



ALASKA NATIVE
TRIBAL HEALTH
CONSORTIUM

Community Energy Projects: Finding and Developing the Right Projects

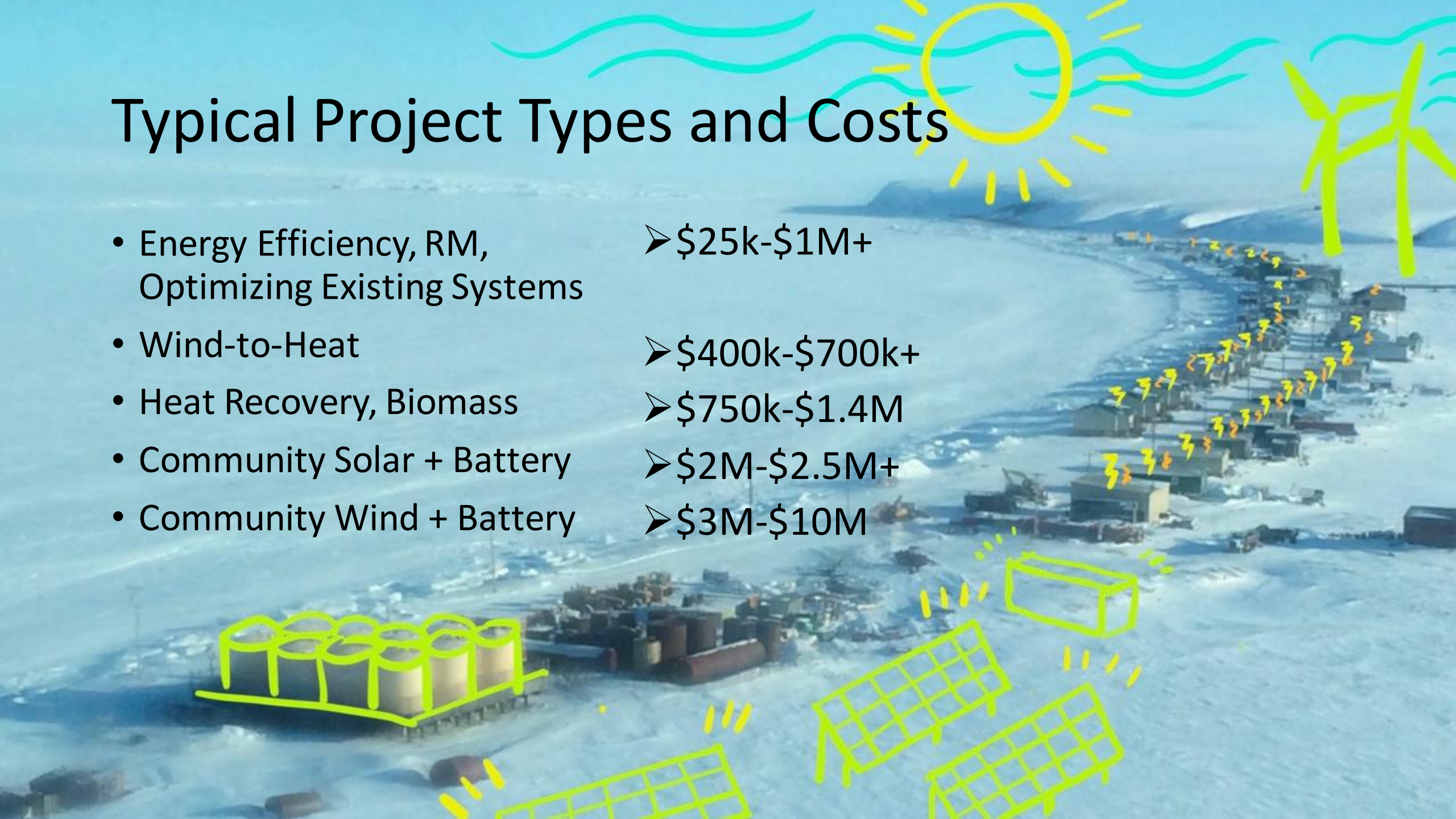
*Partnering with rural communities to make
public health services more affordable by
reducing energy costs*

