



## 2009 - 2010 ANNUAL REPORT



**NC SUSTAINABLE  
ENERGY ASSOCIATION**

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# Table of Contents

A Message from our Executive Director	3
About NCSEA	4
Financial Overview	
2010 Vision: Solutions Innovation and Member Participation	5
NCSEA's Circle of Influence	6
An Example: NCSEA's Technical Working Group	7
NCSEA Event Highlights	8
North Carolina General Assembly Highlights	9
Streamlining Energy in Government	10
NC Utilities Commission Highlights	
Featured NCSEA Publications: People, Policy & Markets	11
2010 New Member Benefits	12
Focus on... Building Codes and Energy Poverty	
Empowering the Southeast	13
Focus on... NC Rising as the "New Energy State"	
NCSEA Appointments & Leadership	14
A Look Back in NC History: Energy Efficiency	
2010 Board of Directors and NCSEA Staff	15



**NC SUSTAINABLE  
ENERGY ASSOCIATION**

## A MESSAGE FROM OUR EXECUTIVE DIRECTOR

Dear Friends:

In my five years leading the North Carolina Sustainable Energy Association, we have learned that people, policy and markets are the three critical ingredients for growing North Carolina's sustainable energy economy. From these three drivers flow thousands of new jobs, billions in new investments, leading academic and industry innovations, price competition, consumer affordability, reliable electricity, and collaborative learning.

**Despite Recession, Demand Rising for NCSEA** – Facing the dual challenge of a major recession and an explosion in demand for NCSEA's programs and expertise, the staff and Board decided it was time to restructure your organization, membership benefits, and program priorities to deliver innovative solutions to our greatest energy challenges while facilitating your participation in NCSEA.

**Member Participation** – NCSEA members know the "green economy" doesn't just happen – you are the leaders creating it in the private sector, your communities and across government each day. NCSEA has responded to requests for what you need: a robust new website, more online and in-person events, clarified member benefits, and more public information valuable for planning and implementing your business models and advancing sustainable energy at home, at work, in government and across our communities.

In 2009 and 2010, NCSEA focused on increasing business engagement through our new Energy Executive Roundtable, and advisory and working groups in finance, energy efficiency, and solar. Together, we are clarifying current barriers and developing responsible, affordable, and reliable solutions for all North Carolinians.

**Policy Overcoming Barriers** – North Carolina's "green energy economy" has been allowed to grow in 2008 and 2009 as a result of dozens of favorable regulatory decisions and passage of more than 70 sustainable energy legislative bills since 2005 – most of these actions informed and led by NCSEA and our members. This success has come full circle, and the next generation of policy and regulatory barriers preventing new growth of our sustainable energy economy have emerged – barriers that are fundamental to the long-term affordability, security, and resiliency of our entire energy economy. It will not be easy for entrenched interests to confront and solve them without embracing change.

**Measuring Markets and Learning** – Our "Circle of Influence" non-profit model enables us to measure the impact of our education and public policy programs on our energy economy and specific sectors in the supply chain. NC is the first state to deliver a multi-year census of sustainable energy employment, revenues, and barriers in the nation – our information and analysis is now identifying where North Carolina can successfully compete in the new global energy economy. In fact, in 2009 all 100 counties were home to one or more energy efficiency or renewable energy companies, employing more than 10,250 people in our State and generating in excess of \$3.5 billion in annual revenue.

You are part of a community of business, individual, government and non-profit leaders engaged in creating our sustainable energy future – you are NCSEA.

Thank you for your support of the North Carolina Sustainable Energy Association!

- Ivan Urlaub



Ivan Urlaub has led the NCSEA team since 2005.

## ABOUT NCSEA

Founded in 1978, the North Carolina Sustainable Energy Association (NCSEA) is a 501(c)3 non-profit membership organization of individuals, businesses, government and non-profits interested in North Carolina's sustainable energy future. Located in Raleigh, but active throughout the state, NCSEA is the only non-profit in North Carolina devoted to leading public policy change and driving market development in ways that will create green jobs in a new energy economy.

NCSEA knows that it takes much more than one program, policy or group to achieve a sustainable energy future and economy for NC, which is why we work with NCSEA members, government officials, business leaders, communities, partner organizations and the general public. We believe the key to success is through removing policy barriers to market development, advocating for policies that will lead to a sustainable energy future, and educating North Carolinians about sustainable energy - all of which will help the industry grow.

## FINANCIAL OVERVIEW

NCSEA's fiscal year ran July 1, 2009 through June 30, 2010. Due to several aggressive changes by the NCSEA team, we weathered the current recession to end the fiscal year close to net zero income.

Income-related actions included: enacting our new dual business model of solutions innovation and member participation, clarifying membership benefits and overhauling membership dues structure (resulting in 89% year-on-year increase in membership dues), and diversifying foundation funding to offset 6% reduction in year-on-year foundation funding. Business memberships increased, largely due to NCSEA's past success in removing policy and regulatory barriers to sustainable energy development that resulted in new opportunities for businesses.

### Fiscal Year Ending June 30, 2010 \*

INCOME	\$713,458
Foundations	\$532,668
Contributions	\$31,985
Membership Dues	\$73,348
Event Income	\$71,976
Other Income	\$3,481
EXPENSE	\$708,816
Wages & Benefits	\$497,471
Office and Administration	\$70,109
Membership Related Total	\$5,193
All Other Program Costs	\$136,044

\* Unaudited results. Audited results will be available by November 15, 2010.

