

BUILDING A BRIGHT FUTURE. TOGETHER.

Executive Summary of the Empower Kentucky Plan

A people's plan to shape a Just Transition to a clean energy economy in Kentucky.

Kentuckians For The Commonwealth



1. OVERVIEW

Empower Kentucky is a homegrown effort to shape a people's energy plan for our state, one that reflects a shared vision and produces positive outcomes for all Kentuckians. This project is the outgrowth of decades of grassroots organizing by Kentuckians affected by coal, energy and just transition issues in our commonwealth.

The Empower Kentucky Project launched in mid-2015, at a time when most politicians in the state were lining up to oppose the EPA's Clean Power Plan (CPP). But the vision and strategy that shaped this effort have always been broader than the narrow question of whether and how Kentucky should comply with the federal climate rule. Instead, the Empower Kentucky Project is an effort to host an informed, creative and inclusive public conversation about the energy future we want, and the best ways to shape a Just Transition to a clean energy economy.

The Clean Power Plan created an important opportunity for that kind of public conversation. The rule gave unprecedented flexibility to each state to shape its own energy plan. However, in Kentucky the CPP was met by fierce opposition from leaders of both political parties. In the absence of responsible public leadership or any effort to develop a state plan, our grassroots organization, Kentuckians For The Commonwealth, stepped up to take on the task. KFTC members decided we would engage Kentuckians in every region of our state to learn people's energy stories, vision and ideas. And together we would write a people's plan reflecting the hopes, concerns and best ideas we gathered for creating jobs, improving the quality of life in our state and reducing climate pollution.

Over the past two years, KFTC members directly engaged more than 1,200 people across every congressional district in this effort. We formed diverse and active workteams to understand Kentucky's changing energy landscape, examine policies and practices, and evaluate the implications of key choices. With guidance from a broad range of experts, our teams created an Environmental Justice Analysis for Kentucky, developed key recommendations and analyzed the outcomes of our plan compared to a business-as-usual scenario.¹

The Empower Kentucky Plan demonstrates that a Just Transition to a clean energy economy is possible in Kentucky. By emphasizing energy efficiency and renewable energy and putting a low price on CO_2 pollution, the plan produces more jobs, less health-harming pollution and lower average bills than Kentucky's business-as-usual scenario over the next 15 years. By 2032, Empower Kentucky Plan invests nearly \$400 million in a Just Transition for affected communities and workers, reduces average bills by 10% compared to business-as-usual, and slashes CO_2 pollution from Kentucky's power sector by 40%. The plan also prioritizes energy efficiency in low-income communities, and limits Kentucky's reliance on risky and polluting energy options.²

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2. THE EMPOWER KENTUCKY PLAN: KEY RECOMMENDATIONS AND OUTCOMES

The Empower Kentucky Plan describes a broad range of steps Kentuckians can take to shape a Just Transition to clean energy economy by accelerating energy efficiency and renewable energy across our economy. The plan includes actions that can be taken by state and local governments, utilities, schools and universities, businesses, nonprofits and residents. Some recommendations simply remove barriers to renewable energy and energy efficiency in current state policies. Others are designed to ensure equity, support a Just Transition and prioritize health. Still others would incentivize and promote clean energy jobs and investments and locally-owned renewable energy across Kentucky.

The plan's recommendations fall in seven main categories, including:

- Create Jobs and Support a Just Transition
- Prioritize Health and Equity
- Accelerate Energy Efficiency and Renewable Energy
- Support Local, Community-based Solutions
- Fully and Fairly Invest In Our Energy Transition
- Meet Our Responsibilities to Act on Climate
- Engage Everyone to Transform Other Essential Systems

Deploying more energy efficiency (EE) and renewable energy (RE) across our economy is the cornerstone of the Empower Kentucky Plan. Together these strategies are low-cost and low-risk energy solutions that can deliver multiple benefits for Kentuckians. By ramping up investments in energy efficiency and renewable energy, Kentucky can spur local job creation and help families and businesses save money on their energy bills. These approaches can avoid or delay the need for risky and expensive investments in new fossil fuel generation. They also result in less power plant pollution, benefiting our health, climate and economy.

