

Design and Assessment of water-energy-food-environment Mega-Systems

The contradictions of competitive democracy in Ghana: electricity as citizenship right, as patronage or as a commodity?

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This paper examines the politics of distribution in the electricity sector in Ghana. We take a holistic approach, studying power generation and ownership as well as electricity pricing and access. This reveals the pattern of winners and losers in the sector, which we then link to a set of accountability mechanisms and political drivers. We find three main drivers at work: pork-barrel politics, electioneering and clientelism. The first two strategies target benefits at specific geographies or the wider population, informed by norms around electricity, its perceived development importance and citizens' rights. The third attempts to accrue political finance through rent-seeking deals over electricity ownership and contracts. These are strongly incentivised by the expense of Ghanaian politicians' efforts to fight highly competitive selection and election campaigns. The paper makes two particular contributions to the literature. First, we reinforce findings about the significance of ideas and ideology to patterns of benefit distribution. The latter may play a significant underpinning role legitimising claims and informing discourse on citizenship rights. Additionally, our three drivers strongly contrast with the accountability mechanisms baked into the standard reform model, which continues to be promoted in the electricity sector in Ghana, and which almost exclusively concerns market mechanisms. These drivers have generated seemingly positive outcomes in Ghana - most notably in the country having one of the highest electrification rates in Africa – but have also acted to stretch the sector and its ability to perform. Political strategies aiming to win elections and selections have resulted in corruption scandals, protests over power cuts and fiscal power-sector crises. Democratic drivers therefore push the sector in both developmentally positive and problematic trajectories.

Keywords

Electricity, Political Economy, Ghana, Distribution, Development

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1 Introduction

Electricity is rarely out of the news in Ghana. In July and August 2019, Ghana's airwaves were filled with allegations of "the biggest corruption scandal ever", including malpractice and corruption in an event known as the 'PDS scandal',¹ relating to a concession agreement to run the state-owned electricity distribution utility, the Electricity Company of Ghana (ECG). Opposition politicians and pundits railed against the perceived incompetence of the government actors involved: "where was the due diligence?", "how could they hand over \$3billion of electricity-grid assets without insurance?". However, this was only the latest in a long series of energy-corruption scandals. From 2016, the Ameri power purchase agreement (PPA) frequently dominated headlines because of its alleged corruption. GhanaWeb, for example, archived about 235 write-ups between 2017 and 2018 around perceived contract overpricing for 250 megawatts (MW) for \$510 million over five years (GhanaWeb, 2021; Ghana Energy Commission, 2019).

Despite these problems, Ghana stands as an apparent success story in Africa. It has one of the continent's highest electrification rates, behind only South Africa and a few small island states.² With over 5000MW of power generation capacity, it also has more installed capacity than its regional neighbours, such as Senegal (864 MW), Cote d'Ivoire (2,178 MW) and Guinea (750 MW) (Power Africa, 2021a, 2021b). Ghana has just under half the capacity of Nigeria, despite having roughly a sixth of the latter's population.³ This reflects what many consider to be a wider positive development story, with Ghana experiencing a growing economy, increasing infrastructure and an entrenched democracy over the past three decades, with three transitions of power and seven broadly peaceful and 'fair' elections.

How can these two experiences of Ghana, of positive democratic development versus a corrupt and crisis-ridden sector, coexist? Rather than being contradictory, we demonstrate that Ghana's pattern of distribution, of who wins what from the electricity system, has a common set of drivers. We highlight two key elements. The first stems from Ghana's political economy, defined by a centralised government with highly competitive candidate selections and public elections. To survive in this context requires implicit or explicit deals with particular groups, or larger publics, to distribute benefits in exchange for political support. Additionally, rent seeking is incentivised by the expense of fulfilling these deals and fighting elections, so that electricity-sector contracts, for example, may be a site for the accrual of political finance to fight off rivals. However, we depart from a simplistic clientelist narrative as we also find that electrification and the pricing of electricity are significantly influenced by claims to citizens' rights, regardless of political affiliation. We argue that earlier phases of clientelism have inculcated this discourse of rights, leading to widespread notions that universal, affordable electricity distribution should be expected with Ghanaian citizenship.

This matters for two principal reasons. The first is the way it demonstrates that ideas, and societally embedded ideologies about development specifically, are a major influence on the politics of distribution. This reinforces a recent trend in the literature recognising the influence of ideas in state welfare systems (Hickey et al, 2020), which demonstrates their importance in legitimising claims on the state and informing perceptions of rights. We strengthen the case made by this literature to acknowledge the importance of ideas in dictating the pattern of distribution, and therefore of beneficiaries, in the electricity sector. The second significance of our findings around

¹ The involved the Power Distribution Systems (PDS) company.

² For example, Mauritius and the Seychelles.

³ At 30 million versus 200 million.

mechanisms of accountability is the contrast with the standard reform model, which has been pushed on the sector in Ghana and elsewhere. The model is a relatively narrow adaptation of the 'good governance' agenda, which sought to add to the earlier structural adjustment policies of the 1980s with a focus on changing institutions. Electricity reform focused narrowly on the market and its mechanisms of competition and accountability through consumer choice. These market mechanisms are supposed to be underpinned by formal, legal regulations purported to bring greater efficiency and to result in better distribution of electricity-sector services. However, we demonstrate that, in Ghana, electricity is mediated by an alternative set of mechanisms. Local MPs and other community leaders, including the chieftaincy, operate the levers of the party-political system, which influences governmental functions. Additionally, citizens are able to mobilise and use democratic accountability to create demands on the state and their representatives. These alternative conceptualisations of accountability and the drivers of the politics of distribution are important, given the continued attempts by donors and some sections of the political elite to push the good governance agenda through the standard reform model. The creation of formalised rules and market institutions unpicks existing accountability mechanisms, whether around citizens' expectations of broad-based distribution, through clientelist deals or through electioneering, porkbarrel efforts. Indeed, attempts at privatisation, unbundling and commodification offer greater opportunities for rent seeking, rather than promised efficiency and customer accountability. This paper demonstrates the consequences that stem from the combination of this political context with Ghana's accountability norms.

The paper now turns to examine the literature on the role of competitive democracy in the electricity sector in greater detail, analysing the theory of accountability behind the good governance/standard reform model and its contrast with a citizenship-rights approach. We then turn to empirical case studies showing where electricity is politicised and the theories behind such clientelist distribution strategies. The case study of Ghana starts with an exploration of the historic roots of electricity in the country, explaining the foundations for belief in the right to electricity access and the politicisation of power. We then examine Ghana's success story – electrification. We also demonstrate that the same strategic interests and societal notions of electricity as a right, supporting the grid's extension, undermine the fiscal position and effectiveness of the grid in terms of tariff pricing, generation contracts and the PDS deal. This paper is based on extensive primary research. Quantitative data were collected on the past three decades and a database of Independent Power Producers (IPPs) created, in order to understand the rise and ownership of this group. Qualitative research was carried out between 2018 and 2021 involving 51 expert interviews with key informants, including former politicians, civil servants, researchers and officials from donor organisations and the private sector. The research also involved examination of newspaper articles, policy documents and official reports. Analysis followed a process-tracing methodology that triangulated evidence from quantitative and qualitative sources, from different data sources and types of interviewee. This generated a detailed understanding of the actors and events being studied and the rationales involved.

