



**Energy and Economic Growth**

Applied Research Programme

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## Thematic Note: Policy Instruments and Governance Structures for Energy Reform

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EEG will commission rigorous research exploring the links between energy, economic growth and poverty reduction in low-income countries. This evidence will be specifically geared to meet the needs of decision makers and enable the development of large-scale energy systems that support sustainable, inclusive growth in low income countries in South Asia and Sub-Saharan Africa.

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## List of abbreviations

DFI	Development Finance Institution
DFID	Department for International Development
Discom	Distribution Company
EEG	Applied Research Programme on Energy and Economic Growth
IPP	Independent Power Producer
OECD	Organisation for Economic Co-operation and Development
PEA	Political Economy Analysis

# 1 Introduction

This Thematic Note is one of six produced in the first year of the Applied Research Programme on Energy and Economic Growth (EEG). Each summarises a set of EEG State-of-Knowledge Papers that explore current understanding around one aspect of a theme related to large-scale energy infrastructure and economic development. This Thematic Note summarises the State of Knowledge Papers produced under EEG's Theme 2 – Policy Instruments and Governance Structures for Energy Reform. It highlights the key findings and research gaps that were identified by State of Knowledge Paper authors through their literature review and their engagement with policymakers and industry practitioners at the EEG Policy Workshops and Research & Matchmaking Conference.

Over the years, the failure of standard growth and development models to yield the desired results in low and middle income countries has led to evolution of the development “big think” from one-size-fits-all approach to a more customized, diagnostics approach. The same is true for reforms in the power sector. With the ‘standard model’ of power sector reforms consisting of unbundling the power sector, corporatization of utilities and opening up power generation to IPPs, producing only modest results in reviving and strengthening the power sector in developing countries, there had been a renewed focus on the political economy of these reforms.

The macro and socioeconomic environment, institutions and challenges faced by the power sector in developing countries are very different from the conditions in the OECD countries in the 1980s, when these ‘standard reforms’ were implemented. In addition to this, the developing countries are very diverse, with different countries and regions facing a different set of problems. This is indicated the varying degrees of success of power sector reforms in different regions: the standard model of reforms was relatively more successful in Latin American countries, as compared to Sub-Saharan and African countries. Thus, it is important to take into account the political and situational contexts in which power sector reforms are being developed.

The two papers in this theme are:

1. Eberhard, A. & Godinho, C. (2016). A Review and Exploration of the Status, Context and Political Economy of Power Sector Reforms in Sub-Saharan Africa, South Asia and Latin America. Energy and Economic Growth Applied Research Programme.
2. McCulloch, N., Ward, J., & Sindou, E. (2016). The Political Economy of Aid for Power Sector Reform. Energy and Economic Growth Applied Research Programme.

The two papers in this theme seek to address these issues and are built around the following questions:

- Where power sector reforms have been undertaken, what has worked and why?
- What does political economy research tell us about driving pro-development changes in access to energy by sub-sector (including gas, coal, oil, renewables etc.), and by context (national, regional)?

- Using PEA, what can we say in terms of progress on power sector reform (structural issues, unbundling etc.); tackling subsidies; promoting inclusive electricity access, donor behaviour etc.?
- What are the transitional possibilities for improving the supply of electricity, possibly without solving the deeper problems of the main supplier, allowing for assessment against classic (capital and capacity) constraints?
- What has been the experience in successful transition countries? – full reform of the central system or more piecemeal decentralised solutions, and the possibility of “nth-best” solutions and “working with the grain” in the power sector and managing expectations.
- How can research be designed to support findings or principles that are transferrable from one context to another?
- How do external actors (like DFID) balance the desire to ‘work with the grain’ without supporting the interests of individuals or groups that are, at best, apathetic, about development outcomes?

