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Ofgem: RIIO-2 sector specific methodology consultation

Submission from the Energy Policy Group, University of Exeter

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Section 1: Introduction and Summary

The Energy Policy Group (EPG) of the University of Exeter is pleased to give our comments on Ofgem's RIIO2 Sector Specific Methodology (SSM). The EPG has previously given its comments on Ofgem's [RIIO](#) Framework Consultation and has written various blogs pressing for more ambition with respect to [RIIO2's](#) environmental output requirements. We have also argued that we find the RIIO regulatory separation from [network charging](#) to be destructive for whole system outcomes and cost effective competition. We think that the network charging regulatory process should be ended and incorporated within the RIIO process.

Given the pace of innovation in energy systems, and the challenge of rapid decarbonisation to meet the Paris climate goals, IGov believes that there is a need for a shift in energy governance to steer a transformation to an integrated, socially just, zero-carbon energy system over the coming decades. With regard to Ofgem, there are two levels of change:

First, there is much that Ofgem can do, given its existing duties and remit, to support this transformation. As we outline below, we do not think that the RIIO process as currently proposed will be sufficient to drive the necessary changes and support innovation in the sector. We recommend changes to the process and to the working practices of Ofgem, to move its practices into line with wider energy goals, particularly carbon reduction.

Second, IGov argues that wider reform to the structures of energy governance is required. Our evidence shows the need for a new institution, which we have provisionally named the Energy Transformation Commission, to act as an enabler and co-ordinator, enabling all energy system actors to implement the high-level energy and climate goals set by government. In Section 6 below, we set out this proposed approach.

For the purpose of this consultation, we will limit much of our commentary to the first of these changes, i.e. we will address what Ofgem can do, given its existing duties and remit. However, we will also address the second point, as we believe changes at both these levels are required.

With regard to the SSM, the document sets out much we agree with in terms of high levels goals for RIIO2. However, the SSM, and its multiple supporting documents, are very light on detail. Since the 'devil is in the detail' it is hard for us to know whether these high level goals will carry through in to implementation. See Section 3 below for details of this.

Our key concern is the lack of ambition within the SSM, and its attendant publications, with respect to the climate change. The [Committee on Climate Change](#) (CCC) has set out the UK's carbon budgets, necessary for achieving the UK's emission reduction targets. More recently, at the request of [government](#), the CCC is considering whether to recommend that the UK adopts a goal of [net zero carbon](#) emissions by 2050, in line with the Paris Agreement. This followed the publication by the IPCC of a [Special Report](#) which highlighted the global importance of limiting warming to [1.5 °C](#), this sets out in crystal clarity the need for a major and immediate low-carbon transition across energy, land, industrial, urban and other systems, technologies and geographies; requiring a halving of global annual emissions by 2030 and net zero carbon emissions by 2050. The next full Assessment Report from the IPCC, AR6 will be published in 2021. As such, we in GB can expect that our climate change targets will, if anything, become more stringent. To meet such targets will require a significant rate of change increase and the energy sector and the way it is regulated will be central to this.

The RIIO2 process, as discussed in the SSM, takes us up to 2025. The SSM does not include RIIO2 for electricity distribution – which is set to last from 2023-2028. The RIIO2 agreement is therefore an essential dimension of transforming to a sustainable, equitable and secure energy system. The combined lack of ambition within RIIO2 for decarbonisation and the absence of a clear framework of how RIIO fits in to the wider government policy with respect to the environment is a severe weakness which we hope will be addressed in the next version of Ofgem's RIIO documents.

This submission is set out in the following way. Section 2 provides a bit more detail of why the absence of environmental ambition is so serious. Section 3 gives our detailed views on the chapter contents of the SSM – without necessarily answering all the questions. Section 4 looks in more detail at innovation questions. Section 5 looks in more detail at gas distribution questions. Section 6 provides our view of a fit for purpose governance system. Section 7 concludes.