2 Democracy, accountability and electricity services

2.1 Market-led reforms as the bringer of electricity

The dominant understanding of the politics of distribution within the electricity sector, and mainstream policy prescriptions for its improvement, are informed by the good governance school of thought rooted in the work of North (1990, 1989). The realm of the state and politics, he argues,

is prone to greater inefficiency, with voters unable to easily judge performance (North, 1990). Moreover, civil servants and politicians do not have incentives that are necessarily aligned with the broader public's interests and so need the right institutions, that is, the right rules, norms and formal procedures, to align their interests to long-term development goals. Additionally, the theory's policy prescriptions pushed for a reduction of political rulers' power in favour of independent regulatory institutions, the rule of law and competitive private markets. Underpinning the whole system is a theory of accountability depicted in Figure 1. Each arrow stands for an accountability mechanism and so this triangular theory asserts that market relationships, those of customer and service provider/seller, generate the most direct and powerful form of accountability, while the 'long accountability' mechanism through democratic institutions keeps the broader system honest and ensures it works for citizens' interests. The latter approach has been emphasised by academics like Timothy Besley and Amartya Sen, who argue that democracies pressure the delivery of demands for public goods, which become seen as immutable citizenship rights: to win elections politicians must listen to citizens and ensure their rights are met; otherwise they face protest and the loss of power (Besley & Burgess, 2002; Besley & Coate, 1998; Sen, 2001).



Figure 1: The World Bank's triangular theory of accountability

Source: World Bank (2004, p 6).

This good governance agenda's application to the electricity sector was the World Bank's (1993) standard reform model. It outlined a programme of unbundling the sector into generation, transmission, distribution and commercial utilities, which should then be privatised. The resulting competition was supposed to increase efficiency and direct actors' interests into the sector's financial health and quality service, overseen by independent regulators. Thus, the World Bank's theory focuses, essentially exclusively, on the short mechanism of accountability through consumer choice.

However, the literature suggests that other political processes continue to be key after a sector has followed the formal reforms of the standard reform model. In the electricity sector, democratic pressure for electrification has been tested globally by Min and in Africa by Ahlborg et al, who both found correlations between democracy and better electricity coverage (Min, 2015; Ahlborg et al, 2015). As Briggs (2021, p.1) writes "electricity is a highly valued good and so governments in

democratic countries feel pressure to provide electricity to where it is scarce": in other words, there is a simple accountability-pressure mechanism. Min (2015) even strengthens his conclusion by showing democracy's stronger correlation with electricity access and reliability than with state capacity. Leaving aside issues in Min's quantification of democracy and authoritarianism, this suggests that democratic pressure can usefully politicise electricity. Much of the literature in this field has less detail on the mechanisms by which democratic pressure works, tending to assume that processes of elections and protest matter. More detail is needed on what occurs in different contexts therefore, and on the specific ways in which democratic pressures can act. We can see this in empirical studies of the electricity sector in India, where clientelist relations pushed rapid extension of the electricity grid in certain states (Kale, 2014; Kale et al, 2018; Dubash et al, 2018; Balls, 2018). These authors found that elections alone are not the primary driver of electrification; rather it is the mobilisation of farmers under intense electoral competition. These same drivers influence the grid's operation and commercial practices. Electoral concerns also dictate patterns of load shedding, something again particularly notable in Uttar Pradesh, which has allocated VIP status to key areas that are prevented from being taken offline (Balls, 2018). Furthermore, Min (2015) recalls how the resistance of states' dispatchers, given political pressure to implement load shedding, caused the largest power outages in history; a surge in demand caused equipment failure that saw the majority of India's grid suffer power failure.

This demonstrates a type of pork-barrel politics, of targeting certain geographical areas or social groups with specific public goods in the hope that they will then provide electoral support. Such deals therefore hope for reciprocity but are generally too widely targeted to involve informal deals. They may also take the form of electioneering. This contrasts with pork-barrel politics in that the latter is geographically or socially targeted, while electioneering is applied more universally, regardless of perceived affiliation or grouping. Typically, it might involve reducing tariffs, something always likely to be universal. This is noticeable, for example, in the highly competitive Indian state of Uttar Pradesh (Balls, 2018), with the consequence of there being insufficient revenues to cover system costs. However, more specific deals have been forged in some instances, when authorities exact retribution on those who didn't vote for the incumbent. Balls (2018), for example, records that, in states like Bihar, rulers have disconnected villages based on their political voting patterns. This is supposed to signal that electricity access is conditional on political support; voting one way should bring you material benefit. Such deals can be targeted more precisely through patron-client relations. These types of informal, explicit or implicit exchanges are the subject of a large literature on clientelism. Clientelism is often used to gain the backing of key supporting constituencies and may be used in more competitive, democratic contexts as well as in more authoritarian countries. In the former, politicians' power can be used to direct benefits in the form of services like electrification or in jobs or financial payments to key community leaders, mobilised groups of citizens and those capable of 'getting out the vote'. In many Indian states, for example, political parties are known to protect people stealing electricity from the grid, blocking the authorities from pursuing charges or taking areas offline (Balls, 2018).

Clientelist deals also frequently involve rents, which are particularly easy to provide in privatised, market economies. Rents here refer to income in excess of what is economically necessary, extracted without the need for significant investment in the system and relatively guaranteed. Thus, handing out contracts to supply equipment or services like maintenance and infrastructure construction can be a way to reward loyalists and a means for more politicians to accrue money. The electricity sector, when unbundled and privatised, is a particular target, given the volume of finance and bills typically associated with it and the monopoly nature of contracts which, once

signed, give near-guaranteed profits. Electricity rents have been documented in many countries as being involved in the financing of upcoming elections or the paying-off of politicians' creditors and financial backers. For example, Cooksey (2017, 2022) links scandals around an IPP, Independent Power Tanzania Limited, to financing the ruling party and its elections. Alongside direct political financing, rent seeking may be used for personal enrichment, to increase an individual's power. For example, this appears to have been the case in Mozambique, where President Guebuza's family hold shares in the IPP Insitec.

Thus, political economy analysis allows us to examine more specific policy mechanisms and thereby to move beyond "vague categories like political will or corruption" (Kale et al, 2018, p 6). Lines of accountability here are far more varied than in the triangle presented in Figure 1. The 'long route' of accountability through democratic practices is at work, perhaps most obviously, in practices of electioneering that appeal to citizens and respond to their demands. In contrast, mechanisms like pork-barrel politics do not necessarily respond to democratic pressure in the way envisioned by the triangle, and rather act as an attempted mass bribe, initiated by politicians, not the general public. Clientelism through rent-seeking deals also falls outside the 'long route' of accountability and subverts the short route of market competition. Informal, implicit and explicit strategies to maintain and/or win power therefore closely intersect with accountability mechanisms, collectively determining the distribution of benefits from electricity. Far from the standard reform model's envisioning of privatised, unbundled and regulated electricity-sector markets unleashing direct consumer accountability, electioneering, pork-barrel spending and clientelism survive – and even thrive in the case of rent seeking – in a reformed electricity sector.

