

Green Tags

Buying and Selling the Environmental Attributes of Renewable Energy

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What is REAP?

- An Alaskan coalition of small and large utilities, environmental groups, consumer groups, businesses, and energy agencies with the goal of “increasing the production of renewable energy in Alaska.”

REAP's Strategies



- Put more viable renewable energy projects in the ground
- Advocate for statewide policies that promote renewables
- Grow the market for renewables (this includes green tags)

What are “Green Tags”

- Green tags are the environmental attributes of renewable energy packaged in a commodity that can be bought and sold
- Green tags help support the development of more renewable energy
- Green tags are also called Tradable Renewable Credits (TRCs) and Renewable Energy Credits (RECs)



- Green tags represent the emissions from conventional electricity generation that are displaced when electricity is generated from wind, solar, biomass, geothermal, and (some) hydro.

Why Green Tags?

- The green tag market was established to help facilitate the sale of renewable electricity nationally and regionally
- Green tags help overcome the obstacle of delivering the benefits of renewable energy to customers who are sometimes far from generating plants

Green Power vs. “Green Tags”

- Green Power *bundles* the energy and the environmental attributes (e.g. the displaced emissions)
- “Green Tags”* *strip off* the environmental attributes from the energy, allowing each to be marketed and sold separately
- In *neither* case are the electrons flowing into your house any different from those going next door
- In *both* cases the result is the same -- a cleaner mix of power in the region:
 - *more renewables in the pool*
 - *less fossil fuel burned*
 - *lower emissions*

*a.k.a Renewable Energy Credits (RECs) or Tradable Renewable Credits (TRCs)

Who Buys Green Tags?

- Utilities and Electric Service Providers to satisfy state mandated Renewable Portfolio Standards
- Competitive renewable energy marketers for sale to customers
- Residential and commercial customers where no other renewable energy options are available
- Event organizers so that events can off-set their electricity or be "climate neutral"

Certification and Tracking

- The Center for Resource Solutions (CRS) developed a widely-used renewable electricity certification program that validated tag-based sales called “Green-e”
 - The green tag must originate entirely from new renewable facilities (after 1999)
 - Certified providers undergo an annual verification process audit to document renewable certificates are sold only once
 - Each certified provider agrees to abide by the Green-e Code of Conduct
 - Each certified provider agrees to disclose the quantity, type and geographic source of their green tags to their residential and small business customers
- Power purchase agreements and state renewable procurement laws almost always now explicitly address contractual rights to renewable attributes
- The Western Governor's Association is working on a regional tracking system for green tags

Who Sells Green Tags?

- Bonneville Environmental Foundation
- Sterling Planet
- American Wind
- Mainstay Energy
- 3 Phases Energy Service
- Aquila
- Pacific Renewables
- Sun Power Electric
- New Wind Energy
- Pepco Energy Services
- PPM Energy
- Green Mountain Energy

What Affects the Price of Green Tags?

- Supply and Demand
- Type of Power (e.g. solar green tags are usually more expensive)
- The location of the project
- The size of the project
- “Extra” environmental certification
- Contract factors
- 1 Mwh for \$2-\$30

Where Does the Money Go?

- The producer of the renewable energy
- The broker of the green tags
- More renewable energy projects

Native Energy



- Rosebud Sioux Reservation
- 750kW NEG Micon

Green Tags in Alaska

- Alaska wind projects are not yet selling green tags
- Green tag sales revenues could be plowed back into more renewable energy development
- Projects like Fire Island will produce large amounts of green tags (100 MW x 8760 hours x .33 CF = 289,080 Mwh green tags/year)
- Potential buyers include: federal agencies, businesses, and environmental groups
- Green tags increase the public's awareness of renewable energy
- Green tags make the connection between climate change and one proactive solution

THANKS!

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