



SOAR

**The Foundational Guide to
Energy Opportunities and
Economic Growth
in Eastern Kentucky**



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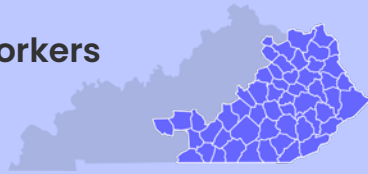
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51,784

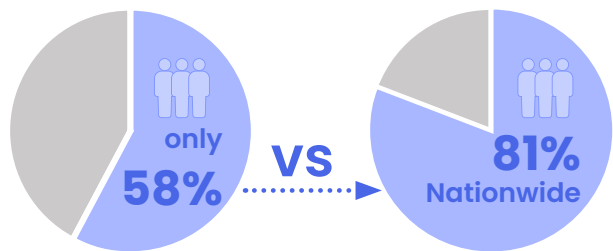
Eastern Kentucky's prime-aged workers

are unemployed

in the region's 36 most distressed counties.

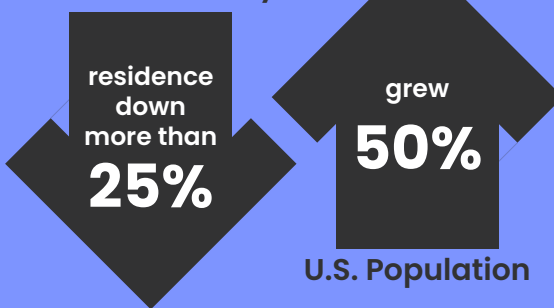


Eastern Kentucky's prime-aged workers between ages 25 and 54 currently holding at least one job



1980 ← → 2023

Eastern Kentucky



If we can reverse population loss, there's no limit to what we can accomplish.

Introduction

A disproportionate number of Eastern Kentucky's prime-aged workers — 51,784 in the region's 36 [most distressed counties](#) — are unemployed. Only 58 percent of those between 25 and 54 currently hold at least one job, compared to 81 percent nationwide.

This is a major issue, considering prime-age unemployment is one of the primary drivers of regional population loss. Between 1980 and 2023, Eastern Kentucky lost more than a quarter of its residents while the U.S. population grew by 50 percent.

We've all seen it happen. The economic circumstances have forced many of our friends, neighbors, and community members with valuable work experience to move away in search of opportunity.

This is an obstacle we've been grappling with for decades. Today, outmigration remains the greatest threat to Eastern Kentucky's stability and prosperity. If we intend to remedy its effects, we have to take bold action — and be open to new strategies. The stakes are too high.

residents can gain access to a larger pool of high-quality, stable, local career opportunities.

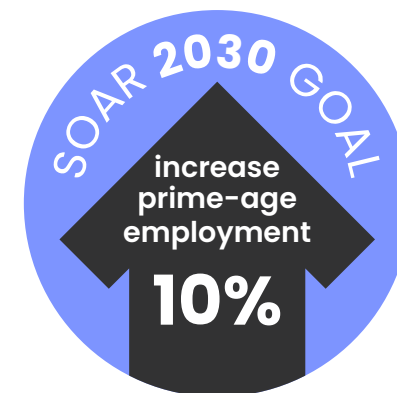
That's where this guide comes in.

An unprecedented number of energy funding opportunities are available. Right now. To seize the moment, Eastern Kentucky must capture a larger share of energy grants and funding than we have historically.

Energy projects and programs yield high-wage, high-skill, enduring career opportunities.

By investing energy funding locally, we can solve two major challenges at once: taking care of essential energy infrastructure and capacity upgrades, and supporting our residents who deserve a hand up.

Plus, if these projects contribute to cheaper, stable energy rates, we can protect small business owners from rising costs. They can also empower municipalities and counties to invest related savings in programs that benefit our communities.



For this reason, [Shaping Our Appalachian Region](#) is focused on an ambitious goal. Our region must increase prime-age employment by 10 percent by 2030. This is achievable only if



Identifying Energy Projects in Eastern Kentucky

It doesn't make sense to go after energy funds simply for the money. You have to go about it with purpose, and attempt to win funding for projects and programs with the biggest, broadest benefits to Eastern Kentucky.

A relevant project for your county or municipality may include:

- Investing in grid infrastructure.
- Upgrading municipal and private buildings for energy efficiency.
- Incentivizing energy efficiency upgrades in private residences.
- Constructing new housing designed to keep energy burdens low.
- Supporting businesses with tax incentives and credits related to energy efficiency upgrades and investments.
- Implementing durable solutions for floods and natural disasters.

While billions in funding awards, incentives, and tax credits are available for these types of initiatives, we can't sit back and wait for the money to find us.

It's up to our community leaders, businesses, and nonprofits to assess our region's greatest needs and discover available funding solutions.

