

25% Renewable Energy for the United States by 2025: *State Level* Agricultural and Economic Impact Tables

The University of Tennessee

Agricultural Economics



by

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The findings and views expressed in this study are those of the authors and may not represent those of the Department of Agricultural Economics.

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Executive Summary

25% Renewable Energy for the United States by 2025: State Agricultural and Economic Impact Tables

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This document is an extension of the November 2006, national report. Included in this report is information on each of the 48 contiguous states and provides potential state level projections that may occur as a result of meeting the 25x'25 vision.

The November 2006, study was undertaken to determine whether the nation's farms, forests and ranches could provide 25 percent of U.S. total energy needs while continuing to produce safe, abundant and affordable food, feed and fiber. The 2006 report provided projections that the 25X'25 vision can be accomplished and the impacts that are likely to occur if such a goal is attained. The analysis was commissioned by the 25x'25 Working Group and conducted by a team of professors and analysts from The University of Tennessee (UT) during 2005-2007. The project was financed by the Energy Future Coalition and The Energy Foundation along with the 25X'25 Working Group. The final report for this project entitled 25% Renewable Energy for the United States By 2025: Agricultural and Economic Impact (English, et al., 2006) along with this report is available on the internet at BEAG.ag.utk.edu or at 25x25.org. Some conclusions from the national analysis are:

- Reaching the 25x'25 "goal would have an extremely favorable impact on rural America and the nation as a whole. Including multiplier effects through the economy, the projected annual impact on the nation from producing and converting feedstocks into energy would be in excess of \$700 billion in economic activity and 5.1 million jobs in 2025, most of that in rural areas". The top fifteen states with economies poised to gain from the development of a renewable energy sector include (in billion dollars/year): Illinois (\$40.1), Iowa (\$35.9), Missouri (\$31.3), Nebraska (\$28.3), Texas (\$22.8), Minnesota (\$22.7), Kansas (\$21.8), Indiana (\$18.9), Kentucky (\$17.8), Arkansas (\$16.0), Oklahoma (\$13.6), Tennessee (\$13.6), Ohio (\$12.4), Mississippi (\$11.5), and North Dakota (\$11.1).
- Total addition to net farm income could reach \$180 billion, as the market rewards growers for producing alternative energy and enhancing our national security. In 2025 alone, net farm income would increase by \$37 billion compared with USDA baseline projections. From a state perspective, Iowa could add \$3.3 billion per year. Other states in the top fifteen include: Illinois (\$3.2), Missouri (\$2.9), Nebraska (\$2.6), Kansas (\$2.1), Kentucky (\$1.9), Texas (\$1.9), Indiana (\$1.7), Minnesota (\$1.7), Arkansas (\$1.6), Oklahoma (\$1.3), Tennessee (\$1.3), Ohio (\$1.1), North Dakota (\$1.1), and Mississippi (\$1.0).
- Contributions from America's farms, forests and ranches could result in the production of 86 billion gallons of ethanol and 1.2 billion gallons of biodiesel, which has the potential to decrease gasoline consumption by 59 billion gallons (based on btu content) in 2025. The production of 15.45 quads of energy from biomass could replace the growing demand for gasoline, natural gas, diesel, and/or coal generated electricity. In addition, nearly 7 quads of energy are generated from solar and wind resources. These renewable energy resources could significantly decrease the

nation's reliance on foreign oil, fossil fuels, and enhance the national security of all Americans. Each state participates in the generation of energy with Texas leading the way, generating an additional 1.27 quads of energy from renewable sources. Other states that increase renewable energy by more than 0.5 quads include Nebraska, Kansas, Iowa, North Dakota, Minnesota, Illinois, Montana, South Dakota, Oklahoma, and Missouri.

- The higher feed crop prices do not result in a one-to-one increase in feed expenses for the livestock industry. Increases in ethanol and biodiesel production result in more distillers dried grains (DDG's) and soybean meal, which partially compensate for increased corn prices. Net returns for the beef sector are projected to increase by 2025 with net returns for pork and poultry declining. However, the integrated nature of both the pork and poultry industries will probably result in additional adjustment of animal inventories in a way to adjust to the new environment, and hence, increase net returns. In addition, the production of energy from manure and tallow could provide additional value for the industry. State analysis of the livestock sector was not conducted as livestock supply was modeled at a national level.

The purpose of this report is to disaggregate the information used in the analysis and provide data at a state level. Energy produced from hydro and geothermal sources are not included in the state analysis since projections for these sources were taken from other studies and considered only at the national level. This report contains projections in a table summary format for states at the census division level for the following:

- Change in net farm income;
- Biodiesel production for 2010, 2015, 2020, and 2025;
- Cellulosic and agricultural feedstock production for 2010, 2015, 2020, and 2025;
- Electricity production from renewable resources for 2010, 2015, 2020, and 2025;
- Ethanol production for 2010, 2015, 2020, and 2025; and
- Land use changes for corn, soybeans, hay, and dedicated energy crops for 2010, 2015, 2020, and 2025.

In addition, aggregations to the Census Division level are provided.

A quick examination of the data provides state level projections of the renewable energy provided, what feedstocks are utilized, and quantifies the economic impacts that will occur as a result of the growth in the renewable energy sector projected for a given state.

America's farms, forests and ranches can play a significant role in meeting the country's renewable energy needs. The impacts of meeting the 25x'25 goal will be spread throughout the nation. With increased investments in research on yields, strong contributions from the forestry sector, utilization of food processing wastes, and the establishment of a million acres of dedicated energy crops will all contribute toward meeting this goal. A combination of all of these new and existing sources can provide sufficient feedstock for the additional 15.45 quads of renewable energy from biomass.

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Methodology

This type of cutting-edge research on the economics of alternative energy required The University of Tennessee research team to combine two computer models in order to provide a comprehensive outlook for the agricultural sector and the national/state economic impacts. A computer simulation model, POLYSYS, and an input-output model, IMPLAN, were used for the study. POLYSYS has been used for a number of national agricultural studies that require projections on the impacts on agricultural acreages and production by U.S. Agricultural Statistical Districts as the result of federal farm policy changes. IMPLAN contains state level input-output models that provide an accounting of each state's economy.

In conducting the analysis, the energy goals needed to meet the 25x'25 vision were placed into the POLYSYS model and compared to a USDA extended baseline. Therefore, the analysis and information generated from the analysis are closely related to the 2006 USDA baseline, so the early years 2006-2010 could be underrepresented (production wise) both nationally and at the state level.

Changes in agricultural data such as net farm income; acres of corn, soybeans, dedicated energy crops, and hay; and cellulosic and agricultural feedstock production were generated in POLYSYS. POLYSYS generated supply information at the 305 region level. These data, acres, costs of production, and quantity produced, can be aggregated to the state level. However, commodity prices, government payments, livestock production, and other market driven information are generated at the national level. To develop state level information from these national data required the use of weights. Many of these weights are based on feedstock data developed by POLYSYS, which represent production data in each of the regions. Ethanol, biodiesel, and electricity production values are based on the location of the feedstocks they require. Therefore, the projected amount of energy production in a given state assumes the feedstocks in that state/region would be transformed in the same region. There was no assumed transportation of feedstock across state lines.

Many of the weights used to disaggregate from the national level data are displayed in Appendix Tables A.1 and A.2. Table 1 contains information on the variables reported at the state level, along with the methodology required to report information at the state level, and the tables reporting the information by year.

Net returns and land use changes are calculated at the region level by using the ratio of regional loan rate to national loan rate as the regional price weight. Then net returns at the regional level are summed to the state level and multiplied by an adjustment factor to determine realized net farm income. This adjustment factor is determined by the ratio of estimated realized net farm income divided by estimated national net returns. The resulting estimate is compared to the USDA *ext* Baseline. The land use data includes transformation of pasture in cropland and pastureland itself into the production of hay, energy crops and major crops (in this order).

Biodiesel comes from three sources in the model – soybeans, tallow, and yellow grease. Population estimates are used to estimate yellow grease quantities for tallow and yellow grease and

biodiesel from soybeans is disaggregated using soybean production weights developed from the POLYSYS solution.

The production of corn stover, wheat straw, dedicated energy crops, corn, and soybeans used in the production of renewable energy to meet ethanol and biodiesel demand were estimated at the regional level by POLYSYS and aggregated to the state level. The use of cellulose was broken into ethanol and electricity production based on the ratio established by POLYSYS at the national level. The amounts of manure, wood, wind, and solar used in the production of electricity were estimated using POLYSYS national projections and exogenous weights to develop state level information. The weights used in the analysis are presented in Appendix A.

Electricity production is disaggregated to the state level using weights developed for each feedstock. For instance, electricity generated from wood through cogeneration is estimated based on the value of the wood as estimated by POLYSYS and the regional quantities available at that price developed by Walsh (2002) and augmented with fuel reduction materials by the University of Tennessee research team.

Ethanol production is derived from several sources. Corn production at the state level for a given year, as estimated by the POLYSYS solution, is used to derive state weights. These state weights when multiplied by the national level of corn ethanol production level provide state level production estimates. For corn residues and dedicated energy crops, quantities produced for ethanol production at the 305 POLYSYS region level are aggregated to the state level. For wood, the national ethanol from wood production estimate for a given year is disaggregated to the state level using the same process as described in the above paragraph on distributing electricity production.

All of these state level projections were used in estimating state level economic impacts. The economic impacts were categorized at three levels: those impacts occurring as a result of changes in the agricultural sector activities, those impacts occurring as a result of converting the feedstocks to energy (Renewable Energy Sector Activities), and those impacts that occur among states in the nation (Interstate Commerce). With the exception of the non-designated impacts, these estimated economic impacts are estimated directly from IMPLAN's state models. The impacts are divided into two different economic estimates – agricultural and renewable energy sectors – at the state level for the years 2010, 2015, 2020, and 2025. The agricultural impacts reflect the impacts resulting from changes in land use, changes in production, changes in prices, changes in government payments, and the addition of dedicated energy crops. The renewable energy sector impacts reflect annual operating expenditures projected for each conversion facility.

The remainder of the document contains projection information by state and by U.S. Census Divisions (Figure 1). Tables 35 through 49 presented at the end of the document contain state level data aggregated by U.S. Census Divisions only.

Table 1. State Tables Created From Information Generated from POLYSYS or IMPLAN

Subject of Table	Weighting Scheme	Projected for the Year of:			
		2010	2015	2020	2025
Change in Net Farm Income	Estimated net returns aggregated from 305 POLYSYS regions and multiplied by net farm income to net returns adjustment factor	Table 2	Table 2	Table 2	Table 2
Biodiesel Production	Weighted to state level by soybean acres (POLYSYS) and tallow/yellow grease weights based on projected state population levels	Table 3	Table 4	Table 5	Table 6
Cellulosic and Agricultural Feedstocks	Corn Stover and Dedicated Energy Crops aggregated from the 305 POLYSYS regions and other cellulose disaggregated by weights in Appendix Table A.1.	Table 7	Table 8	Table 9	Table 10
Electricity Production	Based on feedstock weights developed from aggregated production levels estimated in POLYSYS and for wood and livestock based on weights reported in Table A.1	Table 11	Table 12	Table 13	Table 14
Ethanol Production	Based on feedstock weights developed from aggregated production levels estimated in POLYSYS	Table 15	Table 16	Table 17	Table 18
Acres Planted	Aggregated from 305 POLYSYS regions (includes year 2006)	Table 20	Table 21	Table 22	Table 23
Land Use Change	Aggregated from 305 POLYSYS regions	Table 24	Table 25	Table 26	Table 27
Estimated Agricultural Economic Impacts	Estimated using state IMPLAN models	Table 28	Table 29	Table 30	Table 31
Estimated Renewable Energy Economic Impacts	Estimated using state IMPLAN models	Table 32	Table 33	Table 34	Table 35
Estimated Agricultural and Renewable Energy Economic Impacts	Estimated using state and national IMPLAN models	Table 36	Table 37	Table 38	Table 39

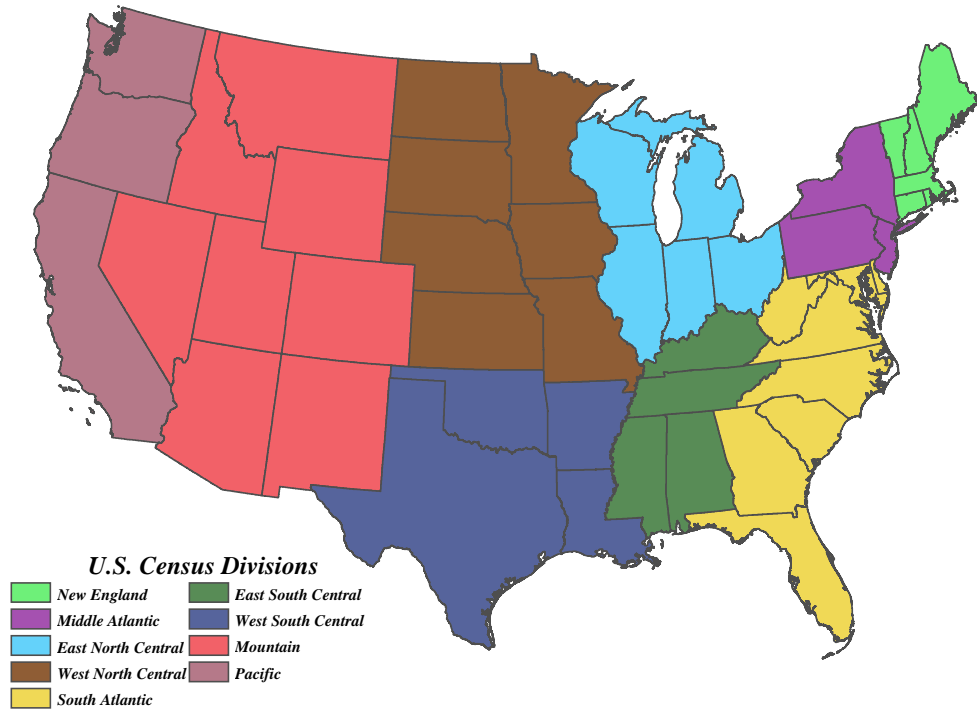


Figure 1. U.S. Census Divisions

Table 2. Change in Net Farm Income by State and Census Region.

Region/States		2010	2015	2020	2025
		Million \$			
East North Central	Total	\$141.71	\$305.12	\$2,934.55	\$7,277.72
Illinois		\$65.52	\$139.83	\$1,250.53	\$3,153.89
Indiana		\$30.64	\$58.94	\$720.55	\$1,732.54
Michigan		\$11.62	\$31.61	\$217.05	\$579.27
Ohio		\$17.83	\$42.34	\$518.43	\$1,142.48
Wisconsin		\$16.09	\$32.39	\$228.00	\$669.54
East South Central	Total	\$15.57	\$159.97	\$1,978.15	\$4,973.20
Alabama		\$0.84	\$35.97	\$385.98	\$718.02
Kentucky		\$8.68	\$36.50	\$602.78	\$1,930.65
Mississippi		\$2.36	\$35.46	\$443.60	\$1,043.83
Tennessee		\$3.69	\$52.04	\$545.79	\$1,280.70
Middle Atlantic	Total	\$8.36	\$22.41	\$279.08	\$796.62
New Jersey		\$0.50	\$0.99	\$13.24	\$50.44
New York		\$2.44	\$14.37	\$125.48	\$286.60
Pennsylvania		\$5.42	\$7.05	\$140.37	\$459.58
Mountain	Total	\$9.15	\$29.55	\$296.90	\$1,004.34
Arizona		(\$0.21)	\$3.66	\$14.58	\$30.77
Colorado		\$6.38	\$8.91	\$79.62	\$276.90
Idaho		\$1.31	\$15.82	\$96.66	\$204.93
Montana		\$0.65	(\$6.58)	\$62.84	\$324.64
Nevada		\$0.00	\$0.15	\$0.93	\$4.41
New Mexico		\$0.57	\$5.31	\$16.87	\$44.19
Utah		\$0.02	\$1.20	\$9.49	\$21.68
Wyoming		\$0.45	\$1.08	\$15.92	\$96.82
New England	Total	\$0.01	\$3.56	\$38.79	\$83.23
Connecticut		\$0.00	\$0.37	\$5.31	\$10.33
Maine		\$0.01	\$0.02	\$0.05	\$0.08
Massachusetts		\$0.00	\$0.51	\$7.28	\$32.34
New Hampshire		\$0.00	\$0.27	\$5.61	\$10.55
Rhode Island		\$0.00	\$0.06	\$0.61	\$0.84
Vermont		\$0.00	\$2.33	\$19.93	\$29.08
Pacific	Total	\$7.08	\$53.50	\$301.10	\$841.35
California		\$0.79	\$11.55	\$53.50	\$147.47
Oregon		\$1.75	\$14.02	\$88.61	\$307.71
Washington		\$4.54	\$27.93	\$158.99	\$386.17

Table 2. Change in Net Farm Income by State and Census Region (Cont.).

Region/States		2010	2015	2020	2025
		Million \$			
South Atlantic	<i>Total</i>	\$11.64	\$97.96	\$1,193.69	\$3,642.67
Delaware		\$0.85	\$1.89	\$19.96	\$42.66
Florida		\$0.33	\$5.96	\$56.56	\$136.55
Georgia		\$0.86	\$16.02	\$233.31	\$658.89
Maryland		\$2.64	\$5.37	\$58.22	\$155.98
North Carolina		\$3.76	\$26.59	\$275.40	\$771.43
South Carolina		\$1.31	\$12.53	\$125.31	\$284.23
Virginia		\$1.72	\$21.88	\$299.48	\$1,041.38
West Virginia		\$0.16	\$7.72	\$125.44	\$551.56
West North Central	<i>Total</i>	\$216.74	\$567.07	\$5,225.57	\$14,242.78
Iowa		\$85.31	\$181.17	\$1,261.48	\$3,229.74
Kansas		\$13.51	\$72.37	\$765.67	\$2,104.24
Minnesota		\$39.07	\$127.70	\$777.06	\$1,693.87
Missouri		\$14.42	\$100.02	\$913.02	\$2,888.50
Nebraska		\$47.30	\$58.34	\$663.70	\$2,604.92
North Dakota		\$3.40	\$13.03	\$527.52	\$1,069.77
South Dakota		\$13.73	\$14.45	\$317.12	\$651.74
West South Central	<i>Total</i>	\$15.74	\$294.85	\$2,716.16	\$5,395.17
Arkansas		\$2.19	\$47.74	\$639.52	\$1,634.60
Louisiana		\$2.06	\$29.47	\$275.73	\$507.79
Oklahoma		\$0.80	\$67.60	\$658.91	\$1,335.09
Texas		\$10.69	\$150.04	\$1,142.00	\$1,917.68
	<i>U.S. Total</i>	\$426.00	\$1,534.00	\$14,964.00	\$38,257.07

Note: Values of zero indicate a value less than \$10,000.

Table 3. Biodiesel Production by State and Census Region , 2010.

Region/States		Soybeans	Yellow Grease	Total
			Million Gallons	
East North Central	<i>Total</i>	32.5	0.5	33.0
Illinois		15.1	0.2	15.3
Indiana		7.8	0.0	7.8
Michigan		2.1	0.3	2.3
Ohio		6.2	0.0	6.2
Wisconsin		1.4	0.0	1.4
East South Central	<i>Total</i>	5.4	0.1	5.6
Alabama		0.3	0.1	0.4
Kentucky		1.7	0.0	1.7
Mississippi		1.9	0.0	1.9
Tennessee		1.5	0.0	1.5
Middle Atlantic	<i>Total</i>	0.5	0.1	0.6
New Jersey		0.1	0.0	0.1
New York		0.0	0.0	0.0
Pennsylvania		0.4	0.1	0.4
Mountain	<i>Total</i>	0.0	22.4	22.4
Arizona		0.0	0.1	0.1
Colorado		0.0	12.8	12.8
Idaho		0.0	5.0	5.0
Montana		0.0	1.1	1.1
Nevada		0.0	0.4	0.4
New Mexico		0.0	1.6	1.6
Utah		0.0	0.5	0.5
Wyoming		0.0	1.0	1.0
New England	<i>Total</i>	0.0	0.0	0.0
Connecticut		0.0	0.0	0.0
Maine		0.0	0.0	0.0
Massachusetts		0.0	0.0	0.0
New Hampshire		0.0	0.0	0.0
Rhode Island		0.0	0.0	0.0
Vermont		0.0	0.0	0.0
Pacific	<i>Total</i>	0.0	11.3	11.3
California		0.0	7.0	7.0
Oregon		0.0	1.1	1.1
Washington		0.0	3.1	3.1

Table 3. Biodiesel Production, 2010 (Cont.)

Region/States		Soybeans	Yellow Grease	Total
		Million Gallons		
South Atlantic	<i>Total</i>	3.3	0.7	3.9
Delaware		0.2	0.0	0.2
Florida		0.0	0.6	0.6
Georgia		0.4	0.0	0.4
Maryland		0.6	0.0	0.6
North Carolina		1.1	0.0	1.1
South Carolina		0.5	0.0	0.5
Virginia		0.5	0.0	0.5
West Virginia		0.0	0.0	0.0
West North Central	<i>Total</i>	42.5	51.4	93.9
Iowa		16.2	1.6	17.8
Kansas		2.6	26.5	29.1
Minnesota		9.0	0.2	9.2
Missouri		5.7	0.0	5.7
Nebraska		4.8	21.4	26.2
North Dakota		0.9	0.1	1.0
South Dakota		3.4	1.7	5.0
West South Central	<i>Total</i>	5.8	43.5	49.3
Arkansas		4.0	2.1	6.1
Louisiana		1.3	0.0	1.3
Oklahoma		0.3	5.6	5.9
Texas		0.3	35.8	36.0
	<i>U.S. Total</i>	90.0	130.0	220.0

Note: Values of zero indicate a value less than 0.1.

Table 4. Biodiesel Production by State and Census Region, 2015.

Region/States		Soybeans	Yellow Grease	Total
		Million Gallons		
East North Central	<i>Total</i>	64.8	1.0	65.9
Illinois		30.4	0.5	30.9
Indiana		15.4	0.0	15.4
Michigan		3.9	0.5	4.5
Ohio		12.2	0.0	12.2
Wisconsin		2.9	0.0	2.9
East South Central	<i>Total</i>	10.2	0.2	10.4
Alabama		0.7	0.1	0.8
Kentucky		3.2	0.0	3.2
Mississippi		3.4	0.1	3.5
Tennessee		2.9	0.0	2.9
Middle Atlantic	<i>Total</i>	1.0	0.2	1.3
New Jersey		0.3	0.0	0.3
New York		0.0	0.1	0.1
Pennsylvania		0.7	0.1	0.9
Mountain	<i>Total</i>	0.0	46.6	46.6
Arizona		0.0	0.3	0.3
Colorado		0.0	26.5	26.5
Idaho		0.0	10.3	10.3
Montana		0.0	2.3	2.3
Nevada		0.0	0.8	0.8
New Mexico		0.0	3.4	3.4
Utah		0.0	1.0	1.0
Wyoming		0.0	2.1	2.1
New England	<i>Total</i>	0.0	0.0	0.0
Connecticut		0.0	0.0	0.0
Maine		0.0	0.0	0.0
Massachusetts		0.0	0.0	0.0
New Hampshire		0.0	0.0	0.0
Rhode Island		0.0	0.0	0.0
Vermont		0.0	0.0	0.0
Pacific	<i>Total</i>	0.0	23.4	23.4
California		0.0	14.6	14.6
Oregon		0.0	2.3	2.3
Washington		0.0	6.5	6.5

Table 4. Biodiesel Production, 2015 (Cont.)

Region/States		Soybeans	Yellow Grease	Total
		Million Gallons		
South Atlantic	<i>Total</i>	5.7	1.4	7.1
Delaware		0.4	0.0	0.4
Florida		0.1	1.3	1.3
Georgia		0.6	0.1	0.7
Maryland		1.0	0.0	1.0
North Carolina		1.9	0.0	1.9
South Carolina		0.9	0.0	0.9
Virginia		0.9	0.0	0.9
West Virginia		0.0	0.0	0.0
West North Central	<i>Total</i>	86.9	106.8	193.7
Iowa		33.4	3.3	36.8
Kansas		5.4	55.0	60.4
Minnesota		17.7	0.4	18.1
Missouri		11.8	0.0	11.8
Nebraska		9.8	44.4	54.2
North Dakota		1.9	0.2	2.1
South Dakota		6.9	3.5	10.4
West South Central	<i>Total</i>	11.4	90.3	101.7
Arkansas		7.4	4.3	11.7
Louisiana		2.4	0.0	2.5
Oklahoma		0.6	11.7	12.4
Texas		0.9	74.3	75.1
	<i>U.S. Total</i>	180.0	270.0	450.0

Note: Values of zero indicate a value less than 0.1.

Table 5. Biodiesel Production by State and Census Region, 2020.

Region/States		Soybeans	Yellow Grease	Total
			Million Gallons	
East North Central	<i>Total</i>	103.1	1.6	104.7
Illinois		49.1	0.7	49.8
Indiana		23.1	0.0	23.1
Michigan		6.5	0.9	7.3
Ohio		19.3	0.0	19.3
Wisconsin		5.1	0.0	5.1
East South Central	<i>Total</i>	14.8	0.3	15.1
Alabama		0.9	0.2	1.0
Kentucky		4.9	0.0	4.9
Mississippi		4.9	0.2	5.1
Tennessee		4.2	0.0	4.2
Middle Atlantic	<i>Total</i>	1.5	0.3	1.8
New Jersey		0.4	0.0	0.4
New York		0.0	0.2	0.2
Pennsylvania		1.1	0.2	1.3
Mountain	<i>Total</i>	0.0	72.5	72.5
Arizona		0.0	0.5	0.5
Colorado		0.0	41.2	41.2
Idaho		0.0	16.0	16.0
Montana		0.0	3.6	3.6
Nevada		0.0	1.3	1.3
New Mexico		0.0	5.2	5.2
Utah		0.0	1.5	1.5
Wyoming		0.0	3.2	3.2
New England	<i>Total</i>	0.0	0.0	0.0
Connecticut		0.0	0.0	0.0
Maine		0.0	0.0	0.0
Massachusetts		0.0	0.0	0.0
New Hampshire		0.0	0.0	0.0
Rhode Island		0.0	0.0	0.0
Vermont		0.0	0.0	0.0
Pacific	<i>Total</i>	0.0	36.4	36.4
California		0.0	22.7	22.7
Oregon		0.0	3.6	3.6
Washington		0.0	10.1	10.1

Table 5. Biodiesel Production, 2020 (Cont.)

