

Africa & Arab States
Waste Management
Delegation at IFAT 2024

UNIDO ITPO Germany Hall A6.241/340 Munich, 13–17 May 2024

Environmental Technologies for Emerging Markets





## Organization:

United Nations Industrial Development Organization (UNIDO) Investment and Technology Promotion Office (ITPO) Germany

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**Prof. Dr. Rolf Steltemeier** Head of UNIDO ITPO Germany

Dear IFAT-Participants and Guests,

Dealing with the world's growing waste problem requires more than just managing what we discard. Municipal solid waste is projected to rise from 2.3 billion tons in 2023 to 3.8 billion tons by 2050. Open burning and substandard landfills exacerbate the problem, while recycling plants, where they exist, are overwhelmed by the sheer volume of waste. The environmental challenges of the waste sector demand the promotion, application and capitalization of innovative and sustainable environmental technologies and solutions, both in regions like Germany and Europe and in emerging markets worldwide.

As the Head of the UNIDO Investment and Technology Promotion Office (ITPO) Germany I would like to warmly welcome you and our 25 delegates to IFAT 2024!

Through its Investment and Technology Promotion Offices, UNIDO promotes the transfer of technologies and investments to developing countries in order to support sustainable industrial development. Our office supports German and

"UNIDO ITPO Germany promotes green and resource-efficient industrial production. We recognize the need to apply circular economy approaches, linking production and modern recycling technologies, and utilizing waste streams to secure a sustainable supply of energy for production processes."

European technology providers and investors in finding potential partners in developing countries and in establishing long-term economic cooperation.

Environmental technologies and (industrial) waste management are priorities of ITPO Germany. Our activities at IFAT 2024 will promote the transfer of innovative and sustainable technologies from Europe to developing countries in order to foster industrial cooperation with these rising markets, especially in sub-Sahara Africa.

In this brochure you will find the profiles of the delegates, who are coming from eleven countries across Africa and the Middle East. Meeting with the representatives will allow you to identify opportunities for the transfer of technologies and for sustainable investment projects.

Please do not hesitate to reach out to us for further information. I wish you all an engaging and successful IFAT 2024!

4 Organizer Organizer





## Highlights of the UNIDO ITPO Germany Delegate Programme at IFAT 2024

AT 2024, ITPO Germany supports the visit of 25 high-level delegates from the waste sector coming from 11 different countries in Africa and the Middle East. The representatives are joining from the following countries: Benin, Côte d'Ivoire, Egypt, Ghana, Jordan, Nigeria, Senegal, Sudan/Oman, Tanzania and Togo.

Highlights on the agenda:

- Panel discussion on the topic of "Waste Management and Recycling – Drivers of Industrial Development in Africa" at the IFAT-Orange Stage on Tuesday, 14 May from 13:30 – 14:20.
- Networking event 'Africa meets IFAT', co-organized with the Mechanical and Plant Engineering Association VDMA and supported by further partners. Tuesday, 14 May at 17:30 in Hall B4 booth 338.
- Pitching event about opportunities in the African waste sector: presentation of projects and tenders in African markets. Afterwards, networking with the delegation and registered participants on Wednesday, 15 May at 10:00 in conference room C53.
- B2B Meetings with different stakeholders at the UNIDO ITPO Germany stand at the main booth of the Federal Association of the German Waste, Water and Circular Economy Industry (BDE) in Hall A6 booth 241/340.

More details about the delegation can be found in this brochure.





Africa Business Network |
Southern African German Chamber
of Commerce and Industry

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Agence Nationale de Gestion des Déchets (ANAGED)

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Director General

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The Africa Business Network of the Federal Ministry for Economic Affairs and Climate Action (BMWK) supports especially small and medium-sized German companies in entering African markets. As a sector expert on circular economy for the Africa Business Network, I am based at the Southern African German Chamber of Commerce and Industry, the first point of contact for all questions regarding the entry and expansion of business contacts by German companies on the South African market. Interests whilst attending IFAT are to meet with German companies keen to enter into Southern African markets in the field of circular economy. Looking for opportunities to collaborate and assist them in entering these markets by providing local market knowledge, access to local partners and overview of the sector in the country.

Supported by:



on the basis of a decision by the German Bundestag The Agence Nationale de Gestion des Déchets (ANAGED) is a public entity in Côte d'Ivoire. It is placed under the technical supervision of the Ministry of Water, Sanitation and Hygiene (MINHAS). It is also under the financial supervision of the Ministry in charge of the Budget and the State Portfolio. ANAGED's missions include

- developing and implementing programmes for the management of all types of solid waste, with a focus on waste recovery in oder to promote the circular economy,
- regulating the management of all types of solid waste,
- supervising the public service that may be delegated to local authorities or to the private sector,
- leading the planning and creation of solid waste management infrastructure,
- mobilising the financial resources needed to improve waste management.

