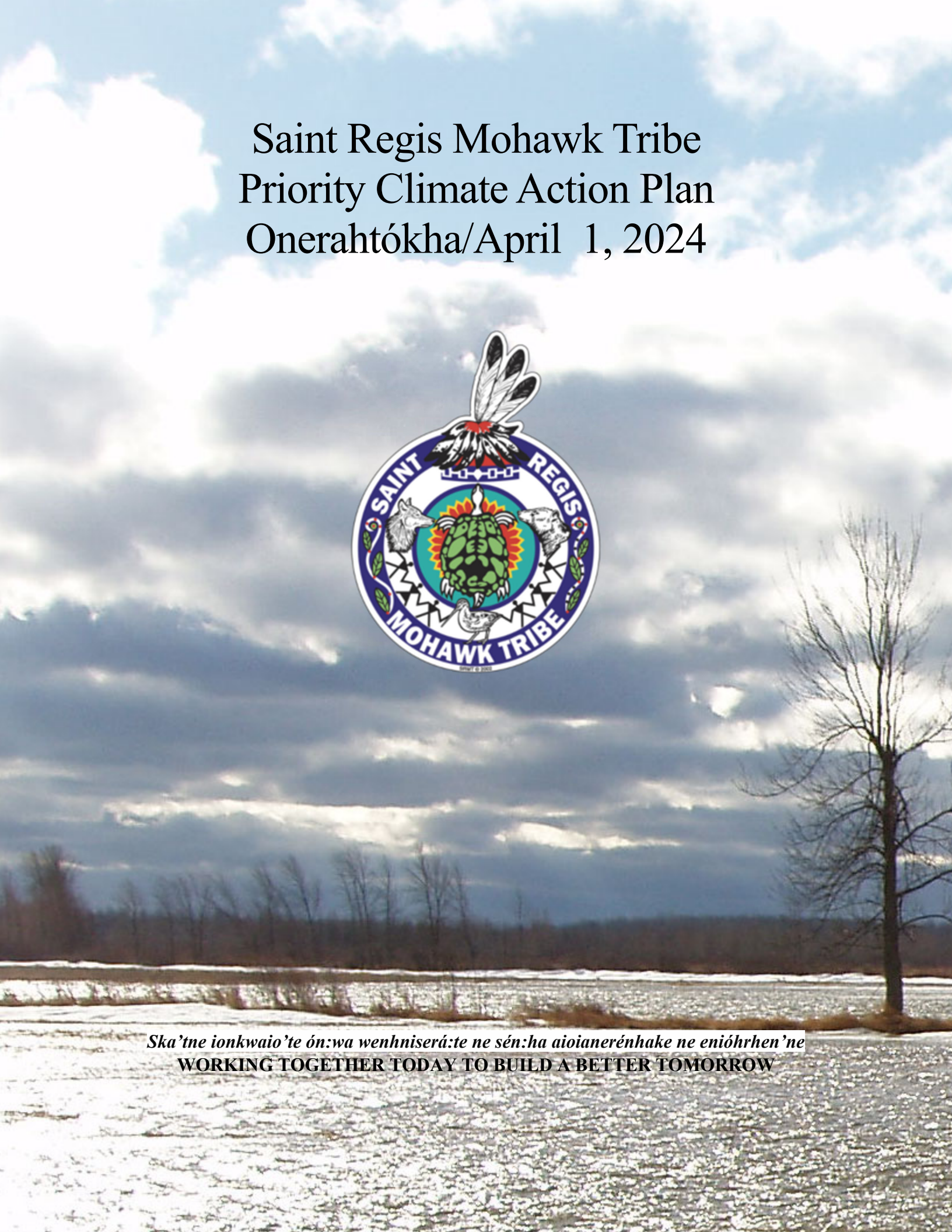
Saint Regis Mohawk Tribe
Priority Climate Action Plan
Onerahtókha/April 1, 2024



