



Pace Energy and Climate Center 2018 Report

The Pace Energy and Climate Center had a great 2018! We filed hundreds of pages of comments, testimony, and recommendations in utility regulatory proceedings, and spoke up and made a difference for clean energy and energy justice in rate cases and grid modernization/utility transformation cases in several states. We supported the Federal Clean Power Plan in court. In Congress, we spoke against weakening Federal law barring discrimination against clean electric generation. The Center earned renewed funding from the U.S. DOE for its Combined Heat and Power work, and from the Energy Foundation for work in New York and Rhode Island. We strengthened our partnership with Earthjustice in regulatory proceedings and in training the next generation of attorneys to take a stand for energy justice. We were a voice for Maryland's Utility of the Future on behalf of clean energy and energy justice advocates.

In October 2018, the Center completed its 30th year of regulatory and policy advocacy on behalf of clean energy for New York, the Northeast, the United States, and around the world. We secured major victories in reducing fixed customer charges for electricity customers in New York, and in ensuring that utility low-income customer programs were ambitious and effective in addressing the growing energy burden for those citizens. We worked closely with a major developer of low-income community solar projects to advance a rational and effective solar tariff in Massachusetts, and dug deep into rate making in Rhode Island to help towns and cities make effective use of high-efficiency street lighting on behalf of taxpayers across the state.

The Center's work is reflected in more than 1,350 pages of filed formal comments, testimony, and white papers. Most of the Center's work has benefitted from powerful collaborations. In 2018, the Center continued, with ACE New York, to co-lead the Clean Energy Organizations Collaborative. We are part of the Clean Energy Parties and New York Million Solar Strong Coalition, engaging in the New York Reforming the Energy Vision and Value of Distributed Energy Resources proceedings; both are critical in shaping markets for solar energy and distributed energy resources in New York. Within the Energy Efficiency for All New York coalition, we provide support on regulatory proceedings aimed at increasing clean energy in affordable multifamily housing. We are especially grateful for the continued partnership and support of Earthjustice, for litigation support in utility rate cases in New York, and in our engagement on gas utility issues.

In 2018 we were selected in a competitive solicitation to serve as administrator of the U.S. Department of Energy's New York / New Jersey Combined Heat and Power regional Technical Assistance Project. We partner with UMass-Amherst School of Mechanical Engineering to provide direct end-user technical assistance and collaborate with industry, government, market participants and key stakeholders on project, policy, and rate making relating to super-efficient energy systems and microgrids. We have worked closely with environmental organizations like Environmental Defense Fund, and with the New York State Energy Research and Development Administration, and the Institute for Energy Economics and Financial Analysis.

In 2018, the Center secured an innovative role with the Quebec Government Office in New York City to provide services as a Clean Economy Attaché. As part of the Quebec economic development team, we worked with businesses and other attaches in the Province to advance clean economy business activities in Quebec and nine Northeast and Mid-Atlantic states.

For all of this and to all our supporters and funders, thanks!

Karl R. Rábago, Executive Director



Staffing Changes: In 2018 we said hello and farewell to some great Center staff members. Rob Habermann completed his year as the Center’s second Equitable Access to Sustainable Energy Fellow and earned his Master of Laws degree in environmental law. Christian Chase Harned started as EASE Fellow mid-year and is hard at work on his LL.M. degree, expected in May 2019. The EASE Fellowship is jointly funded with Earthjustice and the Pace University Elisabeth Haub School of Law (formerly Pace Law School) and engages attorneys in practice dedicated to improving access to clean and affordable energy for low- and moderate-income customers. Sheryl Musgrove, the Center’s first EASE Fellow, who stayed on staff as a senior attorney after her fellowship, left to take a position in California. And Pearl Gray left the Center at the end of 2018 after four years with our team. Staff biographies are posted on the Center website. As in prior years, we hosted several law student interns at the Center, giving them work to do on real clean energy cases and dockets. Many of the Center’s interns have gone on to positions in the energy field, as private and public sector attorneys, and as Excelsior Fellows with the NYSERDA and the Department of Public Service.