Section 2: Absence of Decarbonisation Ambition

If the UK is to meet its current carbon budgets (currently set to cut emissions by 80% by 2050 from a 1990 baseline rather than the Paris commitment of 1.5C), it would broadly have to decarbonise its electricity network and system by 2030; its heat and gas network and system by 2040 and its mobility sector by 2050. However, this is not necessarily in line with the latest science from the IPCC or the wider climate science community which highlights the need to cut emissions faster. In the UK, whilst there has been some decarbonisation within electricity (mainly to do with the move from coal to gas, some renewables and improved efficiency of appliances), there has been almost no decarbonisation of heat or mobility.

The Government has a reasonably clear energy policy in support of a smart and flexible energy system set out in the following documents: the [Clean Growth Strategy](#); the [Industrial Strategy](#); Ofgem's [Smart Systems and Flexible Plan](#); Ofgem's [Strategy for Future Energy Systems](#); and the Secretary of State's latest energy policy [4 Pillar Speech](#). At the same time, as discussed above we

have the CCC Net Zero consultation and in addition we have the NIC Treasury [Review of Regulation](#); and a movement towards a White Paper on Energy Policy. Whilst all of this is going on, Ofgem has also begun a number of consultations on regulatory matters (network charging ([residual](#) and [future](#)), [electricity settlement](#), [the supplier hub model](#), and [RIIO-2](#) issues).

We accept that the transformation of the energy system is not solely the responsibility of Ofgem. We think ultimately it is the Government's responsibility.

However, there are two aspects of this.

- Firstly, in IGov's view the current arrangements between Government and Ofgem are not fit for purpose. We think that Ofgem's Duties should change to include an explicit Duty to deliver decarbonisation outcomes, including carbon reduction; we think the British public (or society) should be able to hold Ofgem accountable for their actions. We also think that the Energy Act 2013 should promulgate the [Strategy and Policy Statement](#), as occurs for water and telecoms, which would allow a little more nuance between public policy and regulatory outcomes. We also think a new institutions is required – an Energy Transformation Commission (ETC) – to parallel the Science Advice of the CCC in delivering an energy transformation. The Secretary of State would decide policy, and then hand over to the ETC to deliver it. Ofgem would become an economic regulator. More of this below.
- Secondly, under current arrangements, Ofgem does have a Duty with respect to 'future customers' and we think Ofgem should interpret this Duty in a more forceful way with respect to climate change. We think Ofgem should show more leadership and determination to ensure that regulation complements public policy and to make sure that networks and other governance rules and incentives, that it has control over, are encouraging of a sustainable, smart and flexible energy system. Whilst the SSM has the high level goals, explicit language and details – such as the requirement of CCC budgets and Government policy that electricity and heat systems should be decarbonised by 2030 and 2040, and the regulatory details of how this is to be achieved - is absent within this RIIO2 document. We think more support for environmental targets could be within Ofgem's remit if Ofgem chose to interpret their Duties in that way. We agree with the [Sustainability First](#) submission in this respect.

In particular, there are two fundamental gaps. The first is as described above the general lack of ambition in respect of climate change. There is, for example, no mention of climate change in the SSM at all. There is an absence of decarbonisation targets and not even any recognition of the central role that the energy system has in driving climate change. This is not acceptable and needs to be front and centre of Ofgem's focus, given the central role that regulation (and wider) governance play in enabling and constraining energy system change.

An example of this might be for the ESO and Figure 2 in the Annex Document. A new principle for the ESO should be to ensure decarbonisation to help meet UK carbon reduction targets. This would then give the ESO a strategic steer to consider decarbonisation in all future decision making.

Another major gap relates to the future of gas. Page 60, para 7.19 does bring up the future of the gas distribution network but passes the decision of what to do with it on – although it does not say what or who to. This is right. Ofgem should not be taking this policy decision. However, the SSM then continues to discuss the RIIO2 gas business plans in a BAU way. What to do with the gas network is a central issue for RIIO and a decision on this cannot be left to RIIO3, with the RIIO2 process continuing as normal. We agree that Ofgem should not be making this policy decision, but equally having a price control and business plan as if these major issues for both gas transmission

and distribution can be set aside is also ducking their responsibility. As such, for example, we believe that the FPNES should be stopped and funds diverted to energy efficiency and low carbon heat systems. See Section 5 for more detail.

