

For Immediate Release



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Coal Ash Recycling Poised for Increases

December 15, 2015, Washington, D.C. — The volume of coal fly ash used in concrete production increased to 13.1 million tons in 2014, for the first time exceeding the 12.6 million ton utilization mark set in 2008. Increases in the use of synthetic gypsum produced by power plant emissions control equipment also helped to push the recycling rate for all types of coal combustion products to a record 48%.

“After a half decade of stalled growth in the utilization of coal combustion products, 2014 finally began to show signs of recovery,” said Thomas H. Adams, executive director of the American Coal Ash Association (“ACAA”) – an organization that advances the environmentally responsible and technically sound use of coal ash as an alternative to disposal. “We are excited to once again focus on growing a practice that conserves energy and natural resources, reduces greenhouse gas emissions, and safely keeps ash out of landfills and disposal ponds.”

The volume of coal ash utilization stalled between 2009 and 2013 as the U.S. Environmental Protection Agency pursued a protracted rulemaking process that posed the threat of a “hazardous waste” designation for coal ash that is disposed. Ash producers, specifiers and users restricted coal ash use in light of the regulatory uncertainty and publicity surrounding EPA’s activities. In 2014, EPA began signaling that the “hazardous waste” designation proposal was off the table and in December 2014 finalized coal ash disposal regulations under the non-hazardous section of federal law.

According to ACAA’s just-released “Production and Use Survey,” 62.4 million tons of coal combustion products were beneficially used in 2014 – up from 51.4 million tons in 2013 and above the 2008 peak of 60.6 million tons. A total of 129.7 million tons of coal combustion products were produced in 2014 – up from 114.7 million tons the prior year.

The volume of coal fly ash and bottom ash produced in 2014 actually declined from the prior year, reflecting a reduced amount of coal consumed by electric utilities in response to environmental regulations and energy market conditions. Fly ash production declined nearly 3 million tons to 50.4 million tons. Bottom ash production declined nearly 2 million tons to 12.5 million tons.

Overall fly ash utilization in 2014 was about even with the prior year at 23.2 million tons, but the use shifted toward concrete applications. Use in concrete and for cement production increased 1.9 million tons, while use in mining, oil field services, and other applications declined.

While ash production declined, the production and use of another “non-ash” coal combustion product increased substantially. Synthetic gypsum is a byproduct of flue gas desulphurization units, also known as “scrubbers,” located at coal-fueled power plants. As more power plants install and operate this type of emissions control equipment, the volume of synthetic gypsum is growing rapidly.

Synthetic gypsum production in 2014 increased 9.7 million tons to 34.1 million tons. Use of synthetic gypsum increased 4.8 million tons to 16.8 million tons, driven by increased utilization in wallboard manufacturing and agricultural applications in which the gypsum improves soil conditions and prevents harmful runoff of fertilizers.

“Although 2014’s results show a significant improvement, it’s important to remember that the United States is still disposing of more than half of the coal combustion products that could be put to good use,” said Adams. “Additionally, the coal ash beneficial use industry is taking significant strides in developing strategies and technologies for reclaiming coal ash materials that were previously disposed.”

Adams referred to a 2015 ACAA-commissioned study by the American Road and Transportation Builders Association that found there will be ample supplies of coal combustion products for beneficial use in the future. The report concluded: “Coal will continue to account for a significant percentage of U.S. electric generation during the next two decades. As a result, CCP production is expected to remain steady, increasing by five (5) percent through 2033. The future of CCP utilization is equally bright. Growing demand in construction markets is expected to increase CCP utilization by over 48 percent. Forecast models project that CCP utilization rises to 63 percent of production by 2033. Even under alternative scenarios of accelerated coal-fueled electric generating unit retirements, CCP production is still expected to exceed overall demand.”

About Coal Ash Recycling

Coal remains the largest fuel source for generating electricity in America and produces large volumes of solid coal combustion products — primarily ash and synthetic gypsum from emissions control devices.

There are many good reasons to view coal combustion products as a resource, rather than a waste. Recycling them conserves natural resources and saves energy. In many cases, products

made with CCPs perform better than products made without it. For instance, coal fly ash makes concrete stronger and more durable. It also reduces the need to manufacture cement, resulting in significant reductions in greenhouse gas emissions – about 13 million tons in 2014 alone.

