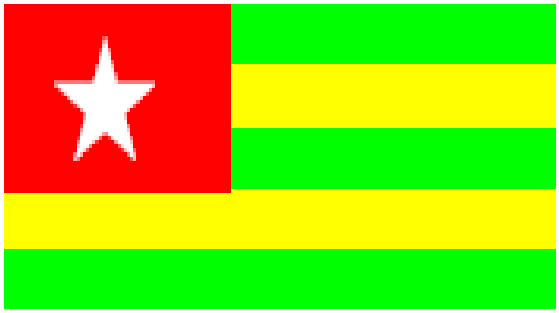
EXPRESSION OF INTEREST FOR CLIMATE INVESTMENT FUNDS PROGRAM

SCALE UP RENEWABLE ENERGY PROGRAM IN LOW INCOME COUNTRIES (SREP)



TOGO

I / Country and agency submitting the expression of interest

COUNTRY:	**TOGOLESE REPUBLIC**
Governmental Agency:	**MINISTRY OF ECONOMY AND FINANCE**
Address:	BP 387, Lomé, TOGO
Tel:	00228 22 21 42 44
Fax:	00228 22 21 09 05
Email:	minifintogo@yahoo.fr

II / Description of the national situation and context of the energy sector

2.1 Basic Country Data

2.1.1 Geography and population

The Togolese Republic is located in West Africa in the Gulf of Guinea, sharing its borders with Ghana to the west, Benin to the east and Burkina Faso to the north. It is bordered to the south by the Atlantic Ocean. The country covers an area of 56,785 km^2 and is divided into five (05) administrative regions. Its estimated population in 2013 is 6.9 million inhabitants with a density of 95 inhabitants per km^2 and an annual growth rate of 2.7%. It consists of 51.4 % women and relatively young population with 41% under 15 years. The living below poverty line (one dollar per day per capita) population decreased from 61 % in 2006 to 58.7% in 2011.

Nearly 60% of the Togolese population lives in rural areas, where access to basic services such as health, drinking water, education, and electricity is still a major challenge.

2.1.2 Economic Data

The economy is dominated by agriculture and services that contribute to the Gross Domestic Product (GDP) respectively 45% and 34 %. The GDP per capita is experiencing continued growth. The GDP has increased by about 2.7% per year on average over the period 2008-2009, and was 900 U$ in 2012. Economic growth has started to recover in 2009 (3.2%), 2010 (4 %), and 2011 (4.1 %) due to strong results in the areas of clinker (23% of exports), phosphate (19%) and political stability. Togo has reached the completion point of Heavily Indebted Poor Country Initiative in December 2010, and received its multilateral debt relief under the Initiative for the Multilateral Debt Relief Initiative (IMDRI). The public debt declined from 73.4 % of GDP in 2009 to 44 % in 2013. External debt in 2013 represents 29% of the total stock of public debt.

2.2 Energy Sector

2.2.1 Overview

a. Energy balance

Total energy consumption in Togo in 2012, estimated at 2 056370 toes (0.31 toes per capita), is mostly dominated by biomass 67%. Oil accounted for 29%, electricity 4% of annual energy consumption. The national electrification rate is approximately 27%, 50% in urban areas and 5% in rural areas. The Government of Togo (according to its national strategy SCAPE 2013-2017) expects to achieve a rate of 50% of national electrification by 2024. Final energy consumption is mainly distributed between households (64%), transport (24%), market and public services (9%), and industry accounts for 3%.

b. The sub-sector of electricity

Two (02) companies manage the power system: the Communauté Electrique du Bénin (CEB) whose primary mission is to produce and transport electricity, and Compagnie d'Energie Electrique du Togo (CEET), which is responsible for distribution of low and medium voltage. The total power delivered to Togo's network was 1042GWh in 2012, of which 886 GWh delivered to CEET by CEB. CEET own production based on thermal power plants in 2012 amounted to 14.3 GWh. Given a total guaranteed power of 40 MW from CEB plants, 100 MW from independent producer plants and 10 MW from CEET's own available plants, the total implemented power capacity of Togo raises to **150 MW**, 20 of which (13%) is from renewable hydroelectric source. The peak power of the network was 140 MW in 2012 and 163 MW in 2013. Production facilities and distribution are old and are causing frequent power outages.

