

Press release

Bologna, 24 October 2017

COGEN: clean district heating in Bologna

Hera's new cogeneration plant opened today in the Borgo Panigale-Reno district. It has the capacity to provide electricity and hot water to 8,000 houses, and is ready for new connections. The investment of over 17 million euro to upgrade the plant achieves a reduction in CO2 emissions, and also improves reliability and energy availability. The ribbon-cutting ceremony was attended by Mayor Virginio Merola.

A modern power station that respects the area

The latest Cogen district heating power station is situated on the site of a plant that has been operating since the 1990s. The foundations for an overall upgrading project focused on enhancing energy efficiency and environmental sustainability were laid between 2012 and 2015. Part of the old plant was demolished in May 2015, and the power station started feeding the district heating network in less than 18 months. In this plant, which has now been totally upgraded even from an architectural perspective, Hera produces energy with the *cogeneration* method, which entails combined production of hot water required for the district heating network and electricity. The entire project was conceived by Hera and envisaged an investment of more than 17 million euro.

The benefits of a Cogen power station

District heating is in itself a "sustainable" supply that respects the environment by ensuring a better performance than conventional domestic boilers. Moreover, the new plant situated in Borgo Panigale guarantees lesser emissions into the environment, more reliability and greater availability of energy. The plant that replaces the thermal power station in via Segantini, which has now been closed, allows to heat the equivalent of 8,000 households. The turbine can currently produce up to 35,000 MWh of energy a year, almost two-fold the amount produced in the past.

By recovering heat contained in the exhaust fumes, the two gas turbines have the capacity to produce 7.44 MWt each. Moreover, another four traditional boilers guarantee additional 11 MWt to integrate the energy reserves. The new power station has drastically reduced emissions.

Compared to the old plant, it is equivalent to planting 25,000 new trees every year or to avoiding the annual circulation of about 8,000 vehicles (annual reduction of 21 t of nitrogen oxide and 2,500 t of CO₂).

The plant has been studied even in terms of size to allow new network connections.

Hence, during the forthcoming months Hera's appointed sales representatives will promote the creation of new network connections by offering potential clients the opportunity to participate in this great "green" project for the city. New clients will also have the additional benefits of district heating, which avoids the cost of purchasing and replacing the boiler, along with the related ordinary and extraordinary maintenance costs, besides a 24H emergency service that will be provided free of charge to all connected clients.

Environmental sustainability and urban renewal

Focus on the area to make the most of it also includes carefully studying the plant's decidedly innovative architectural features. Indeed, it has been developed harmoniously with the aesthetic layout of the urban renewal process carried out in the adjacent Area of the former Sabiem Foundry. Particularly, the power station's profile merges into the area, recalling the Gothic shapes of the city centre. The power station is floodlit with warm LED lights, and is lined with brick red ceramic panels and with perforated metal sheeting with a weathering steel coating. Even in terms of colours, the project has been studied to blend the most recurrent shades in the architectural framework of the city of Bologna, namely brick red, yellow ochre and brown.

HERA Group's commitment for energy efficiency

Over the past 10 years, the HERA Group has launched 447 projects to reduce energy consumption, saving 740,000 toe (tonnes of oil equivalent), which correspond to the annual consumption of 520,000 families, and avoiding the emission of 1.7 million tons of CO₂. These numbers were published in the last sustainability report "Setting a High Value on Energy" of the multi-utility firm, during the past weeks. They also confirm that the overall goal of reducing corporate energy consumption by 3.7% within 2017 has been achieved, further inducing the company to establish a new target of -5% for 2020. These results are the outcome of integrated efficiency-boosting programmes that especially concern the Group's proprietary plants and offices, achieving, in 2016 alone, 4.7% energy saving from the waste cycle, 3.3% from drinking water, 2.3% from district heating, and 1.3% from the use of corporate vehicles.