



2017-2018 ANNUAL REPORT

Mission. Carolina Law's Center for Climate, Energy, Environment and Economics (CE³) has two interrelated missions. First, the Center is expanding opportunities for Carolina Law students to develop a deep understanding of the critical energy and environmental challenges of the day through research, new courses, externship opportunities, moot court competitions, and scholarships. Second, the Center is informing public policy and private sector decision-making at the state and federal levels through non-partisan, objective analysis and stakeholder engagement. We begin our projects by engaging stakeholders in government, business and communities to identify pressing energy and environmental issues. CE³ then utilizes students, UNC faculty, and Center staff to provide analysis and identify innovative legal responses.

Placed in the heart of one of the nation's premier public research universities, CE³ is quickly establishing itself as a place faculty, students, scholars, and energy and environmental stakeholders look to for expertise on an evolving landscape of energy best practices. Early projects include an analysis of state efforts to assess the value of solar energy, educating community stakeholders about ratemaking and energy investments, and co-hosting an ongoing workshop series on the evolving electricity sector for utility commissioners, academics, and electricity sector stakeholders.

The Center and its Staff. Professor Jonas Monast served CE³ Director during the 2017-2018 academic year. Heather Payne continued to serve as CE³ Assistant Director while also expanding her teaching responsibilities at Carolina Law.

Carolina Law faculty members Don Hornstein and Maria Savasta-Kennedy are CE³ faculty affiliates and serve on the CE³ advisory board. In addition, UNC professors Andy Yates (Economics Department) and Stephen Arbogast (Kenan-Flagler Business School) serve on the CE³ advisory board.

Advisory Board. CE³ held its second Board of Advisors meeting on January 12, 2018. This group provides guidance, on a volunteer basis, and assists CE³ with other activities as needed. Advisory Board members and their biographies can be found at <http://www.law.unc.edu/centers/ce3/about/board/>.

Funding. CE³ receives support from the Duke Energy Foundation, the Taft Distinguished Professor Chair, and the C. Boyden Gray Distinguished Professor Chair, and alumni contributions to the CE³ scholarship fund.

STUDENT EDUCATION AND OPPORTUNITIES

Student Research Assistants

Research assistants support work on many of CE³'s projects. CE³ research assistants over the past year include Kristin Brunn (Class of 2019), Jonathan Zator (Class of 2019), Gavin Kim (Class of 2019), Rachel Posey (Class of 2020), Caroline Martin (Class of 2020), Aaron McGlothlin (Class of 2020), Alyssa Wright (Class of 2020), and Sean O'Brien Rafferty (Class of 2020).

Full Scholarship for Incoming Students

For the past three years, CE³ has provided a full scholarship to an incoming student who has distinguished him or herself in areas of environment or energy prior to applying to law school. Jack Gavigan was selected as the third CE³ scholarship recipient. Mr. Gavigan recently graduated from Duke's Nicholas School. We look forward to welcoming him and the rest of the Class of 2021 in August. Jack joins CE³ scholarship recipients Kristin Brunn (Class of 2019) and Erin Grubbs (Class of 2020).

Moot Court Teams

Carolina Law students again participated in the Jeffrey G. Miller National Environmental Law Moot Court Competition, hosted by the Elizabeth Haub School of Law at Pace University, and the National Energy and Sustainability Moot Court Competition, hosted by the West Virginia University College of Law. The Pace/NELMCC team consisted of Tas Lago (Class of 2018), Evan Hiatt and Sarah Thomas (both Class of 2019). The Energy and Sustainability team, who advanced to the Elite Eight round of their competition, consisted of Amanda Aragon and Rachel Procaccini (both Class of 2018) and Hannah Manning (Class of 2019). Over twenty local attorneys volunteered their time to help judge practice rounds and advise the students. Heather Payne, CE³ Assistant Director, coached both moot court teams.

Courses

Courses offered during the 2017-2018 year at Carolina Law as part of the environmental and energy curriculum include:

- Administrative Law (Donald Hornstein)
- Energy Law (Jonas Monast)
- Environmental Law (Heather Payne)
- Environmental Justice (Maria Savasta-Kennedy)
- Environmental Ocean and Coastal Law (Todd Roessler)
- Appellate Advocacy (Donald Hornstein)
- Advanced Appellate Advocacy (Donald Hornstein)
- Electricity and Renewable Energy Finance (Mark Griffith and John McArthur) (funding for the course provided by CE³)
- Environmental and Energy focused Externships

Externships

In addition to traditional classroom instruction on environmental and energy law, students engage in experiential learning on these subjects through enrolling in the Externship Program. Through this academic program, students work on actual matters with practitioners in the field while supervised by law school faculty. Local sites include:

- NC Attorney General-Environment-Air, Land and Water
- NC Department of Environmental Quality
- National Institute of Environmental Health Sciences
- EPA Air Quality Division (RTP)
- Cooperative Solar – Energy Law
- GoTriangle
- Land Loss Prevention Project
- NC Conservation Network
- UNC School of Government: Environmental Finance
- Cary and Durham City Attorneys
- Administrative Law Judges
- Southern Coalition for Social Justice
- Southern Environmental Law Center

