two-year project called SolarBC 2020. During the three-year program, 32 municipalities became Solar Communities, 43 schools installed solar hot water and 17 installed solar PV, solar lessons plans were created for use by BC teachers, and SolarBC facilitated the installation of 15 solar thermal systems on social housing projects,

39 systems on municipal buildings, 5 on health care facilities, 10 on post-secondary institutions, and 546 on private residences, including 43 in First Nations communities. We pioneered the Solar Hot Water Ready Regulation that has been adopted by 36 municipalities, and have undertaken numerous initiatives to address educational, regulatory, policy, inspection, training and industry needs.

The new SolarBC 2020 program is continuing to work on educational, regulatory, policy and training issues, and seeking new opportunities to develop the solar industry in BC. The ongoing work includes the detailed monitoring of 20 solar thermal systems to ascertain system efficiencies under different climatic conditions, and the development of new initiatives with utilities to permit on-bill financing for solar investments.



The Solar PV champions at Oak Bay High School, Victoria



Whistler Mayor Ken Melamed receives certification for Whistler as a Solar Community from Guy Dauncey and Nitya Harris

SolarBC is funded by a grant from the BC Ministry of Energy. During the now-complete three-year program, additional financing was provided for system installations by Natural Resources Canada and the BC Public Sector Energy Conservation Agreement (PSECA).

SolarBC is guided by a BCSEA Board Committee, and governed by an independent Solar BC Oversight Committee with members from utilities, government and the solar industry.

Green Landlords & Green Condos

BCSEA's Green Condos and Green Landlords Project represent key strategic initiatives to address a critical gap in government's and utilities' plans to foster energy efficiency in BC's buildings, i.e. multi-unit residential buildings. In 2008 BCSEA identified apartments and condominiums as not being adequately targeted by conservation programs due to the problematic split between the energy user and the decision-maker for capital upgrades. BCSEA designed a research project that led eventually to current partnership with the City of Vancouver.

During 2011, our Green Landlords Project suffered from delays and setbacks associated with a change of leadership, and has been overtaken by our new Green Condos Project, in which we are participating with the City of Vancouver to facilitate the retrofit of up to 15 condominium buildings in Vancouver.

The work entails meeting with each strata council and obtaining a 75% vote of support from each strata's owners; arranging and coordinating detailed energy assessments for each building; assisting in securing and allocating incentives and financing; assisting in the development of building project plans and the development of contracts; coordinating the contractors; and organizing any necessary follow-up work and evaluations.

Our Green Condos Project is funded by Vancity and the City of Vancouver, and led by Jordan Fisher through his company FRESCo, guided by the BCSEA's Green Buildings Committee.



Communications

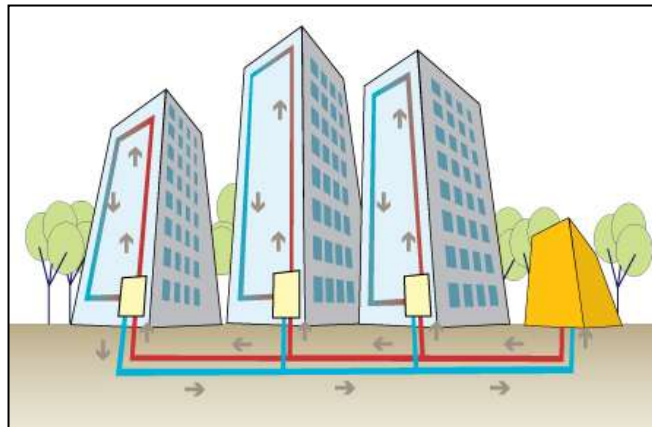
We continue to have an active communications profile, with regular postings on our News and Energy Discussion listservs, regular posting of sustainable energy news stories on our website, regular use of our Twitter feed (2,000 followers) and Facebook pages, occasional appearances on radio, and various Op-Eds and articles in the printed media. Our monthly webinars have been on hold during 2011, but we plan to restart them on a regular basis in 2012.

Policy Work

It's been a busy year for the BCSEA's policy work, with regular interventions before the BC Utilities Commission; meetings with government and BC Hydro; engaging with renewable energy organizations and companies; and engaging with the environmental NGO community to develop better government relations skills, new public outreach tools, and more political leverage through the geographic mapping of electoral areas which demonstrate strong environmental support.

All this takes place in the context of a major shift in BC's electricity policy, which will require some thought about BCSEA's role.

