

Article

Extension of the Electricity Power Grid in Greater Accra and Grand Lomé: From the Perceived to the Resident's Sense of Just/Unjust?

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Abstract

From a sustainability perspective, the production of the city is a co-construction aimed at providing opportunities for residents to access different urban centres. In the absence of co-design of electricity network extension projects, Grand Lomé and Greater Accra face the challenge of social acceptance due to the diversity of perceptions. How do the residents of Accra and Lomé experience the diversity of perceptions of power grid extension projects? To answer this question, this paper uses a mixed and comparative approach to analyse the impact of this diversity of perception on access to electricity in Greater Accra and Grand Lomé, based on spatial equity. The results show that structural non-recognition and residents' dissatisfaction lead to social contempt. When structural non-recognition and dissatisfaction accumulate, socio-spatial injustice occurs.

Keywords: electricity; just; unjust; residents; Grand Lomé; Greater Accra

1. Introduction

In African cities today, one of the challenges is to achieve access for all to urban services, including electricity [1]. This vision is in line with the clauses of the Habitat III world conference and point 11 of the Sustainable Development Goals (SDGs). Since the Earth Summit in Rio in 1992, urban governance stakeholders have initiated the development of an agenda for the 21st century (Agenda 21). This agenda encourages the guarantee of universal access to urban services. The Habitat III clauses also call for national or regional urban policies to ensure equitable access. Studies have given a deeper understanding of the lack of access to urban services in West African cities [2,3].

In Lefebvre's conception, the city is a space that is constructed, experienced and perceived. The operations carried out in an urban space are therefore perceived by the players involved. In both Greater Accra and Grand Lomé, the lack of access to electricity is essentially due to the absence of an electricity network in certain localities. This calls for extension operations (formal activities undertaken by the institution in charge of the electricity service) to improve energy coverage and universal access to electricity. The co-building of these projects is an example of citizen participation. However, these operations are perceived differently by urban stakeholders. On Wednesday 20 February 2017, we were on an exploratory visit to Légbassito (Grand Lomé) at the Lomé C power station. Being on the opposite side of the road and facing the entrance gate, one image caught our attention. Around the centre, we can see households with access to electricity via "the spider system". However, these households are overlooked by two official networks. One of the networks



Received: 5 July 2025

Revised: 8 September 2025

Accepted: 16 September 2025

Published: 31 October 2025

Citation: Anoumou, K.R. Extension of the Electricity Power Grid in Greater Accra and Grand Lomé: From the Perceived to the Resident's Sense of Just/Unjust? *Urban Sci.* **2025**, *9*, 450. <https://doi.org/10.3390/urbansci9110450>

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serves the power station and the other a two-storey house 30 minutes' walk from the track (extract from the field diary sheet number 04 of 29 February 2018 in Légbassito).

This prompted us to ask a lady who was selling “*akassan*” porridge. When asked “... why aren't you connected to this pole that runs in front of your house?”, the woman replied, “We've been here since the wires were recently installed by CEET. It's because of the owner of this house that they've come to do this...” (extract from an interview with Ms X. on 20 February 2018). This response from the lady highlights the reason for the extension of the electricity network in the locality. A year later, during our data collection work in Koklovikopé, a head of the household said “When I arrived in the area, I approached a neighbour to get a sub-meter at his house. Then I drew the current to supply myself. But after the road was built, my meter remained in the neighbour's house and the poles were removed. CEET then came and installed an electricity line around the track. So, I asked CEET in Kégué to move my sub-meter to the new power line not far from my house. But CEET is asking me to pay another CFA 1,500,000. It's not fair...” (extract from an interview conducted on Thursday 25 July 2019 in Koklovikopé with Mr S.).

Some residents of Légbassito and Koklovikopé (Grand Lomé) are questioning the reasons for extending the electricity network. In Greater Accra, on the other hand, and in Adenta in particular, one resident told us “When we arrived in the neighbourhood, I noticed a lack of electricity... The neighbours had informed the chief of the situation who passed on the information. So, after two years, GRIDCo came to extend the network over a given distance” (extract from an interview conducted in Adenta on 19 November 2018 with Ms E.). This statement was echoed by most of the people interviewed in Adenta.

The above comments draw our attention to the problem of acceptance of urban operations. The various observations made are significant. How is this diversity of perception experienced by the ‘Accra resident’ or ‘Lomé resident’?

To answer these questions, this paper analyses the impact of this diversity of perception. The purpose is to demonstrate that the lack of recognition and the accumulation of dissatisfaction create a sense of injustice among residents of Greater Accra and Greater Lomé. The arguments are based on a comparative approach that takes account of the collaboration between the various players involved and the procedure for implementing extensions to the electricity network. In addition, the analysis draws on the theory of social justice [4] and that of recognition [5,6] to gain a better understanding of the way in which this diversity of perception is “experienced” by residents. The analysis is structured in three parts: presentation of the diversity of perception, its causes, and its consequences. A lack of collaboration between the various stakeholders involved in the provision of electricity services in Greater Accra and Greater Lomé is caused by the lack of synergy. Due to this situation, residents' social experiences are impacted, resulting in a lack of recognition of their status as residents and social frustration. These social experiences lead to social contempt. The accumulation of social contempt is experienced as injustice.

2. Materials and Methods

2.1. From Spatial Justice to Accessibility and Co-Design

To enable everyone to have the same understanding of unfair access to electricity, we need to understand the concepts of fair or unfair, spatial justice or spatial injustice and accessibility.

It is difficult to define the concept of just without relating it to that of unjust [7]. The notion of justice refers to a requirement for equality in distribution [8]. This understanding stems from the writings of Aristotle and Rawls, who see justice in terms of an equitable distribution of the common good [9]. For Aristotle, what is ‘just’ is what is equal. Thus, in the Aristotelian conception of justice, a situation is ‘just’ when it “is related to the relative

value of those between whom it is carried out. Prior to the requirement of equality, there must be a standard and a measure, what we call a principle of equivalence, making it possible to compare and evaluate people and things in a situation" [8].

Aristotle distinguishes three types of justice: commutative justice, distributive justice and corrective justice. Justice is commutative when it is based on arithmetical equality. It is distributive when it is based on proportional equality. Justice is correct when it involves a decision to modify a situation deemed unjust or to repair a wrong inflicted by one individual on another [10].

Following on from Aristotle's work, several researchers have worked on the principles for defining justice. John Rawls, for his part, considers justice to be just, which he describes as 'a specific type of normativity' [6]. Rawls stresses that the definition of justice must take account of the principles of freedom and difference [10]. Consequently, if socio-economic inequalities are tolerable, the individual freedoms of all individuals must be guaranteed.

In the social sense, R. Castel suggests that the concept of justice should not be read in Aristotelian terms but should be understood based on the social injustices which it proposes to abolish [6,11]. From the work of John Rawls [4] to that of Amartya Sen [12], which uses the notion of 'capability', we can see that justice is the fruit of historicity. As a result, justice is presented in contemporary studies as "a permanent construction, intimately linked both to what is most fundamental in the construction and functioning of a society and to the representation that each person makes of cohabitation with others" [13].

The use of this concept in the social sciences since the 1990s has revealed two dimensions of analysis [14]. Work on justice reveals a normative dimension and another dimension, known as the institute order (social, political and economic). The proponents of the normative dimension base their reflections on a value judgement about the situations observed. In contrast, other researchers formulate the concept of justice in terms of social and political order.

Given this reality, the use of the concept of 'social justice' is an epistemological choice aimed at axiological neutrality and scientific objectivity [15]. For this research, the choice of analysis falls within the dimension of the instituted social order. Consequently, to think about social justice within the framework of this research, it is a question of questioning "the practical and normative dynamics directed towards social transformation and, from there, articulating normative justifications with political objectives while showing that the practical dynamics which carry them are likely to transform social logics producing injustice" [6].

To put it plainly, this paper understands social justice to mean a distribution of goods that takes account of the practical and normative dynamics instituted by social actors to transform the social logics that produce feelings of injustice based on certain social inequalities. And by 'social injustice', we mean a distribution of goods that gives rise to a situation of denial of structural recognition and dissatisfaction leading to social contempt for a social actor who is the subject of a social claim. These assertions are a sociological conception of social injustice.

As there can be no human existence without space [16], the concept of social justice is applied to territory with the concept of spatial justice. It enables us to analyse the interactions between the concepts of societies and spaces to understand socio-spatial inequalities. From this perspective, Alain Reynaud defines spatial justice as "all the means used by public authorities to reduce inequalities between socio-spatial classes" [17]. From this definition, we can see that spatial justice is always illustrated by spatial injustices.

Spatial justice is a reflection on equity in spatial distribution [13]. For Edward Soja, it is a tool for highlighting the dialectical links between space and justice [18]. It is a tool that aims to achieve what is known as just distribution. For Peter Marcus, spatial justice is

“the ultimate objective of most planning policies” [19]. These policies can produce socio-spatial inequalities that can be perceived as injustices. One definition focuses on issues of redistribution of wealth, services and opportunities for people, while the other focuses on issues of decision-making procedures [7]. To promote either version of this justice, the co-design of urban interventions and operations is a necessity.

Spatial justice, as defined above, involves the concept of accessibility. This refers to the possibility of accessing or disposing of something. In sociology, accessibility cannot be analysed without considering the capabilities of residents [12]. The effectiveness of co-design strengthens residents’ capabilities.

Today, work on spatial justice questions inequalities to enable everyone, including and especially the most disadvantaged, to occupy and inhabit urban space [18]. By insisting on the links between justice and the right to space (or to the city), Soja invites researchers to consider spatial justice as a co-construction of equitable space requiring the participation of civil society and the empowerment of actors.

