

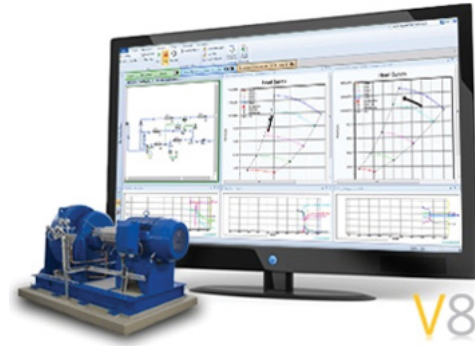
MARKET ANALYSIS HIGHLIGHTS EXCITING NEW GROWTH MARKETS FOR COAL

Informing stakeholders of high-impact products and markets for carbon products from coal that are beyond traditional power and heat applications.

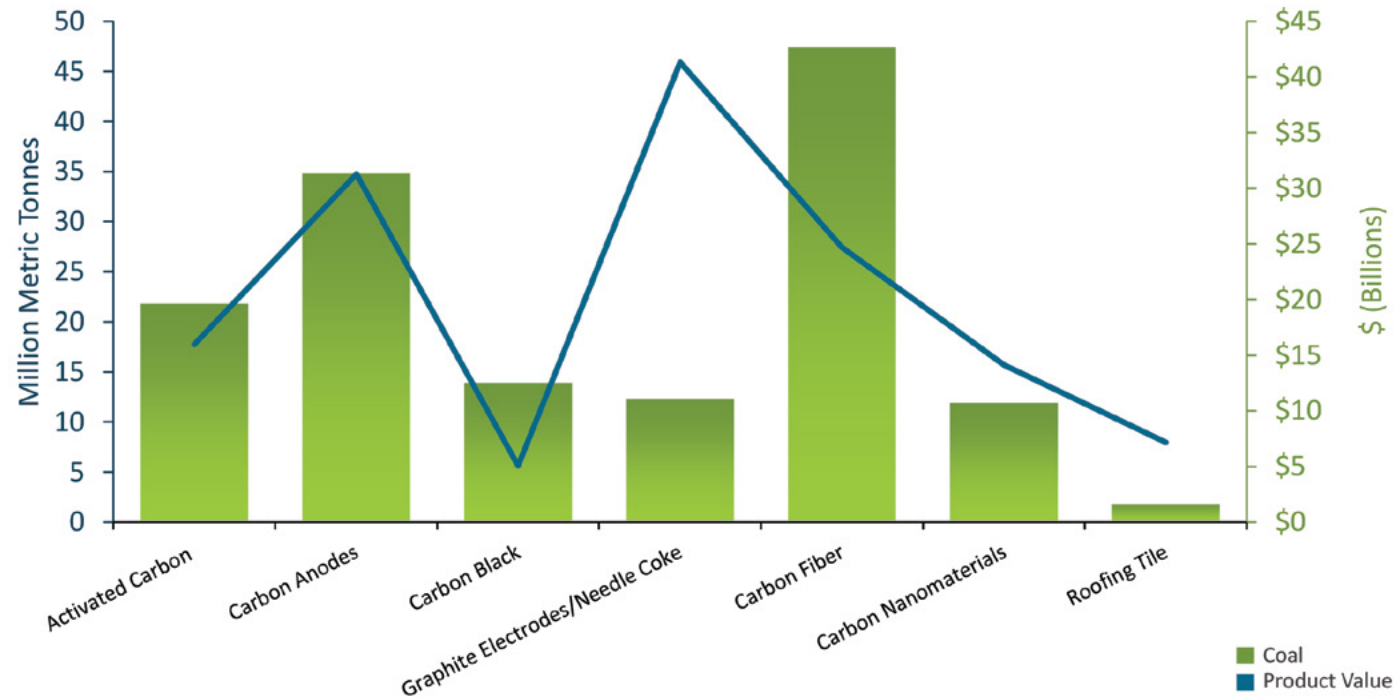
ASSESSING THE MARKET POTENTIAL OF CARBON PRODUCTS FROM COAL

NETL's Energy Markets Analysis Team developed a comprehensive market analysis with quantitative estimates of market size and growth for carbon products, and information on producers, importers, exporters, and the potential for coal-derived carbon products to satisfy this demand, as well as barriers to market entry.

The analysis already has informed programmatic decisions about future research directions and has highlighted markets that can consume significant amounts of coal exclusive of traditional thermal and metallurgical applications.



