

**JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE**

**AGENDA**

**March 8, 2006**

**Wilson and Nash Counties**

Senator Swindell, presiding

**Wilson Technical Community College (8:15-9:00 a.m.)**

**Welcome and Introductions**

**Dr. Rusty Stephens, President, Wilson Technical Community College**

Overview of Wilson Technical Community College and the transformation to a "green campus"

**Mr. Hank Widmer, Director, Eastern North Carolina School for the Deaf**

Overview and update on the Eastern North Carolina School for the Deaf

**Wells Elementary School (9:30-11:00 a.m.)**

**Welcome and Introductions**

**Dr. Larry Price, Superintendent, Wilson County Schools**

Impact Schools: The Integration of Technology into Instruction

**The Honorable Beverly Perdue, Lieutenant Governor**

Business Education Technology Alliance (BETA) Report

**Nash Community College (12:30-1:00 p.m.)**

**Welcome and Introductions**

**Dr. Bill Carver, President, Nash Community College**

**Ms. Fay Agar, Principal, Nash-Rocky Mount Middle College High School**

Overview of Nash-Rocky Mount Middle College High School

**Ms. Sylvia Harriss, Director, Communities in Schools of the Rocky Mount Region**

**Red Oak Middle School (1:30-2:30 p.m.)**

**Welcome and Introductions**

**Dr. Rick McMahon, Superintendent, Nash-Rocky Mount Schools**

School Uniforms and Discipline



## **JOINT LEGISLATIVE EDUCATION OVERSIGHT COMMITTEE**

### ***AGENDA for MEMBERS***

**March 7-8, 2006**  
**Wilson and Nash Counties**  
Senator Swindell, presiding

#### **March 7, 2006      Barton College Dinner**

4:00 p.m.                      Check-in Holiday Inn Express, Wilson  
6:15 p.m.                      Depart for Barton College  
6:30 p.m.                      Dinner at Barton College  
                                     Hosted by Dr. Norval Kneten, President, Barton  
                                     College  
                                     Strictly social event-- no Committee business will be  
                                     conducted

#### **March 8, 2006**

7:00 a.m.-7:30 a.m.              Check-out of Holiday Inn Express and travel to Wilson  
                                         Technical Community College  
7:30 a.m.-8:15 a.m.              Breakfast at Wilson Technical Community College  
                                         Hosted by Dr. Rusty Stephens, President, Wilson  
                                         Technical Community College  
                                         Strictly social event-- no Committee business will be  
                                         conducted

#### **8:15 a.m.-9:00 a.m.      Wilson Technical Community College**

#### **Welcome and Introductions**

##### **Dr. Rusty Stephens, President, Wilson Technical Community College**

Overview of Wilson Technical Community College and the transformation  
to a "green campus"

##### **Mr. Hank Widmer, Director, Eastern North Carolina School for the Deaf**

Overview and update on the Eastern North Carolina School for the Deaf



9:00 a.m.-9:30 a.m. Travel to Wells Elementary School

**9:30 a.m.-11:00 a.m. Wells Elementary School**

**Welcome and Introductions**

**Dr. Larry Price, Superintendent, Wilson County Schools**

Impact Schools: The Integration of Technology into Instruction

**The Honorable Beverly Perdue, Lieutenant Governor**

Business Education Technology Alliance (BETA) Report

11:00 a.m.-11:30 a.m. Travel to Nash Community College

11:30 a.m.-12:30 p.m. Lunch at Nash Community College

Hosted by Dr. Bill Carver, President, Nash Community College

Strictly social event-- no Committee business will be conducted

**12:30 p.m.-1:00 p.m. Nash Community College**

**Welcome and Introductions**

**Dr. Bill Carver, President, Nash Community College**

**Ms. Fay Agar, Principal, Nash-Rocky Mount Middle College High School**

Overview of Nash-Rocky Mount Middle College High School

**Ms. Sylvia Harriss, Director, Communities in Schools of the Rocky Mount Region**

1:00 p.m.-1:30 p.m. Travel to Red Oak Middle School

**1:30 p.m.-2:30 p.m. Red Oak Middle School**

**Welcome and Introductions**

**Dr. Rick McMahon, Superintendent, Nash-Rocky Mount Schools**

School Uniforms and Discipline

2:30 p.m. Travel back to Holiday Inn Express parking lot



**From Holiday Inn Express to Hardy Alumni Hall (Barton College)**

From Montgomery Drive, turn left on Tarboro St. Cross Ward Blvd. and Hines St. and continue toward downtown. Cross Nash St. and Green St. Turn left on Vance St. and travel less than one mile to the main entrance of Barton College. Turn right and find visitor parking in the lot on the left. Passengers may be discharged in the traffic circle at the Bell Tower.

