

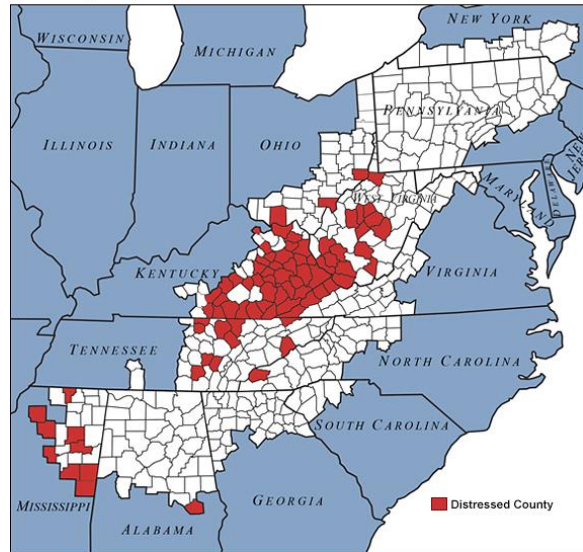
**Written Testimony for House Energy and Mineral Resources
Subcommittee Hearing
February 12, 2019**

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Mr. Chairman, Mr. Ranking Member, Members of the Subcommittee, thank you for the opportunity to present this testimony about our work and the conditions in coal impacted communities. MACED is a Community Development Financial Institution (CDFI) certified by the CDFI Fund of the US Treasury. We manage a loan portfolio of nearly \$20 million invested in small business across Appalachian Kentucky. We are deeply engaged in a range of initiatives to advance a Just Transition to a new economy for coal impacted communities in Appalachia and beyond.

This is a map¹ of Appalachia showing the economically distressed counties in red. They fall into the bottom ten percent of all the counties in the nation as measured by per capita income, poverty rate and three year average unemployment. This map has remained largely unchanged for decades. That doesn't negate the value of vast investments that have been made—there have been many improvements and much work has been done. The Appalachian Regional Commission (ARC) has been a key player ever since it was created and recent increases to its budget through the POWER Initiative have helped a lot. But we still have a long way to go.

ARC-Designated Distressed Counties, Fiscal Year 2019



Created by the Appalachian Regional Commission, August 2018

Data Sources:
Unemployment data: U.S. Bureau of Labor Statistics, LAUS, 2014–2016
Income data: U.S. Bureau of Economic Analysis, REIS, 2016
Poverty data: U.S. Census Bureau, American Community Survey, 2012–2016

The long history of coal mining in Appalachia did not create prosperous communities partly because in the early days these were not jobs that paid well—"You load sixteen tons and what do you get, another day older and deeper in debt." That's why Lyndon Johnson launched the War on Poverty from a front porch in eastern Kentucky.

