

Breaking the gridlock: Navigating the political economy of Africa's energy systems

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By Poorva Karkare

Summary

The energy transition is as necessary as it is polarising – especially in developing countries that are looking to rapidly scale up energy access and industrialise. Techno-economic models make a strong case for a cost-effective high-renewable energy mix for most African countries. However, such analysis often ignores or underestimates the political, behavioural and economic complexity of energy systems reform in developing countries. Political economy analysis offers a useful frame to grapple with this complexity and identify openings for reforms.

This brief highlights political economy lessons from existing analysis of African energy systems. It illustrates a different way to examine why things are the way they are, and shows the need to appreciate the distinct dynamics related to electricity supply and demand.

Advocacy informed by such analysis in turn stands a better chance of being accompanied by action. As with choices faced by many stakeholders, advocacy groups too will need to find the right balance between different objectives that they seek to attain.

Introduction

Energy is a fundamental requirement of economic growth and development. The energy transition, from fossil fuels to renewable alternatives, is the single most important way to limit climate breakdown.

Policymakers worldwide face difficult trade-offs between achieving [climate goals](#), [fiscal sustainability and political feasibility](#). Africa faces particular challenges – it needs a rapid and dramatic increase in [energy access](#), both for households and industries, while withstanding climate shocks and overcoming debt distress. This raises questions about how to promote [green industrialisation](#).

The debate on energy transition in Africa has seen [frustrations and polarisation](#) including whether fossil fuels need to be phased down or out, or whether the policy priority should be on decarbonizing the few fossil fuel dependent energy systems or on increasing energy access in many others.

A major concern therefore is how progress can realistically be made to ensure sustainable energy access – whether this includes increasing energy access, or ensuring energy security, or decarbonisation – across African countries.

In practice, politics and the political economy of the energy sector influence outcomes, though they are often neglected in discussions with a focus instead on technical, geographic, commercial and regulatory aspects.

This briefing note highlights lessons from existing political economy analyses of energy systems in Africa.¹ Political economy analysis studies the interaction of political and economic dynamics that shape outcomes. It helps to complement the more technical debate on the one hand, and the political interests and incentives on the other by bringing in essential contextual analysis. Political economy frameworks help to systematise information, and provide tools to move from political economy [analysis to approach](#).

Between ‘the technically desirable’ and ‘the politically feasible’

The priority in Africa is to turn the tide of [energy poverty](#) while reducing [rural-urban inequality](#) as well as gender and other disparities, rather than [reducing emissions](#).

While this problem definition is largely accepted, there is no consensus on *how* to address it. Historically, electricity provision, especially in Sub-Saharan Africa, has happened through centralised systems which are typically characterised by a limited consumer base with a low ability to pay and high costs of grid connection. Many African energy systems rely on hydropower and fossil fuels to provide both baseload and scalability. But state utilities, often indebted and unable to cover operating costs, have limited fiscal space as well as access to international markets to expand the grid.

Renewable energy, led by solar, wind and hydro, in theory offers an affordable way to scale up energy access. This can be seen by the [levelised cost of energy](#) which measures the average cost of generating one kilowatt hour of electricity over the lifespan of an asset. While solar and onshore wind systems were 710% and 95% more expensive respectively than the cheapest fossil-fuel fired power in 2010, by 2022 they cost 29% and 52% less respectively.

Yet increasing their share in the energy mix also greatly increases the complexity of energy systems. High share of (intermittent) renewables requires a more distributed generation capacity, generally provided by smaller power plants, regional interconnections, and a mix of on-grid and decentralised (off-grid) capacity. It also involves a more fundamental shift in power markets with a large group of players, often independent power producers, feeding into the grid. This makes the decentralised energy systems difficult in practice, involving complex reforms.

Adding to this supply complexity is the fact that there is a ‘the chicken and egg problem’ with demand – should the priority be to provide electricity first for businesses to use it or should the demand first be created before electricity is provided? Cost and reliability of electricity is a major constraint for businesses,

especially for industries and manufacturing, which are potentially major consumers. At the same time, many African countries have very low consumption of electricity given their limited 'productive' base. This in turn means that investments to expand installed capacity may not be commercially viable. A major challenge therefore is to scale up installed capacity and demand for electricity simultaneously, constructing functioning power markets and scale.

