



2010 Program Toolkit

NAACP Climate Justice Initiative Toolkit

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Dear Family,

I am thrilled that by opening this document you are signaling an interest, and what I hope will be a commitment, to linking arms to address one of the most important civil rights issues of our time, climate change.

Since I joined the NAACP national staff, the importance of this work and the connections to our communities are evidenced by the types of issues I've encountered while engaging with you all across the country. In Panola, Texas, we are fighting against an incinerator plant whose owner is seeking to gain a permit to quintuple its toxic emissions within steps of a primarily black community. In Dickson, Tennessee I met with a sister whose whole family has cancer that they've linked to the landfill that is adjacent to their family farm. In New Albany, Indiana, I met a man whose wife died of lung cancer after never smoking a day in her life, yet she lived next to one of the most toxic coal fired power plants in the nation. Right now I am working with the folks in Louisiana, Mississippi, and Alabama who are still dealing with the ravages of Hurricanes Katrina and Rita and are now being impacted by the BP Oil drilling disaster. Both the oil drilling disaster and the Hurricanes of 2005 are each in their own way a direct result of this nation's over reliance on fossil fuels (oil, coal, etc.).

By reading this toolkit, if you don't already know, I trust you will see how all of these issues are interconnected. I trust that with the information resources you find in this document, you will feel tantalized, inspired, and equipped to take action!

We are here to support you and we eagerly anticipate working with you to ensure that our communities are righting the injustices that are visited upon us through the water we drink, the land on which we live, and through the very air we breathe. Our ultimate aim is to position our communities in the forefront, the center, and at the helm of determining our own destiny of residing in livable communities and playing a leadership role in the global economy.

In solidarity,
Jacqui Patterson
Climate Justice Initiative Director



Introduction to Climate Justice

What is Climate Change?

Climate change is a change in weather over periods of time that range from decades to millions of years. It can be a change in the average weather or a change in the distribution of weather events around an average (for example, greater or fewer extreme weather events).

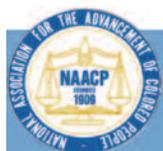
- Global warming is the increase in the average temperature of Earth's near-surface air and oceans since the mid-20th century and its projected continuation.

What are the Environmental Results of Climate Change?

- Melting glaciers/ice caps, etc. result in sea level rise which encroaches on land on which people live;
- Sea level rise is already displacing coastal dwelling communities, where people of color are disproportionately representing;
- Changes in frequency and intensity of extreme weather events particularly affect communities of color because our communities are often already vulnerable due to economic insecurity, substandard housing stock, etc.;
- Species extinction impacts the entire ecosystem of which we are inhabitants including affecting food chain and other issues; and
- Changes in agricultural yields impact black farmers who are already struggling economically, and also exacerbate the existing food desert situation we find in many of our communities. •

How Do These Results Impact Us?

- Illness/Disability/Death—due to heat related conditions, injury from severe weather events, and exposure to pollutants that drive climate change as well as directly negatively impacting health through asthma cancer, etc.
- Physical Displacement—due to rising sea levels overtaking coastal lands, as well as increases in catastrophic and destructive storms
- Culture Erosion—Resulting from displacement in communities and nations, as well as changes in land and sovereignty
- Food insecurity/malnutrition—due to changes in agricultural yields as well as changes in farming because of the market shifting to accommodate growing corn for fuel. (bio-fuel/agrofuel)



- Economic Insecurity—resulting from significant increases in food prices, due to changes in agriculture, as well as instability from severe weather events which result in workers who are unable to work whether its shrimpers in the gulf of Mexico or Grand Ole Opry maintenance persons affected by flooding in Nashville, Tennessee.
- Housing Insecurity—due to displacement from disasters as well as resulting from economic insecurity
- Violence—due to increases in economic insecurity that can drive rises in crime, as well as due to disasters which have been shown to result in spikes in physical and sexual violence against women and girls.
- Criminalization—from disaster situations which tend to result in militarism and are accompanied by criminalization of survivors.

Why Is Climate Change An Issue of Justice, As Well As A Matter of Civil and Human Rights?

INJUSTICE

- Climate change disproportionately negatively impacts those who are least responsible for its advancement, namely persons of color.

HUMAN RIGHTS VIOLATIONS

Climate change negatively impacts the following human rights:

- Right to Self Determination
- Right to Safe and Healthy Work Conditions
- Right to Highest Standard of Physical and Mental Health
- Right to Food
- Right to a Decent Living Condition
- Equal Rights Between Men and Women
- Right of Youth and Children to be Free From Exploitation

CIVIL RIGHTS VIOLATIONS

Climate change negatively impacts the following human rights

- Ensuring peoples' physical integrity and safety
- Protection from discrimination on grounds such as gender, religion, race, sexual orientation, national origin, age, immigrant status, etc.
- Equal access to health care, education, culture, etc.



What Must Be Done About It?

- Reduce Emissions Significantly
- Shift to Renewable Energy Sources—Wind, Solar, Hydro, Geothermal
- Put Adaptation Funding in the Hands of Most Impacted Groups

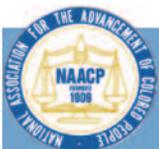


III. Overview of Climate Justice

A. Fact Sheets

- i) 10 Things You Should Know About Climate Change
- ii) Review of Proposed Solutions
- iii) Review of Proposed Solutions II: Renewable Energy Based Solutions

B. Call to Action-10things You Can Do to Advance Climate Justice



– Fact Sheet –

Climate Change 101

Ten Things You Should Know About Climate Change

The climate is changing and humans are both contributing to this change and being affected by it. The climate will continue to change for decades as a result of past human activities, but scientists say that the worst impacts can still be avoided if action is taken soon. Climate change is a scientific phenomenon affecting the world every single day whether it is in the form of extremely hot summers, brutal winters, or extreme natural disasters.

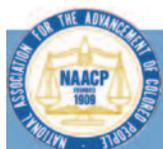
Basics of Climate Change

1. **What is Climate Change?** Although the term climate change has been used interchangeably with the term global warming, the two are different phenomena. "Climate Change" is a broader term that refers to long-term changes in climate, including average temperature and precipitation levels. Both natural and human factors can cause climate change. For example, natural processes like volcanic eruptions, variations in the sun's intensity, or very slow changes in ocean circulation or land surfaces. Human activities that cause greenhouse gases to be released into the air (like the burning of fossil fuels like oil and coal, and deforestation (cutting down trees), or by changing the land surfaces also contributes to climate change.

2. **What is Global Warming?** "Global warming" refers to the increase of the Earth's average surface temperature, due to a build-up of greenhouse gases in the atmosphere. Global warming is often misunderstood to imply that the world will warm uniformly and at the same time. In fact, an increase in average global temperature will result in some of the areas of the world warming more and other less, while some areas can even cool.

Causes of Climate Change

3. **Natural Causes of Climate Change:** The earth's climate changes naturally with varying levels of sunlight reaching the earth causing cycles of warmth and cooling that have been a regular feature of Earth climatic history. Other natural causes of climate change include variations in ocean currents and large volcanic eruptions.



4. **Role of Greenhouse Gas in Climate Change:** Gases that trap heat in the atmosphere are often called greenhouse gases. Although, some greenhouse gases such as carbon dioxide occur naturally and escape into the air through natural processes, scientists agree that human activities cause climate change by adding carbon dioxide and other heat-trapping gases to the atmosphere. Greenhouse gases that enter the air include:

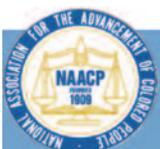
- Water vapor is the most common greenhouse gas. But others that are very important too. Some occur naturally and some come from human activity.
- Carbon Dioxide or CO₂ is the most significant greenhouse gas released by human activities, mostly through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products. It is the main contributor to climate change.
- Methane is produced when vegetation is burned, digested or rotted with no oxygen present. Some examples include: garbage dumps, rice paddies, and grazing cows and other livestock release lots of methane.
- Nitrous oxide can be found naturally in the environment but human activities are increasing the amount of emissions. Nitrous oxide is released when chemical fertilizers and manure are used in agriculture, and also through various industrial activities.

5. **Role of Human Activity in Climate Change:** For thousands of years, the earth's atmosphere has changed very little. The balance of heat-trapping greenhouse gases have remained just right, but today we are having problems keeping this balance due to the burning of fossil fuels to heat our homes, run our cars, produce electricity, and manufacture all sorts of products. Scientists believe that it is the human-induced greenhouse effect that causes environmental concern, because it has the potential to warm the planet at a rate that has never been experienced in human history.

Impact of Climate Change

Climate change is more than a warming trend (which is why the term "global warming" is an inaccurate description of the phenomenon), indeed, climate change touches every corner of human life and increasing temperatures could lead to several negative environmental, health, social, and economic consequences.

6. **Environmental Consequences of Climate Change:** Climate change will alter the quantity and quality of available fresh water and increase the frequency and duration of floods, droughts, and heavy precipitation events. Although climate change will affect different regions in different ways, it is generally expected that dry regions of the world will get drier and wet regions will get wetter.