To compare the outcomes of our plan to outcomes of a business-as-usual scenario, we focused on a set of key recommendations contained within the broader Empower Kentucky Plan and commissioned Synapse Energy Economics Inc. to do the analysis. They modeled the outcomes of the following set of Empower Kentucky recommendations:

- Reduce electricity demand in Kentucky by 17% across our economy by 2032
- Generate 25% of Kentucky's electricity from solar, wind or hydropower in 2032
- Ensure that 18% of all energy savings benefit low-income residents
- Produce at least 1% of electricity from distributed solar by 2032
- Install at least 1,200 MW of combined heat and power to help commercial and industrial customers save money and energy by 2032
- Put a low price on CO₂ pollution from our power sector, starting at \$1 in 2018 and rising to \$3 in 2030
- Invest 20% of CO₂ revenue in a Just Transition for affected workers and communities, and the remainder of those revenues in energy efficiency across the economy.
- Limit the use of risky and polluting options, including biomass.

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¹ The business-as-usual case assumes that the Clean Power Plan does not exist, and that no new regulations are adopted over the next 15 years. It assumes Kentucky's utilities continue to achieve current levels of energy efficiency savings. And it assumes that energy demand in Kentucky grows slowly, at a rate equal to the weighted average of official projections made by utilities in Kentucky. For more details, see the *Empowering Kentucky Report* by Synapse Energy Economics at www.empowerkentucky.org.

² These and other findings, along with a description of key inputs and data sources, are described in an analysis by Synapse Energy Economics available at www.empowerkentucky.org.

SYNAPSE ENERGY ECONOMICS ANALYSIS

Synapse modeled the impact of this package of proposals on jobs, pollution, costs, bills and Kentucky's energy system, and compared the outcomes to the results we would expect to see under a business-as-usual scenario.

Their analysis found that by 2032 the Empower Kentucky Plan will:

- Create 46,300 more job-years for Kentuckians than business-as-usual
- Improve health by avoiding 93 thousand tons of SO₂ and 132 thousand tons of NOx pollution over 15 years
- Lower residential electric bills by 10%, compared to business-as-usual
- Invest \$387 million in a Just Transition for Kentucky's coal workers and communities
- Cut CO₂ pollution by 40% from Kentucky's power sector from 2012 to 2032, exceeding the Clean Power Plan's requirement
- Invest \$11 billion in energy efficiency across our economy, and prioritize energy savings that benefit lowincome households
- Result in a cleaner, more efficient and more diverse energy system
- Build 1,000 MW more solar, 600 MW more wind and 800 MW less natural gas capacity in Kentucky, and rely less on coal generation, than business-as-usual.

The Empower Kentucky Plan produces more jobs, better health and lower bills than business-as-usual, invests in a Just Transition and slashes CO₂ emissions from our power sector by 40%. Interestingly, the plan results in the same number of coal plant retirements by 2032 as the business as usual case, although generation from coal is lower in the Empower scenario. The Empower Kentucky Plan also reduces the amount of new natural gas capacity built in Kentucky over the next 15 years, and helps spur the growth of clean energy jobs and investments statewide.

The Empower Kentucky Plan assumes the Clean Power Plan exists, but its recommendations are worthwhile for Kentuckians, whether or not that federal rule is ever implemented. Kentuckians do not need to wait for a federal mandate to begin to make progress. We can begin today to implement this homegrown energy plan that achieves better outcomes for workers, residents and businesses than the business-as-usual course.

"I think the biggest issue here in eastern Kentucky is figuring out how to transition to a more diverse and dependable economy because we have very few jobs remaining in coal. That's the big looming question."