Efficiency and austerity measures included: flattening NCSEA's organizational hierarchy by eliminating "Development Director" position and transitioning to more collaborative team fundraising and policy program model, scaling back or eliminating net revenue negative events such as the Green Building & Solar Tour, and leveraging significant pro bono professional expertise from NCSEA members and academic institutions.

Wages and benefits comprised nearly 70% of expenses due to three factors: 1) strengthening our focus on educa-

### NCSEA By The Numbers

- ◆ 6 NCSEA hosted events with total approx. attendance of 17,275 people
- ◆ Delivered 86 public presentations to total estimated audience of 21,950 people
- ◆ 47,665 website visits in FY2009-10 from 134 countries, all U.S. states, 75% of visits from Southeast US, and more than 300 NC towns and cities
- ◆ Approximately 122,650 people educated by NCSEA events, presentations, publications and website
- ◆ 5 major reports: Citizens Guide update; Industries Census; 2010 Legislative Guide; 2009 Legislative Wrap Up; 2008-2009 Annual Report
- ◆ 6 full time and 3 part-time employees, 4 graduate student interns
- ◆ Hired two new positions: Education & Outreach Manager and Manager of Market Research
- ◆ Over 30 of legal documents filed
- ◆ 13 of 16 legislative priorities passed
- ◆ 499 Members

tion and outreach staff, programs and technologies, 2) training staff instead of hiring consultants, and 3) retaining staff by changing employee benefits to be comparable with comparable private sector firms and government agencies looking to hire NCSEA staff. These measures have improved efficiency and impact of NCSEA's operations and programmatic work while retaining unique institutional knowledge that makes NCSEA a high value relationship for government, the private sector, academia and non-profit partners. NCSEA received no state or Federal government funding this fiscal year.



## 2010 VISION: SOLUTIONS INNOVATION AND MEMBER PARTICIPATION

In 2010, NCSEA is leading the Southeast in economic and policy changes that are accelerating adoption of renewable energy and energy efficiency solutions and driving industry growth. We strive to be the “go-to” organization in North Carolina for information, education, leading policy change and accelerating development of our sustainable energy economy. To achieve a sustainable energy future, we focus on two practice areas:

**Solutions Innovation** - We aim to be the leader in facilitating implementation of energy efficiency and renewable energy solutions through policy, information and market development programs. We are developing an expertise internally and in our partners in the areas of energy economics, regulation, energy efficiency, and renewable energy technologies and market development pathways that is leading to improved policy options and facilitating development of our energy markets.

**Member Participation** - We are growing the number and involvement of our individual and business members and increasing the number, breadth and geographic scope of partnerships, coalitions and affiliations that can support sustainable energy. We engage more sustainable energy constituents each year with reliable market information, policy analysis, training and collaborative opportunities.

During our 2009-10 fiscal year we added staff to build professional communities and shared knowledge, adopted technology and communications solutions to expand and deepen NCSEA’s impact, and further laid the policy foundation for long-term growth of the sustainable energy economy. We also introduced new member benefits in June 2010 to deliver valuable information and engage our member community.

In the next year, we are poised to take advantage of some key opportunities to further the growth of North Carolina’s sustainable energy future:

1. Build on our role as the “Go-To” sustainable energy policy experts in the state by delivering insightful policy and market analysis to accelerate sustainable energy growth.
2. Create an engaged and educated constituency and a more networked community of professionals and state and community energy leaders.
3. Be a catalyst for improving interaction between all sustainable energy constituents - learning and teaching together.
4. Implement a Win/Win strategy in energy policy that works for our hard-working ratepayers, competitive sustainable energy businesses that are delivering renewables and efficiency products and solutions reliably where allowed to do so, the regulated electric utilities concerned with preserving earnings and minimizing risk, and all our state's electric service providers.

To find this winning path, NCSEA is leading and participating in several collaborative industry and stakeholder efforts.

### 2009 - 2010 HIGHLIGHTS

- NC efficiency and renewables jobs increase 6% while state loses 5% of jobs
- NC State’s FREEDM Center leaps forward on smart grid, electric vehicles and more
- Streamlined role of energy in government, brought together in Commerce under new Assistant Secretary of Energy
- Renewable energy investment tax credits extended to 2016, geothermal & CHP added
- Interconnection standards for renewables expanded to 10 megawatts, costs of interconnection reduced
- 48 sustainable energy bills were introduced in 2009 legislative session
- NC ranks 10<sup>th</sup> in new solar capacity in 2009, and 11<sup>th</sup> in total solar capacity
- NC home to world’s largest solar thermal hot water system
- Amory Lovins and Tom Henkel inducted into NCSEA Solar Hall of Fame
- NC moves from 46<sup>th</sup> to break into Top 30 U.S. states for energy efficiency policy, programs
- Progress Energy announces plans to retire several coal power plants
- NCUC prepares to launch NC Renewable Energy Tracking System (NC RETS)
- Energy saving performance contracting ceiling increased by 300%
- NC Energy Policy Council re-invigorated to identify more sustainable energy policy path for State
- Legislative Climate Change Commission issues final report after 4 years
- Revolving loan funds authorized for efficiency and renewable
- NC receives \$275 million in energy stimulus funds

