

MR. ODHIAMBO ODAWA - CURRICULUM VITAE / PERSONAL RESUME & INDUSTRIAL – COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES PROJECTS WORK EXPERIENCES

NAME	ANTHONY ODHIAMBO ODAWA
AGE	58 YEARS
SPOKEN AND WRITTEN LANGUAGES	Japanese, German , English, Kishwahili
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PERSONAL PROFESSIONAL COMPETENCY SKILLS BASED PROFILE	Task – Oriented and Result-Oriented Consultant / Senior Principal Lecturer / Competency Skills Based Technical Trainer in Engineering / SMEs Entrepreneurship / Industrial – Commercial Energy Efficiency & Renewable Energy Technologies /Conservation /Energy Management /Energy Auditing / Solar Energy PV Systems Designs & Installations (Off – Grid / Hybrid / Mini- /Industrial Productivity Assessment /(as per ENERGY Act 2006 / ERC Act & Reg. 2012 / NITA Act 2006 / TVETA – CDAAC – KETRB Act 2013 & Job & Wealth Creators Bill 2016) Problem-Solving skills / Initiatives and belief in Team Work in a competitive and Fast – changing (dynamic) Work Environment
THE CLIMATE CHANGE MITIGATION / ADVOCACY & ENVIRONMENT COMPLIANCE Management / Conservations Projects through INDUSTRIAL - COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES ENGINEERING COUNSULTANCY TECHNICAL TRAINING /MARKETING / CAPACITY BUILDING / RESEARCH & CAREER DEVELOPMENT OBJECTIVE / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA - CDAAC ACT---2013 / KETRB - TVETA (Job & Wealth Creators Act 2016) - Refer Attachments / Testimonials) Work Experiences	<ol style="list-style-type: none"> To build upon the Vast knowledge / Talent / Attitudes / Engineering Technical Competency Skills Based Local and Overseas Industrial Experiences acquired in over thirty (30) years on Industrial Work experience overseas (Japan and Germany and in Kenya & East / Central Africa for ENERGY Efficiency & Renewable Energy Technologies (Bio –Gas , Bio – Mass , Bio –Fuel , Wind Energy , Geo –Thermal , Ocean Tidal Wave Energy Systems, Mini & Major Hydro Energy Systems etc.) / Energy Auditing / Practical “ Hands – On “ Technical Training of Trainers (ToT) Solar Energy PV Systems Designs / Construction & Installations (Off-Grids / Hybrids /Mini-Grids, Micro–Grids –Solar Home Systems (SHS) , Solar Water Heating Systems etc.) Tools, Machines & Equipment Consultancy / Training / Marketing / Research Development Contracts Services, SMEs Importers & Exporters , Distributors etc. To offer Optimum Energy Efficiency / Energy Conservation / Energy Auditing / Solar Energy PV Systems Designs & Installations / Productivity Improvement / Technical Training / Consultancy / Training / Marketing Development Services to many <u>ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES FACILITIES</u> (the 47 –County Based Governments Manufacturers / Factories / Hotels & Lodges / Hospitals & Dispensaries / Schools & Colleges / SMEs Welding Fabrications Repair Workshops ,) and other MICRO / SMALL/ MEDIUM / LARGE ENTERPRISES in Engineering / Energy Efficiency / Productivity Assessment / Industrial SMEs Entrepreneurship / Micro-Finance (S.M.Es) competitively in the technologically fast - changing economy in Kenya THE FUTURE GREEN Renewable Energy & BLUE ENERGY Economy Renewable Energy Technologies are : Solar Energy PV Hot Water Heating Systems (SWHS) / Solar " Electric-Hybrid - Powered " Road Transport Vehicles /Tri - Cycles & Motor Cycles (Boda -Boda) / " SOLAR Hybrid -Powered " Aviation Aircraft Engines / Solar Energy PV Systems Designs & Installations / Bio Gas Energy Systems / Geo - Thermal Energy Systems / Wind Energy / Bio-Fuels / Bio - Mass / / Mini Hydro etc)
PROFESSIONAL, ACADEMIC, TRAINING DEVELOPMENT, NATIONAL CONTRACTS /JOBS RESPONSIBILITIES AND ACTIVITIES / FIELD WORK IN SITES AS PER THE-TVETA- ACT 2013 & ENERGY ACT	<p><u>FROM 1996 TO DATE (2019) : (THE S.M.A.R.T. Renewable Energy Tech Ltd) PRIVATE CONSULTANT & KERIA - TVETA –AEPEA (AEE) – KETRB TECHNICAL TRAINER & EXAMINER</u> Industrial Energy Efficiency Facilities / Renewable Energy Technologies (Solar PV - Off – Grids / Hybrids / Mini – Grids) / Workshop Technology / Industrial SMEs Entrepreneurships / Industrial Productivity Assessment (Partners – E.R.C. / KAM / KERIA / TVETA - KETRB (Strathmore University & Arizona Univ. - Energy Efficiency & Solar PV Systems Designs) / KEBS / JICA/ J.K.U.A.T. / GIZ / USAID / NTSA – Vehicle Insurance Valuation & Inspection / General Motors / Toyota / Hino /)</p> <ol style="list-style-type: none"> Senior Principal Lecturer in Mecha-Tronics Engineering/Workshop Technology / Energy Efficiency Auditing / Renewable Energy/ Vehicle Body Work / Auto - Electric / Industrial SMEs Entrepreneurship & Projects / Solar Energy PV Systems Designs & Installations (Off-Grids / Hybrids / Mini-Grids) / Industrial Productivity Assessments / Vehicle Technology & Trade Projects /The Technical University

