



Public Value Energy Governance: establishing an institutional framework which better fits a sustainable, secure and affordable energy system

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Abstract:

This short working paper is intended to stimulate discussion about how governance of the energy system in Britain can better keep up with technological, economic and social change. We have set out a possible model for future governance and regulation – which moves from the ‘independent, CEO led’ model currently in Britain to one which is more ‘directed’ and which we argue is more legitimate, transparent and nimble; but which also better suits the characteristics of current technologies (whether supply, demand, storage and ICT integration). We would welcome comments on it by the end of June 2015.

Whatever the optimum model for future energy system governance and regulation, though, the fundamental point remains: the current model of regulation in the UK’s gas and electricity systems is no longer fit for purpose.

Keywords: governance, economic regulation, energy policy, institutions

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1. Introduction

Energy policy in the UK and its governance and regulation is undergoing a period of intense scrutiny. This is partly due to the upcoming 2015 General Election but also because of an ongoing [CMA Inquiry](#) as well as the serious problems the Coalition Government has encountered with respect to EMR¹ and the Green Deal², the two centre pieces of its energy policy.

Members of the Energy Policy Group (EPG) published a [blog](#) in November 2014 called *Bringing International and Local together: decentralising energy regulation*; this working paper further develops our thinking, and we expect a finalised version to be published before the end of the IGov project.

The blog was intended to kick off a debate about the institutional needs of regulation for a sustainable, secure and affordable energy system. It was stimulated by the DECC consultation on a [Strategic Policy Statement](#) (SPS), which arose out of the recommendations made in the [DECC Review of Ofgem in 2011](#). The SPS is intended to replace the [Social and Environmental Guidance](#) from DECC to Ofgem. The [EPG submission](#) to the SPS consultation and [blog about it](#) discusses this in detail.

The Social and Environmental Guidance had occurred every 5 years and it set out the Government's policies and goals for energy policy over the next 5 year, and its concerns for regulation, given Government energy policy. However, it was still only Guidance and the Regulator continued to work to, and interpret, Duties set out in legislation. 'Tension' between 'independent' regulation and regulation's place in achieving policy goals developed because it was felt that economic regulation, overseen by Ofgem, was imposing (or not removing) barriers to successful policy implementation – hence the DECC Review of Ofgem. The SPS is intended to overcome that tension.

¹ See ECC SC Report Implementation of EMR, HC 664, March 2015
<http://www.parliament.uk/business/committees/committees-a-z/commons-select/energy-and-climate-change-committee/news/emr-publication1/>

² See ECC SC Report Green Deal: Watching Brief Part 2
<http://www.publications.parliament.uk/pa/cm201415/cmselect/cmenergy/348/34802.htm>

There are two major problems of the Draft SPS:

- it accepts, without question, that the current model of energy regulation and governance in place in GB – set up in late 1980s / early 1990s under very different conditions - is the right one to enable a transformation to a sustainable, secure and affordable energy system;
- and the draft SPS does not confront [despite this being the fundamental reason for moving from a Social and Environmental Guidance to an SPS], or discuss ways to overcome, the fundamental tension of the ‘gap’ between ‘independent’ regulation (ie arms-length from Government with delegated powers) and the longer term and strategic framework needs of transforming to a decarbonised energy system in a time of rapid technological and economic change.

This latter point implies a more ‘directed’ approach to governance and regulation and a different relationship between Government and the Regulator. Ultimately, the issue to be resolved is how to better ‘direct’ the governance and regulatory system to meet the required transformational budgets and timelines of climate change without undermining innovation or competitive drivers to keep prices as low as possible and practices as efficient as possible.

Thus, a new governance and regulatory process is needed to deal with 3 fundamental issues:

- to ensure appropriate political responsibility and legitimacy via a more directional regulatory approach managed through a new process of relationships between the new institutions so that the energy policy objectives of security, affordability and environment are more legitimate and credible; and
- that the new governance and regulatory process is less unwieldy, quicker to make decisions, more transparent, and better enable trust in, the mechanics of regulation of energy; and finally
- have a set of regulatory institutions which better suit the social and technological issues, including the new energy technologies (supply, demand, storage) and their characteristics and economics as well as the increasing ICT basis and integration needs of energy system operation and management, which includes more decentralised electricity / heat production and use.

The discussion in this paper builds on the EPG blog, and kicks off a debate about the institutional needs of a sustainable, secure and affordable energy system. We argue for a ‘rebalancing’ of institutional power to better suit the needs and realities of the current energy system, and we call this public value energy governance (PVEG).

The regulatory system in Denmark has some hallmarks of PVEG. It has many smaller, regulatory institutions focused on specific areas; it has a political system which takes the political decisions of energy; an overseeing body to give direction; it has an economic regulator which is smaller than Ofgem and primarily undertakes economic analysis and compliance; and it has a State-owned system operator responsible for the technical transition to a secure and sustainable energy system. IGov will be publishing a working paper on the Danish regulatory system shortly, and what lessons there might be for a GB regulatory process. The United States of America³ has a Public Utility Commission (PUC)⁴ approach. Again, it seems to us that there can be benefits from this approach with respect for legitimacy, credibility, transparency, nimbleness and accessibility.

2. Building on the EPG Blog: ‘public value’ regulation versus ‘decentralised’ regulation

The [EPG blog](#), in brief, argued that the current GB ‘independent’ economic regulation does not meet the needs of the transforming the energy system, and argued that a new, or rebalanced, set of institutions more suited to the complex technological, social (including trust, satisfaction, affordability, choice etc), environmental, economic and business needs of enabling the necessary shift in our energy systems is required. The blog provided a short description of the benefits and disbenefits of a move from the current ‘centralised’ regulatory and energy system [dominated by a powerful CEO led Regulator and a regulated but privately owned transmission operator] to another regulatory and governance system for energy made up of few more institutions with more ‘balanced’ power between them.

