



# WORKBOOK I

## COMPLETE

### Grand Renewable Energy Park Community Liaison Committee

*On November 20, 2012, volunteers for the Grand Renewable Energy Park (GREP) Community Liaison Committee (CLC) met at the McSorely Family Hall in the Cayuga Memorial Arena. Results of the discussion are summarized in this workbook as a record of the conversation and as launching point for our continued discussions and meetings.*

## OBJECTIVES

Our objectives for the evening were as follows:

- Get to know each other
- Understand function of the CLC and our roles
- Learn about the project and the construction process
- Discuss concerns within the community related to construction, operation and decommissioning of the project

## AGENDA

- Welcome & Introductions
- Purpose and Guiding Principles of the CLC
- GREP Project Background
- Role and Commitment of CLC Members and GREP Project Team
- CLC Terms of Reference Review and Discussion
- GREP Project Status
- Potential Community Issues
- Next Meeting

Much of this first meeting was directed at confirming the role of the CLC, including commitment of CLC members and the interface with the broader community.

Based on this feedback, a Terms of Reference will be prepared for discussion.

# MEETING #1 ATTENDANCE

## Attendees

Dave Link—Haldimand Federation of Agriculture  
Donna Pitcher  
Donna Wylie  
Drew Cherry—Grand River Conservation Authority  
Fred Morison—Councillor-Ward 2, Haldimand County  
Gary Moscardini  
Geoff Johnston  
Harry Robert Hill  
John Szabo—Haldimand ATV Club  
Joan Smelser  
Kris Franklin—Green Energy Infrastructure, Haldimand County  
Mary Lou Johnston  
Pat D’Haeseleer/Lightfoot  
Rich Canfor

## Regrets

Amy Cameron—MNR  
Carolyn King—Mississaugas of the New Credit  
David Mitchell  
Ken Chastkavich  
Margaret Moscardini  
Matt Jamieson—Six Nations of the Grand River  
Perry Barnhart  
Richard Klement  
Rob Shirton—Councillor Ward 5

## Samsung Renewable Energy

Ariel Bautista—Wind Project Development Manager  
Beatrice Ashby—Manager, Renewable Energy Approval  
Daniel Choi—Solar Project Development Manager  
Jose De Armas—Solar Project Development Manager  
Jeongtack Lee—Managing Director  
Katherine Park—Solar Project Development Associate  
Mohinder Pannu—Senior Engineer  
Richard Ashburn—Land Manager

