

LIGNIN2ENERGY WASTE-TO-VALUE- SOLUTION



GETEC

Chemical Industry:
Clariant, Podari (Romania)

ENERGY FOR MORE.





Delivery of the gas boilers.



Water Treatment Plant.

THE CUSTOMER

As one of the world's leading specialty chemical companies, Clariant contributes to value creation with innovative and sustainable solutions for customers from many industries. The company's portfolio is designed to meet very specific needs with as much precision as possible. At the same time, the research and development is focused on addressing the key trends of our time. These include energy efficiency, renewable raw materials, emission-free mobility, and conserving finite resources. Clariant reports in three business areas: Care Chemicals, Natural Resources, and Catalysis.

THE CHALLENGE

At the Podari production site near Craiova in Romania, Clariant has built the first second-generation sunliquid® bioethanol plant on an industrial scale. In this plant, bioethanol is produced from agricultural residues such as wheat straw using the sunliquid® technology developed by Clariant. In addition to its use as a fuel, it can also serve as base for sustainable aviation fuels and for many chemical products – an important milestone on the way to global sustainable raw material production. GETEC was commissioned with the construction of a CO₂-neutral energy generation plant based on lignin, a residual material from ethanol production.

THE SOLUTION

GETEC has designed and built a combined heat and power plant for Clariant based on lignin and will reliably supply Clariant with sustainable energy. By utilizing a residual material from Clariant's production in the GETEC energy generation plant, considerable energy efficiency potential is leveraged.

The decentralized energy generation is completely regenerative and therefore climate-neutral. The combination of the use of lignin from wheat straw in a fluidized bed boiler is also unique worldwide. In 2019 for this concept, Clariant and GETEC won the German Energy Agency's Energy Efficiency Award in the category decided by public vote.

SCOPE OF SUPPLY AND SERVICES

- Project Development
- Permitting
- Engineering and plant installation
- Financing
- Supply of steam and power
- Operation and Maintenance
- Energy Management

PLANT DATA

Supply with:	Steam Power
Energy source:	Lignin Natural Gas (Backup)
Components:	Biomass Boiler (65 MW _{th}) Gas Boiler (2 x 28 MW _{th}) Steam Turbine Water Treatment Plant Transformer Station
Installed Capacity:	121 MW _{th} 10 MW _{el}



„If you think about sustainable and innovative energy solutions you have to think end to end. And that is clearly something we can do with GETEC as a partner. GETEC puts sustainability at the focus of everything the company does. That is why our cooperation is a perfect match.“

DR. HANS BOHNEN

Former Executive Vice President and COO, CLARIANT