These complexities make electricity provision a [wicked problem](#) which is simultaneously technically complex, economically expensive and politically salient. Reforms in this area can generate resistance, and make it difficult to adopt technically optimal and ultimately more cost-effective systems that are becoming the norm elsewhere.

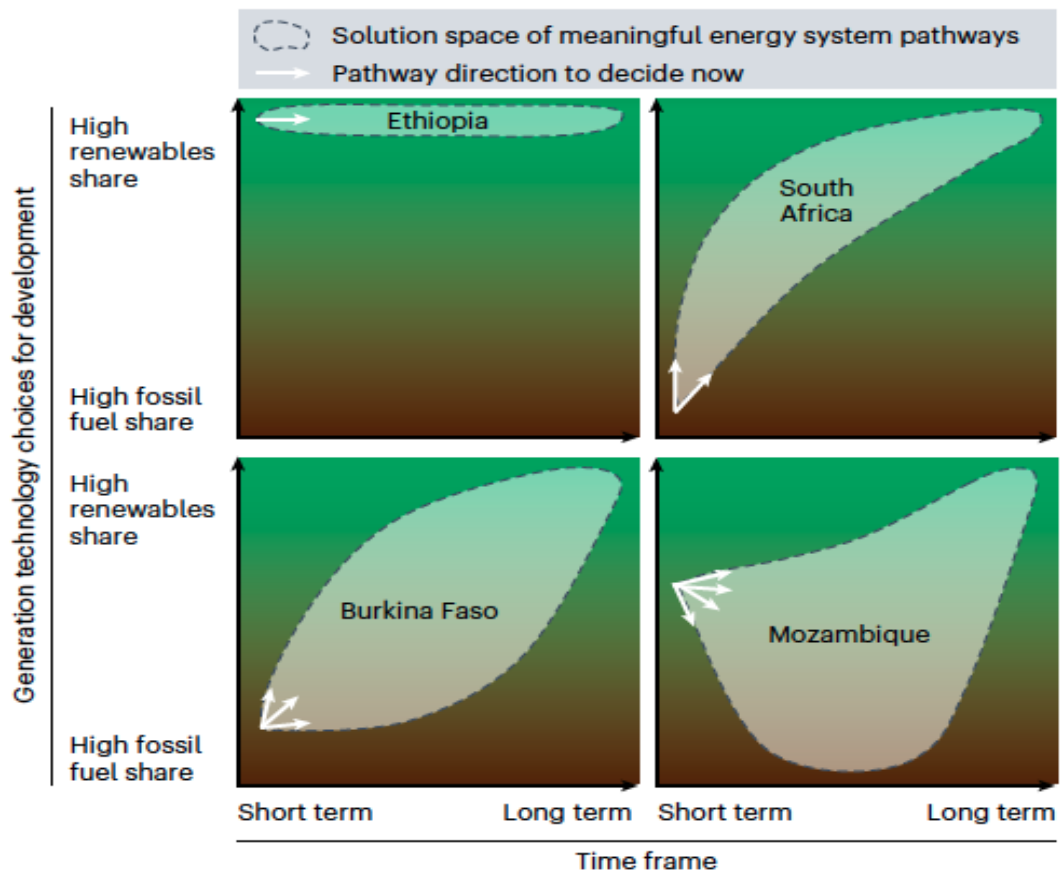
Even if African countries have vast untapped renewable energy potential from a technical point of view, Africa's much-cited clean energy potential [may not be matched by economic and political reality](#). In practice, natural resource endowments and formal regulatory frameworks to promote the adoption of green energy interact with the existing energy system, power market dynamics, industrial (dis)incentives, and other socio-economic and political factors such as utility performance, energy subsidies, formal and informal governance structures. African energy systems, and the electrification of the continent therefore will be constrained by lack of resources and path dependence among other factors, while reflecting these biases. This will influence the pace of electrification as well as the energy mix, ultimately impacting Africa's industrialisation and economic development prospects.

Unlocking Africa's energy access and *transition* cannot be done without major energy system reforms. Moving away from existing systems entrenched in social relations and power dynamics, will create both winners and losers. Not only will these influence transition pathways in a given country but the transition across countries will also be uneven depending on their unique context, including natural resource endowment, historical energy infrastructure, market dynamics, and vested interests.²

Figure 1 below illustrates that the reform space for countries to meet their development goals depends on the existing energy system as well as

endowments. Moreover, the greater the ambition of the reform, the higher the level of uncertainty.

Figure 1: Energy generation technology pathways



Source: Mulugetta et al. (2022).