On the Utilities Commission front, we have intervened in almost twenty proceedings, often partnering with the Sierra Club of BC. Topics have ranged from adjustments to the rates for net metering to transmission reinforcement to support shale gas development in the Dawson Creek – Chetwynd area. While usually not high on the media charts, this regulatory work gives BCSEA direct access to decision-makers, and our actions in this forum can directly affect policy implementation.



Proposed district energy system for Surrey, BC.

Our work on BC Hydro's long-term planning initiatives was stalled when the government struck a ministry-level review committee, which caused Hydro to postpone work on its Integrated Resources Plan and its Revenue Requirements Application, which would have examined the costs of major capital plans and energy conservation spending.

The government has also reduced the role of the Utilities Commission in the development of BC Hydro's plans, including major acquisitions like Site C and overall planning to meet BC's demand for electricity. We will continue to find ways to emphasize the role of energy conservation as the first choice, and continue to assert that BC's electricity rates should not be artificially reduced by postponing the present costs and expecting future generations to pay.

We participated in several proceedings where FortisBC tried, largely unsuccessfully, to get approval for commercial natural gas vehicles such as garbage trucks. We have been cautiously supportive because of the reduced air pollution, but aware of the overarching need to reduce all fossil fuel powered transport.

We brought evidence and expert testimony to get FortisBC to expand its energy efficiency and conservation programs, and we supported an application by River District Energy to develop a district heating system for a large development that's being proposed on the shore of the Fraser River, in line with the City of Vancouver's goal to promote more efficient and sustainable buildings.

Smart meters have been notably absent from our BCUC work, because government gave them a free pass in the Clean Energy Act, and there has been no formal public scrutiny of them.

We met with Minister of Energy Rich Coleman, and later with David Cobb, then President and CEO of BC Hydro to discuss BC Hydro's expenditure plans. We also participated in ministry-level confidential processes on the development of regulations on energy conservation and natural gas vehicles. We also made a submission to the 2012 budget, calling among other things for the expansion of the carbon tax to include industrial emissions such as fugitive emissions from natural gas extraction.

Our policy work is led by the persistently persistent Tom Hackney, guided by the BCSEA's Policy Committee. Our BC Utilities Commission interventions are undertaken by Bill Andrews, supported by Tom Hackney as Case Manager.

Our Chapters

We have four active Chapters in Victoria, Vancouver, Kamloops and Kelowna.

The Kamloops Chapter explored a variety of smaller projects in our first year without the annual Kamloops Energy Fair. We took a position against a proposed parkade, partnered in an alternative transportation event and a film fest, and hosted a few fascinating presentations. We had two beautiful stand-up banners made and have used them at a tradeshow and community events. In the November municipal elections, we surveyed the candidates on four sustainability questions and shared the results with our supporters and the media. It has been a good year, with growing influence in the community and a strong Steering Committee.

The Okanagan Chapter continued its Sustainable Energy Education Series (SEEDS), including a session on making fuel grade alcohol and the Electric Car Show (twice). Our big success for the year was partnering with Habitat for Humanity and successfully raising a grant for a solar hot water installation on a Habitat for Humanity House in West Kelowna. This has just been completed by Swiss Solar Tech.

The ***Victoria Chapter*** held monthly meetings with a variety of great presenters on Sea Level Rise, District Energy Systems, Cob Home Wall Performance, Home Energy Retrofits, Upgrades at the Fernwood Inn, Cycling Infrastructure, and Climate Science. They organized a Sustainable Homes Tour in June, exhibited at the Luxton Fair, and set up booths at Earth Walk Victoria and the UVic Sustainability Fair.



Wendy Mclean, a volunteer with the Kamloops Chapter, with her microhydro

This year the ***Vancouver Chapter*** did things a little differently and held its monthly meetings in a variety of locations like pubs as opposed to meeting rooms, and in more diverse forms such as tours rather than just speakers. The pubs allowed us to network after events in a more relaxed setting than a formal lecture hall. We were also visible in the community, with booths at EPIC Sustainable Living Expo and the Connect Model UN 2011 event, as well as staying involved with special events such as hosting a discussion evening for Guy Dauncey's forthcoming book in which he visits Vancouver in the year 2032.

Internal Changes

This year has been quite challenging on many fronts, with our Head Office going from three full-time paid staff in December 2010 to one person working one day a week in January 2011. Susanna Grimes has been our valiant Admin Assistant for most of the year, and that work is now being done by the equally valiant Bruce Mackenzie.

