NextSource Materials Announces Global Anode Expansion Strategy and Economic Results of First Battery Anode Facility

28.02.2023 | ACCESS Newswire

TORONTO, February 28, 2023 - Nextsource Materials Inc. (TSX:NEXT)(OTCQB:NSRCF) ("NextSource" or the "Company") is pleased to announce its global anode expansion strategy and the economic results from the study relating to its first battery anode facility (BAF) to be located in Mauritius. The highlights are as follows:

- Plans to construct, in stages, multiple BAFs globally in key jurisdictions that would be capable of producing commercial scale graphite anode material for lithium-ion batteries used in electric vehicle (EV) applications
- The Company's planned series of BAFs will leverage exclusive access to well-established proprietary anode processing technology currently supplying coated, spherical and purified graphite (CSPG) to major EV automotive companies (OEMs)
- First BAF (BAF1) to be located in Mauritius, in close proximity to the Company's Molo Graphite Mine in Madagascar and on a strategic shipping route that supplies Asian markets
- Lease for BAF1 signed on existing industrial premises, accelerating the development timeframe to first production and enabling supply of CSPG for qualification with OEM customers
- BAF1 initial production (Line 1) of 3,600 tpa of CSPG to be advanced on an accelerated timeframe, targeting production in Q2 2024
    - Post-tax $NPV_{8\%}$ of US$106.9 million, IRR of 42.7%, and payback within 2.2 years
    - Capital costs of US$23.5 million and working capital of US$4.9 million
    - Annual forecasted revenues of $33.7 million and EBITDA of $13.2 million.
- BAF1 facility capable of housing 3 additional production lines of 3,600 tpa each, resulting in total production capacity (lines 1-4) of 14,400 tpa of CSPG
    - Post-tax $NPV_{8\%}$ of US$439.7 million and IRR of 45.8%, and payback within 3.2 years
    - Incremental capital cost of US$74 million, potentially financeable from Line1 cash flows

Global Anode Facility Expansion Strategy

The Company is planning a staged buildout of a series of BAFs in key geographic locations, each designed with modular production capacities that can expand in lockstep with OEM demand from key markets in Asia, North America, Europe and the UK.

Each BAF's innovative design will be based on a proprietary and well-established processing technology that NextSource has exclusive license to, and is currently used to supply CSPG to major OEMs, including the Toyota and Tesla supply chains. CSPG is the final form of graphite used as anode material, which is assembled along with cathode material and other components into finished lithium-ion batteries for EV applications.

The BAF1 plant in Mauritius is expected to produce commercial volumes of CSPG, primarily targeting supply to Japanese and South Korean customers, as well as qualification material to global OEM customers.

Based on advanced discussions with potential customers, the Company intends to prioritize the construction of additional BAFs in North America, Europe and the UK, each with production capacities capable of meeting the long term CSPG volume requirements of the customers in those markets.

The Company has commenced design work for these locations and is in the process of selecting preferred sites, which are currently undergoing economic evaluation. Timing, final locations and production volumes of additional BAFs will be dependent upon the Company having secured contracted offtakes for CSPG along with the required capital funding and applicable permits.

The Company has also begun the application process to apply for various financial loans and grants available from the US Department of Energy and Department of Defence in support of the US Inflation Reduction Act and by the UK Government's Automotive Transformation Fund.

Economic Results for BAF1 Located in Mauritius

The Company has signed a long-term industrial lease in a freeport-classified industrial park that is close to the international container port of Port Louis. Based on this industrial site, the Company completed a technical study (BAF1 Technical Study) that estimated capital costs and working capital investments at $32.8 million. The post-tax economic results demonstrated an NPV of US$106.9 million using an 8% discount rate and an IRR of 42.7% with a payback of 2.4 years. At full capacity, BAF1 annual revenues are estimated at $33.7 million with an EBITDA of $13.2 million.

President and CEO, Craig Scherba, commented, "We are delighted to announce the acceleration of our anode production strategy with our first BAF to be located in Mauritius. NextSource is now executing on its strategy to become a vertically integrated global supplier of critical battery materials.

Establishing our first BAF in Mauritius provides the shortest path to achieving commercial production of CSPG and providing customers a secure source of anode material that is decoupled from Asian supply chains, while prioritizing our plans to rapidly expand capacity through additional BAFs in North America, Europe and other locations as market demand dictates."

Mauritius was selected over other potential jurisdictions for the first BAF plant based on several strategic and economic advantages that include:

- Proximity to Madagascar resulting in low transport costs for the Company's SuperFlake® graphite feedstock
- Strategic position as a major transport hub along international shipping routes to Asia
- Availability of several suitable industrial locations within proximity of a container port
- Modern infrastructure, educated workforce and a highly supportive business environment
- Favourable tax incentives such as freeport zones and an attractive corporate income tax rate
- Net zero import and export taxes (freeport)

The next steps for the Company are to complete the front-end engineering and design and environmental and social impact assessment ("ESIA") permitting. The Company is in active discussions with strategic offtake partners and debt and equity financiers who have expressed an interest in funding the construction of BAF1 in Mauritius. Upon obtaining necessary funding and completion of the ESIA process, the Company is targeting production from BAF1 in Q2 2024.

Future modular expansions in Mauritius could accommodate up to 3 additional production lines (i.e. lines 2-4) of 3,600 tpa each at the same site, resulting in total production of 14,400 tpa of CSPG. At a total nameplate capacity of 14,400 tpa and assuming that construction of lines 2-4 is initiated after Line 1 begins operation, the combined post-tax economic results demonstrate an NPV of US$439.7 million using an 8% discount rate and an IRR of 45.8% with a payback within 3.2 years. At full capacity, the annual revenues are estimated at US$134.8 million with an EBITDA of US$57.7 million. The incremental capital costs to construct lines 2-4 is estimated at US$74 million, which includes approximately US$16 million that could be financed from Line1 cash flows.

