



Resource efficiency and the imagined public: Insights from cultural theory



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ABSTRACT

Resource efficiency initiatives seek to moderate how water and energy are used at a domestic level. They can address local and regional issues of resource supply while simultaneously reducing carbon emissions and water in-security, hence enabling both mitigation of and adaptation to climate change. Although they form an increasingly important part of our resource governance landscape, these interventions have received relatively little academic scrutiny to date. Utilising the concept of the 'imagined public' as a lens through which to apply an interpretive version of Douglas' cultural theory, this paper presents a novel conceptual framework to analyse the governance of such initiatives. The framework distinguishes between interventions based on assumptions about potential householder participants, 'the imagined public', which are reflected in the initiatives' design and implementation. The framework is applied to compare three initiatives located in the increasingly populous, but water-scarce, county of Kent (south-east England). The analysis reveals whether and how institutional objectives are met; it also describes the interventions' environmental and socio-political contributions, and uncovers how learning occurs between initiatives.

This research suggests that whilst the target interventions differed in their assumptions, design and implementation, they all made a small contribution to more sustainable resource governance. Fundamentally, the initiatives' impact on resource consumption was limited due to a shared technological approach and a narrow framing of their household participants. Moreover, while all three initiatives demonstrated aspects of cumulative institutional learning, the closer involvement of resource providers and a modified funding framework are suggested as a means to engender the transformative change required for achieving greater resource efficiency.

The paper concludes that the proposed conceptual framework provides a useful means to analyse, map, and enhance resource efficiency initiatives. Further, it is argued that the framework also has wider application in addressing broader environmental and social governance challenges.

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1. Introduction

Domestic resource efficiency initiatives are recognised as an increasingly important part of the environmental governance landscape (Guy et al., 2001). In seeking to moderate and adjust household demand for water and energy, they can address local and regional issues of supply capacity. They can also help to reduce

household carbon emissions and water insecurity, mitigating climate change and enabling adaptation. Traditionally, efficiencies in supply systems have been supplemented by the installation of technologies within the home, for example, roof insulation and low-flow taps. These technical measures continue to play an important role in resource governance, through a combination of regulations (e.g. Stationary Office, 1999) and information provision for optimal technical use (e.g. WRAP, 2010). Since the early 2000s however, policy advice on domestic resource demand management (e.g. OECD, 2002; Sustainable Consumption Roundtable, 2006; OFWAT, 2011) has emphasised that changes in consumer behaviour need to supplement technical improvements. Underpinned by economic and psychological models of human action, such behavioural approaches usually aim to prompt resource efficient behaviour by raising awareness of wasteful habits,

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appealing to peoples' value-sets, emphasising individual (primarily economic) benefits, and seeking to influence the context in which household decisions are made (Chatterton, 2011). Critiques suggest that these techno-rational interventions frequently fall short of initiative organisers' anticipated domestic resource demand reductions (Chappells and Medd, 2008; Macrorie et al., 2014).

More recently social practice theorists (SPT) have claimed that there is a need to better understand how water and energy intensive practices (e.g. power showering, central heating usage) develop, are reproduced, and can potentially be transformed, in order to encourage more sustainable domestic resource governance. SPT-based interventions can be both more holistic, (e.g. including manufacturers as well as users), and more targeted (addressing only relevant users) (Shove et al., 2012; Pullinger et al., 2013; Spurling et al., 2013), than either technological or behavioural approaches. Whilst offering a more sociologically, politically and infrastructurally mediated approach to resource governance than 'techno-rational' demand management (Guy and Shove, 2000), practice theory is yet to have a major impact within policy or industry.

When considering the mechanics of domestic resource efficiency, minimal discussion has taken place regarding the specific shape of practitioners' interventions. For instance – who runs initiatives, how are households identified and contacted, what are the intended modes of public participation, and how is success monitored? Yet, these factors impact profoundly on people's experiences of an intervention, as well as on the initiative's operation and outcomes. As we contend in detail below, the design, implementation, monitoring and management of resource governance initiatives communicate implicit understandings about the nature of 'normal' behaviour and the relative resource-related roles and responsibilities of the public and of governance organisations. Constituting "the small 'p' politics" of an intervention, these implicit communications are made both to the public, and to other practitioners. By identifying and analysing these implicit communications associated with resource efficiency initiatives, different routes towards sustainable resource governance may be demonstrated, and their relative merits debated.

Consequently, the objective of this paper is to develop and use a framework for investigating the 'small p' politics of activities undertaken within three linked household resource efficiency initiatives. To achieve this analysis we draw on two conceptual tools.

First, we use ideas about the 'imagined public', originating from research on expertise and lay knowledge (Maranta et al., 2003), and applied to the field of renewable energy (Walker et al., 2010). As suggested by Gordon Walker and colleagues:

'[T]he potential influence of public subjectivities on socio-technical change is realized not only through moments of active participation and protest, but also through 'the public' being imagined, given agency, and invoked for various purposes by actors in technical-industrial and policy networks' (Walker et al., 2010: 931).

Hence, renewable energy professionals' ideas about public reactions to potential energy projects create a phantom actor, 'the imagined public', who have "agency and political significance" and are "available to be invoked in . . . decision-making processes" (*ibid.*: 933). In the same way, we suggest, the organisers of domestic resource efficiency initiatives imagine the public, for example, in determining whether when and how water and energy should be conserved. Moreover, this imagined public shapes resource professionals' practices, for example, in the selection of localities suitable for retrofit initiatives, in how resource demand management interventions are designed, and in how

communication with householders occurs. These assumptions and imaginings about the public are therefore pivotal in identifying and shaping the governance approach adopted for resource efficiency initiatives. Ultimately, they also determine the outcomes and perceived 'success' of such interventions.

Our understanding of imagined publics is positioned through Mary Douglas' cultural theory (Douglas and Wildavski, 1982; Douglas, 1985; Douglas et al., 2003), our second conceptual tool. Cultural theory has been widely utilised to understand how societies achieve collective action (for example, Hood, 1998; Rydin et al., 2004; Tansey, 2004; Baxter and Greenlaw, 2005; Seyfang, 2007; Thompson, 2008; Entwistle, 2010). This conceptual approach promises to be particularly suitable for studying initiatives seeking to mitigate societal risks associated with unsustainable resource consumption. We use an interpretive version of cultural theory as a heuristic to highlight variations between resource efficiency initiatives (Tansey, 2004). This is achieved by linking the design and planned implementation of particular initiatives to associated organisational assumptions about the public.

