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Green Jobs: Opportunities for Rural Communities





Phaedra Ellis-Lamkins, Chief Executive Officer

+ What's happening to our planet





+ What's happening to our communities

- + Climbing percentages of unemployment
- + Alarming rates of respiratory illnesses
- Increase in health problems caused by environmental pollution



- + Scarcity in community capital & wealth accumulation opportunities
- + Incarceration
- + Disenfranchisement from the political process



+ Green For All's Vision

Fight Poverty and Pollution at the Same Time

The shift to clean energy can improve the health and well-being of low-income people, who suffer disproportionately from cancer, asthma and other respiratory ailments in our carbon-based energy economy

AND

it can create entrepreneurial, wealth-building opportunities for those who need new avenues of economic advance.

Green For All is dedicated to building an inclusive green economy strong enough to lift people out of poverty.





+ Green Jobs

Jobs that are good both for **people** and the **planet**



- + rebuild a strong middle class
- + build pathways out of poverty
- + tend to be local jobs
- + strengthen urban and **rural** communities
- + protect our health and the health of the planet
- + accessible to our most needy communities
- + family supporting, career track jobs





+ Green-Collar Jobs in the Clean Energy Economy

- Energy Efficiency
 - Building Retrofits
- Renewable Energy
 - Solar
 - Wind
- Alternative Fuels
 - Biofuels





+ Energy Efficiency Retrofits

Reduce Energy Costs + GHG Emissions:

- 55% of all U.S. energy is wasted: Efficiency is the fastest and cheapest way to address global warming.
- Americans spend more than 5% of their income on energy costs. Low-income Americans spend more than 16%
- Low-income housing in rural communities tends to be even less energy efficient
- \$1 million invested in retrofits=approx. 12 jobs;
 \$10 billion a year in retrofits=120,000 jobs
- -Retrofitting homes will save occupants money, create jobs, and reduce greenhouse gas emissions





+ Solar Power

- Solar photovoltaics (PV) are labor intensive: 20 manufacturing jobs and 13 installation/maintenance jobs per megawatt of energy
- Installation and maintenance are local jobs
- Manufacturing depends on demand and incentives companies move to where the market is
- Require new technical skills, provide good wages







- Rapid growth and high profile industry
- U.S. has lead in annual wind power installation for the past 3 years
- Great potential in Midwestern states
- Potential for jobs in manufacturing turbines and components, operations, installation, maintenance



+ Biofuels

- Efficiency, sustainability, and job creation vary among crops and process
- Job creation not as high now, but technological advances in biofuel and biopower hold promise for agricultural states
- Focus on the bioeconomy as a whole will lead to greater economic development in agricultural areas







Green Jobs on Tribal Lands

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- High unemployment, poverty, inefficient homes present needs and opportunities in Native communities
- Opportunities: Local energy efficiency retrofits, development of renewables
- Estimated 535 Billion kWh/year wind power generation potential
- Estimated 12,000 Billion kWh/year of solar electricity generation potential (4.5 times the US annual generation)
- Local investment, hiring, training, materials use will help revitalize Native communities



+ Winds of Change: Pennsylvania

- Spanish-owned wind company, Gamesa has 2 manufacturing plants in rural PA
- Edensburg, in the southern Alleghenies and Fairless Hills (at site of former US Steel)
- Gamesa has employed 1,160 workers in PA
- Public policy was key: PA passed a measure in 2004 requiring 18 % of the state's electricity come from renewable sources by 2021.





- -Emmet & Dickson counties to house 2 largest communityowned wind farms
- -300 and 200-megawatt wind farms in NW Iowa agricultural community
- -Currently Iowa employs 1400 workers in existing wind turbine/components manufacturing facilities
- -Dept of Energy projects: 500 megawatts=800 construction jobs, 125+ in operations and maintenance
- -National Wind is developing 11 other large communityowned wind projects in MN, IA, SD, ND, Colorado



+ Wind Opportunity in West Virginia

Coal River Wind Project, West Virginia

The proposed project would:

- Create 154 turbines
- Bring online 300 megawatts of power
- Employ 200 construction workers initially and 50 employees longterm plus more over time as demand increases



The wind turbines would line the edge of the Coal River Mountain where currently mountaintop removal has been sited.







- Public Policy to create demand and develop training
- Dedicated Funding
- Engaging Business





Policies that Fuel Green Growth

- State Renewable Portfolio Standards
- State Energy Efficiency Resource Standards
- State/Local Climate Action Plans
- Federal Production Tax Credit
- American Recovery and Reinvestment Act
- American Clean Energy and Security Act (???)



+ Additional Resources

Green For All

- Recovery Resources: www.greenforall.org/recovery
- Case Studies & Reports: www.greenforall.org/resources
- Apollo Alliance: New Energy for States
 - www.apolloalliance.org/reports
- Institute for Local Self Reliance: Rural Power
 - www.newrules.org/energy/publications
- Indigenous Environmental Network
 - Energy Justice in Native America: www.ienearth.org
- Coal River Wind Project
 - www.coalriverwind.org