<p>ENGINEERING COUNSULTANCY TECHNICAL TRAINING/ MARKETING / CAPACITY BUILDING / RESEARCH / CAREER DEVELOPMENT OBJECTIVE / ACTIVITIES / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & ACTIVITIES / FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA ACT---2013</p>	<p>of Kenya. and formerly Lecturer at The Jomo Kenyatta University of Agriculture & Technology (JKUAT—Juja)</p> <ol style="list-style-type: none"> I lecture/ teach the above subjects (on Part – Time basis only) East African School of Aviation/ Jomo Kenyatta University of Agriculture and Technology (Juja). / Toyota East Africa/ General Motors/ Kenya Bureau of Standards (KEBS) /KENAS / KAM /NEMA /JICA / KAIZEN / D.T Dobie Training School. Consultancy in Energy Efficiency / Energy Auditing / Solar Energy PV Systems Designs & Installations (Off-Grids / Hybrids / Mini-Grids) Management/ Marketing/ Entrepreneurship/ Micro - Finance (S.M.Es) / Capacity Building Training/ For manay ENERGY FACILITIES (Factories / Hotels / Lodges / SMEs) SACCOS – Mwalimu/ Harambee / Afya/ Elimu / Mumias Sugar (Sukari SACCO) / South Nyanza Sugar Company SACCO (Awendo) Kenya Association of Manufacturers (K.A.M)/ KEBS / KENAS / NEMA / JICA / GIZ / NTSA - Road Transport Motor Vehicle Inspection Dept
<p>WORK EXPERIENCE, PROFESIONAL ACADEMIC EDUCATION TRAINING DEVELOPMENT, NATIONAL CONTRACTS/ JOBS RESPOSIBILITES AND ACTIVITIES AS PER THE TVETA ACT—2013 & ENERGY ACT 2006SS:</p> <p>THE CLIMATE CHANGE MITIGATION / ADVOCACY & ENVIRONMENT COMPLIANCE <u>Management / Conservations Projects through</u> INDUSTRIAL - COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES ENGINEERING COUNSULTANCY TECHNICAL TRAINING / MARKETING / CAPACITY BUILDING / RESEARCH & CAREER DEVELOPMENT OBJECTIVE / CONTRACTS MANAGEMENT/ JOB RESPONSIBILITIES & FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA - CDAAC ACT---2013/ KETRB - TVETA (Job & Wealth Creators Act 2016) - Refer Attachments / Testimonials) Work Experiences</p>	<ol style="list-style-type: none"> Engineering Technical Training Consultancy Services to Solar Energy PV Systems Design & Installations / Energy Efficiency / Energy Auditing /Energy Conservations MICRO/ SMALL/MEDIUM/LARGE (S.M.E) Enterprises in KENYA using TRAINING MANUALS from E.R.C. / KAM /KEBS / NEMA / ILO/ UNDP / J.I.C.A/ U.S.A.I.D/ S.I.D.A/ G.T.Z Engineering / Energy Efficiency / Energy Auditing / Solar Energy PV Systems Designs & Installations Consultancy Service – Installations/ Inspections / Calibrations / Verifications / Testing / Measurements of ENERGY Facilities Equipments (Solar Panels / Boilers / Furnaces / Motors / HV Equipments) of electrical/ Electronics & Tele communication Service Mecha – tronic Installations/ Inspection / Calibrations / Testing / Verifications / Measurements / Ratings / Repair Services. KEBS /KAM / JICA / KAIZEN Human Resources Management Training/ Recruitment/ Evaluation Consultant Services using TRANING MANUALS from KEBS / KAM ILO/ UNDP /U.S.A.I.D / J.I.C.A/ U.S.A.D/ KENYA ASSOCIATION OF MANUFACTURERS (K.A.M) Engineering Entrepreneurship / Micro –Finance/ Management/Training/ Insurance Industry Consultancy services using TRAINING MANUALS from ILO/UNDP/J.I.C.A /U.S.A.D / KENYA ASSOCIATION OF MANUFATURERS (K.A.M) Export /Import management/ Marketing/Promotion/ Logistics/Finance Training Consultancy services using TRAINING MANUALS from ILO / UNDP / J.I.C.A / U.S.A.I.D. I have worked for these foreign Countries / International NGO's; J.I.C.A (Japan), U.S.A.I.D (U.S.A), G.T.Z (Germany) S.I.D.A (SWEDEN). Please refer to the enclosed Testimonials/documents / Letters as further evidence for our operations/ activities. Consultancy in Management/Training for PUBLIC PROCUREMENT OVERSIGHT AUTHORITY (PPOA) for al procurement contracts/Tenders for Bidders in Kenya (see the enclosed letters). <u>THE FUTURE GREEN Renewable Energy & BLUE ENERGY Economy</u> Renewable Energy Technologies are : Solar Energy PV Hot Water Heating Systems (SWHS) / Solar " Electric-Hybrid - Powered " Road Transport Vehicles /Tri - Cycles & Motor Cycles (Boda -Boda) / " SOLAR Hybrid - Powered " Aviation Aircraft Engines / Solar Energy PV Systems Designs & Installations / Bio Gas Energy Systems / Geo - Thermal Energy Systems / Wind Energy / Bio-Fuels / Bio - Mass / / Mini Hydro etc)