What is at stake here is whether and how society organises to achieve greater resource efficiency in the domestic sphere. While our focus is on the seemingly small issue of the design, implementation and outcomes of a set of local resource efficiency initiatives, our argument is that these apparently small issues matter for sustainability more broadly. Effective resource governance requires not just re-thinking how specific initiatives are planned and implemented, but also demands consideration about how such interventions are enabled, and how experiences can inform future initiatives, hence facilitating lasting transformative change in more environmentally and socially sustainable directions.

Our framework provides the means to link these small 'p' political issues with the broader factors enabling transformative change. We identify three specific contributions. First, the framework enables qualitative analysis of how initiative organisers' assumptions about potential participants are reflected in the design, implementation and perceived outcomes of resource efficiency interventions. Second (and consequently), the framework allows these small 'p' political aspects of different resource efficiency initiatives to be mapped and compared. And finally, the framework supports critique and debate about institutional structures for resource governance, with the potential to inform their development.

In the narrative below, we first explain why we are using the concept of the imagined public and Douglas' cultural theory to study resource efficiency initiatives, before developing a framework for their application. Drawing on documents as well interviews with initiative organisers and participants, we then assess which public is being imagined in three domestic water and energy efficiency retrofit initiatives conducted in Kent during 2008–10. We conclude by reflecting on the usefulness of our conceptual framework in providing a language and an approach for analysing, directing and enhancing future resource governance.

2. The imagined public and cultural theory

Following Maranta et al.'s (2003) notion of 'imagined laypersons', Walker et al. suggest that renewable energy professionals' shared ideas about public attitudes to renewable energy form an 'imagined public'. This imagined public is reproduced in policy formation, and manifested in the 'products and actions' that enable the public to participate in renewable energy decisions; it is therefore in effect 'given power' (Walker et al., 2010: 933). Similarly, we suggest, resource efficiency professionals' imagined public are also 'given power', for example, in contributing to the design and refinement of resource efficiency initiatives and by

informing policy debates on water and energy governance pertinent to the residential sector.

In our case studies the imagined public refers to anticipated resident-participants in the three Kent resource efficiency initiatives. This imagined public is effectively the political signature of the initiative: it shows the inherent assumptions that are being directly (or indirectly) communicated to householders, and other stakeholders, in the operation, monitoring and development of particular interventions (Sharp, 2006). By studying the design, implementation and implications of an initiative for future resource efficiency programmes, assumptions about the imagined public and their anticipated engagement can be identified, and the initiative’s political signature can be ‘read off’. Given this understanding, we take the concept of imagined public as the primary lens through which we apply a cultural theory analysis.

Douglas’ cultural theory argues that ‘collective social action is hard to generate and struggles over the legitimacy of power and control are constant’ (Tansey, 2004: 18). The vehicles for achieving these difficult collective actions are formal and informal ‘institutions’ that structure the practices of those who encounter them. Such institutions are also reproduced (or modified) as individuals give (or deny) credence to particular sayings or actions (*ibid*: 24).

	Low Group – less allegiance to group (human nature more selfish)	High Group – more allegiance to group (human nature is collectively oriented)
High grid – more rules	<p>FATALIST</p> <p>Collective action is highly circumscribed, but is rule-bound with designated roles.</p> <p>Human nature is selfish. Hence, low levels of trust and co-operation exist.</p> <p>Individuals and firms make arrangements for resource use with no attention to communal issues.</p> <p>Individuals are likely to organise where they perceive collective benefits.</p>	<p>HIERARCHICAL</p> <p>Collective action is widely present, but remains rule bound with designated roles.</p> <p>Human nature needs structure to manage potentially fickle individuals.</p> <p>Governance organisations oversee resources, arranging technological and educational investment to ensure sustainable resource use. Individuals and firms follow rules and advice.</p> <p>Those in power do not know public preferences and rules stifle creativity.</p>
Low grid – fewer rules	<p>INDIVIDUALIST</p> <p>Markets allocate goods and services and collective action is achieved through its ‘invisible hand’.</p> <p>Human nature is selfish, so individuals are self-serving.</p> <p>Governance organisations provide incentives and information to enable efficient resource use. Individuals and firms manage resource use for self-interest.</p> <p>A framework of rules needed to ensure ‘fair play’.</p>	<p>EGALITARIAN</p> <p>Co-operation and participation enables local flexibility, collective action that bridges silos is therefore prioritised.</p> <p>Human nature is perceived as oriented towards wellbeing of the group, so individuals are self-determining.</p> <p>Everyone actively builds trust to identify and implement communal goals. Monitoring of impacts is undertaken to enable continuous improvement.</p> <p>Participation takes resources and time, but ultimately decisions and action are needed.</p>

Fig. 1. The four archetypal cultures of ‘cultural theory’. Top half of cell – Governance characteristics (approach to collective action and human nature), developed from Hood (1998: 9) and Thompson (2008: 21, 39). Third quarter – resource governance given an imagined public fitting the archetype’s assumptions (derived logically from top half). Fourth quarter – vulnerabilities of archetype (from Thompson, 2008: 101–4).

The most well-known part of Douglas’ theory is grid-group analysis (see Fig. 1). This provides four ‘archetypal cultures’ as a means to understand and catalogue struggles over the legitimacy between and within institutions (Tansey, 2004: 17). The ‘group’ element of the analysis concerns the strength of allegiance to a particular group or institution. The ‘grid’ element concerns the extent to which societal constraints circumscribe roles, experiences and knowledge. Combining the grid and group elements yields four cultures – hierarchical, fatalist, individualist and egalitarian. Each culture can be characterised in terms of their approach to collective action and their assumptions about human nature (top half of each cell in Fig. 1) (Hood, 1998; Thompson, 2008). Drawing on Douglas’ theory, we apply grid-group analysis to resource governance. As such, varying assumptions made about the public in the design and implementation of domestic resource management initiatives produce different forms of resource governance (third quarter of cells). For example, the top half of the hierarchical cell shows that in this approach an authority has legitimacy in defining and imposing collective needs over a population who are willing to be led. Under such a regime, authorities appraise collective resource availability and expected demand, and then seek to mitigate future crises by either ensuring future supply security or using technologies, education and incentives to attempt to reduce resource demand.