The overall requirements of both types of governance and regulatory system are the same but the ‘centralised’ and the ‘decentralised’ systems have different bodies responsible for different aspects and linked together in different ways and with new relationships. The blog argued that the latter governance and regulatory framework is better suited to the current needs of the energy system. Overall, it argues for a new understanding of the role of regulation, utilities, business models and customers, and a new process of relationships between them.

This blog discussed ‘decentralised regulation’ within the energy sector. It used the term decentralised to (1) reflect a move from the current GB energy regulatory system (with a few

³ <http://projects.exeter.ac.uk/igov/?s=lessons+from+america>

⁴ <http://projects.exeter.ac.uk/igov/lessons-from-america-if-only-the-gema-was-more-like-a-us-public-utility-commission/>

powerful bodies which oversee certain functions) to a system with a number of smaller, more focused institutions; (2) to reflect a move from a fundamentally economic focus of economic regulation to a regulatory framework which includes a greater number of dimensions, such as the needs of transparency, integration, flexibility, trust and so on; (3) to reflect aspects related to political devolution and devolved regulatory powers ie some sort of NI/Welsh/Scottish regulatory process in parallel to the national UK process; (4) new types of ownership and non-traditional business models reflecting a new public-private continuum, such as state-owned system operators; and (5) new types of consumer or citizen involvement, broadly through ICT and new technologies. Most importantly however, is (6) to reflect the difference between delegated types of decision-making via a law and 'directed' decision-making via new sets of mission statements, aims, objectives, processes, discussions, expectations and so on which come together as different relationships between those politically responsible and those responsible for implementation.

It is these directed relationships which are more difficult to codify in law – because of the inherent constraints of law-writing. However, it is also this set of relationships which enable legitimacy, trust and buy-in of the process. As we argue above, the narrowness of Duties in law should be replaced by a new set of communications which together provide a clear intention, or spirit, of policy, better able to be translated into desired outcomes thereby improving legitimacy of the governance process.

As a result of comments about the blog, it became clear that the terms 'centralised' and 'decentralised' energy regulation carry 'baggage' with them, and that somehow 'decentralised regulation' was seen as too closely linked to decentralised generation, as well as too narrowly about Ofgem. While it is complementary to decentralised generation, this was not solely what the term 'decentralised regulation' was meant to encompass, as discussed above. This working paper has settled on the term 'public value energy governance'⁵ (PVEG) because its intention is to discuss the institutional basis of a governance and regulatory system which provides the greatest value and benefit to society and meets public policy objectives.

⁵ Mitchell, C., Woodman, B. (2010). Towards Trust in Regulation - Moving to a Public Value Regulation. *Energy Policy*, 38, 2644-2651.

3. The need for a strategic regulatory framework for energy

The UK is setting up a [new](#) regulatory body – the Oil and Gas Authority (OGA). It seems to us that whatever the rights or wrongs of setting up such an institution – which is charged with maximising the economic recovery of our oil and gas resources – it should have been set up as part of a well thought out, strategic regulatory process for meeting all our energy policy goals. The aim of OGA seems to be to make the North Sea ‘work’ for the UK as a whole – by ensuring greater indigenous oil/gas supply (i.e. security) and longer-term (albeit reduced) tax receipts for the Treasury. Thus, while Government does seem to be thinking to an extent about how to re-regulate energy such that energy companies deliver certain public outcomes for the UK it is unfortunate that the OGA has not been set up within an over-arching energy regulatory framework, as discussed below as the ESSAB, that has greater strategic foresight for the direction, and trade-offs necessary, for an environmentally sustainable, affordable AND secure energy system.

4. Changing governance and regulatory roles implies changing institutional structures

A recent [EPG blog](#) by Bridget Woodman provided a map of the current GB institutional framework for electricity: what organisation is responsible for what; and what the links between them are. This map powerfully illuminates how important, and how centralised, Ofgem and National Grid are within the current energy system regulation (see Figure 1 below).

Yet energy systems, such as those in [Germany and Denmark](#) and to a lesser extent even in Britain, are changing. They are made up of increasing numbers of inputs and outputs (electricity, heat and storage (including electric vehicles), of differing scales (large through to small); there is more interconnection between countries or States; there are increasingly different types of customers and retailers, with greater proportions of self-generation and a greater range of selling and buying arrangements via non traditional business models (NTBM⁶); and there are starting to be greater links between electricity, heating, storage and transport sectors themselves. All of these changes point to the need for a more integrated network and market operation; where services should be valued appropriately within it and where production, transport and use of energy are managed to deliver overall system efficiency.

⁶ <https://www.ofgem.gov.uk/ofgem-publications/93586/non-traditionalbusinessmodelsdiscussionpaper-pdf>

This requirement in turn implies:

- a much greater importance of the system and market operator function;
- a more directional, framework approach for the future development of energy systems and markets;
- a need for much greater flexibility and nimbleness, both of operation but also of decision-making of networks and markets;
- the need for more transparency of costs and profits; and how market actors are enabling or constraining competition and efficient operation
- the need for greater ease of access by customers and NTBM.

These are technical and functional requirements of operating and managing an energy system with different technologies, characteristics, economics and stakeholders. This is a separate, and additional, issue to the legitimacy, credibility and nimbleness issues of Ofgem. GB needs a governance system where the institutions are set up to best enable both the technical and functional needs of delivering an efficient system and to do so in a nimble, legitimate and credible manner. This is not currently the case for both requirements. Therefore, meeting these requirements demands institutional change both in terms of technical and speed competences as well as legitimacy and credibility issues. As discussed later, we argue that this will require a new role for Ofgem, new institutions and new governance to bring the various institutions together in a legitimate fashion. This is a fundamental restructuring of the GB energy governance system.