Ska'tne ionkwaio'te ón:wa wenhniserá:te ne sén:ha aioianerénhake ne enióhrhen'ne

WORKING TOGETHER TODAY TO BUILD A BETTER TOMORROW

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SRMT Water and Wastewater Plant

SRMT Agriculture Department

SRMT Transfer Station

SRMT Economic Development

SRMT Travel

SRMT Tribal Clerks Office

National Grid (Richard Burns)

Akwesasne Mohawk Casino and Resort (Randy Mitchell/John Vanier)

NYSDOT

Acronyms & Abbreviations

CAA	Clean Air Act
CCAP	Comprehensive Climate Adaptation Plan
CFR	Code of Federal Regulations
CIO	(Issued by) Chief Information Officer
CPRG	Climate Pollution Reduction Grant
CV	Coefficient of Variation
EPA	U.S. Environmental Protection Agency
FLIGHT	Facility Level Information on Greenhouse Gas Tool
GHG	Greenhouse Gas
GHGRP	Greenhouse Gas Reporting Program (40 CFR Part 98) Global
GPC	Protocol for Community-Scale
IRA	Inflation Reduction Act
ICR	Information Collection Request
LIDAC	Low-Income and Disadvantaged Communities
MMT CO2e	Million Metric Tons of Carbon Dioxide Equivalent
NEI	National Emissions Inventory
OAR	EPA Office of Air and Radiation
PCAP	Priority Climate Adaptation Plan
PM	Project Manager
PO	EPA Project Officer for Grant
POP	Period of Performance
POR	EPA Project Officer's Representative
PWP	Project Work Plan
QA	Quality Assurance
QAM	Quality Assurance Manager
QAMD	Quality Assurance Manager Delegate
QAPP	Quality Assurance Project Plan
QC	Quality Control
RFI	Request for Information
SLOPE	State and Local Planning for Energy
TGIT(TrGIT)	Tribal - GHG Inventory Tool (provided by the EPA)
TL	Task Leader
SRMT	Saint Regis Mohawk Tribe
NYSDEC	New York State Department of Environmental Conservation
NYSDOT	New York State Department of Transportation
DOE	Department of Energy
LED	Light Emitting Diode
FEMA	Federal Emergency Management Agency

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Table Of Contents

Contents

List of Figures

List of Tables

THE CREATOR

"Now we turn our thoughts to the Creator, or Great Spirit, and send greetings and thanks for all the gifts of Creation. Everything we need to live a good life is here on this Mother Earth. For all the love that is still around us, we gather our minds together as one and send our choicest words of greetings and thanks to the Creator. Now our minds are one."

Introduction

The future generations of the Mohawks in Akwesasne will be dealing with everything done to mother Earth now. Climate change is real and very important to the Mohawk community as it threatens our way of life, our cultural traditions as well as the future of our people. Akwesasne Mohawks rely on Mother Earth to give us everything we need to survive: the air, the water and the soils as well as the animals, plants and trees. Planning and researching to bring about implementation allows us to bring everything forward that we need to do to protect our people, community and resources.

The Saint Regis Mohawk Tribe (SRMT) takes seriously its responsibility to protect human health and the environment as we face increasingly more harmful impacts of climate change. Our community is experiencing more extreme drought and water scarcity as well as dangerous levels of flooding, among other impacts. Extreme weather and climate-related events, as well as changes in average climate conditions, are expected to continue to damage infrastructure, ecosystems, and social systems that provide essential benefits to our community.

The Environment Division's mission statement is: *"To assist the SRMT community in preserving, sustaining, protecting and enhancing the environment for future generations"*.

The air quality program's mission statement is *"Air quality in and around Akwesasne should be healthful for all and of sufficient purity not to degrade the quality of life or cause undo loss."*

The Saint Regis Mohawk Tribe has developed this Priority Climate Action Plan (PCAP) to support investment in policies, practices, and technologies that reduce pollutant emissions, create high-quality jobs, spur economic growth, and enhance the quality of life for Akwesasne. Developed through the Climate Pollution Reduction Grant (CPRG) Planning Grant, this Priority Climate Action Plan intends to tackle damaging climate pollution, accelerate work to address environmental injustice, and empower community-driven solutions in the Akwesasne community.

