



SOUTHERN
ENVIRONMENTAL
LAW CENTER

POWER OF THE LAW QUARTERLY

Fall 2018

CLEAN ENERGY ISSUE

Exceptional does not begin to describe the changes we have seen in the electric power sector in the South over the past few decades. Thanks in large part to the advocacy of SELC and its partners, the environmental impact of electric power production in the Southeast is dramatically less than it was in the 1990s, even though we are producing far more electricity today. Our air and water are cleaner because of this amazing turnabout. In this issue we reflect on the historic progress that has been achieved because it underscores what is at stake today. Powerful political and corporate forces are seeking to turn back the clock by rolling back safeguards and squashing innovations. The Southern Environmental Law Center is doubling down, determined to keep our region moving toward a clean energy future.

A Remarkable Record of Achievement Under Attack

If we singled out one culprit for the loss of clean air, clean water, and unspoiled places in the Southeast historically, electric power generation—and particularly coal-fired power—would be it. By the 1990s, fossil fuel-fired power plants accounted for virtually all of the region’s mercury air pollution, almost three-quarters of soot-forming sulfur dioxide releases, and one-quarter of nitrogen oxide pollution, which contributes to both soot and smog. Coal burning plants were also the single biggest source of toxic pollution in our creeks, rivers, and lakes, responsible for over one-third of the total dumping of wastewater and nearly all of the arsenic, selenium, and mercury.

But since then these regional pollution levels have plummeted. Air emissions of mercury, sulfur dioxide, and nitrogen oxides from electricity generation are all down 85 to 95 percent. Piped discharges of toxic heavy metals into

waterways have been cut in half. These trends are even more impressive when considering that over the same period electricity production in the Southeast has risen by well over 40 percent.

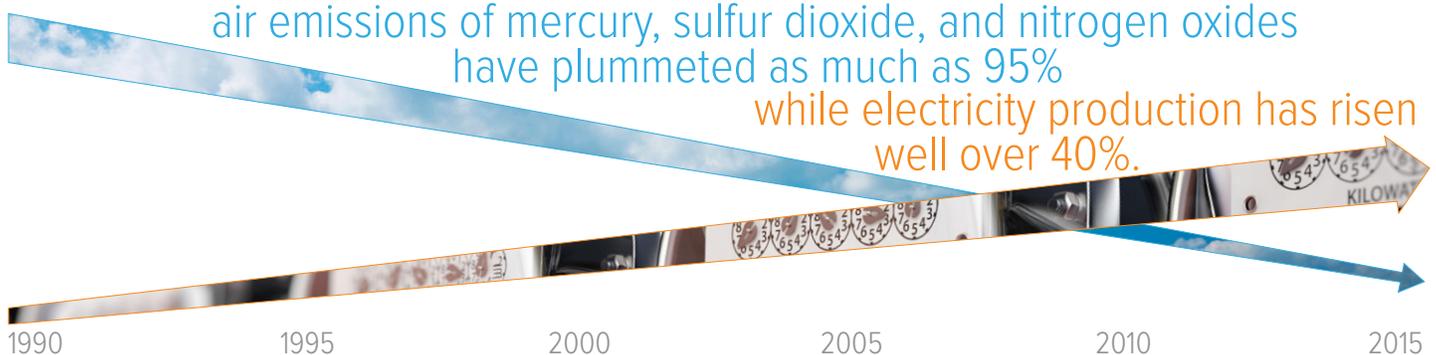
The benefits of this turnabout have been nothing short of amazing. For example, in 1990 unhealthy air plagued the South. That year, during the traditional 214-day season for monitoring smog levels, there were only 64 days when every community in the region had safe readings. By 2017, that number had practically tripled to 185 days. Soot shows a similar trend. In 2002, more than one out of two Southerners lived in an area with unhealthy soot levels. Today, virtually none do.

This is a remarkable success story, and it didn’t happen on its own. Environmental law, and environmental lawyers, made it happen.

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The power of law in action

Congress laid the groundwork with the passage of the bipartisan, landmark environmental laws of the 1970s, particularly the Clean Air Act and Clean Water Act. These statutes reflected a new way of thinking about the environment, a wide-ranging acknowledgment that unchecked industrial growth without basic safe-

our states, but are some of the biggest utility companies in the nation.