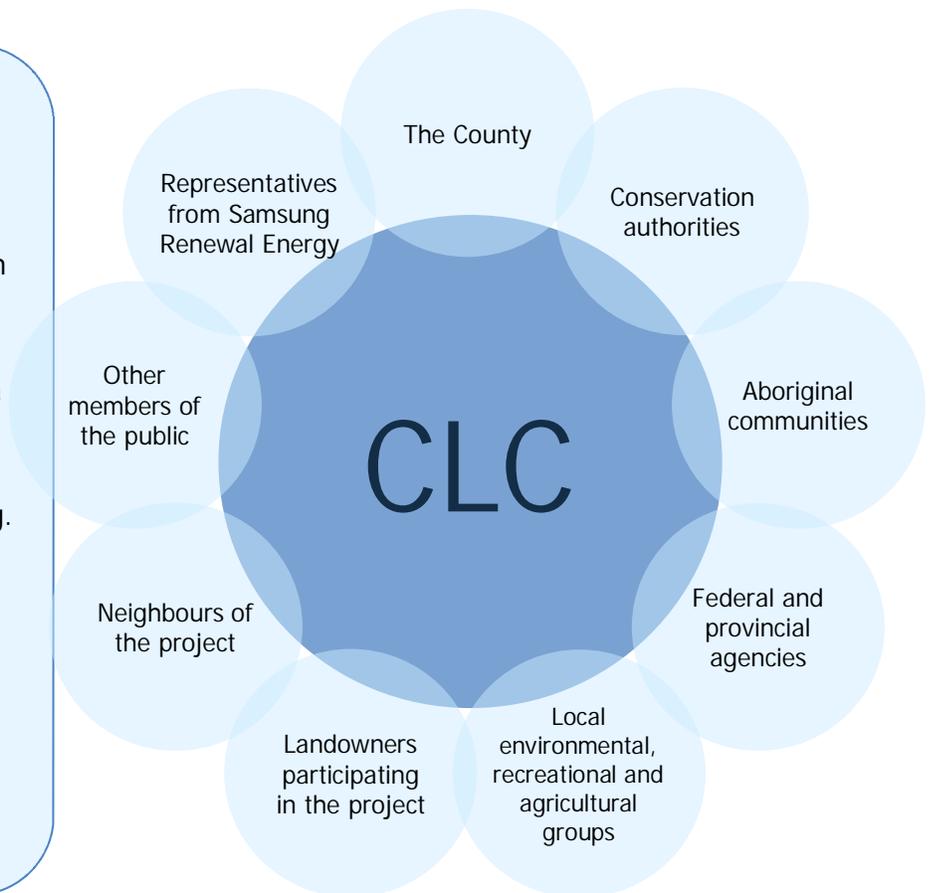
## Pattern Energy

Pat Murray-Stake Holder Relations  
  
Dillon Consulting Limited  
Karla Kolli—Facilitator  
Brent Bullough—Notes

## WHO IS THE CLC?

Membership on the CLC is intended to reflect a mix of voices and interests – that is what will help us better understand different perspectives. Notices were posted in three local papers and 4,500 invitations were sent out to stakeholders living in the study area or with a potential interest in the project. Approximately 24 people expressed interested in participating. At the meeting, we identified the following as potential additional participants:

- Media (Sachem Post was suggested)
- Tourism
- More solar representation



## WHAT IS OUR PURPOSE AND WHY ARE WE HERE?

Consultation with the community is an important part of the Renewable Energy Approval work that has been completed. It is equally important that SRE and the community work together during the construction and operation of the project; *it's about being good neighbours to each other.*

The focus of the CLC is to provide a place for the discussion of community issues and concerns related to the construction and operation of the GREP. Specifically, the terms and conditions of approval state that the CLC shall:

- Provide two-way communications between SRE and members of the public with respect to issues relating to the construction, installation, use, operation, maintenance and retirement of the facility.
- Provide a forum for SRE to provide regular updates on, and to discuss issues or concerns relating to the construction, operation, and decommissioning of the facility with members of the public.
- Ensure that any issues or concerns resulting from the construction, operation, and decommissioning of the facility are discussed and communicated to SRE.

