

1. Introduction

This study develops and applies an ‘Energy Constitution’ conceptual framework in order to elucidate certain new dimensions of fuel poverty governance. The general assumptions underpinning this framework extrapolate across diverse national constitutional settings, and thus have an inherent facility to contribute importantly to emergent bodies of governance and policy knowledge from an international perspective in this area.¹ The analyst is prompted to examine prominent multi-level dimensions of a given country’s constitutional setting, interconnecting the emergent vista of multi-level constitutional capacities and constraints with investigation of the extent to which the state’s constitutional regime structures and moderates a facility to govern in the sphere of energy (see further below).² A specific energy policy issue can then be located and interpreted within the context of these findings (here, fuel poverty), permitting contributions to be made to a new body of knowledge pertaining to international energy studies and aspects of constitutionality.³

In order to concretise the development and application of the framework, the UK is taken as a case-study state.⁴ Within the UK, particular attention is accorded to Northern Ireland.⁵ In order

¹ Amongst many examples of an emergent ‘constitutionalisation’ of energy policy studies within diverse national settings, see, e.g.: the consideration of the Australian experience in “Constitutional Responsibility for Managing Energy and Climate Change”, in Rosemary Lyster and Adrian Bradbrook, *Energy Law and the Environment*, (Cambridge UP 2006), 80-81; the examination of the influence of constitutional issues in the US energy policy setting in Chapter 3 (“The Art and Science of Crafting Public Policy”) of Laurance R Geri and David E McNabb, *Energy Policy in the US: Politics, Challenges, and Prospects for Change*, (CRC 2011); etc.

² Often, the emergent area of ‘constitutionalised’ energy analysis indicated at *ibid* (n.2) and *infra* (n.4) has a tendency to import studies in ‘environmental constitutionalism’ into the sphere of energy analysis, as in, e.g., Chapter 3 (“Ten Good Practices in Environmental Constitutionalism that can Contribute to Sustainable Shale Gas Development”, 30–54) of James R May and Erin Daly (eds.), *Energy, Governance and Sustainability* (Edward Elgar 2016). In the author’s view, energy policy analysts should feel encouraged to press on with developing a richer, more directly energy-oriented form of ‘energy constitutionalism’ in its own right. The ‘Energy Constitution’ model put forward in this paper endeavours to contribute to momentum in this direction.

³ Multi-level *international* constitutional matters are explored in Lesage, Dries, and Thijs Van de Graaf, *Global Energy Governance in a Multipolar World* (Routledge 2010). See further, e.g.: Thijs Van de Graaf, Benjamin K. Sovacool, Arunabha Ghosh, Florian Kern, and Michael T Klare (Eds.), *The Palgrave Handbook of the International Political Economy of Energy* (Palgrave 2016); the extensive treatment given to energy policy and the emergent concern of constitutionality at Chapters 6 (“Pipelines and Principles: Reasonableness and Fairness in Environmental Law”) and 7 (“Reasoning Adequately: Wind Turbine Risks and Benefits”) of Jocelyn Stacey, *The Constitution of the Environmental Emergency* (Hart 2018).

⁴ While all national constitutional settings are by their nature somewhat distinct, and therefore the constitutional environment crystallised by the type of analysis undertaken in this paper will differ to some extent from state to state, certain key aspects of this UK-specific study extrapolate in particularly direct ways to New Zealand and Israel, insofar as these states are highly unusual in that their constitutions are ‘uncodified’; see further the detailed discussion of the UK’s uncodified constitutional setting below. The UK also operates a devolution framework, where a national and devolved level of governance can be identified (see also below); in an alternative system, such as the federal system of the USA, the federal and state levels of governance would be the equivalent primary levels at issue, given that UK-style devolution does not operate in that constitutional setting.

⁵ The Northern Ireland Assembly and its Executive government is in collapse at the time of writing, precipitated by a Renewable Heat Incentive scandal. It is hoped that the devolved institutions can be restored shortly. See further Muinzer, Thomas L. ‘Incendiary Developments: Northern Ireland’s Renewable Heat Incentive, and the Collapse of the Devolved Government’, UKELA E-Law (99) March/April 2017: 18-21.

to get a detailed view of the condition of UK fuel poverty at the present time, the *Annual Fuel Poverty Statistics Report* (hereafter *AFPSR*) is a key point of reference.⁶ The report is England-focused, however it also includes consideration of the UK’s devolved jurisdictions.⁷ An understanding of this important document in turn necessitates the reading of the *Fuel Poverty Methodology Handbook* (hereafter *FPMH*).⁸ In the context of the present study it is notable that the *FPMH* permits one to better understand why Northern Ireland, Scotland and Wales are treated differently in terms of how fuel poverty is measured methodologically in the UK (see further below).⁹

Fuel poverty arises where households cannot achieve adequate levels of heat and electricity at reasonable cost. In essence, fuel poverty covers all energy services.¹⁰ Discussing the English context within the UK, the *FPMH* elaborates that in terms of ‘energy’ itself, fuel poverty modelling is concerned to “capture four areas of energy requirements”, as follows:

Space heating;
Water heating;
Lights and appliances; and
Cooking.¹¹

While this list of factors is perhaps unsurprising, it is helpful insofar as it clarifies what is meant by ‘energy’ in this context in relatively concrete terms.

UK Government’s *AFPSR* states that “Fuel poverty is a devolved issue”.¹² As a general or rhetorical claim targeted at the layperson, this statement might be sufficient (although it is arguable that it is insufficient). Application of the Energy Constitution framework, however, which generates a high degree of accuracy in relation to the interpretation of a given state’s multi-level national-devolved allocation of energy powers, clarifies that the statement is technically incorrect.¹³ Applying the Energy Constitution framework in order to summarise

⁶ *Annual Fuel Poverty Statistics Report, 2018* (Crown: UK, 2018); *Annual Fuel Poverty Statistics Report, 2017* (Crown: UK, 2017); *Annual Fuel Poverty Statistics Report, 2016* (Crown: UK, 2016). The report is updated on an annual basis.

⁷ *Ibid*: *AFPSR, 2018*, Annex C, 84-85; *AFPSR, 2017*, Annex B, 72; *AFPSR, 2016*, 23-24.

⁸ *Fuel Poverty Methodology Handbook* (BEIS: UK, 2018). The handbook is updated on a rolling basis by UK Government. See also the preceding version, *Fuel Poverty Methodology Handbook 2017* (BEIS: UK, 2017). References in this paper refer to the most recent version (2018) unless otherwise stated.

⁹ The *Handbook* is current at the time of writing (“This is the 2018 version of this document, relating to the 2016 fuel poverty figures, and supersedes all earlier methodology documents and updates”, 1).

¹⁰ A lack of definitional clarity that sometimes arises in relation to the meaning of ‘fuel poverty’ is not always helped by the sometimes-overlapping use of the term ‘energy poverty’. The latter term tends to refer to problems in developing nations / less economically developed countries, and pertains to energy being safe, reliable and affordable, although the Republic of Ireland uses the term in a roughly equivalent manner to the way in which Northern Ireland uses ‘fuel poverty’. The notion of ‘poverty’ (embedded in the issue ‘fuel poverty’) also opens up conceptual complexities in its own right; see, e.g., Peter Townsend’s classic paper ‘The Meaning of Poverty’ (1962) 13 (3) *The British Journal of Sociology*, 210-217.

¹¹ *Supra* n.9 (*FPMH*), 2.

¹² *Supra* n.7 (*AFPSR, 2018*) p.84; and (*AFPSR, 2017*), 72.

¹³ See further below.

the overall distribution of energy powers under the UK’s multi-level national/devolved power arrangements, Muinzer and Ellis have found that:

Northern Ireland actually has the greatest extent of devolved powers, despite the fact that it is the smallest administration; Scotland has the largest share of renewable resources and has aspired to greater autonomy in the field of energy, yet it acts on a narrower formal legal basis; and Wales has a much more limited range of devolved energy powers.¹⁴

The assertion in the *AFPSR* that fuel poverty is ‘a devolved issue’ was qualified in a more correct way in the 2016 version of the *FPMH*: “Fuel poverty is a *partially devolved matter*, with each separate administration having individual policy targets, measurement and outputs.”¹⁵ As just noted, this statement was conveyed with less accuracy in the version of the *FPMH* produced in the following years by BEIS.¹⁶ The *FPMH* (2016) has provided a ‘main reason’ underpinning this partial devolution:

The main reason for the devolution is that the separate administrations have the power to affect certain aspects of fuel poverty policies (such as energy efficiency programs) but not others (such as incomes and market conditions, which impact fuel prices).¹⁷

This statement is a little confused, insofar as it does not offer a ‘main reason’ for the devolution itself, but rather provides a recognition that powers pertaining to fuel poverty naturally cross-cut a range of multi-level national/devolved governance competences. This notion of ‘cross-cutting’ will be more sharply clarified and deeply explored through the lens of the Energy Constitution below.

Furthermore, the inaccuracy just noted in the *AFPSR* (2017 & 2018) – that “Fuel poverty is a devolved issue” – is further thrown into relief where one focuses on the UK’s substate level directly and hones in on the manner in which the UK’s Devolved Administrations are required to cross-connect their policy capacities in terms of practical governance. Thus, taking this UK case study’s primary substate focal territory as an example, Northern Ireland, in *Fuel Poverty in Northern Ireland*, an important research document produced for the Northern Ireland Assembly by its research services, the opening paragraph of the report commences by stressing that:

¹⁴ *Supra* n.1 (Muinzer and Ellis), 1181.