## **2 Key insights from the State of Knowledge Papers**

### **2.1 Paper 1: A Review and Exploration of the Status, Context and Political Economy of Power Sector Reforms**

Eberhard & Godinho's State of Knowledge Paper provides an overview of the status and progress of the power sector reforms in Sub-Saharan Africa, South Asia, and Latin America, highlighting the role of the political environment in influencing these reforms. From the 1980's, reform in the power sector was characterised by a wave of market-based reforms in OECD countries that has come to be known as the 'standard model' of reforms. Increased efficiency and reduced costs of power production were the two main drivers behind the adoption of these reforms. The standard model of reforms entailed enacting new electricity laws, corporatization of the power utilities, establishing regulatory agencies and opening up the generation of power to IPPs. The implementation of these reforms in OECD countries was largely successful (Williams & Ghanadan, 2006, and others), even though many of these countries experienced issues like blackouts and volatility in the early 2000s.

The political context, drivers and the process of implementing power sector reforms in non-OECD countries was vastly different. The main drivers behind power sector reforms in these countries was deterioration in the electricity infrastructure and poor technical performance, aid becoming conditional on the enactment of market-based reforms, and poor financial performance of the utilities adding to the overall public debt burden. Towards the end of the 1990s, given this backdrop, non-OECD countries started implementing the 'standard model' of power sector reforms pioneered by the OECD countries. However, evidence indicates that these countries have struggled with the implementation of full package of the reforms (Besant-Jones, 2006, Sen, 2014; and others), resulting in different 'hybrid models'. For instance, in South Asia and Sub-Saharan Africa, countries still have state-owned utilities that are characterised by varying degrees of competition, unbundling, regulation and private sector participation. Countries in Latin America, on the other, were relatively more successful in implementing these reforms, with competitive and regulated power markets becoming the new norm in these countries.

Some of the key reasons for the varying degrees of success in implementing these reforms in different countries and contexts is the differences in the quality and effectiveness of institutions, levels of socio-economic development, and the overall political environment in these countries (Besant-Jones, 2006; Sen, 2014; and others). The experience of these countries over the last 20 years in implementing power sector reforms has shown that the 'one-size-fits-all' approach does not work. It has also highlighted the importance of involving local stakeholders, including the general public, civil society, private sector and other political actors and groups in the consultation process when conceptualizing and implementing reforms in the power sector, instead of being driven by a single ministry or a DFI. The paper also notes that the political environment nationally would have to be considered at each step, and the overall policy making process would have to be open and transparent. In addition to this, given the slow and tedious process of reforms in developing countries, it is important to ensure the reform process sustainable over time. Logical sequencing of reforms, setting realistic timelines and identifying politically feasible measures are highlighted as important steps in achieving greater legitimacy and ensuring more sustainable processes over time.

Given the backdrop of the reforms in the developing countries, and the importance of factoring in the political environment and situational context, the paper develops an integrated approach to PEA that should form the foundation of power sector reforms. The PEA approach proposed in the paper focuses on assessing the following components:

- National Structural characteristics such as the macro-economic context, history and evolution of the role of the state, geopolitical positioning, cultural traditions and its influence on policies and processes and socio-economic conditions
- Institutional analysis of political and economic institutions, including institutional mapping, understanding the incentive structure in these institutions and the practical working arrangements between the different institutions
- Sector analysis of the power sector, including stakeholder analysis and policy analysis of the extant policy and its influence on the political economy
- Policy reform process and
- Other situational factors that can drive or constrain the reform process

The paper also highlights the importance of further research on linking more systematic PEA research and analysis to designing policy reforms, the process of implementation and policy evaluations. This would help in further refining the PEA framework, and ensure a theoretically and practically comprehensive approach.

## **2.2 Paper 2: The Political Economy of Aid for Power Sector Reform**

McCulloch, Ward, & Sindou's State of Knowledge Paper focuses on the political economy of aid in the power sector, highlighting donors' experiences of taking into account the political economy of the state while supporting reform efforts, the challenges faced by them in doing so, and the lessons learnt. The paper is based on a broad literature review on political economy of aid in the power sector, project specific case studies in Tanzania and the Indian state of Odisha and qualitative interviews with project staff at donor institutions engaged in the reform efforts in Tanzania and Odisha.

