

CURRICULUM VITAE ANDREW AMADI

Family name: Amadi
First names: Andrew
Nationality: Kenyan
Place of Residence: Nairobi, Kenya

Education:

Institution Dates	
Moscow State Academy of Fine Chemical Technology, Moscow, Russia 1997 June 2010	Bachelor or Science Degree in Engineering (Chemical Technology) Certified Energy Manager

Language skills: Indicate competence on a scale of 1 to 5 (1 - excellent; 5 - basic)

Language	Reading	Speaking	Writing
English	1	1	1
Swahili	3	2	3
Russian	2	1	2

Membership of professional bodies:

- Kenya Renewable Energy Association
- Association of Energy professionals –Eastern Africa
- Engineers Board of Kenya
- Association of Energy Engineers
- Association of Biogas Contractors
- Geothermal Association of Kenya
- International Geothermal Association
- Kenya Green Building Society
- Practitioners Network – SE4All

1. Other skills:(e.g. Computer literacy, etc.)

2. Specific experience in the region:

Country	Date from - Date to
Kenya	1997-2017
Lesotho	Jan 2009- March 2009
Zambia, Mozambique and Botswana	Sept 2009 - Dec 2009
Rwanda	October 2017 – Present

Date from - Date to	Location	Company	Position	Description
May 2021 To Present	Nairobi	Kenya Renewable Energy Association	Chief Executive Officer	Day-to-day running of the affairs of the Association ensuring highest corporate governance systems are in place. Leading Advocacy for an enabling environment for Renewable Energy in Kenya. Developing relationships with stakeholders and promoting renewable energy in Kenya and the region. Providing Technical support and carrying out analytical work to be used for advocacy for renewable energy.
May 2018 to June 2021	Nairobi	2030 Water Resources Group (Hosted by World Bank)	Project Advisor	Providing Technical and Strategic Support to the 2030 Water Resources Group on Managing industrial effluent waste and promoting Industrial Water Efficiency Programs for Kenya. Participated in developing a concept note to facilitate investment in water use efficient and pollution reduction from Industries Engaged stakeholders to get buy in for the concept Provided technical support to related activities in improving industrial water use and reducing effluent pollution from industries
April 2018 – January 2020	Nairobi	Human Needs Project (With Support from Rockefeller Foundation)	Technical Expert and Project Management	Developing and installing a community based solar street lighting project in Kibra Town Centre Nairobi. Navigating and providing timely advice and guidelines on the applicable regulations and parties to apply to for the licensing. Ensuring highest standards are met and training is passed on to the relevant community members to run the projects.
November 2017 – March 2019	Ngong Kenya	LDKAfrica/ UNHABITAT	Local Consultant	Part of a consortium to close down the dumpsite in Ngong and set up a full recycling facility to handle solid waste generated in the surrounding area. Review of Technical, Economic, Policy and legislative framework required to make it feasible.
October 2017- December 2018	Rwanda	Inka Consulting Associates/ Enabel (Former Belgian Technical Cooperation)	Energy Expert	Review of the energy components in the Study of the Gender Energy Profile of Rwanda. A study to review the impact of energy on gender and reconcile with the Rwandan Gender Policy. Carried out energy use in 958 households and reviewed how to provide clean energy to meet domestic and productive needs. Identify gaps and make recommendations for a better gender responsive Initiatives for the energy sector.
October 2016 October 2017	Kenya	Proto Energy Ltd (Formerly My Gas Ltd)	Energy Efficiency Consultant	Carried out a comparative analysis of the price points at which LPG will be a cheaper fuel option relative to Wood fuel, briquettes, diesel, Industrial diesel oil, Fuel oil and grid electricity. Did cost benefit analysis of conversion from LPG to other fuels and demonstrated market potential for expanded use of LPG as an alternative to other fuels in the market.