These potential pathways demonstrate that there are often trade-offs between, and prioritisation among, the different objectives. For instance, African governments often prioritise cheap and reliable electricity, whether it comes from green sources or not, as they seek to achieve a long-standing objective of industrialisation. They may also prioritise large-scale generation projects which are highly visible than long-term reforms which are not.

In pursuing such potentially environmentally suboptimal strategies, countries may nevertheless be addressing important development needs. Reforms or policy changes are influenced by political feasibility alongside technical desirability. Thus interests, incentives and embedded socioeconomic structures play a big role in informing choices made by actors. Together, these factors constitute the political economy of energy systems in Africa.

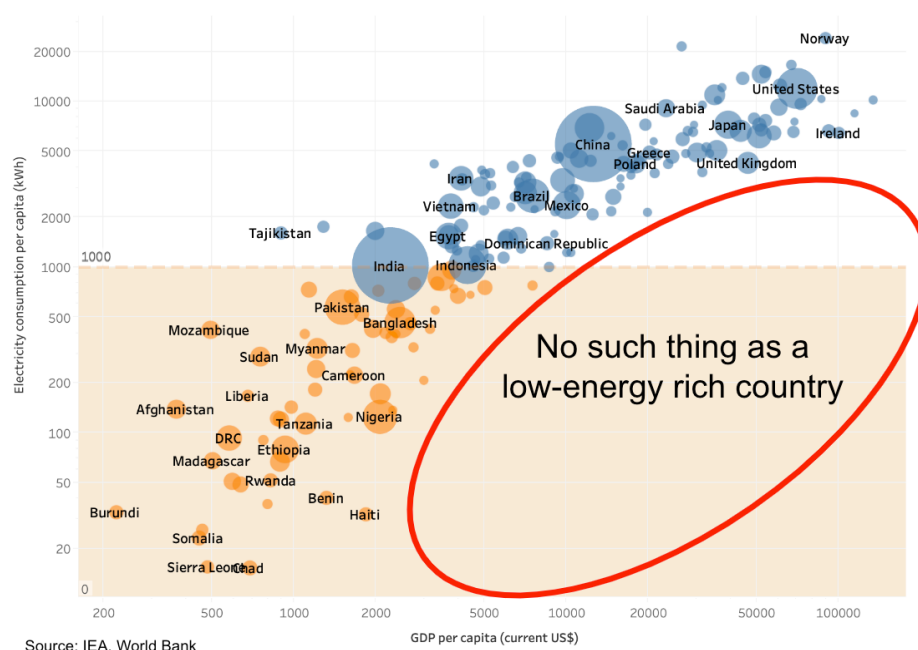
The risk, however, is that there are long-term costs associated with these benefits. These include the risk of stranded assets (where assets lose their value) in the form of fossil fuel based infrastructure whose commercial viability declines as the competitiveness of renewables rises. The challenge for African energy systems therefore, is to balance these short and long-term horizons, and therefore technical and commercial viability with political feasibility.

Such multi-disciplinary scrutiny aids stakeholders in determining more realistic reform pathways by breaking silos of technical (but not politically savvy), financial (but not cognizant of reality), political (but not actionable) solutions. While such analysis may point to a second or even third best option for reform, often, even if not optimal, it is more likely to be accepted and therefore potentially have some impact.

Politics of energy system reforms

At the most basic level, [Africa needs to increase electricity consumption](#) in order to meet its development objectives. Historically, no country has been able to develop without raising its energy/electricity consumption (see Figure 2).