¹⁵ *FPMH*, 2016, (DECC: UK, 2016), 6. Emphasis added.

¹⁶ The subsequent adjustment reads “Fuel poverty is a devolved matter”, *supra* n.9 (*FPMH*), 4.

¹⁷ *FPMH*, 2016 (*supra* n.16), 6; the same words appeared at *FPMH*, 2017 (*supra* n.9), 4.

fuel poverty is an issue which is complex and multi-dimensional and cuts across many different Government Departments including for example, OFMdfM¹⁸; Social Development; Enterprise, Trade and Investment; and Health.¹⁹

These observations highlight the challenge posed to coherent policy formulation in the area of fuel poverty by the “complex and multi-dimensional” crosscutting nature of pertinent governance powers and competences. These sorts of statements do not, however, significantly enhance clarity by identifying, isolating, and qualifying the powers themselves.

The following sections demonstrate how one can contribute to the shoring up of this type of gap in knowledge through the application of the ‘Energy Constitution’ framework. Northern Ireland occupies a special indicative site of focus within the broader context of the UK case study, due to the unprecedented levels of fuel poverty that have predominated in the jurisdiction over recent years, and the pronounced technical challenges that arise there, including a significant degree of energy insecurity and a regional economy that is proportionally weaker than that of the UK’s other substate jurisdictions.

2. Theoretical Framework: the ‘Energy Constitution’

Constitutionally, the UK is unusual, resembling Israel and New Zealand in that it “does not have a written constitution, ie a documentary or codified constitution”.²⁰ Rather than being grounded in a key codified document, such as the US Constitution in the case of the USA, the UK constitution is instead manifest across a range of sources, including (but not limited to) Acts of UK Parliament, certain key court decisions, and various constitutional principles and conventions.²¹ The introduction of devolution in the UK in the late 1990s by Tony Blair’s Labour Government resulted in the creation of three new substate legislatures in this setting: the Northern Ireland Assembly; the Scottish Parliament; the National Assembly for Wales.²² These major constitutional developments were accompanied by the creation of devolved Northern Irish and Scottish executive governments, and a roughly equivalent Welsh Executive Committee for Wales.²³ These substate legislative and executive institutions, and the broader cumulative constitutional arrangements attaching to them (including partially differentiated

¹⁸ That is, the Office of the First Minister and Deputy First Minister of Northern Ireland. In 2016 this was renamed the Executive Office.

¹⁹ *Fuel Poverty in Northern Ireland* Research Paper 89/09 (Northern Ireland Assembly Research and Library Services: Northern Ireland, 2009), 1. This quotation continues to appropriately capture the spirit of fuel poverty’s departmental cross-cutting nature in Northern Ireland, although some of Northern Ireland’s departments themselves have been reorganised since this statement was made.

²⁰ Neil Parpworth, *Constitutional and Administrative Law* (8th edn, Oxford University Press 2014), 11.

²¹ See further: *Ibid* (Parpworth ‘Sources of the UK Constitution’), 12 ; Jim Gallagher, ‘A New Constitution for the UK?’ *LexisPSL*, 06/01/2017 (unpaginated electronic publication).

²² Noreen Burrows, *Devolution* (Sweet & Maxwell 2000).

²³ The Welsh Executive was a Committee of the Welsh Assembly until 2007, where it was separated out from the Assembly into a substate Welsh government that is roughly equivalent in form and nature to the Northern Irish and Scottish executive governments.

substate court systems), structure key capacities for action and agency amongst and between crucial actors in the sphere of energy governance, exerting in turn a powerful shaping influence on the relationships between national and substate multi-level decarbonisation processes.²⁴

In their ‘Mapping the Energy Constitution’ paper (2017),²⁵ Muinzer and Ellis have explored the UK setting in order to generate an eponymous framework that provides “a detailed exploration of [the state’s] ‘Energy Constitution’ as a means of examining the way in which the complex legal framework of devolution shapes the spatial organisation of the UK’s low carbon transition.”²⁶ In doing so, the authors have pointed out that:

The UK has a ‘national’ strategy to decarbonise its energy sector, yet the transfer of key responsibilities to its Devolved Administrations has meant that they control many of the powers that determine the rate and extent of the decarbonisation process. This reflects an asymmetrical distribution of legal responsibilities that has cast a complex range of powers ‘downward’ from the national sphere to subnational scales and which plays a crucial role in shaping the agency at different levels of the UK’s energy governance.²⁷

Integrating work from Cowell et. al.,²⁸ Muinzer and Ellis have stressed that:

as Cowell et al have shown, the UK’s Devolved Administrations (Scotland, Wales, Northern Ireland) have played significant, and varied, roles in the development of renewable energy, although they have tended to adopt certain modes of governance shaped by working within – and sometimes despite – processes, targets and policies defined at the UK level.²⁹

The Energy Constitution framework emphasises how fundamental national/substate multi-level decarbonisation relationships “are shaped by the UK’s constitutional arrangements, which have resulted in a patchwork of subnational jurisdictions imbued with a complex series

²⁴ Richard Cowell, Geraint Ellis, Fionnguala Sherry-Brennan, Peter A. Strachan and David Toke, ‘Rescaling the Governance of Renewable Energy: Lessons from the UK Devolution Experience (2017) 19 (5) *Journal of Environmental Policy and Planning*, 480–502.

²⁵ *Supra* n.1 (Muinzer and Ellis).

²⁶ *Ibid* (Muinzer and Ellis), 1176.

²⁷ *Ibid* (Muinzer and Ellis), 1177.

²⁸ *Supra* n.25, Cowell et al.; Richard Cowell, Geraint Ellis, Fionnguala Sherry-Brennan, Peter A Strachan and David Toke, ‘Energy transitions, sub-national government and regime flexibility: How has devolution in the United Kingdom affected renewable energy development?’ (2017) 23 *Energy Research & Social Science*, 169–181; Richard Cowell, Geraint Ellis, Fionnguala Sherry-Brennan, Peter A Strachan and David Toke, ‘Delivering Renewable Energy Under Devolution’ (DREUD: UK, 2013).

²⁹ *Supra* n.1 (Muinzer and Ellis), 1177. Note that the devolved powers have been adjusted somewhat over time. In the case of Scotland, for example, see the revisions to the devolution arrangements under the Scotland Act 2016; a useful analysis of the energy-specific consequences of these developments is provided in Gavin Little, ‘Energy and the Scotland Act 2016’ (2016) 20 (3) *Edinburgh Law Review*, 394-399; see particularly pages 396 – 397 on the (minor) additional powers devolved in relation to fuel poverty support systems. The general principles behind the mapping of powers exercise remain sound and should be understood to generate a “snapshot” of the contemporary constitution when employed at a given time, due to the fact that the constitution will no doubt be subject to gradual change in future.

of asymmetric energy controls that frequently exhibit nuanced policy intentions.”³⁰ It is further emphasised that “[d]espite the fact that these controls are determined by a range of formal legal instruments, debates over both the scale and (re-)territorialisation of decarbonisation processes in the UK have remained largely ‘lawless’”³¹ and, moreover, have “typically ignored the way” that “detailed constitutional... arrangements have defined the scope for agency and action.”³² Thus, the form and influence of the underlying ‘Energy Constitution’, which has been left largely unexplored in the UK, can be drawn out by “examining the spatial and scalar distribution of powers related to decarbonisation,” which is achieved most particularly through a ‘Mapping of Powers’ element of Muinzer and Ellis’s study via “doctrinal legal analysis”³³ of how the law has defined the energy-related responsibilities of the Devolved Administrations and the impact this has on the energy governance”.³⁴

First, the framework ‘maps’ the UK’s full constitutional distribution of multi-level national and substate legislative powers that define and limit the scope for action and agency across the UK’s major tiers of governance: these can be found set out in full in Appendices to that paper.³⁵ Next, the technique exposes and critiques the energy-specific powers and controls that can be identified amongst this overall power nexus, thereby throwing into relief the primary elements underpinning the ‘Energy Constitution’ in the UK.³⁶ The findings demonstrate how “debates about ‘the right scale’ of action tend to overlook the underlying complexities of energy governance and often project a level of sovereignty and agency that cannot be sustained under detailed examination, with legal responsibilities rarely being able to be isolated to a single scale or having clear boundaries.”³⁷

In addition to identifying and mapping the political-legal fields of competence apportioned across these multi-levels by the state’s latent uncodified constitutional arrangements in the fashion just mentioned, the conceptual framework also asserts that these multi-level governance capacities and restrictions are impacted and moderated by a series of active and inextricable *principles* and *technical constraints*. Taking the aforementioned *principles* first,

³⁰ *Ibid* (Muinzer and Ellis), 1177. See also Rosanne Palmer, *Devolution, Asymmetry and Europe: Multi-level Governance in the United Kingdom* (Brussels: Peter Lang, 2008).

³¹ *Ibid* (Muinzer and Ellis), 1177; drawing on David Delaney, ‘Legal geography – Constitutivities, complexities, and contingencies’ (2015) 39 (1) *Progress in Human Geography*, 96–102. See *ibid* (Delaney), 97.

³² *Ibid* (Muinzer and Ellis), 1177. Drawing on Turner: Sharon Turner, ‘Northern Ireland’s consent to the Climate Change Act 2008: Symbol or illusion?’ (2013) 25 (1) *Journal of Environmental Law*, 63–63; Sharon Turner, ‘Committing to effective climate governance in Northern Ireland: A defining test of devolution’ (2013) 25 (2) *Journal of Environmental Law*, 203–234.

