tango

The energy company converted key technical data into useful business information and created savings

Do you also want to **control and monitor** the production of heat energy, its distribution and usage at the final customer, all in one place?

Do you want to **save on your employees' working hours** and **reduce costs**?

Tango is the solution you're looking for.

Tango is a **modern information solution** to ensure cost-effective planning, and efficient control and management of systems in **smart cities**.

It solves the challenges of modern business, as it constantly monitors the situation and changes in the physical system, and helps you respond to the current situation with **quick and smart decisions**.

Challenges in the management of district heating systems

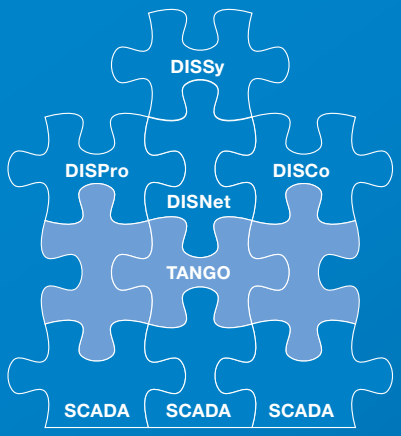
ENERGY CONSUMPTION FORECAST

ENVIRONMENTAL IMPACTS AND UNIT COMMITMENT OPTIMIZATION

INTEGRATED MONITORING OF THE ENTIRE DISTRICT HEATING SYSTEM

Together with smart district heating systems ('DISSy - Digital Intelligent Smart Systems'), Tango establishes uniform near real-time operation control, thus making the management of district heating systems more efficient. **DISSy** regulates the comprehensive process of district heating: **production, distribution and heat consumption.** Tango establishes a single database that enables effective forecasting of technical variables and their optimisation. For final customers, we monitor the situation on all heat stations in a simple and transparent manner. The link to price lists allows us to create managerial reports for more effective decision-making on the basis of financial information.

In the company Energetika Maribor (Slovenia), the advanced forecast of energy inputs and outputs improved fuel purchasing prices and profitability.



Via Tango platform and DISSy, Energetika Maribor (120 MW_h and 16 MW_e) **monitors 13 production units in two locations and 266 heating substations**. Due to smart district heating system and the Tango and DISSy solution, they **save 1% of natural gas cost* and 100 tonnes of CO_2 per year.** This has achieved:

REDUCTION OF HEAT LOSSES

- Due to optimization of production, distribution and consumption
- Due to accurate forecasts of thermal power

MORE EFFICIENT MANAGEMENT

- Due to the establishment of key indicators for monitoring processes
- Due to the establishment of a uniform database of reliable data
- Due to cost reduction

SAVINGS

- CO_2 Emissions
- Consumption of primary energy
- Working hours of employees due to automatic generation of business and regulatory reports

KEY ADVANTAGES OF TANGO

- **Integration and monitoring of the entire district heating system chain,** from production and distribution to the final customer, along with detailed monitoring
- **Collection, processing and exchange of data** with a view to financial analysis and display of the necessary indicators
- **Integration of measurements** by sector
- **Achieving significant savings** in operating costs (OpEX) and impact on investment assessment in the future (CapEX)
- Tango **displays in a simple way the results of machine learning models and optimization algorithms** written in open source programs
- Tango **facilitates connection** with other systems
- **Data visualisation** (dashboards and reports)
- **A comprehensive overview of the system** and applicability in various areas

"At Energetika Maribor, we decided for a comprehensive solution and use the Tango platform, as we wanted to establish all key technical data in one place and convert them into useful business information for improvements in the processes of heat and electrical production. We used the information to predict the use of input products, thus improving the cost of purchasing and operating profitability."

Miran Rožman MSc,
Head of production, Energetika Maribor

*according to the current contractual relationship of Energetika Maribor with the natural gas supplier.

Petrol d.d., Dunajska 50, Ljubljana, Slovenia
tango@tangoiot.com

PETROL
Energy for life