2.2. Theoretical Framework

To analyse the diversity of perceptions of electricity grid extension operations, this paper uses the theory of territorial belonging to examine territorial recognition and social injustices. The feeling of belonging to a territory depends on territorial recognition, which is based on an identity dimension. It is one of the identity reference factors available to any individual [20]. The feeling of belonging is an identity reference to a group and/or an area that is built up over time. This referent illustrates the anchoring of recognition, or the affective manifestation of attachment conditioning actions of solidarity and spatial symbolism. In this way, belonging to a territory cannot dissociate the ‘affective’ from the ‘spatial’, since a place is always a framework for social relationships. We can therefore understand Martina Löw’s concept of the perception of space, which states that space is “a relational arrangement of living beings and social goods” [21]. We note that space cannot be perceived as an entity distinct from the society that inhabits it. Each social group has a living space, marked by experience and conquered by cultural symbols and borrowed by social dynamics.

As space is a place of memory and value, all these elements are sources of collective identity [22]. Collective identity can be claimed based on Axel Honneth’s theory of social recognition, with questions based on the work of Nancy Fraser [19] and Emmanuel Renault [6]. For Axel Honneth [5], recognition is “a form of knowledge of others” (cognitive aspect) and “behaviour towards others” (practical aspect). Feelings of injustice, of “not being respected” and “not being recognised” are at the heart of Honneth’s theory. The denial of recognition and the lack of respect for an individual lead every actor to reflect critically on society. Yet Hegel already emphasised that society is a sphere of recognition in which each member recognises the other. For our modern societies, Honneth distinguishes three types of spheres of recognition. These are the sphere of love, of mutual recognition, and of recognition through respective abilities.

In its applications today, this theory is combined with the theory of social justice. Individuals do not feel socially recognized or valued when there are social denial and contempt. This lack of recognition can lead to social conflict and struggle. These different situations create feelings of injustice that are at the heart of this research. Using Emmanuel Renault’s work as a starting point, we are attempting to understand and explain how actors construct the logic that produces the denial of recognition and social contempt [6]. This theory has made it possible to identify the factors that explain the sense of injustice felt by Lomé residents and Accra residents.

2.3. Methodological Approach

2.3.1. A Cross-Reading of Greater Accra and Grand Lomé

This study cross-reads the perception of electricity network extension operations in Greater Accra and Grand Lomé to identify similarities and dissimilarities in these two capital cities of border countries (Togo and Ghana). This method is an indirect experiment. The element of comparability chosen for this paper is the recognition of belonging to a territory.

Greater Accra and Grand Lomé are capital cities located on the coast of the Gulf of Guinea. They are the main cities of their respective countries [23]. Both urban areas are urban metropolises. If we are to believe the suffix ‘greater’ or ‘grand’ that precedes the names of these two cities, we are dealing with two cities with an urban framework defined by spatial extension and conurbation. Accra’s urban area today comprises the original metropolitan territory, the urban centre of Tema and their peripheral areas, including Madina, Ashaiman, Kasoa and Adenta [23]. Lomé, now known as ‘Greater Lomé’, has undergone a reorganization of its official boundaries, bringing together the prefectures of Golfe and Agoè-Nyivé. These two urban areas are undergoing metropolization to better organize living spaces and address spatial dynamics. Figure 1 shows Grand Lomé.

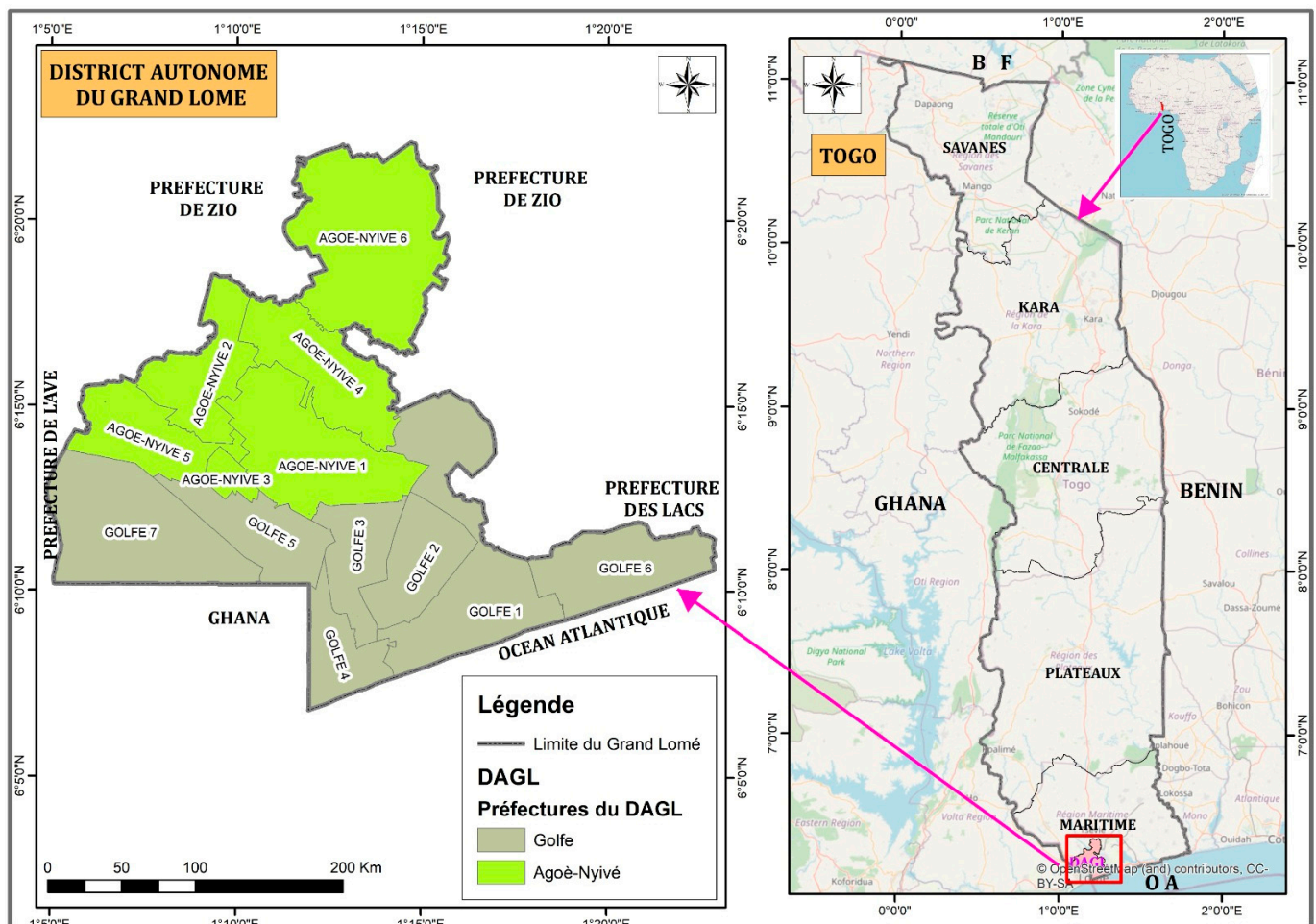


Figure 1. Location of the study area Grand Lomé (Togo), highlighting municipalities and prefectures. Data source: Google Earth, 2025. Author: Anoumou, July 2025.

In addition to the possible origins of the name, anthropologist Yves Maguerat and historian-archaeologist André Dovi Kuévi assert that the name ‘Lomé’ was not known until the 1880s. It is a non-indigenous, non-colonial African city [24,25]. Al-

though 'A-Lomé' (the town's original name) was initially confined to the south side of the lagoon, it soon expanded beyond its original boundaries. It was officially founded by August Köhler in 1897. Today, Lomé, which has become Grand Lomé, is a spread-out territory which, according to decree no. 2017-144/PR of 22 December 2017, includes the former prefectures of the Gulf and Agoè-Nyivé. These prefectures now include thirteen (13) communes (Golfe 1/Bè Est, Golfe 2/Bè Centre, Golfe 3/Bè Ouest, Golfe 4/Amoutivé, Golfe 5/Aflao Gakli, Golfe 6/Baguida, Golfe 7/Aflao Sagbado, Agoé-nyivé 1/Agoé-nyivé, Agoé-nyivé 2/Légbassito, Agoé-nyivé 3/Vakpossito, Agoé-nyivé 4/Togblé, Agoé-nyivé 5/Zanguéra, Agoé-nyivé 6/Adétikopé). It has a population of more than two million, according to projections in the Schéma Directeur d'Aménagement et d'Urbanisme (SDAU) for Grand Lomé. This urban area covers 42,650 ha, or 426.5 km² [26].

Over and above the socio-political unrest since 1990, Grand Lomé is a place of informality [27]. Alongside this city, Greater Accra is positioned as a booming urban centre with urban architecture that is attractive to any observer. A former colonial city, Accra grew from British, Dutch and Danish forts dating from the slave trade as early as 1652. Today, Accra's urban front continues to grow thanks to the demographic explosion and migratory flows.

Unlike Grand Lomé, Greater Accra is made up of ten (10) territorial entities that are districts (Accra Metropolitan, Adenta Municipal, Ga Central Municipal, Ga East Municipal, Ga North Municipal, Ga South Municipal, Ga West Municipal, La Dade kotopon Municipal, La Nkwantanang Madina Municipal and Tema Metropolitan). In 2014, it was home to more than three million people over an area of 89,400 ha or 894 km² [28]. Greater Accra has twice the size and population of Grand Lomé.