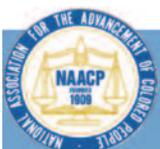
- **Rising Sea Levels:** The global sea level could rise due to several factors including melting ice and glaciers. Rising sea levels could damage coastal regions through flooding and erosion. The climate of various regions could change too quickly for many plant and animal species to adjust. Harsh weather conditions, such as heat waves and droughts, could also happen more often and more severely.
- **Droughts:** Warmer temperatures lead to more frequent and severe droughts around the world. These droughts affect things such as the availability of water and agricultural yields. With the loss in water, crops are not maintained, which results in food shortages, not only in the region experiencing the drought, but also various regions of the world that may depend on those crops for sustenance.

7. **Health Consequences of Climate Change:** Climate change is expected to affect the health of millions of people directly—from heat waves, floods, and storms—and indirectly—by increasing smog and ozone in cities, contributing to the spread of infectious diseases, and reducing the availability and quality of food and water. The populations at greatest risk are those with the least ability to adapt: people who are elderly, sick, and/or poor. ,

- **Heat Waves:** Heat waves will become more frequent and intense, increasing threats to human health and quality of life, especially in cities. With the rise in temperatures come the increase of heat related illnesses and the spread of infectious diseases.
- **Air pollution:** Air pollution problems would increase, placing children, the elderly and people suffering from respiratory problems at greatest risk of health effects. Increases in molds and pollens due to warmer temperatures could also cause respiratory problems such as asthma for some people.

8. **Social Consequences of Climate Change:** Climate change has the potential to impact the livelihood of poor people in developing countries, as well as, those in developed rural communities who have limited capacity to adapt to the stresses caused by the unexpected life changes and disruptions which may result indirectly or directly from climate change.

- **Land displacement:** Scientific studies indicate that millions of people in different parts of the world would be forced to leave their lands due to the loss of access to clean water, housing and food, due to increasing rising sea levels, intense storms, floods, hurricanes, and droughts – or even gradual environmental deterioration such as deforestation, all climate-induced displacement.



9. **Economic Consequences of Climate Change:** The economic impacts of climate change will be felt by the entire nation and the world. In fact, all sectors of the economy – most notably, agriculture, energy, and transportation – will be affected. The essential services that afford us high standards of living such as water supply and water treatment will be impacted, and the ecosystems from which our quality of life depends such as forests, rivers, and lakes will suffer.

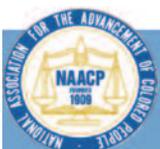
- **Rising Energy Needs and Costs:** Warming will decrease demand for heating energy in winter and increase demand for cooling energy in summer. The latter will result in significant increases in electricity use (and costs) and higher peak demand in most regions.
- **Infrastructure Decays:** More rain is already coming in very heavy events, and this trend is projected to increase across the nation. Such events are harmful to transportation infrastructure, buildings, landscape, and roads.

Responding to Climate Change

Directly or indirectly, climate change will continue to affect all sectors and regions of the United States, and the world. The changes will not happen all at the same time, and there will be temporary winners and losers from climate change, but the long-term impacts will rapidly exceed any perceived benefits. A national policy for immediate action to mitigate emissions coupled with efforts to adapt to unavoidable impacts will significantly reduce the overall costs of continued climate change.

10. **Responding to climate change falls into two major categories mitigation or adaptation.**

- **Mitigation:** Significant reduction in emissions is essential to stem the tide of climate change so emphasis on energy efficiency and conservation is critical. A substantial shift towards clean, renewable energy sources including wind, solar, hydropower, and geothermal energy will ensure progress in mitigation.
- **Adaptation:** Multiple measures are necessary to prepare communities for the impact of climate change including disaster preparedness given the increase of severe weather events, weatherization of homes to protect against extreme heat, alteration in insurance provisions given anticipated flooding and other damages not traditionally covered, alternative water use practices in anticipation of droughts and the shortage of potable water, to name some examples.



Review of Proposed Solutions

Most experts agree that we need to reduce the amount of carbon in the atmosphere if we want to avoid climate disaster. In the U.S., that means reducing our emissions by 80% – maybe even more – by 2050. The multiple strategies that are being advanced to achieve this goal are debatable. This fact sheet identifies five major approaches to reducing the amount of carbon in the air and presents critics’ concerns.

Carbon Trading (Cap and Trade): Carbon Trading is an environmental policy tool aimed at reducing greenhouse gas emissions. Under a cap-and-trade system, the government sets a mandatory cap on greenhouse gas emissions for businesses, utilities, government agencies, agricultural producers, etc. Once this cap is set, the government distributes allowances or credits to regulated organizations, and then allows them to trade credits to meet the cap. Organizations that need to increase their emissions allowances can buy credits from entities that pollute less (and thus have allowances to spare). This is the “trade” in “cap-and-trade.”

Opponents: Critics are concerned that emissions trading schemes may fail to achieve the goal of actually reducing emission reductions. The setting of the rules of the game for each emission trading system is a political process in which lobbyist groups pressure governments, resulting in rules that are too lenient. In fact, Europe tried a Cap and Trade System and energy costs spiked for consumers, and carbon emissions actually went up. Arguably the same result will likely happen here in the US. Other critics present that carbon trading only really serves rich nations; the issue being that carbon trading could put the vital resources of the developing world in the hands of nations that can use carbon credits as a way to counter, or delay, reductions of their own greenhouse gas emissions at the same time.

Clean Coal Technology: Clean Coal Technology refers to any technology associated with reducing the emissions from coal-based electricity generation. The use of the term clean coal precedes the advent of our organization. Back then – the mid-1980s - Congress used the phrase in reference to technologies that reduced sulfur dioxide, nitrogen oxide, and other emissions. Clean coal is also an evolutionary term, meaning that it will expand to mean more things in the future than simply the technologies we use today. That is why the coal-based electricity sector is working hard to bring the next generation of advanced clean coal technologies to the marketplace – including those technologies to capture and store carbon dioxide (CO₂).



Opponents: Currently there is no proven method of completely divesting coal of its dangerous and unhealthy properties. “Clean coal” technology is an unsustainable and unrealistic solution to climate change. Pound for pound, coal produces more CO₂ than almost any other form of energy production. Critics argue that in order to seriously tackle climate change there must be a stop to mining and burning coal. Coal to liquid technology is a step in the wrong direction for our air, water and climate.

Carbon Capture and Sequestration (CCS): Carbon Capture and Sequestration as a broad term that encompasses a number of technologies that aims to prevent the escape of CO₂ pollution into the atmosphere by capturing it and burying it underground instead. Arguably CCS is a critical option available to combat climate change, because it allows for significant reductions in CO₂ emissions from fossil-based systems, enabling it to be used as a bridge to a sustainable energy future.

Opponents: A growing number of critics consider carbon capture and storage (CCS) to be an unproven, expensive and dangerous technology based on the idea that CO₂ from coal-fired power plants – or other large emitters such as steel works – could be captured and stored underground. Leakages of stored CO₂ cannot be excluded, which would have deadly consequences.

Reforestation: Reforestation is defined as the restocking of existing forests and woodlands which have been depleted, with native tree stock. The term reforestation can also refer to afforestation, the process of restoring and recreating areas of woodlands or forest that once existed but were deforested or otherwise removed or destroyed at some point in the past. Arguably, the resulting forest can provide both ecosystem and resource benefits and has the potential to become a major carbon sink. The concept of forests as carbon sinks has drawn attention around reforestation as a possible tool in the fight against global climate change. Because trees draw carbon dioxide from the atmosphere in the process of photosynthesis, they can potentially remove this excess greenhouse gas from the atmosphere and help fight global warming.

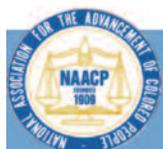
Opponents: According to studies released by scientists from the Carnegie Institution on Reforestation and Global warming shows that preserving and restoring forests is likely to be climatically ineffective as an approach to slow global warming. To prevent climate change, the study argues that we need to transform our energy system. It is only by transforming our energy system and preserving natural habitat, such as forests, that we can maintain a healthy environment. To prevent climate change, we must focus on effective strategies and not just ‘feel-good’ strategies. Other scientists at the University of California Davis and University of Minnesota argue that planting trees is false hope. In-



sufficient amounts of nitrogen gas, they say, will limit plant growth regardless of how much extra carbon dioxide is available. Nitrogen levels, also essential for plant growth, are not rising as fast as those of carbon dioxide. This means there is a limit to how fast plants can grow, and therefore how much carbon dioxide they can absorb, say the researchers.

Nuclear Energy: Nuclear energy originates from the splitting of uranium atoms in a process called fission. At the power plant, the fission process is used to generate heat for producing steam, which is used by a turbine to generate electricity. Proponents state that nuclear energy has the lowest impact on the environment, especially in relation to kilowatts produced, because nuclear plants do not emit harmful gases and require a relatively small area for production. In addition, it is argued that nuclear power is safe, sustainable, and can provide an endless source of energy. According to proponents, there are no significant adverse effects to water, land, habitat, species and air resources.

Opponents: Critics of nuclear energy agree that it is the hope of the nuclear industry that the confusion over climate change will result in support of nuclear power. It is argued that nuclear power is economical and cost effective. Nevertheless, the true costs of nuclear power have been seriously underestimated due to the hidden costs of waste disposal, decommissioning and provision for accidents. Nuclear power is not greenhouse friendly. Even though the electricity that is generated in producing nuclear power does not result in direct emissions of CO₂, the nuclear fuel cycle does release CO₂ during mining, fuel enrichment and plant construction. In fact, uranium mining is one of the most CO₂ intensive industrial operations and as demand for uranium grows CO₂ emissions are expected to rise as core grades decline. According to opponents, the exposure risk to workers in the uranium mining industry is great and the problems of security, safety and environmental impact have been perennial issues for the nuclear industry.