Region/States		Soybeans	Yellow Grease	Total
		Million Gallons		
South Atlantic	<i>Total</i>	10.1	2.1	12.2
Delaware		0.7	0.0	0.7
Florida		0.1	2.0	2.1
Georgia		1.0	0.2	1.1
Maryland		1.7	0.0	1.7
North Carolina		3.4	0.0	3.4
South Carolina		1.6	0.0	1.6
Virginia		1.6	0.0	1.6
West Virginia		0.0	0.0	0.0
West North Central	<i>Total</i>	151.7	166.2	317.9
Iowa		58.1	5.2	63.3
Kansas		8.2	85.6	93.8
Minnesota		34.4	0.7	35.1
Missouri		17.0	0.0	17.0
Nebraska		19.5	69.1	88.6
North Dakota		3.1	0.3	3.3
South Dakota		11.4	5.5	16.9
West South Central	<i>Total</i>	18.8	140.5	159.3
Arkansas		13.4	6.7	20.1
Louisiana		3.3	0.0	3.3
Oklahoma		0.7	18.2	18.9
Texas		1.4	115.5	117.0
	<i>U.S. Total</i>	300.0	420.0	720.0

Note: Values of zero indicate a value less than 0.1.

Table 6. Biodiesel Production by State and Census Region, 2025.

Region/States		Soybeans	Yellow Grease	Total
		Million Gallons		
East North Central	<i>Total</i>	145.3	2.2	147.5
Illinois		71.3	1.0	72.3
Indiana		32.5	0.0	32.5
Michigan		8.3	1.2	9.5
Ohio		28.0	0.0	28.0
Wisconsin		5.3	0.0	5.3
East South Central	<i>Total</i>	20.4	0.5	20.8
Alabama		1.1	0.3	1.4
Kentucky		6.8	0.0	6.8
Mississippi		6.6	0.2	6.9
Tennessee		5.8	0.0	5.8
Middle Atlantic	<i>Total</i>	2.2	0.4	2.6
New Jersey		0.5	0.0	0.5
New York		0.0	0.2	0.2
Pennsylvania		1.6	0.2	1.9
Mountain	<i>Total</i>	0.0	100.2	100.2
Arizona		0.0	0.6	0.6
Colorado		0.0	56.9	56.9
Idaho		0.0	22.2	22.2
Montana		0.0	4.9	4.9
Nevada		0.0	1.8	1.8
New Mexico		0.0	7.2	7.2
Utah		0.0	2.1	2.1
Wyoming		0.0	4.5	4.5
New England	<i>Total</i>	0.0	0.0	0.0
Connecticut		0.0	0.0	0.0
Maine		0.0	0.0	0.0
Massachusetts		0.0	0.0	0.0
New Hampshire		0.0	0.0	0.0
Rhode Island		0.0	0.0	0.0
Vermont		0.0	0.0	0.0
Pacific	<i>Total</i>	0.0	50.2	50.2
California		0.0	31.3	31.3
Oregon		0.0	4.9	4.9
Washington		0.0	14.0	14.0

Table 6. Biodiesel Production, 2025 (Cont.).

Region/States		Soybeans	Yellow Grease	Total
		Million Gallons		
South Atlantic	<i>Total</i>	14.3	3.0	17.3
Delaware		1.0	0.0	1.0
Florida		0.1	2.7	2.9
Georgia		1.5	0.2	1.7
Maryland		2.4	0.0	2.4
North Carolina		4.6	0.0	4.6
South Carolina		2.3	0.0	2.3
Virginia		2.3	0.0	2.3
West Virginia		0.0	0.0	0.0
West North Central	<i>Total</i>	200.5	229.5	429.9
Iowa		74.7	7.1	81.9
Kansas		11.7	118.2	129.9
Minnesota		45.8	0.9	46.7
Missouri		24.3	0.0	24.3
Nebraska		29.1	95.4	124.5
North Dakota		3.1	0.4	3.4
South Dakota		11.8	7.5	19.3
West South Central	<i>Total</i>	27.4	194.1	221.4
Arkansas		19.8	9.3	29.1
Louisiana		4.4	0.1	4.4
Oklahoma		1.1	25.2	26.3
Texas		2.1	159.5	161.6
	<i>U.S. Total</i>	410.0	580.0	990.0

Note: Values of zero indicate a value less than 0.1.

Table 7. Cellulosic and Agricultural Feedstocks by State and Census Region, 2010.

Region/States		Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans
		Million Dry Tons					Million Tons	
East North Central	<i>Total</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>3.7</i>	<i>0.7</i>
Illinois		0.0	0.0	0.0	0.0	0.0	1.7	0.3
Indiana		0.0	0.0	0.0	0.0	0.0	0.8	0.2
Michigan		0.0	0.0	0.0	0.0	0.0	0.3	0.0
Ohio		0.0	0.0	0.0	0.0	0.0	0.4	0.1
Wisconsin		0.0	0.0	0.0	0.0	0.0	0.5	0.0
East South Central	<i>Total</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.4</i>	<i>0.1</i>
Alabama		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Kentucky		0.0	0.0	0.0	0.0	0.0	0.2	0.0
Mississippi		0.0	0.0	0.0	0.0	0.0	0.1	0.0
Tennessee		0.0	0.0	0.0	0.0	0.0	0.1	0.0
Middle Atlantic	<i>Total</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.3</i>	<i>0.0</i>
New Jersey		0.0	0.0	0.0	0.0	0.0	0.0	0.0
New York		0.0	0.0	0.0	0.0	0.0	0.1	0.0
Pennsylvania		0.0	0.0	0.0	0.0	0.0	0.1	0.0
Mountain	<i>Total</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.2</i>	<i>0.0</i>
Arizona		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Colorado		0.0	0.0	0.0	0.0	0.0	0.2	0.0
Idaho		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Montana		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nevada		0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Mexico		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Utah		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wyoming		0.0	0.0	0.0	0.0	0.0	0.0	0.0
New England	<i>Total</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>
Connecticut		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Maine		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Massachusetts		0.0	0.0	0.0	0.0	0.0	0.0	0.0
New Hampshire		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rhode Island		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Vermont		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pacific	<i>Total</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>0.1</i>	<i>0.0</i>
California		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Oregon		0.0	0.0	0.0	0.0	0.0	0.0	0.0
Washington		0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 7. Cellulosic and Agricultural Feedstocks, 2010 (Cont.).

Region/States		Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans
		Million Dry Tons				Million Tons		
South Atlantic	Total	0.0	0.0	0.0	0.0	0.0	0.4	0.1
	Delaware	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Florida	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Georgia	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	Maryland	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	North Carolina	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	South Carolina	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Virginia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	West Virginia	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West North Central	Total	0.0	0.0	0.0	0.0	0.0	5.7	0.9
	Iowa	0.0	0.0	0.0	0.0	0.0	2.0	0.3
	Kansas	0.0	0.0	0.0	0.0	0.0	0.4	0.1
	Minnesota	0.0	0.0	0.0	0.0	0.0	1.1	0.2
	Missouri	0.0	0.0	0.0	0.0	0.0	0.3	0.1
	Nebraska	0.0	0.0	0.0	0.0	0.0	1.4	0.1
	North Dakota	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	South Dakota	0.0	0.0	0.0	0.0	0.0	0.4	0.1
West South Central	Total	0.0	0.0	0.0	0.0	0.0	0.4	0.1
	Arkansas	0.0	0.0	0.0	0.0	0.0	0.0	0.1
	Louisiana	0.0	0.0	0.0	0.0	0.0	0.1	0.0
	Oklahoma	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Texas	0.0	0.0	0.0	0.0	0.0	0.3	0.0
U.S. Total		0.0	0.0	0.0	0.0	0.0	11.1	1.9

Note: Values of zero indicate a value less than 0.1.

*All Sources

Table 8. Cellulosic and Agricultural Feedstocks by State and Census Region, 2015.

Region/States		Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans
		Million Dry Tons					Million Tons	
East North Central	<i>Total</i>	3.2	58.6	5.7	15.8	83.2	5.5	1.4
Illinois		0.5	28.4	1.0	1.4	31.4	2.5	0.7
Indiana		0.9	12.9	0.9	2.3	16.9	1.2	0.3
Michigan		0.1	6.1	1.3	4.2	11.6	0.5	0.1
Ohio		1.2	5.4	2.2	2.6	11.4	0.6	0.3
Wisconsin		0.5	5.7	0.3	5.4	11.9	0.7	0.1
East South Central	<i>Total</i>	16.0	0.5	0.5	37.7	54.7	0.5	0.2
Alabama		3.5	0.0	0.0	13.5	17.0	0.0	0.0
Kentucky		3.5	0.3	0.2	5.8	9.8	0.3	0.1
Mississippi		4.1	0.1	0.1	13.6	17.9	0.1	0.1
Tennessee		5.0	0.2	0.1	4.8	10.1	0.1	0.1
Middle Atlantic	<i>Total</i>	1.4	1.0	0.4	7.4	10.2	0.4	0.0
New Jersey		0.1	0.0	0.0	0.1	0.2	0.0	0.0
New York		1.1	0.9	0.2	3.2	5.4	0.1	0.0
Pennsylvania		0.2	0.1	0.2	4.2	4.7	0.2	0.0
Mountain	<i>Total</i>	0.1	0.2	3.3	7.2	10.7	0.3	0.0
Arizona		0.0	0.2	0.5	0.2	0.8	0.0	0.0
Colorado		0.0	0.0	0.1	0.1	0.1	0.2	0.0
Idaho		0.0	0.0	2.5	4.4	6.9	0.0	0.0
Montana		0.0	0.0	0.1	1.6	1.7	0.0	0.0
Nevada		0.0	0.0	0.0	0.0	0.1	0.0	0.0
New Mexico		0.0	0.0	0.0	0.2	0.3	0.0	0.0
Utah		0.0	0.0	0.2	0.2	0.4	0.0	0.0
Wyoming		0.1	0.0	0.0	0.4	0.5	0.0	0.0
New England	<i>Total</i>	0.3	0.0	0.0	7.5	7.8	0.0	0.0
Connecticut		0.0	0.0	0.0	0.3	0.3	0.0	0.0
Maine		0.0	0.0	0.0	3.6	3.6	0.0	0.0
Massachusetts		0.1	0.0	0.0	0.3	0.3	0.0	0.0
New Hampshire		0.0	0.0	0.0	2.6	2.6	0.0	0.0
Rhode Island		0.0	0.0	0.0	0.1	0.1	0.0	0.0
Vermont		0.2	0.0	0.0	0.7	0.9	0.0	0.0
Pacific	<i>Total</i>	0.0	1.4	6.0	25.5	32.9	0.1	0.0
California		0.0	1.0	1.0	6.3	8.2	0.1	0.0
Oregon		0.0	0.1	1.5	8.7	10.2	0.0	0.0
Washington		0.0	0.3	3.6	10.5	14.4	0.0	0.0

Table 8. Cellulosic and Agricultural Feedstocks, 2015 (Cont.).

Region/States		Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans
		Million Dry Tons				Million Tons		
South Atlantic	Total	7.6	4.8	2.3	46.0	60.7	0.5	0.1
	Delaware	0.0	0.5	0.2	0.1	0.8	0.0	0.0
	Florida	0.5	0.1	0.0	5.3	5.9	0.0	0.0
	Georgia	2.3	0.5	0.1	14.8	17.6	0.1	0.0
	Maryland	0.1	0.8	0.5	0.5	1.8	0.1	0.0
	North Carolina	1.5	2.0	0.8	9.2	13.5	0.2	0.0
	South Carolina	1.2	0.5	0.2	6.2	8.1	0.1	0.0
	Virginia	1.7	0.4	0.5	6.8	9.4	0.1	0.0
	West Virginia	0.3	0.0	0.0	3.1	3.5	0.0	0.0
West North Central	Total	16.7	70.1	8.7	12.1	107.6	8.3	1.8
	Iowa	0.4	32.9	0.0	0.8	34.1	3.0	0.7
	Kansas	4.5	1.9	1.4	0.2	7.9	0.6	0.1
	Minnesota	0.8	22.7	3.7	5.5	32.7	1.5	0.4
	Missouri	5.8	2.1	0.7	5.1	13.7	0.5	0.2
	Nebraska	0.5	10.4	1.1	0.2	12.2	2.0	0.2
	North Dakota	3.4	0.0	1.4	0.0	4.9	0.1	0.0
	South Dakota	1.3	0.2	0.4	0.2	2.1	0.6	0.1
West South Central	Total	21.6	2.4	1.5	28.9	54.3	0.6	0.3
	Arkansas	5.3	0.3	1.4	10.0	17.1	0.0	0.2
	Louisiana	2.9	0.3	0.0	11.2	14.4	0.1	0.1
	Oklahoma	5.9	0.2	0.0	2.2	8.4	0.0	0.0
	Texas	7.4	1.5	0.0	5.4	14.4	0.4	0.0
U.S. Total		66.8	138.9	28.4	188.0	422.2	16.2	3.9

Note: Values of zero indicate a value less than 0.1.

*All Sources

Table 9. Cellulosic and Agricultural Feedstocks by State and Census Region, 2020.

Region/States		Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans
		Million Dry Tons					Million Tons	
East North Central	Total	49.8	72.5	5.9	13.1	141.3	6.9	2.2
Illinois		18.2	34.1	1.2	1.2	54.7	3.1	1.0
Indiana		16.8	15.4	0.9	1.9	35.0	1.5	0.5
Michigan		1.2	7.1	1.5	3.4	13.3	0.6	0.1
Ohio		12.1	7.7	1.9	2.1	23.9	0.8	0.4
Wisconsin		1.5	8.2	0.3	4.4	14.4	0.9	0.1
East South Central	Total	83.2	1.2	0.7	32.6	117.7	0.7	0.4
Alabama		16.0	0.0	0.0	11.8	27.9	0.0	0.0
Kentucky		25.8	0.6	0.4	5.0	31.9	0.3	0.1
Mississippi		18.7	0.2	0.1	11.6	30.7	0.1	0.1
Tennessee		22.6	0.4	0.2	4.1	27.3	0.2	0.1
Middle Atlantic	Total	8.9	2.8	0.6	7.8	20.1	0.5	0.0
New Jersey		0.4	0.1	0.0	0.1	0.6	0.0	0.0
New York		4.0	1.4	0.3	3.2	8.9	0.2	0.0
Pennsylvania		4.5	1.4	0.3	4.5	10.7	0.3	0.0
Mountain	Total	0.4	2.0	10.3	5.3	18.1	0.4	0.0
Arizona		0.0	0.2	0.5	0.2	0.8	0.0	0.0
Colorado		0.0	1.3	2.5	0.1	3.9	0.3	0.0
Idaho		0.0	0.1	3.6	3.1	6.8	0.0	0.0
Montana		0.0	0.0	3.3	1.2	4.5	0.0	0.0
Nevada		0.0	0.0	0.1	0.0	0.1	0.0	0.0
New Mexico		0.0	0.3	0.0	0.2	0.5	0.0	0.0
Utah		0.0	0.0	0.3	0.2	0.5	0.0	0.0
Wyoming		0.4	0.1	0.2	0.4	1.0	0.0	0.0
New England	Total	1.7	0.0	0.0	7.1	8.8	0.0	0.0
Connecticut		0.2	0.0	0.0	0.2	0.5	0.0	0.0
Maine		0.0	0.0	0.0	3.3	3.3	0.0	0.0
Massachusetts		0.3	0.0	0.0	0.3	0.6	0.0	0.0
New Hampshire		0.3	0.0	0.0	2.6	2.8	0.0	0.0
Rhode Island		0.0	0.0	0.0	0.0	0.1	0.0	0.0
Vermont		0.8	0.0	0.0	0.6	1.5	0.0	0.0
Pacific	Total	0.0	1.9	8.3	22.7	33.0	0.1	0.0
California		0.0	1.1	1.0	5.3	7.4	0.1	0.0
Oregon		0.0	0.1	2.1	8.4	10.6	0.0	0.0
Washington		0.0	0.7	5.3	9.0	15.0	0.1	0.0

Table 9. Cellulosic and Agricultural Feedstocks, 2020 (Cont.).

Region/States		Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans
		Million Dry Tons				Million Tons		
South Atlantic	<i>Total</i>	45.8	5.8	2.3	44.7	98.5	0.7	0.2
Delaware		0.1	0.6	0.2	0.1	1.0	0.0	0.0
Florida		2.3	0.1	0.0	5.6	8.0	0.0	0.0
Georgia		10.9	0.7	0.2	13.6	25.4	0.1	0.0
Maryland		0.7	1.3	0.5	0.5	3.0	0.1	0.0
North Carolina		9.9	2.1	0.7	9.4	22.1	0.2	0.1
South Carolina		5.4	0.5	0.2	6.1	12.2	0.1	0.0
Virginia		11.7	0.6	0.4	6.3	18.9	0.1	0.0
West Virginia		4.8	0.0	0.0	3.0	7.9	0.0	0.0
West North Central	<i>Total</i>	97.1	97.3	19.4	10.3	224.1	10.5	2.9
Iowa		5.3	41.8	0.0	0.7	47.8	3.8	1.1
Kansas		23.6	4.9	4.3	0.2	33.1	0.8	0.2
Minnesota		2.2	24.7	4.3	4.7	35.9	1.9	0.6
Missouri		30.6	4.2	0.8	4.3	39.9	0.6	0.4
Nebraska		4.3	18.0	1.8	0.2	24.3	2.5	0.3
North Dakota		22.3	0.5	5.8	0.0	28.6	0.1	0.1
South Dakota		8.9	3.2	2.3	0.2	14.5	0.7	0.2
West South Central	<i>Total</i>	98.4	4.4	3.2	24.9	131.0	0.7	0.4
Arkansas		24.5	0.4	1.2	8.6	34.8	0.0	0.3
Louisiana		11.0	0.4	0.1	9.6	21.1	0.1	0.1
Oklahoma		25.8	0.4	1.1	1.9	29.2	0.1	0.0
Texas		37.1	3.1	0.9	4.8	46.0	0.5	0.0
<i>U.S. Total</i>		385.4	188.0	50.8	168.5	792.7	20.4	6.1

Note: Values of zero indicate a value less than 0.1.

*All Sources

Table 10. Cellulosic and Agricultural Feedstocks by State and Census Region, 2025.

Region/States		Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans
		Million Dry Tons				Million Tons		
East North Central	<i>Total</i>	92.6	77.1	6.0	12.9	188.6	16.6	3.0
Illinois		35.1	36.3	1.4	1.2	74.0	7.6	1.4
Indiana		29.2	14.9	0.9	1.9	46.9	3.2	0.7
Michigan		3.6	8.1	1.7	3.3	16.7	1.6	0.2
Ohio		20.8	7.2	1.7	2.1	31.8	1.7	0.6
Wisconsin		3.8	10.7	0.3	4.4	19.1	2.5	0.1
East South Central	<i>Total</i>	135.7	1.9	0.9	32.5	171.1	1.1	0.5
Alabama		19.8	0.1	0.0	11.9	31.8	0.1	0.0
Kentucky		52.2	1.0	0.5	4.9	58.6	0.5	0.2
Mississippi		28.2	0.3	0.1	11.7	40.3	0.2	0.2
Tennessee		35.5	0.5	0.3	4.0	40.3	0.3	0.1
Middle Atlantic	<i>Total</i>	15.5	3.7	0.7	8.3	28.1	1.1	0.0
New Jersey		1.0	0.1	0.0	0.1	1.3	0.1	0.0
New York		5.4	1.8	0.3	3.4	10.8	0.4	0.0
Pennsylvania		9.1	1.7	0.3	4.8	15.9	0.6	0.0
Mountain	<i>Total</i>	5.1	3.1	15.2	5.2	28.7	1.1	0.0
Arizona		0.0	0.2	0.6	0.2	1.0	0.0	0.0
Colorado		0.1	2.0	3.8	0.1	6.0	0.8	0.0
Idaho		0.0	0.1	4.8	3.0	8.0	0.0	0.0
Montana		3.5	0.1	5.2	1.1	10.0	0.0	0.0
Nevada		0.0	0.0	0.1	0.0	0.1	0.0	0.0
New Mexico		0.1	0.4	0.0	0.2	0.8	0.2	0.0
Utah		0.0	0.1	0.4	0.2	0.7	0.0	0.0
Wyoming		1.5	0.1	0.2	0.4	2.2	0.0	0.0
New England	<i>Total</i>	2.3	0.0	0.0	7.4	9.7	0.0	0.0
Connecticut		0.3	0.0	0.0	0.3	0.6	0.0	0.0
Maine		0.0	0.0	0.0	3.4	3.4	0.0	0.0
Massachusetts		0.9	0.0	0.0	0.3	1.1	0.0	0.0
New Hampshire		0.3	0.0	0.0	2.7	3.0	0.0	0.0
Rhode Island		0.0	0.0	0.0	0.0	0.1	0.0	0.0
Vermont		0.8	0.0	0.0	0.7	1.5	0.0	0.0
Pacific	<i>Total</i>	1.8	2.4	10.8	22.3	37.3	0.6	0.0
California		0.0	1.3	1.0	5.0	7.3	0.2	0.0
Oregon		1.8	0.2	2.8	8.4	13.2	0.1	0.0
Washington		0.1	0.9	7.0	8.9	16.9	0.3	0.0

Table 10. Cellulosic and Agricultural Feedstocks, 2025 (Cont.).

Region/States	Switch- grass	Stover	Straw	Wood*	Total Cellulosic	Corn	Soybeans	
	Million Dry Tons					Million Tons		
South Atlantic	Total	94.0	6.4	2.3	44.8	147.6	1.5	0.3
Delaware		0.1	0.7	0.2	0.1	1.0	0.1	0.0
Florida		3.7	0.1	0.0	5.6	9.4	0.0	0.0
Georgia		19.0	0.6	0.3	13.6	33.5	0.2	0.0
Maryland		1.4	1.6	0.6	0.5	4.1	0.4	0.1
North Carolina		18.9	2.3	0.6	9.4	31.1	0.5	0.1
South Carolina		7.8	0.5	0.2	6.1	14.7	0.1	0.0
Virginia		27.8	0.7	0.4	6.2	35.1	0.2	0.0
West Virginia		15.4	0.0	0.0	3.2	18.7	0.0	0.0
West North Central	Total	209.6	119.7	21.5	10.1	360.9	28.9	3.9
Iowa		21.0	47.9	0.0	0.7	69.6	10.2	1.5
Kansas		39.4	7.4	5.9	0.2	52.9	2.4	0.2
Minnesota		8.0	26.8	3.1	4.6	42.5	5.2	0.8
Missouri		67.8	6.2	1.0	4.2	79.2	1.9	0.5
Nebraska		26.3	25.5	2.1	0.2	54.1	7.0	0.4
North Dakota		31.3	0.9	7.1	0.0	39.3	0.4	0.1
South Dakota		15.8	5.0	2.2	0.2	23.3	1.8	0.3
West South Central	Total	137.2	6.3	4.4	25.0	173.0	2.1	0.5
Arkansas		42.1	0.4	1.3	8.6	52.4	0.1	0.4
Louisiana		13.3	0.5	0.1	9.7	23.6	0.2	0.1
Oklahoma		37.6	0.7	1.8	1.9	42.0	0.2	0.0
Texas		44.2	4.7	1.2	4.8	55.0	1.6	0.0
	U.S. Total	693.9	220.6	61.8	168.5	1,144.9	52.9	8.3

Note: Values of zero indicate a value less than 0.1.

*All Sources

Table 11. Electricity Production by State and Census Region, 2010.

Region/States		Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
East North Central	Total	0.00	0.00	3.68	0.00	0.00	0.00	3.68	2.44	0.59	6.71
Illinois		0.00	0.00	2.49	0.00	0.00	0.00	2.49	0.78	0.52	3.79
Indiana		0.00	0.00	0.40	0.00	0.00	0.00	0.40	0.72	0.07	1.20
Michigan		0.00	0.00	0.33	0.00	0.00	0.00	0.33	0.79	0.00	1.12
Ohio		0.00	0.00	0.18	0.00	0.00	0.00	0.18	0.08	0.00	0.25
Wisconsin		0.00	0.00	0.28	0.00	0.00	0.00	0.28	0.07	0.00	0.34
East South Central	Total	0.00	0.00	5.60	0.00	0.00	0.00	5.60	0.59	0.87	7.06
Alabama		0.00	0.00	3.16	0.00	0.00	0.00	3.16	0.00	0.32	3.48
Kentucky		0.00	0.00	0.87	0.00	0.00	0.00	0.87	0.01	0.02	0.89
Mississippi		0.00	0.00	1.09	0.00	0.00	0.00	1.09	0.57	0.43	2.09
Tennessee		0.00	0.00	0.49	0.00	0.00	0.00	0.49	0.02	0.10	0.61
Middle Atlantic	Total	0.00	0.00	1.61	0.00	0.00	0.00	1.61	5.41	1.09	8.11
New Jersey		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05
New York		0.00	0.00	1.09	0.00	0.00	0.00	1.09	4.91	1.09	7.08
Pennsylvania		0.00	0.00	0.52	0.00	0.00	0.00	0.52	0.45	0.00	0.97
Mountain	Total	0.00	0.00	9.70	0.00	0.00	0.00	9.70	41.12	4.49	55.31
Arizona		0.00	0.00	1.07	0.00	0.00	0.00	1.07	0.08	1.01	2.16
Colorado		0.00	0.00	5.50	0.00	0.00	0.00	5.50	4.60	0.98	11.08
Idaho		0.00	0.00	1.88	0.00	0.00	0.00	1.88	5.96	0.13	7.97
Montana		0.00	0.00	0.47	0.00	0.00	0.00	0.47	12.35	0.45	13.26
Nevada		0.00	0.00	0.03	0.00	0.00	0.00	0.03	10.46	0.19	10.69
New Mexico		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.01	0.16
Utah		0.00	0.00	0.32	0.00	0.00	0.00	0.32	0.21	0.81	1.34
Wyoming		0.00	0.00	0.43	0.00	0.00	0.00	0.43	7.30	0.92	8.65

Table 11. Electricity Production, 2010 (Cont.).