The paper begins by providing a brief overview of the involvement of development partners and donor institutions in developing countries, and then focuses on the two case studies and the lessons learnt from them. Though DFIs and other development partners were supporting power sector reforms in developing countries as early as the 1950s, their involvement in sectorial reforms in the power sector is rooted in the transformation of their own utilities system in the 1980s. As highlighted in the previous paper, OECD countries, where most of the development partners and DFIs are situated, embarked on implementing sweeping power sector reforms in their countries in the 1980s. The success of these reforms led to the 'standard' or 'codebook' model of power sector reforms, which they later tried to support in developing countries.



These standard models of reform faced significant barriers in the developing countries and failed to produce the desired results as model failed to take into account the national, situational and political context of the country and how this differed from the experience of the OECD countries. In addition to this, these standard reform models also failed to provide a roadmap to the governments, but only highlighted the end goals. Donors and DFIs responded differently to the failure of the standard models, with some donors resorting to greater conditionality of aid, with loan disbursements being dependent on countries undertaking specific reforms, and other trying to insulate reform from politics. In essence, however, the failure of the standard model of reforms highlighted the importance of the political economy of aid in the power sector.

The case studies of Tanzania and Odisha, the qualitative interviews with the donors involved in supporting these reforms highlighted that PEA was often not taken into account while supporting reforms as this was viewed as technical assistance, in spite of the project staff having a deep understanding of the political environment. Consequently, only analysis focusing on the technical aspects of the project was undertaken prior to the reforms. There are also two opposing schools of thought in this regard, one believing in the importance of remaining politically neutral, and the other believing in the incorporating PEA into the reform agenda. The literature review also indicated that even if a PEA is conducted prior to supporting the reform agenda, the agenda often does not reflect the findings of the PEA.

The State of Knowledge Paper also highlights the challenges in designing flexible and adaptive reform programmes. Though the literature review finds that flexible and adaptive donor supported programmes have the highest chance of achieving the desired results, it is difficult to design and implement such programmes in practice. For instance, in the power sector, many contracts such as agreements with discoms is large in value and bounded by the initial term of the contract, which may be difficult to amend in the future. The donor institutions can also be structurally inflexible, which may undermine their effectiveness. For instance, due to internal management and operational procedures, donors may be unable to shift project resources from less effective to more effective areas.

McCulloch, Ward, & Sindou's paper consistently finds the importance of trust, personal relationships and dialogue between the donor institutions and the recipient governments being reported as essential to the success of any programme. Overall there was a consensus that "There is no substitute for an experienced and credible [donor] staff member who has the trust and confidence of the key decision maker." In addition to this, the paper also finds that donor institutions put very little effort to work with other stakeholders like civil society organisations, private sector or households, to build the domestic demand for reform. This is both because of home government control over donor institutions not permitting advocacy efforts, as well as the lack of a constituency of support for reforms and interest to build coalitions.

### 3 Priority Research Questions

On the basis of the evidence presented in the two State of Knowledge Papers, the EEG events, and the authors' broader understanding of the thematic evidence, the following questions – along with a proposed methodological approach and output – are proposed as priorities for research:

1. What are the links between the underlying political economy system of a country and the power sector that can help in understanding the design, progression and outcomes of power sector reform in developing countries? What can be learnt about contextualising reform interventions and approaches from countries that have successfully implemented reforms? For example, what can be learnt from past reform attempts/experiences about pacing, intervention scaling, and reform planning in designing politically feasible, yet contextually ambitious reforms?

Approach: Extensive literature review, including political economy research on specific issues (subsidy reform, access, distribution, IPPs etc.) and on the reform experiences of countries across regions. This could be supported through interviews/focus groups with policy-makers, experts and donors. Research should be geared towards identifying determinative political economy contextualities at the general level (political economy system/settlement and sector development/reform) and those that are most important for specific types of reform (e.g. subsidy reform) or in achieving specific sector development objectives (e.g. access).

Output: Systematic and Comprehensive Literature Review of Determinative Political Economy Contextualities – A source book for policy-makers, donors and academics on some common determinative political economy contextualities, alternative approaches to working with/around political issues. This book would provide a valuable resource to assist in incorporating political economy contextualities in the design of the reforms and their progression.

