

Coal to Conductive Inks Expanding Viable High-value, High-growth Markets for Coal

WHAT ARE CONDUCTIVE INKS?

- Conductive inks are infused with conductive materials which enable printing of electrically conductive surfaces
- Conductive inks facilitate production of flexible, stretchable and potentially self-healing electrical circuits

ADVANTAGES OF COAL

Advanced carbon materials such as graphene, graphite, and quantum dots can be produced from domestic coal and significantly lower the costs of conductive inks.

R&D ACTIVITIES

NETL Research & Innovation Center

Developing scalable chemical and physical processing methods for manufacturing advanced carbon materials directly from domestic coal



CHALLENGES

- Optimizing coal-based manufacturing processes and scaling up
- Improving final product properties such as resistance, conductivity, and durability

https://www.netl.doe.gov/Advanced_Coal_Processing

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Minus 100 LLC

Higher

Solid

Low Resista

Developing new or improved methods of manufacturing conductive ink pigments using coal as a primary feedstock

https://www.netl.doe.gov/project-information?p=SC0018694

ADVANCED COAL PROCESSING CONTACTS

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