As the regulatory authority for the waste sector, ANAGED is interested in meeting all the players in the solid waste management cycle (collection, transport, recovery/recycling and disposal).





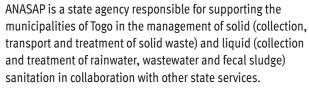


Agence Nationale d'Assainissement et de Salubrité Publique (ANASAP)

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Our presence at IFAT will allow us to have an exchange of valuable information that can contribute to the improvement of the methods and technologies used in the sector. Our participation will allow us to identify the latest advances in the field of sanitation and safety, which can be beneficial for improving the services provided by the agency. By meeting other industry players at the forum, the agency can identify opportunities for collaboration. Following this forum, we hope to have access to additional funding and resource opportunities to support our sanitation and safety initiatives in Togo.





Hazem Moshir
Energy & Sustainability Manager –
Operation Manager
Waste Management Facility

**Arabian Cement Company** 

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Arabian Cement Company is a fully integrated cement plant and a leading cement producer and seller in Egypt. The company was founded in 1997, and is among the leading cement producers in Egypt with a market share around 8 %.

Arabian Cement owns a waste management company (Evolve for investments & projects managements), which has a recycling facility with production capacity 150 tons per day of high quality RDF, which is mainly used as an alternative fuel for cement factories.

At IFAT, we aim to connect with European companies in the waste sector to exchange thoughts and cooperate in planned further upgrades of our recycling equipment and to review new technologies in that topic.

We are looking for manufacturers of shredders and all related equipment which are used in waste management facilities. Currently we have a cement plant and recycling facility in Egypt which is mainly supplying alternative fuel to our cement plant and we are planning to upgrade our recycling facility with the most updated technologies.







Bioenergy for Alternative Fuels

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BioEnergy was founded as a direct result of a problem encounterted by the country in 2013, due to the rising of the economical crisis and the issuing of the law that abolished fuel subsidies for energy intensive industries.

Our vision: Leading the sustainability path, being the organization of choice in energy and waste solutions

Our mission: Through our commitment to innovation and quality towards the development of profitable and affordable results, wherever waste is generated and energy needed.

I am attending IFAT to connect with like-minded individuals, discuss industry trends, share experiences, and explore potential collaborations or partnerships in waste management field, especially the (RDF, Steel Slag recycling, Turnkey Alternative Fuels Facility, r-PET Granules, Recyclables and Organic Fertilizers).

Chanja Datti Ltd, a waste collection & recycling social enterprise is dedicated to transforming the waste in the environment to value, creating jobs and positioned to solve the growing plastic waste and unemployment crisis in Africa. Chanja Datti's four-pronged sustainability model focuses on waste management solutions that reduce CO2 emissions, creation of economic opportunities through the circularity of plastics, engaging on principles of circular economy, and economic empowerment of women and youths via job creation. A key aspect of our operations is our focus on providing high-quality semi-raw materials to plastics manufacturers.

Our organization has cultivated relationships with major players in the manufacturing sector, and we are looking to expand our capabilities along the value chain. At IFAT, I am interested in meeting investors looking to invest in plastic extrusion manufacturing of foam for insulation and rPET for the textile industry. We are also looking to partner with an EV company that has bikes for collection and companies that are looking to manufacture baling machines in Nigeria.







Egyptian Company for solid waste recycling (ECARU)

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Environmental Expressions Limited **Habib Ahmed**Managing Director

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Egyptian Company for Solid Waste Recycling (ECARU) is a service provider specialized in solid waste management.

- Biomass management: ECARU provides collection, transportation, and processing of all types of agricultural residues
   (Biomass) since 1997. ECARU currently collects and processes approximately 500,000 tons annually of different types of biomass to produce various products. Examples include Biomass Derived Fuel (BDF) for cement kilns with an annual capacity of 300,000 tons, organic compost with an annual capacity of 70,000 tons, purified biomass for Medium Density Fiber (MDF) pulp, material for the paper industry with an annual capacity of 100,000 tons as well as animal fodder.
- Municipal Solid Waste (MSW) treatment and disposal management (since 1998): MRF, Composting, SRF production, landfill operations, upgrade and maintenance of equipment and technical support. ECARU is currently receiving 3,500 tons /daily (± 1.270 million tons annually) of MSW on five MRF facilities in the north of Egypt. ECARU currently processes the received quantities to produce more than 300,000 tons annually of high-quality SRF as an alternative solid fuel for cement kilns, and organic compost with an annual capacity of 250,000 tons.

Environmental Expressions Limited (EEL) is a waste management, recycling, and manufacturing company based in Abuja, Nigeria. We provide comprehensive waste management and recycling services to both government and private sector.

