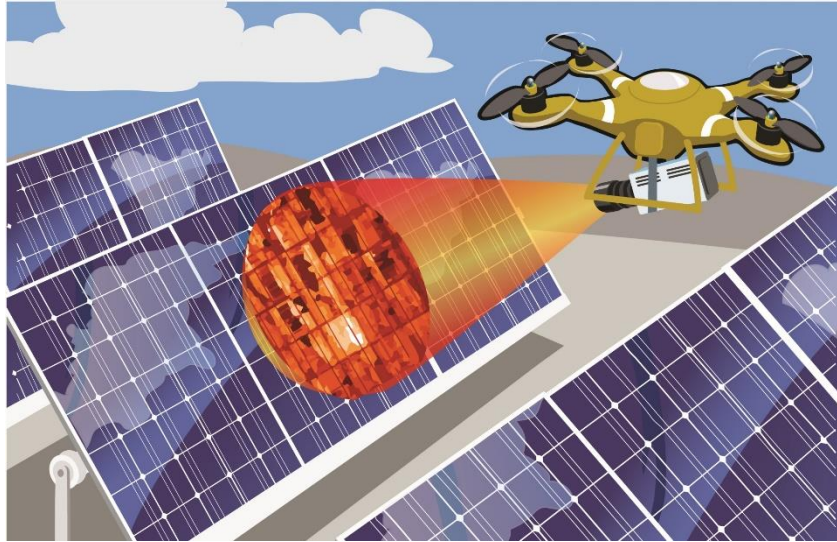


DronEL

A fast and accurate inspection of large photovoltaic plants using aerial drone imaging



Value Proposition

Drone inspections of photovoltaic (PV) systems are the next big thing in the PV operation and maintenance business. AAU and DTU has together with PV service and drone development companies developed a tool making much more detailed imaging of faults visible - even before they have impact on the energy production. Inspection time can therefore be done with much higher quality but much faster – lowering inspection time from days to hours.

Business Opportunity/ Commercial Perspectives

2 patents are in the process of being drafted.

Technology Description

The partners behind DronEL have developed a fast and accurate automatic drone-based inspection system for PV plants that combines IR, luminescence (EL or PL) imaging, and visual images (VI). The system will be able to detect a wider range of PV panel failures: visual defects, hot-spots, solar cell cracks, potential-induced degradation, and more.

The tool has successfully been used to do luminescence based fault imaging even during full sunlight which we believe to be the first in the world to do successfully.

Development Phase/Current State

The system is now in an early prototype state, with custom build drone and software, where the imaging devices can be mounted. It is in the process of being developed into a payload solution that can be mounted on any drone being able to lift its weight.

The project needs feedback from potential customers to fully tailor the solutions towards the market need.

The inventors

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Seeking

- Customers
- Partners