Technology Fact Sheet

Technology Name	**Highly Efficient Heat, Ventilation and Air-conditioning Systems (HVAC)**[i] http://en.wikipedia.org/wiki/HVAC
Subsector GHG emission (megatons CO2-eq)	GHG emissions in the buildings sector in 2009 accounted for 2825 Gg, of which 75% (2120 Gg) - from residential buildings.
Background/Notes, Short description of the technology option	HVAC (heating, ventilation, and air conditioning) refers to indoor comfort technology. The three core functions of heating, ventilation and air conditioning are interdependent, particularly with the need to ensure thermal comfort and indoor air quality within acceptable installation reasonable operation and maintenance costs. HVAC systems can provide ventilation, reduce air infiltration, and maintain pressure correlation between spaces. Though designed for industrial and administrative buildings, also can be implemented in modern residential buildings with enhanced level of comfort.
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.	If by 2030 HVAC systems account for 5% of residential space, energy consumption will drop by more than 1245 mil. MWh/ year.
Implementation barriers	- Increased investment. - Insufficient experience in construction and operation.
Reduction in GHG emissions (megatons CO2-eq)	Reduce 4.5 mln.t CO_2 in between 2010 – 2030
Impact Statements - Impact of this option on the country's development priorities	
Country **social** development priorities	Reduce consumers spending
Country **economic** development priorities – economic benefits	By 2030 reduce fuel consumption by more than 150 thousand tone coal equivalent (t.c.e) per year
Country **environmental** development priorities	Reduce harmful emissions
Other considerations and priorities such a market potential	-
Costs	
Capital costs	Total investments – 258 mil USD
Operational and Maintenance costs	6.63 USD/m^2
Cost of GHG reduction	28.84 USD/t CO_2eq
Lifetime	Lifetime – 15 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/**