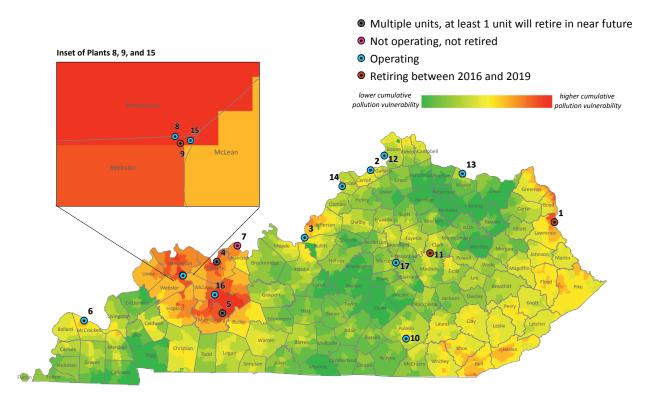
A Seat At The Table participant, Hindman

4 Empower Kentucky

3. AN ENVIRONMENTAL JUSTICE ANALYSIS FOR KENTUCKY³

As part of the Empower Kentucky planning process, KFTC members developed an Environmental Justice Analysis for Kentucky to document and better understand relationships among pollution, health, race and poverty in our state. KFTC's Environmental Justice Workteam included nearly a dozen people, including community members, public health professionals and cartographers from across the state.

Environmental Justice is defined by the U.S. EPA as "the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income" with respect to environmental protection. EPA's Clean Power Plan rule encourages states to do an environmental justice analysis to inform their state implementation plans. An EJ analysis can identify how low-income and people of color communities are affected by pollution, and can shine a light on the need for policies that reduce the pollution burden on vulnerable communities.



Cumulative Pollution Overlay and Coal Plants in Kentucky Map

KFTC's Environmental Justice Analysis for Kentucky explored the distribution of about a dozen types of pollution across our commonwealth to identify areas with the highest burden of cumulative pollution. We also examined the distribution of a number of health conditions that are known to be related to pollution exposure, including: asthma in adults and children and the rates of hypertension, premature death, and heart disease deaths. Lastly, we examined the distribution of a number of demographic factors, including poverty rates, percent minority, education attainment and age distribution. This map shows the areas of our state with the highest overall pollution burdens. More information and documentation can be found at www.empowerkentucky.org.

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The Environmental Justice Analysis and interactive webmap are available at www.empowerkentucky.org.

The KFTC Environmental Justice Workteam used tools and data offered by the EPA to do our own environmental justice analysis, and we went several steps further. We expanded the scope of our analysis to include a number of Kentucky-specific pollution indicators, including proximity to oil and gas wells, surface and underground mines, and other pollution sources that were not included in national datasets provided by the EPA's EJ screen tool. Our analysis also examined how different populations and communities across Kentucky are affected by specific health conditions that are known to be related to pollution exposure.

Our Environmental Justice Analysis for Kentucky finds that pollution from energy sector sources is "directly, strongly and positively correlated with health problems in Kentucky." It also finds important differences in the types of pollution that affect Kentucky's poorest counties, compared to the kinds of pollution that affect Kentucky's counties with the highest percentage of people of color.

Additional findings from our Environmental Justice Analysis include:

- Kentuckians are impacted by pollution from many sources and, while pollution from the energy sector plays a large role, it is not the whole story.
- Different pollution sources affect low-income and minority communities in Kentucky.
- There are strong relationships between exposure-related health problems and vulnerable demographics, such as poverty, educational level and certain age groups.
- Many of Kentucky's coal-burning power plants are located in areas which exhibit high cumulative pollution exposure and/or demographic vulnerability.



"Prioritizing health, equity and just transition came up a lot during the stories we heard at events last spring. My own story is just one example. My father-in-law was just laid off from his mining job in Western Kentucky. My family lives here in the Ohio River Valley where asthma rates are sky-high, especially for African Americans. And my neighborhood needs more affordable and energy efficient housing. All of us — and I mean all of us — deserve an energy plan that prioritizes health, equity and just transition."