CEB has installed 105 MW of which 65 MW is hydropower and 2x20 MW thermal gases. One of the turbines of the thermal power plant is currently broken, and the hydroelectric power plant Nangbéto (2x32, 5 MW) requires rehabilitation; as a result they cannot produce full power. Therefore, most of Togo's electricity consumption is imported (65-70 %) from Transmission Company of Nigeria (TCN) in Nigeria, the Volta River Authority (VRA) of Ghana and Compagnie Ivorienne d'Electricité (CIE) in Côte d'Ivoire. Since October 2010, an independent producer, ContourGlobal built a 100 MW thermal power plant that can run on heavy fuel oil, the DDO or natural gas service. The plant currently operates on heavy fuel oil (HFO), which has the effect of significantly raising the cost of production (from 40 F/kWh with gas to 80 F/kWh with fuel oil), but discussions are underway with Nigeria'spotential gas suppliers to feed the West Africa Pipeline.

For an average growth of 8% per year, the demands for electricity will more than double over the next 10 years, therefore an additional need for 200 MW to meet the country's demand is needed. Taking into account the fact that Nigeria and Ghana are the main electricity providers through CEB, they could reduce their electricity exports due to an increase of the demand in their own countries. The projected hydroelectric dam of Adjarala (147 MW of implemented capacity) will provide an average power supply of 42 MW for both countries (Benin and Togo). Togo should then construct180 MW over the next 10 years to fill the gap. Providing modern, reliable, cheap and clean energy to consumers still remains a challenge.

2.2.2 Energy potential

Togo is not a producer of neither oil nor petroleum products. The country relies on imports to meet its needs for petroleum products. It has, however, resources in renewable energy untapped.

Hydropower potential studies conducted in 1984 identified nearly forty sites on different streams that nearly half (23) has a potential greater than 2 MW. The expected energy production of all sites is estimated to be around 850 GWh for an installed capacity of about 224 MW. The most important project is Adjarala located on the Mono River whose watershed is shared with Bénin. Some rivers are almost dry now, that's why updating the studies is needed. Adjarala dam one's potential estimated at 100 MW is now 147 MW after new studies were done recently.

Solar potential: Togo is located in an area of strong sunlight where solar radiation is fairly well distributed throughout the country. The global solar energy irradiation on a horizontal plane is estimated at 4.4 kWh/m²/day for Atakpamé (Plateaux Region) and 4.5 kWh/m^2/day in Mango in savanna Region. The use of solar energy for thermal or electrical purposes began in the 80's with: (i) the installation of solar water heaters in some health services and hotels by NGO's, (ii) power telecommunications relays (iii) illuminated billboards and (iv) installation of solar pumps in rural areas.

Wind potential : Togo is ranked among the quiet areas although transient spikes wind can reach high values up to 4m/s in some areas especially in the northern part of the country during harmattan period. Only the coastal area of the country has favorable evidence with wind speeds of 3m/s on average. The development of wind power can be considered as a viable alternative. The main project, currently being considered by the country is the proposed construction and operation of a 25.2 MW plant by Delta Wind Togo who has signed a concession agreement with the Government for its implementation.

2.2.3 Renewable energy policy and its applications

The development of alternative energy in Togo is a real necessity in a context of scarcity of natural resources, the fight against climate change and desertification and reducing greenhouse gas emissions. Togo has so resolutely committed to the promotion of renewable energies to overcome its energy deficit and ultimately contribute to the reduction of poverty.

