



DEPLOYMENT OF CHP UNIT in Mondelez

Mondelez Czech Republic, s.r.o. is a part of the Mondelez International group of companies which is the world's leading manufacturer of confectionery and baked products. It's most famous brands include Milka chocolates and Oreo biscuits. The product portfolio in the Czech and Slovak markets includes brands like BeBe Dobré ráno, Opavia, Brumík, Fidorka, Figaro, Halls, Kolonáda, Miňonky or TUC.

Mondelez operates a biscuit factory in Opava. As part of environmental protection measures, the company has installed two new hot water boilers to heat water and the CHP unit in its factory above.

Whereas the CHP units were previously used mainly by cities, in recent years they have also started to be used more and more frequently in commercial applications as well. They bring both financial savings and a lower environmental burden to industrial enterprises. The fuel, natural gas, is significantly more environmentally friendly than the previously used coal.

At the Mondelez factory, the CHP unit was installed during the extensive reconstruction of the gas boiler room which enables the simultaneous production of electricity and heat in an efficient and environmental-friendly manner by using natural gas. The factory is LEED certified (Leadership in Energy and Environmental Design) for green buildings, their design, operation and management. Cogeneration will enable the factory to further reduce its environmental footprint due to lower CO₂ emissions as compared to the separate production of power and heat.

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| CHP unit type | TEDOM Quanto 1000 |
| Fuel | natural gas |
| Electrical output | 999 kW |
| Heat output | 1207 kW |
| Total efficiency (LHV) | 90.4 % |
| Commissioning date | August 2020 |
| Installation site | Opava, Czech Republic |



Combined heat and power production, also known as cogeneration, is a method of electricity generation where the heat released in the process of generating electricity is used in an efficient way. During this process, a high efficiency of energy recovery from the fuel is achieved while this fuel is mostly natural gas, LPG or biogas. Cogeneration pays off where there are higher requirements for the supplies of heat or cold. The electricity generated in the CHP unit can be used for the facility's own consumption or it can be fed into the distribution network.