

Alaska **Rural Energy** Conference

A stylized map of Alaska in yellow and blue, positioned to the right of the main title.

ENERGY PATHWAYS TO ALASKA'S FUTURE

2011 Conference Program

September 27-29, 2011
Juneau, Alaska



Proud Sponsor of the
2011 Alaska Rural Energy Conference

Alaska Energy Authority

AEA Mission: Reduce The Cost Of Energy In Alaska.



akenergyauthority.org



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CONFERENCE WELCOME ADDRESS

Dear Conference Attendees,

On behalf of Alaska Energy Authority's (AEA) Board of Directors, Management and Staff, welcome to the 2011 Alaska Rural Energy Conference.

Thank you for taking time out of your busy schedules to be here for this event. This is the first time our conference is held in Southeast Alaska, and it is good to be here in Juneau with you.

This year's conference theme is "Energy Pathways to Alaska's Future." Those in attendance include rural energy managers, local government representatives, regional planning and projects stakeholders, technology developers, energy service and equipment providers, and state and federal leaders.

We have the opportunity to hear from a wide range of speakers representing industry, government, and more. We also have the opportunity to discuss success stories, challenges, new technologies and most importantly, the vision for a sustainable future.

In addition to the conference sessions, this year a basic Energy 101 course is offered on Monday, September 26. Then on Friday, September 30, there are field trips to successful Juneau-area energy projects. Please take advantage of these opportunities if you can.

Our 2011 conference would not be possible without the hard work of the Planning Committee, led by AEA and the Alaska Center for Energy and Power (ACEP). Southeast Conference, Renewable Energy Alaska Project (REAP) and National Renewable Energy Laboratory (NREL) contributed important input.

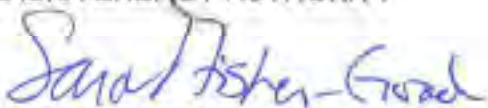
Nor would the conference be possible without the generous support of our many sponsors. Thanks especially to the Denali Commission for making travel grants possible.

Please take some time to explore your program and visit the vendor booths. There is much valuable information to be discovered!

Thank you again for your participation in this year's Rural Energy Conference. I hope you have an enjoyable, productive time.

Sincerely,

ALASKA ENERGY AUTHORITY



Sara Fisher-Goad
Executive Director



CONFERENCE SPONSORS

The 2011 Rural Energy Conference would not have been possible without the generous support of the following organizations. Thank you!

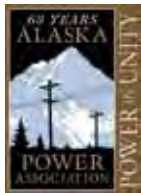
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Monday, September 26, 2011

Welcome Reception hosted by Sealaska

Sealaska Plaza

6:00 pm to 8:00 pm



Sealaska is a leader in green initiatives. Sealaska Corporation has been involved in renewable energy technologies for over 15 years. We have had projects involving wood waste to ethanol, lake-tap hydroelectric projects, wood gasifier electrical generators, waste cooking oil to biodiesel, wind power, and tidal energy. Making reliable and affordable renewable energy for Alaskans is important to us. Light hors d'oeuvres will be served. The Sealaska Plaza is located within walking distance of Centennial Hall.

Tuesday, September 27, 2011

Reception by Alaska Energy Authority

Douglas Island Pink & Chum Hatchery

6:00 pm to 8:00 pm



Located just 2.5 miles from downtown Juneau, the Douglas Island Pink & Chum Hatchery provides amazing views of spectacular salmon sights

and allows those visiting the facility to learn first-hand about Alaska's wild salmon. Inside the facility you will find breathtaking saltwater aquariums displaying a variety of local marine life; including touch-tank aquariums where you are provided with the chance to physically interact with a variety of local sea animals.

Tuesday's reception at the Douglas Island Pink & Chum Hatchery will begin at 6pm and include light hors d'oeuvres and a no-host bar. Buses will transport conference attendees between Centennial Hall and the reception continuously starting at 5:45pm until the end of the reception at 8pm. Parking is available for attendees with their own transportation.