Review of Proposed Solutions to Climate Change II: Renewable Energy Sources

INTRODUCTION

With an underpinning emphasis on reducing reliance on fossil fuel industries which have finite availability of sources and more importantly have extraction and processing practices that are toxic and harmful to people and to low income and communities of color in particular, a range of alternative methods of fulfilling our energy needs have been identified.

RENEWABLE ENERGY SOURCES

Wind is a form of solar energy. Winds are caused by the uneven heating of the atmosphere by the sun, the irregularities of the earth's surface, and rotation of the earth.

According to the Alternative Energy Institute, "With today's technology, wind energy could provide 20% of America's electricity (or about the amount nuclear power provides) with turbines installed on less than 1% of its land area. And within that area, less than 5% of the land would be occupied by wind equipment-the remaining 95% could continue to be used for farming or ranching."

The Department of Energy states that, "Today's wind machines (also called wind turbines) use blades to collect the wind's kinetic energy. The blades are connected to a drive shaft that turns an electric generator to produce electricity. In 2008, wind machines in the United States generated a total of 52 billion kilowatt hours, about 1.3% of total U.S. electricity generation. Although this is a small fraction of the Nation's total electricity production, it was enough electricity to serve 4.6 million households or to power the entire State of Colorado."

Wind energy is clean. Wind machines produce no air or water pollution because no fuel is burned to generate electricity.

According to Colorado University at Boulder, "Electricity generated by the wind cost 30 cents per kWh in 1975, but now costs less than five cents per kWh. In comparison, new coal plants produce electricity at four cents per kWh," but at great cost to the health and wellbeing of humans surrounding the plants, as well as to the broader environment which affects us all.



II. Solar

Solar power is energy which comes from the sun. This energy is very powerful and hits the earth regardless of whether or not we take advantage of it. Even the tiny percentage of sunlight that touches the earth is plenty to meet the energy and power needs of the entire human population more than 8,500 times over.

- Solar energy is a completely free and inexhaustible fuel source
- No fuel, waste, or pollution is expelled in its usage.
- In remote areas, or small villages, solar power can be the saving grace. Sometimes it is the only realistic way to provide energy to a place that is not capable of drawing energy from other sources.
- It can be used for low-power purposes as well as larger ones- from battery chargers, hand-held calculators, and solar powered garden lights to air conditioning, cars, and satellites.

Energy from the sun is converted into solar power using solar collectors, most commonly known as solar panels. Solar panels consist of solar cells designed to capture energy from the sun. The solar panels used in heating air and liquid are different from those used to provide electricity. To absorb the highest possible amount of solar energy, solar panels must be pointed at the sun.

The second way of obtaining solar power involves the use of photoelectric applications. Photoelectric applications use photovoltaic cells in converting energy from the sun into electricity. Photovoltaic cells are considered low maintenance and well suited to remote applications. They use semiconductors like silicon to convert energy from the sun into electricity.

III. Hydro

Hydroelectric power is electric power generated using water power. The power is generated and collected by plants by collecting falling water to generate electricity. A turbine converts the kinetic energy of falling water into mechanical energy. Then a generator converts the mechanical energy from the turbine into electrical energy.

Hydropower is called a renewable energy source because the water on the earth is continuously replenished by precipitation. As long as the water cycle continues, we won't run out of this energy



source. Hydro produces a continuous supply of electrical energy in comparison to other small-scale renewable technologies. The peak energy season is during the winter months when large quantities of electricity are required.

- Hydropower is clean. By providing an alternative energy source, it prevents the burning of 22 billion gallons of oil or 120 million tons of coal each year.
- Hydropower does not produce greenhouse gasses or other air pollution.
- In the U.S., hydropower is produced for an average of 0.85 cents per kilowatt-hour (kwh). This is about 50% the cost of nuclear, 40% the cost of fossil fuel, and 25% the cost of using natural gas.
- Hydro power has the ability to store energy. Water can be stored in a reservoir and released when needed for electricity production.

IV. Geothermal

Geothermal power is cost effective, reliable, sustainable, and environmentally friendly, but has historically been limited to areas near tectonic plate boundaries. Recent technological advances have dramatically expanded the range and size of viable resources, especially for applications such as home heating, opening a potential for widespread exploitation. Geothermal wells release greenhouse gases trapped deep within the earth, but these emissions are much lower per energy unit than those of fossil fuels. As a result, geothermal power has the potential to help mitigate global warming if widely deployed in place of fossil fuels.

According to U.S. the Department of Energy, the United States leads the world in electricity generation with geothermal power. In 2008, U.S. geothermal power plants produced 14.86 billion kilowatt-hours, or 0.4% of total U.S. electricity generation.

Seven states have geothermal power plants:

- California has 34 geothermal power plants, which produce almost 90% of U.S. geothermal electricity.
- Nevada has 16 geothermal power plants.
- Hawaii, Idaho, Montana, and Utah each have one geothermal plant.



— Call To Action —

10 Things You Can Do To Advance Climate Justice

Given the disproportionate impact of climate change on communities of color, we have a lot to lose by not taking action. Given the surge in investment in the “new green economy” there are many opportunities for African Americans to show leadership in the coming transition resulting from climate change. It’s time for us to step to the forefront and lead on addressing this crisis.

Ten Things NAACP Members and Units Can Do to Address Climate Change and Advance Justice

Set an example

- Engage in and promote energy conserving habits—recycling, walking/cycling/public transportation/carpooling, home/office retrofitting

Host a brownbag or a special talk

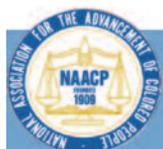
- At school, church, community center, job, etc.
- Conduct an Interview to raise climate justice profiles
- A local climate justice hero or someone who has a story to tell about being impacted by climate change and post the video and/or transcript on NAACP website or elsewhere.

Write

- Article/op-ed for local newspaper or some other local publication.
- Article for national publication
- Blog for your NAACP Site (or some other site)

Do a Local Initiative

- Urban garden
- Produce share
- River clean-up



Start (or participate in) an Advocacy Campaign

- Meet with a local elected official
- Initiate a climate action coalition
- Establish a transportation equity plan
- Establish a disaster preparedness plan

Integrate Climate Justice into Work/Career

- Become a green worker (climate justice activist, disaster worker, transportation planning, etc.)
- Ensure that all careers/workspaces operate under climate justice principles

Join the CJI Speaker's Bureau

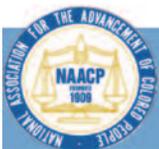
- Responding to the need to raise the profile and the voice of communities most impacted by climate change and ensuring that it is impacted communities' voices that are elevated when folks are looking for speakers. (which is ALL the time)

Join the CJI Circle of Trainers (Participate in a Training of Trainers first)

- Train others in your unit/state/region on the issues, principles, and actions of climate justice

Implement a Climate Action Plan

- Initiate a climate action coalition
- Lead the coalition in implementing a comprehensive plan



IV. Green Economy for Beginners

A. Fact Sheets

- a. Principles of Equity
- b. Sector and Industry Trends
- c. Overview of Green Jobs
- d. Finding a Green Job

B. Green Economy Mini-Toolkit—Call to Action



– Fact Sheet –

The Green Economy for Beginners • Principles of an Equitable Green Economy

Defining the Green Economy

The green economy at its core involves clean energy that consists of four industries that provide products or services related to renewable energy (e.g. solar, wind, geothermal); green building and increased energy efficiency technology; clean transportation and fuels; agriculture and natural resource conservation; and pollution prevention or environmental cleanup.

According to Pew Charitable Trusts, a clean-energy economy “generates jobs, businesses and investments while expanding clean energy production, increasing energy efficiency, reducing greenhouse gas emissions, waste and pollution, and conserving water and other natural resources.” Therefore, the green economy is not just about the ability to produce clean energy, but also technologies that allow cleaner production processes, as well as, the growing market for products which consume less energy, from fluorescent light bulbs to organic and locally produced food. Thus, it might include products, processes, and services that reduce environmental impact or improve natural resource use.

Defining Equity

Equity is a principle that calls for fairness, inclusion and justice. It can be distinguished from the principle of diversity, which is primarily about variety. Equitable policies often require concrete actions and steps beyond simply making everyone “equal before the law,” and accordingly are designed to take appropriate account of historical and contemporary injustices and unequal outcomes. To maximize the opportunities and benefits of the green economy, we must think of green development expansively and equitably.

Equity in the Green Economy

According to the Applied Research Center, equity in a green economy is an economy with jobs that not only improve the environmental health of the community, but also pay sustainable livable wages and benefits to the workers, provide a safe and healthy work environment, and enable the employee to advocate for his or her interests collectively through participation in a union.

In order to achieve equity in the green economy, there are six necessary standards that the federal and local governments that are funding green job initiatives must explicitly work into their planning and development process.



— PRINCIPLES OF AN EQUITABLE GREEN ECONOMY —

Equal Opportunity and Fair Treatment

- Everyone is granted full and fair access to all opportunities and benefits. Programs should be representative of the demographics of the communities in which they are based.