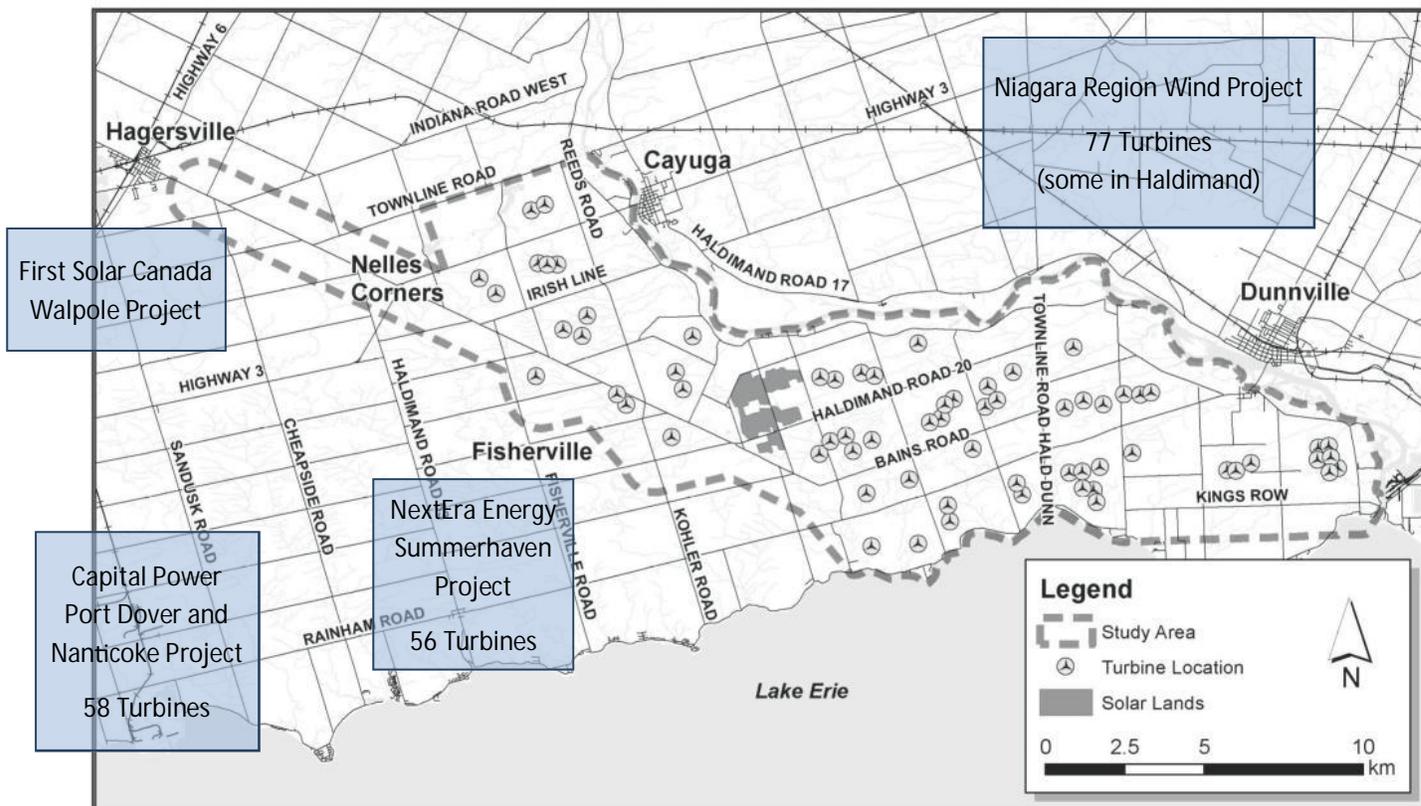
We want the CLC to be guided by principles of *collaboration* and *problem solving, resolution* of issues, *mitigation* of impacts, and encouraging the *use of best practices* in the areas of health safety and the environment. It is not anticipated that the CLC will have decision-making authority, but will act in an advisory capacity.

## HOW DID WE GET HERE?

The GREP, which consists of the *Grand Renewable Solar Park* and *Grand Renewable Wind Park*, received Renewable Energy Approval (REA) in June 2012 from the Ministry of the Environment (MOE). The wind and solar power cluster, located in Haldimand County, will generate approximately 250 megawatts (MW) of power; 150 MW of wind and 100 MW of solar power.

Approval for these projects was granted by the MOE subject to several terms and conditions including the establishment of a CLC for the construction, operation, and decommissioning phases of the projects. The formation of the CLC reflects a continuation of positive interaction with the community developed during the approval process, which included public meetings, a project website, presentation to council, project newsletter, and on-site meetings with landowners.

## STUDY AREA AND OTHER NEARBY PROJECTS



## QUICK REFERENCE

CLC – Community Liaison Committee

MW - Megawatts

GREP – Grand Renewable Energy Park

REA – Renewable Energy Approval

MOE – Ministry of the Environment

SRE – Samsung Renewable Energy

## WHAT DOES A SUCCESSFUL CLC LOOK LIKE?

The CLC discussed the following principles and explored elements of a successful CLC. Comments provided from the CLC are in green italics below.

### Elements of a Successful CLC:

- Meaningful and ongoing participation
- Input into decisions that directly affect the community
- Identification of construction, operation and decommissioning issues and seek resolution
  - *Members are hopeful that potential negative effects of the project are open for discussion and appreciate hearing the facts from SRE rather than through a third party.*
  - *Members require factual information to share with neighbours.*
- Information exchange about the project and the Community
  - *Members expressed a desire to hear varying opinions about the project. The CLC has been established to provide varying perspectives on the project.*
  - *CLC members do not have to be advocates of the project but should share factual project information with the community and assist fellow citizens who are looking for factual information.*
  - *The community is not receiving complete information and the CLC has a role in addressing this. Suggestions to share information will be considered.*
  - *Must explore methods to get information out to the community beyond the CLC.*
- Open and respectful conversation
  - *Knowing where fellow CLC members stand with respect to the project will contribute toward openness.*
  - *Meeting notes should be available for viewing by the public.*

## HOW DO WE WANT TO WORK TOGETHER?

CLC members agreed to the following principles to follow as we conduct our meetings and interact with each other.