Combined Heat and Power, Microgrids: The Center secured additional funding and support from the US Department of Energy through a highly competitive process to continue operation of its regional Combined Heat and Power Technical Assistance Center. Operating as one of only eight such CHP TAP centers in the nation, we will focus our work on developing CHP and microgrid markets in New York and New Jersey, and on providing subject-matter expert support to planners and project developers throughout New England. Our CHP Center has committed to providing direct technical assistance to at least 52 sites annually in the New York / New Jersey region. Because of our experience, we were also given an opportunity to conduct a project funded by NYSERDA to explore innovative financing options for CHP development projects.

Hurricane Maria devastated Puerto Rico in late 2017—causing thousands of deaths and tens of billions of dollars in destruction. With support from the Institute for Energy Economics and Financial Analysis, we prepared and filed hundreds of pages in technical references to support the Puerto Rico regulator’s investigation into redevelopment of the island’s electric utility sector. The filings drew on the Center’s extensive regulatory and technical experience in distributed energy resources, microgrids, renewable energy development, regulation, and utility sector transformation.

The impending retirement of the Indian Point nuclear power station in 2023 has raised a public concern over how New Yorkers will get reliable electricity services when the plants close. The Center has engaged with a wide array of local and regional stakeholders and advocates to lay out and build support for a “pathways” approach that embraces efficiency, distributed energy resources, and increasingly renewable and carbon-free energy supply. We have emphasized the potential for super-efficient CHP, microgrid architecture, and avoiding a rush to new central station gas generation.

During 2018, the Center completed a major new study on the potential pollution from emergency and backup generators throughout New York. Supported by Environmental Defense Fund, the work addresses a significant data gap pertaining to the existing stock of generators in New York City and New York State. We developed a unique modeling tool that provides a comprehensive picture of what would happen if diesel and natural-gas fueled generators, which number in the hundreds of thousands, increased their operating hours, as many experts expect they could do.

Regional Greenhouse Gas Initiative: The Center wrapped up several years of intensive work relating to the Regional Greenhouse Gas Initiative in 2018. We were extremely active in RGGI’s triennial program review that ended in 2017 and wrote a major paper on how RGGI can make

improvements to reduce emissions “leakage” in the years ahead. We also prepared a brief on the issues raised by Virginia’s decision to link its greenhouse gas emissions reduction program to RGGI.

Expert Testimony: Center experts often testify in energy proceedings around the country. Our core work is in rate cases and other proceedings before the NY Public Service Commission. In 2018, we submitted rate case and other formal testimony on a wide range of issues, including fixed customer charges, cost-of-service study methods, return on equity calculation, standby charges for distributed generators/CHP, energy efficiency program spending, performance-based rate making incentives, grid modernization planning, utility merger conditions, net metering and net metering-successor tariffs, low- and moderate-income programs, transportation electrification, gas distribution and pipeline expansion, beneficial electrification, and others. In 2018, we testified in Congress, and in New York, Maryland, Missouri, Kansas, Rhode Island, and Massachusetts.

Energy Justice: The Center prioritizes issues relating to energy justice—affordability, access to clean and sustainable energy, and reductions in pollution in low-income communities and communities of color. Our EASE Fellows submit expert testimony in rate cases and other regulatory proceedings. We supported the Energy Efficiency for All coalition in New York, attended national stakeholder convenings on strategies for tying together equity, resilience, and empowerment, and provided regulatory training and advice to advocates for energy justice throughout New York.

On behalf of Boston Community Capital, a not-for-profit developer of solar energy projects for low-income customers, we developed and proposed an innovative electricity tariff design for low-income community solar projects. In Maryland, we championed an electric car share program for underserved communities as part of the Public Service Commission’s “Utility of the Future” proceedings. Unfortunately, the Commission was not willing to move ahead with the program, but we hope to advance the idea, which has gained ground in a few U.S. cities, in other forums.

In April of 2018, NY Governor Cuomo announced a strong recommitment to and expansion of state-wide energy efficiency program goals. With the Energy Efficiency for All Coalition, the Center has been a leading advocate for ensuring that efficiency programs growth is especially focused on low- and moderate-income customers.