However, much of the literature reviewed thus far focuses on rational, materialist explanations. This is limiting when it comes to the analysis of public goods as norms, since ideas and what could be called the 'moral economy' also matter. Chiefly, this takes the form of claims about what can be expected from the state, of the rights citizens have to certain services. As Levy and Walton (2013) state, these are most effective when backed up with some formal power, particularly laws, something that has happened to some degree in South Africa. Such claims are embedded, for a number of countries, in longstanding ideologies about how development happens. This is perhaps most famously captured in Lenin's (1965) phrase, "Communism is Soviet power plus the electrification of the whole country", which refers to his belief that electricity didn't only gradually create industrialisation, but rather transformed mind-sets and economic practices. Such ideas have had a significant influence over many developing countries, including India. Founding Prime Minister Jawaharlal Nehru took a keen interest in Lenin's ideas on electrification, guoting them in letters to his daughter, future Prime Minister Indira Ghandi, while pursuing hydroelectric dams (Nehru, quoted in Kale, 2014, p 29). Along with other leading independence figures like B R Ambedkar, Nehru's government created the Darmodar Valley Corporation, with the aim of replicating the US Tennessee Valley Authority (TVA), even using TVA personnel (Klingensmith, 2007). Importantly, the assertion of these ideas by the country's independence leaders has had path-dependent effects. It has instilled the societally widespread idea of the technology as a cornerstone of development, featuring alongside roads and agricultural support as a key electoral issue.

Such veneration of electricity furthers ideas of providing the technology as a basic duty of government and as something that should be universally available at an affordable price. This may lead to further resistance against reform and particularly to any hand-over of responsibility to the private sector. Societally embedded ideas about development therefore closely inform perceptions of rights and fair expectations of the state, which, in turn, form the basis of long mechanisms of

accountability; they act to mobilise citizens to make claims on the state. These concerns around citizens' expectations may lead to politicians fearing any conceding of power over the electricity sector in order to have control over the distribution of benefits. Arguably, this factored in the U-turn performed by the Tamil Nadu chief minister in the 1990s against privatising the distribution utility, given the strong backlash from farmers and other interest groups that occurred. Thus, it is not surprising that Kale et al (2018, p 5) conclude that mainstream solutions such as the standard reform model "suggest the impossible route of depoliticising what is inherently a political set of calculations and choices". With this grounding we now turn to examine Ghana's electricity sector, using analysis of its ruling elite and international relations to explain competing politicising and depoliticising agendas.

3 The history of electricity in Ghana

3.1 Historic establishment of a politicised sector

The forces politicising electricity in Ghana have roots in the country's history and its societal basis for political power. The idea of electricity as a cornerstone of development and bringer of modernity was firmly established by the country's founding President Kwame Nkrumah. He was highly influenced by the dam-focused development schemes of the mid-20th century and took particular inspiration from the US's programme of Western state building and industrialisation through dams (Hoag, 2013). This produced the Volta River Scheme, started under British colonialism but embellished by Nkrumah as the foundation for Ghana's development and the wider region's emancipation (McCully, 2001; Adams, 1992). It was modelled on the USA' TVA, with engineers from America supporting the planning of the hydropower dam and associated aluminium smelter, industrial and port zones (Hoag, 2013; Miescher, 2014). Nkrumah praised it in high modernist language as "a gigantic project for the industrial development of our country – a scheme which can change the face of our land and bring wealth and a higher standard of living to our people". He celebrated Akosombo by encouraging tourism to the Akosombo Dam and taking a model of the dam on a roadshow around the country (Miescher, 2014; Miescher & Tsikata, 2009). The scheme involved the establishment of the ECG to handle the electrification of Ghana's key cities and countryside in parts of the south. Nkrumah's leadership therefore firmly established electricity as the key to modernity, as the enabler of progress (MacLean et al, 2016). Despite establishing a legacy of electricity as development, Nkrumah was deposed in 1966 before the scheme was fully completed.

3.2 Disruptive coup d'états, competitive politics and the establishment of clientelism

The 1966 coup represented the strongly contested nature of ruling power in Ghana, something that has acted to politicise the provision of public goods, notably including electricity. Since Nkrumah's deposition in a coup, the country has had four coups and, since democracy was instituted in the 'Fourth Republic' from 1994, three peaceful transitions of power. Throughout, these transfers of political office essentially oscillated between two political groupings, now instituted in two political parties tracing their roots back to discussions at the end of colonialism (Nugent, 1999; Whitfield, 2018; Ninsin, 2016). The Danquah/Busia tradition, now under the National Patriotic Party (NPP), is more conservative, supportive of chieftaincy authorities and focused on the Asante region. The Nkrumah tradition, later adapted by Rawlings and embodied by the current National Democratic Congress (NDC), is more willing to implement wider state-led transformation, adheres to social

democratic claims and is grounded in the east and north of Ghana. Democratic elections in the past two decades have tended to be bitterly fought, with Ghana's strongly centralised state focusing all attention on winning national office. This is partly rooted in the lack of one dominant ethnicity or region, but also stems from the deep-rootedness of the two political traditions (McDonnell, 2016). Thus, presidential elections are relatively close, as shown in Table 1, as are parliamentary elections in the swing regions like Greater Accra.

YEARS/PERCENTAGE VOTES							
1992	1996	2000	2004	2008	2012	2016	2020
58.4	57.4	43.1	44.6	50.23	50.7	44.4	47.4
30.3	39.7	56.9	52.5	49.77	47.7	53.9	51.3
11.3	3.0	0	2.9	0	1.6	1.7	1.3
	58.4 30.3 11.3	58.4 57.4 30.3 39.7 11.3 3.0	1992 1996 2000 58.4 57.4 43.1 30.3 39.7 56.9 11.3 3.0 0	1992 1996 2000 2004 58.4 57.4 43.1 44.6 30.3 39.7 56.9 52.5 11.3 3.0 0 2.9	1992 1996 2000 2004 2008 58.4 57.4 43.1 44.6 50.23 30.3 39.7 56.9 52.5 49.77	19921996200020042008201258.457.443.144.650.2350.730.339.756.952.549.7747.711.33.002.901.6	1992 1996 2000 2004 2008 2012 2016 58.4 57.4 43.1 44.6 50.23 50.7 44.4 30.3 39.7 56.9 52.5 49.77 47.7 53.9 11.3 3.0 0 2.9 0 1.6 1.7

Table 1: Winning margins in multiparty presidential elections in Ghana, 1992–2020

Source: GhanaWeb (2021), Boakye (2018) and Frempong and Asare (2017).

