CASE STUDY

Institute of Oncology Research

GRAPHSIGHT

# GRAPHSIGHT – AI-POWERED ENERGY FORECASTING

### *Problem – Challenge*

*Photovoltaic (PV) energy production is inherently volatile, influenced by factors such as weather, temperature, and system aging. This variability complicates energy pricing and forecasting, presenting challenges for producers, grid operators, and energy traders. Accurate forecasting is essential to stabilize energy markets, reduce costs, enhance grid reliability, and support the broader integration of renewables.*

### *Solution*

*GraphSight SA delivers next-generation PV production forecasting, reducing prediction error by over 10% compared to existing methods. Its forecasting service provides highly accurate intra-day and day-ahead predictions, enabling energy stakeholders to optimize trading strategies, improve grid balancing, and lower reliance on costly reserves. GraphSight's platform efficiently captures complex spatial and temporal dependencies, delivering forecasts that are more robust, adaptive, and computationally efficient than traditional models. This results in tangible benefits across the energy value chain, from producers to traders and consumers.*

*The innovation originates from cutting-edge research conducted at the Università della Svizzera italiana (USI). At its core is a novel application of graph deep learning, an advanced AI technique designed to model complex spatio-temporal dynamics.*

*Founded in 2024 as a USI spin-off, GraphSight has successfully in-licensed proprietary software developed at the university. GraphSight has already gained early recognition, earning an award at the Boldbrain Startup Challenge and securing a place in the USI Startup Centre incubator. It has also established a strategic partnership with DXT Commodities and is actively pursuing opportunities to scale and enter new markets.*