Utility Sector Transformation: New York continues to lead the nation in electric utility regulatory reform aimed at transforming the utility business model. As of 2018, New York’s Reforming the Energy Vision or “REV” proceeding entered its fifth year—and the Center was still deeply involved in more than a dozen spinoff and associated proceedings. The Center has also had the opportunity to leverage its New York experience through another year of work on various aspects of Maryland’s Utility of the Future proceeding, in Rhode Island’s Power Sector Transformation proceeding, in Missouri’s Distributed Energy Resources Investigation, in Washington D.C.’s work on establishing a Distributed Energy Resources Authority, and in other proceedings and places as well.

The Center’s experience in formal electric utility rate cases makes it one of the few organizations with deep understanding of the arcane but critical world of utility service rate development and rate design. Rate design innovations are a growing part of the utility sector transformation agenda. Done right, they can encourage just and efficient changes in the use and costs of utility service. Bad rate design, on the other hand, is regressive, unjust, and can cripple emerging clean energy markets. Center staff published an article in the prestigious *Electricity Journal* on sound rate making principles for the new era of distributed energy resources.

Solar Energy Policy and Advocacy: The Center’s nationally recognized expertise in solar energy valuation and rate design has been invaluable as we have engaged in New York’s pioneering “Value of Distributed Energy Resources—VDER” proceeding and in net metering and other proceedings in Arkansas, Missouri, Rhode Island, and Massachusetts. In 2018, the Center closed out and published a report on its three years of work leading the Northeast Solar Energy Market Coalition, a US Department of Energy-funded project that brought together solar business associations in an effort to harmonize solar market policy across the Northeast US. We also collaborated with outside authors to publish a ground-breaking paper in the Solar Energy Journal on how to achieve very high penetration of solar energy deployment.

Gas Utility Regulatory Issues: The Center has been a leader in New York in developing a regulatory and policy engagement strategy on gas utility issues. With the support of the Energy Foundation, we submitted expert testimony in several gas utility rate cases in New York (and in Rhode Island). In those cases, we crafted and advanced a unique “bottoms-up” strategy that focused on ending cross-subsidies for distribution-level gas infrastructure expansion, subjecting all gas system growth to rigorous and comprehensive benefit-cost analysis (especially in comparison with non-gas solutions like renewable heat and gas efficiency), and accounting for the full life-cycle and well-to-burner tip environmental impacts of direct gas use. And we made progress in ending automatic approvals of gas expansion spending. And with the support of Earthjustice, and in collaboration with more than a dozen other organizations, we intervened in a major new gas proceeding filed by Con Ed. In that case, Con Ed launched “non-pipeline solutions” program proposals that support gas efficiency, gas peak demand reductions, and renewable electric heat market growth. In the same case, the Public Service Commission sided with the Center in denying Con Ed’s proposal to charge customers for the pre-development costs for major new gas pipelines. As 2019 was starting, Con Ed declared a moratorium on new gas connections in the Center’s home county of Westchester, New York. The Center will be front and center on these issues in 2019.

International: The Center held a United Nations side event on “Reaching the 1.1 Billion People Without Power Through Renewable Energy” during the High-Level Political Forum on Sustainable Development Ministerial Meeting on July 18, 2018. The meeting at the German Mission was sponsored by the UN missions of Germany, the United Arab Emirates, Tonga, and Sri Lanka and by the International Renewable Energy Agency (IRENA) and the International Council of Environmental Law. The event demonstrated the advantages of off-grid community renewable energy in providing electricity to unserved populations.

The Center also completed for publication a major 2-year study with Shanghai Jiao Tong University on “A Comparison of Air Pollution Control Governance in the Los Angeles and Beijing-Tianjing-Hebei Regions,” designed to help the U.S., China, and all other countries solve their city air pollution problems; and another major study for the IUCN Academy of International Environmental Law on Community Renewable Energy for Sustainable Development, illustrating its potential for supplying non-polluting energy for economic development in all worldwide jurisdictions to meet their energy needs economically and contribute to their climate change mitigation goals.



Community Engagement: Center staff also spent time in 2018 supporting their home communities. We volunteer, sit on boards, speak to citizens' groups, and advise prospective and current students of law. We teach a course in energy law and regulation. We advise our local community leaders on sustainable energy opportunities.