Increasing renewable energy implementation and use, demand side response, smart and flexible energy system requires a changing system operation, market design, retail policy and network access and charging regime – all of which Ofgem is responsible for. Thus, Ofgem is a centrally important body for transforming the energy system. There is a complete lack of detail within RIIO2 on climate and this is untenable with what the science says is needed.

Section 3 Overview of Our Views of SSM

We are pleased to see customers are to be at the heart of the price control in RIIO2, and that the goal is to introduce a simpler, outcome-based framework (page 6 / para 1.4); that networks are prepared for the future (page 6/1.7); and that better performing companies can earn higher returns if they do a good job, but that they also should expect less if they do a bad job (page 6-7/1.11). As said above, and as will become clear in this section, there is much we support in the SSM document. It is the absence of decarbonisation targets, and lack of strategy and incentives towards a sustainable, secure, equitable and affordable energy system which is our main concern.

Chapter 3

Chapter 3 (page 7/1.19) sets out the consumer process by which customers are involved in RIIO via customer engagement groups which we support – but we do not think this is sufficient. There needs to be a closer link between public policy and regulatory outcomes and we think customers should be able to hold Ofgem to account – for example with respect to meeting climate change and energy system transformation needs. In reality, although Ofgem is meant to take account of future customers, there are limited ways for the average customer to be able to make their wishes known. Citizens Advice is required to input a general customer voice. Businesses can complain about Ofgem decisions via the CMA – an economic body. In theory, the Regulator, once installed is independent. This seems completely wrong to us in this rapidly changing energy world and does nothing to create meaningful consent, transparency or legitimacy within the UK energy sector.

Chapter 4

We broadly support the three new outcomes for customers in Chapter 4 (page 8 / para 1.21; page 12/2.9; page 24/4.6). We can see that license obligations, PCDs and ODIs could be useful in incentivising required outputs (page 25-6) but without details we cannot say if we think they would work. New license obligations have to be sufficiently simple for new entrants. We like the idea of a more dynamic approach to delivering targets; we prefer individual / bespoke business plans – so that true value related to specific company issues can come through (page 27-9); and we think climate change / environmental outcomes need to be added to the list of areas to be incentivised (page 29 / 4.32).

Chapter 5

We agree with the key issues as set out in Para 5.1 and 5.8. We semi-support the whole system definition (page 34/5.14-7). We would exclude waste and water but we do think heat should be part of the regulatory remit, and behind the meter – which is currently excluded. We see electric vehicles as part of electricity and therefore already part of regulation (page 8/1.22; page 34). We do not support a ‘super’ regulator, with energy simply as one dimension of it. We do support a single sector

energy regulator – albeit one reset to be an economic regulator only. We are pleased to see that the SSM talks about coordination and information sharing – which we agree with (page 36). However, we think coordination has to be more than via regulation, and we argue for a new institution to undertake the cross UK coordination, and we think that there needs to be various changes to the roles of current institutions to better enable coordination. This includes Ofgem, which we think should become an economic regulator only albeit still with a new Duty to deliver decarbonisation outcomes.

We support re-openers (page 38 / para 5.36) but we do not believe that re-openers should occur through a set window when triggering is allowed (para 5.37). This effectively has been the problem with RIIO EDI, as explained in detail with respect to [solar](#). Ofgem decided not to reopen and as a result GB got into a strange, stupid situation where it subsidised solar and then spilt it; and where it supported solar at Government level, but undermined it at the implementation stage. This type of situation is one of the key dimensions that Ofgem and RIIO2 has to improve on. Re-opening has to be one of those possibilities that Ofgem has to provide adaptive regulation. Opening up by set rules is part of the system of supporting energy companies first, and customers second. This has to flip if customers are to be at the heart of the energy system.

