



# Mission Led government or Radical Incrementalism for electricity and Net Zero?

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## ABSTRACT

Should we govern the energy transition through bold ‘Mission Led’ government or pragmatic ‘Radical Incrementalism’? A Mission Led approach has an emboldened state setting clear goals for transformational change. Radical Incrementalism calls for pragmatic interventions that can be implemented quickly and benefit millions. Here we explore how the UK government’s commitment to Mission Led government applies to domestic and local energy and energy regulation. We expose our collective ignorance about whether the current energy transition is fair, and describe how Net Zero policy risks making inequality worse. We argue that both Radical Incrementalism and Mission Led government could improve fairness and distributional outcomes from Net Zero, by adopting a ‘relational’ as opposed to ‘rational’ view of domestic energy consumers. This article is published in the thematic collection ‘The critical role of governance for decarbonisation at pace: learning the lessons from SHAPE research’, edited by Sarah Birch, Hilary Graham, Andrew Jordan, Tim O’Riordan, Henry Richards.

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## Introduction

The governance of the electricity system is opaque, technical, and beyond most people to engage in (Lockwood *et al.* 2017). For most of us, the only meaningful choice we can make is to ‘switch’ our electricity supplier between a list of similar companies (Kattirtzi *et al.* 2021). If we are socio-economically fortunate, we may own our homes and might get subsidised solar power, battery storage, electric cars, and heat pumps. For the rest of society, for whom these low-carbon technologies appear as ecological luxuries, there is no meaningful participation in Net Zero electricity (Ambrosio-Albala *et al.* 2020). Research from this team and others shows that the current direction of energy policy is making inequality worse (Hall *et al.* 2021b; Theininimulle *et al.* 2024). How should we approach the governance challenge of net zero if we are simultaneously concerned about both fairness and ensuring we hit our Net Zero targets as fast as possible?

Should we tackle this by making lots of small changes quickly? Or should we set a bolder agenda to transform the system? This question is a caricature of a current debate in UK politics between Radical Incrementalism and Mission Led governance.

### **Mission Led or Radical Incrementalism for domestic energy policy?**

In 2024, the UK Labour Party was elected on a platform of Mission Led government, which: ‘means raising our sights as a nation and focusing on ambitious, measurable, long-term objectives that provide a driving sense of purpose for the country’ (Labour Party 2024). Commentators (Pannel 2024; *The Economist* 2024) attribute the term to Mariana Mazzucato (2021), who argues that bold missions and expanded ambitions are needed of what the state could be and what it can accomplish. In Mazzucato’s formation, we must first set the mission and choose the direction for the economy, then redesign economic systems from there. A Mission Led approach is not to be hidebound by recent ‘small-state’ approaches to government, limited to correcting ‘market failure’. Mazzucato and Rainer Kattel (2024) characterise Mission Driven Government as one which ‘pursues ambitious, clearly articulated policy goals through myriad policies and programs based on experimentation’. How does this relate to ‘fairness in’ energy governance?

### **Fairness in mission led energy policy**

There are five ‘missions’ in Labour’s 2024 ‘Change’ manifesto, one of which aims to ‘Make Britain a clean energy superpower’, slashing fuel poverty, gaining energy independence, securing new jobs and (re-)imagining the role of the state in energy governance (Labour Party 2024). An important part of this plan is setting up ‘Great British Energy’ a state-owned company with remits to develop nuclear energy, and rapidly expand large-scale renewables; it will ‘own, manage and operate clean power projects’ (Department for Energy Security and Net Zero 2024a). The five ‘functions’ of this mission will be: project investment and ownership, project development, supply chain support, new nuclear projects, and the ‘Local Power Plan’.

Of these functions, four out of five address utility-scale energy generation. There is no doubt that establishing a state-owned company to ‘own, manage and operate clean power projects’ *is* a fundamental re-imagining of the political economy of the UK energy system. It challenges the economic assumptions underpinning the privatisation and liberalisation of the UK energy market, that private capital will compete to find the most efficient deployment of renewables given a sufficient market framework (Bell 2023). However, most of us may only notice the effects of this change over the medium to long term, as wholesale energy prices (perhaps) reduce and (perhaps) stabilise as they become less influenced by fossil fuel prices, namely gas (Appunn 2022).