The Center leverages its special relationship with the Elisabeth Haub School of Law and Pace University to provide thought leadership and opportunities to discuss vital issues relating to clean energy. In 2018, along with the Canadian Consulate in New York City, we hosted our 5th Annual New York Power Puzzle forum, featuring keynote speaker Richard Kauffman, New York's chair of energy and finance. We hosted forums on the Indian Point nuclear power plant closure at the Law School and participated in more than a dozen local and regional clean energy events and town hall meetings.

Large corporations all over the world are today emerging as leaders in advancing clean energy development and sustainability practices. The Center has engaged with an exciting, relatively new organization called "Smart Energy Decisions," also based in White Plains, New York, to disseminate best practices information about corporate sustainability and clean energy projects. Center director, Karl Rábago, served as a judge for Smart Energy Decisions first annual innovation awards ceremony.

For over 30 years, the Pace Energy and Climate Change Center has been a leader working at the intersection of energy and the environment. We engage government decision makers and key stakeholders with robust research and analysis in law and policy. Over time, the Center has grown from its initial focus on energy regulatory law and policies to tackle transportation and fuels, as well as climate change mitigation and resilience.

Whether our aim is improving energy efficiency, advancing renewable energy and distributed generation, reducing greenhouse gas emissions or making our communities more resilient in the face of climate change impacts, the Center remains at the leading edge of finding solutions to our energy and climate challenges on the local, state, regional, national and international levels.

Our Center was founded in 1987 as the Pace Energy Project by Dean Emeritus Richard L. Ottinger upon his retirement from the U.S. Congress. Early on, Dean Ottinger recognized the environmental impacts of our supply and use of energy in the United States—and how those impacts were largely externalized from energy decision making. So, from the very beginning, the Center has provided cutting edge research and analysis of energy production alternatives' social and environmental costs and benefits.

The Center trains the next generation of smart energy professionals. Students from Pace University and the Elisabeth Haub School of Law School are actively involved in the Center's projects. Our interns contribute directly to the creation and development of work products for both domestic and international projects. Students have gone on to careers at private firms and public institutions central to the energy discussion.



Looking Ahead in 2019: The year ahead promises to be as exciting and important as the one just completed. Governor Cuomo has announced and sought the budget to implement a “Green New Deal” in New York that will involve significant clean energy expansion, major greenhouse gas emissions reductions, and new programs and focus on job creation, affordability, energy justice, and interstate cooperation. Work will intensify on the Value of Distributed Energy Resources proceeding and other REV-related proceedings, on setting and planning for achieving Green New Deal goals, and on advancing beneficial electrification policies and programs relating to transportation electrification and renewable electric heat market growth.

As this report was being prepared, Con Ed, the biggest utility in New York, filed major electric and gas rate cases. The Center will file testimony on rate design issues, utility program spending, performance incentives, gas system expansion proposals, transportation electrification, energy efficiency, and other issues.

We are providing expert assistance in a utility regulatory case in California involving fixed customer charge proposals, planning and performing a community energy project design project in Aguadilla, Puerto Rico, and continuing our support of Arkansas Audubon Society and Arkansas Advanced Energy Association on issues arising in the state legislature and before the Public Service Commission on net metering and development of distributed energy resource markets.

The Center is also continuing our leadership role, with Earthjustice, in the ongoing Con Ed gas programs and pipeline case. The gas case took an unusual turn when, following a Public Service Commission denial of a Con Ed request that customers bear the cost of pipeline development costs, Con Ed announced a moratorium on new gas service connections in Westchester County, where the Center is located. The Center will continue to work with Earthjustice, Con Ed, and other stakeholders to develop and implement policy and programs that accelerate the deployment of clean, resilient, and affordable energy alternatives to gas.

Whatever the years ahead bring, the Pace Energy and Climate Center plans to be involved in driving clean energy policy. Thanks to the continued support and confidence of our government and foundation funders and expert assistance clients, we will be working to secure clean energy.

Please follow us on Twitter at @energypace.

*More information and our publications
are located on the web at <http://energy.pace.edu>.*

Secure Clean Energy