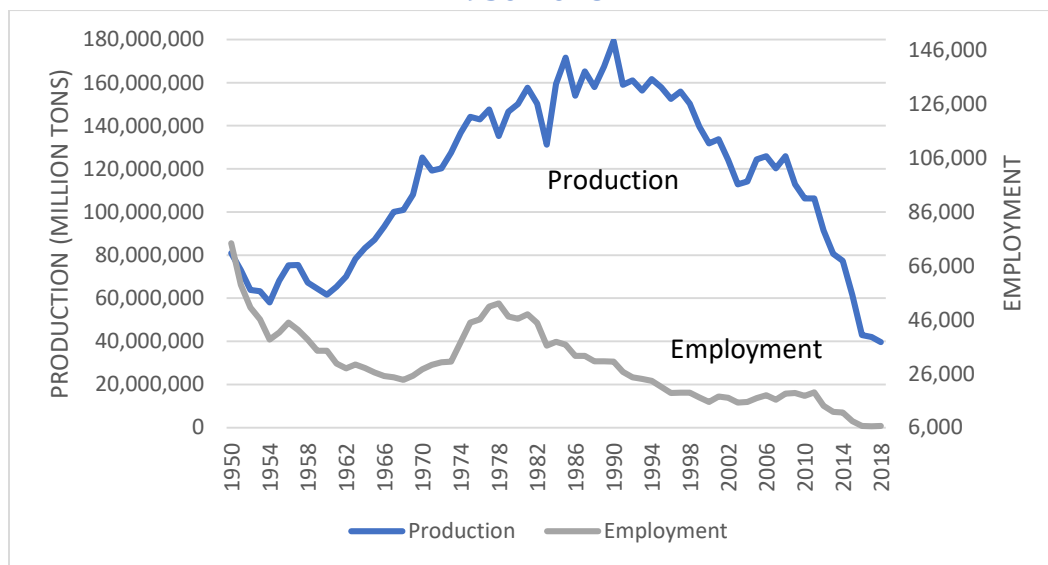


¹ Source: <https://www.arc.gov/research/MapsofAppalachia.asp>



At the end of WWII, we had 75,000 coal mining jobs in Kentucky. But in the 1950's the United Mine Workers Association (UMWA) signed an agreement with the mine operators for the mines to be mechanized. Over the next several decades coal production went up and down, overall increasing significantly until recent years (blue line in the chart²). And as the jobs became more technical, they paid better, a high school graduate could make \$60,000 to \$80,000 per year, making these some of the best-paying jobs in the region. But with long-wall mining machines underground, then the advent of strip mining and finally mountaintop removal mining, more coal could be produced with fewer workers. On the chart above, lower line shows how jobs continued to drop relative to production. By 2011 we were down to fewer than 20,000 jobs.

**Kentucky Coal Production and Employment
1950-2018**



Meanwhile, the dominance of coal largely displaced other large scale approaches to economic development that would have created a more diverse and resilient economy. Through decades of boom and bust in the coal industry, it was too easy to believe, with each downturn, that coal would come back. There was little effort put into developing other sectors of the economy, not enough major investment in education, health care, child care, housing and civic infrastructure. To the extent we did see progress, it was often the result of relatively small local efforts or the work of regional non-profits supported largely by private philanthropy.

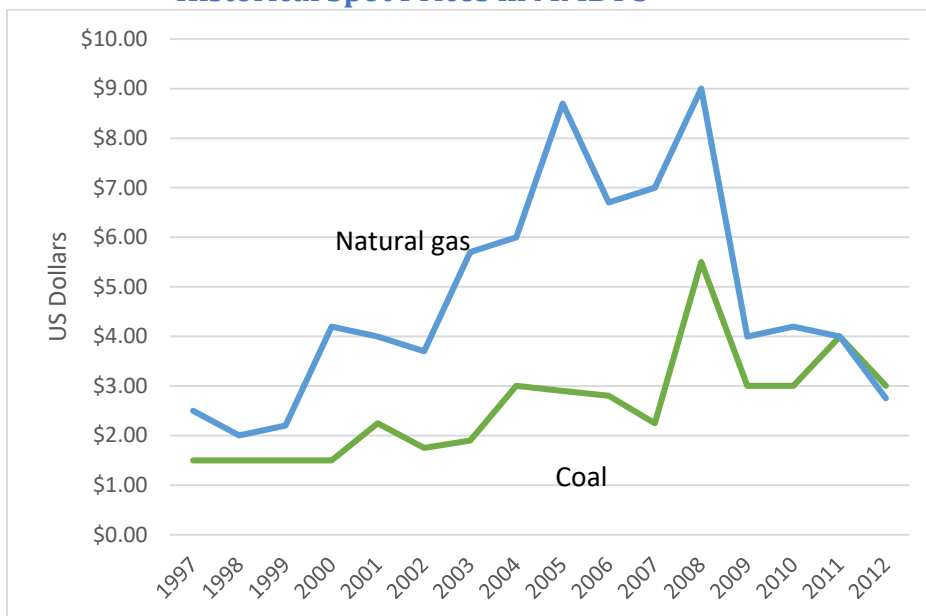
We also saw significant retrenchment on the part of both private philanthropy and the federal government in rural America in general and Appalachia in particular as attention and resources were redirected to pressing problems in urban areas. Disparities in essential

