

PILOTS

The COGNIPLANT concept will be implemented by four end-users:

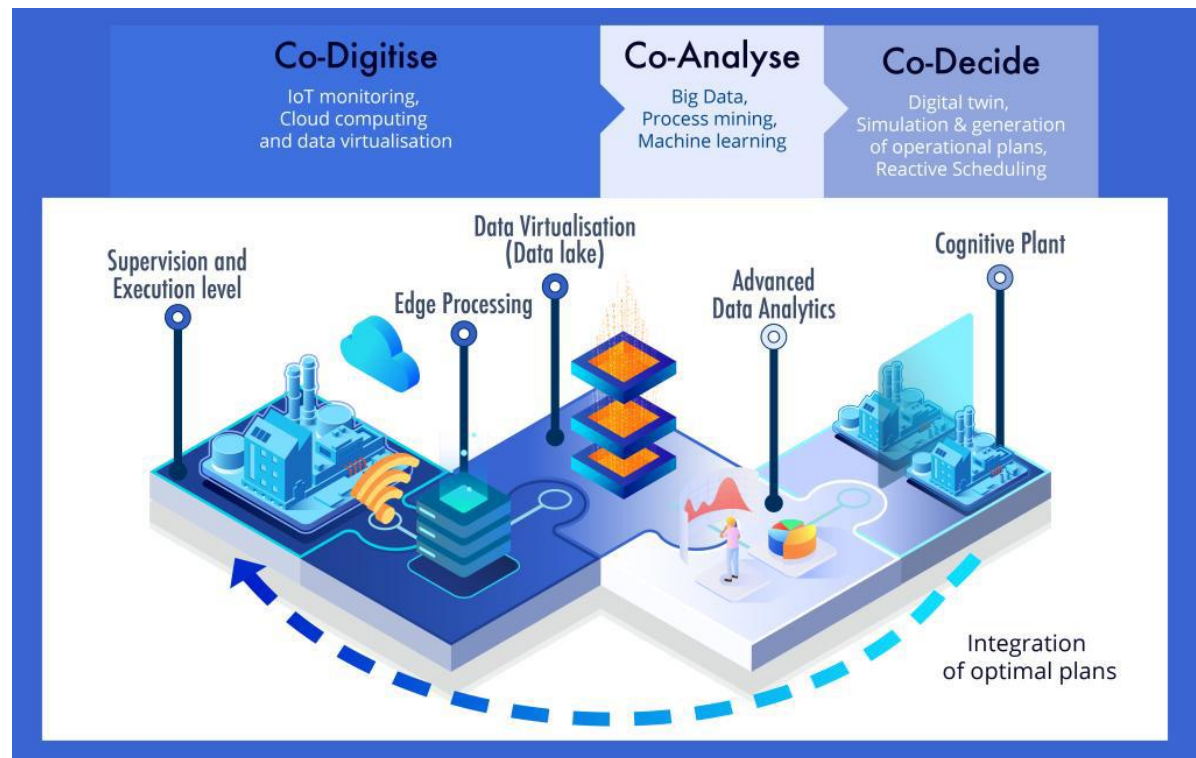
- **Hermes Abrasive** in Austria
- **Aughinish Alumina** in Ireland
- **Fornaci Calce Grigolin** in Italy
- **ACERALAVA – Tubacex Group** in Spain

OUR AMBITIONS

- **Digitalisation in the European process industry**
- **Digital retrofitting**
- **Optimisation methods to distributed targeted process monitoring**
- **Advanced data analytics**
- **Development of digital twin**
- **Cognitive reasoning and reactive scheduling**

The COGNIPLANT solution will provide a hierarchical monitoring and supervisory control. The solution will give a **comprehensive vision of the plants' production performance as well as the energy and resource consumption**. Advanced data analytics will be applied to extract valuable information from the data collected about the processes and their effect on the production plants' overall performance enabling to design and simulate operation plans in digital twin models based on the conclusions. As a result, **optimal operation plans will be obtained that will improve the performance of those cognitive production plants**.

INNOVATIVE APPROACH FOR THE ADVANCED DIGITISATION AND INTELLIGENT MANAGEMENT OF PROCESS INDUSTRIES



COGNIPLANT solution

PROJECT LAYERS

- Sensing and Data Virtualisation level: “Co-Digitise”: collect and structure the data from the different sensors and equipment for its further analysis.
- Advanced data analytics level: “Co-Analyse”: data processing, application of advanced methods of process mining, big data, data mining, etc.
- Virtual Model and simulation level: “Co-Decide”: digital twin, decision making, generation of operational plans, prescriptive general and edge processing.

14 Partners

8 Countries



Consortium



<https://www.cogniplant-h2020.eu/>

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COGNIPLANT

COGNITIVE PLATFORM TO ENHANCE
360° PERFORMANCE AND
SUSTAINABILITY OF THE EUROPEAN
PROCESS INDUSTRY

EU H2020 SPIRE Innovation Action

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