

# AN INTERNATIONAL CONVERSATION ON SUSTAINABLE COMMUNITIES

Alberta Energy and Climate Community of Practice

May 31, 2013 | Edmonton, AB



Workshop Summary

# An International Conversation on Sustainable Communities

HOSTED BY SUSTAINABLE CITIES INTERNATIONAL, THE CITY OF EDMONTON,  
AND ALBERTA COMMUNITY OF PRACTICE ON ENERGY AND CLIMATE

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**PROGRAM**

<b>TIME</b>	<b>ACTIVITY</b>	<b>DESCRIPTION</b>
8:30 - 9:30 a.m.	Registration, networking, breakfast	Opportunity to reconnect and network
9:30 – 10:15 a.m.	Identifying Conversations	Participants introduce themselves and identify climate and energy-oriented conversations for the afternoon cafés
10:15 – 10:30 a.m.	Refreshment break	AB CoP and SCIEL delegates gather
10:30 – 11:15 a.m.	Introductions from SCIEL cities	Short presentations provide context for the conversations SCIEL delegates wish to explore with Alberta practitioners
11:15 a.m. – noon	AB Community of Practice participants join a conversation led by the SCIEL cities	Given the time allotted, participants may move between conversations as they wish
12:00 – 1:00 p.m.	Lunch	Unstructured, relaxed conversation
1:00 – 1:30 p.m.	SCIEL and AB Community of Practice reconvene, Debrief AM	SCIEL to wrap up Energy Lab; AB Community of Practice to complete workshop
1:30 – 3:15 p.m.	Conversation Cafés * Break 2:30-2:45 PM	Participants select conversations they would like to convene with other attendees to hear more about past work and/or explore solutions
3:15 – 4:00 p.m.	Closing	Review the day, check out

## INTERNATIONAL COLLABORATION: SCI ENERGY LAB & AB COMMUNITY OF PRACTICE

### SESSION OVERVIEW

During the morning, international delegates from the Sustainable Cities International (SCI) Energy Lab and Alberta Community of Practice joined forces to discuss collaborative approaches to energy and climate action.

Participants in the SCI Energy Lab represented ten cities from around the world including:

Brussels, Belgium	Vancouver, Canada	Porto, Portugal,
São José dos Pinhais, Brazil	Zagreb, Croatia	Niš, Serbia
Edmonton, Canada	Aswan, Egypt	Durban, South Africa
	Los Cabos, Mexico	

SCIEL delegates gave a brief introduction to sustainability initiatives taking place in their cities, and then joined the Alberta CoP participants to address the question, “What are the most effective partnerships that you’ve developed to advance low-carbon communities?”

During the conversations a number of key themes emerged. Participants noted that improving data access will help improve policy development initiatives. The importance of developing strong cross-jurisdictional relationships with stakeholders as well as regional alignment was also emphasized.

Some differences could be seen when comparing international programs to those in Canada. Abroad, many programs had unique financing and funding mechanisms in place to ensure their sustainability over the long-term. For instance, in Brussels, Belgium, charges attached to utility bills support an energy efficiency fund; in Porto, Portugal, numerous companies and institutions make annual contributions to energy agencies; and in São José dos Pinhais, Brazil, the municipal government is administering a fee to support LED streetlight conversions.

A summary of the key targets and programs for the SCI Energy Lab delegates is provided below.

## GLOBAL ACTIONS FOR LOW CARBON & ENERGY EFFICIENT COMMUNITIES

### Vancouver, Canada

The City of Vancouver is working to become the world's Greenest City by 2020. Their Greenest City Action Plan provides direction on carbon reduction, waste, and ecosystem management activities. The City is also working to develop renewable district-scale heating systems and to improve building energy efficiency.

### Los Cabos, Mexico

Recently adopted, the City of Los Cabos' urban development strategy outlines their strategic approach to numerous sustainability initiatives. The strategy supports investment in alternative energy and the use of sustainable technologies for natural resource exploitation. Los Cabos is currently working collaboratively with Monterrey to develop a large scale wind farm.

