



# Energy Assistance NEWSLETTER

## N° 22

### Sept 2008

## **GDF SUEZ Energy Services Belgium mobilized**

## **Assistance and training mission for the charity work *Cheche* in Bukavu**

### ***Cheche* (« sparks » in Swahili)**

### **A tremendous movement**

Father **André de Ridder**, founder of « *Cheche* » in 1963, with the students of the *Bukavu* College, by choosing the word “spark” for this charity, wanted to mean that by giving training to young people, one can ignite little by little a new fire, a new hope, a new dynamism in the life of deprived and hopeless young people.

The teachers have no more correct equipment to teach to their young student the elementary basic training for a profession. The area is very deprived, poverty and lack of means are obvious.

This social action welcomes the children of the street of *Bukavu* (border city in the eastern part of D.R. Congo, on the shores of a beautiful lake), feeds them, takes care of them and, today, specifically teach them a job in order for them to be autonomous in their future adult life. These trainings consist of joinery (but decreasing due to the number of people working on wood), welder, electrician (this is a new section) and mechanics (car, engines etc...). More than 1000 young people have been trained and 200 are currently following a course. However, during the rebellions and the raids of foreign troops, the two training workshops have been devastated and the material “taken away”.

Energy Assistance decided to support this initiative by delivering material and coaching. We contacted many affiliates of the group to find the long-term necessary support, to collect equipment and help the instructors to better prepare the young people to the basic technical services professions.

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*Bukavu*



*Fabricom-GTI* and *Axima Services* joined the project and **Xavier Sinechal**, the Managing Director of *GDF-SUEZ Energy Services Belgium* (composed of the business units providing *Energy Services* of the Group in Belgium) brought us his full support and the one of his teams.

An internal coordinator, **Pierre Evrard**, was designed and the collection of equipment was initiated through internal communication and participations to management committees. Articles have been published in *Yes* (*Axima's* newsletter) and *What's Up* (*Fabricom*), letters and courier have been circulating. A message was sent to find volunteers ready to go and teach new techniques in welding, mounting, electricity and to assist the instructors.

## 63m<sup>3</sup> of equipment

Today, a container of 63m<sup>3</sup> of equipment has left *Antwerp* end of August and is sailing towards *Dar es-Salaam* (Tanzania) before being loaded onto a truck that will go to *Bukavu*. Furthermore, Energy Assistance found, in France, in *Elyo France* (member of *SES France*) a 50 kVA generator (the current generator is 40 years old and burns more oil than gasoil).

## Training Instructors

Ten volunteers applied and have been trained to do their first training mission in Africa. Four of them, accompanied by Pierre Evrard and the project developer will leave for *Bukavu* during the last quarter of 2008 to unload the container and start immediate training. Several further missions are planned to train the instructors and teach the young students other ways to work and develop techniques, in line with the means available to them today.

Security, which is of utmost importance for *SES*, has not been left aside. The training of instructors together with the support delivered by IT in developing and following up of projects are taken into account thanks to the experience and the skills of the men of *SES Belgium*.

When I first met them, I was impressed by the generosity of the volunteers as well as by their willingness to share and help, and by their social responsibility, although they do not underestimate the difficulties, which wait for them along the shores of the *Kivu Lake*.

## Teams mobilize

A wonderful project gets realized, teams of the Group personnel get mobilized with the support of their management and Energy Assistance meets its commitments: to bring help to people in need, share our techniques and develop sustainable projects.

Thanks to **Xavier Sinechal**, to **Pierre Evrard**, to the teams of *Fabricom* and *Axima* in Belgium. We are impressed by your contribution.

**Jacques Bérard**  
Project Leader



A part of the equipment shipped by container; here the 50 kVA power unit

### **Dibi Banaa, Yeelen nana** (“Darkness gone, Brightness come”)

*Bamako, July 4th 2008, 9 o'clock.  
Hello Julien, Olivier speaking; I am waiting at the bus stop to leave for Koutienso; my colleague from Morocco did not arrive, I will manage on my own.*

Besides being grateful for this information and for **Olivier's** decisive approach in these unforeseen circumstances I hoped that this short mission (one week) would yet be brought to a fruitful end.



The **CSCOM** (Centre de Santé Communautaire) **Kanuyaso** (Koutienso) is positioned between the towns of *Bla* and *San*, about 250 km or 6 to 8 bus hours from **Bamako**, Mali's capital. The centre includes a dispensary, a maternity, a nursery and a centre for the promotion of women. It is the



*On the road...*

health centre for about ten villages in the surrounding area, for a total of 8000 inhabitants, but patients often come from much farther.

The *Kanuyaso* centre receives about 25000 patients per year and provides both curing and preventive (vaccination) services; on average 60 babies are born there each month. The nursery hosts about 150 children and finally some hundred women follow an alphabetisation, health and caretaking course.