Each culture is also inherently unstable, containing the seeds of its own destruction (fourth quarter of each cell) (Douglas and Wildavski, 1982; Hood, 1998; Thompson, 2008). The inherent instability of each archetype is important, as it is the engine driving continual shifts in governance. Given anticipation of such flux, it is not surprising that cultural theory does not attach a normative judgement to the different archetypal cultures. The theory instead understands that archetypes are used for relative evaluations of different institutions (Hood, 1998; Thompson, 2008).

Tansey (2004: 26) stresses that grid-group analysis is associated with an interpretive research approach; he argues that many applications of cultural theory mistakenly utilise a positivist ontology to form absolute judgements, for example, in classifying individuals’ worldviews. Instead, interpretive applications involve relative judgements, recognising that practices, policies or activities often align with more than one archetype, and that cultural allegiances can change over time. While interpretive applications of cultural theory have been widely used to discuss organisational management (e.g. Rydin et al., 2004; Entwistle, 2010; Linsley and Shrive, 2009) and environmental perceptions (e.g. Baxter and Greenlaw, 2005; Seyfang, 2007), no applications have investigated resource efficiency initiatives, nor examined how the public are imagined in demand management interventions.

In seeking to apply cultural studies’ understandings to understand the public imagined in resource efficiency initiatives we have made three adjustments, discussed in turn below.

First, because this research examines collection action as part of a set of domestic resource efficiency initiatives, only three of the above governance modes are viable. To imagine a fatalist public would be to envisage people opposed to taking action for the collective good and to be cynical about anyone’s motives for action. A fatalistic public are likely to regard such initiatives as a waste of money, would tend to be sceptical as to the purpose of their intended involvement, and would commonly be difficult to engage. To imagine a fatalist reception for a new initiative would be to conclude that failure is inevitable. We therefore contend that no initiative would begin with a fatalist view of target householders. We are not the first to make the assumption that fatalist approaches to governance initiatives should be excluded from the analysis of initiatives; following Thompson and Rayner (1998) and Seyfang (2007), therefore, our analysis focuses on the hierarchic, individualist and egalitarian archetypes only.

Second, while Fig. 1 provides a useful theoretical starting point in differentiating between initiatives, its broad remit could encourage the sweeping positivist categorisations criticised by Tansey (2004). By breaking these categories down, we can link cultural theory's understandings to empirical data. Working iteratively between thematically analysed empirical data and the tenets of cultural theory, we identified a number of different factors about resource efficiency initiatives that clearly encompass inherent assumptions about the public. These factors include: the processes through which households are identified and engaged, the goals and mechanisms of the initiative, and the associated monitoring and learning processes. Using these factors alongside Fig. 1, we were able to derive archetypal resource efficiency initiatives (Fig. 2) each encompassing different fixed ideas of the imagined public. In the light of our interpretive understanding that many initiatives include contradictory and inconsistent assumptions, we would not normally expect an initiative to correspond to a whole archetype. Logically derived from Figs. 1 and 2, therefore, Table 1 shows how imagining the different archetypes of the public would translate into specific elements of resource efficiency initiatives. For example imagining a hierarchical public would suggest targeting a resource efficiency initiative on those localities calculated to deliver the greatest aggregate savings; in contrast, organisers viewing the public from an egalitarian perspective might select neighbourhoods where a connection could be made with local enthusiasms or problems, such as an active local

A hierarchical approach assumes that everyone shares the goal of more efficient resource use, particularly if resource efficiency initiatives seek to minimise inconvenience. If a hierarchical approach to resource governance is adopted, aggregate communal reductions in resource use provide the prompt for an initiative, guide the selection of target localities and properties, and form the focus of monitoring. Householders are approached by a governance organisation that presumes that it has their trust. Householders' involvement is incentivised, and domestic resource efficiency is sought primarily through provision of information about suitable technologies, as well as by highlighting collective needs (for example, ameliorating environmental harm). Rules relating to resource use may also form part of an initiative.

Individualistic perspectives focus on achieving domestic resource efficiencies. Initiatives offer the choice of becoming more efficient in household resource use to many householders, who are assumed to be utility-maximising individuals. This belief makes irrelevant the source of the invitation to join the initiative. Householder engagement is incentivised by highlighting the potential for financial savings to be made on utility bills. This is supported by calculated reductions, that are anticipated will be made to carbon emissions and water/ electricity/ gas use. The precise route through which change is achieved is not important, but can include the installation and 'correct' use of new resource efficient technologies, as well as strategies encouraging residents to curb their resource demand. The initiative's success will be monitored according to household satisfaction (i.e. were residents' choices enabled by the initiative?).

Although an egalitarian perspective may frame resource problems as associated with building structure and use of installed equipment, or as a matter of individual behavioural change, it always questions the socio-technical ways in which householder resource consumption is established. Trust developed between different individuals and organisations enables negotiation and decision-making about how to pursue collective actions together. When imagining an egalitarian public, initiative organisers are likely to address domestic resource efficiency alongside other goals (for example, addressing resource poverty). When seeking to engage householders, this approach builds on pre-established relationships of trust (for example, between local authorities, community groups, non-governmental organisations, and existing utility providers, or via neighbours and friends). Householder involvement is incentivised by emphasising potential benefits, and placing strong emphasis on both local and global collective gains. Support focuses on understanding the existing household situation and identifying mechanisms to enable less resource intensive changes to be made to household resource needs. Monitoring is relatively expensive as it collates information from different sources, both during and after the initiative, focusing on unanticipated benefits and costs, as well as stated goals. There is flexibility to make adjustments or change activities during the initiative. There is also an optimistic assumption that by listening to different stakeholder perspectives, and by reflecting on process, learning can be achieved, and a better initiative designed next time.

We contend that no initiative would begin with a fatalist view of the public (as previously discussed).

Fig. 2. Archetypal resource efficiency initiatives.

residents group, neighbourhood resource supply challenges or pockets of fuel poverty. Table 1 constitutes our conceptual framework through which the empirical material below is understood.

The third adjustment relates to the normative position of the analyst. Cultural theory's claim to be a neutral descriptive tool free of normative judgement is difficult to reconcile with interpretive understandings emphasising the impossibility of neutral commentary (Yanow and Schwartz-Shea, 2006). Moreover, it would be disingenuous to deny the authors' sympathy with critiques of the hierarchical and individualist approaches, which seem unlikely to produce the profound changes in complex socio-technical production and consumption systems required. Specifically, the 'fit and forget' technical solutions stressed by hierarchical governance have been critiqued for deliberately designing out active householder involvement, and doing nothing to expose or challenge the underlying drivers of resource demand (e.g. Chappells and Medd, 2008). Meanwhile, individualist initiatives are criticised for focusing just on changing behaviours with insufficient understanding of contexts stimulating household practices (Spaargaren and Mol, 2008; Shove, 2010).

