

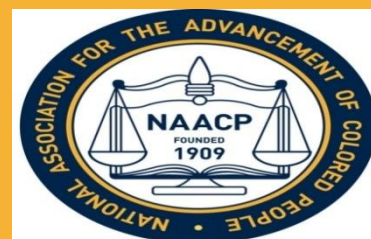
2014

Just Energy Policies: Reducing Pollution and Creating Jobs

MISSOURI REPORT



National Association for the Advancement of Colored People (NAACP)
Environmental and Climate Justice Program
FEBRUARY 2014



Just Energy Policies and Practices

Missouri Report on Energy Efficiency and Renewable Energy Policies

National Association for the Advancement of Colored People

4805 Mt. Hope Drive

Baltimore, MD 21215

(410) 580-5777

www.naacp.org

Environmental and Climate Justice Program

410-580-5794

ecjp@naacpnet.org

Lead Author

Jacqui Patterson

Senior Researchers/Authors

Katie Fink, Camille Grant and Sabrina Terry

Assistant Researchers/Authors

Rachel Rosenberg and Chris Walker

Content Editing Support

Lisa Hamilton and Rachel Kriegsman

Copy Editors

Carol Ko and Christine Van Dyk

WHY THE NAACP IS STANDING UP FOR JUST ENERGY POLICIES

Since 1909, the NAACP has addressed a vast array of civil rights issues including education, employment, housing, civic engagement, health, and criminal justice. Communities of color nationwide are, and have historically been, beset by human and civil rights violations, including disproportionate exposure to pollution, crime, substandard living conditions and more. African Americans who reside near energy production facilities including coal fired power plants, nuclear power plants, or biomass power plants, are more likely to suffer the negative health impacts of prolonged exposure to smog, lead, asbestos, mercury, arsenic, sulfur dioxide, nitrogen oxide and other toxins than any other group of Americans.¹²³⁴

Prolonged exposure, to toxins from these energy production facilities, is tied to birth defects, heart disease, asthma attacks, lung disease, learning difficulties, and even lower property values. Approximately 68% of African Americans live within 30 miles of a coal-fired power plant, which produces the largest proportion of energy compared to any other energy production type. The health conditions associated with exposure to toxins coming from these plants disproportionately affect African Americans. An African American child is three times as likely to be admitted to the hospital and twice more likely to die from an asthma attack than a white American child. Though African Americans are less likely to smoke, they are more likely to die of lung disease than white Americans are.⁵ A 2010 report by the National Research Council (NRC) calculates that particulate matter pollution from U.S. coal-fired power plants is solely responsible for causing approximately 1,530 excess deaths per year. In addition, properties in close proximity to toxic facilities average 15% lower property values.⁶

At the same time, many of the same polluting facilities that affect the daily health and well-being of host communities are major contributors to the greenhouse gases that are driving climate change. Carbon dioxide (CO_2) emissions are the leading cause of climate change and coal-fired power generation accounts for 32% of all CO_2 emissions.⁷ Not only do low-income neighborhoods and communities of color suffer more of the direct health, educational, and economic consequences of these facilities, but also devastating natural disasters such as Hurricanes Katrina and Sandy, along with rising food prices and water shortages, harm low-income people and people of color disproportionately partly due to pre-existing vulnerabilities.

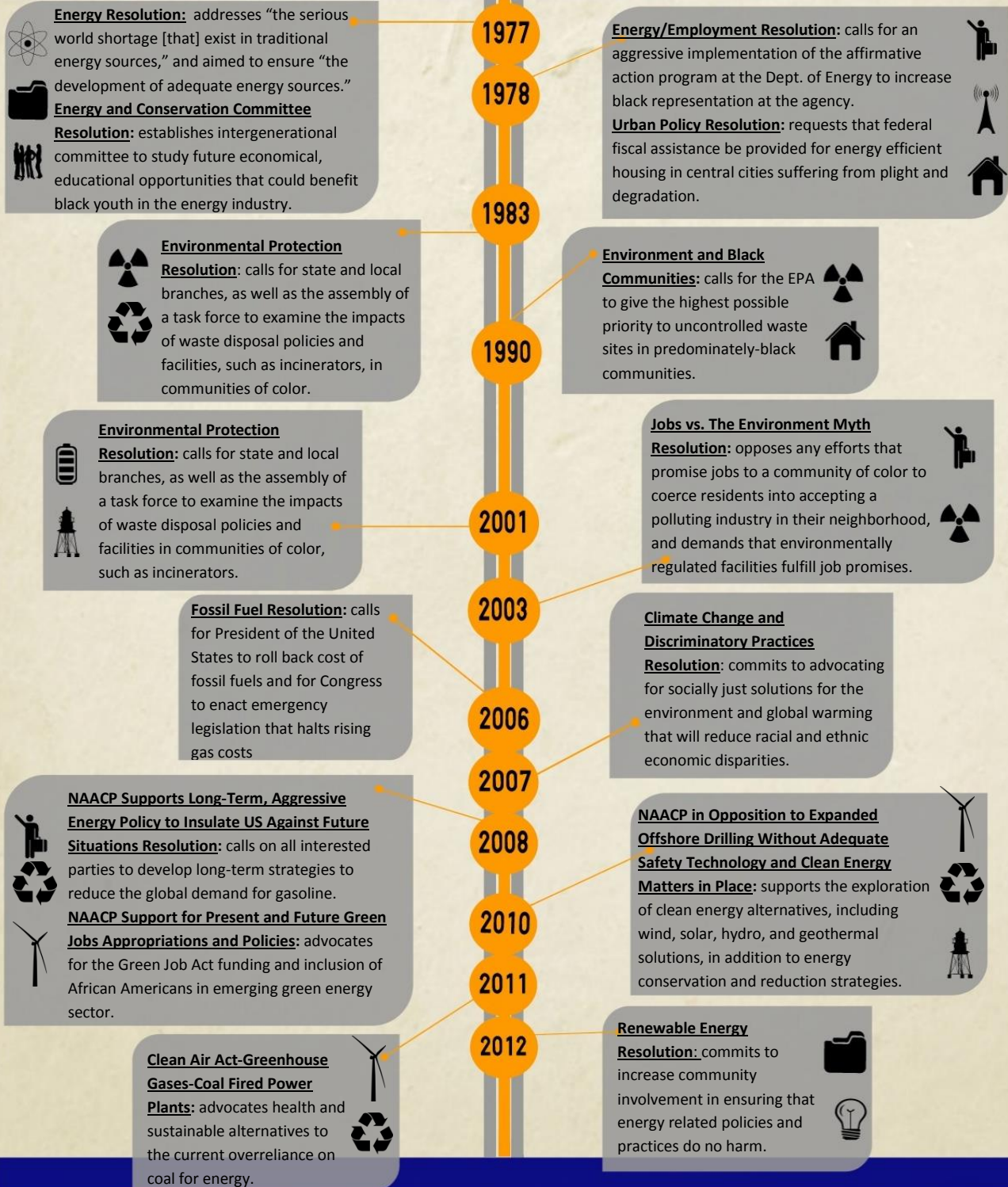
While African Americans are enduring most of the harmful impacts of energy production, they are reaping few of the benefits from the energy sector. According to a 2010 study by the American Association of Blacks in Energy, while African Americans spent \$41 billion on energy in 2009, they only held 1.1% of energy jobs and only gained .01% of the revenue from the energy sector profits.⁸ Therefore, there is both inequity in the incidence of disease and the economic burden for communities of color that host energy production facilities.