5. Arguments for a conventional, delegated ‘independent’ economic regulatory system

The GB energy system is one where Government delegates responsibility to an ‘independent’ regulator who works to Duties set out by law, and where operation and development of the system occurs as a result of incentives on privatised companies. There are three basic arguments in support of this ‘independent’ regulatory system:

- That its independence is well established; that taking decisions based on economics and competition are in the best interests of society; and that it can withstand political intervention, which de facto is assumed to be detrimental for society
- That a large organisation can bring all regulatory dimensions under one roof, reduce silos and reduce squabbling between them
- Together this reduces regulatory uncertainty and risk which better enables investment .

Taking these three issues in order.

5.1 A regulatory system which depoliticises energy policy decisions is preferable

One of the arguments in support of an independent regulatory body overseeing the energy system development is that it takes the political decisions of energy out of the hands of politicians, and that this reduces political intervention which is de facto accepted as leading to worse decisions for society than those taken by the ‘independent’, economically focused regulator.

This working paper does not accept, given the challenges facing the current energy system, that it is possible to remove political decisions from energy policy decision-making. It would argue that in practice depoliticisation of energy does not occur anyway, even within this system of ‘independent’ regulation. It is not certain that depoliticisation of energy policy decisions have ever been possible, or preferable, but, given the current decarbonisation needs of the energy system, we argue that energy policy decisions – which have such a major impact on society – are political and have to be made in a legitimate fashion and as such should be made by democratically elected politicians⁷. This has major implications for the regulatory process and it seems to us that the current, independent, CEO led process does not meet the requirement of legitimacy.

Energy policy requires a number of decisions concerning different technological pathways for decarbonisation AND a choice of timescales for decarbonisation – ie over 20 years or 50 years. These decisions, which include trade-offs between goals, have major distributional consequences for, and requirements of, British society. For example, an energy policy based on nuclear power and decarbonisation over 50 years has very different implications for jobs, supply chains and financial costs to society than a technological future based on renewable energy, energy demand management, gas and storage and decarbonisation over 30 years. These decisions are deeply political and should explicitly be in the hands of politicians who are (albeit imperfectly) answerable to the electorate. These politicians are more able to open up different opportunities for debate and scrutiny than an economic regulator.

For ‘independent’ regulatory arrangements to work in practice, there cannot be much discretion or interpretation of the regulatory Duties for decision making. An ‘independent’ regulatory process has to have a narrow enough set of Duties that they can be written into law, and which, on the whole, can be said to be evaluated through quantitative answers (ie ‘retail competition is

⁷ See work of Caroline Kuzemko http://geography.exeter.ac.uk/staff/index.php?web_id=Caroline_Kuzemko

improving because more domestic consumers switch' etc). Once too much interpretation of the Duties occurs, the 'independent' Regulator moves into de facto policy making decisions which have major distributional (and political) impacts, the outcomes of which are much more open to criticism of illegitimacy.

The move to a sustainable, secure and affordable energy system is inherently broad and complex, and, importantly, not only an economic issue. An 'independent' economic regulator, such as Ofgem, de facto applies a narrow technical /economic analysis to make societal and system decisions (which cross technology, economics, innovation issues, psychology, business and so on). Currently, Ofgem is then evaluated in a narrow legal sense of meeting its Duties, including ensuring the financial stability of the energy system. There is no wider evaluation of ensuring an energy system suitable for the longer term needs of society – beyond that of future needs of customers - nor does Ofgem have any incentive to act in that way, or face a penalty if it does not.

5.2 A large organisation can bring all dimensions under one roof, thereby reducing silos and enable better co-ordination

Ofgem is a large organisation incorporating many dimensions: for example, network regulation, reserve (for overseeing programmes), final decision-maker on code modifications and so on. In addition, there are increasing drivers and goals of energy policy – whether security, affordability, the environment and Ofgem has to incorporate these concerns (and their trade-offs) into its decision-making.

One argument is that by bringing all these concerns together under one roof, it is more economic in terms of running costs but it also gets rid of silos and allows better decision-making; it is easier to give Guidance through one Strategic Policy Statement (SPS, or Social and Environmental Guidance as it was) between the Government and the Regulator; and it is easier to make sure that the different sections of the Regulator don't encroach on the activities of other sections (as they might if there were separate institutions) but at the same time, it ensures that all issues are co-ordinated and considered.

The alternative point of view is that all these dimensions make it too unwieldy in practice to manage; that it has its own institutional momentum to keep following the same course, which may reduce its flexibility and openness to new ideas or practices; that it is difficult to come to agreements internally, slowing down decision-making; that because it is meant to be an economic regulator, the short term is favoured over the longer term, and non-economic issues receive less attention or understanding than economic ones ; that it is not as nimble as it should be when faced with issues such as transfer pricing or customer dissatisfaction, or when it is

trying to keep up with issues in other countries which may have a major impact on the GB energy system.

Moreover, the process of regulation is cumbersome, interventionist, prescriptive and socially and technologically constraining. Every few years, the regulated network companies send in their proposed expenditure for the next regulatory period to the Regulator, and the Regulator then decides what they, the Regulated, are allowed to spend money on for the next few years and how they, the regulated company, is able to recoup those costs. Similarly, with respect to the markets, there is a process for changing the rules of the market at arms-length from the Regulator, although the Regulator still has the power of veto. Ofgem is simply unable to either stimulate appropriate system or market change in this time of rapid technological change, or even keep up with it.

5.3 Reducing regulatory uncertainty

It could be argued that regulatory ‘independence’ via legal Duties, and being a large organisation which brings all dimensions of economic regulation under one roof reduces regulatory uncertainty, and hence risk. Its independence and its clear, simple legal remit means that companies know where they are with the Regulator, and can be less worried about ‘political’ interference.

However, again an alternative view is that the downside of ‘independence’ is that the regulator is slow and unwieldy, seemingly unable to change the regulatory momentum away from the (at least short term) interests of the incumbents – to the detriment of NTBM and wider society. If the Regulator is increasingly viewed as a slow or unwieldy agent, not keeping up with technological and practice change⁸, then that leads to its own form of regulatory risk.

