## **Executive Summary**

**Project Overview:** The Thesaur project, under the leadership of industry experienced entrepreneur, Zoltan Losonczi, is poised to become a preeminent high-tech producer of High Purity Quartz Sand (HPQS), Heavy Minerals (HM) and Silicium Ingots & Wafers from its strategically located silica and heavy minerals rich sand quarry and state-of-the-art processing plant near Targu Mures, Romania. This project is meticulously designed to cater to the burgeoning demand for HPQS in a myriad of high-tech and green-tech applications, including but not limited to photovoltaics (PV), wind turbine blades, semiconductors, optics and optical fibers, specialty glassware and smartphones.

**Development and Deposit:** The development phase of the Thesaur project is forecasted to span approximately 1 year. The project boasts substantial resources totaling approx. 31.2 million tons of quartz sand, characterized by a silica content exceeding 80% in its raw state. With an extraction rate calibrated at 1 million tons per annum, the project has an estimated mine life-cycle of  $\sim 31$  years, ensuring long-term resource availability.

**Capital Investment and Economic Viability:** The Thesaur project necessitates an initial capital expenditure (CapEx) of €20 million to achieve a fully operational quarry and processing plant and an additional €25 million to achieve a fully operational silicon ingot pulling and wafers production facility. The CapEx is meticulously allocated as follows:

- €18.0 million dedicated to infrastructure development
- €4.5 million earmarked for acquisition of mining equipment
- €22.5 million allocated for processing equipment

The project's financial projections are highly robust, essentially turbocharged by the partial trade-in of concentrated heavy minerals (Ilmenite, Rutile, Zircon) for solar-grade polysilicon, the raw material for ingot production. Highlights include a net present value (NPV $_{20}$ ) of EUR 1,258 million, an internal rate of return (IRR) of 570% and a payback period of under two years, with full repayment after the first production year. The €25 million CAPEX for ingot production will be financed from first-year operational cash flows.

**Technical Specifications:** Laboratory analyses and sophisticated technical simulations have been conducted, identifying the most efficacious technical solution for extraction and processing, which is currently under development on the acquired site. This ensures that both the extraction and processing operations will be highly efficient, cost-effective and capable of producing superior quality HPQS.

**Management Expertise:** The Thesaur project is underpinned by a management team comprising industry experts with profound expertise in mining operations, mineral processing, sales, logistics and comprehensive project management. This assemblage of seasoned professionals ensures adept execution, operational efficiency and strategic oversight.

**Community and Stakeholder Engagement:** At Thesaur, there is a resolute commitment to fostering strong, symbiotic relationships with local communities. The project places a high premium on societal engagement and corporate social responsibility, integrating these values into its operational ethos. This commitment is reflected in proactive community involvement initiatives and sustainable operational practices.

In summary, the Thesaur project is strategically positioned to emerge as a pivotal supplier in the HPQS market. The project's success is underpinned by rigorous technical planning, compelling economic fundamentals, an expert management team and an unwavering commitment to community integration and stakeholder value creation. The confluence of these factors renders the Thesaur project a paradigm of excellence in the HPQS industry.