

PV SOLAR PROJECT

Potential Mountsberg Solar Project

**Presentation to
The City of Hamilton**

June 17th, 2015

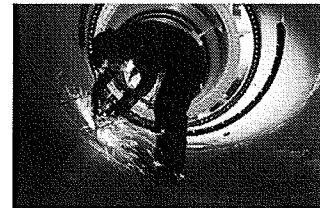
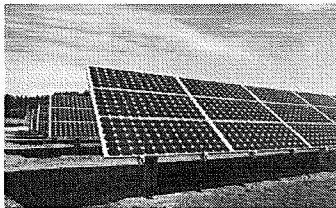
Samsung Renewable Energy Inc.

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Samsung Renewable Energy is creating clean, renewable energy for generations to come. Together with our partners, Samsung is making a \$5-billion investment in Ontario to create the world's largest cluster of wind and solar power. Our investments will create 900 direct renewable energy manufacturing jobs and 9,000 high-skilled jobs in Ontario.

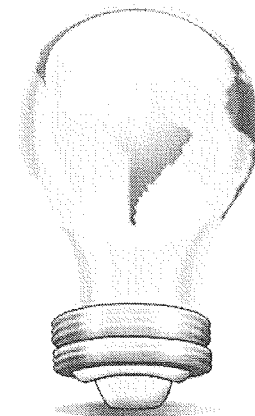
Samsung and its partners are providing much-needed jobs in communities throughout Ontario, including manufacturing facilities in Windsor, Tillsonburg, Toronto and London

Built on Samsung C&T's commercial and technical expertise and the success of its renewable energy projects in several countries – including the United States and Europe – Samsung is creating real jobs, through real investment, benefitting real people.



Renewable energy projects bring economic benefits to both local communities and municipalities throughout Ontario. They:

- generate new manufacturing jobs in Ontario;
- provide local jobs during construction and operation; and
- increase the municipal tax base.



Large Renewable Procurement

The **Independent Electricity System Operator(IESO)** has announced a competition bid process for the procurement of up to 565MW of renewable energy in Ontario, **Large Renewable Procurement(LRP)**, including the procurement of 140MW for Solar and 300MW for Wind. The price of solar energy is expected to decrease significantly due to the nature of a competitive process.

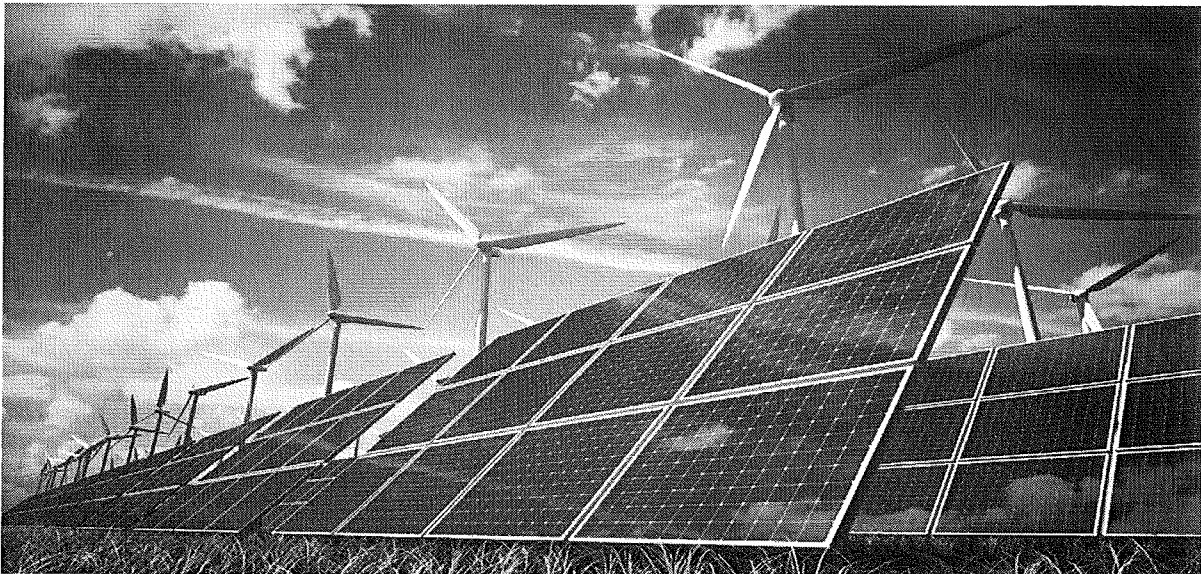
Schedule	Event
June, 2013	Announcement of LRP
Sep, 2014	Submission of RFQ
Nov, 2014	Announcement of Qualified Applicant
	◀ Municipal Resolution required by Aug
Sep 1st, 2015	Submission of RFP
Dec, 2015	Notification of Selected Proponents
Mar, 2018	Beginning of Construction
Dec, 2018	Commercial Operation
Dec, 2038	Decommissioning completed