Chapter 6

We broadly support the future resilience issues of Chapter 6, although are less clear on the NARM principle (pages 43-45). We are in support of output incentives and would like these to be as high a proportion as possible of revenue, and we think these should be within the total business plan – in other words we do not support the way that output regulation tends to be additive to an agreed business plan. With respect to work force resilience, we agree that new skills are needed for a smart and flexible energy system and should be encouraged – and this should also include repurposing those within the gas industry (more of this below). We like the idea of a sustainable workforce strategy (page 50 / para 6.55). We agree that cyber security is an important new(ish) area to be supported (page 52).

Chapter 7

We also broadly support the issues in the managing uncertainty chapter (Chapter 7, page 56 / para 7.3); the driving innovation and efficiency Chapter (8); and simplifying the business plan (chapter 9). As said above, we support re-openers and we think that uncertainty with respect to climate change mitigation requirements should be added to the bullets in para 7.7 (page 57). We agree that asset stranding (page 59) is a major issue to deal with. We do not think in general that those private companies which find their assets redundant should be compensated. However, we think issues to do with the gas grid is somewhat different. We discuss this below in more detail. We do think an equivalent to the electricity networks strategy group might be useful (page 63 / 7.37). However, this should be part of a coordinated whole via an Energy Transformation Commission (ETC), discussed below. One of the ETCs key responsibilities should be how to deal with heat decarbonisation, one central issue of which is what to do with gas networks.

Chapter 8

We agree that companies should undertake innovation activities far more than they currently do as part of their BAU work rather than via allowed funds through their business plan. We also think that past support for innovation should have led to more ‘mainstreaming’ and the fact that it did not is of concern. The Poyry evaluation (page 67/8.9) reflects the problem. On the one hand, the LNCf cost a

few hundred million, and the return could have been worth billions, and so the LCNF was supported. However, the reality is that very little of the LCNF has been mainstreamed. We broadly support the proposals for RIIO2 (page 67/8.12). Similarly, as said in 8.37, the NIA has allowed new entrants in but we think that network companies should have undertaken this kind of work anyway. Stronger incentives on wires (and pipe) companies for non-wire or non-pipe alternatives (NWA / NPA) ought to lead them to evaluate these options anyway. With respect to competition: yes, open these funds up so that non network companies can be involved – and without network companies as partners if they wish; and, at this time, it should be Ofgem which manages the innovation funds (page 80-1/8.85). If our preference that Ofgem becomes an economic regulator only, then this responsibility should shift to the IISO (see Section 6).

Chapter 9

We support much of this chapter. Certainly, we support that companies are penalised if their business plans are based on poor information (page 86 / 9.10) and we would be happy for penalties to be more than the +/- 2% (page 87). We are not sure that we understand return adjustment mechanisms –but we do not think the penalties for business plans based on poor information should be separate, particularly if the whole sector outperforms, as this type of outperformance should benefit customers as well as companies (page 88 / 9.18). Keeping it separate is again a way of being ‘soft’ on private companies. They either are incentivised through RIIO or they are not.

We support the removal of the IQI and agree that the blended sharing factors approach is an improvement. We do not agree that changing company behaviour is not as important as justifying costs (page 94, 9.51). We are entering a time that will see huge changes for the way networks operate, with more decentralised energy and an increase in electric vehicles. This means that going forward companies will need to be incentivised to take more risks (page 93/9.47) and to incorporate new innovations and new business practices, something that was extremely limited in RIIO1. We consider this to be one of the more important elements of RIIO2 and that companies need to be encouraged to try new ways of doing things. In this case we suggest that the Ofwat approach, which encourages risk taking and innovation, is more suitable to a transforming energy system.

Chapter 10

We are on less firm ground in Chapter 10 with respect to our expertise but we do, on the whole, think that a well performing company should expect a reasonable return. We also agree that companies should not end up earning more than they should because of forecasting errors, windfall gains or overgenerous allowances (page 119 / 10.54). We are not sure that we understand return adjustment mechanisms (RAMs). We do not think it is difficult for network companies to understand what ‘well performing’ is – providing that the needs of a decarbonised energy system are made clear to them. We do think this is more difficult for the ESO, which should be responsible for enabling innovation which may not be directly linked to them.