Moreover, if regulatory policy outcomes and policy aspirations become too divergent then that introduces its own regulatory uncertainty – as with DECCs Review of Ofgem, and the subsequent moves towards a SPS, and now with the CMA Inquiry.

There is always going to be a certain amount of risk involved in regulating an energy system. When companies talk of regulatory uncertainty, it tends to be in relation to their bottom line or to do with their willingness to invest. They want any risk associated with their activities placed elsewhere. However, if the energy system is changing rapidly, and regulation is inflexible and slow to deal with new opportunities, pressure builds for change – bringing its own uncertainty.

⁸ <http://projects.exeter.ac.uk/igov/paper-governance-and-disruptive-energy-system-change/>

This may build so powerfully that a major disruption occurs rather than a more managed transformation. This is a serious risk both for society and for companies involved.

Regulatory uncertainty can be reduced by having a clearer, enduring set of guidance documents (which builds in the need for flexibility) for each term of Government, alongside other forms of communication. So an SPS should work with Mission Statements, aims and objectives and so on in addition to legal Duties. Together, this set of inputs which build up to a regulatory process would better clarify relationships between all the regulatory bodies (see Section below). DECC's proposed SPS did not do this adequately, but could be modified to reflect the need for a new, longer term strategic approach.

An independent regulator might be appropriate were the primary goal of the regulator an economic one. However, in a time of changing energy economics, business models and societal goals, a governance and regulatory process which takes account of more than economics and which has more complex relationships with, and between, stakeholders is necessary. The independent regulatory model, rather than reducing risk, seems to be a risk itself.

6. Public Value Energy Governance

PVEG is 'messier' than 'independent' regulation because it is a regulatory process **with legitimacy and credibility** to make trade-offs between policy goals in order to achieve outcomes (ie societal goals). In order for this to occur, it has to be sufficiently non-ideological and pragmatic to make sure societal goals are achieved; and it has to maintain more forms of communication and relationships between the Government and the various regulatory institutions than the current, single SPS enables. Legitimacy implies more consensus and democratic decision making; greater involvement of stakeholders and accountability; and inclusion of a wider set of views. Credibility, whilst related to legitimacy, also implies the ability to make good, well informed policy decisions, which are not continually reversed or changed, and which achieve their stated goals.

While legal relationships are important, communication and social legitimacy is a fundamental requirement of managing the complexities of rapid technological change. A regulatory process which focuses on law, economics and price alone, as now, not only disconnects consumers from their future but also maintains the disconnection.

PVEG therefore:

- Accepts the huge distributional impacts of regulatory decisions requires greater, and closer, political responsibility for those decisions through a new institutional landscape and new, transparent relationships and expectations of, and between, those institutions;
- Tries to increase customer (all sizes) involvement with a key aim of increasing trust via legitimacy and transparency in all processes of regulatory decision-making, and also complements wider societal endeavours to do this;
- Accepts that, because of technological change there will be new more efficient ways of operating and managing the system but also new NTBM and services may appear from new entrants or because of customer wishes, and these need to be valued and incorporated rapidly into the regulatory systems – in other words, the process of governance and regulation has to be quicker and more responsive to NTBM than it currently is, and has to have a better fit to the technological needs of the system;
- Accepts that because of the needs of climate change, there is a desired rate of change towards decarbonisation and in order to do this as cost effectively as is possible, given legitimacy concerns, that some sort of system and market operator and / or architect is needed to get there; and
- For all this to occur there needs to be some sort of regulatory overseer with clearly defined boundaries, given to it by, and answerable to, Parliament.

7. Institutional relationships: delegated versus directed regulation

In GB, we have an independent arms-length regulator, with capabilities delegated to them. In Denmark, while the regulator is also independent, most of the key energy policy decisions and analyses are undertaken by the Ministry or by Energinet (the state owned system operator). In this sense, it is a more directed model. In the 50 US States, there are Public Utility Commissions, which are responsible for energy prices, which work very differently in the different State energy systems, and therefore differ in the degree to which they 'direct' or 'delegate'.

The quality of the relationship between the government and the body that is supposed to make change; and between the body that is making change and customers and other stakeholders differs between these countries and models.

In a PVEG, it is that relationship (where the 'spirit' of desired societal outcomes is understood via various forms of communication) and the pathway to achieving those outcomes that is different from the 'delegated', legalistic letter-of-the-law approach of Ofgem and GB.

Part of this is a different type of political debate. Denmark's decisions look smoother because energy is 'less' political by the time that Energinet (the system operator) gets involved. The politics of energy decisions (including the distributional impacts) is thrashed out in the Folketing (Parliament). In the UK, too much of what are political decisions are delegated to Ofgem so that we in the UK have limited means to discuss those decisions – and so implementation becomes the focus of politics. GB needs to have a genuine forum for political debate about energy system change and what it entails and with (almost) everyone on board.

Part of this difference between PVEG and the current GB 'independent' system is related to the overarching principles that the implementing body is working to. In the case of the UK, Ofgem has a lot of powers, but its overall framework is economics-focused, with a heavy emphasis on relatively short term efficiency. As such, Ofgem finds it hard to factor in environmental sustainability and to think in terms of longer term system change. The criteria used to assess the value of change to the energy market and network regulation is whether it improves better competition not how to enable more companies and customers, which are better able to transform the energy system, to come forward and compete. This criteria continues within the Competition and Markets Authority (CMA), the ultimate arbiter. Even if Ofgem wanted to act more 'sustainably' there is always the possible that a company questions Ofgem's action against its Duties, and appeals its decision to the CMA.

Thus, overarching principles of institutions – and how they are set out, and how they interact with other institutions - is critical. This means that it is not just that the institutional architecture which has to change, but overarching principles as well.

