

Six Nations of the Grand River **Development Corporation Wishes You** a Happy Earth Day 2016

WHO IS SNGRDC?

Six Nations of the Grand River Development Corporation (SNGRDC) was established in May 2015 after it separated from Six Nations Elected Council. SNGRDC currently employs 88 employees in Administration, Tourism, Community Planning, Our Sustenance, Property Management, Bingo and Investments.

HOW SNGRDC IS GOING GREEN

- We invest in clean renewable energy.
- Our printers are set up to automatically print double sided.
- We are currently investigating options to make our building more energy efficient.
- We are in the process of transitioning all 88 SNGRDC employees to paperless pay stubs.
- We are installing recycling station at Six Nations Bingo and Six Nations Tourism.
- All of our board packages are uploaded to the Boardvantage app which can be viewed digitally on an iPad. This saves us approximately 14,000 pieces of paper annually.

1 KWH OF ENERGY CAN POWER





100-watt light

20-watt compact fluorescent lights

SNGRDC is Always Looking for Local Talent

If you want to make a difference in your community, visit www.sndevcorp.ca or www.snfuture.com for more information on upcoming projects. Email your resume to kwabange@sndevcorp.ca to be considered for new and future positions.

HOW YOU CAN GO GREEN

At Home

- Shop local for goods & services.
- Plant a home garden & buy vegetables in season.
- Use energy efficient CFL light bulbs. CFL light bulbs use 80% less energy and last up to 15 times longer.
- Unplug your phone charger when not in use.
- Buy a laptop instead of a desktop. Laptops use 80%
- Use rechargeable batteries. Consider purchasing a charger pack for gaming device controllers.
- Install a low flow high efficiency toilet.

HOW YOU CAN LITERALLY SAVE THE WORLD

Consider a Bachelor Degree in:

- Business, public administration, law or community planning
- Chemistry, biology or environmental science
- Engineering
- Research positions, you will need a master's degree or Ph.D.

* WHERE YOU CAN WORK

*Sample of Potential Career opportunity across North America

Civil Engineers (\$77.990) Design buildings and structures that operate more efficiently, reduce pollution and decrease carbon outputs.

Sustainability Officers (\$63,000) Develop, implement, evaluate and improve on a company's sustainability projects & initiatives.

Conservation Scientists (\$59,530) Find ways to manage resources and protect them from being overused.

Sustainability Consultants (\$68,900) Find strategies that will allow your clients to meet business objectives using a sustainable approach.

Environmental Engineer (\$79,050) Focus your efforts on controlling water/air pollution, discovering waste disposal methods, making use out of recycled materials and reducing public health concerns.



At Work

- Power down your computer every night. A computer turned off uses 65% less energy than one left on.
- Set your work printer up to automatically print double sided.
- Drink out of a reusable coffee mug or water bottle.
- Take your lunch to work in a reusable container.
- Review documents onscreen versus printing them off.
- When buying paper look for a recycled paper with a high percentage of post-consumer content.



SNGRDC IS COMMITTED TO RENEWABLE ENERGY

"I'd put my money on the sun and solar energy. What a source of power! I hope we don't have to wait until oil and coal run out before we tackle that."

-Thomas Edison, 1931

SNGRDC strives to align all of its projects & partnerships with the values of the Six Nations Community. Renewable energy is a sustainable and environmentally friendly investment that will not only brighten our future, but the future of our coming generations.



MEGA WHAT?

- Energy production is measured in megawatts (MW).
- One megawatt of power is equal to 1,000 kilowatts.
- Power plants are typically measured in megawatts per hour (MWh). If a generator that produced one MW of power, ran at full capacity for an entire year (8,765 hours) it would produce 8,765 MWh or 8,765,000 kWh of energy.
- A kilowatt hour is the amount of electricity consumed or generated over a 1-hour period.
- A typical household uses approximately 9,600 kWh or 9.6 MWh per year.

HOW DOES RENEWABLE ENERGY COMPARE?