* Schedules after 2015 are subject to change by IESO's sole decision



Green Energy Investment Agreement(GEIA)

Ontario Solar and Wind Power Cluster

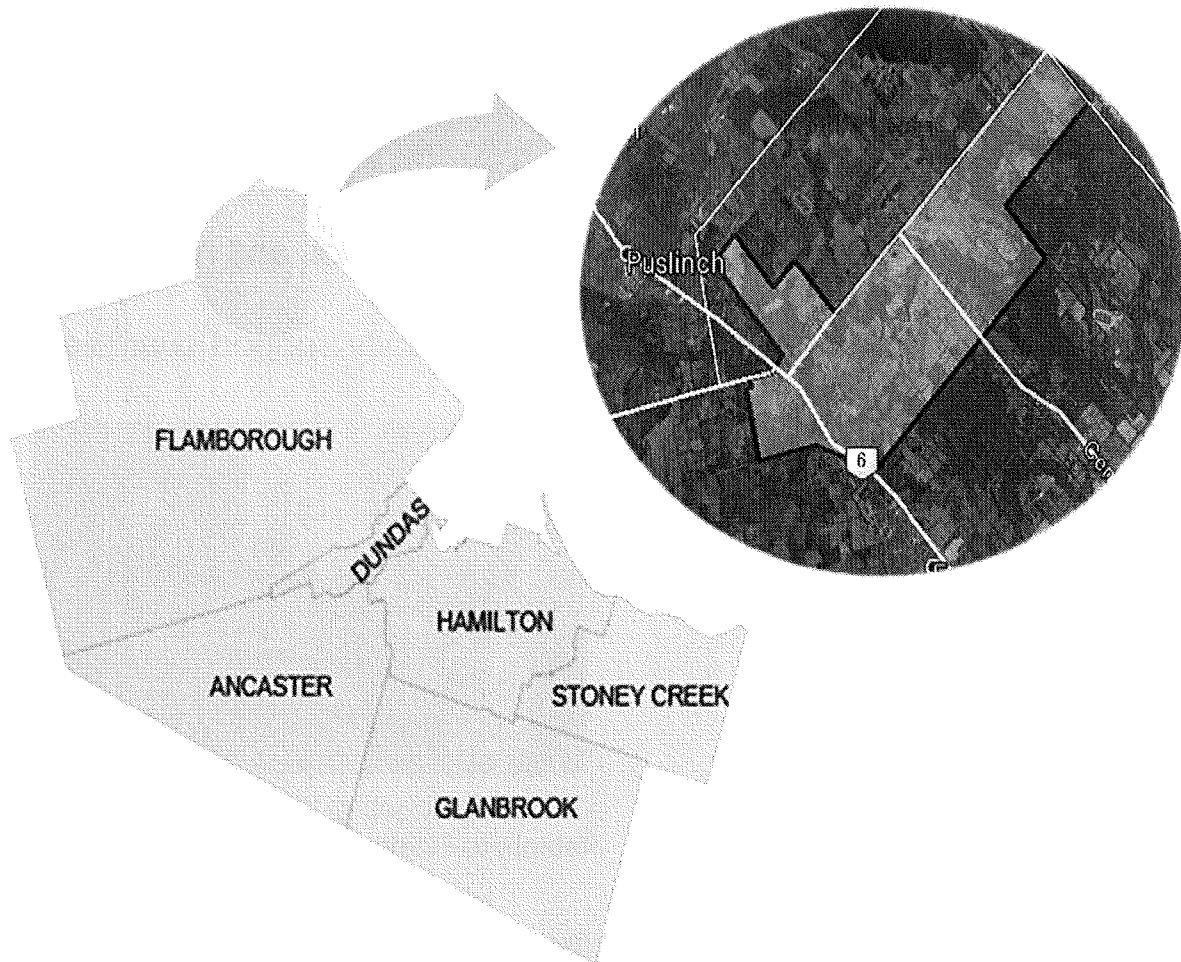


- In 2010, Samsung signed the GEIA with the Government of Ontario
- The GEIA consists of three phases of 1369MW of renewable energy that once completed, will be the worlds largest cluster of wind and solar power
- Samsung delivered on its commitment to open four manufacturing facilities in Windsor, Tillsonburg, Toronto and London that currently employ over 1000 Ontarians
- GEIA will create over 9,000 direct and indirect jobs as a result of this \$5 Billion dollar investment



Potential Solar Project

Mountsberg Solar Project is to be developed by Mountsberg Solar LP in the northeast side of Flamborough. The nameplate capacity will be approximately 10 to 20 Mega-Watt(MW). This region consists mostly of Rural Area under Official Plan of City of Hamilton.



Under Large Renewable Procurement, a Non-Rooftop Solar project is only permitted to be developed where the Project is not located within Prime Agricultural Area under the newly updated Official Plan or, if the Official Plan is not updated, the Site should not be located in Specialty Crop Areas, Organic Land and CLI Class 1, 2, 3 land.



Municipal & Community Benefits

Tax Revenue

