CCHRC
Cold Climate Housing Research Center

GVEA
Golden Valley Electric Association

REAP
Renewable Energy Alaska Project

*present the*

# Renewable Heat & Power *Series*

at the Cold Climate Housing Research Center, 1000 Fairbanks Street, Fairbanks

## BIOMASS

March 22, 5:30-7:30pm

**Instructor:** Robert Deering, Renewable Energy Coordinator, U.S. Forest Service
**Description:** an introduction to biomass heating systems for Alaska residences, including appliances and distribution systems, new technologies, and how to calculate cost and payback for your home.

## SOLAR THERMAL

March 29, 5:30-7:30pm

**Instructor:** Bruno Grunau, Research Engineer, CCHRC
**Description:** an overview of practical designs and applications for Alaska homes, from small domestic hot water systems to large space heating systems with annual storage. Learn about equipment, control systems, and how to calculate cost and payback.

## HEAT PUMPS

April 4, 5:30-7:30pm

**Instructor:** Andy Roe, Alaska Geothermal & Robbin Garber-Slaght, CCHRC
**Description:** learn the basics of how heat pumps work and perform in Alaska, including how to choose a successful site and basic installation techniques. Review examples of existing heat pumps in Alaska and lessons learned.

## WIND

April 5, 5:30-7:30pm

**Instructor:** Greg Egan, Remote Power
**Description:** covers practical designs and applications for a variety of residences, inluding basic cost and payback calculations, equipment, and control systems. Learn how to incorporate wind power into projects and the difference between battery bank and grid-tied systems.

## SOLAR PHOTOVOLTAIC

April 7, 5:30-7:30pm

**Instructor:** Elizabeth Johnston, Design Alaska
**Description:** learn how solar PV works and how to determine if it is an appropriate and cost-effective energy source for your project. This class also includes tips for designing, sizing, and installing a residential PV system.

| COST PER CLASS | In Person | Webinar |
|---|---|---|
| CCHRC members | $10 | $15 |
| Non-members | $15 | $20 |
| CEU Certificate (additional) | $10 | $10 |

To register, visit cchrc.org/classes. For more info contact Vanessa at 907-450-1762 or vanessa@cchrc.org