

# Sustainable Cities International Energy Lab: 2013 to 2016

## **CALL FOR CITIES**

The purpose of the SCI Energy Lab is to accelerate the transformation towards sustainable energy development by supporting the "next wave" of cities that have an interest in learning from leading cities and sufficient capacity to act on what they learn.

### Introduction

Energy is the defining issue of the 21st century. Our cities, the powerhouses of our economies and home to more than half of humanity, require large, reliable sources of energy to meet the needs of individuals, companies and institutions. Our current reliance on fossil fuels, for the generation of electricity and to power our industries and transportation systems, is at the heart of the climate change challenge. How we develop our energy sources, distribute and use energy will impact our future on the planet.

Organizations and cities around the globe report that the technical challenges of sustainable energy systems are not the greatest barriers to implementation, rather it is in the lack of capacity in the organizations and individuals that can move these ideas into action.

The Sustainable Cities International (SCI) Energy Lab is a program designed to improve this capacity through a series of learning exchanges between cities as well as providing a framework for analysis, action and evaluation to assist cities to move forward with their work on sustainable energy. Working with an initial cohort of 10-12 cities, the SCI Energy Lab aims to go well beyond being a simple exchange of pre-existing "best practices." Structured as an Innovations Lab, the goal is to provide a multi-disciplinary forum for collaborative problem solving and idea generation around all aspects of the design, implementation and regulation of urban renewable and local energy systems.

#### Call for candidate cities

Sustainable Cities International is seeking immediate expression of interest for the SCI Energy Lab 2013-2016 program. Please complete and send the attached statement of interest to Jane McRae, jcmcrae@icsc.ca, by February 20th, 2013.

## Selection criteria

The call for candidate cities is directed at intermediate cities with 200,000 to 5 million inhabitants. In order to qualify, a candidate city:

- Has the capacity to undertake sustainability energy planning within the city (capacity includes expertise you can provide in the fields of: planning, sustainability, energy, engineering and/or finances);
- 2. Has undertaken or planned 1-2 sustainability/energy initiatives and can provide evidence for local level government support of these programs;
- 3. Designates 2 representatives to attend the annual SCI Energy Lab workshop event;
- 4. Commits to host a peer exchange event (at least once over the 3 year program), should they be selected as a host city;
- 5. Will be expected to actively participate in city exchanges and web-based events in addition to the annual workshop event;
- 6. Have the capacity to communicate in English, as well as organize events and read/write documents in English.

The decision on which cities are selected will be announced in March 2013. Selected cities will be invited to attend the SCI Energy Lab launch on May 28-30th 2013 (location to be announced).

## How do candidate cities benefit from the SCI Energy Lab?

Participating cities will benefit from:

- Improved effectiveness of practitioners and accelerated action implementation;
- In-depth learning from other cities that are leaders in sustainable energy solutions and their implementation;
- Cross-sector exposure, access to expertise, and the opportunity to develop valuable professional relationships to support their sustainable energy initiatives;
- Increased support from local stakeholders and decision makers as SCI Energy Lab participation is profiled globally;
- Travel costs provided for two city representatives to attend the annual SCI Energy Lab workshop.

# Which issues will the SCI Energy Lab focus on?

The focus of the program will be finalized based on feed-back from participating cities. To assist in refining the program, SCI has identified the following preliminary focus areas:

- 1. Enhance energy efficiency and renewable energy capacity in cities: While many cities provide energy services to their citizens they generally have limited expertise in the area of energy efficiency and renewable energy. In addition, renewable energy is more complex than traditional forms of energy because of the variety of technologies involved, the inconsistent nature of supply, the variety of scales that are possible, and the multiple public, private and non-profit actors involved in the roll-out and maintenance of decentralized renewable energy installations.
- 2. **Policy and by-law frameworks that promote renewable energy up take:** Most cities do not have policies to deal with renewable energy installations at a city scale. In addition some

cities have by-laws that (often unintentionally) limit renewable energy installations and energy efficiency measures. There is a need to assess current municipal policy and by-law frameworks to advance progress in this area, while at the same time overcome hurdles associated with existing laws.