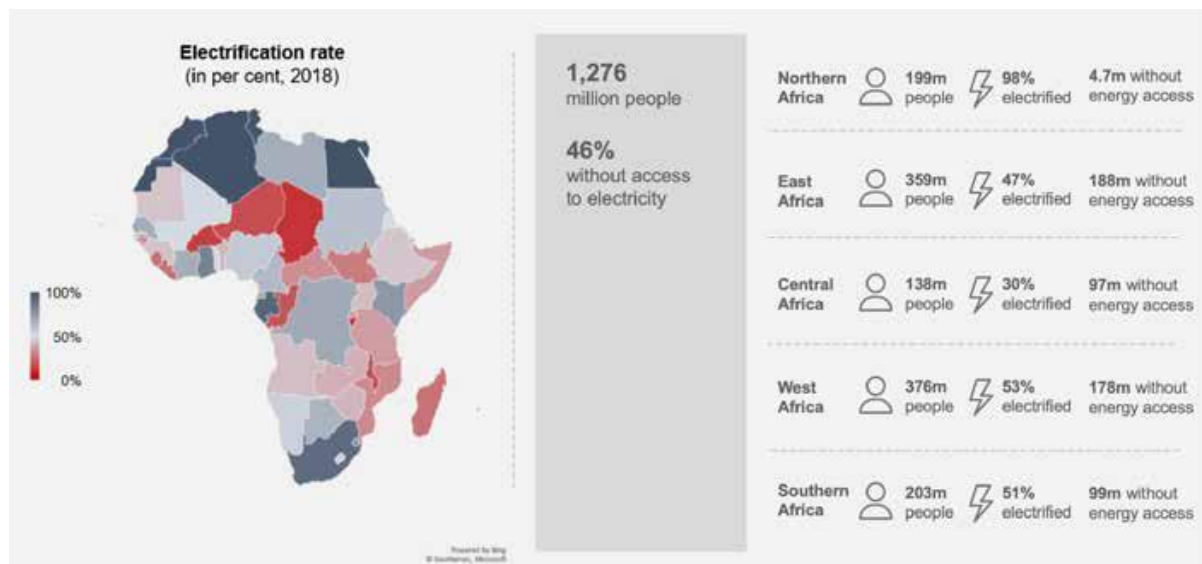
Figure 2: Electricity consumption and income per capita



Source: Tod Moss, *What We Get Wrong About Energy Poverty*

Electricity *supply* in the continent is severely constrained. With 17% of the world's population, [Africa accounts for only 3.5% of global installed electricity capacity](#). Up to 46% of Africans don't have access to electricity (see Figure 3), and [electrification rates in Africa are significantly low](#) compared to other regions and stagnating.

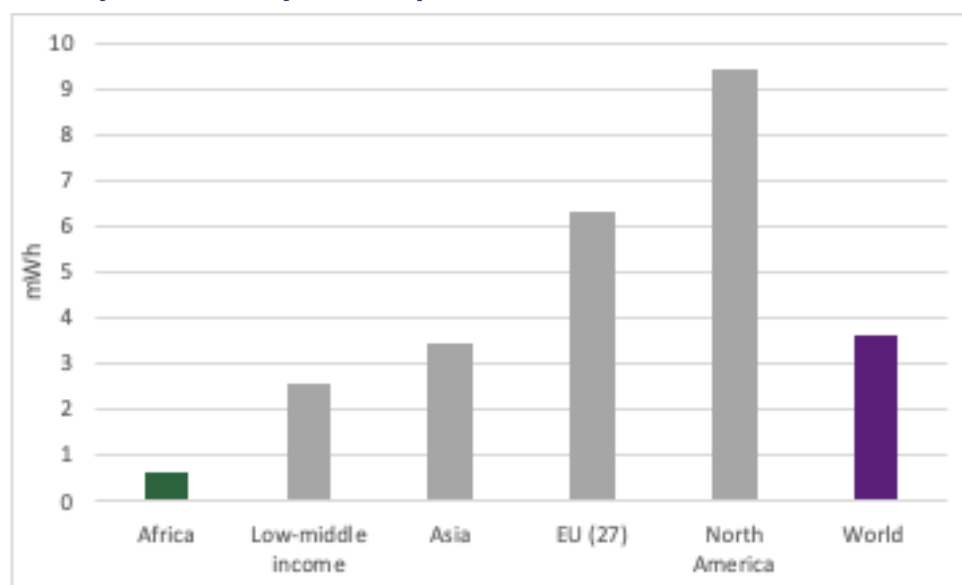
Figure 3: Electrification rates in different regions of Africa



Source: IRENA 2021.

Demand is equally limited. While theoretical or latent demand for electricity (under the right techno-economic conditions) in Africa is considerable, actual demand remains low (see Figure 4). Famously, [“an American fridge uses more electricity than a typical African person in a year”](#).

Figure 4: Per capita electricity consumption



Source: [OurWorldinData](#)

African energy systems vary a lot with several structural and contextual factors influencing the national electricity grids. Industrial and other domestic market structures differ – Morocco, for example, which has near universal access to electricity, needs 41 times more electricity than the Central African Republic where [less than 16% of the population](#) have access to electricity. Resource endowments vary – Kenya, rich in geothermal, solar and wind, has different green energy potential than oil-exporting Angola. State capabilities also matter – in Ethiopia they enabled the country to develop, finance, and implement a large-scale hydropower project, unlike DRC which has struggled to develop the continent's largest hydropower project for decades. This shows that each country is unique in its starting point and priorities.