At Government level, the activities related to renewable energy are governed by the General Directorate of Energy, housing a division of renewables. It should be noted that the Government of Togo in its development strategy SCAPE 2013-2017, is committed to (i) improve the regulatory and institutional framework for the promotion of renewable energy, (ii) exempt taxes on imported equipment in the context of renewable energy and (iii) promote the construction of solar power plant (5 MW) and wind turbines (12 MW) in order to generate electricity.

In the context of energy policy being finalized, it is envisaged the establishment of a Rural Electrification Agency whose missions will also be to cover the development of renewable energy and energy efficiency. The revision of the law 2000 - 012 - (on the electricity sector) is in project and includes provisions to promote renewable energies.

III / Reason for applying to SREP program

3.1 Energy Security

The demand for electricity in Togo continues to increase at an average rate of 8% per year and could double in the coming next 10 years. The country's electricity supply is heavily dependent on oil and its derivative products (including natural gas), which are subject to international price volatility. Diversification of energy supplies will achieve a broader energy mix and will ensure greater energy security to the nation. The Togolese Government intends to develop renewable energy. This orientation was included in the axis 2 of the Accelerated Growth Strategy and Promotion of Employment (SCAPE), adopted in 2013.

3.2 Barriers to the development of renewable energy

Although the option of the promotion of renewable energy has been taken by the Government in the strategy of accelerated growth and employment promotion (SCAPE 2013 to 2017), there are some barriers to be overcome in order to enable potential investors to invest. Indeed, at the regulatory level, beside the code Benino-togolais of electricity, there is no law or directive that regulates the promotion of renewable energy in the country. Also, the lack of studies on the potential of renewable energy sources and specific policy of encouraging the private sector are obstacles to the development of these renewables energies. Moreover, CEET should conduct a study on the capacity of its distribution network to integrate new power generation from renewable energy that private producers may have to inject in the network.

3.3 Proposed areas of SREP program intervention

Investment projects identified under eligible renewable energies in the context of SREP program are presented below in priority order; totalizing 60 to 105 MW implemented capacity.

Small hydro projects:

Togo wants to supply electricity to rural and remote areas through the construction of mini and micro hydro.

CEET has proposed 8 mini-hydro sites economically profitable with a total power of 58 MW. The cost is estimated at 3,500 €/ kW (2.35 million FCFA / kW) at 2009 economic conditions. These are the sites: (i) Glei 2 MW , (ii) AmouOblo 2 MW (iii) LandaPozanda 4 MW (iv) Banga 6 MW (v) Tomegbe - Akloa 8 MW (vi) Kpessi 8 MW (vii) Titira 12 MW , and (viii) military College (Kara) 16 MW.

Three sites including Landa-kpozanda (4MW), Banga (6MW) and Danyi-Konda (10 MW) will be proposed for implementation to the SREP program. The estimated cost of the implementation is USD 75 000 000. SREP program will also be needed to update the identification and studies of sites throughout the country.

Solar projects:

The sun potential is suitable to develop solar electricity generation projects in Togo. A study for the construction of a 5 MW solar power plant is nearing in completion by CEB. On the other hand, a tender of pre-qualification will be launched during this year 2014 for construction and operation (Build Own Operate and Transfer -BOOT) of a solar power plant (5 to 10 MW). The estimated cost of the project is USD 8 300 000. SREP program is expected to participate in the funding with other private investors to lower the cost of kWh produced.

Biomass and waste projects:

Togo would like to take advantage of biomass and municipal waste to generate electricity. In a pre-qualification that will be launched this year 2014,an independent (s) Producer (s) will be chosen for the construction and operation (Build Own Operate and Transfer -BOOT) of a biomass power plant with capacity of2 to 5 MW and a municipal waste power with capacity of 5 to 50 MW. SREP program is expected to participate in the funding with other private investors to lower the cost of kWh produced.

Wind projects:

A project of two wind farms of 12 MW each located near Lomé is undergoing by a private company named Eco Delta Development (EDD) and its subsidiary Delta Wind Togo.

