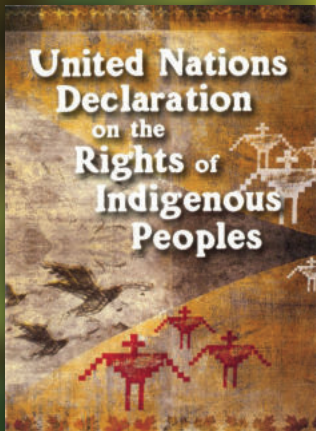




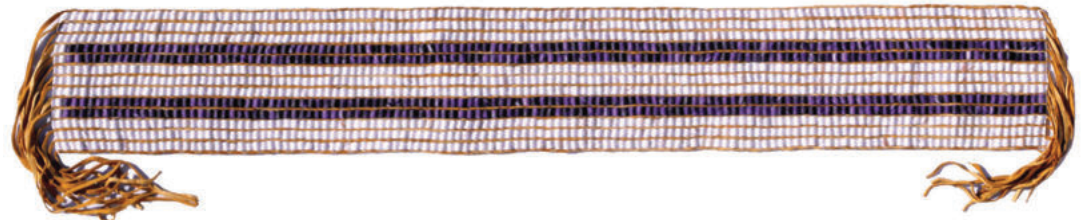
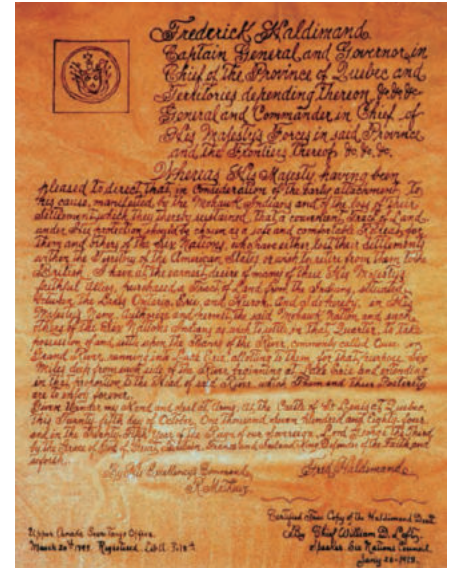
# CLIMATE CHANGE *Project Profile*



## *Six Nations of the Grand River*

Six Nations of the Grand River is the largest Indigenous "First Nation" community in Canada with more than 27,000 citizens entitled to be living on approximately 46,000 acres (18,616 hectares) in Southern Ontario, Canada. It is less than 5% of our lands so promised.

We are a Sovereign Nation. The Two Row Wampum Belt symbolizes the relationship the Six Iroquois Nations have with the rest of North America and other countries. One purple row of beads represents the path of the natives' canoe which contains their customs and laws. The other purple row represents the path of the Whiteman's vessel, the sailing ship, which contains his customs and laws. The meaning of the parallel paths is that neither boat should outpace the other, and the paths should remain separate and parallel forever. Section 35 of Canada's Constitution Act, 1982 recognizes and affirms all Treaties, including the Six Nations Treaties to Sovereignty.



The United Nations Declaration on the Rights of Indigenous Peoples recognizes the urgent need to respect and promote the inherent rights of Indigenous Peoples which derive from their political, economic and social structures; and from their cultures, spiritual traditions, history and Treaties of Sovereignty.

Six Nations of the Grand River make this submission as a Sovereign to the Executive Board of the Climate Development Mechanism for the registration of the Certified Emission Reductions credits being created to counter climate change.





## Renewable Energy

Ontario Hydro amassed \$38 billion in debt now being transferred to consumers through a restructuring scheme

The Peoples of the Six Nations cannot afford the high cost of electricity; which costs will increase in 2 years

The electricity infrastructure at Six Nations is aged, inferior and needs replacing

Six Nations needs to achieve affordable energy independence from the Hydro One grid

Construct 50 megawatt solar farm and install updated electrical infrastructure

Establish an independent Six Nations Electrical Authority to maintain and service Six Nations at affordable rates

## Project Profiles: Overview

### RENEWABLE ENERGY

The Six Nations of the Grand River Peoples cannot afford the present costs of electrical energy and these costs will only be increasing. Many of the Indigenous Peoples within Ontario must chose between paying for electricity or food for their children.

The Six Nations project involves the construction of 50 Mega Watts of AC Solar Photovoltaic Power Plant in the Six Nations of the Grand River Territory, in the Province of Ontario, Canada. The overall aim of the project is to achieve affordable energy independence using clean and environmentally friendly energy for our long-term sustainable development to meet the healthy, educational, social and housing needs for the Six Nations community.

### CAROLINIAN FOREST LIFE ZONE ECOLOGICAL RESTORATION

The Carolinian Woodlands of Six Nations are recognized as a unique and valuable natural heritage feature and are important for the conservation of Species at Risk and their habitats and is the largest remaining concentrated Carolinian forest in Canada.

The Initiative for this living project is intended to promote eco-culturally centred stewardship and conservation of the Six Nations Carolinian System through community involvement, by increasing capacity and strengthening relevant sustainable economic opportunities in ecological restoration; practicing sustainable resource use at Six Nations and throughout the treaty lands.

### WATER SERVICING PLAN AND WATER TREATMENT EXPANSION

The individual water supply systems for the majority of the Six Nations residents are substandard and the safety and well-being of the membership must be addressed. It is critical that the existing water treatment plant be expanded to treat the required increased volume consumption and that the entire Six Nations community be provided potable drinking water through a distribution system originating from an expanded water treatment plant. It is also required that all wells be decommissioned to prevent cross contamination.

