

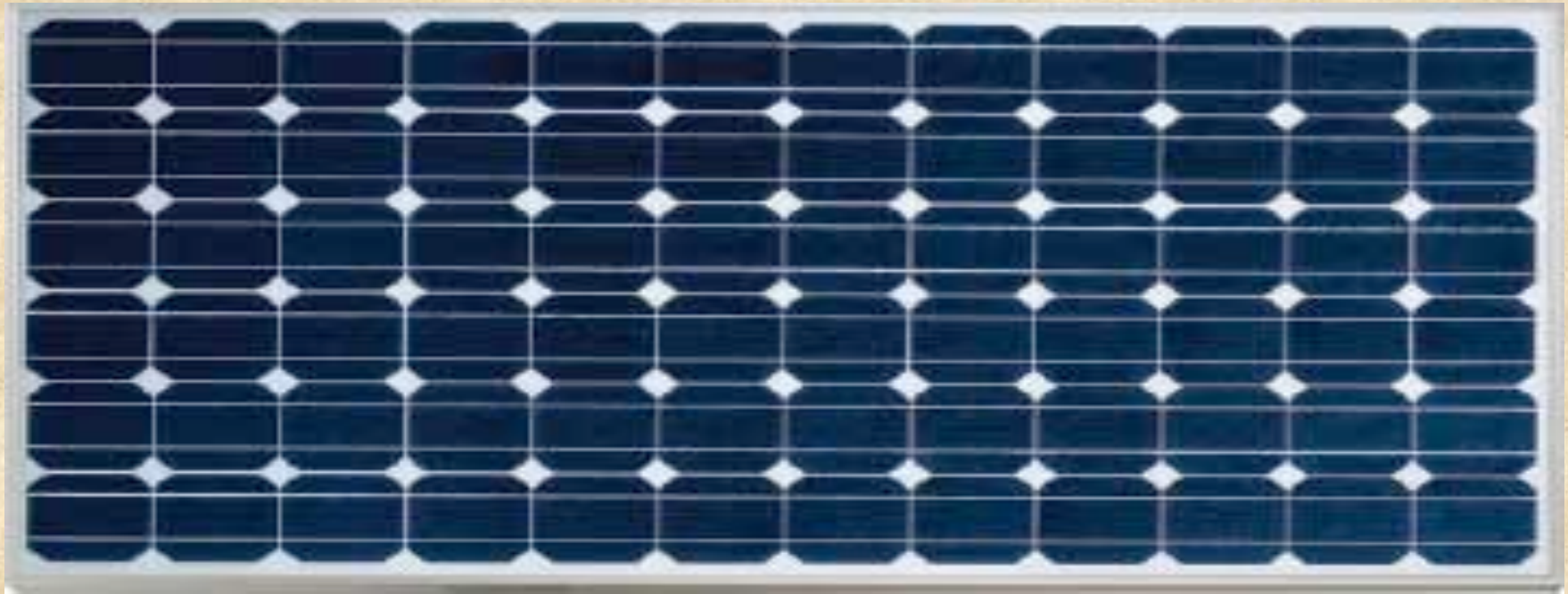
**Bob Deering**  
*Renewable Energy Coordinator*  
**U.S. Forest Service – Region 10**  
**State & Private Forestry**



**But  
Why??**



One day



2.2 panels – all day



35 ← → 530

# Challenges

- Biomass
  - Capital cost
  - Lack of standardization
  - Supply concerns – Forest Products industry health
  - Immature industry
  - Misunderstood
- Hydropower
  - Large upfront investment
  - Forecast risks
  - Responsiveness
  - Transmission barriers
- Wind – poor resource
- Solar – mediocre resource, seasonal
- Geothermal – very few sites, locations, novel

# Benefits

- Local Resources
- Energy security
- Local jobs
- Money stays home
- Price stability
- Greenhouse gases
- Co-benefits
  - Support local industries
  - Water supply
  - Waste utilization
- Alaska leadership

**We have a great story.  
We need your help  
telling it!**

# Biomass Update for SE Alaska

# Current Projects in SE Alaska

- Hollis School
- Whale Pass School
- Hydaburg School in Design and Engineering phase
- Thorne Bay
- Coffman Cove
- Haines Heating Project in Design
- Kake District Heating Design
- Hoonah District Heating
- Angoon THRHA Construction Pending
- KTN Airport
- Ongoing pre-feasibility studies

**AWEDTG Pre-Feasibility Studies  
Apply NOW!**

**USFS – Wood Innovations Grants  
Application period begins 1 October**

# Alaska Wood Energy Conference 2017

- Over 100 attendees
- From Finland, Germany, Canada
- Cool topics such as Green Banks, small Cogeneration and Carbon Credits
- Biomass Hydronics technical instruction for continuing education for professional engineers (37 attendees)
- Post conference tour POW greenhouses (25 attendees)

# Biomass And Greenhouses!



## BIOMASS-HEATED GREENHOUSES

A HANDBOOK FOR ALASKAN SCHOOLS AND COMMUNITY ORGANIZATIONS

# Alaskan Biomass Heated Greenhouses make the news

FOX NEWS FOX BUSINESS FOX NEWS GO FOX NEWS RADIO FOX+NATION FOX NEWS INSIDER

**FOX BUSINESS** [MARKETS](#) POLITICS FEATURES FBN TV [Q](#)

[f](#) [t](#) [p](#)

## New Alaska handbook provides how-to on heated greenhouses

By RACHEL D'ORO | Published May 12, 2017 | [Markets](#) | [Associated Press](#)



A photograph showing a long row of covered walk-in greenhouses. The structures have blue metal frames and translucent plastic covers. They are situated in a rural landscape with mountains in the background under a clear blue sky. A white arrow points to the right, indicating a carousel of images.

# Cross Borders Collaboration

RENEWABLES IN REMOTE COMMUNITIES  
2017 CONFERENCE

Whitehorse

PEMBINA  
institute

**Yukon**  
Energy, Mines and Resources  
Energy Branch

\*DATE CHANGE\*  
October 23 - 26, 2017

- Delegation from Alaska going to Whitehorse Conference