Region/States		Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
New England	<i>Total</i>	0.00	0.00	9.94	0.00	0.00	0.00	9.94	10.83	0.76	21.52
Connecticut		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.07
Maine		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.00	0.58
Massachusetts		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.00	0.35
New Hampshire		0.00	0.00	9.13	0.00	0.00	0.00	9.13	9.61	0.74	19.48
Rhode Island		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02
Vermont		0.00	0.00	0.81	0.00	0.00	0.00	0.81	0.20	0.02	1.03
Pacific	<i>Total</i>	0.00	0.00	7.88	0.00	0.00	0.00	7.88	1.52	1.86	11.26
California		0.00	0.00	5.65	0.00	0.00	0.00	5.65	0.70	1.39	7.73
Oregon		0.00	0.00	0.60	0.00	0.00	0.00	0.60	0.47	0.47	1.54
Washington		0.00	0.00	1.63	0.00	0.00	0.00	1.63	0.36	0.00	1.99
South Atlantic	<i>Total</i>	0.00	0.00	7.52	0.00	0.00	0.00	7.52	1.53	2.14	11.19
Delaware		0.00	0.00	0.74	0.00	0.00	0.00	0.74	0.05	0.00	0.79
Florida		0.00	0.00	0.74	0.00	0.00	0.00	0.74	0.00	0.46	1.20
Georgia		0.00	0.00	4.03	0.00	0.00	0.00	4.03	0.01	0.45	4.48
Maryland		0.00	0.00	0.84	0.00	0.00	0.00	0.84	0.06	0.00	0.91
North Carolina		0.00	0.00	0.17	0.00	0.00	0.00	0.17	0.54	1.05	1.76
South Carolina		0.00	0.00	0.59	0.00	0.00	0.00	0.59	0.01	0.19	0.79
Virginia		0.00	0.00	0.04	0.00	0.00	0.00	0.04	0.05	0.00	0.10
West Virginia		0.00	0.00	0.37	0.00	0.00	0.00	0.37	0.80	0.00	1.18
West North Central	<i>Total</i>	0.00	0.00	18.86	0.00	0.00	0.00	18.86	28.88	1.86	49.60
Iowa		0.00	0.00	0.33	0.00	0.00	0.00	0.33	0.00	0.00	0.34
Kansas		0.00	0.00	11.13	0.00	0.00	0.00	11.13	11.56	0.77	23.46
Minnesota		0.00	0.00	0.79	0.00	0.00	0.00	0.79	6.59	0.01	7.39
Missouri		0.00	0.00	2.32	0.00	0.00	0.00	2.32	0.00	0.29	2.61

Table 11. Electricity Production, 2010 (Cont.).

Region/States	Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total	
Billion kWh's											
Nebraska	0.00	0.00	3.19	0.00	0.00	0.00	3.19	0.08	0.21	3.48	
North Dakota	0.00	0.00	0.27	0.00	0.00	0.00	0.27	0.88	0.00	1.15	
South Dakota	0.00	0.00	0.83	0.00	0.00	0.00	0.83	9.77	0.57	11.17	
West South Central	<i>Total</i>	<i>0.00</i>	<i>0.00</i>	<i>24.20</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>24.20</i>	<i>20.94</i>	<i>3.46</i>	<i>48.60</i>
Arkansas	0.00	0.00	3.50	0.00	0.00	0.00	3.50	0.15	0.39	4.04	
Louisiana	0.00	0.00	0.66	0.00	0.00	0.00	0.66	0.00	0.23	0.89	
Oklahoma	0.00	0.00	3.28	0.00	0.00	0.00	3.28	7.80	0.63	11.72	
Texas	0.00	0.00	16.76	0.00	0.00	0.00	16.76	12.99	2.21	31.96	
<i>U.S. Total</i>		<i>0.00</i>	<i>0.00</i>	<i>89.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>89.00</i>	<i>113.26</i>	<i>17.10</i>	<i>219.36</i>

Note: Values of zero indicate a value less than 0.01.

Table 12. Electricity Production by State and Census Region, 2015.

Region/States		Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
East North Central	Total	18.96	5.23	3.76	9.67	0.79	2.66	41.07	5.97	1.16	48.20
Illinois		0.00	1.84	2.57	2.49	0.00	0.38	7.28	1.92	1.03	10.23
Indiana		13.50	0.78	0.41	0.90	0.17	0.73	16.49	1.77	0.13	18.39
Michigan		2.89	0.96	0.33	2.59	0.03	0.08	6.89	1.94	0.00	8.83
Ohio		2.57	1.64	0.18	1.64	0.46	1.04	7.53	0.19	0.00	7.71
Wisconsin		0.00	0.00	0.28	2.04	0.12	0.44	2.88	0.16	0.00	3.04
East South Central	Total	1.21	0.80	5.60	18.91	6.57	13.36	46.46	1.45	1.71	49.62
Alabama		0.00	0.01	3.16	8.75	1.28	2.89	16.08	0.00	0.64	16.72
Kentucky		0.14	0.19	0.87	3.81	1.29	2.91	9.20	0.01	0.03	9.25
Mississippi		0.99	0.51	1.09	3.22	2.15	3.42	11.39	1.40	0.85	13.63
Tennessee		0.08	0.10	0.49	3.14	1.84	4.14	9.79	0.04	0.19	10.02
Middle Atlantic	Total	0.06	0.13	1.64	4.51	0.08	1.14	7.56	13.24	2.14	22.95
New Jersey		0.00	0.00	0.00	1.64	0.01	0.06	1.71	0.13	0.00	1.83
New York		0.00	0.01	1.12	0.16	0.00	0.92	2.20	12.01	2.14	16.36
Pennsylvania		0.06	0.12	0.52	2.71	0.08	0.17	3.65	1.11	0.00	4.76
Mountain	Total	15.73	2.41	10.00	8.48	3.45	0.05	40.12	100.66	8.86	149.64
Arizona		0.14	1.08	1.10	6.52	1.98	0.00	10.81	0.20	2.00	13.01
Colorado		0.00	0.04	5.70	0.05	0.00	0.00	5.79	11.26	1.94	18.99
Idaho		15.59	0.01	1.90	0.49	0.15	0.00	18.15	14.59	0.25	32.99
Montana		0.00	0.09	0.49	0.90	0.00	0.00	1.48	30.22	0.88	32.58
Nevada		0.00	1.04	0.04	0.03	1.27	0.00	2.38	25.61	0.37	28.37
New Mexico		0.00	0.02	0.00	0.05	0.03	0.00	0.09	0.39	0.01	0.49
Utah		0.00	0.13	0.33	0.16	0.00	0.00	0.62	0.51	1.59	2.72
Wyoming		0.00	0.00	0.44	0.29	0.02	0.05	0.80	17.87	1.82	20.49

Table 12. Electricity Production, 2015 (Cont.).

Region/States		Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
New England	<i>Total</i>	5.15	1.20	10.26	7.30	0.83	0.29	25.04	26.51	1.50	53.04
Connecticut		0.00	0.00	0.00	0.16	0.01	0.03	0.21	0.17	0.00	0.38
Maine		0.00	0.00	0.00	0.18	0.02	0.00	0.20	1.41	0.00	1.61
Massachusetts		0.00	0.00	0.00	2.25	0.00	0.05	2.29	0.85	0.00	3.14
New Hampshire		4.95	0.84	9.46	0.14	0.17	0.02	15.58	23.53	1.45	40.56
Rhode Island		0.00	0.00	0.00	0.03	0.00	0.01	0.04	0.05	0.00	0.10
Vermont		0.21	0.36	0.81	4.54	0.62	0.18	6.72	0.49	0.04	7.26
Pacific	<i>Total</i>	0.66	4.49	8.05	15.34	0.00	0.00	28.54	3.73	3.67	35.94
California		0.46	0.73	5.75	3.72	0.00	0.00	10.66	1.71	2.74	15.11
Oregon		0.04	1.09	0.62	5.18	0.00	0.00	6.92	1.14	0.93	9.00
Washington		0.16	2.68	1.68	6.44	0.00	0.00	10.97	0.88	0.00	11.84
South Atlantic	<i>Total</i>	3.85	0.99	7.54	21.73	1.79	6.33	42.21	3.74	4.23	50.18
Delaware		0.25	0.12	0.74	0.05	0.00	0.01	1.18	0.13	0.00	1.31
Florida		0.04	0.00	0.75	3.57	0.20	0.44	5.00	0.00	0.90	5.90
Georgia		0.22	0.11	4.03	9.86	0.84	1.88	16.93	0.02	0.88	17.83
Maryland		0.37	0.35	0.84	0.32	0.03	0.07	1.98	0.16	0.00	2.13
North Carolina		0.00	0.04	0.17	0.00	0.00	1.26	1.47	1.31	2.08	4.86
South Carolina		0.26	0.17	0.59	4.13	0.44	0.99	6.58	0.01	0.37	6.97
Virginia		0.00	0.00	0.04	0.43	0.08	1.39	1.94	0.13	0.00	2.07
West Virginia		2.71	0.21	0.37	3.37	0.19	0.28	7.13	1.97	0.00	9.10
West North Central	<i>Total</i>	19.23	5.56	19.30	22.16	5.24	13.92	85.42	70.70	3.66	159.78
Iowa		6.12	0.65	0.33	1.46	0.33	0.35	9.23	0.01	0.01	9.25
Kansas		0.89	1.01	11.54	0.15	1.66	3.73	18.97	28.30	1.52	48.78
Minnesota		10.75	2.75	0.79	3.45	0.29	0.65	18.68	16.13	0.02	34.82
Missouri		0.03	0.07	2.32	8.83	1.52	4.84	17.61	0.00	0.58	18.19
Nebraska		0.94	0.62	3.19	6.12	0.56	0.39	11.82	0.20	0.41	12.43

Table 12. Electricity Production, 2015 (Cont.).

Region/States	Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total	
Billion kWh's											
North Dakota	0.41	0.17	0.27	2.00	0.41	2.87	6.13	2.15	0.00	8.28	
South Dakota	0.10	0.29	0.86	0.16	0.49	1.09	2.98	23.92	1.13	28.03	
West South Central	<i>Total</i>	<i>1.07</i>	<i>0.37</i>	<i>24.84</i>	<i>12.29</i>	<i>6.02</i>	<i>17.99</i>	<i>62.58</i>	<i>51.26</i>	<i>6.83</i>	<i>120.67</i>
Arkansas	0.07	0.34	3.50	0.11	0.00	4.44	8.47	0.37	0.76	9.61	
Louisiana	0.15	0.02	0.66	7.23	1.07	2.41	11.55	0.00	0.45	12.00	
Oklahoma	0.11	0.00	3.37	1.43	2.19	4.94	12.05	19.10	1.25	32.40	
Texas	0.73	0.00	17.31	3.51	2.76	6.20	30.50	31.79	4.37	66.66	
	<i>U.S. Total</i>	<i>65.93</i>	<i>21.18</i>	<i>91.00</i>	<i>120.39</i>	<i>24.77</i>	<i>55.73</i>	<i>379.00</i>	<i>277.26</i>	<i>33.77</i>	<i>690.03</i>

Note: Values of zero indicate a value less than 0.01.

Table 13. Electricity Production by State and Census Region, 2020.

Region/States		Corn Stover	Wheat Straw	Live- Stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
East North Central	Total	17.73	5.41	3.85	11.92	21.50	15.15	75.57	9.72	1.73	87.02
Illinois		0.04	2.33	2.67	2.92	0.00	5.53	13.48	3.12	1.53	18.14
Indiana		12.32	0.80	0.42	1.12	10.76	5.10	30.52	2.88	0.20	33.60
Michigan		2.58	1.01	0.32	3.13	0.72	0.37	8.13	3.15	0.00	11.29
Ohio		2.80	1.27	0.17	1.97	7.16	3.68	17.05	0.30	0.00	17.36
Wisconsin		0.00	0.00	0.28	2.78	2.85	0.47	6.39	0.26	0.00	6.65
East South Central	Total	1.91	0.95	5.61	23.39	56.24	25.30	113.39	2.36	2.55	118.31
Alabama		0.00	0.02	3.16	11.06	9.49	4.88	28.61	0.00	0.95	29.56
Kentucky		0.23	0.24	0.87	4.62	15.28	7.85	29.09	0.02	0.05	29.16
Mississippi		1.52	0.56	1.09	3.94	18.10	5.70	30.90	2.27	1.26	34.43
Tennessee		0.15	0.14	0.49	3.77	13.37	6.87	24.80	0.07	0.29	25.15
Middle Atlantic	Total	0.59	0.19	1.61	6.80	2.84	2.71	14.73	21.55	3.20	39.49
New Jersey		0.00	0.00	0.00	2.40	0.15	0.12	2.67	0.20	0.00	2.87
New York		0.10	0.02	1.09	0.21	0.00	1.21	2.64	19.55	3.20	25.38
Pennsylvania		0.49	0.17	0.51	4.19	2.69	1.38	9.43	1.80	0.00	11.23
Mountain	Total	16.01	8.64	10.65	10.43	31.31	0.13	77.18	163.79	13.24	254.20
Arizona		0.15	0.78	1.14	7.98	14.52	0.00	24.57	0.33	2.98	27.88
Colorado		0.47	1.63	6.17	0.07	0.00	0.00	8.33	18.32	2.90	29.55
Idaho		15.13	0.02	1.96	0.60	3.12	0.00	20.82	23.74	0.37	44.94
Montana		0.01	2.14	0.53	1.10	0.00	0.00	3.78	49.18	1.31	54.27
Nevada		0.19	3.77	0.04	0.04	13.19	0.00	17.23	41.68	0.56	59.46
New Mexico		0.03	0.03	0.00	0.07	0.23	0.00	0.36	0.63	0.02	1.00
Utah		0.02	0.17	0.34	0.20	0.00	0.00	0.73	0.83	2.38	3.94
Wyoming		0.02	0.10	0.48	0.37	0.25	0.13	1.35	29.08	2.72	33.15

Table 13. Electricity Production, 2020 (Cont.).

Region/States		Corn Stover	Wheat Straw	Live- Stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
New England	<i>Total</i>	6.73	1.46	11.08	9.52	9.76	0.51	39.05	43.13	2.24	84.42
Connecticut		0.00	0.00	0.00	0.23	0.14	0.07	0.43	0.28	0.00	0.72
Maine		0.00	0.00	0.00	0.25	0.19	0.00	0.44	2.30	0.00	2.74
Massachusetts		0.00	0.00	0.00	3.05	0.00	0.10	3.15	1.38	0.00	4.53
New Hampshire		6.51	1.21	10.27	0.17	2.52	0.08	20.75	38.28	2.17	61.21
Rhode Island		0.00	0.00	0.00	0.04	0.02	0.01	0.07	0.09	0.00	0.16
Vermont		0.22	0.25	0.81	5.78	6.90	0.26	14.21	0.80	0.06	15.07
Pacific	<i>Total</i>	0.70	5.46	8.04	21.38	0.02	0.01	35.61	6.07	5.48	47.16
California		0.41	0.65	5.64	4.96	0.00	0.00	11.66	2.79	4.09	18.53
Oregon		0.05	1.37	0.64	7.89	0.02	0.01	9.99	1.86	1.39	13.24
Washington		0.24	3.45	1.76	8.52	0.00	0.00	13.96	1.42	0.00	15.39
South Atlantic	<i>Total</i>	4.08	0.98	7.47	28.87	12.90	13.93	68.24	6.08	6.31	80.63
Delaware		0.21	0.12	0.74	0.08	0.06	0.03	1.25	0.20	0.00	1.45
Florida		0.04	0.00	0.74	5.21	1.37	0.71	8.08	0.00	1.34	9.42
Georgia		0.24	0.13	4.02	12.73	6.45	3.32	26.88	0.04	1.31	28.23
Maryland		0.45	0.35	0.84	0.48	0.43	0.22	2.77	0.26	0.00	3.03
North Carolina		0.00	0.03	0.19	0.01	0.00	3.01	3.24	2.14	3.10	8.48
South Carolina		0.18	0.15	0.59	5.71	3.18	1.63	11.44	0.02	0.55	12.02
Virginia		0.00	0.00	0.03	0.56	0.50	3.54	4.63	0.22	0.00	4.85
West Virginia		2.96	0.20	0.32	4.08	0.91	1.47	9.94	3.21	0.00	13.15
West North Central	<i>Total</i>	18.71	8.45	20.31	29.03	49.75	29.52	155.77	115.05	5.47	276.29
Iowa		5.56	0.58	0.32	1.77	9.93	1.60	19.76	0.02	0.01	19.79
Kansas		1.77	2.84	12.56	0.19	13.98	7.19	38.52	46.04	2.26	86.83
Minnesota		8.93	2.79	0.79	4.34	1.30	0.67	18.81	26.24	0.02	45.08
Missouri		0.06	0.07	2.32	10.81	11.09	9.30	33.65	0.00	0.87	34.52
Nebraska		0.75	0.49	3.18	8.74	5.87	1.30	20.32	0.33	0.62	21.27

Table 13. Electricity Production, 2020 (Cont.).

Region/States	Corn Stover	Wheat Straw	Live- Stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total	
Billion kWh's											
North Dakota	0.50	0.18	0.22	2.97	2.35	6.78	13.01	3.49	0.00	16.51	
South Dakota	1.14	1.50	0.92	0.21	5.24	2.69	11.69	38.92	1.69	52.30	
West South Central	Total	1.50	1.67	26.38	15.26	43.72	29.93	118.46	83.41	10.21	212.07
Arkansas	0.06	0.32	3.51	0.15	0.00	7.46	11.50	0.61	1.14	13.25	
Louisiana	0.15	0.03	0.66	8.92	6.50	3.34	19.62	0.00	0.67	20.29	
Oklahoma	0.16	0.69	3.58	1.77	15.26	7.84	29.30	31.08	1.87	62.25	
Texas	1.13	0.62	18.63	4.42	21.95	11.28	58.04	51.72	6.53	116.29	
U.S. Total		67.96	33.22	95.00	156.60	228.04	117.18	698.00	451.15	50.43	1,199.59

Note: Values of zero indicate a value less than 0.01.

Table 14. Electricity Production by State and Census Region, 2025.

Region/States		Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
East North Central	Total	15.06	2.11	3.85	6.43	57.44	23.17	108.06	13.07	2.31	123.43
Illinois		0.04	1.07	2.67	1.51	0.00	8.79	14.08	4.20	2.04	20.32
Indiana		10.57	0.31	0.42	0.61	26.88	7.31	46.09	3.87	0.27	50.23
Michigan		2.34	0.37	0.32	1.66	2.79	0.91	8.39	4.24	0.00	12.63
Ohio		2.10	0.36	0.17	1.05	15.95	5.21	24.84	0.41	0.00	25.25
Wisconsin		0.00	0.00	0.28	1.61	11.82	0.95	14.66	0.35	0.00	15.00
East South Central	Total	2.27	0.40	5.61	12.49	134.20	33.98	188.95	3.17	3.40	195.52
Alabama		0.02	0.01	3.16	5.93	15.19	4.97	29.27	0.00	1.27	30.54
Kentucky		0.30	0.11	0.87	2.45	39.97	13.07	56.76	0.03	0.06	56.85
Mississippi		1.80	0.23	1.09	2.11	51.88	7.07	64.17	3.05	1.68	68.90
Tennessee		0.16	0.06	0.49	2.01	27.16	8.88	38.76	0.09	0.39	39.23
Middle Atlantic	Total	0.64	0.07	1.61	3.86	7.25	3.88	17.30	28.97	4.26	50.53
New Jersey		0.00	0.00	0.00	1.35	0.24	0.26	1.85	0.27	0.00	2.12
New York		0.13	0.01	1.09	0.11	0.04	1.34	2.72	26.28	4.26	33.26
Pennsylvania		0.51	0.06	0.51	2.39	6.97	2.28	12.73	2.42	0.00	15.15
Mountain	Total	15.06	4.00	10.65	5.60	76.89	1.28	113.49	220.19	17.61	351.28
Arizona		0.13	0.29	1.14	4.30	32.20	0.00	38.05	0.44	3.97	42.46
Colorado		0.59	0.84	6.17	0.04	0.05	0.02	7.70	24.62	3.86	36.19
Idaho		13.95	0.01	1.96	0.32	16.06	0.00	32.30	31.92	0.49	64.71
Montana		0.03	1.16	0.53	0.57	2.71	0.89	5.89	66.12	1.75	73.75
Nevada		0.27	1.56	0.04	0.02	23.96	0.00	25.85	56.03	0.74	82.62
New Mexico		0.04	0.01	0.00	0.04	0.79	0.01	0.89	0.84	0.02	1.76
Utah		0.02	0.08	0.34	0.11	0.01	0.00	0.56	1.12	3.16	4.84
Wyoming		0.03	0.05	0.48	0.20	1.11	0.36	2.24	39.10	3.61	44.95

Table 14. Electricity Production, 2025 (Cont.).

Region/States		Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total
Billion kWh's											
New England	<i>Total</i>	7.60	0.55	11.08	5.18	42.37	0.58	67.36	57.98	2.97	128.31
Connecticut		0.00	0.00	0.00	0.13	0.23	0.07	0.43	0.38	0.00	0.81
Maine		0.00	0.00	0.00	0.14	0.66	0.00	0.79	3.09	0.00	3.88
Massachusetts		0.00	0.00	0.00	1.71	0.00	0.21	1.92	1.85	0.00	3.78
New Hampshire		7.41	0.46	10.27	0.09	20.16	0.08	38.47	51.47	2.89	92.82
Rhode Island		0.00	0.00	0.00	0.02	0.02	0.01	0.04	0.12	0.00	0.16
Vermont		0.19	0.09	0.81	3.09	21.32	0.21	25.70	1.07	0.09	26.86
Pacific	<i>Total</i>	0.71	2.39	8.04	11.12	1.41	0.46	24.13	8.16	7.29	39.58
California		0.37	0.22	5.64	2.48	0.00	0.00	8.72	3.74	5.44	17.90
Oregon		0.06	0.61	0.64	4.20	1.37	0.45	7.34	2.50	1.85	11.69
Washington		0.27	1.55	1.76	4.44	0.04	0.01	8.07	1.92	0.00	9.99
South Atlantic	<i>Total</i>	4.10	0.36	7.47	15.51	27.96	23.54	78.96	8.17	8.40	95.53
Delaware		0.19	0.04	0.74	0.04	0.06	0.02	1.10	0.27	0.00	1.38
Florida		0.04	0.00	0.74	2.82	2.80	0.91	7.31	0.00	1.79	9.10
Georgia		0.17	0.06	4.02	6.82	14.55	4.76	30.37	0.05	1.75	32.17
Maryland		0.45	0.12	0.84	0.27	1.07	0.35	3.11	0.34	0.00	3.45
North Carolina		0.00	0.01	0.19	0.00	0.00	4.72	4.92	2.87	4.13	11.92
South Carolina		0.15	0.05	0.59	3.07	5.95	1.95	11.76	0.03	0.74	12.53
Virginia		0.00	0.00	0.03	0.32	0.63	6.97	7.95	0.29	0.00	8.24
West Virginia		3.11	0.07	0.32	2.17	2.90	3.86	12.43	4.31	0.00	16.74
West North Central	<i>Total</i>	17.01	2.93	20.31	15.65	110.92	52.47	219.29	154.66	7.28	381.23
Iowa		4.33	0.21	0.32	0.95	22.35	5.25	33.41	0.02	0.01	33.44
Kansas		2.15	1.30	12.56	0.10	30.16	9.86	56.13	61.90	3.01	121.04
Minnesota		7.81	0.69	0.79	2.30	6.13	2.00	19.72	35.28	0.03	55.03
Missouri		0.08	0.03	2.32	5.84	21.61	16.96	46.85	0.00	1.15	48.00
Nebraska		0.66	0.14	3.18	4.67	14.44	6.59	29.69	0.44	0.82	30.96

Table 14. Electricity Production, 2025 (Cont.).

Region/States	Corn Stover	Wheat Straw	Live- stock	Wood	Energy Crop	Byproduct Ethanol	Total Biomass	Wind	Solar	Total	
Billion kWh's											
North Dakota	0.53	0.07	0.22	1.67	4.10	7.83	14.42	4.70	0.00	19.12	
South Dakota	1.46	0.49	0.92	0.11	12.13	3.96	19.07	52.32	2.25	73.64	
West South Central	Total	1.76	0.83	26.38	8.29	72.85	34.35	144.47	112.13	13.58	270.17
Arkansas	0.06	0.14	3.51	0.08	0.00	10.53	14.31	0.82	1.51	16.64	
Louisiana	0.16	0.01	0.66	4.83	10.18	3.33	19.17	0.00	0.89	20.07	
Oklahoma	0.19	0.41	3.58	0.96	28.80	9.42	43.35	41.78	2.48	87.61	
Texas	1.35	0.27	18.63	2.42	33.87	11.08	67.63	69.54	8.69	145.86	
U.S. Total		64.21	13.66	95.00	84.13	531.29	173.71	962.00	606.50	67.10	1,635.60

Note: Values of zero indicate a value less than 0.01.

Table 15. Ethanol Production by State and Census Region, 2010.

