

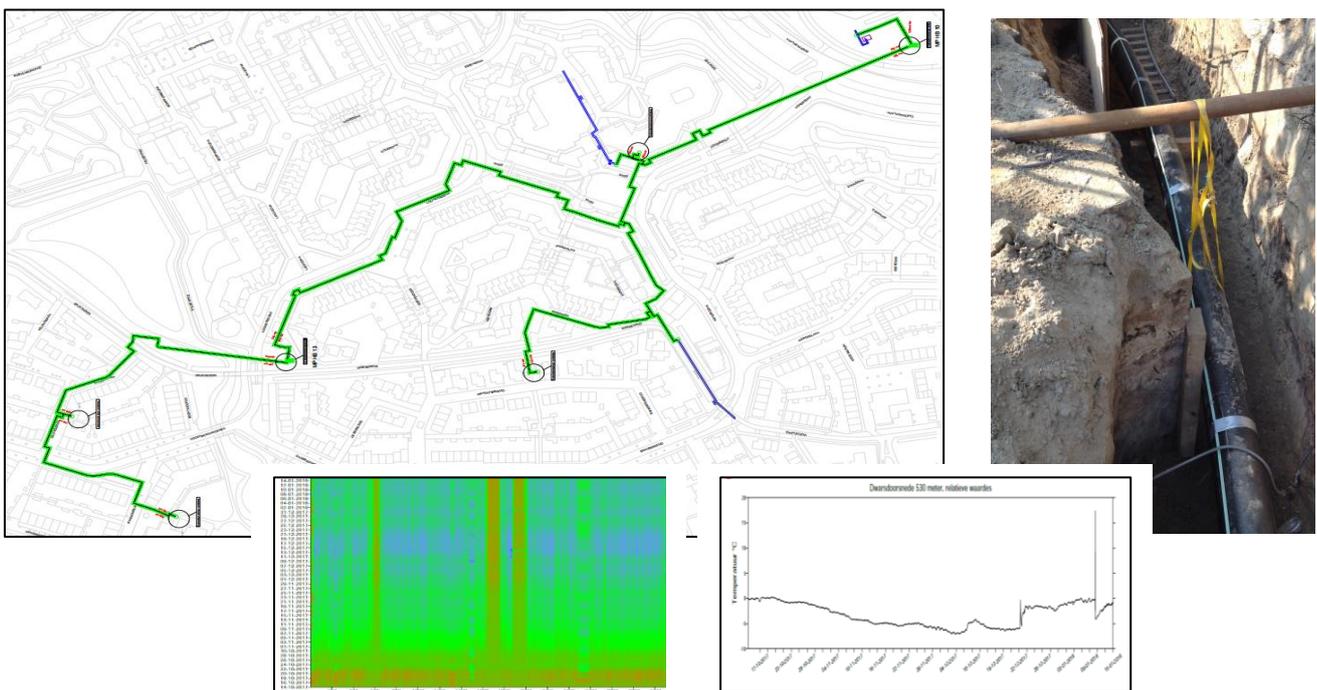
## INVENTEC REALISES LEAK DETECTION SYSTEM FOR DISTRICT HEATING PROJECT VEOLIA

Inventec supplied a **LEAKALERT**<sup>®</sup> leak detection system to Veolia, a major Dutch energy provider, for integration into a district heating system in the city of Breda, The Netherlands. The piping system has a length of 4,2 kms. **LEAKALERT**<sup>®</sup> detects and localises both a leak in the pipe and heat loss caused by deterioration of the insulation.

The operation of **LEAKALERT**<sup>®</sup> is based on DTS (Distributed Temperature Sensing). It basically consists of a fiber optic cable that is attached to the pipeline along its entire length and that is connected to a reading unit. The system measures the temperature at spatial intervals of one meter with a temperature resolution of 0,1° C. Both the transport line and the return line are fitted with a fiber optic cable.

**LEAKALERT**<sup>®</sup> offers essential advantages in comparison with other detection techniques:

- It does not only detect a leak but also indicates the location and degree of heat loss caused by a deterioration of the thermal insulation.
- It localises the event with a spatial accuracy of only one meter and a temperature resolution of 0,1° C.
- No welds, no junction boxes.
- During and after detection of an event the system remains fully operational over its entire length.
- The cable simply can be attached to the pipeline during installation or can be installed later via a small diameter pipe attached to the pipeline.
- Up to 50 km length with one single reading unit.





With regard to system management, monitoring and data processing there are a number of options:

- Continuous measurement with integration into client's SCADA system.
- Continuous measurement with monitoring and data processing via Inventec's **Livesense**® web platform.
- Periodic interrogation by Inventec. The client then does not have to invest in the reading unit.