The only ‘function’ that relates to how ordinary people experience the energy system in the short to medium term is the Local Power Plan, which aims to deploy 8GW of decentralised clean energy through shared ownership models between developers, communities, and local government. This function promises technical support and potentially investment, which may help accelerate local energy systems and shared ownership, but how this will be accomplished is not yet clear and will be defined over the coming parliament. As we set out below, some of the impacts of an unfair and unjust energy system are hitting people’s

lives now, fuel poverty kills thousands each year, and a populist backlash to Net Zero continues to simmer. Is there a case, then, to address people's problems as they exist now and make faster changes, which people will notice immediately and will rebuild trust in further change. Is there a case to be more incremental?

### **Can radical incrementalism make Net Zero fairer faster?**

Radical Incrementalism is a term adopted by Torsten Bell (2024) to describe how pragmatic changes to existing systems like benefits, housing, planning, and taxation can be implemented quickly, and benefit millions. Bell's argument is that these rapid changes will rebuild faith in the state's agency and culminate in transformational change to Britain's productivity and well-being. Bell describes the term as 'Radical to reflect **how far the status quo is failing us**, and incremental because lasting change is achieved by improving reality as we find it ...' (17). In Bell's formulation, pragmatic and positive changes to existing systems must be pursued first before setting the meta-narrative, instead letting it emerge through consistent engagement with how such systems operate now. As Bell argues, radical incrementalism means 'hundreds of policy choices, across different departments and layers of government'. In addition, Radical Incrementalism seeks change that can be implemented rapidly as a mechanism to build trust in a system of government in the UK many have lost faith in. However, unlike the 'Make Britain a Clean Energy Superpower' mission, radical incrementalism in net zero energy policy is much harder to spot, it leads us to ask what is radical, about different types of net zero policy, and what is simply 'incrementalist'?

We caricatured the Mission Led versus Radical Incrementalism debate purposefully. In practice, Radical Incrementalism cannot proceed without some guiding principles for the future of the energy system and Mission Led approaches will be unable to ignore the regulatory unpicking needed to support larger change. In this paper, we explore how each approach to governance challenges (or leaves unchallenged) deeper assumptions that persist in policy, of what is fair for energy consumers, and what domestic energy policy should be.

### **Finding and analysing radical incrementalism and mission led energy governance**

The remainder of this discussion paper is structured in four sections. First, we respond to Bell's call to 'recognise how far the status quo is failing us'. This discussion paper argues that current Net Zero governance is failing us because it is often regressive. Poorer people and whole geographies are (probably) losing out, while more affluent households benefit from Net Zero incentives and technologies. It is failing us because, without intervention, it is likely to widen the gap between rich and poor rather than addressing it. We then 'pause for theory', because the 'radical' in radical incrementalism, and the hope of mission led governance, is that they can both identify and deal with some of the underlying assumptions that set us on this dysfunctional route to Net Zero in the first place. Here we identify the challenge of overcoming 'rational actor' assumptions for energy policy and propose a 'relational' alternative.

In the second part of this paper, we present two types of energy intervention aimed at making for a fairer transition to Net Zero, one a Radical Incrementalist intervention seeking to provide solar power to blocks of flats, and one a Mission Led response to the failure of the British retail energy market to deal with fuel poverty. We show how each is affected by the ‘rational’ assumption about energy consumers, and how it stands to challenge this status quo.

In the final section, we explore the options for relational energy governance and what that might mean for both Mission led and Radical Incrementalist energy policy. Our goal is to challenge both Radical Incrementalist and Mission Led approaches to engage explicitly with relational understandings of people and place, tackling some of the root causes of energy inequality and system failure.

## Is Net Zero governance failing us?

As we reach deeper into electricity system decarbonisation, we will depend more and more on consumer participation and engagement (National Grid ESO 2024). This means energy policy must reach into people’s daily lives and construct incentives that will drive flexibility, fuel switching, and the adoption of ‘smarter’ energy tariffs. As such, we need a good grasp of how these policies and incentives will affect different people. Are they fair? Are they leading us to a ‘Just Transition?’ (Jenkins *et al.* 2016; McCauley *et al.* 2013; Wang & Lo 2021).