Following this PCAP, further detail and refinement of the inputs will be included in the Comprehensive Climate Action Plan (CCAP) scheduled to be completed no later than August 2026.

Greenhouse Gas (GHG) Emissions Inventory

This greenhouse gas (GHG) inventory is a record of quantified emissions by source measured in carbon dioxide equivalent (CO2e) for the CPRG PCAP. GHGs quantified account for the following three gases: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O). Emissions of hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) were not estimated to be emitted in traceable amounts.

In cases where data inputs were not available to collect, proxy data was calculated from a representative boundary. This inventory is used to understand the current sources of GHG emissions for Akwesasne and understand sectors to prioritize for priority emission reduction measures.

GHG Methodology & GHG Emissions by Sector

Data collected was used to calculate annual emissions of both Tribal Government and Community separately based on three scopes. The Community GHG tool examines four sectors based on residential, commercial/institutional, industrial and energy generation, whereas the government portion of the GHG tool is based on available data for each department.

Scope one includes all direct greenhouse gas emission sources from activities taking place within the tribe's geopolitical boundary. Scope two looks at energy related indirect greenhouse gas emissions that result as a consequence of consumption of grid-supplied electricity, heating and/or cooling, within the tribe's geopolitical boundary. Scope three looks at all other indirect emissions that occur as a result of activities within the tribe's geopolitical boundary. These emissions are not covered in Scope 2 such as emissions from waste disposal or emissions from agriculture, land management and urban forestry.

GHG Emissions Projections and Reduction Targets

Using information collected for the PCAP, the Saint Regis Mohawk Tribe will begin with year of 2019 to 2024, to estimate local emission rates from various sources located within and around the territory. Data from the SRMT Government and community was collected and analyzed to determine where to focus efforts to best plan for the SRMT and the community to reduce greenhouse gas emissions. Data will continue to be added to the GHG tool in order to gain accurate information about emissions sources and potential remedial plans for each areas.

Emission Projections

The community and the tribal government's emissions are expected to rise as the population increases and the amount of private business and industry grow within and around Akwesasne. Information collected will allow for planning on how to reduce greenhouse gas emissions due to increased traffic, fossil fuel use and energy use. The PCAP will guide the community with planning future developments, renovations, green building materials and technologies etc.

The following tables and figures show emissions and fuel use for the Saint Regis Mohawk Tribe Departments which were available for year 2019.[1]

Table1. Emissions by Department.

Emissions by Department (MT CO_2e)				
Department	**CO_2**	**CH_4**	**N_2O**	**Total**
Ionkwakiohkwaró:ron Tribal Administration	-	-	-	-
Justice/Police	15	0	0	15
Planning /Infrastructure	-	-	-	-
Office for the Aging	-	-	-	-
Diabetes Center	67	0	0	68
St. Regis Mohawk School	-	-	-	-
Health Services Center	60	0	0	61
Daycare/Headstart	38	0	0	38
Generations Park	-	-	-	-
Environment	12	0	0	12
Public Works-Wastewater Facility	-	-	-	-
Public Works-Water Treatment Facility	-	-	-	-
Partridge House	7	0	0	7
Akwesasne Mohawk Casino and Resort	-	-	-	-
Akwesasne Housing Authority	-	-	-	-
Intensive Preventive Program	12	0	0	12
Individual Residence Alternative Pyke Rd	3	0	0	3
Tribal Farm	-	-	-	-
Food Distribution Center	-	-	-	-
Total Stationary Combustion Emissions	**215**	**0**	**1**	**216**

[1] *2019 data for tables and figure was provided by the SRMT Maintenance Department.*

Table 2. Fuel and Energy Use by Department.

