

**BOLCON
ASSOCIATES
LIMITED
(BCA)**

**BOLCON
RESEARCH
AND TRAINING
INSTITUTE**

SOLID WASTE MANAGEMENT: INFRASTRUCTURE, POLICY, BUSINESS FINANCING, LEGAL AND INSTITUTIONAL FRAMEWORK

2-DAY TRAINING COURSE

Date: 2nd to 3rd July 2018

Venue: **Jogor Centre, Ibadan, Nigeria**



RATIONALE

The growth of human population in our cities has rapidly increased in recent times, mostly through rural-urban migration and natural causes. This has led to significant increases in waste being generated. However as population and waste generation increased, there has also been a concomitant increase in the need for the provision of effective and efficient waste management system. This is to achieve the overall goal of effective solid waste management is the protection of the environment and the health of the people.

Solid waste management remains one of the most daunting environmental sanitation challenges facing the country today and it has continually remained at its lowest ebb despite huge investments in the sector. Currently, as a result of industrialization and rapid population growth in many cities and towns, wastes are generated faster than they are collected, transported and disposed. This has led in most cases to making our cities to become veritable waste disposal sites. It is now a common site to see wastes littering virtually every open space available, including road medians and verges in our cities.

Though there exists the National Environmental Sanitation Policy in Nigeria and some States, like Lagos State, have also passed Environmental Laws which set out the policies to achieve a clean and healthy environment for all Nigerians, there has been no major breakthrough in the sector yet. The main challenges associated with the realization of effective and efficient solid waste management lie in the dearth of adequate infrastructure, workable policies availability of financing and recognition of the fact that solid waste can be a profitable business, if there is effective cooperation and collaboration between government and the private sector.

The state of solid waste management in Nigeria and recent occurrences across the States bring to the fore the need to properly address the issue of solid waste management in a holistic manner. With the realization that the industry is becoming ever more competitive and demanding, a detailed knowledge of the technicalities, policies, commercial and financial framework has become indispensable in ensuring efficiency, effectiveness, access to financing, distributing and managing risk. In an industry that is seeing increased failure of policies, infrastructure, and breakdown along the value chain, the importance of a sound understanding of contemporary issues cannot be underestimated.

Bolcon Associates Ltd, through its Training and Research arm, **BCA** Training and Research, is promoting a two-day intensive training program to discuss some of the problematic issues relating to the realization of effective and efficient solid waste management in Nigeria.

The course analyses the factors driving the development of effective and efficient solid waste management systems, with the aim of providing participants with the knowledge and skills that are needed to understand the policies, technologies, business and financing models that are required to get waste management in Nigeria to its best.

TOPICS COVERED

- Overview of solid waste value chain
- Policy development and implementation
- Appropriate technologies
- Waste minimization, recycling, reuse and conversion
- Data collection and acquisition
- Waste to energy concepts and implementation
- Business case models
- Project finance and PPPs
- Business possibilities
- Legal & institutional framework

WHAT WE OFFER

- Multidisciplinary experts (industry experts, policy makers, academics)
- A platform to exchange experiences and best practices
- Case Studies
- Interactive session
- Debate with policy makers

PROGRAMME

DAY 1: SOLID WASTE MANAGEMENT: UNDERSTANDING THE CHALLENGES

An overview of solid waste management across its value change, evolution and importance of appropriate policy, political and management challenges, of the actors and services it involves and how these are managed:

- Current state of solid waste Management in Nigeria
- Challenges of managing a waste management authority in Nigeria - ways ahead
- An overview of the current trends in solid waste management
- Appropriate technologies, operation and maintenance
- Overview of existing policies
- Role of local policy and regulation
- Data availability, data management for effective planning
- Strategic steps towards implementation

TARGET AUDIENCE:

- Waste management Practitioners
- Executives from industries
- Banks personnel

FEES

- Fees include: course tuition, case study materials, coffee breaks, lunches and social dinner.
- Full fee N50,000.00
- Application and full payment deadline: 25 June 2018
- Early bird fee N45,000.00 Application and full payment deadline: 11 June 2018

THE VENUE

- The training course takes place at, The Meeting Room, JOGOR CENTRE, Harvesters Road, off Liberty Road, Ring Road, Ibadan

DAY 2: BUSINESS MODELS AND FINANCING

Analyzing how new business models are impacting local systems and how they can be accessed

- Business case models along the value chain:
 - Waste Collection
 - Waste Recycling and waste conversion
 - Waste to Energy
- Business models for best practices from the public and private sectors:
- Financing opportunities for solid waste management
- Legal and institutional framework for effective solid waste management
- Summit

BCA TRAINING & RESEARCH

Bolcon Associates Ltd (BCA) is a multidisciplinary firm with great expertise and rich experience in engineering consultancy, project management, infrastructure development, training and research. The firm has been in existence for about 25 years in Nigeria.

