



a2a

calore e servizi

# HEAT

for a sustainable city



We implement the **latest technologies** and **reduce emissions** by focusing on the efficient management of systems and infrastructures.

Our services:

- production, distribution and supply of heat via **district heating**;
- facility management, energy efficiency upgrading and overall comprehensive management of district heating connected **HVAC systems**;
- design, development and operation of **cogeneration plants and heating networks**.



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2.287<sub>GWh</sub>

OF DISTRIBUTED HEAT



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25.465

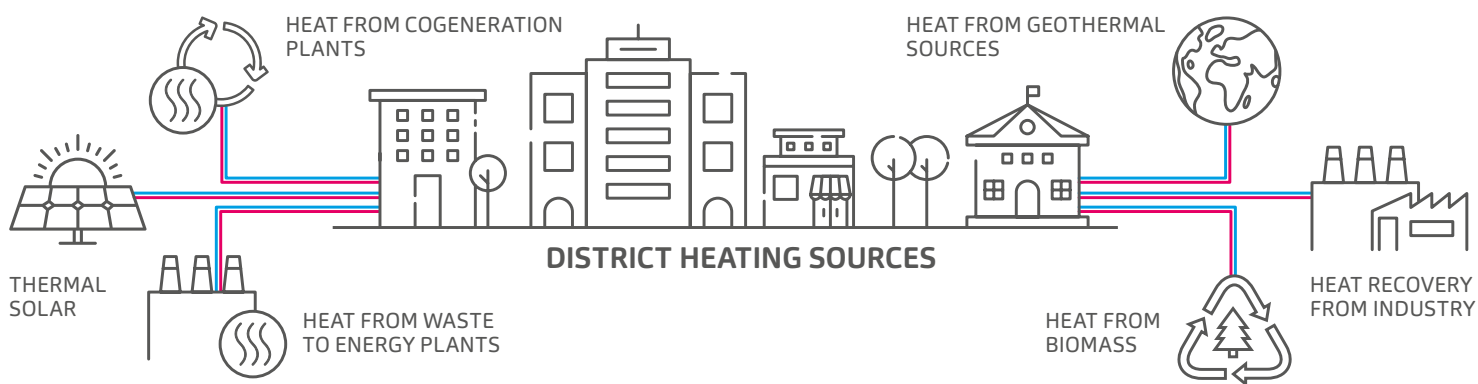
SERVED BUILDINGS

# DISTRICT HEATING

An integrated energy system that uses regional resources, using the heat produced in renewable energy plants and cogeneration plants as well as heat recovered from industrial processes or Waste-to-Energy plants, mainly produced in in **Brescia** (Lamarmora power plant and Brescia Waste-to-Energy plant), **Bergamo** (Goltara and Carnovali)

and **Milan** (Tecnocity, Famagosta, Sesto San Giovanni, Cassano d'Adda and Silla 2). Water is heated by the energy produced or recovered, to then be distributed to apartments through a network of insulated steel pipes, equipped with a 24 hour monitoring system for fault detection and localization.

District heating is an **innovative, reliable** and **efficient** way of heating our homes while also being environmentally friendly.



APPROX  
183.000tonnes  
OF CO<sub>2</sub> AVOIDED



MORE THAN  
1.072km  
OF DISTRICT  
HEATING NETWORK



Standing at 207 metres, **Torre Isozaki** is Italy's second tallest skyscraper and its 50 floors of offices are **entirely heated through district heating network**.





## SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL AWARENESS

A2A Calore e Servizi is an **ESCO** certified company that works according to Italian law **UNI CEI 11352:2014** for the supply of energy services.

It is also certified **ISO 14001:2015** and **EMAS** to attest the company's environmental awareness and attention to citizens' well-being, **ISO 9001:2015** for the quality management system ("effective and efficient" processes), **BS OHSAS 18001:2007** to guarantee employee health and safety.

Implementing district heating means **substituting traditional boilers** with heat exchangers. So it's possible to transfer heat from water to the building's internal heat distribution system to warm up rooms and produce hot water for sanitary use.

## DISTRICT HEATING BENEFITS



### CONVENIENT

System maintenance is both simpler and cheaper



### SAFE

There are no risks associated with bad combustion or open flames



### COMFORTABLE

There's no time limit of use, according to the law



### SUSTAINABLE

It reduces CO<sub>2</sub> emissions and improves the quality of air







**The Kyoto protocol indicates that district heating is amongst the most effective means to reduce carbon dioxide emissions.**

EU directive 2002/91/CE (transposed into Italian law by legislative decree 192/05) confirms this, making it mandatory for systems in new buildings within a kilometre from a network to be district heating ready.



# HEAT MANAGEMENT

We are experts in the **management of HVAC systems in public and private buildings that are connected to the district heating network.**

Our service includes the technological overhaul of such systems and their adjustment to relevant normative standards. We carry out energy diagnosis to establish what technical and financial solution is best from a **safety, cost, performance and environmental perspective.**

An efficient management of systems **improves energy performances, cost savings as well as better air quality.**

The installation of the latest systems and technologies leads to a **more efficient use of energy**, hence guaranteeing lower costs. The total **savings** obtained throughout the life of a contract are used to finance installation and maintenance, at no extra cost for the client.



## THE ADVANTAGES OF EFFICIENT MANAGEMENT



**CONVENIENT**  
Lower general costs



**INNOVATIVE**  
Technological upgrade and system compliance



**PERFORMANCE**  
Improved energy and environmental performance



**PROFITABLE**  
Increase in property value



Today **A2A Calore e Servizi** is the **Italian leader in district heating**. For over 40 years we have been designing and developing heating production and distribution in Milan, Brescia and Bergamo. Thanks to our **experience** and **expertise** in the field, we attend to the specific needs of each client by **upgrading and comprehensively managing innovative heating systems**, therefore ensuring the highest levels of efficiency as well as financial and environmental sustainability. A2A Calore e Servizi is a member of AIRU, Euroheat & Power and the DHC - Technology Platform.



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27

HEAT PRODUCTION  
PLANTS



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1.167<sub>MWt</sub>

TOTAL PLANT  
CAPACITY



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516<sub>MWt</sub>

OF COGENERATION  
CAPACITY



# A2A district heating: a success story in Brescia, Milano and Bergamo



BRESCIA

With a **672** kilometre network connected to **21.313** buildings, district heating is provided to the whole Brescia. **Pinacoteca Tosio Martinengo** and **Santa Giulia Museum** are just a few of the historic buildings connected to the A2A Calore e Servizi network.

In Milan, **3.489** buildings chose district heating, with a total of **51,6 million** cubic metres of heated buildings. Many of the town most important buildings have taken advantage of this opportunity, including the **Duomo**, the **Milan Courts**, **Palazzo Marino**, **Palazzo Reale** and significant urban development projects such as **Cascina Merlata** and **City Life**.

MILANO



BERGAMO



**672** buildings in Bergamo benefit from the district heating network that heats **7,2 million** cubic metres of building space. In addition to this, a number of other highly significant buildings are connected to the network, including **Papa Giovanni XIII hospital**, **Bergamo University**, the **Guardia di Finanza Academy** and **Palazzo Frizzoni**.