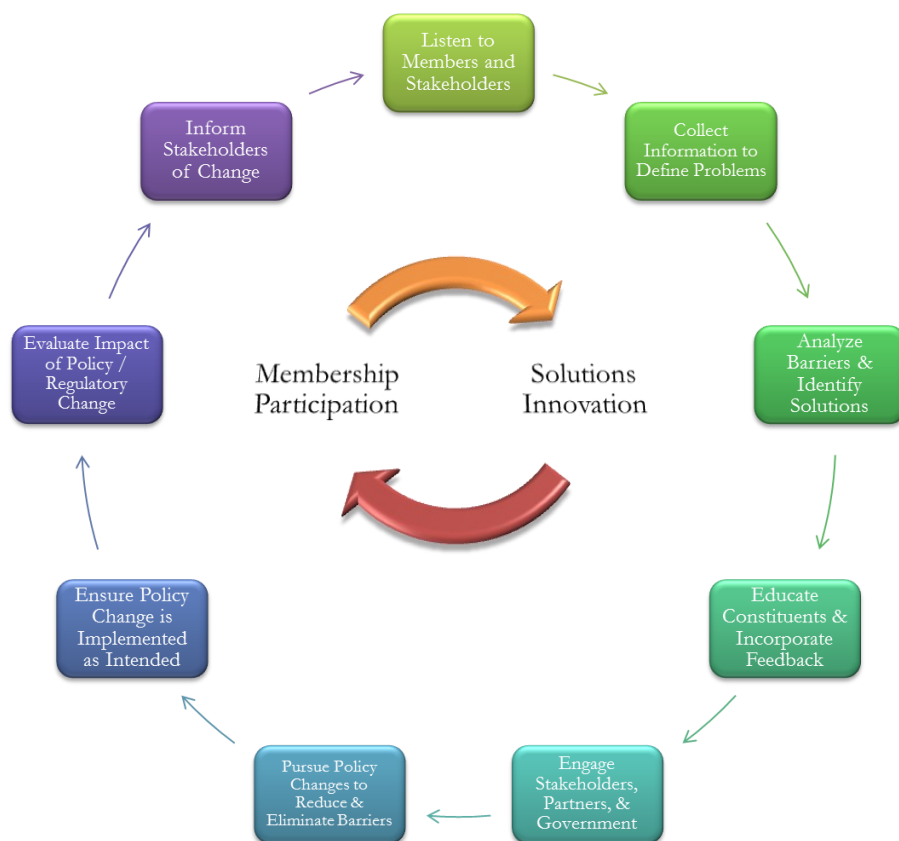
## NCSEA’S CIRCLE OF INFLUENCE

To advance North Carolina toward a sustainable energy future, NCSEA connects people, information, and policy with our markets to identify our energy challenges and turn them into opportunities for all North Carolinians. We do this by applying our Circle of Influence (see diagram below), which creates a constant feedback loop between our two business models: membership participation and solutions innovation.

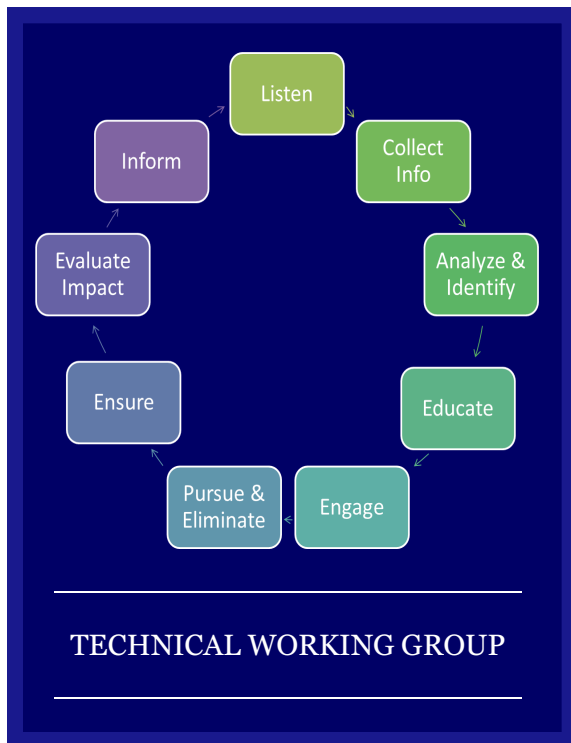
Direct participation by NCSEA members and constituents informs our education, public policy, and market development work. NCSEA staff and advisory groups use this information to identify, analyze and prioritize our State’s energy challenges and develop innovative policy and market-based solutions to move North Carolina forward.

NCSEA’s work never really ends – our Circle of Influence is like an upward spiral of North Carolinians working and becoming more sustainable together. Daily, we manage programs and initiatives at every stage of our Circle. We define problems, identify solutions, educate and get feedback on possible solutions, then engage decision-makers and those who influence them to refine and adopt solutions, and once solutions are adopted we work hard to ensure appropriate implementation. As implementation progresses, we measure whether our State’s energy policy and market-based solutions had the desired impact of creating a more sustainable energy economy, and incorporate these lessons learned back into all of our on-going work and the work of others impacting our energy future.

NCSEA’s circle of influence extends our reach into North Carolina’s business, government and non-profit communities. It is our goal to keep moving through the stages of this cycle to create a supportive legislative and regulatory environment for sustainable energy in North Carolina, to help our businesses offer competitive products and services into a functional, transparent market place, and to develop an engaged community that advocates for sustainable energy policies and makes informed choices in the marketplace. Together, through this continuous cycle of influence, we create a more sustainable, successful reality for all North Carolinians.