To rise to this challenge, we use a wide variety of tactics that fall into two general groups.

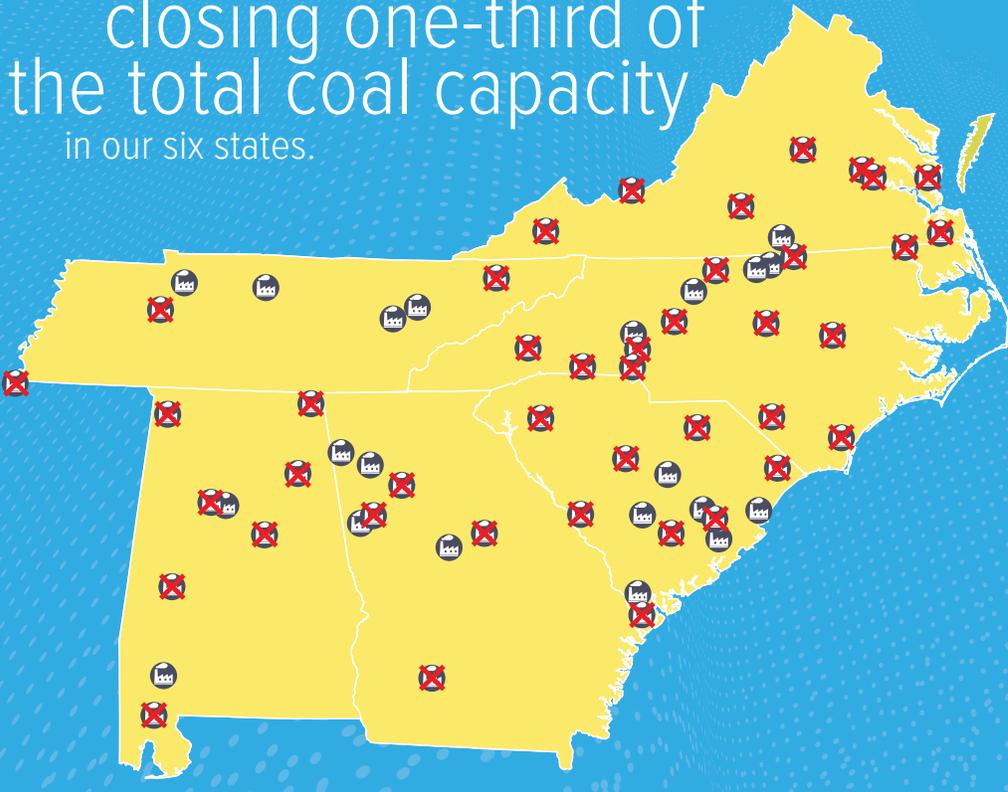
On one side, we directly attack our region's over-reliance on coal-fired power by ensuring that facilities include all the pollution controls required by law. This forces utilities to see on their bot-

coal-fired capacity in our six states.

But it is not enough to retire aging coal plants. In tandem, we expand the role of clean alternatives to meet the region's electricity needs by shaping energy policies that level the playing field for these resources. Over the past dozen years, SELC attorneys have taken part in over 210 legal proceedings before state public service commissions to promote cheap, clean energy efficiency and solar power. SELC has spurred utilities to roll out cost-effective efficiency programs that were almost nonexistent in the Southeast a decade ago. And the dedicated team of attorneys who lead our solar initiative has helped propel the region from 1 gigawatt of solar power in 2015 to 10.5 gigawatts of solar commitments today, enough to meet the energy needs of almost two million homes.

The growth of sustainable energy resources is powering a humming economic engine. Across SELC's six states, the solar industry employs more than 23,000 people. And according to a 2017 U.S. Department of Energy report, over 300,000 Southerners spend some or all of their time working with energy-efficient technologies and services, a labor that sprawls across the construction, manufacturing, and service sectors.

SELC has played an instrumental role in closing one-third of the total coal capacity in our six states.



guards threatens Americans' health and America's natural heritage. But it was one thing to enact broadly worded requirements into federal laws, and quite another to make those laws have real-world impact.

