

FORM 51-102F3

MATERIAL CHANGE REPORT

1. **Name and Address of Company:**

First Tellurium Corp.
381 – 1440 Garden Place
Delta, BC V4M 3Z2

2. **Date of Material Change:**

July 12, 2023

3. **Press Release:**

A News Release dated and issued on July 12, 2023 at Vancouver, BC, through The Newswire and SEDAR.

4. **Summary of Material Change:**

China Mineral Export Restrictions Could Restrict Future Tellurium Supply

5. **Full Description of Material Change:**

See news release, a copy of which is attached hereto

6. **Reliance on Subsection 7.1(2) of the National Instrument 51-102 *Continuous Disclosure Obligations*:**

Not applicable.

7. **Omitted Information:**

Not applicable.

8. **Executive Officer Knowledgeable of Material Change:**

Tyrone Docherty, President and CEO
Telephone: (604) 789-5653

9. **Date of Report:**

July 12, 2023

NEWS >>>

China Mineral Export Restrictions Could Restrict Future Tellurium Supply

China produces about 60% of the world's tellurium, essential for U.S. production of cadmium-tellurium solar cells.

Vancouver, BC, Canada, July 12, 2023 – First Tellurium Corp. (CSE: **FTEL**, OTCQB: **FSTTF**) (the “Company” or “First Tellurium”), reports that ongoing trade tensions between China and the U.S. create implications for both tellurium and the production of cadmium-tellurium solar cells. China announced last week that it will restrict exports of the critical metals gallium and germanium, both essential for the production of semiconductors. China produces around 80% of the world's gallium and approximately 60% of the world's germanium.

China also produces about 60% of the world's tellurium, most of which goes into cadmium-tellurium solar cells. Beijing has warned that it may ban the export of technology used to make solar panels, an industry which China dominates by controlling at least 75% of its global supply chain. That has potentially dire repercussions for the West's drive for solar energy deployment.

As the trade war heats up, the U.S. is looking to secure safe, domestic sources of tellurium and many other critical metals to pre-empt potential shortages.

“This is precisely why the U.S. Department of Energy (DOE) launched its [Cadmium Telluride Accelerator Consortium](#) (CTAC) a year ago,” said First Tellurium President and CEO Tyrone Docherty. “They know the U.S. is vulnerable and has to establish safe and reliable sources of tellurium.”

The CTAC is a \$20-million initiative designed to make cadmium tellurium (CdTe) solar cells less expensive and more efficient while developing new markets for solar cell products. CdTe solar cells, first developed in the United States, represent the second-most common photovoltaic technology in the world after silicon.

According to the National Renewable Energy Laboratory, CdTe is one of the best performing thin-film technologies in large-scale commercial production. The technology can be produced more cheaply than silicon solar panels and has been shown to have a 22.1% efficiency in converting sunlight into electricity. However, without strengthened domestic manufacturing capacity, the US will continue to rely on solar technology imports, exposing the nation to supply chain vulnerabilities while simultaneously losing out on job opportunities.

Metals analyst Chen Lin noted in a recent interview that, “First Solar, as the United States' largest solar panel producer, is directly in competition with Chinese solar producers. First Solar buys more tellurium than any user in the world.”

If China were to restrict tellurium exports, Chen noted, “That would strike at the heart of the U.S. solar panel industry and greatly benefit Chinese producers.”

This supply vulnerability is why First Solar, back in the mid-2000s, set up a worldwide search for tellurium deposits they could acquire and mine themselves. “In North America alone,” said Docherty, “our understanding is that First Solar looked at over a hundred tellurium properties. Their number one

property by far, which they acquired, was the [Colorado Klondike](#) which we now control. In fact, we acquired the property from First Solar's head of exploration at the time, who had purchased it from First Solar to start his own business."

In addition to its extensive use in solar panels, tellurium demand is growing for thermoelectric devices (converting heat to electricity). Additional future demand may come from [next-generation lithium-tellurium batteries](#) under development by First Tellurium partner [Fenix Advanced Materials](#), working in collaboration with the University of British Columbia. The new batteries have demonstrated improved performance compared to lithium-sulphur and lithium-selenium batteries. Research on the batteries was published in the [Journal of Colloid and Interface Science](#), and it has been supported by the Mitacs Accelerate Program, Natural Sciences and Engineering Research Council of Canada, Canada Foundation for Innovation, BC Knowledge Development Fund and Fenix Advanced Materials.

Dr. Jian Liu, Principal's Research Chair in Energy Storage Technologies at UBC's School of Engineering stated: "All-solid-state, lithium-tellurium batteries enable higher energy output with an improved safety rating inside a smaller form-factor, thereby expanding its possible applications. The high purity of tellurium, along with the mineral's overall attributes, makes it ideal as a rechargeable battery material"

Noted Docherty, "We're the only junior mining company in the world focused on tellurium exploration. With our Klondike high-grade tellurium property in Colorado, and the Deer Horn property in British Columbia with its mix of high-grade gold, silver and tellurium, we're ahead of the curve in establishing strategic, domestic supplies for solar panel manufacturers like First Solar."

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 Klondike tellurium-gold property in Colorado and polymetallic [Deer Horn Project](#) in British Columbia 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. First Tellurium is listed on the Canadian Stock Exchange under the symbol "FTEL" and on the OTC under the symbol "FSTTF". Further information about FTEL and its projects can be found on www.firsttellurium.com.

On behalf of the board of directors of
First Tellurium Corp.

"Tyrone Docherty"

Tyrone Docherty
President and CEO

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Forward-looking information

All statements included in this press release that address activities, events or developments that the Company expects, believes or anticipates will or may occur in the future are forward-looking statements. These forward-looking statements involve numerous assumptions made by the Company based on its experience, perception of historical trends, current conditions, expected future developments and other factors it believes are appropriate in the circumstances. In addition, these statements involve substantial known and unknown risks and uncertainties that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will prove inaccurate, certain of which are beyond the Company's control. Readers should not place undue reliance on forward-looking statements. Except as required by law, the Company does not intend to revise or update these forward-looking statements after the date hereof or revise them to reflect the occurrence of future unanticipated event.