African Americans should no longer abide the millstone of the noxious facilities and continue to be overlooked by the energy industry while living in blight. Given that the unemployment rate for African Americans has consistently been nearly twice that of the national average and the average wealth of white Americans is 20 times that of African Americans, it is past time to revolutionize the relationship communities of color have with this multi-billion dollar industry. Leading in a new energy economy serves as pathway out of poor health, poverty and joblessness while establishing a foundation of energy resources and security for generations to come.

The NAACP will continue to build upon its legacy of advocating for equity, economic justice, and environmental justice within the energy sector, especially in the broader context of climate change. The following diagram outlines the NAACP's policy precedence and the foundation for the recommendations we pose to enact change in the energy sector.

NAACP's Just Energy Policy Resolutions

"1977-2012"



WELCOME

In opening this document, you have made a commitment to understand and advance just energy policies and practices. This energy policy compendium will give you the information you need to stand up for a just energy future. The rapid depletion of Earth's non-renewable resources coincides with increased energy consumption in the United States. With a growing understanding of the harmful impact of fossil fuel-based energy production on communities of color and low income communities, it is more important now than ever before that our communities take a stand to move our country to an energy efficient and clean energy future. Our intention in creating this compendium is that it will serve as a resource and will spur states to make sure their energy policies protect communities from harmful energy production processes while simultaneously providing equitable access to economic opportunities in energy efficiency and clean energy.

Focal Policies

The Just Energy Policies Compendium profiles *Renewable Portfolio Standards*, *Energy Efficiency Resource Standards*, and *Net Metering Standards* for each state and also shares detailed information on how to access rebates/loan/grants, etc. for energy efficiency and clean energy.

➤ *Renewable Portfolio Standards*

A Renewable Portfolio Standard (RPS) requires electric utility companies and other retail electric providers to supply a specific minimum amount of customer load with electricity from eligible renewable energy sources. In order to protect community health and well-being, as well as preserve the planet, we must transition to renewable energy. In setting standards for the content of RPS, the NAACP goes further and distinguishes that our sources and processes must be clean energy, recognizing that not all renewable energy has been proven safe with minimal impact on the environment and communities. Under this definition, we focus on efforts on advancing solar, wind, and geothermal energy.

➤ *Energy Efficiency Resource Standards*

Energy Efficiency Resource Standards (EERS) establish a requirement for utility companies to meet annual and cumulative energy savings targets through a portfolio of energy efficiency programs. Given our current dependence on harmful energy production practices, we should reduce our demand for energy altogether.

➤ *Net Metering Standards*

Net Metering Standards require electric utility companies to provide retail credit for net renewable energy produced by a consumer. Meaning, if the consumer generates more energy from their solar panels or wind turbines than they use, they can sell it back to the utility at the same rate at which they purchase electricity. In order to incentivize clean energy practices at the consumer level, we need to offer the opportunity for revenue-generation for individuals and small businesses that contribute to the grid through their energy production.

Equity in Energy Enterprise Policies

As stated above, communities of color and low-income communities historically have less access to jobs and business development opportunities. As part of the effort to advance just energy policies and practices, it is essential to review state policy provisions to ensure that they foster economic growth for local communities. Two key provisions that can ensure equity in economic opportunities afforded by state policies are '*Local Hire*' and '*Minority Business Enterprise*.'

➤ *Local Hire*

Local Hire is a goal or requirement to hire people who live near their place of work. States achieve this goal by requiring contractors with publicly funded projects to recruit a specified proportion of local residents as workers on the project. This provision: 1) ensures that tax dollars are invested back into the local economy; 2) reduces the environmental impact of commuting; 3) fosters community involvement; and 4) preserves local employment opportunities in construction.

➤ *Minority Business Enterprise*

Minority Business Enterprise is defined as a business that is at least 51% owner- operated and controlled on a daily basis by people who identify with specific ethnic minority classifications, including African American, Asian American, Hispanic American, and Native American. MBEs can be self-identified, but are typically certified by a city, state, or federal agency. The predominant certifier for minority businesses is the National Minority Supplier Development Council. Often publically funded projects set a requirement or goal to source MBEs as suppliers.

Financial Incentives for Energy Efficiency and Renewable Energy

Tables listing each state's incentives and rebates for energy efficiency and renewable energy are included in each state profile in the compendium. Each incentive has a short description and a hyperlink to more information.

➤ *Statewide Incentives*

Statewide incentives are generally rebates and loan programs that individuals and businesses may claim according to the provisions of state law. Incentives may also include Local Options enacted by municipal governments.

➤ *Utility-Specific Incentives*

This section relates to the incentives offered by specific utilities in each state, and in some cases interstate utilities. Some programs are only available to either electric or gas customers of a certain utility. Different programs are available for residential and commercial customers.

➤ *Local Incentives*

Local incentives are those offered by counties, cities, and towns. Not all states have local incentives.

➤ *Non-Profit Incentives*

Non-profit incentives are offered by non-profit organizations. These are only available in some states.