Wednesday, September 28, 2011

Energy Education Reception by Alaska Center for Energy & Power

Juneau Arts and Cultural Center

6:00 pm to 8:00 pm



Join us at the Juneau Arts and Cultural Center for a reception focused on Energy Education. Organizations will highlight opportunities for you to bring curriculum and activities related to smart energy choices back to the youth of your area. Cordova High School Science Club will also be presenting their research summary of the methane bio digester project. Light hors d'oeuvres will be served, the Juneau Arts and Cultural Center is located next door to Centennial Hall.

AGENDA

Monday, September 26, 2011

- 12:00 PM - 8:00 PM** Early Registration and Vendor Set-Up
- 1:00 PM - 5:00 PM** Energy 101 (co-chairs: Gwen Holdmann and David Lockard)
- 4:00 PM - 7:00 PM** Read Your Energy Rating (Chair: Jimmy Ord)
- 6:00 PM - 8:00 PM** Welcome Reception hosted by Sealaska. Light hors d'oeuvres will be served. (Sealaska is located within walking distance of Centennial Hall.)
-

Tuesday, September 27, 2011

- 7:00 AM** Registration
- 7:00 AM** Continental Breakfast
- 8:00 AM** **Welcoming Remarks and Keynote Addresses:**
Edward Thomas, President CCTHITA
Mayor Bruce Botelho, City of Juneau
Sara Fisher-Goad, Executive Director, Alaska Energy Authority
Joel Neimeyer, Federal Co-Chair, Denali Commission
Mike Pacheco & Brian Hirsch, National Renewable Energy Laboratory
- 10:00 AM** **Break** (Sponsored by the National Renewable Energy Laboratory)
- 10:30 AM** **Senator Lisa Murkowski**
- 10:45 AM** **Plenary Session:** Putting Alaska's Energy into Perspective
(co-chairs: Gwen Holdmann and David Lockard)
- 12:00 PM** **Lunch** (Provided)
- 12:30 PM** **Presentation:** Mythbusters (chair: Archie Debunker)
- 1:30 PM** **Technical Session 1**
- Financing a Project (chair: Jim Strandberg)
 - Performance of Wind Systems: Wind Systems Come with a Learning Curve (chair: Richard Stromberg)
 - Permitting and Regulations (chair: Rick Harris)
 - Energy Efficiency: Taking the Message Home (chair: Katie Conway)
- 3:00 PM** **Break**
- 3:30 PM** **Technical Session 2**
- Progress Toward Alaska's Renewable & Efficiency Goals (chair: Mike Black)
 - Energy Storage (chair: Frank Williams)
 - Biomass - From Goals to Strategy to Reality (chair: Bob Deering)
 - How Far Can Efficiency Take Us? (chair: Ginny Fay)
- 6:00 PM - 8:00 PM** **Evening Reception** - Douglas Island Pink and Chum Hatchery.
Sponsored by Alaska Energy Authority
Light hors d'oeuvres will be served.
(Shuttle buses departing from Centennial Hall at 5:45 pm.)
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Wednesday, September 28, 2011

- 7:00 AM** Registration
Hydrokinetics Working Group (chair: Jason Meyer)
Clean and Renewable Energy Cluster Efforts in Alaska (chair: Brian Holst)
- 7:00 AM** Continental Breakfast
- 8:00 AM** **Plenary Session:** Utilities Making Decisions (chair: Sara Fisher-Goad)
- 10:00 AM** Break (Sponsored by Cooperative Extension Services - UAF)