Politicians also face significant pressure from within their own ranks, with ministers and senior MPs frequently facing, and losing, internal primaries (Whitfield, 2018). For instance, during the primaries prior to the 2016 general elections, 28 sitting MPs lost their reselection bids, with 15 belonging to the ruling party (NDC) and 13 from the then biggest opposition party (NPP). Similarly, and more poignantly, 48 sitting MPs lost their bids during the primaries that preceded the 2020 general elections. Of the 48 sitting MPs, 39 were from the ruling NPP (Anaba, 2020), while nine belonged to the largest opposition party (NDC) (Acheampong, 2019). Therefore, considerable effort, and money, is spent by those in government and parliament on securing their position. As demonstrated by Abdulai (Abdulai & Hickey, 2016; Abdulai & Crawford, 2010) in education, this involves directing spending to key constituencies when in office. Others, like Nugent (1999), have shown a similar pattern in road building. In addition, such activity involves extracting rents where possible to provide political finance. This typically involves handing out contracts to allied businessmen and companies in anticipation of finance, or to pay off past loans. Such activity is important, given the ever-rising cost of elections. Parliamentarians spent GHC389.803 (US\$ 98,749 in 2016) on average to secure selection and election in the 2016 election, roughly two-and-a-half times their annual salary, with GHC156,134 on the primary contests and GHC235,669 on the election, an increase from the 2012 levels of GHC124,005 and GHC21,609, respectively (CDD & WFD, 2018). Thus, it is unsurprising to see significant rent seeking across the state (Whitfield, 2018), with a recent example being in the booming oil sector (Mohan et al, 2018). Ghana's political environment is therefore highly competitive, with political power unstable, given intra- and inter-factional battles. This reinforces clientelist policy making and a short-termist focus on winning elections.

3.3 The drive to reform

There are consequently three strands of politicisation in the electricity sector, lying in the developmental symbolism of electricity and the motivation to build political finance. These three tendencies run counter to the aims of a group of international donors and technical leaders attempting to depoliticise the sector through a series of long-term reforms in Ghana. The most overt of these are political, with the introduction of open elections and democratic institutions from

1994. This coincided with energy-sector changes that have unbundled the sector and introduced supposedly independent regulation. The early independence period saw the establishment of the Volta River Authority (VRA) as the sole, state-owned utility for electricity generation and transmission. Distribution was then split between VRA in Ghana's north and ECG in the south. Early attempts to reform this state-owned monopoly included corporatisation of VRA's Northern Electricity Board and the benchmarking of all state-owned companies. Additionally, from 1983 to 1985, ECG started a performance–concession agreement with the Ireland Electricity Supply Board to improve the fiscal position of the utility, improving its operational procedures and decreasing losses and improving collection.

More substantive reforms came after the World Bank published its standard reform model in 1993 (World Bank, 1993). Ghana was a relatively early and keen adopter. In 1994, a more extensive concession agreement was signed between ECG and Electricité de France (EDF), based on a performance management agreement. That year was also the start of the Strategic Framework for Power Sector Development Policy that set out the ambition to open up Ghana's electricity system to the private sector. As a result of the Commission's work, 1997 saw the initiation of three important changes: IPPs were given a legal foundation and two regulatory agencies were formed. The Energy Commission was created as an arms-length regulator, licensing IPPs and advising government on electricity-sector policy (Wolf et al, 2007). Additionally, the Public Utilities Regulatory Commission (PURC) is supposed to be completely independent, approving PPAs between IPPs and potential off-takers and setting tariffs (Wolf et al, 2007). Further changes came later. In 2006, transmission and system-management functions were taken from VRA to form a new state-owned company, GRIDCo, Meanwhile, the VRA's `Northern Electricity Department' was spun into a full subsidiary, NEDCo, creating the schematic of different organisations depicted below. The next phase concerned efforts to partially privatise ECG, which started in 2014. Further plans to unbundle and even part-privatise VRA have accelerated under the current (2016-) NPP government; these would involve spinning out VRA's thermal generation plants into a new company that could be privatised. All these efforts at reform are designed, following the logic of the good governance agenda, to depoliticise the operation of Ghana's electricity sector, placing key decision making under the auspices of either the technocrats or market competition.





Source: Kumi (2017).

The steady but consistent drive towards these reforms indicates the presence of long-term thinking in Ghana. Arguably, this stems from donors. The World Bank is most prominent here, as in many other countries' energy sectors, using its position as a major financier to leverage policy reforms (Kapika & Eberhard, 2013; Gore et al, 2019). In Ghana, reforms were a condition of the financing of thermal plants needed to diversify power generation from drought-vulnerable hydropower. The Bank financed the 1999 Takoradi I (330MW), owned by VRA, and the joint-venture Takoradi International Power Company (220MW). Given the conditionality attached to these plants, most researchers conclude: "There is little doubt that the World Bank was instrumental in urging the government to seriously consider a program of reform" (Edjekumhene & Dubash, 2002; Eshun & Amoako-Tuffour, 2016; Edjekumhene et al, 2001). This is consistent with academic study of Ghana's relationship with donors more widely during the 1980s and 1990s. Whitfield and Fraser (2009), for example, have demonstrated the Ghanaian government's tendency to adopt donor policy conditions more than other countries in Africa, such as Ethiopia and Rwanda. Despite having a socialist, populist President in Rawlings, with an apparent desire to push through state-led economic transformation, from 1983 Ghana became the World Bank's star reformer, with a powerful group of Ghanaian technocrats working closely with the Bank, IMF and other donors to implement wide-ranging 'neoliberal' reforms involving liberalised trade, privatisation and monetarist government policy. Key to the success of such reforms was a group of technocrats who, according to Whitfield and Jones' (2009) analysis, held a strong shared belief that such measures were beneficial, but who also played a pre-eminent role in adapting such measures for Ghana, for example by delaying particular reforms or changing their implementation sequence. Such activity increased in the 1990s with the advent of democracy and the control over reforms transferring from technicians to party-politicians; in the 2000s, there was a particular tendency for the Ghanaian government to agree to demands but not to implement them (Whitfield, 2011, 2007, 2018; Whitfield & Jones, 2009).

Equally, it would be wrong to characterise electricity reforms as solely the preserve of external actors. Chiefly, this is because there is significant evidence that a cadre of Ghanaian technocrats took up the mantel of reform and drove the pace and detail of the policies (Edjekumhene et al, 2001; Kapika & Eberhard, 2013; Edjekumhene & Dubash, 2002). For example, in 1994, the government vetoed the World Bank's suggested international consultant for the Power Sector Reform Committee and VRA rejected the idea that Ghana should blindly adopt another country's model (Edjekumhene et al, 2001). Instead, a Ghanajan committee led the process, examining multiple global case studies and appointing a Chilean firm to generate recommendations. Moreover, the committee rejected the World Bank's formula for selecting tariff prices, which would have led to relatively high tariffs (Edjekumhene & Dubash, 2002). Ghanaian leadership can also be seen in the 2000s, with the timing of the creation of GRIDCo and NEDCo, a decision stemming from a new minister of energy, himself with a technical background in VRA, and other sectoral leaders. Key sectoral leaders believed, along the lines of the standard reform model, that creating GRIDCo was necessary to avoid VRA owning transmission lines while also competing with private generation companies (Kapika & Eberhard, 2013);⁴ the new institution was necessary to "referee" the sector.⁵ Senior officials therefore concluded that there is a well established group of technocrats across the ministry, regulators, think- tanks and key utility companies who believe in pursuing a version of the standard reform model.⁶

Overall, this suggests that external pressure through development finance given by the Washington Institutions and donors has combined with the aims of a group of Ghanaian officials over the past three decades to produce long-term policy goals of depoliticising the sector through formal legally based regulation, unbundling, corporatisation and privatisation. These goals are premised on the idea that formal market mechanisms of consumer choice and corporate competition can be introduced as the primary structures of accountability. The following sections examines the way claims to electricity as citizenship right combine with electioneering and rent-seeking incentives to define Ghana's pattern of distribution. We first examine electrification, then tariffs and infrastructure ownership.