Fuel and Energy (MMBtu) Use by Department				
Department	**mcf**	**gal**	**tons**	**Energy Use**
Ionkwakiohkwaró:ron Tribal Administration	-	-	-	-
Justice/Police	-	1,288	-	193
Planning /Infrastructure	-	-	-	-
Office for the Aging	-	-	-	-
Diabetes Center	-	11,789	-	1,073
St. Regis Mohawk School	-	-	-	-
Health Services Center	-	10,451	-	958
Daycare/Headstart	-	3,360	-	503
Generations Park	-	-	-	-
Environment	-	2,131	-	194
Public Works-Wastewater Facility	-	-	-	-
Public Works-Water Treatment Facility	-	-	-	-
Partridge House	-	1,226	-	113
Akwesasne Mohawk Casino and Resort	-	-	-	-
Akwesasne Housing Authority	-	-	-	-
Intensive Preventive Program	-	2,045	-	186
Individual Residence Alternative Pyke Rd	-	308	-	46
Tribal Farm	-	-	-	-
Food Distribution Center	-	-	-	-
Total Stationary Combustion Energy Use	-	32,598	-	**3,266**

Figure 1. Emissions and Energy Use by Department.

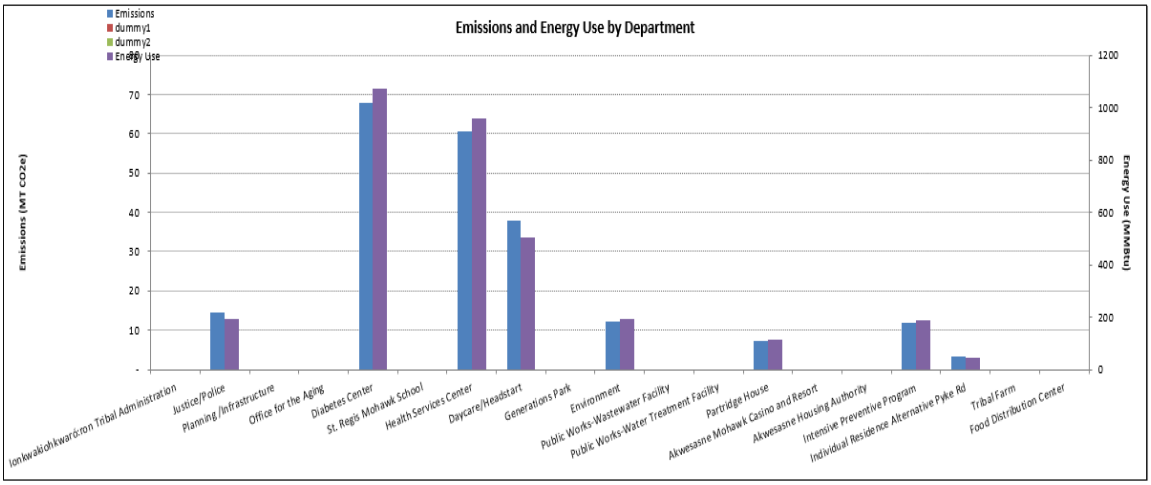


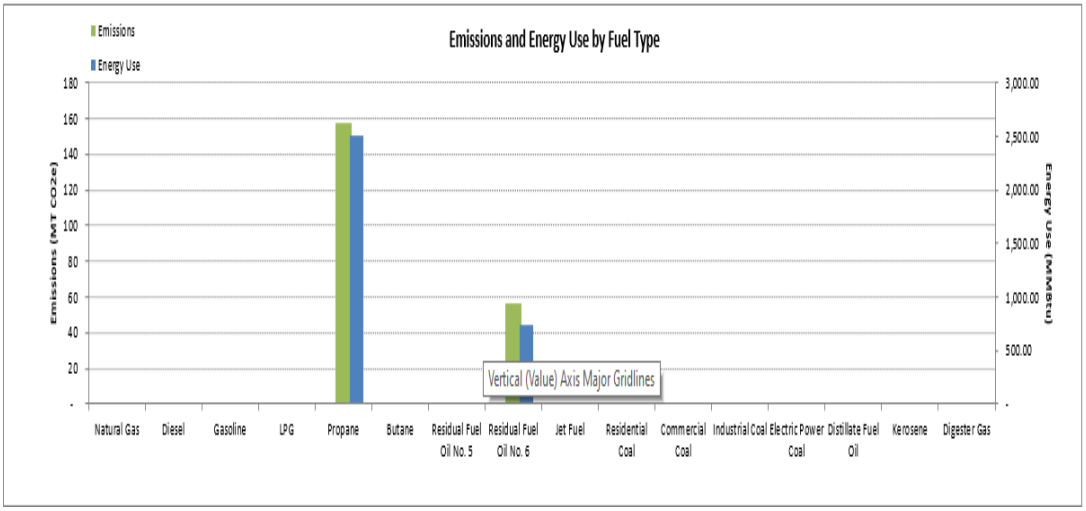
Table 3. Emissions by Fuel Type.

Emissions by Fuel Type (MT CO_2e)				
Fuel Type	**CO_2**	**CH_4**	**N_2O**	**TOTAL**
Natural Gas	-	-	-	-
Diesel	-	-	-	-
Gasoline	-	-	-	-
LPG	-	-	-	-
Propane	157	0	0	158
Butane	-	-	-	-
Residual Fuel Oil No. 5	1	0	0	1
Residual Fuel Oil No. 6	56	0	0	56
Jet Fuel	-	-	-	-
Residential Coal	-	-	-	-
Commercial Coal	-	-	-	-
Industrial Coal	-	-	-	-
Electric Power Coal	-	-	-	-
Distillate Fuel Oil	-	-	-	-
Kerosene	1	0	0	1
Digester Gas	-	-	-	-
Total Emissions from Stationary Fuel Combustion	**215**	**0**	**1**	**216**

Table 4. Fuel and Energy Use by Department.

Fuel and Energy Use by Type			
Fuel Type	**Fuel Used**		**Energy Use (MMBtu)**
Natural Gas	0	mcf	-
Diesel	0	gal	-
Gasoline	0	gal	-
LPG	0	gal	-