2. Do certain political economy contextualities cluster in different regions or country groups? If so, how can opportunities for regional/inter-regional research and learning be better supported? Around which issues/challenges does there seem to be the greatest scope, and potential value, in supporting/facilitating research and policy-making networks?

Approach: Mapping political economy contextualities onto regions and countries, and across time (connected to the preceding question, literature review & qualitative research suggested above), research facilitating workshops, conferences and training in certain regions/country groups around key political economy issues, as related to key sector development/reform challenges. This research approach will help build capacity & networks, while building a middle ground between 'best-practices' and contextualised approaches.

Output: Maps of the political economy contextualities across regions and time (Disaster/abnormal years excluded e.g., natural disasters like floods or droughts, change in

global investment climate, geopolitical shifts, inflationary situations) with secondary research on clusters & key challenges.

3. How can research be designed to support findings or principles that are transferrable from one context to another, and develop theory in the area of power sector development and reform?

Approach: SoK paper 1 provides an initial PEA framework, drawn from multiple prominent PEA frameworks advanced by development partners over the past 10 years. Working from this and/or other PEA frameworks and theory, an integrated framework would be developed and applied to a selection of representative countries (both countries where research already exists and/or those where research is thin or has not yet been conducted) in order to refine inductively. The development of this framework would be supported by the research on determinative political economy contextualities.

Output: An Integrated Political Economy Framework for Power Sector Development and Reform for policy makers, researchers and development partners.

4. To what extent/how have development partners advanced PEA in their power sector development and reform support in the past? Why has it been so difficult to incorporate political analysis into the design and implementation of donor programs? Have some donors been able to incorporate PEA in power sector programs better than others? How have differences in PEA approaches and/or development and reform priorities between donors supported or undermined the implementation of power sector policies and plans?

Approach: Comparative case studies looking at (a) the way in which a number of development partners have attempted to incorporate political analysis into their programming and (b) the relative effectiveness of the different approaches taken, and (c) the way that different approaches support or undermine the approaches adopted by other development partners. In this review, the political culture and drivers behind different approaches will also be explored.

Output: An overview of different PEA tools and approaches (including approaches that adopt a 'politically neutral' approach), and a comparison of their effectiveness in different contexts.

5. How have power sector development and reform experiences evolved in recent years? Are there cases where gradual, iterative approaches have been successful? If so, what distinguished these cases from those where partially implemented reforms have stabilised in the form of 'hybrid market' models? How have recent trends in energy technologies, finance options and/or geopolitical relations impacted the feasibility of structural, market-based reforms?

Approach: Much of the existing research literature on power sector development and reform looks at countries that initiated reforms in the 1990s. However, a growing number of countries have initiated reforms in recent years – especially in Sub-Saharan Africa. There are also those who have made recent advances, such as, for example, subsidy reforms in

South Asia. Lastly, there are many countries for which little (up-to-date) research exists. There is considerable scope for new research on power sector reform in developing countries. This research needs to be systematic, and should contribute to comparative research and theory development. The proposed approach would involve the selection of representative case studies, according to approaches, outcomes or other factors, and the application/tailoring of a PEA framework to these case studies. Ultimately, this research would feed into question 1 and question 2.

Output: An Up-to-Date Comparative Research Literature, Using a Systematic Political Economy Framework

6. How are new energy technologies shifting the political economy of power sector reform? The political economy of aid for power sector reform has been influenced by the fact that the power sector has traditionally been a centrally managed sector with strong economies of scale. However, new energy technologies have the potential to change this radically. The roll out of mini-grids in many countries is likely to change the political relationship between communities, towns and the central authority in a country. Similarly, household systems have the potential to “democratise” energy, eroding the ability of centrally managed institutions to capture rents and allocate resources as before. New metering technologies may change the nature of the political economy challenges associated with false metering and electricity theft.

Approach & Output: A case study that explores how new energy technologies may be modifying the traditional political economy challenges of reform and the implications this might have for the way in which development partners intervene.