ENERGY EFFICIENCY AND CLEAN ENERGY POTENTIAL

To effectively promote just energy efficiency and clean energy policies in any state, we must know the potential for energy efficiency and clean energy. Energy efficiency potential has been studied across the United States. However, while some states have conducted studies about energy efficiency potential, there is not a collection of studies completed for every state. Clean energy potential is available through state by state analysis done by the National Renewable Energy Lab.

Energy Efficiency Potential

Energy Efficiency Potential (EEP) is the amount of energy savings possible from implementing energy efficiency programs and policies. Despite evidence that clearly shows there is potential for all states in America to become more energy efficient, there is no national energy efficiency standard or policy. If the United States implements nationwide energy efficiency measures, there can be a range of benefits and savings by 2020 through a variety of sectors.

Renewable Energy Potential

Renewable Energy Potential (REP) is the estimated annual generating capacity of renewable energy technologies that can be provided for a given region. The NAACP is committed to advancing sources of renewable energy that have been proven to be clean and contribute minimal harm to our communities and environment. These specific types of renewable energy include solar, wind and geothermal energy. U.S. electricity generation in 2012 consisted of only 12% from renewable energy sources (only 32% of this total is from solar, wind and geothermal sources).

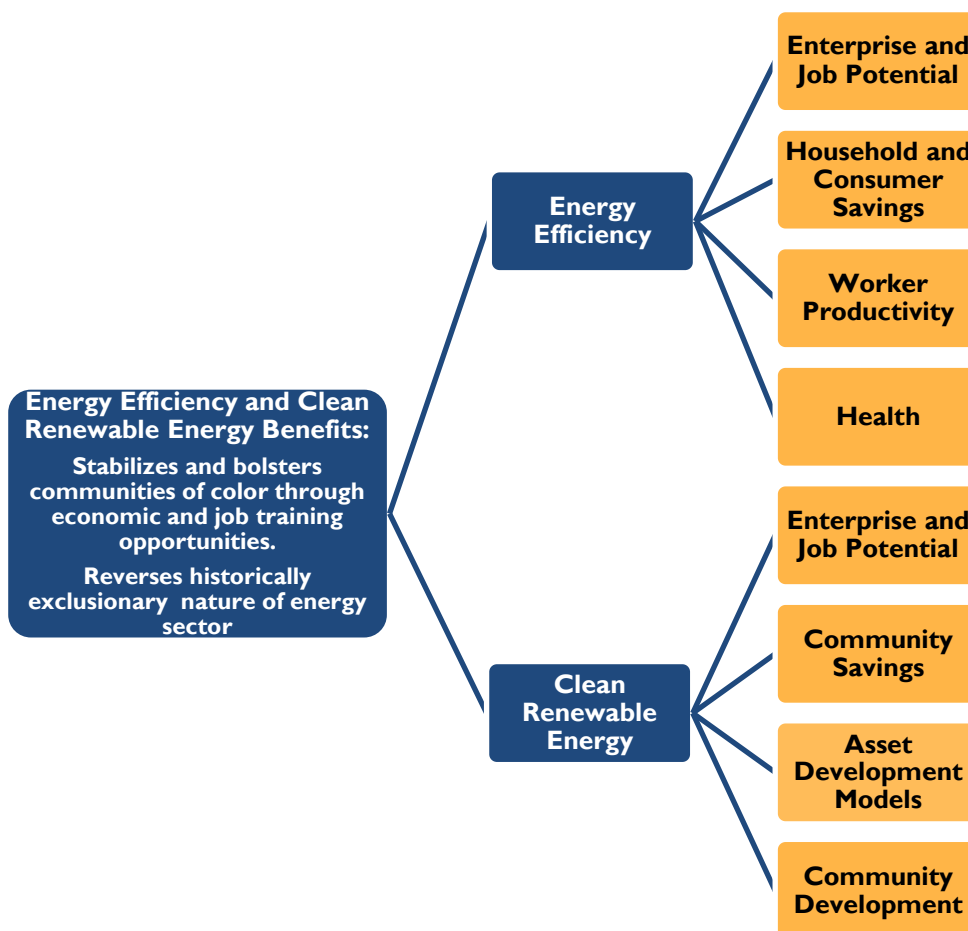
From 2007 to 2012, electricity from renewable sources such as wind, solar and geothermal nearly quadrupled nationally. The wind power market has expanded very quickly over a short period of time. Usage has tripled from 2007 to 2012. In 2012, the nation broke a record by installing more than 13,000 megawatts of wind power capacity and investing \$25 billion into the U.S. economy. Wind power is now the leading source of new capacity in the country and represents 42% of total power capacity and surpasses new natural gas capacity. Wind energy will be the leader in renewable electricity generation capacity, followed by solar energy and then geothermal energy by 2040. The current installed capacity of geothermal energy in the United States is 3,187 megawatts (MW). In the next 50 years, there is potential in the United States to have geothermal energy installed capacity of 10,000 MW.

BENEFITS OF ENERGY EFFICIENCY AND CLEAN RENEWABLE ENERGY POLICIES AND PRACTICES

There are countless benefits that accompany the potential for energy efficiency and clean renewable energy in the United States. These technologies are transforming the energy sector and providing more opportunities for communities of color to become leaders in a sector where there has been scarce participation to date. Energy efficiency and clean renewable energy benefits are both macro and micro -- they bolster and sustain our domestic economy, as well as strengthen local communities, households and businesses. Energy efficiency produces a host of economic benefits, including household and consumer savings, worker productivity, and more. Better building materials associated with energy efficiency generate health benefits by improving indoor air quality and creating safeguards for people who are most susceptible to respiratory illnesses. Clean renewable energy benefits similarly increase community savings in the long-term and they offer a tremendous opportunity to develop assets within communities that can be leveraged for more economic and social benefits.

If electric utilities fulfill merely 20% of their electric sales through renewable energy by 2020, 1.9 million jobs can be created across the United States.⁹ By 2030, an estimated 20% of U.S. electricity will be provided by wind power. The solar power industry is projected to become a \$15 billion industry by 2020.