Students may also enroll in a Semester in Practice externship during the fall semester of their 3L year at one of the following sites:

- U.S. Department of Justice - Environmental Enforcement and Natural Resources in DC
- EPA in DC and Atlanta
- Centers for Disease Control in Atlanta
- EarthJustice NYC
- Southern Environmental Law Center (Asheville, Atlanta & Chapel Hill)

ENGAGEMENT AND ANALYSIS

Events

Understanding Changes to NC’s Renewable Energy Policies: Implementing HB 589 webinar, September 8, 2017. This webinar provided an overview of HB 589, Competitive Energy Solutions for NC, and situated the bill within the larger energy and renewables landscape of the state. In addition to discussing the policy and philosophy differences between how PURPA has been implemented to date and HB 589, the webinar included a detailed overview of the statute and the practical implications of implementing HB 589 – what has changed, what open questions remain, who will benefit, and the likely approach for the new competitive bidding process. The video is available at <https://vimeo.com/233031825>. Many thanks to Gray Styers, Partner, Infrastructure and Development Leader, Smith Moore Leatherwood, for partnering with us on this informational session!

The Limits of Presidential Power in Deconstructing the Administrative State, September 12, 2017. Professor Tim Duane, Visiting Professor of Law at the University of San Diego School of Law and Professor of Environmental Studies at the University of California, Santa Cruz, lectured on federalism and presidential power. President Trump has called for significant deregulation in the area of environmental protection, including through the use of executive orders. Congress has also used the Congressional Review Act to set aside a number of regulatory actions designed to protect the environment implemented under President Obama. Addressing the scope and limits of executive authority for environmental deregulation, the limits on presidential power through both the judiciary and Congress, and the backstop of state environmental law and potential federal preemption, the lecture found both federalism and separation of powers are key constraints on the president's deregulatory agenda. But Congressional consent for that agenda would radically alter the structure and role of the federal administrative state, giving a few key Senators enormous power. The president's power is therefore ultimately dependent on Congress' exercise of power. The video of the lecture is available at <https://vimeo.com/233850176>.

The Politics of Energy in North Carolina, October 23, 2017. CE³ welcomed Representative John Szoka (R), NC House District 45, on October 23, 2017. Rep. Szoka, whose district includes Cumberland County, is a retired Lieutenant Colonel of the U.S. Army and has owned and operated several small businesses in Fayetteville. He is a long-time advocate of energy independence, energy efficiency, and consumer choice. As one of the architects of HB 589, Rep. Szoka is at the forefront of energy policies in our state. We are grateful to him for sharing his thoughts with us, and the video of his talk is available at <https://vimeo.com/239835430>. This event was co-hosted by CE3 and two student groups: the Environmental Law Project (ELP) and the Veterans Advocacy Legal Organization (VALOR).

Fixed Costs and Uncertain Futures in the Regulated Electricity Sector, November 10, 2018. Co-hosted by CE³ and faculty at the University of South Carolina School of Law, this invitation-only conference focused on questions arising (but not limited to) the cancelled nuclear units in South Carolina and the uncertainty regarding new nuclear units under construction in Georgia. These projects highlight the significant investment risks associated with large scale electricity infrastructure projects. State public service commissions approved these projects prior to dramatic declines in natural gas prices and electricity demand, and during a period when federal limits on greenhouse gas emissions seemed likely. These same commissions are now considering the extent to which ratepayers or utility shareholders should bear the multibillion-dollar expenses associated with cancelled projects or cost overruns. As the electricity sector continues to undergo a rapid transition that is driven primarily by shifting market conditions and advances in technology, additional states may face similar questions regarding stranded assets and cost allocation. Potential next steps from this conference are still being identified at this time. CE³ provided funding for three students to attend the conference: Jackie Chang, Leah Kaiser, and Seth Yeazel, all Class of 2019.

Festival of Legal Learning: Environmental Law Symposium, February 10, 2018. Each year, CE³ participates in UNC School of Law's premier CLE event, the Festival of Legal Learning. This year topics included administrative law implications for environmental law, the energy future of the Southeast, legislative updates, and water regulation in North Carolina. Eight students chose to write papers specifically for the Symposium; these papers,

always a key part of the materials given to participants, can be found at <http://studentorgs.law.unc.edu/elp/symposium/>.