Propane	27,486	gal	2,501.23
Butane	0	gal	-
Residual Fuel Oil No. 5	66	gal	9.24
Residual Fuel Oil No. 6	4,974	gal	746.10
Jet Fuel	0	gal	-
Residential Coal	0	tons	-
Commercial Coal	0	tons	-
Industrial Coal	0	tons	-
Electric Power Coal	0	tons	-
Distillate Fuel Oil	0	gal	-
Kerosene	72	gal	9.72
Digester Gas	0	mcf	-
Total Stationary Fuel Consumed			**3,266.29**

Figure 2. Emissions and Energy Use by Fuel Type.



Overview of Current State Action

In January 2020, the nation-leading Climate Leadership and Community Protection Act (Climate Act) took effect in New York. The Climate Act built upon existing policies, codifying actions to meet ambitious clean energy targets and reduce GHG emissions, as seen in the call-out box below. The Climate Act also requires that New York-designated disadvantaged communities2 receive at least 35% of the overall benefits of spending on clean energy and energy efficiency programs, with a goal of 40%.

Implementation of the Climate Act necessitates an all-hands-on-deck approach across State government, with input from a broad array of stakeholders, advisors, and experts. It also requires significant regulatory action by NYS DEC, the New York State Public Service Commission, and many other State agencies and authorities.[2]

Priority Measures for Implementation

Identification and Selection Process for Priority Measures

Previous studies have identified that outdated infrastructure, on road sources and generators as being the largest contributors to greenhouse gas emissions in the territory. The Saint Regis Mohawk Tribe has been utilizing alternative power sources such as solar power for newly built and newer structures which will help reduce greenhouse gas emissions.

