



Building New Renewable Generation Through Green Pricing Programs:

A National Overview of Successful Models

October 20, 2005

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2005 Michigan Energy Conference - *Unleashing the Potential: The Future of Energy in Michigan*



3 Phases Energy Overview

- National renewable energy marketing and development firm
- Serving 7 of the top 10 national green power purchasers
- As a partner to utilities, 3 Phases Energy serves:
 - #2 utility green pricing program by participation in the country
 - #2 program by MWh sales, and
 - #3 program by total number of participants.
 - The programs supported by 3 Phases Energy have achieved between 4% and 13% participation
 - National average 1.2%.
- Supporting 230 MW of new renewable energy capacity – *representing 10% of national voluntary demand*



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RE Roseville
Electric
Reliable Energy • Dependable Service



DELPHI

SAFEWAY

Rockwell
Collins

Choice
Organic
Teas



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FOODS
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Question:

Who is winning the new renewable development horse race:
the voluntary or compliance market?

Answer:



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Compliance, but not by much.

Voluntary Market New Renewables (2004): 2,233 MW.

Compliance Market New Renewables (2003): 2,325 MW.

Note: Even assuming 100% of wind capacity installed in the United States in 2004 served the compliance market (398 MW), these figures remain close.

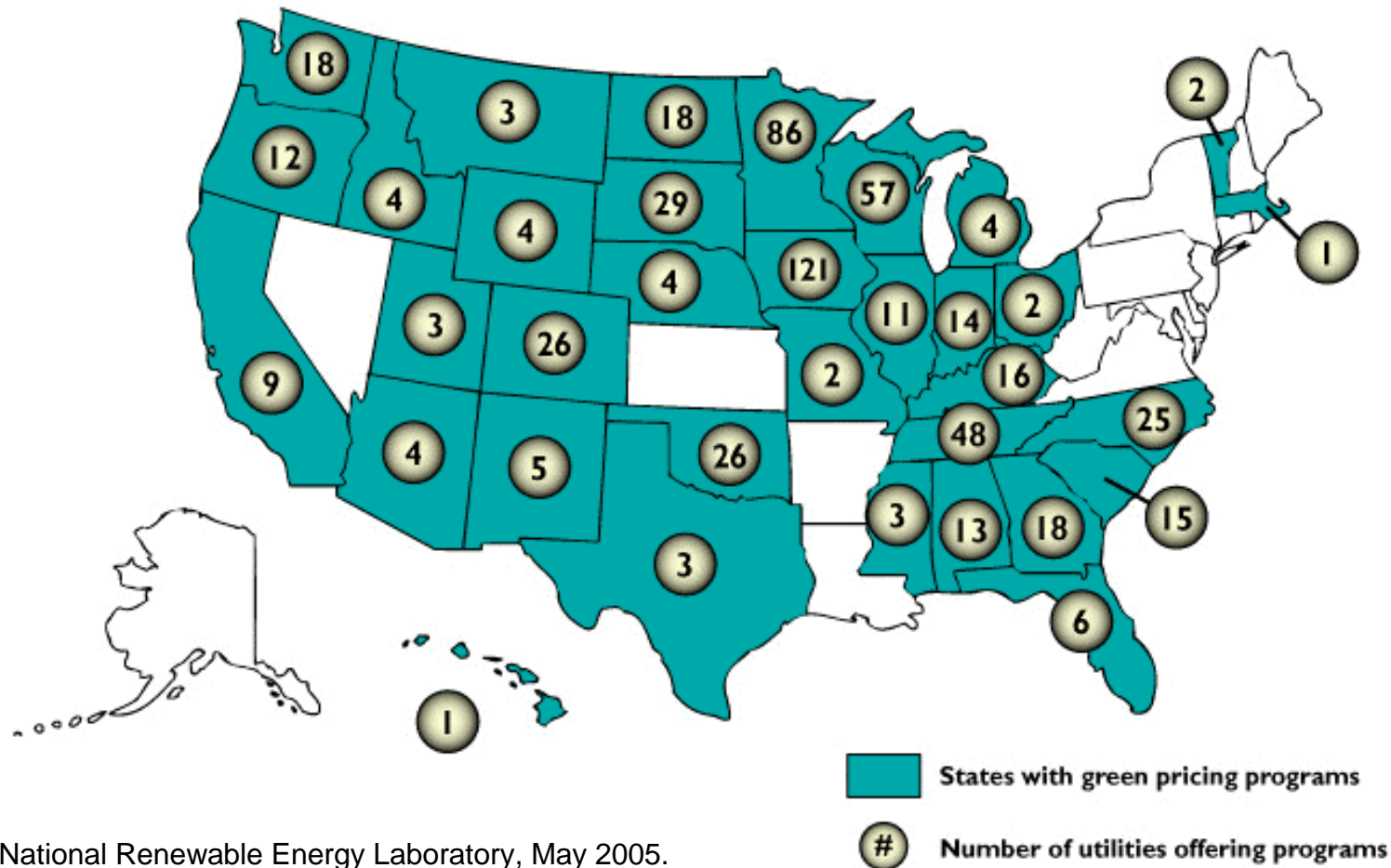
Source: Voluntary market data from U.S. National Renewable Energy Laboratory (NREL) utilizing 2004 data, published in September 2005. Compliance market data from the U.S. Energy Information Agency (EIA) *State Renewable Energy Requirements and Goals*, utilizing year-end 2003 data. Wind energy data from the American Wind Energy Association.