## AN EXAMPLE: NCSEA TECHNICAL WORKING GROUP



NCSEA's Circle of Influence is implemented in many stages of its work. For example, the **Financial Incentives Working Group** which was started in November 2009, and covered issues from homeowner renewable energy and energy efficiency installation tax credits to manufacturing tax credits. The group was made up of 8 NCSEA business members involved in 6 industries, plus two expert advisors and two NCSEA staff. Meeting every 2 to 4 weeks, the committee shares knowledge on the financial incentive barriers businesses face, such as the recession's debilitating impact on being able to find the same investor to monetize both state and Federal tax credits. The Committee helped NCSEA identify, analyze and prioritize several barriers before identifying potential solutions, such as working with the Department of Revenue and recommending legislative actions.

NCSEA staff and some committee members then vetted identified barriers and solutions with stakeholders, partners and government. Out of this invaluable work, NCSEA staff was able to propose a handful of specific legislative proposals. By the end of NCSEA's fiscal year, all proposals to improve state sustainable energy tax incentives appeared on track for passage except one.

The financial incentive changes implemented by this group and NCSEA's partners helped ensure that Federal 1603 renewable grants in lieu of Federal tax credits, would not be considered public funds and taxed by the State, and the definition of "installation" was clarified effectively reducing the installed cost of future renewable energy systems, and several other key changes were made. This information was shared with all NCSEA members and constituents across North Carolina and nationally. NCSEA also continues to evaluate the impact of any regulatory policy change acted on by the financial incentive working group.

**"The big issue is market awareness and education... Despite dramatic financial benefits, companies in particular are not spending. The industrial and manufacturing industry in particular, would benefit greatly from more accessible financing both in terms of procedures and actual funding."**

**"...We are most concerned about the renewal and extension of the state renewable energy tax credits. As a new company in a potentially emerging industry, these credits are critical to our successful deployment of systems statewide, and creating jobs in the area." - NCSEA member**

*Outcome – NCSEA helped pass HB1829, by using website blogs to update visitors on progress and implementation, and conducted webinar to discuss how provisions of 1829 (and other legislation) would impact North Carolina businesses. A 4 page whitepaper was composed for member companies. Also revised 2010 census to identify where companies felt awareness and education was lacking, and what NCSEA should do to improve on this dynamic. Result is that we have a matrix of events and support broken down by focus area and markets that will help us provide the information companies need for their business units, ultimately saving them time and money by not having to research these things themselves.*

## NCSEA EVENT HIGHLIGHTS

Over the last year, NCSEA has increased the number of events, attendees and sponsor revenue with each event. This has helped to spread NCSEA's message and branding, promoted our work, increased our membership, and diversified our revenue model. In the future, we plan to hold additional statewide and regional events in addition to webinars and other online training events.

### **October 8 & 9, 2009 – Growing North Carolina's Green Energy Economy: Learning, Connecting & Creating Opportunities Together.**

More than 400 leaders from communities across North Carolina attended NCSEA's Networking Reception and daylong forum at the Charlotte Convention Center. The event featured remarks by **Amory Lovins**, co-founder of the Rocky Mountain Institute, a highly-acclaimed author and one of our nation's leading voices on renewable energy technologies and energy efficiency solutions, **John Morrison**, North Carolina's new Assistant Secretary of Energy at the Department of Commerce, and Charlotte's Mayor **Pat McCrory**. Highlights of the event included the release of the long-awaited **2009 Renewable Energy & Energy Efficiency Industries Census**, the election of NCSEA's **2010 Board of Directors**, informational panel discussions, presentations, Q&A sessions, remarks by and the announcement of the **2009 sustainable energy awards**.



### **October 3, 10 & 17, 2009 – NC's Green Building & Solar Tour.**

NCSEA, in partnership with local organizers and the American Solar Energy Society, hosted the annual Green Building & Solar Tour over three weekends to educate over 1,200 citizens with the most up-to-date information on a wide range of green building solutions, sustainable energy technologies and energy efficiency measures. Tours were held in communities across NC including: Asheville, Boone/High Country, Chatham County, Durham County, Greenville, Hendersonville, Hickory, Raleigh/Wake County, Wilmington and Winston-Salem.

### **December 10, 2009 – NCSEA's Holiday & (New) Office Warming Party.**

NCSEA and our Board of Directors were joined by close to 100 members, supporters and friends at our Holiday Party, which also gave everyone a chance to check out the organization's new office in the historic Pilot Mill.

### **February 24, 2010 – Building a Renewable Energy Industry in the Charlotte Region.**

More than 320 business and energy leaders, government officials and economic development experts joined NCSEA for a unique public policy forum and networking reception at the US National Whitewater Center in Charlotte. The event provided an overview of pending energy policy legislation that could create market opportunities for the Renewable Energy Industry in the Charlotte Region. This event also focused on the feed-in rate financing mechanism, which has been used successfully by countries around the world and in the US, including Gainesville, FL.

### **May 17, 2010 – Energizing North Carolina's Future: Economic Outlook & Policy Forum.**

Over 150 of North Carolina's top energy, economic, government and business leaders joined NCSEA at the McKimmon Center on May 17, 2010 for timely discussions and presentations regarding our state's economic outlook and the important role that our renewable energy and energy efficiency companies will play. The event featured remarks by NC's Dept. of Commerce Deputy Secretary Dale Carroll, Bob Conner of Sempruis, and NCSEA's Ivan Urlaub. These speakers shared their valuable insight and expertise on the tremendous potential of North Carolina's green energy economy and how our state's renewable energy and energy efficiency companies can work together to create more jobs and economic opportunities while addressing current economic and market barriers facing our industry. The event also featured NCSEA's first "Energy Executives Roundtable" with our Business Members. Speakers discussed NCSEA's 2010 legislative agenda and the energy-related issues expected to come up in 2011. Participants also gained valuable "expert" advice from Sen. Josh Stein and other legislative insiders on how sustainable energy business owners can become more active, engaged and successful in the legislative process.

