



# A Green Jobs Primer

## Job Creation in a Clean Energy Economy

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Our country faces two immense, interrelated challenges: Charting a course to economic recovery and tackling the threat of global warming. Both are moral imperatives that require immediate action in order to fulfill our future obligations to our children. Meeting these challenges head on now and into the future is straightforward—begin a robust and aggressive transition towards a clean energy economy. This transition will leverage new investment streams to build low-carbon infrastructure, catalyze private sector innovation, and lay the foundation for sustainable, long-term economic growth. Building the clean energy economy will also create millions of new green jobs, offering hope to many Americans who are out of work or facing possible layoffs. With major energy and climate policy decisions on the horizon, and the excitement over green jobs growing, we offer answers below to four common questions.

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### 1. What is a green job?

**The short answer:** Green jobs enhance environmental quality, build a vibrant clean energy economy, and help to expand the American middle class.

**The long answer:** Green jobs are today's jobs but repurposed and expanded to build a sustainable low-carbon economy. Most green jobs will be in occupations that people already work in today. Constructing wind farms creates jobs for sheet metal workers and industrial truck drivers. Energy efficiency retrofits for buildings employ roofers and insulators. And expanding mass transit systems employs electricians and dispatchers. Green jobs are not an entirely new job sector. Akin to more familiar blue collar jobs, this new class of employment refers to certain types of productive activities rather than a specific job classification.

What's more, green jobs are inherently local and difficult to outsource. Green jobs involve transforming today's homes, offices and factories and investing in new, low-carbon infrastructure. This work is impossible to push offshore because it must be preformed on site. Making buildings more energy efficient, constructing mass transit lines, installing solar panels and wind turbines, expanding public green space, and growing and refining advanced biofuels all must take place right here in America.

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### 2. Are green jobs only low-paying jobs?

**The short answer:** No. Green jobs encompass a wide breadth of skill sets and pay scales. The bulk is good-paying, middle-skill jobs accessible to all Americans.

**The long answer:** Our research demonstrates that green jobs are broadly distributed across the entire spectrum of the economy. In a side-by-side comparison of job creation from green investments versus investments in the oil industry, we demonstrated that nearly four times more jobs are created overall at every step in the pay scale and across every skill level. Green jobs represent a wide range of points of entry into meaningful, long-term employment, and can provide ladders into the middle class for lower-skilled workers if career advancement and workforce training opportunities are integrated into our larger economic development strategies.

In fact, green jobs are blue collar and white collar alike. Green jobs are not only production-line construction and manufacturing jobs. Green businesses will need secretaries, managers and accountants, too. High-technology endeavors will offer new opportunities in green design, engineering, and finance. Such a diverse spectrum of job creation is precisely what we need in an economy suffering from its worst downturn since the Great Depression.

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### 3. Do gains in green jobs cause losses in other sectors of the economy?

**The short answer:** No. A clean energy economy will result in net job creation because green investments are domestic, have a large multiplier effect, and create work that is skill and labor intensive.

**The long answer:** Investments in renewable energy and energy efficiency can create twice as many jobs per unit of energy and per dollar than traditional fossil-fuel investments by redirecting money previously spent on wasted energy, pollution, and imported fuel toward advanced manufacturing, modern infrastructure, and skilled labor. In the beginning stages, green jobs will simply result in the creation of new jobs that did not exist before, putting people to work without displacing existing sectors. In the medium term, some particularly polluting sectors of the economy experience employment downturns, which is why we must devise smart policies to transition affected workers.

But one day all good jobs will be green jobs as we build an economy where productivity and competitiveness are contingent on increased environmental stewardship and efficient use of all resources, including energy. Moreover, initial public investments in green infrastructure will “crowd-in” private capital. This follows a time-tested script that helped build the railroads, the national highway system, and enabled the development of the Internet revolution. In each case, strategic public investment enabled market transformation and the growth of new industries and vast new opportunities for economic growth and wealth generation.

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### 4. Are green jobs the result of picking technological “winners?”

**The short answer:** No. A clean energy economy will reward efficiency, low-carbon energy and environmental stewardship. Any and all technologies can compete and contribute in this transformed market.

**The long answer:** Building a clean energy economy means fixing broken markets where the costs of pollution are passed onto future generations. Setting strong market signals with smart policies through a combination of investment and regulation will allow the market to decide the most appropriate technologies without distorting real consumer choices.

These policies will also spur a huge wave of innovation as the private sector steps up to meet the challenges of solving global warming and reducing our dependence on polluting fossil fuels. That’s the ultimate promise of new green jobs in a clean energy economy.