The two study areas are the result of the commercial activities developed along the coast of the Gulf of Guinea. There is therefore a historical link between Greater Accra and Grand Lomé. This historical link provides a better understanding of the current urban realities in the two cities. The social reality of a given area is influenced by the originality of the social evolution of that area [29]. Both cities were named 'capital' towards the end of the 1880s (Accra in 1874 and Lomé in 1897).

In addition to these historical links, there are other factors that explain the introduction of electrical supply in Greater Accra and Grand Lomé. They inherited an electrification system dating back to colonial times. This system was designed to run industries, administrative institutions and hospitals. There are therefore common features in the electrification context of the two cities [30,31]. Accra has been connected to Ghana's electricity grid since 1955. The electricity network in Greater Accra originates from the first public generator installed by the Gold Coast Railway Administration in 1914 in the town of Takoradi [32]. Lomé has been connected to the electricity grid since 1926. Electrification of the town took place between 1926 and 1928, with the establishment of several French government institutions. Connecting the city of Lomé was supervised by the *Union Hydro-électrique Africaine* (UHEA), which in 1937 became the *Union Electrique Coloniale* (UNELCO), a French company.

Moreover, both cities benefited from electricity production based essentially on hydroelectric power stations, including the Akossombo and Kpomg dams in Accra, and the Nangbéto and Kpimé dams in Lomé. Similarly, since 1967, the two cities have shared electricity production from the Volta River Authority (VRA), with the construction of the Akossombo dam to make up for energy shortages [30]. The Communauté Électrique du Bénin (CEB), which is responsible for electricity production in Togo, buys a volume of energy from the VRA to make up for the energy shortfalls. Towards the beginning of the 1990s, gas-fired power stations emerged in these towns to produce electricity.

Although the two cities do not share a common code governing the electricity sector, there are similarities. Whether in Greater Accra or Grand Lomé, the electricity sector is organized into three steps (generation, transmission and distribution of electricity). These steps are run by state and private players. In addition, Greater Accra and Grand Lomé have institutions responsible for regulating the electricity sector in relation to the service provided. These include the Accra Public Utilities Regulator Commission (PURC) for greater Accra and the Autorité de Régulation du Secteur Electrique (ARSE) for Grand Lomé. Figure 2 shows the location of Greater Accra.

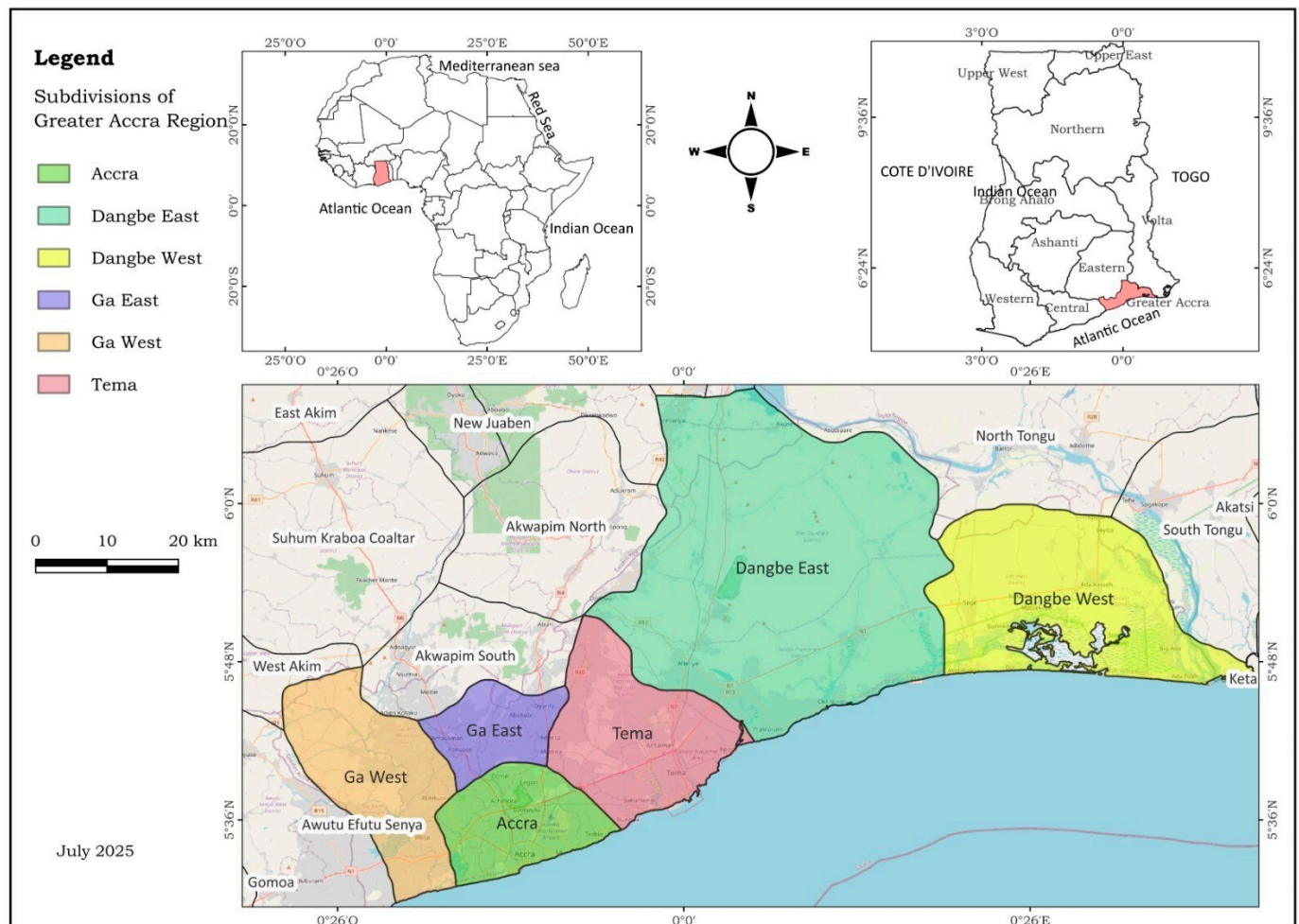


Figure 2. Location of the study area Greater Accra (Ghana), highlighting municipalities. Data source: Google Earth, 2025. Author: Anoumou, July 2025.

2.3.2. Data Collection and Analysis Techniques

Our research opted for a step-by-step approach combining qualitative and quantitative approaches. This methodological itinerary combines observation techniques with geo-referenced photography, individual interviews, questionnaire administration and documentary review.

For Grand Lomé, the exploratory visit was carried out from March to April 2018 in the newest communes, Golfe 2 (Klokovikopé) and Agoè-nyiévé 2 (Légbassito). These areas were chosen for two reasons. Firstly, they are newly integrated into the Grand Lomé urban area. Secondly, they are among the areas where illicit connections predominate [33]. Passing through these neighbourhoods and communes by motorbike or on foot provided an opportunity to talk to residents about the electricity service. Subsequently, interviews were held with staff from CEET's mapping department and an executive from the Electricity

Regulatory Authority (ARSE). We were given the opportunity to visit some of the new urban areas with these agents as part of the Reform and Investment Project in the Energy Sector in Togo (PRISET). As for greater Accra, discussions took place via WhatsApp with residents studying geography at the University of Ghana (Legon), on access to electricity. An exploration visit took place from 31 October to 3 November 2018. This information, which was previously collected as part of the thesis, was updated between 5 May 2025 and 30 June 2025.

- **Observation using photography**

We opted for ethnographic observation using photography. It is “a social construct offering innovative perspectives on the city and its transformations” [34]. Following the exploratory visits, weekly observations took place in the communes or districts recently integrated into these two metropolises. In Accra, the observations were made by a resource person. These observations provided a description of the prevailing social reality in terms of access to electricity. They also revealed the socio-spatial differences in terms of access to electricity. By walking around, taking geo-referenced photographs and using field diaries, we were able to transcribe the findings and retrace the facts. As a result, the photos allow the reader to better perceive and identify the facts transcribed. In addition, the choice of geo-referenced photos is intended to prove the location of the realities highlighted.

- **Individual Interview**

In the case of Grand Lomé, individual interviews were held with several households on the unavailability and dissatisfaction of the electricity service and their experience of it. Agents from ARSE, CEET, AT2ER, the Ministry of Urban Planning and Housing and many other actors involved in the planning and electrification of urban and semi-urban areas were consulted. The interviews took place in situ to allow interviewees to express their perceptions freely. It began in November 2018 and intensified during the period from March to August 2019. As far as Greater Accra is concerned, the interviews were held with residents of Adenta Municipal District (AMD), mainly about connections and the lack of electrical service. Officials from the Metropolitan Assembly of Accra and those of the ECG were questioned about the electrification procedure for the new urban areas of greater Accra. This collection took place from March 2022 to March 2023. All this data was updated from May to June 2025.

The people interviewed were selected as the data collection progressed, based on a travelling survey. As a follow-up to the exploratory visits and initial interviews carried out in the various localities, resource persons were selected for each data collection site. These people put us in touch with other residents who did not have access to electricity. These interviews conducted in Greater Accra and Grand Lomé were transcribed using Transcriber software. The data were then manually processed and triangulated with the other information collected. The table below summarizes the number of people interviewed in each city. The Table 1 present the number of people interviewed.

Table 1. Number of people for interviews.

City	Number of People
Greater Accra	34
Grand Lomé	78

Source: Data of our research, 2021.

We interviewed fewer people in the greater Accra area. This is justified by the fact that we were only interested in Adenta, whereas Légbassito and Koklovikopé were studied in the Grand Lomé area. The focus on Adenta in Greater Accra does not call into question

the comparative findings. Discussions with the Greater Accra Metropolitan Area (GAMA) corroborate this fact.