ESO Annex

Ofgem has promised a full review into Code Governance, commencing in 2019. This Review should therefore have been concluded (and the ensuing recommendations have begun to be implemented) before commencement of RIIO ET-2 in 2021. As we have said, we think it is important that self-regulation of [Codes is ended](#).

Section 4 Innovation questions. These comments relate to CSQ 44 to 50

Innovation by networks is essential for a wide range of energy policy goals and we support greater levels of innovation, particularly when supported as ‘BAU’.

Fundamentally we believe that networks should be at least part funding innovation via turnover rather than through dedicated consumer funded innovation pots. In terms of funding, we would therefore prefer to see an approach which matches network capital investment rather than providing almost 100% of funding where necessary. Networks should be exposed to some level of risk around innovation activities and it is grossly unfair that consumers should bear all of this risk. Innovation on operational activities should not be funded by the consumer.

With respect to the Innovation Rollout Mechanism (IRM), we note your assertion that there has not been compelling evidence of a need for continuing the IRM, citing only 2 successful applications funded to date and the shorter five-year RIIO-2 price control period. However, we do not believe that this is reason to remove the mechanism altogether – but agree that the way it is used should be tightened up as said in page 87 / para 8.12. Whilst we think there has been many instances of ill spent money, care should be taken not to stifle innovative ideas which in the short-term might seem to only benefit an individual network but which could become of benefit to the wider networks once established. It seems to us that a key problem has been that ‘learning’ has not been clearly encapsulated and then disseminated. Being allowed to fail may well be very beneficial, if the experiences are understood and shared. It is this lack of reflection of outcomes and results, and then the lack of sharing which is an important failure related to innovation funding. The Ofwat approach to Business Plan assessment, used in conjunction with the innovation mechanisms, would encourage companies to change behaviour towards risks and allow a degree of experimentation, something which is essential for system transformation.

We do not agree with your proposals related to electricity distribution companies (CSQ50). We have stated in previous consultation responses that we believe the price controls for gas and electricity at both the transmission and distribution level need to be aligned. It is becoming increasingly more important for all network companies to work closer together.

We also believe that any activities, be they even part funded, though Ofgem schemes need a much greater level of oversight. Analysis by members of the Energy Policy Group which formed part of the UK Energy Research Centre ‘Heat, Incumbency and Transformations’ project highlighted that innovation of poor quality was being carried out by certain gas networks and the key aim of this ‘innovation’ was political influencing ([Lowes et al., 2018](#)). Our analysis also showed that much of the innovation also had a gas lean, reflecting the interests of the companies carrying out the innovation. Our specific proposals for innovation across networks under RIIO are that:

- Innovation activities should place some level of financial risk on the network companies, therefore innovation funds should provide at the most, 50% matched innovation funds
- A peer review approach should be taken to innovation funding with matched funding only provided if expert reviewers deem projects to be valuable
- Project outputs should also be peer reviewed and funding should be withheld for projects which do not provide objective analysis
- We support the general idea that innovation funding should be directed to ‘strategic energy system challenges’ and we would suggest the Ofgem engages with Innovate UK to ensure that these challenges are aligned with UK R and D priorities.

- If any innovation schemes are funded by Ofgem, every effort should be made to ensure that the fund raising does not disproportionately affect fuel poor or vulnerable households.

Section 5: Gas distribution questions

GDQ1 to 4

The current proposed outputs will not support the UK Government goals of a low cost, decarbonised energy system. The only proposed output appears to be associated with methane leakage. Heat decarbonisation must be a focus of the RIIO2 price control period and while methane leakage is important, and should be regulated, more needs to be done to drive the gas networks to decarbonise. Because the gas networks have been so strongly promoting the potential for low carbon gas, they should see this sort of incentive as an excellent opportunity.