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February 2017 – Present	Kenya	Frederick Fyle Associates	Energy Expert	Reviewing technical aspects of energy proposals seeking financing. Providing advice on opportunities for investment in Renewable energy in East Africa.
July 2017 - Present	Kenya	FreeWork	Partner	Application of the blockchain and smart contracts in ensuring water and energy supply for food production in Arid and semi arid areas.
Sept 2016- Present	Kenya	LDK Africa	Energy Consultant (Contract)	Identifying opportunities for consultancies in energy management, renewable energy and energy efficiency. Developing and implementing proposals for LDK Africa in Eastern Africa. Designed energy efficiency implementation strategy for Basco Paints Ltd
July 2016- Present	Kenya	WECOL EPZ Ltd	Technical Director	Raising capital and setting up a waste to energy plant which will recycle waste polythene bags for production of industrial diesel oil and generation of electricity. Developed business model for distributed use of combined heat and power using agricultural waste products
October 2017- January 2019	Turkana	Centre for Public Health and Development	Energy Consultant	Designed and optimized a solar solution with battery storage to be able to fully provide affordable electricity using solar power for two Maternal and New Born units in Turkana County
April 2016- Present	Kenya	Shika Solar	Partner	A campaign to get base of the pyramid kerosene users to sign up on a mobile phone platform and earn reward points from buying kerosene at designated outlets and then use the reward points to purchase solar lanterns and home systems
May 2016- September 2019	Kenya	Africa Union European Union Energy Program	Technical Expert	Enjoined as a member of the energy efficiency work stream. Developed a matrix of energy efficiency in all interfaces connected to energy security, energy access and renewable energy. Made policy recommendations for the high level meeting on energy regarding end use appliances, finance and entrepreneurship.
April 2016 - Present	Kenya	Milk powder from geothermal project	Principal Proposer	Researching and developing a technical and financial proposal for investment into a manufacturing plant which will use geothermal steam to produce powdered milk for sale in Kenya and for export to the region.
Dec 2015- April 2016	Kenya	Econoler Inc.	Local Consultant (Contract)	Structuring of Energy efficiency lending facility for Chase Bank in Kenya
2014- Present	Kenya	EED Advisory Services	Energy Consultant (Contract)	Energy Audits of All branches of Chase Bank in Kenya, Energy Audit of Rafiki Micro Finance bank branches in Kenya

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2012-Present	Kenya	Syrecon Services Ltd	Lead Energy Auditor	Energy Audits of Slumberland Mattresses, AON House,, Brown's Cheese, KFC Kimathi Street, Nairobi Java House Kimathi Street, Post Bank House, Vegpro Flower Farms, PZ cussions Factory.
Oct 21012 to March 2013	Kenya	CAMCO Advisory Services (Kenya) Ltd	Senior Consultant (Contract)	Energy Audit of KCC Milk Cooling Plants Carried out energy audit for KCC Milk Cooling plants and assessed the efficiency of the processes and made recommendations for improvement in efficiency of their cooling and refrigeration systems.
Oct 21012 to March 2013	Kenya	CAMCO Advisory Services (Kenya) Ltd	Senior Consultant	Energy Audit of Uchumi Supermarket Carried out an energy audit for Uchumi Supermarket in Nakuru and assessed the energy efficiency. Made recommendations for the improvement of the lighting systems to ensuring they were more energy efficient and thus cost effective.
2012	Kenya	Independent Energy Auditor	Energy Auditor	Energy Audit of Safaricom Base Transceiver sites Carried out energy audits for Safaricom sites, assessed equipment efficiency and made recommendations for a network scale energy efficiency system using advanced process control techniques
April 2012 To September 2012	Kenya	Vestas Inc and Self Help Africa	Consultant (Contract)	Energy Use assessment for 6 rural Centres in high wind potential areas of Kenya Conducted an inventory of the establishments that are the main consumers of energy in Kakuma, Kaokol, Loiyangalani, North Horr, Faza Island and Kiunga. Made an energy model of the current electricity use. Assessed the potential and impact of using available wind energy to power the centres, made suggestions for potential productive uses of wind generated power and projections of demand growth for the centres.
January 2012- October 2016	Kenya	Syrecon Services Ltd	Lead Energy Auditor	Energy Audit of Water Companies Carried out energy audits for the Naivasha Water Company, Ololaiser Water Company and the Narok Water Company. Identified areas of losses and inefficiencies. Made recommendations on how to improve efficiency through the use of smart metering and monitoring systems and also applying the use of renewable energy.
January 2012 to July 2012	Kenya	Frankfurt School of Management	Energy Consultant (Contract)	Energy Audit of Tea Factories Carried out Detailed Energy Audits of Tea Factories. Identified Opportunities for Energy Management, Energy Efficiency, Renewable Energy and Co Generation at 3 Factories