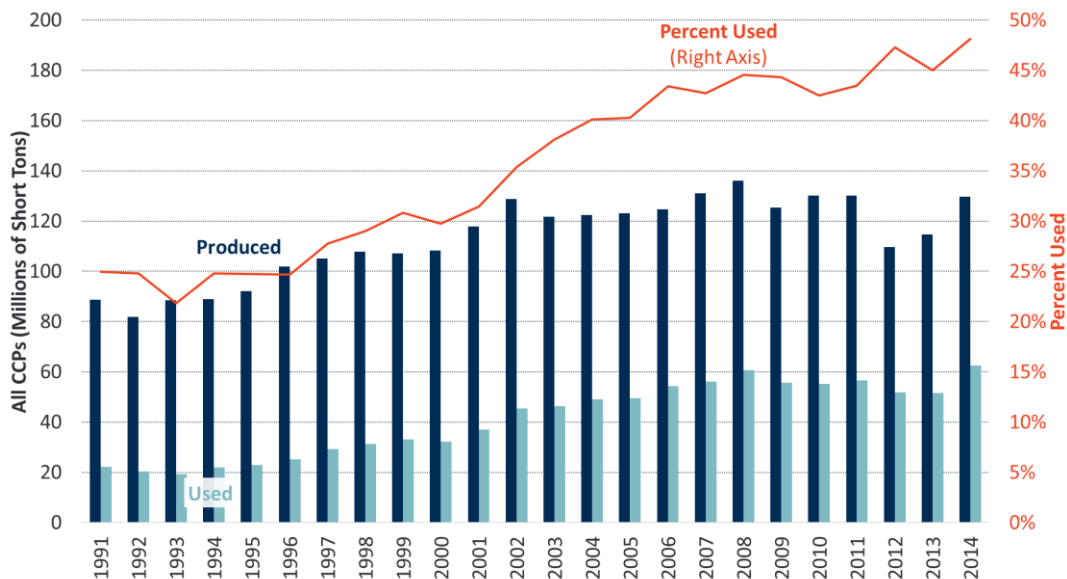
Major uses of coal combustion products include concrete, gypsum wallboard, blasting grit, roofing granules, and a variety of geotechnical and agricultural applications.

About ACAA’s Production and Use Survey

The American Coal Ash Association has conducted a survey quantifying the production and use of coal combustion products in the United States each year since 1966. Data is compiled by directly surveying electric utilities and utilizing additional data produced by the U.S. Energy Information Administration. The survey’s results have been widely utilized by federal agencies including the U.S. Environmental Protection Agency and U.S. Geological Survey.

A summary of overall production and use data since 1991 is represented by the chart below. A complete copy of the 2014 survey results is on the final page.

All CCPs Production and Use with Percent



The American Coal Ash Association was established in 1968 as a trade organization devoted to recycling the materials created when we burn coal to generate electricity. Our members comprise the world's foremost experts on coal ash (fly ash and bottom ash), and boiler slag, flue gas desulfurization gypsum or "synthetic" gypsum, and other "FGD" materials captured by emissions controls. While other organizations focus on disposal issues, ACAA's mission is to advance the management and use of coal combustion products in ways that are: environmentally responsible; technically sound; commercially competitive; and supportive of a sustainable global community.

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2014 Coal Combustion Product (CCP) Production & Use Survey Report

Beneficial Utilization versus Production Totals (Short Tons)									
2014 CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Production / Utilization Totals
Total CCPs Produced by Category	50,422,238	12,478,705	2,694,056	34,123,820	12,596,231	1,255,775	344,551	15,768,766	129,684,142
Total CCPs Used by Category	23,181,723	6,063,028	1,706,621	16,750,990	1,163,434	275,999	0	13,285,766	62,427,561
1. Concrete/Concrete Products/Grout	13,126,930	609,558	0	423,613	0	0	0	0	14,160,100
2. Blended Cement/ Feed for Clinker	3,391,272	1,197,398	0	1,308,208	120,509	0	0	0	6,017,388
3. Flowable Fill	84,734	2,672	0	0	0	0	0	0	87,406
4. Structural Fills/Embankments	2,805,515	1,928,492	51,659	1,586,234	311,183	0	0	0	6,683,084
5. Road Base/Sub-base	365,868	306,936	12,992	0	0	0	0	0	685,796
6. Soil Modification/Stabilization	176,112	720,791	0	0	0	0	0	0	896,903
7. Mineral Filler in Asphalt	68,707	0	9,758	5,197	0	0	0	0	83,662
8. Snow and Ice Control	0	736,397	101,359	0	0	0	0	0	837,756
9. Blasting Grit/Roofing Granules	0	127,114	1,530,853	0	0	0	0	0	1,657,968
10. Mining Applications	1,392,935	41,330	0	813,419	578,244	229,766	0	13,151,161	16,206,855
11. Gypsum Panel Products	0	0	0	11,221,836	0	0	0	0	11,221,836
12. Waste Stabilization/Solidification	279,323	475	0	16,390	0	0	0	134,605	430,794
13. Agriculture	62	10	0	1,332,708	0	0	0	0	1,332,781
14. Aggregate	0	181,107	0	0	0	0	0	0	181,107
15. Oil/Gas Field Services	512,100	4,708	0	0	0	46,233	0	0	563,041
16. Miscellaneous/Other	978,165	206,039	0	43,384	153,498	0	0	0	1,381,086
Summary Utilization to Production Rate									
CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Utilization Total
Totals by CCP Type/Application	23,181,723	6,063,028	1,706,621	16,750,990	1,163,434	275,999	0	13,285,766	62,427,561
Category Use to Production Rate (%)	46%	49%	63%	49%	9%	22%	0%	84%	48%
2014 Cenospheres Sold (Pounds)	4,862,261	Data in this survey represents 189 GWs of Name Plate rating of the total industry wide approximate 302 GW capacity based on EIA's July 2015 Electric Power Monthly.							

Notes:

These are estimates for entire U.S. utility and IPP sectors calculated by dividing the survey respondents data by the portion of the overall industries coal burn they represent, as reported in the July 2015 EIA Electric Power Monthly (58%).