



## Helping British Columbia Communities Find Energy Solutions

The transition to sustainable communities happens faster when communities and their residents change the ways they procure, consume, and conserve energy.

The Smart Planning for Communities (SPC) program benefits from staff with expertise in community sustainability when viewed through an energy lens. Here are some examples of how SPC's Sustainability Facilitators, led by Peter Ostergaard, the program's energy planning specialist, have helped British Columbia communities with their energy efficiency, renewable energy, and greenhouse gas emission reduction initiatives.

### Tsawataineuk First Nation (Kingcome Inlet)

Quaee IR 7 is an off-grid First Nations community about 120 km northwest of Campbell River. Meeting with the Band Council and staff in both Campbell River and in the community, SPC helped identify and prioritize renewable energy and energy efficiency opportunities. With help from the Ministry of Energy and the First Nations Energy and Mining Council, energy savings kits were distributed to all households in the community. A four unit solar hot water demonstration project is underway, with funding from the Fraser Basin Council's Remote Community Implementation Program, Solar BC, and the community.

### Kamloops

The Sustainable Kamloops Committee is responsible for developing a "Sustainable Kamloops Plan", including recommending that city's climate action policies, targets, and actions. At a half day forum in February 2010, SPC gave a presentation to the Committee on innovative ideas and examples from other cities across Canada. Results of the initial two phases of the Plan are summarized in the "Foundations for Sustainability" report. The preparation of both a Community and a Corporate Energy and Emissions Plan are identified as top priorities for the next phase.





photo of Bear Creek Dam courtesy BC Hydro

### Cowichan Valley Regional District

The Cowichan Valley has a vision to be an energy resilient community with a well developed renewable energy sector where energy use is in balance with local production and conservation. SPC provided strategic support for the Regional District’s draft Regional Energy Plan, and participated in a workshop to identify renewable and district energy opportunities.

### Prince George, Colwood, City of North Vancouver, Central Kootenay and Fraser Valley Regional Districts

At first glance, these local governments don’t seem to have a lot in common. But each one has completed a mapping and modeling exercise to see how future development scenarios will affect energy consumption and emissions. The highlights are publicized through a series of webcasts and reports, available on the Climate Action Toolkit, [www.toolkit.bc.ca](http://www.toolkit.bc.ca). Thanks in part to these resources, interest in community scale energy and emissions modeling continues to grow. With funding from the Pacific Institute for Climate Solutions, Simon Fraser University is now leading the development of a freely available and user friendly model capable of simulating the effects of policies and actions on the energy consumption and emissions of any BC community.

### Langford

This Greater Victoria suburban municipality wants to be a national model of a sustainable, resilient and energy-secure community. SPC contributed to Langford’s “Community Energy and Emissions Reduction Strategy” by helping to facilitate public and stakeholder engagement events. Solar powered pedestrian lighting, Green Fleet (E3) participation, intersection transit priority retrofits, and a municipally owned geothermal district energy system at Westhills are examples of how the strategy is being implemented.

### East Kootenay Communities

At a Kootenay Municipal Planners and Leaders seminar, SPC led sessions on sustainability planning for a post peak oil world, with a focus on opportunities that exist across municipal boundaries. Subsequently, the “Carbon Neutral Kootenays Project” was initiated to assist local governments in the Kootenay region in meeting their commitments under the Climate Action Charter, including becoming carbon neutral in their operations.

## FBC Climate Change Resources

**Transportation Demand Management (TDM): A Small and Mid-Size Communities Toolkit** The TDM toolkit offers insights on how to expand transportation options and reduce overall vehicle use in your community.

**Energy Efficiency and Buildings: A Resource Guide for BC’s Local Governments** This manual offers practical examples of how communities are using policy tools to make progress towards energy efficiency, and includes information on energy codes, building and equipment energy rating and labelling, energy management for civic buildings and operations. [www.fraserbasin.bc.ca](http://www.fraserbasin.bc.ca)

**ReTooling for Climate Change:** The ReTooling for Climate Change website is a first stop for elected officials and local and First Nations government staff interested in learning about climate change adaptation. [www.retooling.ca](http://www.retooling.ca)



## ADVICE AND INFORMATION ON COMMUNITY SUSTAINABILITY, ENERGY PLANNING, GREENHOUSE GAS REDUCTION, AND CONSERVING SENSITIVE ECOSYSTEMS

### Sunshine Coast Regional District

In collaboration with Gibsons, Sechelt, and School District 46, the Sunshine Coast Regional District has completed a Community Energy and Emissions Plan. SPC delivered a presentation on energy plan examples, policies and tools at the “One Coast, One Climate” event to help launch the Plan’s implementation phase.