Region/States	Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total
Million Gallons						
East North Central	Total	2,766.4	0.0	0.0	0.0	2,766.4
Illinois		1,241.2	0.0	0.0	0.0	1,241.2
Indiana		623.1	0.0	0.0	0.0	623.1
Michigan		230.0	0.0	0.0	0.0	230.0
Ohio		335.7	0.0	0.0	0.0	335.7
Wisconsin		336.5	0.0	0.0	0.0	336.5
East South Central	Total	266.6	0.0	0.0	0.0	266.6
Alabama		19.3	0.0	0.0	0.0	19.3
Kentucky		134.1	0.0	0.0	0.0	134.1
Mississippi		42.9	0.0	0.0	0.0	42.9
Tennessee		70.4	0.0	0.0	0.0	70.4
Middle Atlantic	Total	182.5	0.0	0.0	0.0	182.5
New Jersey		9.3	0.0	0.0	0.0	9.3
New York		64.1	0.0	0.0	0.0	64.1
Pennsylvania		109.1	0.0	0.0	0.0	109.1
Mountain	Total	139.3	0.0	0.0	0.0	139.3
Arizona		5.2	0.0	0.0	0.0	5.2
Colorado		106.1	0.0	0.0	0.0	106.1
Idaho		5.2	0.0	0.0	0.0	5.2
Montana		1.9	0.0	0.0	0.0	1.9
Nevada		0.0	0.0	0.0	0.0	0.0
New Mexico		13.0	0.0	0.0	0.0	13.0
Utah		2.3	0.0	0.0	0.0	2.3
Wyoming		5.5	0.0	0.0	0.0	5.5
New England	Total	0.0	0.0	0.0	0.0	0.0
Connecticut		0.0	0.0	0.0	0.0	0.0
Maine		0.0	0.0	0.0	0.0	0.0
Massachusetts		0.0	0.0	0.0	0.0	0.0
New Hampshire		0.0	0.0	0.0	0.0	0.0
Rhode Island		0.0	0.0	0.0	0.0	0.0
Vermont		0.0	0.0	0.0	0.0	0.0
Pacific	Total	54.1	0.0	0.0	0.0	54.1
California		29.2	0.0	0.0	0.0	29.2
Oregon		4.4	0.0	0.0	0.0	4.4
Washington		20.5	0.0	0.0	0.0	20.5

Table 15. Ethanol Production, 2010 (Cont.).

Region/States	Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total
Million Gallons						
South Atlantic	Total	260.9	0.0	0.0	0.0	260.9
Delaware		17.8	0.0	0.0	0.0	17.8
Florida		7.5	0.0	0.0	0.0	7.5
Georgia		40.1	0.0	0.0	0.0	40.1
Maryland		52.7	0.0	0.0	0.0	52.7
North Carolina		78.8	0.0	0.0	0.0	78.8
South Carolina		26.7	0.0	0.0	0.0	26.7
Virginia		33.8	0.0	0.0	0.0	33.8
West Virginia		3.4	0.0	0.0	0.0	3.4
West North Central	Total	4,130.5	0.0	0.0	0.0	4,130.5
Iowa		1,504.2	0.0	0.0	0.0	1,504.2
Kansas		296.7	0.0	0.0	0.0	296.7
Minnesota		763.2	0.0	0.0	0.0	763.2
Missouri		248.7	0.0	0.0	0.0	248.7
Nebraska		983.9	0.0	0.0	0.0	983.9
North Dakota		52.1	0.0	0.0	0.0	52.1
South Dakota		281.7	0.0	0.0	0.0	281.7
West South Central	Total	289.7	0.0	0.0	0.0	289.7
Arkansas		19.1	0.0	0.0	0.0	19.1
Louisiana		44.1	0.0	0.0	0.0	44.1
Oklahoma		20.1	0.0	0.0	0.0	20.1
Texas		206.4	0.0	0.0	0.0	206.4
U.S. Total		8,090.1	0.0	0.0	0.0	8,090.1

Note: Values of zero indicate a value less than 0.1.

Table 16. Ethanol Production by State and Census Region, 2015.

Region/States		Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total
Million Gallons							
East North Central	<i>Total</i>	3,127.8	3,659.1	234.0	509.6	227.2	7,757.7
Illinois		1,435.2	1,776.9	42.9	46.1	32.3	3,333.5
Indiana		673.4	805.7	35.8	74.5	62.6	1,652.0
Michigan		263.6	381.1	53.0	132.7	6.5	836.9
Ohio		345.9	338.0	90.8	83.9	88.6	947.3
Wisconsin		409.8	357.3	11.4	172.3	37.2	988.0
East South Central	<i>Total</i>	332.1	32.0	19.8	1,254.9	1,141.1	2,780.0
Alabama		22.7	0.2	0.5	447.7	246.4	717.4
Kentucky		170.8	18.1	10.3	194.7	248.7	642.7
Mississippi		48.4	3.4	3.7	451.9	292.3	799.8
Tennessee		90.2	10.2	5.4	160.6	353.7	620.1
Middle Atlantic	<i>Total</i>	219.7	61.4	17.0	243.6	97.8	639.5
New Jersey		11.5	0.0	1.0	2.5	5.0	20.0
New York		78.0	53.8	9.6	102.6	78.2	322.1
Pennsylvania		130.2	7.7	6.4	138.6	14.6	297.4
Mountain	<i>Total</i>	173.4	10.2	137.7	212.9	4.3	538.5
Arizona		5.9	9.5	18.9	5.6	0.0	40.0
Colorado		118.7	0.0	2.4	2.6	0.0	123.7
Idaho		6.7	0.6	101.8	127.4	0.0	236.6
Montana		5.5	0.0	4.9	46.1	0.0	56.5
Nevada		0.0	0.0	2.0	0.2	0.0	2.2
New Mexico		26.2	0.0	0.7	8.1	0.0	35.0
Utah		3.7	0.0	7.0	8.2	0.0	18.9
Wyoming		6.7	0.0	0.0	14.7	4.3	25.7
New England	<i>Total</i>	0.0	0.0	0.0	239.9	24.5	264.4
Connecticut		0.0	0.0	0.0	8.2	2.7	11.0
Maine		0.0	0.0	0.0	115.1	0.0	115.1
Massachusetts		0.0	0.0	0.0	9.0	3.9	12.8
New Hampshire		0.0	0.0	0.0	84.0	1.6	85.6
Rhode Island		0.0	0.0	0.0	1.6	0.5	2.2
Vermont		0.0	0.0	0.0	21.9	15.8	37.7
Pacific	<i>Total</i>	88.3	86.5	248.2	784.9	0.0	1,207.9
California		36.9	60.1	40.1	190.4	0.0	327.5
Oregon		8.4	4.7	60.1	264.8	0.0	338.1
Washington		43.0	21.7	148.0	329.7	0.0	542.3

Table 16. Ethanol Production, 2015 (Cont.).

Region/States	Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total	
	Million Gallons						
South Atlantic	Total	315.3	300.3	95.8	1,567.2	540.3	2,818.9
Delaware		21.9	32.6	6.8	2.8	0.9	65.0
Florida		9.3	4.9	0.2	182.4	37.9	234.7
Georgia		49.3	28.9	5.8	504.5	160.8	749.2
Maryland		65.2	49.0	19.1	16.4	5.7	155.3
North Carolina		94.5	123.5	34.5	312.9	107.7	673.0
South Carolina		29.2	34.3	9.2	211.2	84.8	368.7
Virginia		41.5	27.2	20.0	232.5	118.8	440.0
West Virginia		4.6	0.0	0.2	104.4	23.8	133.0
West North Central	Total	4,974.8	4,380.0	356.7	390.2	1,188.6	11,290.3
Iowa		1,701.7	2,052.7	0.8	24.9	29.6	3,809.8
Kansas		415.6	116.8	55.9	7.7	318.2	914.1
Minnesota		925.5	1,415.6	152.0	176.4	55.3	2,724.8
Missouri		329.2	130.6	28.2	164.7	413.8	1,066.5
Nebraska		1,212.2	651.3	46.5	7.0	33.4	1,950.5
North Dakota		70.0	0.0	57.4	1.4	245.0	373.8
South Dakota		320.5	13.1	15.8	8.1	93.4	450.8
West South Central	Total	408.4	150.5	60.8	956.8	1,536.2	3,112.6
Arkansas		23.6	18.8	59.4	333.6	379.6	815.0
Louisiana		44.1	20.0	1.4	370.2	205.4	641.0
Oklahoma		37.6	15.1	0.0	73.4	421.7	547.8
Texas		303.1	96.7	0.0	179.6	529.5	1,108.8
	U.S. Total	9,639.8	8,680.0	1,170.0	6,160.0	4,760.0	30,409.8

Note: Values of zero indicate a value less than 0.1.

Table 17. Ethanol Production by State and Census Region, 2020.

Region/States		Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total
Million Gallons							
East North Central	Total	3,606.2	5,342.7	293.8	585.7	3,049.8	12,878.3
Illinois		1,638.3	2,510.0	61.1	53.0	1,112.9	5,375.3
Indiana		764.1	1,133.6	43.8	85.7	1,027.1	3,054.3
Michigan		312.9	526.0	76.9	152.6	74.6	1,143.0
Ohio		419.2	570.0	96.9	96.4	741.2	1,923.6
Wisconsin		471.7	603.1	15.2	198.0	94.1	1,382.1
East South Central	Total	248.3	89.8	35.9	1,442.4	5,092.3	6,908.7
Alabama		17.6	0.5	1.5	514.6	981.4	1,515.6
Kentucky		121.9	47.3	18.3	223.8	1,580.8	1,992.0
Mississippi		39.5	11.7	5.5	519.4	1,146.7	1,722.8
Tennessee		69.4	30.4	10.6	184.6	1,383.3	1,678.3
Middle Atlantic	Total	245.5	207.8	28.6	280.0	546.0	1,307.9
New Jersey		13.2	5.3	2.1	2.9	24.1	47.7
New York		90.6	102.5	13.9	117.9	243.5	568.3
Pennsylvania		141.7	100.0	12.6	159.3	278.4	692.0
Mountain	Total	210.9	147.5	514.3	244.7	26.0	1,143.4
Arizona		7.3	13.2	24.7	6.5	0.0	51.7
Colorado		150.8	95.4	124.2	3.0	0.0	373.4
Idaho		7.8	7.3	177.2	146.5	0.0	338.8
Montana		3.2	2.4	162.9	52.9	0.0	221.4
Nevada		0.0	0.0	2.7	0.2	0.0	2.9
New Mexico		30.1	21.2	1.6	9.3	0.0	62.1
Utah		4.0	3.4	13.3	9.4	0.0	30.1
Wyoming		7.8	4.5	7.7	16.9	26.0	62.9
New England	Total	0.0	0.0	0.0	275.7	101.7	377.3
Connecticut		0.0	0.0	0.0	9.5	14.0	23.5
Maine		0.0	0.0	0.0	132.3	0.0	132.3
Massachusetts		0.0	0.0	0.0	10.3	19.3	29.7
New Hampshire		0.0	0.0	0.0	96.6	15.3	111.9
Rhode Island		0.0	0.0	0.0	1.9	1.6	3.5
Vermont		0.0	0.0	0.0	25.1	51.4	76.5
Pacific	Total	106.1	143.1	415.6	902.1	2.1	1,569.2
California		46.1	83.1	49.2	218.9	0.0	397.3
Oregon		10.5	10.8	104.1	304.4	2.1	431.9
Washington		49.5	49.2	262.4	378.9	0.0	740.0

Table 17. Ethanol Production, 2020 (Cont.).

Region/States		Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total
Million Gallons							
South Atlantic	<i>Total</i>	324.6	424.2	114.0	1,801.3	2,804.5	5,468.6
Delaware		25.2	43.1	9.1	3.2	6.5	87.2
Florida		8.3	8.5	0.3	209.7	142.0	368.8
Georgia		47.1	48.5	9.6	579.8	667.5	1,352.5
Maryland		75.5	92.1	26.5	18.8	44.5	257.4
North Carolina		99.1	151.9	37.4	359.6	606.8	1,254.8
South Carolina		24.3	36.0	11.5	242.7	328.6	643.1
Virginia		41.2	44.2	19.2	267.3	713.3	1,085.1
West Virginia		3.8	0.1	0.3	120.0	295.3	419.6
West North Central	<i>Total</i>	5,747.5	7,171.1	966.0	448.5	5,943.0	20,276.1
Iowa		2,064.7	3,082.9	1.4	28.6	322.9	5,500.5
Kansas		473.4	361.0	216.2	8.8	1,446.5	2,505.9
Minnesota		1,050.0	1,819.8	212.8	202.7	134.1	3,419.4
Missouri		363.1	310.1	42.3	189.3	1,872.3	2,777.1
Nebraska		1,368.1	1,326.4	91.9	8.1	261.0	3,055.5
North Dakota		73.1	38.1	287.5	1.6	1,364.5	1,764.9
South Dakota		355.1	232.8	113.9	9.3	541.7	1,252.8
West South Central	<i>Total</i>	440.8	323.7	161.8	1,099.7	6,024.6	8,050.6
Arkansas		26.6	31.1	59.3	383.4	1,501.9	2,002.2
Louisiana		40.2	30.8	2.5	425.5	672.9	1,171.9
Oklahoma		41.9	31.8	52.8	84.4	1,578.9	1,789.7
Texas		332.2	230.0	47.2	206.4	2,270.9	3,086.8
U.S. Total		10,930.1	13,850.0	2,530.0	7,080.0	23,590.0	57,980.1

Note: Values of zero indicate a value less than 0.1.

Table 18. Ethanol Production by State and Census Region, 2025.

Region/States		Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total
Million Gallons							
East North Central	Total	4,521.7	6,386.8	492.5	1,030.7	4,886.1	17,317.7
Illinois		2,078.2	3,008.0	114.1	93.3	1,853.4	7,147.0
Indiana		872.1	1,231.6	77.8	150.8	1,541.1	3,873.5
Michigan		433.9	666.8	137.5	268.5	192.5	1,699.3
Ohio		451.8	596.4	135.6	169.7	1,099.3	2,452.8
Wisconsin		685.7	884.0	27.4	348.4	199.8	2,145.3
East South Central	Total	297.2	159.2	76.9	2,538.4	7,165.4	10,237.1
Alabama		21.5	4.3	3.5	905.6	1,047.5	1,982.3
Kentucky		149.1	85.5	39.1	393.8	2,755.7	3,423.2
Mississippi		48.5	24.0	11.8	914.1	1,489.9	2,488.3
Tennessee		78.2	45.3	22.6	324.9	1,872.4	2,343.3
Middle Atlantic	Total	299.6	305.7	53.5	492.8	817.4	1,969.1
New Jersey		18.5	12.2	3.3	5.1	54.3	93.3
New York		121.8	149.4	26.6	207.5	282.4	787.8
Pennsylvania		159.3	144.1	23.6	280.3	480.7	1,088.0
Mountain	Total	294.9	256.3	1,251.6	430.7	270.8	2,504.3
Arizona		9.9	15.9	52.8	11.4	0.0	90.0
Colorado		206.6	168.6	312.0	5.3	3.5	696.0
Idaho		11.2	12.4	397.7	257.8	0.0	679.1
Montana		8.8	8.1	430.4	93.2	187.0	727.4
Nevada		0.0	0.0	4.8	0.4	0.0	5.2
New Mexico		41.5	36.8	3.6	16.5	2.7	101.1
Utah		5.9	6.2	30.2	16.5	0.8	59.5
Wyoming		10.8	8.4	20.1	29.7	76.9	145.9
New England	Total	0.0	0.0	0.0	485.2	121.9	607.1
Connecticut		0.0	0.0	0.0	16.6	15.6	32.2
Maine		0.0	0.0	0.0	232.8	0.0	232.8
Massachusetts		0.0	0.0	0.0	18.2	45.3	63.4
New Hampshire		0.0	0.0	0.0	170.0	16.5	186.5
Rhode Island		0.0	0.0	0.0	3.3	1.1	4.4
Vermont		0.0	0.0	0.0	44.2	43.5	87.7
Pacific	Total	150.3	201.2	887.0	1,587.7	97.4	2,923.5
California		66.8	106.1	82.4	385.2	0.0	640.5
Oregon		14.6	16.9	227.9	535.7	94.5	889.5
Washington		68.9	78.2	576.8	666.8	2.9	1,393.6

Table 18. Ethanol Production, 2025 (Cont.).

Region/States		Corn	Corn Stover	Wheat Straw	Wood	Energy Crop	Total
Million Gallons							
South Atlantic	<i>Total</i>	409.0	527.4	190.3	3,170.0	4,964.4	9,261.0
Delaware		35.0	53.9	16.7	5.7	4.3	115.7
Florida		9.8	10.8	0.6	369.0	192.8	583.0
Georgia		44.6	48.5	20.6	1,020.4	1,003.0	2,137.0
Maryland		104.7	129.2	45.4	33.1	73.8	386.2
North Carolina		131.9	188.5	53.3	632.9	995.4	2,002.1
South Carolina		29.7	41.3	20.2	427.2	410.5	928.9
Virginia		48.3	53.9	32.8	470.4	1,469.9	2,075.2
West Virginia		4.9	1.2	0.8	211.3	814.8	1,033.0
West North Central	<i>Total</i>	7,873.8	9,913.0	1,763.2	789.2	11,064.1	31,403.2
Iowa		2,791.4	3,970.2	2.6	50.4	1,107.4	7,922.0
Kansas		653.1	610.8	483.8	15.5	2,079.6	3,842.8
Minnesota		1,429.2	2,221.5	255.9	356.7	422.8	4,686.1
Missouri		514.9	511.1	85.4	333.1	3,576.8	5,021.3
Nebraska		1,900.4	2,108.4	171.8	14.3	1,389.7	5,584.5
North Dakota		103.5	76.1	581.9	2.9	1,651.7	2,416.1
South Dakota		481.2	415.1	181.8	16.4	836.0	1,930.5
West South Central	<i>Total</i>	573.6	520.5	365.0	1,935.3	7,242.5	10,636.9
Arkansas		29.4	36.0	107.3	674.7	2,219.7	3,067.2
Louisiana		48.9	45.0	5.4	748.7	701.6	1,549.6
Oklahoma		55.7	54.5	150.8	148.4	1,985.6	2,395.0
Texas		439.7	385.1	101.4	363.3	2,335.5	3,625.0
U.S. Total		14,420.0	18,270.0	5,080.0	12,460.0	36,630.0	86,860.0

Note: Values of zero indicate a value less than 0.1.

Table 19. Acres Planted for Major Crops, 2006

Region/States		Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton
		Acres Planted						
East North Central	Total	26,908,407	25,454,845	3,720,200	0	3,454,177	1,038,650	0
Illinois		11,245,312	11,469,662	1,265,479	0	539,790	336,861	0
Indiana		5,745,643	6,096,060	653,738	0	542,080	64,150	0
Michigan		2,653,250	1,849,557	560,949	0	389,545	86,320	0
Ohio		3,090,624	5,011,022	1,109,245	0	856,789	94,115	0
Wisconsin		4,173,578	1,028,544	130,790	0	1,125,973	457,204	0
East South Central	Total	3,006,932	5,182,076	1,360,196	0	8,475,314	376,727	2,118,356
Alabama		298,289	324,012	97,006	0	1,281,375	43,351	479,354
Kentucky		1,430,656	1,372,660	569,384	0	3,245,565	23,946	0
Mississippi		499,524	2,136,159	179,251	0	1,329,636	296,008	1,103,508
Tennessee		778,463	1,349,245	514,555	0	2,618,737	13,421	535,495
Middle Atlantic	Total	2,775,994	506,862	317,801	0	3,345,229	268,101	0
New Jersey		115,862	149,178	32,982	0	142,301	2,450	0
New York		1,213,308	0	122,439	0	1,559,439	78,244	0
Pennsylvania		1,446,824	357,684	162,380	0	1,643,489	187,407	0
Mountain	Total	1,502,699	0	9,501,223	0	5,187,591	2,003,379	396,117
Arizona		42,362	0	118,223	0	62,840	22,136	342,541
Colorado		992,093	0	2,525,694	0	1,365,333	279,655	0
Idaho		103,513	0	1,277,951	0	362,505	506,641	0
Montana		63,337	0	4,813,261	0	1,564,958	828,394	0
Nevada		0	0	13,328	0	287,345	2,598	0
New Mexico		142,576	0	385,555	0	131,767	146,416	53,576
Utah		76,970	0	159,428	0	275,694	105,095	0
Wyoming		81,848	0	207,783	0	1,137,148	112,445	0

Table 19. Acres Planted for Major Crops, 2006 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
New England	<i>Total</i>	0	0	0	0	1,024,339	0	0
Connecticut		0	0	0	0	90,821	0	0
Maine		0	0	0	0	313,372	0	0
Massachusetts		0	0	0	0	136,812	0	0
New Hampshire		0	0	0	0	103,578	0	0
Rhode Island		0	0	0	0	7,147	0	0
Vermont		0	0	0	0	372,610	0	0
Pacific	<i>Total</i>	767,499	0	3,560,595	0	2,384,124	1,319,743	1,092,546
California		528,313	0	537,572	0	948,823	966,199	1,092,546
Oregon		59,054	0	802,301	0	957,801	125,521	0
Washington		180,131	0	2,220,721	0	477,500	228,024	0
South Atlantic	<i>Total</i>	3,327,135	3,611,411	1,648,902	0	5,548,686	343,697	2,670,812
Delaware		173,616	243,059	63,265	0	10,586	20,957	0
Florida		133,701	32,326	14,087	0	410,046	0	89,926
Georgia		567,147	397,832	302,708	0	944,670	90,426	1,388,755
Maryland		568,420	565,344	195,910	0	234,210	44,542	0
North Carolina		976,231	1,236,672	568,398	0	933,036	71,332	767,960
South Carolina		357,525	605,795	244,624	0	446,213	50,849	318,418
Virginia		486,010	530,383	249,125	0	1,826,038	60,784	105,754
West Virginia		64,486	0	10,785	0	743,887	4,807	0
West North Central	<i>Total</i>	39,223,004	32,878,611	27,614,208	0	19,529,633	7,471,036	367,440
Iowa		13,065,556	10,967,243	43,520	0	585,949	362,892	0
Kansas		2,650,791	2,439,118	9,463,351	0	3,425,996	2,629,501	0
Minnesota		7,606,701	6,878,314	2,063,702	0	1,143,225	647,816	0
Missouri		2,483,408	5,055,377	1,187,421	0	5,720,325	485,797	367,440
Nebraska		9,106,373	3,599,183	1,795,085	0	3,324,069	889,314	0
North Dakota		811,977	854,685	10,022,304	0	2,682,431	1,890,718	0
South Dakota		3,498,198	3,084,691	3,038,825	0	2,647,637	564,999	0

Table 19. Acres Planted for Major Crops, 2006 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
				Acres Planted				
West South Central	Total	3,091,759	5,874,717	11,343,608	0	13,163,327	5,633,975	7,354,818
Arkansas		191,309	3,974,430	1,011,757	0	2,267,111	1,572,086	933,661
Louisiana		384,320	1,237,905	102,278	0	727,979	655,337	852,905
Oklahoma		205,446	346,766	5,516,985	0	3,535,690	351,769	289,448
Texas		2,310,684	315,616	4,712,588	0	6,632,547	3,054,783	5,278,805
	U.S. Total	80,603,428	73,508,523	59,066,733	0	62,112,419	18,455,309	14,000,088

*Includes Barley, Oats, Rice and Sorghum.

Table 20. Acres Planted for Major Crops, 2010

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
East North Central	Total	28,662,758	24,546,789	3,495,944	0	3,478,648	1,009,861	0
Illinois		11,881,658	10,998,296	1,162,283	0	605,714	315,042	0
Indiana		6,091,788	5,851,952	579,251	0	570,729	55,657	0
Michigan		2,884,372	1,772,719	511,570	0	436,232	76,799	0
Ohio		3,422,339	4,892,780	1,109,778	0	668,622	91,050	0
Wisconsin		4,382,601	1,031,042	133,063	0	1,197,352	471,312	0
East South Central	Total	3,169,679	5,204,912	1,468,403	0	8,746,657	309,995	1,711,210
Alabama		312,255	336,816	101,721	0	999,960	43,662	382,955
Kentucky		1,502,493	1,351,567	640,934	0	3,897,454	24,858	0
Mississippi		533,801	2,139,720	186,184	0	1,644,467	224,849	924,415
Tennessee		821,130	1,376,809	539,565	0	2,204,775	16,626	403,840
Middle Atlantic	Total	3,052,735	465,202	286,127	0	3,737,496	246,314	0
New Jersey		119,268	147,290	32,672	0	176,348	2,513	0
New York		1,307,785	0	115,239	0	1,661,999	78,504	0
Pennsylvania		1,625,681	317,912	138,215	0	1,899,150	165,297	0
Mountain	Total	1,700,771	0	9,489,905	0	6,454,596	1,884,656	460,889
Arizona		46,350	0	118,269	0	73,742	21,284	403,195
Colorado		1,155,682	0	2,696,611	0	1,739,733	249,773	0
Idaho		116,379	0	1,340,066	0	498,475	563,503	0
Montana		64,060	0	4,504,326	0	1,944,753	725,230	0
Nevada		0	0	13,976	0	347,801	2,498	0
New Mexico		147,105	0	411,175	0	157,217	108,327	57,694
Utah		77,454	0	167,177	0	304,832	109,376	0
Wyoming		93,743	0	238,306	0	1,388,043	104,666	0

Table 20. Acres Planted for Major Crops, 2010 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
Acres Planted								
New England	<i>Total</i>	0	0	0	0	1,091,604	0	0
Connecticut		0	0	0	0	122,198	0	0
Maine		0	0	0	0	381,937	0	0
Massachusetts		0	0	0	0	165,689	0	0
New Hampshire		0	0	0	0	125,425	0	0
Rhode Island		0	0	0	0	5,577	0	0
Vermont		0	0	0	0	290,778	0	0
Pacific	<i>Total</i>	776,169	0	3,844,316	0	2,935,013	1,481,577	1,304,541
California		534,783	0	539,092	0	1,153,012	1,104,866	1,304,541
Oregon		61,853	0	861,640	0	1,195,995	122,402	0
Washington		179,532	0	2,443,583	0	586,006	254,309	0
South Atlantic	<i>Total</i>	3,452,509	3,591,160	1,700,893	0	5,990,439	346,723	3,153,985
Delaware		174,708	236,366	66,340	0	11,626	21,490	0
Florida		139,767	32,500	14,772	0	351,585	0	83,523
Georgia		570,714	421,491	309,892	0	969,816	83,057	1,652,716
Maryland		571,996	557,342	203,399	0	273,581	45,856	0
North Carolina		1,034,774	1,209,178	579,543	0	1,068,845	73,938	911,938
South Carolina		401,830	617,718	256,514	0	348,216	55,379	379,717
Virginia		495,242	516,564	259,692	0	2,136,229	62,148	126,091
West Virginia		63,477	0	10,743	0	830,541	4,855	0
West North Central	<i>Total</i>	41,298,393	32,422,531	28,419,469	0	19,837,481	8,006,058	277,103
Iowa		13,671,468	10,642,073	40,393	0	698,987	355,172	0
Kansas		2,707,981	2,452,257	9,403,636	0	3,715,040	2,792,392	0
Minnesota		8,032,622	6,724,477	2,148,969	0	892,151	713,021	0
Missouri		2,551,270	5,066,964	1,196,741	0	6,475,432	519,417	277,103
Nebraska		9,404,431	3,575,704	1,847,469	0	3,896,385	1,009,772	0
North Dakota		918,978	892,129	10,627,536	0	2,093,319	2,079,298	0
South Dakota		4,011,642	3,068,928	3,154,727	0	2,066,166	536,985	0

Table 20. Acres Planted for Major Crops, 2010 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
				Acres Planted				
West South Central	<i>Total</i>	3,273,778	5,959,570	10,074,291	0	11,047,936	5,582,331	6,947,822
Arkansas		196,256	4,011,355	1,057,012	0	2,462,841	1,525,692	704,114
Louisiana		449,059	1,282,264	107,250	0	568,101	553,876	732,628
Oklahoma		206,738	348,634	4,532,894	0	2,864,435	408,477	218,285
Texas		2,421,725	317,316	4,377,136	0	5,152,559	3,094,286	5,292,794
	<i>U.S. Total</i>	85,386,791	72,190,162	58,779,348	0	63,319,870	18,867,514	13,855,550

*Includes Barley, Oats, Rice and Sorghum.