**From Holiday Inn Express to Wilson Technical Community College**

From Montgomery Drive, turn left on Tarboro St. Cross Ward Blvd. and Hines St. and continue toward downtown. Cross Nash St. Turn right on Green St. and travel one block to Goldsboro St. Turn left. Travel across the railroad tracks and bear to the left. At the second traffic light, turn right on Ward Blvd. From the center lane, turn left for parking at the Frank L. Eagles Community Business Center. (Room G-237)

**From Wilson Technical Community College to Wells Elementary School**

From the WTCC campus exit on Ward Blvd., turn right on Ward Blvd. and continue through the light at Herring Ave. Cross the railroad overpass in the right lane. At the split at J.C. Harris Cadillac, continue straight in the right lane. At the next traffic light, turn left on Corbett Ave. (Toisnot Middle School is your landmark.) At the next intersection, turn right on Tilghman Rd. Travel less than one-half mile and turn left on Kincaid Ave. Wells Elementary is just ahead on the right at the corner of Kincaid and Grove.

**From Wells Elementary School to Nash Community College**

Leave the Wells campus and turn right on Kincaid. Continue to Nash St. and turn right. Settle down for a drive of approximately 6 miles until Nash St. (NC 58) intersects NC 97. At the light turn right. Travel less than two miles and turn left on Old Carriage Rd. (The Rocky Mount-Wilson Airport is your landmark just ahead on the right.) A drive of approximately 10 miles will bring you to Nash Community College on the left just short of US 64.

**From Nash Community College to Red Oak Middle School**

Exit Nash Community College and turn left. Exit Old Carriage Rd. on to US 64 West. Take the next exit (the first Nashville exit) and at the bottom of the ramp turn right. Travel several miles to Red Oak. At the traffic light, turn right on NC 43 then take the first left on Red Oak-Battleboro Rd. Red Oak Middle is just ahead on the left.

**From Red Oak Middle School to Holiday Inn Express**

Retrace your steps to US 64. Take US 64 East, then exit at I-95 South. Travel approximately 15 minutes to the **first** Wilson exit (Cracker Barrel). At the top of the ramp, turn left. Travel approximately four miles and turn right on Forest Hills Rd. (McDonald's, Golden Corral, Lowe's). At Tarboro St. (CVS and Walgreens), turn left. Montgomery Dr. is just ahead on the left.





*Wilson Technical  
Community  
College*

1



*Wilson Technical Community  
College  
Board of Trustees*

2



*Study By CCBenefits Co.*  
**2004**  
*Socioeconomic Benefits of*  
**Wilson Technical Community  
College**

3



*Student Benefits*

**Some Key Findings**



Achieving an Associate Degree from WTCC will increase earnings to **\$28,057** per year, or **34.9%** more than the average high school graduate.

An Associate Degree Graduate will earn over **\$250,000** more than someone with a high school diploma or GED.



Lifetime earnings will increase **\$4.39** for every dollar invested (tuition, fees, books, and foregone earnings).

4



## *Return to Taxpayers*

### **Narrow Taxpayer Perspective**

**Benefit/Cost Ratio: 3.5** (State Average = 2.7) (Every dollar of state or local tax money invested in the College returns \$3.49.)

**Rate of Return: 23.9%** (State Average = 16.8%) (The state and local tax dollars earn 23.9% on their investment in Wilson Technical Community College.)

**Payback Period: 5.6 yrs** (State Avg. = 7.7 yrs) (Each dollar spent on education at Wilson Technical Community College is repaid in 5.6 years by the extra taxes paid by the student.)

Note that for a public investment, the typical expectation is that the benefit/cost ratio be  $> 1$  and that the rate of return be  $> 4\%$ . As you can see, the results far exceed these expectations.

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## *Enrollment: 10 Year History*