² Source: [http://energy.ky.gov/Coal%20Facts%20Library/Kentucky%20Coal%20Facts%20-%202016th%20Edition%20\(2016\).pdf](http://energy.ky.gov/Coal%20Facts%20Library/Kentucky%20Coal%20Facts%20-%202016th%20Edition%20(2016).pdf)

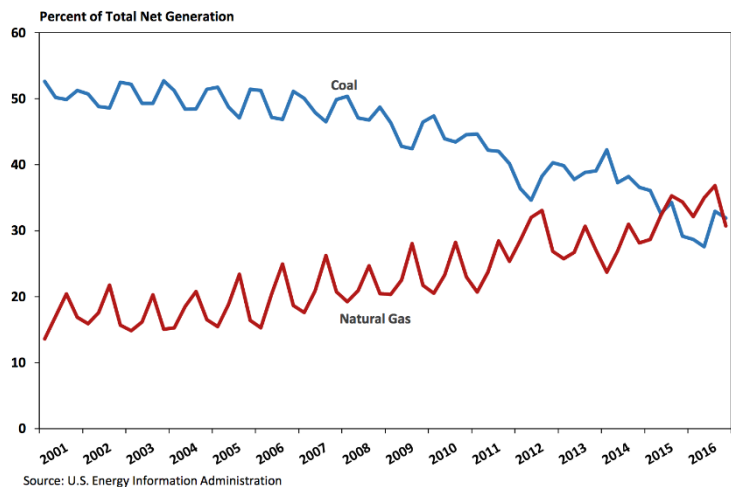
new economy assets like broadband and cell service compounded the other problems cited above. All these factors contributed to a growing sense among rural people that they were being left behind.

Almost 20 years ago, then-Governor Paul Patton, himself a former coal operator, made this observation: "As much as coal has meant to us, it still has not built for us a self-sustaining economy. It's got to be more varied - got to be more broad. In the early 1970's we had an economic developer's dream come true. We had more high tech jobs than we could ever imagine in the coal industry, and it still didn't solve the chronic problems of the region. So we have to build that basic economic foundation." But we didn't do that, and it set the scene for what came next.

Historical Spot Prices in MMBTU



In 2012, something unprecedented happened. For the first time, natural gas, became cheaper than coal as a result of the boom in fracking. The graph shows the prices for coal and natural gas in MMBTU's. When these lines crossed, the coal industry collapsed. Suddenly we lost 10,000 jobs, half of the remaining coal mining jobs in our state. Bankruptcies of several major coal companies followed as natural gas took on an increasing share of electrical generation.



The collapse of the coal industry has been a very real tragedy for the miners, their families, their communities and all the other businesses that relied on those earnings, from grocery stores to car dealers to home builders. It has also devastated local government budgets, as they saw reduced local tax revenues compounded by a sharp decline in coal severance taxes which they had come to rely upon as a significant source of revenue for local services.

The collapse of the coal industry is a tragedy, but it is a tragedy that sits on top of a disaster. That disaster is the fact that even before we lost those 10,000 jobs, this region had been economically distressed for generations. These economic realities have predictable correlates in other areas as well—low educational attainment, among the worst health statistics in the nation, and demographic shifts due to outmigration because of a lack of good paying jobs, resulting in a population that is disproportionately made up of the very old, the very young, and many who are unable to participate in the labor force. We also face the same opioid epidemic that plagues many other rural areas. All of that was true before the collapse of the coal industry.

So the question is not how do we replace those 10,000 or more jobs, and get back to where we were. The question is how do we go forward, how do we build a new economy for Appalachia and for other coal impacted communities—an economy that is more diverse, resilient, sustainable and equitable. Because the old economy was none of those things.

A diverse economy will rely on many small businesses in different sectors. These provide the goods and services needed in the community and keep more money circulating in the local economy.

A resilient economy will be less reliant on a large single industry so we are not vulnerable to sudden shifts in that sector as we have been in the past.

A sustainable economy will be built on balance rather than unchecked growth, respecting the natural ecologies of place—air, land, water, people and culture.

An equitable economy will provide opportunities for all and, perhaps even more importantly, the benefits of the economy will be more widely shared. We need to address all the ways that people have been marginalized, including race, age, gender and gender identity, ethnicity and socio-economic status.

