ENERGY MASTER PLANNING PROJECT

U.S. DEPARTMENT OF ENERGY

FIRST STEPS TOWARD DEVELOPING RENEWABLE ENERGY AND ENERGY EFFICIENCY ON TRIBAL LANDS

Oneida Indian Nation Energy Master Plan

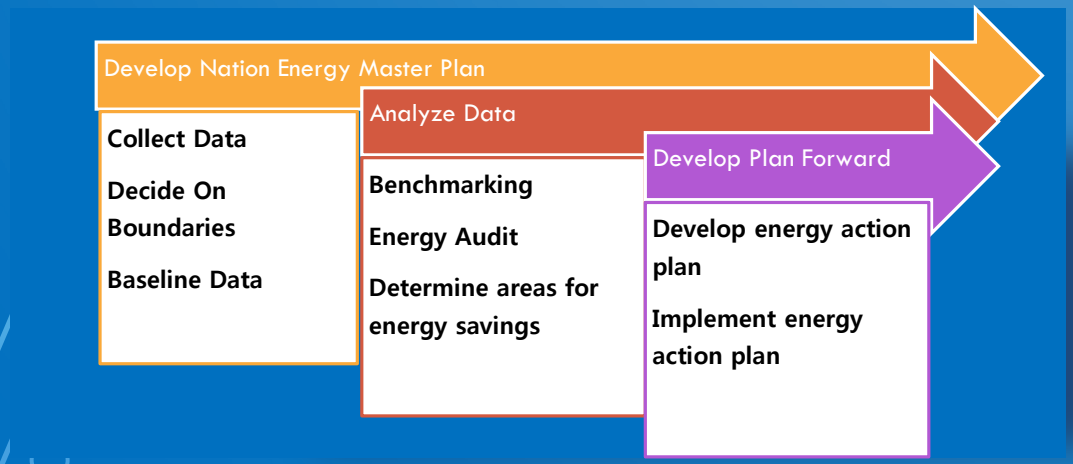
ONEIDA INDIAN NATION

1621-1510

Project Summary

•Through the proposed *Oneida Nation of New York Energy Master Planning Project* the Nation will conduct an energy master planning analysis across its facilities and lands that will provide a comprehensive analysis of energy consumption and lead to the development of a plan to move forward with the implementation of energy efficiency measures.

•This project will include benchmarking and energy audit which will allow the Nation to analyze outcomes to determine implementation measures needed for complete energy action plan



Key Personnel/Organizations

Oneida Indian Nation	Weidt Group
Peter D. Carmen, COO, Business Contact Joe Cavano, Project Manager Mike Vaccaro, TS Facilities Director Paul Gwilt, Facilities Director	Joe DiSanto, Project Executive Jason Steinbock, Project Manager Pluton Angjeli, Kal Palaparthy – Energy Engineers

Timeline- 15 months

Key Milestones & Deliverables

Year 1:	Data Analysis - Benchmarking – B3 Energy Audit – NEO Develop Energy Action Plan
Year 2:	Implementation Project Closeout

Project Outcomes

At a minimum the measurable end-products will include: (1) all reasonable measures, including capital improvements, that would, if implemented, reduce energy use and/or the cost of operating the building; (2) for each measure, the associated annual energy savings, the cost to implement, and the simple payback, calculated by a method determined by the department; (3) a break-down of energy usage by system and predicted energy savings by system after implementation of the proposed measures; and, (4) a general assessment of how the major energy consuming equipment and systems used within spaces impact the energy consumption of the base building systems based on a representative sample of spaces.

Oneida Indian Nation's Path Forward to It's Comprehensive Energy Master Plan

PROJECT OBJECTIVES

The Oneida Indian Nation recognizes the need to be a responsible steward of its resources—including energy resources—while encouraging economic development to support the needs of its operations, programs and members. The ***goal*** of the Oneida Nation of New York *Energy Master Planning Project* is to conduct a baseline energy analysis of all Nation properties and facilities in order to meet the ***objectives*** of

(1) establishing a system for setting energy efficiency improvement goals,

(2) developing an evaluation tool to assist with future comparison of energy usage, and

(3) providing a comprehensive analysis of energy consumption to enable the development of a plan that will result in less use of less energy, increase energy efficiency in tribal buildings, and increase available funding to meet the Nation's economic and environmental priorities.

