

Technology Fact Sheet for Mitigation

Technology	Description	Benefits	Challenges
Biodiesel from jatropha ⁱ	Bio Diesel fuel can be produced from oilseed plants such as sunflower, soy beans, and jatropha. Bio Diesel can be used alone or mixed in any ratio with mineral oil diesel fuel. Production costs for jatropha based biodiesel have been estimated under regional conditions to be 0.50 US\$ cents /litre as long as the price of crude oil is more than 60 US\$/barrel. Those of soy beans and sunflower have been calculated at 5.3 and 1.1 US\$/litre, respectively. Land requirements for production of 50,000 tonnes of biodiesel per annum is 44,000 ha for jatropha as compared to 124,000 ha for soy beans and 57,000 ha for sunflower.	Can easily be integrated into the existing transport infrastructure, thus avoiding the often prohibitive investment costs associated with other renewable options for the transport sector. Biodiesel in particular from jatropha can have significant benefits in terms of GHG emissions and socio-economic development to include job creation in the agriculture and forestry sectors, with significant unused land resources and a large pool of unskilled workers; increasing farm incomes; increasing energy security by producing and using biofuels locally, thus reducing the dependence on imported fossil oil; saving foreign currency by displacing fossil oil imports; earning foreign currency by producing biofuels for export.	The benefits identified can be realised only if a comprehensive adequate policy framework is put in place.

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/>