

Clean Energy Symposium

December 1, 2016

5:30pm **Welcome and Introductions**

5:40pm—6:00pm **Steve Kalland,**
NC Clean Energy Technology
Center

Climate Change, Sustainability, Clean Energy, The Big Picture

6:00pm—6:20pm **Ivan Urlaub**
NC SEA Director

A Vision for North Carolina's Sustainable Energy Economy

6:20pm—6:40pm **Les Hewlett**
ECU Energy Manager

UNC & ECU Renewable Energy Status

6:40pm—7:30 **Panel Discussion**

Sponsored by:

City of Greenville's Environmental Advisory Commission
Cypress Group of the NC Sierra Club



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Dr. Rusty Stephens

Dr. Stephens holds a Bachelor's and Master's degree from Florida State University and an Education Doctorate from Virginia Tech. He has served numerous community colleges throughout the country beginning in 1971. He has held positions ranging from instructor to president and has educated young people from Ohio to Georgia and places in between most recently as President of Wilson Community College. He is a member of the North Carolina Sustainable Energy Association and the Wilson Sustainable Community Council. He was the driving force behind the addition of the 70,000 square foot Student Center LEED Building to the campus of Wilson Community College.

Ivan Urlaub

Ivan Urlaub is the Executive Director of the North Carolina Sustainable Energy Association and serves on the Charlotte Smart Cities Council, *E4 Carolinas'* NC Electric Utility of the Future working group, and RMI's national Electricity Innovations Laboratory (e - Lab) team. Ivan is currently the Technical Principal Investigator on a U.S. DOE grant to craft actionable economic development roadmaps for clean energy product and service R&D, manufacturing and demonstration in NC and the Southeast. Ivan serves on the Three Zeros Advisory Board at UNC-Chapel Hill, he is the founder of the NC Clean Energy Business Alliance and has been recognized by the Charlotte Business Journal as a 2015 Energy Leader for North Carolina. He holds both a Master of Public Policy and a Master of Environmental Management from Duke University.


Steve Kalland

Stephen S. Kalland, Executive Director of the NC Clean Energy Technology Center, currently serves on the Board of Directors of the N.C. Sustainable Energy Association and is a past board member of the Interstate Renewable Energy Council, N.C. Green-Power, and the U.S. Combined Heat and Power Association. He is also on the Advisory Boards of the Research Triangle CleanTech Cluster and the Environmental and Energy Study Institute. Previously, Steve served as project manager with McNeil Technologies, Inc. of Springfield, VA and as the director for Government Relations and Grid-Tied Markets at Xantrex Technology, Inc. and as executive director of the Maryland-DC-Virginia Solar Energy Industries Association. Before that, he was the director of State Programs and Policy Analysis at the national SEIA. Steve graduated from the College of William and Mary in Virginia and received a Master of Science in Public Policy Analysis from the University of Rochester (NY).

Les Hewlett

Les Hewlett is Energy Manager at East Carolina University. After graduating from NC State University with a degree in Electrical Engineering, he was employed by Duke Power Company and, afterwards, Carolina Power & Light Company - from which he retired. Since retirement, he worked as an engineering consultant and volunteered as an energy assessor with Waste Reduction Partners. Les is a Certified Energy Manager and has served as Sustainability Engineer for the City of Fayetteville.

Memorandum

TO: Barbara Lipscomb, City Manager
FROM: Kevin Mulligan, PE, Director of Public Works 
DATE: October 19, 2016
SUBJECT: 2016 Clean Energy Symposium

In March 2007, the Environmental Advisory Commission (EAC) recommended to City Council that Greenville join the Sierra Club's Cool City Initiative by committing to and signing the US Conference of Mayors' Climate Protection Agreement. This initiative was launched to advance the goals of the Kyoto Protocol. Under the Agreement, Greenville committed to take following three actions:

1. Strive to meet or beat the Kyoto Protocol targets in their own communities through actions ranging from anti-sprawl land-use policies to urban forest restoration projects to public information campaigns;
2. Urge their state governments and the federal government to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol -- 7% reduction from 1990 levels by 2012; and
3. Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emission trading system.

The Greenville City Council agreed to participate in the Cool City Initiative, and EAC established a sub-committee called the Greenville Climate Protection Partnership (GCPP). The sub-committee chose to utilize the U.S. Mayors' Climate Protection Agreement - Climate Action Handbook which outlined a 5-step process:

1. Determine the local baseline emissions of global-warming pollutants;
2. Establish a target to lower emissions;
3. Develop a local Climate Action Plan to implement actions that reduce pollutants;
4. Implement the local Climate Action Plan; and
5. Measure, verify, and report performance.

After completion of a baseline inventory, GCPP disbanded. No additional efforts were made to follow up on the remaining milestones as described above. In addition, the City did not maintain statistical data used in the baseline inventory as volunteers completed the effort.

Greenville City government began to implement a series of steps to address greenhouse gas emissions. Actions taken included, but are not limited, to:

1. Requiring that appliances and equipment purchased be Energy Star compliant;
2. Adoption of a policy to implement the Leadership in Energy and Environmental Design (LEED) program when constructing or renovating City buildings;
3. Administrative procedures requiring City departments, where feasible, to purchase environmentally preferable products and services that meet City needs;
4. No idling policies;
5. Award and implementation of the Energy Efficiency Conservation Block Grant (EECBG); and
6. Energy Savings and Performance Contract.

Additional actions may have been taken but are not identified in this memorandum.

Since the Kyoto Protocol was adopted in 2005, levels of global CO₂ have increased with progression of global warming and climate change. Faced with these realities, the Paris Conference on Climate Change in December 2015 reached an agreement to limit global temperature rise to not more than 2°C above preindustrial levels. To achieve this commitment, the federal government has begun to set targets for reducing greenhouse gas emissions in the US. The largest single source of emissions being the burning of fossil fuels for electricity production, the EPA has set a goal of a 30% reduction for North Carolina.

In spite of these actions, global warming and climate change will not be checked until the release of greenhouse gasses is curtailed. This will require significant action at all levels of society. The Cool City initiative of 2007 was a first step in introducing change at the community level. Unfortunately, the initiative was never fully implemented.

The Clean Energy Symposium sponsored by the EAC and the Sierra Club represents an initial effort at reviving the process. The symposium will review the challenge of global warming and climate change and lay out actions and best practices that might be adopted in Greenville. This will set the stage for the City Council to recommit to take action to address greenhouse gas emissions and to set in place an effort to develop and implement a Climate Protection Plan as was included in the original proposal approved in 2007.

The sponsors envision a two-hour symposium to be held in the City Council Chambers during a regularly scheduled EAC meeting. We anticipate our target audience to be 30-50 people from the following groups: Greenville City Council, Pitt County Commissioners, Greenville Utilities Commission, area business leaders, members of ECU faculty and staff, Greenville City employees, and interested parties of the public. More information about the event will be provided as it becomes available.

Should you have any questions, do not hesitate to contact me.

cc: Lisa Kirby, PE, Senior Engineer
Daryl Norris, PE, Civil Engineer II
Durk Tyson, PE, EAC Chairman
David Ames, Sierra Club President