Solar Gnext:

Development of the next generation of Molten Salt Solar Receiver

The context

John Cockerill Solar is working on the development of the new generation of the Solar Receiver. The main goal is to improve the competitiveness of the CSP tower plant.

Project Description

The Solar Gnext project is focused on the development of the new MSSR by:

SOLAR GNEXT









- Development of new dynamic corrosion test loop "Dynacor"
- Testing of new materials with high resistance at high temperature (until 850°C)
- Evaluation of new molten salts and corrosion mitigation solutions to reach an outlet salt temperature of 730°C.
- Development of anticorrosion coating in molten salt at high temperature
- Development of an accurate lifetime prediction model including the corrosion effect.





Partners

John Cockerill:

Design of the new MSSR and the dynamic corrosion test Loop "Dynacor"

Lithcote:

Development of the anticorrosion coating



CRM:

Tests and validation of materials, molten salts and corrosion mitigation solutions **MSM-ULiège:**

Lifetime prediction model including the corrosion effect

Schedule

From 01/10/2019 to 30/09/2022

Budget

Total: 2190K€ / RW funding: 1502K€



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