Furthermore, part of this difference between PVEG and 'independent' regulation is the focus on what is wanted in terms of societal practice change, and the degree of pragmatic openness to the best practice means of achieving those goals.

For example, a more directed approach to energy system transformation might be to have a state owned and, most importantly, a not for profit system operator (SO). Setting incentives which leads to the SO doing what is needed to transform to an integrated, low carbon energy system – given the pace of change in technologies or NTBMs and the momentum and assets of the conventional energy system - when the system operator is part of a privatised transmission

company is complex, open to gaming, and difficult to genuinely separate out conflicts of interest⁹.

It is getting the right institutions in place, and the right relationships between the institutions and stakeholders which are going to make the changes, which is the central difference between PVEG and conventional, energy regulation. PVR would argue that it is this factor which is the key for success in energy system transformation.

Overall, we argue for (1) a shift in the balance of decision-making-power from ‘the independent Regulator’ to a ‘governance process’ which would establish a changing set of relationships between institutions, so that it moves from a delegated to a directed process ; and this entails (2) a re-balancing of power currently concentrated on the Regulator and National Grid (as shown in Figure 1) across more, focused institutions¹⁰ (as shown in Figure 2) which would make the process more flexible, more transparent and more accessible to the regulated companies and customers alike; and for (3) a move from a dominant economic ethos to one which broader dimensions, including greater focus on societal wishes and change; so that this (4) better meets the technical and social needs of the evolving energy system.

A new regulatory and institutional model could be one where the current regulatory functions within Ofgem are broken up and modified, and then rebalanced and added to, for example by a Market Monitor or a Network Code and Code and License Authority (see Figure 1 and 2 below). The whole ‘governance process’ then becomes a greater number of institutions albeit with one institution whose role it is to coordinate them.

This model would be clearer and more transparent to outsiders but also more responsive to the rapidly changing circumstances and regulatory needs of an energy system. Internal disagreements, or issues about resolving different ways of thinking about a problem, can significantly slow down decisions. For example, were market monitoring a separate institution from Ofgem, with a mandate to publish all data, then it would be possible for other organisations, not just Ofgem, to keep better track of important issues such as transfer pricing, company profits, liquidity and so on. Whilst market monitoring – to the degree it is - is within Ofgem, inevitably the findings are drawn in to other issues that Ofgem is grappling with.

⁹ See ECC SC Report Implementation of EMR, HC 664, March 2015.

¹⁰ Known in the original blog of this working paper as ‘regulettes’

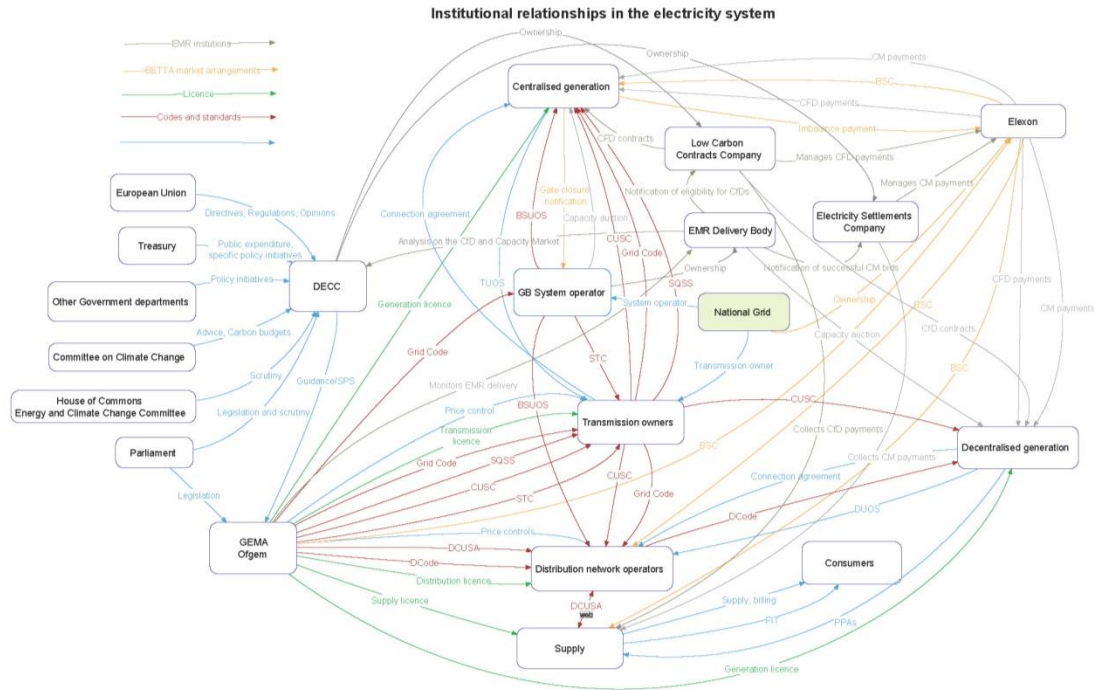


Figure 1: Institutional Relationships in the Electricity System [\[PDF Download\]](#)