We are concerned that the answer is currently ‘we don’t have good data, but we don’t think so’. For example, Xinxin Wang and Kevin Lo find ‘sophisticated empirical studies on energy justice are lacking’. Our own work shows it is possible to construct quantitative distributional analysis of who is winning and losing from Net Zero energy policy; but in doing this work we also noticed a remarkable lack of other work attempting to quantify and empirically explore whether the Net Zero transition is delivering positive outcomes across society (Owen & Barrett 2020; Owen *et al.* 2023). This supports Michel Zimmerman and Steve Pye’s (2018) findings that distributional impacts are routinely under-explored in ex-ante energy policy making (HM Treasury 2022). In a brief review for this study, the authors explored the impact analysis undertaken for two government schemes to encourage the energy transition: the Boiler Upgrade Scheme (Department for Business, Energy and Industrial Strategy 2022) and the Smart Export Guarantee (Department for Business, Energy and Industrial Strategy 2019). We found distributional justice analyses limited to short qualitative paragraphs, even when both schemes identify the risk that low-income households could be excluded.

Some evidence (Collier *et al.* 2023) suggests high income and home ownership do not predict uptake in one area of Net Zero policy (feed-in tariffs), but there is very little analysis in the public domain of the justice impacts of UK energy policy, particularly using real as opposed to modelled data. Our study, and others (Balta-Ozkan *et al.* 2015; Bridgen & Robinson 2023; Tidemann *et al.* 2019; Zimmermann & Pye 2018), represent some of the few attempts to evaluate the justice outcomes of energy policy. In sum, however, we find there is

a serious data gap in understanding whether UK energy policy is indeed ‘fair’ or ‘just’. Very little evaluation is being undertaken systematically for a government Net Zero portfolio that runs into the billions (Department for Energy Security and Net Zero 2024b).

While we are ‘not sure’ who wins and who loses from specific energy policies, we have a better grasp of the poor distributional outcomes in the British retail energy market.

Britain is one of a handful of countries that have opted to fully privatise and liberalise retail supply to domestic customers (Christophers 2024). While some point to the role of active consumers becoming very effective early adopters of decarbonised home technologies, others have demonstrated that this market is achieving poor outcomes for inactive consumers (those who do not switch supplier). Inactive consumers are penalised for disengagement; the price consumers pay is tied to a volatile fossil fuel price, which precipitated a £37 billion taxpayer-funded bailout across 2021/22; new suppliers chasing active consumers (those who switch regularly) must offer tariffs on such tight margins that many fail and consumers are placed on default tariffs; satisfaction in the market by consumers is at an all-time low; and the most vulnerable households have built up over £3 billion of unfair and unserviceable debt (Bell 2023; Dawson *et al.* 2023; Lord 2023; Ofgem 2024c; Quadrangle Research Group 2023).

Are we comfortable with this trade-off between incentivising innovation at one end of the market while living with disadvantage at the other? In a previous contribution, the authors highlighted how the trend towards these smarter, more involved energy contracts is likely to benefit much more affluent and engaged households; and that lower levels of income, education, and trust in the system discourage some social groups from adopting smarter retail energy contracts (Hall *et al.* 2021a). Indeed, only 16 per cent of people conform to the kind of engaged, resource-rich, high-trust characteristics that predict uptake of smart energy tariffs (Hall *et al.* 2021a).

Without intervention, those with existing socioeconomic advantage may capture most of the benefits of the clean energy transition, leaving others behind in expensive ghettoised forms of energy supply (Graham *et al.* 2024; Hall *et al.* 2021a). Others have observed similar dynamics, suggesting that the smart and digital energy contracts of the future are likely to have very poor justice outcomes (Campbell 2023; Gaur *et al.* n.d.). In a recent contribution, which went beyond energy systems alone (Theminiulle *et al.* 2024), the justice dynamics of Net Zero governance were explored over six areas of daily life. The work showed that in each area, Net Zero policy has the potential to make life worse for those already experiencing disadvantage.

Why are we here? Why are both our individual energy policies and our retail energy market tending towards a widening of inequality? To answer this question, we need to understand the underpinning assumptions of energy market creation and regulation and the role government has imagined for itself in the energy system.

## Pause for theory: The ‘rational’ consumer, the inactive consumer, and fixing ‘market failure’

In this section, we briefly cover the ‘rational actor’ theoretical underpinnings that both helped establish a competitive market for retail energy, and that keep government energy policy to date focussed too much on correcting for ‘market failure’. We then set out how each might benefit from moving to relational as opposed to rational expectations of domestic energy consumer behaviour.