- 10:30 AM** **Technical Session 3**
- How Policy Drives Energy Development (chair: Chris Rose)
 - Diesel Engine Efficiency (chair: Alan Fetters)
 - Geothermal Project Update (chair: Peter Crimp)
 - Visualizing Energy Information and Projects Using GIS (chair: Sean Skaling)
- 12:00 PM** **Lunch** (Provided)
- 12:30 PM** **Presentation:** Unintended Consequences (chair: Chris Rose)
- 1:30 PM** **Technical Session 4**
- Feasibility Studies: Lessons Learned (chair: David Lockard)
 - Grid Integration and Power Quality (chair: Chris Mello)
 - Hydropower - the Big Elephant in the RE Room (chair: Doug Ott)
 - Heating Opportunities - Beyond Biomass (chair: Jason Meyer)
- 3:00 PM** **Break**
- 1:30 PM** **Technical Session 5**
- Developing Energy Projects - A Village Perspective (chair: Brian Hirsch)
 - Hydrokinetics Update (chair: Jason Meyer)
 - Transmission Project Challenges (chair: Dave Carlson)
 - Regional Energy Efficiency Planning and Implementation (chair: Rebecca Garrett)
- 6:00 PM - 8:00 PM** **Energy Education Reception - Juneau Arts & Humanities Center**
Sponsored by Alaska Center for Energy & Power - UAF
Light hors d' oeuvres will be served. (The Juneau Arts and Humanities Center is located next door to Centennial Hall.)



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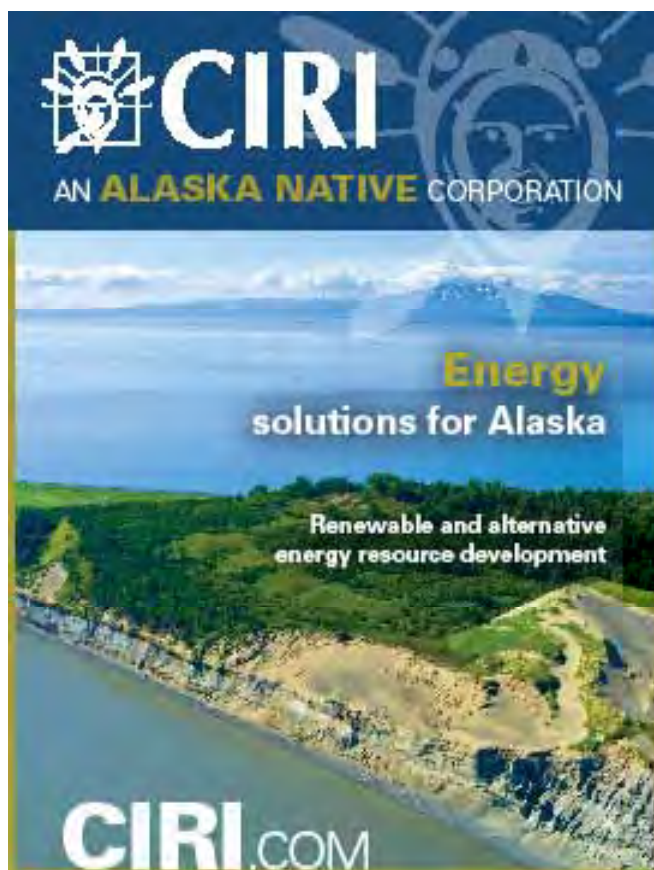
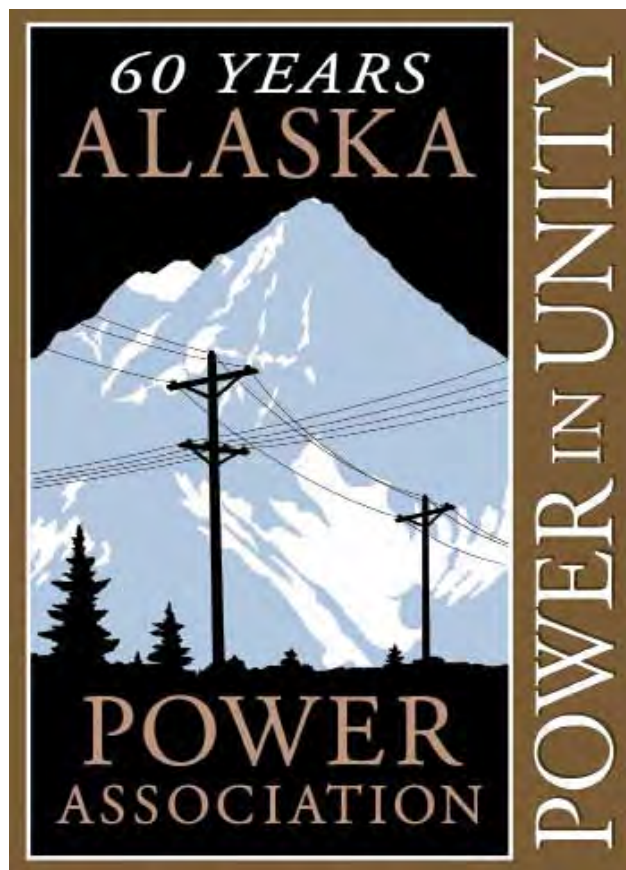
AGENDA *continued*