<p>WORK EXPERIENCE, PROFESIONAL ACADEMIC EDUCATION TRAINING DEVELOPMENT, NATIONAL CONTRACTS/ JOBS RESPOSIBILITIES AND ACTIVITIES AS PER THE TVETA ACT—2013 & ENERGY ACT 2006SS</p> <p>THE CLIMATE CHANGE MITIGATION / ADVOCACY & ENVIRONMENT COMPLIANCE Management / Conservations Projects through INDUSTRIAL - COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES ENGINEERING COUNSULTANCY TECHNICAL TRAINING /MARKETING / CAPACITY BUILDING / RESEARCH & CAREER DEVELOPMENT OBJECTIVE / CONTRACTS MANAGEMENT/ JOB RESPONSIBILITIES & FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA - CDAAC ACT---2013/ KETRB - TVETA (Job & Wealth Creators Act 2016) - Refer Attachments / Testimonials) Work Experiences</p>	<p><u>1996 To Date (2019) THE TECHNICAL UNIVERSITY OF KENYA (T.U. K. NAIROBI</u> <u>(Teaching , Research Projects Development & Competency Skills Based Technical</u> <u>Training at Technical University of Kenya (TUK) , 47 –County Based Energy - Saving</u> <u>Companies)</u></p> <ol style="list-style-type: none"> 1. Senior Principal Lecturer in Mecha-Tronics / SMEs Entrepreneurships & Ent. Projects / Solar Energy PV Systems Designs & Installations (Off- Grids / Hybrids / Mini-Grids – Micro Grids - Solar Home Systems , Solar Hot Water Heating Systems etc.) / Industrial Energy Efficiency / Energy Auditing/ Energy Conservations / Renewable Energy Technologies (Off – Grid / Hybrids / Mini- Grids) Productivity Improvement / Industrial SMEs Entrepreneurship Projects / Vehicle Technology Panel Beating / Automotive Engineering in Mechanical & Mecha-Tronics Engineering Department 2. Supervision of Mechanical/ Airframe / Engines Research Projects for all students <u>THE FUTURE GREEN Renewable Energy & BLUE ENERGY Economy Renewable Energy Technologies are : Solar Energy PV Hot Water Heating Systems (SWHS) / Solar " Electric- Hybrid - Powered " Road Transport Vehicles /Tri - Cycles & Motor Cycles (Boda-Boda) / " SOLAR Hybrid - Powered " Aviation Aircraft Engines / Solar Energy PV Systems Designs & Installations / Bio Gas Energy Systems / Geo - Thermal Energy Systems / Wind Energy / Bio- Fuels / Bio - Mass / / Mini Hydro etc)</u> 3. Tailor—Made / In—House Industrial Energy Efficiency / Energy Auditing / Solar Energy PV Systems Designs & Installations Courses as requested in many ENERGY FACILITIES SMEs in 47 Counties in Kenya / Solar Hot Water Heating Systems 4. Higher National Diploma and Diploma in Transport Management (all Subjects) / Vehicle Engineering / Engine Designs 5. Human Resource Management Courses and Subjects 6. Air Transport Economics / Human Factors in Aviation Industry/Engineering Maintenance, Services and Operations (Ergonomics) 7. Energy Efficiency Manage Conservations (Theory & Practice) 8. Customer Service Management 9. Aviation Laws / Agreements (I.C.A.O / K.C.A.A / I.A.T.A / Regulations and rules) 10. High National Diploma and Diploma in Travel and Tourism Development Operations 11. Air Maintenance Certificate Course (Kenya Poly) 12. Aviation Safety and Security Courses 13. Aviation Insurance Services 14. I.C.A.O / K.C.A.A/ I.A.T.A Rules and Regulations for Aviation Industry 15. Supervision of Mechanical/ Airframe / Engines Research Projects for all students
<p>WORK EXPERIENCE, PROFESSIONAL, ACADEMIC, TRAINING DEVELOPMENT, NATIONAL CONTRACTS/JOBS RESPONSIBILITIES AND ACTIVITIES 1988 – 1998</p> <p>ENGINEERING COUNSULTANCY TECHNICAL TRAINING/ MARKETING / CAPACITY BUILDING / RESEARCH / CAREER DEVELOPMENT OBJECTIVE / ACTIVITIES / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & ACTIVITIES/ FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA ACT---2013</p>	<p><u>1988 – 1996 KENYA NATIONAL EXAMINATION COUNCIL (K.N.E.C)</u> <u>NAIROBI</u> <u>I worked at KNEC as Principal Examination Secretary (Officer) in</u></p> <ol style="list-style-type: none"> 1. Design & Development of KNEC Exam Papers in Engineering Industrial Energy Efficiency / Energy Auditing / Solar Energy PV Systems Designs & Installations / Business Management Subjects KNEC Exam Papers as per the TVETA Sylabi and Higher Diploma/ Diploma / Technician / Artisan International & National Certificates LEVELS 2. Processing all KNEC International & National Higher Diploma and Diploma / Technicians / Artisan Certificates Levels / Subject / Trades (Mecha—Tronics / Electrical & Electronics / Aeronautical/Automotive Engineering subjects 3. Engineering / Entrepreneurship Development Education Trade Subjects 4. Recruitment / Training & Appointment of Chief Technical Examiners for the 500 Public & Private Technical Vocational Institutes / Technical Colleges & Technical Universities in Energy Efficiency/ Energy Auditing / Solar Energy PV Systems Designs & Installations (Off-Grids / Hybrids / Mini-Grids) and all Engineering Subjects / Trade areas 5. The KNEC Setting /Moderating / Proof- Reading / Processing Industrial Energy Efficiency / Energy Auditing / International & National Examination Papers in all subject/Trade areas from KNEC 6. Training /Teaching all Chief Engineering Technical Examiners for Engineering / Solar Energy PV Systems Designs & Installations (Off-Grids / Hybrids / Mini- Grids) / Industrial ENERGY Efficiency / Energy Auditing and Business Management Exam papers