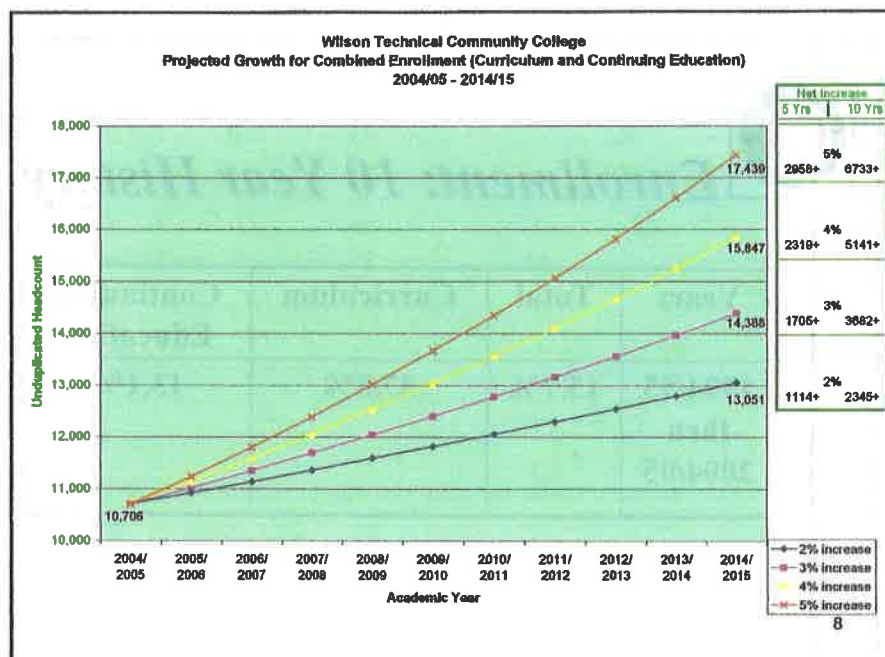
| <b>Years</b>                        | <b>Total</b> | <b>Curriculum</b> | <b>Continuing Education</b> |
|-------------------------------------|--------------|-------------------|-----------------------------|
| <b>1994/95<br/>thru<br/>2004/05</b> | <b>15.7%</b> | <b>37.8%</b>      | <b>13.1%</b>                |

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# 11,000 People enrolled at Wilson Technical Community College last year.

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## ***Master Planning: Looking Ahead 10 Years***

### **Review of mission**

New element - **Sustainability and the Next Industrial Revolution**

### **Programs**

Existing

New

Emphasis on science, technology and business

### **Facilities**

For enrollment growth

For new and revamped programs

Impact on community

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## **Sustainability**

**Defined as: "Development which meets the needs of the present without compromising the ability of future generations to meet their own needs."  
- John Elkington**

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**Sustainability means both  
economy and environment.**

**Environment and economy  
can now be viewed  
holistically as the same thing!**

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*From - Cradle to Cradle:*

*Remaking the Way We Make Things*

*William McDonough and Michael Braungart*

**A brief history of the First Industrial Revolution**

Imagine that you have been given the assignment of designing the First Industrial Revolution -- retrospectively. With respect to its negative consequences, the assignment would have to read something like this:

12



*From - Cradle to Cradle:  
Remaking the Way We Make Things  
William McDonough and Michael Braungart*

Design a system of production that:

- puts billions of pounds of toxic material into the air, water, and soil every year.
- produces some materials so dangerous they will require constant vigilance for future generations.
- results in gigantic amounts of waste.
- measures productivity by how few people are working.

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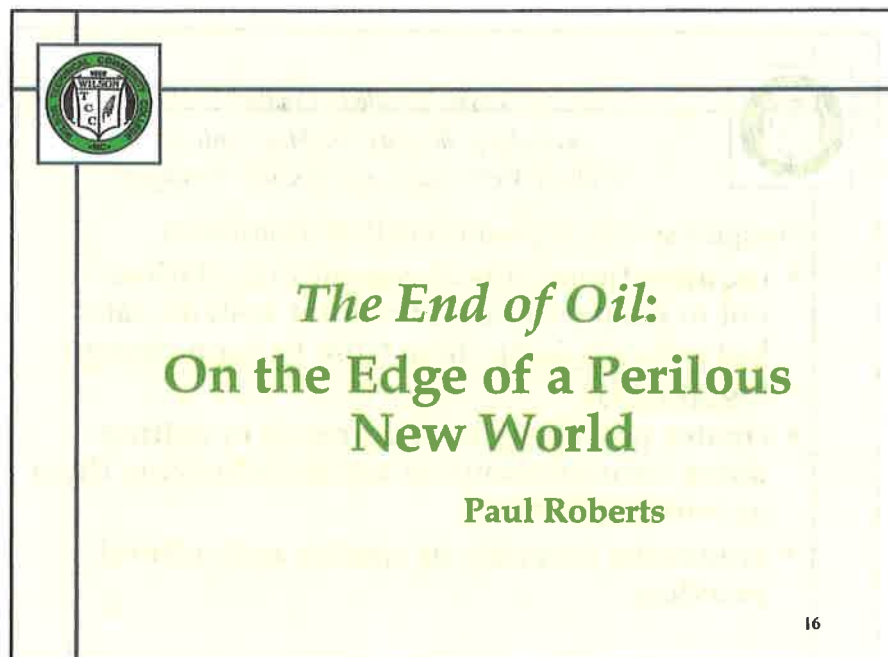
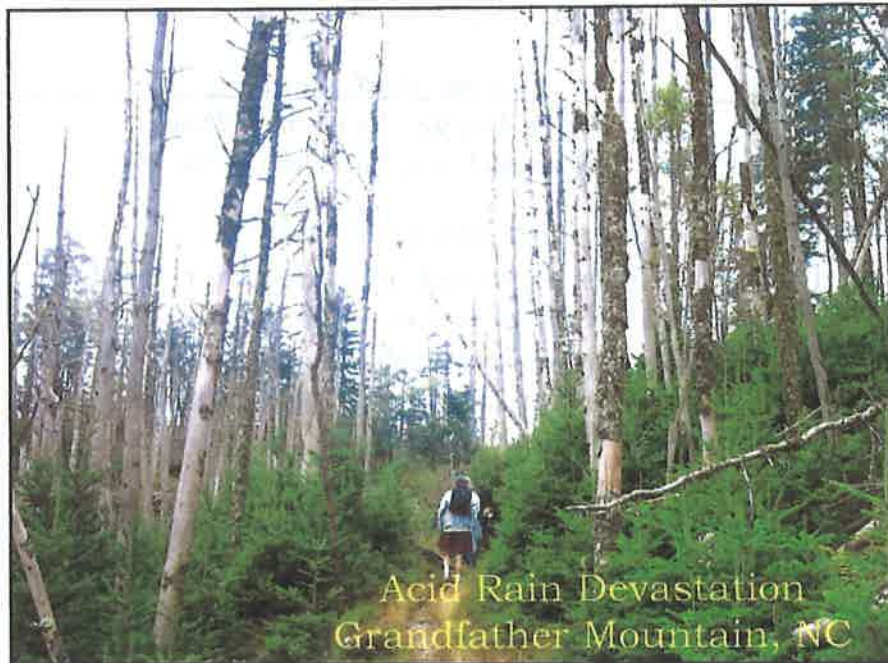