Carrot and stick measures need to be put in place with a financial incentive scheme to drive the delivery of low carbon gas. While your consultation suggests there is uncertainty, there are a number of no regrets heat options which can be delivered now. These include the deployment of biomethane and energy efficiency measures. We would suggest that a good incentive to drive the deployment of low carbon gas would be one that rewards the networks doing the most and provides a penalty for those doing the least. The scheme could be designed to be cost neutral.

GDQ10 to 14

In the context of the Paris Climate Change Agreement which requires a rapid and immediate reduction in the combustion of fossil gas ([Anderson and Broderick, 2017](#)) we do not see how extending the gas grid can be contemplated by Ofgem. As such we believe the FPNES should be stopped and funds diverted to energy efficiency and low carbon heat systems.

In light of the need for rapid heat decarbonisation, we do not feel that solely relying on a re-opener mechanism is the correct approach. It is also unlikely that central Government will suddenly come to a conclusion on heat policy – and we would hope that an ETC will be the delegated institutional lead on this. In the meantime, Ofgem should look to drive as much change as it can via its Duties. We propose that during RIIO GD2 gas networks are financially driven to deliver low carbon gas.

Section 6: A fit for purpose energy governance framework.

The IGov project has argued that GB energy governance is not fit for purpose, and we have proposed a straw fit for purpose framework¹. In the IGov framework, we argue that a new coordinating institution is required – an Energy Transformation Commission (ETC). Figures 1 and 2 below show the current institutional framework and our preferred option. The ETC would be a parallel body to the CCC. In effect, it would be given the direction to coordinate and deliver the energy transformation. Ofgem would become an economic regulator only. An integrated and independent system operator would be responsible for the technical delivery. Both would be overseen by the ETC.

¹ <http://projects.exeter.ac.uk/igov/wp-content/uploads/2014/03/WP-7-Change-and-Inertia-in-the-UK-Energy-System.pdf> ; <http://projects.exeter.ac.uk/igov/paper-gb-energy-governance-for-innovation-sustainability-and-affordability-2/>; <http://projects.exeter.ac.uk/igov/wp-content/uploads/2018/04/CMitchell-presentation-WEET-Forum-26-April-2018.pdf>; <http://projects.exeter.ac.uk/igov/presentation-consumer-participation-market-design-issues/>

This RIIO2 document reflects all the reasons why we think that an ETC is required. RIIO2 is on its own path separate from the wider Government policy and is completely misaligned with the science of climate change.

