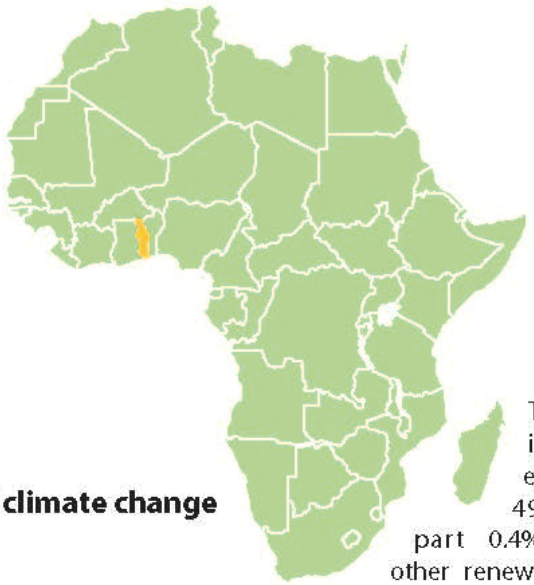
Case Studies



II.4. Togo

II.4.1 Togo's energy and climate change profile

In Togo, the energy situation remains very different between urban and rural areas like in many African countries. The rate of access to electricity is however increasing (from 17% in 2000 to 45% in 2018), but with large differences between urban (access rate = 88.8%) and rural areas (access rate = 8%)[28]. The structure of final energy consumption shows the predominance of biomass energy consumption. From 2010 to 2018, the share of biomass energy in final energy consumption increased from 64% to 75%, and consumption increased from 1,279 ktoe to 1,521 ktoe. In 2018, electricity accounted for 5% of the country's final energy consumption. The country's electricity consumption increased from 69 ktoe to 107 ktoe between 2010 and 2018. The consumption of oil products decreased from 663 ktoe in 2010 to 414 ktoe in 2018. These oil products accounted for 20% of the country's final energy consumption in 2018[29].

The majority of energy generated in Togo is thermal. The two largest energy suppliers are hydropower with 49% and fossil fuels with 50.6%. A small part 0.4% is obtained by burning biomass or other renewable energy. Togo generates some of its own electricity but imports the majority of its needs from Nigeria and Ghana.

Renewable Energy Profile

Togo's potential of renewable energies is considerable taking into account the size of the country. It is estimated that from a potential of 100% renewable energy resources, the country has 20 % of PV resource, 30% biomass and 50% of small scale hydro. Wind resource is considered not available or not economically feasible[30].

In 2010, the population served by mini-grids and isolated renewable energy systems was well below 1% and will not exceed 8.92% in 2030 in rural areas according to national forecasts. This form of energy is not even taken into account in the national energy balance (PANER, 2015).

28 https://energypedia.info/wiki/Togo_Energy_Situation

29 IFDD ; UEMOA.- Atlas de l'énergie dans l'espace UEMOA - Rapport 2020.- Quebec : IFDD, 2020. 156p. (francophonie.org)

30 ECOWAS Renewable Energy Policy (2015). Praia: ECOWAS, 2015. 82p http://www.ecreee.org/sites/default/files/documents/ecowas_renewable_energy_policy.pdf

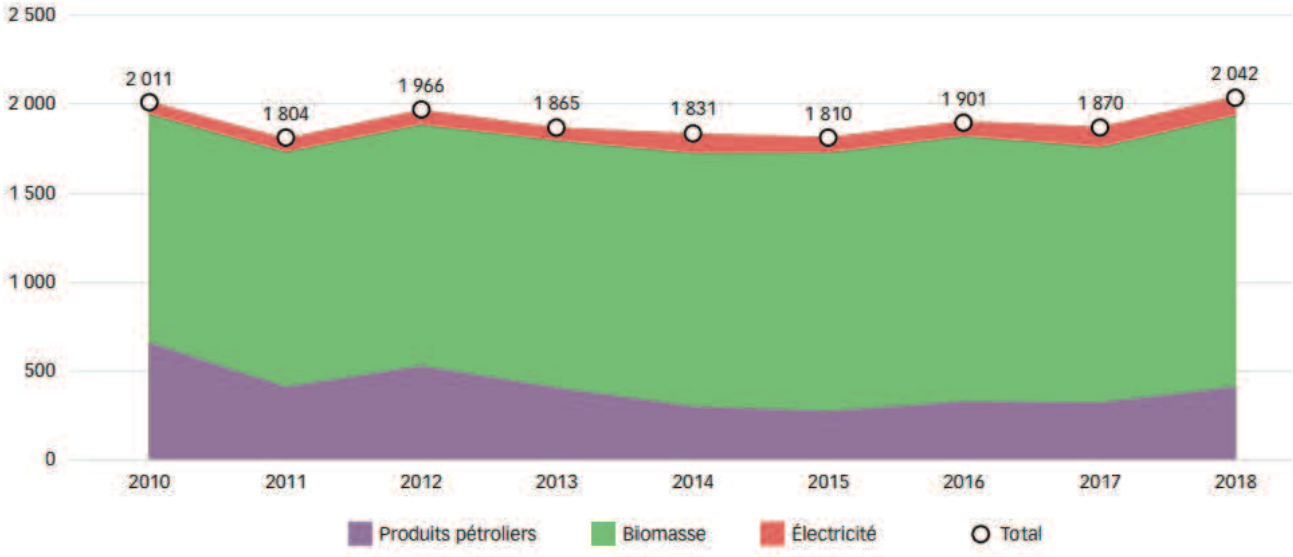


Figure: *Evolution of final consumption by energy source in Togo from 2010 to 2018 (ktoe)*
Source: *Atlas, IFDD*

The modern use of solar energy has long been limited to a few private use such as solar water heaters in some places like hotels, maternity hospitals, panels on the roofs of some NGO buildings, or religious representations and houses.