Then, we have to [put our best applications forward](#) and try to win.

Urban areas tend to win energy funding more often. They simply have more manpower and expertise to identify and apply for funding. This doesn't mean they need the funds more than rural areas do.

Plenty of Eastern Kentucky communities already have a backlog of energy projects that desperately need to get underway. In 2022, Kentucky's average monthly electric utility bill was \$155, an increase of nine percent since 2017. Boyd, Perry, and Pike counties pay the highest electricity rates of the state's 120 counties.

To address these disparities, we need to raise awareness about available funding. This Foundational Guide aims to make the process easier for you.

Who Can Benefit from This Foundational Guide?

- Auto Manufacturing
- Building Owners
- Business
- Commercial Building Owners
- Energy Producers
- Government
- Higher Education
- Homeowners
- Individuals
- Investors
- Local Government
- Nonprofit
- Public Power Entity
- Rural Electric Cooperatives
- Rural Energy Cooperatives
- RUS Borrowers
- Small Businesses
- State Agencies
- Utilities

From wide-scale grid infrastructure projects to microloans for energy entrepreneurs, the Kentucky Energy and Environment Cabinet is Eastern Kentucky's ally.

Shaping Our Appalachian Region is a 501(c)3 nonprofit organization dedicated to reversing population loss and driving prosperity for the 54 Appalachian counties in Eastern Kentucky.



SOAR

How to Use this Foundational Guide

We've rounded up the best opportunities for our region, organized by funding type.

Section I

will help you identify your 'why' for local and regional energy projects.

Section II

identifies financing solutions for energy projects, such as loans.

Section III

identifies funding opportunities for energy projects, such as grants.

Section IV

identifies incentives for energy projects, such as tax credits.

Sections 2-4 feature listings of each financing, funding, or incentive opportunity. Use these listings to identify the best-aligned funding opportunities for your project or program concept.

Each one includes:

- The institution, organization, or agency issuing funds.
- Which entity type(s) are eligible to apply.
- The estimated dollar value of the opportunity.
- Links to more information.

When it's time to create your funding applications and project plan, we can connect you with additional resources. Our [Grants 101 Playbook](#) walks you through the process of developing competitive applications. Technical assistance from the [Kentucky Energy and Environment Cabinet](#) will expand your team's capacity and expertise for grant applications and project implementation.

Before exploring the listings, make sure you are clear on the 'why' behind your endeavor. Energy projects are significant undertakings. Eastern Kentucky residents stand to benefit greatly from a successful outcome.



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Have questions?

Contact Kacy after reading through this Foundational Guide.

SECTION I:

Which Energy Investments Will Best Serve Eastern Kentucky's Economy?

What Is Energy Burden?

Energy burden is the percentage of household income spent on energy costs. It's a key performance indicator of energy affordability in a particular area.

In 2022, the average energy burden in Kentucky was 3.03% for the total population and 8.11% for the low-income population.

The energy burden can be as steep as 12% in some counties, especially in eastern ones.

Source: [Team Kentucky Energy and Environment Cabinet](#)