Excellence and Efficacy

- Job programs should be highly effective and tailored to building strong skills and career paths for marginalized communities. This will in turn maximize the benefits and transformative potential of the green economy. Finally, jobs should be of high quality.

Health and Wellness

- The health, safety, and well-being of all individuals and their communities are protected, as well as, existing disparities eliminated.

Human Rights and Workers' Rights

- All employees and residents of the community are guaranteed basic rights which include the right to organize and engage in collective advocacy.

Sustainability and Security

- Communities should be provided the support and protection needed for long-term economic security and environmental sustenance. This includes: affordable housing, access to public transportation, and high quality of education for children.

Transparency and Accountability

- Openness is maintained in all phases of planning, decision-making, program development, implementation, documentation, and evaluation. This process welcomes public participation involving those from the most disadvantaged communities.



Understand Economic Development in the Green Economy: Production and Consumption

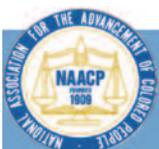
Businesses to grow the green economy tend to fall into two major categories: stimulating production or consumption.

- **Production Businesses:** These types of businesses range from those that produce green products, such as manufacturers and good processors, to those that sell green products or participate in the green lifestyle economy such as farmer's markets and local park maintenance operators. Production industries produce goods that can be exported and imported between regions.
- **Consumption (or Lifestyle):** These types of businesses are local-serving only. Cities and state are recognizing the importance of consumption-driven economic development by adopting regulations for energy use and green building incentives.

Green Job “Core Areas”

The green economy is defined as being comprised of sectors that provide products or services in five areas:

- **Agriculture and natural resource conservation:** Natural resource conservation refers to products or services designed to help conserve, maintain, and improve natural resources and the environment. Green jobs in this area will involve dealing with agriculture food systems, forest and land management, and organic farming.
- **Clean transportation and fuels:** Clean transportation refers development of new technologies for energy storage and alternative fuels, as well as the engineering of improved fuel efficiencies and emissions reductions. Green jobs in this area will involve the development of advanced batteries, fuel cells, electric and hybrid vehicles, alternative fuels, public transit, and activities related to meeting fuel efficiency standards.
- **Renewable Energy Production:** Renewable energy is energy generated natural resources such as sunlight (solar), wind, water (hydro), geothermal heat, and biomass (wood and wood waste, agricultural and energy crops & associated residues, animal waste, municipal solid waste, food products & processing waste). Green jobs in this area will include those producing renewable energy those that produce and supply parts or equipment used in energy collection (such as solar panels or wind turbines).



- **Increased Energy Efficiency:** Energy efficiency involves all changes that result in a reduction of the energy used for a given energy service (i.e., space heating, lighting, etc.) or level of activity. Green jobs in this area may involve the insulation of a building to achieve the same desired temperature with less energy use; installing lighting and other energy systems in a building to reduce overall energy usage; or producing energy efficient household appliance.
- **Pollution prevention or environmental cleanup:** Pollution prevention refers to products that are designed to have minimal impacts on human health and the environment, and services that eliminate or reduce the amount toxic in harmful substances. Green jobs in this area will involve providing services and/or products related to controlling industrial and commercial emissions, environmental remediation, waste management, recycling, water conservation and treatment.

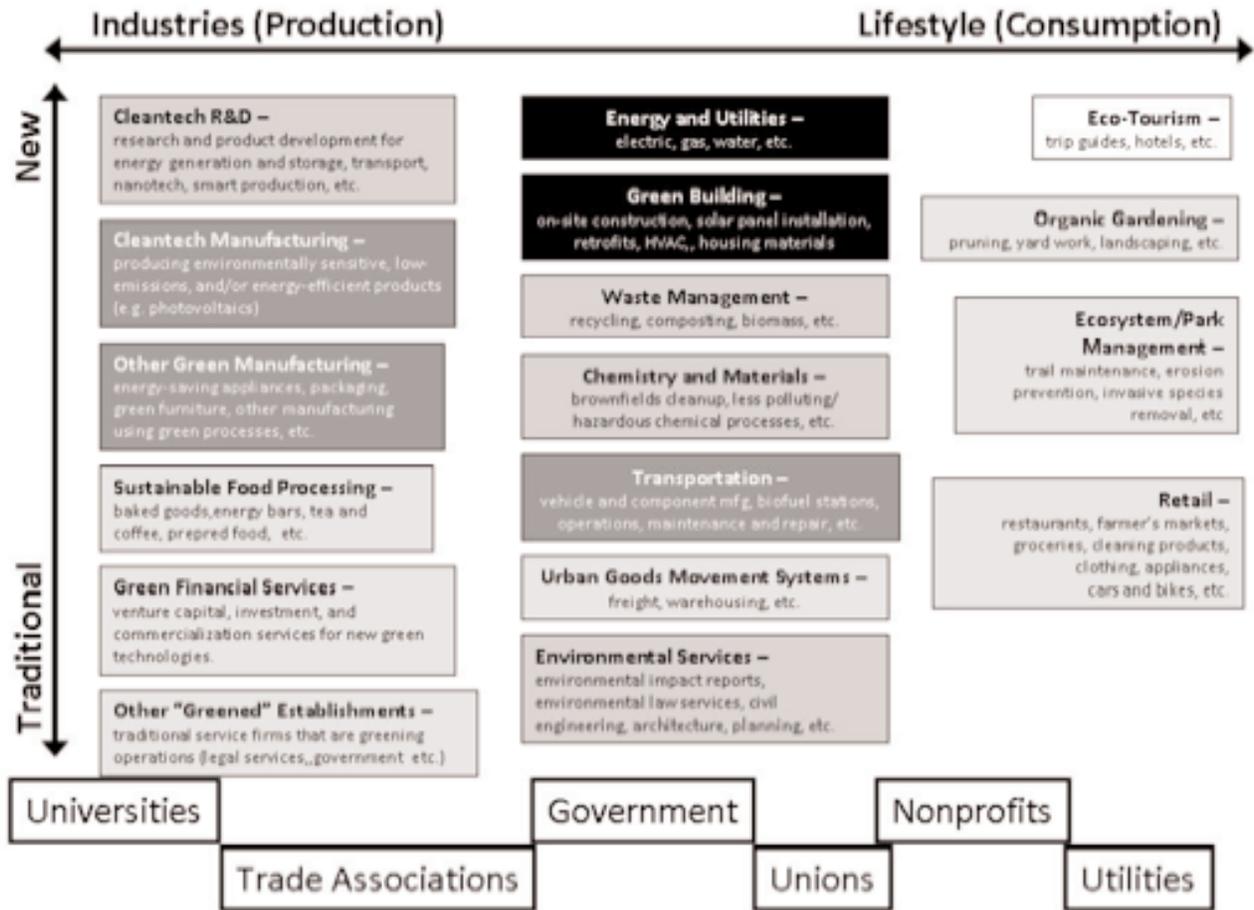
Figure 2 shows a map of the green economy that groups businesses into 17 categories. The map presents the range of green business categories along two axes.

- The vertical axis shows the range from traditional businesses, such as utilities, and professional services that are greening their operations; to businesses in emerging industries, such as nanotechnology research, solar panel manufacturing and eco-tourism.
- The horizontal axis shows businesses from those that produce green products, such as manufactures and food processors; to those that sell green products.
- Within the green economy, businesses interact with and are influenced by the universities, trade associations, government agencies, unions, nonprofit organizations, and utilities.



– FIGURE 2: MAP OF THE GREEN ECONOMY –

The Green Economy for Beginners • Overview of Green Collar Jobs



UCB Center for Community Innovation



– Fact Sheet –

The Green Economy for Beginners • Overview of Green Collar Jobs

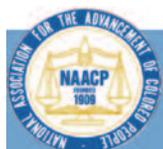
The American Recovery and Reinvestment Act (ARRA) included more than \$80 billion clean energy investments, of which \$600 million was directed towards green job training programs. This commitment comes at a great time when the African American unemployment rate is at an all-time low. The emerging green economy presents a tremendous opportunity for communities of color to link strategies that achieve climate justice and economic justice at the same time.

Green – Collar Jobs

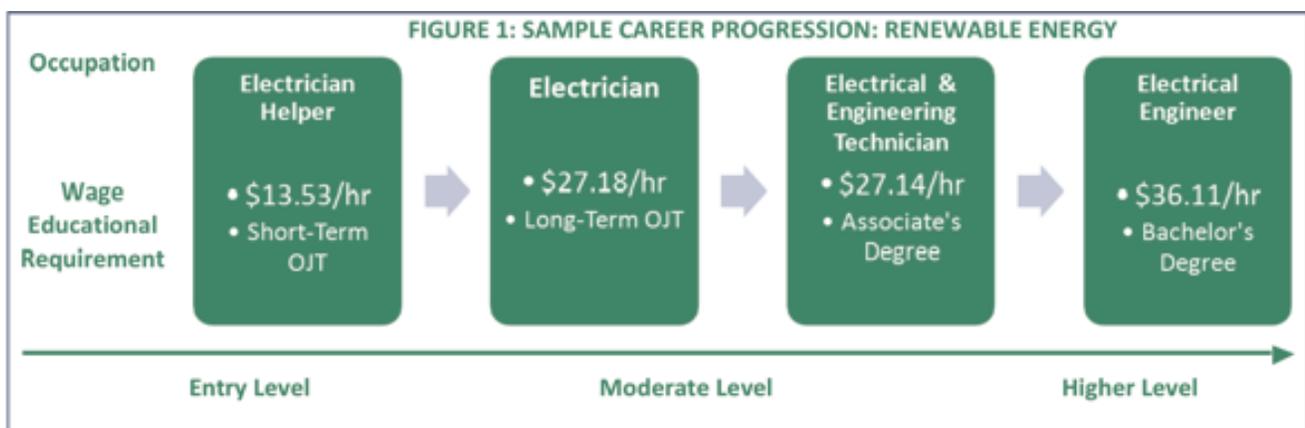
- Green-collar jobs are defined by the Apollo Alliance and Green For All as “well-paid, career track jobs that contribute directly to preserving or enhancing environmental quality. If a job improves the environment, but doesn’t provide a family-supporting wage or a career ladder to move low-income workers into higher-skilled occupations, it is not a green-collar job.”
- Green-collar jobs are often localized because many of them involve transforming and upgrading the immediate built and natural environment which include retrofitting buildings, installing solar panels, constructing transit lines, and landscaping.
- Although there is a need for some specialized green workers in the green economy, we still need the basics. Skills in science, technology, engineering and math will be important.

