

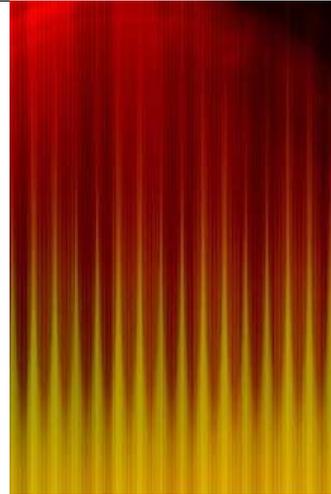


ncGreenPower

The power to choose. The power to change.

Presentation to
Commission on Electric Utility
Restructuring
Special Subcommittee on HJR 686
October 3, 2007





ADVANCED ENERGY

- Founded in 1980 by N.C. Utilities Commission
- Independent 501(c)3 with NCUC as its members
- Primarily funded through NC ratepayers
- Investigate and implement new technologies for distributed generation, load management, conservation and energy efficiency
- Work on energy efficiency and conservation projects

ENERGY

| ENVIRONMENT

| ECONOMY



NC GreenPower Program

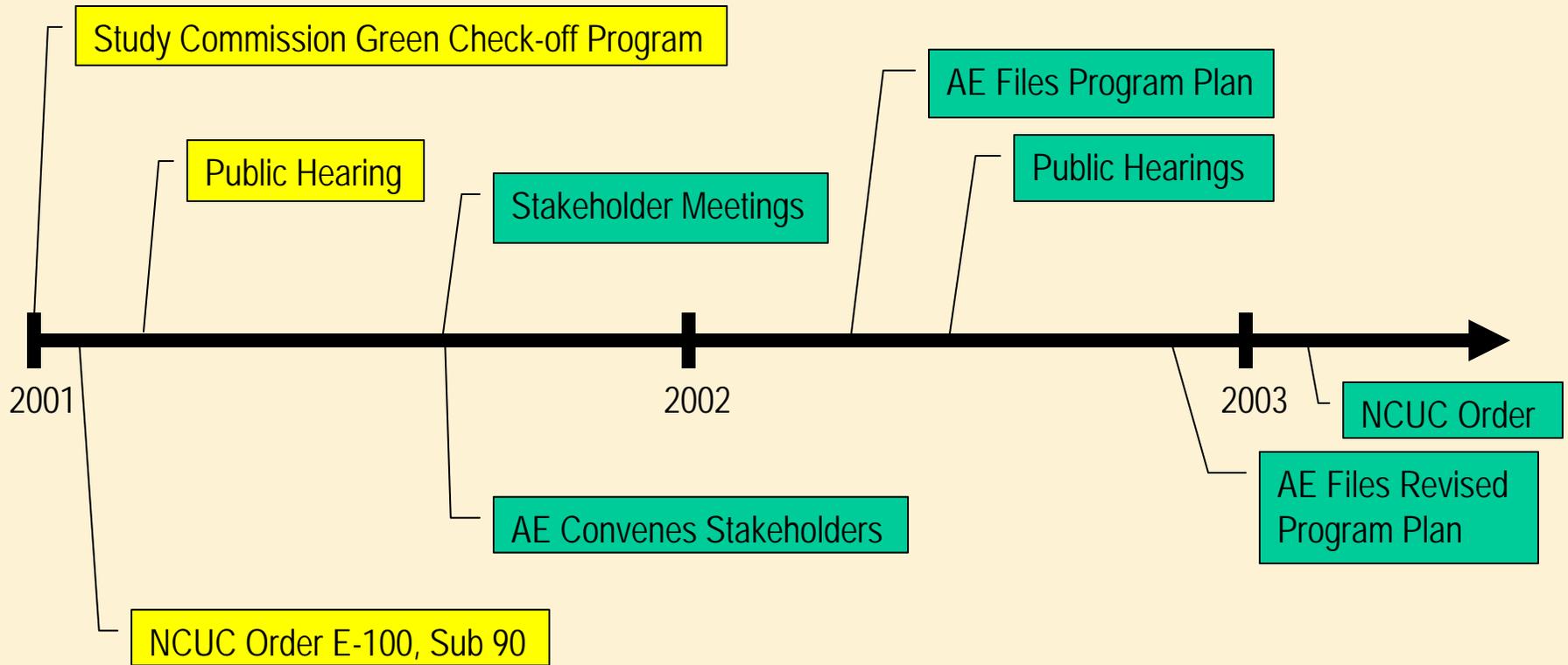
- Originated from recommendation from NC Study Commission on restructuring.
- First green power program developed by key stakeholders and made available on a statewide basis
- Involves IOUs, electric cooperatives and municipalities
- Voluntary and tax deductible
- All renewable projects in NC



ncGreenPower

The power to choose. The power to change.