### The ‘rational’ consumer, the inactive consumer, and fixing ‘market failure’

We argue that one reason for the blindness to inequality and marginalisation is the foundational conceptualisation of the energy ‘consumer’ in marketised energy policy. For retail energy markets to work, the end user must be cast as a utility-maximising or at least satisficing individual (Helm 2004), who either enthusiastically enters the energy market seeking the best deal based on a set of known, calculable preferences (Defeuilley 2009) [or] they are enticed into the market to discover these preferences and find a better deal (Littlechild 2009). The last two citations also characterise a running debate on what constitutes a success in domestic energy retail markets. Is it switching rates? Is it driving innovation? Is it reducing price anomalies, so the price tends towards marginal costs? Very rarely, though, does this debate consider what is ‘fair’.

The Competition and Markets Authority (2016) investigation into the British energy retail market found incumbent utility firms were routinely overcharging customers to the tune of £1.4 billion to £2 billion in 2015 or 4 to 9 per cent of market size, and with particular detriment to those on prepayment meters who tend to be on lower incomes. Proponents of retail energy markets responded by questioning the methodology, but not the overall finding that inactive consumers were paying more. The proponents of retail markets suggest this is normal and possibly even desirable: ‘price discrimination could be an efficient means of sharing costs rather than of securing excess profit: that is, a “two-tier market” with active customers paying marginal cost and less active customers sharing overhead costs could be the outcome of a competitive market’ (Littlechild 2015).

The problem we find with debate on the efficacy of retail energy markets is that it very rarely investigates *who* wins and *who* loses, what their socioeconomic characteristics are, and what kind of impact, for example, a £50 overcharge might have on a fuel-poor family compared to an affluent professional home. This was a substantial enough problem before 2020 when the CMA investigated the market, but in 2024 onwards it should become core focus of energy policy, given the potential for Net Zero to exacerbate these inequalities as ‘active consumers’ can equip themselves to compete further in the energy market of tomorrow and ‘less active consumers’ bear more ‘overhead’. The retail energy market therefore requires a much better understanding of inactivity: who is inactive and why?

When we consider the specific policies that government makes to steer the energy system, we find a similar ‘faith in markets’ narrative that limits the scope of government intervention. The individual energy policy that governments



make to steer Net Zero is imagined in response to ‘market failure’; not only in the retail energy market but in the market for home heating technologies, the market for solar power, etc. For example, these markets struggle to price and capture the negative externalities of conventional heat technologies (that is, air quality and GHG (greenhouse gas) impacts), so government action is needed to incentivise households to purchase heat pumps (Department for Energy Security and Net Zero 2023). Across government, each regulatory proposal must complete an Impact Assessment where, as a primary element of the ‘rationale for intervention’, civil servants must describe where there is a ‘market failure’ which policy is to address (HM Government 2024).

While some might frame attempts to fix market failure as ‘Radical Incrementalism’, we think it is not. We would call this simply ‘incrementalism’, as it contains no recognition of the wider failure of the system or the structural conditions and assumptions that lead to failure. The challenge is more explicit in ‘Mission Led’ governance as, Mazzucato & Kattel (2024) argue that the public sector needs to overcome this restriction, ‘the less we believe that governments can do anything other than fix market failures, the less we will invest in the public sector’s broader potential’. How, though, are we to overcome a culture of ‘market failure’ governance, unless we start from a different theoretical place than well-functioning competitive markets with rational, active consumers and minimal state intervention as the ideal?

### **From rational to relational, a transformative step for energy governance?**

The authors of this paper are proposing that energy consumers (all consumers really, but for this case we will stick with energy) are relational as opposed to rational actors. Relational economic sociology argues that markets are constituted of social relations: relations of trust, friendship, power, and dependence, which have moral and emotional qualities (Ambrosio-Albala *et al.* 2020). This is in opposition to the methodological individualism of the neo-classical school, where ‘rational’ actors make decisions on how they participate in the energy market without reference to any social or shared meanings Miyamura (2020). The authors have recently concluded a project exploring the relational sociology of energy efficiency retrofit in the UK (Middlemiss *et al.* 2024). Our work challenged the dominant conception in UK energy policy around retrofit: that market failure for energy efficiency could be solved by a price incentive.