Occupational Trends of Green-Collar Jobs

- Green-collar jobs fall into a number of occupational industries; some are familiar to the traditional “gray” economy, such as transportation. And others are new to the green economy, such as weatherization.
- For example, there is a need for professional workers with specific skill sets directly needed by green-related firms. There is also a need for sales engineers or technical sales representatives for small start-up green-related firms. In addition, there is a need for individuals who can teach, train and prepare other for future green-related workforce positions.



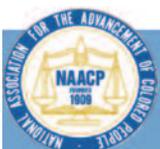
- Careers in green-related occupations are available at all levels of education attainment. See the sample progression in the renewable energy area illustrated in Figure 1.
- Green jobs pay higher wages than the wages paid in comparable conventional gray jobs.
- Green jobs are harder to export, even though some exporting has occurred.
- Green jobs are more likely to be unionized.
- There is a great deal of controversy over the total number of jobs the green economy will produce, but the fact remains that green-collar jobs is an emerging sector which require a number of level of skills and educational levels.



Source: Bureau of Labor Market Information & Strategic Initiatives, 2009

Examples of a Non-Traditional Green Collar Jobs

- **Meteorology:** When it comes to the natural energy and green building sectors, meteorologists contribute by analyzing and interpreting weather data in order to aid in the construction of buildings, to determine the best use of land, and to prevent and record pollution or water shortages.
- **Builders/Architects:** Green architecture, or sustainable building, is the process of building structures with environmentally conscious materials and resources. Green architecture can begin as small as Natural Building, which is constructing buildings out of local and natural materials. It can become as in-depth as constructing a home out of 100 percent organic materials and self-sustaining fixtures like compost toilets in the bathrooms.



- **Botanists/Biologists/Agriculturalist:** Biologists look at pollution and other environmental problems and come up with solutions. They figure out what is in the air, water, and soil to make sure that the environment is safe. They also give advice on how to clean the environment. For example, they might design a safe way to get rid of trash. Environmental biologists focus on protecting animals and plants.
- **Urban planners/Rural Planners:** Those who have green careers as regional planners work hand in hand with developers and the community. They help communities figure out what the best ways to use space and resources is, while keeping growth and future change in mind. If you would love knowing that you helped to shape your community and make it a good place for the present and future, this would be a great job for you.



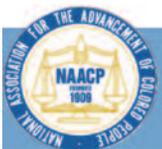
– Fact Sheet –

Finding a Job in the Green Economy

Green jobs should be good jobs that not only improve the environmental health of our communities and nation, but also pay sustainable wages and benefits to the workers, and provide a healthy work environment. Regardless of your professional goals, skill set, or education level, the green economy offers a wide range of career opportunities where employees can start at an entry-level job and work their way up with more experience and skills. Chart 1 highlights over ten green sector industries, provides a brief description of the field and describes the potential occupations in that industry.

Chart 2 is a resource list for green job careers.

Chart 1: Career Opportunities in the Green Economy



A. Chart 2: Career Opportunities in the Green Economy Green Dream Jobs

One of the largest and oldest of green job posting sites.

<http://www.sustainablebusiness.com/index.cfm/go/greendreamjobs.main>

■ **GreenStart Job Board**

Sponsored by the American Solar Energy Society

http://www.ases.org/index.php?option=com_content&view=article&id=81&Itemid=6

■ **Environmental Career.com**

Has job postings, articles and event listings

<http://www.environmentalcareer.info/index.asp>

■ **GreenBiz.com**

Professional jobs in green, cleantech, and sustainable business

<http://jobs.greenbiz.com/>

■ **GreenSage.com**

Focuses on sustainable living and green building jobs

<http://www.greensage.com/ezine/Ads-Jobs/ezineGrnJobAds.html>

■ **Green Energy Jobs Online.com**

Employment in alternative energy

<http://www.greenenergyjobsonline.com/>

■ **Ecological Society of America**

Job postings, internships and fellowships

http://www.esa.org/careers_certification/employment.php

■ **Assorted job boards**

Use keywords such as "sustainable" or "green" or "solar", etc.

<http://www.indeed.com>

<http://jobs.treehugger.com>

<http://green-jobs.monstertrak.com/green-careers>

<http://www.rileyguide.com/env.html#env>

■ **Stopdodo**

Excellent global portal for environmental and renewable energy jobs

<http://www.stopdodo.com/>

■ **North American Association for Environmental Education**

Environmental education jobs in K-12, higher education and non-profits

<http://eelink.net/pages/EE+Jobs+Database>

■ **Green Career Central**

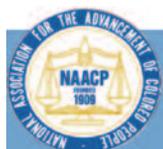
There is a membership fee but some areas are free; good tips for career direction

<http://www.greencarecentral.com>

■ **Veterans Green Jobs**

Jobs and retraining for vets transitioning to civilian life

<http://veteransgreenjobs.org/>



– Green Jobs Toolkit--Call to Action –

Ensuring a Sustainable Future for Our Communities

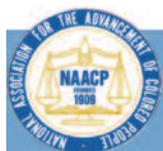
African American and the Green Economy

THE ISSUE:

- In order to ensure a sustainable future for our communities, we must be dedicated to building an inclusive green economy, strong enough to lift people out of poverty.
- There is a great deal of controversy over the total number of jobs the green economy will produce, but the fact remains that the green employment is an emerging sector which accommodates a range of skillsets and educational levels.
- The green revolution can produce millions of jobs. But some green job advocates express concern that people of color and those with barriers to employment may miss opportunities.
- In addition to the creation of green-collar jobs, it is important that the federal and local government that are funding green job initiatives build equity (jobs that not only improve the environmental health of the community, but also pay sustainable livable wages and benefits to the workers, provide a safe and healthy work environment, and enable the employee to advocate for his or her interests collectively through participation in a union) explicitly into their planning and development process.

THE ACTION WE NEED YOU TO TAKE:

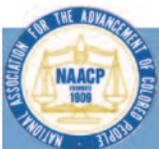
- Advocate for your city and state government to offer training programs so that people of color can get trained in green jobs skills. For example, some cities, such as Washington, D.C., are making a concerted effort to train African Americans for green jobs. Carbon-freeDC, an organization working to lower carbon emissions in the District, has provided training on homes in underserved communities.
- Monitor green job opportunities in your community and document the extent to which African Americans are accessing these opportunities.
- Educate your peers about the importance of enterprise/job opportunities that benefit the environment by promoting energy conservation and/or alternative/renewable energy sources.
- Spread the word about programs in your area where people can acquire contracts for retrofitting/weatherization and/or be trained and placed in green jobs.



- Establish a monitoring mechanism to document instances of inequity (lack of pay equity, hazardous work conditions, etc.) in green jobs.

THE MESSAGE: (Talking Points)

- Black communities are being crushed in the nexus of the climate/ecological crisis, financial crisis, foreclosure crisis, and other crises through all of the above mechanisms. These issues are interconnected and pervasive as well as significantly more severely felt in communities of color than in white communities.
- At the same time, tremendous opportunities exist as policy makers have a vested interest in addressing these crises and delivering resources for their constituents.
- It is up to us as a community to get organized and coordinated to position ourselves to lead in the new green economy. WE can turn this situation around from being in a place where we have the most to lose, to a circumstance where we have the most to gain!
- EVERYONE has a role to play in what must be a comprehensive agenda if we hope to see success. This must be a multi-sector, multi-pronged effort.



