

# Territorial Climate & Infrastructure Workshop

## Energy

### Renewable Energy & EV Charging Stations

# Projects

## Renewable Energy

1. 42MW Wind Farm - \$10.6M
2. 20MW Solar PV Farm - \$4.1M
3. Electric Vehicles & Charging Stations - \$4M



# RE Project Benefits



**Major reduction  
in the PPA and  
electricity rates**



**83% reduction in  
CO2 emissions  
or 100,000  
tons/year**



**Project access  
roads open up  
new  
opportunities for  
housing and  
agriculture**



**Keeps up  
\$27M per year  
in the local  
economy  
currently spent  
on diesel fuel**



**Meets ASRECs  
RE goal: 50%  
by 2025 and  
100% by 2050**



# Electricity Rates

- US Average<sup>1</sup> – Dec 2021  
Residential – 13.75 c/KWh  
All Customer Classes – 11.1 c/KWh
- American Samoa – Dec 2021  
Residential – 36.6 c/KWh  
All Customer Classes – 36.0 c/KWh

<sup>1</sup> Source – EIA



# Equity Financing will reduce Wind & Solar PV PPA and Electricity Rates

- Original PPA Rate - 11.0 c/KWh  
ASPA Base Rate - 9.7 c/KWh  
ASPA Electric Rate - 20.7 c/KWh
- PPA Rate with ASPA Equity - 3.1 c/KWh  
ASPA Base Rate - 9.7 c/KWh  
ASPA Electric Rate - 12.8 c/KWh

# Project Status

## Wind Project

- Grid Study in progress
- Biological & Endangered Species Study in progress
- Detail Design in progress
- Road & Transportation Study in progress

## 20MW Solar PV Project

- Land Survey Completed (Site 1 and 2)
- Archaeologic Study Site – 2 completed. Site 1 in progress
- Biological Study – Site 2 completed, Site 1 in progress
- Engineering & Detail Design – in progress

# Electric Vehicles & Charging Stations

76 sq.  
miles



Total Land  
Area

9,000+



Registered  
vehicles

6 million  
gallons



Annual fuel  
consumption



# Electric Vehicles & Charging Stations

## Challenges

- Lack of EV charging stations
- Lack of funding for infrastructure and O&M capacity development



# Electric Vehicles & Charging Stations

- Project Goals
  - Develop infrastructure for electric vehicles (ASG and residential homes)
  - ASG to pilot EV project
- Project Benefits
  - Reduce petroleum use by land-based vehicles
  - Reduce carbon footprint & dependency on fossil fuel

