

Technology Fact Sheet for Mitigation

Technology	Description	Benefits	Challenges
Small wind turbine ⁱ	Smaller-scale wind turbines can be found in a wide range of applications including off-grid power; either directly by charging a storage battery or in combination with another form of generation to cover intermittent periods when there is little or no wind. Small scale power wind rating applications range; less than 1000W(battery charging and light seasonal loads), 1-30kW (residential and heavy seasonal loads), and 30-300kW(farms and remote communities. Generating cost between 15-35 US\$ cents/kWh). The investment cost is wide depending on the application and lies between 1500-6000 US\$/kW	Small wind may be cost effective depending on the costs of alternate off-grid technologies and fuel prices; however the overall contribution of small wind to climate change mitigation will probably be limited due to the long payback periods required to offset the carbon used in their manufacture.	Challenges include need to have awareness and information programme 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/>