This centre was established on explicit request and with the help of the village *Koutienso* and is lead by **Sister Suzy Spaenhoven**, nurse and charity sister. The other nurses and assistants are of African origin, the midwife and the dentist are local villagers who have adapted their traditional practice as much as possible to modern medicine.

From Belgium this **CSCOM** is supported by the non-profit organisation **Fifala** (little fan in *Bambara*) ([www.fifala.be](http://www.fifala.be)).

Early in 2007 **Fifala** sent an application to Energy Assistance in order to repair and expand an electric PV power supply of the centre in an adequate manner. A fortunate coincidence made it possible for two E.A. colleagues on a mission mid 2007 to visit the centre in *Koutienso* during the research phase. This visit provided an excellent report on the conditions of the electrical equipment defining the requirements on the ground of which the nature of the intervention and the needed equipment were identified.

Another fortunate surprise was the fact that **Fifala** wished to send a full container door to door to *Koutienso* and that this container could also

transport the PV equipment purchased by E.A.

The transport (maritime and over the mainland) to *Bamako* proceeded smoothly. An unexpected delay occurred in *Bamako*. In spite of our vast experience and meticulous precautions another six weeks passed before the container could cover its final trajectory to *Koutienso*. From this moment on we had regained full control. Because of the great heat at the end of the dry season and the absence of sr Suzy we decided to start the mission early July.



*Practical initiation course*



*The dispensary now takes advantage of independant electricity supply by solar panels*

Olivier could count on an energetic group of assistants eager to learn (They called themselves the local “*Dream Team*”). He taught them with pleasure an elementary formation and they helped him to complete the mission, initially foreseen for **two**, successfully on his own.

In the quarters of the sisters the complete electrical wiring was reviewed, the lighting was replaced, the batteries and regulator were changed, and thanks to the inverter some additional 230 VAC wall sockets were installed. The solar panels (originally in the

shadow of the surrounding wall) were lifted in order to fully capture the available sunlight. Also the batteries and the power supply of the refrigerator were replaced and the wiring was corrected.

Thanks to the local enthusiasm everything went so smooth that, in spite of a friendly invitation for the 21<sup>st</sup> of July reception from our embassy in *Bamako*, Olivier rather celebrated this holiday in his own country. In the mean time he can think back with satisfaction to his short but intense ex-

perience in *Koutiense* that makes the sun shine day and night:  
*Tlé bè, su ni tié!*

**Olivier Debaets, volunteer**  
**Julien Smets, project leader**



*Farewell dinner with the « Dream Team »...*

# Evaluation of the Hydraulic Power Plant of *Lulingu* (D.R. Congo) as experienced by a trainee student

## After 11 years of war

Energy Assistance received in March a request by *Urafiki* (non-profit organization) for the evaluation of a hydraulic power plant of 700 kW in *Lulingu*, eastern part of Congo.

The area went through a period of 11 years of war that ended in 2006. The villages are isolated and the population lives under the poverty level. But **Monseigneur Simon-Pierre**, Vicar of the *Kasongo* diocese and initiator of the project, keeps hope and tries with dynamism and perseverance to pull the populations out of poverty.

In order to evaluate the project, E.A. decided to send an expert (**Guy Bemelmans**, specialist in hydroelectric installations by *Electrabel Generation*) and a novice (myself, last year student engineer in mechanics and trainee by E.A.).

We were accompanied by **Serge Lammens**, previous director of the *Sominki* (Mining Company of East Congo and owner of the *Lulingu* Power station which was nationalized and renamed *Samika*). Serge knew quite well the area for having lived there most of his life. Our purpose was to make an assessment of *Lulingu* power station condition and of the production capacity of the mechanical workshops located in *Kalima*.

## From theory to practice

Two weeks before our departure I had to apply my theoretical knowledge to familiarize myself with hydroelectric power stations and learn the difference between a “*Pelton*” or a “*Francis*” turbine. Slightly difficult exercise at the beginning but very rewarding thereafter. So we left, Guy, Serge and myself on July 17<sup>th</sup> for

*Kigali* (Rwanda) where a member of *Kasongo* diocese would accompany us to *Bukavu*, the next day. The Bishop, **Monseigneur Kaboy**, and the Vicar, Monseigneur Simon Pierre, who came with us all along the way to *Lulingu* and *Kalima*, warmly welcomed us. We also met some representatives of the state who showed their support to the mission.

