

Scalable Earth Observation Intelligence

Driving Smarter, More Efficient, and Resilient Energy Systems

CEPartnership Networking session July 2025





Reliable Intelligence.

Resilient Infrastructure.

Empower governments and businesses with actionable Earth intelligence to manage critical infrastructure, monitor environmental resources, and build climate resilience.



Thermal + Optical data enables to see the features with unparalleled accuracy



HOW CAN WE CONTRIBUTE?

OUR MENU:

Tools to quickly identify energy losses and equipment overheating through AI analysis of satellite heat maps.

Tools to enable proactive maintenance by forecasting infrastructure issues before they cause downtime.

Provide users with comprehensive on demand monitoring by combining Earth observation data with IoT sensors in remote locations.

Precise Decision Making

Energy Loss

Proactive maintenance

On Demand monitoring



SCALABLE TECHNOLOGY





Defects = Heat anomalies Thermal images from **Space** reveal problem areas

We develop proprietary AI detection & output prediction models to offer timely insights for large-scale, remote areas with little to no access to data



Satellite imagery covers a full



In-house Algorithms 4x imagery



Proprietary AI automatically detects heat



Optical verification cross-check results and





• BASED IN THE UK and Poland. Established in 2022.



eesa



• x4 Thermal Imagery Enhancement Algorithm developed

- ESA Business Incubation Cohort 2023 with initial funding of €50,000
- Partnership with ConstellR data provider



THANK YOU

CELESSE team welcomes any questions

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