

# Italy, Vicenza District Heating



## General

<b>Region/city/location</b>	Veneto/Vicenza	<b>Contact</b>	AIM Servizi a rete S.r.l. Paolo Zuccato Paolo.Zuccato@aim vicenza.it
<b>Description</b>	Vicenza, 100 000 people, has a large geothermal water reservoir at 68°C around 2 km depth. Heat pumps are implemented to obtain optimum useful heat energy. This DH reduces energy consumption by up to 60%, i.e. 3885 MWh/year. The use of the geothermal heat began in mid-2013 and provided 5,38% (2,4GWh) of the total heat production in 2013. Other heat inputs are: 27,05% (12,1 GWh) cogeneration and 67,57% (30,2 GWh) boiler.		

## Project

<b>Inhabitants connected</b>	211	<b>Production of heating and/or cooling</b>	Heating only. 44,6 GWh in 2013.
<b>Installed geothermal capacity</b>	700 kWth	<b>Comparison with fossil energies</b>	
<b>Others uses (drinking water, cascade uses...)</b>	No		

## Financing

<b>Investment for geothermal well</b>	The well was drilled in 1983 by Sapiem for a joint-venture Agip-Enel	<b>Investment for geothermal heating station</b>	
<b>Investment for DH network and substation</b>		<b>Cost of MWh sold</b>	Prices of the DH service are established by AIM Servizi a Rete, according to a principle of equating of final thermal energy price to the

## Financing

natural gas. Prices of heat sold are also calculated in a different way for residential and for industry and tertiary.

## Technical

**Installed capacity ( MWth)**

36,7 MWth

**Operating Temperature of the DH**

Water temperature of DH network in delivery pipes: 85 °C – 65 °C

**Innovation if any**

Multi source system

**Temperature of the geothermal resource (production - injection)**

68°C

**DH Length (m)**

19.148 m



**Geothermal well «Vicenza»**

## Heat exchange with the DH network



## Geothermal water discharge in the river Astichello



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