Table 21. Acres Planted for Major Crops, 2015

Region/States		Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton
		Acres Planted						
East North Central	Total	27,583,307	24,577,176	3,502,036	1,118,520	3,384,289	906,433	0
Illinois		11,481,166	11,158,209	1,019,563	203,127	613,773	309,087	0
Indiana		5,727,096	5,801,596	554,736	348,600	569,686	53,531	0
Michigan		2,817,696	1,678,663	616,661	49,825	456,611	72,021	0
Ohio		3,088,596	4,854,966	1,162,781	370,717	580,666	79,436	0
Wisconsin		4,468,754	1,083,741	148,295	146,253	1,163,553	392,358	0
East South Central	Total	3,266,980	4,874,464	1,253,147	2,905,127	9,456,243	197,629	852,194
Alabama		305,753	336,354	101,281	673,266	2,000,804	43,085	37,081
Kentucky		1,586,812	1,276,030	496,348	657,803	3,893,798	24,996	0
Mississippi		503,149	1,975,962	190,406	752,236	1,663,062	113,068	616,073
Tennessee		871,265	1,286,119	465,113	821,822	1,898,579	16,481	199,041
Middle Atlantic	Total	3,048,207	464,771	289,366	456,253	3,788,599	251,511	0
New Jersey		121,963	149,474	31,866	20,623	167,748	1,914	0
New York		1,307,868	0	131,310	333,362	1,587,625	76,231	0
Pennsylvania		1,618,376	315,297	126,189	102,268	2,033,226	173,366	0
Mountain	Total	1,791,077	0	10,354,016	41,946	6,474,442	2,016,129	424,001
Arizona		43,518	0	115,508	0	68,033	20,873	366,649
Colorado		1,043,325	0	3,330,168	0	1,792,388	250,673	0
Idaho		127,726	0	1,610,784	0	408,842	611,788	0
Montana		153,932	0	4,432,684	0	1,998,040	743,442	0
Nevada		0	0	13,915	0	353,328	2,450	0
New Mexico		229,225	0	417,409	0	159,658	100,505	57,352
Utah		99,015	0	201,491	0	266,982	152,308	0
Wyoming		94,337	0	232,057	41,946	1,427,171	134,090	0

Table 21. Acres Planted for Major Crops, 2015 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
New England	<i>Total</i>	0	0	0	110,609	1,062,104	0	0
Connecticut		0	0	0	12,297	124,469	0	0
Maine		0	0	0	0	389,107	0	0
Massachusetts		0	0	0	16,672	168,200	0	0
New Hampshire		0	0	0	9,365	134,514	0	0
Rhode Island		0	0	0	2,670	9,319	0	0
Vermont		0	0	0	69,605	236,495	0	0
Pacific	<i>Total</i>	930,446	0	4,315,782	0	3,021,735	1,377,502	1,178,690
California		551,623	0	520,507	0	1,143,706	1,056,455	1,178,690
Oregon		89,343	0	1,026,512	0	1,272,552	112,330	0
Washington		289,480	0	2,768,762	0	605,478	208,717	0
South Atlantic	<i>Total</i>	3,468,184	3,142,465	1,569,869	1,625,197	6,397,826	321,554	2,666,952
Delaware		178,595	207,098	66,340	17,834	12,040	23,072	0
Florida		142,441	32,455	14,376	149,700	452,456	0	120,326
Georgia		583,056	350,599	259,117	430,923	1,013,038	74,365	1,356,215
Maryland		588,346	513,659	207,010	37,434	283,535	44,104	0
North Carolina		1,036,674	1,054,435	559,283	328,462	1,163,519	66,009	763,516
South Carolina		365,875	530,094	201,749	247,969	296,705	51,319	343,820
Virginia		501,436	454,125	250,262	338,746	2,249,660	57,914	83,075
West Virginia		71,763	0	11,732	74,129	926,874	4,771	0
West North Central	<i>Total</i>	41,446,076	33,277,753	27,143,483	5,967,568	20,594,058	7,713,622	316,388
Iowa		13,046,388	11,115,829	35,831	144,872	646,878	339,905	0
Kansas		3,104,454	2,486,965	8,858,204	1,789,615	3,880,049	2,862,211	0
Minnesota		8,080,252	6,632,411	2,303,020	222,663	820,347	621,305	0
Missouri		2,821,787	5,246,867	1,130,012	1,412,483	7,063,030	463,395	316,388
Nebraska		9,613,727	3,690,545	1,844,955	219,252	4,255,105	909,447	0
North Dakota		1,005,465	952,661	9,733,141	1,495,771	2,042,074	2,034,902	0
South Dakota		3,774,004	3,152,476	3,238,319	682,912	1,886,575	482,457	0

Table 21. Acres Planted for Major Crops, 2015 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
West South Central	<i>Total</i>	3,633,975	5,880,387	9,849,531	5,099,489	8,874,751	5,737,061	6,606,806
Arkansas	202,228	3,741,231	1,051,375	1,006,657	2,446,093	1,872,776	152,372	
Louisiana	374,485	1,249,527	94,875	546,428	517,651	379,002	378,414	
Oklahoma	309,765	404,217	4,224,223	1,598,991	2,473,482	508,017	159,200	
Texas	2,747,497	485,412	4,479,058	1,947,412	3,437,525	2,977,266	5,916,820	
	<i>U.S. Total</i>	85,168,252	72,217,016	58,277,229	17,324,707	63,054,048	18,521,442	12,045,032

*Includes Barley, Oats, Rice and Sorghum.

Table 22. Acres Planted for Major Crops, 2020

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
East North Central	Total	27,500,858	19,320,185	3,184,593	6,263,512	3,908,828	873,364	0
Illinois		11,309,404	8,875,276	959,473	2,409,099	642,707	300,846	0
Indiana		5,619,373	4,285,875	493,741	1,918,001	601,713	51,609	0
Michigan		2,901,892	1,371,388	693,269	211,632	468,320	67,749	0
Ohio		3,219,659	3,821,400	891,203	1,436,725	758,859	85,900	0
Wisconsin		4,450,529	966,246	146,907	288,055	1,437,229	367,260	0
East South Central	Total	2,126,378	3,505,078	938,285	8,719,794	9,475,300	244,754	844,742
Alabama		211,449	215,935	66,497	1,837,077	1,988,787	28,597	1,701
Kentucky		983,348	955,418	395,834	2,828,238	3,800,402	24,430	0
Mississippi		356,029	1,406,560	123,232	1,961,497	1,612,124	175,564	614,449
Tennessee		575,553	927,165	352,722	2,092,981	2,073,987	16,163	228,592
Middle Atlantic	Total	2,961,287	330,744	317,936	1,526,873	3,921,309	211,619	0
New Jersey		121,987	104,060	35,486	85,629	178,878	1,860	0
New York		1,309,500	0	136,532	729,033	1,808,506	59,803	0
Pennsylvania		1,529,800	226,684	145,918	712,210	1,933,924	149,956	0
Mountain	Total	1,806,576	0	11,089,559	223,743	6,355,095	2,169,664	433,180
Arizona		48,727	0	116,467	0	63,482	20,783	368,426
Colorado		1,141,533	0	3,429,035	0	1,654,062	296,993	0
Idaho		125,274	0	1,649,107	0	386,983	613,348	0
Montana		75,049	0	5,009,344	0	2,017,105	879,463	0
Nevada		0	0	14,275	0	349,672	2,439	0
New Mexico		228,518	0	438,116	0	159,370	103,935	64,754
Utah		93,034	0	206,488	0	259,942	162,668	0
Wyoming		94,443	0	226,726	223,743	1,464,480	90,034	0

Table 22. Acres Planted for Major Crops, 2020 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
New England	<i>Total</i>	0	0	0	326,410	1,019,422	0	0
Connecticut		0	0	0	46,756	115,226	0	0
Maine		0	0	0	0	386,198	0	0
Massachusetts		0	0	0	63,205	157,835	0	0
New Hampshire		0	0	0	51,779	112,524	0	0
Rhode Island		0	0	0	5,442	9,177	0	0
Vermont		0	0	0	159,228	238,462	0	0
Pacific	<i>Total</i>	989,120	0	4,337,386	27,923	3,139,734	1,404,333	1,172,729
California		606,140	0	504,343	0	1,113,475	1,048,574	1,172,729
Oregon		97,042	0	1,060,395	27,923	1,399,458	132,200	0
Washington		285,938	0	2,772,648	0	626,801	223,559	0
South Atlantic	<i>Total</i>	3,017,935	2,762,548	1,289,457	5,622,410	6,609,746	287,706	2,191,767
Delaware		179,036	193,959	68,055	25,052	11,758	24,275	0
Florida		115,486	20,836	9,656	371,944	465,472	0	116,206
Georgia		467,006	270,871	206,650	1,191,740	1,186,488	66,875	1,099,341
Maryland		590,168	432,103	212,359	153,311	291,961	45,157	0
North Carolina		933,195	935,267	441,638	1,307,026	1,092,485	60,446	674,299
South Carolina		262,988	492,472	167,688	617,589	344,277	39,900	226,608
Virginia		418,050	417,038	174,608	1,393,056	2,178,517	46,647	75,312
West Virginia		52,006	0	8,803	562,691	1,038,788	4,406	0
West North Central	<i>Total</i>	41,285,506	28,447,149	23,436,945	20,024,720	22,981,145	7,023,346	407,565
Iowa		13,750,916	9,453,966	33,720	768,303	677,672	327,704	0
Kansas		3,052,551	1,885,406	7,545,407	5,225,652	3,878,274	2,646,720	0
Minnesota		7,934,451	6,361,878	2,496,703	490,500	958,944	597,317	0
Missouri		2,702,915	3,755,425	860,674	4,758,373	7,770,922	445,143	407,565
Nebraska		9,389,583	3,645,175	1,866,580	1,343,275	4,866,816	896,298	0
North Dakota		902,304	773,049	7,596,607	5,326,547	2,560,411	1,630,241	0
South Dakota		3,552,786	2,572,250	3,037,255	2,112,071	2,268,105	479,924	0

Table 22. Acres Planted for Major Crops, 2020 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
West South Central	Total	3,251,993	4,765,168	9,395,969	14,031,208	8,241,989	4,910,619	5,548,313
Arkansas		194,047	3,329,716	690,023	2,706,451	2,355,937	1,581,492	393,468
Louisiana		295,526	822,068	70,111	1,155,178	559,976	385,686	417,714
Oklahoma		283,549	229,381	4,413,512	3,768,905	2,156,060	303,383	135,064
Texas		2,478,871	384,003	4,222,323	6,400,674	3,170,015	2,640,058	4,602,067
	U.S. Total	82,939,652	59,130,872	53,990,130	56,766,593	65,652,568	17,125,405	10,598,296

*Includes Barley, Oats, Rice and Sorghum.

Table 23. Acres Planted for Major Crops, 2025

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
East North Central	Total	25,027,748	17,939,965	2,947,628	11,120,393	6,148,836	841,956	0
Illinois		10,346,224	8,491,027	908,671	3,716,612	900,650	294,900	0
Indiana		4,633,301	3,980,915	472,349	3,284,632	790,187	49,402	0
Michigan		2,888,682	1,161,248	705,808	672,248	788,959	68,518	0
Ohio		2,506,205	3,655,222	712,863	2,561,130	1,509,507	85,507	0
Wisconsin		4,653,336	651,552	147,936	885,771	2,159,533	343,630	0
East South Central	Total	1,844,944	3,171,328	861,785	12,819,677	14,201,713	243,265	1,230,957
Alabama		187,288	186,421	60,839	2,036,495	2,917,708	30,271	298,582
Kentucky		868,086	888,523	365,282	4,640,641	4,592,655	24,161	0
Mississippi		315,152	1,249,056	112,949	2,842,026	2,455,861	175,827	675,882
Tennessee		474,419	847,328	322,714	3,300,515	4,235,488	13,006	256,493
Middle Atlantic	Total	2,614,107	311,208	299,117	2,713,632	4,672,477	198,431	0
New Jersey		122,385	85,116	24,881	203,449	287,412	1,869	0
New York		1,257,746	0	143,360	1,006,160	1,855,761	57,377	0
Pennsylvania		1,233,977	226,092	130,876	1,504,023	2,529,303	139,186	0
Mountain	Total	1,885,214	0	11,100,729	3,867,030	8,524,941	2,007,369	418,681
Arizona		47,813	0	143,309	0	71,193	21,099	352,872
Colorado		1,128,457	0	3,572,914	283,001	2,231,197	328,823	0
Idaho		134,069	0	1,705,376	0	576,457	576,458	0
Montana		153,892	0	4,726,503	2,513,098	2,798,297	661,332	0
Nevada		0	0	14,794	371	437,710	2,476	0
New Mexico		227,491	0	469,100	218,363	208,844	107,654	65,809
Utah		99,211	0	213,431	63,455	346,313	170,128	0
Wyoming		94,281	0	255,301	788,742	1,854,930	139,400	0

Table 23. Acres Planted for Major Crops, 2025 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
New England	<i>Total</i>	0	0	0	468,619	1,150,384	0	0
Connecticut		0	0	0	56,199	111,392	0	0
Maine		0	0	0	0	384,059	0	0
Massachusetts		0	0	0	180,680	284,734	0	0
New Hampshire		0	0	0	59,256	105,818	0	0
Rhode Island		0	0	0	5,255	11,787	0	0
Vermont		0	0	0	167,229	252,594	0	0
Pacific	<i>Total</i>	1,016,084	0	4,440,283	585,896	4,326,294	1,372,009	1,180,473
California		633,973	0	492,643	0	1,383,164	1,049,234	1,180,473
Oregon		96,492	0	1,090,180	550,464	1,987,256	121,605	0
Washington		285,620	0	2,857,460	35,431	955,875	201,171	0
South Atlantic	<i>Total</i>	2,705,559	2,585,687	1,155,638	9,965,596	8,837,435	261,858	2,095,634
Delaware		179,210	182,624	70,528	41,778	16,467	15,600	0
Florida		99,818	18,481	8,835	601,802	1,011,166	0	113,830
Georgia		329,738	267,986	197,798	2,055,881	1,836,920	64,954	1,045,594
Maryland		590,459	404,790	196,336	266,810	332,564	34,211	0
North Carolina		878,281	849,354	360,034	2,018,898	1,187,681	58,261	664,112
South Carolina		232,162	468,319	153,421	889,414	733,036	38,787	204,218
Virginia		348,639	394,133	160,396	2,688,001	2,448,618	45,842	67,879
West Virginia		47,251	0	8,290	1,403,013	1,270,982	4,203	0
West North Central	<i>Total</i>	40,661,867	24,766,387	20,399,668	43,892,791	36,576,119	6,967,883	365,107
Iowa		13,390,680	8,006,116	31,934	2,570,673	1,078,483	313,686	0
Kansas		3,013,173	1,779,002	7,311,022	8,953,072	7,047,349	2,568,756	0
Minnesota		7,796,985	5,580,442	1,675,490	2,457,847	1,446,852	588,671	0
Missouri		2,745,780	3,537,648	833,979	9,045,310	8,704,456	428,163	365,107
Nebraska		9,408,612	3,591,246	1,551,914	7,574,497	8,172,657	879,658	0
North Dakota		872,566	507,508	6,831,993	8,102,810	5,144,930	1,710,494	0
South Dakota		3,434,070	1,764,425	2,163,336	5,188,583	4,981,392	478,455	0

Table 23. Acres Planted for Major Crops, 2025 (Cont.)

Region/States	Corn	Soybeans	Wheat	Ded Energy	Hay	Other*	Cotton	
	Acres Planted							
West South Central	Total	2,940,385	4,567,593	8,189,255	20,390,121	17,076,338	4,639,233	4,847,345
Arkansas		154,293	3,240,367	630,732	4,462,908	3,430,874	1,617,884	165,049
Louisiana		259,450	729,141	64,146	1,450,602	1,082,259	390,646	452,820
Oklahoma		268,487	233,538	4,045,237	5,617,562	5,640,858	283,536	134,875
Texas		2,258,155	364,547	3,449,140	8,859,050	6,922,347	2,347,167	4,094,601
	U.S. Total	78,695,909	53,342,168	49,394,103	105,823,755	101,514,536	16,532,004	10,138,196

*Includes Barley, Oats, Rice and Sorghum.

Table 24. Land Use Change by State and Census Region, 2010.

Region/States		Corn	Soybeans	Switchgrass	Hay
		Acres Planted			
East North Central	<i>Total</i>	200,824.4	258,580.9	0.0	40,308.0
Illinois		44,291.5	143,248.9	0.0	0.0
Indiana		34,359.2	27,055.7	0.0	8,609.0
Michigan		40,354.2	32,060.8	0.0	2,073.9
Ohio		32,472.2	31,002.5	0.0	0.0
Wisconsin		49,347.4	25,213.0	0.0	29,625.1
East South Central	<i>Total</i>	0.0	9,774.7	0.0	81,587.4
Alabama		0.0	0.0	0.0	0.0
Kentucky		0.0	9,774.7	0.0	48,639.3
Mississippi		0.0	0.0	0.0	30,264.0
Tennessee		0.0	0.0	0.0	2,684.0
Middle Atlantic	<i>Total</i>	15,530.4	3,472.7	0.0	26,962.4
New Jersey		0.0	1,980.0	0.0	905.2
New York		15,530.4	0.0	0.0	-13,900.7
Pennsylvania		0.0	1,492.8	0.0	39,957.8
Mountain	<i>Total</i>	175,682.3	0.0	0.0	157,902.6
Arizona		0.0	0.0	0.0	0.0
Colorado		172,350.4	0.0	0.0	35,882.7
Idaho		3,331.9	0.0	0.0	77,598.0
Montana		0.0	0.0	0.0	16,133.8
Nevada		0.0	0.0	0.0	0.0
New Mexico		0.0	0.0	0.0	1,367.1
Utah		0.0	0.0	0.0	22,903.8
Wyoming		0.0	0.0	0.0	4,017.2
New England	<i>Total</i>	0.0	0.0	0.0	2,488.5
Connecticut		0.0	0.0	0.0	0.0
Maine		0.0	0.0	0.0	2,464.2
Massachusetts		0.0	0.0	0.0	18.9
New Hampshire		0.0	0.0	0.0	5.4
Rhode Island		0.0	0.0	0.0	0.0
Vermont		0.0	0.0	0.0	0.0
Pacific	<i>Total</i>	3,476.0	0.0	0.0	57,027.4
California		3,476.0	0.0	0.0	17,525.8
Oregon		0.0	0.0	0.0	39,501.5
Washington		0.0	0.0	0.0	0.0

Table 24. Land Use Change, 2010 (Cont.)

Region/States		Corn	Soybeans	Switchgrass	Hay
		Acres Planted			
South Atlantic	<i>Total</i>	2,979.8	31,082.0	0.0	10,569.0
Delaware		0.0	2,044.9	0.0	-1,201.6
Florida		0.0	0.0	0.0	0.0
Georgia		0.0	14,362.3	0.0	2,234.3
Maryland		0.0	3,362.9	0.0	384.1
North Carolina		2,979.8	289.8	0.0	1,556.1
South Carolina		0.0	7,409.0	0.0	0.0
Virginia		0.0	3,613.2	0.0	7,248.3
West Virginia		0.0	0.0	0.0	347.8
West North Central	<i>Total</i>	454,887.2	387,253.6	0.0	365,953.0
Iowa		260,379.6	252,782.8	0.0	60,603.0
Kansas		0.0	0.0	0.0	50,494.3
Minnesota		0.0	126,800.9	0.0	0.0
Missouri		0.0	7,669.8	0.0	100,767.9
Nebraska		117,210.4	0.0	0.0	154,087.8
North Dakota		0.0	0.0	0.0	0.0
South Dakota		77,297.2	0.0	0.0	0.0
West South Central	<i>Total</i>	33,410.8	0.0	0.0	-22,926.0
Arkansas		0.0	0.0	0.0	428.5
Louisiana		0.0	0.0	0.0	0.0
Oklahoma		0.0	0.0	0.0	0.0
Texas		33,410.8	0.0	0.0	-23,354.5
<i>U.S. Total</i>		886,791.0	690,163.9	0.0	719,872.2

Table 25. Land Use Change by State and Census Region, 2015.

Region/States		Corn	Soybeans	Switchgrass	Hay
		Acres Planted			
East North Central	Total	-884,525.7	732,033.6	1,118,520.5	137,560.9
Illinois		-318,725.4	468,665.5	203,126.7	33,781.7
Indiana		-348,816.7	107,850.7	348,599.6	33,539.0
Michigan		-14,547.4	-340.8	49,824.5	21,584.2
Ohio		-283,034.0	66,877.0	370,716.6	-5,324.6
Wisconsin		80,597.7	88,981.3	146,253.1	53,980.6
East South Central	Total	33,152.4	-285,444.9	2,905,126.7	24,455.5
Alabama		-18,575.6	0.0	673,265.6	147,872.4
Kentucky		55,575.1	-44,557.3	657,803.1	47,347.0
Mississippi		-38,273.5	-152,087.3	752,235.9	-77,603.8
Tennessee		34,426.3	-88,800.3	821,822.1	-93,160.2
Middle Atlantic	Total	-33,731.4	32,756.2	456,252.5	106,826.2
New Jersey		413.2	6,976.9	20,623.4	-4,744.6
New York		-3,106.3	0.0	333,361.6	-38,975.3
Pennsylvania		-31,038.3	25,779.3	102,267.5	150,546.1
Mountain	Total	302,739.1	0.0	41,945.7	76,123.5
Arizona		0.0	0.0	0.0	-4,257.0
Colorado		102,358.1	0.0	0.0	41,633.3
Idaho		13,102.6	0.0	0.0	5,668.3
Montana		88,646.7	0.0	0.0	18,964.6
Nevada		0.0	0.0	0.0	0.0
New Mexico		79,306.0	0.0	0.0	423.4
Utah		20,078.8	0.0	0.0	875.9
Wyoming		-753.2	0.0	41,945.7	12,815.0
New England	Total	0.0	0.0	110,608.7	-8,467.5
Connecticut		0.0	0.0	12,297.0	237.1
Maine		0.0	0.0	0.0	3,319.5
Massachusetts		0.0	0.0	16,671.7	-227.3
New Hampshire		0.0	0.0	9,365.1	7,007.0
Rhode Island		0.0	0.0	2,670.1	-456.9
Vermont		0.0	0.0	69,604.8	-18,346.9
Pacific	Total	146,489.3	0.0	0.0	104,313.2
California		10,474.4	0.0	0.0	9,010.1
Oregon		27,233.7	0.0	0.0	95,303.1
Washington		108,781.2	0.0	0.0	0.0

Table 25. Land Use Change, 2015 (Cont.).

Region/States		Corn	Soybeans	Switchgrass	Hay
		Acres Planted			
South Atlantic	Total	-32,125.8	-221,576.4	1,625,196.5	211,322.3
Delaware		544.7	-15,237.7	17,834.3	-1,012.7
Florida		0.0	0.0	149,699.8	-51,853.8
Georgia		1,423.0	-28,160.3	430,922.8	-19,124.2
Maryland		5,408.0	-9,260.0	37,433.8	13,805.1
North Carolina		-9,442.8	-79,635.8	328,461.9	78,416.9
South Carolina		-43,642.4	-55,273.5	247,968.7	-8,477.2
Virginia		2,447.7	-34,009.0	338,746.1	102,678.2
West Virginia		11,136.0	0.0	74,129.3	96,890.0
West North Central	Total	863,343.0	1,451,447.0	5,967,567.9	1,355,389.0
Iowa		67,734.7	550,014.1	144,871.7	35,603.8
Kansas		344,666.3	38,075.0	1,789,615.2	242,954.2
Minnesota		70,148.4	230,034.4	222,662.8	38,452.1
Missouri		225,404.9	316,370.2	1,412,483.0	235,799.1
Nebraska		298,110.7	143,231.7	219,252.4	519,364.4
North Dakota		71,340.5	61,836.6	1,495,771.1	207,458.9
South Dakota		-214,062.5	111,885.1	682,911.7	75,756.6
West South Central	Total	272,909.7	7,799.3	5,099,489.0	-1,153,477.7
Arkansas		2,217.4	-185,817.0	1,006,657.2	9,387.0
Louisiana		-83,165.4	-30,976.7	546,428.1	19,758.5
Oklahoma		99,071.8	56,061.8	1,598,991.2	-83,901.0
Texas		254,785.9	168,531.2	1,947,412.4	-1,098,722.2
	U.S. Total	668,250.6	1,717,014.8	17,324,707.4	854,045.5

Table 26. Land Use Change by State and Census Region, 2020.

