Development of a National Energy Efficiency Policy, Strategy and Action Plan

in Cameroon

Energy Efficiency Dialogue Forum Report – Yaoundé 25/04/2013

August 2013

This study has been elaborated on behalf of Electricity Sector Regulatory Agency (ARSEL) – Cameroon, to develop a National Energy Efficiency Policy, Strategy and Action Plan.

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Acronyms and abbreviations

ARSEL	Electricity Sector Regulatory Agency
EE	Energy efficiency
EUEI PDF	EU Energy Initiative – Partnership Dialogue Facility
VIP	Very important Person

1 Context

The Energy Efficiency Dialogue forum was organised the 25th of April 2013 in Cameroon, by the EU Energy Initiative Partnership Dialogue Facility (EUEI PDF) and the Agence de Régulation du Secteur de l'Electricité (ARSEL) in close collaboration with the Cameroonian Ministry of Energy and Water in charge of Natural Resources (MINEE) and the EU delegation to Cameroon.

As a dialogue forum, the event brought together the EE project stakeholders to facilitate exchanges and to select priorities work at national level.

About hundred representatives from the different sectors attended the event, among them were the energy efficiency business practitioners, civil society, research and financial institution representatives from Cameroon seeking a platform for relevant, strategic information and knowledge exchange, business-to-business partnerships and linkages as well as investment opportunities.

The present document gives a brief report of the forum, and presents also the lesson learnt and recommendations on additional activities required for the EE project.

2 Keynote speeches

The first half of the day was mainly focused on the speeches of some of the invited VIPs. The following minutes of the event includes the speeches as attached or embedded files.

Timing	Day 1 –Keynote Speeches	File attached
09:00 – 09:15	Welcome address by Jean Pierre Kedi – *General Manager, ARSEL* A welcome address was made by the GM of the ARSEL, stressing the importance of the EE for the government of Cameroon, and thanking the EUEI PDF for the technical assistance provided to support the ARSEL in the development of the National EE Policy, Strategy and Action Plan.	Discours DG Cérémonie d'ouverture FORUM
09:15 – 09:30	EUEI PDF Introduction by David Otieno – *Project Manager, EUEI-PDF* In this presentation, the EUEI PDF Project Manager explained the objective of the EUEI PDF and the conditions to obtain the financial support of this facility. He also described the all the steps of the EE project of Cameroon	see file EUEI_PDF_Presentation_Cameroon dialogue event_Speech_2013_1.pptx attached
09:30 – 09:45	EU support to the Energy Efficiency actions in Cameroon by H.E. Raul Mateus-Paula – *EU Ambassador, Cameroon* In his speech, the Ambassador stressed the importance of the energy sector in the cooperation with Cameroon, and underlined the efforts achieved through the energy facilities and the EIB for the Lom Pangar project. The Ambassador expressed his full support to the EE project in Cameroon and the availability his services for the future opportunities discussions.	discours_CDD-25-04-2013.doc
09:45 – 10:00	Opening remarks by H.E. the Minister of Energy The Minister has a last minute obligation and therefore, was unable to attend. The attached speech was prepared in coordination with the communication services of the ARSEL and the energy ministry.	EE Dialogue Forum - Projet de Discours

10:30 – 11:00	Energy Efficiency Experiences in Cameroon by Prof. Thomas Tamo – *Deputy Director, ENSPY* As a representative of the main engineering school of Cameroon, Prof. Tamo presented the status of the EE actions in the country and the different existing barriers to an efficient use of energy.	
11:00 – 11:30	Experiences on Energy Efficiency – Uganda by David Otieno – *Project Manager, EUEI-PDF* The EUEI PDF Project Manager described the EE experiences for the Uganda.	

3 Interactive parallel sessions

The interactive parallel sessions were organized as focus group discussions on EE for the Households & end-user equipment, Building and tertiary sector, industrial sector and Financial issues. The stakeholders included the manufacturers, the consultants, the universities and government representatives, the international institutions and the civil society.

The parallel session exchanges were done on the EE technical, regulatory, economic and financial aspects.

3.1 Industrial sector

Table 1: Interactive parallel session – Industrial sector (Expert: P. Garnier)

Issue	Summary
Technical Aspect	• Lack of EE engineering skills in companies. • Involve EE consultants to optimize the energy design of buildings and industrial facilities. • Disseminate efficient equipment (engine, compressor …), and more generally, promote the optimizing of equipments that are large electricity consumers • Industrial upgrading (ongoing development of a program supported by the Ministry of Industry). • Increase the energy supply and ensure the guarantee of electricity access and quality to the industrial sector.
Regulatory/normative aspects	• Develop energy efficiency policies. • Define a proper regulatory framework. The Electricity Act of the 14/11/2012 defines the principle of Energy Efficiency, but implementing regulations have not been promulgated yet. • Need to develop a normative framework. Develop energy management systems such as ISO 50001 and standards on performances of industrial equipments.
Economical aspects	• Adapt the cost of self-generated electricity • Develop a national feed-in tariff strategy and review the profitability of the self-producers

Issue	Summary
Funding	• Mobilization of donors in order to develop funding mechanisms for EE projects and support programs to studies. • Development of public-private partnerships to finance investments by energy savings (private firms and ESCOs).
Academic aspects	• Building of a training programme for the industrial energy experts • Strengthen the R&D capacities of companies in the energy efficiency field.
Other	• In order to support the Energy Audits in the industrial sector, develop programs with implementation at institutional level (eg continue audit programs of ARSEL)

3.2 Household and end-user equipments

Table 2: Interactive parallel session – Household & End-user equipments (Expert: G. Njoua)

