Technology Fact Sheet

Technology Name	**Low power nuclear CHP (few dozens MW)** [i] Mini Nuclear Power Plants Could Power 20,000 Homes. http://www.physorg.com/news145561984.html
Subsector GHG emission (megatons CO2-eq)	5.067 mil. t CO_2 in thermal power sector in 2010
Background/Notes, Short description of the technology option	In Los Alamos laboratories, U.S.A. low power NPP blocks (few dozens MW) have been developed and put into circulation. The plants are enclosed in concrete blocks, delivered to the consumer, sited in an underground containment vault, do not require any intervention in the operation. After the fuel is consumed, the blocks are retrieved and returned back to the deliverer.
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.	The blocks are meant to supply electricity and heat to remote settlements.
Implementation barriers	- Not available so far - Possible fear about radioactive pollution
Reduction in GHG emissions (megatons CO2-eq)	Provided by 2030 the installed power is 450 MWt (150 MWe), it will be possible to reduce 0,81 mil. t CO_2.
Impact Statements - Impact of this option on the country's development priorities	
Country **social** development priorities	Increase security of heat supply
Country **economic** development priorities – economic benefits	Reduce import of fuel
Country **environmental** development priorities	Exclude harmful emissions
Other considerations and priorities such as market potential	-
Costs	
Capital costs	Investments in thermal part - 400 mln.USD
Operational and Maintenance costs	-
Cost of GHG reduction	50 USD/t
Lifetime.	Lifetime – 10 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/**