*From - Cradle to Cradle:  
Remaking the Way We Make Things  
William McDonough and Michael Braungart*

Design a system of production that: (continued)

- requires thousands of complex regulations -- not to keep people and natural systems safe, but rather to keep them from being poisoned too quickly.
- creates prosperity by digging up or cutting down natural resources and then burying them or burning them.
- erodes the diversity of species and cultural practices.

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**In short, oil depletion is  
arguably the most serious  
crisis ever to face industrial  
society.** *Paul Roberts*

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**Thus, the real question, for anyone truly  
concerned about our future, is not  
whether change is going to come, but  
whether this shift will be peaceful and  
orderly or chaotic and violent because  
we waited too long to begin planning  
for it.**

*The End of Oil*

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**The End of Oil and the energy crisis it has precipitated is also the single greatest opportunity for humankind since the end of WWII.**

*Rusty Stephens*

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**The world will not evolve past its current state of crisis by using the same thinking that created the situation.**

**Albert Einstein**

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# Not the Same Thinking?

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## Rocky Mountain Institute

### Climate



- Household CO<sub>2</sub> Savings – Lighting Measures

Residential, commercial, industrial, and municipal lighting uses about 22 percent of all the electricity generated in the United States, and accounts for thirty-nine million tons of carbon dioxide emissions. RMI estimates that the technology already exists to cost-effectively save 50-90 percent of the power now consumed by lights in the United States. That would save \$30 billion a year – enough electricity to retire 70 to 120 large power plants – and reduce carbon-dioxide emissions by twenty to thirty-five million tons per year.

An incandescent light bulb costs seventy-five cents or less at the store, but it will typically cost six to ten times that for electricity over its relatively short (750-hour) life. This is because incandescent lights put out more heat than light. In fact, 90 percent of the electricity that runs an incandescent is lost to heat.

Compact fluorescent bulbs are four times more efficient than incandescents, and last nine to thirteen times as long. They cost more up-front, but not over the long term.

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REPLACE ONE INCANDESCENT LIGHTBULB  
WITH A COMPACT FLUORESCENT LAMP AND YOU  
WILL SAVE THIS 500 POUND PILE OF COAL.

National Geographic, August 2005



## *Not the Same Thinking*

At your Community College we  
have begun planning for the  
change from the carbon-based  
energy era to the new era of  
sustainable energy and  
environment - The Next  
Industrial Revolution.