- **From sampling to administering the questionnaire**

The selection of interviewees in the various data collection areas was based on an approach aimed at achieving an homogeneous representation of the parent populations. In the absence of a database providing information on households without access to electricity in the new urban areas of both Lomé and Accra, a progressive selection method based on itinerancy was adopted. This is a non-probabilistic sampling method determined by the residents. This sampling technique is also known as the resident-determined sampling method, or respondent-driven sampling (RDS). In each field, the number zero (0) refers to the resource person and n refers to sample saturation. Respondents were approached on the recommendation of resource persons (Marcel in Koklovikopé, Rachelle in Légbassito, and Jude in Adenta). This technique made it possible to obtain quantifiable data from one city to another on the diversity of perceptions of the electricity network extension operations. This approach supports the qualitative data in measuring the weight of the observed facts. The data for Greater Accra was obtained from residents of the Adenta Municipal District. For Grand Lomé, information was collected in Koklovikopé and Légbassito. In implementing this technique, we encountered difficulties due to the availability of the heads of households, who are the people who applied for the connections. Some made appointments with us but did not keep them. The number of persons interviewed is present in the Table 2.

Table 2. Number of people who completed a questionnaire by urban area.

City	Number of People
Greater Accra	48
Grand Lomé	96

Source: Data of our research, 2021.

- **Mapping**

Mapping in the context of this research is the culmination of the progressive approach. It has enabled the various findings made through observation, interviews, and the administration of the questionnaire to be materialized. Using QGIS software, some of the data collected has been geographically represented. Location maps and thematic maps were produced as a continuation of the analysis of the facts. The base maps were obtained from Agetur-Togo and CEET for Grand Lomé. For Greater Accra, they were obtained from ECG. It should be noted that some base maps were scanned from scientific works and then vectorized using QGIS.

3. Results

3.1. Perceptions of the Expansion of the Electricity Network in Greater Accra and Grand Lomé

Perception refers broadly to the activity by which a subject experiences an object or reality. This activity is a cognitive mechanism based on information received from a third party, and on stereotypes. According to Herbert Smith's work in American cities, "providing residents with information on urban management promotes the co-production of urban space" [35]. This is therefore a form of participation in urban projects that are guided by cognition. A cross-reading of the information obtained on the conventional expansion of the electricity network reveals a diversity of perceptions. How does this diversity of perceptions manifest itself in the two urban areas?

3.1.1. The Expansion of the Electricity Network as Perceived by the People of Lomé

For 56 per cent of Lomé residents living in Légbassito and Koklovikopé, the expansion of the electricity network is motivated by political reasons. This is reflected in the data in Figure 3 below. On the other hand, 33 per cent argue that the expansion of the electricity network is dependent on the ability of applicants to pay for the expansion costs. Therefore, they do not consider it to be political action.

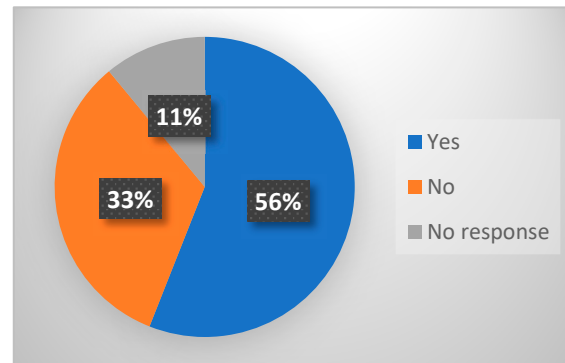


Figure 3. Distribution of respondents in Grand Lomé according to their perception of the expansion of the electricity network as political. Source: data of our research, 2021.

The political interpretation made by 56% is based on a few arguments that we present in Table 3. By cross-analysing figure and Table 3, we can see that 50% of these 56% of residents of Légbassito and Koklovikopé base their view on a deployment based on “a matter of knowledge”. Thus, for these residents of Grand Lomé, the extension of the electricity network in certain areas was facilitated by the presence in the community of “people with knowledge”. This expression was used by more than half of these residents. For them,

“It’s not enough to pay the CEET estimate. You must know someone there. You must have contact. Many of us have paid the estimate, but so far, the CEET has not come to install the poles. And yet, we have paid, and it will soon be nine months.” (Excerpt from an interview conducted on 25 June in Légbassito with Mr. F).

Table 3. Distribution of residents of Grand Lomé according to reasons for the political interpretation of the expansion of the electricity network.

Argument Motivating Political Perception	Respondents	Percentage
No responses	33	34.4
The Central Office is not working	7	7.3
It is a matter of knowledge	48	50
Lack of facilities	8	8.3
Total	96	100

Source: Data of our research, 2021.

Contrary to these residents, CEET’s senior management considers the extension operations to be projects aimed at improving network coverage. Thus, “the mapping department proposes network extension lines each year after conducting a survey of land use. The choice of which line to implement is decided by the administrative council (AC)” (excerpt from the interview conducted on 12 August 2019, with Mr. R. at CEET).

When this information is compared with data obtained from a field agent from the CEET mapping department, a slight difference emerges. The agent stated the following:

“There are always projects here at the CEET. But I can tell you that it’s political. For example, there is a project for the outlying districts of Lomé, but it has now

been moved to Dapaong. Yes, there are projects, but the choice of locations for these lines is made on a flexible basis, with changes every day. This is the case for the extension lines currently proposed in the PRISET project. . .” (Excerpt from the interview conducted on 12 March 2019, with Mr. D. at CEET).

The political interpretation of the deployment of the electricity network in Légbassito and Koklovikopé is therefore favoured by the flexibility in the choice of streets/alleys to be connected. Furthermore, the delay by CEET in connecting or installing the network for certain residents who have paid the estimate fuels this diversity of perception. Beyond the contradictory logic observed between the various actors involved, the diversity of perceptions weakens the co-production of space in these localities of Grand Lomé.

Table 4, below, compares the statements made by residents, technical agents, and decision-makers. It shows that all stakeholders involved agree that individual extensions are carried out at the customer’s request, provided they can pay the connection fee. However, there is a difference in perception regarding extensions carried out as part of infrastructure development projects. CEET does not work in synergy with the urban planning and programming department. Thus, it carries out network extension projects based on decisions made by the Board of Directors following prospecting missions carried out by the mapping department in conjunction with the project department. The mapping department makes proposals for locations to be connected to the electricity network based on the map of its existing equipment and not based on the map of the urban fabric and urban facilities planned by the various agencies for Grand Lomé. Consequently, populations that do not benefit from these projects interpret these extensions to the electricity network in political terms when the beneficiary localities are inhabited by a few prominent figures. This is the case with the extensions made by CEET in neighbourhoods such as Légbassito Madjikpéto (electrification of the CEG and the road leading to it) and Légbassito Ahonkpoè (the road leading to the canton chief’s residence) as part of the construction of the major bypass road. The following table summarizes the urban stakeholders’ perceptions of the electricity network expansion project in Grand Lomé.

Table 4. Summary table of urban stakeholders’ perceptions of the electricity network expansion project in Grand Lomé.

Element of Comparison	Residents	CEET Technical Agent	CEET Decision-Maker
Choice of extension location on personal initiative	Customer request	Customer request	Customer request
Choice of network expansion location for a project	Policy	Management decision	Administrative Council decision
Connection conditions	Payment of connection	estimate Payment of connection	estimate Payment of connection
Conditions for completing the extension	within the deadline Have knowledge	Sign the work order (WO)	Payment of the connection estimate

Source: Data of our research, 2025.

However, according to a senior CEET executive, in Grand Lomé, “expansion is fundamentally based on the potential customer quota. If an area can provide CEET with thirty customers, that is better than an area where there are only two or five customers. There are currently areas where CEET is operating at a loss” (excerpt from an interview conducted on 12 August 2023, with Mr. R. at CEET). The population’s lack of knowledge about the selection criteria fuels speculation.

Furthermore, delays in issuing work orders (W.O.) mean that connection deadlines are not being met. This situation has led some residents of Légbassito to believe that they need to have contact within the CEET management team to be connected on time.

3.1.2. The Deployment of the Electricity Network as Perceived by Accra Residents

Unlike Grand Lomé, in Greater Accra, the expansion of the electricity network is mainly seen as an urban project by the various stakeholders involved. Information obtained from the municipality of Adenta indicates that the rollout of the electricity network is a coordinated development initiative. Indeed, when asked, “Is the expansion of the ECG electricity network a political decision?”, 82% answered no as demonstrate the Figure 4 below, while 6% considered that the deployment of the network by GRIDCo was the result of a political decision. Table 5, below, provides more information on the reasons behind these different perceptions.

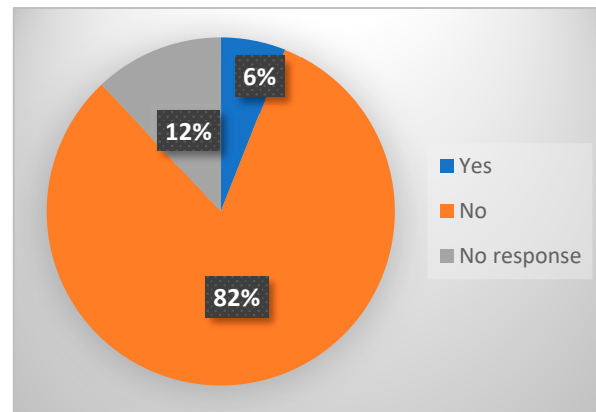


Figure 4. Distribution of Adenta respondents according to whether the expansion of the electricity network is a political decision. Source: Data of our research, 2021.