Updating the local infrastructure will allow for more energy efficient homes, businesses and energy use of all kinds. Due to New York State Route 37 running through Akwesasne, the area has a high amount of traffic with people crossing from major cities such as Albany, New York, Syracuse to Ottawa, Montreal and Quebec City. Akwesasne has also become a popular attraction area with the Akwesasne Mohawk Casino and Resort and the Mohawk International Raceway gaining popularity.

Akwesasne's Priority Measures List

Generators

Internal combustion engines often are used in applications similar to those associated with external combustion sources. Most stationary internal combustion engines are used to generate electric power to pump gas or other fluids. There are more facilities within the territory now that utilize generators for alternative power due to the nature of their business and facility. The major pollutants of concern are total organic compounds and oxides of nitrogen.

Replacing stationary emissions sources such generators, with alternative sources of power like solar power would reduce local greenhouse gas emissions.[3]

[2] *Information pertaining to NYS PCAP was taken from Climate Pollution Reduction Grants Program Priority Climate Action Plan (ny.gov)*

[3] *Emissions reductions based on information provided by the Saint Regis Mohawk Tribe-Environment Division Emissions Inventory Report 2014.*

On Road Sources

On-Road Mobile emissions include emissions from sources such as automobiles, buses, Sport Utility Vehicles (SUVs), vans, and motorcycles. Annual Average Daily vehicle trips through Akwesasne from the St. Lawrence County Line to Route 37C in 2003 were just over 11,000. Local attractions such as the Akwesasne Mohawk Casino and Resort and the Mohawk International Raceway have also gained popularity and caused an increase in traffic to the area. Promoting electric or hybrid vehicles and providing vehicle power charging stations would begin to reduce greenhouse gas emissions.

On-road source emissions could be reduced if public transport were available to the community, this would reduce the amount of single occupant vehicles commuting around the community. Installing electric vehicle charging stations and converting the Saint Regis Mohawk Tribe's fleet to electric vehicles would also reduce emissions.[4]

Infrastructure

Local infrastructure was identified as a priority area due to outdated building codes and more energy efficient appliances being available. Older buildings and facilities may require upgrading and/or retrofitting with things such electrical outlets, light fixtures and wastewater usage. New buildings constructed by the Saint Regis Mohawk Tribe utilize solar power as an alternative source of power.

Incorporating green building standards along with installing low flow water systems and LED lighting to new facilities and renovations as examples would reduce the use of grid supplied power. Creating solar power utilities would provide an alternate source of power for the community to reduce emissions.

Benefit Analysis

A reduction in the quantity of greenhouse gas emissions produced by Akwesasne and the Saint Regis Mohawk Tribe will have a range of benefits as a whole. Reducing the amount of energy consumed and replacing outdated equipment with alternative energy sources and energy efficient equipment will reduce greenhouse gas emissions. Planting more trees and better land management practices will also improve carbon sinks. This will improve community health as well as enhance the natural environment.

Job Creation

There will be several employment opportunities created for the Saint Regis Mohawk Tribe through the need to retrofit outdated buildings and infrastructure with alternative energy sources and equipment. There will need to be maintenance of new technology and facility upgrades. With these updates, there will be a need for drivers, maintenance crews, and administration.

[4] *On Road Sources data-https://www.dot.ny.gov/divisions/engineering/technical-services/hds-respository/franklintvbk.pdf*

Improved Daily Quality of Life

Reduced emissions improve daily life for all community members and Saint Regis Mohawk Tribal Employees, especially those with respiratory issues. Alternative power sources may also lead to less local power outages which can impact people who require machines to assist with daily functions. Tree planting in public areas of the tribal government and continuing to promote tree giveaways to the community could improve carbon sequestration. Planting native fruit trees would also help improve the quality of life of the community.

