

For Immediate Release



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Coal Ash Recycling Rate Increased in 2024 as Ash Harvesting Continued Rapid Growth

WASHINGTON, DC – December 4, 2025 – Seventy-two percent of the coal ash produced during 2024 was recycled – increasing from 69 percent in 2023 and marking the 10th consecutive year that more than half of the coal ash produced in the United States was beneficially used rather than disposed.

American Coal Ash Association (“ACAA”) has conducted an annual “Production and Use Survey” since 1968 to quantify volumes of coal combustion products (“CCP”) generated by electric utilities and utilized in a variety of beneficial use applications. In addition to this “fresh” ash production and use, a rapidly growing practice of “harvesting” previously disposed ash has begun to supply significant volumes of material to beneficial use markets.

ACAA estimates several million tons of previously disposed ash was utilized in a variety of applications in 2024, including coal ash pond closure activities, concrete products, cement kiln raw feed, and gypsum panel manufacturing. ACAA has commenced a new study to quantify the volumes of harvested ash now being utilized in addition to the fresh ash metrics tracked in its legacy survey. Results of the first harvesting study are anticipated early in 2026 and will be used to update results of 2024’s survey.

“Harvested ash utilization represents growth in coal ash recycling above and beyond the increasing volumes of ash recycled from current power plant operations,” said Thomas H. Adams, ACAA Executive Director. “The rapidly increasing utilization of harvested CCP shows that beneficial use markets are adapting to changing dynamics in coal-fueled electricity generation in the United States. With soaring electricity demand forecasts delaying many anticipated coal plant closures, the combination of continued fresh ash production and significant expansion of harvesting activity portends ample coal ash supplies for construction markets for many years to come.”

According to ACAA’s 2024 survey, 46 million tons of newly produced coal combustion products were beneficially used in all applications in 2024, about level with the previous year. Production of new CCP declined from 66.7 million tons in 2023 to 63.6 million tons in 2024.

“Coal ash” is a generic term that encompasses several coal combustion products that can be beneficially used in a wide variety of applications. Highlights of CCP production and use in 2024 include:

- Use of coal fly ash in **concrete** increased from 11.9 million tons in 2023 to 14.6 million tons in 2024. Fly ash improves concrete durability and significantly reduces greenhouse gas emissions associated with concrete production.
- Use of all coal combustion products in **cement production** declined from 6.8 million tons in 2023 to 5.3 million tons in 2024.
- Utilization of a key “non-ash” coal combustion product also posted a slight decline. Synthetic gypsum is a byproduct of some flue gas desulphurization units, also known as “scrubbers,” located at coal-fueled power plants. Use of synthetic gypsum in **panel products** (i.e. wallboard) decreased from 13.1 million tons in 2023 to 12.9 million tons in 2024 (but remained well above 2022’s utilization of 11.3 million tons.)
- Synthetic gypsum use in **agricultural applications** – in which the gypsum improves soil conditions and prevents harmful runoff of fertilizers – remained level with the previous year at 730,000 tons.
- Use of CCP in **structural fills** rebounded slightly from an all-time low of only 45,000 tons in 2023 to 274,000 tons in 2024, but remained well below historical use in this application.
- Production of boiler slag declined from 3.3 million tons in 2023 to 1.6 million tons in 2024, with utilization in the production of **blasting grit and roofing granules** increasing from 259,000 tons to 835,000 million tons.

“As America’s electricity grid changes, the coal ash beneficial use industry is evolving as well,” said Adams. “Rumors of coal ash’s demise are greatly exaggerated. Rapidly expanding use of harvesting strategies and beneficiation technologies are increasing both the quantity and reliability of ash supplies for markets that need them – all while accomplishing the significant environmental benefits that come with utilizing this secure domestic resource.”

About Coal Ash Recycling

Coal remained the fuel source for 16 percent of U.S. electricity generation in 2024 and continues to produce 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 CCP 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 14 million tons in 2024 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

American Coal Ash Association – an organization that advances the environmentally responsible and technically sound use of coal ash as an alternative to disposal – has conducted a survey quantifying the production and use of coal combustion products in the United States each year since 1968. 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.

Charts summarizing overall production and use data since 1991 and fly ash production and use since 2000 are included below. A complete copy of the 2024 survey results is also included. All charts and historical reports are available at [Production & Use Reports – ACAA](#).