Bailey Gamble, Rural Energy Program, Mechanical Engineer

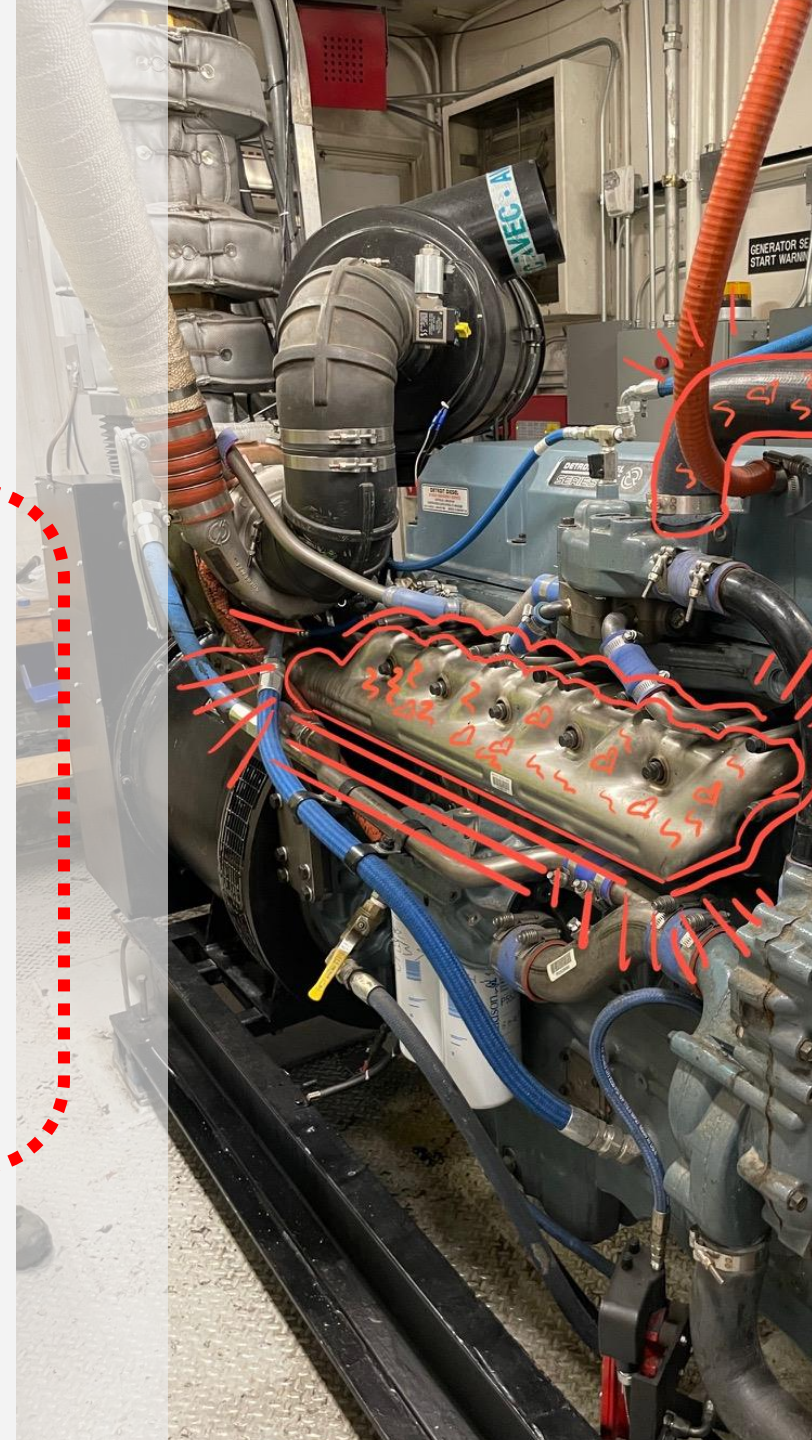
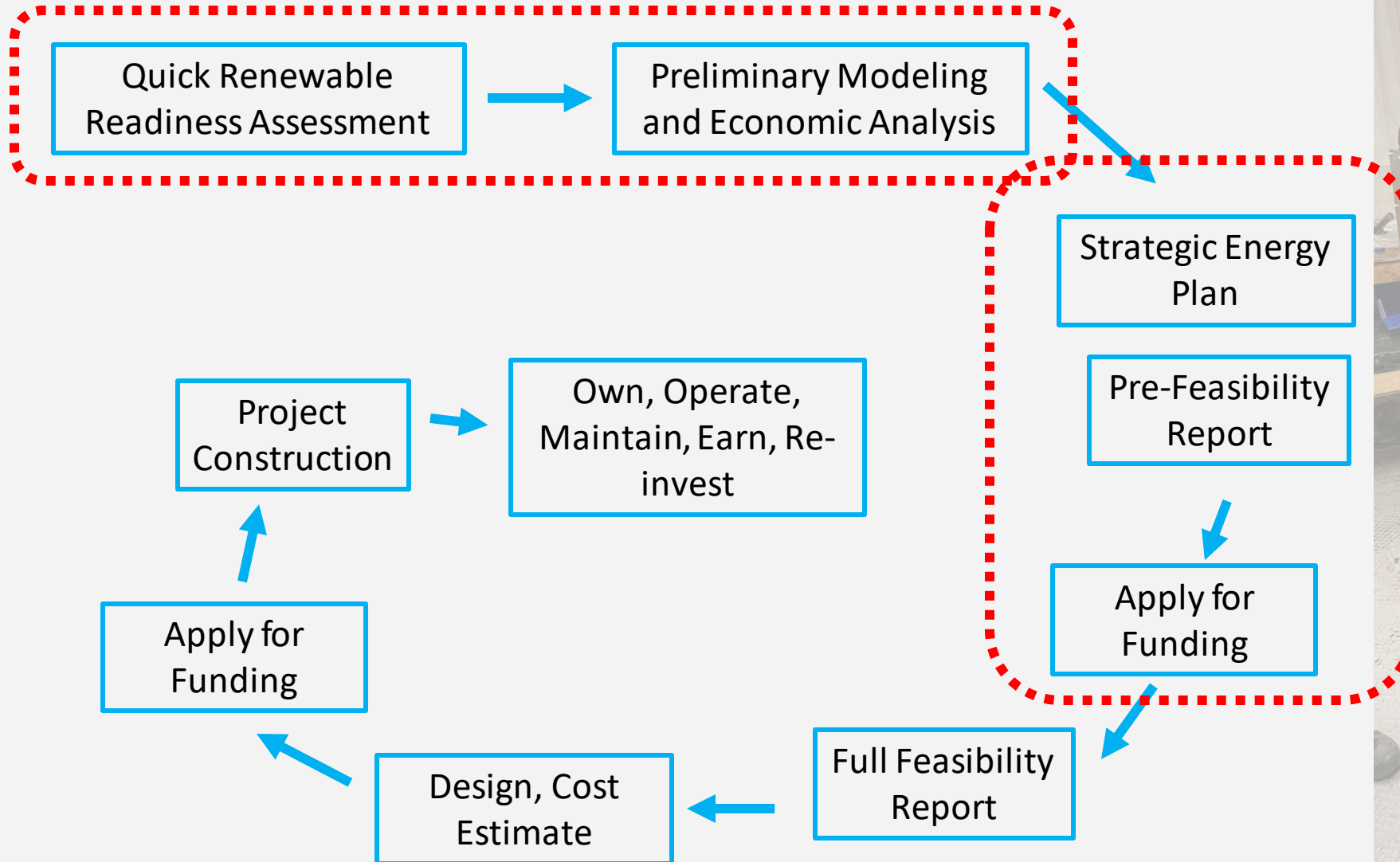