Timeline



ncGreenPower

The power to choose. The power to change.

Stakeholders

- Investor-owned utilities
- Electric cooperatives
- Municipalities
- Citizen Activist Groups (environmentalists)
- Suppliers (green power generators)
- Governmental Agencies and Regulators
- Consultants



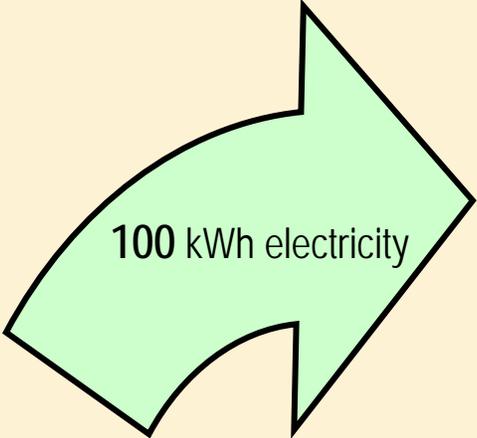
ncGreenPower

The power to choose. The power to change.

The Program

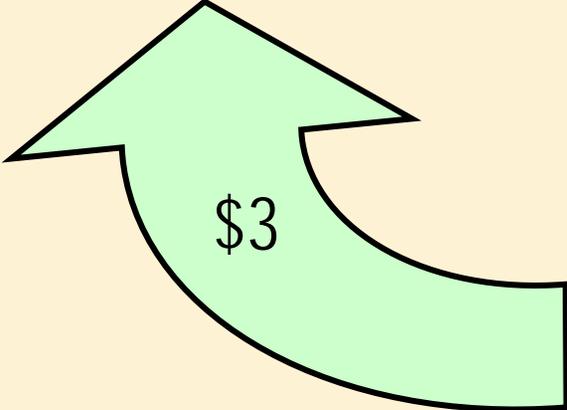
- Participation subsidizes the generation of renewable energy directly from green power producers in North Carolina.
- All monies collected by the utilities are forwarded in their entirety to NC GreenPower.
- NC GreenPower uses the funds to cover the higher costs of adding renewable energy to North Carolina's electric grid.





**Renewable
Generators**

- Solar, wind, methane

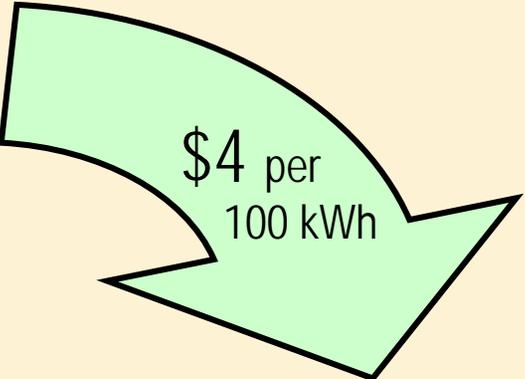


**NC GreenPower
Participants**



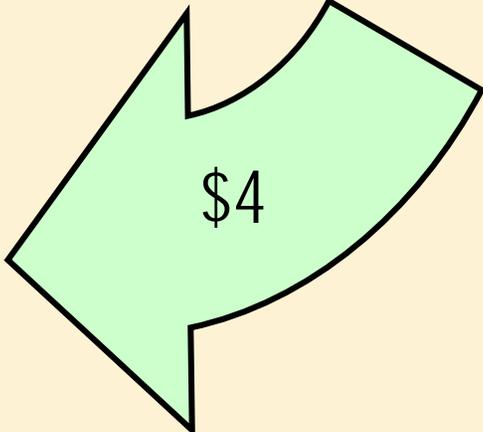
**How
NC GreenPower
Works**

- NC GreenPower**
- Contracts with NC generators
 - Marketing
 - Administration



NC Utilities

- Sign up customers
- Billing and collection



ncGreenPower
The power to choose. The power to change.