In addition there are other factors which are less easily observable. For example, national policies set formal objectives and targets for electrification or renewables share in the energy mix, but unwritten norms and practices also influence the behaviour of actors and affect outcomes. The electricity sector is not only a symbol of state-building and a political objective but also an [opportunity for rent-seeking](#). These rents, which are normally used to fund election campaigns, and their distribution, including for clientelism and vote buying, are an inherent part of the electricity grid system.³

All these factors interact and can explain why the energy systems in African countries are the way they are.

Electricity supply and the problem of collective action

Electricity generation, transmission and distribution, often managed by different entities, have distinct dynamics that need to work in unison for consumers to have uninterrupted access. This requires coordination among a wide range of entities to deliver this public good. Short term competitive politics often make long term investments in building and maintaining costly electricity grids less attractive/politically expedient.

Given limited resources, governments prioritise supply to specific regions or sectors over others, influencing outcomes. For example, governments typically do not tax rural households and in so doing they also face less scrutiny on the lack of

provision of basic necessities to these areas. This creates a suboptimal equilibrium where governments continue to prioritise urban areas given their tax contributions, further exacerbating existing inequalities.

Nigeria's case illustrates the complexity of energy systems.

Box 1: Unpacking Nigeria's electricity grid

Nigeria's national installed capacity of 13GW falls short for its size and population, and is dwarfed for instance by the Netherlands, which boasts 3.5 times the capacity for a fraction of the population. Due to poor management only 8GW is actually generated – 80% from natural gas and 20% from hydro. Inefficiencies abound – natural gas, which accompanies the oil extraction process in the country, is flared rather than being delivered to power stations, which in turn face challenges of inadequate gas supply.

Of the generated electricity, just 3.5GW is transmitted due to dilapidated state-controlled transmission infrastructure. Distribution, though privatised just like electricity generation, grapples with government-set low tariffs, hindering fair pricing. Nigerians pay a mere 0.07 \$/kWh, significantly lower than peers in Côte d'Ivoire (0.15 \$/kWh), Senegal (0.20 \$/kWh), or Liberia (0.32 \$/kWh). [Non-payment rates of about 30%](#) further impede distributors' returns on investments.

The result is an [underutilization of Nigeria's grid capacity](#), with electricity consumption in the whole country comparable to Edinburgh, in the United Kingdom, with only 0.2% of the Nigerian population. Ghana, South Africa, and the USA consume 2.5, 29, and 90 times more electricity, respectively. While Lagos and Shanghai have comparable populations, the former gets 1,000 mWh of electricity from the grid, while the latter gets 30,000 mWh.

In per capita terms, the contrast is even starker – an average Dutch person uses 46 times more electricity than a Nigerian. Consequently, Nigeria spends \$14.5 billion annually on diesel generators, spending on average six months without electricity from the grid.

The above account comes from a [podcast series](#) by 'de Correspondent', unless otherwise cited.

Greening the electricity grid, while environmentally desirable, and in theory very cost-effective, adds another layer of complexity to the existing challenges of electricity provision. It requires [adaptations to the grid infrastructure](#), and a different paradigm to manage a more diverse and distributed generation capacity.

Consumers and businesses value [electricity availability, affordability, and reliability](#) more than the precise energy source that powers the grid. In both [Angola](#) and [South Africa](#), consumers believe that their government is doing a poor job of providing electricity, emphasising the lack of reliability.

Reforms to green the grid not only comes with costs, but it may also run up against vested interests in the way current energy systems are designed and run. Electricity provided under the grid is often subsidised. In Sub-Saharan Africa, electricity tariffs on [average cover only about 70% the actual cost of production](#), without considering additional costs associated with grid expansion and new connections. While making the use of fossil fuel backed electricity cheaper has an environmental footprint, rolling them back is also [deeply unpopular](#).

Between centralised and decentralised solutions to electrify the continent

Decentralised electricity provision is seen as an affordable solution for electrifying rural areas, while also increasingly becoming an attractive option for businesses and (peri-)urban consumers to bring down electricity costs and shield them from frequent power outages. [Recent research](#) finds that deploying decentralised alternative solutions in rural areas under Kenya's electrification programmes could have expanded the number of rural connections and enhanced the efficiency of the rest of the electricity grid in Kenya without incurring extra costs.