Typical Project Types and Costs

- Energy Efficiency, RM, Optimizing Existing Systems ➤ \$25k-\$1M+
- Wind-to-Heat ➤ \$400k-\$700k+
- Heat Recovery, Biomass ➤ \$750k-\$1.4M
- Community Solar + Battery ➤ \$2M-\$2.5M+
- Community Wind + Battery ➤ \$3M-\$10M



Choosing and Developing a Project





Renewable Readiness Assessment

Rubric used to evaluate community fit for high penetration renewable project, guide regional planning

Factors Considered:

- **Community interest/engagement, admin capacity**
- **Size of diesel load**
- **Fuel cost (avoided fuel cost)**
- Distressed community status
- Potential for IPP
- Power system, controls status
- Infrastructure Management Support
- Existing system % renewables

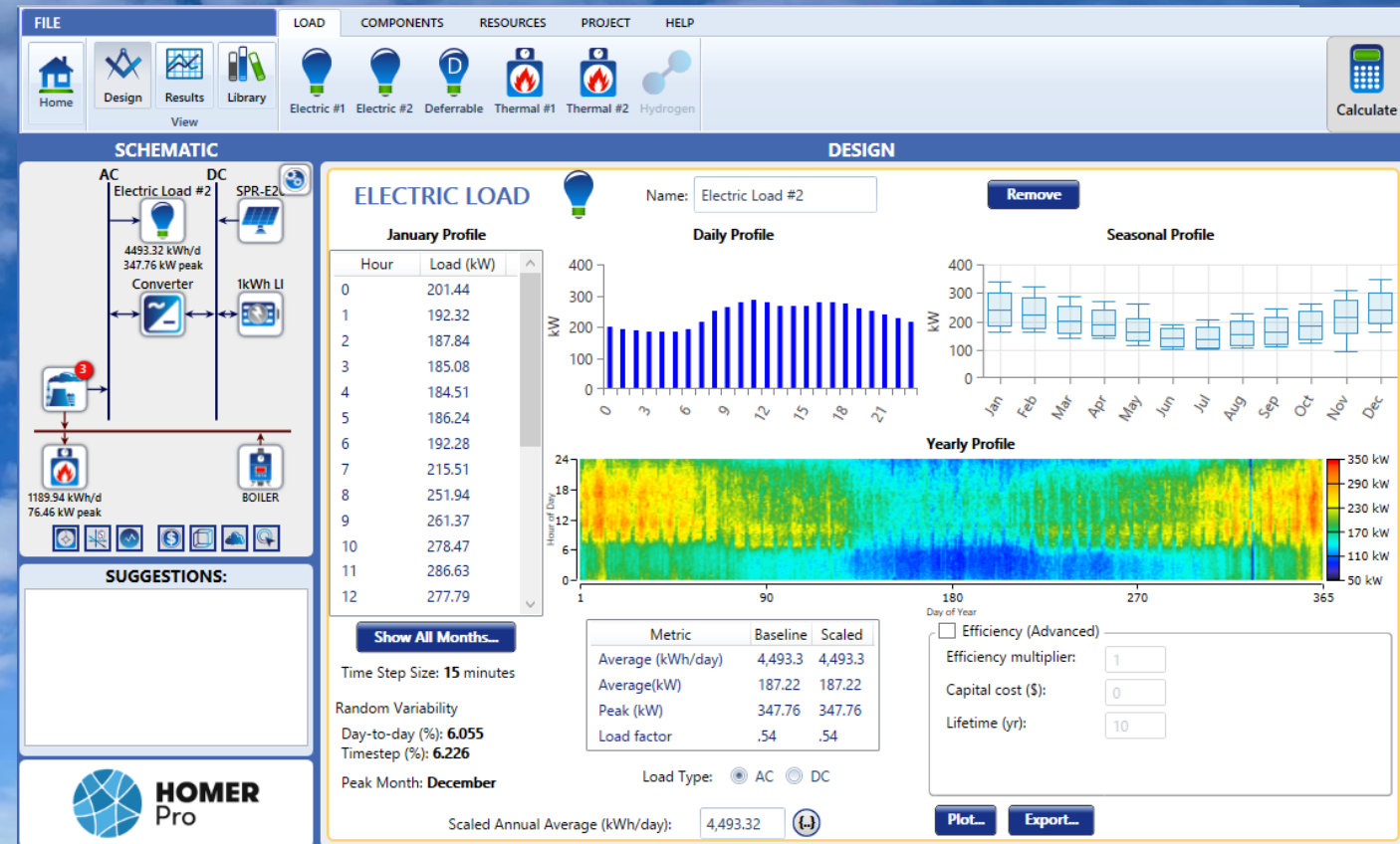
Preliminary Modeling

Enter in:

- Load
- Component Tech Specs
- Resource Data
- Costs

Get Out:

- Estimated Renewable Contribution
- Estimated Fuel Offset
- Economic Benefit
- Pre-Feasibility Level Report and/or info for Strategic Energy Plan