Issue	Summary
Technical Aspect	• Development of a building materials national database • Promote the development of solar based water heating system • Promote the use of PV for the common parts of the residential building • Increase the energy supply and ensure the guarantee of electricity access and quality to the industrial sector.
Regulatory/normative aspects	• Develop energy efficiency policies. • Building capacity of the testing and control agencies • Improve the contribution of the decentralized authorities in the construction process • Improve the construction legislation with the EPB (Energy performance of Building) code • Promote the use of PV for lighting • Reinforce the authority of the control agencies for EE of the electrical equipment • Develop an end users equipment certification/labelling system • Improve the product import legislation

Issue	Summary
Economical aspects	• Removing pricing barriers for local building material • Develop a subsidies or taxation mechanisms for the building envelope • Developing awareness on the type of building materials, their cost and implementation mode • Creation of an effective market of local materials • Reducing the pricing barrier for the end-user equipment • Developing awareness on the EE for the end user equipment • Improve the end-user equipment labelling system
Funding	• Mobilization of donors in order to develop funding mechanisms for EE projects • Development of PPP to finance EE investments (private firms and ESCOs).
Academic aspects	• Training and refreshing capacity of civil engineers and architects • Development of the EPB evaluation tools • Training of electrical, mechanical and electro-technical engineers on the selection and installation rules and standards for the end-user equipments • Development of the national test labs for the end-user equipment
Other	•

3.3 Losses in electricity production and distribution

Table 3: Interactive parallel session – Losses in electricity production and distribution (Expert: E. Ngueha)

Issue	Summary
Technical Aspect	• Development of a national plan to minimise the transmission and distribution losses
Regulatory/normative aspects	• Development of a better consumer pricing strategy • Implementation of the IPPs regulation, capacity building of national actors • Development of an independent national TSO (transport/transmission system operator)
Economical aspects	• Development of the energy bill reviewer expertise (may be included in the auditor tasks) • Development of the awareness campaigns on power factor optimization, peak power demand, an peak and off-peak usage time • Increase the collaboration with the private sector for modelling and tooling development
Funding	• Development of PPP mechanisms for projects and investments financing on losses on electricity production and distribution

Issue	Summary
Academic aspects	• Power production, transmission & distribution training and refreshing capacity of electrical engineers as independent auditors
Other	•

3.4 Building and tertiary sector

Table 4: Interactive parallel session – Building and tertiary sector (Expert: A. Kemajou)

Issue	Summary
Technical Aspect	• Development of a national database of building materials • Preconizing the types of HVAC and lighting equipments, including the performance monitoring system; • Development of the local guidelines for the energy audits and control;
Regulatory/normative aspects	• Development of EE regulation for the buildings and tertiary sector; • Integration of EE measures in practices and projects in the tertiary sector; • Definition of an energy related national building's classification and labeling system; • Elaboration of a local equipment certification and labeling system.
Economical aspects	• Develop a subsidies or taxation mechanisms for the building envelope improvement • Creation of an effective market of local materials • Reducing the pricing barrier for the end-user equipment • Development of a national energy audit campaign for the public buildings
Funding	• Development of PPP mechanisms for EE projects and investments financing
Academic aspects	• Training and refreshing capacity of civil engineers and architects • Training of electrical, mechanical and electro-technical engineers on the selection and installation rules of end-user equipments • Development of the national test labs for the end-user equipment
Other	•

3.5 Energy efficiency financing issues

Table 5: Interactive parallel session – EE Financing issues (Expert: I. Tayabi)

Issue	Summary
Technical Aspect	• Development of the financial guarantee and risk management tools for EE projects • Involvement of the financial sector in the EE in Cameroon through a clustering approach (activity sector and type of users)
Regulatory/normative aspects	• Development of the financial mechanism to support the equipment and materials providers • Elaboration of a green finance strategy incorporating the financial sector in the transformation process to low-carbon and resource-efficient economy • Removing financial barriers to the development of EE projects in Cameroon • Preparation of the procedures manual for the ESCO development and implementation
Economical aspects	• Creation of an effective market of local materials and end-user equipment • Development of a national EE campaign for the financial sector and venture capitalist
Funding	• Development of PPP mechanisms for EE projects and investments financing • Development of the financial sector interest on the EE business opportunities, actually perceived as high transactional cost and very risky
Academic aspects	• Training and refreshing capacity of financial analysts on EE in Cameroon • Training and capacity building for the potential EE investors (on economic issues likely to make an investment project bankable) and the banks or financial institutions (on the payback ad profitability of the EE technologies)
Other	•

4 Closing remarks

16:15 – 17:00	Closing discussion by Bernard Jamet – *Project Leader, IED* The EE Project Leader concluded the day by a speech summarizing all the findings and inputs of the attendees during the parallel sessions, and invited the different stakeholders to provide more inputs during the workshop. Closing Remarks by Walter Englebert, *Portfolio Manager, GIZ Cameroon* The GIZ representative stressed the importance of the private sector in the implementation of the EE project in Cameroon. He also described the role of the financial sector as a facilitator in the realization of the EE projects in all the sectors.	Closing Remarks EE Dialogue Forum_DOrev

5 Lessons learnt, recommendations

Despite the absence of the Minister in charge of Energy, the EUEI PDF considered all the results of this first day to be above the expectations. The different stakeholders expressed their satisfaction about the initiative of the ARSEL to develop a national EE policy, strategy and action plan, which is another important step toward the load shedding problem resolution in Cameroon.

The organisers also agreed to transfer most of the next forum/workshop logistic management to the ARSEL, with the support of the local partner.

EUEI PDF is an instrument of the