Clement Musonda Kankomba

Phone contact: Mobile. +260 974579031 E-mail Address: musondakankomba@gmail.com Address: 40/01 Twin Park, Lusaka, Zambia.

Personal Information

Date of Birth : 04th January 1974

Gender : Male

Marital status : Married since 2013

Nationality : Zambian

Language spoken : English, French, Bemba, Swahili

Career Objective

I am passionate about sustainability, the environment and renewable energy. I would like to use my knowledge of engineering, and experience with renewable energy systems and solar cooking to help promote the use of clean energy. I'm a project engineer at Rosa Solar; working on solar PV development; commercial and industrial; and more in solar home. I'm also designing, sizing and manufacturing efficient solar stoves for the tropics and solar food driers to reduce deforestation and climate change effects. I have proved leadership skills in working with a team in different regions of Africa.

Education History

Institution: University of Lubumbashi

Certificate: Diploma

Program of study: Electromechanical civil engineering diploma

Year of completion: 2007

Institution: University of Lubumbashi

Certificate: Graduate Degree Program of study: Applied Science

Year of completion: 2003

Institution: Lubuye Institute – Catholic Congregation of Oostaker Brothers / Kalemie

Certificate: State Diploma

Program of study: Electrical industry

Year of completion: 1994

Institution: The Technical and Professional Secondary School

Program of study: Industrial Electricity.

Year of completion: 1994

Institution: Bwakya Primary School – Catholic Parish Notre Dame Des Pauvres / Lubumbashi.

Program of study: Primary school education

Year of completion: 1987.

Leadership Experience

RESPONSIBILITIES HELD:

Institution Name: ROSA SOLAR

Job Title: Project Engineer
Period: March 2018 to Date
Nature of work: Voluntary

Responsibilities:

- Manage techniques , marketing and administration & finances departments
- Provide new innovations in the stuff
- Design, size and install all engineering systems (Solar PV systems, backup systems, solar cooking and food driers systems)
- Foster team spirit and encourage good interrelations between local and international staff.
- Provide efficient, safety of the engineering systems.
- Test the engineering systems before the use.
- Provide seminars, conferences, and workshops about solar cooking project to the communities (Schools, hospitals....)

Institution Name: Heliac solar cooker / Denmark

Job Title: Technical partner

Period: November 2017 to February 2018

Nature of work: Voluntary

Responsibilities:

- Provide a new design of Heliac solar cooker
- Building the heliac solar cookers
- Finding the users of the heliac solar cookers
- Installing the heliac solar cookers
- Testing the heliac solar cookers with the users
- After the test; provide the techniques evaluations to the Heliac company of Denmark

Institution Name: Sol Suffit VZW

Job Title: Project Representation Period: August 2014 to January 2017

Nature of work: Voluntary

Responsibilities:

- Representing the project in Central Africa and the Southern region of Africa.
- Organise demonstration and presentation of the parabolic solar cooker, Suniccok model.
- Collaborate with other stakeholders to expand the project
- Provide technical improvement of the solar cooker, sunicook model
- Provide monthly and annually evaluations of the project

Institution Name: Organic Producers and Processors Association of Zambia (OPPAZ)

Job Title: Solar food driers manufacturer **Period:** December 2012 to February 2013

Nature of work: Voluntary

Responsibilities:

- Provide the manufacturing services for solar food driers of the same technical specifications
- Test the solar food driers after the manufacturing.
- Organise the transport services of the solar food driers to the client (OPPAZ)

Work Experience

Institution: ROSA SOLAR
Job Title: Project Engineer
Period: March 2018 to Date
Nature of work: Part -time

Responsibilities:

- Identify and develop potential solar cooking and food driers projects in Zambia
- Design and size the different type of solar cookers (box types; parabolic; heliac...)
- Conduct technical and economic feasibility of solar project; calculation of the potential PV system size and
 costs of envisaged solar PV project, energy cost savings for Commercial and Industrial sector, business
 models and implementation possibilities, identification of suitable implementation/technology partners and
 market-specific implementation knowledge (e.g. regulations).
- Designing and sizing the solar home systems and backup system 5 KW / 48 VDC/20 VAC
- Electrical maintenance; wiring, electrical pumps, assignment on backup system
- Participate in Renewable Solution for Africa seminars in Zambia organized by RES4AFRICA
- Participate in the 1rst summit of small hydro in Zambia organized by VOITH/ Germany

- Participate in the German Training Week about solar PV development organized by GIZ/ Zambia
- Organise the demonstration and the presentation about solar cooking project at the Government Complex in Zambia
- Participate in the workshop about Energy&gender organized the EU and the Ministry of Energy in Zambia
- Participate in energy events such as conferences, workshops and trainings.
- Organise the demonstration and presentation about clean cooking in schools, univertisities...

Institution Name: Heliac Solar cooker / Denmark

Job Title: Technical partner in Zambia Period: November 2017 to February 2018

Nature of work: Part-time

Responsibilities:

- Provide new design of heliac solar cooker with safety aspects.
- Building the heliac solar cooker
- Finding the users.
- Installing the heliac solar cookers to the users.
- Testing the heliac solar cooker with the users
- Provide technical evaluations after the test

Institution: Solar Cooking International / USA

Job Title: Technical partner

Period: January 2017 to August 2017

Nature of work: Voluntary

Responsibilities:

- Data collection of the use of charcoal in Zambia
- Performed feasibility studies on waste to energy in Lusaka as an alternative to the over dependence on charcoal for cooking.
- Research about clean stoves and clean energy in Zambia

Institution: Sol Suffit VZW/ NGO

Job Title: Technical partner& Project representation

Period: March 2014 to December 2017

Nature of work: voluntary

Responsibilities:

- Representing the project in DRCongo and the Southern region of Africa
- Provide improvement to the design
- Provide legal local registration documents of the organization
- Search opportunities of the solar cooking in Zambia with the sunicook model

Institution: ANAMED (Actions for Natural Medicine)/ Solar Energy – Ndola/ Zambia

Job Title: Trainer

Period: January 2011 and November 2012

Nature of work: Voluntary

Responsibilities:

 Organise a training about the usage of solar stoves in Natural Medicine (Theory about solar energy, solar cooking, ...)

- Solar water disinfection , SODIS method
- Solar food driers using the solar box cooker
- Solar cooker, to reduce deforestation and climate change effects...
- Solar cooker, to improve nutrition and sanitation
- Solar cooker; to reduce poverty
- Solar cooker; to save money
- Literature review on the charcoal study
- Stakeholder meetings and discussions on charcoal economics § Publications on charcoal success stories.

Institution: Rotary club Belgium / DRCongo

Job Title: Electrotechnician

Period: June 2008 to December 2010

Nature of work: voluntary

Responsibilities:

- Designer and installer of the solar home PV/ 1.5 KW to Sambwa and Kambikila villages around Lubumbashi town/ Katanga
- Designer and installer of solar pumps in Sambwa and Kambikila villages
- Provide Water and sanitation structures
- Organise seminars and conferences about job creations in catholic techniques school

Affiliations

Member: Anamed International / German and Solar Cooking International Association / USA; Solar Association of Zambia

Conferences and Short Training Courses

 Application of the solar energy in Natural Medicine organised by ANAMED INTERNATIONAL/ Germany, attending from 9th up to 16 th January 2011 at Kafakumba Training Center in Ndola/ Zambia.