- 3. Overcome technical and policy confusion to support grid-feed: A key method of promoting renewable energy at a local scale is providing third parties the opportunity to provide surplus electricity into the local grid either on a net metering basis, or for the payment of a set tariff. This reduces the need for energy storage systems, makes renewable energy projects more cost efficient, and provide electricity for the grid. However, many cities find grid feed-in a challenge because of technical concerns regarding multiple energy feed-in points, and lack of policy clarity on technical requirements and appropriate tariffs.
- 4. Improve energy governance across multiple actors: The integration of multiple third parties as suppliers into the local electricity grid also significantly changes the systems of governance used to build, maintain and regulate traditional centralized energy systems. How to facilitate the uptake of energy efficiency and renewable energy technologies among multiple public, private, and community partners is a central challenge for urban renewable energy. Rolling out energy efficiency and renewable energy at scale while also ensuring long-term reliability, will require novel combinations of incentives, regulations, and capacity building both inside and outside of the municipal government.
- 5. **Financing sustainable energy:** The local renewable energy and energy efficiency sector in many cities is often very small because of a history of limited investment in local energy generation. Local governments have potential access to large sources of external funding, but often do not know how to tap these resources. New models of quantifying the potential benefits of cross-sectoral approaches are needed. Financial managers would also benefit from a broader understanding of how to link budgets with sustainable energy targets.

# How will the SCI Energy Lab work?

The SCI Energy Lab provides a focused platform for sustainable energy innovation exchange with an initial cohort of 10-12 cities. Two or three cities considered to be global leaders in sustainable energy development will play the role of resource cities. Starting from a **baseline assessment** of existing energy supply systems, cities will: **identify opportunities and initiatives** they intend to advance as well as existing barriers they need to overcome; set **goals**, **targets and milestones**; **implement** their initiatives and projects; **monitor and document results** during their participation in the Lab. Cities will commit to three years participation in the Lab to ensure short, mid and long-term transitional strategies are in place and opportunities for multi-sectoral collaboration have been realized within their region.

City exchanges will include a combination of:

- Site visits to relevant projects and programs within participating cities;
- Annual forums to exchange experiences across sectors, disciplines and regions;
- In depth workshops to unpack issues, assist participants in developing strategies for implementation in their cities and provide concrete input and feedback on existing or proposed programs and procedures;
- Input from technical and policy experts who will participate in SCI Energy Lab events as specialist advisers. Their role will be to provide guidance and address specific questions of concern in participating cities.

In addition to the face-to-face events, various social media and on-line communication methods will be utilized. Regular check-in calls by the SCI Energy Lab Project team will serve as both a means of monitoring and measuring progress, and of identifying issues where additional support or input may be required.

## What would be the contribution of participating cities?

There is **no member fee** connected to the participation in the SCI Energy Lab. Travel costs are supported by the SCI Energy Lab program. **Selected cities are expected to:** 

- 1. Be prepared to host a peer exchange event during the course of the three year program. Event hosts would be expected to
  - a. Participate in designing the event (including appropriate site visits) to ensure it provides the maximum benefit to the host city:
  - b. Cover costs of event venues;
  - c. Provide local transport for site visits;
  - d. Provide meals and refreshments for the event.
- 2. Send participants with the relevant experience and interest to the various Energy Lab events.
- 3. Designate a representative responsible for monthly monitoring and check in calls.
- 4. Share tools and documents that have been developed by the city (for example sustainable energy policy documents and technical specifications regarding grid feed in projects).
- 5. Attend the SCI Energy Lab launch on May 28-30<sup>th</sup> 2013.

Sustainable Cities International has developed core expertise in knowledge transfer and peer learning between cities over its 20 year history. From this base, SCI has developed the Energy Lab to promote innovation on sustainable energy. We look forward to working with the cities interested in participating in this 3 year program.

## **CALL FOR CITIES: Draft Letter of Intent**

To return latest on February 20th, 2013 to Jane McRae: jcmcrae@icsc.ca

To whom it may concern:

## Confirmation of Intent to Participate in the Sustainable Cities International (SCI) Energy Lab

This letter serves to confirm that (*your city name here*) would like to participate in the SCI Energy Lab.

If selected as a participating city, we commit to:

- 1. Provide capacity to undertake sustainability energy planning within the city (capacity includes expertise you can provide in the fields of: planning, sustainability, energy, engineering and/or finances);
- 2. Designate two representatives to attend the annual SCI Energy Lab workshop event;
- 3. Host a peer exchange event (at least once over the 3 year program), should our city be selected as a host city. As hosts of the exchange event we will organize venues, local travel and event meals as part of our contribution to the SCI Energy Lab.
- 4. Actively participate in city exchanges and web-based events in addition to the annual workshop event(s);
- 5. Share tools and resources that we have developed to promote renewable energy and energy efficiency in our city;
- 6. Attend the SCI Energy Lab launch on May 28-30<sup>th</sup> 2013.

(Name of key contact person here) has been identified as the **key contact person** for the SCI Energy Lab. (Name of key contact and/or additional contact person) will co-ordinate our participation in the program.

#### **Full contact information:**

(key contact person(s) telephone)
(key contact person(s) email)
(key contact person(s) postal address)

Yours Sincerely

(Signature)