³³ On doctrinal legal analysis, see further Mike McConville and Wing Hong Chui (eds.) *Research Methods for Law* (Edinburgh: Edinburgh University Press, 2007), 18-21; and Aulis Aarnio *Essays on the Doctrinal Study of Law* (London: Springer, 2011) 19-26.

³⁴ *Supra* n.1 (Muinzer and Ellis), 1177.

³⁵ *Ibid* (Muinzer and Ellis), ‘Appendix’, 1194-1197.

³⁶ Most particularly over *ibid* (Muinzer and Ellis), 1180-1186, ‘The UK’s “Energy Constitution”: Mapping the Powers’.

³⁷ *Ibid* (Muinzer and Ellis), 1180. Building on insights raised in Benda-Beckmann F von, Benda-Beckmann K von and A Griffiths, ‘Space and legal pluralism’ In: *Spatializing Law: An Anthropological Geography of Law in Society* (Oxon, England: Ashgate, 2013), 1–29.

these can be divided into two key principles as follows:

- **Principle 1 = The recognition and qualification that identifiable devolved/national powers appear to be relatively clear-cut and rigid, e.g., the (correct) assertion that ‘energy’ competence is devolved to Northern Ireland³⁸; however, the powers are *in actuality fuzzy and slightly indeterminate*, and as such a particular competence may not only be difficult to define in precise terms, but may likely overlap with other competences to some extent.³⁹**

Muinzer and Ellis have generated three key assumptions from these circumstances:

The key points here are threefold:

firstly, it is often difficult to gauge in legal terms where precisely the fuzzy dividing lines between particular devolved-reserved powers are to begin and end;

secondly, and as with other areas of law, core legislative provisions can be dynamically interpreted by the courts;

and thirdly, given that the UK’s ‘Energy Constitution’ is geographically differentiated, such case law will inevitably reflect the wider socio-spatial context of devolution.⁴⁰

- **Principle 2 = Notwithstanding the fuzzy or semi-indeterminate nature of a given national or devolved power (per the previous principle), the *additional* assertion that identifiable national/substate powers are subject to particular special conditions/qualifications applicable within the broader framework of those powers.** These conditions are active where powers may be *hollowed out* to some extent, or *cut into / cut away* by associated powers.

As an example of the ‘**hollowing out**’ of a power, it is the case that ‘energy’ competence is devolved to Northern Ireland⁴¹; however, within that devolved competence, ‘nuclear energy’ is excepted, that is to say, it is *not devolved* under the terms of the pertinent constitutional legislation, such that Northern Ireland’s devolved ‘energy’ competence is partially *hollowed out* as a consequence of these restrictions on nuclear energy

³⁸ See further Section 4 below, where Northern Ireland’s competences are examined.

³⁹ Consequently, the Energy Constitution framework accords a particular degree of significance to courts of law, insofar as courts can be called upon to establish more precise parameters around particular devolved/national competences when called on to do so: see, e.g., the following court case, involving Scottish reserved/devolved powers, *Imperial Tobacco Limited v The Lord Advocate (Scotland)* [2012] UKSC 61.

⁴⁰ *Supra* n.1 (Muinzer and Ellis), 1188.

⁴¹ Energy is a ‘transferred’ matter in accordance with the Northern Ireland Act 1998, s.4; see further Section 4 below.

control.⁴²

As an example of powers being ‘**cut into**’ / ‘**cut away**’ by associated competences, it has just been noted that ‘energy’ is devolved to Northern Ireland; however, ‘taxes’ are reserved to national Parliament,⁴³ that is to say, they are *not* devolved. Given that tax powers are frequently used to create economic mechanisms that will incentivise energy decarbonisation, it is the case that aspects of the facility to act in the area of energy at the Northern Irish level are *cut into* or *cut away* by the tax reservation. In other words, although on the face of things this reservation concerns a distinct non-energy competence, nevertheless it removes some agency to act in the sphere of energy subnationally, in spite of the fact that ‘energy’ itself as a competence is devolved to Northern Ireland.

Coming now to the *technical constraints* mentioned above, which serve to moderate the operation of multi-level governance capacities and restrictions that are identified when political-legal capacities are ‘mapped’ across the national and substate levels, these are mostly of a technical legal nature. Their presence is dictated by the reality that the operation of the UK’s constitutional machinery is governed by constitutional law. In order to apply the conceptual framework to useful ends, it is enough that these major technical constraints are recognised and acknowledged, such that they contribute to and qualify the overall picture provided by the Energy Constitution. Although the following list is not exhaustive,⁴⁴ the major technical constraints operating here within the Energy Constitution framework paradigm are as follows:

- **The function of executive devolution.** It is *legislative* devolution that is directly engaged in the ‘mapping of powers’ exercise itself, because executive devolution cannot be mapped in the same coherent way from the fundamental constitutional legislation. Yet executive devolution is a pertinent, active feature of the UK constitution that is in operation and that therefore should be understood to impact and qualify the overall picture provided by the Energy Constitution.

Parpworth clarifies the distinction between ‘legislative’ and ‘executive’ devolution as follows:

‘devolution’ taken in a broad conceptual sense ‘may involve the transfer of functions from central government to a subordinate executive in addition to or as an alternative to the transfer of legislative power from one Parliament to another. In other words, devolution may be “executive”, “legislative”, or

⁴² This nuclear exception is expressed in the legislation as “[n]uclear energy and nuclear installations, including nuclear safety, security and safeguards, and liability for nuclear occurrences”; Northern Ireland Act 1998, Schedule 2.18.

⁴³ Northern Ireland Act 1998, Schedule 2.9.

⁴⁴ For example, see the paragraph immediately after this indented list, where it is also noted that constitutions normally confer direct ‘rights’ on citizens, and as such a rights-based schema can be interpreted as acting as a shaping influence in the context of the powers identified under the Energy Constitution mapping exercise.

both”[.]⁴⁵

- **The operation of *legislative consent motions* (also known in the UK as the ‘Sewel convention’).**

Muinzer and Ellis summarise this feature of the Energy Constitution as follows:

[A] legislative consent motion... dictates that a provision of a Westminster Act that intrudes upon an area of devolved competence will extend to the pertinent devolved jurisdiction only where the Devolved Assembly has passed a motion consenting to the arrangement[.]⁴⁶

Importantly, the authors also stress that: “these consent motions embody an *agreement* between national Parliament and the devolved institutions”.⁴⁷ This means that although legislative consent motions are an applied constitutional practice, national Parliament can technically over-ride a substate Parliament in an instance where that substate Parliament will not consent to national Parliament’s intrusion on its devolved energy (or other) powers.

- **Special arrangements or agreements arising from the structure of national/devolved structure of UK governance that Richard Rawlings has summatively described as ‘new style pseudo-contracts’ / ‘a raft of inter-institutional administrative agreements’.**⁴⁸ In the UK these include things like the important *Memorandum of Understanding on Devolution*.⁴⁹ Muinzer and Ellis summarise that this *Memorandum*, and other agreements like it, are formal agreements that “provide a basis for how the Devolved Administrations and UK Government conduct relations with one another (in areas including communication, consultation, information exchange, etc.)”.⁵⁰ More broadly, this field of ‘special arrangements or agreements’ can be widened out to include any form of ‘soft law’ that compliments the body of ‘hard law’ containing the powers that are ‘mapped out’ under the Energy Constitution (and any equivalent examples of pertinent hard law, such as the Human Rights Act 1998 mentioned in the following paragraph).⁵¹

⁴⁵ Discussed in *Supra* n.1 (Muinzer and Ellis), 1188, drawing on Parpworth’s summary clarification of the distinction between legislative and executive devolution in Neil Parpworth, *Constitutional and Administrative Law* (8th edn, Oxford: Oxford University Press, 2014), 161-162.

⁴⁶ *Supra* n.1 (Muinzer and Ellis), 1180.

⁴⁷ *Ibid* (Muinzer and Ellis), 1180-1181.

⁴⁸ See Richard Rawlings, ‘Concordats of the constitution’ (2000) 116 *Law Quarterly Review*, 257–286.

⁴⁹ *Memorandum of Understanding and Supplementary Agreements Between the United Kingdom Government, the Scottish Ministers, the Welsh Ministers, the Northern Ireland Executive Committee* (UK Government, 2013).

⁵⁰ *Supra* n.1 (Muinzer and Ellis), 1181.

⁵¹ As discussed at *Ibid* (Muinzer and Ellis), 1181.

The Energy Constitution also encourages the analyst to acknowledge and consider the role and presence of *rights* and *equity* in relation to a given energy issue (here, fuel poverty). This is chiefly due to the fact that constitutions normally grant equitable *rights* to individual citizens, namely, human rights and associated protections and entitlements. The UK’s Human Rights Act 1998, for example, is a major explicit source of individual rights in the UK. The Energy Constitution invites the question as to how or to what extent such constitutional rights may/may not impact or moderate particular aspects of multi-level energy entitlements within the broader context of the state’s framing of public and private powers.

