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.
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.

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

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