

## Technology Fact Sheet

Technology Name	<b>Passive homes<sup>i</sup></b> <a href="http://www.casepassive.eu/concept">www.casepassive.eu/concept</a>
Subsector GHG emission (megatons CO <sub>2</sub> -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	Passive homes is a new concept, in line with European standards in construction industry. It ensures reduced maintenance costs through energy efficient design. Passive homes provide a comfortable indoor climate with heating energy consumption of no more than 15 kWh / (m <sup>2</sup> year), preferably from renewable energy sources.
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 passive homes account for 5% of residential space, heating only will save by 60 TJ of energy per year.
Implementation barriers	<ul style="list-style-type: none"> <li>- Increased investment.</li> <li>- At present possible for small and medium houses only.</li> </ul>
Reduction in GHG emissions (megatons CO <sub>2</sub> -eq)	Reduction of 0.036 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 2.1 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	Total 710 mil USD
Operational and Maintenance costs	1.11 \$/m <sup>2</sup>
Cost of GHG reduction	6500 USD/t CO <sub>2</sub> eq
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/>