In contrast, approaches that build on communities of trust to address multiple goals – recognising variations between households and emphasising reflection as a route to learning – could enable a radical shift towards more sustainable domestic resource consumption. Such initiatives are described by the egalitarian approach, and include the negotiative demand management initiatives advocated by social practice theorists (e.g. Sofoulis et al., 2005; Strengers, 2008, 2011). In asserting our preference for egalitarian initiatives, we are not suggesting that they are universally and uniquely superior to other forms of resource efficiency. Rather, faced with mounting environmental pressures, an egalitarian approach provides a means to identify and challenge lock-in to unsustainable domestic resource use and infrastructures (Arthur, 1989).

In the sections that follow we use our conceptual framework (Table 1) to investigate three consecutive resource efficiency initiatives.

3. Resource efficiency in Kent, UK

Known as the 'garden of England', the county of Kent, in the extreme south-east of the UK, forms a site of acute tensions between development and conservation. This area is already water stressed, but planned economic growth and housing provision places additional pressure on infrastructure provision (Furey, 2007; ODPM, 2006). Amelioration of the impact of strategic development has been partly focused on ensuring resource efficient new build properties, but resource conservation and demand reduction are also sought in existing homes. Our concern is with a set of three consecutive resource efficiency initiatives that aimed to reduce water and energy (electricity and gas) consumption by retrofitting technologies in existing properties, and seeking to change residents' resource consuming practices. We are interested in how the design, implementation and monitoring of these initiatives can be analysed according to the ways that household participants (including those targeted only and those passively/actively engaged) are imagined by respective initiative organisers. For clarity, we call these interventions, Initiative One, Initiative Two and Initiative Three.

Initiated by Kent County Council (KCC), together with partners South East Water, the Environment Agency and Ashford Borough Council, in 2008 the first of the three initiatives – 'Savings on Tap: Water savings for existing homes' (henceforth Initiative One) – sought to reduce water use by retrofitting existing homes in the planned eco-city of Ashford. This initiative centred around installing

Table 1
Conceptual framework.

Plans/activities		The public are imagined to be..		
		Hierarchical	Individualist	Egalitarian
Identification and engagement	Target localities	Target areas prioritised by households' potential contribution to aggregate resource goals	Widespread promotion enables keen householders to choose to be involved	Neighbourhoods targeted because of local resource demand and/or perceived householder needs/interest
	Source of household engagement request	Known named governance organisation	Source is less important, individual householder pursues self-interest	Trusted networks utilised to maximise person-to-person contact and build lasting relations
	Householder engagement strategy	Rules/requirements prompted by need for shared communal gains	Potential financial savings to individual household	Potential local and regional environmental and societal benefit, in addition to household gains
Initiative goals		Reduce aggregate resources consumed by households to benefit society	Reduce householders' resource use and expenditure	To nurture reduced domestic resource use, and to continually improve how societal goals are pursued.
Anticipated mechanisms for change		Rules, resource efficient building materials and technologies, appeals to societal duties	Information provision and incentives to enable householders to make choices	Understanding the existing situation (resource demand and use of broader services). Supporting change at both household and societal scales
Monitoring and learning strategy		Monitoring of pre-defined 'public interest', goals focused on aggregate resource demand	Monitoring of individual household savings and perceived customer service	Variety of monitoring and appraisal strategies. Greater emphasis on reflection and learning to improve outcomes.

water efficiency measures and providing water-saving advice to properties located in an area characterised by privately owned 1970s and 1980s two and three bedroom properties. The initiative also offered to conduct simple plumbing works to fix any water leaks.

In 2009 a follow-up initiative combined water and energy retrofit processes in two prosperous residential districts in the north-east of Ashford. Led by 'Ashford's Future' ('AF', a semi-private development corporation supporting infrastructure for new development in Ashford between 2003 and 2011), 'Savings at Home' (Initiative Two) involved a coalition of utility providers and local government bodies. The target districts were selected on the basis of anticipated carbon-savings from structural measures (such as loft-insulation) and smaller technical measures (such as a home energy monitor). Utility companies supplied these measures, while consultants, Creative Environmental Networks (CEN), delivered the programme.

Third, in light of experiences from Initiative Two and the rising importance of domestic energy efficiency, the 'Kent area based retrofit programme' (Initiative Three) was commissioned by an alliance of Kent local authorities. Psychologists from the University of Kent designed an engagement programme that CEN then delivered. The initiative gave tailored householder support and retrofitted efficient technologies during a home visit. Adopting a geographically phased delivery approach, Initiative Three aimed to pool public sector financial resources to stimulate integrated 'whole home' structural energy and water efficiency measures. It also sought to maximise grant funding for householders. Phase I of Initiative Three targeted 1200–1500 homes within four Kent boroughs.

4. Method

This research originated as an in-depth empirical analysis of the strategic governance of Initiative Two; the additional benefits of setting this research in the context of the preceding and subsequent initiatives emerged later. Informed by our particular understanding of cultural theory as theorised using the concept of the 'imagined public' and applied to domestic resource efficiency initiatives, initial research investigated Initiative Two's objectives and implementation. Data collection comprised a comprehensive review of stakeholder documents and web sites, eight practitioner interviews (P1–8 below, listed below with professional affiliation,

e.g. "P7 KCC") and observations from three 'shadowed' home visits. In addition, random sampling selected 60 households who were invited to participate in the research by the consultants, CEN, during a home visit. Six weeks later, the 14 responding households were interviewed (nineteen individuals in total, H1–19). Both householder and practitioner interviews were in-depth, semi-structured discussions that lasted approximately one hour.

As understanding of the resource governance landscape in Kent emerged, analysis increasingly focused on how different elements of initiative design developed. Hence, the preceding and subsequent resource efficiency initiatives were recognised as crucial in shaping resource governance approaches. Significant information relating to Initiatives One and Three was found within the existing data, particularly the practitioner interviews. Supplementary data was gathered through documentary analysis (four additional documents) and website reviews (six websites). Consequent asymmetries in the data mean that analysis of Initiative Three was largely documentary, and refers to the first phase of the programme only. Nevertheless, the data is sufficient to examine points of similarity and difference, supporting conclusions about how the public was imagined in the different initiatives.