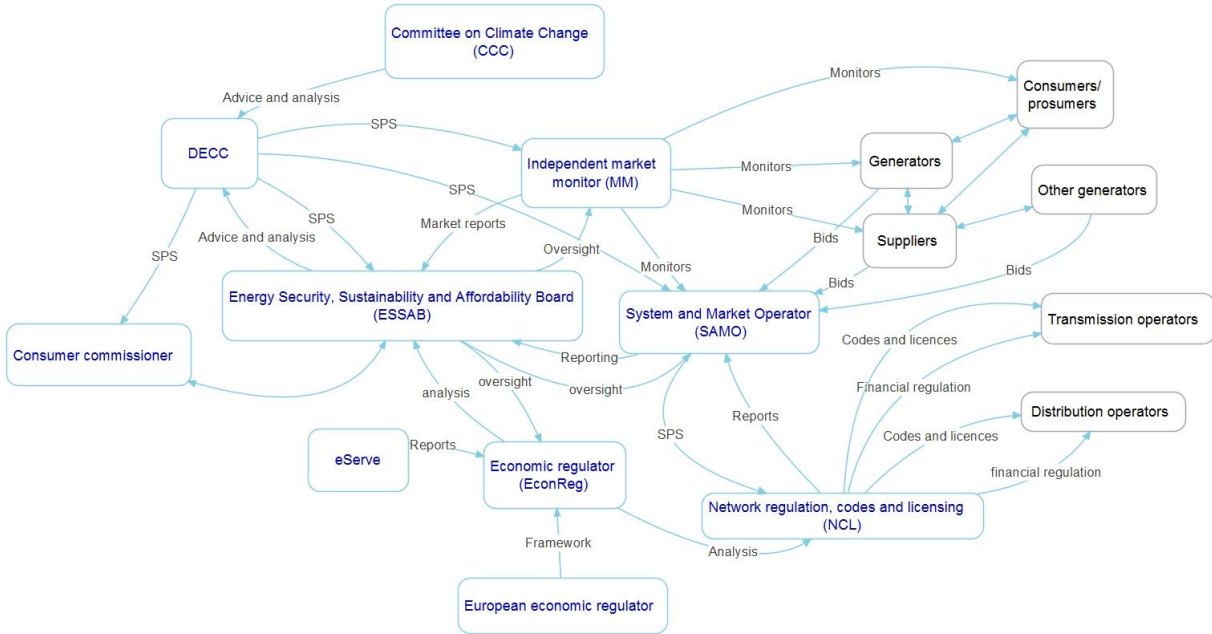


Figure 2: Straw figure of Public Value Energy Governance [\[PDF Download\]](#)

Together, the PVEG process would have institutions:

- with more focused roles;
- which are independent of each other;
- which are more responsive and flexible to the priority goals and technical needs of energy policy;
- which have clear responsibilities, and
- which have clear penalties for not meeting those responsibilities.

Together, this would be an improvement on a CEO-led, independent regulator. PVEG allows appropriate political oversight – politicians take the decisions, and the regulatory bodies implement them. Public Value regulatory process is less unwieldy than a large organisation, with one overseeing body of several smaller institutions which are able to focus on what they should do [without worrying about the implications for other sections if they were part of a large regulator] – thus, they are nimbler, take decisions more quickly, are more flexible etc. This then makes PVEG more accessible to customers and stakeholders which should increase trust and satisfaction; and it better suits the technical needs of an integrated energy and economically efficient system.

8. A Straw Figure – Public Value Energy Governance

A possible PVEG model is set out in Figure 2. We stress this is simply one suggestion. Each institution is described reasonably briefly below. The following sub-sections discuss broader questions, such as their relationship to each or to DECC in more detail. Overall, the combination of institutions is intended to meet the deficit of the current system (1) to be more legitimate and credible; (2) to be less unwieldy; and (3) to better suit the technical needs of more efficient integration on the way to decarbonisation via a better balance between institutions, and some new ones.

We favour a body which is responsible for implementing energy policy, which is separate from DECC and which has hierarchical decision-making power over Ofgem, the system operator and other regulatory and governance institutions. We consider that this is part and parcel of an efficient governance framework with clearly defined outcomes, ie reducing carbon by 80% by 2050. This body works to a DECC SPS, and the political decisions are made by DECC – thereby giving the governance legitimacy.

The most important issue is the relationship of the overseeing body in the governance and regulatory process to DECC. As stated above, this discussion paper argues that the major

political decisions of energy policy should be legitimate, and it is not possible to achieve legitimacy when these decisions are made by an 'independent' economic regulator. How these political decisions are made, and in what institutions those decisions are taken, is the key point of a legitimate energy policy decision-making process.

8.1 The Overseeing Body – In or Outside DECC?

The leadership of this PVEG process should be an overseeing organisation. It would have responsibility via a SPS (see sub-section below) for co-ordinating energy policy in GB with respect to (i) overall security and energy system transformation (ii) for line-managing the other institutions¹¹ within the regulatory process (ie SAMO, MM, NCL, CA, eserve, Data, EconReg – outlined below) which exist under their own set of regulation and responsibilities; and (iii) ensuring the delivery of the priorities and trade-offs between Government goals as set out in the SPSs of the various regulatory institutions, and making sure that policies are delivered – and if they are not, that they understand why and can feed back in to DECC, in good time, for new or altered policies.

The Labour Party has talked about an Energy and Security Board. We have enlarged this to an Energy, Security, Sustainability and Affordability Board (ESSAB). The ESSAB type body has variously been discussed before: eg as an [Office of Carbon Responsibility](#); or an [Energy Security Board](#) or an [Energy Agency](#).

The key points to clarify are its responsibilities, its capacities, its governance, its relationship with DECC and other energy institutions, and to ensure that it is nimble.

The politics of energy policy making imply that high-level energy policy decisions should be made by Government – ie led by DECC – and Parliament. DECC has to continue to be the fundamental energy policy decision-making body.

ESSAB can be involved with this in either of two ways:

- (1) Similar to the Danish Energy Agency in Denmark, so that ESSAB sits within DECC and is the co-ordinator of policy, bringing in stakeholders, sorting out the politics and so on through a legitimate process which brings in stakeholders in multiple ways, whether it be through expert advisory boards, one-off committees, meetings, surveys etc. It provides advice to the Ministry and politicians. Its level of separation from politicians is not great, but it is still a separate body.

¹¹ These other institutions were dubbed the regulettes in the original blog <http://projects.exeter.ac.uk/igov/new-thinking-bringing-international-and-local-together-decentralising-energy-regulation/>

(2) as an additional body, outside of DECC, which is responsible for implementing and co-ordinating energy policy once it has been agreed and thrashed out at the political level within DECC, and which it could input along with other stakeholders.