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“Working to ensure a sustainable future by promoting renewable energy and energy efficiency in North Carolina through Education, Public Policy, and Economic Development”

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# NORTH CAROLINA GENERAL ASSEMBLY HIGHLIGHTS

As part of NCSEA's education and public policy work, our staff leads and participates in collaborative stakeholder discussions and educates and advises legislators and decision makers on issues and bills of importance. The majority of the 2009 and 2010 legislative sessions occurred within NCSEA's 2009-2010 fiscal year. In the recent biennium, legislators grappled with massive budget shortfalls and a weaker economy, preventing most legislation from being considered. With few exceptions, only those industries bucking the trends of the recession by creating jobs and revenues – like the efficiency and renewables industries – were considered for improved tax credits and other expansions of market-based policies.

In fact, more than 45 sustainable energy related bills were introduced in the 2009 legislative “long session” with 18 becoming law. An additional 22 sustainable energy-related bills were introduced in 2010. Of these 67 bills, NCSEA prioritized a subset of 16 bills, 13 of which passed into law – responsibly improving upon the policy foundation of our green economy. Our staff worked with our members and partners, legislators, the Governor's office, the NC Department of Commerce, and other state and local government agencies to inform these policies.

## Highlights from NCSEA's 2009 legislative priorities include passage of:

- Extension of state renewable energy investment tax credits for five more years through January 1, 2016;
- Expansion of state renewable energy investment tax credits to include geothermal heat pumps and ability to take the credit against gross premiums insurance tax;
- Streamlined the role of energy in government by relocating the State Energy Office, Energy Policy Council, Low Income Weatherization program and other energy functions inside the Department of Commerce under the oversight of new Assistant Secretary of Energy position;
- Reformulated and expanded authority of the NC Energy Policy Council to develop comprehensive energy policy recommendations that ensure but are not limited to reliability and affordability, extending policy analysis to include job creation and economic development, as well as environmental and human health concerns;
- Raised ceiling on energy saving performance contracting for state governmental units from \$100 million up to \$500 million (no taxpayer money is used, only bank loans), which will create more than 2,000 new jobs and save tens millions in taxpayer money;
- Expanded current limitations placed by cities, counties and deeds on installation of solar collectors on homes

to include all residential properties, not just single family homes;

- Authorized local governments to adopt innovative financing techniques such as revolving loan funds and some form of property assessed clean energy (PACE) financing;
- Directed the Energy Policy Council and Utilities Commission to study the creation of a “renewable energy trading” platform, which is intended to provide minimally adequate market transparency necessary for attracting investors, securing loans and growing a functional, competitive renewable energy marketplace;
- Extended the authorization of the Legislative Commission on Global Climate Change so it can complete its work, which it did in May 2010; and
- Authorized Progress Energy to replace seven coal-fired power units, including one of the dirtiest in the United States, with new natural gas power plants.

## Highlights from NCSEA's 2010 legislative priorities include passage of:

- Expansion of the state Renewable Energy Investment Tax Credit to include combined heat and power systems
- Clarification of the definition of a renewable energy “installation,” definition of “cost” of a renewable energy system for calculating the tax credit, applicability to lease arrangements (primarily for solar thermal hot water, geothermal and combined heat and power);
- Revival of the 25% Renewable Energy Manufacturing Tax Credit, with expansion to include solar and wind power sub-assembly, combined heat and power, and cost of transitioning existing manufacture of non-energy products to an eligible renewable energy product;
- Clarification to the NC renewable energy investment tax credit that Federal Section 1603 grants provided under the American Recovery and Reinvestment Act (ARRA) are not considered public funds for the purposes of the state tax credit;
- Clarified local government authority to authorize property assessed clean energy (PACE) financing (passage pre-dated Federal conflict over PACE financing); and
- Clarified that local governments can use general funds to finance energy efficiency measures.

Annually since 2005, NCSEA has produced an educational guide to sustainable energy legislation introduced by the North Carolina General Assembly. At the close of each session, NCSEA publishes a “Legislative Wrap Up” highlighting new sustainable energy laws. NCSEA's 2009 and 2010 NC Sustainable Energy Legislative Guides can be found online at [www.energync.org/resources](http://www.energync.org/resources).

## STREAMLINING ENERGY IN GOVERNMENT

Historically, North Carolina's sustainable energy programs have been scattered across 14 agencies and offices with little funding and resources to coordinate planning and implementation. With the rapid growth of North Carolina's green energy economy, the disjointed presence of energy in state government was becoming an obstacle to coordinated green energy policy and economic development. In 2007 NCSEA partnered with the NC Institute for Emerging Issues to explore solutions – fast forward to December 2008 where advised IEP's Business Committee on Energy – which focused exclusively on streamlining and elevating the role of energy in our state government. NCSEA then assisted the Executive Branch to develop options, which culminated in Session Law 2009-446.

This law brought the State Energy Office, Energy Policy Council, Low Income Weatherization program and other energy functions inside the Department of Commerce, created a Director of the Green Economy position and placed these energy functions under a new Assistant Secretary of Energy.