Throughout its history, SELC has put these laws to work, helping Southerners realize the promise of a better, healthier life embodied in the country's bedrock environmental protections. And we have had no bigger task than using these laws to change the practices of the South's electric utilities, which are not only among the most powerful entities in

tom line the true cost of a coal-based energy system and to decide whether it makes financial sense to pay that full cost or to retire the plant. We close the legal loopholes on coal-fired power through actions like bringing enforcement suits on behalf of local citizens, strengthening air and water permits, and challenging deficient EPA regulations. Fighting for essential health and environmental safeguards has been the key to preventing the construction of seven new coal-fired generating units and securing the planned or actual retirement of 130 out of 246 units, accounting for one-third of the total

Federal agenda versus southern reality

Today, all of this progress is at risk because the Trump administration is hell-bent on boosting the coal industry and undercutting clean energy businesses. A year and a half in, this administration had officially acted no fewer than 42 times to directly undercut significant national safeguards on the fossil fuels used to generate electricity or to institute policies hampering the growth of the renewable energy and energy efficiency industries. That's an average of once every two weeks.

What's the rationale for turning back the clock to allow coal to be king once more? It's the same old story: anything

that cleans up our air and water, anything that troubles supposedly cheap coal, and anything that increases the use of “fringe” resources like solar power must be bad for the economy and for pocketbooks. Robust environmental protections and economic vitality can’t co-exist, they say.

But the southern experience belies this myth. After all the environmental and clean energy progress we’ve made since 1990, we’ve also managed to add over eight million jobs in the six SELC states—a 45 percent increase—and keep the regional economy as a whole thriving, with the inflation-adjusted real gross domestic product for the Southeast doubling over that same time frame.

And it is not just historic numbers and trends that drive us. It is the stories: the Alabama mayor whose small town sits less than a mile downstream from 300 acres of leaky coal ash lagoons and who was so concerned about a proposal to weaken federal coal ash safeguards that he traveled to Washington, D.C., to ask EPA at a public hearing, “Have you lost your mind?” The church in Atlanta that uses the money it earns from its new solar panels to expand its Toys for Tots program. The North Carolina hospitals now eligible for an energy efficient heating system that can cut costs by reducing energy use by up to 75 percent.

SELC’s work in the areas of coal ash, solar power, and energy efficiency is interwoven with these stories and countless others that capture, in a way statistics alone cannot, how out of touch this administration is with the many ways environmental protections and clean energy benefit



“I have never heard a community ask for less protection from coal ash.”

— Senior Attorney Frank Holleman
testifying before Congress

individuals and communities every day throughout the South.

Fighting back, looking ahead

As this newsletter details, our work in these three areas is far from done. We have made tremendous progress, but tremendous challenges remain. To overcome them we must maintain the hard-won momentum we have built, even in the face of a federal government that seeks to rip away the safeguards that were essential to giving us the cleaner, healthier, and growing Southeast that we know today.

This disconnect between the southern story and current federal policy is greatest when it comes to global climate change. We are home to unique natural areas—from the spruce-fir forests on our Appalachian peaks to the coastal estuaries and barrier islands—that are especially vulnerable to the effects of a warming climate. And climate change will fall hard on the South’s economy due to damage to coastal property and lower agricultural yields, resulting in our region becoming

poorer relative to other regions of the United States. Yet the Trump team has shown little understanding or concern for this threat and is scuttling any federal action that addresses greenhouse gas pollution.

Fortunately, we can fight back on this issue, too. The most direct example, described on the back of this newsletter, is Virginia’s bold step to marshal market forces to cap power plant carbon dioxide emissions. But Southerners also reduce the burden on our global climate with each new solar installation that brings cheap, clean power to the grid; each new efficiency program that reduces energy waste and bills; and each court order requiring a coal plant to pay for cleaning up local contamination.

In this critical time, you can count on SELC to protect the South’s historic environmental and clean energy achievements, to build on them, and to defend the laws that made them possible, so that future generations of Southerners will have their own success stories—both large and small—to tell.