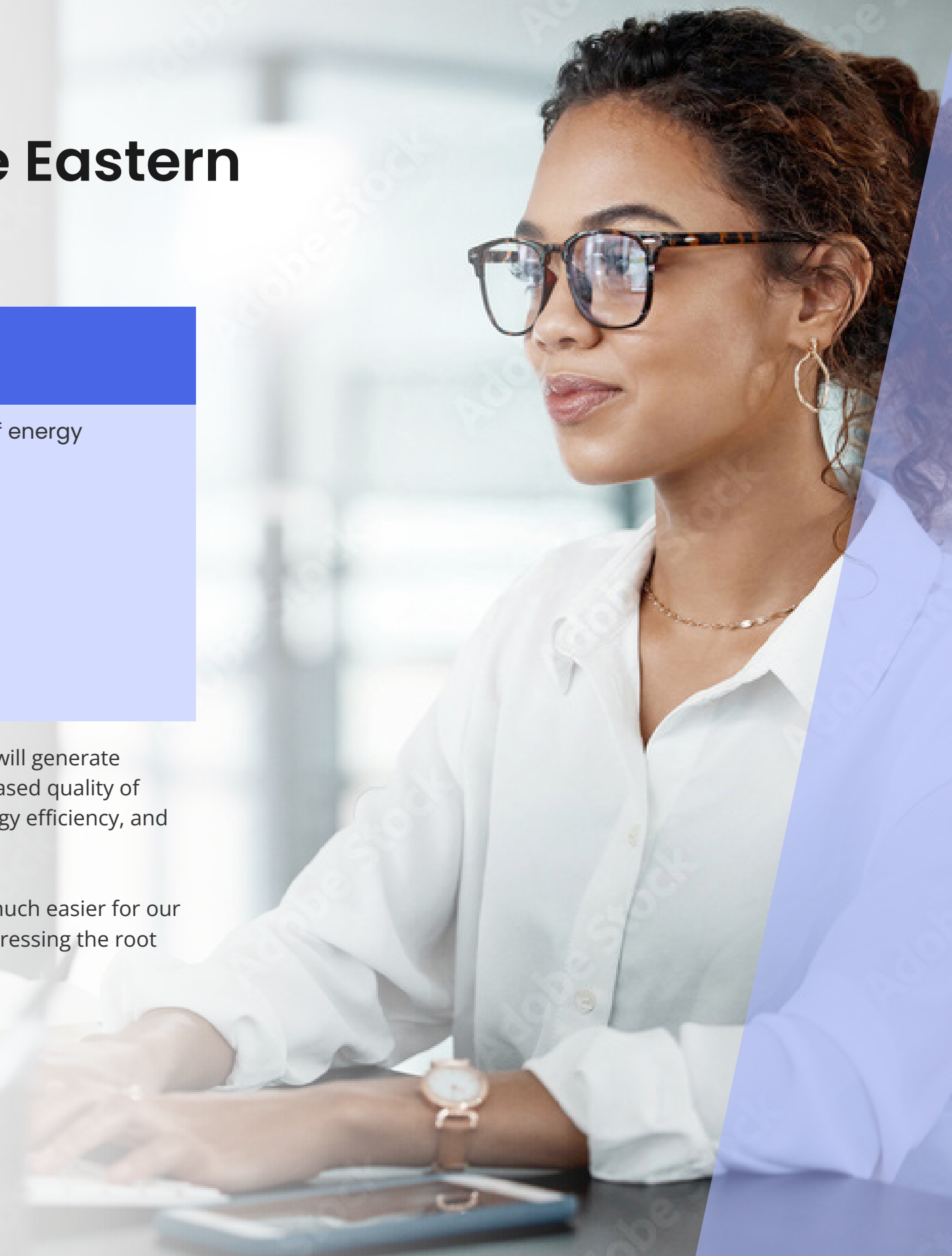
Rural disparities in [energy affordability](#) are getting worse. [30 of the 43 counties](#) in Eastern Kentucky are above the state's average energy burden.

At the heart of our energy burden issue lies in the problems of significant income disparities and rising energy costs. An additional issue is building stock: many public and private structures in Eastern Kentucky aren't energy efficient. This results in higher usage and higher energy costs.

We have an opportunity to address these all at one time with investments in energy projects.

If we go after the right funds, Eastern Kentucky will generate high-wage energy jobs. This will lead to an increased quality of life, a strengthened local economy, greater energy efficiency, and well-managed energy costs.

In the long run, these investments will make it much easier for our residents to continue building their careers, addressing the root cause of our region's population loss.





Securing Eastern Kentucky's Grid with Energy Investments

Coal production continues to decline—from over 30 million tons per quarter in 2000 to under [seven million tons per quarter](#) in 2023, which is forcing a difficult question:

What will it take to secure our grid's future?

[In 2022, about 68 percent of Kentucky's utility-scale electricity net generation was coal-fired](#), the third-largest share of any state after West Virginia and Wyoming. Historically, coal-fired power plants produced more than 90 percent of Kentucky's net generation. We will continue to observe this decline over the next several decades.

As you evaluate which energy projects and programs will best serve your constituents, keep these big-picture considerations in mind:

- How can we protect low-income communities from increased energy burden?
- Are homeowners aware of ways to make their properties more energy efficient?
- How can we align disaster relief efforts with future-proofed energy investments?
- And in the big picture: Can energy investments help retain rural residents?

Thanks to billions in available funding, we can reframe these problems as opportunities. If we use local talent to develop energy infrastructure and fund these projects adequately, we will be able to:

- Assure businesses they can protect margins as energy costs increase or fluctuate.
- Maintain low, competitive energy rates to incentivize commercial investments in Kentucky, help existing small businesses stay in business, and encourage startups to hang their shingle.
- Support homeowners modernizing their energy systems with durable, efficient upgrades.
- Assure residents we can rebuild effectively after natural disasters.
- Reduce the [average household energy burden](#).
- Stop population loss in its tracks.

Ready to make these outcomes a reality? The following funding, financing, and incentives can help YOU, our local leaders, businesses, and nonprofits, to take effective action.

SECTION II:

Financing Solutions



Agency: Kentucky Cabinet for Economic Development

➔ [KEDFA Direct Loan Program](#) Loan

For: ■ **Business**

Purpose: Allow businesses to obtain the long-term financing needed to encourage growth.

How It Works: Finances qualified activity in the agribusiness, tourism, industrial, or service industries.