Serena Owen

Serena Owen is KFTC member from northern Kentucky. She has been active in every phase of the Empower Kentucky Project, including as a table host for a community conversation about Kentucky's Energy Future and as a member on several planning workteams.

4. WHY INCLUDE A PRICE ON CARBON, AND WHY SUCH A LOW PRICE?

During the course of the Empower Kentucky planning process, our research found that ramping up energy efficiency and renewable energy generation would not be enough, on its own, to achieve significant pollution reductions from Kentucky's power sector. A preliminary analysis by Synapse Energy Economics determined that utilities in Kentucky would sell more coal power to other states if Kentuckians reduced our own demand for it.

After learning this outcome, the Empower Kentucky planning team considered additional policy options necessary to prioritize health and achieve deeper pollution reductions. With assistance from Synapse, we examined the implications of putting a price on CO₂ pollution from our power sector. Synapse modeled the impact of various CO₂ price scenarios to evaluate their impact on emissions, jobs, average bills and the share of Kentucky's energy mix produced by coal, gas and renewable energy.

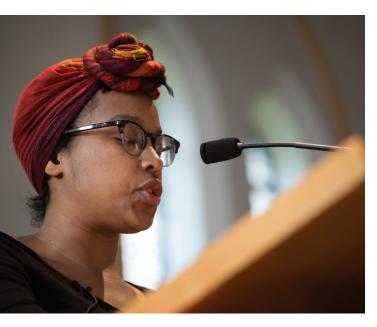
The Empower Kentucky Plan recommends putting a low price on CO₂ pollution from Kentucky's power sector and on the CO₂ content of imported electricity. We call for a fee of \$1 per short ton of CO₂ pollution in 2018, which gradually increases to \$3 over 15 years. By 2032 this policy will generate nearly \$2 billion in revenue, all of which will be reinvested in efficiency programs statewide and in efforts to create jobs and support a Just Transition for affected workers and communities.

KFTC recommends a low CO₂ price at this time because our analysis found that higher levels would greatly accelerate the build-out of new natural gas plants in Kentucky. Our proposed level appears high enough to achieve significant pollution reductions and invests in Just Transition, but not so high to drive rapid growth in Kentucky's natural gas infrastructure.

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As the costs of renewable energy continue to plummet, Kentucky may soon reach a point where a higher price on CO_2 will result in greater investments in renewable generation, rather than in more natural gas capacity. Until then, a relatively low price is necessary to prioritize health while also supporting Kentucky's transition to a clean energy future.

KFTC shares concerns held by environmental justice and economic justice organizations about many carbon-pricing policies. We believe any such policy must be designed carefully, after a good public process, as part of a comprehensive strategy to achieve meaningful pollution reductions, address racial and economic equity, and support a Just Transition. We intend for this Kentucky-specific proposal to reflect those shared values and make a constructive contribution to the broader national discussion.









5. OUR PROCESS: EVERYONE DESERVES A SEAT AT THE TABLE

At the core of the Empower Kentucky Project is the belief that Kentuckians have an opportunity, right now, to shape a bright energy future, one that works for all of us. We believe that change for the better is possible when people on the frontlines — those directly affected by poverty, pollution, racism and the decline of family-sustaining jobs — are at the front and center of shaping solutions.

In all, more than 1,200 Kentuckians shared their vision and ideas to inform this plan.

- 750 people took part in events held in each congressional district called A Seat At The Table: Community Conversations about Kentucky's Energy Future
- Hundreds participated in workshops, listening sessions, house parties, interviews, a two-day conference and/or an online survey
- 250 people attended a two-day conference, the Empower Kentucky Summit, to learn about and provide feedback on a draft plan
- Informed by this public input, several KFTC planning teams worked over many months to shape the Environmental Analysis and Empower Kentucky Plan.

