



Application note

Biogas Flow Measurement for Power Generation

Benefits:

- Actual flow rate
- Real time calculations of normal gas flow rate
- Help for accurate reporting



Summary

A small city in Scandinavia was using flowmeters to report how much gas they were using and venting, to the environmental authorities.

The city was using mechanical meters with a local totalizer and no output. Every morning they had to send an employee to look at the totalizer from the two meters and calculate the actual difference from inlet gas and the burned gas to assess their plant performance and amount of gas flared.

Application

- Medium: Biogas
 - Pipe: 2" (DN50)
 - Temperature: ambient
 - Accuracy requirement: $\pm 2\%$ of reading

Challenge

This biogas was somewhat 'dirty' and 'wet' and the municipality was questioning the meters' totalizers. They were looking for a more reliable solution with outputs showing actual flow as well. When the company erected another biogas plant, they were keen to find the best suitable solution.



Solution

Across both plants the customer opted for the PanaFlow ZIG DN50. The package we supplied included Pressure and Temperature sensors to read normal flow. After several months of operation, the customer confirmed the meters were working per expectations and to their satisfaction.