

## List of Private Companies Working on Integrated Waste Management

### 1. COBA Impact Manufacturing PLC.

**Background:** COBA Impact Manufacturing PLC is the first company to launch a full scale hot wash recycling plant for Polyethylene Terephthalate (PET) and High-Density Polyethylene (HDPE) bottles in Ethiopia. The plant started manufacturing PET flakes in May 2015. The machinery used is imported from Italy and is state of the art. The recycling capacity is of 500 kg per hour. The water filtration systems respect the European norms and ensure that the wastewater that is discharged is within the most demanding international standards. This is a pioneering project for the company where its objective is to introduce the importance to recycle plastics for environmental conservation and introduce the numerous advantages renewable energy offers to communities.

**Technology/Product/Service:** Collection and recycling of PET and HDPE bottles in reusable flakes for export markets.

### 2. Penda PLC.

**Background:** Penda PLC is an international paper and carton recycling company, working to improve the environment and urban centers. In most cases, paper and carton waste are burned or dumped at the landfill, creating significant pollution problem in Ethiopia. By recycling this waste instead, Penda PLC is able to create jobs for unemployed youth, make paper and packaging cheaper, and save hard currency by using locally available raw materials instead of pulp and paper import.

**Technology/Product/Service:** Collect and sort paper and carton waste; produce pulp; and supply to local paper industries.

### 3. Oryx PLC.

**Background:** Oryx International PLC is involved in collection and recycling of plastic waste materials to produce plastic scrap.

**Technology/Product/Service:** Plastic scrap

### 4. Ermias Fikiru PLC.

**Background:** Ermias Fikiru PLC is involved in collection and recycling of plastic bags to produce and supply conduit and plastic wrappers.

**Technology/Product/Service:** Conduit and plastic wrapper.

## 5. Dynamic Sanitary Service

**Background:** Dynamic Sanitary Service is a pioneer solid waste management service private company established in 1999. With 19 years of wealthy experience in solid waste collection, recycling and waste disposal activities, the company has got good recognition among the community and government in creating employment opportunity of the youth and contributing to the improvement of waste management of the urban areas of the country.

**Technology/Product/Service:** Waste collection, recycling and waste disposal.

## 6. Mamay Water Works

**Background:** Mamay Water Works is based in Ethiopia to offer waste water treatment solutions at residential and business areas. Its major areas of engagement include industrial liquid waste management, general and graywater treatment and related environmental challenges that usually occur in urban and industrial areas. The company also collaborates with renowned Africa companies to provide state of the art technologies.

**Technology/Product/Service:** Industrial liquid waste management, general and graywater treatment.

## List of Private Companies Working on Off-grid Renewable Technologies

### 1. Solar Development PLC.

**Background:** Solar Development PLC. is an Ethiopian private company established in 2008 and focuses on power generation and technology supply. The company is specialized in electromechanical products supply and distribution; solar systems assembly, integration and installation; and wholesale and retail distribution. It provides a turnkey solution for a wide range of solar systems and applications, from Pico Solar Home Systems (PSHS) up to autonomous village power supplies, street lights, DC refrigerator/freezers, solar pumping systems, and thermo-siphon solar water heaters. Further, the company is engaged in power- backup systems for grid connected areas.

**Technology/Product/Service:** solar panels, solar charge controllers, inverters, batteries, DC lamps and refrigerators, solar water heaters, solar water pumps, solar street lights, ovPilot, ovBeacon, ovCAMP, little sun original, little sun charge, mobile one solar home system, fosera modern battery technology, and fosera power line LSHS.

### 2. SolarWoman

**Background:** SolarWoman provides innovative renewable energy solutions to homes, businesses and organizations across Ethiopia. Under the Clinton Foundation Initiative, SolarWoman is involved in lighting up rural health care facilities to make services more amenable and accessible for local populations. The company has extensive experience in maintenance and service of solar powered products and services.

**Technology/ Product/Service:** Solar lanterns, solar lamp, camp light bulb pack, solar water pump, solar controller with inverter charger, solar battery, different sizes of solar panels, maintenance free solar batteries, charge controllers, inverters and inverter chargers, solar water pumps, solar water heaters, energy saving LED and CFL lamps, and solar fittings and accessories.

### 3. Lydetco PLC.

**Background:** LYDETCO PLC. was founded in 1996 and registered as a private limited company dealing mainly with solar power systems, industrial machinery, and equipment. The company supplies renewable energy technology such as solar PV and solar thermal for the realization of sustainable livelihoods in rural and urban areas. Furthermore, the company aims to create capacity and capability in simple energy management techniques through technology know-how transfer of PV and wind power technology.

**Technology/Product/Service:** solar system and components (sun oven generators, electronics, steca, batteries, loads, pico PV, systems, pumps, and accessories); solar water heaters (household systems and largescale update systems); industrial packing; and industrial inputs and machinery.

#### 4. ACME Engineering and Trading PLC.

**Background:** ACME Engineering and Trading PLC. was founded in 2003 and registered as a private limited company dealing mainly with solar power systems, water supply, agricultural engineering and scientific laboratory systems.

**Technology/Product/Service:** Electric power generation equipment; power distribution equipment; water supply equipment; drip and sprinkler irrigation systems; greenhouse and accessories; laboratory and field investigation equipment; agricultural implements; trunk irrigation; rehabilitate and develop water supply systems; equipment maintenance; and trading and workshops.