- Start on time and end on time
- Respect the agenda
- Participate
- Listen to each other
- Use respectful language
- Only one person should be speaking at a time (limit side conversations)
- Come to the meeting prepared
- Liaise within your community
- LOL (laughter is welcome... as long as it's not at anyone's expense)

### Delegations

Recognizing that the meetings are open to the public, the CLC discussed what they would like to do if members of the public want to speak at future meetings. The following points of view were expressed:

- Concern that we may lose control of meetings if the public is permitted to address the CLC.
- If the public takes the time to attend a meeting and listen attentively, they should be given time to make a statement at the end of the meeting.
- Some members of the public may only become aware of the project after construction begins and they should be given an opportunity to inquire about the project.

It was concluded that while the CLC is not the only avenue for people to inquire about the project, if the public does choose to use the CLC to submit their comments, they should be given a chance to do so. In order to ensure that public comments do not prevent the CLC from performing its duties, members of the public who do wish to address the CLC will be required to register their name prior to the meeting and will be permitted to speak for a set time limit.

## WHEN AND WHERE WILL WE MEET?

CLC Members were reminded that the CLC has been established for a minimum period of two years. During this two-year period, meetings will be held a minimum of two times per year. CLC meetings shall be open to the general public. The public may be given a limited amount of time to address the CLC, however discussion will be among those who are committee members only. SRE will provide administrative support for the meetings including providing meeting space, agendas and meeting records, and taking care of any photocopying needs. We anticipate meeting at least four times over the next two years, including tonight's meeting, as follows:

- Meeting 1 (November 20, 2012): Introduction and Purpose of the CLC
- Meeting 2 (March 2013 *tentative*)
- Meeting 3 (November 2013 *tentative*)
- Meeting 4 (April 2014 *tentative*)

### CLC members made the following suggestion for future meetings:

- Dates to avoid include Tuesdays and March Break.
- Some felt the McSorely Family Hall was too loud. We'll speak to facility staff before future meetings are held at this venue about noise and also consider holding meetings at other locations. The Lions' Hall was recommended.
- One CLC members suggested that four meetings over two years is not sufficient. The possibility of holding additional meetings will be discussed at the next CLC meeting.
- Notification for future meetings will be given to members one month in advance.

## WHAT'S HAPPENING ON THE GRAND RENEWABLE ENERGY PARK?

Samsung Representatives, Ariel Bautista (wind) and Jose De Armas (solar) provided updates on their respective components of the GREP. What is important to Samsung is that people have access to factual information about the project. The CLC is seen as one of the means to achieve this.

The Green Energy and Green Economy Act requires that jobs are created in Ontario and that renewable energy components be manufactured in Ontario. Samsung Renewable Energy is bringing 16,000 jobs to Ontario including the manufacturing of photovoltaic panels, wind turbine blades, and inverters. Up to 60% of components may be from outside of Ontario but all manufacturing must take place in Ontario. Component Manufacturers and their locations are as follows: Turbine Blades—Siemens in Tillsonburg; Turbine Towers—CS Wind in Windsor; Solar Inverters—SMA in Toronto; and, Solar Panels—Soon to be announced manufacturer in London.

The GREP is unique in that it is a combination of two projects: the Grand Renewable Wind Project (GRW) and the Grand Renewable Solar Project (GRS), comprising 150 megawatts (MW) of wind and 100 MW of solar. Both components are expected to be operational by 2014. Here is some additional information about each component.

### Wind

- 67 turbines each capable of producing 2.3 MW of power at a wind speed of 14 m/s (50 km/hr).
- Turbines will only turn between 4 m/s (15 km/hr) and 25 m/s (90 km/hr) for efficiency and safety reasons.
- Turbines are 100 m tall at the hub (where the blades connect to the tower). Blades are 49 m long. Highest point of the blade when turning is about 149 m. The closest the blades come to the ground is about 50 m.
- The project is currently with an Environmental Review Tribunal and a decision is expected at the end of December 2012. Assuming the project approval is upheld, construction will begin in the spring of 2013. Access roads would be put in place in the spring and summer of 2013 and turbine construction would begin in fall 2013.

