



FOR IMMEDIATE RELEASE

Shyam Metalics & Energy Limited to Make Aluminum Foil for Lithium-ion Cell Manufacturing

The move enables India-made battery-grade Aluminum foil at scale to support domestic Lithium-ion battery production.

<u>Kolkata/Mumbai, 25th September 2023</u>: Shyam Metalics and Energy Limited ("Shyam Metalics" or the "Company"), a leading integrated metal producer headquartered in Kolkata, officially announces its entry into energy storage sector with battery-grade Aluminum foil, a critical component in Lithium-ion cells. The Company gears towards becoming one of the first large-scale domestic contributors to the government's *AatmaNirbhar Bharat* initiative in the battery energy storage sector.

Shyam Metalics, a major producer and exporter of Aluminum foil for various industrial applications with an annual production capacity of 20,000 tons will allow India to corner a share for raw materials in the global Lithium-ion cell market, which is expected to reach 6500GWh/year capacity by 2030.

For the production of 1GWh (Gigawatt-hour) of LFP (Lithium Iron Phosphate) cells, which powers a wide variety of electric vehicles and energy storage systems, 350 tons of high purity and uniform-thickness aluminum foil is required that acts as a positive (cathode) current collector. The demand doubles for Sodium-ion batteries where both positive and negative current collectors is expected to be using aluminum foils.

The customized battery aluminum foil from Shyam Metalics with thickness ranging from 12-micron to 20-micron has been tested and validated by third-party laboratories. The Company also has the necessary state-of-the-art German equipment that can manufacture aluminum foils as thin as 6-micron thickness, which will be suitable for future requirements where the foil thickness is expected to decrease with evolving Lithium-ion cell technologies for an improved value of cell gravimetric energy density (amount of energy contained per unit weight of the cell expressed in terms of Watt-hour/Kilogram).

According to various industry and policy assessments, India needs over 903GWh of energy storage system capacity to decarbonize its mobility and power sectors; and Lithium-ion batteries will have a very big market share in this.

India spent \$1.8bn to import 5,486.18 kWh lithium-ion batteries during April-November 2022 period as against the import of 6,167.68 lakh units of lithium-ion batteries for \$1.83bn in 2021-22, indicating a growth in imports consequently to rising demand for electric vehicles and green energy solutions.

As India gets ready to set up Lithium-ion cell Giga-factories as part of the government's production-linked incentive (PLI) scheme, Shyam Metalics' foray into raw material space for Lithium-ion cell manufacturing strengthens the indigenization drive in the strategically important energy storage solutions sector and providing the Company a future-relevant business opportunity.

Commenting on the launch, Mr. Brij Bhushan Agarwal, Vice Chairman & Managing Director, said, "We are thrilled to foray into manufacturing battery foil and support the government to mobilize resources to





indigenize battery cell manufacturing. We believe that India's energy transformation will skyrocket as we delve into lithium-ion battery foil manufacturing, supporting the government's efforts to localize battery cell production. This move will free India from import dependence, strengthen upstream component manufacturing, enhance material processing, nurture skills, foster technology know-how, and fortify the infrastructure for a wholly indigenous value chain."

Mr. Sheetij Agarwal, Head of Business Excellence & Strategy, said, "For India's sustainable future, lithium-ion batteries are as crucial as fossil fuels. SMEL is committed to securing minerals and streamlining cell and battery manufacturing to power our grid and EV transition. With the government's support through duty reductions and funding, our new battery foil division will drive cost-efficient battery production and contribute to our nation's growth."

About Shyam Metalics & Energy Limited

<u>Shyam Metalics</u> is a leading integrated metal-producing company based in India primarily in the steel industry in West Bengal and Odisha with a focus on long steel products and ferro alloys. Headquartered in Kolkata, West Bengal, the company is amongst the largest producers of ferroalloys in terms of installed capacity in India (Source: CRISIL Report). The company can sell intermediate and final products across the steel value chain. Shyam Metalics is one of the leading players in terms of pellet capacity and the fourth largest player in the sponge iron industry in terms of sponge iron capacity in India (Source: CRISIL Report).

For further details, please contact:

Madhura Burse | madhura@conceptpr.com | M:98209 21911 Saylee Narkar | saylee@conceptpr.com | M: 77189 77879