Agency: Kentucky Cabinet for Energy and Environment

➔ [eSELF Revolving Loan Program](#) Loan

For: ■ **State Agencies**

Purpose: Capital support to reduce energy consumption by 20+ percent.

How It Works: Self-perform energy efficiency projects costing between \$50,000 and \$225,000 for at least a 20% reduction in energy consumption.

➔ [ESPC Revolving Loan Program](#) Loan

For: ■ **State Agencies**

Purpose: Capital support for energy efficiency projects.

How It Works: Funds for energy projects over \$600,000. Investment-grade energy audits must provide a detailed cost-benefit analysis of energy efficiency investments and use a life cycle energy cost analysis.

What is financing?

Loans, featuring an interest-bearing principal that must be repaid.

Many of the following financing solutions offer favorable terms for qualified projects. Benefits may include below-market interest rates, guarantor options, subsidies, down payment assistance, and more.

➔ [Hybrid Revolving Loan Program](#) Loan

For: ■ **State Agencies**

Purpose: Capital support for energy efficiency projects.

How It Works: Funds for energy projects between \$50,000 and \$600,000. An energy audit or engineering analysis is required along with a completed design and development package.

➔ [Kentucky Property Assessed Clean Energy \(PACE\)](#)

Special Assessment

For: ■ **Commercial Building Owners**, ■ **Government**, ■ **Nonprofit**

Purpose: Incentivize upgrades with zero net cost to property owners.

How It Works: Building owners borrow money for energy efficiency, renewable energy, or other projects and make repayments via an assessment on their property tax bill.



Agency: Kentucky Infrastructure Authority

➔ [KIA Loan Programs](#) Loan

For: ■ **Local Government**

Purpose: Funding construction of local public works projects, such as water, sewer, solid waste facilities and other infrastructure.

How It Works: Apply for [Fund B](#) loans, which cover broadband and energy projects.



Agency: U.S. Department of Agriculture

➔ [Distributed Generation Energy Project Financing](#) Loan

For: ■ **Utilities**, ■ **Business**

Purpose: Provide more power supply options for rural communities via renewable resources.

How It Works: Finance the acquisition, construction, or improvement of facilities serving rural communities.

➔ [Electric Infrastructure Loan & Loan Guarantee Program](#)

Loan, Loan Guarantee

For: ■ **Government**, ■ **Nonprofit**, ■ **Business**

Purpose: Finance the construction of electric distribution facilities in rural areas.

How It Works: Issues insured loans and loan guarantees to nonprofit and cooperative associations, public bodies, and other utilities.

➔ [Energy Efficiency and Conservation Loan Program](#)

Loan, Loan Guarantee

For: ■ **Nonprofit**, ■ **Business**, ■ **Homeowners**

Purpose: Help consumers save money, reduce the need to purchase or generate energy, reduce emissions from generation of electricity, and strengthen rural economies through job creation for energy efficiency and conservation projects.

How It Works: Issues loans to energy efficiency and conservation projects for commercial, industrial, and residential consumers in rural areas.

➔ [Rural Energy Savings Program \(RESP\)](#) Loan

For: ■ **RUS Borrowers**

Purpose: Help consumers save money, reduce the need to purchase or generate energy, and reduce emissions from the generation of electricity.

How It Works: Covers the cost of labor and materials for energy conservation measures and finances renewable energy projects.



Agency: U.S. Department of Energy (DOE)

➔ [Advanced Technology Vehicles Manufacturing \(ATVM\) Loan Program](#) Loan

For: ■ **Auto Manufacturing**

Purpose: Support U.S. manufacturing of fuel-efficient, advanced technology vehicles, and qualifying components.

How It Works: Issues direct loans for reequipping, expanding, or establishing manufacturing facilities in eligible ways.

➔ [Better Buildings Financing Navigator](#) Tool

For: **All**

Purpose: Narrow your search for DOE financing.

How It Works: Explore DOE financing options with this navigator tool.

➔ [Carbon Infrastructure Finance and Innovation Act \(CIFIA\)](#) Loan

For: ■ **Business**, ■ **Government**

Purpose: Incentivize the launch of carbon capture, utilization, and storage (CCUS) technologies, including direct air capture (DAC).

How It Works: Provides financing for projects that specifically develop shared CO2 transport infrastructure.

➔ [Efficiency-as-a-Service](#) Structured Financing

For: ■ **Building Owners**

Purpose: Upgrade energy systems without spending your own capital.

How It Works: Off-balance-sheet treatment for an energy services agreement (ESA) or other structure.

➔ [Energy Savings Performance Contract \(ESPC\)](#)

Structured Financing

For: ■ **Building Owners**

Purpose: Little-to-no upfront cost for \$1 million+ complex efficiency projects.

How It Works: An ESPC project is paid for by its own energy savings.