- Application of the solar energy in Natural Medicine organised by ANAMED INTERNATIONAL/ Germany, attending from 28th October up to 4 th November 2012 at Kafakumba Training Center in Ndola/ Zambia.
- Youth workshop in leadership quality; drug abuse; carrier guidance; entrepreneurship; HIV and AIDS at Garden Hotel 2013 in Lusaka/ Zambia
- Presentation of Rosa solar stoves project in SAIS pitch at Bongo Hive in Lusaka in July 2018 in Lusaka / Zambia
- Presentation and demonstration of Rosa solar stoves at the Government Complex in August 2018 in Lusaka / Zambia
- Attendance to the training about Renewble solution for Africa at Intecontinental Hotel 27th-28th
 - November 2018 in Lusaka/ Zambia
- Attendance to the First summit about small Hydro organized by VOITH at Radisson Blu Hotel in January 24.2019 in Lusaka/ Zambia
- Attendance at the workshop of Energy & Gender organized by UE at the Government Complex on 4 th April 2019in Lusaka / Zambia
- Attendance at the German Training Week about Project development in PV Solar project Development organized by GIZ from 6th-10th May 2019 at Radisson Blu Hotel in Lusaka / Zambia.
- Presentation and demonstration of solar cooking project at Munali girls secondary School in partnership with Seattle Academy of Science & Arts / USA in July 2019 in Lusaka / Zambia.
- Presentation and demonstration of solar cooking project at East Park Mall exhibition on alternative to charcoal organized by Zesco on 14th November 2019 in Lusaka/ Zambia
- Demonstration about solar cooking project with ZAMSEED in cooperation (Heliac solar cooker & solar box cooker) March 2020 in Lusaka/ Zambia.
- Attendance at the workshop of Gender & Energy by IAEREP at Sarovar Hotel on 6 th October 2020.

- Participation at the 2020 National Innovation Fair organized by NTBC/ UNDP / ZICTA from 2nd up to 3rd December 2020.
- Electrical maintenance at ADANTAGE INSURANCE Company July –December 2021.
- Solar cooking demonstration at Zambian Governance Foundation, 28TH February 2022

RELEVANT COURSE WORK:

ELECTROMECHANICAL ENGINNEERING

- Maintenance Engineering
- Energical Engineering
- HE technical Engineering
- Mechanical Vibration Engineering
- Electrical machinery Engineering
- Cinematic and dynamics of machinery
- Production of Energies Machines
- Mechanical Manufacturing Technologies
- Metallic Construction

Other Modules:

Introduction to Economics, Administration Low; Management; Introduction to Psychology

COMPUTER LITERACY:

Can demonstrate accurate knowledge in the following:

- Microsoft Office packages
- Have basic understanding of the following engineering application software:
- Solidworks
- Matlab
- LabVIEW
- Circuit maker
- General software and electrical installations

Personal Skills and Abilities

PERSONAL SKILLS:

- Honest, fast learner, open minded, ambitious, self-motivated and goal oriented
- Can work under minimum supervision
- Very reliable and willing to learn from others
- Effective communication skills and public relations

- Interpersonal skills
- Excellent attention to detail
- Problem solving
- Excellent team building spirit
- Excellent supervisory skill

PROFESSIONAL SKILLS:

- Manufacturing and marketing of solar driers and solar cookers
- Research and analytical skills
- Proficient in several green energies
- Microsoft Office packages
- Engineering consulting and installation in solar photovoltaic system and solar driers and cookers manufacturing
- Engineering electrical maintenance

Research and Publications

- Clement Musonda. Determination of characteristics in charge of the train-rail 2006/2007
- Clement Musonda , Determination of the transformer capacity in extension area 2008
- Clement Musonda, Clean stoves for the tropics 2013.
- Clement Musonda,, Solar food drying process in Zambia, partnership with Green people organization / Germany, November 2021- January 2022

References

Lulu Chuulu

Marketing manager at the National Technology Business Centre

Cell: +260977259820

Email: Ichuulu@ntbc.co.zm

Akiko Ishibashi

Project coordinator at Heliac solar cooker / Denmark

Cell: +45 22 36 99 11 Email:ai@heliac.dk

Jens Byskov

Facilitator of Heliac solar cooker / Research advisor at the University of Zambia

Cell: +26776550187

Email: jby@sund.ku.dk

Martin Lyambai
 Advisor - Renewable Energy and Private Sector Development

Cell: +260971122459

Email: martin.lyambai@giz.de