We worked with a relational economic sociology based on the work of Viviana Zelizer (2021), which demonstrates the role of emotion, trust, and power in economic decision-making. We found the concept of *relational work* particularly instructive for understanding trust and participation in Net Zero transitions. Zelizer (2012) argues that all economic decisions are preceded by ‘relational work;’ where the individual makes sense of the potential transaction based on existing social relations with other individuals, technologies, institutions, and identities. Both Zelizer and Charles Tilly (2006) stress that relational work leads to the creation, negotiation, and formation of ‘relational packages’, key building blocks for interpreting economic action. These relational

packages will define the kind of economic transactions people deem appropriate; whether energy-efficiency retrofit, for example, fits with their relational package around spending on the ‘home’ or whether it sits in another relational package around, for example, climate action. Nina Bandelj (2020) further elaborates how relational work is *work*: it requires the expenditure of effort to accomplish a goal. Relational work can occur at micro-level within households, but is also present between individuals and organisations/institutions.

For our purposes, this means that as a person first engages with ‘Net Zero’ decisions, such as which energy tariff to choose or whether to apply for some incentive offered by UK energy policy, they will first undertake relational work to establish the transaction. This will include forming or drawing on ‘distinctive social ties’: connections among individuals or groups involved in the economic activity and their ‘negotiated meanings’. One recent study found that how a new energy tariff choice enters one’s life is a strong preference driver: for example, whether a friend recommends an energy tariff as opposed to a regulator or local authority (Watson *et al.* 2024).

If lower-income or specific geographical communities are not participating in Net Zero, we need to know, because to accelerate participation we need to build institutional trust through relational networks and relational work. With reference to Figure 1, and our wider discussion on the data gap for Net Zero participation, if working-class suburbs of Grimsby have no solar power, battery storage, electric vehicles (EVs), or heat pumps, no experience of smart tariffs and no engagement with Net Zero, relational networks of trust cannot be built. If hardly anyone in Blackpool has retrofitted a home for energy efficiency, then how will people relate to ‘Net Zero’ but through the media they consume. It matters where Net Zero comes to ground and it matters who with.

What might energy policy look like through the lens of relational economic sociology? If we are no longer dealing with atomised individuals in competition over price but instead with people who live in communities and speak with each other and trust or distrust different institutions; people who make gifts to each other, volunteer in their community, and make relational packages to understand what new transactions around Net Zero mean to their lives?

## **Incremental and/or Mission Led Net Zero governance for domestic Net Zero**

In this section, we set out two examples of Net Zero/energy policy and governance that fit within the radical incrementalist and mission led paradigms, for each we question how and to what degree they challenge the rational actor assumption of energy consumers and whether they can be best understood through a relational lens.

### **‘Solar for Flats’: Radical Incrementalism for Britain’s flat dwellers**

In recent years, there has been an expansion in local energy and local energy business models based on the premise that, as smart meters and distributed



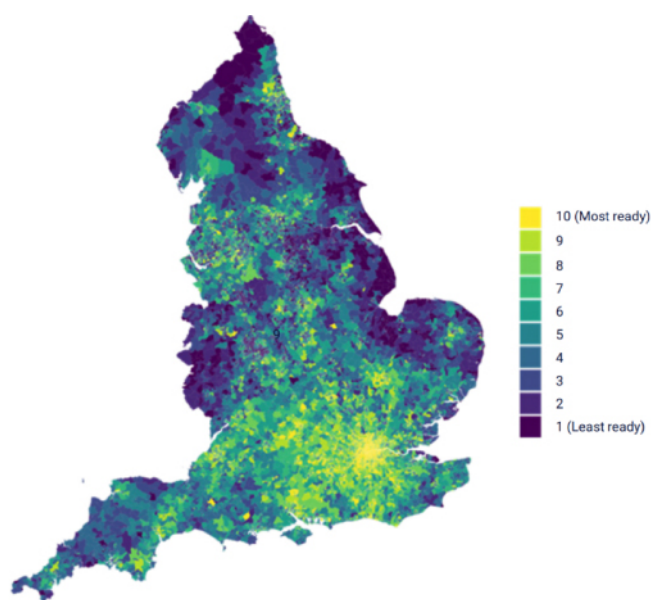


Figure 1. A heat map visualising which areas are 'ready' for a Net Zero transition and which areas risk being 'left behind' (Source: Theminiulle *et al.* 2024).