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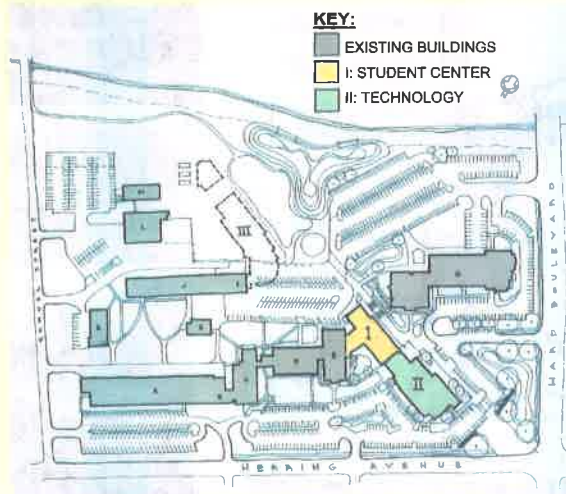


## Programs

- Existing Program Reviews
  - Update and revamp
  - Eliminate
- New Programs Needed
  - List for possible development includes
    - Construction trades
    - Industrial management
    - **Green advantage program**
    - HVAC
    - Mechanical systems - engineering and installation
    - Electrical/electronics instrumentation
    - Agri-business
- New Programs (cont'd)
  - Automotive
  - Diesel
  - Mechanical - Automotive Systems
  - Hybrid engines
  - Automotive & HEO diesel
  - Bio-gas, including all waste fuel (bio-energy)
  - Forest management
  - HEO
  - Landscape Development
  - See nursery greenhouse above

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## Facilities Phasing Master-Plan



### Phase I:

Consolidate Student Services

Retrofit New Classroom in Existing Building

### Phase II:

Science & Technology Building:

- Information Technology
- Sustainable Energy
- Sustainable Design
- Allied Health
- Business Incubators
- Flexible Space

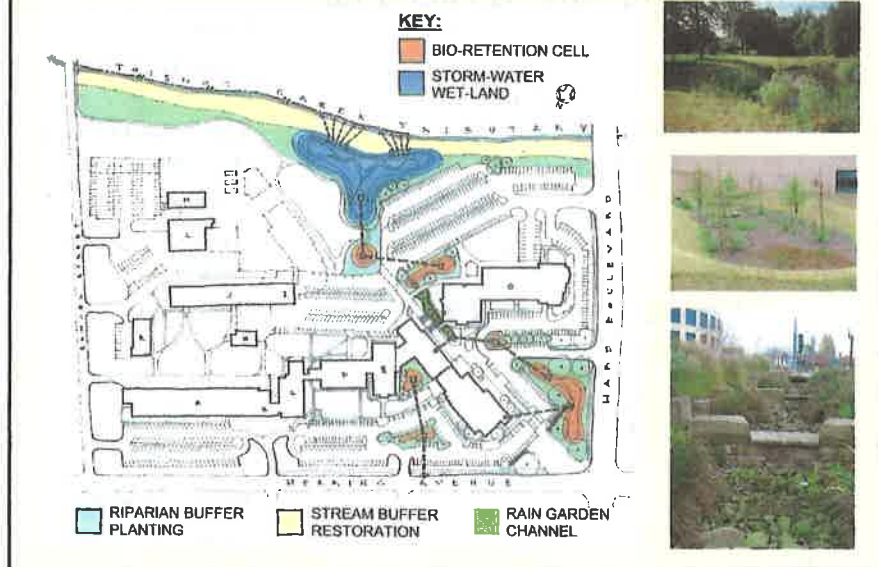
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## Sustainability Elements

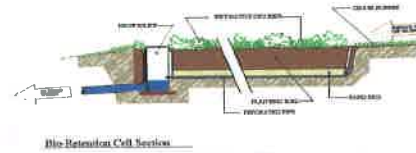
- Photovoltaic [solar cells]
- Geo-thermal
- Recycled carpet
- Day lighting
- Wind turbine
- Non VOC paint
- Site ecology

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## Storm-Water Management Plan

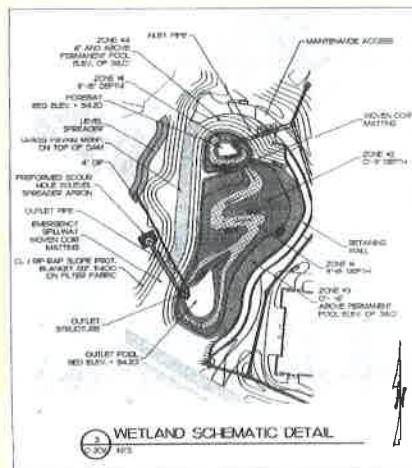


### Bio-Retention Cell Details



## Stormwater Wetland

## Educational Demonstration of Management Techniques that Incorporate Water, Landform, Species Diversity, and the Nature of Succession to Build for a Benefit to the Environment



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## Green Roof Demonstration: Sustainable Site and Energy Concepts



**The Green Roof Assembly**  
The Green Roof Assembly consists of a 4-inch deep growing medium, a 2-inch drainage layer, a 2-inch root barrier, a 2-inch insulation layer, and a 2-inch structural layer. The total depth of the assembly is 12 inches.

