Technology Fact Sheet

Technology Name	**Heating systems with hydrogen**[i] http://www.ecomagazin.ro/hidrogen-pentru-caldura-din-case/
Subsector GHG emission (megatons CO2-eq)	5.067 mln.t CO_2 in thermal power sector in 2010
Background/Notes, Short description of the technology option	Many specialists predict a more intensive development of hydrogen energy, especially, as this is a method of storing energy for diurnal, annual electric load curves flattening, of storing energy produced by wind and solar plants. In addition, hydrogen is the cleanest fuel, burning of which generates only water vapors. It should be mentioned that hydrogen is the most convenient fuel for fuel cells.
Implementation assumptions. How the technology will be implemented and diffused across the subsector? Explain if the technology could have some improvements in the country environment.	
Implementation barriers	- Technologies are at development and implementation stage. - Hydrogen is a costly fuel - 5…12 USD/kg
Reduction in GHG emissions (megatons CO2-eq)	If 500 kW will be installed by 2030, it will entail a reduction of 0.43 Mt.CO_2eq.
Impact Statements - Impact of this option on the country's development priorities	
Country **social** development priorities	Improve indoor climate.
Country **economic** development priorities – economic benefits	Wide possibilities for import and domestic production increase the country's energy security
Country **environmental** development priorities	Exclude harmful emissions
Other considerations and priorities such as market potential	-
Costs	
Capital costs	At 500 kW power – 250 thousand USD
Operational and Maintenance costs	Operational and maintenance costs –72.8 $/GJ.
Cost of GHG reduction	0.06 $/t
Lifetime.	Lifetime – 10 years
Other	-

[i] This fact sheet has been extracted from TNA Report - Technology Needs Assessment for climate change mitigation - Republic of Moldova. You can access the complete report from the TNA project website **http://tech-action.org/**