

Brookings-Battelle Clean Economy Database: List of Outliers

Brookings and Battelle researchers went to great lengths to assure the accuracy of the clean economy data generated for this report. Yet, there are some accuracy concerns regarding job growth that arise from the limitations of the data available to the researchers.

The main focus of this analysis is on clean economy establishments active in 2010. Since complicated, multi-establishment organizations—especially governments—often change their organization structures by substituting establishments for one another in the National Establishment Time Series (NETS) Database, the methodology used here may occasionally *exaggerate* job changes from 2003 to 2010 because earlier (no longer existing) establishments are not in the Brookings-Battelle Clean Economy Database.

To make the reader and fellow scholars aware of potentially erroneous records that could significantly impact the interpretation of growth rates, Brookings researchers generated a list of every establishment with recorded employment losses or gains greater than or equal to an absolute value of 1000 jobs from 2003 to 2010. These observations were well outside the bounds of a normal distribution. To assess their validity, Brookings researchers examined local news reports or other public sources of company level information whenever available.

In general, unverifiable growth anomalies were most likely to be found in the public sector oriented segments: conservation, regulation and compliance, waste management and treatment, and public mass transit. Anomalies in other segments were confirmed as legitimate in some cases in that they appeared to reflect real trends. In other cases, the extent of the change—either positive or negative—appears to have been exaggerated (again see appendix for discussion). Because no database was available to comprehensively or confidently confirm or correct these changes, the Brookings team decided to disclose the most influential or extreme establishment level observations by metropolitan area, state, and segment.

The table below lists information for all 135 establishments in the Brookings-Battelle database (out of 57,501) that exhibited extreme employment changes of 1000 or more from 2003 to 2010.

The reader is advised that some of the records may be erroneous and caution is recommended in interpreting the growth numbers of the relevant metropolitan area and state for the segment(s) listed.

**Potential Errata File: Single Establishment Records with Employment Changes of plus or minus 1000 Jobs between 2003 and 2010
Sorted by State**

The Establishment's Clean Economy Segment	Jobs, 2003	Jobs, 2010	Change in Jobs, 2003 to 2010	Metropolitan/Micropolitan Area Name	State
Appliances	3300	300	-3000	Fort Smith, AR-OK	AR
Green Consumer Products	1	4000	3999	Little Rock-North Little Rock-Conway, AR	AR
Recycled-Content Products	1800	14	-1786	Non-metropolitan area	AR
Conservation	136	2500	2364	Sacramento--Arden-Arcade--Roseville, CA	CA
Conservation	1500	2500	1000	Sacramento--Arden-Arcade--Roseville, CA	CA
Energy-saving Consumer Products	5100	1700	-3400	San Jose-Sunnyvale-Santa Clara, CA	CA
Green Building Materials	3	3000	2997	Los Angeles-Long Beach-Santa Ana, CA	CA
HVAC and Building Control Systems	350	3000	2650	San Francisco-Oakland-Fremont, CA	CA
Lighting	3000	300	-2700	San Jose-Sunnyvale-Santa Clara, CA	CA
Organic Food and Farming	3000	250	-2750	Merced, CA	CA
Professional Energy Services	8350	7000	-1350	San Francisco-Oakland-Fremont, CA	CA
Public Mass Transit	100	1600	1500	San Diego-Carlsbad-San Marcos, CA	CA
Smart Grid	0	2000	2000	San Francisco-Oakland-Fremont, CA	CA
Waste Management and Treatment	0	3000	3000	Los Angeles-Long Beach-Santa Ana, CA	CA
Waste Management and Treatment	1	1063	1062	San Diego-Carlsbad-San Marcos, CA	CA
Wind	1000	3000	2000	San Jose-Sunnyvale-Santa Clara, CA	CA
Fuel Cells	2	2800	2798	Boulder, CO	CO
Waste Management and Treatment	1150	150	-1000	Washington-Arlington-Alexandria, DC-VA-MD-WV	DC
Conservation	0	1900	1900	Tallahassee, FL	FL
Conservation	0	2000	2000	Tallahassee, FL	FL
Conservation	0	4600	4600	Tallahassee, FL	FL
Energy-saving Consumer Products	2000	15	-1985	Miami-Fort Lauderdale-Pompano Beach, FL	FL
Pollution Reduction	3832	50	-3782	Palm Bay-Melbourne-Titusville, FL	FL
Public Mass Transit	0	1000	1000	Orlando-Kissimmee-Sanford, FL	FL
Conservation	0	1500	1500	Atlanta-Sandy Springs-Marietta, GA	GA
Conservation	0	2500	2500	Atlanta-Sandy Springs-Marietta, GA	GA
Energy-saving Consumer Products	1400	200	-1200	Non-metropolitan area	GA
Green Architecture and Construction Services	325	1450	1125	Atlanta-Sandy Springs-Marietta, GA	GA
Public Mass Transit	30	1500	1470	Brunswick, GA	GA
Regulation and Compliance	30	1200	1170	Honolulu, HI	HI
Energy-saving Building Materials	0	1000	1000	Ontario, OR-ID Micropolitan Statistical area	ID
Remediation	10	1050	1040	Boise City-Nampa, ID	ID
Public Mass Transit	0	1000	1000	Chicago-Joliet-Naperville, IL-IN-WI	IL
Public Mass Transit	0	2000	2000	Chicago-Joliet-Naperville, IL-IN-WI	IL
Public Mass Transit	1200	90	-1110	St. Louis, MO-IL	IL
Appliances	2700	250	-2450	Evansville, IN-KY	IN
Electric Vehicle Technologies	0	2100	2100	Kokomo, IN	IN
Appliances	5000	6000	1000	Louisville-Jefferson County, KY-IN	KY
Regulation and Compliance	1700	349	-1351	Frankfort, KY Micropolitan Statistical area	KY
Public Mass Transit	1400	60	-1340	New Orleans-Metairie-Kenner, LA	LA
Sustainable Forestry Products	1600	100	-1500	Monroe, LA	LA
Waste Management and Treatment	1562	21	-1541	New Orleans-Metairie-Kenner, LA	LA
Waste Management and Treatment	2510	65	-2445	Baltimore-Towson, MD	MD
Green Consumer Products	4000	3000	-1000	Allegan, MI Micropolitan Statistical area	MI
Green Consumer Products	8700	583	-8117	Grand Rapids-Wyoming, MI	MI
Organic Food and Farming	5000	50	-4950	Battle Creek, MI	MI
Regulation and Compliance	10	1100	1090	Lansing-East Lansing, MI	MI
Sustainable Forestry Products	0	1165	1165	Escanaba, MI Micropolitan Statistical area	MI
Conservation	0	1000	1000	Minneapolis-St. Paul-Bloomington, MN-WI	MN
Conservation	0	1000	1000	Minneapolis-St. Paul-Bloomington, MN-WI	MN