The process of analysis began by deriving themes inductively from the amassed data. Our interpretation developed through iterative rounds of analysis, each undertaken with the concept of the imagined public held as the primary lens through which cultural theory would be applied. Nevertheless, the specific elements of the initiatives to be differentiated (that is, the row titles in Table 1) did not crystallise until after the thematic analysis was complete and an initial narrative had been produced. The subsequent application of this framework enabled the public implicitly imagined by different elements of the three resource efficiency initiatives to be more fully identified. Further re-writing adjusted the narrative structure of our research to the categories presented in the conceptual framework.

5. Findings

5.1. Identification and engagement of households

Initiative One offered a standard set of water efficiency measures to householders in modern housing, with the aim of

appraising the water governance mechanisms for future homes. The initiative was successful in engaging 284 of the 500 households approached (57%) through a combination of outreach methods. These included an invitation letter from KCC, follow-up door-knocking and introductions made by friends and neighbours (P7, KCC). As only approximately 40% of targeted properties were metered for water, promotion of the initiative noted the potential for individual household financial savings, alongside benefits to shared water amenities in the locality (KCC, 2007).

Initiative Two targeted districts believed to be able to deliver significant energy savings. Less intensively local than Initiative One, 451 households were recruited (17% of those in the targeted areas) through a combination of letter mailing, leaflet drops, marketing at a public event and door-knocking (CEN, 2010a). Marketing for Initiative Two occurred under the banner of the semi-private sector delivery body 'Ashfor's Future' (AF). Several participant interviewees indicated that this choice was not successful; some did not recognise the organisation, others saw it as an inappropriate sponsor. For example, one interviewee commented, "Grant schemes for improvements need to be administered locally by companies that aren't run for profit" (H10). (Though Ashford's Future was not run for profit, the participant's lack of clarity was clearly damaging to the initiative). The initiative's marketing rhetoric emphasised financial savings by inviting householders to "save water, save energy and save money" by taking up free "expert visits" and technical measures (AF, 2010). This financial call to action was based on the assumption that "once aware that it not going to cost them anything, [households would engage because] they [would] save money, and they [would receive] some nice stuff" (P1, CEN).

Initiative Three used an area-by-area strategic approach to focus on hard-to-treat properties with high levels of energy use. This approach targeted residents from varied socio-economic backgrounds. Eligible households were referred for delivery of free cavity and loft insulation as well as receiving free simple energy and water efficiency measures. Experiences from the Initiative Two pilot influenced design of this initiative in terms of acknowledging the importance of communications and public engagement. For example, the initiative's business case stated that, "co-branding with a trusted brand such as the council is encouraged" to "develop trust and project legitimacy" (CEN 2010b). A postcard with a tailored message was sent to potential participant households to convey the potential for free measures to deliver financial savings and warmer homes. This resulted in Phase I generating a household uptake rate of between 8.8% and 11.2%.

In all three initiatives, selection of the target neighbourhood(s) was driven by the perceived potential for aggregate resource savings without reference to other local imperatives (e.g. fuel poverty or utilities' local network difficulties). We understand this

sole emphasis on aggregate savings as imagining a hierarchical public that is willing to take clear instructions about how to support the collective good. In addition, hints that the public were seen in a slightly more collective egalitarian light were indicated through Initiative One's utilisation of a 'word of mouth' promotion approach. To a lesser extent, this egalitarian approach was also demonstrated by Initiative Two's use of door-to-door engagement and Initiative Three's attention to trust. These different techniques may have contributed to the difference in household uptake, with approximately 50% of households participating in Initiative One compared to less than 20% in the other two initiatives. (Equally, this disparity may reflect differences in the labour intensity of the approaches). In terms of what was imagined to incentivise the public, Initiatives Two and Three offer an individualist emphasis on household financial benefits, while egalitarian attention to the shared local environment featured more strongly in Initiative One.

5.2. Goals and mechanisms

Table 2 offers an overview of the key goals and mechanisms of each intervention and reflects the respective organisers' initial intentions and assumptions. The official rationale of Initiatives One and Two focuses on technological change and aggregate resource gains, suggesting a hierarchical view of the public. In contrast, the rationale for Initiative Three combines technological change with economic opportunities for households, suggesting both hierarchical and individualist perspectives. However, when the realised mechanisms and outcomes of these initiatives are examined using our conceptual framework, the picture is different.

Initiative One imposed water-efficient technologies on participating householders and focused upon measuring the initiative's impact on cumulative resource demand. Compared to Initiative Two, little emphasis was given to understanding the home situation of the participants. While this 'one-size fits all' perspective is largely in line with a hierarchical public, the follow-up pack, posted to participants after the completion of the retrofit, provides an exception. This pack included a leaflet detailing behaviour change opportunities, a thank-you letter from KCC and a tea-towel that made links between saving water and the local river, cared for by the Kent Wildlife Trust. This appeal to known local amenities and organisations illustrates an egalitarian understanding of the public as motivated by collective local needs.

In contrast, Initiative Two was intended to be "... more tuned up for behavioural impact and creating pro-environmental behaviour as a central aim" (P7, KCC). Extended conversations were designed to provide "face-to-face advice in the home ... [as] one of the best ways of unlocking behavioural savings" (P3, CEN). The programme organisers placed confidence in technical monitoring equipment, which was designed to increase the

Table 2
Goals and intended mechanisms.

Initiative	Mechanisms	Key goals/estimated potential savings
1. Savings on tap (P7, KCC)	a) Information provision b) 'Easy' water-efficiency measures c) Plumbing service	a) Increased household water-efficiency awareness b) 10% reduction in domestic water-use
2. Savings at home (AF, 2009; CEN, 2010a)	a) Tailored household resource efficiency advice b) 'Easy' water and energy efficiency measures c) Structural energy-efficiency measures	a) Demonstrate a cost-effective mechanism for delivering integrated energy and water savings b) 25% CO ₂ reductions and 10% water use reduction in 50% properties, and 60% CO ₂ reductions in 5% properties
3. Kent retrofit programme (CEN, 2011)	a) Home visits delivering tailored resource efficiency advice b) Whole-house energy efficiency audits and provision of 'easy' measures c) Structural energy efficiency measures	a) Undertake a county-wide retrofit for existing hard to treat homes to reduce carbon emissions, and provide economic opportunities to households b) Pilot marketing approach aimed at targeting different socio-economic groups c) 600-1,000 homes per year to be retrofitted, with intended savings of £200 per household d) Develop innovative finance mechanisms to enable a whole-house retrofit approach

visibility of resource usage through provision of feedback on domestic consumption levels (Hargreaves et al., 2013). This information provision strategy was based upon perceptions that “the majority of people . . . don’t know how much energy they are using and don’t know what their water bills or energy rates are” (P2, CEN). In the organisers’ perceptions, therefore, householders were unable to manage their domestic resource use without such data. The observed home visits showed this philosophy in practice, as the consultants predominantly followed a prescribed expert-led protocol, leaving minimal space for residents to ask questions or challenge assumptions. As well as providing the home energy monitor, attempts were made to review utility bills and to provide advice on potential resource savings. Overall, the emphasis on information and financial savings means that Initiative Two’s mechanisms are oriented towards an individualist public.

