



## Green Tags: One Way to Support Renewable Energy Development In Alaska

International Wind-Diesel Conference  
April 25, 2008  
Girdwood, Alaska

## Renewable Energy Alaska Project (REAP)

REAP is an Alaskan coalition of small and large electric utilities, environmental groups, consumer groups, businesses, Alaska Native organizations and state and federal agencies with the shared goal of *"increasing the production of renewable energy in Alaska."*

# REAP Board Members

Homer Electric Association (HEA)  
Chugach Electric Association (CEA)  
Municipal Light and Power (ML & P)  
Golden Valley Electric Association (GVEA)  
Kotzebue Electric Association (KEA)  
Alaska Village Electric Cooperative  
TDX Power  
Alaska Power Association (APA)  
Alaska Power and Telephone  
Sierra Club  
ABS Alaskan, Inc

Alaska Conservation Alliance  
Alaska Center for the Environment  
Alaska Public Interest Research Group (AkPIRG)  
Rural Alaska Community Action Program (RurALCAP)  
Green Star  
Chena Hot Springs  
PowerCorp Alaska, Inc.  
Aleutian Pribilof Islands Association (APIA)  
Yukon River Inter-Tribal Watershed Council

## REAP Contributing Members

- ❑ Alaska Energy Authority (AEA)
- ❑ Alaska Housing Finance Corporation (AHFC)
- ❑ Denali Commission
- ❑ National Renewable Energy Lab (NREL)
- ❑ US Department of Agriculture, Rural Development (USDA)

## Other REAP Organizational Members

- UPC Wind Management
- Huntley & Associates
- Naknek Electric Association
- Alaska Inter-Tribal Council
- Siemens Building Technologies
- Alaska Building Science Network
- Northern Power
- Kodiak Electric Association
- Cold Climate Housing Research Center
- IBEW, Local 1547
- CIRI
- ORMAT
- STG, Inc.
- enXco
- City of Bethel
- City of Sitka
- City of Ketchikan
- Alaska Municipal League



## REAP's Objectives

1. Advocate for the construction of viable renewable energy projects proposed for Alaska
2. Help develop and implement policies that will lead to increased production of renewable energy
3. Build a market for renewable energy in Alaska
4. Foster and demonstrate stakeholder unity in support of renewable energy and
5. Promote energy efficiency

## Renewable Energy as Risk Management: The World's Climate is Changing



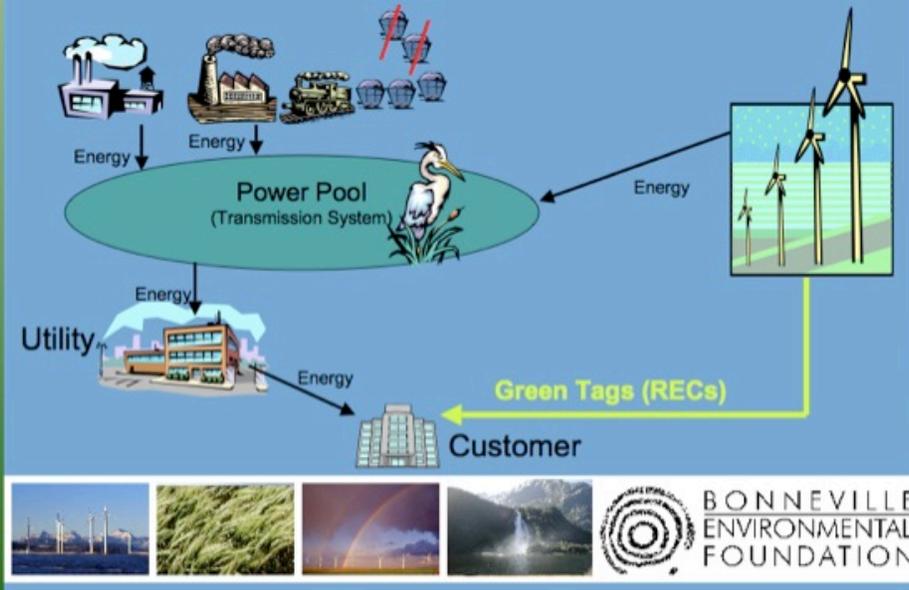
- Carbon regulation in the United States is now regarded as inevitable
- US Supreme Court has ruled that CO<sub>2</sub> is a "pollutant" under the Clean Air Act
- Congress is currently considering over ten different regulatory options
- \$10 - \$85 per ton of CO<sub>2</sub>
- Utilities are already figuring carbon risk into their integrated resource plans



Green Tags (also known as renewable energy credits or RECs) represent the environmental benefits when emissions from conventional electricity generation are displaced by renewable energy.