energy resources like solar power, heat pumps, battery storage, and EVs get cheaper, they will be able to form Smart Local Energy Systems (SLES) which optimise these assets together. A great deal of analytical effort and innovation funding has been expended on trying to make SLES constellations work in the UK (Ofgem 2021; UKRI Innovate UK n.d.). Most of these trials retain the conception of the energy consumer as a utility maximiser wishing to become their own energy micro-entrepreneur (Community Energy England 2024; Laes & Bombaerts 2022), ready to deploy their smart energy systems towards individual gain. This cannot work for people in certain types of dwelling or tenure, who do not own the objects that allow for SLES. More recently still, innovation funding has started to take account of these issues and multiple trials have been established serving lower-income homes.<sup>1</sup> Some of these have progressed under innovation funding trials and others have been accommodated by Ofgem's regulatory sandbox service, which investigates the changes needed to energy market regulations to allow innovation to happen.

The example of radical incrementalism we want to highlight here is where Emergent Energy, a UK company, worked through the supply licensing regime and Balancing and Settlement Code to discover where and how a solar microgrid could be used to ensure people who live in flats could benefit from rooftop solar energy. England and Wales has over 5.4 million flats (Office for National Statistics 2023) and hitherto there have been few opportunities for the occupants of flats to benefit from rooftop solar energy.

<sup>1</sup>For example, see Electricity North West (2024).

This is largely because energy system regulation viewed flats as though they were any other home with a meter, beyond which energy was being transacted over a public network. Regardless of them living in a communal building, the energy system treated them as atomised household units without proximity to each other (methodological individualism). There was no space in the regulations to recognise the opportunities of multi-occupancy buildings for solar rooftops, or any recognition that these housing types were virtually absent from the energy transition. This was until a company was driven to expand access adopted ‘Radical Incrementalism’<sup>2</sup> to solve the problem.

Emergent Energy worked with the regulator Ofgem (2020) through the regulatory sandbox process, and with Hackney Light and Power (Hackney Government 2024) to understand the barriers to provisioning a microgrid and metering and billing infrastructure to flats to enable residents in Hackney to ‘self-consume’ solar energy generated on their block. Critically for such tenants, there would be no up-front capital involved. The council would own the equipment and repay the capital through energy bill payments of the residents subscribing to the new solar tariff. Current expectations are that the scheme will pay for itself while enabling the average consumer to achieve a 20 per cent bill saving.

To allow this trial to take place, however, Ofgem needed to grant Emergent derogations from the License Condition 13A.4 of the Electricity Distribution License and temporary consent not to comply with License Condition 14 B to ensure that charges could be levied appropriately for the different users of the new microgrid (Ofgem 2023). Emergent also required a sandbox derogation from several metering codes of practice found in the Balancing and Settlement Code (Ofgem 2022). This ensured that the customers on the metered network gained better access to third-party suppliers. At the time of writing, Hackney Council has just closed the Green Investment round 1 offer (August 2024) and raised £600,000 through community municipal bonds (Davis & Cartwright 2019), which are expected to be used for extending the Emergent scheme solarising council-owned flats (Abundance 2024).

The derogations granted were both aimed at ensuring that competition between suppliers could still take place, and that the ability to accurately meter and charge all users for discrete elements of the system, such as the exempt distribution network, could be retained. By incrementally unpacking which system codes and licences were affected, Emergent and Ofgem were able to identify derogations allowing the trial to take place and then work towards adopting these derogations into the licensing regime so that others could replicate the model.<sup>3</sup>

The experience of Emergent Energy and Hackney Light and Power shows that, to enable a ‘radical’ shift in the opportunities for Net Zero participation in the UK, specific attention needs to be paid to energy system regulation and governance. Where most individuals can only engage with solar on an atomised

<sup>2</sup>The term Radical Incrementalism is used by the Chief Executive Officer of Emergent Energy, who first used it in an associated workshop to describe their approach (personal communication 2024).

<sup>3</sup>Though at the time of writing, this process is ongoing.

‘entrepreneurial’ basis by buying solar for their own home and trading surplus, the Emergent and Hackney model makes space for collective participation in a communally (in this place municipally) owned asset, *and* it extends that opportunity to geographic and socio-economic groups that have hitherto been marginalised. This means the residents of flats in Hackney and, as the model proliferates, across Britain can start to build *relational packages* around positive, locally meaningful engagements with Net Zero technologies. This model may be extendable to other dense forms of mixed-tenure dwellings like terraces and central urban areas, which have historically benefitted much less from incentives such as the feed-in tariff. This may be the next incremental step in extending the benefits of Net Zero to marginalised or excluded communities which, in Torsten Bell’s formulation, can be done quickly with visible positive results on people’s daily lives.