– Resources –

Reports/Other Information

- A Climate of Change—Environmental Justice and Climate Change Initiative
<http://www.ejcc.org/>
- African Americans and Climate Change, An Unequal Burden –Congressional Black Caucus http://www.rprogress.org/publications/2004/CBCF_REPORT_F.pdf
- Air of Injustice http://www.energyjustice.net/coal/Air_of_Injustice.pdf
- Business As Usual—Greenpeace International http://www.energyjustice.net/coal/Air_of_Injustice.pdf
- Climate Change Bibliography—Environmental Justice Resource Center <http://www.ejrc.cau.edu/ClimateBib1.htm>
- Green Equity Toolkit (Green Jobs)—Applied Research Center <http://www.arc.org/content/view/1139/136/>
- Hoodwinked in the Hothouse—Rising Tide North America <http://www.risingtidenorthamerica.org/special/fsbooklet.pdf>
- Katrina to Copenhagen YouTube Site www.youtube.com/katrina2copenhagen
- Looking Both Ways—Asian Communities for Reproductive Justice
<http://reproductivejustice.org/assets/docs/ACRJ-MS5-Looking-Both-Ways.pdf>
- Making Green Work (Green Collar Jobs Campaign) Ella Baker Center for Human Rights
<http://www.ellabakercenter.org/downloads/gcjc/making-green-work.pdf>
- NAACP Climate Justice Initiative Blog-
[NAACPhttps://climatejusticeinitiative.wordpress.com](https://climatejusticeinitiative.wordpress.com)

Key Organizations—General

- Apollo Alliance—National <http://apolloalliance.org/>
- Deep South Center for Environmental Justice (Dillard University)—New Orleans, LA
<http://www.dscej.org/>
- Energy Justice Network—National <http://www.energyjustice.net/>
- Energy Action Coalition—National <http://www.energyactioncoalition.org/>
- Environmental Justice and Climate Change Initiative- National www.ejcc.org
- Environmental Justice Resource Center--Atlanta, GA www.ejrc.cau.edu
- Environmental Protection Agency—National www.epa.gov
- Indigenous Environmental Network--Flagstaff, AZ <http://www.ienearth.org/>



- Mobilization for Climate Justice—National www.actforclimatejustice.org
- Movement Generation for Change-- Oakland, CA www.movementgeneration.org
- The Ruckus Society (Eco-justice Action Ideas)— Oakland, CA <http://ruckus.org/article.php?id=647>
- Southwest Network for Economic and Environmental Justice (SNEEJ)—Albuquerque, NM <http://www.sneej.org/>
- Southwest Workers Union--San Antonio, TX <http://www.swunion.org/>

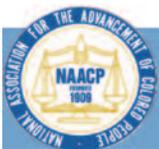
Key Organizations—Youth and College

- Alpha Goes Green Initiative <http://green.apa1906.net/about.aspx>
- Alternatives for Communities and Environment <http://www.ace-ej.org/>
- Boston Youth Environmental Network <http://www.environmentnetwork.org/default.aspx>
- Hip Hop Caucus--Green the Block <http://www.greentheblock.net/>
- It's Getting Hot in Here <http://itsgettinghotinhere.org/>
- Power Shift <http://www.seac.org/energy/packet.shtml>
- US Social Forum—Youth Working Group
http://wiki.ussf2010.org/wiki/Working_Groups#Youth_WG
- Youth Environmental Justice Network <http://youthunited.net/yucadwpgs/YEJ%20only/yucayejnetwork.htm>



VI. Organizing Tools/ Samples

- A. Letter to the Editor
- B. Public Service Announcement
- C. Local Meeting Agenda



– Letter to Editor –

Letter to the Editor—Sample

Dear Editor,

I've lived in Salisbury, Alabama for all my life and have raised three children here. Throughout my life I've seen and experienced many things, but I'm just starting to understand how they connect to climate change. Now that I know, I want policy makers to take aggressive action in reversing climate change by drastically cutting greenhouse gas emissions, for the sakes of my children and their children.

My friend who is a farmer has to grow different crops and finds it harder to sell her products because of changes in weather that have affected her harvest and the market in general. We've seen an increase in storms and the most recent tornado destroyed several houses in the next county over. My community is right next to a coal plant and we have high rates of asthma, which I hear is tied to the smoke from that plant, and it is that same smoke that puts pollution into the air that increases climate change.

We must move away from dirty industries that are polluting my community and others, as well as literally destroying the planet. Corporations aren't going to do it on their own so we need policies to enforce major reductions in emissions. We have to do this for the sake of present and future generations. Thank you.

Sincerely,
Shakira Activist
Salisbury, Alabama

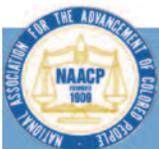


– Public Service Announcement –

Climate change affects everyone. But it affects some of us more than others. Communities of color, low income communities, indigenous communities, women, youth, and elderly persons are examples of groups most affected by climate change. These effects happen through illness, displacement, and even death resulting from sea level rise, changing agriculture resulting in food shortages, and severe weather events such as heat, storms, and flooding.

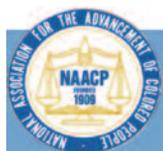
THERE IS SO MUCH WE CAN DO TO CHANGE THIS PICTURE!

It's up to each and every one of us to engage in the 3 Rs –Community Local Self Reliance which means we have mechanisms and resources to take care of community needs, Community Resilience which includes capacity to recover from disasters and other challenges to livable communities, and Community Resistance which means that if there are forces that come into our communities that threaten our wellbeing we are able to resist and take ownership of ensuring that we have livable communities.



– Local Meeting Agenda –

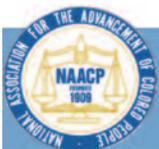
- I. Icebreaker/Introductions
- II. Participants Brainstorm: What do we know about climate change and how it affects our communities, families, and individuals?
- III. Ecological Cycle of Climate Change—What systems affect climate change? What systems are affected by climate change?
 - a. Economic/Jobs
 - b. Agriculture/Food
 - c. Health
 - d. Housing
 - e. Transportation
 - f. Energy usage
 - g. Criminal Justice
 - h. Disaster Planning
- IV. BREAK
- V. Given all we've heard....Is Climate Justice a Civil Rights Issue?
- VI. What Can We Do? –The 3 Rs of Climate Justice(Re-Visioning, Resistance, Resilience, Local Self Reliance): Models for Mitigation and Adaptation
- VII. Opportunities in Our Community and Beyond (Asset mapping and identifying external resources)
- VIII. Documenting Commitments and Next Steps, including scheduling first Climate Justice Task Force Meeting (Task Force will support and encourage community commitments)
- IX. Announcements
- X. Adjournment



VII. Joint Committee Opportunities

A. Review of Program Intersections

- Civic Engagement
- Criminal Justice
- Economic Justice
- Education
- Health



– Climate Justice and the NAACP Advocacy Agenda –

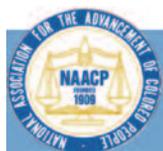
Climate change is affected by how societies, communities and individuals function, on many levels. Climate change also increasingly has multiple impacts on our lives. With NAACP's multi-issue advocacy agenda, climate change is a common thread that runs through all of the sectors in which we are engaged. Thus, there are many opportunities for cross-programmatic collaboration to address these intersections.

I. Health

a. Nutrition/Childhood Obesity/Food Deserts: Given the direct effect climate change has on food supply due to its impact on agricultural yields, as well as the indirect influence via the shifting of the financial market as well as the alteration in farming patterns as folks change to mono-cropping for agro-fuel, there are multiple mechanisms for the effects of climate change and methods employed for curbing it on access to affordable and healthy food. As such the Climate Justice Initiative and Health Program can combine efforts in joint advocacy and messaging around the Farm Bill, Climate Legislation, and on No Child Left Inside, as a few examples.

b. Cancer Clusters & Asthma and Respiratory Illnesses: The same toxins that are driving climate change, such as those emitted from coal fired power plants, are impacting the health of African Americans. Emissions from various industrial facilities have been tied to disproportionately high rates of asthma in African American communities, as well as cancer clusters. Here the Climate Justice Initiative and Health Program can form joint advocacy initiatives targeting EPA regulatory provisions, the Clean Air Act, Climate Legislation, legislation and programs around health disparities as well as potentially working with universities on strengthening the evidence base around the linkage between toxic facilities and community health.

c. Reproductive Health, Family Planning, and Population Control: Many organizations are emphasizing a linkage between climate change and population. Instead of focusing on consumption and the fact that there are few who are disproportionately gorging on energy resources, they focus on the birth rates of people in communities of color and the global south. Big environmental groups and family planning organizations use images of black and brown people and call for increased resources for family planning as part of



climate change mitigation. The Health and Climate Justice Programs of the NAACP could collaborate on counter-messaging by emphasizing reduced consumption/energy conservation versus this troubling trend of differential focus on controlling reproduction in communities of color.

d. Violence Against Women: In times of disaster there is a proven link to spikes in violence against women. This is one of many ways that women and girls are disproportionately impacted by climate change. The Health and Climate Justice programs can collaborate on ensuring that there are mechanisms in place to better protect women and girls from experiencing violence in times of disaster as well as ensuring that justice is served if women and girls are victimized by violence.

e. Mental Health: Post disaster incidence of mental health problems significantly spikes as people deal with displacement, death, illness, destitution, etc. As such, special provisions should be in place to ensure access to mental health services. The Health and Climate Justice programs can work together to encourage integration of mental health provisions in disaster plans and advocate for accompanying funding for this mandate in disaster related legislation and/or health related legislation.

f. HIV&AIDS: With poverty identified as one of the drivers of HIV&AIDS, and given the relationship between increased poverty and climate change, addressing a possible increase in HIV&AIDS in the face of climate change is an important consideration. The Health and Climate Justice programs could work on increasing the body of research linking poverty and HIV&AIDS, particularly among African Americans, so that policies designed to alleviate HIV&AIDS address root causes in addition to providing much needed care, support, and treatment.

g. Health Care Reform: As demonstrated, African Americans are most exposed to toxins and severe weather events, but have the least access to health care. Combined advocacy by the Health and Climate Justice programs must ensure that African Americans have access to health insurance and care so that the disproportionate disease and morbidity is tempered by access to life preserving care.