### Solar

- More than 400,000 photovoltaic (PV) solar panels installed on fixed, ground-mounted racking.
- Approximately 800 acres of land required.
- A berm will be created to provide a landscaping barrier for adjacent residences.
- PV panel manufacturer expected to be announced shortly (will be based in London, Ontario).
- Construction is expected to start in spring 2013 and take approximately 1 year to complete.

Several agreements have been signed with various parties and several more are needed prior to construction. Key agreements already in place include the Road Use Agreement with the County and several agreements with the Six Nations of the Grand River. The Six Nations agreements can be seen at [sixnationsfuture.com](http://sixnationsfuture.com).

## WHAT'S HAPPENING ON THE GRAND RENEWABLE ENERGY PARK?

Samsung Renewable Energy and Pattern, together with Capital Power Corporation and Niagara Region Wind Corporation, have entered into a Community Vibrancy Fund (CVF) agreement with Haldimand County. The CVF will see the renewable energy companies permitting projects in Haldimand County contribute over \$40 million dollars to benefit the residents of the County over the next two decades. These funds will be earmarked for Council approved community related projects and other community needs as determined by Council. The agreement is subject to Council ratification and the signing of individual agreements with each proponent. For more information, visit [http://www.patternenergy.com/media/news/announcements/haldimand\\_community\\_vibrancy\\_091911](http://www.patternenergy.com/media/news/announcements/haldimand_community_vibrancy_091911)

Discussions during the meeting raised important information about the project that may not be widely known. It will be important for the CLC to share this knowledge with others in the community to increase the level of knowledge about this and other wind and solar projects taking place within Haldimand County. For instance, The Grand Renewable Energy Park (GREP) is one of five projects proposed in Haldimand County all in various stages of development. The proponents for the other four projects are NextEra (56 turbines), Capital (58 wind turbines), Niagara Region (77 in total, some in Haldimand) and the First Solar Walpole Solar project west of Hagersville. All projects have been required to establish a Community Liaison Committee and Kris Franklin, the County's Green Energy Infrastructure Project Manager is participating on all CLCs.

Key Information to share with your neighbours:

- Wind turbines only turn when the wind is blowing. They are not powered to turn through any other means.
- Access roads currently under construction on wind farms in the community are not related to the GREP as GREP construction has not yet started.
- As one CLC member informed the group, a large hospital would have a 1 MW backup generator in place to continue operation in the event of a power outage. The GREP will erect/install 250 MW.
- Identifying locations for turbines is a long, iterative process. High wind areas with appropriate land (considering all required setbacks) is identified. Landowners willing to host turbines and panels are identified and studies are completed to identify the ideal layout.
- Electricity produced by the project is fed into the provincial grid via a 20 km long 230 kV transmission line along Haldimand Road 20 connecting to the grid near Hagersville.

## WHAT'S HAPPENING ON THE GRAND RENEWABLE ENERGY PARK?

Members were asked to share what issues they and their neighbours have regarding the project. A summary of the discussion on each issue is provided below for construction, operation, decommissioning and general concerns.

### Construction

Members noted that most opposition from the community appears to be directed at the wind component of GREP.

Property value—MPAC conducted a study on property values at the Wolfe Island project, which has been in place for a couple of years and did not find a long-term effect on property value. This study will be shared with the CLC.

Road damage—SRE has entered into a road use agreement with the County and will return the road network to pre-construction condition.

Wilson Road—SRE has not presently made a request to open this road allowance.

Expropriation—No expropriation is needed for the project. Temporary road widening within the existing road allowance may be required to accommodate turning radii of construction vehicles and components but no expropriation is required.

Construction site security and safety—Turbines are not constructed all at once. Construction will progress across the study area. Each construction site will be suitably secured.

Traffic management—Will be provided by a selected contractor.

Foundations—Turbines are not connected to bedrock. Each turbine tower is supported by a 16 m (approx.) diameter, floating concrete foundation. Each site is individually assessed and foundation size varies accordingly.

Existing trails—There are existing ATV trails in close proximity to the turbines. Maps showing the location of access roads, panels and turbines will be shared to identify potential trail conflicts and safety issues.