Yet, decentralised solutions are also not without their own complexities. The business models of decentralised electricity providers – whether pay-as-you-go or fully owned – can quickly hit a ceiling of available (paying) customers, especially in least developed countries and other fragile contexts, and sometimes act as '[a conduit for consumer debt](#)'. Others underscore the need for broader [public support through subsidies](#) for these solutions to become commercially viable given limited consumer affordability and demand based on research in rural Rwanda, Senegal, and Burkina Faso.⁴ Additionally, failure of decentralised renewable projects due to [lack of maintenance](#) adds another layer of complexity as the lack of necessary capabilities to operate and maintain these installations affects the sustainability of these projects.⁵

On and off-grid solutions can be complementary, but can also create tensions. While a switch by rural users to off-grid solutions can [reduce the need for costly grid expansion](#) or remove the burden on the existing grid, shifts by the urban base (to self-financed installations) can [reduce utility revenues](#) and [heighten grid pressure](#) as these consumers continue to use the grid as backup while the need to subsidise rural use mounts.

A renewable energy transition requires significant upfront investment, with costs further rising as transition progresses beyond the initial phase, or deepens (requiring more infrastructure – storage, more expensive renewables, etc. – for the same output of energy). Low and middle income countries often [lack the fiscal space](#) to do this. High cost of capital for African countries further raise the price tag for clean energy systems.⁶ These factors may explain why investments are largely lacking in Africa.⁷ To make the transition to cleaner energy systems more accessible to African countries therefore there is a need for subsidising these costs. Downplaying this can even be [counterproductive](#) and [disrupt growth](#) in markets where renewable energy is taking off. [Challenges of securing financing](#) to expand such solutions have been well documented.

Overall, both on- and off-grid systems in Africa are underperforming such that growth remains far below what is necessary to reverse the trend of energy poverty in Sub Saharan Africa. In 2022, a [mere 2.7 GW of renewable capacity was added to the grid in Africa](#), which is an increase of 4.8%, though it remains far below the global average of 9.6% with a total of 295 GW in additional renewable capacity added worldwide.

Creating demand by increasing the productive use of electricity

In addition to the legacy of underperforming and outdated grids, and the complexity of energy systems reform, electricity demand is one of the biggest challenges African countries face. This is both linked to infrastructure deficiencies, as well as low productive use of electricity.

National electrification programmes, while raising the proportion of households connected to the grid, do not address this challenge of deficient demand as seen in the case of Kenya where [electricity consumption among these newly connected households remains very low](#). Extending access to rural areas is often a loss-making activity given higher costs of grid connection.⁸ This combination of high cost of provision and low demand in rural and remote areas [reduces the incentive to provide electricity](#) in these areas further entrenching urban-rural inequalities.

This particularly affects women and girls. Traditionally assigned the most [energy-intensive household tasks](#) such as washing, cooking and cleaning, women often spend long hours collecting fuels and water. This not only exposes them to safety risks and health hazards (from the use of firewood), but it also has [opportunity costs](#) as they are unable to participate in the labour market.

Looking ahead – coordinated growth in supply and demand

African countries find themselves in a difficult position to expand electricity supply in a context of highly limited real demand. Resolving this dilemma requires addressing the supply constraints highlighted above.

In addition, raising electricity demand from its currently low base requires measures beyond ensuring access alone. There is a [positive and bidirectional relationship](#) between electricity consumption and economic growth in Africa.⁹ Thus, from a development perspective, there is a need for [supporting productive economic activity, where industries can anchor demand](#). As discussions around

'green industrialisation' gather momentum, [renewable electrification](#) itself could pave the way to build new local capabilities (around equipment manufacturing, construction, operation and maintenance of renewable plants) while also promoting economic activity in industries that use this electricity.

[Some African countries](#) are strategically positioning themselves for economic development opportunities in the global green transition. This includes supplying green energy, green hydrogen and derivatives to other parts of the world, but attracting investments for future energy intensive industries. Examples include [Kenya's emphasis on geothermal energy production](#) for green manufacturing including [President Ruto's ambition](#) to [attract industries using clean energy](#), Morocco's push to green its industrial base and [innovation in green applications](#) to secure access to the EU market, and various countries exploring green hydrogen exports. Even though these initiatives are very new, they call for a scrutiny into what drives them, who benefits and does what.