II. Education

a. Environmental Education: All students should emerge from school with an under-



standing of the environment. For students of color in particular, it is critical that there is curriculum content on environment and climate change given the disproportionate impact of environmental exposures and the effects of climate change in our communities. As we advocate for equity and quality education, our agenda must include recommendations regarding a robust environmental education component.

b. Environmental Sciences Pipeline: As we anticipate the way climate change will increasingly impact the earth and our communities and as we seek to play a leadership role in climate change mitigation and adaptation, we must ensure that there is a cadre of youth of color in the environmental sciences pipeline who are prepared to don the mantle of leadership. Thus, advocating with foundations for support for scholarships in environmental sciences for students of color and advocating with HBCUs and others to offer course content and study tracks in this area is critical.

III. Economic Justice

a. Economic Vulnerability and Disaster: Hurricanes Katrina and Rita (and to some extent the recent BP Oil Drilling Disaster) demonstrated how substandard housing stock, reliance on public transportation, under-insurance (home, business, and health) are all economically based vulnerabilities that make African American communities more vulnerable and less resilient in the face of increasing disasters/severe weather events resulting from climate change. The Climate Justice Initiative and the Economic Development Department can collaborate on examining disaster related legislation, liability limits on corporations, and regulatory measures and how well they ensure protections and support communities in recovering from disaster.

b. Impact of Changing Agriculture Market on Black Farmers: The impact of climate change on weather patterns has increased droughts, which significantly jeopardizes already vulnerable black farmers. Together, the Economic Development program and the Climate Justice Initiative can examine the Farm Bill and other relevant legislation for implications for the plight of black farmers and advocate accordingly.

c. The Green Economy and Green Jobs: Given that communities of color have the most to lose with the disproportionate impact of climate change, correspondingly those communities should have the most to gain from the green economy to balance the effect, decrease economically based vulnerability, and increase resilience. The Economic



Development Program and the Climate Justice Initiative can work together on advancing and improving legislation related to green jobs and availability of contracts and also on implementation by facilitating access to programs that ensure that African Americans are getting green contracts and green jobs. We can also work together to establish our own definition of green jobs including setting standards of equity and safety.

IV. Criminal Justice

a. Criminalization of Disaster Survivors: Climate change results in the increase of severe weather events or “natural disasters.” As the most recent examples of hurricanes Katrina and Rita showed us, handling of the chaos following disasters often results in criminalization of the very victims of the disaster, particularly when those survivors are people of color. Ideally, the climate justice program would welcome engagement with the criminal justice program in developing draft guidance to be incorporated into disaster planning at national and state levels to guard against the criminalization of survivors of disaster.

b. Intersection of Climate Crisis and Economic Crises can equal diminishing opportunities for paid work and increased crime, which is something for which to remain vigilant, even if there isn’t a direct criminal justice related action item to address this proactively.

V. Civic Engagement

Disaster, Displacement, Redistricting and Voter Disenfranchisement: Climate change driven disasters, which can result in massive displacement which, as proven by Hurricanes Katrina and Rita, results in voter disenfranchisement. Also, with redistricting that sometimes occur due to resulting shifts in living patterns and population distribution, it further complicates matters. Again, given the heightened social vulnerability of people of color, the likelihood of experiencing displacement and subsequent voter disenfranchisement is heightened. Collaboration between Civic Engagement and Climate Justice departments could result in examining regulations around voting post-disaster and making recommendations to officials regarding how to preserve rights in post disaster contexts.



VIII. Youth and College Engagement - 10 Ways Youth and College Members Can Advance Climate Justice

I. Direct Study Projects for College Credit

- a. Geography students can conduct mapping projects of community risks and assets
- b. Urban Planning students can examine access to transportation, brownfields, etc.
- c. Social Work students could examine impact of exposure to environmental risk on families.
- d. Engineering students could develop a prototype for some energy efficiency tool.
- e. Business students could develop a model to examine revenue potential from community ownership of utilities.
- f. Health students could look at health impacts of exposure to environmental toxins.
- g. Economics majors could look at long range potential of a shift from fossil fuels to renewable sources of energy.

II. Community Events (Fairs/Festivals/etc.)

- a. Booths can be set up to educate community on impact of climate change and actions that can be taken.
- b. Mini-Trainings can be provided at events so that communities have skills to address climate change.

III. Campus Consciousness Tour

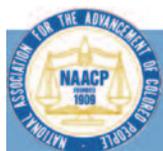
- a. Local campuses in-state can collaborate to do a statewide event where campuses visit each other.
- b. Regions could combine and raise funds for a multi-state awareness raising tour.

IV. Documentation Project

- a. Events on climate/environmental justice can be filmed, blogged about and posted online.
- b. Interviews with impacted persons or local heroes can be filmed, blogged about, and posted online.

V. Local Campaign (Start or join existing campaign)

- a. Advocacy days can be organized where students visit legislators to educate them on climate/environmental justice.
- b. Letter writing can be organized to raise volume in educating legislators on climate/en-



vironment.

c. Postcard campaigns can also raise awareness and show popular support for just climate policy.

VI. Campus Event

a. Film Screenings are excellent for helping folks understand the impact of climate change.

b. Featured Speakers bring stories and analysis that can touch and compel audiences.

VII. Written Article

a. Blogs can be written to raise issues of environmental and climate justice in the blogosphere.

b. Op-Eds can be written to raise awareness around climate justice through local newspapers.

VIII. Student delegation to national/international events

a. Power Shift was a gathering that happened in 2009 where youth mobilized around climate justice.

b. US Social Forum will draw 20,000 people to Detroit, MI including many youth to advance social justice.

c. UN Framework Convention on Climate Change is an opportunity to link with youth from around the world to jointly mobilize around climate justice.

IX. Local project

a. Clean-up projects can be done in parks, on beaches, in city streets, etc.

b. Community gardens can be planted in cooperation with local groups/schools/churches, etc.

c. Campus audits can be conducted at schools to ensure that energy efficiency is employed.

X. Book Club/Book Discussion Group

a. Year round series of books focused on climate/environmental justice issues can be featured.

b. A one-time special featured book on climate/environmental justice can be selected.



3. Would you like assistance from the NAACP Climate Justice Initiative Technical Assistance Program? If so, what kind of assistance would you like?

4. Please share any other comments or questions here.

5. Please share your contact information below.

1.

Name _____

NAACP Unit _____

City and State _____

Email Address _____

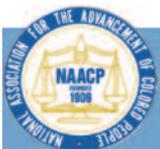
Phone Number (if phone call is preferred over email) _____

This survey can be found online at: <http://www.surveymonkey.com/s/39Z5DXV>



X. Glossary of Terms

- 1. Biofuels-** are a wide range of fuels which are in some way derived from biomass. The term covers solid biomass, liquid fuels and various biogases. Biofuels are gaining increased public and scientific attention, driven by factors such as oil price spikes and the need for increased energy security. Biofuel is a gas or liquid fuel made from plant material (biomass). Includes wood, wood waste, wood liquors, peat, railroad ties, wood sludge, spent sulfite liquors, agricultural waste, straw, tires, fish oils, tall oil, sludge waste, waste alcohol, municipal solid waste, landfill gases, other waste, and ethanol blended into motor gasoline.
- 2. Biomass-** is energy that is produced by combusting biomass materials such as wood. The carbon dioxide emitted from burning biomass will not increase total atmospheric carbon dioxide if this consumption is done on a sustainable basis (i.e., if in a given period of time, re-growth of biomass takes up as much carbon dioxide as is released from biomass combustion). Biomass energy is often suggested as a replacement for fossil fuel combustion.
- 3. Carbon Capture and Sequestration (CCS)** - refers to a geo-engineering technique for long-term storage of carbon dioxide or other forms of carbon to mitigate global warming. CO2 sequestration can be synonymous with the storage part of carbon capture and storage, which refers to large-scale, permanent artificial capture and sequestration of industrially-produced CO2 using sub-surface saline aquifers, reservoirs, ocean water, aging oil fields, or other carbon sinks.
- 4. Carbon Dioxide-** is a gas that exists in the earth's atmosphere that is use by plants during photosynthesis and produced during respiration by animals and humans. Also, it's a colorless, odorless, non-poisonous gas that is a normal part of Earth's atmosphere. Carbon dioxide is a product of fossil-fuel combustion as well as other processes. It is considered a greenhouse gas as it traps heat radiated into the atmosphere and thereby contributes to the potential for global warming.
- 5. Carbon Trading (Cap and Trade)-** refers to companies who reduce their emissions below their required limit and then trade their extra permits to companies that are not able to make reductions as easily. The overall goal of a trading plan is to minimize the cost of meeting a set emissions target the cap is an enforceable limit on emissions that is usually lowered over time aiming towards a national emissions reduction target.
- 6. Clean Coal-** refers to an almost exclusively used to refer to carbon capture and sequestration technology (CCS), Clean coal is an umbrella term used primarily to describe technologies that may reduce emissions of carbon dioxide (CO2) and other greenhouse gas that arise from the burning of coal for electrical power. Typically, "clean coal" has been used by coal companies in reference to



carbon capture and sequestration, which pumps and stores CO₂ emissions underground, and to plants using an Integrated gasification combined cycle which gasifies coal to reduce CO₂ emissions

7. Clean Coal Technology- refers to technologies being developed that aim to reduce the environmental impact coal production. Clean coal technology usually addresses atmospheric problems resulting from burning coal such as acid rain. Coal, is the primarily use of the generation of electricity, is the second largest domestic contributor to carbon dioxide emissions in the USA. Recently the public has become increasingly concerned with global warming which has led to new legislation. The coal industry has responded by running advertising touting clean coal in an effort to counter negative perceptions, as well as by putting more than \$50 billion towards the development and deployment of clean coal technologies, including carbon capture and storage.