4 Who benefits from electricity distribution? Election strategies and citizenship claims

Electrification has been used in Ghana as a power to make clientelist deals. Along with other public goods like roads, education and health, electricity is used as a tool to win over voters. After Nkrumah's Volta scheme, 15% of the country had electricity access (Cuesta-Fernández, 2018), although this was mostly urban. President Rawlings began the major advancement in 1989 with the National Electrification Scheme, which aimed for universal access by 2020 (Cuesta-Fernández, 2018; Kemausuor & Ackom, 2017). First, the grid would be extended to district capitals, before fanning out to towns, and villages with over 500 households. Alongside this state-defined effort, the Self-Help Electrification Programme (SHEP) pledged that the government would connect communities that provided poles to the nearest grid point and which had already wired 30% of households (Kemausuor & Ackom, 2017; Cuesta-Fernández, 2018). The government and its state agencies invested heavily in both schemes with significant donor support. The policies were

⁴ Interview, former senior GRIDCo official. Echoed by: Kapika and Eberhard 2013

⁵ Interview, Senior Planner 1, Energy Commission, 2019.

⁶ Interviews, Senior Planner 1, Energy Commission; former senior GRIDCo official; former minister of energy, 2019.

replaced by the sequential Ghana Energy Access and Development Project (GEDAP) from 2007 and, in the 2010s, Sustainable Energy for All (SE4ALL).

The political prioritisation of electrification is demonstrated by the Ministry of Energy's direct operational handling of electrification, in contrast to operational planning and management in other electricity-sector functions. The "ministry is the driving force" behind electrification,⁷ not least so it can exert a significant influence on where it takes place. There are two interwoven aims here. One relates to state building in Ghana's sparsely populated, arid north. Cuesta-Fernandez (2018), for example, examines the leap in this region's coverage from 0% in 1990,8 to 67% in 2015. The region's low customer base, stemming from its low population density (just an eighth of all customers over a greater area), helps explain why its distribution has been kept under VRA: the utility's profits from generation have been used to subsidise grid expansion and operation in the north (Cuesta-Fernández, 2018; Kemausuor & Ackom, 2017). The main, overriding, aim for electrification in the north and south was to win votes. A number of academics have studied this (eg Sackeyfio, 2018; Nugent, 1999; Cuesta-Fernández, 2018), including Briggs (2012, 2021), whose modelling of electrification demonstrates significant variations in electrification under each party, aimed at increasing turnout. For instance, the NDC prioritised its core voting area, then targeted swing regions (Cuesta-Fernández, 2018; Briggs, 2012, 2021), thereby using electricity as a tool to secure or increase votes.

However, analyses like Briggs's simply assume these outcomes are centrally controlled and directed towards winning the Presidency. Our evidence, in contrast, demonstrates a deeper connection of electrification to the unstable manifestation of power in Ghana that specifically involves clientelist deals, where electricity is exchanged for political support.⁹ Under the Self-Help Electrification Programme (SHEP), the Ministry of Energy (MoE) connected communities which, essentially, were able to raise enough money,¹⁰ enabling MPs to promise electricity to villages if they had enough resources. SHEP required villages to reach a certain amount of prior connected houses and the provision of poles for electricity cables. Once these criteria were met, the Ministry of Energy was supposed to connect villages to the national grid, but MPs actively lobbied to ensure their prioritisation in the ministry's schedule of work. They also secured contracts from the ministry to implement the SHEP scheme. Thus, political competition in Ghana, the very real threat of being ousted by those within and outside your political coalition, drove politicians and governments to rapidly extend electricity across the country. Electrification therefore proceeded according to partypolitical logics to maximise the electoral effect, something favouring extension of the national grid and tying electricity to the state, as opposed to linking it to private companies or regional governmental organisations. For instance, in 2012, the NDC government, capitalising on relatively low coverage in three northern regions, extended and improved electricity supply to key constituencies as part of a deal to continue and increase its voting support sector in the 2016 elections.¹¹ By the end of its term in 2016, the NDC had increased coverage in the three northern regions to 65%, with the subsequent NPP government facing accusations of adding little more since 2017.¹² Clientelist practices focused on winning or keeping power are therefore a key driver

⁷ Interviews, senior and junior officials, Renewables, Ministry of Energy, 2019.

⁸ With only isolated generators in the main towns.

⁹ Interview, senior official, PURC, 2021.

¹⁰ The criteria required poles for cables and a level of prior electrification.

¹¹ Former senior official, Ministry of Energy, 2020.

¹² Ibid.

in Ghana's rise to the position of second most electrified country in Africa, after South Africa, and excluding the small, densely-populated islands of Mauritius, Seychelles and Reunion.¹³

Ghana's electrification drive therefore suggests that the predominant mode of accountability in the country ran through MPs. The exchange can be surmised in popular slogans such as 'No electricity, no vote!' seen before and during every cycle of general elections.¹⁴ However, the anger and expectation expressed by these popular claims portrays another important element of electricity politics in Ghana. The politicisation of the technology, as well as its increasingly wide spread, have served to entrench notions that electricity was a key pillar of development and a linear generator of progress. This was cultivated, for example, through President Rawlings' rhetoric pledging electricity for all and to increase access to electricity. MacLean et al (2016) assert that, by the late 2010s, this had instilled the widespread societal idea that electricity access was a non-negotiable people's right, a primary duty of government. As one donor official explained, the "symbolism of electricity [in Ghana means] it's not just lighting for lighting's sake"¹⁵. This was particularly proven during the power shortage crisis of 2012–16, known as Dumsor. Destrée's (2019) detailed anthropology of this time demonstrates that this power shortage led to socially and geographically widespread protests, with the grievance expressed through calls for people's citizenship rights and claims that electricity supply was a fundamental duty of government.

A combination of history and the use of electricity as a vote-winner has consequently entrenched deep societal claims to the technology. Accountability in Ghana's electricity sector is therefore underpinned by broader societal claims, made through public media and protest, as well as through deals with politicians who can exert power on the utilities and bureaucracy, given the informal parallel structure of political power in Ghana. Although occurring outside the more formal model envisioned by the good governance agenda, these democratic pressure to maintain or win ruling power and please established public norms have clashed with attempts to install an alternative mode of accountability based on the good governance framework, either through the introduction of independent, legally governed regulation or the introduction of private, market-capitalist relations. We now examine this clash between electricity as commodity versus electricity as political object and citizenship right, and the influence it has on policy making around tariff pricing.

