

Technology Fact Sheet for Mitigation

Technology		Benefits	Challenges
Land use change and forestry -Improved charcoal production Sub Sector			
Improved traditional kilnⁱ	Charcoal production is done through a method called pyrolysis of biomass in traditional earth kilns using pyrolysis process. During pyrolysis, biomass undergoes a sequence of changes and normally yields a black carbonaceous solid called charcoal, along with a mixture of gases and vapors. Generally, charcoal production. The efficiency of traditional earth kiln is low typically around 10%. Recent research results have demonstrated that efficiency can be raised to around 18 to 20% through optimisation of carbonization processes.	There are several environmental and socioeconomic benefits to switch to improved traditional kiln to include: significant reduction in toxic indoor air pollutants which will result in improved health conditions. Due to increased on-farm availability of fuelwood the time spent daily on gathering fuelwood is saved for use in more productive activities and higher incomes, which in itself could further improve livelihoods.	Several barriers on the policy issues have been identified to include the need for an official recognition of charcoal production and marketing by national energy policies

ⁱ This fact sheet has been extracted from TNA Report – Technology Needs Assessment and Technology Action Plans For Climate Change Mitigation– Zambia. You can access the complete report from the TNA project website <http://tech-action.org/>