➔ [On-Bill Financing \(OBF\) and On-Bill Repayment \(OBR\)](#)

Financing

For: ■ **Building Owners**, ■ **Homeowners**

Purpose: Incentivize energy efficiency upgrades with low-to-zero interest rates, simple contract structure, and streamlined repayment.

How It Works: A utility or private lender supplies capital to a customer to fund energy efficiency, renewable energy, or other generation projects and is repaid through regular payments on an existing utility bill. Only available in regions where utilities support on-bill programs.



Title 17 Clean Energy Financing

➔ [Energy Infrastructure Reinvestment](#) Loan

For: ■ **Utilities**, ■ **Energy Producers**

Purpose: Upgrading or updating energy infrastructure, replacing infrastructure with clean energy, or building new facilities for clean energy infrastructure uses.

How It Works: Provides access to lower-interest loans for innovative projects than would otherwise be available.

➔ [Innovative Energy and Innovative Supply Chain](#) Loan

For: ■ **Business**

Purpose: Deploy new or significantly improved high-impact clean energy technology (Innovative Energy) or employ new or significantly improved technology in the manufacturing process for a qualifying clean energy technology or manufacture innovative products with an eligible technology end-use (Innovative Supply Chain).

How It Works: Financing for “Innovative Energy” or “Innovative Supply Chain” projects.



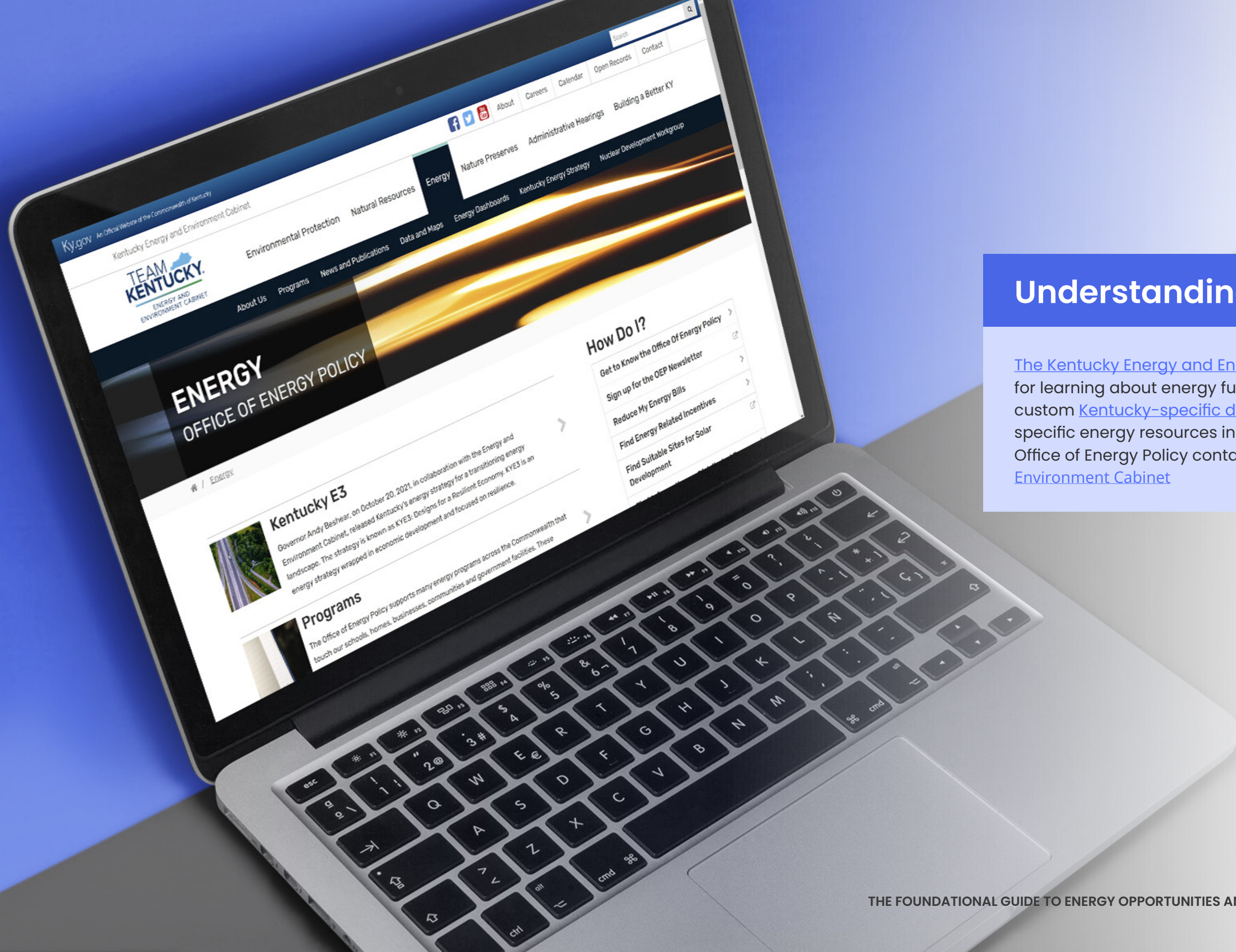
Lenders: CDFIs

➔ [Opportunity Finance Network \(OFN\)](#) Loan

For: ■ **Nonprofit**, ■ **Small Businesses**

Purpose: Lenders vested in community success.