July 19. As the roads were unfit for motor vehicles, we had to take a small plane to *Lulingu*. We landed on a 500-meter long airstrip in the middle of the rain forest. Every travel to *Lulingu* had to be done by foot or two-wheel vehicles, so a dozen of motorcycles were waiting for us to transport us to the village through paths which would have been considered unfit in Belgium. We settled in the house of **Father Serge**, with members of the Parish of *La Hulpe* who stayed during the month of July in *Lulingu*.



Our volunteers together with the power plant staff

## Pitiful technical conditions

We had two days to make the assessment of the Power station, which was built in 1955, and still in operation although at low regime (only one of the two turbine runs and produces 80 kW and more than half of the energy produced is lost by the grid). The energy arriving at the houses is of bad quality (voltage varies between 80 and 150 V depending on the period of the day).



*Visiting the Lulingu workshops*

We nevertheless took the time to walk along the whole water pipe (which ended up to be a beautiful 17km walk, on broken paths), and spent the whole morning at the power station.

Teamwork helped a lot. While Guy was observing the damages, I was noting down all possible details and photographing the installations. They have suffered from the weather and from the lack of maintenance during the war, which has left them in a pitiful condition. We quickly noticed that important works would be required to restart the whole power station. Furthermore, the population although welcoming, did not seem very interested in its rehabilitation.

July 22. We had to leave for *Kalima* where we met the director of *Sakima* and visited the mechanical workshops. They had been looted and no more of the needed tools or maintenance material were available to fabricate the pipelines for the power station: big disappointment! This visit was nevertheless the opportunity for Serge to meet again with his workers who showed great affection for their former Director. We drove back to *Bukavu* on July 25 and took a plane back to *Kigali* on the next day. And so ended up our mission of only 10 days, but fulfilled completely.

## A unique experience

Back to *Brussels*, I wrote a report describing in details the condition of the

installations, the repairs to be performed and a budget for the next steps. For that, Guy helped me a lot, as well as **Jean-Pierre Germeau** and **René Lambeau** (who helped me for the civil work details), without forgetting the nu-

merous colleagues of E.A. who helped me by phone or e-mail. As we had expected, the budget is far beyond the means of E.A. This motivates me to be as complete as possible in my report, which will be precious for *Urafiki* in order to collect funds elsewhere.

Thanks to this first experience in the world of cooperation, I learned the numerous difficulties that appear where one does not really expect them. Finally I experienced the life/work as an employee (getting up at 7 o'clock during two months; not easy when used to the student life). Finally, this training will have been a unique experience, which will often be useful for me, and I'm not ready to forget it.

I would like to thank the Energy Assistance team to have welcomed me so warmly and to have been available for me during my training period. I hope that other students will have the same possibility to work on a project that will fascinate them like this one. And, as most of you know, once we have worked on a project with Energy Assistance, we only want one thing: to start again.

**Hilario Saenz Palomeque**



*Hilario Saenz together with the children of Lulingu*

## Success for Claude Gastout at the Tractebel Engineering Forum

On September 18th, some 125 Tractebel Engineering colleagues attended the presentation of the GOMA *Ngangi Centre* by project leader **Claude**. It was the occasion to remind the persons present of Engineering's contribution to the success of this project (more than 50% of the funding). **Xavier** opened the conference, describing the context of the project, while **Roland** concluded summarizing recent E.A. actions and some current projects.



## Report Board of Directors 19.06.2008

### New project's approval

Country	Name	Description
Burkina Faso	<i>Boni 1</i>	Restoration of the PV installation of a health center
Mali	<i>Heremakono</i>	Electricity supply (PV) for a health center and a water pump
Togo	<i>Dzogblakopé</i>	Electricity supply (PV) for an agricultural and pastoral education center
Togo	<i>Kati-Akplolo</i>	Electricity supply (PV) of a health center and a school

**Roland Rosseel**

**ENERGY ASSISTANCE** needs its **MEMBERS'** support.

For Belgium The annual membership fee is **€ 20** for full members and **€ 5** for associated members. (Please send your contribution to our bank account number ING **310-1675876-93** - IBAN: BE98 3101 6758 7693 - BIC: BBRUBEBB).

**IMPORTANT** : In the message with your payment, please mention the amount being paid for membership (€ 20 or € 5) and/or the amount of the donation. The donation is tax-deductible and you will receive a tax certificate for any donation of **€ 30** or more. The membership form can be downloaded from the site (<http://www.energy-assistance.be>) or can be obtained from the association.

For France, Every one who would like to join EAF can do so by sending a subscription of **€20** by cheque made out to **ENERGY ASSISTANCE FRANCE** at 1, Place des Degrés, 92059 Paris La Défense. Please let us have your address details so that we can send you a tax receipt (all donations and subscriptions to EAF are tax deductible in France up to 60%).

**Thank you in advance.**

**REMINDER**: Please send any changes in your personal data (address, telephone number, e-mail) to **Sabine Baeten**.



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