Improved Health Outcomes

Community health concerns linked to greenhouse gas emissions would become less severe over time potentially when emissions are reduced. Respiratory issues would potentially lessen with people in the area when emissions become reduced.

Improved Water Quality

Community education on ways to reduce water consumption would reduce emissions created by the wastewater process. As part of green building codes, low flow water systems should be promoted to use in all new buildings.

Enhanced Climate resilience

The community would become more resilient to climate change by planning and initiating ways to reduce greenhouse gas emissions. Planning for the future and deciding best practices for the community using the PCAP will prepare the community for any potential climate change issues that will arise in the future.

Increased Economic Resilience

Retrofitting the infrastructure and facilities within Akwesasne will make the economy less dependent on outside sources of energy. This would potentially increase the workforce with new employment opportunities in alternative energies and in new technologies for daily living. Increasing the solar power energy available from tribally owned utilities can be sold back to the grid at a profit for the tribe.

Priority Measures Alignment with the State's Efforts and Counties Action Plans

The New York State Climate Act established statewide GHG emission limits, requiring a 40% reduction in statewide GHG emissions from 1990 levels by 2030 and an 85% reduction in statewide GHG emissions from 1990 levels by 2050. The Climate Act also establishes a goal of net zero emissions across all sectors of the economy by 2050.

Low-Income and Disadvantaged Community Analysis

Context for Akwesasne's LIDAC Analysis

Tribes are not required to complete a Low-Income and Disadvantaged Community(LIDAC) Analysis in the initial PCAP. The SRMT territorial boundaries are federally-recognized as reservation lands and are automatically designated as a disadvantaged community. Other than GHG and other pollutant emission reductions, Akwesasne's priority measures list in this PCAP will provide additional to the community and surrounding areas.

Disadvantaged communities refer to the areas which most suffer from a combination of economic, health, and environmental burdens. These burdens include poverty, high unemployment, air and water pollution, presence of hazardous wastes as well as high incidence of asthma and heart disease. Groups of persons that experience a higher risk of poverty, social exclusion, discrimination and violence than the general population, including, but not limited to, ethnic minorities, migrants, people with disabilities, isolated elderly people and children

Impact of PCAP Implementation on LIDACs

The impacts of the PCAP developed will positively impact the community when implemented by reducing GHG emissions. The creation of green spaces in new and existing SRMT owned lands would improve the local environment as well as the community by providing habitat, food sources, shade, etc. to open areas. Community education on renewable energy sources and technologies will help guide members on best practices for their needs.

Figure 3. Goals and reduction measures.

GOAL	STRATEGY	REDUCTION MEASURE
Reduce Emissions from Energy Generation	Develop Renewable Energy Technology	Create incentives for community members to use/convert to renewable energy sources such solar power and/or wind.
		Install renewable energy hardware such as solar power cell or wind power to new and existing facilities and homes.
	Energy Resilience	Upgrade local infrastructure to renewable energy sources.
		Create a renewable energy utility that will service the community.
Reduce Energy Consumption From Buildings	Building Retrofits	Install energy efficient equipment and appliances in facilities.
		Inspect and upgrade all facilities where weatherization may require upgrades and replace.
		Install LED lighting to all facilities.
		Install smart thermostats to all facilities.
	New Building Standards	Adopt green building standards for all major renovations and new builds.
Reduction of Vehicle Emissions	Emission Reductions Actions	Provide public transportation.
		Promote carpooling among coworkers.
		Promote hybrid and electric vehicle use.
		Provide more charging stations for electric vehicles.
		Convert SRMT fleet vehicles to hybrid and/or electric.
Environmental Land Management Planning	Land Use	Creation of wetlands and tree planting throughout the territory creates a carbon sink as well as provides habitat and nourishment for a variety of species.
		Create green infrastructure.
		Implement green building codes where applicable.

