



RENEWABLE ENERGY, ENERGY EFFICIENCY & JOBS

INTRODUCTION

Many well-paying, green jobs in construction, maintenance and operation would be created from an overhaul of our electricity infrastructure such as transmission improvements to support a distributed grid.¹ Renewable energy, on average, would create four times more jobs per megawatt of installed capacity than natural gas, 40% more than coal² and many more times than nuclear power. Substantial numbers of jobs would be in manufacturing and construction trades.³

1. Green collar jobs- blue collar jobs whose products and services directly improve the environment- are relatively high quality.⁴

- Green collar jobs are also more available to those who have lower level education, low income, or who were formerly incarcerated than traditional blue collar employment.⁵
- Green collar jobs consist of energy, water and green building employment opportunities including energy and conservation systems installations, energy retrofits, construction and demolition.⁶
- Green collar jobs include both entry level and more difficult work, allowing room for advancement and offering competitive, above minimum wage salaries, and health and retirement plans.⁷

2. Renewable energy can create more US jobs than fossil fuels and nuclear power.

- In the United States alone, 1.3 million “direct impact” jobs could be created by a ten-year investment of \$150 billion in renewable energy sectors (electricity and motor fuel). Direct impact jobs result from an increase in demand for the industry in question. They do not include tangential jobs such as retail stores or other support work.⁸
- A proposed “new” nuclear reactor would employ at most 700 permanent workers and 4000 workers on a temporary basis during construction⁹.
- Cost estimates for constructing a 1500 megawatt (MW) reactor are as high as 12 billion dollars¹⁰, maybe more as cost predictions keep increasing. Therefore, the same investment in nuclear (150 billion dollars—see bullet one) would yield at best, 58,750 additional jobs of which 50,000 would be temporary, disappearing after four years.
- While the coal and oil industries have had massive job losses—in the hundreds of thousands in the past decade, despite continuing subsidies—wind is now poised not only to compete in cost with coal and oil, but to provide more jobs per unit of cost than fossil energies.¹¹
- Although wind is a labor-intensive technology, it is competitive with other energy sources because it saves money in other ways such as lower requirements for materials and capital, no fuel and few disposal costs, and fewer costs to the environment.¹²
- Wind jobs fit a variety of fields, including structural, electrical and mechanical engineering, meteorology, surveying, metal-working, supervising, computer operations, mechanical and technical.¹³

3. Energy efficiency creates more jobs than natural gas and nuclear power.

- Energy efficiency creates jobs in installation, creation, operation and maintenance of new buildings systems and new manufacturing of efficient appliances. This represents a shift of investment from creation of energy to conserving energy.¹⁴
- For every 1 million dollars invested in energy efficiency there are 21.5 jobs created as opposed to 11.5 jobs in new natural gas generation.¹⁵
- For every 1 million dollars invested in nuclear energy, there is less than one job created.

¹ New Energy for America: The Apollo Jobs Report for Good Jobs & Energy Independence. Apollo Alliance. January, 2004.

² Ibid. New Energy

³ Ibid. New Energy

⁴ Pinderhughes, R. Green Collar Jobs: An Analysis of the Capacity of Green Businesses to Provide High Quality Jobs for Men and Women with Barriers to Employment. City of Berkeley Office of Energy and Sustainable Development. 2007.

⁵ Ibid. Pinderhughes

⁶ Ibid. Pinderhughes

⁷ Ibid. Pinderhughes

⁸ English, Burton C. et al. University of Tennessee. *25% Renewable Energy for the United States By 2025: Agricultural and Economic Impacts*. November 2006. see also: <http://apolloalliance.org/blog/?p=149>.

⁹ Moore, Patrick. My View: Nuclear energy can boost jobs, economy. Mlive.com. September 05, 2008 at http://blog.mlive.com/sagopinion_impact/2008/09/my_view_nuclear_energy_can_boo/print.html

¹⁰ Scroggs, Steven D. Direct Testimony before the Florida Public Service Commission RE: Florida Power and Light Company's Petition to Determine Need for Turkey Point Nuclear Units 6 and 7 Electrical Power Plant. October 16, 2007. # 09-467-07. Exhibit SDS-8.

¹¹ Dorn, Jonathan G., Global Wind Power Capacity Reaches 100,000 Megawatts. Earth Policy Institute. March 4, 2008 at <http://www.earth-policy.org/Indicators/Wind/2008.htm>

¹² Ibid. Dorn, 2008.

¹³ Ibid. Dorn, 2008.

¹⁴ Ibid. New Energy

¹⁵ Ibid. New Energy