

This is a repository copy of *Policy Brief and Report on the Political Economy of Electricity in Ghana*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/192089/>

Book:

Dye, Barnaby (2022) *Policy Brief and Report on the Political Economy of Electricity in Ghana*. The University of Manchester , United Kingdom .

Reuse

This article is distributed under the terms of the Creative Commons Attribution-NoDerivs (CC BY-ND) licence. This licence allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to the original authors. More information and the full terms of the licence here: <https://creativecommons.org/licenses/>

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.

FutureDAMS

Policy Brief and Report on the Political Economy of Electricity in Ghana



**Dr Barnaby Dye, Research Fellow,
University of Manchester**

POLICY BRIEF: GHANA'S ELECTRICITY SECTOR

Four Key Recommendations

Recognise the political context: Understand that short-term, party-political pressure means political power is held informally. This means that unofficial policy-making processes are the norm and that these tend to be more influential than formal, official rules and policies.

Think twice before turning private: Contracts with private companies offer major rent-seeking opportunities, meaning chances to use public money for near-guaranteed financial profit used for party-political and/or personal gain. State-owned companies can therefore reduce rent seeking opportunities.

Tariff setting - formalise subsidies: After the Public Utility Regulatory Commission's (PURC) experts recommend a tariff, allow the Ministry of Energy to take a final decision on price. This generates a formal, transparent mechanism for tariff subsidy, with accountability for who pays. This acknowledges tariffs' electorally-sensitive nature and removes informal policymaking processes that currently create a black box around tariff setting.

Maintain expertise in state-owned electricity agencies:

Comparatively high expertise in the state-owned utilities enables the internal improvement of policy and robust system planning and operation. Maintaining and supporting this existing capacity should be a policy priority.

Recommendations: explanatory overview

Recognise the political context

Ghana is a country with a highly competitive, strongly embedded electoral democracy. Elections in the Fourth Republic have typically been won by close margins, with key contests in a series of swing regions (Accra, the Coastal and Central regions). In addition, there is considerable competition within parties, with MPs and ministers fighting to maintain or improve their positions.

This context creates a strong degree of short-termism. Politicians focus on pleasing their electorate, honouring promises and raising campaign funds over an imminent time-period, meaning they are less able to address longer-term policy priorities. Such short-termism is typical in highly competitive democracies around the world. However, it is particularly important in Ghana, given the informal nature of government and the concentration of power in the presidency. Although formal rules exist, underpinned by the law, they are routinely bypassed.

For the electricity sector, this means that processes of competitive, open procurement, or staff appointments, and decisions about tariffs, might not follow official processes. Rather, the presidency and leading politicians use their informal power and unofficial decision-making processes to shape planning and operational decisions.

Orthodox policy prescriptions seek to address these problems by adding to the reforms Ghana has adopted since the 1990s, which unbundle and privatise system functions, and introduce market competition. However, these measures only focus on formal rules and laws. The prevalence of informal power and informal policy making in Ghana, tied to election-focused political pressures, commonly overwhelm such reforms.

Realistic thinking is therefore required. Further adoption of the 'standard reform model' – the agenda of unbundling, privatising and marketising the electricity sector – whether by introducing legal governance or market reforms, is unlikely to work as intended. Rather than planning changes based on an ideal scenario, solutions should start from the political realities in Ghana.

Think twice before turning private

This first conclusion has implications for privatisation. Private companies increasingly dominate in the generation of electricity in Ghana and, at least partial, privatisation of the distribution utility, the Electricity Company of Ghana (ECG), has been long-planned. The rationale is that profit seeking will support system-cost recovery, efficiency and customer satisfaction.

However, private companies also offer major potential opportunities for politicians' rent seeking. Contracts may be awarded to party-political financiers or family members and friends. This can then be used for personal gain or for campaign finance.

This major risk is currently under-acknowledged. Although rules of open competitive tendering can be put in place, these may be manipulated in Ghana, overcome by the informal concentration of power and by non-official policy-making practices.

In contrast, infrastructure construction and operation[F1] by state agencies do not offer the same possibility for rent seeking. Primarily this is because the state agency collect revenues from infrastructure, but also because state agencies typically face stronger accountability to the civil service and parliament and often have transparency requirements making scrutiny easier.