### Brussels, Belgium

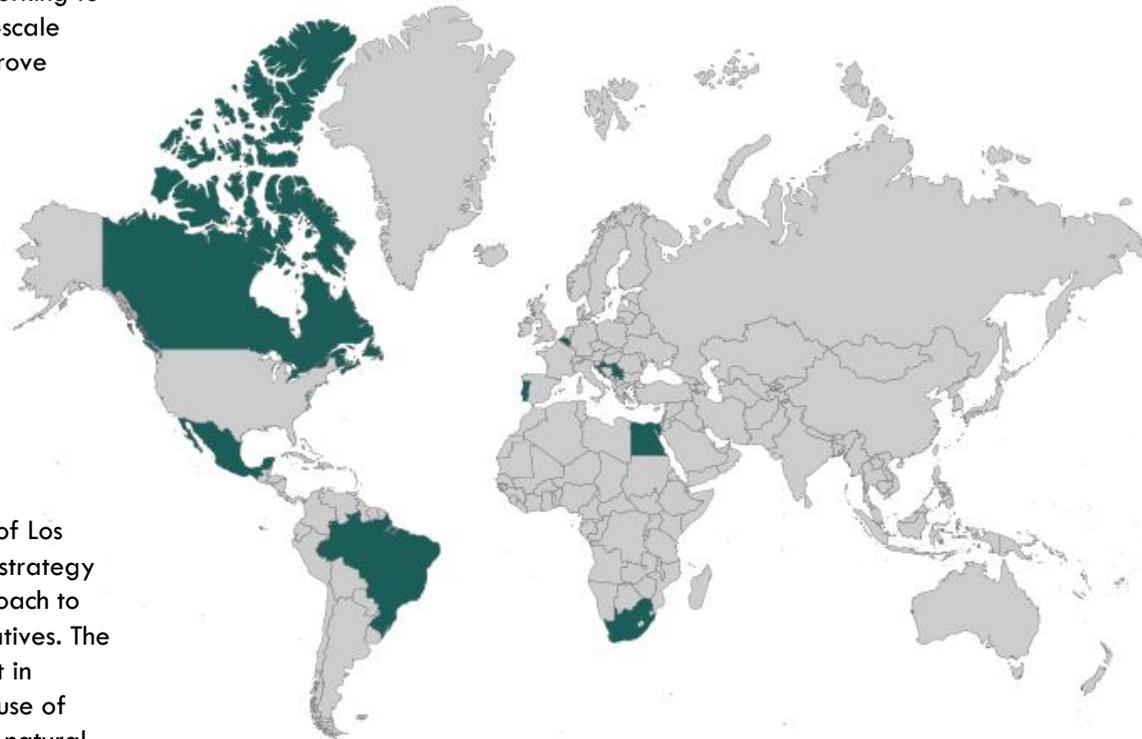
The City of Brussels strongly supports sustainable construction practices and technology innovation. New buildings must meet passive house standards, working towards net zero by 2015. The City also delivers training to practitioners in the development industry.

### Niš, Serbia

Niš is currently working on a Sustainable Energy Action Plan (SEAP) to reach an emission reduction target of 20% by 2020. The National Renewable Energy Action Plan aims to produce 27% of energy from renewable sources by 2020.

### Durban, South Africa

Durban is working closely with industry to build sustainable energy infrastructure in the city. They're also working with community members to develop residential solar hot water heating systems.



