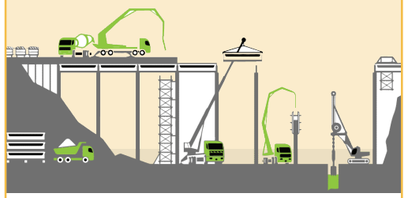
ENVIRONMENTAL SUSTAINABILITY SERVICES

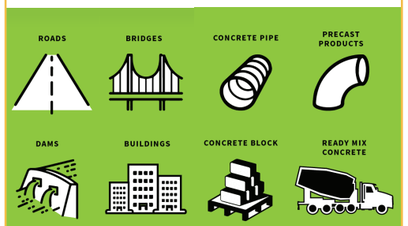
Sustainability is central to everything we do at Charah Solutions. Our core business is centered on coal ash byproduct management, the beneficial recycling of ash products, and environmental remediation and compliance. We develop innovative sustainable solutions to complex environmental issues for the betterment of the planet and the communities in which we operate.

- REDUCES GREENHOUSE GAS EMISSIONS
- DECREASES LANDFILL DISPOSAL
- CONSERVES AND PROTECTS WATER
- CONSERVES VIRGIN RESOURCES
- REMEDIATES LAND FOR USE

SINCE 2020, WE SAVED 4.79 MILLION TONS OF CO_2 FROM ENTERING THE ATMOSPHERE.



Charah Solutions fly ash improves concrete durability, strength, mixability, and finish. This concrete is used to build infrastructure to keep the economy moving.



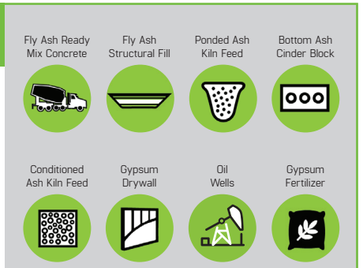
FOR EVERY TON OF FLY ASH USED TO REPLACE TRADITIONAL CEMENT, .87 TONS OF CO_2 IS SAVED FROM ENTERING THE ATMOSPHERE.

POWER PLANT

CCRs are generated by burning pulverized coal in a boiler furnace which creates both bottom ash and fly ash. The bottom ash is mechanically collected at the bottom of the boiler furnace whereas fly ash is captured by routing flue gas through electrostatic precipitators. The final process is flue gas desulfurization (FGD) creating synthetic gypsum. All processes create byproducts which are managed by Charah Solutions and can be beneficially used through sustainable processes.

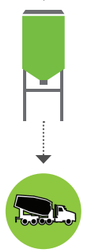
BENEFICIAL USE of CCPs

Charah Solutions manages the coal combustion products (CCPs), including fly ash, bottom ash, conditioned ash, ponded ash, and gypsum, which are collected and beneficially used in products for multiple industries. By beneficially using more than 2.58 million tons of ash and supplementary cementitious materials (SCMs) each year, we dramatically reduce greenhouse gas emissions and the amount of waste sent to landfills.



SINCE 2020, WE HAVE BENEFICIALLY RECYCLED MORE THAN 5.4 MILLION TONS OF CCPs.

DRY FLY ASH FOR READY MIX CONCRETE

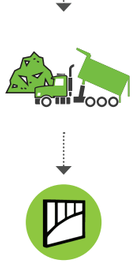


Class C and Class F fly ash is transported via truck, barge, or rail to ready mix concrete producers where it is beneficially used by mixing with other ingredients to produce concrete.

CONDITIONED FLY ASH FOR STRUCTURAL FILL

Charah Solutions manages the design, construction, and operation of structural fill projects in which the land is reclaimed and used for community or business use.

GYPSUM FOR DRYWALL



Raw gypsum byproduct is sold to drywall manufacturing plants where it is beneficially used in residential and commercial construction projects.

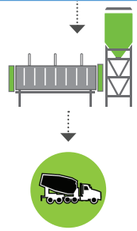
GYPSUM FOR AG FERTILIZER

Raw gypsum byproduct is sold to growers where it is beneficially used as agriculture fertilizer to enhance soil health and improve plant nutrition.

ASH POND MANAGEMENT

Charah Solutions manages the design, construction, operation, and remediation of onsite ash ponds to enable the safe and compliant beneficial use of these byproduct materials.

BENEFICIATED ASH – ENVIROSOURCE™



Pond ash is beneficiated using Charah Solutions' proprietary EnviroSource™ fly ash beneficiation technology, which uses a thermal process to reduce the loss on ignition (LOI) of the ash, making formerly unusable fly ash stored in ponds and landfills immediately marketable to be beneficially used in the production of concrete.

CONDITIONED FLY ASH FOR STRUCTURAL FILL

Charah Solutions manages the design, construction, and operation of structural fill projects in which the land is reclaimed and used for community or business use.

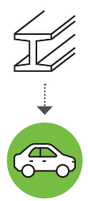
REMEDIATED POND LAND REUSE

Upon ash pond closure by removal of the ash pond, the land is remediated and redeveloped for community use, renewable energy, agricultural, commercial, or other industrial redevelopment opportunities.

POWER PLANT DECOMMISSIONING AND DEMOLITION

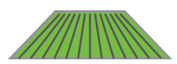
Through our Environmental Risk Transfer (ERT) services, we take full ownership of decommissioned power plants and land from the utility. We demolish the power plant and recycle the steel and other metals. The land is also fully remediated and redeveloped for use, which includes community use, renewable energy, agricultural, commercial, or other industrial redevelopment opportunities.

RECYCLED STEEL FOR INDUSTRIAL USE



Steel from the demolished plant and other facilities is collected and recycled, where it is then beneficially used to produce products for the automotive, construction, furniture, and other industries.

LAND REMEDIATION/ REDEVELOPMENT



Upon demolition of the power plant, the land is remediated and redeveloped for community use, renewable energy, agricultural, commercial, or other industrial redevelopment opportunities.

BUILD PARKS, GREEN SPACES, NATURAL HABITATS, AND COMMERCIAL SPACES.

Since 2015, Charah Solutions has reclaimed approximately 4,818 acres of land for community use.

SINCE 2020, CHARAH SOLUTIONS HAS DIVERTED 5.4 MILLION TONS OF MATERIAL FROM LANDFILLS.