

Walmart Renewable Energy

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Renewable Energy Markets
Conference

2005: "21st Century Leadership"



Be supplied 100% by renewable energy



Create zero waste



Sell products that sustain our resources and environment

Renewable energy/energy efficiency goals

- Aspirational Goal: Be served by 100% Renewable Energy
 - Produce/purchase renewable energy at or below utility prices
 - Focus on “on-site” or directed output purchases
 - To date, have not purchased RECs to meet goals
- Complementary Energy Efficiency Goal
 - Develop a store prototype that is 25%-30% more efficient
 - Focus on three energy consuming systems; refrigeration, heating and air conditioning, and lighting

Renewable energy examples

Solar

- 20 solar installations in CA and HI
 - 19 roof mounted systems
 - One 1MW ground mounted solar tracking system
 - April 2009: announced 10-20 additional CA projects

Wind

- April 2009: began buying wind energy from wind farm in Notrees, TX; PPA agreement with Duke Energy
- Testing on-site micro-wind turbine; exploring community wind

Waste-to-Energy/Biomass

- Exploring opportunities

Walmart Notrees, TX Wind Power Purchase

- In late 2008 Walmart and Duke Energy entered into 4-year power purchase agreement
- Began taking delivery in April 2009
 - Will provide approx. 15% of electricity requirements for facilities in the ERCOT deregulated regions of TX
- Projected Annual KWH: 226 Million
- Energy Statistics
 - Equates to providing enough power to serve 20,000 homes
 - Avoids 139,000 metric tons of CO₂
 - Equivalent of removing 25,000 cars off of the road

Key Ingredients/Critical Success Factors

- Takes good partnership with complimentary goals and resources to make the deal work
- Being in a deregulated state is a plus
- Walmart is a licensed REP (Retail Electric Provider) in TX
- Access to Transmission is key
- Having the ability to take 45 MW of capacity

Renewable energy purchasing: lessons learned

- Renewable energy purchases should align with corporate sustainability goals
 - What are your renewable energy goals?
 - What price are you willing to pay?
 - Are you willing to pay premium? How much?
 - Project ownership or PPA preferences?
 - Is REC ownership an issue with your company?
- Need financial modeling skills for renewable energy projects
- Internal education and buy-in is key

Good luck in your renewable energy efforts!