Thursday September 29, 2011

- 7:00 AM** Registration
- Hydro-electric Working Group** (chair: Doug Ott)
- Geothermal Working Group** (chair: Gwen Holdmann)
- 7:00 AM** Continental Breakfast
- 8:30 AM** **Plenary Session:**
Thinking as a Region: Case Study - Southeast Integrated Resources Plan
(chair: Robert Venables)
- 10:00 AM** **Break**
- 10:30 AM** **Technical Session 6**
- Energy for Community Health - Food Security, Sewer & Water (chair: Jack Hebert)
 - Alternative Fuels (chair: Dennis Witmer)
 - Looking Beyond Alaska: Global Lessons (chair: Nils Andreassen)
 - Demand Side Management (chair: Tim McCleod)
- 12:00 PM** **Lunch** (Provided) Eat in Regional Discussion Groups
- 12:30 PM** **Regional Break Out Discussion** (chair: Sandra Moller)
- 2:30 PM** **Regional Report Presentation to Lt. Governor Treadwell** (Sponsored by Denali Commission)

Friday September 30, 2011

8:00 AM - 11:00 AM **Field Trips** (Sign up for these exciting opportunities at the registration desk).





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We can make wood pellet deliveries anywhere in Alaska accessible by barge. We have created a replicable delivery infrastructure to deliver bulk wood pellets to customers large and small. We can deliver premium wood pellets equal to heating oil at the equivalent prices of \$2.61 and \$3.50 a gallon almost anywhere! Contact us for more information.



HELPING TO CREATE THE ALASKA WOOD PELLET HEATING INDUSTRY

Transitioning from fossil fuels to renewable energy sources is not easy. Sealaska is partnering with existing, established, companies to sell, install, and service wood pellet boiler systems. The easiest and fastest way to get ourselves off of costly, imported fossil fuels is to educate businesses and show them alternative technologies and have them offer alternative products.



TESTING ALTERNATIVE ENERGY TECHNOLOGIES

Sealaska Corporation has been involved in renewable energy technologies for over 15 years. We have had projects involving wood waste to ethanol, lake tap hydro electric projects, wood gasifier electrical generators, waste cooking oil to biodiesel, wind power, and tidal energy. Making reliable and affordable renewable energy for Alaskans is important to us.

CONVERTING TO RENEWABLE ENERGY

Clean energy sources power the Sealaska Plaza, our corporate headquarters. Since transitioning from oil-based energy to renewable wood pellets in November 2010, we have saved over 20,000 gallons of heating oil.

Visit Sealaska.com to learn more about Sealaska's work to make Southeast green.



CONFERENCE OVERVIEW

Daily Meals

The conference offers a daily continental breakfast at 7:00 a.m. on Tuesday, Wednesday, and Thursday, along with a catered lunch at noon. A brown bag lunch is offered on the final day to accommodate the afternoon plans. All daily meals as well as snacks and our day-long coffee and tea service are served in Sheffield Ballroom 1.