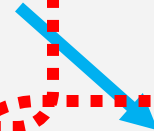


Choosing and Developing a Project

Quick Renewable
Readiness Assessment



Preliminary Modeling
and Economic Analysis



Strategic Energy
Plan

Pre-Feasibility
Report

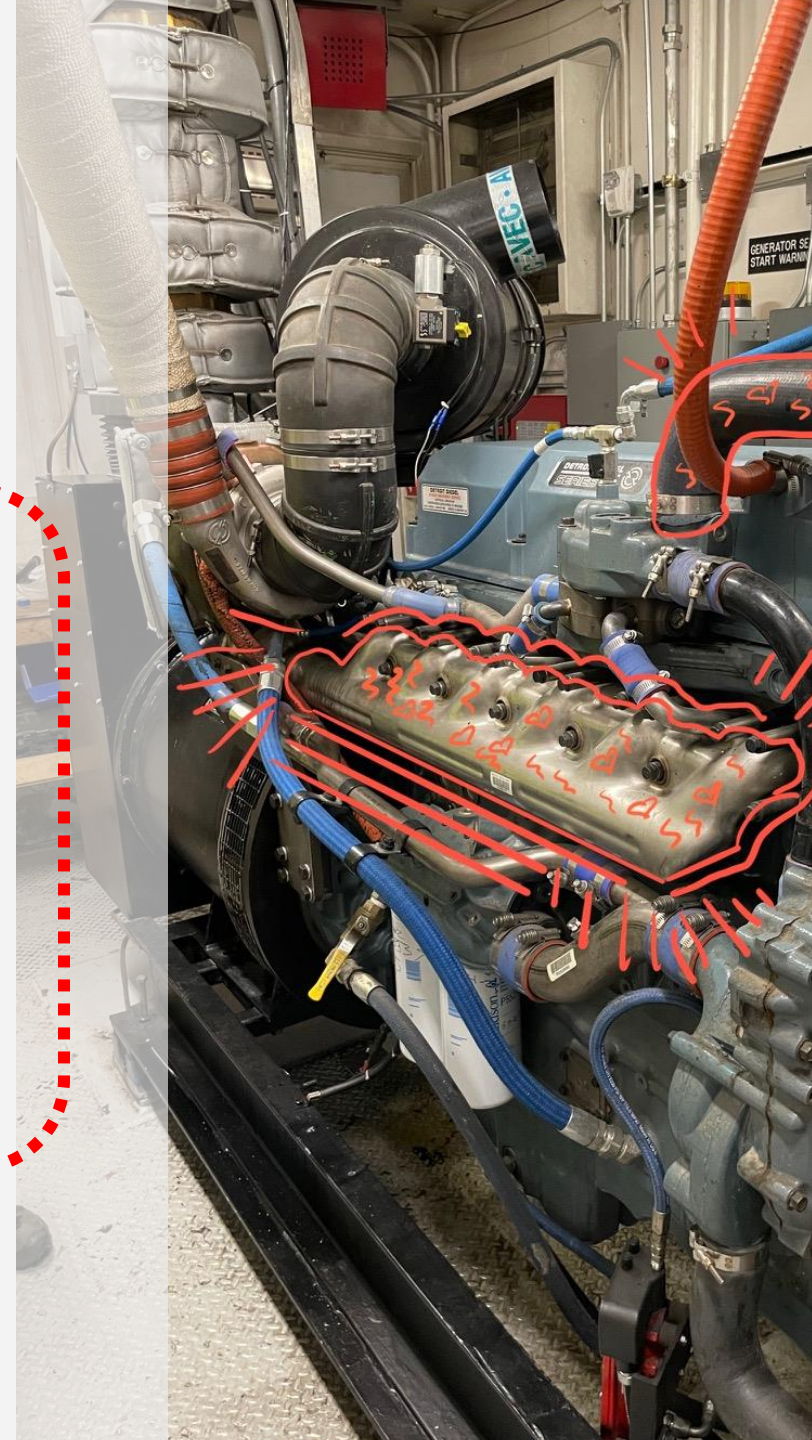


Apply for
Funding

**DOE – Office of
Indian Energy
Technical
Assistance Program**

To... ☐ ie-ta@hq.doe.gov
Cc...
Bcc... ☐ tribal.energy@nrel.gov
Subject Technical assistance request

Name:
Tribe or Tribal Organization:
Email:
Phone:
What type of assistance are you requesting?
Provide a concise description of the technical assistance being requested:
Provide any applicable background information relevant to this request (energy goals, location, past studies):
Describe any time constraints (If none, state 'no constraints'):



- **Support is available now for:**

- Identifying the right energy project for your community
- Initial stages of development, energy planning
- Creating technical documentation needing for funding app
- Applying for funding

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- **Leverage available support to access current and near future funding opportunities**

- If energy is a priority for your communities, engage support ASAP to take advantage of unique funding environment

Thank you!