3. Fuel Poverty, Northern Ireland and UK Substate Divergence

Subnational regional differences have a substantial ability to affect and influence fuel poverty. For much of this study’s preparation period, Northern Ireland was on record as having the highest rates of fuel poverty in the UK according to the latest available statistics. These had not been updated since 2011’s figures, sitting at an astonishing 42% of Northern Irish households in fuel poverty for 2011.⁵² The figures were finally updated by a report released on 31 May 2018, which reported for 2016. According to the new figures the 42% level for 2011 has improved to 22% for 2016 (see further below).⁵³

Northern Ireland is presently undergoing a challenging and somewhat unstable ‘post-Troubles transition’ after years of civil unrest and violence, and it is also the least developed region of the UK, with the weakest economy. As such, it is notable that it has been emphasised in the Northern Irish context that home-improvements to an energy inefficient home, such as the installation of central heating, will not necessarily be enough to remedy fuel poverty in certain individual cases, given that a sustained low income may cause fuel poverty to persist regardless.⁵⁴ Liddell, Morris, McKenzie and Rae have also clarified that “Whilst there are three classic causes of fuel poverty (energy efficiency of building fabric, income, and price of domestic fuels), fuel poverty in Northern Ireland has been driven prominently by the price of heating oil, and more recently by volatility in the price of gas.”⁵⁵ Indeed, setting the issue of the strength of the Northern Irish economy aside and taking energy costs in isolation, it remains

⁵² *Annual Fuel Poverty Statistics Report, 2014* (Crown: UK, 2014), 62.

⁵³ Healy and Clinch have clarified and emphasised that fuel poverty is also a troubling issue below the Northern Irish border in the Republic of Ireland: see e.g., Peter J Clinch and John D. Healy, *Alleviating fuel poverty in Ireland: a program for the 21st century* (University College Dublin, Department of Environmental Studies, 1999), 2. See further: John D Healy and Peter J. Clinch ‘Quantifying the severity of fuel poverty, its relationship with poor housing and reasons for non-investment in energy-saving measures in Ireland’ (2004) 32.2 *Energy Policy*, 207-220; John D. Healy and Peter J. Clinch, ‘Fuel poverty, thermal comfort and occupancy: results of a national household-survey in Ireland’ (2002) 73.3-4 *Applied Energy*, 329-343. See also Sue Scott, Sean Lyons, Claire Keane, Donal McCarthy and Richard S. J. Tol, ‘Fuel poverty in Ireland: Extent, affected groups and policy issues’ ESRI working paper (2008, No. 262)..

⁵⁴ Niamh Shortt and Jorun Rugkåsa, “‘The walls were so damp and cold’ fuel poverty and ill health in Northern Ireland: results from a housing intervention’ (2007) 13.1 *Health & Place*, 99-110.

⁵⁵ Christine Liddell, Chris Morris, Paul McKenzie and Gordon Rae, “Defining Fuel Poverty in Northern Ireland: a preliminary review”, Department for Social Development in Northern Ireland, 2011, 6.

the case that “excessively high fuel prices in Northern Ireland have meant that a very large number of households are still in fuel poverty.”⁵⁶ Further regional features also exert formative influences in this respect. For example, it has been stated that:

[t]he level and depth of fuel poverty is... greater for households *not* connected to the gas grid. ...Households classified as ‘rural’ have a much higher proportion of households that are *not* connected to the gas grid, and therefore, a higher level and depth of fuel poverty.⁵⁷

These correlations have been flagged up over the course of statistical analysis pertaining to England, however it is notable that Northern Ireland has a proportionately high rural community, and gas grid connection is frequently less developed than elsewhere in the UK.⁵⁸

Northern Ireland has also been troubled in particular by a heavy reliance on oil, usually much higher in price than gas. These sorts of circumstances can pose entrenched challenges for fuel poverty mitigation.⁵⁹ In March 2017 the Housing Executive in Northern Ireland published preliminary findings from the Northern Ireland House Condition Survey 2016 (NIHCS 2016).⁶⁰ The NIHCS 2016 objectives as stated included “[t]o provide a reliable assessment of the energy efficiency of the stock and the level of Fuel Poverty in Northern Ireland on a comparable basis with the rest of the UK.”⁶¹ Disappointingly, this preliminary report scarcely touched on fuel poverty, and it was hoped that the main report to follow would bring Northern Ireland’s calcified 2011 statistics (noted above) more up to speed with the rest of the UK.

This finally occurred with the release on 31 May 2018 of the Northern Ireland House Condition Survey Main Report 2016 (NIHCSMP 2016).⁶² Using a 10% fuel poverty measurement indicator,⁶³ the report found that in 2016 “approximately 22% (160,000) of households in Northern Ireland were in fuel poverty”, meaning that this “represents a significant improvement

⁵⁶ Maggie Davidson, Simon Nicol, Mike Roys, Helen Garrett, Adele Beaumont and Charlotte Turner, *The Cost of Poor Housing in Northern Ireland* (BRE: UK, 2012), 1.

⁵⁷ *Supra* n.7 (AFPSR, 2016), 25.

⁵⁸ Using sophisticated modelling, Walker, Liddell, McKenzie and Morris have found significant geographic disparity in the rate and cost of home retrofits in Northern Ireland, although they also find evidence that rural areas may be better served by policy than might have been expected based on existing expectations, see: Ryan Walker, Christine Liddell, Paul McKenzie and Chris Morris, ‘Evaluating fuel poverty policy in Northern Ireland using a geographic approach’ (2013) 63 *Energy Policy*, 765-774. For insightful exploration of fuel poverty in the context of UK urban/rural divides, see Deborah Roberts, Esperanza Vera-Toscano, and Euan Phimister, ‘Fuel poverty in the UK: Is there a difference between rural and urban areas?’ (2015) 87(C) *Energy Policy*, 216-223.

⁵⁹ For novel analysis of what the authors call a ‘boundary spanner’ approach to tackling fuel poverty in rural Northern Ireland, which seems to hold a facility to yield impressive results, see Jorun Rugkåsa, Niamh K. Shortt and Leslie Boydell, ‘The right tool for the task: “boundary spanners” in a partnership approach to tackle fuel poverty in rural Northern Ireland’ (2007) 15.3 *Health & Social Care in the Community*, 221-230.

⁶⁰ Northern Ireland Housing Executive, *House Condition Survey, Preliminary Report 2016* (NIE: Northern Ireland, 2017), 3.

⁶¹ *Ibid* (Northern Ireland Housing Executive, *Preliminary Report*), 9.

⁶² Northern Ireland Housing Executive, *House Condition Survey, Main Report* (NIE: Northern Ireland, 2018).

⁶³ Measurement indicators are discussed below.

in fuel poverty levels since 2011 when the figure was 42% (294,000).”⁶⁴ The 20 percentage points decrease is attributable to a number of factors, most importantly “lower average fuel prices, lower modelled household energy use (mainly due to improved energy efficiency of the stock, particularly dwelling fabric and heating systems) and increased income.”⁶⁵ As the *AFPSR* (2018) points out, one reason for the improvement that is directly attributable to the Devolved Administration itself is that “[t]he [Northern Ireland] Executive focused on removing poor energy efficiency as one of the causes of fuel poverty 2011-2016.”⁶⁶ Thus, the *NIHCSMP* 2016 emphasises that targeted strategic “investment by government in domestic energy efficiency schemes of over £117 million in the private sector and £181 million in Housing Executive stock” has taken place over 2011-2016, which has “made a contribution to reducing domestic energy consumption and thus fuel poverty levels.”⁶⁷

In sum, Northern Ireland stands apart from the UK’s other substate jurisdictions somewhat. This includes through the extent to which Northern Ireland had been subject to a radically high level of fuel poverty (42%) according to the most recent available reports that had preceded the *NIHCSMP* report of May 2018, with the latter report indicating that this major problem is at last being brought under at least some degree of meaningful control (currently at 22%).

Situating Northern Ireland within the UK more broadly, the UK’s cumulative substate picture is complicated by regional economic and geographic (climactic) disparities and variations, which render elusive any sense of precise comparison between households in each substate jurisdiction. Writing in 2012, Liddell, Morris, McKenzie and Rae have noted that:

prevalence of fuel poverty has always been higher outside of England. In 2009, 18% of English households were in fuel poverty, compared with 26% in Wales, 33% in Scotland, and 44% in Northern Ireland. ...[I]n Northern Ireland... households spend almost 1.5 times as much of their income on heat, power and light as do English households.⁶⁸

They add that:

The greater cost of heating and lighting in Northern Ireland is attributable to several factors. The region has a colder climate, requiring 20% more heating in an average year than does London; oil-fired heating systems also predominate, and (in April 2011) these cost 68% more than gas to produce a therm of domestic heat; electricity is also more

⁶⁴ *Supra* n.61 (*NIHCSMP 2016*) 15. However, note also that at the very recent time of writing on 9 April 2019 Estimated Fuel Poverty Figures for 2017-2018 based on modelling were published by the Northern Ireland Housing Executive in the report ‘Estimates of Fuel Poverty in Northern Ireland 2017 and 2018’ (Housing Executive, 9 April 2019). While the outcomes are only indicative estimates, it is reported that the 2018 estimate shows that “a small rise in the level of fuel poverty in Northern Ireland relative to 2016” has since been occurring due to electricity price rises (quoting *ibid.* p.8).

⁶⁵ *Ibid* (*NIHCSMP 2016*) 15.

⁶⁶ *Supra* n.7 (*AFPSR, 2018*) 85.

⁶⁷ *Supra* n.61 (*NIHCSMP 2016*) 15.