Tree loss—One turbine requires the removal of trees from a tree plantation where tree removal has been approved by authorities. No trees will be lost due to the solar component of the project. SRE will replace any trees lost, which is also a requirement of the road use agreement.

Berms—A 6 m wide berm will be put in place along Haldimand Road 20 as a landscaping feature to block the view of the solar park from nearby residents.

Permits—Several permits are still required before construction can begin, including entrance permits, building permits, and permits from the Conservation Authorities. At the time of the meeting, all construction permits were still required.

Top soil—Whether the top soil is removed or not will depend on the EPC contractor. It may be that topsoil is used to construct the berm at the solar site.

## ISSUES, CONCERNS AND RESPONSES

### Operation/Maintenance

**Fencing**—Solar arrays are clustered and fencing will be placed around each cluster allowing for wildlife movement through the solar park while restricting direct access to the panels. No fencing is required for the turbines.

**Access to turbines**—A 1 metre gravel area surrounds each turbine. There is no restriction to accessing the turbines however they are located on private property so access by the general public should not occur. There are no climbing structures on the outside of the turbine (located inside the turbine behind a locked door).

**Lighting**—Transport Canada established the lighting criteria for turbines. Select turbines throughout the project will have lighting as stipulated by Transport Canada.

**Noise**—No residence should experience noise greater than 40 dB, which is similar to the noise level in a quiet room.

**Loss of agricultural land**—Projects are not permitted on prime agricultural land. A hosting landowner of the solar components indicated that soils are not ideal; the land is difficult to farm; and compared to the amount of land under production in Ontario, the amount of land lost to solar panels is extremely small. Once the project is decommissioned, the land will again be available for agricultural use.

### Decommissioning

**Decommissioning Plan**—A plan has been submitted as part of the REA package and includes removal of project components such that lands will be returned to an acceptable condition for its intended use.

**Project life**—At the end of the 20 year power contract, the project will be assessed to determine if it should be continued.

**Solar components**—Project components will be removed and land restored to an acceptable condition for its intended use.

**Wind components**—Concrete foundations will be left after decommissioning at 1 m below the surface to permit agriculture.

### General Questions and Concerns

**Nanticoke**—The province has an initiative to phase out coal power generation by 2014. The Green Energy and Green Economy Act is part of the solution.

**Energy prices**—There are concerns that energy prices may rise as a result of renewable energy projects. It should be noted that nuclear energy is the most widely used in Ontario. Cost overruns from nuclear as well as other factors could result in higher costs but it is difficult to speculate. Costs for renewable energy projects, such as GREP, are borne by private developers, not the province. The province enters a contract to buy electricity from these private projects at a guaranteed rate.

## HOW CAN WE BEST INFORM EACH OTHER AND THE COMMUNITY?

Throughout the meeting, several suggestions were raised to keep the community informed. Suggestions include the following:

- Monthly column or information notice in a local paper, such as the Sachus Post to provide updates on the project
- Monthly newsletters
- Project hotline
- Facebook and/or Twitter to share project information and respond to inquiries
- Site office
- Presentations to community groups, such as the Lions, to share information and answer questions. Samsung would welcome suggestions from the CLC for groups to approach.

CLC members will be asked for permission to post their name and affiliation (for example, landowner, elected representative, etc.) on the project web site. If posted, this will help members of the community identify who may be able to answer questions. For example, Kris Franklin is a contact at the county who would address any issues with roads.

Members will also be asked if their name and/or phone number can be shared with other CLC members for the purpose of internal communication.

## NEXT MEETING

Based on discussion, the following actions have been identified and decisions made regarding the next meeting:

- Next meeting will be in March or April 2013—before construction begins
- Detailed maps will be available at the next meeting showing component layouts and access road locations.
- Links to resources such as the Ontario Power Authority, research on health effects, and MPAC research on property values are to be shared with CLC members.
- Migratory bird studies to be provided to the Ministry of Natural Resources.
- Engineering, procurement and construction (EPC) contractor information will be shared and the EPC contractor may attend.
- CLC members are encouraged to visit nearby wind (NextEra) and solar (Walpole west of Hagersville) projects under construction to get a better sense of what is involved and to anticipate questions and concerns we may hear from the community.