If ESSAB sat outside of DECC, then DECC would make the fundamental strategic policy and regulatory statements, and there would have to be sufficient staffing in DECC as well as ESSAB to ensure credibility. If ESSAB were within DECC, then again there would have to be overlapping of competences – no bad thing. In both cases, it is DECC which sets out strategic policy and regulatory statements for ESSAB, SAMO, the market monitor, Data, eserve, NCL, EconReg and CA, if there is one.

The concern is that ESSAB would become a ‘political’ body. At one level, it is impossible for this not to be the case. On the other hand, the point about a PVEG is that it distributes power and increases transparency, as well as overtly confronting the issues around the politicisation and legitimacy of energy and regulation. Whether it sat inside DECC or outside of it, a process is needed where all stakeholders are better enabled to be involved. This is not just a matter of inviting all stakeholders to meetings, which probably occurs at the moment. This is about proactively trying to ensure that the system enables this at all levels – including by ensuring market and network rules, Codes and Licenses etc do not support one set of stakeholders rather than another; that the demand side is treated equally with the supply side and so on. In addition, the ESSAB constitution would have to clearly state that it is a primarily co-ordinating and analytical body, albeit with final hierarchical powers over other institutions – and that it works to the high level political decisions worked out in DECC.

Where to place ESSAB comes down to the judgement over legitimacy – ie would legitimacy of the regulatory process be better if ESSAB was in DECC. Or would it better to have DECC make the decisions, as now, but combined with a new outside body (ESSAB) which brings together regulatory institutions in such a way to better meet the social and technical needs of decarbonising the energy system, and which confronts and overcomes the inherent problems which arise from the current relationship between DECC and the ‘independent’ regulator [ie more legitimate as political decisions taken in DECC; more directed with ESSAB having co-ordinating role; a rebalancing of power of different institutions; not just an economic focus; better fit to technical needs; clarity of roles through SPSs; more transparent etc].

In the end, a legitimate, fit for purpose governance and regulatory system can only be implemented if Government is determined to make this happen and implement a process which is transparent and open enough to stakeholders and scrutiny.

8.2 Governance of the Overseeing Body

ESSAB would work to a SPS, which clearly sets out its role. If it sits within DECC, an SPS would 'separate' it in some ways from simply being a division of DECC but would legitimise its role and enable it to input into the 'thrashing' out the politics of policy. If it sat outside of DECC, it would add one level of separation from that legitimacy of politics making.

Whatever, in both cases, a vital part of its role is to establish the legitimacy and credibility of policy making whilst overcoming the problems of linking 'independent regulation' and the complex development of fast changing technological energy system. One aspect of this would be ESSAB's responsibility for knowledge gathering and strategic understanding of energy systems around the world so that it can take both an informed ie detailed view of the performance of the institutions it oversees - but also keep in mind the 'big picture' of global energy developments. Credibility needs sufficient and appropriate staffing.

The other institutions would then work to ESSAB, via SPSs, in order to ensure cohesion and direction.

ESSAB has a role to fulfil, and provided DECC's Vision for it, its Mission, its Goal and its Aims are clear enough in its SPS from DECC; and if its relationships with the other regulatory institutions are equally clear (also through their SPSs from DECC), then it should be that its 'political' nature is opened up and managed as much as it can be (discussed further below).

Nevertheless, a core goal of PVEG process is to confront the tension between 'independent regulation' and the current needs of decarbonising the energy system by a certain time, and in a time of technological uncertainty. By clarifying the roles (and power) of the institutions – particularly that of the Economic Regulator and the System Operator as institutions working **to** the ESSAB via SPSs, with the ESSAB has the ultimate decision-making powers to co-ordinate energy policy. However, this comes with a clear mandate from DECC where the political decisions are made. ESSAB is a body which is more directive, and better able to make the trade-off decisions but ultimately the political decisions have to come from the politicians

8.3 Vision, mission statements, aims, goals, and legal duties

A key mechanism to aid ESSAB and the institutions are the detailed Vision, mission statement, aims and goals set out in a SPS- like document, published by DECC, the policy making body. These new SPSs should more clearly set out DECC's Vision for an energy system going into the future. This might be a Vision for greater innovation of practice within the energy system in terms of new entrants, types of business models, new services, new technologies, new

customer relationships which together would lead to greater efficiency of operation; greater liquidity of markets; reduced fuel poor numbers and so on.

The SPS has to more clearly show the direction of travel and move away from a legalistic approach of 'must have regard to' towards a document which is much more about the 'spirit' of intention. The writing of the SPS-like document would continue as the responsibility of Government and Parliament; it would be the new overseeing institution (ESSAB) which would ensure they were fulfilled.

The writing of the SPSs could itself become a vehicle for far greater consensus and transparency of energy policy.

All of these SPSs would interweave. In some ways of course, it would be easier to have one SPS for one institution from DECC, as now between Ofgem and DECC. The problem of one SPS is that it allows greater amounts of interpretation. A direct relationship between DECC and the smaller institution via a specific SPS for a specific role is clearer, more legitimate, and more transparent. Successful outcomes are more likely if ESSAB has a clear role in ensuring the institutions do what they are meant to, or explaining why they do not.

The overseeing body and the smaller institutions would all work to performance indicators, and potentially subject to penalties if they do not perform their functions appropriately.