<p>WORK EXPERIENCE, PROFESIONAL ACADEMIC EDUCATION TRAINING DEVELOPMENT, NATIONAL CONTRACTS/ JOBS RESPOSIBILITES AND ACTIVITIES AS PER THE TVETA ACT—2013 & ENERGY ACT 2006SS</p> <p>ENGINEERING COUNSULTANCY TECHNICAL TRAINING/ MARKETING / CAPACITY BUILDING / RESEARCH / CAREER DEVELOPMENT OBJECTIVE / ACTIVITIES / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & ACTIVITIES / FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA ACT---2013</p>	<p><u>1997-1998 - KENYA TECHNICAL TEACHERS COLLEGE (K.T.T.C.) NAIROBI</u></p> <p>Higher National Diploma in Industrial SMEs Entrepreneurship Development Practical Engineering Technical Subjects Studied and currently Teaching at Technical University of Kenya :</p> <ol style="list-style-type: none"> 1. Consultancy, Counseling and Guidance 2. Production Management / Solar Energy PV Systems Designs & Installations / Industrial Energy Efficiency / Energy Auditing 3. Human Resource Management 4. Project Evaluation / Monitoring and Implementation / Industrial Energy Efficiency 5. Entrepreneurial Behavior 6. Business Plan Project Development 7. Research Methodology / Energy Conservations 8. Marketing Management (Theory & Practice) 9. Financial Accounting and Management 10. Instructor / Trainers Development Techniques / Methods 11. Customer Service Management / training / Energy 12. Curriculum Development and Evaluation Methods 13. Enterprise (Company) Management and Development
<p>THE CLIMATE CHANGE MITIGATION / ADVOCACY & ENVIRONMENT COMPLIANCE Management / Conservations Projects through INDUSTRIAL - COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES ENGINEERING COUNSULTANCY TECHNICAL TRAINING / MARKETING / CAPACITY BUILDING / RESEARCH & CAREER DEVELOPMENT OBJECTIVE / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA - CDAAC ACT---2013/ KETRB - TVETA (Job & Wealth Creators Act 2016) - Refer Attachments / Testimonials) Work Experiences</p>	<p><u>FROM 1981 – 1990 (Teaching , Research Projects Development & Competency Skills Based Technical Training at JKUAT, 47 –County Based Energy - Saving Companies)</u></p> <p><u>THE JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY (JKUAT) , NAIROBI/ JUJA</u></p> <p>I worked as Assistant Lecturer & Lecturer / Senior Lecturer in Renewable Energy Technologies / Mecha-Tronics /Automotive & Road Transport Vehicles & Agriculture Machinery / Industrial Plant / Production / Aeronautical Engineering Diploma & Higher Diploma Subjects</p> <ol style="list-style-type: none"> 1. Mathematics 2. Mecha-Tronics Engineering / Solar Energy PV Systems / Industrial Energy Efficiency & Renewable Energy Technologies 3. / Industrial SMEs Entrepreneurships 4. Mechanical Engineering Workshop Technology (Theory / Practice) 5. Thermodynamics / Solar Energy / Fluids Energy Efficiency 6. Fluid Mechanics / Heat Energy Efficiency & Renewable Energy Technologies 7. Mechanics of Machines/ flight Mechanics / SMEs Entrepreneurship 8. Industrial Entrepreneurships / Micro – Finance Development 9. Engineering Drawing and Design 10. Transport Management and Development / SMEs entrepreneurship 11. Engineering Workshop Management / Safety / Laws 16. Supervision of Mecha-Tronics Engineering Research / Trade Projects for all Third Year Students Supervision of Mechanical/ Airframe / Engines Research Projects for all students THE FUTURE GREEN Renewable Energy & BLUE ENERGY Economy Renewable Energy Technologies are : Solar Energy PV Hot Water Heating Systems (SWHS)/ Solar " Electric- Hybrid - Powered " Road Transport Vehicles/Tri - Cycles & Motor Cycles (Boda -Boda)/ " SOLAR Hybrid - Powered " Aviation Aircraft Engines / Solar Energy PV Systems Designs & Installations / Bio Gas Energy Systems / Geo - Thermal Energy Systems / Wind Energy / Bio- Fuels / Bio - Mass / / Mini Hydro etc)
	<p><u>1983 – 1985 - THE KYOTO UNIVERSITY (KYOTO CITY) JAPAN (Teaching at JKUAT- Juja / Japanese Government Scholarship Studied & Worked in Japan Industrv – Toyota / Nissan / Isuzu / Mitsubishi / Nokia / Sanyo / SONY , Sumitomo Companies etc.)</u></p> <ol style="list-style-type: none"> 1. Mecha-Tronics Engineering / Industrial Energy Efficiency and Renewable Energy Technologies /Design Methods 2. Mecha-Tronics Engineering Operation Design and Development / Industrial Energy Efficiency / Industrial Energy Auditing

ACADEMIC EDUCATION AND PROFESSIONAL TRAINING & QUALIFICATIONS AND EXPERIENCES	<ol style="list-style-type: none"> 3. Engineering Service Design and Development / Energy Efficiency 4. Solar Energy PV Systems Designs & Installations (Off-Grids / Hybrids / Mini-Grids, Micro - Grids – Solar Home Systems , Solar Hot Water Heating Systems) Research Methodology and Design / Energy Applications 5. Industrial Energy Efficiency : Engines / Power Plant Design, Services and Operations / SMEs Industrial entrepreneurship 6. Industrial Energy Auditing : Aeronautical / Automotive Tools/ Machines/ Equipment <ol style="list-style-type: none"> a. Design Principles and Development (I.S.O)
