THE ITALIAN HVACR EXPERIENCE

A CONTRIBUTION TO ACHIEVING UN’S 17 SUSTAINABLE DEVELOPMENT GOALS

Wednesday, 6 November 2019 | 18:00 - 20:00 | Austria room
Who is Assoclima

Assoclima is the Italian Association of Heating, Cooling and Ventilation systems manufacturers. Born in 1964 with the name Co.Aer, Assoclima is an independent association, belonging to the Anima Federation, which represents various product groups including heat pumps, water chillers, condensers, fan coils, air handling units, fans, aerotherms, heat exchangers, cooling towers, air distribution and diffusion components, air filters.

Assoclima is member of EUROVENT, EHPA and APPLiA (ex CECED Europe).

ASSOCLIMA NUMBERS

- 63 associated companies
- 7,200 employees
- 2,155 MILLIONS total turnover
- 30% EXPORT/TURNOVER
- More than 85% of the major companies of the sector are represented by Assoclima
What we do

- Technical-legislative support to members
- Participation in regulatory and certification activities
- Information, updating, communication and marketing
- National and foreign institutional relations
- Participation to conferences and fairs
Inside Assoclima the **Italian heat pumps group** has a strategic role. The most important aim of the group is to **contribute to the development of heat pumps technology**, having effects on legislations as well as on public opinion.

For the HVACR sector the last year ended with positive figures. The sectors linked to **renewable thermal sources**, in particular heat pumps, have grown.

In the National Integrated Energy and Climate Plan (PNIEC-in Italian) a very important role is given to the thermal sector to achieve the objectives by 2030.

Italy is asked to face a **technological change towards electrification** and towards solutions that further the **penetration of renewable sources** and the **decarbonization**.
To estimate the development required by the PNIEC target scenario for heat pumps used as the main heating system in the residential and tertiary sectors from 2018 to 2030, it is assumed that the systems used for this purpose have 1500 hours of operation and that they continue with the same trend as in the years prior to the growth in the installation of systems used for cooling only.

On the basis of these assumptions, the overall growth of the stock of installed capacity of heat pumps for heating needed to achieve the objectives from 2018 to 2030 is 32 GWt (from 33 in 2017 to 65 in 2030).

The additional 32 GWt are expected to induce investments of around EUR 9.6 billion over 13 years, with an average of 750 million per year, with positive effects on the economy and employment. Achieving the PNIEC targets by 2030 will require a doubling of the heat pump penetration rate.

The next years will be crucial.
The Italian HVACR experience

Thanks to heat pumps, through heating with renewables sources and cooling with sustainable refrigeration we can achieve several SDG’s goals:

- affordable and clean energy
- responsible consumption and production
- climate action

and as a consequence sustainable cities and communities.
The Italian HVACR experience

HVAC equipment manufacturers represented by Assoclima are ready from an industrial point of view and have the tools to make the necessary investments to increase their production.

On the market are now available equipments that uses non climate-changing refrigerant fluids.

Furthermore all the companies are now aware of the complete recyclability of products.

The Italian experience: in the HVACR sector Italian manufacturers represent an excellence especially regarding hydronic systems.
The Italian HVACR experience

Hydronic heat pumps are a leader technology in Italy.
The use of water has advantages compared to other fluid because it’s ecological and any loss does not imply toxicity or pollution.

Other advantages of hydronic heat pumps:
- Flexibility of the life cycle in HP systems;
- Heat recovery -> system efficiency and performance optimization.
The European heat pump market continues growth. Compared to 2017, 139,610 (+12.5%) more heat pumps have been installed in 2018. With 1.26 million units sold across Europe yet another sales record has been achieved. Assuming a life expectancy of approx. 20 years, the current European heat pump stock amounts to 11.80 million units (cumulated sales from 1997 – 2018).

Focusing on the various heat pump types, reversible air/air (51223, 10.5%) and air/water (13357, 12.4%) systems contributed most to the overall gains.