

HPC Energy consumption optimization

Aim

Reduction of sustainability impact

Customer Needs

Implement a model capable of **predicting HPC power consumption** by having **available data on CPU and GPU temperatures** and their loads

Green coding: include correlation between codes executed on HPC and energy consumption in the model

Development and implementation of a **shutdown optimization policy** of the idle nodes, depending on the extent of the code to be executed

Solution and achievements

Development of a **A.I. based model for consumption prediction** by considering the extent of the code executed as well

Evaluation of the performance of the model on test data