### MEET THE SPC FACILITATOR



**Peter Ostergaard** is SPC’s province-wide Sustainability Facilitator with expertise in community energy planning. In his previous role as Assistant Deputy Minister in the BC Ministry of Energy, Mines and Petroleum Resources, he was responsible for many programs

**policies, and initiatives in community energy, energy efficiency, transportation, climate change, buildings, natural gas and electricity. He also served for six years as Chair and Chief Executive Officer of the BC Utilities Commission. Peter lives in an energy efficient R2000 house he helped build almost 25 years ago, and looks after land use and development matters for his community association in Saanich.**

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### Cariboo and Chilcotin First Nations

At an “Aboriginal Business Action Forum” in Williams Lake held in June 2009, SPC led sessions on the use of alternative energy sources like bio-mass for greenhouses and for remote community electricity generation.

### Lions Bay

Situated between Vancouver and Squamish, Lions Bay sought advice from the Smart Planning Program on sustainability policies and potential energy actions, including solar hot water and micro hydro electricity generation. SPC met with Council twice and led an evening sustainability forum for residents.

### T’Souke Nation

Smart Planning staff met with T’Souke First Nation officials to explore ways to support the community’s sustainability endeavours and help advance its solar energy proposals. Located west of Victoria, the community now boasts the largest solar PV project to date in the Province. SPC was invited to speak at the opening ceremonies of the T’Souke Solar Gathering, which also highlighted workshops and tours. By providing funds to offset travel costs for some participants from remote communities, they were able to see first hand the benefits of renewable energy to make their own communities healthier and more sustainable.



Energy retrofits were completed at Saanich Municipal Hall saving the District money.

### Vancouver Island

Emissions from vehicles are usually the largest source of greenhouse gases in small and rural communities. In April 2011, SPC staff facilitated a one day learning event in Parksville for mid-Island practitioners to discuss transportation demand management innovations and successes.

### Columbia Shuswap

Together with the City of Salmon Arm, Ducks Unlimited, and the Columbia Shuswap Regional District, SPC hosted a workshop in Salmon Arm offering advice and information on community sustainability, energy planning, greenhouse gas reduction, and conserving sensitive ecosystems.

### Northern Vancouver Island

At an SPC-hosted dinner and evening workshop, participants from Northern Vancouver Island communities learned how sustainability principles can help build a healthy North Island economy. Representatives from six local governments and First Nations met in Port McNeill to discuss economic and energy paths that would support both community sustainability and environmental quality.



## THE BC CLIMATE ACTION TOOLKIT

**The BC Climate Action Toolkit** is an online resource for knowledge sharing and collaboration about climate protection for local governments in British Columbia

The site provides the latest news, best practices, practical advice, information and strategic guidance to help BC local governments successfully reduce greenhouse gas emissions and, at the same time, strengthen their communities.

Key resources include a database of **Reports & Guides, Funding & Training** advice, descriptions of **Plans, Policies, Projects and Processes**. The site is also a portal to community Success Stories and a periodic E-News.

This Climate Action Toolkit is provided by a three-way partnership of the Province, the Union of British Columbia Municipalities and Smart Planning for Communities, a program of the Fraser Basin Council.

[www.toolkit.bc.ca](http://www.toolkit.bc.ca)



Southeast False Creek District Energy System  
*photo courtesy City of Vancouver*

Peter Ostergaard is leading a research project that will result in a 'White Paper' on The Regulation of District Energy Systems funded by the **Pacific Institute for Climate Solutions (PICS)**.

The development and operation of district energy systems is emerging as a key strategy in reducing British Columbia's greenhouse gas emissions, as they usually deliver the higher efficiency and lower emissions energy services necessary for a lower carbon world.

## PACIFIC INSTITUTE FOR CLIMATE SOLUTIONS

The advantages, barriers, ownership and operating models, environmental and community benefits, and technology choices associated with district energy systems are generally well known and reported. Less well understood is the policy framework, and the type and level of economic regulation, required to enable district energy systems to get built, to recover operating and capital costs, and to offer rates and service levels comparable (or superior) to conventional electricity and natural gas alternatives

Ostergaard will explore several economic, regulatory and policy issues associated with district energy in BC including short-term municipal rate stabilization fund models and blanket local service area by-laws. The Report will recommend ways these systems can be regulated to encourage their development, while offering

fair rates to customers and minimizing investment risks to their owners.

PICS partners with governments, the private sector, other researchers and civil society, in order to research, monitor, and analyze the potential impacts of climate change and to assess, develop and promote viable mitigation and adaptation options to better inform climate change policies and actions. ■

## Contact Us

**Plan for a strong, vibrant, sustainable community**

Smart Planning for Communities offers local and First Nations governments the services of skilled Sustainability Facilitators in communities across BC.

[smartplanningbc.ca](http://smartplanningbc.ca)