

# Accelerating the Heating and Cooling Transition



Joint Call 2021  
Kick-off meeting of granted projects

Project presentation pitch

17 November 2021



# Shallow-Geothermal sourced Low-Temperature District Heating

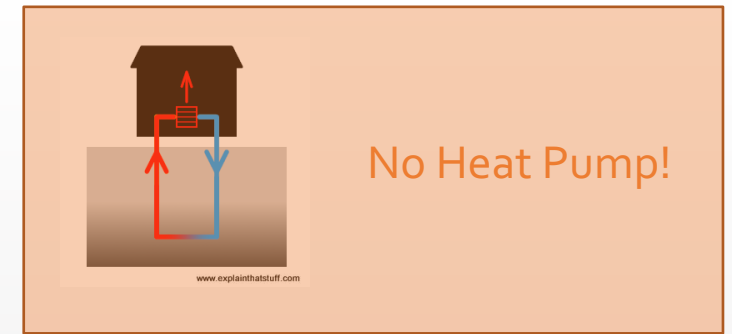
S-GeoHeat

Enabling Low-Quality Sources for End-Users

# Intro

- Introduce yourself
  - Dr. Hakan İbrahim Tol / Project Coordinator / DR TOL Engineering Consultation, Ltd., Türkiye
- Introduce consortium
  - DI. Christoph Rohringer & DI. Jürgen Fluch / AEE INTEC, Austria
  - Dr. Stefano Coss / Arteria Technologies GmbH, Austria
  - Dr. Fatma Zehra Çakıcı / Atatürk University, Türkiye
  - Emrah Bal (PhD Candidate) / Konsorsiyum Bilişim Teknolojileri A.Ş., Türkiye
  - Dr. Taylan Akın / Pamukkale University, Türkiye
  - Meltem Tunç Biret / Samsun Governorship, Türkiye

# Challenge you are tackling



Havza,  
Samsun,  
Türkiye



53 – 56 °C

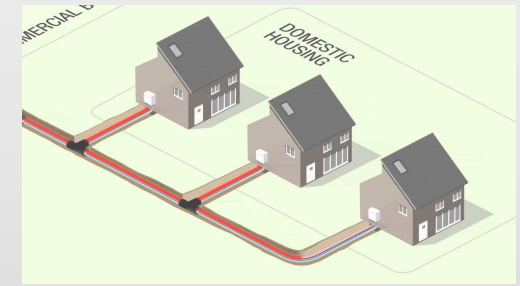
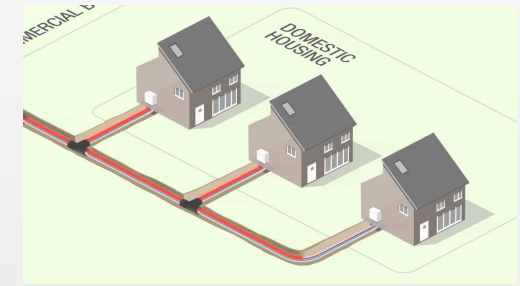
Ladik,  
Samsun,  
Türkiye



28 – 38 °C



Up to 55 °C



Case Area

Geothermal

Industrial Waste Heat

Insulated Buildings

# Solution to be provided

Integrated approach for the technical and economic feasibility analyses for the direct use of shallow geothermal sources (without ground source heat pumps) in meeting the demands of end-users (space heating and domestic hot water) via low-temperature DH systems equipped with smart control features and blockchain technology.



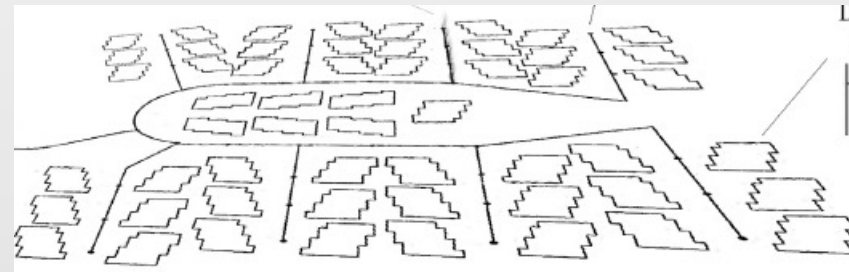
Building Insulation  
Retrofitting Strategies  
Indoor Heating System



Geological Site  
Characterization



Industrial Waste Heat



District Heating Network  
Smart Operation & Control  
Blockchain Technology

Technical Analyses  
Economic Analyses  
-  
Pilot Demonstration