

Annex 7 – Green Investments in Mozambique

Analysis of Investment Potential by Sector

Sector	Total Projected Investment Range Over 5yr horizon USD Million	Short Term Potential (< 2 yrs)	Long Term Potential (> 5 yrs)	Chief Barriers	Opportunities
Biomass	100 – 200	Uncertain	Positive	<ul style="list-style-type: none"> - Lack of Regulation for IPPs & Feed-in Tariffs - Grid Access & Off-take - Competition with traditional fuel wood 	<ul style="list-style-type: none"> - Co-generation at Sugar Mills - Gasification of Waste Biomass for Mini-Grids - Combination with other technologies for off-grid hybrid rural electrification solutions - Technologies for more efficient use of fuel wood (carbonisation / charcoal / efficient cook-stoves)
Biofuels	4.000 – 5.000	Positive	Positive	<ul style="list-style-type: none"> - Competition for land with other agricultural & food crops; - Mostly large scale / major investments 	<ul style="list-style-type: none"> - Bio-fuels Mandate - Production for export markets - Establishment of increased downstream capacity for domestic market demand
Solar	50 - 100	Uncertain	Uncertain to Positive	<ul style="list-style-type: none"> - Lacking supply chain infrastructure - Dominance of FUNAE & Donors - Pricing Pressure - Market Access 	<ul style="list-style-type: none"> - Innovative delivery & distribution models for the establishment of utility like services in rural electrification using modern solar technologies; - Combination with other technologies for off-grid hybrid rural electrification solutions; - Use in productive agriculture for water pumping, crop drying and processing

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Mini, Small - Medium Hydro	400 - 600	Uncertain	Uncertain to Positive	<ul style="list-style-type: none"> - Lacking regulation for IPPs & Feed-in Tariffs - Competition with large Hydro - Grid Access & Off-take - Requirement for detailed studies of prospective sites 	<ul style="list-style-type: none"> - Mini and Pico-hydro for off-grid and mini-grid usage; - Combination with other technologies for off-grid hybrid rural electrification solutions;
Wind	50 - 75	Unlikely	Uncertain	<ul style="list-style-type: none"> - Lacking regulation for IPPs & Feed-in Tariffs - Grid Access & Off-take - Requirement for detailed studies of prospective sites - Unlikely to be competitive without subsidy 	<ul style="list-style-type: none"> - Mini- and Pico installations for specialised off grid and mini-grid applications (eco-tourism lodges and agriculture / water pumping); - Combination with other technologies for off-grid hybrid rural electrification solutions;
Geothermal	N/a	Zero	Uncertain	<ul style="list-style-type: none"> - Cost of exploration and development; - Does not appear to be a GoM priority / focus; - Capital intensive technology. 	<ul style="list-style-type: none"> - Known availability of Geothermal Resource.
Tidal	N/a	Zero	Uncertain	<ul style="list-style-type: none"> - Cost of exploration and development; - Lack of commercially proven technologies. 	<ul style="list-style-type: none"> - Known availability of Tidal Resource.
Natural Gas	N/a	Unlikely	Positive	<ul style="list-style-type: none"> - All future uses depend on the development of a widespread and reliable distribution system / network which is not yet planned. 	<ul style="list-style-type: none"> - Proven availability of MZ gas reserves; - Use of gas for thermal power in industrial / manufacturing processes (cement / DRI); - CNG for use in vehicles; - Electricity generation for export of electricity; - Thermal Power for domestic use

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Cleaner Production (for Heavy Industry and Hotels & Tourism)	100 - 200	Uncertain	Uncertain	<ul style="list-style-type: none"> - Lack of Awareness & Information - Low level of environmental standards and enforcement - Lack of supply chain infrastructure for EE & environmental technologies and services 	<ul style="list-style-type: none"> - EE in commercial and residential buildings - air conditioning and lighting; - Resource management in tourism sector (water / lighting / air conditioning) - EE and resource efficiency in cement manufacturing
EMS	25 - 50	Uncertain to Positive	Uncertain to Positive	<ul style="list-style-type: none"> - Lack of Awareness & Information - Low level of environmental standards and enforcement 	<ul style="list-style-type: none"> - Achievement of certification standards (eg ISO / FSC) - Training in EE & Resource management especially in water supply and waste management for industrial / manufacturing processes.
Waste Management	125 - 250	Positive	Positive	<ul style="list-style-type: none"> - Relatively small scale of existing operations / schemes - Legislation and regulation still under development 	<ul style="list-style-type: none"> - Scale up / replication of piloted schemes for recycling & composting; - Management contracts for waste disposal and treatment (as contractor to government / local authorities)
Water & Sanitation	350 - 515	Unlikely	Uncertain	<ul style="list-style-type: none"> - Dominated by public sector 	<ul style="list-style-type: none"> - Opportunities for providing contracted services (construction and operation) to government and local government authorities - Establishment of dedicated infrastructure for tourism developments

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Forestry	4.500 – 5.500	Positive	Positive	<ul style="list-style-type: none"> - Weak enforcement of regulation and abuse of licences / concessions (link to corruption); - Mostly large scale / major investments 	<ul style="list-style-type: none"> - Downstream investment in value added processing; - Schemes for involvement of local communities; - REDD / carbon sequestration and sinks; - Certification of plantation management & down-stream activities (FSC)