A concession agreement has already been signed between the Togolese Government and the private partner in 2012. Studies have been done but construction has not started yet, the company is searching for funding.
The annual producible could reach 30 GWh (both farms), with an economic cost of 100 FCFA/ kWh, and the cost of the construction is around 1,500€ /kW. The estimated cost of the project is USD 50 000 000excluding import tax. SREP program is expected to participate in the funding with other private investors to lower the cost of kWh produced.

Sector reform

The present electricity code allows independent producer to establish but need improvement for import tax exemptions and various incentives. SREP program will have to include a component to finance the sector reform, in particular the review of the law on (i) electricity (including the creation of the rural electrification agency), (ii) the Public-Private Partnership, (iii) the promotion of renewable energy and (iv) strengthening the regulatory authority in the sector. These concerns are addressed in this document.

3.3 Reasons for the solicitation of CIF

Although power plants based on renewable energy have lower operating costs compared to thermal power plants, the investment required to produce a kWh of renewable energy is very high. The consideration of the above proposed projects under the SREP program will reduce the cost of capital for investment through the CIF and thus make the price per kWh of renewable energy more affordable. Moreover, the proposed SREP projects fall under Axis 2 of the strategy for growth and employment promotion ("Strengthening economic / infrastructure development of energy infrastructure" SCAPE 2013-2017) and is aligned with pillar 1 of the AfDB country strategy paper for Togo 2011-2015 ("development of economic infrastructure").

IV / Energy policy and sector regulation

4.1 Institutional Framework

The Ministry of Mines and Energy (MME) is responsible for the energy sector, including the sub-sector of electricity through the General Directorate of Energy (DGE), which has the task to : (i) develop and implement the energy policy , (ii) monitor the implementation of the investment program , (iii) preserve state assets , (iv) carry out studies when necessary to ensure the reliability of energy and equipment safety, (v) identify and propose measures of energy efficiency and energy technology proven , and (vi) act as energy advisor to the Government, the local communities and investors. Other institutions in the energy sub-sector are:

The Regulatory Authority for Electricity Sector (ARSE), established in July 2000 to regulate the sub-sector of electricity : (i) defining and enforcement of the sub-sector (ii) reviewing and overseeing procurement mechanisms (iii) advising on proposals and decisions regarding tariff , (iv) providing advice on the development of energy infrastructure , (v) providing advice on issuances of

expropriation for public utility (vi) monitoring and certifying electrical installations , and (vii) managing potential conflicts between distributors and consumers.
It should be noted that CEB, is not regulated by the ARSE yet.

The Compagnie d'Energie Electrique du Togo (CEET): public entity created in 1963, is responsible for the distribution of electricity in the country. CEET operates some thermal power plants in areas where the CEB network is absent, but buys most of its electricity from CEB and ContourGlobal (a private producer). Most of the network is interconnected, but several provinces of the country are not yet connected to the national network. These communities are powered by diesel generators power plants with an installed capacity ranges from 32kW to 750 kW. In 2012, there were 37 localities supplied with insulated electrical system, with a total installed capacity of 9.6 MW.

The Communauté Electrique du Benin (CEB): it was created in 1968 by Benin and Togo through the Benino-togolais electricity code to import, produce and transmit electricity for the benefit of the two countries. This code Benino- Togolais was revised in December2003 to open the sector to independent producers. However, CEB remains the sole buyer of the power system (both countries) and delivers electricity to Benin Electric Power Corporation (SBEE) in Bénin, and CEET in Togo and some large industrial customers. Exceptionally, the energy produced by ContourGlobal is sold directly to CEET.

The independent producer ContourGlobal Togo: an independent power producer (IPP), operating since 2010 in Lomé, a thermal power plant with a capacity of 100 MW operable with natural gas, heavy fuel or DDO. The power plant is equipped with six (06) production groups, working with heavy fuel oil (HFO) due to the lack of natural gaz. The government has initiated discussions with potential gas suppliers in Nigeria to get the necessary volume of gas delivered through the West Africa Pipeline to operate the plant. ContourGlobal does not work full time; it is requested in case of shortage of power supplied from CEB.

