EU trajectories and opportunities for HVAC sector

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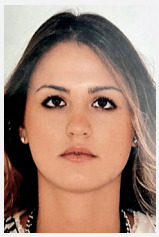

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The achievement of a future post-carbon society asks for a careful management of a series of transitions, topic that is of fundamental importance today. Such transitions are not only energy- and environmental-related, but involve also economic and social domains, engaging all sectors in a process that will lead the world towards a green future.

The European direction is clear and well defined in two documents of vision - the Energy Roadmap 2050 and the European Green Deal – which allow to define the prospects for the sustainable development of our European Union, also to recover from the COVID-19 emergency period. Among the pillars of the future transition, in which it is interesting to mention hydrogen and renewables, the fundamental role of buildings and of their renovation is well-recognized. Specifically, the rationalisation of energy consumption and the introduction of technological innovation to increase the energy efficiency of buildings represent key factors for the implementation of community policies, always keeping in mind the need to guarantee high-quality comfort and health conditions within occupied spaces. The technological innovation in the building sector is exploited on three levels: the reduction of buildings energy demands required by the energy metabolism of the buildings, the use of efficient technological solutions to improve the overall buildings energy efficiency, and the integration of renewable sources.

In this scenario, the HVAC sector plays a key role in defining effective research and development roadmaps for the industrial sector, as well as in rendering such innovative and promising technologies market-ready. The industrial sector, nowadays, is able to provide high-quality and efficient products, which can drive the sustainable transition of the building sector. Moreover, new approaches are needed to value investment decisions and technological solutions. In this sense, it is interesting to mention that we started from a design approach that encouraged the introduction of the cost-optimal concept to move to the cost-benefit approach, which allows to include into projects evaluation also the related externalities and their effects on society, well-being and people's health. This approach can be considered as more in line with the transition we are living, allowing to consider the effects that our choices will have on a new society, the post-carbon one. ■