Review of Authority to Implement

Authority to Implement

The path to ensuring Tribes' authority to implement GHG reduction measures varies. Driven by a range of stakeholders including federally-recognized Tribes, state governments, local governments, utilities, and individual residents, each Tribe is characterized by a unique regulatory landscape that will define their path forward to achieving ambitious climate pollution reduction goals. While state, local, and utility regulations are important considerations, it is crucial to note that all Tribes may choose to exercise Tribal sovereignty should state and state-regulated utility policy prevent the implementation of priority measures. Because this situation is unique to Tribes, an overview of Tribal sovereignty and how it applies to energy-related activities on Tribal land is provided below.

Overview of Tribal Sovereignty

Sovereignty refers to the independence and autonomy of a Tribe, state, government, or political entity to govern without external interference. It enables a government to establish and enforce its own laws. Within the United States, there are specific criteria and hierarchies that define the relationships between sovereigns. The concept of supremacy, where one sovereign has authority over others for the common good of a nation, grants the federal government the power to supersede state and Tribal authority in certain instances. The United States derives its authority from its citizens, as outlined in founding documents such as the United States Constitution. The federal government, as the supreme authority, determines the areas in which states can govern themselves, effectively granting state sovereignty.

In contrast, Tribes were recognized as preexisting sovereigns with inherent authority when the United States was formed. They had established relationships, signed treaties, and interacted with the federal government as independent nations. The creation of numerous treaties led to the development of government-to-government relationships between individual Tribes and the federal government, resulting in the concept of Tribes as "domestic dependent nations." These entities possess distinct independent authority but remain subject to certain powers of the United States, including the application of certain federal laws.

Tribal sovereignty, therefore, refers to the inherent right of Tribes to govern themselves, their borders, lands, and people. It is unique in that it is directly tied to cultural beliefs, lands, and historical traditions. While sovereignty grants Tribes the right to establish their own government, determine membership requirements, enact legislation, and establish law enforcement and court systems, these rights are based on a distinct culture and history that protects an important way of life for each of the 574 federally-recognized Tribes in the United States. Sovereignty is not just a political concept that provides Tribes with power, but also a mechanism to protect important cultural and historical aspects of a Tribe, which can have a significant impact on government-to-government interactions. Tribes are not subject to individual states' laws and are entitled to regulate and operate independently of states.

Intersection with Other Funding Availability

The Saint Regis Mohawk Tribe will continue to reduce emissions through data collection and air sampling. The Saint Regis Mohawk Tribe has explored several funding sources to determine whether these sources could fund part or all of our three Priority Measures.

Figure 4. Potential Funding Sources.

Potential Funding Agency	Description	Goal For Funding
DOE Tribal Energy Efficiency Block Grant	Provides funds to tribes for projects that reduce fossil fuel emissions or improve energy efficiency.	This grant will reduce energy consumption from buildings(residential and commercial)
FEMA Building Resilient Infrastructure and Communities(BRIC)	FEMA set aside money that respond to FEMA Hazard Mitigation Plan and reduce risks they face from natural disasters.	This funding opportunity could aid with renewable energy projects and infrastructure.
Community Change Grants	IRA funding to benefit disadvantaged communities through projects that reduce pollution, increase climate resilience and build community capacity to respond to environmental and climate justice challenges.	This funding could be used towards all the priority measures list.
DOE Tribal Home Electrification and Appliance Rebates Program	A rebate program designed to support tribal homes to reduce energy bills and improve indoor air quality by providing direct funding to renovate homes for energy efficient electrical appliances.	Renovate existing homes and buildings in order to make them more energy efficient.

Conclusion

Finalizing the SRMT PCAP allows for planning to attain the goals of reducing emissions within the territory over the coming years. The goals will be achieved by educating the community on the benefits on the benefits of GHG emission reductions. Providing educational resources, incentives and technology could be ways to obtain the goals. Next steps may include writing grants and finding additional funding sources, identifying renewable energy sources suited for the area and land management planning to expand carbon sink areas.