4.2 Regulatory Framework

The adoption of Law No. 2000-012 of 18 July 2000 on electricity and its implementing Decree No. 2000-089/PR 08 November 2000 was an important step forward to ensure the development of sub-electricity sector. However, this legislation has a number of shortcomings related to the absence of provisions on:

- the electrification of rural areas;
- the use of renewable energy;
- the need for technology transfer in the energy field;
- the fate that should be reserved for production surpluses made by private companies, particularly in the context of industrial operation ;
- The obligation to ensure price transparency through the development, publication and wide dissemination of tariff policy;
- ...

The Code Benino- togolais of electricity revised in 2003 opened the segment of power generation to the private sector and dedicated CEB as the sole buyer. This code should be revised to adapt itself to the new regional ECOWAS recommendations.

4.3 Energy policy

Togo's energy policy is not yet adopted by the Government; expected to be adopted by the end of 2014. The draft energy policy has a lot of provisions such as, to:

(i)/ develop and adopt an investment code or law which includes tax and incentives for the promotion of renewables energies;

(ii)/ develop and adopt rules defining the conditions for the production of renewable energy and connection to the national network at a discounted price;

(iii)/ develop and adopt a law to define energy efficiency policy by promoting equipment using low energy;

(iv)/ develop and adopt specific legislation to promote the electrification of rural and economically disadvantaged areas, specifically setting up a national rural electrification agency and a Rural Electrification Fund.

(v)/ implement the program for the liberalization of the electricity market to promote the inclusion of Togo in the Regional Market ECOWAS.

(vi)/develop an institutional framework to establish a public-private partnership:

• Definition of a favorable tax and customs arrangements for electrification projects in rural areas;

• Establishment of a funding mechanism with the participation of external donors and the national financial system;

(vii)/ Encourage the production and off-grid energy supply in remote or isolated areas and provide appropriate incentives to businesses to ensure a reasonable return on investment.

(viii) Facilitate the creation of industrial facilities for the local manufacture of electrical equipment;

(ix) / Explore sedimentary basin for petroleum products and gas.

4.4 Resilience to Climate Change

Togo, in its draft energy policy aims to promote alternative energy sources to reduce pressure on wood resources, develop appropriate technologies for the use of these alternative energy sources. The country also intends to develop and promote the use of efficient wood stoves and raise awareness about the problems of desertification and soil erosion from deforestation, as well as alternative technologies for fuel wood and charcoal wood.

4.5 Tariff policy

Togo does not have a formal tariff policy. The practice is that CEET and CEB formulate their requests for revision of tariffs to the ministry of Energy. For CEET, the regulator (ARSE) examines the merits and issues professional advice to Government authorities. The Ministry of Mines and Energy (MME) is responsible for the tariff policy for electricity and is responsible for proposing revisions to the Government after review.

The last rate increase was adopted in November 2010 and implemented in January 2011. Rates revised were below the level expected by CEET. An operating subsidy of CFAF 3 billion is paid annually by the Government to CEET to supply fuel to the power plant ContourGlobal. Energy is bought by CEET at the average of 58 FCFA/KWh form CEB and 121 FCFA / kWh from ContourGlobal. Average tariffs (tax free) for distribution are 100 FCFA/kWh for medium voltage customers and 98 FCFA / kWh for low voltage customers.
When tariff policy is defined, implemented and sustained by an independent regulatory, it gives more visibility and confidence to private willing to invest in the sector. The sector reform will aim to reinforce the independence of the regulator and make it decide for tariffs.