We call this **Just Transition**. And the justice we call for in this transition is based on the reality that our communities, and communities like ours, literally fueled the growth of this great nation. And they sacrificed—lives, families, health, water, prosperity—even as they gave us the timber that built our towns, the coal that fired our industries, the steel that made our cars.

These communities are now bearing the brunt of global changes in the energy economy. They are owed a debt for the sacrifices they have made, and we can repay that debt with



the new investments that are needed to grow the new economy. We must reinvest in our communities, many of which have lost more than half of their population to outmigration. We must make them places where the young people growing up want to stay; where those who went off to college or their first job want to come back; where people who left to find work and had successful careers elsewhere might come back to retire; and where the tourist who comes to visit decides they'd like to stay.

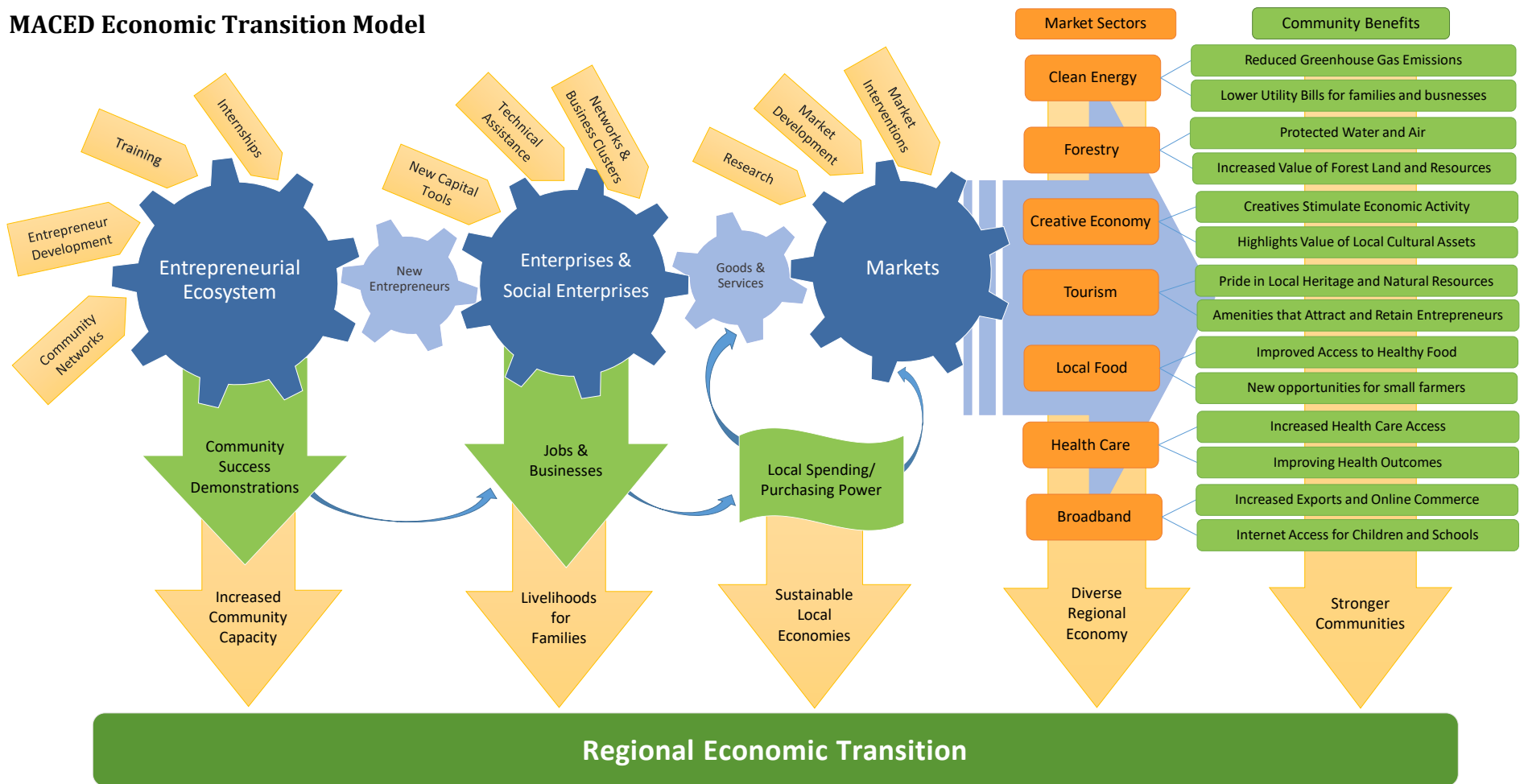
All of the amenities and resources needed to revitalize these communities and make them attractive and livable places are themselves economic drivers creating jobs and livelihoods—the farmers market, the local foods restaurant, the coffee shop, the music venue, the craft brewery, the retirement community, housing, healthcare, and recreation all contribute to a quality of life that many people are looking for today.