⁶⁸ Christine Liddell et al., ‘Measuring and monitoring fuel poverty in the UK: National and regional perspectives’ (2012) 49 *Energy Policy* 27-32, 30.

expensive in the region[.]⁶⁹

Given the ‘asymmetric’ nature of devolution,⁷⁰ that is, where devolved powers and capacities frequently differ across Northern Ireland, Scotland and Wales (England is governed from national Parliament⁷¹), this creates an inherent capacity for substantial differentiation between the energy-related powers allocated to each devolved region under the terms of the Energy Constitution (see Section 4 below). Thus, it is unsurprising to find that the policy experience across these jurisdictions has diverged somewhat. Unlike Northern Ireland, the UK’s other substate jurisdictions have tended toward adopting statutory targets for fuel poverty⁷². The *AFPSR* has noted that “Scotland and Wales have targets and set policies to tackle the issue” of fuel poverty that differ from the Northern Irish policy approach.⁷³ However, and what is perhaps more unusual, is that the devolved divergences have also resulted in different definitional and methodological approaches to the actual measurement of fuel poverty. In particular, and as the *AFPSR* has pointed out, “each nation in the UK ha[s] its own fuel poverty definition”.⁷⁴ This definitional divergence has the effect of meaning that one cannot conveniently and directly aggregate Northern Irish, Scottish, Welsh and English fuel poverty measures in order to produce one overall ‘whole picture’ of the UK experience⁷⁵; one cannot do so due to the fact that the definitional and methodological approach to measurement is not standardised across the jurisdictions.⁷⁶

In reflecting on these sorts of definitional and methodological divergences, the *AFPSR* notes that:

⁶⁹ *Ibid* (Liddell), 30.

⁷⁰ Asymmetry and associated devolution issues are raised insightfully in the context of (Welsh) energy policy in Stevie Upton, ‘The Devolution Settlement and Energy Policy in Wales: Reflections on some Critical Issues’ (2014) 27 (1) *Contemporary Wales*, 105–126.

⁷¹ For an overview of law-making in the UK, see Robert Hazell and Richard Rawlings (eds.), *Devolution, Law Making and the Constitution* (UK: Imprint Academic; issued on digital publication by Andrews UK Limited, 2015).

⁷² A sense of Northern Ireland’s overall strategic approach to fuel poverty is provided in *Warmer Healthier Homes: A New Fuel Poverty Strategy for Northern Ireland* (Department for Social Development: Northern Ireland, 2011).

⁷³ *Supra* n.7 (*AFPSR*, 2016), 23. See also *Supra* n.7: *AFPSR*, 2017, 72; *AFPSR*, 2018, 84.

⁷⁴ *Supra* n.7 (*AFPSR*, 2017), 72 and (*AFPSR*, 2018),84.

⁷⁵ Much research exists on how fuel poverty can be best defined, see e.g., Moore’s ‘Definitions of Fuel Poverty’, which includes an explanation of the merits of a ‘budget standard’ approach that factors minimum income standards into fuel poverty measurement calculations: Richard Moore, ‘Definitions of fuel poverty: Implications for policy’ (2012) 49 *Energy Policy*, 19-26. On measurement issues, see also e.g., Ryan Walker, Paul McKenzie, Christine Liddell and Chris Morris, ‘Estimating fuel poverty at household level: An integrated approach’ (2014) 80 *Energy and Buildings*, 469-479. *Defining Fuel Poverty In Northern Ireland: A Preliminary Review* addresses the definition of fuel poverty in great detail in the Northern Irish context, and posits sophisticated improvements that the authors suggest can better represent the problem: *Supra* n.56 (Liddell), Section 2, 53–120.

⁷⁶ Thus, artificial adjustments are required. Note also that although Northern Ireland employs a 10% fuel poverty measure (see below), the most recent Northern Irish fuel poverty report has also included England-style “LIHC” calculations (also discussed below) for the first time: see further the *NIHCSMP 2016*, at *Supra* n.61. This means Northern Irish fuel poverty rates can be more easily compared with England’s rates.

Due to both definition and methodological differences in fuel poverty for each devolved nation, the figures are non-additive (i.e. should not be combined) in relation to a UK total.⁷⁷

Hence the particular importance of the *FPMH* – the handbook dealing with methodology – flagged up above. As outlined in the Table appended to this paper,⁷⁸ Scotland and Wales use (unstandardised) percentage indicators⁷⁹ to gauge fuel poverty levels, England uses what is known as a Low Income High Costs (‘LIHC’) indicator, and Northern Ireland uses a Scotland/Wales style percentage indicator (although Northern Ireland has also integrated the English LIHC into its reporting for the first time recently⁸⁰). England’s LIHC indicator is outlined in the following terms:

Under the LIHC indicator, a household is considered to be fuel poor if:

- they have required fuel costs that are above average (the national median level).
- were they to spend that amount, they would be left with a residual income below the official poverty line.⁸¹

The “LIHC definition is a relative indicator as it compares households to the national median fuel costs and income – thereby reflecting contemporary trends.”⁸² England had until relatively recently taken a 10% definition approach to fuel poverty resembling the (unstandardized) Scottish, Welsh and Northern Irish 10%. Reduced to its essentials, this type of approach recognises a household to be in fuel poverty where 10% or more of its income is spent on fuel needs. An independent review led by Professor Sir John Hills and published in 2012 advised the government to employ (amongst other things) a differing model that included calculation of both the *extent* and the *depth* of fuel poverty.⁸³ Here, the ‘extent’ of the problem can be defined as “how many fuel poor households there are”⁸⁴ and the ‘depth’ of the problem can be defined as “how badly affected each fuel poor household is”.⁸⁵ After a consultation period the new Hills approach was phased in for England. The LIHC model has some clear merits in that it presents a richer picture of fuel poverty circumstances, for example capturing the ‘depth’ of the problem in a way that a flat 10% indicator does not do. It also contains some demerits in that it is more convoluted than the previous approach, and in the broader context of the multi-

⁷⁷ *Supra* n.7 (AFPSR, 2018), 85; *Supra* n.7, (AFPSR, 2017), 72; and *Supra* n.7, (AFPSR, 2016), 24.

⁷⁸ See ‘Table, with Key’, below.

⁷⁹ The indicators are ‘unstandardised’ in the sense that the devolved jurisdictions do not use identical means to calculate their percentages; see ‘Table, with Key’, below.

⁸⁰ See the NIHC SMP 2016 report, at *Supra* n.61.

⁸¹ *Supra* n.7 (AFPSR, 2018, 6; AFPSR, 2017, 6; AFPSR, 2016, 6–7).

⁸² *Supra* n.9 (FPMH), 1. For more detail on the LIHC indicator see *FPMH* Chapter 6.

⁸³ John Hills, *Getting the Measure of Fuel Poverty, Final Report of the Fuel Poverty Review* (DECC: London, 2012).

⁸⁴ *Supra* n.7 (AFPSR, 2017), 6.

⁸⁵ *Ibid*, (AFPSR, 2017), 6. More particularly, “the depth of fuel poverty is represented by the ‘fuel poverty gap’. This is defined as the amount by which the assessed energy needs of fuel poor households exceed the threshold for reasonable costs.” *Supra* n.9 (FPMH), 63, emphasis added.

level Energy Constitution setting it more heavily distorts a capacity to generalise across the substate vista due to the lack of similitude between the traditional Northern Irish, Scottish and Welsh 10% indicators and the current developed English approach.⁸⁶

[FIGURE 1 APPEARS – PLEASE REFER TO THE DOCUMENT CONTAINING FIGURES/TABLES PROVIDED WITH THIS SUBMISSION, PER HOUSE STYLE REQUIREMENTS]

Source: Fuel Poverty Methodology Handbook (BEIS: UK, 2017), 2.⁸⁷

Amongst Northern Ireland’s relatively limited body of government documents engaging fuel poverty, it has been stated that:

In broad terms *the same definition of fuel poverty has been adopted by both the UK Government and the devolved administrations in Northern Ireland, Scotland and Wales*. In Northern Ireland, the definition of fuel poverty is set out in the Northern Ireland Fuel Poverty Strategy, ‘Ending Fuel Poverty: A Strategy for Northern Ireland’, which states that:

‘a household is in fuel poverty if, in order to maintain an acceptable level of temperature throughout the home, the occupants would have to spend more than 10% of their income on all household fuel use[.]’⁸⁸

It is clear from the commentary above that the implication here that ‘the same definition of fuel poverty’ has been rolled out across the UK is somewhat misleading.⁸⁹

The Energy Constitution framework has been sketched out under heading 2 above. Under this third heading consideration has been afforded to Northern Ireland’s fuel poverty circumstances, and certain important asymmetric elements manifest within the UK’s substate setting in relation to fuel poverty have also been highlighted, in particular concerning definitional and methodological issues. The unfolding analysis is now well placed to situate fuel poverty more directly within the context of section 2’s Energy Constitution framework, in order to better elucidate capacities for action and areas of constraint running across and between the UK’s national and devolved multi-levels of governance. This is undertaken in the following section.

⁸⁶ As noted above (n.73; see also the Table appended to this paper), the last major reporting round in Northern Ireland included LIHC readings for the first time. The *AFPSR, 2018* results for Northern Ireland are set out and correlated with England at *Supra* n.7, *AFPSR 2018*, 85.

⁸⁷ The official fuel poverty statistics themselves provide generalised and indicative data. The statistics are generalised insofar as they do not pinpoint specific households; and they are indicative in the sense that they indicate extant levels of fuel poverty with a reasonable degree of accuracy, but without pin-point accuracy or statistical certainty. The table above appears in virtually identical form in the more recent *FPMH, 2018* (see page 2), but the 2017 version is reproduced here because it includes a little more information within the table border.

⁸⁸ *Supra* n.20 (*Fuel Poverty in Northern Ireland*), 1. Emphasis added.

⁸⁹ See further the Table at the end of this paper (*‘Table, with Key’*).