4.6 Regulation of the electricity sub- sector

The regulator of the electricity sector (ARSE), although under the Ministry of Mines and Energy, has a relative independence. ARSE is following the implementation of the performance contract between CEET and the Government. ARSE does not have the responsibility to regulate tariff, but advises the Government. The ARSE is not associated with the negotiation of power purchase agreements for electricity production. In the context of sector reform agenda, the authority of ARSE should be strengthened.

4.7 Economic performance of the sector

a / Performance of CEET

Business results of CEET are as follows:
- The rate of energy billing recovery is 84 %, a rate of technical and non-technical losses by 16%, which is respectable result, compared to several countries in the sub-region.
- The recovery rate of private bills costumers is 95 %, while the administrative costumers are only 35-50 %. They represent 32 % of consumption and seriously affect the results of CEET.
- The time of interventions to achieve small scale work and connections are still very high (30 to 40 days) due to the difficulties to address supply and connection materiel.

Net operating income of CEET revolves around balance. In 2009, it was positive to 0.1 billion FCFA, before falling to - 3.8 billion FCFA in 2010,and then rose to 2.4 billion in 2011 and 3.24 billion FCFA in 2012. The financial situation of CEET has improved due to: (i)impact of tariff increase in January 2011,(ii) the change in the power purchase contract of Contour Global by CEB (decrease of about 10 billion FCFA francs in the expenses of CEET)(iii), an annual operating subsidy of about 3 billion FCFA. However, the financial results of CEET the past three years remain fragile. The electricity from the CEB and Contour Global purchase represent 70 % of the expense of CEET. The financial situation of CEET is therefore strongly influenced by the prices of electricity imported from Nigeria and Ghana, and by fluctuations in fossil fuel prices on international markets. The financial flexibility is limited; CEET is limited to self-finance the investment needed for its development.

b / Performance of CEB

The benefits of CEB were positive from 2008 to 2010 but then deteriorated in 2011 and 2012 with respective losses of 3.67 billion FCFA and 7.45 billion FCFA despite the increase of 10% of the tariff effective in July 2009 (the rate increased from 50 to 55 FCFA / kWh). CEB is highly dependent on its

purchases in Ghana and Nigeria. Like CEET, it is essential that CEB has a clear tariff policy and an adjustment mechanism to pass on increases in the cost of imports of electricity.

4.8 Procurement governance

Procurement is regulated by the Law 2009-013 of 30/06/2009 relating to public procurement and delegation of publics services. There is a procurement control institution (Direction Nationale du Contrôle des Marchés Publics -DNCMP) and a regulator of public procurement (Regulatory Authority for Public Procurement -AGP). All public institutions have a person responsible for public procurement and a procurement board which is controlled by the National Board. This is to ensure transparency in procurement process. The procurement law is consistent with the sub-regional organization West African Economic and Monetary Union (WAEMU) directives that require tenders to be open to the economic space of the WAEMU. However, after a certain threshold, bids are open internationally. In case of dispute in the acquisition process, bidders may appeal to the ARMP for arbitration.

V / institutional capacity and technical

5.1 Institutional Capacity

The Code Benino-togolais of electricity revised in 2003 opened the sub-sector electricity for independent producers and allows CEET to carry out activities of energy production in areas CEB grid is absent. Production based on renewable energy can be conducted either by CEET or private investors.

There is a division in charge of renewable energy within the General Directorate of Energy (DGE). Strengthening institutional capacity is essential, given the political will have to develop renewables in the energy mix, therefore the importance of responsibility for the structure in charge of renewable energy needs adequate skills and training. CEET has also created its own service of renewable energies (DPER) since 2012.

5.2 Technical Capacity

Togo has already experienced the production and use of renewable energy for productive purposes.
Solar: experiences of using the solar energy were made in the 80's and 90's for the electrification of social infrastructure such as schools, health centers, drinking water pumping in rural areas.
In 2003, UNDP supported the project «Solar energy for domestic needs of women in Regions of Central and Kara" in Program Improvement Livelihoods Populations (PAMEP).
In 2009, UNDP has also funded under the program mentioned above, the municipalities of Kountoiré and Naki-East. This program has helped to promote this form of energy through the use of solar cookers, solar dryers and solar equipment but hasn't been scaled up.