The following diagram further details the benefits of energy efficiency and clean renewable energy as described in this section:



RECOMMENDED ENERGY POLICY STANDARDS

The NAACP has established recommendations for Renewable Portfolio Standards, Energy Efficiency Resource Standards, and Net Metering Standards to provide guidelines for state energy policies. Based on sector analysis, these standards are attainable. If adopted nationwide, these policies will protect the well-being of communities as well as help to prevent climate change. Also, as part of its economic equity and justice agenda, the NAACP advocates for Local Hire and Minority Business Enterprise provisions to better support economic opportunities for African American entrepreneurs, businesses, and communities in the energy sector.

Renewable Portfolio Standards

A Renewable Portfolio Standard (RPS) requires electric utility companies and other retail electric providers to supply a specific minimum amount of customer load with electricity from eligible renewable energy sources.

Recommended Standard

Minimally 25% renewable by 2025

Mandatory/Voluntary

Mandatory

Allowable Sources

Definition includes renewable electric energy sources, which naturally replenish over a human, rather than geological, period. The clean energy sources the NAACP supports are wind, solar, and geothermal.



Energy Efficiency Resource Standards

Energy Efficiency Resource Standards (EERS) establish a requirement for utility companies to meet annual and cumulative energy savings targets through a portfolio of energy efficiency programs.

Recommended Standard

Minimally 2% annual reduction of previous year retail electricity sales

Mandatory/Voluntary

Mandatory

Net Metering Standards

Net Metering Standards require electric utility companies to provide retail credit for net renewable energy produced by a consumer.

Capacity Limit Recommendation

Per System: 2,000 kW (minimally)

Mandatory/Voluntary

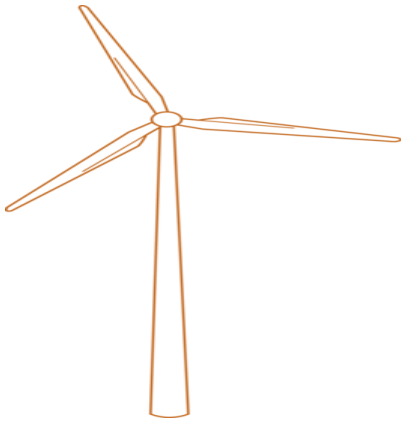
Mandatory

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Definition includes renewable electric energy sources, which naturally replenish over a human, rather than geological, period. The sources the NAACP supports are wind, solar, and geothermal.

Local Hire

Local Hire is a goal or requirement to hire people who live near their place of work. States achieve this goal by requiring contractors with publicly funded projects to recruit a specified proportion of local residents as workers on the project. *The practice ensures that tax dollars are invested back into the local economy, reduces the environmental impact of commuting, fosters community involvement, and preserves local employment opportunities in construction.*



Components of Provision

- Extra renewable energy credit multipliers for in-state installation and in-state manufactured content;
- Renewable energy credits for a utility providing incentives to build a plant in-state;
- Renewable energy credits for a utility that makes an investment in a plant located in-state;
- Quota for government assisted construction project employers to hire a percentage of workers locally;
- Bidding preferences for companies that hire a percentage of their employees in-state for state-funded public works projects and service contracts.

Minority Business Enterprise

A Minority Business Enterprise is a business that is at least 51% owned, operated, and controlled on a daily basis by people who identify with specific ethnic minority classifications, including African American, Asian American, Hispanic American, and Native American. MBEs can be self-identified, but are typically certified by a city, state, or federal agency. The predominant certifier for minority businesses is the National Minority Supplier Development Council. Often publically funded projects set a requirement or goal to source MBEs as suppliers.

Components of Provision/Certification

The MBE certification process is administered at the state level and may include the following:

- Provide training opportunities;
- Notify MBEs of state business opportunities;
- Set-aside funds for MBEs.

This provision establishes requirements for a certain percentage of the dollar amount spent on construction, professional services, materials, supplies, equipment, alteration, repair, or improvement by a state governmental entity to go toward MBEs.

SUMMARY OF FINDINGS

This report catalogs a wealth of state level information on Renewable Portfolio Standards, Energy Efficiency Resource Standards, Net Metering Standards, and Economic Opportunities for Local and Workers and Minority Business Enterprises (MBEs).

In studying the Renewable Portfolio Standards of the 50 states, we found the following:

- 29 states, plus the District of Columbia have Mandatory Renewable Portfolio Standards, while 9 states have Voluntary Renewable Energy Portfolio Goals.
 - The states with mandatory standards include: Arizona, California, Colorado, Connecticut, Delaware, District of Columbia, Hawaii, Illinois, Iowa, Kansas, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oregon, Pennsylvania, Rhode Island, Texas, Washington, and Wisconsin.
 - Out of these 29 states and the District of Columbia, the states that meet or exceed the NAACP recommended standard of 25% by 2025 are: California, Colorado, Connecticut, Hawaii, Illinois, Maine, Minnesota, Nevada, New York, and Oregon.
- The states that have Voluntary Renewable Portfolio Goals are: Alaska, Indiana, North Dakota, Oklahoma, South Dakota, Utah, Vermont, Virginia, and West Virginia.
- Each state could tighten up on their definitions of renewable energy to comply with the NAACP recommended energy sources which are wind, solar, and geothermal, as all state RPS's include sources that are potentially harmful.

In examining the Energy Efficiency Resource Standards of the 50 states, we found the following:

- Eighteen states have Mandatory Energy Efficiency Resource Standards, and 8 states have Voluntary Energy Efficiency Resource Standards.
 - The states with mandatory goals are: Arizona, California, Colorado, Connecticut, Hawaii, Illinois, Indiana, Iowa, Maryland, Massachusetts, Minnesota, New Mexico, New York, North Carolina, Ohio, Pennsylvania, Washington, and Wisconsin.
 - The states with Voluntary Energy Efficiency Resource Goals are: Arkansas, Delaware, Maine, Missouri, Oregon, Texas, Vermont, and Virginia.
- The state standards that are comparable to the NAACP Recommended Standard of 2% annual reduction of previous year retail electricity sales are: Arizona, Delaware, Illinois, Indiana, Massachusetts, New York, and Vermont.

