

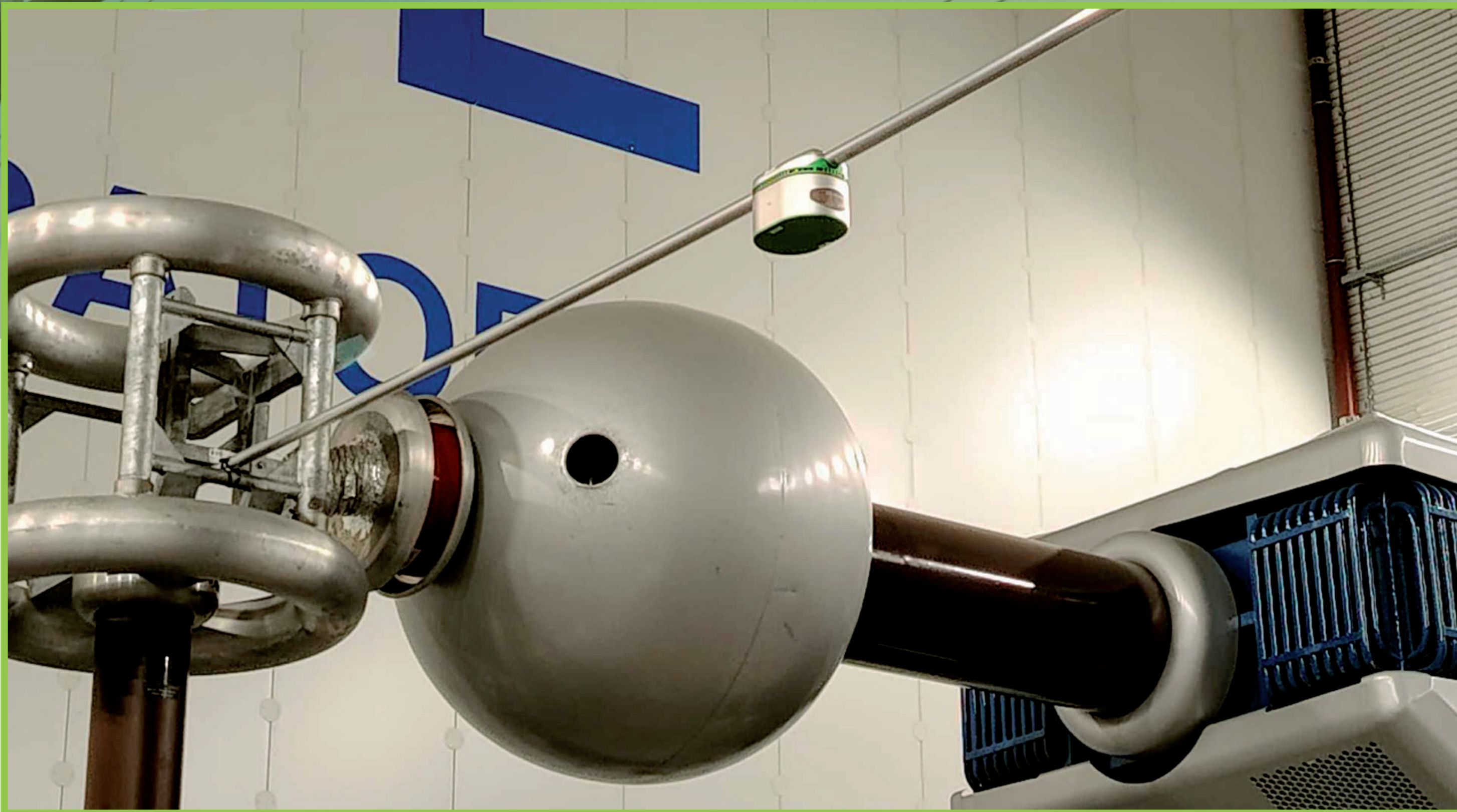


Funded by
the European Union



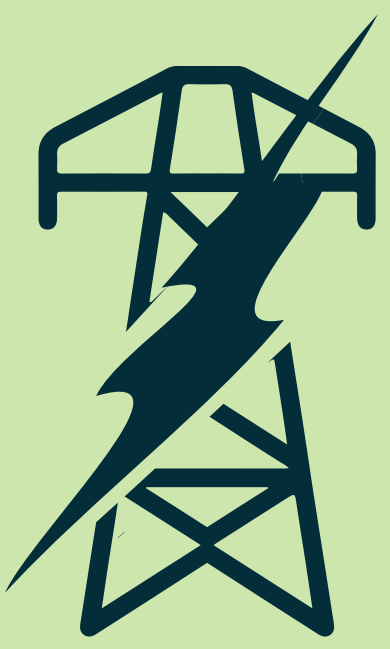
HeroGrid

Smart energy harvesting and transition for a
reliable European electricity grid based on DLR
model for HTLS powerlines