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SELC LEADS COAL ASH CLEANUP

In 2012, when SELC began going to court to protect southeastern communities from toxic coal ash pollution, utilities were bent on operating leaky, unlined coal ash lagoons. In fact, when SELC first sued to stop pollution from Duke Energy's ash ponds in North Carolina, the utility responded that it would *never* excavate its ponds and put the coal ash in dry, lined storage. Six years later, the company has committed to stop using lagoons and to excavate and safely store ash at 10 of its 16 facilities in the Carolinas, about 65 million tons of coal waste.

Inaction on an inherited danger

Coal ash has long been one of the hidden costs of fossil fuels—as hazardous as air pollution from power plants, but largely ignored. Burning coal has its own pernicious effects, of course, and the pollutants not released into the air don't just go away. Arsenic, mercury, selenium, and other toxics end up in the leftover ash. For decades, utilities have mixed ash with water and sluiced it into unlined pits where it leaches these toxics into groundwater and nearby surface waters. The pits are usually on the banks of rivers and lakes—and they leak constantly. By requiring utilities to clean up coal ash and meet their obligations to protect clean water as well as clean air, we are forcing them to confront the true costs of coal.

The dangers of coal ash grabbed national attention in December 2008, when a massive coal ash lagoon at

TVA's Kingston plant ruptured, spilling more than one billion gallons of hazardous pollution and huge amounts of sludge into the Emory and Clinch Rivers. It was the worst coal ash disaster in U.S. history. Three years later, however, efforts to enact national safeguards for ash had stalled, and nothing was happening at the state level. With government failing in its protective mission, SELC launched a regional initiative to investigate coal ash sites for possible enforcement actions in court.

Fortunately, Congress, in the early 1970s, understood that the government would not always have the resources, the interest, or the will to enforce environmental protections, and included what are known as “citizen

suit” provisions in major environmental laws. Citizen suit provisions authorize individuals and communities hurt by illegal pollution to enforce protections when the government cannot or will not. Over the past six years, SELC has stood in the shoes of government on behalf of local communities across the region to force utilities to clean up their coal ash waste.

The southern solution and national implications

We started in South Carolina. Through legal action and public pressure, we reached settlements with the state's utilities to move their ash to dry, lined storage away from waterways. Their excavations are well

... excavations are well ahead of schedule, and we have seen immediate environmental and health benefits, with water monitoring data showing steep drops in hazardous chemicals. For example, at the Grainger site on the Waccamaw River, arsenic levels have fallen 90 percent.



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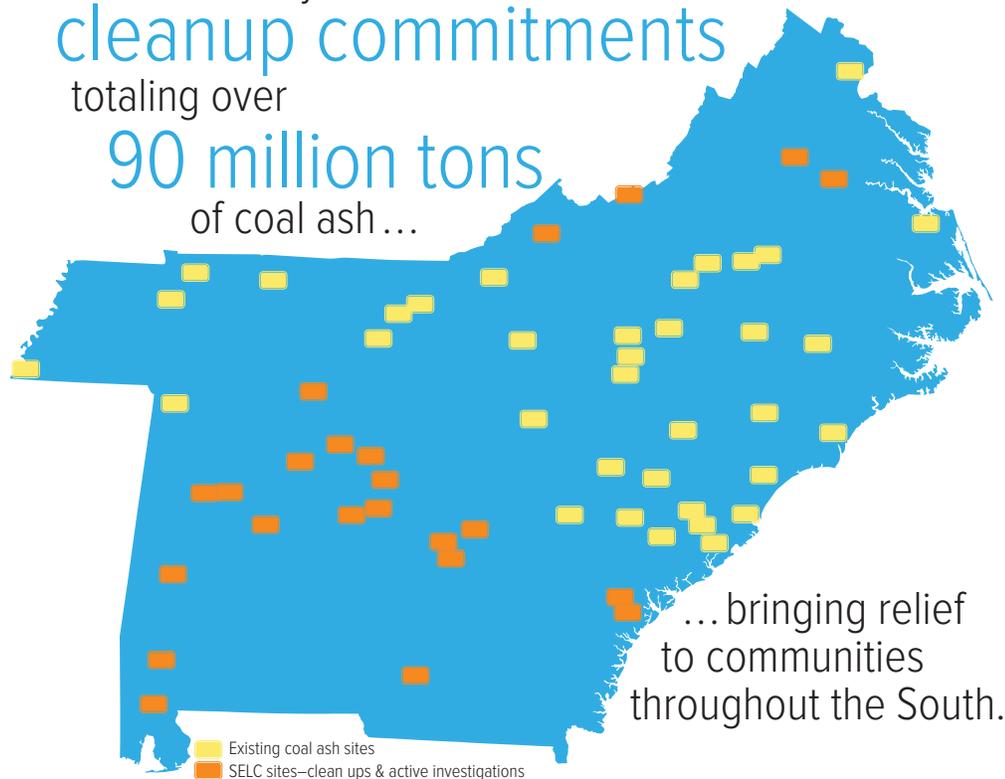
Today, our efforts continue to break new ground. In 2017, after high-profile trials, SELC won the two first-ever rulings in federal court to find utilities in violation of the Clean Water Act for illegal pollution from the irresponsible storage of coal ash waste. The first win came against Dominion Energy's Chesapeake plant in Virginia. Soon after, we achieved an even more resounding victory against TVA's Gallatin plant in Tennessee. The court rejected TVA's half-baked cleanup plan and ordered it to excavate more than 10 million tons of coal ash at the site on the Cumberland River. The judge wrote, "The solution is not to cover over those decades-old mistakes, but to pull them up by their roots."

