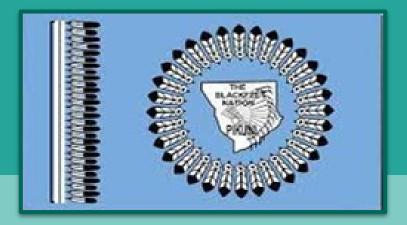
Blackfeet Community College Sustainable Energy Project

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Amskapii Piikanii

Blackfeet Community College is located on the Blackfeet Reservation which includes
1.5 million acres managed by the Blackfeet Tribal Business Council.
The Blackfeet Tribe is represented by more than 17,000 members with ancestral connections extending throughout Canada and the United States half of the members reside on the Blackfeet Reservation.

Blackfeet Community College

Chartered by the Blackfeet Tribe 1972. 1994 Land Grant Institution

Project Description

To reduce campus energy costs, BCC Renewable Energy Program plans to install four grid-tied, solar photovoltaic (PV) Systems on campus facilities totaling approximately 53.2 kW-DC. To advance knowledge about renewable energy, the project will provide hands on paid training in the solar PV technology to students at BCC and Blackfeet High schools, as well as community members.

- Project Budget Contractual \$204,401
- Equipment-Modules, Inverters, Racking, Electrical BOS, Data Acquisition System O&M, labor,
- Projected savings Red Fox Business Division, Little Star Blackfeet Child Care, Medicine Shield Fitness Center, and the Muskrat Lodge Media Center. These solar PV systems are estimated to produce 68mW hours of purchased electricity per year for the lifetime of the system
- Training-Recruited from TERO, BCC, Heart Butte High School- 14 interested 10 selected and 8 completed.

Project Goal

The goals of this project include: creating access to solar and renewable energy benefits for the Blackfeet community, generating energy cost savings for Blackfeet Community College, and creating an educational opportunity for students from schools to learn about renewable energy, explore career pathways, and participate in workforce development and hands on paid training for 10 students and community members.



Project schedule to date

- 1. Installation-Complete April-May-Ordering May-June Mobilization
- Trainees-3 weeks Complete Recruiting-BCC, Heart Butte Schools, BTERO.
 8 trainees, 2 continued on with GRID Alternatives
- Finish date Complete June 30, 2021 Installation completed
- 1. Monitoring August-September Complet training BCC IT Staff







Week 1 Grid Alternatives Orientation, Safety Basics, Solar Energy Basics, Energy Efficiency and weatherization, Tribal Energy and Policy, Net metering, Off-grid System Basics, Soft Skills & Resume Building, System Sizing, Employment Readiness, OSHA 10 Certification

Week 2-3 Hands on Training, Racking installation, minor maintenance, small equipment, wiring, harnessing.







Coming Deliverables

Milestone 5.1: System performance verified.

Task 6.0: Monitoring Task Details: Vendor and BCC staff continue to monitor system performance through remote monitoring system and utility bills.

Task 7.0 Verification of Energy Savings Task Details: Vendor will work to verify energy savings by collecting utility bills paid by BCC. Systems not performing as expected will be evaluated for potential issues.

Milestone 7.1: Vendor staff collect utility bills in coordination with BCC staff and prepare reports to submit to DOE staff.

Milestone 7.2: BCC and vendor complete and submit comprehensive final report. As part of this Task, at least one BCC representative and a vendor staff member will attend the annual Tribal Program Energy Review in Lakewood for both years of the grant.

Challenges

Location was a challenge on the equipment ordering for the project.



Unexpected Outcomes

Decrease in Match requirement due to COVID-19



2 Trainees continued on with GRID Alternatives.





Savings To Date

Red Fox Building

2021	August \$92.00	September \$111.00
2020 Difference	\$325.08 \$233.08	\$344.30 \$233.30
Little Star 2021	\$29.00	\$29.00
2020	\$52.46 \$23.46	\$64.42 \$35.42
Muskrat Lodge		
2021	\$29.00	\$35.22
2020	\$83.02 \$54.02	\$145.10 \$109.88

Medicine Shield

2020

2021	\$29.00	\$29.00

\$52.09

\$55.31



Thank you

Department of Energy Office of Indian Energy Blackfeet Trainees, GRID Alternatives Bonneville Environmental Fund First Interstate Bank, Glacier Electric, Heart Butte Public Schools, Blackfeet TERO









