Technology Fact Sheet

Sector	Human Health
Adaptation needs	In the recent decades deaths and morbid conditions caused by heat waves become more frequent and pronounced in Central Europe, including in the Republic of Moldova. They turned into a new problem in the region and in the country. The frequency and intensity of heat waves, strong frosts, abundant precipitations and flooding, which are more pronounced from year to year, worsen the quality of life and health of population. The basic characteristics of buildings, built until now do not ensure energy conservation during the cold season, do not provide sufficient insulation of internal environment from the external one during heat waves, and do not contribute to maintaining optimal temperatures in rooms unless significant energy costs are incurred.
Technology Name	***Energy conservation measures, measures aimed at maintaining optimal temperature in homes and public places and reducing the adverse effects of extreme temperatures (heat waves and low temperature) on health and quality of life of population.*** [i]
How this technology contributes to adaptation	Perfect insulation of housing and public premises, production and training areas not only essentially reduces energy costs during the cold and warm season, but also contributes, on the one hand, to assuring optimal habitual conditions and, on the other, ensures optimal conditions for professional activities, education and training (below 32oC during daytime, and below 24 ° C at night). These measures are essential to adaptation of population to climate change, primarily, in urban areas.
Background	Poor indoor environmental quality resulting from insufficient air circulation, poor lighting, mold build up, temperature variances, carpeting and furniture materials, pesticides, toxic adhesives and paints, and high concentration of pollutants contribute widely to respiratory problems, allergies, nausea, headaches, and skin rashes. This measure, which is part of the overall policy of adaptation to climate change, reducing energy consumption and subsequently reducing greenhouse gases in the atmosphere. This measure shall be accomplished by a more efficient thermal insulation of all residential, industrial and administrative buildings, by conserving energy and reducing energy spent for heating.
Costs	Measures have to be implemented in urban areas. The approximate cost is 750 lei per 1m2 of wall. Local public administration authorities in towns have to not only plan allocation of budgetary resources, seek donors' assistance, but also mobilize resources of businesses and population to make this work.
Country Social Development Priorities	In terms of the country's social development, perfect insulation of housing and public spaces, production and training areas is a priority matter, because it allows to save significant amounts of energy in the future, and respectively, reduce greenhouse gas emissions.
Economic Benefits	Economic benefits will be higher since it heating costs in winter and internal air

	conditioning costs in summer will be significantly reduced.
Environmental benefits	Reducing heating costs in winter and air conditioning costs in summer will contribute to environmental development due to fuel savings (natural gas and solid fuel), and electricity.
Social benefits	Social benefits are obvious due to significant savings in spending for heating in wintertime and internal air conditioning during summer. The resources saved could be channeled to other needs: healthier diets, more decent living conditions, cultural needs, etc.
Other considerations and priorities	Energy conservation measures will result not only in reducing the adverse effects of extreme temperatures (heat waves and low temperatures) on health and quality of life, but also reduce greenhouse gas emissions into the atmosphere, biodiversity conservation.

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