How It Works: Check out the Opportunity Finance Network (OFN) for local loan funds and energy project opportunities, such as through [Community Ventures](#), [Kentucky Highlands Investment Corporation](#), [Mountain Association](#), [Green Bank for Rural America](#) and [Southeast Kentucky Economic Development](#).



Understanding Your Energy Assets

[The Kentucky Energy and Environment Cabinet](#) is a valuable resource for learning about energy funding opportunities. You can access custom [Kentucky-specific dashboards](#) that provide data about specific energy resources in the Commonwealth, as well. Find your Office of Energy Policy contact here [About Us - Kentucky Energy and Environment Cabinet](#)

SECTION III: Funding Solutions

What is funding?

Grants to nonprofit organizations and government bodies that don't have to be repaid but may require a funding match and strict use terms.

The following funding solutions are inclusive of nonprofits, governments, as well as startups and businesses participating in energy development.

Get to know the [Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization](#), a comprehensive funding clearinghouse, source of technical assistance, and helpful resources.



Interagency Working Group on Coal & Power Plant Communities & Economic Revitalization



Agency: Commonwealth of Kentucky Department for Local Government

➔ Explore: [Federal Grants](#) ➔ Explore: [State Grants](#)



Agency: Federal Emergency Management Administration

➔ [Building Resilient Infrastructure and Communities](#) Grant

For: **Government**

Purpose: Proactively reduce hazard risk to community infrastructure.

How It Works: Funds projects that reduce the risks faced from disasters and natural hazards and promote infrastructure resilience.



Agency: Kentucky Cabinet for Health and Family Services

➔ [Low Income Home Energy Assistance Program \(LIHEAP\)](#) Grant

For: **Individuals**

Purpose: Assist families with energy costs.

How It Works: Provides federally funded assistance in managing costs associated with home energy bills, energy crises, weatherization, and energy-related minor home repairs.



Agency: U.S. Department of Agriculture

[↪ Advanced Biofuel Payment Program](#) [Grant](#)

For: ■ **Business**

Purpose: Support the production of advanced biofuels.

How It Works: Makes quarterly payments based on eligible advanced biofuel produced.

[↪ Community Facilities Direct Loan & Grant Program](#)

[Grant, Loan](#)

For: ■ **Government**, ■ **Nonprofit**

Purpose: Develop essential community facilities in rural areas.

How It Works: Provides affordable funding through grants and low-interest loans or a combination of the two.

[↪ Empowering Rural America New ERA Program](#)

[Grant, Loan](#)

For: ■ **RUS Borrowers**, ■ **Rural Electric Cooperatives**

Purpose: Help rural Americans transition to clean, affordable, and reliable energy.

How It Works: Issues grants and loans for energy efficiency improvements to eligible generation and transmission systems; purchasing, building, or deploying renewable energy, zero-emission systems; carbon capture storage systems; or to purchase renewable energy.

[↪ Energy Resource Conservation](#) [Loan](#)

For: ■ **Rural Utilities**, ■ **Service (RUS) Borrowers**

Purpose: Help consumers save money, reduce the need to purchase or generate energy, and reduce emissions from the generation of electricity.

How It Works: Enables current RUS borrowers to make funds available to their consumers for energy conservation and renewable energy projects by deferring payment of principal and interest.

[↪ High Energy Cost Grants](#) [Grant](#)

For: ■ **Government**, ■ **Nonprofit**, ■ **Business**

Purpose: Assist energy providers and entities in lowering energy burden for eligible households.

How It Works: Provides grants to finance the acquisition, construction or improvement of facilities.

[↪ Rural Energy for America Technical Assistance Grant Program](#)

[Grant](#)

For: ■ **Government**, ■ **Higher Education**, ■ **Rural Electricity Cooperative**, ■ **Public Power Entity**

Purpose: Recruitment of renewable energy or energy efficiency projects, identification of electrical engineering services, preparation of REAP applications for Agency financial assistance, as well as preparing reports and assessments necessary to request financial assistance.

How It Works: Provides grants and technical assistance for eligible rural renewable energy projects, energy efficiency projects, and more.



Agency: U.S. Department of Commerce

[↪ Public Works and Economic Adjustment Assistance Program](#)

[Grant](#)

For: ■ **Government**, ■ **Nonprofit**

Purpose: Support construction, non-construction, planning, technical assistance, and revolving loan fund projects under EDA's Public Works program and EAA programs (which includes Assistance to Coal Communities).