Energy-saving Consumer Products	0	1430	1430	Owatonna, MN Micropolitan Statistical area	MN
Regulation and Compliance	45	1100	1055	Minneapolis-St. Paul-Bloomington, MN-WI	MN
Conservation	22	2000	1978	Raleigh-Cary, NC	NC
Nuclear Energy	0	1377	1377	Wilmington, NC	NC
Professional Environmental Services	0	1400	1400	Durham-Chapel Hill, NC	NC
Regulation and Compliance	3	1400	1397	Durham-Chapel Hill, NC	NC
Regulation and Compliance	968	3854	2886	Raleigh-Cary, NC	NC
Regulation and Compliance	1500	300	-1200	Durham-Chapel Hill, NC	NC
Conservation	500	1600	1100	Trenton-Ewing, NJ	NJ
Public Mass Transit	6	3000	2994	New York-Northern New Jersey-Long Island, NY-NJ-PA	NJ
Regulation and Compliance	500	3000	2500	Trenton-Ewing, NJ	NJ
Waste Management and Treatment	400	3000	2600	Trenton-Ewing, NJ	NJ
Green Architecture and Construction Services	0	2200	2200	Las Vegas-Paradise, NV	NV
Public Mass Transit	1300	190	-1110	Las Vegas-Paradise, NV	NV
Conservation	0	1200	1200	Albany-Schenectady-Troy, NY	NY
Conservation	0	5000	5000	New York-Northern New Jersey-Long Island, NY-NJ-PA	NY
HVAC and Building Control Systems	0	1200	1200	Syracuse, NY	NY
Public Mass Transit	439	4390	3951	New York-Northern New Jersey-Long Island, NY-NJ-PA	NY
Public Mass Transit	500	6030	5530	New York-Northern New Jersey-Long Island, NY-NJ-PA	NY
Public Mass Transit	1000	4750	3750	New York-Northern New Jersey-Long Island, NY-NJ-PA	NY
Public Mass Transit	1300	130	-1170	Buffalo-Niagara Falls, NY	NY
Public Mass Transit	1300	200	-1100	Buffalo-Niagara Falls, NY	NY
Public Mass Transit	2200	300	-1900	New York-Northern New Jersey-Long Island, NY-NJ-PA	NY
Recycled-Content Products	0	1700	1700	New York-Northern New Jersey-Long Island, NY-NJ-PA	NY
Recycled-Content Products	1500	200	-1300	Ogdensburg-Massena, NY Micropolitan Statistical area	NY
Recycled-Content Products	1700	470	-1230	Jamestown-Dunkirk-Fredonia, NY Micropolitan Statistical area	NY
Regulation and Compliance	0	1700	1700	Albany-Schenectady-Troy, NY	NY
Regulation and Compliance	0	3000	3000	Albany-Schenectady-Troy, NY	NY
Regulation and Compliance	0	6000	6000	Olean, NY Micropolitan Statistical area	NY
Solar Thermal	0	1782	1782	Ogdensburg-Massena, NY Micropolitan Statistical area	NY
Waste Management and Treatment	0	1000	1000	New York-Northern New Jersey-Long Island, NY-NJ-PA	NY
Waste Management and Treatment	1200	34	-1166	Syracuse, NY	NY
Wind	0	5000	5000	Albany-Schenectady-Troy, NY	NY
Appliances	2000	100	-1900	Findlay, OH Micropolitan Statistical area	OH
Appliances	2500	250	-2250	Marion, OH Micropolitan Statistical area	OH
Appliances	3800	300	-3500	Fremont, OH Micropolitan Statistical area	OH
Electric Vehicle Technologies	4000	130	-3870	Springfield, OH	OH
Public Mass Transit	1	2200	2199	Cleveland-Elyria-Mentor, OH	OH
Recycled-Content Products	2500	1200	-1300	Cleveland-Elyria-Mentor, OH	OH
Regulation and Compliance	15	2800	2785	Toledo, OH	OH
Smart Grid	0	1200	1200	Cleveland-Elyria-Mentor, OH	OH
Waste Management and Treatment	15	2521	2506	Canton-Massillon, OH	OH
Waste Management and Treatment	1300	3000	1700	Tulsa, OK	OK
Sustainable Forestry Products	1122	11	-1111	Portland-Vancouver-Hillsboro, OR-WA	OR
Sustainable Forestry Products	1829	150	-1679	Roseburg, OR Micropolitan Statistical area	OR
Conservation	0	1000	1000	Harrisburg-Carlisle, PA	PA
Green Consumer Products	1350	100	-1250	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	PA