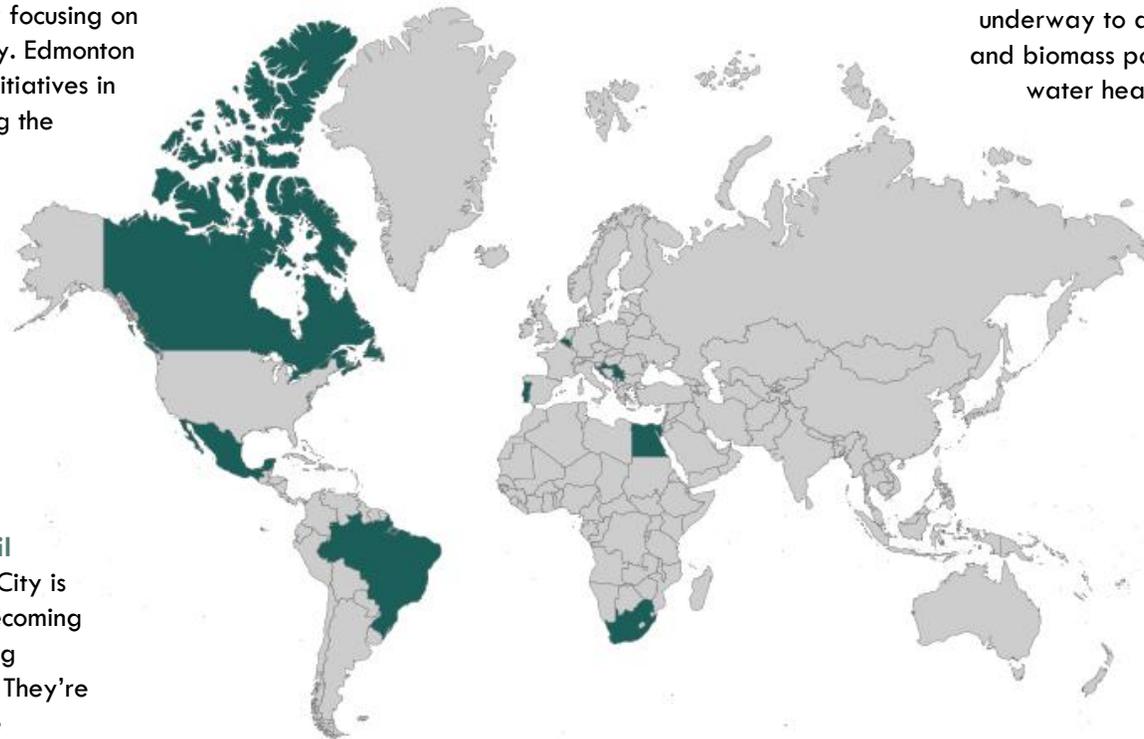
## GLOBAL ACTIONS FOR LOW CARBON & ENERGY EFFICIENT COMMUNITIES

### Edmonton, Canada

The City of Edmonton is aiming to become carbon neutral by 2050. Their environmental strategic plan, *The Way We Green*, outlines numerous objectives to support this goal, strongly focusing on carbon reduction and energy. Edmonton is working on a number of initiatives in support of this plan, including the Blatchford community development and new biofuel plant.

### São José dos Pinhais, Brazil

In São José dos Pinhais, the City is actively working towards becoming low-carbon and implementing sustainable energy projects. They're also working closely with the federal government to implement a City-wide LED streetlight installation. The municipality has created a fee to ensure the project is supported by a sustainable financing mechanism over the long-term.



### Porto, Portugal

Porto's Sustainable Energy Action Plan (SEAP) aims to decrease GHG emissions by 22% by 2020 and 45% by 2045. Some projects underway to achieve this include natural gas and biomass powered electricity plants, solar water heating, and active transportation development.

### Zagreb, Croatia

Zagreb plans to reduce both their energy use and GHG emissions by 20% and to increase their electricity share from renewables to 20%. The City is also placing a strong emphasis on public education about energy efficiency.

### Aswan, Egypt

Aswan is following the lead of the national government in aiming to generate 20% of their electricity from renewables by 2020. In addition to using hydro power, they're hoping to expand solar and wind power generation. The Egyptian Solar Plan supports the production of 3500 MW of electricity from solar development.

## CONVERSATION CAFÉS: ALBERTA COMMUNITY OF PRACTICE

### SESSION OVERVIEW

In the afternoon, the Community of Practice took part in a series of conversation cafés about seven energy and carbon reduction topics. Individuals from across the province took part, including strong representation from the Government of Alberta, municipalities, academia, and business networks. Summaries of each conversation are outlined below.

### WHAT IS ALBERTA'S ROLE IN REDUCING GHG EMISSIONS?

A discussion was held on the role of the province in reducing GHG emissions. An overview of Alberta's climate strategy and policies was provided, including the ongoing Climate Change Strategy (2008) renewal. A synopsis of the Specified Gas Emitters Regulation was also given. Compliance options through the SGER were highlighted, including: onsite reductions, paying \$15/tCO<sub>2e</sub> to the CCEMF, and purchasing offsets and/or performance credits.