In April, we advertised for a full-time Program Manager, and after an extensive interview process we hired Roberta Martell to fill the position on the understanding that she would go on to become our Executive Director. After a two-month analysis of our operations, her detailed analytical review of our operations indicated some internal organizational shortcomings that we since have been taking steps to address. Roberta declined to become our Executive Director, so we are still in need of committed staff leadership at our Head Office.

THE YEAR AHEAD

We live in very troubling times, where the gravity of the climate crisis is being pushed out of people's minds by a desperate concern to restore economic growth, and get a handle on the massive problems of global and national debt, aided by a successful campaign by climate-deniers and fossil fuel interests to downplay the risks of climate change and emphasize the virtues of the oil sands and natural gas.

If anyone doubts the urgency of the climate crisis, they have only to consider the recent report from the generally conservative International Energy Agency, which reported in November that the world is hurtling toward irreversible climate change, and that if bold action is not taken in the next five years the world will lose the chance to limit warming, since 90% of the available "carbon budget" that will keep us below the 450 ppm threshold will be swallowed up by 2017, there will be no room left for manoeuvre.



www.vancouver.ca/greeneestcity

Fatih Birol, chief economist at the International Energy Agency, said "The door is closing. I am very worried – if we don't change direction now on how we use energy, we will end up beyond what scientists tell us is the minimum for safety. The door will be closed forever."

Here in British Columbia, with our strong track record of climate policy leadership, there are signs that the provincial government has put climate change on the back burner, behind more immediate concerns such as accelerating

the development of natural gas extraction, guaranteeing that BC will have no ability to meet its 33% climate reduction target by 2020.

The urgency of the situation shouts to us ever more pressingly, while the vision of a green, sustainable world urges us to move faster so that we can demonstrate that our societies and economies can flourish without fossil fuels.

What can a small organization like the BCSEA do, faced with such huge global realities? We have no moral or ethical choice but to seek new responses that could turn things around, and set British Columbia back on the path to being 100% free of fossil fuels by 2030, which is our goal as an organization. We can be buoyed by the City of Vancouver's commitment to becoming the greenest city in the world by 2020, and encouraged the strong showing of support that Vancouver's Mayor and councillors received in the recent municipal election.

We face a world of choices. Technically, energy comes in three different forms. Should we focus on solutions for electricity, transportation, or heat?

Most of BC's electricity is already zero carbon, and existing commitments have us on track to be self-sufficient in mostly green electricity by 2017. Even though there are differing views as to whether BC's power should be produced by the public or the private sector, BC's Clean Energy Act has put the province on the road to a zero carbon electrical future.

Should we devote time to building a partnership that would persuade the government to adopt a similar Clean Heat Act, establishing the purpose and the means to get there, backed by a study which could demonstrate how BC's heat could be met by a combination of greater efficiency and renewable heat?

Or should we devote time to building a similar partnership that would persuade the government to adopt to a Clean Transportation Act, backed by a study which could demonstrate how our personal transportation needs could be met by a combination of more walking, cycling and electric bikes, more ridesharing, transit and light rail transit, combined with a shift to electric vehicles and plug-in hybrid electric vehicles?

Should we maybe apply our energy to working to build a strong Green Economy Alliance, to become a potent political presence for a future green economy and its many benefits?

Or should we focus on providing world class presentations that can reach thousands of people each month, so that our decision-makers become well informed and positively inclined towards the practicality of the best sustainable energy solutions, policies and regulations? These are all options that can be considered by our new Board of Directors, along with others that might be brought forward.



Brynnen Ford, from Seattle, with her Madsen electric cargo bike

What wisdom can BCSEA's history bring to our decision-making? After seven years, we are at a crossroads. To do all these things we must have a strong organization, and the events of the past year have shown that we can't keep on being effective on a shoestring, kept alive by pure volunteer dedication. We need to reach out more, but at the same time we must put ourselves on a more solid footing.

Organizationally, our immediate priority must be to secure paid staff leadership to provide stability, oversight and support to our existing projects, and to our members and Chapters. With SolarBC, Green Condos, the Climate Change Showdown and our four active Chapters we have commitments that must be nurtured so that they can expand and flourish.

We must do all this while ensuring that we follow the best organizational practices in management, administration, record-keeping, and financial management.

In closing, we extend our thanks to our members who have continued to support us both financially and in other ways, to the volunteers who put in such valiant work in our Chapters, and to the contractors and staff who are making a solid day-to-day difference in the world through our projects.

One of the great leaders of our age, Mahatma Gandhi, said, "You must be the change you want to see in the world." In continuing your support for BCSEA, by enabling us to continue the work that we do, is one way that you can help us to fulfill that charge.