613 Utilities Nationally Are Offering Green Pricing Programs



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Utility Green Pricing Activities



Source: National Renewable Energy Laboratory, May 2005.

While Utility Green Pricing Programs Are Common...



...Some Programs Are Successful, But Many Are Not

1. Just 10 programs are responsible for 85% of total MWh sales nationally and 75% of the customer participants.
2. Across the 600+ utility programs, only 1.2% of customers, on average, participate in green pricing programs.
3. Participation rates are far below the levels consumer research predicts, time and again, across the country.

This means the vast majority of green pricing programs are failing to harness the significant latent demand for renewable energy development.

The Four Flavors of Green Pricing Programs



- *Build a Little, Build a Little* (Moorehead Public Service)
- *Build It, and They Will Come* (PNM, Consumers Energy)
- *Prove Demand, And Then Build*
 - REC based approach (Palo Alto, Detroit Edison)
 - Pure waiting list approach (Austin Energy)
- *Contribution Programs* (Various)

There Are Specific Differences Between the Best Programs and the Rest



The majority of the NREL List of Top Ten utility programs "*Prove Demand, Then Commit*" and also utilize the following tools:

1. Green-e Certification® of voluntary green pricing programs
2. 100% New Renewables
3. High quality product for low to modest premium
4. No Minimum Customer Commitment
5. Local and Regional Generation
6. Usage-Based Offering to Residential/Small Commercial
7. Block Offering to Large Commercial/Industrial
8. REC/Power Blending to allow for easy implementation, in advance of signing long-term power purchase agreements.

Utilities Are Enabling New Renewable Energy Development



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...Through a Combination of Power and REC Arrangements In Support of Their Green Pricing Programs.

- RECs or REC/Power Blending (37%) of utilities
- Purchased power or owned generation (63%) of utilities

Key Trend to Watch:

3 Phases Energy predicts REC purchases will reach 50% in 2005.



Renewable Energy Certification

Certification by Green-e® of *Voluntary* Green Pricing Programs Provides Iron-Clad Means of Assuring Product Quality and Consumer Protection.



- Nation's leading symbol for renewable energy excellence
- Stringent standards for consumer and environmental protection developed through years of stakeholder-driven national discussion
- Quality Assurance through Annual Verification Audit
- Recognizes best practice programs and builds consumer confidence in renewable energy
- Half of NREL top ten utility green pricing programs are Green-e certified®.

State Renewable Portfolio Standards are verified and/or audited by state agencies.



The Road Ahead

The first generation of utility green pricing programs have been operational for a number of years. *What will the next generation of utility green pricing programs in Michigan do?*

	Utility	Green Program	Rate	Program Inception Date
1st Generation:	Traverse City Light and Power	<i>Green Rate</i>	1.5 cents/kWh	1996
	We Energies	<i>Energy for Tomorrow</i>	2.0 cents/kWh	2000
2.5 MW New Renewables developed	Lansing Board of Water and Light	<i>GreenWise Electric Power</i>	3.0 cents/kWh	2001
	Upper Peninsula Power Company	<i>NatureWise</i>	4.0 cents/kWh	2001
Next Generation:	Consumers Energy	<i>Green Generation</i>	1.6 cents/kWh	2005
	Detroit Edison Company	-	2.0 cents/kWh	Proposed
Let's roll	Indiana Michigan Power	-	-	Under Development



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