II.4.2 Existing policies and laws, including the country's NDC and national, regional and local policies and legislation relating to climate change and energy

Renewable Energy policies and laws

In Togo, in spite of the huge potential for the generation of renewable energies, this sub-sector is still in its infancy, except for hydroelectricity. Consequently, there is very little policy that applies directly to renewable energy in the country's current policies.

In 2016, the Government established the "Agence togolaise d'électrification rurale et des énergies renouvelables", Togolese Agency for Rural Electrification and Renewable Energy (AT2ER) which aims to provide electricity to rural communities. The objective of the national electrification was to provide access to energy to all Togolese by 2030.

The first renewable energy development law was then passed in July 2018. Its aim was to make up 50% of the national energy mix with renewables by 2030. The government also published a roadmap to reach 100% electrification by the same year. In June 2021, the Sheikh Mohammed Bin Zayed Solar Power Plant, one of the largest solar power plants in West Africa, was inaugurated. With an installed capacity of 50 MW, the plant is co-financed in PPP (Public Private Partnership) to an amount of 60 million US dollars or 35 billion FCFA by the Togolese government, the Abu Dhabi Fund for Development (ADFD), the West African Development Bank (BOAD), ADEX (Abu Dhabi Exports) and AMEA Togo Solar. This plant is expected to extend to 70MW in the coming months. The construction of additional solar power plants are also expected in the near future. According to the BOAD, which will co-finance a new project alongside the IFC (as part of its Scaling Solar program), the new PV plant will increase the share of renewables in the energy mix from 27 % in 2021 to 40% in 2024, and increase the country's electrification rate from 59% in 2021 to 75% in 2025.

Climate change profile, policies and laws

As early as 1995, Togo demonstrated its determination to participate in the global effort to combat climate change by ratifying the Framework Convention on Climate Change and in 2017 the country ratified the Paris Climate Agreement. This commitment is reflected in the government's 2020-2025 roadmap.

To achieve the goals set out in the Paris Agreement, Togo submitted its updated Nationally Determined Contribution (NDC) in October 2021. It has also begun that same year the process of producing its Fourth National Communication. This NDC covers all sectors, despite Togo's small contribution to global greenhouse gas emissions.

Togo's commitment is finally reflected in the submission of its first biennial update report (BUR) and the implementation of several projects, including most recently the project to launch 10 smart cities.

II.4.3 Overview of opportunities and barriers

From the review of relevant documentation on possible renewable energy development in Togo, it appears that raising the renewable energy business share in Togo through

accelerated access to small-scale solar photovoltaics and hydropower is the most feasible route for electrification[31].

However, an assessment identifies the monopoly, non-liberalization of the energy sector, and the lack of a trained workforce as the main inhibitors for private investment. The optimization of the system for better performance and the creation of local manufacturing plants to promote the national production of solar system components along the assembly lines can therefore be recommended[32].

In terms of policy, there are only few adopted rules and regulations within the Togolese energy sector such as standardised Power Purchase Agreements and Power purchase tariffs. In addition, few incentive measures in taxation exist which only favour companies with a public interest and not private organizations. Furthermore, the non-liberalisation of the energy sector does not help investment from private investors to participate.

Finally, the lack of formal institutional framework for the promotion of renewable energies is also another barrier to the development of renewable energies in the country (PANER, 2015).

II.4.4 Points of Action for local civil society organisations

From the opportunities and barriers noted above, the following points of action for local CSOs could be proposed:

- Put in place a framework or coalition of local CSOs for the promotion of RE and dialogue with the authorities
- Advocate for the creation of local manufacturing plants to promote the national production of solar system components along with assembly lines, showing the lack of such plants in the region and the benefits in terms of capacity building, green job creation in the value chain, import cost reduction, etc.
- Advocate for the creation of training centres with a view to develop a critical mass of qualified RE professionals to solve to lack of trained workforce and ensure the reliability on local workforce
- Advocate for the Government to create enabling conditions (establishment of a clear and attractive investment framework; PPP promotion; incentive taxation and duty measures for private sector; land access; possible export of surplus; clear local content law or regulations, etc.) for the investment of the private sector and review the monopoly and non-liberalization of the energy sector.

31 NJUGUNA, James; KANSONGUE, L. Nanimpo; VERTIGANS, Stephen.- Renewable energy could get Togo to its goals: experts identify what's in the way. Aberdeen: The Conversation, November 2022. At: https://theconversation.com/renewable-energy-could-get-togo-to-its-goals-experts-identify-whats-in-the-way-186754

32 KANSONGUE, Nanimpo; NJUGUNA, James; VERTIGANS, Stephen.- An assessment of renewable energy development in energy mix for Togo. In: International Journal of Sustainable Energy, vol 41, 2022. Issue 8, p. 1037-1056. https://www.tandfonline.com/doi/full/10.1080/14786451.2021.2023150