



ENVIRONMENTAL LAW & POLICY CENTER

Protecting the Midwest's Environment and Natural Heritage

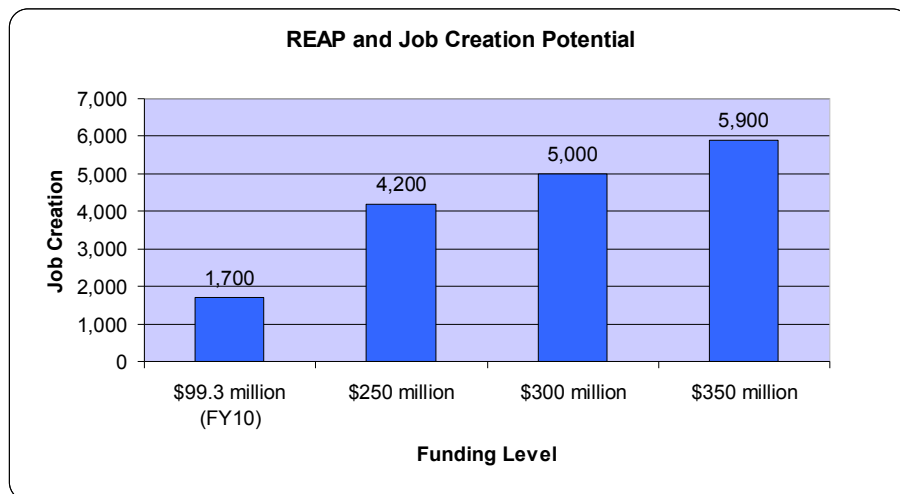
The Rural Energy for America Program (REAP): Effective, Fast Clean Energy Job Creation

Conceived in the 2002 Farm Bill, REAP is responsible for the development of thousands of new clean energy projects across rural America. Farmers and rural businesses are using REAP to build new clean energy projects for wind and solar power, biodiesel, anaerobic digesters and other biomass, geothermal, and energy-saving upgrades. REAP also helps rural electric cooperatives, ag extension offices and other non-profits to conduct energy technical assistance to assess rural clean energy needs. REAP is a strong success, with more than 3,500 clean energy project awards in 49 states since the program's first year in 2003.

ELPC has calculated REAP's job creation benefits at current and higher funding levels. Our analysis is based on employment data from the U.S. Department of Commerce and the U.S. Department of Agriculture for clean energy industries in combination with REAP project awards.

- *Our calculations show that REAP could create approximately 5,900 net jobs in the national economy each year at a funding level of \$350 million a year. In other words, REAP produces nearly 17 jobs per \$1 million of investment.*

REAP's job creation levels are higher than most other government-funded programs, including 17% higher than household tax cuts and 74% more than oil and gas subsidies.¹

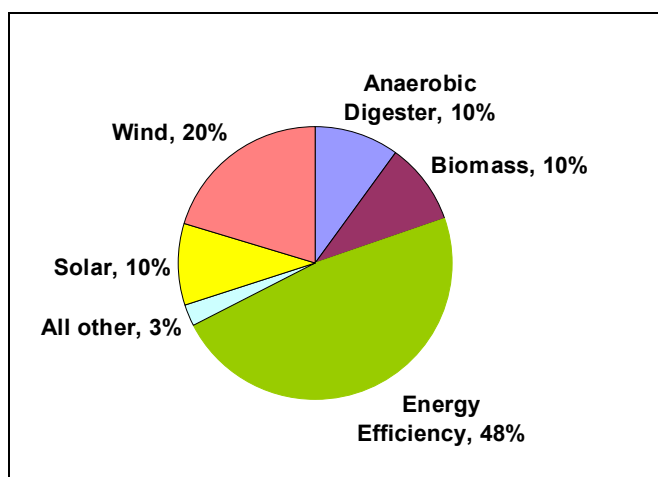


¹ See Testimony of Dr. Robert Pollin, Co-Director of the Political Economy Research Institute at the University of Massachusetts-Amherst, before the U.S. House Committee on Education and Labor, October 24, 2008, at page 3 (available [here](#)).

Methodology

To estimate REAP's job creation/employment potential, we used two sets of data: 1) employment rates for clean energy industries developed by the Political Economy Research Institute (PERI) at the University of Massachusetts-Amherst; and 2) data on the different clean energy technologies funded by REAP in the last two years.

