

An Energy-Efficiency Engineer on his Way to the Motherland

Every year, thousands of young brilliant African minds leave their homeland to go overseas. In a 2001 B.B.C. article, it was reported that about 23,000 doctors, university professors, engineers and other professionals have left the continent annually since 1990¹.

They leave for several reasons, including exploring a different way of life, advancing their education in technical fields at the more advance and prestigious universities, or to fleeing civil war at home.

Many that leave have a strong desire to return home and make a living using these newly acquired skills and resources gained from their overseas educations. They desire to find solutions to the needs of their communities, including fresh water, safe shelter, peace, social order and reusable energy.

I, Lionel Metchop, am one of these ambitious and dedicated young Africans. I am a graduate of Binghamton University with a Bachelor of Science in Mechanical Engineering (2004), and a graduate of Arizona State University with a Master of Science in Mechanical & Aerospace Engineering (2007). When I arrived to the U.S. in December 2000, I understood from the start that for Africa to stop relying on foreign aid, these skilled Africans who received their advanced education outside of their native country must be ready to return home. They must be ready willing and able to assist in the development of their communities by any means necessary. Those who have been educated overseas have developed and gathered great networking alliances with very powerful and globally conscious companies which have enabled them to financially care for their families back at home. As a result of this newly found financial freedom, many individuals face the challenge of leaving a more adjustable and convenient environment for one that's not so convenient. After much thought and discussion, I have decided to be one of those few and return home to serve my community utilizing these skills, resources, and networks that I've obtained from my American education and experience. I intend to be an active member in my community by focusing these skills into the energy sector.

At a time when the western world is facing an energy crisis, Africa too has been facing a similar crisis due to extreme droughts leading near-empty hydroelectric barrage reservoir, coupled with aging equipment and facilities, lack of investment in the energy sector, and many more. Commendable efforts have been deployed by African governments to address the current shortage in electricity availability, including:

- Increase in energy production capacity. In Cameroon for example, the production capacity went from 763 MW to 934 MW over the past 4 years.
- Minimization of blackouts through rotation of electricity between customers
- Investment promotion in Africa's energy sector

Such initiatives require a continuous supply of qualified labor. However, there is a significant shortage of qualified project managers, researchers, technicians and engineers in this field to successfully facilitate the solutions initiated by the government. For example in my country of Cameroon, with a population of about 17,795,000, there are less than 100 individuals who graduate with degrees in Mechanical and Electrical Engineering. Knowing this, the objectives of my journey to Cameroon are:

1. To incorporate the training of engineers and technicians and apply their skills to the energy efficiency and sustainability market through seminars and workshops
2. To consult with local government and businesses in addressing the current shortage of energy, and the long term management of energy supply and demand
3. To work within the business community and increase the market availability of energy efficient appliances

To achieve these objectives, I trained over the past 4 years in the United States in the following ways:

- Academic experience as a scientific researcher at Arizona State University www.asu.edu
- Professional experience as an energy-efficiency engineer for Lincus, Inc. www.lincusenergy.com
- Entrepreneurial experience as a service provider in potable water and waste recycling www.watelsolutions.com
- Cultural contributions as a musician for the West-African musical band Africa Tam-Tam www.africatamtam.com

Community Service as leader in various student organizations, including the National Society of Black Engineers (NSBE) www.nsbe.org and African Student Association (AFSA).

I thank you for all the support you have given and continue to give me by attending my fundraising banquet and by putting me in contact with people you believe will help me to succeed in my African journey.

If you are interested in keeping abreast of my progress send me an e-mail to info@watelsolutions.com with “Go back and Serve” in the subject line.

¹ <http://news.bbc.co.uk/2/hi/africa/1605242.stm>