

Technology Fact Sheet for Mitigation

Technology	Description	Benefits	Challenges
Biomass Gasifier ⁱ	Biomass gasification for off grid applications involves production of gaseous fuel called producer gas used in a gas engines and modified gasoline and diesel internal combustion engines for electricity generation. Producer gas can also be used to produce steam which is then expanded on a steam reciprocating internal engines to produce electricity. The generating costs range between 8-12 US\$ cents/kWh and corresponding capacity ranging between 20-50000 kW. The investment cost range between 1800-2100 US\$/Kw	Besides providing electricity to isolated areas in rural areas and associated benefits elaborated under small hydro is the additional employment created for the feedstock providers who are mostly small and medium scale farmers and foresters.	The challenge for biomass gasification implementation lack of awareness for sensitising policy makers and financial providers on the potential of the technology and innovative financing mechanism aimed at leveraging the relatively higher electricity generating costs compared to other traditional energy supply systems.

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/>