Note two specific things about the work done here: First, many of the changes to regulation that were needed were made to retain the function of competitive retail energy markets, which are already seen to be failing lower-income disengaged homes. Second, Emergent Energy went beyond standard ‘market-correcting’ energy policy, which is blind to people and place, and established its own relational approach to include a specific geographic and socio-economic community in the energy transition. If Radical Incrementalism is to retain its ‘radical’ element, it needs to continue to pursue change that surpasses ‘market-correcting’ energy policy and Emergent’s use of the approach is a good example.

### **Universal Basic Energy, a ‘Mission Led’ energy policy**

If Mission Led governance means orienting economic systems to public purpose, the experience of low income and vulnerable consumers in the retail energy market should be high priority. As of 1 July 2024, National Energy Action estimates that the number of households in fuel poverty is close to 5.6 million, each unable to afford sufficient warmth (Middlemiss 2017; National Energy Action 2024). Cold homes kill people; excess winter deaths attributed to cold homes and fuel poverty range between 3000 and more than 9000 people per year (E3G 2018). For those who survive, there are a range of physical and mental health effects resulting from fuel poverty that place significant additional stress and costs on health and social care services. There are multiple policy packages that aim to reduce the burden of energy bills on the poorest homes, but even including the impacts of these policies, the average fuel poverty gap (the increase in incomes or decrease in fuel bills needed to escape fuel poverty) was £417 per fuel-poor home or £1.3 billion in aggregate in 2023 (Hinson & Bolton 2024). With energy poverty so entrenched, there is some doubt that energy policy alone can make up for other systemic inequalities (Middlemiss 2020).

Emerging in dialogue with the wider debate on ‘Universal Basic Income’ (Bidadanure 2019), the idea of Universal Basic Services guarantees everyone a series of public services, such as health, shelter, food, education, information, access to legal services, and transport. These together are argued to provision a basic social floor for everyone (Portes *et al.* 2017). Extending the notion to

analyse energy specifically, the New Economics Foundation proposes a ‘National Energy Guarantee’ where a minimum essential volume of energy is provided free, and a premium is applied to higher levels of usage (Chapman & Kumar 2023). Advocates of the National Energy Guarantee describe it as a dividend on our national mission to Net Zero and are explicitly targeting Labour’s clean power mission as a way into Whitehall energy policy (Taylor 2024).

The idea works by a price premium being applied at the top end of household energy consumption, which is designed to pay for the Universal Basic at the bottom. This is argued to have the dual advantage of lifting millions out of fuel poverty while incentivising energy-efficiency improvements for those who are able to pay. The NEF (National Energy Foundation) analysis suggests an average gain of £250 among the poorest 30 per cent of households, which is 60 per cent of the existing fuel poverty gap.<sup>4</sup>

The notion that energy sufficiency could be provisioned via a Universal Basic Energy model has to assume that the higher users will be locked into the supply relationship and unable to switch away to a different tariff structure. While we have stated that the UK is an outlier in having a fully competitive retail energy market, evidence from countries around the world that have implemented rising block tariffs (similar structures to a National Energy Guarantee) shows that positive effects on affordability are common (Foster & Witte 2020). Many of the counter-arguments to Universal Basic Energy and rising block tariffs are based on experience from outside Europe or are theorised not observed (Chapman 2024). There is, in short, a powerful distributional case for adopting a Universal Basic Energy programme.

While the work of NEF presents a compelling case, the implications for energy system governance are profound. To achieve a National Energy Guarantee, a cornerstone of UK energy policy would need to be altered: retail market competition. The ability of a domestic consumer to switch supplier is enabled by the Electricity Act 1989 and held in the licensing regime administered by Ofgem (2024a). The standard licence conditions contain provisions for all domestic energy consumers to make and end supply contracts with licensed parties. The current standard time for being able to switch energy supplier is 5 days (Ofgem 2024b).