An exception from Initiative Two’s individualist mechanisms would have arisen had the intended referrals for larger household structural measures been achieved. This would have provided an element of technological change, implying a public imagined in a more hierarchical way. However, contrary to the organisers’ expectations, few of the targeted homes were suitable for such improvements, indeed of the 229 households identified to potentially benefit from structural measures, works were only undertaken in 40 households (CEN, 2010a). The explanation for this mismatch may be an administrative change to the referral process, which caused a significant time gap between the initial home visit and contact made by contractors to offer their installation services. The lower than anticipated outcomes also resulted because many residents had already capitalised on available funding mechanisms and consequently were not eligible for further assistance.

Initiative Three’s design specified a one to two hour tailored home visit that was to ‘be flexible and adapted to suit the needs and understanding[s] of the resident, as well as the property itself’ (CEN, 2010b: 7). The household visits were intended to achieve a multitude of tasks including ‘addressing behavioural change, assessing eligibility for external funding, establishing needs with respect to other services, installing small measures, undertaking plumbing repairs (where possible), and establishing the technical requirements of larger measures’ (CEN, 2010b: 12). This intention to achieve flexibility, and the very breadth of the proposed agenda, demonstrate potential for Initiative Three to approach the actively engaged role needed to support an egalitarian public. Realisation of these ambitions, however, depended on the extent to which the training and conduct of the consultants allowed householders to shape discussion during the home visits.

This analysis demonstrates a shift from relatively low-contact retrofitting in Initiative One (hierarchical mechanism) towards interactions indicative of a more active framing of residents (advocated by both individualist and egalitarian approaches). While Initiative Two’s emphasis on residents’ behaviour change links it firmly to an individualist public, Initiative Three appears to follow a broader domestic resource governance agenda that has potential to adopt a more supportive role for actively engaged householders, indicating a more egalitarian view of the public.

5.3. Monitoring and learning from the resource efficiency initiatives

Informed by reports on each initiative’s achievements (Environment Agency, 2007; CEN, 2010a; CEN, 2011), our data regarding learning largely relates to what was monitored, and whether and how this informed the design of subsequent domestic resource efficiency initiatives.

In relation to Initiative One, aggregate water demand monitoring was undertaken for the target and control districts. In practice, the monitoring process was full of ‘noise’, for example from emergency works, and hence the impact of the initiative proved hard to isolate. Additional monitoring involved participating households being invited to provide feedback through a satisfaction survey. This comprised a short telephone interviews with 60 households (23% of those participating). It found that 85% of residents rated themselves as ‘satisfied’ or ‘very satisfied’ with the initiative. Moreover, whilst 82% of respondents agreed that information and measures provided had ‘made them think about their water-use behaviour’, 30% asserted that only minor or zero adjustments in behaviour had resulted (Facts International, 2009). A particular learning point, not imagined by the initiative organisers, was that people were willing to be involved in the project even if they did not save money. As described by a senior figure from Ashford’s Future;

‘One thing we learnt from . . . [Initiative One] which surprised the client group, was that households that were not metered were keen to take part in the project [even though] they were getting absolutely no financial benefit from it all.’ (P6, AF).

Based partly on ‘the noise’ encountered in Initiative One’s monitoring process, but also due to cost implications, Initiative Two avoided direct monitoring of domestic resource consumption and instead estimated water and energy savings from accepted industry standards attributable to each installed measure. On this basis, estimated savings of 6.8 m³ water per property per year, and 2440 tonnes of carbon dioxide emission savings (CEN, 2010a), led Initiative Two to be deemed a success. However, the programme organisers acknowledged that installed technological devices do not guarantee carbon or water savings, as people may remove the devices, or use them in different ways to those anticipated (P7, KCC). Additionally a project report by authors of this paper revealed limitations of marketing Initiative Two under the banner of AF, and participants’ mixed perceptions of the financial focus of the engagement process (Macrorie and Sharp, 2010). Following the disbanding of AF in March 2011, the intended roll out of Initiative Two across Ashford stalled, and fresh debates were raised concerning the extent of new housing growth for the town.

Phase I of Initiative Three involved 603 home-visits across four Kent boroughs. The initiative installed a range of small energy and water saving measures, as well as facilitating structural measures (including, fitting loft and cavity wall insulation, replacing boilers and performing upgrades to central heating systems). This programme was funded via householder financial contributions and leveraged monies made available by utility companies as part of the Carbon Emissions Reduction Target (CERT). Following the home visit, 10% of participating households contributed to a telephone satisfaction survey (CEN, 2011). Of these, 80% suggested that they would recommend the service to a neighbour and 66% reported that they had ‘changed their behaviour’ in some way, for instance turning off unused lights. Meanwhile 18% reported that they were warmer, while 9% agreed that their well-being and happiness had increased.

In terms of the categories in Table 1, monitoring processes in Initiatives One and Two are primarily focused on aggregate savings and customer service, relating to hierarchical and individualist perspectives on the public respectively. For Initiative Three, the questionnaire added an egalitarian emphasis with its combined concerns on household savings, customer service and collective welfare interests (such as warmth and well-being). To be even more egalitarian-focused, we might have anticipated additional qualitative investigation of participants’ experiences of the

initiative and/or householders' attempts to adjust their resource consuming practices.

Applying our conceptual framework, has demonstrated how the three Kent initiatives provide a 'family' of approaches to domestic resource efficiency, with clear links being made between successive initiatives by the organisers. There are several identifiable instances where lessons from one initiative influenced another. For instance: aggregate monitoring proved unrealistic in Initiative One and has not been attempted subsequently, challenges marketing Initiative Two influenced the household engagement process for Initiative Three, and most notably, the intended flexibility of the visits in Initiative Three was significantly shaped by preceding organisational experiences. However, not all of these lessons were translated into action. In particular, recognition in Initiative One that residents were motivated by more than finance was disregarded in the design of Initiative Two. Meanwhile the apparent success of Initiative One's neighbourhood marketing approach was not perceived as a learning point. In addition to such internal organisational learning, experience and knowledge from the consultants, CEN, supported the design of initiatives Two and Three.