Tariff setting - formalise subsidies

The financial sustainability of Ghana's electricity sector is a major problem caused by the utilities' debt and the fact tariffs remain below system operating costs. Thus far, efforts to change the fiscal problem focus on enforcing a system of independent, transparent tariff setting. However, political pressure to win favour at elections through cheap electricity, and to direct the revenue from electricity sales towards party-political ends, means tariffs and payments between public and private utilities have rarely operated as intended. This situation could be improved through:

- Continue to expand pre-pay tariff metres. This is an important technology because it forces the recipient to pay bills.
- Mandating the Ministry of Finance to always pay for the public sector's electricity directly, rather than attempting to enforce this through budget lines.
- Formalising subsidies in the tariff process. This would take decision making away from PURC and formally acknowledge tariff setting as a political process which would include de jure or de facto subsidies. PURC could still make technical recommendations for tariffs. The Ministry of Energy would then need to openly decide to subsidise these recommendations or not. This would increase accountability over subsidy provision.



Context

FutureDAMS (a project at the University of Manchester) carried out research on the political economy of the electricity sector between 2019 and 2021. Research focused on decision making regarding power generation, the distribution of benefits and the capacity of the bureaucracy.

Maintain technical capacity/expertise in state-owned electricity agencies

We found that Ghana's state-owned electricity utilities manage to minimise party-political appointments to technical positions and predominantly adopt a merit-based system of recruitment and promotion. This is most true of the Volta River Authority (VRA), Ghana Grid Company Limited (GRIDCo) and Electricity Company of Ghana (ECG), with the exception of politically-appointed leadership and board level. Even when political appointments do occur to technical teams, they tend to be of qualified and capable individuals. This conclusion applies less to ECG, where smaller technical planning teams in the central office are largely merit-based and are not subject to political interference, although other parts of the organisation are.

Comparative research on the electricity sectors in Nigeria, Rwanda, Tanzania and Rwanda shows that Ghana's electricity utilities appear to have an advantage. They seem to have significantly higher capacity and capability in terms of planning and managing the electricity system. This is an asset to the country that should be supported as a policy priority.

Maintaining this capacity is dependent on:

- Remuneration. Salaries should be competitive, although not necessarily higher than the private sector. This is partly because of additional benefits like housing and social services, such as those offered by VRA.
- Building an esprit des corps or performance culture. This is dependent on reinforcing:
 - meritocratic recruitment and promotion of skilled personnel;
 - effective internal training and educational institutions (eg VRA's Training School);
 - avoiding unnecessary reorganisation of high-performing teams within the system that might disrupt personnel or affect their morale;
 - fostering team morale and team-building activities where possible, including through education, suggesting opportunities for training by development partners.

Policy Report: Summary of findings on the political economy of Ghana's electricity sector, its recent crises and underlying weaknesses

This section provides an overview of the evidence underpinning our policy recommendations.

The drivers of major crises and ongoing issues for Ghana's 21st century electricity sector

Two recent crises have shaped the development of Ghana's electricity sector.

'Dumsor' power crisis (2012–16)

A major load-shedding crisis occurred for four years. It was extremely politically unpopular and made a significant negative impact on national GDP. It was initially triggered by four factors:

- a break in the West African Gas Pipeline; over-dependence on this pipeline and the construction of a plant (Sunon Asolgi) that couldn't switch from gas to light crude;
- Insufficient planning for future demand, leaving demand for and supply of electricity too close;
- A medium-scale drought that decreased hydropower's contribution to national supply.

However, as more power plants came online in 2013–15 and the gas pipeline was fixed, the power crisis should have ended. There was sufficient on-grid capacity to avoid a major power shortage. It did not end because:

- underlying fiscal weakness meant ECG and VRA (which must also supply fuel to the Independent Power Producers (IPPs)) did not have the funds to purchase the fuel to run the plants;
- The government did not transfer sufficient funds because of large election-related spending and a post-election deficit, resulting in insufficient money to pay for fuel imports.

The oversupply crisis (2016 to date)

Partly as a reaction to the long Dumsor power shortage, and with an election approaching, the government signed contracts for some 3000MW of power generation capacity through Power Purchase Agreement (PPA) deals with existing and new IPPs (not all of these have yet come online). This move roughly doubled installed capacity, while peak demand has only risen from 2000MW to 2800MW since 2015. Given that the PPAs are 'take or pay' agreements, this leaves ECG and the Ghanaian state, which provided sovereign guarantees, with a substantial deficit. According to the World Bank, this reached 4%–5% of GDP in 2018.

