

French research and development activities related to conference topics by ADEME

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ADEME is a public organisation to implement public policy in the areas of the environment, energy and sustainable development. ADEME is supervised by the department of ecological transition, the department of higher education and the department of research and innovation. Through management of thesis or export of French innovations for instance, ADEME organises and contributes to the financing of research and innovation to help ecological transition and fight climatic change.

- There is a real trend to improve thermal insulation and air-tightness of buildings, which is inducing a real need for ventilation systems functioning correctly. The challenge is to accommodate both energy savings, Indoor Air Quality and hygienic requirements in the strategies for new and retrofitted buildings. Energy transition shall not be achieved at the expense of occupants' health. ADEME is particularly active on this point.

The agency helps to finance projects in buildings and construction area through:

- Funding of more than 50 PhD's every year for more than 25 years (including 3 to 4 thesis per year on IAQ and ventilation)
- The call for projects "Sustainable building by 2020" or "Cortea" to help research and development of industrial products for new and retrofitted buildings as well as framework projects which are presented during this conference.

- VIA QUALITE project (2013-2016) aims at developing quality management of ventilation systems complementing the existing quality management of building air-tightness of our energy regulation. The aim is to improve the installation of ventilation systems and achieved IAQ in residential buildings with a limited cost, without a systematic measurement of installations and involving all concerned actors of building
- PROMEVENT (2014-2016) aims at improving measurements for the inspection of residential ventilation systems, proposes inspection process for mechanical ventilation systems including airflow measurement at ATD and duct air tightness measurement.
- ICHAQAI

The objective of the ICHAQAI scientific project was twofold: firstly, to identify and characterize the different elements that can have a detrimental impact on the indoor air quality during construction; secondly, to propose solutions that will enable professionals to reduce the negative impacts of construction on the indoor air quality of the future constructed building 'in-use'.

- PERFORMANCE: monitoring of humidity controlled ventilation systems on more than 10 years

ADEME provides expertise and links with other call for projects as for instance FUI (Unique fundings inter-departments), ANR (French National Agency for Research)...

- ADEME is operating the schedule for future investment (PIA) created in 2010 by the French government to stimulate innovation and investment in France on green growth (from 2010 to 2017: 2.5 billion € of funding including 582 millions for SMEs)
- Implementation of PRAXIBAT a training tool for practitioners to improve their skills and fitting needed for sustainable buildings and energy efficiency. For ventilation, 50 technical fully equipped centers and more than 200 trainers. For building air-tightness, 62 equipped centers and more than 350 trainers.
- A strong activity of publication of public dedicated guides and technical guides for professionals on ventilation and IAQ (ventilative cooling, school ventilation ECOL' AIR, energy refurbishment, acoustic comfort, IAQ...).