



Italian National Agency for New Technologies,  
Energy and Sustainable Economic Development



International  
Energy Agency



IEA Technology Collaboration Programme

# Advanced Fuel Cells

Annex 33 - Fuel Cell for Stationary Applications  
Workshop on

## CHP in the built environment: Natural Gas and/or Hydrogen?

14<sup>th</sup> May 2021

Webinar, 13:00 – 15:00 CET

Much attention and commitment is being raised towards the utilisation of hydrogen to displace fossil fuels in the energy sector, favouring massive penetration of fluctuating renewables. The cost of this paradigm shift is of geopolitical concern, and many initiatives are being set up to address the implications of substituting expensive innovative technologies for established infrastructures, innovative business models for established revenue streams. Being able to leverage the legacy infrastructures for fossil fuel distribution, such as the natural gas grid, can be a way of channelling a smooth and manageable transition to all-renewable power.

This workshop looks into the end-use aspects of this development, related to heat and power supply in the built environment (residential and commercial users and prosumers). What are the technical implications and feasible business strategies for heat and power suppliers to deal with growing percentages of hydrogen in natural gas, if the transmission or even distribution grids will be used to store renewable power? Is pure hydrogen the way to go directly?

<b>13:00</b>	<b>Welcome and introduction</b>	<b>Viviana Cigolotti, Annex 33 Operating Agent, ENEA, Italy</b>
<b>13:10</b>	Opening by the Moderator	Stephen McPhail, ENEA, Italy
<b>13:15</b>	Logistic fuels vs. renewable hydrogen: best solution for fuel cells?	Andreas Frommel, Sunfire, Germany
<b>13:30</b>	PowerCellution, growing market demand calls for complex deliveries	Åse Bye, Powercell, Sweden
<b>13:45</b>	Elcogen solid oxide technology in energy conversion	Matti Noponen, Elcogen Oy, Finland
<b>14:00</b>	PEM FC for stationary applications ; from Data center Backup power to Microgrid prime power	Roy Segev, Ballard, Canada
<b>14:15</b>	SOLIDpower: clean solutions for stationary applications	Stefano Modena Solid Power, Italy
<b>14:30</b>	<b>Round table</b>	