

PRESS RELEASE

SENER wins the iMm 2021 award for its Artificial Intelligence RESPIRA® project

Madrid (Spain), December 16, 2021 - The SENER engineering and technology group was a winner at the 7th edition of the <u>iMm Managing Change Awards</u>, which are organized annually by the Institute of Marketing and Management S.L. SENER received the iMm Award for the best company driving change in the family business category thanks to its innovative intelligent ventilation system RESPIRA[®].

The awards were presented on the evening of December 15 in Madrid. The Director of the Hub Innovation to Market (HI2M) at SENER, Luis Marzá, accepted the award on behalf of the company, alongside two RESPIRA[®] team members from SENER Infrastructure, Guillem Peris and Sergio Escribano.

The iMm Managing Change Awards are presented annually by the Institute of Marketing and Management S.L in order to recognize and reward companies and individuals that support and encourage change in organizations, promote trends, uphold entrepreneurial ideas, bring culture and knowledge to today's society, and implement changes aimed at well-being, productivity and organizational happiness.

RESPIRA®, SMART VENTILATION

RESPIRA[®] is an artificial intelligence solution that is capable of determining the ideal ventilation strategy by defining several criteria and reading parameters in real time, such as the indoor temperature, humidity, air quality, and the efficiency of HVAC devices. This information is used by a dynamic algorithm to predict the environmental conditions (depending on the weather forecast, the service to be provided and other factors) and then apply a mode of operation to the ventilation units in order to ensure proper air flow while minimizing electricity consumption inside the structure. Thanks to the ability of RESPIRA[®] to optimize HVAC systems with machine learning and automatic learning applications, the performance of HVAC systems is constantly being evaluated to yield the perfect ventilation strategy at all times.

The RESPIRA[®] system is already present in several facilities; most notably, it has been in use in the conventional metro network of Barcelona since July 2020. In this facility, the use of RESPIRA[®] has led to significant energy savings for Transports Metropolitans de Barcelona, resulting also in more efficient temperature control, with a drop of more than 1° C inside the network and the consequent improvement in passenger comfort. By correlating all the information, technicians can improve maintenance tasks by quickly identifying any abnormal operation in specific devices of the HVAC network. They can also determine which stations in the network require new investments in order to ensure optimal passenger comfort. The RESPIRA[®] system is thus helping to efficiently and sustainably manage the HVAC components.

RESPIRA[®] is part of one of SENER's strategic lines in the field of infrastructure, which seeks to develop intelligent digital systems that provide solutions to the real problems of the various stakeholders in the value chain and in society as a whole by relying on the combined expert technical knowledge of its engineers and the enormous potential of new digital technologies.

About SENER

SENER is a private engineering and technology group founded in 1956, which seeks to offer its clients the most advanced technological solutions and which enjoys international recognition thanks to its independence and its commitment to innovation and quality. SENER has 2,350 professionals on five continents.

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SENER combines the activities of Aerospace and Engineering and has ownership stakes in companies working in the energy field. SENER Aeroespacial has more than 50 years of experience and is a top-tier Space, Defense and Science supplier. SENER Engineering has become a world leader in the areas of Infrastructure, Energy and Marine.