*"We found that the Canadian government has violated a range of international human rights obligations toward First Nations persons and communities by failing to remedy the severe water crisis."*

Human Rights Watch report on drinking water crisis in Ontario First Nations Communities, June 2016.

### WASTEWATER SOLUTION

The existing wastewater collection and treatment system services only the village of Ohsweken; is a facultative lagoon system; is at capacity and does not meet federal or provincial design standards. Expansion for residential housing, schools or businesses can no longer be accommodated. A new "standard setting state of the art" wastewater treatment plant needs to be constructed in conjunction with Six Nations Water Servicing and Water Treatment Expansion proposal to service additional Six Nations members not currently attached to the existing system and to allow for critically needed housing development to occur.





## RENEWABLE ENERGY

The 50 Megawatt Solar Farm will meet electrification needs and required infrastructure for the entire Six Nations of the Grand River community will be met in a reliable, service oriented and cost-effective way; to Six Nations Peoples standards and respectful of our values. We will prove our commitment for protecting Mother Earth through this “green initiative” is achievable and affordable. An independent Six Nations Electrical Authority at arms length from any political body will govern and implement long term planning and management to meet the ever-growing needs of the Six Nations Community foremost. Electricity will be available and affordable for all. This initiative has also begun a pilot project on Six Nations for a free community shuttle / bus service utilizing driverless electric motorized vehicles. This will be the first of its kind north of the U.S. border.

## CAROLINIAN FOREST LIFE ZONE ECOLOGICAL RESTORATION

This ongoing culture driven initiative focuses specifically on the afforestation, reforestation and habitat restoration that will contribute to climate change mitigation by capturing (‘bio sequestering’) atmospheric carbon and locking it into living and dead biomass in the ecosystem (e.g. tree biomass, soil organic carbon). The proposed project is presented here as a twenty-one-year program. This multi-year project will maximize the benefits for habitat and biodiversity conservation, including atmospheric Greenhouse Gas (GHG) emission removals, and ecological restoration of the Six Nations Carolinian Woodlands and throughout Six Nations’ treaty lands.

## WATER SERVICING PLAN AND WATER TREATMENT EXPANSION

This much-needed infrastructure would then be able to accommodate the immediate and critical need for an additional 1,200 “Net Zero” housing units at Six Nations. The availability of this water system would ensure safe drinking water services for the schools and will provide pressurized water for fire protection at the schools, homes, service providers and businesses throughout the Six Nations community. Every Six Nations member will have safe drinking water.

## WASTEWATER SOLUTION

This will replace an existing and offensive lagoon system for wastewater sewage treatment that cannot meet Six Nations needs. Utilizing new and proven technology to set a new standard for wastewater treatment throughout the Grand River watershed is required if the integrity of the Grand River is to be protected.

## Carolinian Forest

45% of Six Nations is covered by Carolinian Forest

Restore habitat areas to help protect and conserve our natural biodiversity

Protect and conserve existing natural elements; indigenous plants and medicines.

Promote seed collection to maintain integrity of natural Carolinian forests at Six Nations and elsewhere.

Continue to practice our sustainable guidelines for future generations for all natural things; it is our culture

# Project Profiles: Key Elements & Outcomes

## PROJECT LEVERS

- Strong environmental stewardship and management practices
- A population, imbued in tradition, respect for the environment and all living things
- ISO 14001:2015 fully integrated Environmental Management System
- Implementation of a continuous remote monitoring and sensing of CO<sub>2</sub>E emissions
- Development of Human Capital through education and on the Job Training across gender lines

The Six Nations of the Grand River Territory environmental stewardship program will be adopting the ISO 14001:2015 environmental management system as part of its strategic planning processes and greater focus on leadership with proactive initiatives to protect the environment from harm and degradation, such as sustainable resource use and climate change mitigation, improving environmental performance and lifecycle thinking when considering new environmental initiatives and means of communication to the general population in the Territory.

## COMMUNITY SCALE

All four projects bring positive attributes to every single member of the Six Nations Community. From affordable “green” energy, to reforestation, endangered species protection, honouring and respecting our traditional medicinal plants, to clean potable water and fire protection; everyone’s health and well being will be enhanced. All these initiatives will establish Six Nations as a centre for excellence in the fight against climate change; which expertise will be shared with Indigenous Peoples throughout North America and worldwide.

## EMPLOYMENT AND TRAINING

Six Nations has a 25.4% unemployment rate. Our youth all need hope for long term positive job opportunities and a progressive future, respectful of our Indigenous culture and values. The workforce for all aspects for these projects will come from the Six Nations community first. Training for all employment opportunities will be prioritized to utilize the expertise within Six Nations Grand River Employment and Training Department and coordinated with Six Nations Post Secondary Education Offices to maximize employment opportunities for all qualified Six Nations members and training for the future.

Six Nations of the Grand River have mandated First Nations Engineering Ltd. in conjunction with De Sousa Costa International Inc. (DeSC) to oversee, manage and implement CDM strict requirements for these projects and those of the DeSC RippleModel™ Program. Both have confirmed the prerequisite that the Six Nations labour force and construction operators will be utilized to the maximum throughout these projects.



## Water and Wastewater

2,917 housing units on Six Nations; only 375 connected to treated water; 1,546 on wells; 591 on trucked water; 330 homes have no source of water

86% of wells are contaminated

Schools will get safe drinking water

Proper fire protection throughout the Six Nations community will be achievable

Health related illnesses from unsafe drinking water will be eradicated

Water and waste water infrastructure will allow for 1,200 critically needed housing to be serviced upon construction