Table 5. Distribution of Adenta residents according to their justification for the political interpretation of the expansion of the electricity network.

Justification	Expansion of the Electricity Grid, a Political Decision			Total
	Yes	No	NA	
It was a need expressed by the community	00	23	04	27
It is provided for in the local development plan	00	16	02	18
The choice of beneficiary localities	03	00	00	03
Total	03	39	06	48

Source: data of our research, 2021.

Table 5 shows that the non-political interpretation of the electricity network extension by Adenta residents is justified by the provision of information to the population about the operation carried out. Thus, 56.25% of those surveyed (27 Adenta residents) maintain that the extension of the electricity network is a “need expressed by the community”. In other words, it is a request for extension of the network introduced by a third party, or a need expressed by the community to the traditional chief, who then transmits it to the development committee. Eighteen other respondents (37.5%) stated that the deployment of the electricity network was provided for in the local development plan. However, 6.25% of the people who mentioned that it was a political decision question the choice of beneficiary localities. For the latter, several communities or customers simultaneously express their needs. When asked, “How is the choice of localities to benefit from the extension of the electricity network made?”, they respond, “These are political choices” (excerpt from an interview conducted on 12 April 2022, in Adenta with Mr. G.).

It should be noted that, in accordance with the Self-Help Electrification Program (SHEP), 4200 communities with more than 500 inhabitants have been connected to the national grid [36]. Thus, some communities, without having expressed the need, have

benefited from a connection to the national electricity grid, particularly rural areas and some areas newly integrated into the urban area. The choice of beneficiary localities was therefore made in synergy with the Ministry of Energy, the EC, the PURC, GRIDCo, and the ECG. According to an official from the municipality of Adenta, district capitals were favoured for these connection projects. This is revealed in the following statement:

“The NES master plan identified and prioritized 69 network-based electrification project packages to be implemented in six five-year phases. Connecting the district capitals (64 in total) and completing projects already underway were given top priority and were therefore included in the first phase of the master plan. The subsequent phases were prioritized based on economic criteria as well as political, traditional, and historical factors.” (Excerpt from an interview conducted with Mr. G. in Adenta on 12 April 2021).

In Adenta, Kokloviokopé, and Légbassito, some residents interpret the lack of information about the selection of locations that will benefit from the power grid expansion projects as a political decision. This view considers the expansion of the power grid to be a discriminatory government measure. This is also emphasized by David Darbon, who points out that the public measure to expand the power grid is a marginalizing measure [37,38].

As development initiatives are carried out collaboratively in the municipality of Adenta, the diversity of perception concerns the quality of the electricity supplied rather than the deployment of the electricity network. This is revealed in the comments below from a geography student at Legon University.

“Here you will see the electricity network almost everywhere. The only problem is that there are too many loads shedding. Each year, GRIDCo carries out transformer substations and extensions of the electricity network. And so, the electrical network is almost everywhere. Places where it is not available, the planning committees of these municipalities promote alternative energies.” (excerpt from an interview conducted on 2 November 2020, with Mr. M. in Adenta.)

The same observation is made by Catalina Duque Gomez in Nairobi. For her, the diversity of experiences lived by residents goes hand in hand with a diversity of perceptions. She told us the following:

“The diversity of situations regarding access to electricity reflects socio-spatial inequalities and fragmentation, as well as the tactics—collective or individual, formal or informal—employed by users in four different neighbourhoods (slums, middle class, upper class, CBD) to compensate for service failures or lack of service, depending on their technical, economic, social, and political capacities and resources” [39].

The perceptions of the reasons for the deployment of the electricity network amongst Accra residents is presented above. What are the causes of the diversity of perception in Greater Accra and Grand Lomé?

3.2. *The Causes of Differing Perceptions in Greater Accra and Grand Lomé*

Our analysis of the causes of diversity in perception in Greater Accra and Grand Lomé is based on data obtained from residents of these two urban areas and recent scientific research. Considering the diversity of perceptions presented above, the argument highlights the synergy of actions in the provision of public services. The provision of public services is a “combination of actions, institutions, and resources that enable a good to be delivered [...] regardless of the forms of this collaboration (direct or indirect, one-off or permanent), substitution, competition, complementarity. . .” [40]. From this definition, it should be noted that the deployment of the electricity network is a series of actions involving residents, the municipality, and the company in charge of the service in varying ways. According to field data, the causes of the diversity of perception in the two agglomerations are linked to the

collaboration of the actors and the procedure for carrying out the operations to extend the electricity network.

3.2.1. Challenges to Collaboration Among Stakeholders Involved in Expanding the Electricity Grid

Whether you live in Greater Accra or Grand Lomé, electricity as an urban service brings residents and the companies in charge of the network into contact with each other and with the electricity sector and land-use planning stakeholders. From one urban area to another, there is variation in the level of collaboration between the stakeholders involved when it comes to expanding the electricity network.

From the triangulation of the information obtained, we can see that there are two types of collaboration between the various stakeholders: ad hoc collaboration and permanent collaboration. This is illustrated in the comparative table below.

Table 6 highlights the similarities and differences in terms of synergies between the various stakeholders involved. There is a sporadic relationship between the electricity companies (CEET and GRIDCo) and residents. The “occasional” nature of this relationship lies in the fact that residents of Adenta (Greater Accra) or Légbassito (Grand Lomé) are only involved in the implementation of extension projects (based on company funds) for informational purposes. However, it is important to qualify this “occasional” nature in the case of the municipality of Adenta. In fact, in areas with less coverage by the Adenta electricity network, residents inform the traditional authorities, who are represented on the development committee with GRIDCo. This results in an indirect relationship that provides a channel for expressing the need for network expansion when it is not possible to submit an individual expansion request. This possibility does not exist for residents of Lomé. This is confirmed by a statement from a CEET engineer.

Table 6. Summary table of collaboration between stakeholders involved in the expansion of the electricity network in Greater Accra and Grand Lomé.

Elements	Greater Accra	Grand Lomé
Relationship between the electric company and the population	Occasional	Occasional
Relationship between the electric company and the traditional chief	Permanent	None
Relationship between the electric company and the land use planning agent	Permanent	None
Relationship with local authorities	Permanent	None
Relationship with stakeholders in the energy sector	Permanent	Permanent

Source: data of our research, 2025.

“There is no real relationship between the populations of the unconnected neighbourhoods of Lomé and CEET. They are not CEET subscribers. . . They are simply told that a project is coming, and they will have electricity. . . Internally, we work with the CVDs, giving priority to schools, public places, and the chief’s house. But in Lomé, this is not done” (excerpt from the interview conducted on 12 March 2019, with Mr. D. at CEET).

From the engineers’ comments, we understand that the absence of this possibility in Grand Lomé is a choice made by CEET.

In addition to this similarity, Table 6 shows that in both Greater Accra and Grand Lomé, there is synergy between the actions of the various companies in the energy sector. This is reflected in the comments of a CEET engineer, who said the following:

“There is a collaborative relationship between CEET, CEB, and AT2ER. Since this agency does not have any equipment, it always comes to us. Our cartographic data is more up to date than that of the City Council and others. When I was working in cartography, a lady from the French Embassy used to come by all the time. We had data that even the road authorities didn’t have” (excerpt from the interview conducted on 12 March 2019, with Mr. D. at CEET).

In Greater Accra, this synergy of actions is embodied by the Planning Committee. There is therefore an ongoing relationship between these different actors. From the information gathered, we can see a convergence of perception among companies in the energy sector.

Considering these facts, we can confidently echo the words of Sylvie Jaglin: “The logic of planning and building conventional infrastructure creates an ugly demand for services...” [38]. Considering the facts presented above on Greater Accra and Grand Lomé, we note that the form of collaboration between the various urban actors influences the perception of Accra and Lomé residents on the expansion of the electricity network. Consequently, a one-off relationship between the actors involved promotes a diversity of perceptions. However, a permanent relationship gives way to a common perception of the electricity network expansion operation.

3.2.2. Challenging the Procedure for Implementing the Electricity Network Expansion Project

In addition to the form of collaboration between the actors involved, the procedure for implementing electricity network expansion projects is a source of diversity in perception, according to the information obtained. Indeed, the concept of procedure refers to the manner of doing or executing something. In the context of electricity network expansion projects, talking about procedure means questioning the different stages of implementing an electricity network expansion project. The stages of implementing expansions are governed by an electricity code in Greater Accra, as in Grand Lomé. Thus, the implementation of the electricity network in Greater Accra is governed by the National Electricity Grid Code [41]. In Grand Lomé, however, the implementation of the electricity network is subject to the international agreement on the Benin-Togo electricity code [42].

The electricity codes in force in the two metropolitan areas reveal a difference in the procedure for extending the electricity grid on the initiative of the electricity companies. This difference is highlighted in Table 7, in a comparative approach.

Table 7. Summary table of the stages involved in extending the electricity network in Greater Accra and Grand Lomé.

Greater Accra		Grand Lomé	
Step	-	Project declaration	-
	-	Authorization request	-
	-	Project implementation	-
		CEB site visit	

Source: data of our research, 2025.

Thus, this type of electrical network expansion in Greater Accra involves three stages: project declaration, authorization request, and network implementation. In Grand Lomé, a fourth stage (CEB inspection of the works) is added to the three stages existing in Greater Accra. There is therefore a similarity in the network extension procedure in these urban areas. However, there are specific features at each stage of the network extension procedure. The similarities and differences in these practices are shown in Table 8.

Table 8. Summary table of practices for implementing electricity network expansion projects in Greater Accra and Grand Lomé.