**Roofing Membrane**  
The Green Roof Assembly is installed over a waterproofing membrane.

**Drainage/Water Retention**  
The Green Roof Assembly is designed to retain water for up to 24 hours.

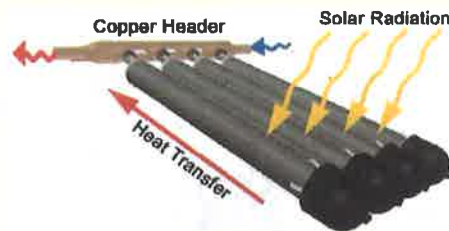
**Insulation**  
The Green Roof Assembly is designed to provide thermal insulation for the building.

**Plant Selection**  
The Green Roof Assembly is designed to support a variety of plant species.



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## Solar Energy: New Evacuated Tube Solar Collectors



www.apricus-solar.com



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## Renewable Energy - Photovoltaic Panels



**Figure 3.24** In this solar house in Oxford, UK, a 1 MWp grid-linked array of monocrystalline PV modules forms an integral part of the roof, alongside solar water heating panels. The PV array supplies the house's annual electricity requirements, plus a small surplus used to provide some of the power for a small electric car

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## Wind Energy - Micro Turbines Integrated into Architecture

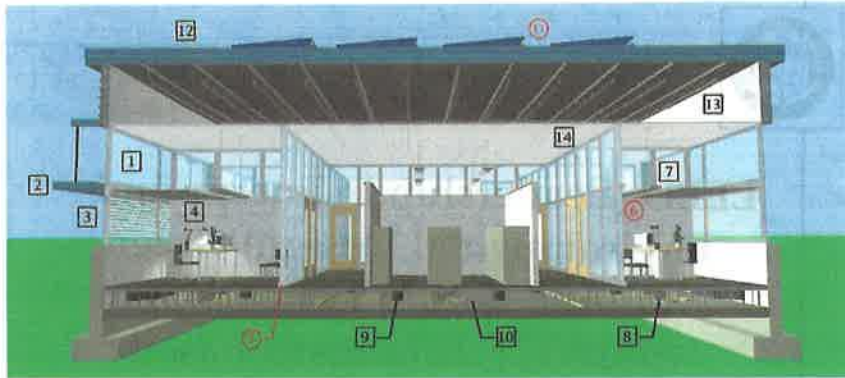


**Figure 7.1** The 70 watt rated Marlec 'Rutland Wind Charger'. Many thousands of small wind turbines like these are in use world-wide.



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## Wilson Technical Community College Student Center



### Sustainable Strategies:

- 1 Generous Daylighting Aperture
- 2 Shading Device on South Elevation to Protect View Window from Beam Sunlight
- 3 Low e View Window
- 4 Interior Light Shelf to Project Light Deep into the Building
- 5 Glazed Removable Partition Provides Natural Light and Views to the Outdoors to Interior Work Spaces
- 6 Lighting Control System Incorporating Photosensors and Occupancy Sensors
- 7 High Efficiency Fluorescent Fixtures with Dimmable Ballasts Tied to Photosensors
- 8 Movable Electrical and Telecommunications Outlets
- 9 Underfloor Air Distribution System Movable Air Diffusers
- 10 Air Plenum Requires Minimal Ductwork
- 11 16,500 kWp Photovoltaic Array Supplying 20% of Building Energy Requirements
- 12 Superinsulated R-30 Roof
- 13 Integrated Structure and Return Air Distribution
- 14 High, Reflective Bright White Ceilings

Funded by a \$100,000 Appropriation from the 2004 North Carolina General Assembly

Willard Fyfe Architects, PA

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**Your Community  
Colleges Can be  
Catalysts for The Next  
Industrial Revolution.**

40



**In summary: We are at the  
turning of the tide. We have  
come to a critical point in  
human history.**

**Like Henry Youngman said:**

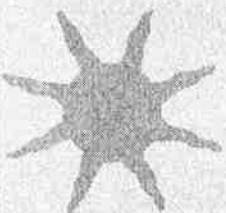
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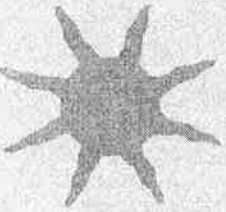
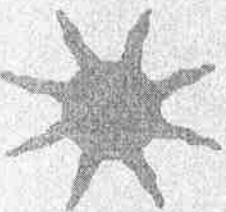


# ***EASTERN NORTH CAROLINA SCHOOL FOR THE DEAF***

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## **PRESENTATION TO THE NORTH CAROLINA GENERAL ASSEMBLY JOINT EDUCATIONAL OVERSIGHT COMMITTEE**