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July 2011-July 2012	Kenya	BCECOM-Egis and ECM Centre Ltd	Team Leader (Contract)	Energy Survey of households in Kenya (ESHOK) Team leader in the energy survey of households under the Environment Cost Management Centre Ltd. Assessed household energy consumption of 2,000 households to establish the current energy use patterns and inform the Least Cost Development Plan for Electricity under the Ministry of Energy
2011	Kenya	Independent consultant	Energy Auditor	Energy Audit of Horticulture Group Carried out energy audits of 11 farms and pack houses. Identified opportunities for saving energy, reducing costs as well as reviewed options for captive power generation from process wastes.
February 2011 to October 2011	Kenya	United Nations Environment Programme	Energy Consultant (Contract)	Energy Audit of Kenya Defence Forces Facilities Carried out detailed energy audits of 22 government residential and administrative units. Identified opportunities for energy efficiency and use of renewable energy as well as possible clean Development Mechanism Projects. Prepared Investment plans and a Sustainable Energy policy for the Kenya Defence Forces.
July 2009 To Dec 2009	Zambia, Mozambique and Botswana	Econoler International and The Centre for Development of Enterprise (EU)	Energy Consultant (Contract)	Energy Audits of 18 Small and Medium Enterprises (SMEs) in Zambia, Mozambique and Botswana Carried out Energy Audits of 18 SMEs as part of the Centre for Development of Enterprise, Southern Africa Energy Management Program. The audits included small sorghum milling plant, Fruit juice manufacturing plant, Brewery, Bank headquarters, Large Hotel, small Restaurant, rubber and plastics factory, Beef processing plant, Slaughter house, wheat and maize milling plant, wheat farm, leather tanning plant, edible oil processing plants, condensed milk manufacturing plant, milk processing plant
May 2009- Sept 2009	Kenya	Kenya Association of Manufacturers	Energy Consultant (Contract)	Energy Efficiency Benchmarking Study Carrying out a study to assess the present energy efficiency levels in tea processing, edible oil manufacturing, textile manufacturing and dairy processing industries in Kenya. The findings will form industry benchmarks against which energy efficiency can be compared in the different sectors
July 2009	Kenya	Renewable Energy Ventures	Energy Auditor (Contract)	Coffee Plantation and Processing plant Energy audit assessment of a major coffee plantation and processing plant. Assessing the energy efficiency of the irrigation systems, coffee drying and processing of the dried coffee including resulting and packaging of the final product

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Jan 2009 to April 2009	Lesotho	Econoler International / World Bank	Energy Auditor (Contract)	Water and Sewerage Authority of Lesotho Carried out a detailed energy audit of the entire water delivery and sewerage system in the Kingdom of Lesotho. Made site visits to all pumping sites, took measurements, quantified energy use and Identified opportunities for reducing energy costs.
Oct2008 –Dec 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Off-grid Lodges, Kenya Energy audit expert for carrying out detailed assessment of energy use at all the Wilderness Lodges, off grid lodges. Prepared an energy audit plan for an off-grid site, made visits and assessed energy use, trended daily demand profiles, reconciled observed trend with actual energy use. Identified opportunities for reducing energy costs
2008-2011	Kenya	Independent Consultant	Energy Auditor	Domestic Energy audits Domestic energy audits for more than 10 households. Identifying options for efficient energy use, sizing power back up systems, replacing inefficient electrical appliances. Installation of real time energy monitoring systems. Analysis of billing systems.
June 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Children's Home, Nairobi Energy Audit Expert commissioned to assist the home manage energy costs. Prepared Energy Audit plan. Took measurements and assessed data. Prepared daily load profile. Identified opportunities for saving up to 40% on energy costs
April 2008 to May 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Fine Spinners Ltd Carried out assessment for potential for energy saving at the Fine spinner's Ltd factory. Identified focus areas and designed detailed energy audit
September 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Nairobi Safari Club Energy Audit expert - carried our survey assessment of the hotel with a view to designing a systematic energy cost reduction programme based on improvement in maintenance oriented towards lowering energy costs.
June 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Standard Chartered Bank Carried out assessment of energy use at two branches of the bank and developed a corporate social responsibility based approach for energy efficiency and business sustainability.
2007- 2010	Kenya	Nova Capital Partners	Principal	Nova Capital Partners Focal point for assessing energy investment opportunities in Kenya as well as other possible investment deals in Manufacturing, Agribusiness, retail and construction

