

Needs/challenges, barriers, opportunities

Country

Italy

Urgent Needs/Challenges

The further development of DHC would require:

- i. A dedicated legislative framework integrating all the measures related to DHC (high efficiency heat production, heat transport and distribution, heat market).
- ii. A simplification of the authorisation pattern for the localization and the realisation of DHC systems (generation plant, distribution network).
- iii. An effective economic support scheme related to the heat effectively distributed, with particular attention to renewable energy sources and high efficiency cogeneration plants. The application of incentives should be clear, reliable and simple.

The main challenges identified by the target groups appears to be: “convincing new customers” and “convincing policy makers”, followed by “fossil transition”.

Main Driving Forces

The main driving forces pushing the development of DHC that have been reported could be summarised as follows:

- i. Energy saving and higher efficiency of the national energy sector.
- ii. A better utilisation of renewable energy with particular emphases to biomass and wastes.
- iii. A higher security offered in comparison to the individual decentralized heating plants.
- iv. A reduction of the heating costs, also considering the economical incentives where applicable.

Main Barriers

The main barriers identified by the stakeholders are:

- i. The particular climate conditions of Italy characterized in northern regions by winter seasons very cold (minimum temperature below 10-15 °C) but lasting up to 5 month in the best situation. Milder temperatures are experienced in central and southern regions do not allow the utilisation of district heating systems, except that in restricted mountain areas.
- ii. The extended diffusion of high efficiency decentralized heating systems connected to the gas grid.
- iii. The particular urban structure of most old Italian cities and its historical buildings and the location of electric power plants generally far from the heat costumers.
- iv. The lack of simple and stable procedures to obtain the incentives related to the distributed heat.
- v. The high cost and the energy losses of the heat distribution grid.

Main Opportunities

The main opportunities for the further development of DHC system in Italy are connected to:

- i. The development of small combined production plant feeded with local biomass or wastes.
- ii. A stronger support from municipalities for the realization of district heating systems through the attribution of “local public utility” to the heat grid.
- iii. A better integration between industries generating and/or processing heat and heat distribution companies.

Contribution towards EU targets

Although it is expected that DHC will double its penetration in the next decade, its overall contribution towards EU 20/20/20 to 2020 energy targets will remain marginal.

Nevertheless, at local level it will facilitate the use of renewable energy sources and will contribute to the reduction of air pollutants and green house gas emissions.