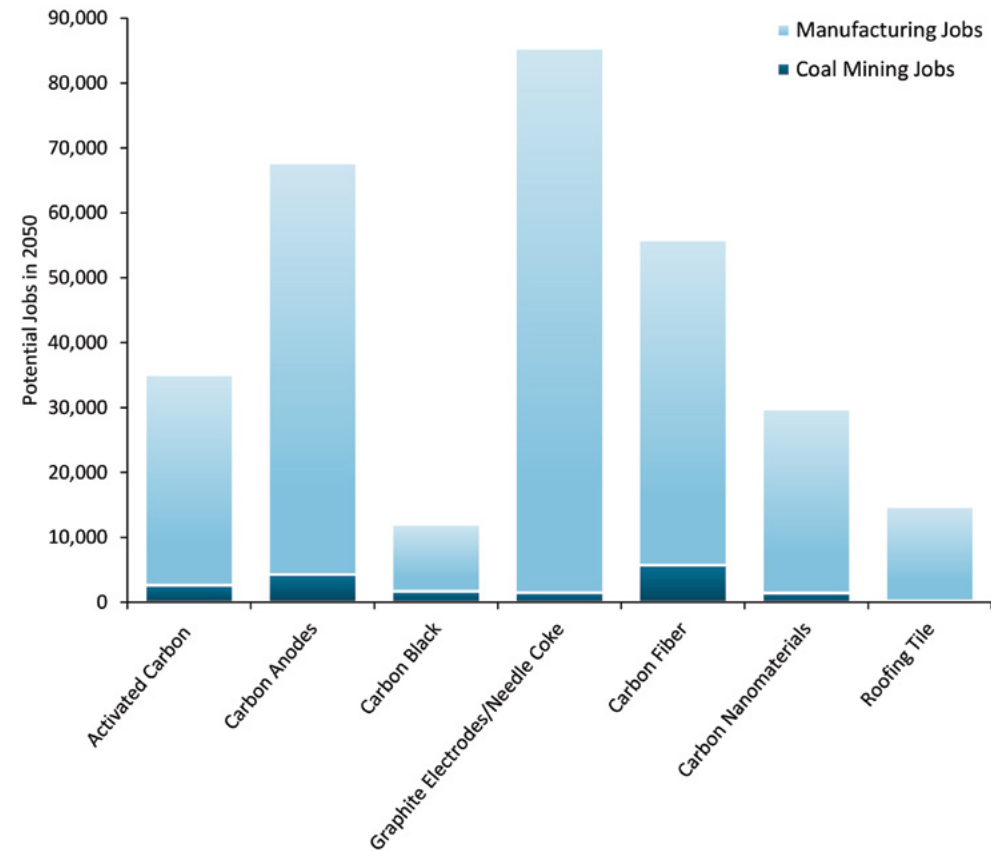
MARKET ANALYSIS IDENTIFIES HIGH-VALUE PRODUCTS WITH POTENTIAL TO UTILIZE MILLIONS OF TONNES OF DOMESTIC COAL



NETL's analysis of coal-based products indicates the potential for utilizing over 145 million metric tonnes of coal to produce products worth over \$140 billion in year 2050. The values are reported in year 2050 and represent a high coal penetration scenario of 80 percent of the overall product market. Several products (e.g., anodes and carbon fiber) represent high demand growth scenarios.

LARGE JOB GROWTH POTENTIAL IS INDICATED

NETL investigated several coal-based products and found the potential for over 17,500 coal mining jobs and over 280,000 manufacturing jobs by 2050. This analysis enables NETL to focus on developing technologies and coal-based products with the highest impact on job and value creation.



PARTNERSHIPS ENABLE ACCESS TO CUTTING-EDGE DATA

A collaborative partnership was established with Ramaco Carbon and the Oak Ridge National Laboratory to access state-of-the-art data on novel coal-based carbon fiber technologies to support a Life Cycle Analysis of light vehicle materials. Life cycle analysis evaluates the environmental footprint of rapidly emerging coal-based manufacturing technologies.

PARTNERS

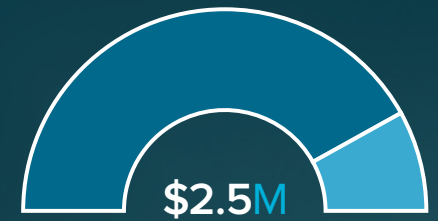


AWARD NUMBER

FWP-1022432

PROJECT BUDGET

FY20 FUNDING



● SEA* TASK \$400,000

* Systems Engineering and Analysis

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