The rationales for oversupply are:

- High-modernist ideology (see below), essentially involving the belief that increasing electricity generation automatically results in industrialisation, economic growth and thus energy demand.
- Pre-electoral panic, given the unpopularity of load shedding with voters in the context of highly competitive elections.
- The rent-seeking opportunity IPPs created for politicians just before an election.

Key underlying drivers of Ghana's electricity problems

Ghana's electricity sector is affected by three connected, underlying financial issues. First is [F1] [BD2] insufficient tariff collection by ECG, meaning that there is not enough funding for distribution grids and maintenance. Consequently, inadequate funds are passed on to IPPs and state utilities (VRA, BPA and GRIDCo). Doing this has harmed the ability to pay for fuel (causing load shedding), the reliability of electricity generation (caused by a lack of maintenance of thermal power and overuse of hydropower) and the maintenance of GRIDCo's transmission grid.

The fiscal problem is rooted in three issues:

The electoral importance of electricity

This most prominent issue affects tariff setting, where it is politically untenable to force through significant sustained tariff increases or institute something nearer to a cost-reflective tariff. In order to maintain electoral popularity, it is crucial to ensure that the public is able to use and pay for electricity. Affordability and electricity access are increasingly ingrained, as a growing number of people see them as a citizenship right, as something associated with being a Ghanaian.[1] Thus, any policy threatening the fundamentals of increased access or a change in electricity's affordability is likely to meet stiff resistance.

This is part of a wider picture, where 'retail policies', as in many democracies, are the 'bread and butter' of politics in Ghana. The government has made numerous efforts to extend free or subsidised services in order to keep or extend its voting base. These are often geographically directed to maximise vote-winning potential. Such subsidies should not necessarily be construed as negative, since they offer potentially important economic support and developmental opportunity. However, they constrain investment in longer-term development ambitions and durable investment in industrialisation. Examples in which electoral interests have influenced the pattern of state service provision include:

- the process of electrification (which areas got access first);[1]
- extension of primary schools and the new free secondary school scheme;[2]
- agricultural subsidies, particularly for the economically important cocoa sector.[3]

Maintain technical capacity/expertise in state-owned electricity agencies

Rent seeking

Politicians in Ghana are strongly incentivised to use their positions of power to create rents. Typically, this means directing government contracts towards allied businesses. This activity can be used to repay money borrowed for electioneering, or to build up future campaign funds. There are two publicly documented examples of this in the electricity sector:

- Corruption among Independent [F1] Power Producers (IPPs). Investigators and newspaper stories have shown that some IPPs are politically connected, using public contracts to support politically affiliated businesses or financiers. The major example of this is the Ameri plant.[1]
- The PDS management contract for the ECG. This deal slowly progressed over the best part of a decade and involved the take-over of the Southern distribution company, ECG, as a concession deal by a consortium known as PDS. Initially, the consortium's 20% of local content went to businesspersons favoured by the ruling NDC party and not allied to the opposition NPP. The content was then expanded from 20% to 51% under the incoming NPP government (post-2016), with companies directly associated with senior politicians receiving shares.

However, the deal collapsed in 2019. This appeared to be because of a desire by the NPP to gain a controlling set of shares in PDS, something opposed by the PDS deal's original sponsors, the US Millennium Challenge Corporation (MCC) and its associated organisation, the Millennium Development Authority (MiDA), which initiated the deal and offered a large grant as a financial incentive. Allegedly, the NPP wanted a controlling share of the board so as to exert control over ECG contracts: it could hand them to party-affiliated companies and thereby accrue election financing. This was effectively vetoed by the MCC/MiDA and other parties, causing the NPP to withdraw support for the deal using the excuse of a forged legal document.

The influence of high-modernist ideology

High modernism is an ideology about development, positing simple notions of technology creating economic development in a linear fashion (more technology equals development). It is underpinned by a supreme optimism in the power of expertise and technicians to create development, converting 'backward', 'traditional' peoples into 'modern', 'rational' citizens. Such basic notions were key to informing President Kwame Nkrumah, Ghana's independence leader, and his Volta River and Dam scheme. They remain powerful in contemporary Africa.[1]

In recent times, high modernism has fostered a belief that increasing electricity generation will automatically create demand for electricity. As a result, some politically produced forecasts were imbued with a belief that Ghana could never have enough power. This led to predictions of a far higher demand trajectory than technical experts in the utilities had published. Such forecasts, despite being unrealistic, helped justify and inform the 2015–16 doubling of generation, which must be paid for through take-or-pay PPAs (ie the government has to pay for any electricity which is not used).