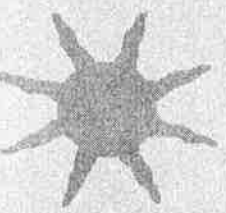
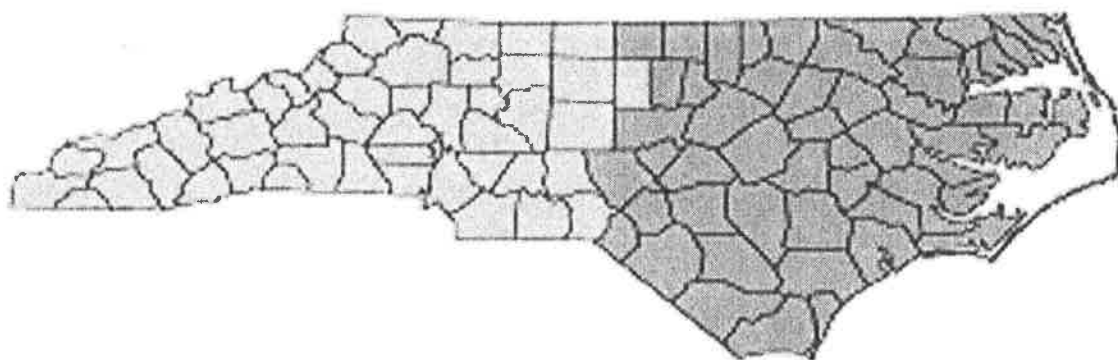
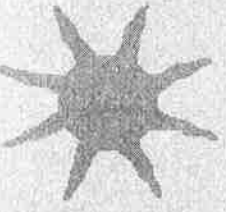
March 8, 2006

Wilson Technical Community College    Henry N. Widmer, Director

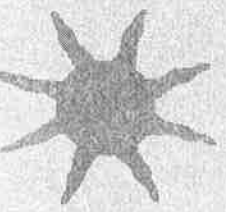


# ***ENCSD CATCHMENT AREA***

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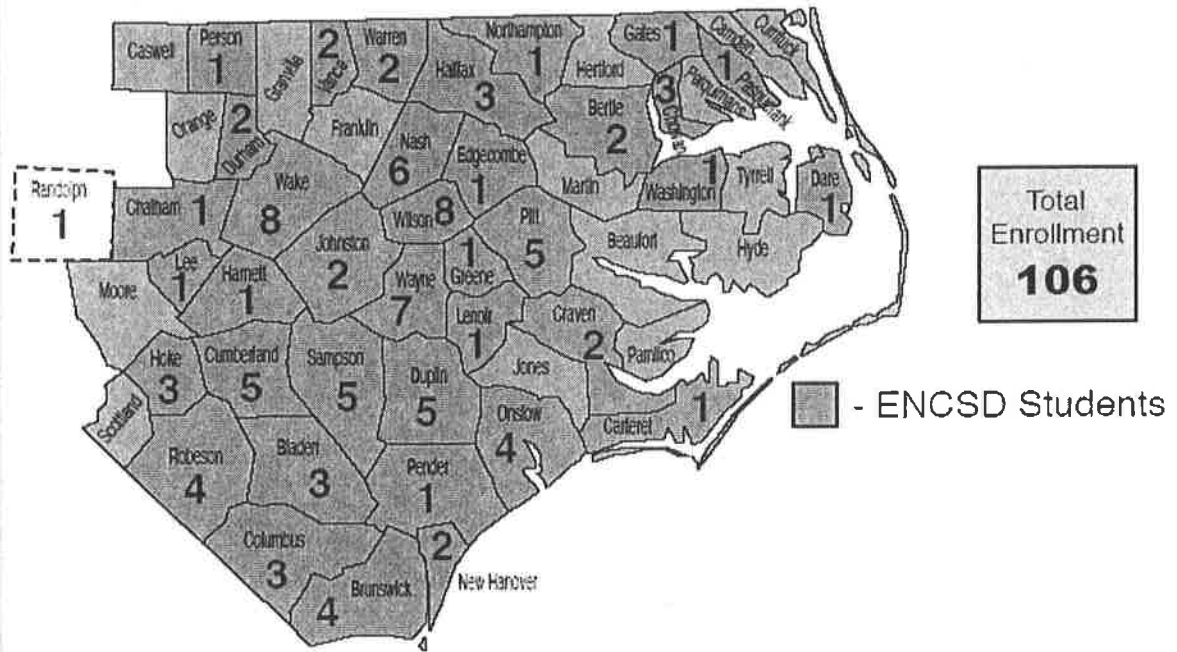


**ENCSD SERVES THE  
EASTERNMOST 53 COUNTIES  
IN NORTH CAROLINA**



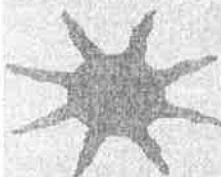
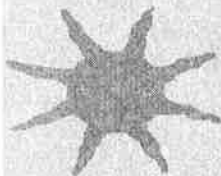
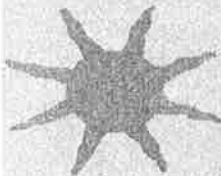