4. The Energy Constitution and Northern Ireland

In terms of ‘mapping’ key pin-pointed legislative energy powers onto the UK’s conceptual national and substate levels,⁹⁰ Cowell et al. have calculated for Northern Ireland at the substate level as follows: ‘energy policy’ is ‘fully devolved’; ‘planning and consents (onshore)’ are ‘fully devolved’; ‘planning and consents (offshore)’ are mostly ‘fully devolved’; and the associated field of ‘economic development spending’ is ‘fully devolved’.⁹¹ Application of the Energy Constitution framework makes it possible to sharpen and develop these useful findings with greater accuracy. Northern Ireland’s governance powers are articulated most directly in law in an important constitutional statute, the Northern Ireland Act 1998 (hereafter NIA 1998). The NIA 1998 establishes the key arrangements for devolving particular ‘matters’ to Northern Ireland, and recognises that the Northern Ireland Assembly has ‘legislative competence’ to legislate on these matters.⁹² The matters are construed in the legislation as ‘transferred’ matters,⁹³ which are devolved, ‘reserved’ matters, where the Assembly can only legislate in these areas if it has received the permission of the Secretary of State,⁹⁴ and ‘excepted’ matters,⁹⁵ which are withheld to the national level.

Schedule 2 to the NIA 1998 specifies excepted matters⁹⁶ and Schedule 3 specifies reserved matters,⁹⁷ doing so in a technical legalistic way, and the legislation creates a rule that if matters do not appear as being expressly excepted or reserved then they are to be interpreted as being devolved.⁹⁸ ‘Energy’ is excluded from Schedules 2 and 3; as such, it does not appear as an expressly excepted or reserved matter, and in accordance with the rule just stated, ‘energy’ is therefore to be interpreted as a transferred/devolved competence. Bearing in mind both the ‘fuzzy’ / potentially overlapping edges of powers and the capacity for powers to ‘cut into’ one another under the Energy Constitution (as outlined above), Muinzer and Ellis have identified and flagged up additional competences that are absent from the Schedules (ie., they are devolved to Northern Ireland) that have a particularly notable impact on energy competence. These include planning powers, aspects of utility regulation and housing.⁹⁹ The fact that these powers can be mapped to Northern Ireland at the substate level *bolsters* Northern Ireland’s

⁹⁰ The expression ‘substate level’ or equivalent that is employed in this paper is also often described as the ‘subnational level’ in the context of political science, most particularly multi-level governance analysis, see e.g., Kirsten Jorgensen, Anu Jogesh and Arabinda Mishra, ‘Multi-level Climate Governance and the Role of the Subnational Level’ (2015) 12 (4) *Journal of Integrative Environmental Sciences*, 235–245.

⁹¹ See the Table entitled ‘Table I. Devolution of energy-related powers in the UK’ in Cowell et. al. at *Supra* n.25 (‘Rescaling the Governance of Renewable Energy’).

⁹² NIA 1998, section 6.

⁹³ NIA 1998, section 4(1).

⁹⁴ *Ibid.*

⁹⁵ *Ibid.*

⁹⁶ NIA 1998, Schedule 2.

⁹⁷ NIA 1998, Schedule 3.

⁹⁸ NIA 1998, section 4.

⁹⁹ Discussed *Supra* n.1 (Muinzer and Ellis), 1184.

capacity to engage in energy governance.

Certain other significant powers, however, must be mapped to the national level rather than to Northern Ireland at the substate level, because they can be identified explicitly as being under national control. Firstly, in terms of the concepts of the *hollowing out* and *cutting into* of competences under the Energy Constitution framework (outlined above), the *hollowing out* phenomenon is detectable: most particularly, Northern Ireland’s devolved energy competence is hollowed out to a partial degree through competence pertaining to ‘nuclear energy’ and nuclear power stations being withheld to the national level.¹⁰⁰ Secondly, a degree of *cutting into* Northern Ireland’s energy competence by competences located at the national level is also detectable, which further limits Northern Ireland’s substate governance space under the Energy Constitution. Thus, ‘taxes’ and ‘duties’ are withheld from Northern Ireland,¹⁰¹ and therefore must be mapped to the national level. Given that taxes and duties have a capacity to be applied to the energy sector in order to steer the energy market or affect consumer behavioural change (taxes), and to moderate fuel import / export costs (duties), these powers cut into Northern Ireland’s substate capacity for agency in the field of energy. Similarly, ‘international relations’ are excepted,¹⁰² further cutting into Northern Irish competence by restricting the Northern Ireland Assembly from legislating autonomously in areas engaging international climate and energy agreements, etc. The detectable *cutting in* effect also incorporates restrictions on Northern Ireland’s direct relations with the EU / supranational institutions, which are similarly scaled to the national level and include energy-specific EU matters.¹⁰³

These findings expose key elements of the essential ‘backdrop’ of agency and constraint acting on the issue of fuel poverty in Northern Ireland under the terms of the Energy Constitution, however in order to apply the framework more acutely it is necessary to embed the issue of fuel poverty within the Energy Constitution’s power nexus in a narrower way. Where one does situate fuel poverty within the framework of these powers, it becomes evident that Northern Ireland enjoys at least some degree of broad competence to act in the area of fuel poverty, insofar as fuel poverty is an energy-oriented issue and ‘energy’ competence is devolved. As noted above, Cowell et al. have emphasised that ‘economic development spending’ is also devolved,¹⁰⁴ providing, e.g., some facility for Northern Ireland to target monies funnelled down from the EU towards fuel poverty problems; see for instance Laurentis et al. on how “[a]ccessing European resources has... been important to the evolution of Arbed”,¹⁰⁵ a Welsh domestic housing retrofit programme intended to reduce fuel poverty in Wales.¹⁰⁶ Similarly, there is scope to alleviate fuel poverty by channelling relief monies or associated spending from

¹⁰⁰ This occurs at NIA 1998, Schedule 2.18.

¹⁰¹ NIA 1998, Schedule 2.9.

¹⁰² NIA 1998, Schedule 2.3.

¹⁰³ *Ibid.*

¹⁰⁴ *Supra* n.92 and text to note.

¹⁰⁵ Carla De Laurentis, Malcolm Eames, and Miriam Hunt, ‘Retrofitting the built environment “to save” energy: Arbed, the emergence of a distinctive sustainability transition pathway in Wales’ (2017) 35.7 *Environment and Planning C: Politics and Space* 1156, 1167.

¹⁰⁶ See generally *ibid* (Laurentis et al).

Northern Ireland’s block grant into fuel poverty solutions, possibly relating (but not necessarily restricted) to the improvement of energy efficiency in building stock.¹⁰⁷

Such efforts can only be complimented by Northern Ireland’s devolved housing powers (identified as being scaled to Northern Ireland in the mapping above). If housing powers were retained to the national level, a lack of competence in this area could *cut into* the devolved capacity for energy action in this sphere, including energy efficiency improvements and retrofitting, and thus act as a governance obstacle. Northern Ireland’s devolved planning powers (identified above) can also be interpreted as creating constitutional space in the sphere of fuel poverty: e.g., they can be leveraged conceivably to shape outcomes geared towards securing greater energy efficiency in building stock and associated obligations as part of the planning consents procedure.¹⁰⁸ In spite, then, of the *hollowing out* and *cutting in* concepts operationalised under the terms of the Energy Constitution, which significantly dent Northern Ireland’s overall capacity for substate agency, Northern Ireland is far from an impotent jurisdiction in the sphere of fuel poverty, and it is by no means compelled to passively follow an agenda set from ‘above’ at the national level under the terms of the Energy Constitution’s distribution of power capacities. Given this broad power remit, it is advisable that the Northern Irish governance institutions recognise their extensive capacities for agency in this area, with a view to engaging in progressive governance that is as *actively driven* as possible by the Northern Irish administration in the interest of mitigating regional fuel poverty. It has been noted above that the 42% fuel poverty figure that persisted for Northern Irish households in recent years has lately been significantly reduced. Research has highlighted that Northern Ireland’s major governance actors have a tendency towards passively following nationally-led energy policy programmes, and are subject to something of a culture of energy policy “inertia”.¹⁰⁹ Testing the extent to which the recent success in reducing the 42% fuel poverty figure was driven in practice by primarily national or primarily substate action is beyond the scope of this paper, however it is clear that the *capacity* to drive a progressive substate agenda exists in principle (as demonstrated here). It is to be hoped that these capacities are utilised and maximised in a thoughtful and strategic way by the Northern Irish administration in going forward.

¹⁰⁷ Northern Ireland operates an Affordable Warmth Scheme along these lines, see:

https://touch.nihe.gov.uk/index/benefits/affordable_warmth_scheme.htm accessed 27 April 2019

Issues, problems and solutions pertaining to energy efficiency and housing stock in the context of fuel poverty are treated in detail in Chapter 6 of Brenda Boardman, *Fixing Fuel Poverty: Challenges and Solutions* (UK: Earthscan, 2010), 125-166. Research has detected a problem in Northern Ireland where households suffering the worst fuel poverty rates may not necessarily fit the criteria for energy efficiency upgrades, see: Ryan Walker, Christine Liddell, Paul McKenzie, Chris Morris and Susan Lagdon, ‘Fuel poverty in Northern Ireland: Humanizing the plight of vulnerable households’ (2014) 4 *Energy Research & Social Science*, 89-99.

¹⁰⁸ In spite of certain tensions between energy efficiency obligations and targeted fuel poverty alleviation policies, UK Government has favoured energy efficiency obligations as a main policy for reducing fuel poverty; See further Jan Rosenow, Reg Platt, and Brooke Flanagan, ‘Fuel poverty and energy efficiency obligations—A critical assessment of the supplier obligation in the UK’ (2013) 62 *Energy Policy*, 1194-1203.