Further Reading

Ayanoore, I., and Dye, B. (2022). The dynamic equilibrium of state effectiveness: the factors eroding and supporting Ghana's 'state within a state' - the Volta River Authority. FutureDAMS working paper 020. [Available at <https://hummedia.manchester.ac.uk/institutes/gdi/publications/workingpapers/futuredams/futuredams-working-paper-020-dye-ayanoore.pdf>].

Dye, B. (2021). Structural Reform and the Politics of Electricity Crises in Ghana: Tidying whilst the House is on Fire?. FutureDAMS Working Paper 13 [available at <https://www.futuredams.org/the-political-power-controlling-ghanas-electricity-system-and-the-ensuing-crises/>].

Dye, B., and Bawakyillenua, S. (2022). The contradictions of competitive democracy in Ghana: electricity as citizenship right, as patronage or as a commodity? FutureDAMS Working Paper 019. (available at <https://hummedia.manchester.ac.uk/institutes/gdi/publications/workingpapers/futuredams/futuredams-working-paper-019-dye-bawakyillenuo.pdf>].

References

- Abdulai, Abdul-Gafaru, and Sam Hickey. "The Politics of Development Under Competitive Clientelism: Insights from Ghana's Education Sector." *African Affairs*, January 6, 2016, adv071. <https://doi.org/10.1093/afraf/adv071>.
- Antwi, Prince. "Ameri Scandal Cages Akufo-Addo Between Party & Family." *GhanaGuardian*. 2019. <https://ghanaguardian.com/ameri-scandal-cages-akufo-addo-between-party-family>.
- Briggs, Ryan C. "Electrifying the Base? Aid and Incumbent Advantage in Ghana." *The Journal of Modern African Studies* 50, no. 04 (December 2012): 603–24. <https://doi.org/10.1017/S0022278X12000365>.
- "Power to Which People? Explaining How Electrification Targets Voters across Party Rotations in Ghana." *World Development* 141 (May 2021): 105391. <https://doi.org/10.1016/j.worlddev.2021.105391>.
- Dye, Barnaby Joseph. "Continuity or Change in the Infrastructure Turn? Reform of the Technicians' Realm in a World Bank Dam." *The European Journal of Development Research*, no. 32 (2020): 627–51. <https://doi.org/10.1057/s41287-019-00232-4>.
- "The Return of 'High Modernism'? Exploring the Changing Development Paradigm through a Rwandan Case Study of Dam Construction." *Journal of Eastern African Studies* 10, no. 2 (April 2, 2016): 303–24. <https://doi.org/10.1080/17531055.2016.1181411>.
- "Unpacking Authoritarian Governance in Electricity Policy: Understanding Progress, Inconsistency and Stagnation in Tanzania." *Energy Research & Social Science* 80 (October 2021): 102209. <https://doi.org/10.1016/j.erss.2021.102209>.
- Kasapa FM. "AMERI Deal Was Rushed through Parliament – MP." *GhanaWeb*. December 15, 2015. <https://www.ghanaweb.com/GhanaHomePage/NewsArchive/AMERI-deal-was-rushed-through-parliament-MP-400919>.
- MacLean, Lauren, George M. Bob-Milliar, Elizabeth Baldwin, and Elisa Dickey. "The Construction of Citizenship and the Public Provision of Electricity during the 2014 World Cup in Ghana." *The Journal of Modern African Studies* 54, no. 04 (December 2016): 555–90. <https://doi.org/10.1017/S0022278X16000574>.
- MacLean, Lauren, Christopher D. Gore, Jennifer Brass, and Elizabeth Baldwin. "Expectations of Power: The Politics of State-Building and Access to Electricity Provision in Ghana and Uganda." *Journal of African Political Economy and Development* 1, no. 1 (December 1, 2016): 103–34.
- Whitfield, Lindsay. *Economies after Colonialism: Ghana and the Struggle for Power*. 1st ed. Cambridge University Press, 2018. <https://doi.org/10.1017/9781108545877>.
- World Bank. "International Development Association Project Appraisal Document for the Ghana Energy Sector Transformation Initiative Project." Washington DC: The World Bank, June 21, 2018.