Participants in these events shared stories and offered ideas for change. Many spoke about family members with asthma or black lung disease. Some described efforts to become more energy efficient or use renewable energy in their homes. Some talked about family members who worked in the mines, or described their own careers working for utilities, retrofitting power plants or working on coal river barges and rail lines. Some talked about pollution and health problems related to living near power plants or strip mines. Many shared stories about high electric bills, and the struggles faced by renters and people living in old and leaky homes.

Reflecting on the power of the stories that were shared, one person said, "We're ready for an energy transition, but we understand the complexity." Another observed, "We need to make a transition. And it starts by respecting and understanding affected workers."

As KFTC Chairperson Elizabeth Sanders said at the time, "We're going to design a blueprint for Kentucky that will make our communities more livable, improve our health — for everyone, from those living near strip mines to those living in the shadows of smokestacks — strengthen our economy, and support a Just Transition for workers and communities. **Our process and our plan will be beautiful, diverse and full of life and power."**

8 Empower Kentucky Empower Kentucky

6. WHERE WE GO FROM HERE

The release of the Empower Kentucky Plan takes place in a troubled moment for Kentucky, the country and the world. The power of fossil fuel industries is everywhere evident in our democracy. There appear to be few opportunities and little support for advancing a Just Transition to a clean energy economy within the Kentucky General Assembly or the U.S. Congress. Instead, our country is on the verge of lurching backwards on clean energy and climate commitments, a possibility that poses grave risks for our economy, health and climate.

Despite that reality, members of Kentuckians For The Commonwealth, along with many other Kentuckians, remain determined. This plan reminds us that even a coal-dominated state like Kentucky has options — choices we could make today — that are good for workers, residents and our climate. The Empower Kentucky Plan and process offer a hopeful model about what is needed, and what it will take, to build shared political will for a Just Transition.

While we are realistic about political roadblocks, we refuse to be limited by them. The stakes are too high. We'll continue to organize for better state and federal energy policies. And we'll seize every opportunity to implement incremental pieces of this plan and make progress at a local level. This plan offers a positive vision and a menu of good ideas that can be taken up by mayors and city council members, state legislators, candidates running for office, community organizations, labor leaders, students, health advocates, congregations, the Public Service Commission and utilities themselves.

Today many people across Kentucky and the U.S. are in motion. They are organizing for better jobs, better health, racial and economic justice, climate action, just transition and a healthy democracy. They are working to advance clean energy projects and policies locally, including within our cities, school districts and local utilities. They are showing up at town hall meetings, rallies and offices to demand better from state and national leaders. And many are making decisions to run for office themselves or support others to run with a vision for Empowering Kentucky.

It is our hope and intention that this plan, and the grassroots process that created it, will contribute to powerful local, state, and national organizing campaigns in the months and years ahead.



7. KENTUCKIANS FOR THE COMMONWEALTH

Kentuckians For The Commonwealth (KFTC) is a 35-year old grassroots social justice organization with more than 11,000 members and 14 chapters that span from Pikeville to Paducah.

We are Kentuckians. We are determined to build a bright energy future — one that works for all of us. Today our commonwealth has the opportunity to build a new, clean energy economy in ways that create jobs, advance equity and support a just transition while protecting our health and climate. We believe all Kentuckians deserve a seat at the table and a voice in shaping those decisions. Together we can ensure that our next energy system reflects the values and serves the interests of all Kentuckians, not just a powerful few.

We seek to build a new clean energy system that ...

- is fair and equitable
- invests in a Just Transition for affected workers and communities
- creates good quality jobs and opportunities
- significantly reduces risks and harm to our health, environment and climate
- prioritizes low-risk, no-regrets energy solutions
- encourages self-reliance, local ownership and community-based solutions
- empowers and assists all Kentuckians to save energy and benefit from renewable energy
- supports healthy and sustainable communities, now and for future generations
- reflects sound science, a vision for a just society and an inclusive, democratic process

Contact

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Empower Kentucky 11