#### 5. Beta Engineering Services PLC.

**Background:** Beta Engineering Services PLC. is certified multi-disciplinary engineering and construction firm which has been operating for more than 20 years with 5 satellite stations over key regions of Ethiopia. The company provides services in renewable energy technology, electro-mechanical, construction, and consultancy services.

**Technology/Product/Service:** Solar, bio-fuel, and bio-gas production and installation; industrial installation; maintenance of oil companies and electro-mechanical equipment; supply of generators and UPS; construction of residential, commercial, heavy civil and automated parking systems; and consultancy services (traffic management, logistical support to foreign firms, industrial and project management).

#### 6. Rensys Engineering and Trading PLC.

**Background:** As energy solution company, it is the biggest supplier of individual solar home system, supply batteries for industries and communication companies and is the first private solar micro grid developer in Ethiopia.

**Technology/Product/Service:** Solar lanterns, solar lamp, camp light bulb pack, solar water pump, solar controller with inverter charger, solar battery, and different sizes of solar panels.

#### 7. Everbright PLC.

**Background:** As energy solution company, Everbright PLC. Supply and install individual solar home systems and solar batteries.

**Technology/Product/Service:** Solar lanterns, solar lamp, camp light bulb pack, solar water pump, solar controller with inverter charger, solar battery, and different sizes of solar panels.

## List of Water Well Drilling Private Companies

### 1. Tana Water Well Drilling PLC.

**Background:** Tana water well drilling PLC. has been operational for the past 14 years, leading the water well drilling sector in Ethiopia. The company recently started producing high quality PVC and HDPE Pipes. The company operates at a high standard and maintain a position of leadership in the industry. Apart from operating in the domestic market, the company is set to expand water well drilling and borehole works to other African and Middle Eastern countries.

**Technology/Product/Service:** Engaged in water well drilling services; and produce high quality PVC and HDPE pipes.

### 2. Adequate Water Works PLC.

**Background:** Adequate Water Works PLC has been operational since 2010 and is engaged in the water sector development specifically in groundwater management and feasibility study; electromechanical equipment supplies and installation; water well drilling and drilling machinery supply; and maintenance, technical specification preparation and evaluation. The company is able to drill water wells for drinking and irrigation purpose in every kind of ground formation with diameter of 6 - 14 inch up to 300m depth depending to the diameter of the well. The company also supply and install solar water pumps, submersible and surface water pumps, diesel generators, steel casings, water well drilling rigs, drilling tools and accessories, and air compressors.

**Technology/Product/Service:** Engaged in water well drilling and drilling machinery supply; electromechanical equipment supplies and installation; groundwater management and feasibility study and other consultancy services.

### 3. Zekalay General Trading PLC.

**Background:** Zekalay General Trading PLC. is engaged in water well drilling and construction works, merchandize, rental of heavy machineries, conducting pump test, establishing water systems (including reservoirs and pipe line extensions) and the supply and installation of submersible pumps and generators.

**Technology/Product/Service:** Water well drilling and construction works; bore hole rehabilitation; supply and installation of submersible pumps; supply generators, hand pumps, UPVC, and steel casing of different diameters.

## List of Water Works Construction Private Companies

### 1. United Construction PLC.

**Background:** United Construction PLC is an Ethiopian based independent private multi-sectorial investment company which was established in 2003. The company has been engaged in building and road construction, and water works project development and construction (waste water treatment plants, sewerage system lines, dams and irrigation structures).

**Technology/Product/Service:** Water works development and construction (waste water treatment plants, sewerage system lines, dams and irrigation structures); building and road construction; and batching plants.

### 2. Bermog Construction PLC.

**Background:** Bermog Construction PLC. is an Ethiopian based private company which has been engaged in building and road construction, wind farm construction, and water works project development and construction.

**Technology/Product/Service:** Water works development and construction; building, road and windfarm construction.

### 3. Bigeta Construction and Business PLC.

**Background:** Bigeta Construction and Business PLC. is an Ethiopian based private company which has been engaged in road construction and water works project development and construction (sewerage system lines and irrigation structures development).

**Technology/Product/Service:** Water works development and construction (sewerage system lines and irrigation structures development); and road construction.

## List of Water Work Design Consulting Private Companies

### 1. MS Consultancy

**Background:** MS Consultancy is an Ethiopian-based independent firm offering a range of development and technical services in civil engineering mainly focusing on waste management and water resources development (water supply and sanitation, irrigation, hydropower, infrastructure development and other civil engineering works).

### 2. DH Consult

**Background:** DH Consult is an Ethiopian independent consultancy firm offering a range of development and technical services including water resources studies, water supply and sanitation, program review and impact assessment, remote sensing, surveying, and GIS services.

### 3. Tropics Consulting Engineers PLC.

**Background:** Tropics Consulting Engineer PLC. specializes in multi-dimensional and multi-sectoral area of professional services. The firm is engaged in water supply and sanitation; hydropower, irrigation and agriculture development; environment impact assessment and capacity building; and construction support services.

### 4. Metaferia Consulting Engineers PLC.

**Background:** Metaferia Consulting Engineers PLC. is one of the leading consulting firms in Ethiopia and is involved in the fields of roads and bridges, buildings design and construction supervision, training and capacity building, water resources management and irrigation, water supply and sanitation and environmental management. It is also actively working in Africa mostly in the rural and urban water supply and sanitation services.