Regulation and Compliance	0	1000	1000	Harrisburg-Carlisle, PA	PA
Waste Management and Treatment	4000	200	-3800	Philadelphia-Camden-Wilmington, PA-NJ-DE-MD	PA
Regulation and Compliance	1385	72	-1313	Providence-New Bedford-Fall River, RI-MA	RI
Remediation	5700	2300	-3400	Augusta-Richmond County, GA-SC	SC
Green Chemical Products	10000	7000	-3000	Kingsport-Bristol-Bristol, TN-VA	TN
HVAC and Building Control Systems	1600	3400	1800	Memphis, TN-MS-AR	TN
HVAC and Building Control Systems	1780	220	-1560	Clarksville, TN-KY	TN
Professional Energy Services	0	4000	4000	Knoxville, TN	TN
Professional Energy Services	3	4000	3997	Knoxville, TN	TN
Regulation and Compliance	75	5000	4925	Nashville-Davidson--Murfreesboro--Franklin, TN	TN
Green Building Materials	1205	17	-1188	Lufkin, TX Micropolitan Statistical area	TX
HVAC and Building Control Systems	1200	120	-1080	Tyler, TX	TX
HVAC and Building Control Systems	1725	250	-1475	Houston-Sugar Land-Baytown, TX	TX
HVAC and Building Control Systems	2000	40	-1960	Tyler, TX	TX
Professional Energy Services	1300	82	-1218	Houston-Sugar Land-Baytown, TX	TX
Professional Environmental Services	120	4000	3880	Houston-Sugar Land-Baytown, TX	TX
Public Mass Transit	0	1000	1000	Dallas-Fort Worth-Arlington, TX	TX
Recycled-Content Products	1500	300	-1200	Non-metropolitan area	TX
Recycling and Reuse	0	1000	1000	Houston-Sugar Land-Baytown, TX	TX
Waste Management and Treatment	2000	220	-1780	Dallas-Fort Worth-Arlington, TX	TX
Water Efficient Products	1500	280	-1220	Brownwood, TX Micropolitan Statistical area	TX
Organic Food and Farming	1600	190	-1410	Non-metropolitan area	UT
Conservation	0	5000	5000	Washington-Arlington-Alexandria, DC-VA-MD-WV	VA
Regulation and Compliance	0	1000	1000	Washington-Arlington-Alexandria, DC-VA-MD-WV	VA
Regulation and Compliance	1500	90	-1410	Washington-Arlington-Alexandria, DC-VA-MD-WV	VA
Regulation and Compliance	3000	4000	1000	Washington-Arlington-Alexandria, DC-VA-MD-WV	VA
Sustainable Forestry Products	1900	450	-1450	Non-metropolitan area	VA
Conservation	11	1100	1089	Olympia, WA	WA
Energy-saving Building Materials	0	1000	1000	Seattle-Tacoma-Bellevue, WA	WA
Hydropower	5023	3900	-1123	Moses Lake, WA Micropolitan Statistical area	WA
Public Mass Transit	85	1800	1715	Seattle-Tacoma-Bellevue, WA	WA
Sustainable Forestry Products	3000	300	-2700	Seattle-Tacoma-Bellevue, WA	WA
Conservation	50	2000	1950	Madison, WI	WI
Energy-saving Building Materials	0	1200	1200	Wausau, WI	WI
Energy-saving Building Materials	1300	220	-1080	Non-metropolitan area	WI
Green Chemical Products	3300	100	-3200	Racine, WI	WI
HVAC and Building Control Systems	100	1282	1182	Wausau, WI	WI
Water Efficient Products	7500	10	-7490	Sheboygan, WI	WI