The ***benefits*** of the project will enable the Nation to achieve governmental self-sufficiency and economic independence by reducing dependency on outside energy sources and realizing cost savings associated with energy efficiency, while still protecting the environment.

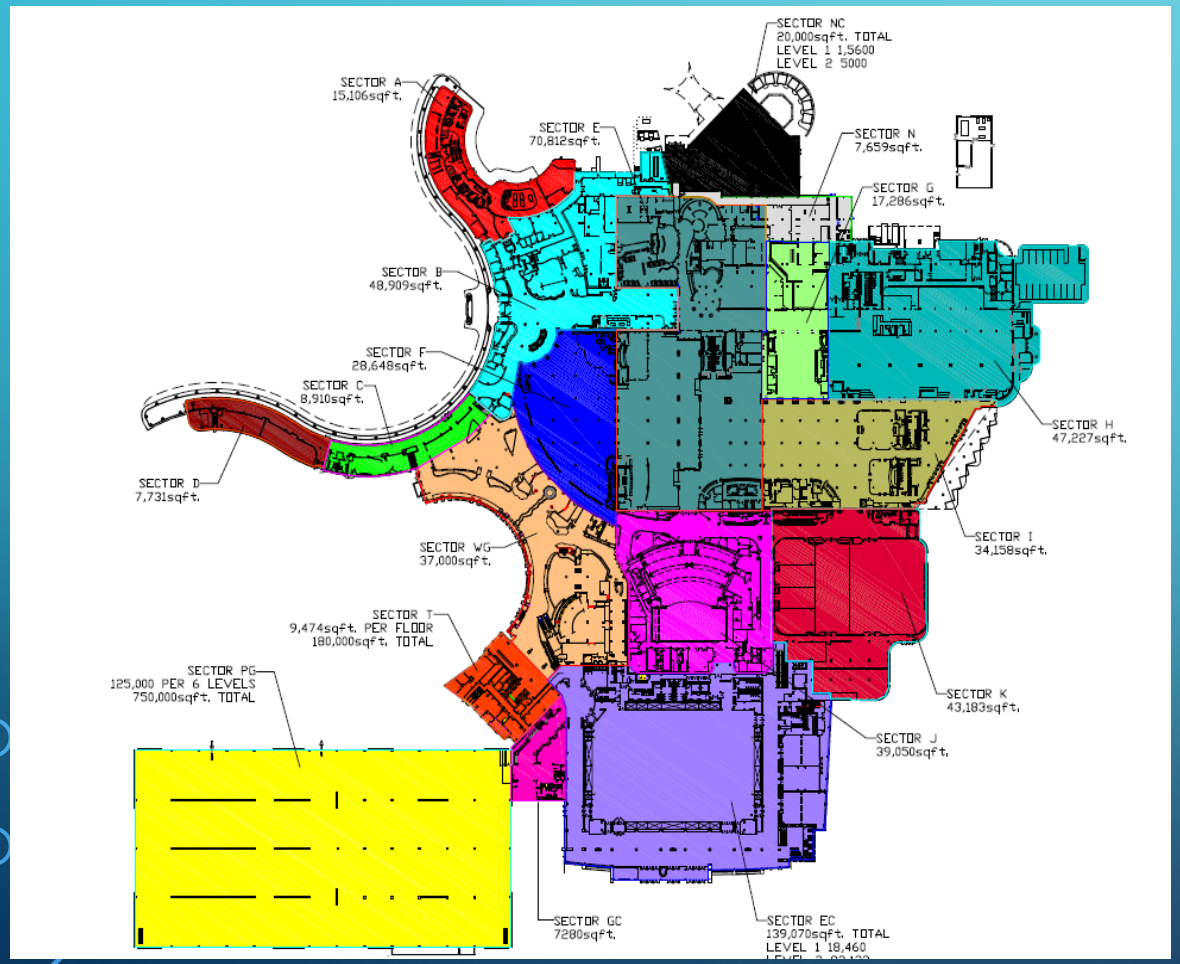
The ***impact of DOE funding*** will support the Nation's efforts to maintain government programs and services by streamlining economic efficiency and develop and to protect its environment and natural resources, to ensure a safe, healthful and productive environment for current residents and visitors on its lands, and for the seventh generation to come.

