# District Heating Metering

Reliable Energy Landscape Project

- Pilot incentive for Installation of thermostatic valves, heat meters and HCA for about 17,500 residential customers of DH Termokos, Prishtina
- Support Energy Regulator with design of thermal energy pricing methodology and model for consumption-based tariffs
- Support the Termokos' corporate upgrade transition from spatial billing to consumption-based billing as well as upgrading the consumer's database with new software for pricing and billing.
- Support Termokos in preparing an operation and maintenance plan (e.g., maintenance intervals of technical components, service contracts, spare parts, estimation etc.);
- Total Budget USD 10.9 million
- Implementation Consultant: **Decon International GmbH & iC consulenten** 
  - Contract was signed on 31rd of October 2019 USD 1,402,718.00
  - Contract was extended at no cost until June 2022.

Pre—Implementation Phase: December 2019— July 2020

- Kick off meetings,
- Inception Report,
- Operation Manuals and Plans.
- Baseline Technical Buildings Studies
- Household Survey and Technical Survey
- BC&O Strategy
- Metering Systems Tendering Package,
- MoU with Termokos

## Implementation Phase

August 2020— September 2022

planned timeline:

#### District Heating Metering (DHM)

- Co-financing MoU with Prishtina Municipality
- Tender Package for Metering System Supply and Installation
- Meters, Heat Cost Allocators, Thermostatic Valves and Software's for reading,
  metering and billing purposes
- Training, capacity building, and regulatory support as well as Termokoses support on maintenance and tariff application process.
- New District Heating Pricing Rule and Tariffs
- Behavior Change and Outreach Campaigns
- Monitoring and Evaluation
- Environmental and Social Impact Compliance
- Gender and Social Inclusion Compliance

# — Tender published in March 2021 and the two rounds of over 150 clarifications were provided.

- 10 JV Companies have applied and TEP members elected 2 Independent.
- Co-funding agreement with Municipality of Prishtina is signed 2 million Euro already allocated.
- Pricing Rule Finalized and Tariff Model is finalized and Board approval and public consultation Training/Workshop was held and follow-up activities are being carried out.
- Substation Data from Termokos to be obtained and analyses on baseline data are in process.
- Information campaign to Termokos customers started.

#### **Implementation Phase:**

• January 2021 - ongoing

- Implementation Phase:
- January 2022 End of THP
- Contract Negotiations with the contractor ENERCO for Meters,
  Heat Cost Allocators, Thermostatic Dynamic Valves, and
  Software's Installation
- Tripartite Agreement between Termokos, Municipality, and MFK
  for the Project assignment after the TED is signed
- Expiry of the IC contract and extension of QSCS scope of the contract until November 2022 is signed
- Project Closure V3 outline and strategy are resubmitted to MCC

#### District Heating Metering (DHM) - Summary

#### The aim of these interventions are:

- Installation of measuring equipment in 17,500 apartments to reflect consumption-based heat metering
- Installation of thermostatic heating valves with built-in balancing function on radiators.
  - 72,500 Thermostatic radiator valves
  - 51,300 Heat Cost Allocators
  - 4 500 heat meters
  - Support regulator with the design of consumption-based tariffs.
  - Support the Termokos' corporate upgrade transition from spatial billing to consumption-based billing as well as upgrading the consumer's database with new software for pricing and billing.

Total Budget

- MFK: \$10.9 million
- Municipality: €2 million

2018 Project Development 2019 Due Diligence

Procurement of the Implementation Consultant and Project Launch Event

2020 Baseline Technical and House Hold Studies, Tendering for Metering Company, BC&O Campaign

2021 Installation of Metering Systems, Technical Assistance & Heating Tariff Design, BC&O implementation

2022 New contract. Beginning of Installation. Assignment to MP

# Implement ation Phase:

activities:

January 2022 – ETHP

- In April 2022 Contract is signed with ENERCO LLC in JV with
  Interadria LLC, HFC Grupa and TI-SAN d.o.o an as the supply
  contractor for Meters, Heat Cost Allocators, Thermostatic
  Dynamic Valves, balancing valves, Heat Circulating Pumps and
  Software Installation for the DHM activity
- Training on GSI and ESMP for Termokos and the new contractor has been held and several other follow up trainings have been made.
- Continued Behavior Change and Outreach Campaigns targeting more regions of Prishtina are done on social media, posters, and Viber groups in cooperation with Termokos and MP

# Implementation Phase:

January 2022 – ongoing

- 100% of surveys are completed in all districts and hydraulic calculations are expected to be finished until 28 October 2022. Orders are made upon results of these calculations,
- The installation has started on 22<sup>nd</sup> of July and will finish until 23.03.2023 as predicted with implementation schedule.
- Pricing rule of thermal Energy is approved from MFK
- Assistance to Termokos on new system of invoicing and billing is planned to be provided

#### District Heating Metering (DHM) - Summary

- The implementation is structured in two parts:
- Technical surveys and installations;
- Designs are provided for all districts. Hydraulic analysis is provided and BOQ designed for all surveyed apartments.
- Installation has started on 22. July 2022
- Apartments are identified with red stickers if for more than 2 attempts were not found at home

#### Implementation plan

- Duration of the project is 294 days
- Delays on orders for pumps due to results of delays on Hydraulic analysis.
- Final designs with Hydraulic calculations latest 28 October 2022.
- Risk for not ordering the total quantities and items as per BOQ

Updated Time Schedule			
	Duration	Start	Finish
Survey, installation and reporting Project Plan	294 days	8-Apr-2022	31-Mar-2022
Site Survey and design Substations and Apartments	151 days	4-May-2022	28-Oct-2022
Ulpiana	81 days	4-May-2022	8-Aug-2022
Kodra e Diellit	92 days	16-May-2022	31-Aug-2022
Qendra	100 days	30-May-2022	23-Sep-2022
Dardania	110 days	10-Jun-2022	17-Oct-2022
Kalabria	100 days	4-Jul-2022	28-Oct-2022
Private Houses	59 days	22-Aug-2022	28-Oct-2022
Passive Apartments			
Installations	185 days	27-Jul-2022	6-Mar-2023
Ulpiana	45 days	27-Jul-2022	16-Sep-2022
Kodra e Diellit	47 days	22-Aug-2022	14-Oct-2022
Dardania	47 days	28-Sep-2022	21-Nov-2022
Qendra	66 days	8-Nov-2022	28-Jan-2022
Kalabria	50 days	5-Jan-2023	6-Mar-2023
Private Houses	25 days	30-Jan-2023	28-Feb-2023
Passive Apartments			
Installation of pumps, DP, and Balancing Valves	119 days	30-Oct-2023	23-Mar-2023

#### District Heating Metering Activity – Millennium Foundation Kosovo

- 17,500 customers to be equipped with Heating Control and Metering Equipment (Valves, HCA, Meters, Pumps, etc)
- Contract signed on April 8, 2022
- July 22 Start of Installations
- Total contract value €9,315,170

#### Installations until now:

- 10025 apartments until November 29, 2022
- €7,7 million or 83% of the contract value.
- Tripartite Agreement between MFK, Municipality and Termokos for continuation of the project after November 2022.

#### Behavior Change and Outreach Campaigns:

 Viber Group (over 3000 participants), social media (MFK, Termokos, Municipality), Media buy-in (TV and Radio Adds), banners, stickers, posters, interviews, podcasts, etc.

#### **Regulatory and Termokos Support:**

- New Pricing Rule and Tariff Methodology of Thermal Energy is approved by ERO
- Assistance to Termokos on a new system of invoicing and billing ongoing, GSI, ESP, customer care, etc