Transforming the Coal Value Chain

Despite market challenges, coal is an abundant domestic resource, and remains economically important to regions throughout the U.S.

Using existing infrastructure and a mature supply chain, these critical feedstocks produced from coal take shape in high value, high growth products:

- **Construction Materials**
  - Composites, building materials, roofing tiles
  - $49.4B; CAGR 6.7%

- **Conductive Inks**
  - Electronics, touch screens, 3D printing, RFID tagging
  - $4.6B; CAGR 4.5%

- **Carbon Foam**
  - Steel production, aerospace tooling
  - $0.11B; CAGR 14%

- **Pitch**
  - A carbonaceous feedstock that can be derived from coal

- **Graphite**
  - Layered sheets of carbon with high thermal and electrical conductivity

- **Graphene and quantum dots**
  - Nanomaterials with specialized physiochemical properties

- **Energy Storage**
  - Lithium-ion batteries, supercapacitors
  - $37.9B; CAGR 14.4%

- **Carbon Fiber**
  - Aerospace, composites, automotive
  - $4.3B; CAGR 11.2%

US coal industry relative to 2008:

- 2008: 100%
- 2018: 60%

Proven coal reserves (Gt in 2018):

- **US** 500
- **Russian Federation** 300
- **Australia** 200
- **China** 150
- **India** 100

Market data and projections from third-party reports.