Smart Grid:
Core Firms in the Research Triangle

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Prepared for:
Research Triangle CleanTech Cluster

April 8, 2011
Durham, NC
Manufacturing Climate Solutions

15 Clean Tech studies by CGGC

LED Lighting  Electric Vehicle Batteries  Wind Power
Efficient Windows  Hybrid Trucks  Solar Power
Residential Re-insulation  Rail Cars  Carbon Capture & Storage
Water Heaters  Public Transit Buses  Smart Grid
Hog Waste Treatment  Anti-Idling for Trucks
Recycled Energy
U.S. Smart Grid
Finding new ways to cut carbon and create jobs

National study to be released April 19, 2011
Upcoming Research: NC Focus

**Phase I** (forthcoming)
- Research Triangle focus
- X Core firms
- 13-county map
- Each firm’s “footprint”
- Taxonomy strengths and gaps (preliminary)

**Phase II** (seeking funding)
- North Carolina focus
- Core and linked industries
- Statewide map
- Value chain strengths and gaps (measured in number of firms at core and linked industry levels)
- Supporting industry assets (R&D, workforce development, etc.)
63 core firms in the Triangle

- IT and communications (34)
  - Alcatel-Lucent
  - Elster
  - Google
  - Intel
- Smart T&D hardware (5)
  - ABB
  - GE
  - Schneider Electric
- Energy management (25)
  - Cisco Systems
  - Honeywell
  - Johnson Controls
  - Siemens Energy
- Telecom service (3)
  - AT&T
  - Sprint
  - Verizon
- System integration (2)
  - IBM
  - Red Hat

14 core firms elsewhere in NC

- Charlotte
  - Accenture
  - Capgemini
  - S&C Electric Company
  - Microsoft
  - Oracle
- Greensboro
  - RF Micro Devices
- Shelby
  - Cooper Power Systems
  - Novatech Process Solutions
- Wilmington
  - Sequentric
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<th>Company</th>
<th>Energy storage</th>
<th>Wide area monitoring and control</th>
<th>Renewable and distributed generation</th>
<th>Transmission enhancement</th>
<th>Distribution grid management</th>
<th>Advanced metering infrastructure</th>
<th>Demand response</th>
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- Hardware
- Δ Software & Services
- Energy storage: 3, 3
- Wide-area monitoring and control: 2, 0
- Information and communications technology integration: 23, 22
- Renewable and distributed generation integration: 1, 1
- Transmission enhancement applications: 0, 1
- Advanced transformers: 7, 3
- Distribution grid management: 6, 2
- Advanced metering infrastructure: 12, 19
- EV charging infrastructure: 4, 7
- C & I and residential building energy management: 11, 21
- Demand Response: 1, 8

# of firms in hardware
# of firms in software & services
Thank you for your attention!

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