# technology with nature

## TEDOM COGENERATION UNITS IN COMMERCIAL AND OFFICE BUILDINGS

Commercial buildings are typical places where cogeneration units are particularly effective. They can significantly reduce these facilities' energy costs, as tens of TEDOM cogeneration units installed in Czech as well as foreign commercial buildings prove.

## MEDIOLANUM BANK, ITALY



Mediolanum S.p.A. is an Italian provider of comprehensive financial services focusing primarily on banking services, life insurance, and trusts. Their main products target mainly individuals and families. One of the prerequisites of the project's energetic efficiency was to ensure that CHP units function as an emergency power supply in case of failure. Another objective was to utilize the produced heat as efficiently as possible. During the summer season, the system therefore operates on the trigeneration principle where the produced heat is converted into cold air through an absorption system. The Mediolanum Bank has two buildings containing two CHP units each. The project was realized by Energia+ s.r.l., TEDOM's sales representative in Italy.

#### Basic Information on the Installed Unit

CHP unit type	Cento T180
Number of units	4
Fuel	Natural gas
Electrical output	720 kW
Heat output	892 kW
Annual heat production	3 600 MWh
Annual power production	4 460 MWh
Year of installation	2008
Place of installation	Milan (Italy)
Investor	Mediolanum

### Benefits of TEDOM cogeneration unit

The power produced is used for internal consumption of the whole facility and contingent surplus power is sold into the grid. The CHP unit also serves as an emergency power supply in case of power failure. CHP unit installation meets the expectations and earns the expected savings.

### SELECTED REFERENCES FROM COMMERCIAL BUILDING, BANKS AND SHOPPING MALLS



#### **Town Hall Oberndorf, Germany**

CHP unit type: Electrical output: Year of installation: 2011

Micro T30 30 kW



Conference center Fabrika, Humpolec, CZ

CHP unit type: Micro T30 Electrical output: 30 kW Year of installation: 2011



#### Audi Center Zaventem, Belgium

CHP unit type: Electrical output: Year of installation: 2011

Cento T180 SP 180 kW



Sparkasse Bank, Donauwörth, Germany

CHP unit type: Electrical output: Year of installation: 2012

Micro T30 30 kW

#### Other references:

- Cento T160 SPI, Tesco Stores ČR a.s., Jaroměř, CZ
- Micro T30 AP, Uni Wien Biocenter, Vienna, AT
- Cento T 100 SPE, Bank, Rostov na Donu, RU
- Cento T 160 S, Corporate Center, Nižnij Novgorod, RU
- Cento T 160 S, Kinoteatr, Rostov na Donu, RU
- Premi S22 SPE, Savings bank, Donauwörth, DE
- Micro T 30 AP, Residential complex with shops, Cambridge, UK

- Premi 22, Department store, Vimperk, CZ
- Premi 22 AP, Samsport, Myjava, SK
- Plus 22 SPE, District Office, Klatovy, CZ
- Twin 22 AP, Department store Rubín, Brno, CZ
- Plus 22 AP, Folk House, Šumperk, CZ
- Plus 22 AP, Supermarket Delvita, Brno, CZ
- Plus 22 AP, Department store Vysočina, Pelhřimov, CZ