A general overview of Annex 78

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ABSTRACT

International Energy Agency (IEA) Annex 78 was launched in 2018. The title of the Annex is "Supplementing Ventilation with Gas-phase Air Cleaning, Implementation, and Energy Implications." The objective of the Annex is to bring researchers and industry together to investigate the possible energy benefits of using gas-phase air cleaners (partial substitute for ventilation) and establish procedures for improving indoor air quality or reducing the prescribed ventilation rates by gas-phase air cleaning; a test method for air cleaners that considers perceived air quality ratings is also included in the activities with the potential of developing a new standard. The Annex concentrates its work around four tasks: (A) Energy benefits of using gas-phase air cleaning; (B) How to partly substitute ventilation by air cleaning; (C) Selection and testing standards for air cleaners; and (D) Long term field test of gas-phase air cleaning. This presentation will summarize the results obtained during the activity of Annex 78 focusing on developing the method for testing gas-phase air cleaners and new metrics such as ventilation or CO₂ credit to account for potential ventilation substitution as on the energy consequences of using air cleaners.

KEYWORDS

Air Cleaning; Gas-phase; Energy; Standard; Clean air deliverey rate