These data are credible and conservative. The PERI data are based on U.S. Department of Commerce industrial economic output data for different categories of "green" investments.² USDA provided the REAP award data, from which ELPC derived the actual distribution of awards by technology for the years 2008 and 2009:



Since the PERI data does not specifically address each of the REAP technology categories (e.g., wind power), ELPC used the PERI technology categories that most correlated to REAP data, and then estimated job creation for each of the REAP job categories:

REAP technology	Corresponding PERI sector	Estimated jobs per \$1 million in investment (from PERI)	% of total REAP funding, 2008-2009	Weighted average estimated jobs based on % of REAP funding
Energy Efficiency	Building Retrofits (energy efficiency)	18.45	47.7%	8.81
Wind	Wind	14.90	20.2%	3.02
Biomass	Biomass	15.50	9.6%	1.49
Anaerobic Digester	Biomass	15.50	10.1%	1.55
Solar	Solar	15.82	9.8%	1.55
Other (hydrogen, geothermal, hybrid, hydropower)	Average of Wind/Solar/Biomass	15.50	2.5%	0.39
TOTALS			100%	16.80

² PERI used very similar data in its report *The Economic Benefits of Investing in Green Energy* (June 2009) ([report available here](#)).

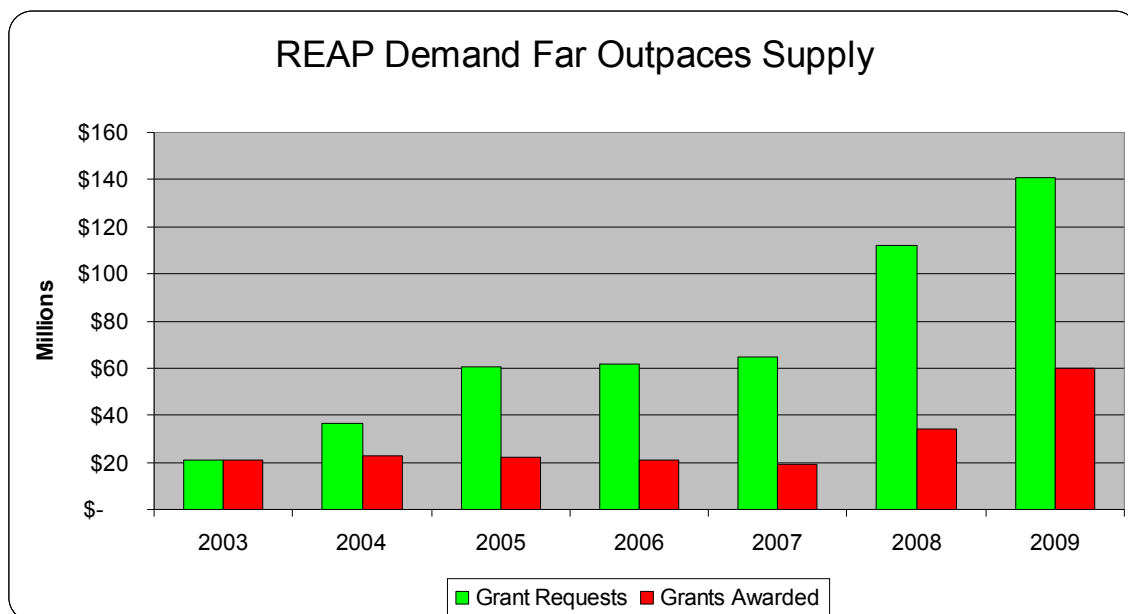
As indicated above, the average estimated employment creation per \$1 million of investment is nearly 17 jobs. Energy efficiency projects are the most employment-intensive projects of all of the green sectors included in the REAP universe of projects.

These calculations are at the low end of employment estimates for several reasons:

- We did not estimate employment for awards in the form of loan guarantees. While loan guarantees provide greater leveraging value than grants, we do not have job creation factors to calculate loan guarantee job impacts.
- We did not account for the consumer energy-related benefits, such as lower energy bills resulting from energy efficiency. These benefits last much longer than the construction-related benefits.
- We did not account for rural development benefits of locally-owned and operated clean energy systems. REAP projects are inherently locally owned.
- We did not account for on-farm and rural small business jobs “saved” because of the investment in these projects.

Other Considerations

REAP is a popular program across the country, and demand outpaces available funding. As indicated in the graph below, applications for REAP grants have always outpaced supply since the program’s inception, even as funding has increased over the years. Such strong demand should continue to accelerate with additional funding, thereby ensuring actual job creation.



REAP can move projects to construction quickly; nearly half of the projects which received awards in the Summer and Fall of 2008 are complete, and we expect similar trends to continue in the future – with half or more of all projects finished within a year.