6. Discussion: resource efficiency in context

Having applied the analytical framework set out in Table 1, Fig. 3 provides a 'traffic light' summary of the extent to which hierarchical, individualist and/or egalitarian publics were imagined for each of the three appraised initiatives. The most striking feature of Fig. 3 is the complexity of the picture portrayed. Not one initiative is framed around a single archetype. It is, however, possible to discern a pattern in terms of particular imagined publics being more (or less) prevalent in relation to particular types of activities. Most notably, a hierarchical emphasis on aggregate resource savings dominated selection of target localities. A similar – though slightly less pronounced – hierarchical emphasis is visible, in terms of setting goals for the resource efficiency initiative. Both of these criteria are 'externally facing', in terms of being defined at the start of each project and being readily auditable by external partners and funders. We can speculate that these externally facing aspects of initiative design are oriented towards a hierarchical public because this is how initiative organisers think (or know) that their external partners imagine the public.

Resource governance approach	1. Savings on Tap			2. Savings at Home			3. Kent Retrofit Programme		
	H	I	E	H	I	E	H	I	E
Targeting localities	Dark shading			Dark shading			Dark shading		
Source of engagement request*		Light shading	Light shading		Light shading	Light shading		Light shading	Light shading
Householder engagement strategy*		Light shading	Light shading		Dark shading			Dark shading	
Setting goals	Dark shading			Dark shading			Light shading	Light shading	
Mechanisms for change*	Dark shading		Light shading		Dark shading		Light shading	Light shading	Dark shading
Organisational monitoring & learning*	Light shading	Light shading		Light shading	Light shading				Dark shading
Weighting (Internal* & External criteria)	7	3	3	5	6	1	4	5	5
Weighting (Internal * criteria only)	3	3	3	1	6	1	1	4	5

Fig. 3. Modes of resource governance evident in three resource efficiency initiatives. Key: Hierarchical (H), Individualist (I) and Egalitarian (E) archetypes. No shading indicates absence; light shading, presence; dark shading, dominance. The 'weighting' draws the different criteria together, allocating two points for dominance, one point for presence, and zero points for absence. Internal Criteria are asterisked; External Criteria are not asterisked. Both types of criteria are explained in the text.

In contrast, the initiatives' engagement strategy (i.e. source of request and strategy to engage households), mechanisms, and monitoring approaches, are likely to be more directly concerned with how different organisers imagined their public's response to the respective initiatives. It is certainly possible to see greater contrast between the initiatives in relation to these 'internally facing' criteria (marked with an asterisk in Fig. 3). As the analysis of 'weightings' for such criteria shows, Initiative One has elements that imply all three types of public, Initiative Two imagines an individualist public, whereas Initiative Three has elements associated with both an individualist and egalitarian public.

What does Fig. 3 reveal about the design, function, and outcomes of resource efficiency initiatives? Use of our conceptual framework demonstrates that while all three initiatives apparently met their goals, their overall impact on reducing domestic resource consumption was limited; they made changes in relatively few properties in a fairly small way. In this respect, the initiatives' impact on domestic resource consumption in Kent can be seen as something of a tokenistic effort.

But perhaps the underlying governance aim is not delivering resource savings per-se, but rather providing learning from trialling different types of initiatives, in advance of a wider roll-out to other households. As noted in Section 5.3, cumulative learning occurred between the three initiatives. This was demonstrated most notably in relation to the mechanisms for promoting action which became more flexible through the initiatives, but also by the acknowledged failure of Initiative One's 'noisy' aggregate monitoring, and through recognition of the problems of marketing Initiative Two. However, there were also examples of lessons not being learnt (Initiative One's marketing success), or not being implemented (Initiative One's observation about public motivations). In terms of processes for learning, it follows that the formal end-of-initiative reports can be regarded as having had mixed success in passing on lessons for future resource efficiency initiative design and implementation. Involvement of the authors in Initiative Two, and of Kent University researchers in Initiative Three, also provides a formal route for learning, albeit at the slower pace of academic analysis and publication. Overall, because the initiatives were organised by somewhat diverse partnerships and drew on different pots of funding, there was no formal review of the extent to which learning had been achieved and passed on (if at all). Similarly, analysis of the mechanisms of learning, and consideration of the implications of institutional learning processes for domestic resource consumption (other than that provided in this article), did not occur. Moreover, a means of sharing and synthesising learning from these three resource efficiency experiences on a national or international scale was completely lacking.

Turning to the significance of learning made by the respective initiative organisers, the points reported above offer considerable support for our normative preference for initiatives imagining an egalitarian public. Results from application of our conceptual framework highlighted the need for resource efficiency initiatives to have more responsive home visits, trusted organisations to be used for public engagement processes, and participants' willingness to take action even without the promise of individual (financial) benefits. These are all aspects of an egalitarian approach. Despite organisational attempts to implement parts of this learning (as described above), even Initiative Three is a long way from the archetype of an egalitarian resource efficiency initiative (as shown in Fig. 2). It is useful to consider why this is and what this means.

First, it is notable that none of the initiatives really imagined the public as active within their local setting as a fully egalitarian approach would encourage. Whereas the contact mechanism of Initiative One was partly embedded in the local through

neighbour-to-neighbour marketing, neither Initiative Two, nor Three, used such a mechanism. Instead, marketing occurred by use of local authority and delivery-body branding. Moreover, in terms of incentivising action, while the initiatives sought to appeal to imagined householders' individual wellbeing, global well-being, or both (the latter categorised as appealing to an egalitarian public on Fig. 3), attempts to highlight the benefits of resource efficiency for local societal and environmental well-being were conspicuous by their absence. Only in the case of Initiative One's follow-up pack was a link made between resource efficiency in people's homes and a local environmental asset. This link with local resources may have been easier to establish for Initiative One because it focused on water, and not on the less tangible resource of electricity (or gas). In the U.K., water is still sold by locality-based companies, and links can be made to visible local water resources. In contrast, Initiatives Two and Three involved national energy companies that compete for customers and where energy production is often out of sight, making it harder to anchor resource shortages in the local experience.

