



3Degrees™

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PRESENTED TO
Environmental Markets Association

PRESENTED BY
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3degreesinc.com

Who is 3Degrees?

Since 2002, 3Degrees has provided renewable energy and carbon offset solutions via Renewable Energy Certificates (RECs) and Verified Emissions Reductions (carbon offsets).

○ Clients

- Current provider to 5 of the Top 10 Largest U.S. Purchasers of Green Power
- Starbucks, Safeway, Coldwater Creek, Morgan Stanley, Adobe

○ Awards

- 2009 DOE Green Power Leadership Award for *Non-Utility Green Power Supplier of the Year*
 - Green Power Leadership Award winner in 2005, 2007, 2008



Physical Markets in Need of Financial Instruments

Physical Market Characteristics

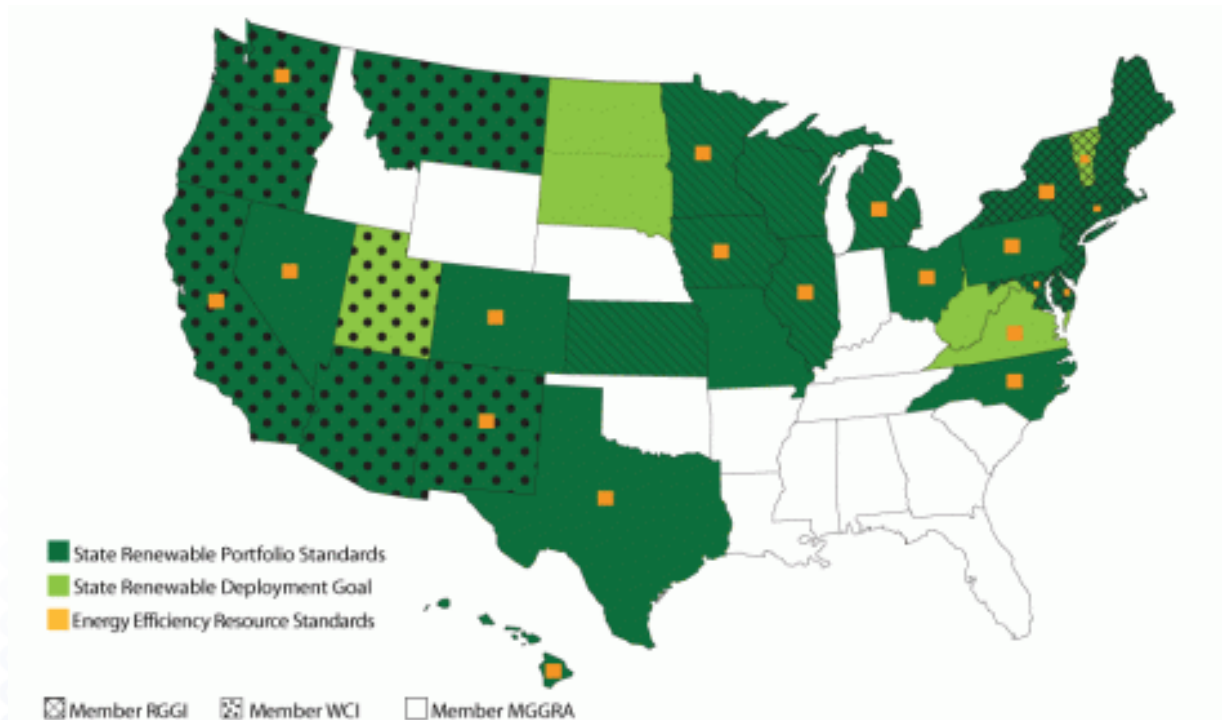
- Generally OTC
- Non-standard contracts
- Storage (i.e., banking)
- Illiquid
- Messy... Not always speaking the same language

