Technology Fact Sheet

Technology Name	**Buildings walls insulation**[i] http://www.iuses.eu/materiali/ro/MANUAL_PENTRU_ELEVI/Eficienta_energetica_in_cladiri.pdf
Subsector GHG emission (megatons CO_2-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	By the end of 2009 Moldova's housing stock was 78.9 mil. m^2, of which 30.1 m^2 in urban sector and 48.8 mil. m^2 - in rural sector. Extrapolation of the trend data for the years 2002-2009 resulted in 86.2 mil. m^2 for 2030, of which 34.6 mil. m^2 in urban sector and 51.6 mil. m^2 in rural sector. In 1997, when buildings walls insulation requirements changed, the housing stock was 73.2 mil. m^2. In buildings constructed until 1997 the average heating intensity was 70 W/ m^2 in urban sector, and 160 W/ m^2 in rural sector-. After 1997 these values dropped to 50 W/ m^2 and 130 W/ m^2 , respectively. In the last decade insulation measures have been implemented in about 10% of old buildings in urban areas and 1-2% of buildings in rural areas: walls insulation, replacement of old windows with new multiple glazed units, replacement of doors, etc. Heat consumption in the residential sector in 2010 was 47.3 PJ, and is expected to reach 58.1 PJ[3] in 2030.
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.	Until now rehabilitation of buildings in the country has been made at the initiative of consumers – home- and apartments owners. To enhance this process it is necessary to organize it as a national program at municipalities level, with a certain share of subsidies. Thus, by 2030, it would be possible to rehabilitate all buildings in urban areas and 50% of buildings in rural areas.
Implementation barriers	- Large investments. - Lack of interest from the part of central and locale public administration.
Reduction in GHG emissions (megatons CO2-eq)	Reduction of 7.5 mln.t CO_2 in between 2010 – 2030
Impact Statements - Impact of this option on the country's development priorities	
Country **social** development priorities	Improve indoor comfort. Reduce consumers spending.
Country **economic** development priorities – economic benefits	By 2030 reduce fuel consumption by more than 300 thousand tone coal equivalent (t.c.e) per year
Country **environmental** development priorities	Reduce harmful emissions
Other considerations and priorities such as market potential	-
Costs	
Capital costs	Total investments of cca 1 400 mil.USD
Operational and Maintenance costs	Operational and Maintenance costs unchanged
Cost of GHG reduction	Provided the cost of investment is 1400 million USD and the amount of emissions reduced in 2010-2030 is 7,5 mil. t , the specific cost of reduction will be 190 USD / t.
Lifetime.	Lifetime – 30 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/**