BCA is organized and staffed to furnish the technical talents required to produce the most economical, viable and comprehensive solutions to engineering, project management, policy, provision of complex infrastructural development projects, training and research.

BCA Training and Research is an arm of Bolcon Associates Ltd that was launched a year ago to tap into the rich experience and expertise of our professional staff, project specialists and multidisciplinary associates from the academia, public and private sectors.

In terms of topics and sectors, **BCA** Training and Research focuses on different aspects connected to public utilities and infrastructure, policy setting and management, financing, procurement, tariff setting, asset management, project management, water and sanitation, energy development and off-grid distribution.

BCA Training and Research

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Bodija – Ashi Road, Bodija, Ibadan

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SOLID WASTE MANAGEMENT: INFRASTRUCTURE, POLICY, BUSINESS FINANCING, LEGAL AND INSTITUTIONAL FRAMEWORK

DAY 1: SOLID WASTE MANAGEMENT: UNDERSTANDING THE CHALLENGES

- 9.30 am – 10.30am: **Overview of solid waste management:** Engr. Bola Olowe FNSE, Managing Director, Bolcon Associates Ltd, Ibadan
- 10.30am – 11.30am: **Solid waste management in Nigeria, the past, current and future trends – Challenges of managing a waste management authority and the way forward!** Mr Oladimeji Oresanya, Globetech & former Managing Director of Lagos Waste Management Authority (LAWMA)
- 11.30am – 12 noon **TEA BREAK**
- 12.00 noon – 1.00pm: **Appropriate technologies, operation and maintenance of solid waste management schemes:** Engr Wahab Ogunbiyi FNSE, Former General Manager, Lagos Waste Management Authority (LAWMA)
- 1.00pm – 2.00pm **Local policy and regulation in effective solid waste management:** Mr Olalekan Owojori, Managing Director/CEO Welbeck Consulting, Lagos.
- 2.00pm – 3.30pm **LUNCH**
- 3.30pm – 4.30pm **Data availability, data management for effective planning in solid waste management:** Dr Balogun, Babcock University, Ilishan-Remo, Ogun State

DAY 2: BUSINESS, LEGAL/INSTITUTIONAL FRAMEWORK AND FINANCING

- 9.00 – 10.00am: **Opportunities for public and private partnership in solid waste Management:** Mrs Lolade Oresanwo, MD West Africa Energy, Ibadan
- 10.00- 11.00am: **Green funds, as a veritable source of funding in Solid wastemanagement:** Mrs Achenyo Obaro, CEO Greennovative Chain Consulting, Ibadan
- 11.00 – 11.30: **TEA BREAK**
- 11.30pm – 12.30pm: **Public Private Partnerships and Financing opportunities for solid waste management:** Mr Olumide Thomas, Managing Director, Thomas Macaulay Capital Limited, Lagos
- 12.30pm – 1.30pm **Legal and Institutional Framework in Solid Waste Management:** Oluwaseun Fasuhanmi, Legal and Compliance at Standard Street Manpower Limited
- 1.30pm – 2.30pm **LUNCH**
- 2.30 am – 4.00pm: **Summit on Business case models along the value chain:**
Chairman: Prof M.C.K Sridhar, Institute of Public Health, University College Hospital, Ibadan
- Discussants:
- Waste collection - A PSP operator form Lagos
 - Waste recycling and waste conversion - Mrs Bilikiss Abiola, CEO, Wecyclers, Lagos
 - Waste to energy - Engr Hakeem Busari, Managing Director, Hakkam-B and Associates Ltd.
- 4.00PM – 4.30pm: Closing

RESOURCE PERSONS



Engr Bola Olowe FNSE, Managing Director, Bolcon Associates Ltd.

