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Building on
Job Growth in
Renewable Energy
Component
Manufacturing



NEW CLEAN ENERGY JOB GROWTH

Roter Hub Main Bearing Low-Speed Shaft Genthox
High-Speed Shaft
Coupling

Cover film
Solar cell
Incapoulant
Sabar cell
Gashet
Frame

Diode

Batteries

Charge
Controller

Tower

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 Iowa.

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 Iowa 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.

Manufacturing	, Jobs a	ınd Investment	for	185,000	MW
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Location	# of Firms	Jobs Wind	Jobs Solar	Jobs Geothermal	Jobs Biomass	Jobs Total
Illinois	2,289	31,522	18,292	3,607	4,090	57,511
Indiana	1,321	25,807	7,483	3,711	3,743	40,744
Wisconsin	1,331	26,612	5,007	2,156	3,286	37,061
Missouri	785	10,747	7,636	3,183	1,988	23,554
Minnesota	1,070	9,031	5,242	1,539	2,491	18,303
Oregon	655	2,805	6,403	645	1,338	11,191
lowa	457	5,193	2,891	669	828	9,581
Washington	790	4,111	3,238	622	850	8,821
Nebraska	200	2,817	2,368	294	731	6,210
South Dakota	109	2,253	64	944	217	3,478
Idaho	197	820	1,347	155	153	2,475

Revitalizing Iowa's Manufacturing

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

In all, there are more than 457 firms in Iowa 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

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.

Top 20	Counti	ies in	lowa
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County	Firms	Wind Millions \$ Jobs		Solar Millions \$ Jobs		Geothermal Millions \$ Jobs		Biomass Millions \$ Jobs		Total Millions \$ Jobs	
Clinton	14	\$29.90	210	\$216.90	851	\$0.40	2	\$0.30	1	\$247.50	1,06
Delaware	8	\$2.70	19	\$200.60	1,054	\$0.00	0	\$0.60	2	\$203.90	1,07
Des Moines	9	\$49.20	164	\$20.70	112	\$72.90	261	\$38.20	191	\$181.00	72
Black Hawk	19	\$110.90	759	\$1.50	8	\$20.00	106	\$6.50	38	\$138.90	91
Wayne	2	\$0.00	0	\$93.50	491	\$0.00	0	\$2.10	16	\$95.60	50
Dubuque	18	\$74.70	492	\$1.70	14	\$2.70	19	\$12.00	77	\$91.10	60
Pottawattamie	7	\$72.10	466	\$0.00	0	\$0.00	0	\$0.20	1	\$72.30	46
Linn	32	\$13.30	82	\$28.30	153	\$4.80	34	\$18.90	128	\$65.30	39
Woodbury	17	\$60.80	354	\$2.40	17	\$0.00	0	\$0.60	4	\$63.80	37
Scott	25	\$29.00	197	\$5.60	36	\$1.00	8	\$11.80	75	\$47.40	3
Jefferson	8	\$43.80	310	\$0.20	1	\$0.40	3	\$0.10	1	\$44.50	3
Lee	5	\$35.40	229	\$0.10	1	\$0.00	0	\$0.00	0	\$35.50	23
Appanoose	6	\$11.70	90	\$19.80	78	\$1.00	5	\$0.40	2	\$32.90	17
Polk	29	\$18.80	131	\$2.80	17	\$2.70	17	\$2.30	14	\$26.60	17
Marshall	11	\$1.90	14	\$0.30	3	\$13.20	84	\$7.40	45	\$22.80	14
Muscatine	7	\$17.40	115	\$0.00	0	\$4.00	21	\$0.90	5	\$22.30	14
Sioux	8	\$20.70	145	\$0.10	1	\$0.00	0	\$1.30	8	\$22.10	1.5
Marion	6	\$11.10	87	\$0.00	0	\$0.00	0	\$8.00	45	\$19.10	13
Page	1	\$18.40	110	\$0.00	0	\$0.00	0	\$0.00	0	\$18.40	11
Cedar	9	\$14.60	102	\$0.00	0	\$1.50	11	\$0.60	3	\$16.70	1

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

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.