Renewable Energy: Opportunities for Community Enterprise

Briefing Paper One of

Black, Brown and Green

FOR IMMEDIATE RELEASE

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October 2009

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Renewable Energy is Black Brown and Green

*Black, Brown and Green*, a program of the Center for Social Inclusion, calls attention to the economic opportunities and hurdles facing green business models for communities of color. Promoting control and ownership of the energy supply by this community ensures that the tremendous value of the green energy economy can be shared by communities of color and add depth to the broader economy.

The energy sector is transforming from a “big” business structure driven by non-renewable environmental extraction to a sector built on accessible abundant and renewable energy to households and business of all sizes. This change will bring exciting new entrepreneurship opportunities and the potential to transform socially and economically isolated communities of color into meaningful partners in their local and regional economies.

Businesses and communities must lay a foundation for success that transforms individual and community prospects today. Policy makers, investors and stakeholders need a firm grasp of business structures that protect community control, strategies to raise the right type and levels of capital, and accessible technology. These issues affect all green energy businesses, but are especially crucial for those owned or operated by people of color who historically have had limited access to the energy sector.

Launched in 2009, the mission of *Black, Brown and Green* is to provide clear information and help expand the presence of community owned or controlled green energy companies of all sizes and sectors.

*Black, Brown and Green* is designed to help build a framework for successful Green business models in communities of color. The series begins with a community-oriented analysis of the technologies and economics underlying the renewable energy supply chain. As CSI rolls out future analysis and papers, we will provide advocates, and the progressive green businesses community with an overview of the relevant policies, technical risks and investment models for renewable energy at the community level.

*Black Brown and Green* will offer important resources to help communities and companies succeed. Key among these will be a critical analysis of how energy, race, and wealth are being reshaped by renewable energy. Our work is grounded by analysis, insight and inspiration on trends and best practices from policy makers, advocates and progressive business leadership from leading companies and advocates including: Green for All, The Pratt Institute, Cooler, Insight Center for Community Economic Development, Broadway Federal Bank, Green Worker Cooperatives, Institute for Local Self Reliance and Full Spectrum of NY.
Black, Brown and Green Release Timeline:

Oct. 2nd  Renewable Energy: Opportunities for Community Enterprise
Oct. 14th  Biomass Power Development in Communities: An Assessment of Opportunities and Constraints
Nov. 5th   Wind Power Development in Communities: An Assessment of Opportunities and Constraints
Nov. 16th  Geothermal Power Development in Communities: An Assessment of Opportunities and Constraints
Dec. 10th  Black Brown and Green: The Economics of Renewable Energy Business Development in Communities
Introduction

Renewable energy electricity generation accounts for approximately 7% of energy production in the United States. While this may seem to be a large portion, keep in mind that over a third of that production is traditional hydroelectric power (such as the Hoover Dam). As concerns over climate change and energy security mount, calls increase for a greater reliance on renewable energy. To some, renewable energy also represents an opportunity to build a new “green” industry in the United States. No single renewable energy technology will be able to provide for all of our country’s power needs, but rather several technologies will need to be employed to decrease the country’s reliance on fossil fuels and to reduce carbon emissions.

CSI in collaboration with its allies is releasing a series of papers examining wind, solar, geothermal, and biomass renewable production. The recommendations will enable decision makers to better understand which technologies are most suitable to community-level development. The suggestions, detailed in upcoming briefing papers, will be based upon the following factors:

- Low technological risk/expertise required
- Turn-key technology
- (Relatively) straightforward financing models
- Low competitive risk

Quick Facts: US Energy Production by Type

Source: Energy Information Association (EIA), Electric Power Monthly, July 2009

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1 Energy Information Association (EIA), Electric Power Monthly, July 2009 Edition
Key Obstacles in Renewable Energy

A glance at the distribution of our current energy supply, in the graphs, above suggest both opportunity and challenges. U.S. market share of a dwindling supply of fossil fuels still casts a long shadow, and heightens our geopolitical insecurity by requiring heavy dependence on foreign oil. Environmental degradation related to oil production and fossil fuel consumption, threatens the global eco system. While the reasons to increase renewable energy generation capabilities are numerous, there are several factors that currently hinder its adoption for any community of color looking to install renewable energy technology.

- **Grid parity:** While wind and solar technologies are becoming more efficient, currently renewable energy technologies are not able to cost-effectively compete with fossil fuel power generation. Of course this comparison depends, in part, on the fluctuating price of a barrel of oil, but renewable energy still fell short of grid parity when a barrel of oil was selling at $100. For this reason, renewable energy projects must rely on government incentives to be able to compete with fossil fuel technology. Given the need to reach economies of scale, adoption of
renewable technology is highly dependent on government policies and regulation to achieve the necessary volume of production. Some argue that regulation is warranted because the cost of fossil fuel does not take into consideration “external costs” such as the impact of CO2 emissions on global climate change. At the community level, price disparities in the grid are a central obstacle, blocking the development of local businesses, greater household incomes, from those who could enter the market of renewable energy generation once those technologies are able to compete effectively.

- **Distributed Generation/ Transmission Infrastructure**: Currently, the United States’ electrical system is highly centralized with large power plants generating most of the country’s energy. Renewable energy technologies such as solar PV and small wind are considered “distributed” generation technologies because they are typically located on-site of a consumer and represent a departure from traditional energy infrastructure. Extensive improvements will need to be made to the current electric transmission infrastructure in order to accommodate the development of non-distributed renewable energy that is renewable energy generated off site that must be routed to the consumer. The US Department of Energy (DOE) has identified transmission limitations as the greatest obstacle to wind power development. This is because sufficient transmission capacity frequently does not exist in locations where wind farms or other renewable energy projects are ideally located. The lack of a 21st century transmission grid stifles the development of technology and commercial applications that could make renewable energy more accessible and cheaper for communities of color.

- **NIMBYism (Not in My Backyard)**: Local opposition to renewable energy projects, particularly those that are not distributed generation projects, is a greater hindrance to projects than most would realize.

### Key Incentives in Renewable Energy

As stated above, any scale up of renewable energy production will depend on government policies and regulation if it’s to achieve cost parity with fossil fuels. However, there are several state and federal incentives available to encourage the development and expansion of renewable energy projects, including those at the community-level.

- **Federal incentives**
  - Tax credits established in the Energy Policy Act of 2005
  - Department of Energy grants established in the American Recovery and Reinvestment Act (ARRA)
• State incentives
  o Renewable Portfolio Standards (RPS) in several states require a specific percentage of electric power come from renewable energy by certain dates
  o Specific renewable energy incentives to subsidize the upfront capital cost of renewable energy projects

• Power utilities
  o Many states have statutes that allow customers to sell the energy they generate back to the utility for the electricity they produce over and above their own usage
  o Many utilities offer customers the option of purchasing electricity produced from renewable energy under their “Green Power” programs

Our series of papers will explore technologies that can be implemented on a community level. Rather than presenting an all encompassing review, these briefing papers are intended to stimulate community-level discussion to better understand which technologies are most suitable to create affordable and accessible renewable energy enterprises.