NCGP's Mission

NC GreenPower's mission is to improve the quality of the environment by encouraging the development of renewable energy resources through consumers' voluntary funding of green power purchases by electric utilities in North Carolina.



ncGreenPower

The power to choose. The power to change.

Objectives

- Improve quality of environment
- Increase amount of generation from renewable sources
- Create economic and technological benefits through investment in renewable generation

ENERGY • ENVIRONMENT • ECONOMY



ncGreenPower

The power to choose. The power to change.

Program Administration

- Independent 501(c)3 non-profit with Advanced Energy Board as its members
- No employees of its own
- Established and operated by Advanced Energy
 - 7 “Green Team” members - about 4.5 FTE
 - Access to all the Advanced Energy expertise
 - Specific to NCGP – operations, administration, sales, marketing and technical expertise



ncGreenPower

The power to choose. The power to change.

Governance

- 22 member Board of Directors
 - President of Advanced Energy
 - 2 Advanced Energy Board members
 - 7 technology representatives*
 - 6 consumer/environmental representatives*
 - 5 utility representatives
 - 1 Director of NC State Energy Office

(* Appointed by the NC Utilities Commission)



ncGreenPower

The power to choose. The power to change.

Program Funding

- Initial Funding
 - Grant from Smithfield Foods Environmental Enhancement Fund administered by Attorney General's office
 - Advanced Energy
 - Utilities (cash and in-kind)
- On-going Funding
 - Participant Contributions
 - State Energy Office grants
 - Advanced Energy
 - Utilities (cash and in-kind)
 - Duke/Cinergy merger settlement



Program Expenses

- Renewable Energy Agreements
- Administration
- Program Expenses (scaleable)
 - Education and Awareness
 - Marketing and Advertising
 - Sales Efforts



ncGreenPower

The power to choose. The power to change.

Three NC GreenPower Products

■ Mass Market

- Solar, wind and methane
- \$4.00 per block of 100 kWh
- Minimum = one block or \$4.00 per month
- Designed for residential customers and small businesses

■ Large Volume

- Solar, wind, methane, small hydro, and biomass
- \$2.50 per block* of 100 kWh
- *Minimum = 100 blocks or \$250.00 per month
- Designed for businesses



ncGreenPower

The power to choose. The power to change.

Three NC GreenPower Products con't.

- Brokered Bids
 - New product – Summer 2007
 - Solar PV, wind, methane, small hydro, and biomass
 - Designed to be more competitive with market and appeal to large businesses
 - Minimum = \$25,000+ annually
 - Bids received on an on-going basis and are offered to potential corporate sponsors



ncGreenPower

The power to choose. The power to change.

The Supply Side – Renewable Energy

- Payments derived from subscriber contributions
- Available to suppliers selected by bid or fast track
- Paid in addition to payment by servicing utility
- Payments made for actual power delivered to the grid
- Payments vary by resource
- Must be a North Carolina qualifying facility to participate



Generators

- Open bid process for in-state generation
- Evaluation committee reviews all bids
- Agreements negotiated with selected generators; no contract guarantees
- Generator sells energy to utility at avoided cost rate; NC GreenPower buys RECs from energy that is supplied to grid

