Composites in energy, transport, and manufacturing

Drivers for change in all three industries

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State of the carbon fiber industry

Capacity, pricing, demand
State of the carbon fiber industry

Where is all of this capacity going to go?

Overview of carbon fiber production capacity (metric ton)

- Under construction
- Announced
- Commissioned

Source: BloombergNEF
Wind becomes the new leader

Larger turbines require stronger materials
Installed wind capacity will grow five-fold in the next 30 years

Global cumulative installed capacity

Source: BloombergNEF
And competitive pricing with other technologies

Current LCOE range ($/MWh, nominal) - United States, 2019 H2

Source: BloombergNEF
Automotive demand relies on China, EVs

The hardest vehicles to electrify need to get lighter
EV sales will increase out to 2040

Global long-term passenger vehicle sales by drivetrain

Automotive demand relies on China, EVs

Source: BloombergNEF
Automotive demand relies on China, EVs

Buses and commercial vehicles are key to composite demand

Proterra electric bus – lightweight carbon fiber frame

Yutong electric bus – fiberglass panels

Source: Proterra, Yutong
3D printing opens up new applications

Automation and less material waste can lower the cost of composite parts
3D printing investment is rising

Disclosed VCPE funding ($m)

Source: BloombergNEF, CB Insights

3D printing opens up new applications
For questions on the presentation, please contact
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