Bola Olowe has a Bachelor's degree in civil engineering from the University of Lagos, a Master degree in water and waste engineering from the prestigious Water Engineering Development Centre (WEDC), Loughborough University, United Kingdom. He also has an MBA from the premier University of Ibadan. He is a Fellow of the Nigerian Society of Engineers and member Associate of Consulting Engineering in Nigeria (ACEN). Engr Olowe has been practicing as a consulting engineer for over 30 years and has been involved in the design and construction of the first sanitary landfill in Nigeria. He was lead consultant in the design, build, finance and operate the first Integrated Solid Waste Project in Nigeria and has conducted many studies and research in Solid waste management, including preparation of master plan for the waste management component of some regional master plans in Nigeria.



Professor M. C. K. Sridhar, Professor of Environmental Health in the Department of Environmental Health Sciences, Faculty of Public Health, College of Medicine, University of Ibadan, Ibadan.

He obtained PhD from Indian Institute of Science, Bangalore, India, worked for 13 years before moving to University of Ibadan, Ibadan in 1977. Worked on research projects ranging, from water resources, eutrophication and pollution control, water treatment, waste management, environmental toxicology, and community mobilization. Developed waste to wealth projects since 1980s particularly compost and organo-mineral fertilizers, biogas for communities using stakeholder approach. He established several pilot scale or demonstration units in communities. He was a consultant to UNDP, UNICEF, World Bank, several NGOs and Government bodies and agencies. Traveled extensively and visited several waste management facilities in India, Switzerland, Sweden, Finland, Denmark, and USA. Trained various categories in environmental field and published over 300 scientific papers in books and journals.



Mr. Ola Oresanya, MD, Globetech & former MD LAWMA

Mr Ola Oresanya has a bachelor's degree in geology from the premier University of Ibadan and a master's degree in environmental management and ecology from the Obafemi Awolowo University, Ile-Ife. He is also an alumnus of the Harvard Kennedy School, Harvard University, Massachusetts, USA. He has over 30 years' experience in environmental management covering different areas such as solid waste, liquid waste, remediation and human resource development for the environment sector. He worked with the Lagos State Waste Management Authority for 30 years between 1985 to 2015, and served as the Managing Director of the agency for 10 years between 2005 to 2015. Mr Ola Oresanya was pivotal to the regeneration of Lagos with the institutional reform and improved efficiency he introduced in waste management. Under his stewardship as the managing director of LAWMA, the various parts of the state were freed from the grip of refuse.

Bilikiss Adebisi Abiola, CEO, Wecyclers a recycling company based in Lagos. The company collects recyclable rubbish from households in Lagos, sorts and sends SMS



messages to the person who supplied the rubbish, telling them about points they have earned from the rubbish they donated. A graduate of Fisk University, Vanderbilt University and MIT's Sloan School of Management. While at MIT, I was a Legatum Fellow at MIT's Legatum center for Development and Entrepreneurship and a vice president of the MIT Sloan Africa Business Club. I am also a Carroll Wilson Fellow, an Echoing Green Fellow and a 2013 recipient of the Cartier Women's Initiative Awards. Her company works in partnership with the Lagos Waste Management Authority, Coca-Cola and GlaxoSmithKline to subsidize their operation. Wecyclers had found that a significant proportion of the rubbish came from these companies and they were willing to assist with the recycling effort.



Lolade Oresanwo, Chief Operating Officer of West Africa Energy, a private contractor that has the rights and responsibility of waste management in Oyo State. She has operational responsibility for all site and business areas and manages sales managers for both suppliers and customers. Manages business development, and human resources and responsible for developing, implementing, and managing the operational aspects of the annual budget. Direct and administer all financial plans including raising finance for the company. Oversee business policies and accounting practices, Review and analyze financial reports Oversee administrative functions ensuring smooth daily operations of physical plant and equipment. A graduate of the University of Ibadan, she also has an MBA from Cranfield School of Management, Cranfield University, Milton Keynes, United Kingdom. She worked as Business Development Manager, HSBC, UK, Strategy Consultant, Sulger, Buel & Co, Cranfield, UK.



Ayodele Thomas – Managing Director, Thomas Macaulay Capital
Ayodele Thomas is a graduate of Economics and Masters in Finance, in addition to several professional certifications from notable schools such as the Institute of Management Development, Lausanne, Switzerland; and the Bank Risk Management with International Development Institute, Dublin, Ireland amongst others. A distinguished investment banker and veteran with a career spanning over three decades in finance, advisory, securitization, restructuring, and mergers & acquisitions. Ayodele was responsible for managing Intercontinental Bank's Investment Banking Group where he handled several capital market transactions. Prior to this, he worked for Central Bank of Nigeria, ICON (Merchant Bankers) Limited and Federal Ministry of Industry. Having played key roles in facilitating various business combinations, mergers/acquisitions and strategic corporate buy-ins, which led to the emergence of the global Dangote Group, and the Intercontinental Group (Intercontinental Bank, Equity Bank, Associated Discount House, Gateway Bank, WAPIC Insurance, Intercontinental Securities, and Intercontinental Capital Markets), his professionalism has earned him the respect of numerous clients and peers within the market.