We offer a big thankyou, to one and all of you!

- Guy Dauncey, President, with help and contributions from Tom Hackney, Renate Sitch, Nitya Harris, Jordan Fisher, and various others.

December 10th 2011

Appendix 1: Summary of BCSEA Policy Work in 2011:

BCUC Proceedings & related work:

BC Hydro

IRP: Technical Advisory Committee (IRP suspended in summer 2011 due to review of BC Hydro; expected to be resumed in fall 2011 or spring 2012)

RRA; and DSM expenditure schedule (suspended in summer 2011 due to review of BC Hydro; expected to resume 24 November)

Meeting with David Cobb, President and CEO of BC Hydro re RRA & DSM spending (8 September)

Ruskin Dam and Powerhouse Upgrade: ongoing; expected to be completed December

Residential Inclining Block Rate (RIB) repricing: completed

Net metering repricing: expected to be completed in December

Remote Communities Electrification (RCE) – three small projects (Tsay Keh Dene; Fort Ware; Elhlateese): completed

Large General Service rate (LGS) prospective growth adjustment TS 78: completed

Smart Meter Infrastructure Regulatory Account: completed

Dawson Creek/Chetwynd area transmission project: continuing into 2012: FN motion to adjourn; GHG issues; obligation to serve;

FortisBC gas

2012-13 Revenue Requirements Application (RRA) & gas rates: oral hearings just finished; to be completed in January. BCSEA-SCBC provided expert testimony to support more ambitious DSM spending.

Terms & conditions for CNG/LNG service offering; NGV incentives; and related (Vedder Trucking; Waste Management; Surrey Ops Centre): mostly completed: FortisBC made several applications aimed at developing service offerings to supply natural gas and/or incent NG vehicle capital replacement to replace diesel fuel commercial vehicles. The Commission has generally discouraged this and discouraged the use of DSM incentive monies to support this.

Alternative Energy Service Inquiry: ongoing, continuing into 2012

Resource Planning Advisory Group (RPAG): ongoing, meeting about twice a year. Met in spring; meeting scheduled for December. To give semi-formal input to Fortis's (gas) long-term strategic planning.

Energy Efficiency and Conservation (EEC) stakeholder group: met in spring; meeting again 22 November; stakeholder input to Fortis's (gas) EEC plans.

Fortis electric

2012-13 RRA & 20-year ISP, with 2012-13 DSM expenditure schedule: BCSEA-SCBC filed expert evidence to support more DSM; may bring testimony. Will probably run into 2012.

Residential Inclining Block (RIB) rate: completed. BCSEA advocated a more effective rate for conservation.

River District

River District Energy district energy system application. BCSEA supported the application.

Notably absent from the scope of BCUC consideration:

Smart meters – exempted from BCUC review: installations proceeding apace, amid lots of controversy

Site C – exempted from BCUC review: Not yet factored into BC Hydro's official plans; no official cabinet decision yet announced; government speaks of it as a committed resource.

Increasing public profile of BCSEA's work:

Op Ed by Bill Andrews on the price of electricity and government's political approach to BC Hydro's rates.

DSM regs: participation in confidential ministry discussions of proposed new regulations to promote more DSM.

Regs @ NGVs: participation in confidential ministry discussions of proposed regulations under the Clean Energy Act that would support Fortis's NGV plans.

Meeting with Rich Coleman, Minister of Energy and Mines

2012 Budget Submission

CEBC-ENGO dialogue: Begun in June. Meetings 25 July & 16 November 2011; and working group meetings during summer. The 16 November meeting has led to an initiative to create a joint statement of shared principles. Also there is a desire to coordinate with first nations interests (Energy and Mining Council).

CanWEA WindVision initiative: July call with Nick Heap of CanWEA; public announcement of the WindVision, October: CanWEA predicts a big increase in BC Hydro's electric load, based on industrial expansion (largely shale gas) in the north. CanWEA wishes to capitalize on this.

Organizing for Change: Priorities for Environmental Leadership: buildings not selected as a priority (spring): (water; species at risk; Georgia Strait marine protected area; carbon tax; mining)

Email blasts: developing ability to reach out to members, themed on the year's "Priorities for Environmental Leadership". Also in February around the provincial party leadership races.
Green mapping: has been under development all year.

Vision 2030: Early in 2011, tried to get Vision 2030 going. Worked on budget and concept, met with Robert Gifford, Psychologist at UVic.