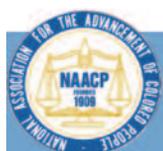
8. Clean energy- refers to the natural energetic processes that can be harnessed with little pollution, such as anaerobic digestion, geothermal power, wind power, small-scale hydropower, solar energy, biomass power, tidal power, and wave power .

9. Climate Change- refers to an alteration in climate or weather over a period of time which can cause extreme weather changes or events in a specific region or the whole earth. The term is used to refer specifically to climate change caused by human activity; for example, the United Nations Framework Convention on Climate Change defines climate change as "a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods." In the latter sense climate change is synonymous with global warming.

10. Deforestation- refers to those practices or processes that result in the conversion of forested lands for non-forest uses. This is often cited as one of the major causes of the enhanced greenhouse effect for two reasons: 1) the burning or decomposition of the wood releases carbon dioxide; and 2) trees that once removed carbon dioxide from the atmosphere in the process of photosynthesis are no longer present.

11. Ecosystem- refers to the combined physical and biological components of an environment. An ecosystem is generally an area within the natural environment in which physical (abiotic) factors of the environment, such as rocks and soil, function together along with interdependent (biotic) organisms, such as plants and animals, within the same habitat to create a stable system.

12. Energy Efficiency- is the reduction of the amount of energy used for a given service or level of activity in order to produce the same level of end-use service. Energy efficiency improvements are predominantly achieved through using technologically more advanced equipment. For example, using compact fluorescent light globes reduces the amount of electricity required for lighting. Making homes, vehicles, and businesses more energy efficient is seen as a largely untapped solution to addressing the problems of pollution, global warming, energy security, and fossil fuel depletion.



13. Ethanol- is a clean burning, high octane, renewable fuel additive made from grain or other biomass sources; Ethanol is mostly a blending source to help lower the amount of oil consumed while providing for cleaner-burning fuel. But over time, it could grow in importance as an alternative fuel called E85. That's a blend of 85 percent ethanol and 15 percent gasoline, the mix preferred for flex-fuel vehicles.

14. Extreme Weather Events- Severe weather, such as floods, hurricanes and tornadoes, which damages communities and may affect our health. Hurricane Katrina is an example of an extreme weather event.

15. Fossil Fuels- are fuels formed by natural resources such as decomposition of buried dead organisms. The age of the organisms and their resulting fossil fuels is typically millions of years, and sometimes exceeds 650 million years. The fossil fuels include coal, petroleum, and natural gas, and contain high percentages of carbon. Fossil fuels is a general term for buried combustible geologic deposits of organic materials, formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust over hundreds of millions of years.

16. Geothermal- of or relating to the heat in the interior of the earth; the water of hot springs and geysers is heated by geothermal sources. Geothermal energy is power generated from natural steam, hot water, hot rocks, or lava in the Earth's crust. In general, geothermal power is produced by pumping water into cracks in the Earth's crust and then conveying the heated water or steam back to the surface so that its heat can be extracted through a heat exchanger, or its pressure can be used to drive turbines.

17. Global Warming- refers to an increase in the average temperature on earth that causes climate change. An increase in global temperature will cause sea levels to rise and will change the amount and pattern of precipitation, probably including expansion of subtropical deserts. Warming is expected to be strongest in the Arctic and would be associated with continuing retreat of glaciers, permafrost and sea ice. Other likely effects include changes in the frequency and intensity of extreme weather events, species extinctions, and changes in agricultural yields. Warming and related changes will vary from region to region around the globe, though the nature of these regional variations is uncertain.

18. Green Economy- refers to a rapidly growing billion-dollar sector that includes renewable energy sources, organic produce and products, green buildings and alternative fuel sources that are environmentally sustainable, based on the belief that our biosphere is a closed system with finite resources and a limited capacity for self-regulation and self-renewal.

19. Greenhouse Gasses- are chemical compounds that are in the atmosphere that contribute to the greenhouse effect by absorbing infrared radiation produced by solar warming of the Earth's sur-



face. These gasses include: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (NO₂), and water vapor. Although greenhouse gases occur naturally in the atmosphere, the elevated levels especially of carbon dioxide and methane that have been observed in recent decades are directly related, at least in part, to human activities such as the burning of fossil fuels and the deforestation of tropical forests.

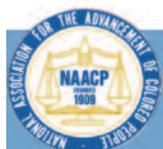
20. Hydropower- refers to the use of water to power machinery or make electricity. Water constantly moves through a vast global cycle, evaporating from lakes and oceans, forming clouds, precipitating as rain or snow, and then flowing back down to the ocean. The energy of this water cycle, which is driven by the sun, can be tapped to produce electricity or for mechanical tasks like grinding grain. Hydropower uses fuel water that is not reduced or used up in the process. Because the water cycle is an endless, constantly recharging system, hydropower is considered a renewable energy.

21. Methane- is an odorless gas produced by the decomposition of organic matter. The burning methane in the presence of oxygen produces carbon dioxide and water. The relative abundance of methane makes it an attractive fuel. However, because it is a gas at normal temperature and pressure, methane is difficult to transport from its source. The major source of methane is extraction from geological deposits known as natural gas fields. It is associated with other hydrocarbon fuels and sometimes accompanied by helium and nitrogen. The gas at shallow levels (low pressure) is formed by decay of organic matter and reworked methane from deep under the Earth's surface. In general, sediments buried deeper and at higher temperatures than those which give oil generate natural gas. Methane is also produced in considerable quantities from the decaying organic wastes of solid waste landfills.

22. Nitrous Oxide- is a powerful greenhouse gas with a global warming potential of 296 times that of carbon dioxide (CO₂). Major sources of nitrous oxide include soil cultivation practices, especially the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning.

23. Nuclear Energy- is atomic energy; the energy released by a nuclear reaction. Power obtained by splitting heavy atoms (fission) or joining light atoms (fusion). A nuclear power plant uses a controlled atomic chain reaction to produce heat. The heat is used to make steam to run conventional turbine generators.

24. Reforestation- the restoration (replanting) of a forest that had been reduced by fire or cutting. That is, restocking of existing forests and woodlands which have been depleted. Reforestation can be used to improve the quality of human life by soaking up pollution and dust from the air, rebuild natural habitats and ecosystems, mitigate global warming since forests facilitate bio-sequestration of atmospheric carbon dioxide, and harvest for resources, particularly timber.





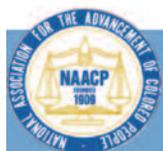
25. Renewable Energy Sources- refers to energy is energy generated from natural resources such as sunlight, wind, rain, tides, and geothermal heat, which are reused. Renewable energy plays an important role in the supply of energy. When renewable energy sources are used, the demand for fossil fuels is reduced. Unlike fossil fuels, non-biomass renewable sources of energy (hydropower, geothermal, wind, and solar) do not directly emit greenhouse gases.

26. Sea Level Rise- is the level of the ocean's surface. Sea level at a particular location changes regularly with the tides and irregularly due to conditions such as wind and currents. Other factors that contribute to such fluctuation include water temperature and salinity, air pressure, seasonal changes, the amount of stream runoff, and the amount of water that is stored as ice or snow. The reference point used as a standard for determining terrestrial and atmospheric elevation or ocean depths is called the mean sea level and is calculated as the average of hourly tide levels measured by mechanical tide gauges over extended periods of time.

27. Solar Energy- is the power collected from sunlight used to generate electricity also refers to radiant light and heat from the sun, that has been harnessed by humans since ancient times using a range of ever-evolving technologies. Solar radiation, along with secondary solar-powered resources such as wind and wave power, hydroelectricity and biomass, account for most of the available renewable energy on earth. Only a minuscule fraction of the available solar energy is used.

28. Water Vapor- refers to the invisible, gaseous state of water. Water vapor is one state of water within the hydrosphere. Water vapor can be produced from the evaporation of boiling liquid water or from the sublimation of ice. Under typical atmospheric conditions, water vapor is continuously generated by evaporation and removed by condensation.

29. Weatherization- refers to weatherproofing is the practice of protecting a building and its interior from the elements, particularly from sunlight, precipitation, and wind, and of modifying a building to reduce energy consumption and optimize energy efficiency. Weatherization is distinct from building insulation, although building insulation requires weatherization for proper functioning. Many types of insulation can be thought of as weatherization, because they block drafts or protect from cold winds. Whereas insulation primarily reduces conductive heat flow, weatherization primarily reduces convective heat flow.



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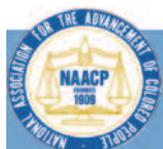
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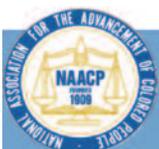
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