ENGINEERING COUNSULTANCY TECHNICAL TRAINING/MARKETING / CAPACITY BUILDING / RESEARCH / CAREER DEVELOPMENT OBJECTIVE / ACTIVITIES / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & ACTIVITIES/ FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA ACT---2013	<p><u>1980 – 1981 THE KENYA TECHNICAL TEACHERS COLLEGE (K.T.T.C.) NAIROBI</u></p> <ul style="list-style-type: none"> • Passed Diploma in Mecha-Tronics Engineering Technical Education with 2nd class • Lecturing / Teaching / Tests & Measurements Methods • Lessons Plan Development and Evaluation methods • Instructor/ Teaching / Tests & Measurements Development Methods // Industrial Energy Efficiency / Solar Energy • Design and Development of Teaching materials • Mecha—Tronics Engineering / Industrial Energy Efficiency Tests and Measurements (Setting and Moderating Exams, Papers Methods)
ENGINEERING COUNSULTANCY TECHNICAL TRAINING/MARKETING / CAPACITY BUILDING / RESEARCH / CAREER DEVELOPMENT OBJECTIVE / ACTIVITIES / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & ACTIVITIES/ FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA ACT---2013	<p><u>1979 THE STRUGAT UNIVERSITY, (WEST GERMANY)</u></p> <ol style="list-style-type: none"> 1 Further training in Energy Efficiency / Energy Auditing Management Science (theory and Practice) And Supervision Techniques in Automotive/ Aeronautical / Engineering Workshops in West German 1. Special Training for Trainers in Aeronautical / Automotive Engineering Subjects (T.O.T) / Energy Efficiency / SMEs Industrial Entrepreneurship 2. Customer Service Management Techniques and Supervision 3. Human Factors in Transport / Aviation Industry / Engineering, Maintenance Services and Operations 4. Quantitative Methods Techniques / Statistics (Q.M) 5. Research Methods
THE CLIMATE CHANGE MITIGATION / ADVOCACY & ENVIRONMENT COMPLIANCE Management / Conservations Projects through INDUSTRIAL - COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES ENGINEERING COUNSULTANCY TECHNICAL TRAINING /MARKETING / CAPACITY BUILDING / RESEARCH & CAREER DEVELOPMENT OBJECTIVE / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & FIELD	<p><u>1976 – 1980 THE KENYA POLYTECHNIC UNIVERSTY COLLEGE (NAIROBI)- Currently Technical University of Kenya (TUK)</u></p> <p>Working at the HUGHES / CMC Engineering LTD & Studied for Diploma Mecha-Tronics Engineering : Automotive / Aeronautical Engineering / Road Transport & Logistics / Insurance Management</p> <p>Passed with credit:</p> <ol style="list-style-type: none"> 1. Mecha-Tronics Engineering / Airframe/ Engine/ Power Plant Design and Operations 2. Mecha-Tronics Engineering Science and Application / Energy Efficiency / 3. Mechanics of Fluid and Machines / Heat Energy / Solar Energy Uses & Applications in al ENERGY Facilities 4. Mecha-Tronics Engineering Workshop Tools, Machines , Accessories, Materials and Processes 5. Mechanical Engineering Technology (Theory/ Practice) / Industrial ENERGY Efficiency / Solar Energy Applications

<p>WORK AS PER THE ENERGY ACT 2006 & TVETA - CDAAC ACT---2013 / KETRB - TVETA (Job & Wealth Creators Act 2016) - Refer Attachments / Testimonials) Work Experiences</p>	<ol style="list-style-type: none"> 6. Mecha-Tronics Engineering Drawing Practice, Concepts and Design 7. Mecha-Tronics Engineering Workshop Planning and Design/ Safety Procedures/ Regulations/ Rules / Laws / ENERGY Uses Laws 8. Human Factors in Transport/ Aviation Industry/ Mecha-Tronics Engineering Machines / Maintenance, Services and Operations (Ergonomics)
<p>FURTHER PROFESSIONAL WORK AND CONTRACTS/ JOBS WITH NATIONAL RESPONSIBILITIES AND ACTIVITIES/ PRACTICAL FIELD & SITES / CASE STUDY VISITS AND ACTIVITIES</p> <p>ENGINEERING COUNSULTANCY TECHNICAL TRAINING/ MARKETING / CAPACITY BUILDING / RESEARCH/ CAREER DEVELOPMENT OBJECTIVE / ACTIVITIES / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & ACTIVITIES/ FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA ACT---2013</p>	<p>1975 – 1980 HUGHES LTD / C.M.C. ENGINEERING LTD Mecha-Tronics Engineering Technical Apprenticeship Training in Automotive / Road Transport Vehicles & Agricultural Machinery / Production / Industrial Plant & Energy / Aeronautical Engineering and worked as Workshop Supervisor in Nairobi / Nakuru / Eldoret Branches</p> <p><u>1995 to Date (2019)</u> KEREA – EAREF- KAM - E.R.C. – NEMA - TVETA – CDAAC – KETRB - NITA - KEBS (NQI) / Strathmore University (Solar PV Systems)- Industrial ENERGY Efficiency AUDITING / Energy Management & Conservations / Energy Efficiency & Renewable Energy