How It Works: Issues grants and cooperative agreements that leverage existing regional assets and advance economic prosperity in distressed communities.



Agency: U.S. Department of Energy

[↪ Communities LEAP \(Local Energy Action Program\)](#)

[Technical Assistance](#)

For: ■ **Nonprofit**, ■ **Government**

Purpose: High-value job creation in the emerging nuclear energy sector; developing the necessary infrastructure to support this high-tech industry; attracting further investment; stimulating economic growth across the region.

How It Works: Resources and technical assistance for low-income, energy-burdened communities that are experiencing direct economic impacts from a shift away from historical reliance on fossil fuels.

[↪ Office of Clean Energy Demonstrations Funding](#)

[Information](#) [List](#)

For: **All**

Purpose: Narrow your search for clean energy funding, prizes, and competitions.

How It Works: Explore a convenient list of opportunities.

[↪ Weatherization Assistance Program](#) [Grant](#)

For: ■ **Homeowners**

Purpose: Reduce energy costs for low-income households.

How It Works: Increase home energy efficiency through cost-free retrofits for eligible individuals.



Agency: U.S. Economic Development Administration

➔ [Planning and Local Technical Assistance Program](#)

[Technical Assistance](#)

For: ■ **Government**

Purpose: Assist with developing economic development plans and studies designed to build capacity and guide the economic prosperity and resiliency of an area or region.

How It Works: Issue grants or cooperative agreements alongside direct assistance with plan coordination.



Agency: U.S. Environmental Protection Agency

➔ [Brownfields Revolving Loan Fund](#)

[Grant, Technical Assistance](#)

For: ■ **Government**, ■ **Nonprofit**

Purpose: Remediate brownfield hazards and educate communities about revolving loan fund capabilities.

How It Works: Issues grants for brownfield cleanup and remediation and provides technical assistance for capacity building.

➔ [Brownfields Job Training Grants](#) [Grant, Loan](#)

For: ■ **Government**, ■ **Nonprofit**

Purpose: Avoid outsourced hires and help locals obtain jobs across a spectrum of brownfield activities, including the assessment, cleanup, remediation, and planning/site preparation for the revitalization of brownfields.

How It Works: Funds eligible brownfield-related job training programs.

➔ [Clean Heavy Duty Vehicle and School Bus Programs](#)

[Grant, Rebate](#)

For: ■ **Government**, ■ **Nonprofit**

Purpose: Promote cleaner air and enable recipients to reduce costs.

How It Works: Funds grants to eligible applicants.

➔ [Multipurpose Grants](#) [Grant](#)

For: ■ **Government**, ■ **Nonprofit**

Purpose: Encourage cleanup of per- and polyfluoroalkyl substances (PFAS), implement environmental justice programs, and address climate change.

How It Works: Funds grants to eligible applicants.

➔ [People, Prosperity and the Planet](#) [Grant](#)

For: ■ **Government**, ■ **Nonprofit**

Purpose: Engage students to design environmental solutions that move us toward a sustainable future.

How It Works: Provides teams of undergraduate and graduate students an opportunity to receive a two-year award of up to \$75,000 to gain invaluable experience through classroom learning, laboratory and field work to address environmental issues.



Agency: U.S. Small Business Administration

➔ [Small Business Development Center Programs](#) [Grant](#)

For: ■ **Small Business**

Purpose: Help small businesses access capital, develop and exchange new technologies, and improve business planning, strategy, operations, and financial management.

How It Works: Provides problem-solving assistance.

➔ [Small Business Innovation Research and Small Business Technology Transfer \(STTR\)](#) [Grant](#)

For: ■ **Business**, ■ **Nonprofit**

Purpose: Stimulate technological innovation, meet federal research and development (R&D) needs, and increase commercialization to transition R&D into impact.

How It Works: EPA is a participating agency. Funds a diverse portfolio of startups and small businesses, including but not limited to those in the energy industry.



Investors: Funding for Energy Businesses

[Kentucky Angel Investors Network](#) [Investor](#)

For: ■ **Business**

Purpose: Fund Kentucky's brightest entrepreneurial endeavors.

How It Works: Provides angel investment services to Kentucky startups.

[Keyhorse Capital](#) [Investor](#)

For: ■ **Business**

Purpose: Fund seed and early-stage high-growth technology startups.

How It Works: Invests venture capital in qualified businesses.



SECTION IV:

Incentives for Clean Energy and Energy Efficiency Economic Development

What are incentives?

Tax credits, rebates, and other instruments that reduce the bottom-line costs of an investment.

The following incentives may require upfront investment and later reimbursement.