Wind: The use of wind power is marginal or almost nonexistent. Installed capacity is estimated at about 5.7 kW. It is used for various purposes in rural areas, particularly in Atalote (Prefecture Keran) and Gapé - Kpédji (Zio Prefecture) for water pumping.

Hydroelectricity: the country capitalizes a long experience with hydroelectric power plant; Nangbéto (65 MW) for the CEB and a mini hydropower system of Kpimé (1.6 MW) for CEET.

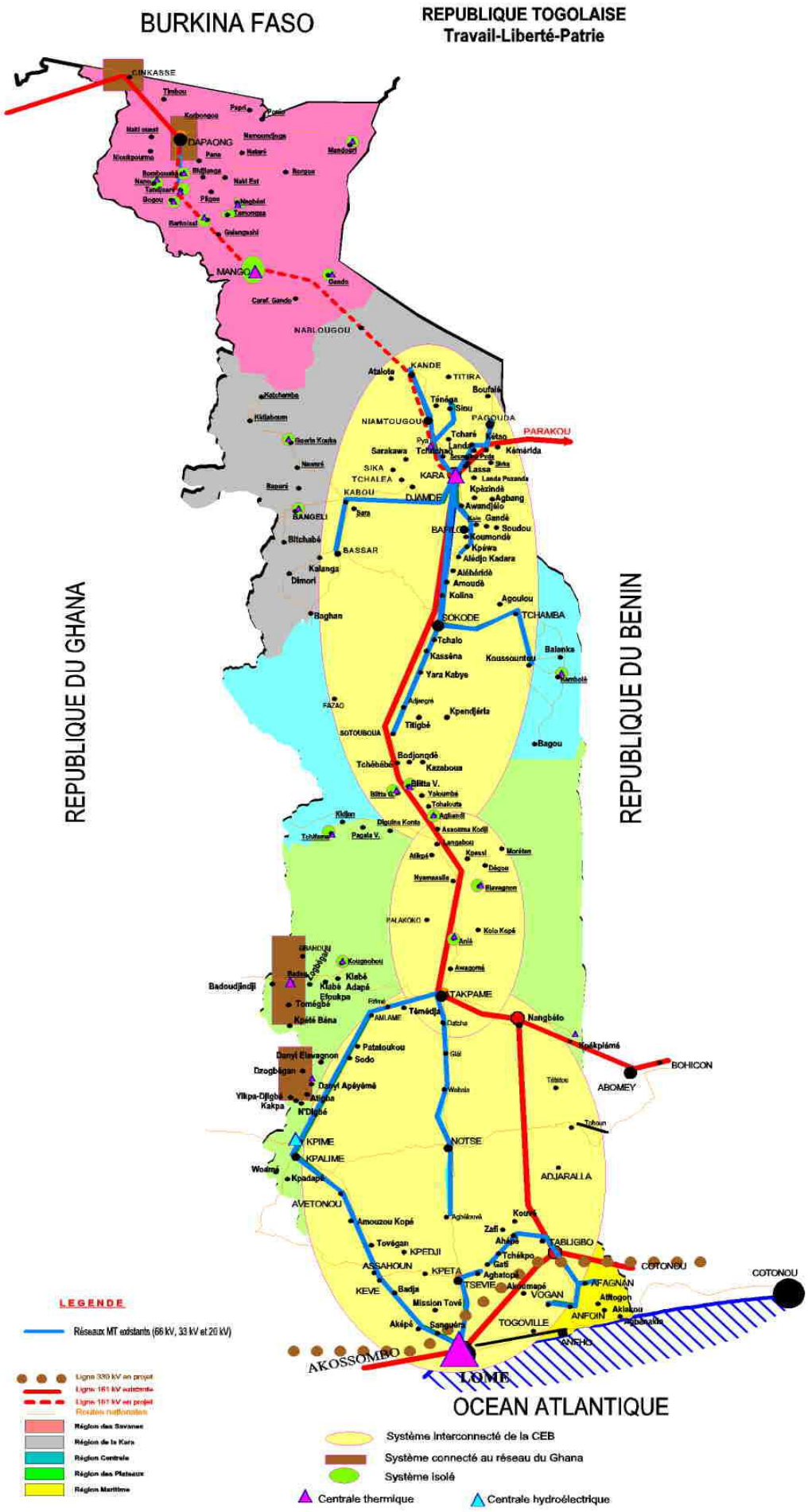
The Ministry of Energy will strengthen its staff capacity through various programs.
The Government is identifying capacity building needs in the context of the administration's modernization. More staff will be recruited to reinforce the capacity at the Ministry. Furthermore, ECREEE organization (one of ECOWAS organization in charge of renewable energy) regularly trains staff of the Ministry and the CEET each year.

