First Tellurium CEO Comments on Tellurium Extending Lithium-ion Battery Life by 400%

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Vancouver, Jan. 26, 2022 - <u>First Tellurium Corp.</u> (CSE: FTEL) (the "Company" or "First Tellurium"), continues to track advancements in tellurium battery technology globally. Researchers and scientists find adding tellurium to new and existing battery technologies can extend battery life up to 400% and in some cases hold 10 times the charge.

Since lithium-ion batteries changed the world over 30 years ago the need for a safer, lighter, longer lasting battery has been the challenge, it seems that tellurium may be the answer.

Current lithium-ion batteries use sulfur and selenium as electrode materials, tellurium is a better conductor with higher energy density.

Singapore's Agency for Science, Technology and Research (A*STAR) researchers have demonstrated that electrodes made from tellurium can improve the energy storage and power output of rechargeable lithium-ion batteries. Tellurium electrodes have higher energy densities and may be charged and discharged faster than conventional electrode materials.

The team then developed a cathode made entirely from tellurium nanowires just seven nanometers wide, which they laid together to form a mat. This formed a flexible tellurium cathode with an energy density of 1800 milliwatt hours per cubic centimeter which allowed it to store 50 per cent more energy than a conventional lithium cobalt oxide electrode of the same size. It also retained more than 98 per cent of its capacity after 80 charging cycles.

Not only is tellurium showing vast improvements in current lithium-ion batteries but in metal tellurium batteries, sulfur tellurium, zinc tellurium and new solid state lithium batteries as well.

A research team at The University of Texas at Austin has found a way to stabilize lithium-sulfur batteries, making them more likely to become commercially viable.

Lithium-sulfur batteries deliver more use per charge and are environmentally friendlier, but degrade quickly over time. Both the positive and negative electrodes in lithium-sulfur batteries hold 10 times as much charge capacity as materials in today's lithium-ion batteries. Coating the lithium electrode with tellurium protects the electrolyte from degrading, stunts the growth of deposits and lets the battery last longer. The added layer of tellurium on top of the lithium metal inside the battery extends the battery's lifespan by a factor of four compared to other lithium batteries.

"From Singapore to Texas, from Canada to Europe tellurium battery research has never been more active or promising," stated Tyrone Docherty, CEO of First Tellurium. "The superior conductivity of tellurium over other minerals is already prolific in solar panels, CDs, DVDs and semiconductors, and is now finding its way into the batteries of the future."

The forecasted demand for tellurium already exceeds global supply without the added demand of the battery industry. We all know the basic rules of supply and demand, and when demand outstrips supply. First Tellurium holds some of the most promising tellurium properties in North America and continues to deploy its business strategies to become a key supplier of this rare element to an ever-expanding industry.

What is Tellurium (Te)

Tellurium naturally occurring element found in the earth's crust, but is extremely rare.

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The largest use of tellurium (Te) in the past decade or more has been in the manufacture of thin-film photovoltaic solar panels. Tellurium, along with cadmium, is an essential component of the thin photovoltaic layer which generates the electricity from solar radiation.

Increasingly used in thermoelectric devices, including solar panels. Tellurium is also used in vulcanization of rubber, percussion caps, battery plate protectors and electrical resistors

About First Tellurium Corp.

First Tellurium's unique business model is to generate revenue and value through mineral discovery, project development, project generation and cooperative access to untapped mineral regions in Indigenous territory with sustainable exploration.

Our polymetallic (tellurium, gold, silver copper, tungsten) Deer Horn Project in British Columbia and Klondike tellurium-gold property in Colorado anchor a diversified search for metals, working in alliance with Indigenous peoples, NGOs, governments and leading metals buyers. This is the future of mineral exploration: generating revenue by exploring responsibly and leveraging diverse partnerships.

First Tellurium proudly adheres to and supports the principles and rights set out in the United Nations Declaration on the Rights of Indigenous Peoples and in particular the fundamental proposition of free, prior and informed consent.

On behalf of the board of directors of

First Tellurium Corp.

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