In reviewing the Net Metering Standards of the 50 states, we found the following:

- Net Metering Standards are the most pervasive standards in the United States with 43 states plus the District of Columbia having Mandatory Net Metering Standards, while 3 states have Voluntary Net Metering Goals.
 - The states with Net Metering Standards are: Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Florida, Georgia, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.
- The states with Voluntary Net Metering Goals are: Idaho, South Carolina, and Texas.
- States that meet or exceed the NAACP recommended standard for Net Metering with a maximum of 2,000 kW or more are: Arizona, California, Colorado, Connecticut, Delaware, Florida, Maryland, Massachusetts, New Jersey, New Mexico, New York, Ohio, Oregon, Pennsylvania, Rhode Island, Utah, Vermont, and West Virginia.

In investigating the economic opportunity provisions for local workers and MBEs in energy policies for the 50 states, we found the following:

- Only 9 states had explicit Local Hire provisions within the Renewable Portfolio Standards, Energy Efficiency Resource Standards, and Net Metering Standards.
 - The states with Local Hire Provisions are: Arizona, California, Delaware, District of Columbia, Maine, Massachusetts, Michigan, Minnesota, and Montana.
- There were no states with Minority Business Enterprise provisions specific to energy policies.



MISSOURI ENERGY EFFICIENCY AND RENEWABLE ENERGY POLICY PROFILE

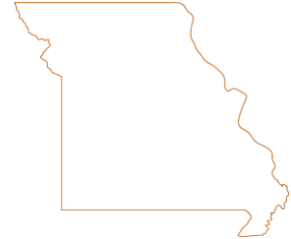
A REVIEW OF MISSOURI'S STATE POLICIES

Current Status and Recommendations

The following assessment highlights the shortcomings and the attributes of Missouri's status in relation to NAACP's three focal energy policies:

Renewable Portfolio Standards

Missouri has a mandatory renewable portfolio standard of 15% by 2021. As Missouri makes progress toward its 2021 goal, Missouri should establish a mandatory goal of at least 25% renewable energy by 2025, while focusing on the development of solar, wind, and geothermal resources as the best possible options for clean energy development.



Energy Efficiency Resource Standards

Missouri has a voluntary EERS, which will expand from the current level of 0.3% annual savings to 0.9% in 2015 and 1.7% annual savings in 2019 to culminate in 9.9% cumulative savings in 2020, together with peak demand reduction goals. Ideally, however, the state of Missouri will ratchet up its EERS to minimally, a 2% annual reduction over each previous year's retail electric sales, and make the standard mandatory.

Net Metering Standards

Missouri has a mandatory net metering policy requiring electric utility companies to provide retail credit for systems with capacities up to 100 kW, and imposes a statewide cap at 5% of a utility's single-hour peak load during the previous year. Requiring electric utility companies to provide retail credit to ratepayers with system capacity of at least up to 2,000 kW would provide more flexibility and incentive for the production of renewable energy generated in the state and would help individual consumers and small businesses to affordably access clean energy resources. The state should also therefore raise or remove the statewide cap.

Local Hire

Missouri lacks a local hire provision. Establishing a Local Hire Provision that encompasses energy projects would significantly increase the amount of tax dollars that Missouri reinvests into the local economy and would provide local jobs to enable people to work near where they live.

Minority Business Enterprise

Missouri's Office of Equal Opportunity (OEO) certifies minority business enterprises and women-owned business enterprises for all state agencies, except for Missouri's Department of Transportation, which certifies DBEs for federally assisted highway construction projects. The OEO lists its MBE goal as 10% and its WBE goal as 5%. Beyond Missouri's participation goals, however, including provisions with funding set aside is critical to ensure that the state's DBEs meet their full potential. Further, the expansion of training programs and the establishment of a proactive notification system to alert DBEs to procurement opportunities would improve the state's program.

MISSOURI

The Show Me State¹⁰



Renewable Portfolio Standards

Policy Name and Date

Missouri Clean Energy Initiative--third state RPS adopted by ballot initiative, November 4, 2008

Standard

15% renewable by 2021

Missouri Energy Fact

Renewable energy resources accounted for 3 percent of Missouri's net electricity generation in 2011; most of that generation came from conventional hydroelectric power and wind.

<http://www.eia.gov/state/print.cfm?sid=MO>

Mandatory/Voluntary

Mandatory

Allowable Sources

Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric¹²

Energy Efficiency Resource Standards

Policy Name and Date

Senate Bill 376: Missouri Energy Efficiency Investment Act, 2009

Standard

9.9% cumulative electricity savings by 2020 from 0.3 annual savings in 2012, expanding to 0.9% annually in 2015, and 1.7% in 2019.

Mandatory/Voluntary

Voluntary¹³

Net Metering Standards

Capacity Limit

Per System: 100 kW

Entire State: 5% of utility's single-hour peak load during previous year

Mandatory/Voluntary

Mandatory

Allowable Sources

Solar Thermal Electric, Photovoltaics, Wind, Hydroelectric, Small Hydroelectric, Fuel Cells using Renewable Fuels¹⁵

ECONOMIC OPPORTUNITIES

Local Hire Provision: NO

MBE Provision/Certification: YES

The Missouri Office of Equal Opportunity certifies MBEs to provide greater opportunities for these businesses to bid on state contracts.¹⁴

State Facts

Capital: Jefferson City

Area: 69,703 sq mi

Population: 5,988,927

State Bird: Eastern

Bluebird

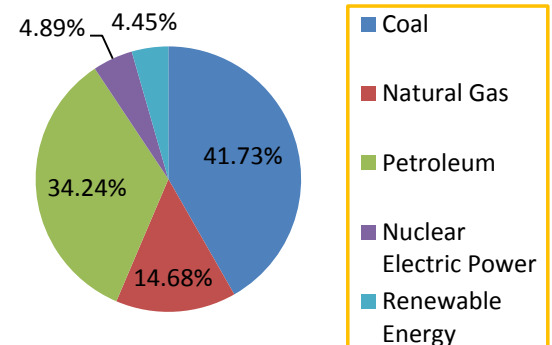
State Flower: Hawthorn

Blossom¹¹

MISSOURI at a Glance:

- ✓ Renewable Portfolio Standards
- ✓ Energy Efficiency Resource Standards
- ✓ Net Metering Standards

Missouri Energy Consumption Estimates 2010



Clean Energy Potential in Missouri

Background

Although Missouri's renewable energy industry is less developed than some of its neighboring states, it possesses an equally strong renewable energy resource potential.¹⁶ Most of the state's electricity comes from coal, nearly all of it shipped from Wyoming. However, the state's windy land, located relatively close to dense, energy-consuming urban centers, puts Missouri in a prime position to become a national leader in renewable energy. A renewable energy industry in Missouri would create tens of thousands of jobs and new sources of income for farmers.¹⁷



Solar: Missouri has urban utility-scale PV potential of 30,549 GWh (30.09% of total net generation), rural utility-scale PV potential of 5,335,269 GWh (over 100% of total net generation), and rooftop PV potential is 16,160 GWh (17.5% of total net generation).