¹⁰⁹ Geraint Ellis, Richard Cowell, Fionnguala Sherry-Brennan, Peter A Strachan and David Toke, ‘Planning, Energy and Devolution in the UK’ (2013) 84 (3) *Town Planning Review* 397, 404; Thomas L Muinzer, ‘Warming Up: Northern Ireland’s Developing Response to Climate Change in the Context of UK Devolution’, (September/October, 2016) (96) *UKELA E-Law*, 19-22.

On the other hand, Energy Constitution theory also crystallises additional recognitions and qualifications. ‘Fuel poverty’ ranges beyond reasonably clear-cut issues of energy/fuel, including going beyond the already challenging issue of the pricing of fuel in the context of fluctuating energy markets. For instance, issues around health and age are raised. Research has found that fuel poverty has a tendency to negatively impact human health, with significant physical health impacts being detectable in children and infants, and notable mental health effects being detected amongst adults and adolescents.¹¹⁰ In terms of age more generally, research shows that the elderly tend to be especially vulnerable to fuel poverty.¹¹¹ Complex psychological drivers can also be operative. For example, Price, Brazier and Wang’s work shows that those who ‘feel’ fuel poor (subjectively) may or may not meet conventional objective fuel poverty standards; there can be some disparity between subjective feeling and objective income-to-energy affordability in this area (this should perhaps come as no surprise, given the technical nature of the objective measurement criteria, and the uncertainties in general that surround complex internal human responses and subjective psychology).¹¹²

Most particularly, however, given the nature of the constitutional powers discussed above, it is notable that (fuel) *poverty* connects with wider, additional complexities. These include issues involving levels of income, household expenditure, taxation, and, in sum, fundamental macro and micro market and income conditions and challenges that are both bound up with and that underpin the workings of the state’s broader national economy. With the main economic levers in the UK being scaled to the national level, including tax control (mapped to the national level above),¹¹³ Northern Ireland’s ability to deal autonomously with fuel poverty’s broader underlying economic challenges and contributing influences seems relatively weak. Christman has pointed out that a facility to shape the law in the area of social security is devolved to Northern Ireland¹¹⁴; given that income inequality is a significant driver of fuel poverty, this could afford Northern Ireland significant room to provide some relief to the fuel poor through this channel. However, substantial *cutting in* and *hollowing out* is at play here. Thus, Christman describes the devolved capacity for agency in this area as ‘notional competence’ that is ‘subject to the “parity principle”’,¹¹⁵ that is, the principle that parity between social security in Northern Ireland and the rest of the UK is to be encouraged, and where the UK-level Secretary of State is given a formal role in balancing the system with the appropriate

¹¹⁰ Christine Liddell and Chris Morris, ‘Fuel poverty and human health: a review of recent evidence’ (2010) 38.6 *Energy Policy* 2987-2997.

¹¹¹ Tracey O’Neill, Clare Jinks and Anne Squire, “Heating Is More Important Than Food” Older Women’s Perceptions of Fuel Poverty’ (2006) 20.3 *Journal of Housing for the Elderly*, 95-108.

¹¹² Catherine Waddams Price, Karl Brazier and Wenjia Wang, ‘Objective and subjective measures of fuel poverty’ (2012) 49 *Energy Policy*, 33-39.

¹¹³ Although dated now in relation to the UK’s contemporary policy landscape, insightful analysis of carbon taxes and their potential impact on aspects of fuel poverty provided by Brenda Boardman in 1993 remains useful in terms of the general principles under examination, see: Brenda Boardman, ‘Opportunities and constraints posed by fuel poverty on policies to reduce the greenhouse effect in Britain’ (1993) 44.2 *Applied Energy*, 185-195.

¹¹⁴ Ben Christman, *Moving from Cold Laws to Warm Homes: Energy Justice and the Law on Fuel Poverty in the UK* (Doctoral Thesis, Queen’s University Belfast, 2017), 234.

¹¹⁵ The principle is set down at NIA 1998, s.87(1).

Northern Ireland Minister.¹¹⁶ Christman also notes that Northern Ireland is constrained by substantial budgetary considerations in terms of how it administers its social security system, with the overall budget itself for Northern Ireland being set at Westminster.¹¹⁷ Thus he characterises these powers as a very narrow basis on which Northern Ireland might seek to act in the sphere of fuel poverty.¹¹⁸

More broadly, and perhaps somewhat paradoxically, it may be to some extent *desirable* that certain core aspects of the controls that might permit Northern Ireland and the other Devolved Administrations to better attend to these sorts of dimensions of the fuel poverty problem should be beyond the devolved regions’ immediate grasp (as they are at present, in the case of Scotland and Wales as well as Northern Ireland). This may be the case insofar as adjusting the Energy Constitution so that the devolved institutions can enjoy radical autonomy to act in the sphere of the economy could result in a lack of joined-up thinking that might distort or otherwise negatively impact the UK economy’s broader workings. This could arise where Northern Ireland, Scotland and Wales might seek to leverage their internal economic controls to benefit their own internal energy economies in a manner resulting in complex competitive conditions between the substate jurisdictions: devoid of a substantial overarching national-level balancing influence, this could generate complicated and potentially unforeseen ‘winners and losers’ across the broader UK economy, and, indeed, could conceivably intensify fuel poverty levels in certain regions.

The Energy Constitution paradigm also invites consideration of *rights* and *equity*. In the introductory Abstract to his important paper ‘Energy, Equity and the Future of the Fuel Poor’, Roberts notes that:

A warm and adequately-lit home is considered a basic need, together with access to energy-consuming appliances ranging from a fridge to a TV. An underlying tenet of sustainable energy is that such basic needs should be affordably met.¹¹⁹

Where one locates the conditions of the fuel poor in the context of equity in the manner that Roberts does, this is certainly an appropriate observation and conclusion (such basic needs *should* be affordably met). The Energy Constitution framework, however, suggests that one could perhaps go further here. Constitutions normally accord the public citizen with *rights*, and in the context of the UK’s uncodified constitution one normally turns to the Human Rights Act 1998 to find the major list of rights set out.¹²⁰ One finds here a *right to life*,¹²¹ a *right to freedom from forced labour*,¹²² a *right to a fair trial*,¹²³ and so on. The rights do not include a

¹¹⁶ See *Supra* n.115 (Christman) n.104, 234, including footnote n.889.

¹¹⁷ *Ibid* (Christman), 234.

¹¹⁸ *Ibid* (Christman), 234–235.

¹¹⁹ Simon Roberts, ‘Energy, equity and the future of the fuel poor’ (2008) 36.12 *Energy Policy*, 4471–4474, 4471.

¹²⁰ Human Rights Act 1998.

¹²¹ Human Rights Act 1998, Schedule 1 Article 2.

¹²² Human Rights Act 1998, Schedule 1 Article 4.

¹²³ Human Rights Act 1998, Schedule 1 Article 6.

right to energy / right to affordable sustainable energy, or equivalent. If Roberts is correct in construing sustainable energy as a basic need that should be affordably met – as he surely is¹²⁴ – then a *right to energy*, however it might best be phrased, should arguably be implied into / read into the UK’s Energy Constitution. Identifying and establishing an implied right in this way is not uncommon in terms of the way in which constitutional law often works. For example, recently in 2017 *Friends of the Irish Environment* brought a case before Ireland’s High Court where it was determined by the court that although the written Irish Constitution does not set out an explicit fundamental *environmental* right, such a right *can* be said to exist.¹²⁵ Thus, the judge, Mr Justice Max Barrett, asserted that:

Concrete duties and responsibilities will fall in time to be defined and demarcated. But to start down that path of definition and demarcation, one first has to recognise that there is a personal constitutional right to an environment that is consistent with the human dignity and well-being of citizens at large and upon which those duties and responsibilities will be constructed. This the court does.¹²⁶

Although, of course, the constitutions of Ireland and the UK differ somewhat in terms of their technical form and nature, it is certainly arguable along the same lines of general principle that an affordable energy-oriented right should be read into the UK’s constitutional rights framework in a similar way. This is something that the UK courts could explicitly clarify (or reject), as and when an appropriate court case begging the question arises. If it were to be accepted that such an implied right *does* exist, then the *right to (affordable) energy* must be interpreted as an operative feature of the Energy Constitution where the framework is applied to the UK. This would mean that the state has an emphatic rights-based constitutional duty to create conditions where fuel poverty will not prevent households from achieving adequate levels of affordable heat and electricity.

5. Conclusions and Policy Implications

This study has developed and applied an ‘Energy Constitution’ analytical framework in the context of fuel poverty, taking the UK as a case study in order to concretise the inquiry and honing in most particularly on Northern Ireland. The Energy Constitution model recognises the following:

This perspective... emphasises the need to appreciate the way in which law must be viewed within wider contexts, and instead of simple ‘doctrines’ we should think of the

¹²⁴ For more on the ethical assumptions pertaining to (in)justice underpinning a designation of ‘fuel poverty’, see Gordon Walker and Rosie Day, ‘Fuel Poverty as Injustice: Integrating Distribution, Recognition and Procedure in the Struggle for Affordable Warmth’ (2012) 49 *Energy Policy*, 69–75.

¹²⁵ *Merriman & Ors v Fingal County Council & Ors; Friends of the Irish Environment Clg v Fingal County Council & Ors* [2017] IEHC 695.

¹²⁶ *Ibid.* (per Mr Justice Max Barrett), at Paragraph [264].