Further, the law reformulated and expanded the NC Energy Policy Council's authority to develop comprehensive energy policy recommendations that will ensure reliability and affordability, but look beyond these simple requirements to complex matters of energy policies future impact on job creation and economic development, as well as environmental and human health concerns. Governor

Perdue charged the new 16 member Council in November 2009 to create short- and long-term policy recommendations to create jobs and make North Carolina a national leader in the green economy.

In May 2010, after six quick months of work, the NC Energy Policy Council issued three short term legislative policy recommendations to Governor Perdue and the General Assembly, including: revival of the NC Renewable Energy Manufacturing Tax Credit; provide more options to finance clean energy by clarifying local government authority to support project development financing; and affirming the development of wind energy throughout North Carolina.

In 2010, NCSEA led the drafting, discussion and passage of the manufacturing tax credit, partnered with the League of Municipalities and others to achieve expanded local financing authority, and the third recommendation got bogged down in the Senate over strong disagreements between Senators.

In May, the Energy Policy Council moved to its next task of developing far more comprehensive assessment of state energy policies and formulating executive and legislative recommendations for 2011. To assist the Council in understanding the barriers and opportunities in current policy, regulation and markets, NCSEA staff has been named as voting members to the Energy Efficiency, Renewable Energy, and Baseload Committees of the Energy Policy Council, and will spend more than 30% of staff time assisting the State and stakeholders in this effort in 2010 and 2011.

## NC UTILITIES COMMISSION HIGHLIGHTS

As part of NCSEA's public policy and education work, NCSEA monitors and regularly intervenes in NC Utilities Commission (NCUC) dockets that relate to the organization's mission and strategic plan. This fiscal year NCSEA intervened with mixed success in more than 15 dockets primarily related to clarification, defense and implementation of the NC Renewable Energy and Energy Efficiency Portfolio Standard law (Session Law 2007-397, various dockets including E-100, Sub 113).

**NCSEA intervened in dockets and participated in working groups involving issues of:**

- Renewable Energy Certificates (REC), creation of the NC Renewable Energy Tracking System (NC RETS), lack of REC market transparency and visibility;
- Avoided cost rates;
- Utility integrated resources plans, compliance plans and compliance reports;
- Utility efficiency programs and rate riders, smart grid definition and utility smart grid plans, and whether EISA2007 standards should be adopted for utility efficiency, modifying rate design, and using smart grid to supply pricing and usage data

## NC UTILITIES COMMISSION HIGHLIGHTS CONTINUED

to customers;

- Utility requests for clarification of definitions and laws, requests for determinations of eligibility of “biomass” projects by third parties, attempts to clarify the definition of biomass;
- Implementation of Duke’s PV Distributed Generation program; and
- The capabilities of the wholesale market to deliver a “least cost” mix of generation resources.

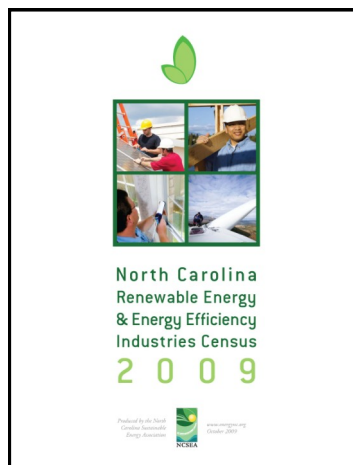
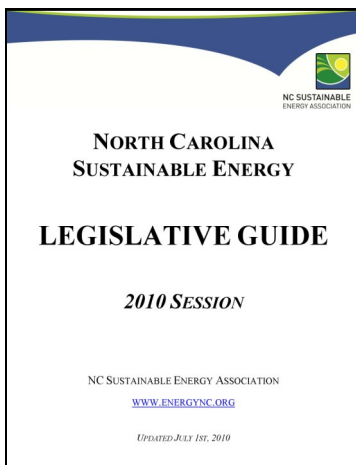
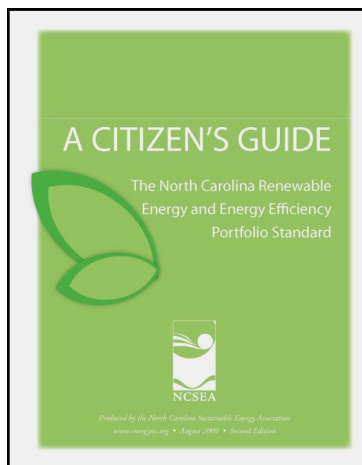
The NCUC is conservative in its approach to policy, deferring to legislative mandates and making limited, incremental changes in regulation. Environment, public health and economic development concerns are outside the scope of the NCUC’s authority. Rulings are primarily evaluated on the NCUC’s narrower legislative mandate of reliability and “least cost”. To date, these principles are typically applied by parties to individual technologies and projects, not accounting for the beneficial cost characteristics of efficiency and distributed generation in a diversified energy portfolio.

Prior to the recent reform of the NC Energy Policy Council, there was no institution with authority to evaluate policy on these broader criteria informed by a portfolio-wide analysis.

This past year, regulatory uncertainty was exacerbated for renewable energy developers by several highly unfavorable rulings – resulting in forfeiture to other states of nearly \$300 million in new solar development over the next 10 years. Similarly, the majority of North Carolina’s energy efficiency potential continues to be ineligible for REPS compliance because it is implemented by someone other than the electric utility and the utility has a strong financial disincentive to allow others to deliver efficiency solutions.