Region/States		Corn	Soybeans	Switchgrass	Hay
Acres Planted					
East North Central	Total	-292,892.6	-4,176,084.6	6,263,511.6	647,827.5
Illinois		-277,005.4	-1,708,663.4	2,409,098.7	103,720.7
Indiana		-361,081.8	-1,309,282.3	1,918,001.4	102,083.7
Michigan		169,692.9	-269,484.0	211,631.9	27,556.1
Ohio		-20,104.6	-865,787.9	1,436,724.5	162,715.0
Wisconsin		195,606.2	-22,867.1	288,055.1	251,752.1
East South Central	Total	-1,107,509.2	-1,642,849.0	8,719,793.9	167,518.7
Alabama		-105,460.8	-121,463.4	1,837,077.4	133,638.1
Kentucky		-553,133.0	-352,514.4	2,828,238.4	54,735.4
Mississippi		-184,763.6	-716,847.0	1,961,497.0	-126,885.1
Tennessee		-264,151.9	-452,024.1	2,092,981.1	106,030.2
Middle Atlantic	Total	-80,140.8	-83,628.7	1,526,872.8	78,707.2
New Jersey		21.2	-36,500.3	85,629.5	13,680.3
New York		-209.0	0.0	729,033.4	34,443.8
Pennsylvania		-79,953.0	-47,128.4	712,209.9	30,583.1
Mountain	Total	376,644.3	0.0	223,742.9	-68,915.1
Arizona		6,750.3	0.0	0.0	-5,447.4
Colorado		257,158.9	0.0	0.0	-106,045.4
Idaho		11,282.5	0.0	0.0	6,710.7
Montana		9,539.8	0.0	0.0	-6,226.3
Nevada		0.0	0.0	0.0	0.0
New Mexico		78,085.4	0.0	0.0	406.6
Utah		13,827.5	0.0	0.0	4,650.1
Wyoming		0.0	0.0	223,742.9	37,036.6
New England	Total	0.0	0.0	326,409.9	-40,912.0
Connecticut		0.0	0.0	46,756.5	-7,817.5
Maine		0.0	0.0	0.0	4,098.7
Massachusetts		0.0	0.0	63,204.9	-8,981.1
New Hampshire		0.0	0.0	51,779.5	-13,764.2
Rhode Island		0.0	0.0	5,441.6	-505.3
Vermont		0.0	0.0	159,227.5	-13,942.6
Pacific	Total	205,850.7	0.0	27,923.4	256,841.1
California		63,448.3	0.0	0.0	6,812.0
Oregon		35,608.1	0.0	27,923.4	232,358.9
Washington		106,794.4	0.0	0.0	17,670.3

Table 26. Land Use Change, 2020 (Cont.)

Region/States		Corn	Soybeans	Switchgrass	Hay
		Acres Planted			
South Atlantic	Total	-479,544.7	-439,732.7	5,622,410.4	280,893.2
Delaware		375.0	-17,866.4	25,052.1	-1,181.1
Florida		-27,442.1	-11,720.2	371,944.3	-31,468.9
Georgia		-116,618.2	-97,490.3	1,191,740.1	87,248.7
Maryland		5,233.2	-75,471.5	153,311.4	36,524.0
North Carolina		-111,075.7	-126,735.8	1,307,026.1	-1,664.4
South Carolina		-147,930.9	-61,293.9	617,589.1	42,013.9
Virginia		-77,154.9	-49,154.6	1,393,055.8	52,330.8
West Virginia		-4,931.0	0.0	562,691.5	97,090.3
West North Central	Total	922,685.9	-2,698,499.9	20,024,720.5	3,910,099.9
Iowa		730,684.9	-670,659.3	768,303.1	109,615.1
Kansas		283,312.9	-523,624.0	5,225,652.2	180,212.0
Minnesota		65,817.9	62,484.0	490,499.6	184,526.6
Missouri		101,186.1	-1,143,182.2	4,758,373.0	992,412.1
Nebraska		154,267.9	137,726.7	1,343,274.9	1,225,391.7
North Dakota		-34,727.7	-120,532.2	5,326,547.0	743,339.6
South Dakota		-377,856.1	-440,713.0	2,112,070.7	474,602.9
West South Central	Total	-79,235.1	-1,030,572.3	14,031,208.0	-1,704,293.6
Arkansas		-6,648.7	-514,441.7	2,706,450.7	-64,680.4
Louisiana		-163,691.3	-462,413.2	1,155,177.9	66,844.7
Oklahoma		72,134.1	-119,856.1	3,768,905.2	-383,604.2
Texas		18,970.8	66,138.8	6,400,674.2	-1,322,853.7
	U.S. Total	-534,141.5	-10,071,367.2	56,766,593.3	3,527,767.0

Table 27. Land Use Change by State and Census Region, 2025.

Region/States	Corn	Soybeans	Switchgrass	Hay	
Acres Planted					
East North Central	Total	-2,238,776.8	-5,283,774.1	11,120,392.8	3,011,309.7
Illinois		-997,933.5	-2,007,685.4	3,716,612.0	400,960.7
Indiana		-1,252,158.2	-1,528,612.4	3,284,631.8	325,515.9
Michigan		190,461.1	-414,468.8	672,248.1	345,519.0
Ohio		-619,647.2	-999,213.2	2,561,129.5	920,912.3
Wisconsin		440,501.1	-333,794.3	885,771.4	1,018,401.8
East South Central	Total	-1,385,616.7	-1,945,316.9	12,819,677.1	4,981,812.0
Alabama		-128,757.7	-143,527.6	2,036,494.7	1,055,349.7
Kentucky		-668,349.1	-410,023.3	4,640,641.5	938,434.8
Mississippi		-223,249.3	-861,605.6	2,842,026.2	700,879.9
Tennessee		-365,260.6	-530,160.3	3,300,514.7	2,287,147.6
Middle Atlantic	Total	-380,081.5	-63,041.3	2,713,631.8	800,999.8
New Jersey		423.2	-43,764.3	203,448.5	115,421.8
New York		-46,421.8	0.0	1,006,159.8	113,472.9
Pennsylvania		-334,082.9	-19,276.9	1,504,023.4	572,105.2
Mountain	Total	515,677.1	0.0	3,867,030.4	2,042,726.8
Arizona		7,453.4	0.0	0.0	5,432.7
Colorado		301,458.4	0.0	283,000.9	464,066.7
Idaho		21,251.5	0.0	0.0	163,446.2
Montana		88,384.7	0.0	2,513,098.1	755,473.7
Nevada		0.0	0.0	371.0	90,981.8
New Mexico		77,063.4	0.0	218,362.9	49,829.9
Utah		20,007.1	0.0	63,455.4	85,331.5
Wyoming		58.8	0.0	788,742.1	428,164.3
New England	Total	0.0	0.0	468,619.3	98,129.8
Connecticut		0.0	0.0	56,199.1	-10,713.9
Maine		0.0	0.0	0.0	4,871.9
Massachusetts		0.0	0.0	180,680.5	119,188.3
New Hampshire		0.0	0.0	59,255.9	-19,507.6
Rhode Island		0.0	0.0	5,255.2	2,178.6
Vermont		0.0	0.0	167,228.7	2,112.5
Pacific	Total	236,063.6	0.0	585,895.5	1,461,232.8
California		91,592.8	0.0	0.0	290,950.5
Oregon		35,909.5	0.0	550,464.3	828,209.0
Washington		108,561.3	0.0	35,431.3	342,073.3

Table 27. Land Use Change, 2025 (Cont.).

Region/States		Corn	Soybeans	Switchgrass	Hay
		Acres Planted			
South Atlantic	Total	-777,512.9	-448,197.4	9,965,595.9	2,556,307.3
	Delaware	555.1	-18,021.7	41,778.4	1,826.1
	Florida	-43,105.9	-14,228.4	601,802.4	520,503.3
	Georgia	-253,869.0	-91,061.6	2,055,880.6	772,505.0
	Maryland	5,541.9	-72,792.6	266,809.5	74,279.4
	North Carolina	-160,633.6	-144,699.5	2,018,897.5	82,704.1
	South Carolina	-178,744.5	-55,709.4	889,414.0	433,075.5
	Virginia	-141,298.7	-51,684.2	2,688,000.5	338,972.6
	West Virginia	-5,958.2	0.0	1,403,012.8	332,441.2
West North Central	Total	583,863.6	-5,748,220.8	43,892,790.9	17,526,257.4
	Iowa	315,882.3	-1,648,920.4	2,570,672.8	551,841.6
	Kansas	244,017.5	-618,873.5	8,953,072.3	3,314,199.6
	Minnesota	90,107.8	-630,108.7	2,457,846.5	678,334.7
	Missouri	147,517.4	-1,339,245.8	9,045,310.0	2,014,549.6
	Nebraska	280,058.2	106,057.2	7,574,496.5	4,424,072.5
	North Dakota	-64,159.2	-390,261.6	8,102,810.2	3,341,704.1
	South Dakota	-429,560.4	-1,226,868.0	5,188,582.5	3,201,555.3
West South Central	Total	-359,629.2	-1,165,505.0	20,390,121.0	6,989,933.8
	Arkansas	-46,396.3	-531,980.7	4,462,907.7	819,476.5
	Louisiana	-199,753.5	-561,373.9	1,450,602.3	592,885.2
	Oklahoma	57,078.0	-117,339.1	5,617,561.5	3,113,860.2
	Texas	-170,557.4	45,188.8	8,859,049.6	2,463,711.9
U.S. Total		-3,806,012.8	-14,654,055.3	105,823,754.6	39,468,709.4

Table 28. Estimated Agricultural Economic Impacts by State and Census Region, 2010.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	<i>Total</i>	\$858.3	\$1,364.8	6,401	11,274
Illinois		\$387.2	\$645.8	2,495	4,778
Indiana		\$181.6	\$273.9	1,252	2,222
Michigan		\$73.4	\$114.0	736	1,132
Ohio		\$109.8	\$164.6	980	1,554
Wisconsin		\$106.3	\$166.5	938	1,588
East South Central	<i>Total</i>	\$112.1	\$169.6	1,548	2,209
Alabama		\$5.3	\$7.4	28	52
Kentucky		\$64.6	\$98.5	1,142	1,534
Mississippi		\$20.7	\$29.7	233	345
Tennessee		\$21.5	\$34.0	145	277
Middle Atlantic	<i>Total</i>	\$54.6	\$88.4	409	720
New Jersey		\$2.9	\$4.4	21	33
New York		\$13.9	\$19.7	55	103
Pennsylvania		\$37.8	\$64.3	333	584
Mountain	<i>Total</i>	\$166.5	\$330.0	2,217	4,034
Arizona		\$0.5	\$1.1	6	12
Colorado		\$99.8	\$194.9	1,077	2,023
Idaho		\$28.8	\$60.1	491	902
Montana		\$24.5	\$50.0	474	798
Nevada		\$0.0	\$0.1	1	2
New Mexico		\$3.5	\$5.2	24	45
Utah		\$4.5	\$9.7	84	145
Wyoming		\$4.9	\$9.0	60	107
New England	<i>Total</i>	\$0.6	\$0.9	12	17
Connecticut		\$0.0	\$0.0	0	0
Maine		\$0.5	\$0.9	12	17
Massachusetts		\$0.0	\$0.0	0	0
New Hampshire		\$0.0	\$0.0	0	0
Rhode Island		\$0.0	\$0.0	0	0
Vermont		\$0.0	\$0.0	0	0
Pacific	<i>Total</i>	\$71.2	\$149.4	1,877	2,695
California		\$11.3	\$23.3	157	267
Oregon		\$15.2	\$34.1	475	696
Washington		\$44.7	\$92.0	1,246	1,733

Table 28. Estimated Agricultural Economic Impacts, 2010 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$77.4	\$116.7	594	1,006
Delaware		\$4.8	\$6.6	28	46
Florida		\$2.0	\$3.1	11	23
Georgia		\$10.9	\$16.8	84	142
Maryland		\$15.3	\$23.3	103	183
North Carolina		\$23.0	\$34.9	141	269
South Carolina		\$8.8	\$12.8	83	129
Virginia		\$11.7	\$17.9	131	196
West Virginia		\$0.9	\$1.3	13	17
West North Central	Total	\$1,406.4	\$2,262.8	10,827	20,322
Iowa		\$534.4	\$821.8	3,980	7,264
Kansas		\$97.4	\$170.3	847	1,628
Minnesota		\$236.1	\$399.7	1,813	3,411
Missouri		\$95.6	\$164.5	969	1,720
Nebraska		\$324.8	\$512.8	2,022	4,176
North Dakota		\$30.4	\$61.8	541	923
South Dakota		\$87.8	\$131.9	656	1,201
West South Central	Total	\$97.5	\$165.1	869	1,582
Arkansas		\$16.6	\$26.9	191	318
Louisiana		\$12.5	\$17.7	71	133
Oklahoma		\$6.7	\$14.7	126	225
Texas		\$61.7	\$105.8	481	906
U.S. Total		\$2,844.6	\$4,647.7	24,754	43,858

Table 29. Estimated Agricultural Economic Impacts by State and Census Region, 2015.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$4,573.9	\$7,127.1	33,322	56,389
Illinois		\$2,397.0	\$3,861.3	17,424	29,458
Indiana		\$1,037.9	\$1,526.1	8,373	13,295
Michigan		\$314.3	\$460.7	1,836	3,266
Ohio		\$265.9	\$358.4	198	1,176
Wisconsin		\$558.7	\$920.6	5,490	9,195
East South Central	Total	\$966.7	\$1,605.7	17,467	26,886
Alabama		\$224.9	\$389.8	3,208	5,001
Kentucky		\$269.4	\$422.2	4,748	7,074
Mississippi		\$162.4	\$250.3	1,269	2,344
Tennessee		\$310.0	\$543.5	8,243	12,467
Middle Atlantic	Total	\$204.4	\$341.3	2,629	3,905
New Jersey		\$6.0	\$8.2	113	132
New York		\$136.7	\$211.8	1,430	2,100
Pennsylvania		\$61.7	\$121.2	1,087	1,673
Mountain	Total	\$324.6	\$729.4	4,215	8,792
Arizona		\$3.3	\$20.0	-65	56
Colorado		\$110.7	\$234.4	1,466	2,700
Idaho		\$164.5	\$364.2	1,913	4,339
Montana		-\$15.2	-\$9.1	0	62
Nevada		\$1.7	\$4.2	8	37
New Mexico		\$32.5	\$57.2	425	743
Utah		\$18.3	\$40.8	354	647
Wyoming		\$8.7	\$17.8	113	209
New England	Total	\$16.1	\$24.3	299	398
Connecticut		\$1.9	\$2.8	40	50
Maine		\$0.7	\$1.2	15	21
Massachusetts		\$2.6	\$3.6	72	82
New Hampshire		\$2.5	\$4.2	78	101
Rhode Island		\$0.3	\$0.3	6	6
Vermont		\$8.2	\$12.3	88	137
Pacific	Total	\$483.0	\$1,092.4	8,726	17,404
California		\$34.4	\$110.9	127	1,119
Oregon		\$136.2	\$303.9	3,002	5,687
Washington		\$312.5	\$677.6	5,597	10,597

Table 29. Estimated Agricultural Economic Impacts, 2015 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$942.1	\$1,449.2	12,369	17,976
Delaware		\$47.6	\$59.9	336	454
Florida		\$26.0	\$35.0	323	398
Georgia		\$124.5	\$202.6	1,023	1,719
Maryland		\$102.1	\$151.4	1,025	1,513
North Carolina		\$297.3	\$461.4	2,108	3,546
South Carolina		\$96.1	\$132.5	1,010	1,494
Virginia		\$193.4	\$306.7	3,488	5,001
West Virginia		\$55.1	\$99.6	3,056	3,850
West North Central	Total	\$7,814.2	\$12,914.6	62,397	111,748
Iowa		\$2,820.3	\$4,444.6	19,403	34,660
Kansas		\$577.3	\$985.8	4,563	8,331
Minnesota		\$2,218.4	\$3,644.1	16,598	29,793
Missouri		\$737.5	\$1,444.2	13,029	20,917
Nebraska		\$1,222.1	\$1,975.4	7,156	14,823
North Dakota		\$162.8	\$283.8	1,131	2,154
South Dakota		\$75.8	\$136.7	517	1,071
West South Central	Total	\$1,416.9	\$2,312.9	21,535	31,105
Arkansas		\$479.0	\$765.6	5,623	8,718
Louisiana		\$110.0	\$156.6	467	865
Oklahoma		\$300.0	\$485.8	4,914	7,380
Texas		\$528.0	\$904.9	10,531	14,141
U.S. Total		\$16,742.0	\$27,596.9	162,960	274,603

Table 30. Estimated Agricultural Economic Impacts by State and Census Region, 2020.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	<i>Total</i>	\$11,228.0	\$16,799.0	70,934	120,182
Illinois		\$5,313.0	\$8,225.7	33,723	57,474
Indiana		\$3,020.6	\$4,340.1	21,445	33,302
Michigan		\$623.7	\$909.7	3,577	6,391
Ohio		\$1,121.4	\$1,521.5	1,519	5,754
Wisconsin		\$1,149.4	\$1,802.1	10,669	17,260
East South Central	<i>Total</i>	\$6,928.1	\$10,070.5	105,376	140,697
Alabama		\$1,355.3	\$2,091.1	16,103	23,187
Kentucky		\$2,138.6	\$2,974.5	28,726	39,091
Mississippi		\$1,502.4	\$2,068.2	17,810	23,570
Tennessee		\$1,931.8	\$2,936.7	42,736	54,849
Middle Atlantic	<i>Total</i>	\$1,121.2	\$1,669.5	11,719	16,282
New Jersey		\$45.6	\$62.3	539	681
New York		\$513.2	\$751.8	4,988	6,946
Pennsylvania		\$562.4	\$855.3	6,191	8,654
Mountain	<i>Total</i>	\$1,137.4	\$2,323.5	9,612	22,414
Arizona		\$21.0	\$54.0	46	325
Colorado		\$383.2	\$827.6	3,113	7,345
Idaho		\$303.6	\$620.9	2,633	6,452
Montana		\$281.7	\$546.8	2,342	5,356
Nevada		\$2.8	\$6.2	12	52
New Mexico		\$52.5	\$98.2	539	1,078
Utah		\$34.1	\$72.5	445	958
Wyoming		\$58.4	\$97.4	482	850
New England	<i>Total</i>	\$127.7	\$171.2	1,716	2,194
Connecticut		\$16.8	\$22.9	255	313
Maine		\$0.7	\$1.2	15	22
Massachusetts		\$23.5	\$31.5	472	551
New Hampshire		\$17.4	\$22.3	293	356
Rhode Island		\$2.2	\$2.7	35	39
Vermont		\$67.1	\$90.7	646	914
Pacific	<i>Total</i>	\$1,029.3	\$2,043.2	14,669	28,189
California		\$113.7	\$261.7	721	2,442
Oregon		\$368.8	\$663.1	7,186	10,925
Washington		\$546.7	\$1,118.4	6,762	14,822

Table 30. Estimated Agricultural Economic Impacts, 2020 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	<i>Total</i>	\$4,576.3	\$6,854.4	59,058	83,675
Delaware		\$92.4	\$119.2	635	874
Florida		\$197.6	\$311.2	2,262	3,239
Georgia		\$953.8	\$1,503.1	8,050	12,725
Maryland		\$260.3	\$377.2	2,347	3,468
North Carolina		\$1,059.9	\$1,591.3	7,364	11,931
South Carolina		\$494.0	\$673.7	5,895	7,706
Virginia		\$1,077.0	\$1,582.8	16,445	22,706
West Virginia		\$441.4	\$695.8	16,060	21,026
West North Central	<i>Total</i>	\$21,964.8	\$33,357.8	158,726	273,583
Iowa		\$5,489.4	\$8,201.2	36,126	62,847
Kansas		\$2,998.5	\$4,270.7	18,897	31,330
Minnesota		\$3,573.7	\$5,721.6	25,747	45,837
Missouri		\$3,256.4	\$5,661.8	39,921	65,551
Nebraska		\$3,015.7	\$4,668.6	17,308	34,511
North Dakota		\$2,271.3	\$2,953.0	12,999	20,138
South Dakota		\$1,359.7	\$1,881.1	7,728	13,367
West South Central	<i>Total</i>	\$8,732.2	\$12,722.9	104,685	141,354
Arkansas		\$2,178.2	\$3,024.2	19,314	27,655
Louisiana		\$872.7	\$1,402.3	8,081	12,277
Oklahoma		\$2,245.9	\$3,079.3	31,128	40,507
Texas		\$3,435.4	\$5,217.1	46,162	60,915
<i>U.S. Total</i>		\$56,844.9	\$86,012.0	536,493	828,570

Table 31. Estimated Agricultural Economic Impacts by State and Census Region, 2025.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$19,425.2	\$28,973.7	124,781	210,774
Illinois		\$9,269.3	\$14,183.1	59,475	99,708
Indiana		\$5,033.5	\$7,089.6	36,304	55,499
Michigan		\$1,127.4	\$1,665.3	6,865	12,147
Ohio		\$1,777.7	\$2,416.6	2,124	8,861
Wisconsin		\$2,217.3	\$3,619.1	20,012	34,558
East South Central	Total	\$15,071.4	\$21,749.9	258,753	335,061
Alabama		\$2,242.6	\$3,450.5	27,581	39,655
Kentucky		\$5,770.3	\$7,871.8	87,682	111,440
Mississippi		\$3,035.7	\$4,138.8	41,039	53,096
Tennessee		\$4,022.9	\$6,288.9	102,451	130,870
Middle Atlantic	Total	\$2,322.2	\$3,673.8	25,495	38,038
New Jersey		\$151.6	\$214.7	2,217	2,733
New York		\$855.7	\$1,277.1	8,058	11,636
Pennsylvania		\$1,314.9	\$2,181.9	15,220	23,669
Mountain	Total	\$3,089.4	\$5,287.1	26,475	50,204
Arizona		\$55.8	\$125.6	292	930
Colorado		\$1,054.3	\$1,830.6	8,355	15,715
Idaho		\$477.3	\$984.0	3,851	9,929
Montana		\$1,039.0	\$1,555.8	9,411	15,482
Nevada		\$23.4	\$39.4	263	429
New Mexico		\$97.2	\$160.0	962	1,715
Utah		\$77.9	\$141.4	1,090	1,847
Wyoming		\$264.5	\$450.4	2,250	4,158
New England	Total	\$244.1	\$348.4	4,233	5,335
Connecticut		\$27.8	\$37.9	416	508
Maine		\$0.7	\$1.2	15	22
Massachusetts		\$104.2	\$152.8	2,495	2,949
New Hampshire		\$27.6	\$36.3	465	580
Rhode Island		\$2.3	\$3.1	44	51
Vermont		\$81.5	\$117.1	798	1,224
Pacific	Total	\$2,405.7	\$4,127.7	35,667	54,813
California		\$261.9	\$563.4	2,173	5,407
Oregon		\$834.2	\$1,457.9	15,657	23,292
Washington		\$1,309.6	\$2,106.5	17,837	26,115

Table 31. Estimated Agricultural Economic Impacts, 2025 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$11,238.3	\$16,632.3	164,495	220,712
Delaware		\$126.8	\$163.3	871	1,223
Florida		\$464.2	\$755.1	6,081	8,957
Georgia		\$2,120.1	\$3,508.4	18,762	31,402
Maryland		\$466.5	\$676.4	4,214	6,227
North Carolina		\$2,327.3	\$3,465.5	16,543	26,458
South Carolina		\$919.2	\$1,273.8	12,066	15,924
Virginia		\$3,123.3	\$4,384.9	48,492	62,651
West Virginia		\$1,690.9	\$2,404.9	57,466	67,870
West North Central	Total	\$43,784.0	\$65,543.6	328,092	548,247
Iowa		\$9,610.0	\$13,811.6	61,424	103,669
Kansas		\$6,305.5	\$9,138.3	40,798	68,873
Minnesota		\$5,106.9	\$8,155.4	35,181	63,829
Missouri		\$8,541.5	\$13,659.6	109,930	162,916
Nebraska		\$7,911.6	\$11,742.6	44,784	85,658
North Dakota		\$3,912.8	\$5,415.9	22,774	37,782
South Dakota		\$2,395.9	\$3,620.1	13,201	25,519
West South Central	Total	\$16,083.8	\$24,175.8	203,768	286,441
Arkansas		\$4,777.8	\$6,562.6	47,888	66,669
Louisiana		\$1,427.2	\$2,215.2	15,522	22,756
Oklahoma		\$4,489.2	\$6,557.7	67,514	93,285
Texas		\$5,389.6	\$8,840.3	72,843	103,731
U.S. Total		\$113,664.2	\$170,512.2	1,171,760	1,749,625

Table 32. Estimated Renewable Energy Economic Impacts by State and Census Region, 2010.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$4,937.6	\$10,595.6	2,097	48,154
Illinois		\$2,286.3	\$5,155.3	956	22,489
Indiana		\$1,006.7	\$2,044.1	462	9,721
Michigan		\$379.5	\$846.5	173	3,741
Ohio		\$707.0	\$1,440.5	250	6,854
Wisconsin		\$558.1	\$1,109.3	256	5,349
East South Central	Total	\$476.0	\$918.1	225	4,358
Alabama		\$35.7	\$72.4	22	354
Kentucky		\$235.4	\$444.3	106	2,045
Mississippi		\$82.8	\$156.0	40	772
Tennessee		\$122.2	\$245.3	57	1,187
Middle Atlantic	Total	\$297.8	\$656.3	140	2,847
New Jersey		\$15.7	\$32.5	7	122
New York		\$106.0	\$221.4	49	856
Pennsylvania		\$176.2	\$402.4	84	1,869
Mountain	Total	\$356.4	\$789.6	145	3,968
Arizona		\$10.4	\$21.9	12	115
Colorado		\$262.3	\$604.2	97	2,975
Idaho		\$24.5	\$46.3	9	262
Montana		\$8.6	\$15.7	5	87
Nevada		\$1.3	\$2.3	1	10
New Mexico		\$29.3	\$60.8	13	326
Utah		\$5.8	\$12.7	2	72
Wyoming		\$14.4	\$25.6	6	121
New England	Total	\$0.3	\$0.5	0	3
Connecticut		\$0.0	\$0.0	0	0
Maine		\$0.1	\$0.1	0	1
Massachusetts		\$0.2	\$0.3	0	1
New Hampshire		\$0.0	\$0.0	0	0
Rhode Island		\$0.0	\$0.0	0	0
Vermont		\$0.0	\$0.0	0	0
Pacific	Total	\$136.5	\$288.6	57	1,284
California		\$73.8	\$162.4	33	705
Oregon		\$11.1	\$23.7	5	122
Washington		\$51.6	\$102.4	19	458