While the Company believes that synergies exist by developing an integrated business model with the Molo Graphite Mine, the BAFs will be capable of processing flake graphite obtained from third parties. As such, future modular expansions of BAF1 and construction of additional BAFs would be based on processing demand from customers, with graphite flake being sourced from the Molo Graphite Mine and, where appropriate, from qualified flake graphite feedstock of third parties.

As the BAFs will also be capable of processing CSPG from qualified flake graphite of third parties, the Company can also be a service provider to other companies, utilising its specialized equipment and proprietary processing IP to offer CSPG toll manufacturing arrangements.

BAF1 Economic Results

The following presents the economic results of line 1 only of the Mauritius BAF.

Economic Highlights	Post-Tax Results (US$)
Net Present Value ("NPV") (8% discount rate) (1)(2)(3)(4)	106.9 million
Initial Capital Costs (2)	23.5 million
Initial Working Capital (3)	4.9 million
Sustaining and Rehabilitation Costs	15.4 million
Life of Operation (LoO)	30 years
Internal Rate of Return ("IRR") (1)(4)	42.7%
Payback (1)(4)	2.2 years
Annual Revenues (5)	33.7 million
EBITDA (5)	13.2 million
Economic Operational Highlights	
Average Annual Production	
Anode material (CSPG)	3,600 tpa
By-products (fines)	4,000 tpa
Average Sales Price Assumption (US$ per tonne)	
Anode material (CSPG)	US$8,750
By-products (fines)	US$550
Average Operating Costs (US$ per tonne of CSPG) (4)(6)	US$5,535

1. Assumes Project is financed with 100% equity.
2. CAPEX includes process equipment, ancillary civil & infrastructure, electrical and utilities, project and construction services, and contingency of $2.9 million.
3. Working capital for first 3 months of operation and raw materials inventory.
4. As measured from start of operation of line 1 and assumes no inflationary adjustments in sales price or operating costs.
5. Estimate is for first full year of operation at full capacity and excludes royalties, taxes, depreciation, and amortization.
6. Assumes all opex allocated to CSPG production without deduction for by-product revenues and excludes royalties, taxes, depreciation, and amortization.

Note: Unless otherwise noted, all monetary figures presented throughout this press release are expressed in US dollars (USD). Capital cost estimates were prepared by the Company's EPCM Erudite Strategies to a confidence level of +/- 15% to 20% and are preliminary in nature. These results should not be relied upon for investment decisions. The BAF Technical Study is not a technical report for the purposes of National Instrument 43-101 but rather is a preliminary economic and technical study relating to the design, construction and operation of the BAF1.

About NextSource Materials Inc.

Nextsource Materials Inc. is a battery materials development company based in Toronto, Canada that is

intent on becoming a vertically integrated global supplier of battery materials through the mining and value-added processing of graphite and other minerals. Construction of the processing plant and mining camp for the Company's Molo Graphite Mine in Madagascar is now complete, with the commencement of mine commissioning beginning shortly.

The Company's Molo graphite project in Madagascar is one of the largest known and highest-quality projects globally, and the only one with SuperFlake® graphite. Phase 1 of the Molo mine is in the final stages of completion and approaching first production.

NextSource Materials is listed on the Toronto Stock Exchange (TSX) under the symbol "NEXT" and on the OTCQB under the symbol "NSRCF".

For further information about NextSource visit our website at www.nextsourcematerials.com or contact us a +1.416.364.4911 or email Brent Nykoliation, Executive Vice President at brent@nextsourcematerials.com or Craig Scherba, President & CEO at craig@nextsourcematerials.com.

Safe Harbour: This press release contains statements that may constitute "forward-looking information" or "forward-looking statements" within the meaning of applicable Canadian and United States securities legislation. Readers are cautioned not to place undue reliance on forward-looking information or statements. Forward looking statements and information are frequently characterized by words such as "plan", "expect", "project", "intend", "believe", "anticipate", "estimate", "potential", "possible" and other similar words, or statements that certain events or conditions "may", "will", "could", "expected" or "should" occur. Forward-looking statements include any statements regarding, among others, timing of construction and completion of the Mauritius BAF and proposed timing of future locations of additional BAFs, timing and completion of front-end engineering and design and ESIA permitting, the economic results of the BAF Technical Study including capital costs estimates, operating costs estimates, payback, NPV, IRR, production, sales pricing and working capital estimates, the construction and potential expansion of the BAFs, expansion plans , as well as the Company's intent on becoming a fully integrated global supplier of critical battery and technology materials. These statements are based on current expectations, estimates and assumptions that involve a number of risks, which could cause actual results to vary and, in some instances, to differ materially from those anticipated by the Company and described in the forward-looking statements contained in this press release. No assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur or, if any of them do so, what benefits the Company will derive there from. The forward-looking statements contained in this news release are made as at the date of this news release and the Company does not undertake any obligation to update publicly or to revise any of the forward-looking statements, whether because of new information, future events or otherwise, except as may be required by applicable securities laws. Although the forward-looking statements contained in this news release are based on what management believes are reasonable assumptions, the Company cannot assure investors that actual results will be consistent with them. These forward-looking statements are made as of the date of this news release and are expressly qualified in their entirety by this cautionary statement. Subject to applicable securities laws, the Company does not assume any obligation to update or revise the forward-looking statements contained herein to reflect events or circumstances occurring after the date of this news release.

SOURCE: Nextsource Materials Inc.

View source version on accesswire.com:
https://www.accesswire.com/741163/NextSource-Materials-Announces-Global-Anode-Expansion-Strategy-and-Econon