As a result, legislative action will be critical in 2011 to overcome these additional barriers to cost effective renewable energy development and enabling North Carolina to realize its energy efficiency potential and the least cost portfolio for energy consumers that would follow.

## Featured NCSEA Publications: People, Policy & Markets



***Did you know .... The 2009 Industry Census conservatively estimates the renewable energy and energy efficiency industries employed 10,250 full-time North Carolina employees in 2009 and generated over \$3.5 billion in annual revenue.***

## 2010 NEW MEMBER BENEFITS

In June 2010, after a year of discussions with our membership base, NCSEA rolled out new membership benefits that were designed to give our members more access to highly valuable information, training, networking opportunities and more.

These benefits include improved access to the following information and resources:

- Energy Executives Roundtables
- Webinar discounts
- Event and Training discounts
- Sponsorship opportunities at NCSEA events
- Access to the NCSEA Business Member Directory
- NCSEA Logo program
- NCSEA Green Jobs Board
- Regulatory Summaries (Gigawatt members only)

We heard you...

**“Provide NCSEA members with regular updates on state and local legislation and regulations regarding renewable energy”** - NCSEA member

**“The information on sustainable energy is out there but is not reaching the average person”** - 2010 Census

*Outcome – NCSEA’s new website, benefits, and free offerings to address these concerns and provide a valuable general resource for all citizens, businesses and leaders of the State; while providing targeted additional analysis and exposure for our members.*

## FOCUS ON ... BUILDING CODES AND ENERGY POVERTY

The Southeast is the most energy inefficient region of the United States and Southeast states on average spend 18% more on energy than any other region of the nation to generate \$1 million in Gross State Product. North Carolina could boost its economy by simply requiring greater energy efficiency.

In 2008, North Carolina received a \$500,000 Federal grant to investigate strengthening the State’s residential and commercial building codes. This year, the Energy Committee of the Building Code Council worked with our State’s building experts and NCSEA members to develop the 2012 NC Energy Conservation Code. The Energy Committee recommended a 30% energy efficiency improvement to the code. In September, the Building Code Council will vote to adopt or reject their recommendation.

In early 2010, Governor Perdue set a goal for NC to go 30% beyond code

in her effort to position North Carolina as a national green economy leader. Such a code will:

- Make homes more affordable, durable and energy efficient;
- Bring systemic relief to the State’s poorest households (over 300,000 North Carolinians), paying 70% of their annual household income in 2009 to non-transportation related energy expenses.
- Avoid the cost of building several new power plants, reduce air pollution, and improve our energy security;
- Secure Federal job training and development funds to achieve code compliance; and
- Increase expendable income in North Carolina by \$75 million per year or greater.

North Carolina’s population is expected to grow between 30% and

50% by 2025. The State will come out of the recession into a construction boom. If North Carolina chooses to be a national building code leader, the State will become a more productive energy economy, and be a cleaner, healthier, and more affordable place to live and work.

### Energy Poverty in NC Worsens (2008 & 2009)

Poverty Level	Percent of Annual Income Spent on Home Energy	
	2008	2009
Below 50%	54.5%	70.0%
50 - 74%	22.0%	28.1%
75 - 99%	15.8%	20.1%
100 - 124%	12.2%	15.6%
125 - 149%	10.0%	12.8%
150 - 185%	8.2%	10.5%

Source: Fisher, Sheehan & Colton, Home Energy Affordability Gap, Released April 2009, 2010



## EMPOWERING THE SOUTHEAST

NCSEA's uniquely integrated solutions innovation and member participation business models provide a constant source of new lessons learned and innovative programmatic opportunities to sustain progress toward a sustainable energy future.

In the past few years, NCSEA received numerous requests from organizations across 15 U.S. states to assist with non-profit organizational strategic planning, policy strategy and analysis, and/or measuring their own sustainable energy market growth and activity. This is a strong

reflection of NCSEA's advanced ability to:

- Help states identify barriers to the advancement of sustainable energy solutions;
- Understand the complex relationship between energy policy, regulation and market development to the states find their own ways to develop and promote policy solutions to overcome their set of policy and regulatory barriers; and
- Measure the market impact of policy changes each state achieves in terms of job creation, private sector revenues, and identifying re-

maintaining barriers to growing their state and local sustainable energy markets.

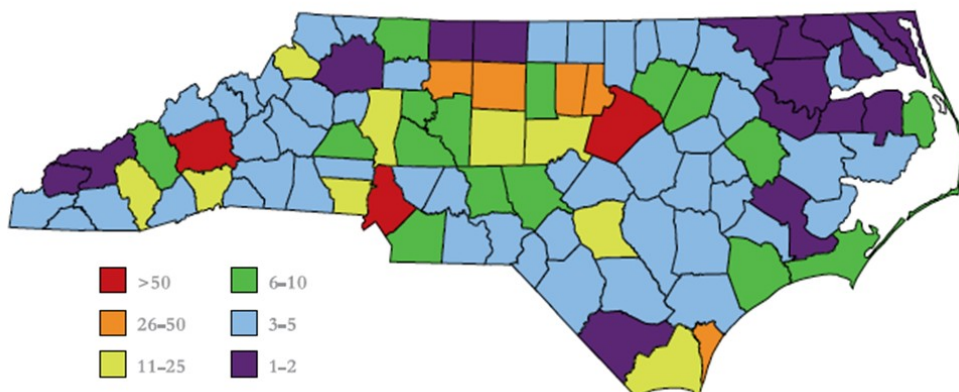
In addition to non-profits, several grant-making foundations also requested the evolving expertise of NCSEA Executive Director Ivan Urlaub and Paul Quinlan, who was recently promoted to Deputy Director and Strategic Projects. States include Alabama, Arizona, Arkansas, Colorado, Florida, Georgia, Indiana, Kentucky, Michigan, Missouri, Ohio, South Carolina, Tennessee, Virginia and Utah.