Table 32. Estimated Renewable Energy Economic Impacts, 2010 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$443.1	\$902.0	227	4,192
Delaware		\$29.7	\$52.7	15	213
Florida		\$14.6	\$31.0	7	159
Georgia		\$68.5	\$150.3	40	713
Maryland		\$88.0	\$184.1	43	822
North Carolina		\$133.9	\$270.5	68	1,306
South Carolina		\$45.9	\$85.9	22	411
Virginia		\$57.0	\$116.8	28	518
West Virginia		\$5.6	\$10.7	3	49
West North Central	Total	\$6,860.0	\$14,283.3	3,239	70,003
Iowa		\$2,441.3	\$4,697.9	1,148	21,996
Kansas		\$585.0	\$1,339.9	257	6,779
Minnesota		\$1,262.6	\$2,699.5	595	12,490
Missouri		\$464.8	\$1,050.6	198	5,491
Nebraska		\$1,572.1	\$3,485.3	777	18,234
North Dakota		\$85.2	\$165.6	42	777
South Dakota		\$449.1	\$844.5	222	4,237
West South Central	Total	\$663.1	\$1,476.9	281	7,148
Arkansas		\$53.3	\$104.2	22	555
Louisiana		\$82.4	\$161.3	37	822
Oklahoma		\$53.8	\$115.1	25	627
Texas		\$473.6	\$1,096.3	198	5,143
Interstate Commerce	Total	\$0.0	\$26,454.1	0	201,925
U.S. Total		\$14,171.0	\$56,365.0	6,412	343,882

Table 33. Estimated Renewable Energy Economic Impacts by State and Census Region, 2015.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$13,167.9	\$27,640.0	7,616	133,323
Illinois		\$5,738.1	\$12,465.3	3,232	56,899
Indiana		\$2,585.2	\$5,201.5	1,619	26,250
Michigan		\$1,314.4	\$2,810.9	849	13,511
Ohio		\$1,973.2	\$3,991.0	950	20,123
Wisconsin		\$1,556.9	\$3,171.3	965	16,541
East South Central	Total	\$4,614.1	\$9,221.9	3,076	49,882
Alabama		\$1,231.0	\$2,531.6	825	14,014
Kentucky		\$1,052.8	\$2,054.0	671	10,507
Mississippi		\$1,365.2	\$2,578.4	909	14,310
Tennessee		\$965.1	\$2,057.9	671	11,051
Middle Atlantic	Total	\$1,002.9	\$2,261.2	650	10,722
New Jersey		\$32.4	\$67.5	19	271
New York		\$496.4	\$1,064.7	337	4,641
Pennsylvania		\$474.2	\$1,128.9	294	5,810
Mountain	Total	\$1,123.2	\$2,396.9	617	13,536
Arizona		\$69.7	\$143.9	51	772
Colorado		\$329.2	\$752.0	123	3,744
Idaho		\$446.6	\$928.2	279	5,733
Montana		\$104.7	\$213.4	71	1,258
Nevada		\$6.4	\$11.6	4	53
New Mexico		\$74.8	\$158.8	36	893
Utah		\$36.4	\$83.3	21	521
Wyoming		\$55.4	\$105.8	32	563
New England	Total	\$458.4	\$962.3	309	5,452
Connecticut		\$18.7	\$41.0	13	187
Maine		\$201.3	\$410.5	135	2,426
Massachusetts		\$22.1	\$49.0	15	240
New Hampshire		\$149.5	\$331.1	100	1,846
Rhode Island		\$3.7	\$7.6	3	38
Vermont		\$63.0	\$123.1	43	716
Pacific	Total	\$2,294.9	\$5,184.3	1,387	26,839
California		\$614.0	\$1,454.4	381	7,086
Oregon		\$616.2	\$1,409.2	392	8,128
Washington		\$1,064.7	\$2,320.6	615	11,624

Table 33. Estimated Renewable Energy Economic Impacts, 2015 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$4,448.9	\$9,707.6	3,149	52,371
Delaware		\$98.5	\$175.5	67	762
Florida		\$377.1	\$954.4	271	5,741
Georgia		\$1,192.1	\$2,741.4	856	14,704
Maryland		\$241.4	\$497.1	153	2,391
North Carolina		\$1,058.4	\$2,270.1	743	12,473
South Carolina		\$582.4	\$1,199.1	415	6,541
Virginia		\$686.0	\$1,437.0	491	7,358
West Virginia		\$213.1	\$432.9	153	2,403
West North Central	Total	\$17,517.8	\$35,483.6	11,028	182,985
Iowa		\$5,803.9	\$10,918.7	3,674	54,347
Kansas		\$1,608.6	\$3,459.1	933	18,131
Minnesota		\$4,086.1	\$8,505.2	2,733	42,085
Missouri		\$1,832.1	\$4,067.6	1,095	22,900
Nebraska		\$2,960.7	\$6,295.2	1,792	33,955
North Dakota		\$527.2	\$935.3	397	4,817
South Dakota		\$699.1	\$1,302.4	403	6,749
West South Central	Total	\$5,416.4	\$11,417.3	3,492	62,163
Arkansas		\$1,388.9	\$2,694.3	932	15,245
Louisiana		\$1,094.9	\$2,322.6	724	13,718
Oklahoma		\$866.7	\$1,728.8	617	9,964
Texas		\$2,066.0	\$4,671.5	1,218	23,236
Interstate Commerce	Total	\$0.0	\$95,419.3	0	737,831
U.S. Total		\$50,044.5	\$199,694.4	31,324	1,275,105

Table 34. Estimated Renewable Energy Economic Impacts by State and Census Region, 2020.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$21,586.3	\$44,735.2	13,145	217,916
Illinois		\$9,117.4	\$19,559.3	5,451	90,092
Indiana		\$4,657.3	\$9,303.3	3,149	47,591
Michigan		\$1,768.0	\$3,741.3	1,164	17,993
Ohio		\$3,909.5	\$7,817.1	2,010	39,688
Wisconsin		\$2,134.0	\$4,314.1	1,370	22,552
East South Central	Total	\$10,854.6	\$21,087.0	7,625	111,806
Alabama		\$2,488.8	\$4,905.0	1,701	26,458
Kentucky		\$3,080.5	\$5,825.3	2,174	29,697
Mississippi		\$2,785.0	\$5,132.1	1,908	27,861
Tennessee		\$2,500.3	\$5,224.5	1,842	27,790
Middle Atlantic	Total	\$2,047.1	\$4,458.2	1,441	21,296
New Jersey		\$73.5	\$148.6	49	607
New York		\$882.6	\$1,841.5	626	8,003
Pennsylvania		\$1,091.1	\$2,468.2	766	12,686
Mountain	Total	\$2,202.8	\$4,523.5	1,290	25,080
Arizona		\$90.2	\$185.6	64	992
Colorado		\$837.2	\$1,825.0	405	9,274
Idaho		\$609.9	\$1,238.3	383	7,571
Montana		\$351.0	\$654.6	256	3,789
Nevada		\$9.2	\$16.4	5	75
New Mexico		\$126.3	\$256.9	68	1,455
Utah		\$56.7	\$126.3	34	785
Wyoming		\$122.4	\$220.3	76	1,139
New England	Total	\$677.1	\$1,383.2	460	7,632
Connecticut		\$40.2	\$82.3	28	361
Maine		\$241.5	\$488.2	162	2,864
Massachusetts		\$50.7	\$105.7	35	503
New Hampshire		\$213.7	\$462.0	144	2,531
Rhode Island		\$6.0	\$11.8	4	59
Vermont		\$125.0	\$233.2	87	1,314
Pacific	Total	\$3,101.3	\$6,897.6	1,878	35,555
California		\$767.0	\$1,806.3	471	8,771
Oregon		\$879.3	\$1,979.2	561	11,323
Washington		\$1,455.1	\$3,112.0	846	15,461

Table 34. Estimated Renewable Energy Economic Impacts, 2020 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$8,472.0	\$17,680.0	6,200	93,733
Delaware		\$132.5	\$235.7	91	1,028
Florida		\$619.5	\$1,509.9	453	8,940
Georgia		\$2,076.1	\$4,604.4	1,527	24,294
Maryland		\$398.0	\$807.7	268	3,929
North Carolina		\$1,976.0	\$4,114.8	1,434	22,346
South Carolina		\$1,014.1	\$2,019.9	743	10,848
Virginia		\$1,614.4	\$3,200.3	1,205	16,065
West Virginia		\$641.4	\$1,187.3	480	6,284
West North Central	Total	\$30,875.3	\$61,391.0	20,876	322,541
Iowa		\$8,339.7	\$15,558.8	5,458	77,949
Kansas		\$4,059.4	\$8,371.6	2,718	44,706
Minnesota		\$5,140.4	\$10,659.8	3,479	52,892
Missouri		\$4,571.7	\$9,865.9	2,979	55,842
Nebraska		\$4,556.7	\$9,463.9	3,004	51,707
North Dakota		\$2,406.9	\$4,164.9	1,946	21,658
South Dakota		\$1,800.5	\$3,306.2	1,292	17,786
West South Central	Total	\$13,191.3	\$26,981.5	8,976	145,099
Arkansas		\$3,260.8	\$6,209.9	2,238	34,769
Louisiana		\$1,906.4	\$3,897.0	1,294	22,489
Oklahoma		\$2,707.8	\$5,272.6	2,000	30,147
Texas		\$5,316.4	\$11,602.0	3,445	57,694
Interstate Commerce	Total	\$0.0	\$173,503.0	0	1,340,316
U.S. Total		\$93,007.9	\$362,640.0	61,892	2,320,973

Table 35. Estimated Renewable Energy Economic Impacts by State and Census Region, 2025.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$28,917.9	\$59,897.9	17,789	292,482
Illinois		\$12,128.1	\$25,929.6	7,293	119,472
Indiana		\$5,903.3	\$11,797.7	4,032	60,539
Michigan		\$2,613.9	\$5,542.8	1,734	26,759
Ohio		\$4,980.6	\$9,980.6	2,595	50,930
Wisconsin		\$3,292.0	\$6,647.2	2,134	34,782
East South Central	Total	\$16,077.6	\$31,009.4	11,309	163,175
Alabama		\$3,281.2	\$6,454.5	2,227	34,623
Kentucky		\$5,270.9	\$9,931.0	3,749	50,542
Mississippi		\$4,039.4	\$7,315.7	2,761	39,062
Tennessee		\$3,486.1	\$7,308.3	2,572	38,948
Middle Atlantic	Total	\$3,152.5	\$6,918.7	2,251	33,399
New Jersey		\$141.8	\$285.1	99	1,174
New York		\$1,258.1	\$2,670.7	892	11,700
Pennsylvania		\$1,752.6	\$3,962.9	1,260	20,524
Mountain	Total	\$4,512.1	\$9,037.7	2,788	50,172
Arizona		\$155.5	\$319.9	106	1,710
Colorado		\$1,485.7	\$3,205.0	761	16,352
Idaho		\$1,175.7	\$2,339.9	750	14,133
Montana		\$1,106.0	\$2,029.0	817	11,631
Nevada		\$14.7	\$26.5	8	121
New Mexico		\$199.2	\$404.1	110	2,305
Utah		\$108.3	\$239.7	67	1,489
Wyoming		\$267.0	\$473.7	170	2,431
New England	Total	\$1,141.0	\$2,295.1	773	12,441
Connecticut		\$57.9	\$121.5	40	541
Maine		\$442.7	\$858.6	297	4,879
Massachusetts		\$107.3	\$221.2	75	1,046
New Hampshire		\$375.3	\$790.4	253	4,246
Rhode Island		\$7.8	\$16.0	5	81
Vermont		\$150.1	\$287.4	103	1,649
Pacific	Total	\$5,592.9	\$12,215.0	3,418	62,627
California		\$1,178.6	\$2,801.0	726	13,648
Oregon		\$1,746.6	\$3,800.2	1,123	21,366
Washington		\$2,667.7	\$5,613.7	1,568	27,613

Table 35. Estimated Renewable Energy Economic Impacts, 2025 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$14,360.1	\$29,647.4	10,558	156,380
Delaware		\$177.1	\$316.4	120	1,383
Florida		\$996.7	\$2,459.5	728	14,611
Georgia		\$3,287.5	\$7,243.1	2,420	38,007
Maryland		\$600.5	\$1,223.9	407	5,982
North Carolina		\$3,160.7	\$6,557.5	2,299	35,535
South Carolina		\$1,484.6	\$2,967.2	1,084	15,898
Virginia		\$3,069.9	\$6,028.5	2,308	30,137
West Virginia		\$1,583.1	\$2,851.2	1,191	14,826
West North Central	Total	\$47,492.1	\$94,135.7	32,611	496,785
Iowa		\$11,943.8	\$22,077.7	7,912	110,462
Kansas		\$6,167.8	\$12,673.0	4,179	67,676
Minnesota		\$7,040.8	\$14,551.8	4,765	72,116
Missouri		\$8,216.1	\$17,630.0	5,426	99,746
Nebraska		\$8,093.0	\$16,521.1	5,663	90,491
North Dakota		\$3,291.6	\$5,680.8	2,661	29,380
South Dakota		\$2,739.0	\$5,001.4	2,005	26,914
West South Central	Total	\$17,529.7	\$35,697.2	11,893	192,556
Arkansas		\$4,997.6	\$9,442.1	3,432	52,456
Louisiana		\$2,547.6	\$5,208.9	1,719	29,986
Oklahoma		\$3,631.6	\$7,072.5	2,678	40,391
Texas		\$6,352.9	\$13,973.7	4,064	69,723
Interstate Commerce	Total	\$0.0	\$252,990.5	0	1,955,891
U.S. Total		\$138,776.0	\$533,844.6	93,390	3,415,909

Table 36. Estimated Agricultural and Renewable Energy Economic Impacts by State and Census Region, 2010.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	<i>Total</i>	\$5,795.9	\$11,960.4	8,497	59,428
	Illinois	\$2,673.4	\$5,801.1	3,450	27,266
	Indiana	\$1,188.3	\$2,318.0	1,714	11,944
	Michigan	\$452.9	\$960.5	909	4,873
	Ohio	\$816.8	\$1,605.0	1,230	8,408
	Wisconsin	\$664.5	\$1,275.7	1,194	6,937
East South Central	<i>Total</i>	\$588.1	\$1,087.7	1,773	6,567
	Alabama	\$41.0	\$79.8	50	406
	Kentucky	\$300.0	\$542.8	1,248	3,579
	Mississippi	\$103.5	\$185.8	273	1,117
	Tennessee	\$143.6	\$279.3	202	1,465
Middle Atlantic	<i>Total</i>	\$352.5	\$744.7	549	3,566
	New Jersey	\$18.6	\$36.9	28	155
	New York	\$119.9	\$241.1	104	959
	Pennsylvania	\$213.9	\$466.8	417	2,452
Mountain	<i>Total</i>	\$523.0	\$1,119.6	2,363	8,003
	Arizona	\$10.8	\$23.0	18	127
	Colorado	\$362.1	\$799.1	1,174	4,997
	Idaho	\$53.4	\$106.4	501	1,164
	Montana	\$33.1	\$65.8	479	885
	Nevada	\$1.3	\$2.4	1	12
	New Mexico	\$32.7	\$66.0	37	372
	Utah	\$10.2	\$22.4	87	218
	Wyoming	\$19.3	\$34.6	66	228
New England	<i>Total</i>	\$0.8	\$1.5	12	20
	Connecticut	\$0.0	\$0.0	0	0
	Maine	\$0.6	\$1.0	12	18
	Massachusetts	\$0.2	\$0.3	0	2
	New Hampshire	\$0.0	\$0.0	0	0
	Rhode Island	\$0.0	\$0.0	0	0
	Vermont	\$0.0	\$0.0	0	0
Pacific	<i>Total</i>	\$207.7	\$438.0	1,933	3,979
	California	\$85.1	\$185.8	189	971
	Oregon	\$26.3	\$57.8	479	818
	Washington	\$96.3	\$194.4	1,265	2,190

Table 36. Estimated Agricultural and Renewable Energy Economic Impacts, 2010 (Cont.)

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$520.5	\$1,018.7	821	5,198
Delaware		\$34.5	\$59.3	44	259
Florida		\$16.5	\$34.1	18	182
Georgia		\$79.4	\$167.1	124	856
Maryland		\$103.4	\$207.4	146	1,005
North Carolina		\$156.9	\$305.5	209	1,575
South Carolina		\$54.6	\$98.7	105	540
Virginia		\$68.6	\$134.7	159	714
West Virginia		\$6.5	\$11.9	16	67
West North Central	Total	\$8,266.5	\$16,546.1	14,065	90,325
Iowa		\$2,975.7	\$5,519.7	5,128	29,261
Kansas		\$682.5	\$1,510.2	1,104	8,406
Minnesota		\$1,498.7	\$3,099.1	2,408	15,900
Missouri		\$560.3	\$1,215.1	1,167	7,210
Nebraska		\$1,896.9	\$3,998.2	2,798	22,409
North Dakota		\$115.6	\$227.4	583	1,700
South Dakota		\$536.9	\$976.4	877	5,439
West South Central	Total	\$760.7	\$1,642.0	1,150	8,729
Arkansas		\$69.9	\$131.1	213	873
Louisiana		\$94.9	\$179.0	107	955
Oklahoma		\$60.5	\$129.8	151	852
Texas		\$535.4	\$1,202.1	679	6,049
Interstate Commerce	Total	\$0.0	\$26,451.1	0	201,925
U.S. Total		\$17,015.6	\$61,012.7	31,163	387,740

Table 37. Estimated Agricultural and Renewable Energy Economic Impacts by State and Census Region, 2015.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$17,741.8	\$34,767.1	40,937	189,712
	Illinois	\$8,135.1	\$16,326.7	20,656	86,357
	Indiana	\$3,623.1	\$6,727.6	9,992	39,545
	Michigan	\$1,628.7	\$3,271.7	2,686	16,776
	Ohio	\$2,239.2	\$4,349.3	1,148	21,299
	Wisconsin	\$2,115.7	\$4,091.8	6,455	25,735
East South Central	Total	\$5,580.7	\$10,827.7	20,543	76,768
	Alabama	\$1,455.9	\$2,921.4	4,033	19,015
	Kentucky	\$1,322.1	\$2,476.2	5,418	17,581
	Mississippi	\$1,527.6	\$2,828.7	2,178	16,654
	Tennessee	\$1,275.1	\$2,601.4	8,914	23,518
Middle Atlantic	Total	\$1,207.3	\$2,602.4	3,279	14,628
	New Jersey	\$38.3	\$75.8	131	403
	New York	\$633.1	\$1,276.6	1,767	6,742
	Pennsylvania	\$535.9	\$1,250.1	1,381	7,483
Mountain	Total	\$1,447.8	\$3,126.3	4,831	22,328
	Arizona	\$73.0	\$163.9	-14	827
	Colorado	\$439.9	\$986.3	1,590	6,443
	Idaho	\$611.1	\$1,292.4	2,192	10,072
	Montana	\$89.5	\$204.2	71	1,320
	Nevada	\$8.2	\$15.8	11	90
	New Mexico	\$107.4	\$215.9	461	1,636
	Utah	\$54.7	\$124.1	375	1,168
	Wyoming	\$64.1	\$123.6	145	772
New England	Total	\$474.5	\$986.7	608	5,851
	Connecticut	\$20.7	\$43.7	53	237
	Maine	\$202.0	\$411.7	150	2,447
	Massachusetts	\$24.8	\$52.6	87	323
	New Hampshire	\$151.9	\$335.3	179	1,947
	Rhode Island	\$4.0	\$7.9	8	44
	Vermont	\$71.2	\$135.4	131	853
Pacific	Total	\$2,777.9	\$6,276.7	10,113	44,244
	California	\$648.4	\$1,565.3	508	8,206
	Oregon	\$752.3	\$1,713.2	3,393	13,816
	Washington	\$1,377.2	\$2,998.2	6,212	22,222

Table 37. Estimated Agricultural and Renewable Energy Economic Impacts, 2015 (Cont.)

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$5,391.0	\$11,156.8	15,519	70,347
Delaware		\$146.1	\$235.4	403	1,216
Florida		\$403.1	\$989.4	594	6,139
Georgia		\$1,316.5	\$2,944.0	1,879	16,422
Maryland		\$343.5	\$648.6	1,178	3,904
North Carolina		\$1,355.7	\$2,731.6	2,851	16,018
South Carolina		\$678.5	\$1,331.6	1,425	8,035
Virginia		\$879.4	\$1,743.7	3,980	12,360
West Virginia		\$268.2	\$532.5	3,209	6,253
West North Central	Total	\$25,332.0	\$48,398.2	73,426	294,732
Iowa		\$8,624.1	\$15,363.3	23,078	89,007
Kansas		\$2,185.9	\$4,444.9	5,496	26,462
Minnesota		\$6,304.5	\$12,149.3	19,331	71,878
Missouri		\$2,569.6	\$5,511.8	14,125	43,816
Nebraska		\$4,182.9	\$8,270.7	8,948	48,778
North Dakota		\$690.1	\$1,219.2	1,528	6,971
South Dakota		\$774.9	\$1,439.1	920	7,820
West South Central	Total	\$6,833.4	\$13,730.2	25,027	93,268
Arkansas		\$1,867.9	\$3,459.9	6,555	23,964
Louisiana		\$1,204.9	\$2,479.3	1,191	14,583
Oklahoma		\$1,166.7	\$2,214.6	5,531	17,344
Texas		\$2,594.0	\$5,576.4	11,750	37,377
Interstate Commerce	Total	\$0.0	\$95,419.3	0	737,831
U.S. Total		\$66,786.4	\$227,291.4	194,283	1,549,709

Table 38. Estimated Agricultural and Renewable Energy Economic Impacts by State and Census Region, 2020.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$32,814.3	\$61,534.2	84,078	338,098
	Illinois	\$14,430.4	\$27,785.0	39,174	147,567
	Indiana	\$7,678.0	\$13,643.4	24,594	80,893
	Michigan	\$2,391.7	\$4,651.0	4,741	24,385
	Ohio	\$5,030.9	\$9,338.6	3,530	45,442
	Wisconsin	\$3,283.4	\$6,116.2	12,039	39,811
East South Central	Total	\$17,782.7	\$31,157.4	113,001	252,503
	Alabama	\$3,844.1	\$6,996.2	17,804	49,645
	Kentucky	\$5,219.1	\$8,799.8	30,900	68,788
	Mississippi	\$4,287.4	\$7,200.3	19,719	51,431
	Tennessee	\$4,432.1	\$8,161.2	44,578	82,639
Middle Atlantic	Total	\$3,168.3	\$6,127.7	13,160	37,577
	New Jersey	\$119.1	\$210.9	588	1,288
	New York	\$1,395.8	\$2,593.3	5,615	14,949
	Pennsylvania	\$1,653.5	\$3,323.5	6,957	21,340
Mountain	Total	\$3,340.2	\$6,847.0	10,902	47,493
	Arizona	\$111.2	\$239.6	110	1,316
	Colorado	\$1,220.4	\$2,652.6	3,519	16,618
	Idaho	\$913.5	\$1,859.2	3,016	14,023
	Montana	\$632.8	\$1,201.5	2,597	9,145
	Nevada	\$12.0	\$22.6	17	126
	New Mexico	\$178.8	\$355.1	606	2,533
	Utah	\$90.8	\$198.8	479	1,742
	Wyoming	\$180.8	\$317.7	558	1,990
New England	Total	\$804.8	\$1,554.4	2,177	9,827
	Connecticut	\$57.0	\$105.1	283	674
	Maine	\$242.2	\$489.4	177	2,886
	Massachusetts	\$74.2	\$137.2	508	1,054
	New Hampshire	\$231.1	\$484.3	437	2,887
	Rhode Island	\$8.2	\$14.5	39	98
	Vermont	\$192.1	\$323.8	733	2,228
Pacific	Total	\$4,130.6	\$8,940.7	16,546	63,743
	California	\$880.7	\$2,068.1	1,192	11,213
	Oregon	\$1,248.1	\$2,642.3	7,746	22,248
	Washington	\$2,001.8	\$4,230.3	7,608	30,282

Table 38. Estimated Agricultural and Renewable Energy Economic Impacts, 2020 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$13,048.3	\$24,534.3	65,258	177,408
Delaware		\$224.9	\$354.9	726	1,902
Florida		\$817.1	\$1,821.1	2,716	12,179
Georgia		\$3,029.9	\$6,107.5	9,577	37,019
Maryland		\$658.3	\$1,184.9	2,615	7,397
North Carolina		\$3,035.9	\$5,706.1	8,798	34,277
South Carolina		\$1,508.1	\$2,693.6	6,637	18,553
Virginia		\$2,691.3	\$4,783.2	17,649	38,771
West Virginia		\$1,082.7	\$1,883.1	16,540	27,310
West North Central	Total	\$52,840.0	\$94,748.8	179,603	596,123
Iowa		\$13,829.2	\$23,759.9	41,584	140,796
Kansas		\$7,057.9	\$12,642.3	21,616	76,036
Minnesota		\$8,714.2	\$16,381.3	29,226	98,729
Missouri		\$7,828.1	\$15,527.7	42,900	121,394
Nebraska		\$7,572.3	\$14,132.4	20,311	86,219
North Dakota		\$4,678.2	\$7,117.9	14,945	41,796
South Dakota		\$3,160.2	\$5,187.2	9,021	31,153
West South Central	Total	\$21,923.5	\$39,704.4	113,661	286,453
Arkansas		\$5,438.9	\$9,234.1	21,551	62,424
Louisiana		\$2,779.1	\$5,299.3	9,375	34,766
Oklahoma		\$4,953.7	\$8,351.9	33,128	70,654
Texas		\$8,751.8	\$16,819.1	49,607	118,609
Interstate Commerce	Total	\$0.0	\$173,503.0	0	1,340,316
U.S. Total		\$149,852.8	\$448,652.0	598,386	3,149,541

Table 39. Estimated Agricultural and Renewable Energy Economic Impacts by State and Census Region, 2025.