Wind: The onshore wind power potential is 689,519 GWh (over 100% of total net generation).

Geothermal: Enhanced geothermal systems potential is 835,445 GWh (over 100% of total net generation).¹⁸

Incentives in Missouri

Type	Incentives	Description
Statewide	Energy Revolving Fund Loans	The Missouri Energy Revolving Fund Loan Program, administered by the Division of Energy in the Missouri Department of Natural Resources (DNR), is available for energy efficiency and renewable energy projects for public and governmental buildings and structures.
	Missouri Agricultural and Energy Saving Team – A Revolutionary Opportunity (MAESTRO)	The Missouri Agricultural and Small Business Development Authority (MASBDA) is now offering incentives to livestock farmers in the form of assistance with loans for energy efficiency.
	Renewable Energy Generation Zone Property Tax Abatement	Legislation (H.B. 737) allows for new, expanded, or replacement business facilities to receive a property tax exemption from the applicable local government authority.
	Sales Tax Holiday for Energy-Efficient Appliances	The state of Missouri offers consumers a seven-day exemption from state sales taxes on certain Energy Star certified new appliances.
	Tax Deduction for Home Energy Audits and Energy Efficiency Improvements	The state of Missouri enacted legislation that allows homeowners to take an income tax deduction on the cost of home energy audits and associated energy efficiency improvements.

Type	Incentives	Description
Statewide	Wood Energy Production Credit	The Wood Energy Tax Credit, allows individuals or businesses processing Missouri forestry industry residues into fuels an income tax credit of \$5.00 per ton of processed material (e.g., wood pellets).
Utility-Specific	Ameren Missouri - Solar Renewable Energy Credits	Ameren Missouri offers a Standard Offer Contract to customers that generate solar power.
	Ameren Missouri - Photovoltaic Rebate Program	Ameren Missouri offers rebates to its customers for the installation of net metered photovoltaic (PV) systems on their properties.
	Ameren Missouri (Electric) - Business Energy Efficiency Program	Ameren Missouri will give cash incentives to non-residential customers for Standard Electric Efficiency Measures identified in official program materials as well as site-specific custom measures.
	Ameren Missouri (Electric) - Residential Energy Efficiency Rebate Programs	Ameren Missouri offers rebates and discounts to residential electric customers for the purchase and installation of energy efficiency measures.
	Ameren Missouri (Gas) - Business Energy Efficiency Program	Ameren Missouri offers its commercial natural gas customers rebates for the installation of certain energy efficient natural gas equipment and measures, such as programmable thermostats, food service equipment, building insulation and water heating equipment.

Type	Incentives	Description
Utility-Specific	<u>Ameren Missouri (Gas) - Residential Energy Efficiency Rebate Programs</u>	Ameren Missouri offers residential natural gas customers rebates for the installation of certain energy efficiency measures and natural gas equipment.
	<u>Atmos Energy (Gas) - Residential Efficiency Program</u>	Atmos Energy provides rebates for residential natural gas heating equipment through the Missouri High Efficiency Rebate Program.
	<u>Citizens Electric Corporation - Residential Energy Efficiency Rebate Program</u>	Citizens Electric Corporation offers rebates and price reductions to its residential customers for purchasing and installing energy efficient equipment.
	<u>City Utilities of Springfield - Commercial Energy Efficiency Rebate Program</u>	City Utilities of Springfield offers incentives for commercial customers to increase the efficiency of eligible facilities.
	<u>City Utilities of Springfield - Residential Energy Efficiency Rebate Program</u>	City Utilities of Springfield Missouri provides incentives for residential customers to increase the efficiency of eligible homes.
	<u>Columbia Water & Light - Residential Super Saver Loans</u>	The Columbia Water & Light (CWL) Home Performance Super Saver Loan allows Columbia residents to finance energy improvements to homes with affordable, low-interest loans with five to ten year terms.
	<u>Columbia Water & Light - Commercial Super Saver Loans</u>	Columbia Water & Light (CWL) provides Commercial Super Saver Loans, which allow C&I rate customers to replace a furnace along with a new central air conditioner or heat pump with an efficiency rating 11 EER or greater for units 6 tons or larger.

Type	Incentives	Description
Utility-Specific	Columbia Water & Light - Residential HVAC Rebate Program	Columbia Water & Light (CWL) provides an HVAC incentive for residential customers that are replacing an older heating and cooling system.
	Columbia Water & Light - New Home Energy Star Rebate	Columbia Water and Light offers a \$1,000 rebate to customers for the construction of new homes that achieve certification as Energy Star homes.
	Columbia Water & Light - HVAC and Lighting Efficiency Rebates	Columbia Water & Light (CWL) offers rebates to its commercial and industrial customers for the purchase of high efficiency HVAC installations and efficient lighting.
	Columbia Water & Light - Home Performance with Energy Star Rebates	Columbia Water and Light, a municipal utility, offers rebates to its residential customers who make certain energy efficient improvements to the home.
	Columbia Water & Light - Solar Rebates	Columbia Water & Light (CWL) offers rebates to its commercial and residential customers for the purchase of solar water heaters and solar photovoltaic systems.
	Co-Mo Electric Cooperative - Energy Efficiency Rebate Program	Co-Mo Electric Cooperative provides rebates to residential and commercial members who install air source, dual fuel, and/or geothermal heat pumps, and certain energy efficient appliances.
	Cuivre River Electric - Energy Efficiency Rebate Programs	Cuivre River Electric Cooperative, through the Take Control & Save Program, offers rebates for cooperative members who purchase efficient geothermal and dual fuel heat pumps, and electric water heaters.

