DELIVERING WITHIN A DEMANDING TIMEFRAME:

BILFINGER ENGINEERING'S INTEGRAL CONTRIBUTION TO E.ON'S SUSTAINABLE ENERGY COOPERATION PROJECT.

BILFINGER

Project Scope

Bilfinger Engineering played a crucial role in creating the basic engineering for E.ON's advanced energy project. E.ON plans to build an innovative energy recovery plant at the Imerys production site in Willebroek, Belgium. Using different syngas types, the plant is designed to generate ample electricity for the site and around 40,000 nearby households. This syngas is a byproduct of Imerys' carbon black production, which is essential for lithium-ion batteries in electric vehicles.

Bilfinger Engineering supported E.ON by providing a cost estimate and swiftly preparing comprehensive documents for permit applications within a challenging timeframe. Bilfinger Engineering's contributions were pivotal in realizing E.ON's sustainable energy vision, showcasing their commitment to innovative engineering and reaching project milestones.

Services Provided:

Basic Engineering



Client: E.ON Power Plants Belgium (EPPB)

Location: Imerys production site, Willebroek, Belgium

Market: Energy

Key feature:The syngas generates sufficient electricity to supply the site itself and 40.000 households in the area.

Navigating Deadlines

The project was successfully completed within a condensed 7-month period, showcasing the team's ability to efficiently navigate tight deadlines and complex logistics. Although managing communication with the end customer through E.ON was challenging at first, Bilfinger Engineering improved this by participating in meetings with the two parties, thereby enhancing direct communication and alignment.

Despite the tight deadlines and the dynamic nature of contractor supply chains, E.ON's proactive involvement and provision of essential information facilitated thorough research and smooth project progression. By the end of February 2023, all necessary permits were successfully obtained, with construction already well underway. This achievement underscores Bilfinger Engineering's commendable performance throughout the entire process.

Collaboration and Synergy

The core team from Bilfinger Engineering was based in Belgium and the Netherlands, with specialized expertise, such as turbine knowledge and drafting, coming from colleagues in Germany and Ukraine. Even though the team was working from different locations, the proactive approach through consistent communication and regular check-ins proved to be successful in mitigating possible challenges posed by the geographical diversity of the team.

Collaboration across borders in this project is a great example of the added benefit Bilfinger can offer clients as all required disciplines and expertise are in-house.

Efficiency and Sustainability

Upon completion, the facility will have a positive environmental impact, generating electricity with significantly lower CO_2 emissions compared to conventional power generation methods. What sets it apart is the heightened requirements placed on the burners due to the unique gas composition emanating during production. Furthermore, the plant will play a role in enhancing local air quality by utilizing exhaust gas treatment to minimize sulfur and nitrogen emissions.