Figure 1

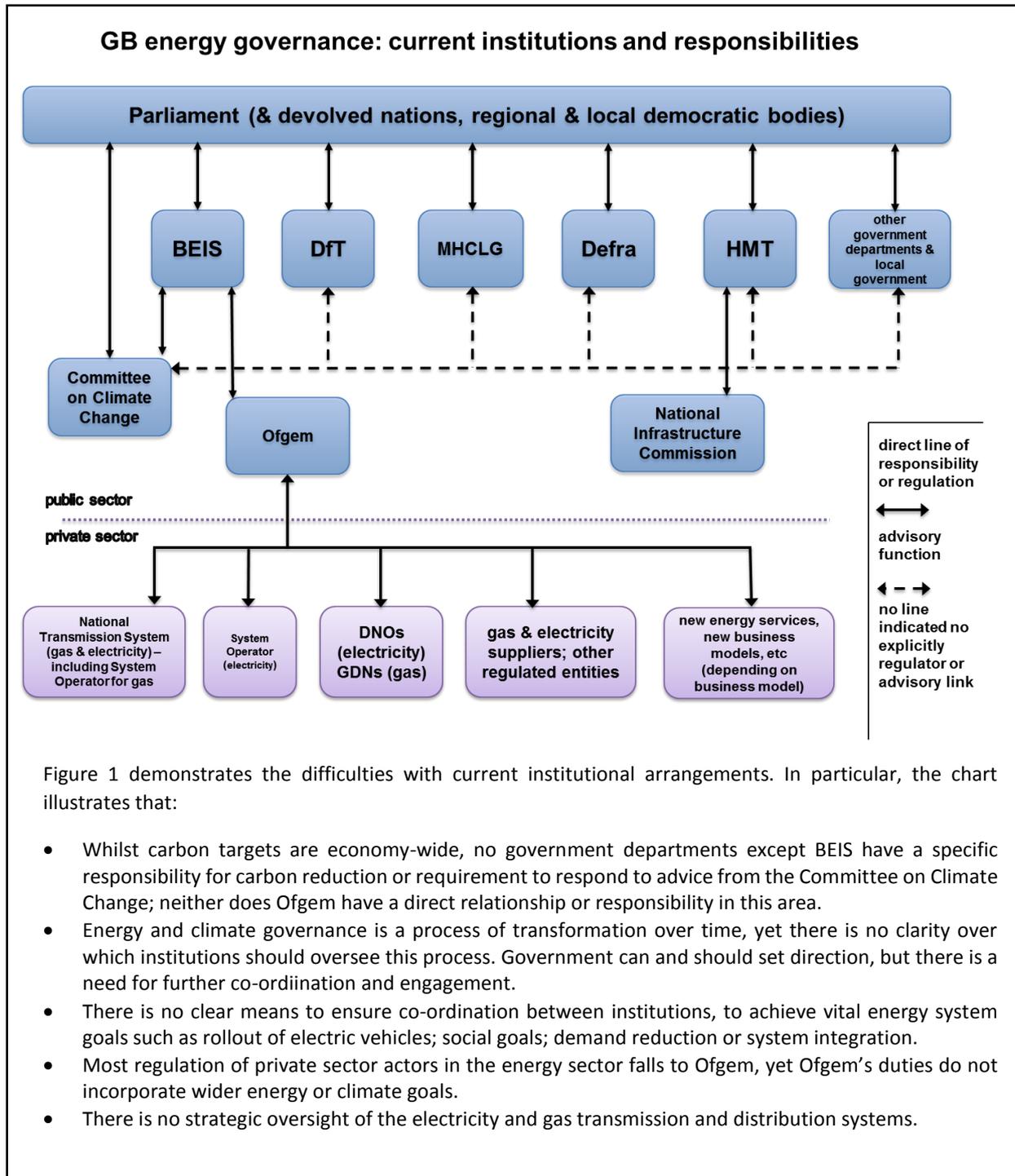


Figure 2

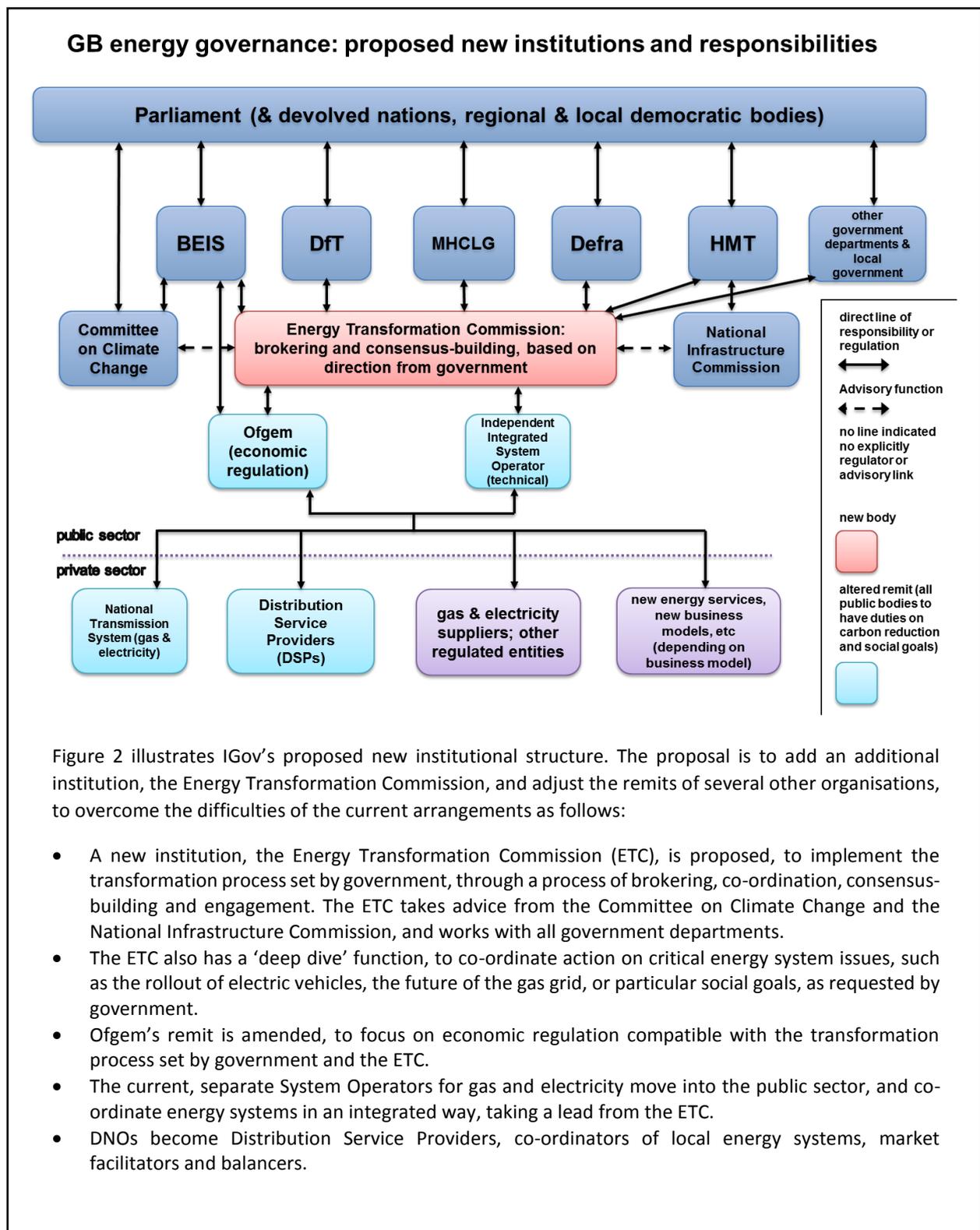


Figure 2 illustrates IGov’s proposed new institutional structure. The proposal is to add an additional institution, the Energy Transformation Commission, and adjust the remits of several other organisations, to overcome the difficulties of the current arrangements as follows:

- A new institution, the Energy Transformation Commission (ETC), is proposed, to implement the transformation process set by government, through a process of brokering, co-ordination, consensus-building and engagement. The ETC takes advice from the Committee on Climate Change and the National Infrastructure Commission, and works with all government departments.
- The ETC also has a ‘deep dive’ function, to co-ordinate action on critical energy system issues, such as the rollout of electric vehicles, the future of the gas grid, or particular social goals, as requested by government.
- Ofgem’s remit is amended, to focus on economic regulation compatible with the transformation process set by government and the ETC.
- The current, separate System Operators for gas and electricity move into the public sector, and co-ordinate energy systems in an integrated way, taking a lead from the ETC.
- DNOs become Distribution Service Providers, co-ordinators of local energy systems, market facilitators and balancers.

Section 7 Conclusion

Given the pace of innovation in energy systems, and the challenge of rapid decarbonisation to meet the Paris climate goals, IGov believes that there is a need for a shift in energy governance to steer a transformation to an integrated, socially just, zero-carbon energy system over the coming decades. With regard to Ofgem, there are two levels of change:

- First, there is much that Ofgem can do, given its existing duties and remit, to support this transformation. As we have outlined, we do not think that the RIIO process as currently proposed will be sufficient to drive the necessary changes and support innovation in the sector. We recommend changes to the process and to the working practices of Ofgem, to move its practices into line with wider energy goals, particularly carbon reduction.
- Second, we argue that wider reform to the structures of energy governance is required. Our IGov research shows the need for a new institution, which we have provisionally named the Energy Transformation Commission, to act as an enabler and co-ordinator, enabling all energy system actors to implement the high-level energy and climate goals set by government.

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