Type	Incentives	Description
Utility-Specific	<u>Empire District Electric - Commercial and Industrial Efficiency Rebates</u>	Empire District Electric Company offers rebates to certain commercial and industrial customers for the installation of energy efficient equipment.
	<u>Empire District Electric - Low Income New Homes Program</u>	Empire District Electric offers rebates for the utilization of energy efficient measures and appliances in new, low-income homes.
	<u>Empire District Electric - Residential Energy Efficiency Rebate</u>	The Empire District Electric Company offers rebates for customers who construct highly efficient homes and purchase efficient central air conditioners.
	<u>Independence Power and Light - Commercial Energy Efficiency Rebate Program</u>	Independence Power and Light offers rebates to their commercial customers for purchasing and installing energy efficient equipment.
	<u>Independence Power and Light - New Homes Rebate Program</u>	Independence Power and Light offers rebates to builders for constructing new, energy efficient homes that meet Energy Star standards.
	<u>Independence Power and Light - Residential Energy Efficiency Rebate Program</u>	Independence Power and Light (IPL) offers rebates to residential customers for purchasing new, energy efficient appliances.
	<u>Intercounty Electric Cooperative - Energy Efficiency Rebate Program</u>	Intercounty Electric Cooperative provides rebates to its customers for the purchase of a variety of energy efficient equipment and appliances.

Type	Incentives	Description
Utility-Specific	Kansas City Power & Light - Solar Photovoltaic Rebates	Kansas City Power and Light and its affiliate Kansas City Power and Light Greater Missouri Operations (collectively referred to as KCP&L) offer rebates to their customers for the installation of net metered photovoltaic (PV) systems on their properties.
	Kansas City Power & Light - Commercial/Industrial Energy Efficiency Rebate Program	Kansas City Power & Light (KCP&L) provides financial incentives for commercial and industrial customers to increase the energy efficiency of eligible facilities.
	Kansas City Power & Light - Cool Homes Residential Rebate Program	Kansas City Power and Light (KCP&L) offers rebates to residential customers to help offset the cost of replacing inefficient central AC and heat pump systems with newer, more efficient models.
	Kansas City Power & Light - Energy Optimizer Programmable Thermostat Program	Kansas City Power and Light (KCP&L) offers a free Honeywell programmable thermostat, worth \$300, and free installation to qualifying customers to manage energy usage.
	Kansas City Power & Light - ENERGY STAR New Homes Rebate Program	Kansas City Power and Light (KCP&L) offers rebates to residential customers towards the cost of an ENERGY STAR Home Energy Assessment and a portion of the installed efficiency improvements.
	Kansas City Power & Light - Home Performance with ENERGY STAR	Kansas City Power & Light (KCP&L) offers rebates to residential customers towards the cost of an ENERGY STAR Home Energy Assessment and a portion of the installed efficiency improvements.

Type	Incentives	Description
Utility-Specific	Kirkwood Electric - Residential Energy Efficiency Rebate Program	Kirkwood Electric offers rebates to its residential customers who install energy efficient heat pumps and electric hot water heaters in their new and existing homes.
	Laclede Gas Company - Loan Programs for Energy Efficiency	The Laclede Gas Company offers two loan programs for customers to improve energy efficiency.
	Laclede Gas Company - Commercial and Industrial Energy Efficiency Rebate Program	Commercial and Industrial customers can receive rebates for various energy efficiency measures.
	Laclede Gas Company - Residential High Efficiency Heating Rebate Program	Laclede Gas Company offers various rebates to residential customers for investing in energy efficient equipment and appliances.
	Liberty Utilities - Residential and Small Business Energy Efficiency Rebate Program	Liberty Utilities provides a number of general rebate offerings to customers under the company's Residential Firm Service Rate or the Small Firm General Service Rate.
	Missouri Gas Energy (MGE) - Home Performance with ENERGY STAR	Missouri Gas Energy (MGE) offers rebates to its residential customers towards the cost of an ENERGY STAR Home Energy Assessment and a portion of the installed efficiency improvements.
	Missouri Gas Energy (MGE) - Residential and Small Business Efficiency Rebates	Missouri Gas Energy (MGE) offers its residential and small business customers rebates for the purchase and installation of efficient natural gas water heating and space heating equipment within its service territory.

Type	Incentives	Description
Utility-Specific	<u>Missouri Rural Electric Cooperative - Residential Energy Efficiency Rebate Program</u>	Missouri Rural Electric Cooperative (MREC) offers a number of rebates to residential customers for the purchase and installation of energy efficient equipment.
	<u>Ozark Border Electric Cooperative - Residential Energy Efficiency Rebate Program</u>	Ozark Border Electric Cooperative has made rebates available to residential members for the installation of energy efficient geothermal and air source heat pumps, electric water heaters, and room air conditioners.
	<u>Platte-Clay Electric Cooperative - Residential Energy Efficiency Rebates</u>	Platte-Clay Electric Cooperative offers a variety of rebates to residential and commercial customers who wish to upgrade to energy efficient equipment.
	<u>Residential Energy Efficiency Rebate (Offered by Members of Associated Electric Cooperative)</u>	Associated Electric Cooperative and many of its associated member cooperatives offer rebates to residential customers who purchase and install energy efficient equipment for the home.
	<u>Southwest Electric Cooperative - Energy Efficiency Rebate Program</u>	Southwest Electric Cooperative offers rebates to its customers that purchase energy efficient heating and air conditioning equipment.
	<u>White River Valley Electric Cooperative - Energy Efficiency Rebate Program</u>	The residential and commercial appliance and heating rebate program encourages members to purchase Energy Star equipment that qualifies under the White River Energy Efficiency Program.

Type	Incentives	Description
Local	Kansas City - EnergyWorks KC	The EnergyWorks KC program offers rebates to commercial, residential, and non-profit Kansas City organizations and residents who improve energy efficiency in their homes or buildings.
	St. Louis County - Residential Energy Efficiency Loan Program	St. Louis County SAVES offers loans to residents for energy efficiency improvements in owner-occupied, single-family homes.

CONCLUSION

When comparing Missouri's energy policies to the recommendations set forth by the NAACP, one can see that Missouri has the potential to reap the health, environmental, and economic benefits of just energy policies and clean energy development.