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August 2007- October 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	East Africa Portland Cement Company Ltd Technical expert for the assessment of potential for waste heat recovery. Led project to carry out feasibility study of waste heat recovery. Planned energy audit. Took the relevant measurements, assessed overall kiln performance, carried out simulation and benchmarking with other similar sized plants. Identified and quantified potential for saving up to 20% by cogeneration.
April 2007- June 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Associated Battery Manufactures Ltd Technical Expert for carrying out detailed energy audits at two battery manufacturing sites. Identified opportunities for improvement in burner efficiency, rationalisation of electricity tariffs and waste heat recovery from furnaces
March 2007- April 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	East African cables Ltd. Technical Expert for carrying out detailed energy audit at cable manufacturing plant. Planned and executed a detailed survey of electrical power supply and distribution, individual machine efficiencies and light mapping of the entire factories. Identified and prioritised opportunities for energy saving.
September 2007- March 2008	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Githunguri Dairies Ltd. (2007-2008) Energy Expert: Carried out a survey of fuel use and assessed possibility of fuel change to reduce costs.
January 2007	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Mater Hospital Energy Audit expert- Reviewed electricity billing history and tariff analysis, carried out inspection of the key energy cost centres, identified options for relocation of combined heating and power unit. Designed a detailed energy audit to further identify opportunities and develop a management system
Feb 2007	Kenya	Integrated Energy Solutions Ltd	Energy Engineer (Contract)	Kenya Breweries (2007) Energy Audit expert- Reviewed energy use and process systems. Assessed waste management and the options for waste to power using a third party power purchase arrangement
January 2007- December 2011	Kenya	Centre for Energy Efficiency and Conservation	Energy Auditor	Energy Management Awards (EMA) Carried out Technical assessments at the Nairobi Hospital. Eveready Batteries, Spin-Knit Ltd, ASL packaging Division, Bedi Investments Ltd, Uniliver Ltd, Protex EPZ, Brookside Dairies, Tononola Steel Company. Participated in review of assessments and grading of applicants for EMA 2007 to 2011.

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1998	Kenya	Kenya Petroleum Refineries Ltd	Refinery Technologist	Kenya Petroleum Refineries Ltd Carried out a full review of the platinum reforming furnaces and process and identified practical no cost options for reducing the energy costs associated.
January 2007- March 2009	Kenya	Integrated Energy Solutions Ltd	Energy Engineer	ESCO Development Developed a marketing strategy and plan for introducing the concept of performance based contracting for achieving energy savings. Made presentations to key industries and institutions and arranged to implement demonstration projects of the same
April 2010- November 2013	Kenya	Polymer Energy Company (EPZ) Ltd	Technical Director	Waste to Energy Co-founded Polymer Energy Co Ltd. A company that is dedicated to recycling waste tyres, plastics and organics into energy using pyrolysis technology. The project business plan was declared as one of the best clean technology investment opportunities in East Africa at the finals of the Bid Network Clean technology competition held at the Hague in June 2010. Prepared a feasibility study for waste to energy generation in Kenya using large scale biogas technology
March 2009- November 2013	Kenya	Renewable Energy Ventures (K) Ltd	Chief Operating Officer/ independent Distributor	Solar Technology Conducted an assessment of the viability of replacing Kerosene lanterns with a suitable solar lantern. Identified and carried out independent testing of the Sun King lantern. Partnered with its manufacturers, Greenlight planet to introduce the product into the African market. Submitted the product for independent testing under the lighting Africa Project. Sun King was recognized as the best task lighting product in the African market and the second overall best value product. Committed to a long term plan to replace all kerosene lanterns with suitable solar lanterns. Co-ordinated Project plan for the installation of a 5 KW solar system for a school in Trans Mara District, Kenya.
Nov 2011 to Dec 2011	Kenya/Mauritius	Association of Hotel and Restaurant Owners in Mauritius	Energy Efficiency Consultant (Contract)	Energy Manual for Association of Hotel Owners in Mauritius Wrote a manual for energy management of appliances and systems typically used in hotels. Providing useful and concise information to decision makers for procurement and management of efficient energy systems.

Other relevant information (Publications)

1. Energy Efficiency Benchmarking for Key Manufacturing Sectors in Kenya – Edible Oils, Plastic, Dairy, Tea Processing and Steel Manufacturing- Kenya Association of Manufacturers, June 2010.
2. Direct use of geothermal energy for clean manufacturing in Kenya- African Rift Geothermal Conference, November 2012, World Energy Engineering Congress, Washington DC, 2013.
3. Use of Recycling Streams for increased productivity in mass exchange processes- Russian Academy of Sciences- February 1997
4. White paper on Aligning Labour to Energy, Water and Food Production in Arid and Semi Arid Lands using decentralized computing systems to create a shared-agency ecosystem based on the Kazin Protocol to a standard that specifies the application of value-forming labour in production.