Otopeni, Romania - Highly efficient District Heating renovation
Christian Engel - Thermaflex
Otopeni – a green city

The mayor of Otopeni has created a green city for happy citizens. He was looking for the ideal partner to realize a sustainable district heating system. Using the rich geothermal resources as a base.
A long lasting partnership for sustainability
Substations & Geothermal Dwells
We are thinking different – serving operator, end user and the environment
Otopeni Project – the common Goals

- Connecting new customers
- Attractive heat price without subsidies
- Local energy (geothermal)
Experienced partner in co-creating tailor made solutions
Running 40% of the lines in existing ducts
ENVIRONMENTAL AND CITIZEN WELL-BEING RESULTS

The technical solution allowed to satisfy very important aspects for the Town Hall, such as minimizing the impact of works on the civil construction, opening the road and perturbing circulation, and avoiding the destruction of trees on the border of the road.

The elasticity of the pre-insulated PE pipes also permitted:
- to maximize the evasion of trees, manholes and other obstacles (which greatly reduced the impact of works on green spaces)
- to pass 30 up to 70m sections under other networks: methane gas, drinkable water, sewage, electricity cables, telecommunications cables, etc., through their curving and sliding on a 30 cm sand layer.
- the passing of the main access road of Otopeni has been made possible through the prior concrete duct, in spite of extremely restrictive spaces due to the presence of buildings only 6-10 m away from the duct entrance.
- It was also possible to avoid affecting some alleys, streets, parking spaces and green spaces through the use of the old concrete duct created in the 80s for the transportation of geothermal water, through which 70m sections have been slid through a very narrow space.

ECONOMIC AND FINANCIAL RESULTS

Last criteria for Dalkia Romania was the competitiveness of solution. Taking into account:
The life time 50 years old
The reduction of installation time (machinery and manpower)
The reduction of volumes of civil construction works (width of trenches, avoid opening in road streets)
In total the solution pipe plus installation lead to a direct reduction by 25% compared to the classical installation costs of steel pre-insulated pipes and to 40% if we integrated the life time (cost avoid to change the new pipe installed).

Director of Agency Bucharest Blv
In charge of project

Technical Director
Serving operator, end user and the environment
Long lasting partnership for sustainability
Co-creating tailor made solutions
Let’s connect
Get more information:
Christian Engel  c.engel@thermaflex.com

thermaflex
taking care of energy and the environment