Agency: Kentucky Cabinet for Economic Development

➔ [Kentucky Angel Investment Tax Credit](#) Tax Incentive

For: ■ Investors

Purpose: Encourage capital investments in Kentucky small businesses.

How It Works: Offers a tax credit of up to 40 percent of their investment in counties with high unemployment rates, or enhanced counties, and 25 percent in all other counties.

➔ [Kentucky Business Investment \(KBI\) Program](#)

Tax Incentive

For: ■ Business

Purpose: Create and maintain a minimum of 10 new, full-time jobs per applying business.

How It Works: Offers tax credits up to 100 percent of corporate income or limited liability entity tax liability arising from the project.

➔ [Kentucky Enterprise Initiative Act \(KEIA\)](#) Tax Incentive

For: ■ Business

Purpose: Stimulate economic development related to building and construction, research and development, flight simulation, and qualified industry activities.

How It Works: Offers a refund of sales and use tax for qualified purchases related to an eligible project.

➔ [Kentucky Reinvestment Act \(KRA\)](#) Tax Incentive

For: ■ Business

Purpose: Create and maintain 25 new, full-time jobs per applying business and invest in eligible equipment.

How It Works: Offers a tax credit for all income generated through the project.



Agency: U.S Department of Energy / Environmental Protection Agency

➔ [Energy STAR Homeowner Rebates](#) Tax Credit

For: ■ Individuals

Purpose: Lower the cost of energy efficient home upgrades by up to 30 percent.

How It Works: Claim up to \$3,200 annually in federal tax credits for select home upgrades, broken down into heat pump investments (up to \$2,000 in credits) and energy efficiency investments (up to \$1,200 in credits). Clean energy equipment upgrades, such as solar or battery storage, may be reimbursable up to 30 percent.



Agency: U.S Internal Revenue Service

➔ **48C Advanced Energy Project Credit** Tax Incentive

For: ■ Government, ■ Nonprofit, ■ Business

Purpose: Incentivize investments in advanced energy projects: clean energy manufacturing and recycling projects, industrial decarbonization projects, critical materials projects

How It Works: Reduce federal tax owed through a tax credit. At least \$4 billion of the total \$10 billion must be allocated to designated energy communities, which includes [many counties](#) in Eastern Kentucky.

➔ **179D Energy Efficient Commercial Buildings Deduction**

Tax Incentive

For: ■ Building Owners

Purpose: Reduce buildings' total annual energy and power costs by at least 25%.

How It Works: Reduce federal tax owed through a tax credit calculated as a percentage of eligible square footage.

➔ **Alternative Fuel Vehicle Refueling Property Credit**

Tax Incentive

For: ■ Nonprofit, ■ Business, ■ Individuals

Purpose: Incentivize installation of equipment to store or dispense clean-burning fuel or to recharge electric motor vehicles.

How It Works: Reduce federal tax owed through an up to \$100,000 credit for businesses and up to \$1,000 for individual filers.

➔ **Builders of Energy-Efficient Homes** Tax Incentive

For: ■ Government, ■ Nonprofit, ■ Business

Purpose: Incentivize building qualified energy efficient homes.

How It Works: Reduce federal tax owed through an up to \$5,000 tax credit.

➔ **Clean Vehicle Credits** Tax Incentive

For: ■ Business, ■ Individuals

Purpose: Offset the expense of upgrading to qualified clean vehicles.

How It Works: Reduce federal tax owed through a tax credit.

➔ **Direct Pay for Clean Energy Investments**

Direct Pay + Tax Incentive

For: ■ Government, ■ Nonprofit, ■ Rural Energy Cooperatives

Purpose: Skip the competitive grant process to issue direct payments for qualified projects equal to the full value of tax credits for building qualifying clean energy projects.

How It Works: Complete an eligible project and file the direct pay paperwork in the following tax year. Receive up to 70% of the project cost.

➔ **Home Energy Credits** Tax Incentive

For: ■ Individuals

Purpose: Offset the expense of upgrading home energy systems to be more efficient and/or source from renewables.

How It Works: Reduce federal tax owed through a tax credit.



Conclusion

Eastern Kentucky is counting on you to seize the moment.

Your next energy infrastructure project could be funded by one (or more) of the opportunities contained in this Foundational Guide.

Are you ready to get started? Your next steps are to identify the right project(s) for your community. Then, you can begin developing your project plan, budget, and partnerships. Once all these pieces are in place, it'll be time to start writing your funding applications.



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Contact Kacy for more information about energy-related jobs and funding opportunities for Eastern Kentucky households, businesses, investors, government agencies, rural electric cooperatives, nonprofits, and other eligible entities.

Prepare for the application phase with our free eBook: [The Grants 101 Playbook for Eastern Kentucky](#).

If you have questions, contact [Shaping Our Appalachian Region](#). Our expert team will provide a free review of your project plan, connect you with local partners, and help you prepare the best application possible.