Outline

1. What is Renewable Energy?
2. Basics of the U.S. Electricity Grid
3. Renewable Energy Certificates
4. Renewable Energy Markets
5. Renewable Energy Project Financing, PLUS if Renewable Energy is So Great, Why Don’t They Build More?
6. Homework
Renewable energy is natural, abundant, and clean.
Wind
Solar
Geothermal
Biomass
Low-Impact Impact Hydro
Wind
Solar
Geothermal
Biomass
Low-Impact Hydro
not nuclear
not “clean” coal
not natural gas
U.S. Mix

- Nuclear: 37%
- Petroleum: 37%
- Renewable: 19%
- Natural Gas: 30%
- Coal: 12%

Data: EIA March 2013
U.S. Mix—Renewable Energy

- Hydropower: 28%
- Wind: 56%
- Geothermal: 8%
- Solar: 4%
- Biomass Wood: 3%
- Biomass Waste: 1%
grid basics
The Grid
The Grid: 345-499 kV
The Grid: 500-699 kV
The Grid: 700-799 kV
The Grid: 1,000 kV DC
Snapshot: June 16
Electricity consumption per capita
13,394 kWh in U.S.
I want to buy renewable energy
The Electricity Grid
Ways to Buy Renewable Energy

Voluntary Market
- Competitive electricity
- Utility green pricing programs
- Voluntary REC purchases

Compliance Market
- Utility RPS purchases
The Renewable Energy Certificate
Renewable Portfolio Standards:
29 States + D.C. have an RPS
REASON #79: BECAUSE WIND IS ABUNDANT

Buy Clean Energy is an ongoing campaign to spur individuals and organizations to buy clean energy. Nationwide, only 3% of our energy comes from clean sources like wind and solar, and only 2% of people sign up when it's offered by their utility. Buy clean energy today and then sign the roster of clean energy supporters. It's easy and just takes a minute. Clean energy is our future. ☺
### Find Renewable Energy for Your Home or Organization

This search form will help you find certified renewable energy products for your home or organization. (To specify more than one item in each list hold down the Ctrl/Cmd key while clicking to specify more than one item.)

<table>
<thead>
<tr>
<th>Search For:</th>
<th>Product Type:</th>
<th>Available in:</th>
<th>Show products containing:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any</td>
<td>Any</td>
<td>Anywhere</td>
<td>Any</td>
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<tr>
<td>Home</td>
<td>REC</td>
<td>Alabama</td>
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<td>Wholesale</td>
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<td>Arizona</td>
<td>Hydro</td>
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</tbody>
</table>

- Geothermal
- Biomass
- LFG

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**Quick Links**

- Find Renewable Energy for Your Home or Organization
- Organizations Using Renewable Energy
- Green-e Energy National Standard
- Green-e Climate Standards
- Verification Reports

**Latest News**

- Appleton Coated LLC Joins Green-e Marketplace With 100% Renewable Energy Commitment, October 27, 2011
- Call for Comments: Biomass and Repowering in Green-e Energy National Standard, September 21, 2011
- Green-e Energy

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Project Financing in Brief

Power Purchase Agreement (PPA)
Renewable Energy Certificates
Tax breaks and other stuff

Legislative Support

Production Tax Credit (PTC)
Investment Tax Credit (ITC)
If renewable energy is so great, why aren’t we building it faster?
Renewable Integration Issues
Variability
Transmission siting
High capital costs
PTC Stress
Fossil Fuel Availability
Energy efficiency first
Renewable energy is the new new thing
Where Are the Renewable Energy Jobs?
Buy renewable energy
Tell a friend
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