5 Who benefits From Ghana's tariffs? The resistance against electricity as commodity

A longstanding contentious issue concerns electricity tariffs. The issue has concerned the gap between system costs and the income generated by tariffs. There is consequently much discussion over how high the tariffs should be set. As cited above, higher tariffs have long been a target of international reformers, who have been joined by domestic actors, typically from the state utilities VRA and ECG and the Ministry of Finance (Keener & Banerjee, 2006). In line with the standard reform model, they have argued for formal separation of tariff making from government and an independent, transparent process of tariff setting that generates sufficient revenue to cover the system's cost. This pressure started in the first reform planning of the 1990s, as the World Bank pushed for a formula generating a higher tariff, which was supposed to be set by a new, formally independent, legally mandated regulator. The latter was established, and in its first year (1998)

¹³ As their geography makes them easier to electrify.

¹⁴ Former senior official, Ministry of Energy, 2020.

¹⁵ Interview, Senior donor official, Accra, 2019

introduced a 300% tariff increase, although this increase was later abandoned by the President (Edjekhumene & Dubash, 2002). By the early 2000s, tariffs therefore reflected 95% of system costs (Edjekhumene & Dubash, 2002) and the country has undergone periods of automatic, independently set tariff adjustments. Such adjustments occurred between 2003–06 and 2010–13, while subsequent increases have also been made, lifting the average tariff from \$0.13 per kWh in 2013 (World Bank data cited by Rupp, 2013) to around \$0.18 in 2019.

However, from the early years of reform, tariff setting has not achieved the stated goal of having technicians independently set rates. Given the clientelist, informal nature of political power in Ghana, and its concentration within central government, Ghanaian politicians are able to continually resist legal formal regulation by the PURC, maintaining de facto power to set tariff policy. Given the unpopularity of automatic rises, adherence to this technical solution has not lasted long.¹⁶ Moreover, the Presidency typically directly intervenes in the tariff-setting process, through the imposition of subsidies with Parliament's approval (although these aren't consistently paid by the state).¹⁷ For instance, after campaigning on the issue in 2015, the NPP President decreased tariffs in 2018 by 17.5%.¹⁸ Revealingly, the PURC "was prevailed on to reduce the tariffs because, before the reduction, the Minister of Finance had earlier on gone to Parliament house to announce the reduction and even gave some figures that the electricity reduction was going to go by. That actually influenced the PURC's line of action ... because the PURC is a government set-up and its owner has gone to Parliament to tell the whole world that it is reducing tariffs by a certain margin; if you act to the contrary you will be the one to be hanged".¹⁹ Thus, officials asserted that PURC directly reports to the President or that "PURC will swear they are the most independent organisation in Ghana" but in reality, they bend to the will of the President.²⁰ The setting of tariffs is thus obscured, a "black box",²¹ with different tariffs for hospitals, schools and other subsidised entities announced in government budgets, all of which create loopholes through which to fix the price while maintaining the image of formal regulation.²²

Underpinning these actions are intertwined strategic rationales that cultivate, and respond to, societally embedded principles of electricity as a right, not a commodity. As a consequence of the historic significance of electricity, there is a strongly embedded principle that it should be available to all, even those unable to pay. Beyond widespread sentiment, key societal groups lobby for these principles, such as the Trades Union Congress, the Association of Ghana Industries and the Civil Service Association (Keener & Banerjee, 2006). During the tariff-setting process, other groups are also involved, including government ministers and civil servants, MPs and civil society groups, again all calling for low tariffs.²³ Demonstrating this notion of electricity as a right, and not a commodity, one survey during the 2012–16 power crisis found that a majority of the public were against tariff increases, even if these could fix the system's problems. Given the way Ghana's competitive electoral nature renders such strongly held sentiments hard to ignore, going against the majority of the public contains clear electoral jeopardy and potentially hands an advantage to

¹⁶ Unverified statement from a former minister of energy.

¹⁷ Interview, senior official, PURC, 2021.

¹⁸ Interview, senior official, MiDA; <u>http://www.mop.gov.gh/index.php/2018/04/05/akufo-addo-commends-purc-for-electricity-tariff-reduction/.</u> Accessed: 10 November 2021.

¹⁹ Interview, senior official, PURC, 2021.

²⁰ Interviews, Senior Planners 1 and 2 and Planning Team, Energy Commission, 2019.

²¹ Interview, Senior Planner 1, ECG, 2019.

²² Interview, Senior Planner 1, Energy Commission, 2019.

²³ Interview, senior official, PURC, 2021.

internal and external party opposition. Thus, Ghana is one of the rare countries that uses industrial tariffs to subsidise residents, something that harms its international business competitiveness. For example, Ethiopia and Tanzania subsidise industry in order to attract inward investment. Typically, industries report that they require between 3 and 8 cents per kWh to remain competitive,²⁴ yet Ghana's 2019–20 tariffs for industry ranged from \$US12.95 cents per KwH for consumer category 0–300 KwH to \$US21.75 cents per KwH for consumer category 600+ KwH,²⁵ on top of an additional monthly service charge of \$201.74.²⁶ An additional bias towards residences is demonstrated by the way industrial plants are the first to shut down. For instance, Ghana's aluminium plant VALCO was ordered to close or run below full capacity during the power crises of 1984–85, 1998 and 2012–14.

This illustrates the presence of long accountability mechanisms such as those conceptualised by the good governance model, where public pressure influences the provision of public goods, ensuring access and affordability. This results in strong resistance to claims of electricity as a commodity. Thus, the standard reform model contains insufficient accountability mechanisms, whether through claims to citizenship rights and the rejection of electricity as a commodity, or broad-based electioneering strategies. Collectively, these routinely overrule the technicians involved in tariff setting, despite their formal independence. Under such mechanisms, the competitive nature of politics prevents tariff setting at a level that covers the cost of the electricity grid. These mechanisms also resist international pressure from donors, despite their significant aid spending. Moreover, such mechanisms have worked to protect residents from paying for electricity. The SHEP created an opening to avoid paying for electricity as such grid extensions took time to integrate into ECG's billing management and MPs actively lobbied to prevent or reduce these debts being collected. Here, then, competitive democratic pressures act as a barrier to long-term fiscal agendas of creating a financially sustainable electricity system. This harms the state-owned utilities' fiscal health, something that creates a poorly maintained system, thereby reducing the reliability of power supply and increasing technical energy losses. As one of the authors has demonstrated elsewhere (Dye, 2020) in the case of the 2012–14 power crisis, these financial gaps ultimately contribute to shortfalls in generation given the way VRA and ECG are then unable to afford power plants' fuel. Thus, electioneering political strategies that provide broad-based benefits across society, which are incentivised given Ghana's highly competitive selection and elections, combine with accountability mechanisms rooted in increasingly entrenched citizenship claims to block attempts to transform electricity into a commodity, governed outside informal politics.

6 Who benefits from electricity generation? The importance of rent seeking for

political finance

Short-term, election-focused politics have also had a profound impact on the makeup of Ghana's power generation. From the 1990s, the government was supposed to contract private firms to construct new power plants, rendering electricity a commodity, with market logics enabling lower prices and higher-quality service. However, the institutions and regulations formally mandating this were trumped by a fear of upsetting key interest groups and the incentive to generate finance to maintain and win political support. Thus, the government turned from a planned construction of renewables towards the rapid building of gas power plants, given the latter's greater potential

²⁵ Energy Commission of Ghana, 2020.