Powershift: Regulating the Evolving Energy Sector, February 11, 2018. CE³ co-hosted the latest event in the Power Shift workshop series—a collaborative project between CE³, Duke University’s Nicholas Institute for Environmental Policy Solutions, and Harvard University’s Environmental Policy Initiative. Power Shift is a network of energy law professors and energy practitioners, and regularly convenes workshops focusing on current challenges facing the electricity sector. Speakers at the February 2018 workshop included North Carolina Utilities Commission Chairman Edward Finley, New York Public Service Commission Chairman John Rhodes, Kentucky Public Service Commission Commissioner Talina Matthews, and former FERC Chairman Norman Bay. Panel discussions focused on governance of Regional Transmission Organizations, competition and public utilities, and the evolving role of natural gas in the energy mix. This follows a PowerShift meeting at the University of Minnesota in December, 2017, focusing on electricity sector issues facing Minnesota and surrounding states. The conference proceedings from that meeting have been published by Kate Konschnik, CE³ Board Member, available at http://www.law.unc.edu/documents/clear/publications/ni_proceedings_18-01.pdf.

UNC Environmental Research Briefing, February 16, 2018. The UNC Institute for the Environment convened a meeting for the non-profit community to learn about environmental research occurring across campus. Both Jonas Monast and Heather Payne presented CE³ research during the session.

UNC Clean Tech Summit, March 1-2, 2018. CE³ participated as a Campus Partner in the University of North Carolina Clean Tech Summit, which was co-hosted by the UNC Institute for the Environment and the UNC Kenan-Flagler Business School Center for Sustainable Enterprise. The event highlights the latest innovations, trends and challenges in the clean technology industry and how North Carolina is playing a key role in leading the way to a green global economy. Heather Payne moderated the panel *Renewable Energy Policy in NC: The Future Beyond HB 589*. Panelists included: Ken Jennings, Renewable Strategy and Policy Director, Duke Energy Carolinas; Brian O’Hara, Senior Vice President Strategy and Government Affairs, Strata Solar; Ben Snowden, Clean Energy and Environmental Lawyer, Kilpatrick Townsend and Stockton LLP; and Representative John Szoka, Conference Leader, N.C. House of Representatives. More information can be found at <https://ie.unc.edu/cleantech/>. CE³ also took the opportunity to host a table at the networking lunch, providing undergraduate students the opportunity to learn more about CE³’s work and Carolina Law in general.

A Conversation with Former FERC Commissioner Norman Bay, June 5, 2018. Former FERC chair Norman Bay joined Jonas Monast for a conversation about clean energy, evolving energy markets, and the tension between federal and state energy priorities. The Washington, DC event was part of the UNC School of Law Summer Spotlight Series.

Energy Transitions in Federal Systems – The View from Germany, June 19, 2018. This webinar was part of an ongoing project comparing the energy transitions underway in the United States and Germany, with a focus on the distinctive roles of federal and state governments in each country. A two-year joint project between Jonas Monast and University

of Tübingen Professor Johannes Saurer, the project will identify lessons from both countries to inform progress toward cleaner, affordable, and reliable energy systems. The funding comes from the University of Tübingen to foster collaboration between faculty and students at Tübingen and UNC.

CE³ Reports

Distributed Energy Resource Valuation Methodologies – A Comparative Analysis.

Heather Payne and Jonas Monast recently completed a study analyzing different approaches states are using to determine the value of distributed energy resources. The analysis focuses on nine states that have taken recent action via legislation and/or public utility commission proceedings -- Arizona, California, Hawaii, Massachusetts, Minnesota, Mississippi, New Hampshire, New York, and South Carolina. This is the culmination of a CE³ project which started with an invitation-only event in November, 2016. The report can be found at <http://www.law.unc.edu/documents/clear/publications/derpaperfinal.pdf>, and more about the project can be found at <http://www.law.unc.edu/centers/ce3/documents/>.

Transitioning to a Lower Carbon Energy Future: Challenges and Opportunities for Municipal Utilities and Electric Cooperatives. CE³ and Florida State University College of Law, Environmental, Energy & Land Use Program published a white paper examining the challenges and opportunities that municipal utilities and electric cooperatives face as they transition to a lower carbon future. Municipally-owned utilities (munis) and electric cooperatives (co-ops) provide electricity to millions of customers throughout the United States. Yet the important role of munis and co-ops is sometimes overlooked in the field of energy law. Recent market changes, such as rapidly declining costs of solar photovoltaic panels and wind energy, have led to dramatic changes in the U.S. energy mix. As consumers respond to these changes by demanding more diverse sources of energy, including lower-carbon options like renewable and nuclear energy, munis and co-ops will be at the forefront of this transition. The paper summarizes a March 24, 2017 conference that featured representatives from many different types of municipal utilities and cooperatives around the country in order to better understand these opportunities and challenges and to develop broadly-applicable lessons learned. Authors include Carolina Law's Jonas Monast and Heather Payne, FSU professor Hannah Wiseman, and Carolina Law student (and former CE³ research assistant) Nicolas Eason (L'19). The paper can be accessed at <http://www.law.unc.edu/documents/clear/publications/fsuuncmuni.pdf>.

LOOKING AHEAD

CE³ is looking forward to another productive and engaging year. During the next academic year, we will launch a new scholars program for select students interested in energy or environmental law, and will launch a new project focusing on energy transitions and the impacts on rural economies.