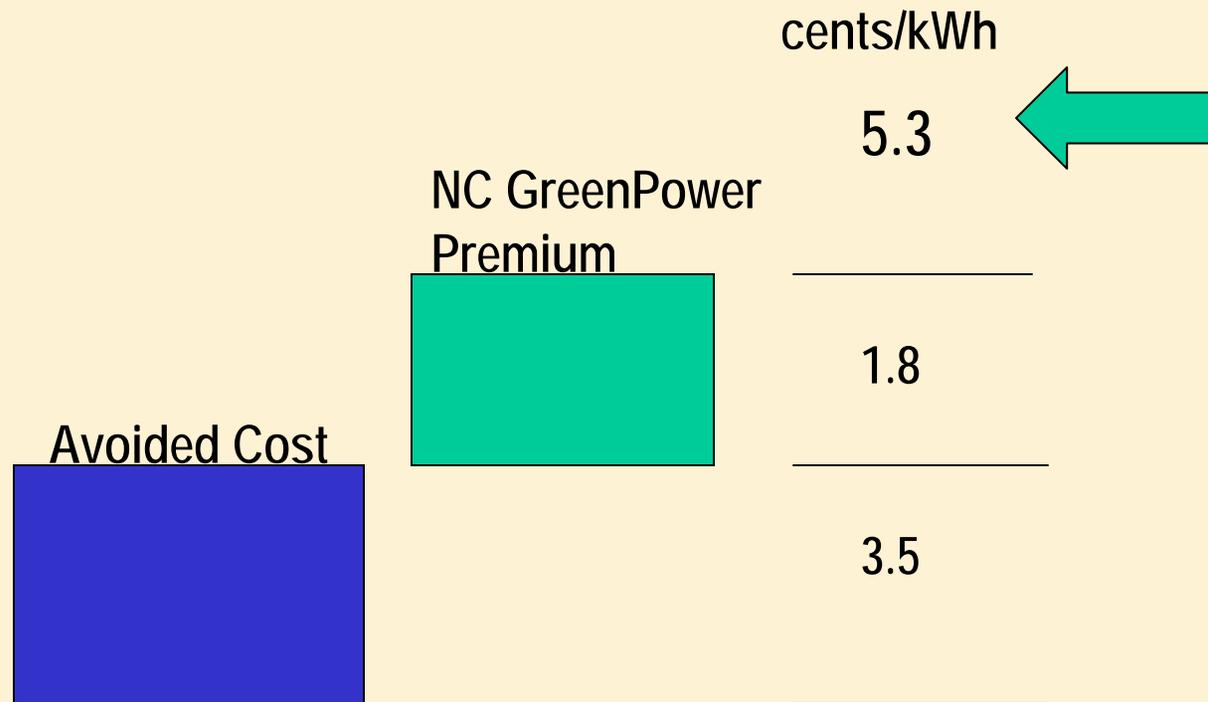


ncGreenPower

The power to choose. The power to change.

Revenue to Generators

(an example)



ncGreenPower

The power to choose. The power to change.

Generators at-a-glance

Agreements as of 10/1/07:

Solar photovoltaic under 10 kW - 86

Solar photovoltaic over 10 kW - 3

Landfill methane gas - 2

Wind under 10 kW - 3

Small hydro (includes aggregation) - 2

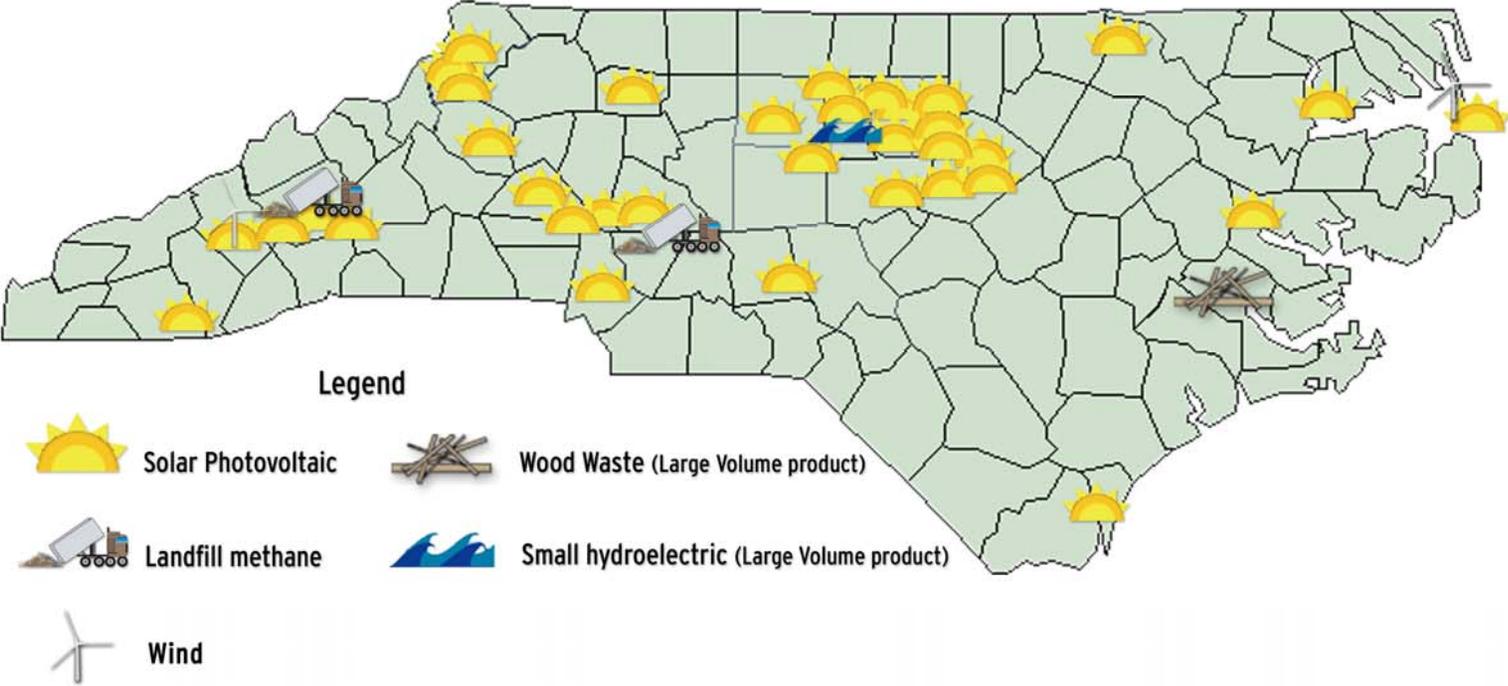
Wood waste - 1



ncGreenPower

The power to choose. The power to change.

NC GreenPower Generators



ncGreenPower
The power to choose. The power to change.



ncGreenPower

Site of NC GreenPower's upcoming press conference to announce its first generation of electricity from landfill methane gas.

Tuesday, March 21, 2006 | 2:00 - 3:00 p.m.







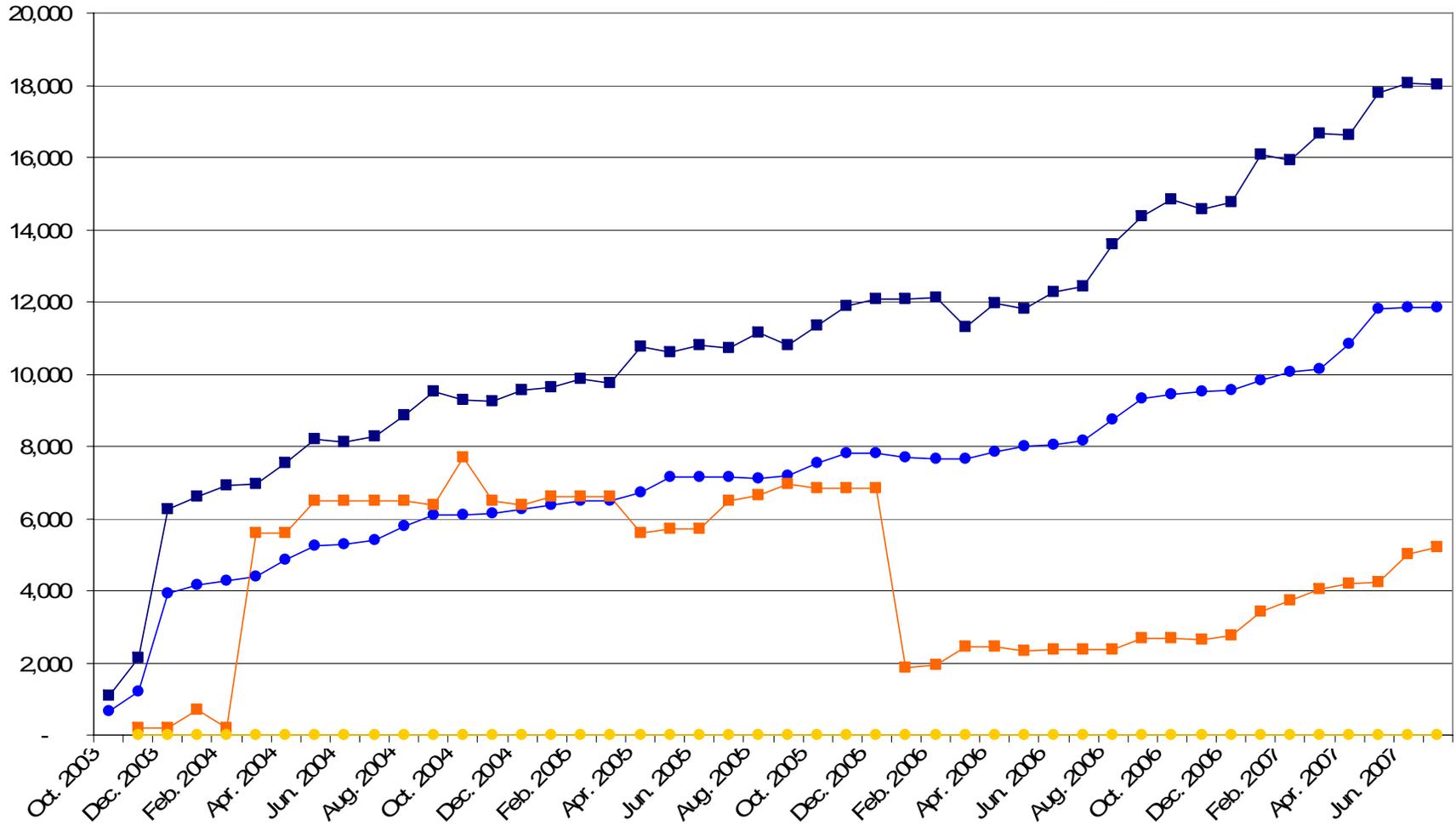
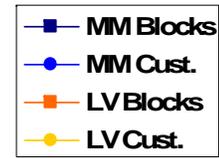
The Demand Side

