Technology Fact Sheet

Technology Name	**CHP on motor organic agents**[i] Lucien Y. Bronicki ORGANIC RANKINE CYCLE POWER PLANT FOR WASTE HEAT RECOVERY, http://www.ormat.com/
Subsector GHG emission (megatons CO2-eq)	5.067 mln.t CO_2 in thermal energy sector in 2010
Background/Notes, Short description of the technology option	Lately turbine plants operated by the action of organic matter vapors - freons and hydrocarbons (methane, butane, isobutan, pentane) are being developed. These plants can operate at low pressures and temperatures with relatively high electrical efficiency. They can run on different fuels, including biomass and also recover heat from gas exhausted from engines and industrial plants. A wide range of operating powers is the advantage of such plants.
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.	Will be implemented in district heating industrial enterprises, etc. It is possible to install a total thermal power of 200 MW.
Implementation barriers	- Little operating practice. - Lack of commercial production
Reduction in GHG emissions (megatons CO2eq)	Reduce 0.45 mln.t CO_2 in between 2010 – 2030
Impact Statements - Impact of this option on the country's development priorities	
Country **social** development priorities	Create jobs Increase energy security of the country
Country **economic** development priorities – economic benefits	Reduce import of fuel
Country **environmental** development priorities	Reduce harmful emissions
Other considerations and priorities such as market potential	-
Costs	
Capital costs	Investments in the thermal part will be cca 100 mln.USD
Operational and Maintenance costs	Operational and maintenance costs -16.7 USD/GJ
Cost of GHG reduction	14 USD/t
Lifetime	Lifetime – 15 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/**