Conference Structure

Plenary Sessions: Daily Plenary Sessions are opportunities for an assembly of all participants to hear from leading officials on energy issues from the state and national level. Plenary Sessions are scheduled in the mornings each day of the conference.

Technical Sessions: During this three-day period, six technical sessions have been planned, each offering four concurrent workshops on different topics. We'd like to believe that no two workshops are the same, creating a unique forum. Details of the technical sessions are in the detailed Daily Agenda in your conference folder.

Regional Breakout Session: Thursday, September 29th. This final conference event is a one-time opportunity to focus on your region's areas of interest and development ideas. Groups will be defined for the 12 main regional areas of Alaska. If your region has a low turnout, please feel free to join another region similar to yours. Regional representatives will present discussion points to Lt. Governor Treadwell at 2 pm.

Vendor Booths

Booths are located throughout the halls of the conference area and in the small lobby across from the breakout rooms. Booths will be open throughout the conference.

Evaluation Form

At the end of the conference, you will be asked to fill out an evaluation form to help us plan future rural energy conferences. Your cooperation is needed in completing this form and we ask that you submit them to the conference staff before you leave. Thank you, in advance, for your valuable input!

Continuing Education Credits

Continuing education credits are available for engineers and educators attending this conference. Forms are available at the registration desk and in each breakout room and should be signed by session chairs after each session.

Conference Staff / Assistance

Questions? Concerns? Comments?

Please see any of the conference staff for assistance. We will do our best to accommodate your needs while attending the Rural Energy Conference!

Canada's Energy Technology Portal
cleanenergy.gc.ca



Consulate of Canada, Anchorage

Canada anchorage@international.gc.ca



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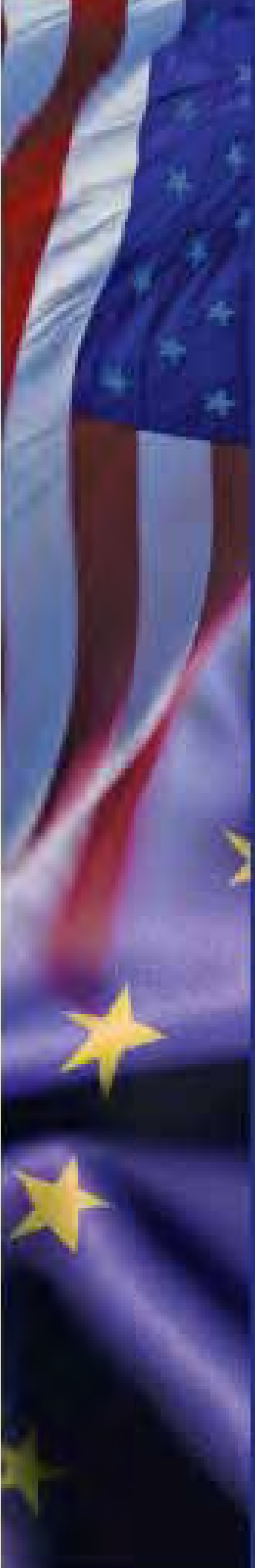
DENALI COMMISSION

The Denali Commission, an independent federal agency since 1998, works with program partners to improve the effectiveness of government services, develop a labor force through training and promote development of Alaska's basic infrastructure. From addressing fuel storage needs to creating accessible health care facilities; empowering people through skills development and improving transportation systems, the Denali Commission is a catalyst for sustainable development in rural Alaska and contributes lasting benefits to Alaska's next generation.

PROGRAM AREAS: ENERGY | HEALTH FACILITIES | TRANSPORTATION | TRAINING | ECONOMIC DEVELOPMENT

WELCOME ALASKA RURAL ENERGY CONFERENCE ATTENDEES

From the Commissioners and staff of the Denali Commission,
We look forward to your visit at our booth.



T: 888-480-4321 or 907-271-1414 510 L Street, Suite 410 Anchorage, Alaska 99501 www.denali.gov