Program Participation at 7/31/07

- Current subscribers — 11,849
- Monthly blocks subscribed — 23,224
- Annual equivalent blocks subscribed — 278,693
- Annual equivalent energy — 27,869,320 kWh
- Program to date contributions \$2,016,931



NC GreenPower Participation Rates (Since Inception October 2003)



NCGP Messaging

You Can Make a Difference!

- As little as \$4 per month can protect the environment and improve health in North Carolina.
- You have the power to make positive changes for North Carolina's energy, environment, and economy.
- With NC GreenPower, we can bring cleaner sources of energy to our state.
- It's the right thing to do!



ncGreenPower

The power to choose. The power to change.

You are making a difference!

Each \$4 block of NC GreenPower subscribed monthly will annually offset:

- 2497 lbs. of carbon dioxide (CO₂)
- 3 lbs. of nitrogen oxides (NO_x)
- 972 lbs. of coal required to produce the same energy



The annual reduction of CO₂ emissions from one block of NC GreenPower subscribed monthly is equivalent to planting 192 trees or not driving 3,039 miles or 73 days.



ncGreenPower
The power to choose. The power to change.

NCGP's Future

- Marketing funding from Duke/Cinergy merger opened up ability for layered marketing for NCGP
- Grassroots effort still valuable for residential product
- Increase corporate sales efforts
- Still developing marketing opportunities and tweaking the plan based off personal and others' experiences
- Continued utility support and collaboration



ncGreenPower

The power to choose. The power to change.

South Carolina Activity

- Santee Cooper - program operating
- Palmetto Clean Energy – 2008 launch
 - Duke Energy
 - Progress Energy
 - SC Electric & Gas



ncGreenPower

The power to choose. The power to change.

Lessons Learned

- Involve stakeholders to gain buy-in and support
- Utility administration and bill inserts are invaluable expense controls
- Create pricing and products reflective of the local marketplace resources
- Corporate sales quickly add to program success
- Grassroots marketing campaign can be effective if budget is limited





ncGreenPower

The power to choose. The power to change.

NC GreenPower
909 Capability Drive, Suite 2100
Raleigh, NC 27606

www.ncgreenpower.org

866-533-NCGP