VI / Main partners

The main development partners involved in Togo in the electricity sector are the African Development Bank (AfDB), the French Development Agency (AFD), the World Bank, the West African Development Bank (BOAD), the Bank for Investment and Development (EBID), the German International Cooperation (GIZ), KfW, West African Economic and Monetary Union (WAEMU) and the European Union. These partners are involved in all segments of the electricity(energy generation, transmission, distribution) and technical assistance. There is still no formal mechanism for sector coordination.
The aid coordination is ensured through the institutional mechanism for coordination, monitoring and evaluation of development policies (DIPD) which houses several coordination structures.

CEB has undertaken a study of pre-feasibility in order to conduct a pilot plant from solar photovoltaic system power 5 MW with a private developer. Similarly, a project of 13,000 solar street lights is being implemented with funding from China Exim Bank. This project was preceded by a pilot phase and enters its implementation phase. The contract has been awarded and work is scheduled to start in June 2014. Another project called Program of development of renewable energy and energy efficiency (PRODERE) is funded by WAEMU and aims to power 22 rural community infrastructures (schools, health centers); nearly 1340 households and 19 boreholes for water drainage are programmed to be equipped. This program is now in its implementation phase after contract award to selected contractors. AfDB and the World Bank have agreed to participate in the financing of the construction of the hydroelectric dam Adjarala; the project is at the stage of evaluation.

Through the SREP program, the CIF will contribute to the development of renewable energy potential and increase the share of renewables in the energy mix of Togo. SREP program will been rolling in the Government's vision expressed in its Strategy for Accelerated Growth and Employment Promotion (SCAPE 2013-2017).


BURKINA FASO
REPUBLIQUE TOGOLAISE
Travail-Liberté-Patrie
REPUBLIQUE DU GHANA
REPUBLIQUE DU BENIN
CINKASSE
DAPAONG
MANGO
NAMOUNTOUGOU
NIAMTOUGOU
PAGOUDA
PARAKOU
NAMOUNTOUGOU
KANDE
TITIRA
SOKODE
TCHAMBA
BASSAR
KARA
DJAMDE
KABOU
SOTOUBOUA
BAFILO
BOHICON
ABOMEY
ATAKPAME
NANGBETO
NOTSE
KPALIME
KPIME
AVETONOU
ADJARALLA
TABLIGBO
COTONOU
AFAGNAN
VOGAN
ANFOIN
TOGOVILLE
ANEHO
AKOSSOMBO
LOME
OCEAN ATLANTIQUE
LEGENDE
Réseaux MT existants (66 kV, 33 kV et 20 kV)
Ligne 330 kV en projet
Ligne 161 kV existante
Ligne 161 kV en projet
Réseau nationaux
Région des Savanes
Région de la Kara
Région Centrale
Région des Plateaux
Région Maritime
Système interconnecté de la CEB
Système connecté au réseau du Ghana
Système isolé
Centrale thermique
Centrale hydroélectrique