## FOCUS ON ... NC RISING AS THE “NEW ENERGY STATE”

NCSEA is proud to be a partner in the “Charlotte New Energy Capital” effort to make Charlotte our nation's energy capital. Conventional energy industries are a strong leadership presence in the region - instrumental in bringing Charlotte's energy leaders together for this initiative. Charlotte's established industries are now being joined by some of the fastest growing industries in the global energy economy – including renewable energy, energy efficiency, high performance building, smart grid and electric vehicles.

Through NCSEA's annual industries census, Charlotte's success is showing, as are other regions. In fact, the Triangle leads our State in attracting the world's fastest growing energy industries. If policy makers take aggressive action next year, our State could quickly arrive on the international stage attracting clean energy jobs, manufacturing, and leading new energy innovations.

North Carolina is at the beginning of a promising rise as “The New Energy State” of the United States, and Charlotte, the Triangle and the Asheville regions are all leading our way.



## NCSEA APPOINTMENTS AND LEADERSHIP

### IVAN URLAUB

Graduate—Leadership NC Class XVII

Renewable Energy Committee of NC Energy Policy Council

Industrial Committee - Charlotte New Energy Capital

EU Energy Program Steering Committee - Center for International Understanding

Chair, Solar 2011 Local Organizing Committee

NC Legislative Commission on Global Climate Change

Steering Committee—NC Clean Energy Initiative

### PAUL QUINLAN

North Carolina Wind Working Group

Workforce Development—State Energy Sector Partnership

### OTHER LEADERSHIP

NCSEA Energy Efficiency Advisory Group

NCSEA Sustainable Energy Financing Advisory Group

NCSEA Solar Business Working Group

NCSEA Carbon Technical Advisory Group (under design)

## A Look Back in NC History: Energy Efficiency

- 2003 NCSEA initiates failed Public Benefits Campaign, educates key constituencies.
- 2005 NCSEA starts citizen and business efficiency campaign (Docket E-100, Sub 103).
- 2006 NCSEA files consumer complaint against Duke Energy for not including Energy Efficiency in their near- and long-term resource plans. (Docket E-100, Sub 110). Duke creates collaborative efficiency work group to address consumer complaints.
- 2007 NCSEA tries to help Duke Energy design transparent, performance-based efficiency program. NCUC disapproves Duke proposed 800 MW coal power unit, orders 1% of revenues to go to efficiency. (Docket E-7, Sub 790) NCSEA designs and negotiates passage of first Renewable Energy and Energy Efficiency Portfolio Standard in the Southeast U.S. (Session Law 2007-397).
- 2008 NCSEA opposes Save-A-Watt (Docket E-7, Sub 831), proposing more cost effective rate structures to encourage ratepayers to adopt a far greater amount of energy efficiency measures (Docket E-100, Sub 116) This proposal was rejected by Utilities Commission.
- 2009 NCSEA supports GreenCo's electric membership corporation's energy efficiency programs (Docket E-100, Sub 118). NCSEA promotes smart grid investments to facilitate more energy efficiency measures and provide ratepayers with additional information about their electricity usage (Docket #-100, Sub 123) NCSEA opposes aspects of Progress Energy Carolina's energy efficiency cost-recovery mechanism because they are not transparently tied to performance (Docket E-2, Sub 931).
- 2010 Leaders work with NCSEA to adopt tax credit incentives for geothermal and combined heat and power systems, which will significantly improve efficient use of energy.

# 2010 BOARD OF DIRECTORS AND NCSEA STAFF

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Chapel Hill, NC

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Charlotte, NC

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Southern Energy Management  
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**Chris Senior**  
Anchorage Building Corp.  
Chapel Hill, NC

## NCSEA Staff

**Ivan Urlaub**  
Executive Director  
[ivan@energync.org](mailto:ivan@energync.org)

**Cristina Starr**  
Education & Outreach Mgr.  
[cristina@energync.org](mailto:cristina@energync.org)

**Nichole Campbell**  
Office Manager  
[officemanager@energync.org](mailto:officemanager@energync.org)

**Paul Quinlan**  
Deputy Director & Strategic Projects  
[paul@energync.org](mailto:paul@energync.org)

**Kurt Olson** (*pt*)  
Energy Policy Counsel  
[kurt@energync.org](mailto:kurt@energync.org)

**Patsy Paliotta** (*pt*)  
Membership Services  
[memberservices@energync.org](mailto:memberservices@energync.org)

**Julie Robinson**  
Marketing & Comm. Director  
[julie@energync.org](mailto:julie@energync.org)

**Rich Crowley**  
Economic Development Mgr.  
[rich@energync.org](mailto:rich@energync.org)



**NC SUSTAINABLE  
ENERGY ASSOCIATION**



## NC SUSTAINABLE ENERGY ASSOCIATION

P.O. Box 6465, Raleigh, NC 27628

(919) 832-7601 • (919) 832-6967 fax • [info@energync.org](mailto:info@energync.org) • [www.energync.org](http://www.energync.org)

For more information on the renewable energy and energy  
efficiency industry and its jobs, as well as other recent  
information and reports, go to:

**[www.energync.org](http://www.energync.org)**