Financial Market Development

- CCFE
- Green Exchange



Regional and State Initiatives: Fragmented and Illiquid Markets

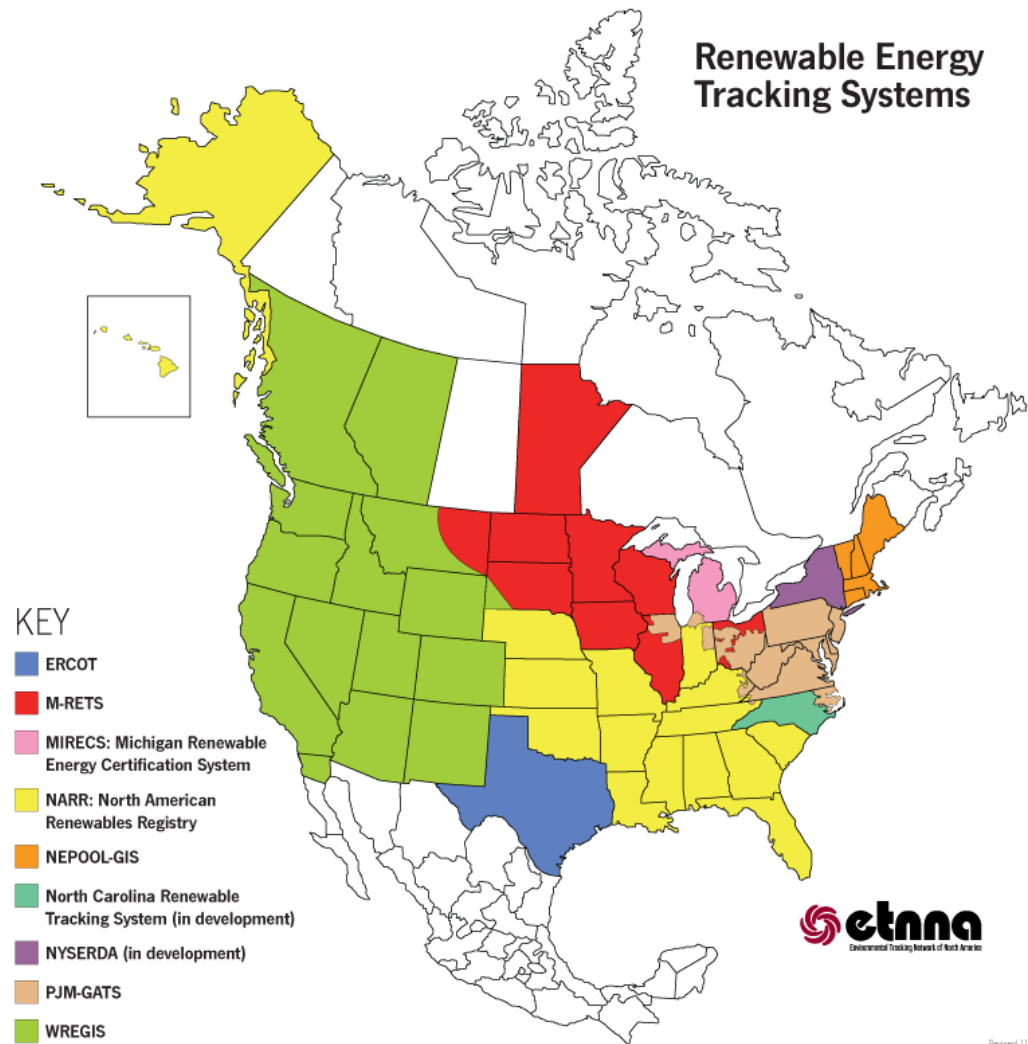


- 35 state RPS obligations/goals
 - Nearly all allow unbundled REC trading
 - Each state has its own REC definition(s)
- 3 regional carbon initiatives

Source: World Resources Institute (<http://www.wri.org/map/regional-and-state-actions-climate-change>)

Physical Delivery by way of Electronic Tracking Systems

- 9 state/regional tracking systems
- Tracking system administrators issue RECs to generators and account holders
- RECs generally transferred and retired within the system
- Limited ability to transfer RECs between systems



Source: Environmental Tracking Network of North America (<http://www.etnaa.org/images/ETNNA-Tracking-System-Map.gif>)

Current REC Markets have their Challenges BUT...

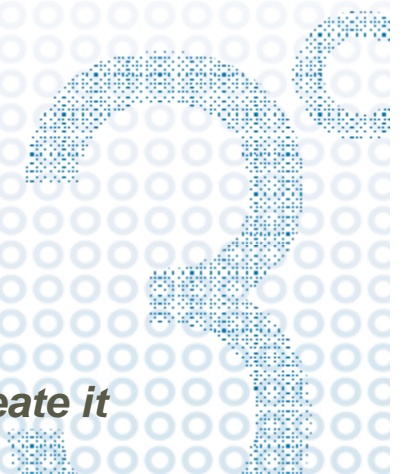
REC market is growing

- Sales of green power using unbundled RECs have increased 300% to 15.6 million MWh (2005 to 2008) NREL
- Nationally accepted standard for RECs (Green-e)
- Price Discovery (for those who want to monitor the marketplace)

REC market is accessible

- Utilities
- Large developers
- Munis and Coops
- Small developers
- Large voluntary customers
- Individuals

Foundation is in place for a National REC- Just need the will to create it



Current REC Markets have their Challenges BUT...

REC markets continue to grow DESPITE difficulties

- Growth will be slower but will continue
- State RPS markets will remain strong
- Markets will remain geographically separate and illiquid but volumes will grow
- Derivatives and futures will continue to be challenged

Still Missing the Key Ingredient for Financial Instruments

- Liquidity, Liquidity, Liquidity
- Financial Instruments need a large pool of liquidity in the underlying physical market to back settlement and delivery
- Current futures and options are viewed as terminal trades – taken to expiration because there isn't enough liquidity to trade in and out of positions

National RPS Enables Development of Financial Instruments

What could a National RPS bring...

- Large, homogenous supply and demand
- Standard financial contract expected – fungibility and quality control
- Defined long term obligations
- Brings all players to the table
- In other words – Liquidity

Financial Instruments

- Index Pricing
- Derivatives
 - Liquid physical market to back futures
 - Options (not insurance policies)
 - More reasonable credit and margin restrictions
 - Inter market swaps





<http://instoresnow.walmart.com/green-living-wind.aspx>



3DegreesTM

Bringing Climate Solutions Down To Earth.

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