²⁴ A more extreme example is the insistence that the aluminium smelter VALCO, cannot run above \$0.03 per kWh. Interview, Senior Planners 1 and 2 and Planning Team, Energy Commission, 2019.

²⁶ At exchange prices on 11 June 2021.

profits. Historically, Ghana's primary source of electricity has been hydropower. However, with the construction of Bui Dam by 2012, the last major dam site in the country was tapped. The remaining hydropower sites are smaller projects originally identified in 1960s surveys. Ghana's Strategic National Energy Plan (SNEP) and the National Energy Act of 2010 outlined a series of plants to be developed, including the Juale Dam on the Oti River (90MW), the Pwalugu Dam (47MW) and a group in the Micro-Hydro Western Rivers Scheme (625MW). Efforts were made to implement these plans: after extensive rounds of planning, Pwalugu Dam is now under construction. In 2009 Ghana also engaged the Brazilian firm Andrea Gutierrez in the construction of Juale Dam, including securing a loan from that country's development bank, BNDES.²⁷ Ghana also entered into negotiations with neighbouring Togo over the project, as the reservoir would extend into its territory. In addition, studies were made of the micro-hydro sites;²⁸ these found only seven remaining because of open-cast mining.²⁹

However, bar Pwalugu, these initiatives stalled. The BNDES funding for Juale was diverted to a road scheme under NDC President Mahama, something long promised for the NDC's heartland Volta region. Alongside this electoral motivation, technicians reported linguistic and cultural difficulties in negotiating with neighbouring francophone Togo,³⁰ which acted as another barrier. Other potential micro-hydro sites are heavily contaminated by mining. The remaining Western micro-hydros are also stalled, but for political, rather than technical reasons. The government is crucially concerned with the displacement of key influential groups like cocoa farmers. Given cocoa's position as one of the country's economic pillars, cocoa farmers have long held an important position in Ghana, influencing the first coup against Nkrumah for example (Whitfield, 2018: Konadu & Campbell, 2016), Given the state's dependence on revenues from industry. through the Cocoa Board, and the revenues generated by the sector for both political parties' financial backers, negatively impacting this group for a small volume of electricity does not appear tenable. Thus, political calculations, whether about minimising popular opposition, or about the value of diverting funds to more vote-winning projects, have exerted a strong influence on the lack of renewable generation. Again, this demonstrates the importance of Ghana's competitive political environment and the incompatibility of the formal separation and depoliticisation of the public status of electricity in the country.

In the renewables sector, these same rationales were equally important, helping to explain solar and wind's slow progress. Officially, the government appeared to support diversification to solar and wind: initiatives were being discussed from 1989,³¹ and an Energy Foundation started in 1997 to promote renewables and energy efficiency (Kapika & Eberhard, 2013; Edjekhumene & Dubash, 2002). In 2007, the World Bank again advocated these technologies (World Bank, 2007) and KfW (Kreditanstalt für Wiederaufbau) supported VRA to develop the first utility-scale wind and solar plants.³² In 2010, the plan was for 8MW of solar and 15MW of wind, the latter being cheaper. However, with costs decreasing, these ambitions grew, first to 12MW and now to 75MW of wind and 200MW of solar, potentially including floating solar linked to Akosombo's generators.³³

²⁷ 'Brazil and Ghana to build 90-MW project in West Africa'. *Hydro Review*, 13 October 2009 [Available at <u>https://www.hydroreview.com/2009/10/13/brazil-and-ghana-to/</u>]. Interviews, former ambassador, Brazilian government; Senior Planners 1 and 2, Energy Commission, 2019.

²⁸ Interviews, senior official, Renewables, Ministry of Energy, 2019.

²⁹ Ibid.

³⁰ Ibid.

³¹ Ibid.

³² Interview, Senior Manager 2, VRA, 2019.

³³ Ibid. This was a recognition of the significant drop in the price of solar panels.

However, progress on renewables has been limited. VRA did progress with a solar plant of 2.5MW and advanced planning for further solar and wind. Meanwhile, Bui Power Authority is building a 200MW plant to connect to its hydropower generators, again initiating this essentially independently of the Ministry of Energy.³⁴ Besides these state utilities, one private-sector deal for national solar power was signed by the government in 2016, the 20MW BXC Solar. The state's interest is far more demonstrable in the role of renewables for extending electrification. Solar powered mini-grids are planned to reach the last 15% of Ghanaians without electricity.³⁵ Primarily these communities are in highly remote areas where extending the grid makes little financial sense, for example around Lake Volta's shoreline, or on island communities such as Agbetumi, Mim Kyemfere, Soho Bame and Tokor (Bawakyillenuo, 2020).

This minimal progress stands in sharp contrast to the rapid expansion of private-sector gas power projects between 2012 and 2016, listed in Table 2. Figure 3 shows the boom in power plants, particularly gas-powered IPPs in 2014, particularly in response to the country's ongoing power shortage (Dye, 2020). However, since the industry standard for such deals involves a guaranteed payment to the private company through so-called take-or-pay contracts (payment for 90% of the capacity they make available), this boom in plants also represented a method of gaining rents. Typically, this would occur through payments made to businessmen associated with politicians, or such contacts' inclusion in a power-plant's consortium. Dye (2020) has demonstrated the way the official, formal process of increasing electricity generation, which had been in place for at least a decade and primarily involved technicians from the state utilities, Energy Ministry and Energy Commission, was suspended.

Name of power plant	Generation capacity (MW)	Year of commencement
CENIT Energy Ltd (CEL)	110	2013
Kpone Thermal Power Plant (KTPP)	220	2015
KarpowerShip 1	247	2015
Ameri	250	2016
Sunon–Asogli Power Plant (SAPP) 2	360	2016
Trojan 2A	16.3	2016
Trojan 2B	16.3	2016
Genser	96.08	2016
Total	1315.68	

Table 2: Private-sector gas IPPs in Ghana, 2012–16

Source: Ghana Energy Commission (2019).

³⁴ Interviews, senior official, Bui Power Authority, 2019.

³⁵ Interviews, senior and junior officials, Renewables, Ministry of Energy; Senior Planners 1 and 2 and Planning Team, Energy Commission, 2019. See also Republic of Ghana et al (2018).



Figure 3: Demonstrating the diversification and increase in electricity generation

Off the record, officials with knowledge described how the boom in IPPs was in-part motivated to extract wealth:³⁶ the ruling party was "leveraging the crisis to sign everything and anything",³⁷ with civil servants reportedly told "to do it like this" even if they knew it was not legal.³⁸ Thus, rather than following the formally mandated standard reform model that would involve commercial negotiations between the utilities and prospective private firms, the ministry took the lead in negotiations, instructing the off-taker, ECG, to sign contracts: deals were "not officially approved but on the system anyway";³⁹ we were "told by management to accept the contracts".⁴⁰ There are also subsequent allegations of rent seeking from the group of contracted gas plants, as demonstrated by the Ameri plant and PDS scandal discussed in the introduction. There is therefore significant evidence of informal decision-making power and absence of the rule of law in Ghana, which enables rent seeking and the usurping of formal rules. In turn this is driven by the competitiveness of elections and the consequent expense of seeking and maintaining political office. Here, electricity was politicised in a different way, not according to public demand but rather in response to strategies to build sufficient political finance to ensure maintenance of political power. These consequences have also been problematic for the sector's long-term fiscal health: oversupply is created, with installed capacity roughly double on-grid demand, meaning that the take-or-pay

contracts have to be fulfilled, but without consumers able to pay for the electricity. Again, this illustrates mechanisms of accountability running through citizenship claims and informal political power structures.