These legal fights are not over. Supported by national industry groups, the utilities have appealed the rulings, and we are in court making our arguments once again. Much is at stake in these appellate decisions, which will affect industry practices nationwide by clarifying utilities' legal responsibilities.

To date, our advocacy has secured cleanup commitments totaling over 90 million tons, bringing relief to communities throughout the South. But the impacts have gone beyond our region. Because our pioneering, on-the-ground legal work has been so successful, our efforts underscored the magnitude of the coal ash problem and helped compel EPA to develop the first nationwide standards governing coal ash storage.

But just as the new rule is beginning to provide greater protection, the Trump administration is trying to delay, weaken, and possibly repeal these

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important rulings. SELC is playing a principal role in defending them. In April, Senior Attorney Frank Holleman testified on Capitol Hill in defense of strong coal ash protections. "I have never heard a community ask for less protection from coal ash," Holleman said. "Having spent our time and effort helping communities protect themselves, we are now spending time and effort fighting what is supposed to be our country's Environmental Protection Agency."

Pressing on at all levels

At the same time, we have not let up on the successful state-level advocacy that made us a leading national voice. In Alabama, we have urged rejection of the state's deficient coal ash rules. In Tennessee, we have explained to Memphis authorities and residents how TVA's reckless plans would threaten the city's primary source of drinking water with arsenic contamination. And in North Carolina, we have not forgotten about the six remaining sites where Duke has not yet committed to cleaning up its coal ash. We will be in federal court

on two of those sites this year.

No matter the venue and no matter the adversary, as long as the utilities choose the most primitive and irresponsible way to store coal ash, SELC will be there to stand up for the rights of citizens and for clean water.

Curbing the Rush to Natural Gas

Having slashed our region's over-reliance on coal, we are now working to stop over-investing in natural gas. Our sights are on the Atlantic Coast Pipeline, a destructive and unnecessary 600-mile boondoggle spanning Virginia to North Carolina. SELC convinced the Fourth Circuit to invalidate permits that had been issued by the U.S. Fish and Wildlife Service and National Park Service, then prevailed on FERC to halt all construction. We will press forward in federal court with five coordinated lawsuits—and simultaneously in public utility commission proceedings—to highlight how utilities are using self-serving, inflated demand forecasts to rationalize a \$6.5 billion pipeline project that will increase company profits at customers' expense.



SOLAR POWER IN THE SOUTH

The clean energy future has truly begun to arrive in the South on the rays of the sun. Solar energy’s inherent advantages, such as its ability to provide increased power in the heat of the day when the electric grid needs it most, have combined with falling solar panel costs and improving policies to fuel the resource’s astronomical growth in the region. In the past three years, solar installations and commitments in the Southeast have skyrocketed over 900 percent. Soon, they will provide enough electricity to power almost two million homes.