In 2010, fossil fuel based energy accounted for 91% of the total energy (electricity and fuels) consumed in Missouri, whether imported or from in-state sources. Only 4.45% of total energy came from renewables. In the electric power sector in particular, both for in-state use and or export to neighboring states, Missouri generated 80.8% of the state's electricity from coal in September 2013, whereas net generation of renewables accounted for only 1.6%. In spite of its abundant in-state clean energy potential, at \$1.41 billion in expenditures, Missouri spent the 4th most, out of 50 states in the nation, on coal imports in 2012.¹⁹ Missouri has four power plants that received a failing environmental justice grade in the 2012 Coal Blooded Report. Coal based electricity production, from cradle to grave, has been proven to be unhealthy to humans and the environment.

While Missouri has a renewable portfolio standard ramping up to 15% by 2021, the state must establish a new goal looking past 2021 at minimally, 25% by 2025. Additionally, under Missouri's RPS, allowable sources include options that have a history of proven harms. Missouri should focus on solar, wind, and geothermal sources as the best possible options for clean energy development. Therefore, it is laudable that the state has a solar technology minimum in its RPS of 0.3% of sales in 2021, but Missouri should ideally dramatically expand the technology minimum.

Missouri's current energy efficiency resource standard is voluntary and ramps up from 0.3% to 0.9% in 2015 and to 1.7% in 2019. Missouri must boost its energy efficiency resource standard to minimally, a 2% annual reduction over each previous year's retail electricity sales, and make it mandatory.

Missouri should increase its mandatory net metering standard from a 100 kW capacity limit per system to at least 2,000 kW, in order to spur renewables development statewide, and to allow residents to access affordable clean energy. Further, the state should raise or remove the cap at 5% of a utility's peak load during the previous year.

Fortunately, Missouri does have an array of state and utility specific incentives. In order for Missouri to establish a standing as a leader in just energy policies, however, the state will ideally bring these three focal energy policies up to the standards recommended by the NAACP.

Laudably, Missouri's Office of Equal Opportunity(OEO) certifies minority business enterprises and women-owned business enterprises for all state agencies, except for Missouri's Department of Transportation, which certifies DBEs for federally assisted highway construction projects. The state therefore has more extensive MBE certification coverage than most. The OEO lists its MBE goal as 10% and its WBE goal as 5%. Beyond Missouri's participation goals, including provisions with funding set aside is critical to ensure that the state's DBEs meet their full potential. The expansion of training programs and the establishment of a proactive notification system to alert DBEs to procurement opportunities would improve the state's program. Finally, Missouri must establish a statewide local hire program to ensure that local development catalyzes local economic growth and resilience.

Missouri has tremendous potential to meet the NAACP's recommended standards while increasing job opportunities and energy affordability for its residents. More aggressively tapping into its vast renewable energy sources like wind, solar, and geothermal will help Missouri become a more resilient state, as will energy efficiency measures. Missouri should expand on its current hiring and procurement policies to strengthen local economies and ensure that residents benefit from the energy sector's expansion.

The NAACP is committed to using this analysis of energy efficiency and renewable energy potential and policies, in tandem with economic development and equity models, as tools for the continued transformation of the energy sector. We will be hosting a series of meetings and events aimed at mobilizing our units, collaborating with our partners, and working with stakeholders in implementing these recommendations, as outlined in the soon-to-be-released Just Energy Policies Action Toolkit.

ENDNOTES

- ¹ Biomass Electricity: Clean Energy Subsidies for a Dirty Industry, Biomass Accountability Project, <http://www.pfpi.net/wp-content/uploads/2011/06/BAP-Biomass-Projects-Report.pdf>.
- ² Environmental Injustice in Siting Nuclear Power Plant, University of Notre Dame http://www3.nd.edu/~kshradet/pubs/final-pdf-ej-nuke-siting-wi-Alldred_08-0544.pdf.
- ³ Energy Justice Network – The Air of Injustice, http://www.energyjustice.net/files/coal/Air_of_Injustice.pdf.
- ⁴ Air Quality, American Lung Association. <http://www.lung.org/assets/documents/publications/solddc-chapters/air-quality.pdf>.
- ⁵ Energy Justice Network – The Air of Injustice, http://www.energyjustice.net/files/coal/Air_of_Injustice.pdf.
- ⁶ National Research Council. Committee on Health, Environmental and Other External Costs and Benefits of Energy Production and Consumption. Hidden Costs of Energy: *Unpriced Consequences of Energy Production and Use*. National Academies Press, 2010. pp. 82-94.
- ⁷ U.S. EIA. “Emissions of Greenhouse Gases Report.”
- ⁸ American Association for Blacks In Energy – Energy, Economics, and the Environment: Effects on African Americans, <http://www.aabe.org/docs/whitepapers/docs/1-State-of-Energy-in-Black-America-Report.pdf>.
- ⁹ Alternative Energy News, <http://www.alternative-energy-news.info/potential-for-19-million-renewable-energy-jobs/>.
- ¹⁰ <http://www.50states.com/bio/nickname1.htm#UIWjh8XAffl>.
- ¹¹ Missouri, Britannica, <http://www.britannica.com/EBchecked/topic/385713/Missouri>.
- ¹² <http://dsireusa.org/incentives/allsummaries.cfm?SearchType=RPS&re=1&ee=1>.
- ¹³ http://www.dsireusa.org/documents/summarymaps/EERS_map.pdf.
- ¹⁴ Missouri Office of Equal Opportunity, M/WBE Certifications, <http://oeo.mo.gov/mwbe-certifications/>.
- ¹⁵ <http://www.dsireusa.org/incentives/allsummaries.cfm?SearchType=Net&re=1&ee=1>.
- ¹⁶ Acore Renewable Energy, <http://www.acore.org/files/pdfs/states/2012-50statereport-lowres.pdf>.
- ¹⁷ NRDC – Renewable Energy in Missouri, <http://www.nrdc.org/energy/renewables/missouri.asp>.
- ¹⁸ U.S. RENEWABLE ENERGY TECHNICAL POTENTIALS: A GIS-BASED ANALYSIS, <http://www.nrel.gov/docs/fy12osti/51946.pdf>.
- ¹⁹ Burning Coal, Burning Cash: Ranking the States that Burn the Most Coal-2014 Update, *Union of Concerned Scientists*, http://www.ucsusa.org/clean_energy/smart-energy-solutions/decrease-coal/burning-coal-burning-cash-2014-update-state-coal-imports.html