

B2B Events 0617

RIF PROPOSAL NUMBER	TITLE	COORDINATOR	HOST ORGANISATION	PARTNER	COLLABORATION COUNTRY ORGANISATIONS	PROJECT BUDGET	RIF FUNDING	PUBLISHABLE SUMMARY
BILATERAL/ISRAEL/0518/0017	Ensuring an optimum and reliable photovoltaic performance	Marios Theristis	University of Cyprus	M.G.F.K. ENERGY LTD	CCO1: Raycatch	102.480,00 €	99.120,00 €	<p>A cornerstone of the transition from polluted and finite energy to clean and renewable energy systems is the increasing reliability, efficiency and service lifetime of the photovoltaic (PV) solar systems. However, a major aspect that is lacking along this exponential growth is the ease of asset operations. To date, technicians are still essential to manually examine displayed data on screens with, as expected, a very limited success. The strong market growth of PV requires the equivalent automated tools for asset management.</p> <p>The main aim of the proposal is the development of a commercial product that will assist in maintaining an optimal level of operation of PV plants. In particular, the proposed project is concerned with advancing the field of the automatic identification of performance loss, degradation and failures in monitored PV plants and their classification into various fault types and degradation mechanisms, which are manifested in the field.</p> <p>Specifically, innovative methodologies based on machine learning and statistical analysis will be developed for identifying performance losses and failures in PV plants without disrupting their operation. Such methodologies have also the potential to contribute greatly to new standards on PV performance, degradation and reliability.</p> <p>The algorithms will be integrated in a commercial product, Raycatch, which is an artificial intelligence (AI) diagnostics technology for solar energy, on a mission to revolutionize the PV market by enabling automated management of solar assets. By deciphering existing solar energy data, Raycatch transforms PV O&M tasks from traditional scheduled operations to on-demand management. The result is maximized performance and maintenance of solar assets, leading to increased yield, decreased operational costs and the acceleration of solar energy penetration in the global energy market.</p>