Technology - Solar Energy PV Systems (Off – Grids / Hybrids/ Mini – Grids)</p> <ol style="list-style-type: none"> 1. Chief Engineering Technical Examiner with Kenya National Examination Council (K.N.E.C / TVETA & NITA / E.R.C. / KAM / Strathmore University - Solar Energy PV Systems Designs & Energy Efficiency Management & Auditing) and Association of Business Executives (A.B.E London) in ENERGY Efficiency / Energy Auditing / Renewable Energy Technologies (Off – Grids / Hybrids / Mini – Grids) / Solar Hot Water Heating Systems / Business Management, Technical/ Aeronautical/ Automotive Subjects and Industrial SMEs Entrepreneurship Development Subjects Energy Engineering / Energy Conservations 2. Chief Engineering Examiner with The National Industrial Training Authority (N.I.T.A. / TVETA) Ministry of Education, Science and Technology 3. Curriculum Developer with Kenya Curriculums Development Institute (K C D .I.) Business, SMEs Entrepreneurship Development and Technical/ Engineering Subjects 4. Supervision of Mechanical/ Airframe / Engines Research Projects for Companies <u>THE FUTURE GREEN Renewable Energy & BLUE ENERGY Economy Renewable Energy Technologies</u> are : Solar Energy PV Hot Water Heating Systems (SWHS)/ Solar " Electric- Hybrid - Powered " Road Transport Vehicles/Tri - Cycles & Motor Cycles (Boda-Boda) / " SOLAR Hybrid - Powered " Aviation Aircraft Engines / Solar Energy PV Systems Designs & Installations / Bio Gas Energy Systems / Geo - Thermal Energy Systems / Wind Energy / Bio- Fuels / Bio - Mass / / Mini Hydro etc) 5.
	<p>1964 – 1970 Bondeni Primary School, Nakuru Passed C.P.E with 30 points</p> <p>1971 – 1974 Menengai High School, Nakuru Passed E.A.C.E with 24 Points</p>
<p>THE CLIMATE CHANGE MITIGATION / ADVOCACY & ENVIRONMENT COMPLIANCE Management / Conservations Projects through INDUSTRIAL - COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES ENGINEERING COUNSULTANCY TECHNICAL TRAINING / MARKETING / CAPACITY BUILDING / RESEARCH & CAREER DEVELOPMENT OBJECTIVE / CONTRACTS MANAGEMENT/ JOB RESPONSIBILITIES & FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA - CDAAC ACT---2013 / KETRB - TVETA (Job & Wealth Creators</p>	<p><u>REFEREES</u></p> <ol style="list-style-type: none"> 1. Prof Da Silva - Deputy Vice Chancellor STRATHMORE University & Executive Director Strathmore Energy Research Center (Patron of AEPEA (AEE) - KEREA - EAREF) Energy Efficiency Facilities & Renewable Energy Technology Expert - The Strathmore Energy Efficiency Advanced Research & Training Laboratories (The Strathmore University, Madaraka Nairobi P. O. Box Nairobi 2. Mr. J.M. Khakame Deputy Secretary Post School Technical Examination Kenya National Examination Council P.O. Box 73598 NAIROBI

<p>Act 2016) - Refer Attachments / Testimonials) Work Experiences</p>	
<p>WORK EXPERIENCE PROFESSIONAL ACADEMIC EDUCATION TRAINING, DEVELOPMENT NATIONAL CONTRACTS/JOBS RESPONSIBILITIES AND ACTIVITIES AS PER THE ENERGY Act 2006 / TVETA Act 2013 / ERC Energy Reg. 2012</p> <p>ENGINEERING COUNSULTANCY TECHNICAL TRAINING/MARKETING / CAPACITY BUILDING / RESEARCH / CAREER DEVELOPMENT OBJECTIVE / ACTIVITIES / CONTRACTS MANAGEMENT / JOB RESPONSIBILITIES & ACTIVITIES/ FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA ACT---2013</p>	<ol style="list-style-type: none"> 4. Mecha-Tronics Engineering / Industrial Energy Efficiency / Solar Energy PV Systems Designs & Installations Consultancy Services to many MICRO/SMALL/MEDIUM/LARGE (S.M.E) Enterprises in Kenya using TRAINING MANUALS from ILO/UNDP/J.I.C.A /U.S.A.I.D/S.I.D.A/G.T.Z/KENYA ASSOCIATION OF MANUFACTURES(KAM) 5. Engineering Consultancy Services- Installations/ Inspections of electrical/ Electronics and Telecommunication Services. 6. Mecha-tronics Installations/ Inspection/ Repair Services. 7. Human Resources Management Training/ Recruitment/ Evaluation Consultar Services using TRAINING MANUALS from ILO/UNDP/J.I.C.A/U.S.A.I.D/S.I.D.A/G.T.Z/KENYA ASSOCIATION OF MANUFACTURES(KAM) 8. Engineering Entrepreneurship / Micro – Finance/ Management/ Training / Insurance Consultancy services using TRAINING MANUALS from ILO/UNDP/J.I.C.A/U.S.A.I.D/S.I.D.A/G.T.Z/KENYA ASSOCIATION OF MANUFACTURES(KAM) 9. Export / Import Management / Marketing / Promotion / Logistics/ Finance Training Consultancy services using TRAINING MANUALS from ILO/UNDP/J.I.C.A/U.S.A.I.D 10. I have worked ofr these foreign countries / International NGO's; J.I.C.A (Japan), U.S.A.I.D. (USA), G.T.Z (Germany) S.I.D.A (SWEDEN). Please refer to the enclosed testimonials/ documents/ letters as further evidence for our operations / activities 11. Consultancy in Management / Training for PUBLIC PROCUREMENT OVERSIGHT AUTHORITY (PPOA) for all procurement Contracts/ Tenders for Bidders in Kenya (see the enclosed letters.
