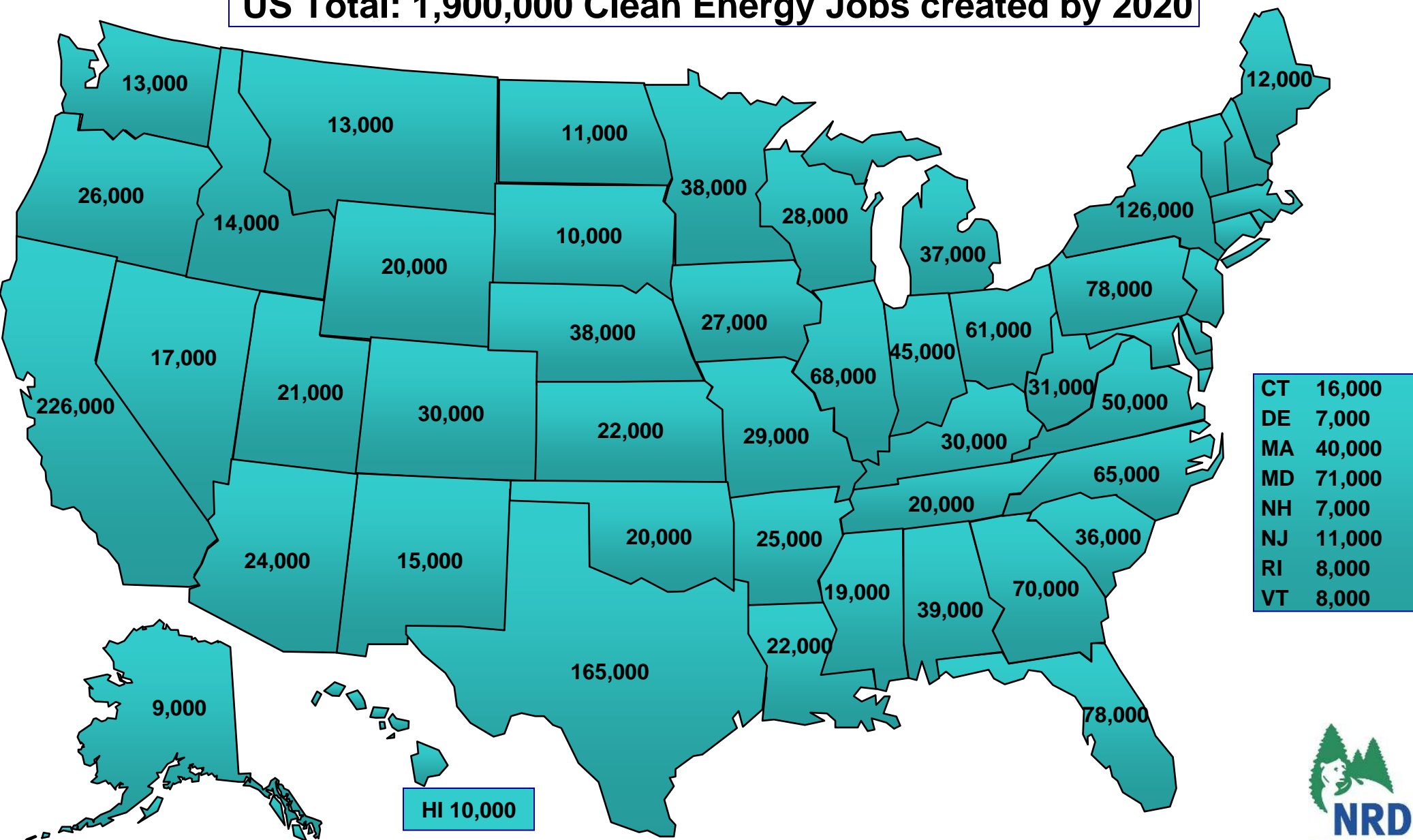


Clean Energy Investments Create More Jobs

Comprehensive clean energy and climate protection legislation, like the American Clean Energy and Security Act (H.R. 2454) and the Clean Energy Jobs and American Power Act (S. 1733), would strengthen the U.S. economy by establishing pollution limits and incentives that together will drive large-scale investments in clean energy and energy efficiency. These investments will result in stronger job growth, higher real household income, and increased economic output than the U.S. would experience without the bill. New analysis by the University of California shows conclusively that climate policy will strengthen the economies of every state, and the U.S. as a whole, and that it would create between 918,000 (moderate-efficiency case) and 1.9 million (high-efficiency case) more jobs by 2020 than what the U.S. would see in the absence of such legislation. This maps presents the results from the high-efficiency case.