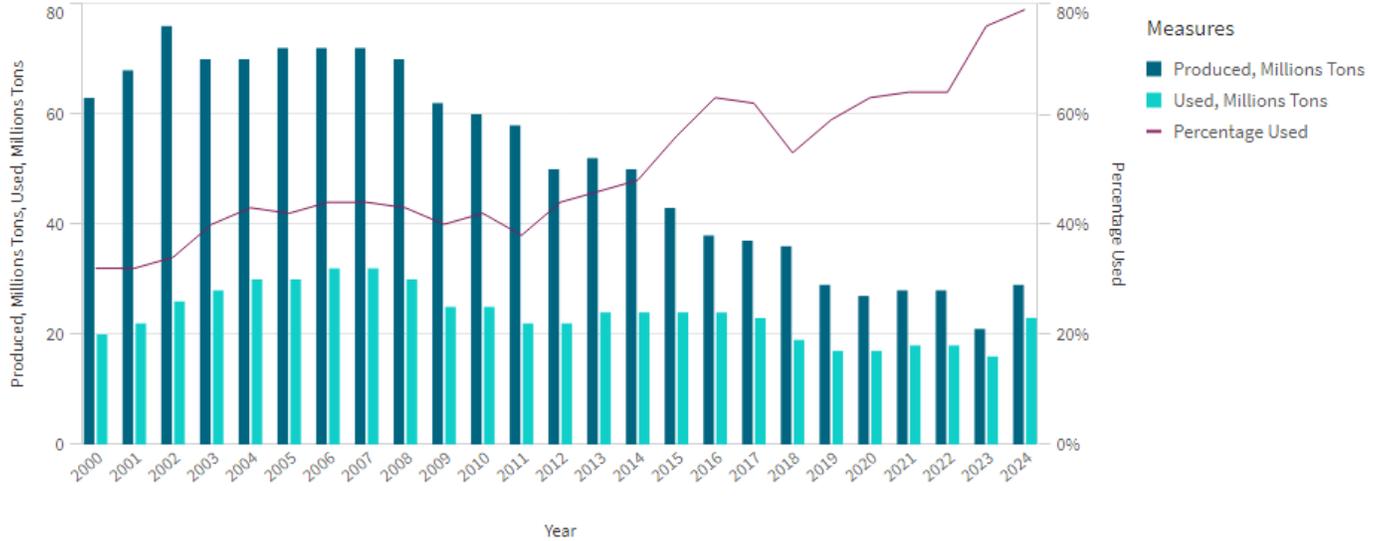
All CCPs Production and Use with Percent Used

All CCP Production & Use (1991 - 2024)



Fly Ash – Production and Use

Fly Ash Production & Use (2000-2024)



2024 CCP Production and Use Survey Results

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2024 Coal Combustion Product (CCP) Production and Use Survey

Beneficial Utilization versus Production Totals (Short Tons)									
2024 CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Total Production / Utilization Totals
Total CCPs Produced by Category	24,718,600	7,666,800	1,580,936	16,860,200	5,122,215	1,687,795	52,602	5,885,300	63,574,448
Total CCPs Used by Category	19,386,568	2,720,561	889,947	17,142,322	0	6,388	7,255	5,885,300	46,038,342
CCP Type / Application									
1. Concrete/Concrete Products /Grout	14,593,135	379,959		10,155					14,983,249
2. Blended Cement/ Feed for Clinker	3,364,973	474,525		1,501,065		5,819			5,346,382
3. Flowable Fill	11,532								11,532
4. Structural Fills/Embankments	97,871	175,649							273,521
5. Road Base/Sub-base	102,199	218,181						12,539	332,919
6. Soil Modification/Stabilization	194,112	7,332							201,444
7. Mineral Filler in Asphalt						569			569
8. Snow and Ice Control		13,324	155						13,479
9. Blasting Grit/Roofing Granules		178,325	834,866						1,013,191
10. Mining Applications		11,592						5,443,670	5,455,262
11. Gypsum Panel Products (formerly Wallboard)				12,875,501					12,875,501
12. Waste Stabilization/Solidification	14,517								14,517
13. Agriculture				730,602					730,602
14. Aggregate	2,694	257,293							259,988
15. Oil/Gas Field Services	9,345						7,255		16,600
16. CCR Pond Closure Activities		7,364							7,364
17. Miscellaneous/Other	996,190	997,017	54,926	2,024,999				429,090	4,502,222
Summary Utilization to Production Rate									
2024 CCP Categories	Fly Ash	Bottom Ash	Boiler Slag	FGD Gypsum	FGD Material Wet Scrubbers	FGD Material Dry Scrubbers	FGD Other	FBC Ash	CCP Total Utilization Total
Totals by CCP Type/Application	19,386,568	2,720,561	889,947	17,142,322	0	6,388	7,255	5,885,300	46,038,342
Category Use to Production Rate (%)	78%	35%	56%	102%	0%	0%	14%	100%	72%

Total CCP production for Fly Ash, Bottom Ash, FGD Gypsum, and FBC Ash is taken directly from the Ash Mart, which is based on the EIA's 2024 data for coal power plants. Production estimates for Boiler Slag and the Wet, Dry, and Other categories are derived using the 10-year average results from the 2014-2023 surveys, benchmarked against the Ash Mart totals for Bottom Ash and FGD Gypsum. The 17 individual CCP category estimates presented in this report are calculated from the responses to the "2024 Coal Combustion Product (CCP) Production and Use Survey." Special thanks to all survey participants.