Representatives from the Government of British Columbia joined the conversation, contributing to a discussion comparing policy approaches in the two provinces. Key differences in BC include the regulated utility system and the use of carbon tax funds as a source of general revenue. In contrast, in Alberta funding generated through the SGER is reallocated to climate change initiatives by way of the CCEMF. There was some discussion as to whether the Alberta government could play a role in facilitating the aggregation of municipal GHG emissions reductions. However, it was noted that the Government of Alberta's role in provincial offset verification would likely create many challenges with this approach.

### CARBON CONVERSATIONS

**Carbon Conversations** is a UK-based facilitation tool that supports low-carbon living by connecting people to the values and emotions related to change. The program is designed to be carried out over six group meetings which begin by exploring why individuals care about climate change and what a low-carbon future looks like. Subsequent meetings give participants the information they need to reduce their carbon-footprint by addressing GHG reductions in the home, travel and transportation, food, consumption, and waste.

The first ever launch of Carbon Conversations in Canada took place during An International Conversation on Sustainable Communities. The tool was presented and attendees ran through the first meeting, Low-Carbon Futures. After the demonstration, the feasibility of using a similar tool in a Canadian context was assessed. Participants strongly supported piloting a draft Canadian version and identified resources and personnel for further discussions and support.

### GREEN DEVELOPMENT PRACTICES

More progressive building codes as well as land use and zoning bylaws were discussed as important tools to help municipalities ensure residential and commercial buildings become increasingly energy efficient. The importance of ensuring that such changes do not compromise safety was emphasized, as well as the potential for bonuses to be used as tools to help incent developers to build green voluntarily.

Enabling legislation was also discussed. Alberta's commitment to adopting the residential National Building Code was recognized as a positive development that will greatly improve the efficiency of residential buildings.

## EXPLORING SOLUTIONS

Actions were identified to help accelerate the implementation of energy efficiency and low-carbon measures across the province. The need for a long-term financial source to support projects was stressed. Participants were interested in gaining greater accessibility to CCEMC funding as well as the development of revolving funds. The importance of adopting stronger building codes was highlighted, as well as in ensuring that legislation in the Municipal Government Act supports communities in going beyond the code. The group also supported expanding the offset market, calling for guidebooks and tools to be made available to help streamline the offset verification process.

## SUSTAINABLE FUNDING AND FINANCING MODELS

Multiple financing and funding models were discussed to evaluate their feasibility to support energy and climate projects in the long-term. Models discussed include: systems benefit charges, revolving funds, subsidized interest loans, cooperatives, and energy services agencies. Systems benefit charges (SBCs) were identified as being the most sustainable. It is common for energy efficiency SBCs to be levied to consumers by introducing small surcharges on monthly utility bills. SBCs were recognized as advantageous as they are long-term, predictable, and ensure money is being directed towards activities that benefit the public.

## IDENTIFYING BARRIERS

Barriers were outlined specifically in regards to the deployment of alternative and renewable technologies. Municipal permitting requirements and their associated costs are currently seen as a barrier to solar PV use in municipalities. Currently, most municipalities require development and building permits. Some communities have made policy changes to remove the development permit requirement. Micro-generation regulations were also cited as a barrier to proponents exporting renewable power into the grid. The requirement to become a power generator may prevent proponents from commissioning systems that produce more power than their facilities directly consume.

Technology barriers were also discussed. Consumers may be uninformed about performance and lack the data needed to assess feasibility of new technologies. Additionally, customers may have difficulty receiving ongoing service support for technologies due to frequent turnover in renewable suppliers.

## CANADIAN ENERGY STRATEGY

An overview of the Canadian Energy Strategy (CES) was provided. The CES will outline a shared vision in developing Canada's energy resources in a sustainable, resilient, and efficient manner. Strategy development is a collaborative effort across provinces and territories. Alberta, Newfoundland and Manitoba have taken leadership roles in the effort. The plan supports an ongoing energy dialogue between provinces that is focused on solutions. The strategy will focus on ten key areas.