Engr. AbdulWahab Ogunbiyi - Director of Research and Development in the Lagos State Ministry of Works and Infrastructure and the immediate past General Manager of LAWMA He is a Fellow of the Nigeria Society of Engineers and holds B. Eng. Mechanical Engineering, M.Sc. (Met. & Mat.) and currently, he is a PhD student and a Researcher at the University of Lagos. He is

a versatile designer and innovator who has designed and built several machines and equipments for use in solid waste management. He recently designed and developed machines and equipment for the treatment of E- Waste materials in Lagos. This caught the attention of UNEP for possible support to produce the plant for use in Lagos and in other African countries.



Olalekan Owojori Managing Director/CEO Welbeck Consulting, Lagos, former Director Sopra Consultancy. Wellbeck has been operating in the Waste management industry for over 10 years and is currently Consultant to the Association of Waste Managers of Nigeria (AWAM). Lekan is a Chartered Management Accountant, with over 20 year's senior management experience. He was highly instrumental, in setting up the Business Link

London South, an organisation that provided business support to small and medium size organisation in the United Kingdom. Also he was part of the management team for General Dental Council, Government regulator for the in the UK. He is a business adviser to many businesses that have experienced a turnaround in their profit.



Oluwaseun Fasuhanmi, Legal and Compliance at Standard Street Manpower Limited. An Environmental Lawyer with over 10 years

Waste Management experience, I am dedicated to putting my passion and skills to good use by driving Sustainable Development through the creation of apt framework to exercise Environmental Stewardship, achieve Social Justice, generate Economic Growth and strengthen

Environmental Governance. She obtained L.LB, Law from the University of Lagos and M.Sc, Environmental Management, Coventry University.



Mrs Achenyo Obaro CEO, Greennovative Chain, which provides research and advocacy services in climate change mitigation. Achenyo Idachaba is an environmental and energy consultant based in Nigeria offering expertise in carbon assessments, clean energy development, and supply chain strategies, focused specifically on the needs of Nigeria. Her mandate is to assist institutions with identifying viable

carbon reduction and energy efficiency projects that have the potential for leveraging carbon financing e.g. CDM, VCS. Achenyo is the Founder of Greennovative Chain Consulting (GCC). Prior to founding GCC, Achenyo spent over 10 years with ExxonMobil in the United States where she held a variety of regional and global positions in procurement, planning and operations. She received a B.Sc. Degree in Computer Science/Economics from the Obafemi Awolowo University in Ile-Ife, Nigeria. She has an M.S. in Applied Computer Science from Illinois State University and an M.B.A. in Business Administration from Cornell University in the United States. She is an Association of Energy Engineers (AEE) Certified Carbon

Reduction Manager (CRM). In 2014 she was given the Cartier award, a women's initiative award for sub-Saharan Africa. She has been featured on CNN and her TED talk in 2015 achieved over a million hits.



Dr. Olubunmi Lawrence Balogun lectures in the Department of Agricultural Economics, Babcock University, Ilishan-Remo, Ogun State. His areas of specialization are data analysis and data management, Social capital, Microcredit and Poverty (welfare economics). He is highly skilled in data management and analysis. He has contributed to a number of research publications on a variety of topics related to sustainable development in sub-Saharan Africa, data acquisition and data analysis in solid wastes management, resource use, rural development, social network, poverty and credit issues in Nigeria. He is a member of World Forum on Climate Change, Agriculture and Food Security (WFCCAFS).



Engr Hakeem Busari, Managing Consultant Hakkam-B and Associates Ltd is widely experienced in the design and construction of waste to energy projects in Nieria. He has designed and built several plants all over Nigeria. Hakeem is a graduate of Mechanical Engineering, University of Lagos. Hehas an M.Sc in Water Resources and Environmental Engineering, an MBA (Executive) and his currently pursuing a PhD programme in Water Resources and Environmental Engineering