



## **EWB Long Term Fellowship Project Mechanical Engineer - Sanergy**

**Role:** Project Mechanical Engineer

**Venture:** Sanergy

**Website:** <http://saner.gy>

**Location:** Nairobi, Kenya

**Start Date:** Training beginning May 7<sup>th</sup>, departure for placement May 27<sup>th</sup>, 2018

**Duration:** 3 weeks of training in Toronto, 12 months in Kenya

### **About Engineers Without Borders Canada (EWB)**

Engineers Without Borders Canada (EWB) is a Canadian NGO that invests in people and ventures to create a thriving and sustainable world. Bolstered by its network of 40 chapters and 1300 members, EWB provides seed funding, talent and mentorship to social enterprises throughout Sub-Saharan Africa. For more information on EWB, visit <http://ewb.ca>.

### **About the EWB Fellows Program**

The EWB Fellows Program exists to develop a cadre of Systems Change Leaders by equipping them with the opportunities, competencies and skills needed to build a more thriving and sustainable world. Every year we recruit 25-30 outstanding people for the 12-month Fellowship, placing successful candidates in one of our early-stage Ventures located throughout Sub-Saharan Africa. This Fellowship opportunity is with Sanergy and is based in Nairobi, Kenya.

### **About Sanergy - Black Soldier Fly Production**

Sanergy's mission is to build healthy and prosperous communities by making urban hygienic sanitation affordable and accessible for everyone, forever, starting in the informal settlements of Nairobi, Kenya. We build a network of high-quality, low-cost toilets in urban slums, safely collect the waste from the communities and treat and convert it into useful end-products, such as organic fertilizer and protein rich animal feed from Black Soldier Fly Larvae (BSFL).

We reduce the cost to provide full sanitation value chain services (containment, emptying, transport, treatment and disposal/reuse) by leveraging market forces - the agricultural inputs sector - willing to pay for high-quality waste-derived end-products.

We are currently scaling up our processing facility to increase and optimize our production of animal feed. This scale up includes the construction and startup of a production facility to



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produce 300 tons of animal feed per month. This facility will be the first greenfield insect animal feed production facility from insect waste in Africa – a unique opportunity!

### About the Role

As a Project Mechanical Engineer for Sanergy, your responsibilities will include:

- Commissioning and installing equipment for the full scale factory
- Complete detailed design of production and processing equipment
- Managing procurement, installation, commissioning and operationalizing loading, unloading, processing and containment equipment for the full scale plant
- Developing process flows and procedures for full scale operations
- Complete risk and safety assessments on plant and adjust designs accordingly
- Supporting installation, commissioning and operationalization of other units
- Working with the project team, consultants and contractors to enable the design, implementation and operationalization of equipment for site
- Mentoring and training Sanergy engineers on best practice, specifically in equipment selection and installation and in some cases, design

Sound exciting? Here's who we are looking for.

### Skills & Qualifications

**Qualifications:** BSc Mechanical Engineering required, professional certification ideal.

**Experience:** At least 3 years of experience required. Experience with manufacturing build projects, equipment design and procurement is ideal.

#### Skills:

##### *Required*

- Ability to read and update mechanical drawings for equipment
- Strong analytical ability to tie design to business success
- A pragmatic innovator – will not reinvent the wheel, but will find new ways to use it
- Strong quantitative analysis required
- Ability to troubleshoot equipment faults and failures

##### *Desired*

- Strong communication skills



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- Design, installation and commissioning of industrial equipment
- Compilation of specification sheets
- Comfortable engaging with contractors and consultants
- Design, installation and commissioning of equipment, ideally from the waste management industry or manufacturing industry

#### **Behaviours/Character Traits:**

- Doesn't stop at the stock standard solution – looks for creative ways to solve problems
- Can handle abstract problems and generate a range of possible solutions
- Able to properly weigh up risk, cost and time tradeoffs
- Resilient to set backs, contingency plans
- Flexibility – able to adjust to shifts in scope and timeline
- Able to identify personal shortcomings and limitations and close those gaps
- Strong autonomy – can self-direct and manage own deliverables and timelines

Please note: You must be a Canadian citizen, permanent resident, or landed immigrant in order to apply. No exceptions.

#### **Compensation**

All costs relating to the placement are either paid for directly by EWB (airfare, insurance, vaccinations, trainings) or indirectly through a living stipend, which covers food, living expenses, local travel, etc. Fellows also receive an honorarium that can be used to assist with repatriation costs that is provided after completion of 12 month contract. The stipend covers basic living expenses for a modest lifestyle in your placement country. It is not likely that you will be able to use the stipend to cover previous expenses (ex. student loans). However, EWB will do its best to support you in extending the non-repayment period on student loans if necessary.

Additionally, EWB offers a range of benefits including insurance, a settlement allowance, professional development opportunities, and more.

#### **Application Instructions**

Submitting your application for the EWB Fellowship involves two steps:

Step 1: Under the subject line “Project Mechanical Engineer - Sanergy”, submit your CV/Resume to [lfrecruitment@ewb.ca](mailto:lfrecruitment@ewb.ca).



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Step 2: Complete the [following online application form](#).

We **highly encourage** applicants to apply for more than one role as this is a highly competitive program. If you would like to submit your candidacy to more than one role, please fill out separate forms.

Applications will be reviewed, and interviews scheduled on a rolling basis, so please submit your application as soon as possible. If the posting is still on our website, consider the role available.

For further detail about EWB, please refer to our [website](#).