Second, learning may not have been passed on between interventions due to the silo-ed nature of funding for domestic resource efficiency initiatives. Despite the clear physical links between domestic water and energy use (Early, 2009), practitioners developing Initiatives Two and Three reported difficulties securing funding intended to address combined water and energy efficiency concerns. This is likely to be the result of the complex institutional architecture relating to resource governance. Whereas in continental Europe and much of North America, energy and water continue to be delivered in units coinciding with local authority boundaries, in the UK, local authorities districts are found within the areas addressed by (largely) regional water companies, and with their residents served by multiple national energy companies. Also, different regulators provide contrasting incentive structures for utilities to participate in resource efficiency. The ultimate effect is that it is hard to develop local authority-utility partnerships that address domestic resource efficiency, particularly if they seek to target more than one type of utility. More joined-up funding intended to support creative approaches to both resource efficiency and to other sustainability issues (including for example, resource poverty, food consumption, or waste management), could yield exciting interventions capable of engaging a locality-oriented egalitarian public.

Third, each initiative involved an asymmetric partnership between local authorities, utility suppliers and householders. While local authorities developed and drove the initiatives, the private sector organisations were relatively passive partners, their role being confined to the provision of technical measures and access to funding, as encouraged by regulators. Moreover, while residents' domestic arrangements were subject to scrutiny, the initiatives did not probe the utility companies' resource management practices, nor the policy decisions and actions undertaken by the local authorities. In this respect, even with the best of intentions, the initiatives might be seen as 'user-blaming' (Sofoulis, 2005), seeking either to inform and incentivise the public, or to 'design them out' (Macrorie et al., 2014), but offering no information or changes of policy by other parties in the partnership. If the utility companies were to embrace these partnerships more fully, efficiency efforts might be more closely targeted, so as to take account of particular demand challenges (for instance, where and when peak load events occur within a locality), and might equally lead to changes in the utilities' policies or activities. Actions to address domestic resource efficiency could also be cross-referenced with parallel local community actions and initiatives. Such a localised approach would imply a public imagined more as equal partners, who can genuinely help utilities address specific local problems.

In summary, the normative use of our framework has highlighted how all three Kent initiatives indicate significant problems associated with the overwhelmingly dominant techno-rational design of resource efficiency initiatives. Such an approach imagines the public as self-interested profit maximisers that can be educated and incentivised to use installed technologies in the intended way, or who will make resource efficient choices. This perspective does not sufficiently challenge the assumptions and practices of resource governing policy-makers and resource-managing utility companies, or take account of how householders are frequently 'locked-in' to unsustainable infrastructural and institutional systems (Arthur, 1989). Use of framework has also highlighted a lack of joined-up institutional support and learning. In particular, the initiatives are constrained by the stakeholder partnerships that they require, making them complex to organise and fund. The geographically diffuse nature of UK utilities adds to the difficulties of bridging different sustainability agendas or making connections with local environmental features. This analysis has revealed a lack of any mechanism through which learning from different initiatives can be transferred, yet such learning is essential if future resource conservation and efficiency measures are going to present an authentic egalitarian message that "we are all in this together".

7. Conclusion

This paper has provided a novel conceptual framework for assessing resource governance, which applies the concept of imagined publics as the primary lens through which a cultural theory analysis is undertaken. The contributions made by this framework are threefold.

First, by highlighting the assumptions communicated and perpetuated by the resource efficiency initiatives and their organisers, the framework enables a socio-political analysis that moves beyond the quantitative measures (e.g. tonnes of carbon saved) usually used for their appraisal. Specifically the framework enables a common analytical frame to be applied to the processes of participant selection, approach and engagement, the initiative goals and mechanisms for change, as well as the monitoring and learning strategy. This common analytical frame has only been possible because of the novel combination of cultural theory with the concept of the imagined public. While the use of cultural theory's hierarchical, individualist and egalitarian archetypes in isolation might have enabled analysis of initiatives' mechanisms for encouraging domestic resource demand modifications, it is through the additional insight gained from considering the imagined public that the processes of identifying and recruiting participants, conducting the intervention, as well as monitoring and (potentially) learning from the initiative can additionally be unpacked.

Second, as an analytical approach, the framework provided the means to comparatively map resource efficiency initiatives. If the Kent initiatives are indeed typical, the analysis suggests that a hierarchical public looms large in the imaginations of domestic resource efficiency policy makers and practitioners, and is particularly prominent in relation to the externally facing aspects of the initiatives subject to the scrutiny of funders and regulators. Some initiatives additionally demonstrate a concern to appeal to an individualistic public, with only a few initiative-elements being oriented towards an imagined egalitarian public. In this respect, the findings support existing analyses that highlight the dominance of techno-rational approaches to resource governance (for example, Guy and Shove, 2000; Macrorie et al., 2014).

Third, moving from an analytical to a normative position, the framework has enabled the institutional, regulatory and management structures supporting resource efficiency in the UK to be

critiqued. Use of the framework has demonstrated how these structures often detract from opportunities that could be afforded were resource efficiency oriented to a more egalitarian public, a perspective that we have argued is currently necessary in order to support a transition away from dominant, and frequently under-performing, techno-rational approaches. Specifically, the framework has highlighted how the mismatch between the geographies and scales of different publics, combined with silo-ed funding mechanisms for different resources, leads to unequal partnerships. This commonly results in householders being treated as the only individuals or organisations whose practices need reform.

Given these contributions, and whilst claims made in this paper rest primarily on analysis of resource efficiency governance at a local and regional scale, we argue that our proposed framework could be usefully applied to a broader context. Most obviously, the framework could support cross-sectoral (e.g. water, energy and waste) or cross-national analyses of institutional frameworks for enabling domestic resource efficiency. Such analyses would usefully widen the primary focus from householders as the imagined public to consider a broad range of imagined publics (including, technology manufacturers, advocacy groups, utility companies and/or regulators). The framework could also be enlisted to examine the governance of a wider range of environmental and social issues. These might include: biodiversity policy, commercial waste management, sustainable food provision, or social care at home. In all cases, the key contribution of our framework would be to enable understanding and comparative appraisal of the small 'p' politics of policy, commercial, or grassroots governance interventions. The framework would elucidate how assumptions inherent to governance interventions, and producing imagined publics, have distinct implications for the design, implementation, outcomes and evolution of those initiatives. Understanding these assumptions is essential we argue for researching resource governance initiatives, and in particular for potentially directing them in more environmentally and socially sustainable directions, and hence for achieving lasting change.

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