<p>WORK EXPERIENCE PROFESSIONAL ACADEMIC EDUCATIONAL TRAINING / DEVELOPMENT/NATIONAL CONTRACTS / JOBS RESPONSIBILITIES AND ACTIVITIES/ FIELD WORK & SITES ACTIVITIES</p> <p>THE CLIMATE CHANGE MITIGATION / ADVOCACY & ENVIRONMENT COMPLIANCE <u>Management /</u> <u>Conservations Projects through</u> INDUSTRIAL - COMMERCIAL ENERGY EFFICIENCY & RENEWABLE ENERGY TECHNOLOGIES ENGINEERING COUNSULTANCY TECHNICAL TRAINING /MARKETING / CAPACITY BUILDING / RESEARCH & CAREER DEVELOPMENT OBJECTIVE / CONTRACTS MANAGEMENT/ JOB RESPONSIBILITIES & FIELD WORK AS PER THE ENERGY ACT 2006 & TVETA - CDAAC ACT---2013/ KETRB - TVETA (Job & Wealth Creators Act 2016) - Refer Attachments / Testimonials) Work Experiences</p>	<p><u>2003 to 2019</u></p> <ol style="list-style-type: none"> 1. ENERGY ACT (2006) & TVET ACT—2013 / INTERNATIONAL ENERGY EFFICIENCY MANAGEMENT / ENERGY AUDITING / SOLAR ENERGY PV SYSTEMS DESIGNS EFFICIENCY---INSPECTIONS / TESTING / CALIBRATIONS / MEASUREMENTS / VERIFICATIONS & RATING IN FACTORIES / HOTELS / HOSPITALS (Kaluworks / Bamburi / Vivo Energy / Coca Cola / Arthi River Mining / KPLC / BAT / KBL / Bidco / Del Monte) ENERGY LICENSING SPECIAL COURSES WITH KENYA ASSOCIATION OF MANUFACTURERS (K.A.M) / MINISTRY OF ENERGY / ENERGY REGULATORY COMMISSION (E.R.C) / JAPAN INTERNATIONAL CO-OPERATION AGENCY (J.I.C.A) / U.S.A.I.D / G.T.Z 2. Practical-Hands- On Engineering Technical Training / Field Work in Industries / Factories for ENERGY Efficiency Auditing / Calibration / Inspection / Installation in many Industries / Mombasa/ Kisumu/ Nairobi / Nakuru / Eldoret 3. K.A.M / E.R.C. / NITA Energy Auditing for Industries Course April 2008 2 JICA / K.A.M / UNDP-- Energy Management for S.M.Es Course 2003 4. K.A.M / NITA / ERC - Biofuel and Solar Technology for Industry Course April 2008 5. K.A.M / ERC / JICA-- Investment Grade Energy Auditing (SMEs) Course 2008 6. K.A.M / E.R.C./ NITA General Energy Auditing for Industry (SMEs) Course December 2008 K.A.M / E.R.C. Green Building and Energy Course August 2009 7. J.I.C.A / NITA / KAM Energy Efficiency Licensing Course (SMEs) Mumias Sugar August 2006..... 8. U.S.A.I.D / KAM Energy Licensing Course (SMEs) Kibos Sugar 2007 9. Supervision of Mechanical/ Airframe / Engines Research Projects for Companies - <u>THE FUTURE GREEN Renewable Energy & BLUE ENERGY Economy</u> Renewable Energy Technologies are : Solar Energy PV Hot Water Heating Systems (SWHS)/ <u>Solar " Electric- Hybrid - Powered " Road Transport Vehicles /Tri - Cycles & Motor Cycles (Boda -Boda) / " SOLAR Hybrid - Powered " Aviation Aircraft Engines / Solar Energy PV Systems Designs & Installations / Bio Gas Energy Systems / Geo - Thermal Energy Systems / Wind Energy / Bio- Fuels / Bio - Mass / / Mini Hydro etc)</u> 10.