So what? Advocacy informed by analysis

While African energy systems need substantial reforms to unblock energy access, tackle energy poverty and several inequities, "[practice often falls well short of theory](#)". To understand why this is the case, it is important to look beyond the technical, and into the political realm.

A fundamental step in this process is problem definition – the energy transition in Africa is about expanding access and increasing consumption, and doing so in a cost-effective manner, while creating new opportunities to industrialise.

The slow growth in access, and similarly the slow adoption of renewables is partly the result of a collective action failure and path dependency. Historical underinvestments have led to persistent barriers to increase both the demand and supply of electricity across the continent.

Political economy analyses help unpack the black box of 'political will' and what may be undermining collective action for long-term energy system change. African administrations often have to navigate an environment of limited state capacity, while political leaders have to deal with [constraints in the face of](#)

[competitive politics](#) and consider ways of getting re-elected. As such, undertaking unpopular reform or those whose benefits will only be visible when the leaders are no longer in power may not be seen as conducive to the politics of electioneering. Rather than being an anomaly, this is the system in which they operate. This short time horizon means that governments resort to solutions at the margin such as imposing [stricter standards on diesel generators](#) or using biometrics for fossil fuel subsidies to [minimise leakages](#), rather than more comprehensive and radical reforms. In some cases, short term fixes, while necessary and effective, can be very expensive. This is the case, for example, with the use of [floating power plants](#) in South Africa and several other African countries.

Similarly, subsidised electricity provision, while justified given it is a basic necessity, can be problematic when it is run on fossil fuel with yet another yet related set of complex dynamics.¹⁰ Rolling them back is politically very difficult even if it saddles utilities up with unsustainable debt. While it is more effective to charge full prices and use the revenues to specifically target those in need, “[a] [subsidy characterised as concern for the energy poor works much better at election time](#)”.^{11 12} Moreover, these subsidies are also associated with patronage and rent-seeking. Potential losers from reforms to end fossil fuel subsidies – for instance fuel suppliers or generator importers – could be a bigger hurdle to governments than consumers themselves. Nevertheless, some countries like Iran and India have successfully phased out unsustainable fossil fuel subsidies. This was a function of reform design, building and communication of positive political narratives, compensation and a counteroffer, and timing.¹³ This points to the importance of [building on domestic traction](#).

Analysing the ‘winners and losers’ from reform also reveals that complex development challenges may require ‘best-fit’ solutions tailored to specific contexts rather than a ‘best practice’ approach. Governments may seek efficiency within an inefficient system. This includes, for example, building gas-to-power plants which can be built relatively quickly. While these may seem less efficient than a transition to green electricity which is technically desirable, such seemingly second or third best options may be more politically feasible in the short run, even if they come at a higher cost, in the long run.

It is important to highlight that these ‘best fit’ reforms are also not a panacea. Power plants have long payback periods and these investments may be risky.

[Solar and wind power have a lower levelised cost of electricity](#), with prices set to further decline, making gas-to-power less attractive. Other considerations include the longer-term implications of international climate regimes such as the Carbon Border Adjustment Mechanism, which will impose a premium on embedded emissions of industrial imports, but also a further phaseout of foreign investment in fossil fuel infrastructure.

The economic viability of gas-to-power investments to a large extent will differ by country and depend on internal factors such as available resources and demand for domestic use (as opposed to exports), as well as external ones such access to technology and finance, and the competitiveness of alternative technologies (Ibid.). What is clear, however, is that betting on a fossil-fuel heavy energy system may come with significant risks. Policymakers therefore need to balance different objectives of (1) averting immediate energy crisis (2) boosting consumption and access, and (3) scaling up affordable energy.

Climate and energy advocacy that is informed by political economy analysis can bridge the gap between ambition and implementation in different ways

- i. contextualising advocacy by assessing the feasibility of reforms,
- ii. identifying key actors to build coalitions and strategising,
- iii. ensuring the sustainability of advocacy by avoiding potential backlash,
- iv. strengthening efforts for greater accountability and promoting more inclusive policies by altering interests/incentives of actors.

Thinking politically may help identify stakeholders to form a coalition for change and develop a 'winning' narrative as highlighted above. This can be achieved by emphasising the [co-benefits of green energy](#). For instance, highlighting its potential for job creation or mitigating air pollution and improving human health can be useful entry points to get a greater buy-in from the government and thus making reforms more palatable.