US Total: 1,900,000 Clean Energy Jobs created by 2020



Analysis

The figure presented is based on collaborative research by the University of California, University of Illinois, and Yale University to study the detailed economic impacts of comprehensive clean energy and climate protection legislation, like the American Clean Energy and Security Act and the Clean Energy Jobs and American Power Act, on the U.S. and each of the 50 states.

The economic assessment was conducted using EAGLE, a new state-of-the-art forecasting model, which details patterns of supply, demand, employment, incomes, resource allocation, energy use, and emissions across the nation and within each of the 50 United States. Using a general equilibrium framework, the model captures both direct impacts and the extensive economy-wide indirect effects of climate and energy policies.

For more information on the model and methodology, please see: http://are.berkeley.edu/~dwrh/CERES_Web/Docs/ES_DRHFK091024.pdf

Notes:

- Employment is measured as average full-time equivalent (FTE) labor force participation per year. This means a single full-time job or two half-time jobs (people) are both counted as one FTE job.
- By reducing our dependence on imported energy, comprehensive clean energy and climate protection legislation will free us to commit more of our resources to domestic job creation while reducing our vulnerability to volatile oil prices, climate damage, and other threats to our national security. Moving from dirty to clean sources of energy will unleash a wave of more efficient technologies and drive innovation that will create new industries.
- The cost reductions driven by such legislation will boost our economy. The reason is simple: energy efficiency reduces costs for transportation and energy and thereby saves households and businesses money -- money they can spend on domestic goods and services, which will create jobs for Americans. For example, over the last thirty years, California reduced its per capita electricity consumption to 40% below the national average. This saved households \$56 billion, and those savings created 1.5 million additional jobs in California.
- The EAGLE findings are consistent with previous analyses that have similarly demonstrated that clean energy investments create more jobs, across a wider variety of skill and education levels, than comparable investments in fossil-fuel energy sources. The Political Economy Research Institute (PERI) estimated in June 2009 that the combined effects of the American Reinvestment and Recovery Act ('Stimulus Bill') and ACES would yield a near-term net increase of 1.7 million jobs, based on a \$150 billion shift in annual investment from traditional to clean energy.¹ While the PERI analysis focuses on the near-term effect of such legislation, EAGLE was used to analyze the longer-term impact.
- Results from both EAGLE and PERI are consistent with studies done by U.S. government agencies – such as the Environmental Protection Agency, Congressional Budget Office, and the Department of Energy – that show strong economic growth with comprehensive energy and climate legislation, especially when combined with strong energy efficiency policies.
- For the EAGLE modeling effort, two scenarios were developed: a moderate-efficiency case and a high-efficiency case. The moderate-efficiency case reflects faithful, but not aggressive, implementation of the energy efficiency standards and incentives in ACES, and assumes moderate rates of innovation in response to these policies. The high efficiency case indicates the potential for greater economic gains from more aggressive implementation of the efficiency provisions of ACES at the federal level, and adoption of supportive policies by most states. The rate of energy productivity improvements in the high-efficiency case are consistent with results that have been achieved by states that historically have had the most successful energy efficiency policies.² A recent McKinsey & Company study on energy efficiency potential in the U.S. found that there are enough cost-efficient energy efficiency opportunities in order to achieve these levels of efficiency improvement by 2020, all at a positive return.³

Footnotes:

¹ Political Economy Research Institute: "The Economic Benefits of Investing in Clean Energy", downloadable from http://www.americanprogress.org/issues/2009/06/clean_energy.html.

² For example, California achieved an aggregate increase in energy efficiency averaging 1.4% per year from 1972 to 2002. The high-efficiency case assumes that energy efficiency improves at a rate of 1.5% per year, compared to 0.75% per year in the moderate-efficiency case.

³ McKinsey & Company: "Unlocking Energy Efficiency Potential in the U.S.", downloadable from http://www.mckinsey.com/clientervice/electricpowernaturalgas/US_energy_efficiency/.