Green tags are the "bragging rights" to the environmental benefits of generating electricity from renewable energy

## How Green Tags Work



## Safeway

### Powered by **Wind Energy**

- All our U.S. Fuel Stations are now powered by wind energy.
- We are one of the top 10 corporate purchasers of renewable energy in the U.S.
- By purchasing renewable energy, Carrs/Safeway is dedicated to a greener, cleaner environment.
- For further information, visit [www.safeway.com/windenergy](http://www.safeway.com/windenergy)



# What are *Denali Green Tags*?



- A REAP program in partnership with Bonneville Environmental Foundation (BEF)
- Wind supply from Kotzebue and St. Paul
- Renewable energy by Alaskans, for Alaskans!



# Where do *Denali Green Tags* come from?

Kotzebue Electric Association

TDX Power (St. Paul)

Projects in the Pacific NW



# What do Alaska Producers Get?

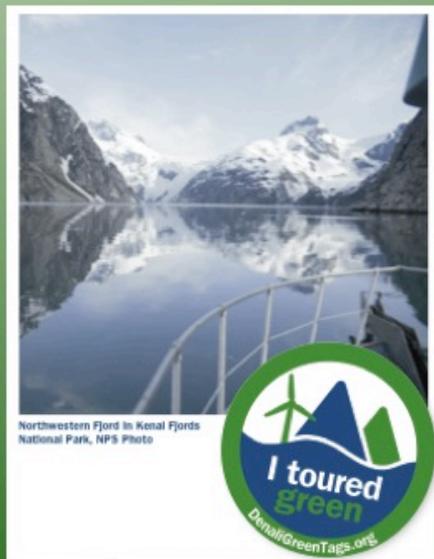
Between .4¢ and .5¢/kWh (\$4-\$5/MWh)

Contracts from one to five years

Green-E certification

# Who buys *Denali Green Tags*?

- Purchased by individuals, businesses, agencies, building managers, and event planners
  - GSA Federal Buildings
  - Cold Climate Housing Research Center
  - Skinny Raven Sports
  - Major Marine Tours



# Tour Green

Business sell \$2 "mini" Denali Green Tags to their tour customers

Most businesses also purchase Denali Green Tags to offset their operations

Each "Mini"-Green Tag represents 100 kilowatt-hours of wind power and a savings of 140 pounds of emissions



# Other Options

Kasigluk

Toksook Bay

20 year contracts



# Summary

- The environmental benefits of wind generation do have a dollar value
- That value may increase as carbon regulation in the US is implemented
- Projects should consider this modest income stream



Chris Rose  
Executive Director  
308 G Street, Suite 218  
Anchorage, Alaska 99501  
907-929-7770  
[realaska.org](http://realaska.org)

Thanks!!!

# Denali Green Tag Purchasers

- Alaska Center for Appropriate Technology
- Alaska Center for the Environment
- Alaska Conservation Foundation
- Alaska Conservation Solutions Alaska Wildland Adventures
- Applied Organics
- The Ascending Path LLC
- Best Storage Inc.Cold
- Climate Housing & Research Center
- Contemporary Cuisine
- Center for Alaskan Coastal Studies
- Fireside Books
- Green Star Inc.
- Kenai Fjords National Park
- Major Marine Tours
- Northern Alaska Environmental Center
- Organic Hair Design
- Pacific Outdoor Equipment
- Raven's Brew Coffee, Inc. - Anchorage
- Raven's Brew Coffee, Inc. - Ketchikan
- REAP - 3rd Annual AK Renewable Energy Fair Skinny Raven Sports
- US General Services Admin Public Bldgs.
- US Fish & Wildlife Service - for Migratory Bird Day at the Alaska Zoo