Elements	Greater Accra		Grand Lomé	
	Extension Individual	Extension Made by the Company	Extension Individual	Extension Made by the Company
Project design	After connection request	After annual network assessment	After connection request	After prospecting
Financing	The customer	EC; Financial partners	The customer	Financial partners
Consultation with those affected	Yes	Yes	Sometimes	No
Information at the start of work	Yes	Yes	Yes	Yes
Organization in collaboration with the municipality	Yes	Yes	No	No
Participatory action	Yes	Yes	Yes	No

Source: data of our research, 2025.

We can see that practices follow a participatory or unilateral dynamic from one urban area to another. For example, in Grand Lomé, project design is carried out unilaterally after prospecting by mapping service agents and evaluation by management. In contrast, in Greater Accra, there is an annual evaluation of the network by the EC, GRIDCo, PURC, and ECG, considering the observations made by the planning committee. This approach contributes to the participatory implementation of electricity network expansion projects.

Furthermore, there is a wide range of reactions when the expansion of the network affects residents' property. In Greater Accra, for example, there is consultation between GRIDCo and those affected by the installation of electricity poles. This approach allows residents to be involved in the implementation of electricity network expansion projects. In Grand Lomé, however, CEET informs those affected without consulting them. These residents are treated as "illegal occupants" of space reserved for the expansion of network services. This lack of consultation contributes to the diversity of perceptions, considering the information obtained from the residents of Légbassito and Koklovikopé.

The above-mentioned causes point to a lack of shared representation and interactive processes regarding the expansion of the electricity network. This raises the issue of the design and implementation of urban projects. Indeed, urban projects involve collaboration on three levels: defining a common challenge at the city or metropolitan area level, collective activities, and assigning responsibilities for urban operations. Considering the field data, the absence of these elements is accompanied by a diversity of perceptions of the expansion of the electricity network in Greater Accra and Grand Lomé.

Given the factors explaining the diverse perceptions of the expansion of the electricity network as presented above, how does this diversity of perception influence the experiences of the inhabitants of Légbassito, Koklovikopé, and Adenta?

4. Discussion

Space is a place of memory where social groups, through their organization and institutions, construct social values. Thus, Emmanuel Renault's recent work on injustice emphasizes that an individual's experience of reality depends on the model of social organization [6]. From the explanatory factors raised above, we can see that the diversity of perceptions regarding the expansion of the electricity network leads to a feeling of denial of social recognition among residents. From Greater Accra to Grand Lomé, we see that the expansion of the electricity grid is accompanied by a diversity of values or feelings about the service provided. According to Jacques Levy, this value is constantly being

constructed in relation to the functioning of society and the representation that everyone has of cohabitation with others [13]. Indeed, the procedures and practices for extending the electricity network in Grand Lomé and Greater Accra reveal a diversity of feelings based on the need for recognition by others and towards others. For Axel Honneth, recognition by others is linked to the functioning of societies [5]. These different forms of recognition are illustrated in urban projects through the spatial and social languages of the senses. Thus, the data obtained in the field are facts that reflect the feelings of residents. They highlight the residents' feeling of non-recognition by the designer and their refusal to extend the electricity network.

4.1. Residents' Feeling of Not Being Recognized by the Designer

Assuming that "social existence is linked to a social institution. . ." [6], residents of a neighbourhood are recognized by a social entity that confers status upon them. Thus, residents who interpret the expansion of the electricity network in political terms express a need for recognition on behalf of Koklovikopé and Légbassito (Grand Lomé). The exclamation, "We are also Lomé residents!" speaks volumes.

A need for recognition of the residents in Koklovikopé is a reality. They do not have coverage from the official CEET electricity network, whereas across the road (across the main bypass), the residents of Attiéguou 2 do have official electricity network coverage. Considering this fact, are we facing a denial of recognition? With this question, we would like to know whether state actors (the main actors in the production of urban space) recognize the residents of Koklovikopé as "residents of Grand Lomé." To this end, one head of household emphasized the following to us:

"There is no official electricity network here. We don't even have a road to get to the neighbourhood, and when it rains, the shortcuts that serve as paths are inaccessible because they are flooded with water from the gutters that flow into the neighbourhood. When this road was built, the government told contractors that no one should live there and that it could ensure that the water was drained towards the Zio. If you stand up there and look down, you will see that the entire road is covered in water. Those who are still behind us are suffering greatly." (Excerpt from an interview conducted on 27 July 2020, with Mr. J. in Koklovikopé).

The statement made by the resident above gives pause for thought. What are the reasons behind this statement about the main producer in the urban area? According to the provisions of the Urban Development Master Plan (SDAU), Koklovikopé is in the bed of the Zio River. It is a flood zone in the immediate vicinity of Zio. It is

"...an agricultural development zone/green and landscaped development zone. Construction for residential, commercial, industrial, recreational, and tourism purposes is prohibited. . . Only buildings for agricultural and market gardening use are permitted, as well as special areas dedicated to logistics. No social or community facilities may be built, except for sports and leisure facilities and urban parks." [26]

Considering these regulations, the residents of Koklovikopé are illegally occupying urban space. Therefore, the state is not refusing to grant them something that is rightfully theirs. Rather, the state is complying with the regulations governing this space.

However, it appears that 36% of residents were unaware of these regulations at the time of purchase. They only found out about it when the major bypass was built. Others (64%) made the purchase despite knowing that the area was off-limits for habitation. Among the latter, the majority hoped for a revision of the regulations, as had been done

for other residential neighbourhoods now located within the green belt previously defined in the 1981 PDU. However, some people purchased land for agricultural activities. These individuals received authorization to settle there. Processing these responses based on quotas produces the following Figure 5.

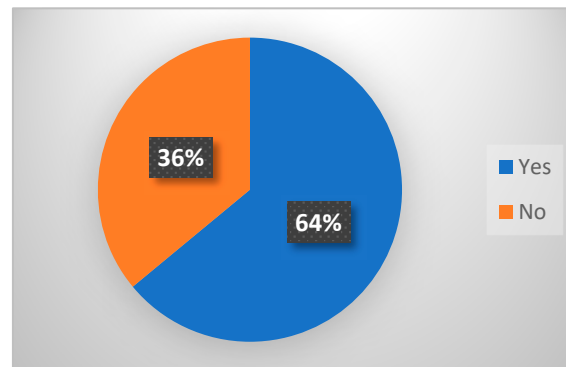


Figure 5. Knowledge of urban planning regulations in Koklovikopé prior to purchasing land. Source: data of our research, 2021.

It is therefore understandable that ignorance of urban planning regulations concerning the Koklovikopé land fuels residents' feelings of non-recognition by the developer.

As for the municipality of Légbassito, it is defined by the Master Plan for Development and Urban Planning (SDAU) as a former rural centre undergoing urbanization [26]. According to Decree No. 2017-144/PR of 22 December 2017, the commune has been integrated into the Grand Lomé urban area. However, Légbassito remains an unapproved zone, as illustrated in the following map.

Until the time of our fieldwork, Légbassito had poor coverage by the official CEET electricity network, despite the implementation of the Lomé Electricity Network Extension Project between July 2018 and June 2025. According to a CEET official, these two projects contributed to "the reinforcement of the low-voltage power line leaving Lomé C and enabled the installation of electricity poles on the road parallel to the major bypass. This is the road that starts at the Légbassito market, passes through the Madjikipéto CMS, and ends at the Avinato neighbourhood intersection" (excerpt from an interview conducted on 12 August 2020, with Mr. R. at CEET).

Faced with this reality, the scarcity of projects to extend the power grid is experienced by the residents of Légbassito as social contempt. "Why haven't we benefited from the recent installation of electricity poles that has taken place throughout Agoè? Our locality is home to a power station, but most of the existing network was built on personal or collective initiative" (excerpt from an interview with Mr. F. in Légbassito on Friday, 26 July 2020). For the residents of Légbassito, the CEET's failure to deploy the electricity network in their locality is synonymous with indifference. Indeed, while government officials justify the absence of the electricity network by the locality's lack of approval, some residents argue that the government is aware of their presence in the locality.

Considering all these realities, it is appropriate to speak of marginalization of the residents of Légbassito and Klokovicopé, who experience social contempt due to the unavailability of the official CEET network in their living space. They experience a sense of social and economic exclusion linked to their living conditions and geographical location. They are marginalized from access to electricity because they cannot afford to connect to the official network (those connected informally or poorly connected) or via a relay (those not connected). The Figure 6 caption, which shows the spatial distribution of connection types, clearly demonstrates the exclusion of certain residents in terms of access to the CEET network. This reality is consistent with Robert Castel's definition of marginality [11].

Consequently, those who are “informally connected or poorly connected” are essentially economically marginalized. Meanwhile, those who are “not connected” are socially and economically marginalized. The latter are excluded from society and do not have access to the CEET electricity network, unlike residents of the city centre and the peri-centre. Their perceptions of the electricity network extension projects reflect a feeling of being left behind, of being excluded from the system and unable to benefit from the amenities of the city. Considering the arguments developed above, those who are structurally unrecognized are people who do not have electricity or who are dissatisfied with the electricity service.

As for electricity, it still hasn't arrived. We don't have any poles, so we've made what are called spider connections. At the Complexe la Raison school, someone managed to install a pole, but we don't know what measures were taken to gain access to it. Electricity in this region is a real problem. We got electricity from a neighbor. His wife and child went to Togo 2000 during the fair in 2017. They participated in a raffle for 300 CFA francs at the insistence of the child, which allowed them to win a cash power. After that, to collect the prize, we were asked for money... In the end, friends working at CEET Baguida helped us finally get the meter.