So we envision an economic transition driven by entrepreneurs whose businesses create goods and services to drive diverse local economies, and focus on sectors that not only generate economic activity but also generate benefits for the community.

The dynamic relationship between entrepreneurial ecosystems, enterprises, market sectors and community benefits are captured in MACED's Economic Transition Model (see the following page, page 6). This model recognizes that investment in key sectors can not only generate economic activity but also results in additional benefits to the community and the people who live there. For example, local health care facilities provide jobs, but also make care more accessible if residents don't have to travel to get the care they need—and the dollars spent on health care remain in the community. Similarly, retrofits to increase energy efficiency create jobs for the installers while also making homes healthier, safer and more comfortable and make businesses more profitable. The reduction in carbon output benefits all of us. Similar multiple benefits apply to the other market sectors identified in the model.



MACED Economic Transition Model



The five gears in this model represent the dynamic relationship between the entrepreneurial ecosystem, enterprises and markets. The entrepreneurial ecosystem supports new entrepreneurs, who in turn create enterprises that produce goods and services, which feed into markets.

The small arrows pushing the gears represent active measures that can be implemented to accelerate the process and magnify the impacts. At the right-hand side of the model are promising market sectors that MACED has identified and the additional community benefits that enterprises in these sectors can generate.

A functioning entrepreneurial ecosystem generates new entrepreneurs and also builds models for success in communities, which raises local capacity. Enterprises create goods and services that feed into markets, but also produce jobs and local spending power that help support local markets.

The five arrows at the bottom (increased community capacity, livelihoods for families, sustainable local economies, diverse regional economy and stronger communities) are all results of the various elements depicted in the model, and together these drive regional economic transition.

Examples

There are many examples of exemplary work that illustrate the potential to grow a new economy:



At the nexus of local food and energy, **Gwen Christon** owns a grocery store at a rural crossroads in Letcher County Kentucky. She invested half a million dollars in energy efficiency and now saves \$40,000 a year in utility costs. The upgrade was financed with a \$100,000 USDA REAP grant and \$400,000 in financing from MACED. The energy savings cover the debt service. The store looks so much better that her sales are up 7% and she has hired two more full time workers.

The energy savings have also helped her cut some of her prices which also contributes to the increased sales. The next nearest grocery store is ten miles away, so without this store the surrounding area would be a food desert. By including more local produce in her store, Gwen is also helping to support local growers, keeping more money circulating in the local economy.





Scott Shoupe is a fourth generation coal miner. After 22 years in the mines he is now participating in MACED's New Energy Interns program, funded by a 2016 ARC POWER grant. Scott is learning to do energy audits and retrofits, and plans to start his own energy efficiency business. Commercial energy retrofits can pay for themselves, often rapidly, by reducing both the energy usage and the demand charges on the utility bills. One grocery warehouse in Kentucky is now saving \$100,000 per year after investing \$200,000 in a lighting retrofit.

MACED'S New Energy Interns were recently featured in a video by *Fortune Magazine*:
<https://maced.org/energy/new-economy-work-featured-by-fortune-magazine/>

New Energy Interns in *Yes! Magazine*:
<https://www.yesmagazine.org/planet/energy-conservation-jobs-come-to-coal-country-20181005>



This is **Tim Robinson**, pictured in the photo on the left with Congressman Hal Rogers. Tim started a drug treatment program, Addiction Recovery Care, that now has facilities across eastern Kentucky. MACED financed one of those centers and also implemented energy efficiency measures that resulted in enough savings for them to buy a new van.