³⁶ Interviews, donor officials from Germany, Japan, the US, and the World Bank, and with a senior official, ECG, 2019.

³⁷ Interviews, academic researchers, 2019.

³⁸ Interview, senior official, MCC, 2019.

³⁹ Interview, Senior Planner 2, Energy Commission, 2019.

⁴⁰ Interview, Planning Team, Energy Commission, 2019.

7 The battle over who owns distribution

A further example of the politicisation of electricity in Ghana and the rejection of the standard reform model's commodification of electricity, and of its effects on the distribution of public services, is a deal to privatise the management of Ghana's main electricity-distribution company. As mentioned at the paper's outset, this involved PDS taking a management contract to run ECG, with the deal orchestrated by the US government's Millennium Challenge Corporation (MCC). The logic was that it could increase transparency (presuming that to be a benefit in itself); incentivise bill collection; boost political independence; and maximise operational efficiency. There is evidence of such schemes working elsewhere, for instance in Uganda, where the privatised utility has some of the best performance statistics in Africa (Gore, 2017; Gore et al, 2019). The concession plan had widespread support among officials in the ECG and VRA and key donors such as the World Bank and the MCC and USAID. Despite this, the NDC was an "unwilling beneficiary" whom the MCC had "a struggle" to convince.⁴¹ Ultimately, however, it was "hard to say no to half a billion" dollars the MCC was granting to support the deal.⁴² A call for tender started in September 2015.

However, rather than fulfilling the desired goal to improve the efficiency and operation of the electricity distribution company, the deal was undone by rent-seeking behaviour and was terminated in 2019. The motivation to do this was two-fold: both political parties wanted to benefit directly from ownership of the cash-cow of the electricity sector, including the numerous contracts handed out by the utility. Rent seeking in the deal first occurred under the NDC, with a businessman affiliated to the ruling party and with no prior experience of the role heading the new consortium.⁴³ The NPP were more ambitious, demanding an increase in local content to 50% when it arrived in office so that its operatives could control ECG's contracts. Thus, work on the deal reportedly moved to the Presidency, which then handed out additional local content shares to family-affiliated businesses. As one official involved described it, the "government wanted a part of it [the local content handed out under the NDC], they wanted the benefit"44. However, these attempts were only accommodated to a certain degree, with the MCC insisting on further conditions to limit the power of these NPP shareholders on ECG's spending: "[We, the MCC] tried to accommodate them but negotiations didn't go very far. In 2018–2019, they brought in partners [they wanted in the deal. They] were not known companies ... fronted by people sympathetic [to the NPP]"⁴⁵. The MCC attempted to find further alternatives, for example governmental institutional investors or shares on the Ghanaian stock exchange, but these were all rejected by the NPP.⁴⁶ With the NPP unhappy with the deal, and resistant to the fact that it also benefited NDC-affiliated investors, the party decided to cancel it on seemingly spurious grounds (MiDA, 2019). Thus, rent seeking, the desire to accrue political finance and to avoid handing any advantage to the opposition, prevented further reform of the electricity sector and resulted in the deal's 'scandalous' collapse. The electricity sector was therefore too embedded in the political economy of election finance in Ghana for depoliticising reforms to be successfully implemented.

⁴¹ Interview, senior official, MCC, 2019.

⁴² Ibid.

⁴³ Interview, senior researcher, CDC, 2019.

⁴⁴ Interview, senior official, MCC, 2019.

⁴⁵ Interview, senior official, MCC, 2019.

⁴⁶ Interviews, senior official, MiDA; and senior researcher, CDC, 2019.

8 Conclusion

This paper has sought to demonstrate a common set of drivers behind Ghana's apparently contradictory successes and failures in the electricity sector. On the one hand, the country has one of the highest electrification rates on the continent, and a relatively competent planning bureaucracy. Simultaneously, however, the sector has witnessed frequent corruption scandals and has serious fiscal issues hampering maintenance and performance. We have sought to demonstrate the common drivers behind these contradictory outcomes, showing a pattern of distributional politics rooted in the politicisation of electricity in Ghana as a citizenship right but also as a source of political finance. Underlying much of the politics of distribution in Ghana are societally embedded ideas about the importance of electricity. With its historical roots in founding President Kwame Nkrumah's plans, and the flagship Volta River Project, initial assertion of modernist development and veneration of electricity has helped to embed the technology's importance in Ghana. A widespread assumption of its developmental potential has informed perceptions of rights and expectations, with citizens making demands of the state to have connections to the grid and affordable power. These ideas and values inform commonly assumed citizenship rights, forming the basis for 'long accountability', which works through citizens pressuring political representatives to meet their needs.

As well as such bottom-up accountability, the celebration of and attention to electricity influences strategies of pork-barrel politics. For the electricity sector, this was a key driver of electrification, with MPs, political parties and other political leaders paying for electrification, or directing state money towards extending the grid to their constituencies in an attempt to secure votes. While responding to electricity's popularity, these policies are initiated by politicians. We can see a similar driver behind electioneering measures taken against tariffs. Even more universal than targeted electrification, we can see tariff reduction, or at least the prevention of rises, as key strategies in election campaigns. Despite attempts by the regulator and Western donors to push for tariff increases to ameliorate Ghana's fiscal issues, politicians have sought both to find favour and to meet expectations around low-cost tariffs. Electricity is also politicised as a form of electioneering finance. Clientelist relations, handing out contracts to supply power, equipment and maintenance, are ways to accrue rents that can then be spent on winning or maintaining power. Thus, materialist interests have combined with long-accountability mechanisms and norms around electricity to influence the distribution of benefits from the sector.

This explanation of the mechanisms of accountability, materialist and ideational drivers in Ghana's electricity matters for two reasons. First, it demonstrates the importance of ideas and ideology in electricity policy making, as distinct from materialist, strategic interests. Second, we have demonstrated a major difference between the mechanisms of accountability in operation in Ghana, and the wider drivers in the electricity sector, and those theorised by the standard reform model. Although initiated by the good governance agenda and its influence on development policy, the electricity sector reform programme has a remarkably narrow theorisation of the drivers acting on its distribution of resources, focusing almost exclusively on the market, and the accountability generated by consumer choice and competition. This understanding is important, given the ongoing push by donors and a number of Ghana's political elite to promote the standard reform model, as evidenced by the PDS deal. This paper's alternative understanding of electricity as politicised, as a venerated citizens' right and a commodity subsumed into patron–client relations rather than those of the market, explains why such deals struggle to function and why the standard reform model fails to live up to the expectations set by its advocates. Its narrow version of accountability cannot account for a more complex political economy.

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