At EEL, we firmly believe that waste is not just a problem but an opportunity for something new. We understand the value and immense potential in reusing and recycling materials, and we are dedicated to reducing waste and its impact on society. By harnessing the power of innovation and technology, we transform waste LDPE Film and waste PET Bottles into high-quality reusable products at our state-of-the-art facility in Abuja, Nigeria.

Our participation in IFAT is driven by our commitment to enhancing and expanding our current capabilities, addressing operational and production challenges, and seeking partnerships to explore new opportunities within our industry. We are interested in improving our ability to manage waste water from our recycling operations as well as improving the quality of stream of waste received. Additionally, we are interested in developing the first Landfill to Gas Power Plant in conjunction with a municipal waste recovery facility. Our objective is to gain insights into similar initiatives worldwide, adopt industry-leading practices, and forge strategic alliances with diverse stakeholders to successfully execute the project.





Estidama EnerCycle

Hazir Farouk Abdelraheem Elhaj

Founder and General Manager

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Our current product interests lie in developing technology that utilizes recycled plastic waste to construct durable and cost-effective biogas digesters, as well as small units for recycling food waste to produce compost.

As a new startup, we are eager to learn about the latest cutting-edge solutions in the international circular economy at IFAT Munich. We are also keen on finding potential partners to collaborate with on our journey towards sustainability.





Electronic Waste Africa

Evariste Aohoui

CEO & Founder

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Electronic Waste Africa (EWA) is a small organization providing a set of e-waste management services in Côte d'Ivoire. The company is so far the unique small company operating in the sector of te challenging e-waste sector in the country. The services provided by EWA range from consultancy services and trainings to e-waste collection and pretreatment.

EWA is now engaged in building the ecosystem of a sustainable e-waste management system in the country. By creating an enabling environment for both formal and informal actors to work together in an inclusive system, the objective is to leverage the local e-waste management system and circular economy.

EWA joins IFAT with the idea to mobilize investors and technology providers to advance the sector of e-waste management in Côte d'Ivoire. EWA is looking for collaborations to go the next step of development.







FREEE Recycle Limited

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FREEE Recycle is a Nigerian social enterprise tackling waste management through innovative tire recycling. We transform discarded tyres into eco-friendly rubber products, primarily comfortable and durable flip flops. This not only reduces landfill waste and environmental pollution but also creates sustainable livelihoods, empowering a workforce with a focus on women. Committed to a circular economy, FREEE Recycle promotes responsible manufacturing while offering stylish and eco-conscious flooring solutions and other everyday items for its consumers.

Good Earth Recycling Limited (GERL) was incorporated by the Corporate Affairs Commission in June 2021 with the vision to establish the pioneer PET bottle to bottle integrated recycling facility to be located in Ibadan, being the capital and most populous city of Oyo State in Nigeria.

The project will be executed in three phases, commencing with the aggregation of post-consumer PET plastic bottles in June 2024. We are in the process of identifying plant and machinery as well as potential financial partners who are keen in participating and creating a positive environmental impact by means of funding state of the art equipment and technology thereby ensuring value addition and a sustainable economy for the people of Africa.







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Jospong Group of Companies

Dr. Joseph Siaw
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KfW funded a 15 mio euro project for Mechanical Biological Treatment (MBT) with the aim to produce RDF and compost in the Greater Amman Municipality (GAM). We are interested to see all the companies that are working on MBT projects that could interest the tender to establish the facility of MBT in Amman.

Within the framework of German Financial Cooperation with Jordan, and through KfW support, a contract for Consulting Services was signed in September 2023 between the GAM and CDM Smith SE. The consultancy services comprise technical planning and support to the PEA in designing, tendering, and supervising construction for a Mechanical Biological Treatment facility under Lot 1. The accompanying measures address the relevant framework conditions in terms of institutional, technical, and socio-economic aspects. The activities comprise of various tasks: Product marketing, RDF (substitute fuels), Compost, Recyclables (secondary raw materials), Capacity Development, Supervision of operation, Institutional support, Support for potential plant extension, Financial management.

Jospong Group of Companies is one of the most diversified wholly Ghanaian private companies with interest in over 60 different subsidiaries. Established in 1995 with a core business of printing and publishing, the company has in the last couple of years grown into a conglomerate with operations in 14 sectors of the economy. The Jospong Group of Companies has 8 of the 60 different subsidiaries in other parts of Africa and the Middle Fast.

In 2006, the founder revolutionized waste management in Ghana with the introduction of Zoomlion Ghana Limited which currently is the leading waste management company in the country and West Africa, with operations in Ghana and in five other African countries. The businesses in the circular economy space comprising of waste management in terms of public cleansing, residential waste collection, treatment and processing of municipal solid waste, plastic waste, liquid waste and medical waste.