But the resource is far from its full potential. Unfair taxes, fees, and regulations hold it back. SELC is knocking down these policy barriers to establish and expand the free-market conditions that allow solar power to grow to its greatest capacity.

Many of these barriers target monopoly utility customers who seek a measure of energy independence,

either by installing solar panels or purchasing solar power from a competing power provider. SELC is protecting these customers’ right to go solar without punitive treatment. In Virginia, we struck a blow for companies who want to buy solar power when we helped persuade the state Supreme Court that Dominion Energy can’t penalize their business customers that contract for power from an independent solar developer. SELC also recently challenged Alabama Power’s levying of a steep monthly charge when homeowners choose to put solar panels on their roofs. The penalty claws back about half the savings a customer would receive from having solar panels, and has stunted growth in the state’s solar market.

While better rooftop solar policies are important, many roofs aren’t suitable for solar panels. And many low- and moderate-income customers cannot install solar because they are

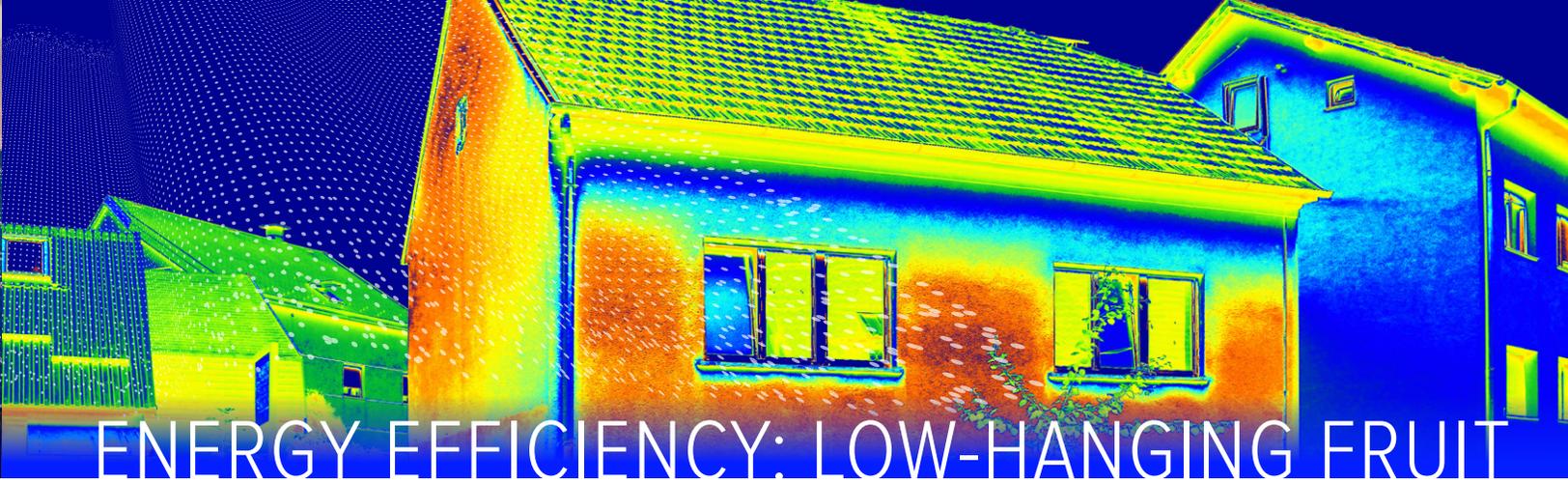
renters, reside in apartment buildings, or lack access to financing. As one equitable solution to expanding access to solar power, SELC is advancing community solar, which allows customers to invest in a piece of a small solar project and get credit for that investment on their monthly bill as if their panels were on their own roof. Through legislation and follow-up legal proceedings, we have successfully pushed for and shaped utilities’ first-ever community solar programs in Georgia, Virginia, and North Carolina. And in South Carolina, our work with Duke Energy and South Carolina Electric and Gas Company led to the inclusion of novel incentives for low-income participants in their programs.