# ***ENCSD CATCHMENT AREA***



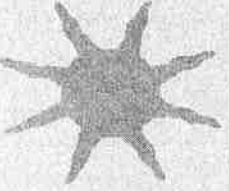
## ***STUDENT AND STAFF ACCOMPLISHMENTS***

- ★ **MET EXPECTED GROWTH**
- ★ **SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS ACCREDITATION**
- ★ **FOUR PATHWAYS TO HIGH SCHOOL DIPLOMA**

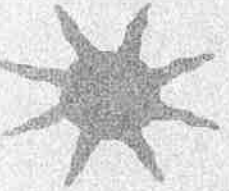




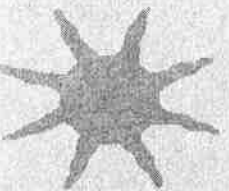
## *POST-GRADUATE STUDY FOR 2004 & 2005 ENCSD GRADUATES*



**50% - EMPLOYED**



**22% - JOB TRAINING PROGRAM**



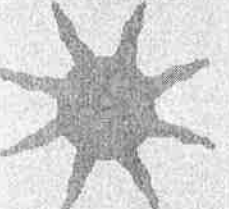
**11% - COMM. COLLEGE/UNIVERSITY**

**6% - EMPLOYED & COMM. COLLEGE**

**11% - UNEMPLOYED**

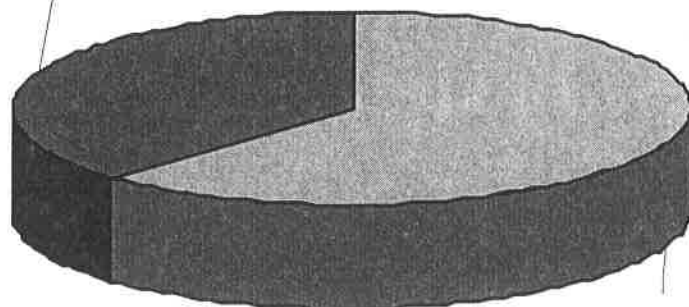


## *ENCSD STUDENT DEMOGRAPHICS ARE CHANGING*



### **ADMISSION OF 16 NEW STUDENTS: 8/05 - 2/06**

**38%**



**62%**

☐ MULTIPLE  
DISABILITIES

☒ SINGLE  
DISABILITY

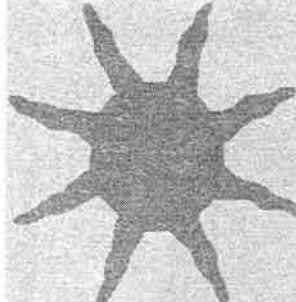
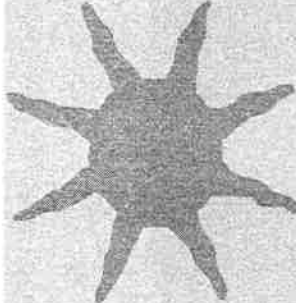
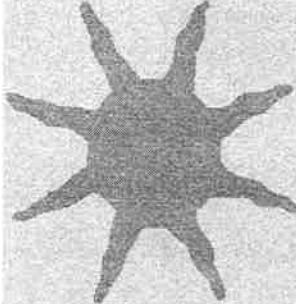


***EASTERN NORTH CAROLINA SCHOOL FOR THE DEAF  
PRESENTATION TO THE NORTH CAROLINA GENERAL ASSEMBLY JOINT  
EDUCATIONAL OVERSIGHT COMMITTEE***

*March 8, 2006*

*Wilson Technical Community College Henry N. Widmer, Director*

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- ★ ENCSD Serves the Easternmost 53 Counties in North Carolina
  - ★ Served 106 Students During 2005-2006 School Year
  - ★ Met Expected Growth Under DPI ABC Program 2 Out Of Last 3 Years
  - ★ Accredited By SACS
  - ★ Offers All Four Pathways To High School Diploma
  - ★ Post-Graduate Study (2004-2005)
    - 50% - Employed
    - 22% - Job Training Program
    - 11% - Comm. College/University
    - 6%- Employed & Comm. College
    - 11% - Unemployed
  - ★ Historically, 30% of ENCSD Students Have Multiple Disabilities: Deaf-Blind, Behavioral/Emotional, Mental, Autism, & Orthopedic Disabilities
  - ★ 2005-2006 School Year Admitted 16 New Students: 62% With Multiple Disabilities and 38% With Single Disability of Hearing Impaired