After all these ups and downs, electricity still hasn't arrived at our house. It stayed by the side of the road and was left with the person who had initially supplied us with electricity. This is not without consequence, because every time, we have to bother people to recharge the meter. Yesterday, my child went to check before recharging, because sometimes it disconnects on its own. If this happens in the middle of the night, we are forced to stay like that until dawn, because it is someone else's door. We cannot wake them up in the middle of the night. Since the meter is not in our house, we have serious difficulties with electricity, especially when we are in limbo without electricity.

Figure 6. Excerpt from an interview conducted on 27 July 2021, with Mr. J. in Koklovikopé.

Few actions are being taken by the state to improve coverage of the official CEET network. This fact is justified by the following comments from a resident of Légbassito:

“My brother, stop that. The government has certainly not yet approved Légbassito. But the same government has made Légbassito a municipality. We have a town hall, and the town hall officials go out into the field to collect taxes. So, they know that we live in this part of town. So why hasn't the network been expanded here? The power lines you see were put up by the residents themselves. The official extensions made by CEET itself can be counted on one hand” (excerpt from the interview conducted on Thursday, 25 July 2020, with Mr. Th. in Légbassito).

From the arguments developed above, it appears that the scarcity of power grid extension projects and the lack of awareness of them foster a feeling of non-recognition among the residents of Légbassito. We can therefore conclude that in both Koklovikopé and Légbassito, the lack of awareness of the operations carried out leads residents to feel a sense of non-recognition.

However, in the Adenta district, the involvement of traditional leaders in the development committee as representatives of the population reduces the lack of awareness of the operations carried out. Indeed, the chief present at the Planning Committee meeting reports to the council of traditional leaders of the Adenta district. The latter, in turn, report to their constituents.

As a result, whether individuals live in a slum area or a traditional unplanned area, they are informed of any operations underway in the locality when necessary. Furthermore, GRIDCo provides the population with an annual activity report detailing the extension

projects carried out and their costs, as well as the maintenance and upkeep of the electricity network. These reports are available on the official GRIDCo website.

4.2. Feeling of Rejection of the Expansion of the Electricity Grid

In addition to the feeling of non-recognition, the data obtained revealed the existence of a refusal to extend the electricity network. By refusal to extend the electricity network, we mean a rejection of action to deploy the electricity network. This feeling varies from one area to another. The Figure 6 below introduces our analysis of this sentiment, which stems from the refusal to expand the electricity network in Grand Lomé (Légbassito and Koklovikopé).

This Figure 6 highlights social frustration due to the failure to connect to the CEET electricity grid, even though the resident had completed the administrative procedures and made the required payment. Many residents encountered in Koklovikopé find themselves in the same situation as this one. Following the installation of the electricity network along the entire length of the ring road, these residents took collective or individual steps to be connected to the network. Thus, like Mr. J., whose comments are quoted above, some residents paid the connection fee without being connected. Residents of this locality did not have the means to pay the estimate and took advantage of the connection campaigns carried out by CEET in 2018, 2019, and 2020 to submit their applications, but they were not connected to the official grid.

Cross-checking with an engineer from CEET reveals that

“The agents responsible for extending the network are experiencing difficulties in installing electricity poles due to the topography of the ground. They are in bed of the Zio River. It is difficult to install a pole unless an embankment is built, as was done at the level of truck traffic and agricultural production towards Zogbédji. With all this, it is not possible to carry out an expansion project in this area” (excerpt from the interview conducted on 12 March 2020, with Mr. D. at CEET).

In view of the various reasons raised above, CEET does not agree to extend the electricity network to Koklovikopé for technical reasons related to the morphology of the soil. However, for residents, the fact that the official CEET electricity network has been extended to Zogbédji and ‘MAN truck plant’ proves that there is a refusal to intervene in their locality. There is therefore a sense of social frustration fuelled by the lack of awareness among Koklovikopé residents and the lack of diversity in the opportunities offered to them by CEET. This creates a situation of relative frustration. According to the sociology lexicon, this frustration is “a gap between the goods to which individuals believe they are entitled and those they think they will obtain” [10]. Thus, despite the technical and topographical reasons highlighted by CEET, residents consider the availability of the electricity network to be a given once the connection fee has been paid. Consequently, the failure to install the network after payment is seen as a discrepancy, a breach of the social contract.

Furthermore, the following questions arise: why does CEET provide connection estimates to residents in areas where it itself is experiencing difficulties in expanding the network? Why does CEET not offer them other solutions? These questions call into question the opportunities offered by CEET to residents of *non-aedificandi* areas in Grand Lomé to access electricity services.

The same interpretation of the refusal to expand can be seen in Légbassito due to CEET’s delay in connecting new subscribers. According to the ARSE’s 2017 annual report, the CEET agency in Adidogomé notes that the annual rate of connections completed on time is 2% for all the localities it covers [33]. This agency covers several municipalities, including Légbassito. With an annual rate of 2% of connections completed on time, many residents feel forgotten, particularly those living in the municipality of Légbassito. In

this municipality, based on the calculation of quotas from the responses obtained during interviews with people connected to the official CEET network, we were able to produce the Figure 7 below.

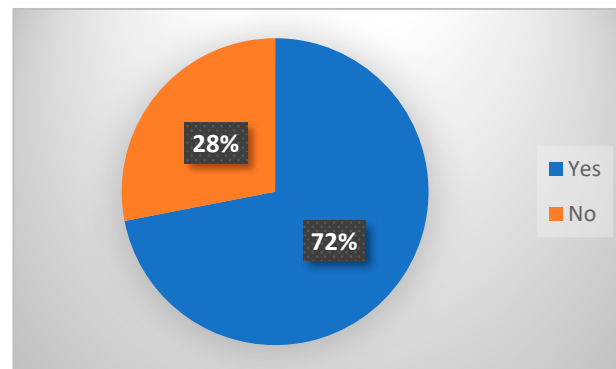


Figure 7. Distribution of people connected to the official electricity grid within the deadline. Source: data of our research, 2021.

According to the provisions of the Technical Distribution Regulations (RTD) for electrical energy in Togo, the connection of a third party after payment of the estimate is to take place within ten days. However, in practice, CEET technical agents mention a regular delay of fourteen days. This standard timeframe is not always respected by technical agents. Ninety-one percent of people already connected to the electricity grid in the area emphasize that connection takes place after several months. This constitutes a breach of the terms of the connection contract by CEET. This situation is a source of frustration for future CEET subscribers.

In Greater Accra, particularly in the Adenta district, there is also relative frustration among some residents. This concerns 6.25% of those interviewed in Adenta who are unaware of the criteria for selecting localities for electricity network extension projects. These residents live in less densely populated areas of Adenta with poor coverage by the official electricity network. As a result, the use of solar kits is common among these residents. However, they are forced to use energy rationally by avoiding high-energy consumption appliances. This has led to some dissatisfaction. It should be noted that this relative frustration is far from being a deprivation of rights. Solar kits are a palliative measure to compensate for the poor coverage of the official electricity grid.

Considering the realities presented above, it can be deduced that the diversity of perceptions regarding the extension of the electricity network in newly integrated urban areas in Greater Accra and Grand Lomé is linked to the fragility of the socio-spatial integration of residents. Consequently, this raises issues of recognition and relative frustration among residents of neighbourhoods newly integrated into an urban area. They experience a sense of social and spatial exclusion due to the feeling of non-recognition of resident status and the refusal to extend it.

This reality is not unique to the two urban areas at the heart of our research. The same observation was recently made by Laure Criqui about the informal settlements of Delhi and Lima. She places recognition at the heart of the socio-spatial integration practices of residents of informal settlements. She emphasizes that “to complete their integration into the city, these populations are certainly in need of services, but also of quality services that satisfy their aspirations for modernity and political recognition as full citizens” [43].

It is therefore understandable that the diversity of perceptions is justified by the lack of collaboration between the various actors involved and the procedure for implementing the electricity network. This fact is illustrated in the daily lives of residents of the two agglomerations by the non-recognition of resident status and/or relative frustration.

These consequences are experienced as social contempt or injustice by some residents of Légbassito and Koklovikopé. In contrast, in Adenta (Greater Accra), the relative frustration expressed by residents is experienced as social inequality.

To decrease this sense of injustice, it is essential to provide residents with information about the electricity grid, from the design to the operationalization of grid expansion projects. The availability of information creates possibilities and opportunities for residents. It is with this in mind that the LETRIKI project was proposed to provide universal access to electricity in Greater Lomé [44]. The aim of this project is to enable residents of Grand Lomé to have access to electricity even if the CEET distribution network is not available.

The map below shows the Greater Lomé area through a cartographic simulation that uses a combination of different sources of production. The map demonstrates that the ‘energy for all’ objective cannot be achieved without a mechanism to inform residents about electricity grid sources based on their location. Figure 8 shows the possibility of access to energy for all, regardless of place of residence, when combining the CEET coverage network and the areas of intervention of the various structures involved in the supply of equipment (solar kits) for domestic or industrial use.

