Technology Fact Sheet

Technology Name	**Energy management system implementation**[i] ISO launches ISO 50001 energy management standard. http://energymanagement.com.my/
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	Energy Management System (EnMS), introduced by ISO 50 001, is a range of management processes that allow more appropriate management of the enterprise (organization) for maintenance and systematic improvement of energy performance. It includes collection, processing and analysis of data on consumption per points of consumption of all forms of energy and energy carriers (electricity, heat, cold, compressed air, natural gas, other fuels, etc.) and informing the top-management about the data collected, as well as making proposals on elimination of gaps and energy wise necessary improvements. By monitoring energy consumption the EnMS allows to prevent violation of regulations and equipment maintenance modes, track trends in consumption growth and timely remove the reasons that entailed it, identify the enterprise (organization)'s priorities in terms of implementing energy efficiency enhancement measures. The practice of enterprises in the EU countries show that implementation of EnMS can result in energy consumption reduction by 10 ... 20%.
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 about 80% of facilities implement EMS, it will reduce energy consumption by 5%, and will save 125mil. MWh / year. EnMS implementation costs are assumed to be 1.7 USD/ m^2 (5000 USD per a facility of 3000 m^2.
Implementation barriers	- Little knowledge about EnMS.
Reduction in GHG emissions (megatons CO2-eq)	Reduction of more than 0.54 mln.t CO_2 in 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 cca. 125 mil. kWh per year
Country **environmental** development priorities	Reduce harmful emissions
Other considerations and priorities such as market potential	-
Costs	
Capital costs	Total investments of 28.7 mil. USD
Operational and Maintenance costs	-
Cost of GHG reduction	-26.6 USD/t CO_2eq.
Lifetime	Lifetime – 20
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/**