Their website can be found here:

<https://www.arccenters.com/>

A video highlighting their energy savings can be found here:

<https://www.youtube.com/watch?v=hkiWwO3TFY>

MACED Program Innovations

How\$martKY is a MACED program that provides residential on-bill financing for energy efficiency retrofits. The customer pays nothing upfront, the utility pays the contractor, and places a charge on the customer's bill to recover the investment, plus interest. The annual savings are greater than the charge on the bill, so the customer comes out ahead and the utility benefits from the demand reduction. Contractors get jobs and the customer gets a healthier and more comfortable home. Everybody wins.

Energy Efficient Enterprises (E3) provides energy efficiency for commercial enterprises as well as the financing needed to implement the measures. Payback for commercial efficiency is often much faster than residential retrofits due to reduction in demand charges alongside of the reduction in kWh usage. Currently MACED is developing a new financing tool to support solar installations for small commercial enterprises. Rising electric rates are increasing the interest in solar for these businesses in our region.

Creative application of capital is needed to support economic transition in economically distressed regions. MACED has been pioneering several tools designed to allow us to finance start-ups and business. We have created a Venture Capital Loan Fund that can make higher risk investments and offer flexible repayments so as not to cash-starve the enterprise in the early stages. We have also created a collateral support fund as a donor-advised fund at a regional community foundation. Another innovation is our crowd-match loan through which we can match crowd-sourced capital (from platforms like Kiva or Kickstarter) one-to-one up to \$10,000 with a loan that doesn't require credit score or collateral. We use the ability to crowd source the other funds as a proxy for the credit-worthiness of the enterprise. The CDFI Fund and the ARC POWER fund have provided important support for these innovations.

New Federal Investment

The Appalachian Regional Commission's POWER Initiative, the AML Pilot Grants and the proposed RECLAIM Act are important examples of how new federal investment can support work on the ground in these communities. POWER has added capacity to organizations large and small across the coalfields of Appalachia and spurred new and expanded programs to support entrepreneurship and a range of innovative approaches to economic transition. A recently announced AML Pilot Grant for the town of Benham in Harlan County will upgrade and expand facilities there related to coal heritage tourism. We appreciate the fact that programs like this have gotten, and continue to get, support from both sides of the aisle.

There are many more examples to share, but the important thing is this—there is hope in these communities, and there are people who are digging in hard to create a brighter future. Investments like the ARC POWER grants, the AML Pilot Program and the RECLAIM Act represent important investment that can support these grassroots efforts. And as we build this new economy, we need to ensure that it creates a future with opportunities for all, meeting diversity with equity, and that we attend to the sustainability that is needed for our children and grandchildren to thrive, and for our planet to survive.



Links for more information

Information about MACED programs

MACED's website

<https://maced.org/>

MACED Five-year Impact Report

[https://maced.org/wp-content/uploads/MACED-ImpactReport Nov2018 final sm.pdf](https://maced.org/wp-content/uploads/MACED-ImpactReport%20Nov2018%20final%20sm.pdf)

Strategies for Just Transition

https://maced.org/wp-content/uploads/2018/05/MACED_strategy_briefs_web.pdf

Appalachian Regional Commission reports

Distressed Counties maps FY2002-FY2019

<https://www.arc.gov/research/MapsofAppalachia.asp>

Appalachian Coal Industry Ecosystem

https://www.arc.gov/assets/research_reports/CIESummary-AppalachianCoalIndustryEcosystemAnalysis.pdf

Entrepreneurial Ecosystems

https://www.arc.gov/research/researchreportdetails.asp?REPORT_ID=147

Additional reports

<https://www.arc.gov/research/ResearchReports.asp>

Appalachia Funders Network

<https://www.appalachiafunders.org/>

Kentucky Coal Data from the Kentucky Energy and Environment Cabinet

<http://energy.ky.gov/Pages/CoalFacts.aspx>