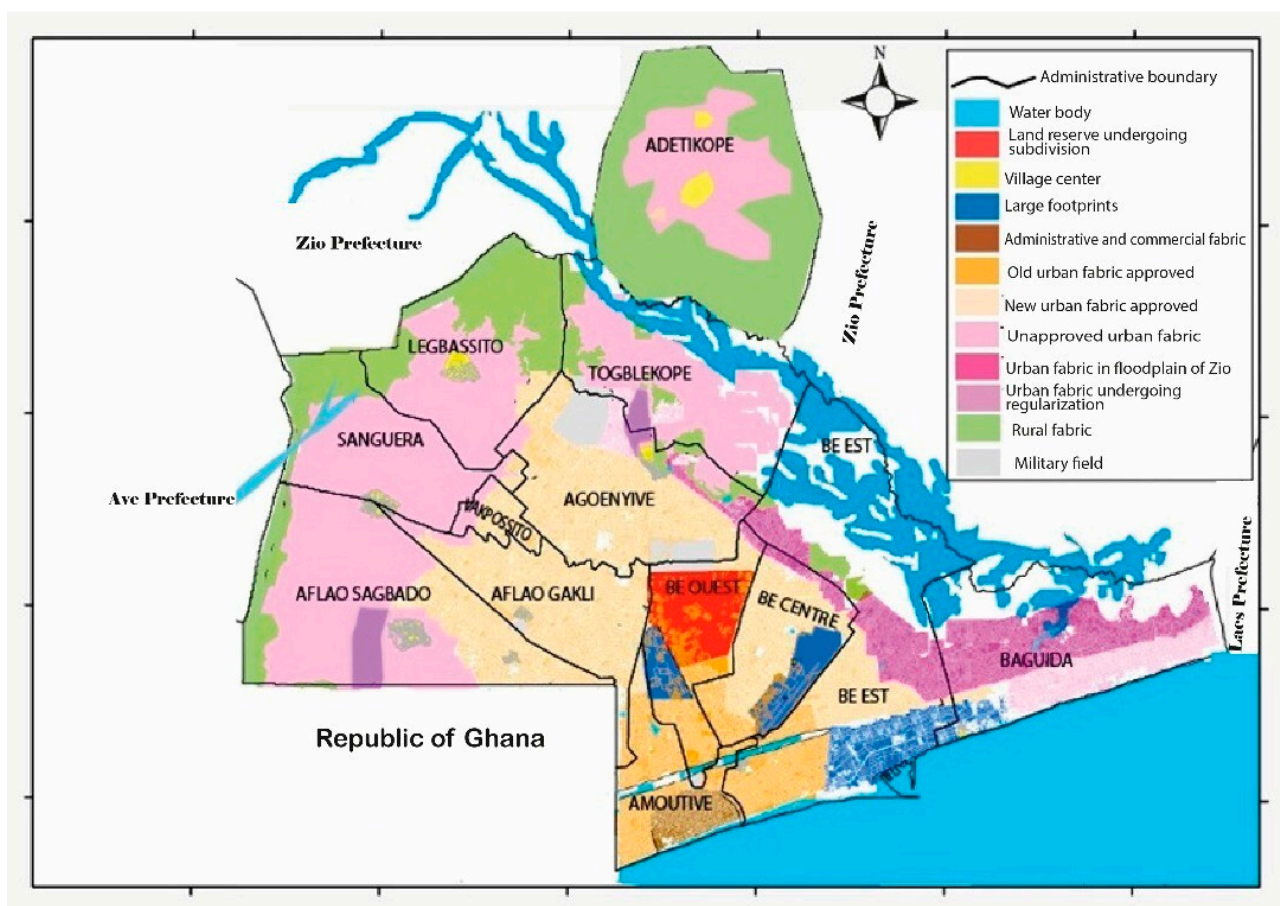


Figure 8. Typology of urban fabrics in Grand Lomé. Data Source: Google Earth, 2025. Author: Anoumou, 2025.

Inspired by the energy potential of Grand Lomé (Figure 9), the high cost of connection in the absence of an electricity distribution network, and the lack of awareness of the possibilities for accessing electricity depending on the place of residence, LETRIKI proposes the development of a digital information mechanism to put an end to information injustices and production losses due to illegal connections and unconventional installations. This proposal’s aim is to ensure fair and equitable access to electricity services for residents in

Greater Lomé. Two models are incorporated into LETRIKI, which is a digital mechanism. The system consists of a web and mobile application model, as well as a GSM mobile technology model that provides information via a toll-free number. The GSM component of the LETRIKI project aims to enable all residents, regardless of their level of living, to access information on energy coverage and connection costs in their locality. Mobile phones have become an effective tool for residents to track their consumption.

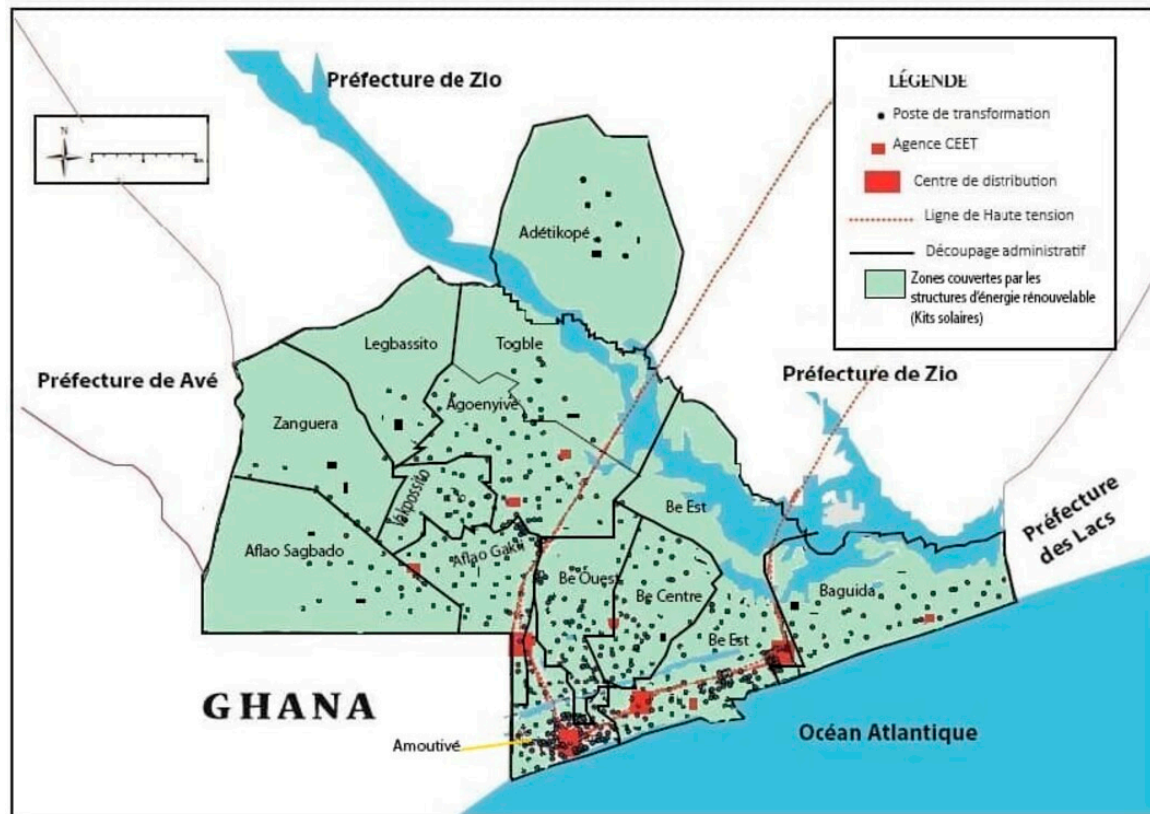


Figure 9. Simulation of electrical coverage in the event of a combination of different sources of electricity generation. Data Source: Google Earth, 2025—Auteur: ANOUMOU, 2025.

5. Conclusions

This paper analyses the expansion of the electricity grid in Greater Accra and Grand Lomé, based on the diversity of perceptions among residents and producers in the area. The expansion of the electricity grid in Greater Accra and Grand Lomé is perceived differently by residents and electricity companies. These land-use planning actions are perceived and experienced by some residents as being politically motivated. Faced with this contradictory situation, there is a problem of synergy of actions in the provision of electricity services in Greater Accra and Grand Lomé. This social reality can be explained by the lack of collaboration between the various actors involved and the procedure for implementing the electricity network. This organizational model for the extension of the electricity network in Greater Accra and Grand Lomé impacts on the social experience of residents, as illustrated by the lack of recognition of status and social frustration. These cognitive consequences can be observed in social and spatial language used by residents and electricity company agents. These findings remain relevant despite the passage of time (from 2018 to 2025). Despite efforts to improve the electrification process and electrification rates from 2018 to 2025 in Greater Accra and Grand Lomé, there are still instances of social frustration and non-recognition.

All things considered, it should be noted that structural non-recognition and resident dissatisfaction lead to social contempt. When structural non-recognition and dissatisfaction accumulate, it becomes a matter of socio-spatial injustice, as demonstrated by Emmanuel Renault [6]. There is therefore a situation of socio-spatial exclusion in terms of access to electricity in new urban areas. We can therefore conclude that these residents are socially and economically marginalized. From this assertion, we can see that the dissatisfaction and lack of recognition in Légbassito and Koklovikopé regarding the expansion of the electricity network is experienced by residents as an injustice. In contrast, in Adenta (Greater Accra), the proposals made in less densely populated areas to compensate for the lack of electricity network coverage are met with relative frustration. This is therefore a situation of inequality.

Funding: This research was funded by the World Bank through the Regional Center of Excellence on Sustainable Cities in Africa (CERVIDA-DOUNEDON), Université de Lomé, grant number IDA 5360 TG.

Institutional Review Board Statement: The Regional Center of Excellence on Sustainable Cities in Africa (CERViDA-DOUNEDON) has granted us permission to proceed with this study via authorization number 32/AT/D/CERViDA-UL/2025.

Informed Consent Statement: As part of this study, the people surveyed were informed of the purpose of the study. They gave their informed consent.

Data Availability Statement: The remote sensing data used in this study are freely available on the corresponding website, and the processed data are available upon request.

Conflicts of Interest: The authors declare no conflict of interest.

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