- Wind turbines and solar panels do not give off any greenhouse gas emissions when converting their energy sources into electrical energy.
- 1 MW of energy produced through renewable sources will prevent 170,000 lbs of coal being burned, 300,000 lbs of CO₂ (carbon monoxide) being released into the atmosphere, and 397,000 litres of water from being consumed.
- A 500 kw (0.5 MW) solar placement, roughly the size of Oneida Business Park roof-top installation, can power approximately 78 homes a year without emitting any CO₂ or wasting precious clean water.

CASE STUDY - GRAND RENEWABLE ENERGY PARK

Grand Renewable Energy is comprised of a 100 MW solar installation and a 149 MW wind installation in South Cayuga.

Offsets 585,000 tons of CO₂ per year, equivalent to removing **110,000**+ cars from the roads



Conserves enough water each year to service the needs of 12,000 people



Produces enough power to service 1.2 Million homes over the next 20 years



On top of Environmental Savings, SNGRDC has paid off all debt resulting from Grand Renewable Solar within the first year of a 20-year operation. Meaning the next 19 years of this project is purely profit. SNGRDC has also repaid 1.4 Million or approximately 20% of the debt resulting from Grand Renewable Wind investment.

SOLAR

Solar resources in this region run at a capacity of

1 MW X (8760 Hours per year) X (17% Capacity)

Average yearly consumption per household = 9.6 MWh

1 MW Solar Installation can power 155 homes/year



WIND

Wind resources in this region run at a capacity of

1 MW X (8760 Hours per year) X (32% Capacity)

Average yearly consumption per household = 9.6 MWh

1 MW Wind Installation can power 292 homes per year

HYDROELECTRIC

Nuclear Power Generation can run at a capacity of

1 MW X (8760 Hours per year) X (90% Capacity)

Average yearly consumption per household = 9.6 MWh

1 MW Wind Installation can power 821 homes per year 🛄 🞹



SNGRDC RENEWABLE ENERGY PROJECTS

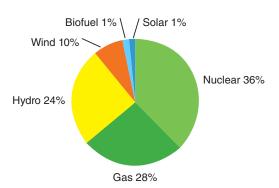
Our future is dependent on our actions today. SNGRDC believes investing in renewable energy means investing in the future. SNGRDC's current clean energy portfolio generates 868 MW of renewable energy through 13 solar or wind power projects either directly or indirectly.

WIND POWER

Wind power currently provides 10% of Ontario's total electricity. It is the fastest growing energy source in the world and it will play an increasing role in supplying our electricity in the future.

The amount of electricity a wind turbine can produce depends on the strength and consistency of the wind at any given time. In this region wind power runs at a capacity of 32%.

POWER GENERATION IN ONTARIO



SOLAR POWER

Solar power currently provides about 1% of Ontario's electricity. SNGRDC will soon expand its solar portfolio by investing 10% equity into Nanticoke Solar. Construction on this solar installation is set to begin in 2017. The amount of electricity a solar farm can produce depends on the intensity of the sun and the number of hours the panels are exposed to the sun. In this region, solar power runs at a capacity of 17%.

Oneida Business Park is currently the only SNGRDC Renewable Energy project located on Six Nations reserve. This 500 KW roof-top solar installation received the Aboriginal Project of the Year award in 2016 from the Ontario Sustainable Energy Association. A total of 2,307 solar panels make up this installation and providing enough energy to power 78 households per year.

SNGRDC WIND PROJECTS

| PROJECT | PARTNER | LOCATION |
|------------------------------------|-------------------------------------|---------------------|
| Grand Renewable Wind | Samsung, Pattern Energy & SNGRDC | South Cayuga |
| *Summerhaven Project | NextEra Energy | Nanticoke |
| *Port Ryerse | Boralex Inc. | Norfolk County |
| Gunn's Hill | ProWind Canada & SNGRDC | Norwich |
| *Port Dover & Nanticoke Project | Capital Power | Port Dover |
| Niagara Regional Wind Farm | Boralex & Enercon | Hamilton to Niagara |