- Upon the development of the solar facility, the property class of the project site would need to be changed to Industrial. Property tax for Industrial in Flamborough region is approximately 4.42% which is around 3 times bigger than 1.17% for Rural-Residential.

Community Vibrancy Fund

- Fund will support local community, environmental, and health and wellness initiatives
- Fund will provide a stable source of community support over the life of the project

Municipal Permits

- Building permit
- Entrance permit
- Traffic Management Plan



Samsung donating 20 Samsung Galaxy tablets to Rainham Central School

Job Creation

- Hundreds of workers on-site during construction period

Local Economic Stimulation

- Utilizing local subcontractors during construction and operations
- Purchasing goods and services, increasing revenue for service businesses (Hotel, Housing, Restaurant, etc)



Fire Safety, Emergency Plan

1. Training and Cooperation with Local Fire Station

Training sessions and Cooperation under the emergency plan with the local fire station

2. Remote Monitoring

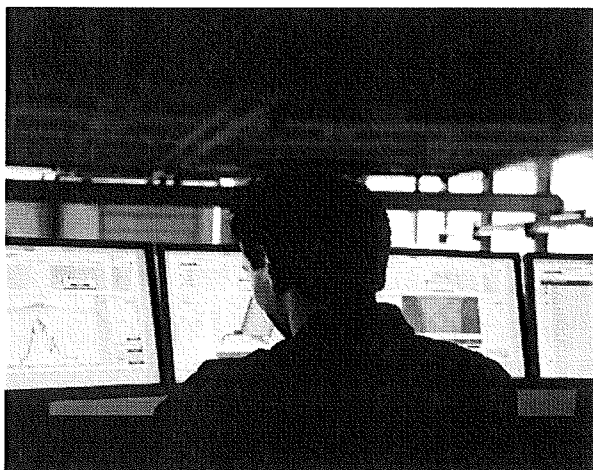
Solar facility is remotely managed through SCADA system which provides information on energy production, inverter status, panel status, and weather conditions.

Any alerts, abnormalities or malfunctions of the plant are also reported to system administrators in real-time, which in hand initiates emergency protocols depending on the alerts.

