

## Technology Fact Sheet

Technology Name	<b>Building construction to optimal orientation</b> <sup>i</sup> <a href="http://www.sustainable-buildings.org/wiki/index.php/Building_Orientation">http://www.sustainable-buildings.org/wiki/index.php/Building_Orientation</a>
Subsector GHG emission (megatonnes 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	Most apartment blocks have a length of 3-5 times the width. If positioned with the narrow part to the north, where heat losses are 10% higher, the heat losses can be reduced by 0.15%.
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.	When planning and designing buildings location, orientation of the narrow part of the building towards north (south) should be observed. This need occurs in one building from ten.
Implementation barriers	- Architects may pose some impediments
Reduction in GHG emissions (megatons CO2-eq)	Reduction of 0.0003 mln.t CO <sub>2</sub> in between 2010 – 2030
<b>Impact Statements - Impact of this option on the country's development priorities</b>	
Country <b>social</b> development priorities	Reduce consumers spending
Country <b>economic</b> development priorities – economic benefits	By 2030 reduce fuel consumption by more than 160 thousand tone coal equivalent (t.c.e) per year
Country <b>environmental</b> development priorities	Reduce harmful emissions
<b>Other</b> considerations and priorities such as market potential	-
<b>Costs</b>	
Capital costs	No need for additional investments
Operational and Maintenance costs	Maintenance costs will not increase
Cost of GHG reduction	
Lifetime.	Lifetime – 30 years
Other	-

<sup>i</sup> 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/>