An important tool for expanding larger-scale solar farms, as well as rooftop solar, is a little-known 1970s federal law, the Public Utility Regulatory Policies Act. It required states to create rules that give independently developed solar power a chance to fairly compete

with utility-owned generation. Especially in North and South Carolina, we have used this federal backstop to ward off utility attacks on competitive markets. But there are attempts in Washington, D.C., to gut the law’s protections. SELC is weighing in at the Federal Energy Regulatory Commission and in Congress to stress the law’s importance to solar power’s future in the Southeast.

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ENERGY EFFICIENCY: LOW-HANGING FRUIT

Energy efficiency is our cleanest, cheapest energy resource. Saving energy through efficiency helps lower customer bills, reduces emissions of carbon dioxide and other pollutants, and creates jobs. Yet despite these proven benefits, the efficiency efforts of utilities in the Southeast lag behind those of utilities in other regions.

To help bring the benefits of energy efficiency to our region, SELC is pursuing an aggressive strategy to spur utilities to adopt new programs—such as incentives to upgrade lighting, heating, and cooling systems—so that customers can meet their power needs with less electricity and at a lower cost.

We are focusing on where customers are paying exceptionally high electricity bills to fund expensive, unnecessary projects. In the wake of the costly failure of the V.C. Summer nuclear project in South Carolina, SELC is leveraging the controversy to advance significant, long-needed reforms in

energy planning and utility regulation, and to press for reliance on clean, renewable energy and energy efficiency to fill the void left by the abandoned project. In Georgia, SELC's Atlanta office is pressing for reforms that will advance energy savings and ease electricity costs for Georgia Power rate-payers burdened with the exorbitant cost of the risky Plant Vogtle nuclear project.

Cutting the cost of power serves lower-income families in particular; they spend a large percentage of their income on energy bills. As a result, struggling families sometimes find themselves forced to choose between electricity and other basic necessities. Energy efficiency can reduce and stabilize utility bills, relieving this high energy burden.

Since 2005, SELC attorneys have taken part in more than 210 public service commission proceedings, making PSC advocacy a foundational component of our clean energy work—particularly our energy efficiency efforts.

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Energy efficiency can reduce and stabilize utility bills, relieving this high energy burden.

While the work is often obscure, the impact is very real. From 2014 to 2017, Duke Energy Carolinas' efficiency programs eliminated the need for more

than four natural gas power plants that otherwise would have been built to meet peak electricity demand. Our participation in energy planning at the state level will continue to be the mainstay of our drive to parlay improvements in energy efficiency into measurable reductions in energy waste, electricity bills, and greenhouse gas emissions.

We worked with Duke Energy to achieve efficiency programs that eliminated the need for more than four natural gas power plants that otherwise would have been built to meet peak electricity demand.



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WILL YOU HELP US MEET AN ENERGY CHALLENGE?

SELC will receive \$550,000 for our Clean Energy Initiative if we can match it with new or increased contributions in 2018. Please partner with us in this powerful, transformative work so critical to the South's future by making a special Clean Energy gift today.

Virginia Carbon Regulations

Climate change has come to southeastern shores, and we must do our part to address the cause. Although regional power sector greenhouse gas emissions are two-thirds of their 2007 peak, if SELC's six states were viewed as a country, we would still be the eighth largest contributor to global warming in the world.

The need for reasonable, prompt action by states is even greater because the Trump administration is refusing to accept reality and responsibility. It has withdrawn the U.S. from the Paris Climate Accords and is dismantling the Clean Power Plan, a landmark, market-based EPA program to rein in carbon dioxide pollution from fossil fuel-fired power plants.

Virginia is leading the response to this federal retreat by launching its own project to cut greenhouse gases. In the process of being finalized, the

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program would establish a CO₂ emissions trading program for power plants that could link to an existing program covering nine eastern states. Under Virginia's proposal, the statewide CO₂ cap would be 15 percent tighter than it would have been under the Clean Power Plan.

Drawing on our in-depth knowledge of Virginia energy issues, SELC has played a lead role in supporting

the state throughout the rulemaking process. Going forward, we will help defend the final program from any legislative attacks and legal challenges and will use State Corporation Commission proceedings to ensure that utilities cost-effectively comply. It is vital that we curb greenhouse gas pollution, while being smart about it.