



**GREEN
PROSPERITY:
How Clean-Energy
Policies Can Fight
Poverty and
Raise Living
Standards in the
United States**

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**Prepared under commission from the
Natural Resources Defense Council
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EXECUTIVE SUMMARY

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www.peri.umass.edu/green_prosperity

EXECUTIVE SUMMARY

The United States today faces a formidable generation-long challenge: to transform the economy from being driven primarily by fossil fuel sources of energy, which are the major cause of global climate change, to becoming an economy that can function effectively through renewable energy sources and by achieving high levels of energy efficiency.

The project of building a clean-energy economy will become a powerful engine of expanding employment opportunities throughout the U.S. economy. According to a study that PERI recently completed with the Center for American Progress (CAP),¹ clean-energy investments at the level of about \$150 billion per year—i.e. around one percent of U.S. GDP—can generate about 1.7 million net new jobs throughout the U.S. economy.

This level of annual new clean-energy investments in the U.S. will be strongly encouraged through the combination of direct government spending, along with the subsidies and incentives for private business investors that would result from the American Recovery and Reinvestment Act (the February 2009 Obama stimulus program) and the American Clean Energy and Security Act (ACESA—the Waxman-Markey bill) now being debated in Congress. Within this strongly supportive policy framework, the advance of clean-energy technologies will accelerate and markets supporting these technologies will mature. This will create a self-reinforcing dynamic of rising private-sector clean-energy investment opportunities, which in turn will mean expanding job opportunities.

The building of a clean-energy economy in the United States can also serve another purpose: to create new ‘pathways out of poverty’ for the 78 million people in this country (roughly 25 percent of the population) who are presently poor or near-poor, and raise living standards more generally for low-income

people in the United States. How the project of building a clean-energy economy can benefit low-income people in the U.S. is the focus of this study.

In the discussions that follow, we examine how investments in clean energy—including energy efficiency measures such as residential and commercial building retrofits, public transportation and a smart grid electrical transmission system, along with renewable energy sources such as wind, solar, and biomass power—create major new employment opportunities in comparison with spending equivalent amounts of money within the traditional fossil fuel sectors, i.e. oil, natural gas and coal. We then assess the impact on low-income families of seeing their household energy bills go down as a result of investments in energy efficiency retrofits. We finally also consider how investments in improving public transportation systems can reduce transportation costs for low-income families.

Clean-Energy Investments Create Job Opportunities

In general, our findings show that clean-energy investments create more job opportunities than spending on fossil fuels, across all levels of skill and education. The largest benefits will accrue to workers with relatively low educational credentials.

We further find that a high proportion of the jobs generated by clean-energy investments should offer good opportunities for advancement through training programs, and more generally, that newly employed low-income workers will see new opportunities to lift themselves and their families out of poverty.

Considering a \$150 billion annual level of clean-energy investments in the U.S. economy, some of our major specific findings include the following:

EXPANDING EMPLOYMENT OPPORTUNITIES FOR LOWER-INCOME WORKING PEOPLE

- Out of the 1.7 million net increase in job creation, roughly 870,000 of the newly available jobs would be accessible to workers with high school degrees or less.

¹ Pollin, Robert, James Heintz, and Heidi Garrett-Peltier. 2009. “The Economic Benefits of Investing in Clean Energy: How the economic stimulus program and new legislation will boost U.S. economic growth and employment” Washington, DC: Center for American Progress.

- Roughly 614,000 of the newly expanded number of jobs available for workers with high school degrees or less will offer decent opportunities for promotions and rising wages over time. The job creation within this category is seven times larger than the number of jobs that would be created in this category by spending the same amount of money within the fossil fuel industry.
 - To maximize opportunities for decent job opportunities, clean-energy investment policies need to operate in tandem with high-quality and widely-accessible training programs; minimum wage laws that set a 'living wage' standard throughout the country; and a more favorable environment for union organizing among low-wage workers.
 - The net increase of 1.7 million jobs will generate roughly a one percentage point fall in the unemployment rate. This in turn should raise earnings for low-income workers by about 2 percent.

MORE JOBS ACROSS ALL EDUCATIONAL LEVELS

- 3.2 times more jobs overall than fossil-fuel investments
- 3.6 times more jobs requiring high school degrees or less
- 2.6 times more jobs requiring college degrees or more
- 3.0 times more jobs requiring some college

ENERGY EFFICIENCY RETROFITS LOWER HOME HEATING AND UTILITY BILLS

- Retrofits could reduce living costs by an average of 3-4 percent for low-income households.
- Achieving these benefits will require well-designed policies to expand the market for retrofits.
- The markets to provide retrofitting services must be targeted to benefit low-income renters as well as homeowners.

IMPROVING PUBLIC TRANSIT REDUCES TRANSPORTATION EXPENSES

- Improving public transportation in urban centers to about 25–50 percent of total transportation could lower costs and raise living standards for low-income households by an average of 1–4 percent.
- The largest benefits will accrue to households that can replace a car with public transit.
- These households would see their annual transportation expenditures fall by roughly \$2,000.
- This would represent a reduction in total expenditures for these families of about 10 percent.

These findings are particularly significant in the context of the current energy debate because they turn upside-down a common objection from opponents of clean-energy policies: that environmental policies will be harmful for the poor. We show that, to the contrary, with effective policies in place, investing in clean energy can provide significant new opportunities at all levels of the U.S. economy, and especially for families who are poor or near-poor.

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