POTENTIAL WIND POWER COMPONENT MANUFACTURERS



7,870 NEW JOBS

POTENTIAL SOLAR POWER COMPONENT MANUFACTURERS



6,741 NEW JOBS



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NEW JERSEY'S ROAD TO ENERGY INDEPENDENCE

Building on Job Growth in Renewable Energy Component Manufacturing

NEW CLEAN ENERGY JOB GROWTH

Roter Hub Main Bearing Low-Speed Shaft Gentox High-Speed Shaft Coupling Yaw Motor Yaw Drive Tower Disc Brake Gen Pow

a report developed by the Renewable Energy Policy Project clearly demonstrates, a major commitment to renewable electric generation will reduce our national security exposure, stabilize climate and provide a multi-billion dollar investment and reindustrialization program that will lead to new job growth in New Jersey.

Analyzing the Demand for Components

The Renewable Energy Policy Project recently completed a state-by-state analysis of the job-creating potential of renewable energy technologies. The results of this analysis were very encouraging both for the country as a whole and for New Jersey in particular.

A national program to develop renewable energy will benefit the regions and states that have the best renewable resource base – solar, wind, biomass and geothermal. It will also create a demand for billions of dollars of components, the parts that make up the finished renewable plants. This demand could, if accompanied by appropriate incentives, provide important new markets for domestic manufacturers that are already manufacturing equipment similar to the components that go into new renewable generation. More than 75% of the potential new demand can be expected to flow to the 20 states that have suffered the greatest job losses. A program that supported the development of renewable energy projects while simultaneously supporting the development of a strong, advanced component manufacturing industry would benefit many states and regions.

The report breaks renewable generation technologies down into their component parts and then examines where traditional industries exist that could, if provided with appropriate incentives, become suppliers of the billions of dollars of new parts that will be necessary.

The Report analyses the renewable energy industry assuming that the United States moves to stabilize carbon emissions. Stabilizing emissions of carbon requires adding 18,500 MW of new renewable projects each year for the next ten years. The Report looks at the total demand generated by this ten-year stabilization program and tracks that demand down to the individual industries capable of manufacturing the components.

Revitalizing New Jersey's Manufacturing

The national demand is allocated to individual states and eventually to the county level. This report outlines the potential for New Jersey from a national commitment to accelerate renewable energy development.

In all, there are more than 457 firms in New Jersey that are currently active in the industrial sectors that could supply the component parts to meet the demand necessary to deliver a 15% reduction in global warming emissions.

A major program to develop renewable energy will create a demand for the component parts that go into the

New Jersey County Investment

County		Wind	to be	Solar		Geothern	nal	Bioma	SS	Toto	ll laka
County	Firms	Millions \$	JODS	Millions \$	Jobs	Millions \$	saot	Millions \$	Jobs	Millions \$	JODS
Mercer	64	\$138.50	576	\$258.00	768	\$191.50	796	\$49.70	195	\$637.70	2,335
Middlesex	128	\$233.60	1,641	\$180.60	970	\$22.80	152	\$6.70	42	\$443.70	2,805
Bergen	146	\$87.00	603	\$156.80	728	\$28.20	158	\$44.30	310	\$316.30	1,799
Monmouth	74	\$66.30	449	\$209.10	788	\$0.60	3	\$2.30	14	\$278.30	1,254
Burlington	67	\$101.60	699	\$131.20	525	\$8.20	58	\$28.30	200	\$269.30	1,482
Union	135	\$113.70	823	\$78.80	373	\$11.00	68	\$26.50	179	\$230.00	1,443
Morris	113	\$43.90	325	\$114.80	516	\$3.20	21	\$35.50	249	\$197.40	1,111
Somerset	60	\$35.50	246	\$101.50	359	\$4.20	16	\$5.70	32	\$146.90	653
Camden	71	\$41.60	284	\$65.00	417	\$7.00	48	\$22.50	157	\$136.10	906
Essex	127	\$51.40	353	\$72.40	413	\$3.40	21	\$5.80	37	\$133.00	824
Passaic	122	\$55.30	400	\$55.20	236	\$4.40	17	\$7.20	42	\$122.10	695
Hudson	51	\$51.20	354	\$61.20	343	\$1.10	5	\$1.30	7	\$114.80	709
Warren	13	\$57.40	416	\$4.70	36	\$39.70	213	\$9.60	52	\$111.40	717
Gloucester	45	\$66.80	427	\$24.20	87	\$13.60	45	\$5.50	23	\$110.10	582
Hunterdon	31	\$38.10	231	\$33.00	185	\$1.90	7	\$2.00	9	\$75.00	432
Ocean	36	\$34.70	243	\$19.40	108	\$0.80	6	\$1.90	14	\$56.80	371
Atlantic	13	\$26.10	197	\$0.20	2	\$0.20	1	\$0.10	0	\$26.60	200
Cumberland	23	\$17.90	124	\$2.30	13	\$1.50	11	\$0.60	3	\$22.30	151
Sussex	22	\$8.00	57	\$6.90	27	\$0.00	0	\$0.20	1	\$15.10	85
Salem	5	\$0.30	2	\$4.50	6	\$0.00	0	\$0.00	0	\$4.80	8
Cape May	5	\$1.90	12	\$0.00	0	\$0.00	0	\$0.10	1	\$2.00	13

REPP had recently completed a study of the labor that goes into renewables which included a detailed survey of employment related to wind and solar PV. The overall manufacturing jobs/MW numbers found using the NAICS census method and shown in the table above agree well

Manufacturing Jobs and Investment for 185,000 MW

Location	# of Firms	Jobs Wind	Jobs Solar	Jobs Geothermal	Jobs Biomass	Jobs Total
Illinois	2,289	30,010	19,298	3,396	3,875	56,579
New York	1,925	18,523	14,617	8,150	6,640	47,930
Pennsylvania	2,188	19,588	15,767	3,402	3,911	42,668
Indiana	1,321	25,180	7,485	3,191	3,365	39,221
Wisconsin	1,331	25,179	4,943	2,037	2,974	35,133
Michigan	2,050	24,350	6,644	1,502	2,281	34,777
New Jersey	1,351	7,870	6,741	1,620	1,467	17,698
Connecticut	772	6,160	7,757	812	813	15,542
Minnesota	1,070	9,246	5,238	1,477	2,444	18,405
lowa	457	4,914	2,889	648	779	9,230
Washington	790	3,902	3,190	618	852	8,562



renewable developments. A major portion of the potential benefits flowing from the development of renewable energy will go to the manufacturers who supply the component parts. In order to capture as much of that potential as possible for domestic industry, the first step is to understand where the potential manufacturers are located and then devise the incentives that allow them to move efficiently into the industry.

In addition, the demand can support the creation of thousands more new jobs related to the expanded manufacturing activity.

with the numbers found in the previous REPP study, giving confidence in the above method. Having obtained a jobs/MW number, the jobs are allocated geographically according to the census manufacturing in the exact same manner that the investment was allocated.