

**POTENTIAL WIND POWER  
COMPONENT MANUFACTURERS**



**10,964 NEW JOBS**

**POTENTIAL SOLAR POWER  
COMPONENT MANUFACTURERS**



**11,062 NEW JOBS**

Summary of Findings: Renewable Energy Policy Project Technical Report

**NORTH  
CAROLINA'S  
ROAD TO ENERGY  
INDEPENDENCE**

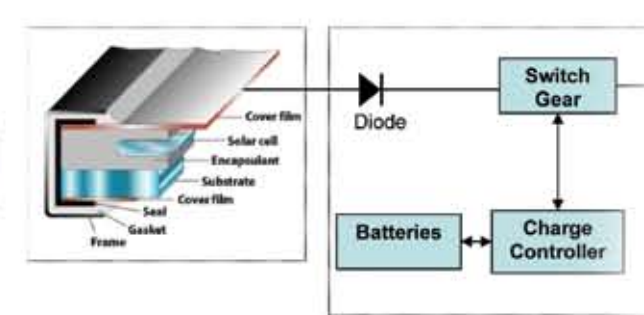
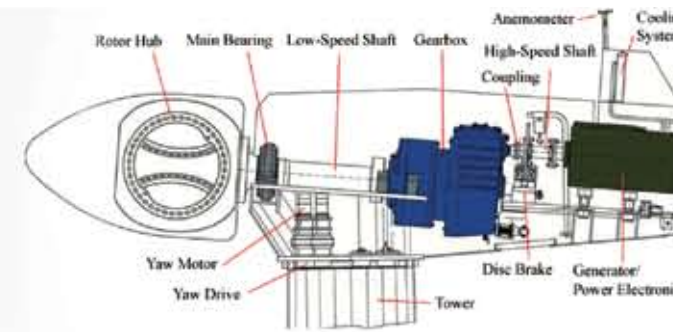
**Building on  
Job Growth in  
Renewable Energy  
Component  
Manufacturing**



Prepared by the Blue Green Alliance  
2929 University Ave. SE #150  
Minneapolis, MN 55414  
info@bluegreenalliance.org



# NEW CLEAN ENERGY JOB GROWTH



**As** 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 North Carolina.

## 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 North Carolina 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 and Investment for 185,000 MW

Location	# of Firms	Jobs Wind	Jobs Solar	Jobs Geothermal	Jobs Biomass	Jobs Total
Texas	3,358	25,044	23,221	4,660	7,175	60,100
North Carolina	1,096	10,964	11,062	2,810	3,708	28,544
South Carolina	488	11,204	3,559	5,223	2,365	22,351
Florida	1,617	8,467	7,718	1,070	1,449	18,704
Tennessee	853	9,011	5,122	1,078	2,451	17,662
Georgia	864	8,044	6,285	1,016	1,303	16,648
Alabama	635	10,085	2,035	997	982	14,099
Virginia	624	8,565	3,672	489	1,047	13,773
Arkansas	384	4,572	2,394	656	1,008	8,630
Louisiana	507	4,845	1,958	660	1,054	8,517
Mississippi	318	2,957	1,674	881	2,449	7,961

## Revitalizing North Carolina's Manufacturing

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

In all, there are more than 457 firms in North Carolina 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 Counties in North Carolina

County	Firms	Wind		Solar		Geothermal		Biomass		Total	
		Millions \$	Jobs	Millions \$	Jobs	Millions \$	Jobs	Millions \$	Jobs	Millions \$	Jobs
Mecklenburg	137	\$540.00	2,885	\$96.80	428	\$325.50	1,154	\$100.10	389	\$1,062.40	4,856
Forsyth	47	\$107.50	514	\$608.60	3,187	\$108.30	442	\$30.40	123	\$854.80	4,266
Guilford	88	\$66.40	448	\$272.10	1,015	\$5.30	34	\$41.30	297	\$385.10	1,794
Wake	77	\$106.70	687	\$165.80	1,047	\$0.80	4	\$4.60	28	\$277.90	1,766
Iredell	41	\$95.40	647	\$88.40	359	\$7.40	31	\$22.80	158	\$214.00	1,195
Durham	21	\$42.10	284	\$142.30	386	\$0.00	0	\$0.40	3	\$184.80	673
Johnston	18	\$15.90	100	\$52.60	403	\$0.90	7	\$115.00	846	\$184.40	1,356
Scotland	2	\$0.00	0	\$181.50	752	\$0.00	0	\$2.30	9	\$183.80	761
Burke	6	\$32.50	215	\$136.70	1,036	\$0.00	0	\$0.00	0	\$169.20	1,251
Buncombe	45	\$91.50	640	\$21.60	91	\$13.50	86	\$6.60	38	\$133.20	855
Gaston	43	\$100.60	639	\$12.20	35	\$0.90	7	\$1.10	7	\$114.80	688
Cleveland	19	\$26.60	168	\$66.50	434	\$2.20	12	\$4.20	24	\$99.50	638
Alamance	26	\$41.10	276	\$0.20	1	\$12.70	87	\$42.00	298	\$96.00	662
Sampson	2	\$0.00	0	\$88.30	380	\$0.00	0	\$0.00	0	\$88.30	380
New Hanover	31	\$41.30	195	\$4.50	30	\$29.20	98	\$12.30	52	\$87.30	375
Cabarrus	12	\$27.70	210	\$51.40	393	\$0.00	0	\$0.00	0	\$79.10	603
Union	35	\$26.70	174	\$14.60	94	\$20.10	107	\$8.50	51	\$69.90	426
Davidson	30	\$35.30	267	\$5.10	22	\$2.10	9	\$21.80	149	\$64.30	447
Franklin	4	\$54.10	368	\$3.70	31	\$0.00	0	\$0.00	0	\$57.80	399
Catawba	34	\$31.30	226	\$4.30	15	\$17.70	125	\$3.30	23	\$56.60	389

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.