

## Shishmaref Heat Recovery Project

|                          |                                       |
|--------------------------|---------------------------------------|
| <b>Grantees</b>          | City of Shishmaref (Local Government) |
| <b>Technology Type</b>   | HEAT RECOVERY                         |
| <b>Region</b>            | Bering Straits                        |
| <b>AEDG Project Code</b> | 10361                                 |

### REF Grants Received

| Round | App | Grant Title                      | Grant # | AEA Project # | Phase        | Start Date | End Date | Status |
|-------|-----|----------------------------------|---------|---------------|--------------|------------|----------|--------|
| 5     | 856 | Shishmaref Heat Recovery Project | 7050856 | 403055        | Construction | 7/1/12     | 6/30/16  | Active |

### Grant 7050856: Shishmaref Heat Recovery Project

**Project Scope:** The proposed project will design and construct a heat recovery system between the Alaska Village Electric Cooperative (AVEC) power plant and the end-user community buildings: 1) Water Treatment Plant, 2) Clinic, and 3) City Office. The new system will capture jacket water heat generated by the AVEC plant that is currently wasted to the atmosphere by power plant radiators. The new system will tie into the end-users heating systems using heat exchangers, control mechanisms and any required upgrades to the existing building hydronic systems.

City of Shishmaref, in collaboration with ANTHC, will construct this heat recovery system to connect waste heat from AVECs generating station to the water treatment plant, clinic, and City Office. The project will displace approximately 7,900 gallons of diesel per year. A detailed Heat Recovery Analysis was completed for the City of Shishmaref and Alaska Native Tribal Health Consortium (ANTHC) by Alaska Energy and Engineering, Inc.

**Project Status:** The engineering design is in progress through the Alaska Native Tribal Health Consortium.

| As of Nov. 30, 2013        | Budget              | Expenditures       |
|----------------------------|---------------------|--------------------|
| Renewable Energy Funding   | \$310,841.00        | \$16,003.34        |
| Other State Funding        | \$0.00              | \$0.00             |
| <b>Total State</b>         | <b>\$310,841.00</b> | <b>\$16,003.34</b> |
| Required Local Match       | \$16,360.00         | \$12,765.83        |
| Federal Grant Funding      | \$0.00              | \$0.00             |
| <b>Total Project Costs</b> | <b>\$327,201.00</b> | <b>\$28,769.17</b> |