EUROPEAN REGIONAL DEVELOPMENT FUND

"COMPETITIVENESS, ENTREPRENEURSHIP & INNOVATION" (EPANEK)

The company **E.** Astrakianakis & Co. E.E. and Altus LSA SA Emporiki Construction based in the Region of Crete joined the action of National Scope "Research - Create - Innovate Second Cycle ". The aim of the action is to connect research and innovation with entrepreneurship and to strengthen the competitiveness, productivity and extroversion of businesses towards international markets, with the aim of transitioning to quality innovative entrepreneurship and increasing domestic added value. The purpose of this action is to direct and effectively channel the available resources to promote research activities and the implementation of innovations in businesses, and especially in small and medium-sized businesses, through a series of interventions.

The total budget of the investment is €319,000.00 and is co-financed by the Greek State and the European Union and in particular the **European Regional Development Fund** (ERDF) within the framework of the Operational Program "Competitiveness, Entrepreneurship and Innovation (EPANEK)" of the NSRF 2014 - 2020.

The business plan that was approved for financing and is being implemented is entitled "Integrated system of automated control of photovoltaic parks with weather station and IR-thermography from drones)".

By participating in the Action, businesses aim to:

- Creation/adaptation/extension of software for finding available sites for the installation of photovoltaic parks in order to produce 3D models of the available sites.
- Build/customize/extend drone software for aerial capture of IR-thermal images with the required accuracy/quality and intelligent surveying of PV installed stations through thermography and meteorological data.
- Development and improvement of methods to assess defects and problems of a PV park as well as
 appropriate correlation of electrical characteristics and current operation / efficiency with thermal
 profiles of PV cells at the level of cells, arrays and frames with matching environmental conditions.
- Completion of the above in a system that will operate automatically and the results will be displayed on a platform for the evaluation of PV systems.
- Testing/evaluation of the integrated system in an installed PV park for pilot operation.
- Investigation of the best possible exploitation of the technology and the integrated system that will be developed after the end of the project.

With the contribution of EPANEK 2014 – 2020, businesses were strengthened, bringing benefits to the country's competitiveness as well as to the local economy.



European Union European Regional Development Fund



