CATERPILLAR®



November 22, 2022

Caterpillar contact: Brant Watson Global Government & Corporate Affairs 309-264-2610 Watson Brant@cat.com

FOR IMMEDIATE RELEASE

<u>Caterpillar Successfully Demonstrates First Battery Electric Large Mining</u> <u>Truck and Invests in Sustainable Proving Ground</u>

IRVING, Texas – Caterpillar Inc. (NYSE: CAT) announced today a successful demonstration of its first battery electric 793 large mining truck and a significant investment to transform its Arizona-based proving ground into a sustainable testing and validation hub of the future.

Caterpillar completed development of its first battery electric 793 prototype with support from key mining customers participating in Caterpillar's Early Learner program. Participants of the program with definitive electrification agreements include BHP, Freeport-McMoRan, Newmont Corporation, Rio Tinto and Teck Resources Limited.

"Our global team came together to develop this battery truck at an accelerated pace to help our customers meet their sustainability commitments," said Resource Industries Group President Denise Johnson. "This demonstration is a significant milestone, and we are excited for these trucks to get to work at customers' sites around the world in the near future."

The Early Learner program launched in 2021 and focuses on accelerating the development and validation of Caterpillar's battery electric trucks at participating customers' sites. This approach supports the individual commitments each Early Learner participant has made to reduce and eliminate greenhouse gas emissions from their operations. A primary objective of the program is for Caterpillar to collaborate more closely with its customers as the industry undergoes transformational change through the energy transition.

Early Learner customers came together to witness a live demonstration of Caterpillar's prototype battery truck on a seven-kilometer (4.3-mile) course. During the event, Caterpillar monitored over 1,100 data channels, gathering 110,000 data points per second, to validate simulation and engineering modeling capabilities. Fully loaded to its rated capacity, the truck achieved a top speed of 60 km/h (37.3 mph). The loaded truck traveled one kilometer (0.62 mile) up a 10% grade at 12 km/h (7.5 mph). The truck also performed a one kilometer (0.62 mile) run on a 10% downhill grade, capturing the energy that would normally be lost to heat and regenerating that energy to the battery. Upon completing the entire run, the truck maintained enough battery energy to perform additional complete cycles.

Mine Site of the Future

The prototype truck was built at Caterpillar's Tucson Proving Ground, located in Green Valley, Arizona. In support of the energy transition, Caterpillar is investing to transform the proving ground into a working, sustainable "mine site of the future" by installing and utilizing a variety of renewable energy sources. The objective is to implement the same sustainable solutions mining companies will use at their own operations to learn firsthand what it takes to run an electrified mine site and effectively support customers through the changes.

"The transformation of the Tucson Proving Ground allows Caterpillar to demonstrate our energy transition commitments and serve as a stronger advisor to customers as we navigate the changes together. We know it will take an integrated, site-level solution for miners to achieve their carbon-reduction goals, and we're here to help as they redefine the way they mine for generations to come," emphasized Johnson.

As part of the site transformation, the company will install the latest advancements in sustainability technology, including green hydrogen production, natural gas and 100% hydrogen reciprocating engine power generation, fuel cell power generation and expanded energy storage systems. The site will also leverage a variety of renewable power sources, including wind, solar and hydrogen, capable of powering the facility and its products as they become electrified. The transformation of the facility will also serve as a learning platform for optimizing charging and energy management integration.

About Caterpillar

With 2021 sales and revenues of \$51.0 billion, Caterpillar Inc. is the world's leading manufacturer of construction and mining equipment, off-highway diesel and natural gas engines, industrial gas turbines and diesel-electric locomotives. For nearly 100 years, we've been helping customers build a better, more sustainable world and are committed and contributing to a reduced-carbon future. Our innovative products and services, backed by our global dealer network, provide exceptional value that helps customers succeed. Caterpillar does business on every continent, principally operating through three primary segments – Construction Industries, Resource Industries and Energy & Transportation – and providing financing and related services through our Financial Products segment. Visit us at <u>caterpillar.com</u> or join the conversation on our <u>social media channels</u>.

Forward-Looking Statements

Certain statements in this press release relate to future events and expectations and are forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "believe," "estimate," "will be," "will," "would," "expect," "anticipate," "plan," "forecast," "target," "guide," "project," "intend," "could," "should" or other similar words or expressions often identify forward-looking statements. All statements other than statements of historical fact are forward-looking statements, including, without limitation, statements regarding our outlook, projections, forecasts or trend descriptions. These statements do not guarantee future performance and speak only as of the date they are made, and we do not undertake to update our forward-looking statements.

Caterpillar's actual results may differ materially from those described or implied in our forward-looking statements based on a number of factors, including, but not limited to: (i) global and regional economic conditions and economic conditions in the industries we serve; (ii) commodity price changes, material price increases, fluctuations in demand for our products or significant shortages of material; (iii) government monetary or fiscal policies; (iv) political and economic risks, commercial instability and events beyond our control in the countries in which we operate; (v) international trade policies and their impact on demand for our products and our competitive position, including the imposition of new tariffs or changes in existing tariff rates; (vi) our ability to develop, produce and market quality products that meet our customers' needs; (vii) the impact of the highly competitive environment in which we operate on our sales and pricing; (viii) information technology security threats and computer crime; (ix) inventory management decisions and sourcing practices of our dealers and our OEM customers; (x) a failure to realize, or a delay in realizing, all of the anticipated benefits of our acquisitions, joint ventures or divestitures; (xi) union disputes or other employee relations issues; (xii) adverse effects of unexpected events; (xiii) disruptions or volatility in global financial markets limiting our sources of liquidity or the liquidity of our customers, dealers and suppliers; (xiv) failure to maintain our credit ratings and potential resulting increases to our cost of borrowing and adverse effects on our cost of funds, liquidity, competitive position and access to capital markets; (xv) our Financial Products segment's risks associated with the financial services industry; (xvi) changes in interest rates or market liquidity conditions; (xvii) an increase in delinquencies, repossessions or net losses of Cat Financial's customers; (xviii) currency fluctuations; (xix) our or Cat Financial's compliance with financial and other restrictive covenants in debt agreements; (xx) increased pension plan funding obligations; (xxi) alleged or actual violations of trade or anti-corruption laws and regulations; (xxii) additional tax expense or exposure, including the impact of U.S. tax reform; (xxiii) significant legal proceedings, claims, lawsuits or government investigations; (xxiv) new regulations or changes in financial services regulations; (xxv) compliance with environmental laws and regulations; (xxvi) the duration and geographic spread of, business disruptions caused by, and the overall global economic impact of, the COVID-19 pandemic; and (xxvii) other factors described in more detail in Caterpillar's Forms 10-Q, 10-K and other filings with the Securities and Exchange Commission.