‘Energy Constitution’ as being composed of a complicated spectrum of legal spatialities where jurisdictional boundaries are pluralistic, fuzzy and fluid. These circumstances are inextricably bound up with the multi-scalar complexities underlying the decarbonisation challenge, which in turn cannot be effectively isolated from pertinent legal frameworks.¹²⁷

It has been seen that divergent substate spatialities and regional differences exert influential forces on the issue of fuel poverty, and it has been highlighted that Northern Ireland had the highest rates of fuel poverty in the UK (42% of Northern Irish households in fuel poverty in 2011) until the most recent round of reporting established that a drop in these levels has subsequently occurred (a 20% drop to 22% for 2016, reported May 2018).¹²⁸ The analysis has clarified that Northern Ireland’s devolved institutions are possessed of a pronounced capacity to act in the sphere of fuel poverty within the setting of these fluid, multi-scalar conditions. The UK’s particular Energy Constitution has imbued the state’s devolved regions with divergent asymmetric powers, which interact in turn with inherent socio-spatial regional differences. In a system where the UK’s devolved institutions are at significant liberty to employ their devolved powers within their nuanced regional settings as they see fit in the interest of best serving their constituents, it is natural that variation should arise both in terms of practical governance approaches and in terms of fuel poverty mitigation outcomes.

Walker has noted in the context of a consideration of the microgeneration of heat and electricity that uncertainty surrounds the extent to which decentralised and distributed energy systems might remedy sweeping fuel poverty problems¹²⁹; it can be similarly difficult to assess the extent to which decentralised *governance* systems are useful in combatting the problem, as in the case of devolution, where devolved institutions, local authorities, and so forth have some inherent facility to play an important role in tackling the problem within the state’s devolved jurisdictions. Nevertheless, it should be stressed that multilevel governmental actors have an obligation to employ available powers to the best of their ability to redress fuel poverty, including key actors at the devolved level of governance. This is particularly the case insofar as research has demonstrated that the energy vulnerable have limited agency to reduce their own vulnerability in their own right.¹³⁰ Research has also shown that better regulation of domestic pricing structures can be a vital tool in reducing fuel poverty,¹³¹ again highlighting how it is not appropriate to place the primary onus for determining solutions on the energy ‘consumer’. Simshauser, Nelson and Doan believe that a complex reaction they describe as the ‘Boomerang Paradox’ occurs in the context of growing advanced economies: on one hand,

¹²⁷ *Supra* n.1 (Muinzer and Ellis), 1190.

¹²⁸ *AFPSR*, 2018, pp.84-85 (*Supra* n.7).

¹²⁹ Gordon Walker, ‘Decentralised systems and fuel poverty: Are there any links or risks?’ (2008) 36 (12) *Energy Policy*, 4514-4517.

¹³⁰ Lucie Middlemiss and Ross Gillard, ‘Fuel Poverty from the Bottom-Up: Characterising Household Energy Vulnerability through the Lived Experience of the Fuel Poor’ (2015) 6 *Energy Research & Social Science*, 146–154.

¹³¹ Kimberley C. O’Sullivan, Philippa L. Howden-Chapman, and Geoff Fougere, ‘Making the connection: The relationship between fuel poverty, electricity disconnection, and prepayment metering’ (2011) 39.2 *Energy Policy*, 733-741. This research centres on prepayment metering in New Zealand, but clearly holds lessons for the UK setting also.

such healthily growing economies serve to cause general household incomes to rise and the costs of electrical appliances to depress; but on the other hand, they simultaneously necessitate greater power grid capacities, serving in turn to create conditions for augmented fuel poverty.¹³² If their analysis is correct, it speaks to the theme of governmental actors and other appropriate regulatory bodies having an obligation to intervene on behalf of the public so that the poorest do not fall victim to these sorts of systemic forces.

The fuel poverty prognosis for the future in Northern Ireland had seemed bleak, but the recent reduction in levels from 42% to 22% of households in fuel poverty, while still not acceptable, is encouraging. It had been stated that:

If Northern Ireland retains a 10% threshold, ...fuel poverty rates are likely to increase rapidly in the coming years. This is because the majority of households in Northern Ireland who are not already fuel poor are clustered close to the 10% threshold. Falls in income and rising energy prices will move many tens of thousands of these households into fuel poverty. ...The net result is that churn around the threshold is likely to be dominated by people falling into, rather than moving out of fuel poverty.¹³³

These valid concerns have not been realised in the most recent reporting round, due to a lowering in average fuel prices and a general increase in income, combined with efforts from the devolved administration to improve energy efficiency in housing stock.

However, this research clarifies that it will be necessary for Northern Ireland’s devolved substate governance institutions to recognise that they have relatively extensive powers permitting them to engage with the problem of fuel poverty in a more targeted and robust manner than has hitherto been the case. This facility for agency brings with it in turn an obligation to leverage these extensive powers and the associated capacities for action under the Energy Constitution within the UK in order to drive solutions to these problems. UK fuel poverty was flagged by Bradshaw and Hutton as a challenge that was likely due to grow as far back as 1983¹³⁴; it is certainly high time key governance actors set their shoulder to the wheel of utilising their agency as a means of resolving the substantial levels of fuel poverty that continue to persist in Northern Ireland, and beyond.

More broadly, this study highlights a need for further targeted research that considers and investigates the extent to which the Energy Constitution model can be applied in wider international settings within states in order to elucidate aspects of fuel poverty policy and governance in countries elsewhere. It also highlights a need for additional research along Energy Constitution lines that examines and explores other major multi-scalar energy-specific policy challenges within states (i.e., problems that differ from fuel poverty), including

¹³² Paul Simshauser, Tim Nelson and Thao Doan, ‘The boomerang paradox, Part I: How a nation's wealth is creating fuel poverty’ (2011) 24.1 *The Electricity Journal*, 72-91.

¹³³ *Supra* n.69 (Liddell), 31.

¹³⁴ Jonathan Bradshaw and Sandra Hutton, ‘Social policy options and fuel poverty’ (1983) 3.3-4 *Journal of Economic Psychology*, 249-266.

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Thomas L Muinzer, Energy Policy (2020), Manuscript Version*

renewables deployment, energy efficiency augmentation, and so on.

TABLE, WITH KEY

SUBSTATE REGION	NORTHERN IRELAND	SCOTLAND	WALES	ENGLAND
FUEL POVERTY INDICATOR	10%* (i.e., household is fuel poor if required to spend more than 10% of income on adequate home energy)	10% **	10% **	‘Low Income high Costs’ method / LIHC
STATUTORY TARGET	None	Fuel poverty to be eradicated as far as reasonably practicable by November 2016 (target has been missed); Fuel Poverty (Target, Definition and Strategy) (Scotland) Bill proposes a statutory target of ensuring no more than 5% of Scottish households are in fuel poverty by 2040****	Fuel poverty to be eradicated as far as reasonably practicable by end of 2018	As many fuel poor households as reasonably practicable are to achieve minimum Fuel Poverty Energy Efficiency Ratings (specifically, a minimum FPEER rating of Band C by 2030, with interim targets of Band E by 2020, and Band D by 2025; see further <i>AFPSR, 2018 (Supra n.3) pp11-15</i>).
LAST REPORTING YEAR	2016	2017*****	2016	2016
LAST % OF HOUSEHOLDS IN FUEL POVERTY REPORTED ***	22%	24.9%	23%	11.1%

<p>TABLE: KEY</p>	<p>* In the NIHCSMP 2016, for the first time, Northern Ireland also reported on the ‘Low Income High Costs’/LIHC fuel poverty indicator used in England. The findings show that 7% of households were in fuel poverty under this definition and this compared with 11% in England (2015). The average fuel poverty gap for all Northern Ireland households was estimated at £436 (£353 in England 2015). This indicates that while the extent of fuel poverty under LIHC is less in Northern Ireland, the depth or severity is greater than in England (see <i>Supra</i> n.3, <i>AFPSR</i>, 2018), 85.</p> <p>** Note that Wales’ “methodology differs from Scotland in relation to the heating assumptions used”, such that the Scottish and Welsh indicators are non-additive: quoting <i>AFPSR</i>, 2016, p.24 (<i>Supra</i> n.3); reiterated at <i>AFPSR</i>, 2017, 72 and <i>AFPSR</i>, 2018, 84 (<i>Supra</i> n.3).</p> <p>*** Calculation of fuel poverty levels is an inaccurate science, albeit a useful one. For example, in discussing the English fuel poverty modelling outputs, the <i>FPMH</i> notes that it amounts to a ‘point estimate’ of the number of households affected, which involves certain ‘approximations’. Thus: “the modelling process requires numerous assumptions. For example, there is no information on the energy supplier and the tariff that a household uses. Instead, households are assigned an average price depending on the region that they live in and the way in which they pay for their energy (e.g. standard credit, direct debit, etc.)” Quoting <i>FPMH</i> (<i>Supra</i> n.5), 63.</p> <p>**** This Bill is before the Scottish Parliament at the time of writing.</p> <p>***** Scotland is the only UK jurisdiction which has published a more recent housing condition survey and thus its fuel poverty statistics are most up-to-date. The figures are contained in the report ‘Scottish Housing Condition Survey: 2017 Key Findings’ (Scottish Government, Directorate for Housing and Social Justice, December 2018)</p>
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Source: author’s Table and Key

Acknowledgements

The author thanks Anna-Marie McAlinden (*Mills Selig* solicitors), Dr Ben Christman, Professor Richard Cowell, Professor Geraint Ellis and Professor Christine Liddell (alphabetical order).

A preliminary outline of the ideas underpinning this research was presented at the *Energy Justice Research Retreat* conference at St Andrews University (Scotland), 26th – 29th June 2017. The outcome findings were presented in an energy section of the *Law and the Environment 2019* conference at University College Cork (Ireland), 11th April 2019.