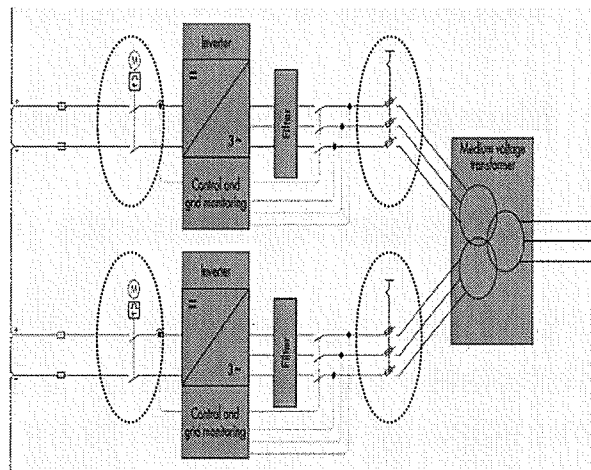
3. Automatic Fire Preventive Control system

Should fire to occur on PV panel strings, it will directly affect current/voltage levels of that particular string and will automatically trigger fuse-out for the array although it is very rare.

This automatic shut down logic is implemented in string, array, section basis where fuses, circuit breakers and safety switches will automatically kick-in when abnormal level of current/voltage is detected to prevent from fire spreading.



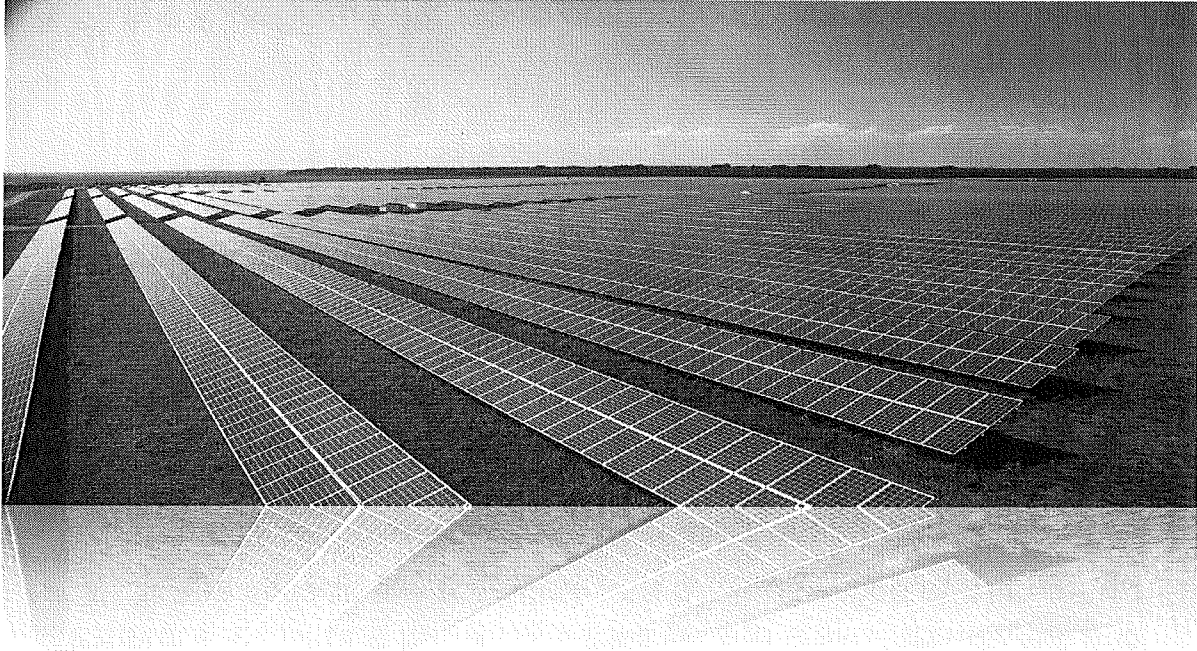
[Solar farm Monitoring]



[Fire Preventive Automatic
Cut-off Control system]

Large Renewable Procurement

RFP Applicant Requirements



Before the submission of **Request For Proposal(RFP)** documents for LRP I, applicants are required to fulfill some requirements including:

- **Municipal Council Support Resolution (Requisite)**
- **Municipal Meeting Confirmation (Requisite)**
- **Municipal Agreements (Optional)**

The above requirements shall be provided upon the Prescribed Template/Form provided by IESO with the signatory of municipality which confirms the Local Municipality Support.