<u>INTERNATIONAL NGOS PRACTICAL WORK</u> <u>EXPERIENCE IN CONSUTANCY PRACTICAL TRAINING /</u> <u>ENERGY EFFICIENCY / SOLAR ENERGY PV SYSTEMS</u> <u>DESIGNS / RESEARCH / CAPACITY BUILDING (JICA /</u> <u>USAID / ILO / UNDP / SIDA / NITA / KAM / ERC / VOCTEC /</u> <u>KEBS / JKUAT / KERA . / Strathmore University & Arizona</u> <u>State University - USA)</u> (Mr. Odhiambo Odawa)	<u>SPONSORS / VENUES /</u> <u>TOWNS / HOTELS (Please</u> <u>Refer Certificates)</u>	<u>Date/ days / Year</u>
Industrial Energy Efficiency & Renewable Energy Technology (Solar Energy PV Design & Installations (Off – Grid / Hybrid / Mini – Grids) Advanced Practical Course ERC /GIZ/ Project	The Strathmore University Energy Research Center / ERC / KAM / TVETA / GIZ / KEBS / NITA / KERA	21 st to 25 th Sept. 2015
The International Certificate <u>GEOTHERMAL Energy</u> <u>Efficiency / OIL & GAS Engineering Technical Training</u> Workshop –UP—Stream & Down-Stream Operations Explorations / Drilling / Refinery Processes / Distribution / Inspections / Testing / Calibrations / Measurements /Verifications/ Rating of Machines / Tools / Equipment)	The Japan- JICA / Indian & Kenya Governments Project ERC /NITA /TVETA / KAM /KEBS / KERA	15 th --17 th April 2015
The International Technical Training in Solar Energy PV Systems Designs & Installations (Off-Grids / Hybrids / Mni- Grids) for Educators (T.O.T.) / Energy Regulatory Commission E.R.C. & NITA) Licensing (T-1 / T -2 / T- 3) Course/ VOCTEC USAID / USA / Kenya Project	The Strathmore University & The Arizona State University Training Program / ERC / KEBS KAM / TVETA / GIZ / KERA	July 8 th --30 th 2014
The JICA / NITA / ERC / Solar Energy PV Systems Designs & Installations (Off-Grids / Hybrids / Mini-Grids) International Course for Educators (T.O.T.) / Energy Regulatory Commission E.R.C. & NITA) T -1 / T-2 / T- 3) Course — Japan B.R.I.G.H.T. Energy Efficiency Project	The JKUAT—I.E.E.T. / ERC / KAM /NITA / KERA /TVETA / KEBS /Japan	October 14 th –30 th 2014
<u>CERTIFIED ENERGY MANAGEMENT & ENERGY</u> <u>AUDITING (C.E.M.) International Course</u> <u>A.E.E. / U.S.A. / South Africa / KAM / E.R.C. / NITA)</u>	THE SANKARA HOTEL (Nairobi) & The Association of Energy Engineers (A.E.E. – USA & <u>South Africa</u>)	5 TH - 16 TH /10/2013
<u>Practical ENERGY Efficiency AUDITING Course</u> (KAM / NITA / E.R.C. / KEBS / KERA / Ministry of Energy)	The Pan-Afric Hotel Nairobi	5 th ---11 th -/6/ 2011
<u>Practical ENERGY Efficiency Management & Conservations</u> <u>Course</u> (KAM / NITA / E.R.C. / KEBS / KERA /Ministry of Energy)	The Royal Court Hotel Mombasa	10 th ---16 th -/9/ 2012
<u>Practical ENERGY Efficiency AUDITING Course</u> (KAM / E.R.C. / NITA / KEBS / KERA / Ministry of Energy)	The Sarova WhiteSands Hotel Mombasa	14 th ---19 th -/4/ 2014
Practical PRODUCTIVITY IMPROVEMENT at Work—Places CONSULTANTS Course (Productivity Center of Kenya / JICA/ KAIZEN / NITA)	The Productivity Center/ JICA HQS Nairobi	5 TH —13 TH -/11/ 2013
<u>The Practical ENERGY Efficiency / Insurance / Banking &</u> <u>Finance Course</u> (KAM / E.R.C. / NITA / Ministry of Energy)	Sarova White sands Hotel	12 th ----18 th -/ 6/2013

Practical Energy Efficiency Auditing & Financial Engineering Course (KAM / ERC / KERA / KEBS / Ministry of Energy 0	Mombasa Sirikwa Hotel (Hotel) & Panaris Hotels (Nairobi)	June 2015 & August 2015
1. JICA/KAIZEN SMEs Solar Energy PV/ Industrial Energy Efficiency/Business Management-Trainin	Coconut Grill Hotel, Thika City	20-25 / 08 / 2012
2. JICA /KAIZEN Solar Energy PV Energy Efficiency Business Management Training Programme (S.M.Es)	Kariobangi Light Industries -Nairobi	18 – 23 rd /06/2012
3. JICA/ EPC Export Marketing 9 (S.M.Es)	Nairobi / Kisumu	23 – 24 /06/2012
4. JICA / EPC EXPORT Logistics & Finance (S.M.Es)	Nairobi/ Mombasa	July 2011
5. JICA / EPC EXPORT Trade Training / Energy Efficiency – BEGINNERS COURSE (S.M.Es)	Malindi / Kisii Nakuru	10 – 19/1/2010
6. JICA/ EPC Export Training of Trainers / Energy Efficiency & Solar Energy PV Course (S.M.Es)	Nairobi / Eldoret	28 – 29/ 11/2009
7.		
8. JICA / EPC EXPORT TRADE training – INTERMEDIATE COURSE	Kisumu / Eldoret	10 – 16 /2/2011
9. JICA/ KAM Energy Auditing/ Management (Solar Energy S.M.Es) Energy/ Inspection/ Calibration/ Insatllation	Mombasa / Nairobi	13 – 15/10/2010 14-16 06/2011