Lagos Waste Management Authority (LAWMA) **Dr. Muyiwa Gbadegesin** Managing Director/CEO Lagos/Nigeria +234 7067000700 (SMS Only) m.gbadegesin@lawma.gov.ng https://lawma.gov.ng/



NAK LIMITED

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The Lagos Waste Management Authority (LAWMA), formerly known as Lagos State Refuse Disposal Board (LSRDB) was established in 1977 when it was glaring that the then two Local Government Councils, namely Lagos Island and Lagos Mainland, could not cope with the volume of waste resulting from the oil-boom stimulated economy and its attendant influence on migrants into the new capital city from the rural areas of Nigeria and neighbouring West African countries. The amount of waste generation in Lagos State continues to increase along with rapid increase in population, accelerated urbanization, industrialization pace, economic growth, business activities and consumption patterns; all these directly and indirectly drive up solid waste quantities from households, commercial institutions, industrial concerns and market outlets. In a bid to achieve a cleaner and livable Lagos, the Authority has continued to plan and implement programs and activities, not only to meet the ever-expanding challenges, but also to prepare for future challenges.

Founded in 2013, NAK LTD is a duly registered company from Tanzania. The firm and its partners are duly registered as environmental practitioners in the National Environment Management Council – (NEMC) as well as Occupational Safety and Health Authority (OSHA) Tanzania.

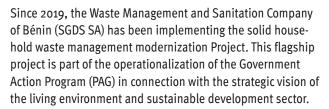
NAK LTD specializes in health, safety (including risk assessments), environmental management services and waste management services to ensure proper and safe disposal of waste. NAK provides the following services: medical and pharmaceutical waste disposal; site cleanups, recycling of precious and semi-precious metals, soil remediations, E-waste and battery recycling, tank removal and cleaning, off spec and outdated products destructions. NAK has a registered waste management facility (occupying 80,000 sq meters) located at Fukayosi, Bagamoyo, Dar es Salaam, Tanzania.

At IFAT, NAK is keen on finding sludge removal machinery and electronic waste shredders that can shred different types of electronic waste. We are interested to explore technologies from partners in similar industries in Europe as well as financing opportunities.





Société de gestion des déchets et de la salubrité (SGDS SA) **Eké Gilles Amoussou** Managing Director Cotonou/Bénin +229 99997009 contact.sgds@sgds.bj www.sgds.bj



Initially, the company operated in the municipalities of Grand Nokoué, including Cotonou, Porto-Novo, Sèmè-Podji, Abomey-Calavi, and Ouidah. On April 2021, the statutes were amended to make the company national and extend its activities to the management of liquid waste. The former "SGDS GN SA" became the "SGDS SA". Since October 2023, it has been providing permanent intervention in the Parakou municipality.

Since then SGDS SA provides services free of charge in all covered areas. In order to ensure the sustainability and continuity of waste management and sanitation services provided to the population, the solid waste management modernization project has planned the implementation of an economic model.





Societe Nationale de Gestion integree des dechets sonaged Sa Cheikh Mouhamed Fadel Fall Director of Industrial Development and circular Economy

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The launch of the "Zero Waste" initiative in 2019 has sparked popular enthusiasm around waste by making their rational management an absolute urgency. It is within this framework that a new strategy has been implemented, including in its initial phase the launch of an emergency plan to improve service levels for users. Other consolidation phases have also been initiated with programs for the total control of certain neighborhoods and priority axes, a complaints service, the issue of city entrances, as well as other related issues such as the desilting of certain areas. These initiatives are directly aligned with SONAGED's major missions which require the implementation of precise operational action plans to meet the challenge of making our country cleaner and more welcoming in a "fast-track" mode.

SONAGED is responsible for implementing this strategy at the national level and is therefore interested in the whole value chain of waste, from segregated collection to valorization and disposal.





Vega Recycling
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Specialized in the collection and recycling of plastic waste, in particular the manufacture of granulated plastic waste which is sold locally, in Togo and in the West African subregion. We see environmental protection as an essential mission. The grant received during the project competitions launched by FAIEJ (Togolese State Fund) in 2015 enabled us to formally launch this social enterprise in 2016. Today, it offers over 3,000 income-generating activities thanks to the collection of plastic waste and several stable jobs, 80% of which are held by women, who make a living from it. Constantly innovating, we have introduced smart garbage cans and a mobile application called Zéro Déchet, which teaches waste sorting and is equipped with a geolocation system.

At IFAT, as the world's leading trade fair for environmental technologies, water management and sustainable solutions, we are looking forward to collaborate with suppliers of machines/lines; PET washing; Regranulationine for foil. Molds for plastic products; water purification systems.

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