THE PROJECT

- The Nation has contracted with an energy consultant to provide a comprehensive analysis of energy consumption for approximately 50 buildings (~3.5 million square feet) and to develop a plan to move forward with the implementation of energy efficiency measures. The audit will be consistent with ASHRAE Level II requirements and requirements of the DOE First Steps Toward Developing Renewable Energy and Energy Efficiency on Tribal Lands, Topic Area 2.

- Prior to beginning the audit process, the Nation will provide their consultants with consumption data for gas, electricity, oil, propane, etc., and building usage profiles for each of the Nation's facilities, including occupancy and hours of use.

NATION PROPERTIES



Turning Stone Resort Casino- 700 Hotel Rooms – Over 4.5 million guests per year

- **5 Golf Courses-** Many PGA Championship Tournaments
- **11 Restaurants- 2 Spas**
- **Golf Dome and Sports Complex**
- **Entertainment Venues**
- **RV Park**

Yellow Brick Road Casino

Point Place Casino (Opening 2018)

12 SavOn gas stations and convenience stores

Maple Leaf Market

3 full service marinas

3,000-acre hunting game preserve

Salmon Acres Fishing Lodge

THINGS TO CONSIDER…..

- Floor plans and building usage
- Hours that various areas within the buildings are open and typical occupancy profiles
- Temperature & humidity targets for occupied spaces (typical vs specialty spaces)
- Major equipment lists – for central plant or building based heating and cooling systems
- Log data for central plant for various times of day, outside air temp, season, and vacation periods
- Notation of comfort or service deficiencies to attempt to resolve if possible
- Information related to either limitations or future plans impacting building use
- Historical building limitations
- Future capital improvements

TIMELINE- 15 MONTHS

Energy Study	10/1/2017	Start Date
ACTIVITY	START	END
Project Kick Off	10/9/2017	
Identify Boundaries of Study	10/17/2017	11/30/2017
Data Gathering	10/30/2017	1/30/2018
Complete Analysis Begin Benchmarking	2/1/2018	
Complete Benchmark Study	2/1/2018	4/1/2018
Identify Buildings for Cost Savings	2/1/2018	4/1/2018
Report Review Utilizing B3 Tool	3/1/2018	6/1/2018
Identify Next Steps	4/1/2018	6/1/2018
Begin Energy Audit	6/1/2018	9/1/2018
Audit Draft Review	8/1/2018	10/1/2018
Interactive Analysis	10/1/2018	12/1/2018
Final Report and Close Out	10/1/2018	1/1/2019

ANTICIPATED OUTCOME

At a minimum the measurable end-products will include:

(1) all reasonable measures, including capital improvements, that would, if implemented, reduce energy use and/or the cost of operating the building;
(2) for each measure, the associated annual energy savings, the cost to implement, and the simple payback, calculated by a method determined by the department;
(3) a break-down of energy usage by system and predicted energy savings by system after implementation of the proposed measures; and,
(4) a general assessment of how the major energy consuming equipment and systems used within spaces impact the energy consumption of the base building systems based on a representative sample of spaces.

Given the current (and future) energy needs of the Nation's operations and potential expansion activities, the *impact of DOE funding* through this grant opportunity will be to enable the Nation to further support its efforts to maintain government programs and services by improving economic and energy efficiency, achieving increased governmental self-sufficiency and economic independence by reducing dependency on outside energy sources, and simultaneously protecting its environment and natural resources for the benefit of seven generations into the future.

Thank You!

Questions?