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
East North Central	Total	\$48,343.1	\$88,871.5	142,569	503,256
Illinois		\$21,397.4	\$40,112.7	66,768	219,180
Indiana		\$10,936.9	\$18,887.2	40,336	116,039
Michigan		\$3,741.3	\$7,208.1	8,599	38,906
Ohio		\$6,758.3	\$12,397.2	4,720	59,791
Wisconsin		\$5,509.3	\$10,266.3	22,146	69,340
East South Central	Total	\$31,149.0	\$52,759.3	270,062	498,236
Alabama		\$5,523.8	\$9,904.9	29,808	74,278
Kentucky		\$11,041.2	\$17,802.7	91,431	161,982
Mississippi		\$7,075.1	\$11,454.5	43,800	92,158
Tennessee		\$7,509.0	\$13,597.2	105,023	169,818
Middle Atlantic	Total	\$5,474.7	\$10,592.4	27,746	71,436
New Jersey		\$293.4	\$499.8	2,316	3,907
New York		\$2,113.8	\$3,947.8	8,950	23,336
Pennsylvania		\$3,067.5	\$6,144.8	16,480	44,193
Mountain	Total	\$7,601.6	\$14,324.8	29,263	100,376
Arizona		\$211.3	\$445.5	398	2,640
Colorado		\$2,540.0	\$5,035.6	9,115	32,067
Idaho		\$1,653.0	\$3,323.9	4,601	24,061
Montana		\$2,145.0	\$3,584.7	10,227	27,114
Nevada		\$38.1	\$65.9	272	549
New Mexico		\$296.4	\$564.1	1,072	4,020
Utah		\$186.1	\$381.0	1,158	3,336
Wyoming		\$531.5	\$924.1	2,420	6,589
New England	Total	\$1,385.1	\$2,643.5	5,005	17,776
Connecticut		\$85.7	\$159.3	455	1,049
Maine		\$443.4	\$859.8	312	4,901
Massachusetts		\$211.5	\$374.0	2,569	3,995
New Hampshire		\$402.9	\$826.8	718	4,826
Rhode Island		\$10.1	\$19.1	49	132
Vermont		\$231.5	\$404.6	902	2,873
Pacific	Total	\$7,998.6	\$16,342.7	39,085	117,441
California		\$1,440.4	\$3,364.4	2,900	19,055
Oregon		\$2,580.9	\$5,258.1	16,780	44,658
Washington		\$3,977.3	\$7,720.1	19,405	53,728

Table 39. Estimated Agricultural and Renewable Energy Economic Impacts, 2025 (Cont.).

State/Regions		Total Industry Output		Employment	
		Direct	Total	Direct	Total
		Million \$		Number	
South Atlantic	Total	\$25,598.4	\$46,279.7	175,054	377,094
Delaware		\$303.9	\$479.8	991	2,607
Florida		\$1,460.9	\$3,214.7	6,809	23,568
Georgia		\$5,407.6	\$10,751.5	21,182	69,410
Maryland		\$1,067.0	\$1,900.3	4,622	12,209
North Carolina		\$5,488.0	\$10,023.0	18,843	61,993
South Carolina		\$2,403.8	\$4,241.1	13,150	31,822
Virginia		\$6,193.2	\$10,413.4	50,800	92,788
West Virginia		\$3,274.0	\$5,256.0	58,657	82,697
West North Central	Total	\$91,276.2	\$159,679.3	360,704	1,045,034
Iowa		\$21,553.8	\$35,889.3	69,337	214,132
Kansas		\$12,473.2	\$21,811.3	44,977	136,549
Minnesota		\$12,147.6	\$22,707.2	39,946	135,945
Missouri		\$16,757.6	\$31,289.6	115,356	262,662
Nebraska		\$16,004.6	\$28,263.7	50,447	176,150
North Dakota		\$7,204.4	\$11,096.7	25,435	67,162
South Dakota		\$5,134.9	\$8,621.5	15,206	52,434
West South Central	Total	\$33,613.4	\$59,873.0	215,661	478,997
Arkansas		\$9,775.4	\$16,004.7	51,320	119,126
Louisiana		\$3,974.8	\$7,424.1	17,242	52,742
Oklahoma		\$8,120.8	\$13,630.2	70,192	133,676
Texas		\$11,742.5	\$22,814.1	76,907	173,453
Interstate Commerce	Total	\$0.0	\$252,990.5	0	1,955,891
U.S. Total		\$252,440.2	\$704,356.8	1,265,149	5,165,537

Table 40. Change in Net Farm Income by Census Divisions.

Region	2010	2015	2020	2025
			Million \$	
East North Central	\$141.71	\$305.12	\$2,934.55	\$7,277.72
East South Central	\$15.57	\$159.97	\$1,978.15	\$4,973.20
Middle Atlantic	\$8.36	\$22.41	\$279.08	\$796.62
Mountain	\$9.15	\$29.55	\$296.90	\$1,004.34
New England	\$0.01	\$3.56	\$38.79	\$83.23
Pacific	\$7.08	\$53.50	\$301.10	\$841.35
South Atlantic	\$11.64	\$97.96	\$1,193.69	\$3,642.67
West North Central	\$216.74	\$567.07	\$5,225.57	\$14,242.78
West South Central	\$15.74	\$294.85	\$2,716.16	\$5,395.17
<i>U.S. Total</i>	\$426.00	\$1,534.00	\$14,964.00	\$38,257.07

Table 41. Biodiesel Production by Census Divisions.

Region	2010	2015	2020	2025
			Million Gallons	
East North Central	33.0	65.9	104.7	147.5
East South Central	5.6	10.4	15.1	20.8
Middle Atlantic	0.6	1.3	1.8	2.6
Mountain	22.4	46.6	72.5	100.2
New England	0.0	0.0	0.0	0.0
Pacific	11.3	23.4	36.4	50.2
South Atlantic	3.9	7.1	12.2	17.3
West North Central	93.9	193.7	317.9	429.9
West South Central	49.3	101.7	159.3	221.4
<i>U.S. Total</i>	220.0	450.0	720.0	990.0

Table 42. Total Cellulosic and Agricultural Feedstocks by Census Divisions.

Region	2010	2015	2020	2025
			Million Dry Tons	
East North Central	0.0	83.2	141.3	188.6
East South Central	0.0	54.7	117.7	171.1
Middle Atlantic	0.0	10.2	20.1	25.1
Mountain	0.0	10.7	18.1	28.7
New England	0.0	7.8	8.8	9.7
Pacific	0.0	32.9	333.0	37.3
South Atlantic	0.0	60.7	98.5	147.6
West North Central	0.0	107.6	224.1	360.9
West South Central	0.0	54.3	131.0	173.0
<i>U.S. Total</i>	0.0	422.2	792.7	1,144.9

Table 43. Total Electricity Production by Census Divisions.

Region	2010	2015	2020	2025
Billion kWh's				
East North Central	6.71	48.20	87.02	123.43
East South Central	7.06	49.62	118.31	195.52
Middle Atlantic	8.11	22.95	39.49	50.53
Mountain	55.31	149.64	254.20	351.28
New England	21.52	53.04	84.42	128.31
Pacific	11.26	35.94	47.16	39.58
South Atlantic	11.19	50.18	80.63	95.53
West North Central	49.60	159.78	276.29	381.23
West South Central	48.60	120.67	212.07	270.17
<i>U.S. Total</i>	219.36	690.03	1,199.59	1,635.60

Table 44. Ethanol Production by Census Divisions.

Region	2010	2015	2020	2025
Million Gallons				
East North Central	2,766.4	7,757.7	12,878.3	17,317.7
East South Central	266.6	2,780.0	6,908.7	10,237.1
Middle Atlantic	182.5	639.5	1,307.9	1,969.1
Mountain	139.3	538.5	1,143.4	2,504.3
New England	0.0	264.4	377.3	607.1
Pacific	54.1	1,207.9	1,569.2	2,923.5
South Atlantic	260.9	2,818.9	5,468.6	9,261.0
West North Central	4,130.5	11,290.3	20,276.1	31,403.2
West South Central	289.7	3,112.6	8,050.6	10,636.9
<i>U.S. Total</i>	8,090.1	30,409.8	57,980.1	86,860.0

Table 45. Change in Corn Acres Planted by Census Divisions.

Region	2010	2015	2020	2025
Acres Planted				
East North Central	200,824.4	-884,525.7	-292,892.6	-2,238,776.8
East South Central	0.0	33,152.4	-1,107,509.2	-1,385,616.7
Middle Atlantic	15,530.4	-33,731.4	-80,140.8	-380,081.5
Mountain	175,682.3	302,739.1	376,644.3	515,677.1
New England	0.0	0.0	0.0	0.0
Pacific	3,476.0	146,489.3	205,850.7	236,063.6
South Atlantic	2,979.8	-32,125.8	-479,544.7	-777,512.9
West North Central	454,887.2	863,343.0	922,685.9	583,863.6
West South Central	33,410.8	272,909.7	-79,235.1	-359,629.2
<i>U.S. Total</i>	886,791.0	668,250.6	-534,141.5	-3,806,012.8

Table 46. Change in Soybean Acres Planted by Census Divisions.

Region	2010	2015	2020	2025
Acres Planted				
East North Central	258,580.9	732,033.6	-4,176,084.6	-5,283,774.1
East South Central	9,774.7	-285,444.9	-1,642,849.0	-1,945,316.9
Middle Atlantic	3,472.7	32,756.2	-83,628.7	-63,041.3
Mountain	0.0	0.0	0.0	0.0
New England	0.0	0.0	0.0	0.0
Pacific	0.0	0.0	0.0	0.0
South Atlantic	31,082.0	-221,576.4	-439,732.7	-448,197.4
West North Central	387,253.6	1,451,447.0	-2,698,499.9	-5,748,220.8
West South Central	0.0	7,799.3	-1,030,572.3	-1,165,505.0
<i>U.S. Total</i>	690,163.9	1,717,014.8	-10,071,367.2	-14,654,055.3

Table 47. Change in Switchgrass Acres Planted by Census Divisions.

Region	2010	2015	2020	2025
Acres Planted				
East North Central	0.0	1,118,520.5	6,263,511.6	11,120,392.8
East South Central	0.0	2,905,126.7	8,719,793.9	12,819,677.1
Middle Atlantic	0.0	456,252.5	1,526,872.8	2,713,631.8
Mountain	0.0	41,945.7	223,742.9	3,867,030.4
New England	0.0	110,608.7	326,409.9	468,619.3
Pacific	0.0	0.0	27,923.4	585,895.5
South Atlantic	0.0	1,625,196.5	5,622,410.4	9,965,595.9
West North Central	0.0	5,967,567.9	20,024,720.5	43,892,790.9
West South Central	0.0	5,099,489.0	14,031,208.0	20,390,121.0
<i>U.S. Total</i>	0.0	17,324,707.4	56,766,593.3	105,823,754.6

Table 48. Change in Hay Acres Planted by Census Divisions.

Region	2010	2015	2020	2025
Acres Planted				
East North Central	40,308.0	137,560.9	647,827.5	3,011,309.7
East South Central	81,587.4	24,455.5	167,518.7	4,981,812.0
Middle Atlantic	26,962.4	106,826.2	78,707.2	800,999.8
Mountain	157,902.6	76,123.5	-68,915.1	2,042,726.8
New England	2,488.5	-8,467.5	-40,912.0	98,129.8
Pacific	57,027.4	104,313.2	256,841.1	1,461,232.8
South Atlantic	10,569.0	211,322.3	280,893.2	2,556,307.3
West North Central	365,953.0	1,355,389.0	3,910,099.9	17,526,257.4
West South Central	-22,926.0	-1,153,477.7	-1,704,293.6	6,989,933.8
<i>U.S. Total</i>	719,872.2	854,045.5	3,527,767.0	39,468,709.4

Table 49. Estimated Agricultural Economic Impacts for Total Industry Output by Census Divisions.

Region	2010	2015	2020	2025
			Million \$	
East North Central	\$1,364.8	\$7,127.1	\$16,799.0	\$28,973.7
East South Central	\$169.6	\$1,605.7	\$10,070.5	\$21,749.9
Middle Atlantic	\$88.4	\$341.3	\$1,669.5	\$3,673.8
Mountain	\$330.0	\$729.4	\$2,323.5	\$5,287.1
New England	\$0.9	\$24.3	\$171.2	\$348.4
Pacific	\$149.4	\$1,092.4	\$2,043.2	\$4,127.7
South Atlantic	\$116.7	\$1,449.2	\$6,854.4	\$16,632.3
West North Central	\$2,262.8	\$12,914.6	\$33,357.8	\$65,543.6
West South Central	\$165.1	\$2,312.9	\$12,722.9	\$24,175.8
<i>U.S. Total</i>	<i>\$4,647.7</i>	<i>\$27,596.9</i>	<i>\$86,012.0</i>	<i>\$170,512.2</i>

Table 50. Estimated Agricultural Economic Impacts for Employment by Census Divisions.

Region	2010	2015	2020	2025
			Number	
East North Central	11,274	56,389	120,182	210,774
East South Central	2,209	26,886	140,697	335,061
Middle Atlantic	720	3,905	16,282	38,038
Mountain	4,034	8,792	22,414	50,204
New England	17	398	2,194	5,335
Pacific	2,695	17,404	28,189	54,813
South Atlantic	1,006	17,976	83,675	220,712
West North Central	20,322	111,748	273,583	548,247
West South Central	1,582	31,105	141,354	286,441
<i>U.S. Total</i>	<i>43,858</i>	<i>274,603</i>	<i>828,570</i>	<i>1,749,625</i>

Table 51. Estimated Renewable Energy Economic Impacts for Total Industry Output by Census Divisions.

Region	2010	2015	2020	2025
			Million \$	
East North Central	\$10,595.6	\$27,640.0	\$44,735.2	\$59,897.9
East South Central	\$918.1	\$9,221.9	\$21,087.0	\$31,009.4
Middle Atlantic	\$656.3	\$2,261.2	\$4,458.2	\$6,918.7
Mountain	\$789.6	\$2,396.9	\$4,523.5	\$9,037.7
New England	\$0.5	\$962.3	\$1,383.2	\$2,295.1
Pacific	\$288.6	\$5,184.3	\$6,897.6	\$12,215.0
South Atlantic	\$902.0	\$9,707.6	\$17,680.0	\$29,647.4
West North Central	\$14,283.3	\$35,483.6	\$61,391.0	\$94,135.7
West South Central	\$1,476.9	\$11,417.3	\$26,981.5	\$35,697.2
Interstate Commerce	\$26,454.1	\$95,419.3	\$173,503.0	\$252,990.5
<i>U.S. Total</i>	<i>\$56,365.0</i>	<i>\$199,694.4</i>	<i>\$362,640.0</i>	<i>\$533,844.6</i>

Table 52. Estimated Renewable Energy Economic Impacts for Employment by Census Divisions.

Region	2010	2015	2020	2025
			Number	
East North Central	48,154	133,323	217,916	292,482
East South Central	4,358	49,882	111,806	163,175
Middle Atlantic	2,847	10,722	21,296	33,399
Mountain	3,968	13,536	25,080	50,172
New England	3	5,452	7,632	12,441
Pacific	1,284	26,839	35,555	62,627
South Atlantic	4,192	52,371	93,733	156,380
West North Central	70,003	182,985	322,541	496,785
West South Central	7,148	62,163	145,099	192,556
Interstate Commerce	201,925	737,831	1,340,316	1,955,891
<i>U.S. Total</i>	342,882	1,275,105	2,320,973	3,415,909

Table 53. Estimated Renewable Energy and Agricultural Economic Impacts for Total Industry Output by Census Divisions.

Region	2010	2015	2020	2025
			Million \$	
East North Central	\$11,960.4	\$34,767.1	\$61,534.2	\$88,871.5
East South Central	\$1,087.7	\$10,827.7	\$31,157.4	\$52,759.3
Middle Atlantic	\$744.7	\$2,602.4	\$6,127.7	\$10,592.4
Mountain	\$1,119.6	\$3,126.3	\$6,847.0	\$14,324.8
New England	\$1.5	\$986.7	\$1,554.4	\$2,643.5
Pacific	\$438.0	\$6,276.7	\$8,940.7	\$16,342.7
South Atlantic	\$1,018.7	\$11,156.8	\$24,534.3	\$46,279.7
West North Central	\$16,546.1	\$48,398.2	\$94,748.8	\$159,679.3
West South Central	\$1,642.0	\$13,730.2	\$39,704.4	\$59,873.0
Interstate Commerce	\$26,454.1	\$95,419.3	\$173,503.0	\$252,990.5
<i>U.S. Total</i>	\$61,012.7	\$227,291.4	\$448,652.0	\$704,356.8

Table 54. Estimated Renewable Energy and Agricultural Economic Impacts for Employment by Census Divisions.

Region	2010	2015	2020	2025
			Number	
East North Central	59,428	189,712	338,098	503,256
East South Central	6,567	76,768	252,503	498,236
Middle Atlantic	3,566	14,628	37,577	71,436
Mountain	8,003	22,328	47,493	100,376
New England	20	5,851	9,827	17,776
Pacific	3,979	44,244	63,743	117,441
South Atlantic	5,198	70,347	177,408	377,094
West North Central	90,325	294,732	596,123	1,045,034
West South Central	8,729	93,268	286,453	478,997
Interstate Commerce	201,925	737,831	1,340,316	1,955,891
<i>U.S. Total</i>	387,740	1,549,709	3,149,541	5,165,537

**Appendix A: Weights used to disaggregated selected variables
reported in this analysis**

Table A1. State weights used to distribute non agricultural and estimated wastes from livestock operations.

State name	Wind	Solar Photo Voltaic	Solar Thermal	Beef	Pork	Dairy	Hen	Poultry	Yellow Grease
Alabama	0.000	0.019	0.000	0.000	0.000	0.000	0.010	0.125	0.000
Arizona	0.001	0.059	0.299	0.016	0.000	0.040	0.000	0.000	0.016
Arkansas	0.001	0.023	0.000	0.001	0.012	0.000	0.016	0.135	0.001
California	0.006	0.081	0.140	0.054	0.000	0.382	0.087	0.033	0.054
Colorado	0.041	0.058	0.005	0.098	0.018	0.023	0.015	0.000	0.098
Connecticut	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Delaware	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.030	0.000
Florida	0.000	0.027	0.000	0.005	0.000	0.034	0.038	0.013	0.005
Georgia	0.000	0.026	0.000	0.000	0.006	0.011	0.050	0.157	0.000
Idaho	0.007	0.030	0.000	0.038	0.000	0.085	0.000	0.000	0.038
Illinois	0.006	0.004	0.000	0.002	0.062	0.000	0.012	0.000	0.002
Indiana	0.000	0.000	0.000	0.000	0.042	0.014	0.083	0.002	0.000
Iowa	0.053	0.007	0.000	0.012	0.228	0.010	0.150	0.001	0.012
Kansas	0.102	0.045	0.006	0.204	0.026	0.000	0.000	0.000	0.204
Kentucky	0.000	0.001	0.000	0.000	0.005	0.000	0.000	0.034	0.000
Louisiana	0.000	0.013	0.000	0.000	0.000	0.000	0.001	0.026	0.000
Maine	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maryland	0.001	0.000	0.000	0.000	0.000	0.003	0.012	0.033	0.000
Massachusetts	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Michigan	0.007	0.000	0.000	0.002	0.016	0.027	0.028	0.000	0.002
Minnesota	0.058	0.000	0.000	0.002	0.108	0.015	0.044	0.004	0.002
Mississippi	0.000	0.017	0.000	0.000	0.009	0.000	0.000	0.090	0.000
Missouri	0.005	0.025	0.000	0.000	0.049	0.000	0.022	0.034	0.000
Montana	0.109	0.026	0.000	0.008	0.002	0.000	0.000	0.000	0.008
Nebraska	0.085	0.043	0.000	0.164	0.043	0.007	0.046	0.000	0.164
Nevada	0.005	0.062	0.141	0.003	0.000	0.000	0.000	0.000	0.003
New Hampshire	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New Jersey	0.001	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000
New Mexico	0.043	0.064	0.184	0.012	0.000	0.084	0.000	0.000	0.012

Table A1. State weights used to distribute non agricultural and estimated wastes from livestock operations (Cont.).

State name	Wind	Solar Photo Voltaic	Solar Thermal	Beef	Pork	Dairy	Hen	Poultry	Yellow Grease
New York	0.008	0.000	0.000	0.000	0.001	0.050	0.013	0.000	0.000
North Carolina	0.001	0.012	0.000	0.000	0.228	0.003	0.013	0.081	0.000
North Dakota	0.092	0.011	0.000	0.001	0.000	0.000	0.000	0.000	0.001
Ohio	0.001	0.000	0.000	0.000	0.019	0.008	0.117	0.002	0.000
Oregon	0.004	0.028	0.000	0.008	0.000	0.019	0.011	0.002	0.008
Pennsylvania	0.004	0.000	0.000	0.000	0.020	0.011	0.078	0.014	0.000
Rhode Island	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
South Carolina	0.000	0.011	0.000	0.000	0.006	0.000	0.018	0.022	0.000
South Dakota	0.086	0.033	0.000	0.013	0.021	0.005	0.008	0.000	0.013
Tennessee	0.000	0.006	0.000	0.000	0.003	0.000	0.000	0.019	0.000
Texas	0.115	0.129	0.147	0.275	0.000	0.049	0.057	0.066	0.275
Utah	0.002	0.047	0.071	0.004	0.016	0.010	0.013	0.000	0.004
Vermont	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000
Virginia	0.002	0.001	0.000	0.000	0.007	0.000	0.006	0.031	0.000
Washington	0.003	0.000	0.000	0.024	0.000	0.046	0.019	0.004	0.024
West Virginia	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.011	0.000
Wisconsin	0.007	0.000	0.000	0.000	0.003	0.051	0.015	0.004	0.000
Wyoming	0.064	0.054	0.000	0.008	0.002	0.000	0.000	0.000	0.008

Table A.2. Corn and Soybean weights generated from POLYSYS production projections.

State name	Soybean Production Weight				Corn Production Weight			
	2010	2015	2020	2025	2010	2015	2020	2025
Alabama	0.004	0.004	0.003	0.003	0.002	0.002	0.002	0.001
Arizona	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
Arkansas	0.045	0.042	0.046	0.048	0.002	0.002	0.002	0.002
California	0.000	0.000	0.000	0.000	0.004	0.004	0.004	0.005
Colorado	0.000	0.000	0.000	0.000	0.014	0.012	0.014	0.014
Connecticut	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Delaware	0.002	0.002	0.002	0.003	0.002	0.002	0.002	0.002
Florida	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
Georgia	0.004	0.004	0.003	0.004	0.005	0.005	0.004	0.003
Idaho	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
Illinois	0.168	0.166	0.166	0.174	0.154	0.149	0.150	0.144
Indiana	0.084	0.076	0.078	0.079	0.074	0.070	0.070	0.060
Iowa	0.177	0.186	0.177	0.182	0.185	0.177	0.189	0.194
Kansas	0.029	0.031	0.028	0.029	0.037	0.043	0.043	0.045
Kentucky	0.020	0.017	0.016	0.017	0.017	0.018	0.011	0.010
Louisiana	0.014	0.012	0.011	0.011	0.006	0.005	0.004	0.003
Maine	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maryland	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007
Massachusetts	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Michigan	0.023	0.021	0.021	0.020	0.028	0.027	0.029	0.030
Minnesota	0.102	0.106	0.117	0.112	0.096	0.096	0.096	0.099
Mississippi	0.021	0.018	0.017	0.016	0.005	0.005	0.004	0.003
Missouri	0.064	0.069	0.058	0.059	0.031	0.034	0.033	0.036
Montana	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.001
Nebraska	0.054	0.059	0.066	0.071	0.123	0.126	0.125	0.132
Nevada	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New Hampshire	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
New Jersey	0.002	0.002	0.001	0.001	0.001	0.001	0.001	0.001
New Mexico	0.000	0.000	0.000	0.000	0.002	0.003	0.003	0.003

Table A.2. Corn and Soybean weights generated from POLYSYS production projections
(Continued).

State name	Soybean Production Weight				Corn Production Weight			
	2010	2015	2020	2025	2010	2015	2020	2025
New York	0.000	0.000	0.000	0.000	0.008	0.008	0.008	0.008
North Carolina	0.012	0.011	0.011	0.011	0.010	0.010	0.009	0.009
North Dakota	0.010	0.012	0.010	0.007	0.007	0.007	0.007	0.007
Ohio	0.068	0.062	0.065	0.068	0.040	0.036	0.038	0.031
Oklahoma	0.003	0.004	0.003	0.003	0.003	0.004	0.004	0.004
Oregon	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
Pennsylvania	0.004	0.004	0.003	0.004	0.014	0.014	0.013	0.011
Rhode Island	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
South Carolina	0.006	0.005	0.005	0.006	0.003	0.003	0.002	0.002
South Dakota	0.038	0.041	0.043	0.029	0.035	0.033	0.032	0.033
Tennessee	0.017	0.015	0.014	0.014	0.009	0.009	0.006	0.005
Texas	0.003	0.005	0.005	0.005	0.026	0.031	0.030	0.030
Utah	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Vermont	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Virginia	0.006	0.005	0.005	0.006	0.004	0.004	0.004	0.003
Washington	0.000	0.000	0.000	0.000	0.003	0.004	0.005	0.005
West Virginia	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Wisconsin	0.015	0.017	0.019	0.013	0.042	0.043	0.043	0.048
Wyoming	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001

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