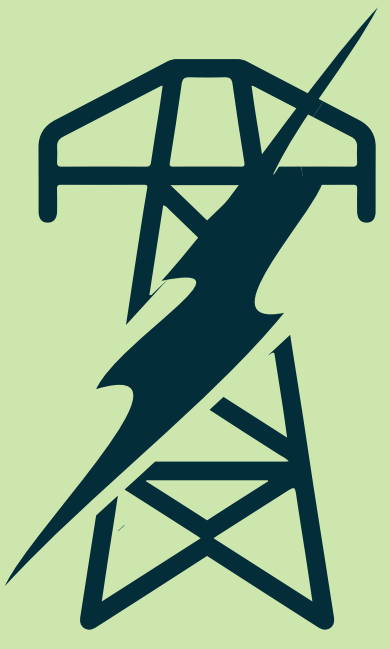


HEROGRID aims to develop and validate a **new concept of DLR for HTLS** powerlines, using **self-powered IoT devices** to improve the efficiency and reliability of electricity transmission across Europe.

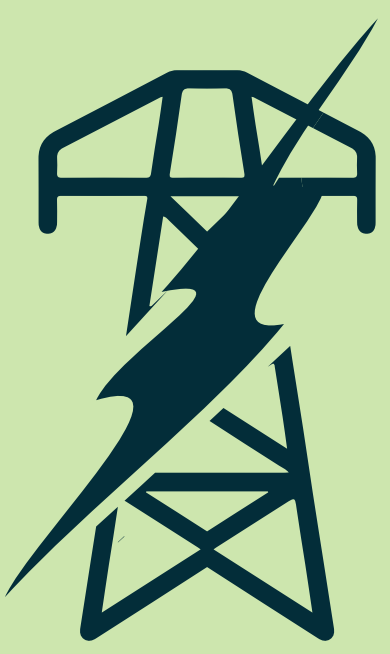
To achieve this, the project will focus on three main **technological areas**:



New AI-based DLR models specifically designed for HTLS powerlines, enabling accurate real-time monitoring and predictive control of grid performance.

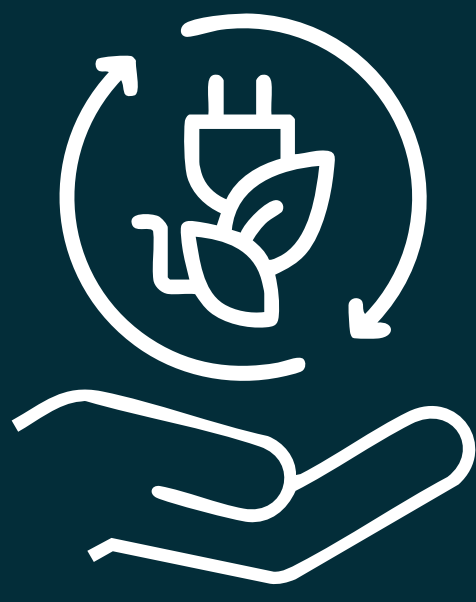


Novel IoT sensor nodes capable of operating under the high-temperature and environmental conditions typical of HTLS lines.

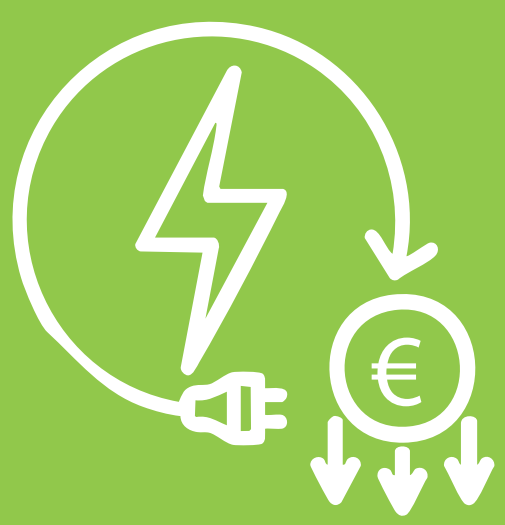


Energy harvesting systems that ensure full power autonomy of the sensors, combining **piezoelectric and thermoelectric harvesters** with an integrated power management system.

HEROGRID KEY BENEFITS:



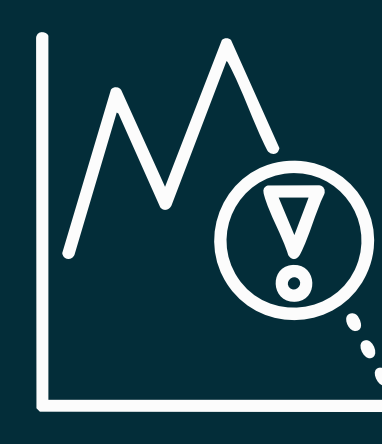
Reliable and safe
integration of
renewable energy
sources



Lower operation
and maintenance
costs



Higher
transmission
capacity



Predictive analysis
for demand and
congestion
reduction

CONSORTIUM:



www.herogrid.eu



This activity has received funding from the European Union, under the Horizon Europe, the EU Framework Programme for Research and Innovation – Project 101192630 — HEROGRID. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. Neither the European Union nor the granting authority can be held responsible for them.