SNGRDC SOLAR PROJECTS

| PROJECT | PARTNER | LOCATION |
|--|-------------------------------------|-----------------------------|
| Grand Renewable Solar | Samsung, Pattern Energy & SNGRDC | Hagersville |
| *Walpole Project | First Solar | Brant County |
| *Brantgate Solar Farm | Penn Energy | Brant County |
| BGI Solar | Brant Renewable Energy & SNGRDC | Welland & Norfolk County |
| *Welland Ridge & Norfolk Bloomsburg Project | SunEdison | Port Dover |
| Oneida Business Park Rooftop Solar | Brant Renewable Energy & SNGRDC | Six Nations |

^{*}Community Benefits Agreement versus Equity Ownership

We are Expanding our Clean Energy Portfolio - Nanticoke Solar

On March 11th of this year, the Independent Energy Systems Operator (IESO) rewarded a LRP 1 clean energy contract to Ontario Power Generation, SunEdison Construction & Six Nations of the Grand River Development Corporation to construct a 44 MW solar farm along Lake Erie. This installation is set for construction in 2017 on the property of OPG's former coal burning power plant.

SNGRDC will invest 10% equity and anticipates to generate no less than

7.4 MILLION over the next 20 YEARS



COMMUNITY ENERGY PLAN

This project was made possible in part through the financial support of the Independent Electricity System Operator's Aboriginal Community Energy Plan Program.

What is a Community Energy Plan?

A comprehensive long-term planning tool that can be used as a starting point to identify goals for energy management.





KEY COMPONENTS OF THE COMMUNITY ENERGY PLAN

- · Collecting energy data
- Identifying opportunities & priorities
- Forecasting future energy needs
- · Creating an implementation plan

THE BENEFITS OF A COMMUNITY ENERGY PLAN

- Develop long term comprehensive plan
- Improve energy efficiency
- Better manage costs
- Identifying green energy opportunities
- Creating an implementation plan
- · Collect baseline energy data
- Reduce energy consumption
- Awareness & education
- Forecasting future energy needs
- Implementing annual action items

HOW CAN I HELP?

Go to **www.sndevcorp.ca** to find out more and to complete a short survey on your home energy consumption. Once completed, your name will be entered into a draw for an energy efficient flat screen TV and other prizes.

You can also print off a copy of the survey and either drop it off at Six Nations Tourism or email it to rdhill@sndevcorp.ca

OUR SUSTENANCE

Six Nations Farmer's Market



2676 Fourth Line (Behind Big Six Gas)
The first outdoor market will be

SATURDAY MAY 21!

Outdoor Farmer's Market runs Saturdays 9 am - 1 pm from May long weekend to Thanksgiving long weekend

Community Gardens • Greenhouse • Good Food Box



Join us for Community Awareness Week on Saturday, May 21st from 12 pm to 4 pm to construct and compete in a...

SOLAR POWERED BOAT RACE

For ages 6 to 16

To register contact tcurley@sndevcorp.ca
no cost to participate • space is limited • register early

NIAGARA Region Wind Farm ONTARIO POWER GENERATION

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Simply Grand

GRAND RENEWABLE SOLAR LP

OPEN CALL FOR BOARD MEMBERS

MAKE A DIFFERENCE TODAY!

ADVISORY COMMITTEE

Mandate

To provide oversight of the Board of Directors of the Corporation and the Board of Trustees of the Economic Development Trust, including to ensure that each entity is operating in line with the long-term plan of the community, as well as being socially responsible and preserving national and cultural integrity.

BOARD OF TRUSTEES

Mandate

To determine the distributions of yearly profits generated by SNGRDC. All funds will go towards tackling community priorities.

BOARD OF DIRECTORS

Mandate

To provide oversight of management and the operations of the Development Corporation, including through the supervision of the CEO President.

Apply to the SNGRDC Board of Trustees, Board of Directors or the overarching Advisory Committee.

Applications, Roles & Responsibilities can be found at www.sndevcorp.ca

Applications can be picked up at:

Six Nations of the Grand River Development Corporation 2498 Chiefswood Rd. Ohsweken, ON | NOA 1M0 nkohoko@sndevcorp.ca or 519-753-1950 ext. 6421

Submit a sealed application, resume & cover letter to:

Nicole Kohoko, Corporate Secretary 2498 Chiefswood Rd. Ohsweken, ON | NOA 1M0 nkohoko@sndevcorp.ca

