Coal combustion products (CCPs) are created in the electricity generating process at coal-fired power plants. CCPs produced by We Energies and Wisconsin Public Service (WPS) have gained an international reputation for quality, performance, value and environmental benefits.

We Energies and WPS produce three types of CCPs:

1. **Fly ash**
2. **Bottom ash**
3. **FGD gypsum**

### Fly ash

**Description**
Fly ash is fine, glassy powder collected from power plant flue gas and comes in two classes: Class C and Class F. We produce both materials and consistently meet ASTM C 618 quality-control standards. Fly ash particles are spherically shaped and have an average diameter of approximately 10 microns.

**Uses**
Contractors and suppliers use our fly ash for:
- Concrete (cement replacement)
- Grouts and mortars
- Structural fills
- Controlled low-strength material (flowable fill)
- Asphalt pavement
- Full-depth reclamation of old pavement
- Roller-compacted concrete
- Soil stabilization

**Benefits**
- Improved workability and reduced heat of hydration
- Increased strength, durability, and acid and sulfate resistance
- Reduced cost, water demand, segregation and bleeding of fresh concrete
- Reduced permeability, corrosion and alkali-aggregate reactions of hardened concrete

### Available products

**Class C fly ash**
- **Chemical:** High lime content; cementitious
- **Distribution:** By tanker truck or rail from southeastern Wisconsin (Pleasant Prairie and Oak Creek), central Wisconsin (Weston) and Marquette, Michigan
- **Color:** Buff

**Class F fly ash**
- **Chemical:** Low lime content; highly pozzolanic
- **Distribution:** By tanker truck or rail from southeastern Wisconsin (Oak Creek)
- **Color:** Tan

### Notable projects
- Milwaukee Art Museum
- Bradley Center, Milwaukee
- Lambeau Field, Green Bay
- Miller Park, Milwaukee
- Trump Tower, Chicago
- Marquette Interchange, Milwaukee
- More than 50 percent of all concrete placed in Wisconsin uses Class C fly ash

*The Milwaukee Art Museum was constructed using We Energies fly ash.*
## Bottom ash

**Description**
Bottom ash is a coarse to fine-grain, sand-like material collected from the bottom of coal-fired boilers. Bottom ash has a unit weight around 90 lbs/ft³ and compacts like sand. Bottom ash is distributed from power plants located in Wausau, Green Bay, Oak Creek and Kenosha, Wisconsin and Marquette, Michigan.

**Uses**
Contractors and suppliers use bottom ash for:
- Structural fills
- Backfill
- Road base and sub-base
- Drainage media
- Aggregate for concrete, asphalt and masonry
- Abrasives/traction

**Benefits**
- Increased economy
- Low-density fill
- Easy to compact
- Replaces natural quarried sand and gravel, making it a green construction material

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## FGD gypsum

**Description**
FGD gypsum is produced from forced oxidation wet scrubber emissions control technology. We Energies' FGD gypsum is a high-purity calcium sulfate dihydrate (CaSO₄·2H₂O) and has a free moisture content of approximately 8 percent. FGD gypsum is produced and distributed from power plants located in Oak Creek and Pleasant Prairie, Wisconsin.

**Uses**
- Raw ingredient for products such as wallboard and plaster
- Cement manufacturing and concrete production
- Agricultural soil amendment and source of plant nutrients, calcium and sulfur

**Benefits**
- Replaces mined gypsum with local source
- Preserves natural sources and offsets greenhouse gas emissions associated with transportation and mining
- Controls time of set in concrete
- Improves soil structure, producing healthier plants and increasing crop yield

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For more information, distribution and sales

<table>
<thead>
<tr>
<th><strong>Fly ash</strong></th>
<th><strong>Bottom ash</strong></th>
<th><strong>FGD gypsum</strong></th>
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<tbody>
<tr>
<td>Lafarge North America&lt;br&gt;800-323-5949</td>
<td>We Energies / WPS&lt;br&gt;414-221-4274</td>
<td><strong>Agricultural use:</strong>&lt;br&gt;Gypsoil&lt;br&gt;866-497-7645</td>
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