Implementing a Universal Basic Energy programme would mean re-casting the energy retail market. A rising block tariff model assumes that prices are set the same for everyone. Therefore, the notion of retail energy utilities competing on cost would have to be replaced. This would mean reconstituting the entire systems architecture, from who is responsible for metering and billing, to how network costs and charges are recovered, how the system is balanced and settled. From a distributional justice perspective, the National Energy Guarantee scheme is persuasive, but from a system governance perspective it would mean a seismic re-organisation of the system. From our relational economic sociology perspective, this too would require a whole new set of social relations to emerge

<sup>4</sup>Although each figure was produced at different times during a period of substantial price volatility.

around energy as an entitlement as opposed to a bought commodity, the energy system as a tool of social redistribution as well as one of needs provision.

Finally, as we move to a market where *when* we use energy can be as important as how much we use, the rising block tariff model would have to evolve to accommodate shifting price signals, which it is unsuited to doing. Once again, the trade-off between allowing innovation to thrive at the ‘engaged’ end of the market and the distributional outcomes of this becomes paramount. Enabling low-income homes to benefit from smart tariffs must become a priority for UK retail energy market policy.

## **Challenging both Radical Incrementalism and Mission Led governance to treat domestic consumers as relational**

In this discussion paper, we have set up two extremes of energy governance between a Mission Led and a Radical Incrementalist approach. We have pointed to a substantial data gap in understanding just how much the status quo of Net Zero governance is delivering or failing to deliver a just transition. We have shown there are real tendencies within the status quo of Net Zero governance to compound existing inequalities and create new ones. We have argued that these inequalities are in part due to system regulation founded on assumptions that consumers are rational, utility-maximising micro-entrepreneurs, when instead they are relational decision-makers, who make and remake different meanings of what Net Zero or low-carbon technologies/institutions mean to them in their daily lives. We have argued that in areas where Net Zero governance is failing to make progress, people may construct negative relational packages around Net Zero. We have then set out two forms of energy policy/governance, which characterise two ends of the relational–Mission Led spectrum.

In the case of ‘Solar for Flats’, we have shown that there are opportunities within existing system codes and licences to include new, hitherto-excluded communities in the energy transition; that identifying modest changes to system regulation can make space for transformational business models that could serve millions in their daily lives. We have also suggested that by building on these regulatory changes even more communities might be recruited into solar generation, and possibly into battery storage and electrification. If we work with our relational definition of energy consumers, we might also propose that these models might lead to closer engagement with the existing energy retail market and lead communities to consider the smarter tariffs and energy services currently thought to benefit more affluent groups. By making incremental changes such as these, we might retain some of the foundational design principles of the UK energy system and yet make Net Zero governance fairer, greener, and more inclusive.

On the other hand, we have also used relational economic sociology to challenge the foundational principles that justified that creation of a retail energy market in the first place. If the foundational assumptions are wrong, and

consumers are relational as opposed to rational actors, does this not require a re-think and reform of the retail energy market, so it does reflect how people behave and make decisions? If this is the case, then more Mission Led energy policy like Universal Basic Energy might be an important correction to structural injustices that will only persist in different forms under a more incrementalist approach. Both approaches need to be bold enough to challenge fundamental theoretical assumptions about domestic consumer behaviour that underpin the retail market.

The ‘Local Power Plan’ element of Labour’s clean energy mission has still to be defined. As currently formulated, there is a clearer leaning toward ‘Radical Incrementalist’ options of expanded distributed generation than a re-casting of the retail market. If more clean power is going to be extended to local communities, then there are some real priorities for the Local Power Plan to address than can be pursued now:

- (1) Close the data gap: we need to know who is winning and losing from Net Zero energy policy, so we can design interventions that are more inclusive. This is critical whether one does so incrementally or not.
- (2) Select geographic or socio-demographic communities that are left behind in the Net Zero transition and use examples like Solar for Flats to re-think the relationship between building owners, energy suppliers, and energy infrastructure that will suit those specific communities instead of a theorised rational ‘consumer’.
- (3) Design energy policy specifically for the benefit of different groups of consumers and their social relations. This will mean creating incentive structures and regulatory space for solar energy on terraced housing, for electrically heated homes in cities, and it will mean pro-actively enrolling left-behind communities on smarter energy tariffs and ensuring they benefit from flexibility and digitisation.

There are promising moves in the Local Power Plan to make changes for the better that people will notice quickly in their daily lives. They will be much more powerful if we take inspiration from Mission Led governance to re-imagine the role of the state, and pragmatic direction from Radical Incrementalism to do so for the benefit of real communities in short order.

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