

## TVA Recycles Coal Ash as Part of Our Mission of Environmental Stewardship

In 2022, TVA recycled 82% of the coal combustion residuals (CCR) we produced for the manufacture of wallboard and cement, as well as a replacement for Portland cement in concrete. That's millions of tons of coal ash that does not have to be stored and managed in landfills.

The Environmental Protection Agency encourages the use of coal ash because the practice:

- Reduces the use of virgin resources
- Lowers greenhouse gas emissions
- Reduces the cost of coal ash disposal
- Improves strength and durability of materials

Coal ash improves the performance and sustainability of building products like cement, wall board, and roofing shingles.



TVA sells coal ash to companies that recycle it into products like cement and concrete.




## TVA Recycles Coal Ash as Part of Our Mission of Economic Development

Recycling coal ash is not just good for the environment, it helps create hundreds of jobs across the Tennessee Valley. Byproducts of the coal combustion process are recycled and used to help fuel our region's economic growth.



*The fly ash produced at Kingston is an excellent quality. Having a close, reliable source is vitally important to us.*

**Joe Fowler**, General Manager of Ready Mix USA

 Employs 140 people in Knoxville, TN



*The cost to build roads, runways, and bridges would increase by an estimated \$104.6 billion over the next 20 years if fly ash were not available.*

**American Road and Transportation Builders Association**




*Fly ash from Kingston plays a vital role in our supply chain, providing us with quality material that exceeds the expectations of our customer base.*

**Wesley Blalock**, General Manager of Blalock Ready Mix in Sevierville, TN

 Employs 100+ people in East Tennessee


### Built with Coal Ash

Notable national monuments and infrastructure all across the country are built with coal ash.

  
**Oakland Bay Bridge**

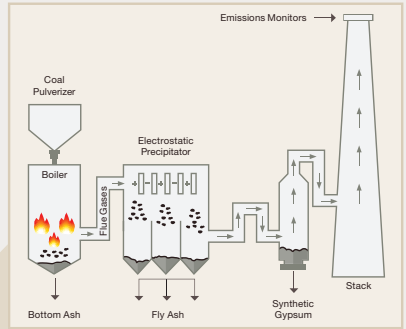
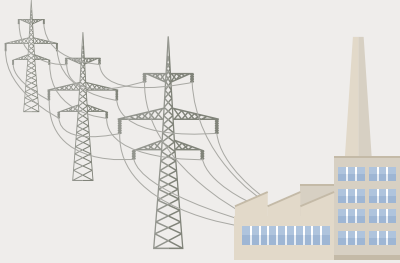
  
**Hoover Dam**

  
**One World Trade Center**

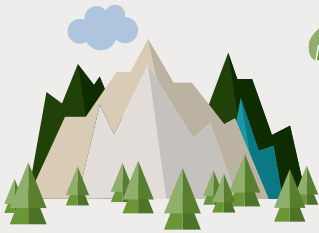
  
**Washington, D.C. Metro**

# Benefits of Recycling Coal Ash

When power plants burn coal to produce electricity, coal combustion residuals (CCR), commonly known as coal ash, are created.



These residuals include fly ash, bottom ash/slag, and synthetic gypsum.



**Synthetic gypsum** conserves natural resources by replacing natural mined gypsum



**Fly ash** is used in airport runways

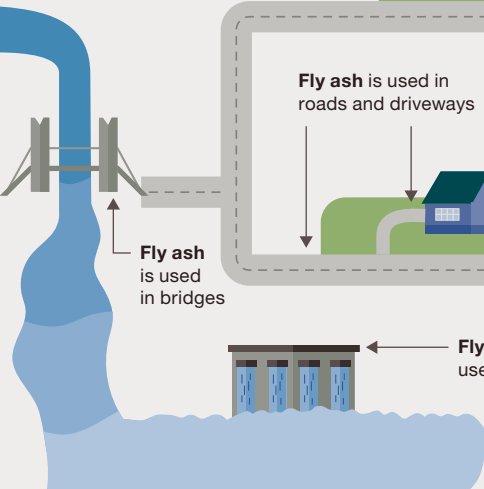
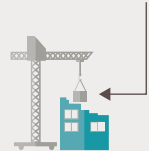


**Fly ash** is used to replace Portland Cement in the production of concrete

Concrete with **fly ash** is stronger, more durable, lower cost, and environmentally friendly

**Fly ash** is used in precast concrete products

Every ton of **fly ash** that replaces Portland Cement reduces carbon emissions by 1 ton



**Fly ash** is used in bridges

**Fly ash** is used in roads and driveways

**Synthetic gypsum** is used in wallboard



**Fly ash** is used in dams

Some **CCR** have properties suitable for metal castings in the aerospace and automotive industries