8.4 The Regulatory Institutions

The regulatory institutions in addition to ESSAB would work to their own SPS directly from DECC, but also work to ESSAB with their own SPS with ESSAB. The institutions:

- A State Owned and/or not for profit system and market operator (SAMO), which would have responsibility for the technical transformation to a secure, affordable, low carbon energy (ie both gas and electricity) system. It would have direct functionality via an SPS from DECC and work to ESSAB with a parallel SPS between themselves and the ESSAB. The system and market operator would enable better integration of system operation, including the demand side, capacity markets / capabilities, storage, heat, interconnection, electric vehicles etc. However, the SAMO would not simply become a recast National Grid. Its roles is sometimes known as a [system architect](#);
- Network regulation and Code and License capability (NCL) would be a separate organisation, working to SAMO, and capable of change in Codes and Licenses order that it can keep up with the rapidly changing operation and management technologies and techniques. While much of the current Codes and Licenses are functional – and therefore will not have to change – the process of changing Codes and Licenses would have to be fundamentally rethought.

- A market monitor (MM) taking the market monitor part of Ofgem and turn it into a stand-alone institution whose responsibility would be to keep track of competitive practices within the markets, and to publish daily prices and trends. It would have direct functionality from DECC via an SPS, and work to ESSAB with another parallel SPS. This would increase transparency across the system through publication of all data; be more accessible – whether for potential new entrants as well as for customers - and therefore one step towards the energy system regaining the trust of customers. In doing so, it would be focused on buying and selling in different markets but it would also be able to publish analyses which have relevance for generation, supply and customers, and at the same time sidestep internal worries a centralised body might have of transparently publishing such information.
- An easily accessible Data body, this might be part of the market monitor, separate or within the SAMO, as it is in Denmark.
- An Eserve function which is currently part of Ofgem, but which could be functionally separate, and if not separate might be better placed in a Market Monitor
- The economic regulator (EconReg) would become an economic analysis and compliance office, as DERA in Denmark, and therefore much smaller than it currently is. It would have an SPS with DECC and an SPS with ESSAB. ESSAB clearly has final decision-making ability over EconReg. This would also fit a system of a European Energy Regulator, which ensures transmission and interconnection issues, as FERC in the US. One issue is to decide whether a full-time PUC¹² type Commission structure would be preferable to the current CEO plus part time board structure.
- There might also be a formal consumer advocate / commissioner (CA), as in many US States, who are responsible for putting together submissions to the various consultations on behalf of customers, and which have direct functionality from DECC via an SPS but working to ESSAB with a parallel SPS between themselves and ESSAB.
- The Committee on Climate Change's remit would continue to set out the science, adaptation and mitigation of climate change, including potential technology pathways. The implementation of ESSA / ESSAB would remove any issues of conflicts of interest that the CCC is sometimes accused of having in that it would be the ESSA / ESSAB which would be responsible for ensuring the technology pathways were met, including by putting in place regulatory roadmaps to enable that to happen and regular reports. Effectively, the CCC would therefore be able to concentrate on saying what the science is and needs to happen to meet the emission reduction needs without having to worry that it was also having to 'balance' in some way the realities of policy decision-making.

¹² <http://projects.exeter.ac.uk/igov/lessons-from-america-if-only-the-gema-was-more-like-a-us-public-utility-commission/>

8.5 Nimble Regulation

Energy is changing rapidly and it's important that our regulatory system keeps up with that change, rather than constrain it. This change is not only related to the economics of technologies but it is also about the new opportunities in operation of the energy system, which in turn opens up many new business ventures and possibilities, including new relationships with customers and retailers who want them. Customers and retailers in this sense might be traditional major users but also domestic customers, cities, co-operatives and so on. The regulatory system has to enable this economic, technical and social change. The public value model matches this need, provides flexibility in how it addresses emerging issues in a changing environment but also provides consumer support (for customers including fuel poor) via an expert advocate for their needs; and a market monitor which provides transparent, reliable, free information about markets as well as monitoring uncompetitive practices.

8.6 Trust and Providing Certainty to Customers and Investors

One certainty that can be provided within policy and regulation is that the regulatory process is keeping up with technical, economic and social change, thereby reducing disruption. The future of energy system technologies and their operation is uncertain at the moment, but policy clarity about moving towards a low carbon system would help.

Consumer trust in energy companies is low, and the necessary transformation in energy systems will be hindered if customers do not believe that companies are carrying out change in an affordable and acceptable way. For this to be believed by customers, there has to be trust. Investors also need to trust the system. It is not just that they need to be able to make money out of the system, but they need to trust that the policies in place will continue. We would argue that consistent, clear signals about where the energy system is going is what is needed, combined with transparency.

Moreover, the system has to be built on the 'spirit' of where the intended direction and outcome is, rather than on the letter of the law. In this situation, there needs to be trust – not just between customers and the regulatory process or between customers and energy companies, but also there has to be trust between the regulatory institutions and Government. Building greater consensus within the regulatory process would help that. Again, it seems to us beneficial in establishing a regulatory process (1) where the responsibility for achieving the desired societal outcomes is placed on all institutions; (2) which allows wider societal concerns beyond economics to be included is preferable; and (3) acts as a check on the 'power' of the various institutions, away from the current regulatory system with undue power in the hands of the few. A public value regulatory system should be more able to effectively increase trust and

transparency via: the Market Monitor; a Customer Advocate; a combined, state-owned system and market operator; separation of CCC and its policy implementation; and accessible Codes and Licenses which can be more easily changed.

9. Conclusion

This short working Paper is intended to stimulate discussion about how governance of the energy system in Britain can better keep up with technological, economic and social change. We have set out a possible model for future governance and regulation – which moves from the ‘independent, CEO led’ model currently in Britain to one which is more ‘directed’ and which we argue is more legitimate, transparent and nimble; but which also better suits the characteristics of current technologies (whether supply, demand, storage and ICT integration). We would welcome comments on it by the end of June 2015. Whatever the optimum model for future energy system governance and regulation, though, the fundamental point remains: the current model of regulation in the UK’s gas and electricity systems is no longer fit for purpose.

We would welcome comments on the ideas in this working paper, please send any comments via email to igov@exeter.ac.uk by 30th June 2015. Thank you.