While climate action is a key entry point on the international stage, in many African countries the influence of action in the national economy is limited. Unlike in European governments, where the climate portfolio is increasingly brought under powerful ministries like Economic Affairs (e.g. [Netherlands](#), or [Germany](#)), in many African countries, it typically remains under the Ministry of Environment, which has relatively limited influence and oversight on economic activities.

Moreover, [balance of power between different Ministries](#) – tensions in mandates of different entities and competition over resources – can have significant impact on outcomes. Politically informed advocacy can pinpoint entry points to address inter-ministerial competition in mandates and improve coordination which is often inadequate.

However, in fulfilling their roles, civil society organisations may themselves also face trade-offs. While contextualising advocacy can help secure political buy-in by settling for the second or third best solution through revised ambitions, many argue that addressing the challenges of climate change requires large transformative changes in turn necessitating ambitious reforms. Similarly, choices may arise between inclusive yet indecisive consultations and strategic yet backdoor negotiations.

Finally, the different imbalances in terms of gender and other cross-sectional inequalities in the energy system are often overlooked, with limited discussions on how to effectively address them. The deployment of green energy alone is unlikely to automatically tackle these structural dynamics which disadvantage certain groups. More research is needed to draw lessons for advocacy.

Box 2: Conclusions from existing political economy analyses

The vibrant literature on political economy analysis and thinking and working politically offers valuable lessons for practitioners and civil society organisations in the climate and energy space. Some of these works are directly related to the energy sector (e.g. Barnett and McCullough 2019), others offer insights that can be relevant across sectors (e.g. various publications by [ESID](#)).

Some implications highlighted in existing analyses include:

[Working with the grain](#)

Building on existing systems may be more effective than advocating to replace them completely.

[Building sailboats not trains](#)

Building flexibility in the reform agenda to navigate (and at times circumvent) counter-reform pressures rather than propose inflexible reforms that may run aground for being too disruptive from the start.

Context is everything

What works in one place may not necessarily be possible in another. Rather than advocating the 'ideal' model, there is a need for a context-driven approach to reform.

Experimenting and learning from mistakes

Addressing commonly accepted and identified development problems through an iterative learning-by-doing process (problem-driven iterative adaptation).

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Endnotes

1. This note draws on discussions from a closed door workshop on “The Future of Energy Security in Africa” with African climate experts organised by the Konrad Adenauer Stiftung, [Regional Programme on Energy Security and Climate Change in Sub-Saharan Africa](#) and facilitated by ECDPM in September 2023.
2. Africa is a vast geographic area comprising more than 50 countries with a [diverse set of endowments, needs and priorities](#).
3. This is not value judgement but rather a descriptive analysis of the current system. Interestingly, [recent research](#) suggests that “residents across Africa don’t always interpret clientelist practices as bad governance, but rather as necessary pathways toward human dignity” so they are recognised and included as legitimate agents in the political process.
4. Households willingness to pay is constrained by [low incomes](#), which are [not enough to cover the costs of solar devices](#).
5. A [recent systematic review](#) shows that private electricity firms do not always undertake the maintenance of off-grid systems while these costs can often surpass what rural households can afford.
6. The already high cost of capital is further exacerbated by rising interest rates in the US. For instance, the cost of [unsubsidised solar in Ghana would be about 140% higher than in the US solely because of the cost of capital](#).

7. Whereas Africa needs an estimated \$700 billion to develop green energy across the continent, it received [only 2% of the \\$2.8 trillion invested globally in renewables](#) between 2000 and 2020.
8. This is mainly due to low population density and non-existent distribution infrastructure.
9. Rather than a simple one on one relation, it is [important to appreciate](#) “the extent to which these effects [i.e. increased economic growth/income] are the result of the broader institutional political economy within which expanded access is embedded”.
10. In 2019, [about 36%](#) of fossil fuel subsidies went for fossil fuel powered electricity
11. 13. Given the low electricity consumption of the poor, electricity subsidies often benefit the better-off more.
12. While rich countries are less reliant on subsidising energy for winning elections, this issue nevertheless remains political as seen by the [yellow vests’ protests in France](#).
13. Reinforcing this, [a recent World Bank survey](#) shows that consumer support for reforming fossil fuel subsidies increases when accompanied by compensatory policies, while signalling credibility, and effective communication with iterative process of dialogue with citizens.

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