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Realizing NetZero in social housing: strategic public procurement and internal stakeholder engagement

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ABSTRACT

Energy costs and fuel poverty are major concerns for social housing tenants, many of whom are vulnerable citizens. To meet challenging NetZero targets, public organizations have used strategic public procurement (SPP) in decarbonizing social housing stock and to make it more energy efficient. Drawing on SPP and stakeholder engagement, we theoretically argue that public organizations' diverse set of internal stakeholders are integral to SPP. Empirically, we provide evidence of a disconnect between organization-facing and customer-facing stakeholder groups which must be considered and addressed if NetZero targets, and organizational responsibility are to be achieved when implementing SPP.

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KEYWORDS Internal stakeholder engagement; social housing; organizational responsibility; strategic public procurement; NetZero

Introduction

Sustainability, especially NetZero – the reduction of carbon dioxide (CO2) emissions (UNEP 2022) – is one of the grand challenges confronting contemporary society, governments, and businesses alike (Dahlmann, Brammer, and Roehrich 2023; Pot, Dewulf, and Termeer 2022). Through strategic public procurement (SPP), a specialized approach to public procurement extending beyond the traditional acquisition of goods and services to meet broader policy objectives and societal goals (Patrucco et al. 2017), local governments can address this grand challenge, delivering sustainable outcomes for citizens (de Coninck et al. 2023; George et al. 2024). As powerful buyers, local governments may use their purchasing power to create demand for sustainable products and services that minimize negative impacts on the environment and improve social value generation (e.g. social inclusion) (Hafsa, Darnall, and Bretschneider 2022; Patrucco et al. 2023). In the UK context, SPP has a vital role in local governments as the Public Service (Social Value) Act of 2013 requires (strategic)

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public sectors to consider sustainability criteria when procuring goods and services (Selviaridis, Luzzini, and Mena 2024).

Accounting for nearly 40% of global CO_2 emissions, the housing sector has been subject to close scrutiny (ICE 2022). Social housing constitutes a significant proportion of housing, accounting for over 20% of housing stock in the Netherlands, Austria, and Denmark (OECD 2020); widespread retrofitting of energy efficiency measures to existing housing stock is considered key to achieving NetZero (EC 2020). In the UK, social housing represents 15% of UK greenhouse gas emissions (DBEIS 2021). Social housing landlords, local governments use SPP to engage with local suppliers to establish and realize retrofit programmes, decarbonize existing social housing stock (Hawkins, Krause, and Deslatte 2023; NHF 2022), and build new low carbon homes (LocalGov 2022) through initiatives such as innovation competitions and the co-development of sustainable solutions between public and private sector organizations (Leminen et al. 2021).

If SPP is to support the decarbonization of social housing, local governments must engage with a variety of key internal and external stakeholders (Pinz, Roudyani, and Thaler 2018), whilst following public standards, regulatory frameworks, and bureaucratic processes (Boselie, Van Harten, and Veld 2021). Decarbonization must go beyond the involvement of building and material suppliers; citizens play an intrinsic role, lending input and support on possible solutions (Trischler et al. 2023). Given the size of the social housing sector, aggregating demand for renewable heating technologies (e.g. involving multiple stakeholders such as technicians or builders) could help to decarbonize housing stock by promoting the use of innovative technologies (LocalGov 2022). Apart from suppliers and citizens, local governments should also carefully consider how to best engage internal stakeholders – defined as 'functional departments, employees, and business units' (Sirgy 2002, 145) – who are involved in SPP implementation, from bidding, working with suppliers and service users to project execution, monitoring, and termination (Patrucco et al. 2023). Challenges, or even tensions, arising between internal stakeholders regarding decarbonization targets and the process of achieving them could delay, or derail, the decarbonization process and reduce social value generation. Thus, allowing stakeholders to own and embrace sustainability (Meehan and Bryde 2014) would enhance SPP's ability to address social issues for (vulnerable) citizens.

Past studies frequently focused on individual (Ramírez de la Cruz et al. 2020) and multiple (Harland et al. 2019) *external* stakeholders (e.g. suppliers), yet few have addressed the important role played by a local government's multiple *internal* stakeholders (Handfield et al. 2024; Patrucco et al. 2023). Recently, studies of multi-stakeholder engagement have included internal stakeholders' perspectives (Viglia et al. 2023). We theoretically argue and provide empirical evidence that local governments' diverse set of internal stakeholders are integral in SPP as their frequent interactions with each other, service users, and other key stakeholders are crucial in tackling grand challenges (Dzigbede, Gehl, and Willoughby 2020; Patrucco et al. 2019). This is a vital, but under-explored, area of SPP research as local governments have obligations to ensure their service offerings deliver value to all, especially vulnerable citizens (Best, Moffett, and McAdam 2019) – individuals who are at greater risk of poor physical, mental, and social health, often as a result of difficult environmental or socio-economic settings (WHO 2010). Understanding not only external stakeholders' perspectives in SPP but also the possibly diverging views of multiple internal stakeholders is key to

avoiding tensions negatively impacting SPP processes and outcomes (Johnson and Klassen 2022).

Our paper addresses these gaps, advancing our theoretical understanding of the roles of a local government's internal stakeholders in SPP, through an empirical study of a social housing directorate within an English council – Bristol City Council (BCC). Drawing on stakeholder engagement literature (e.g. Foo et al. 2011; Kujala et al. 2022) and SPP (Edler and Georghiou 2007), we investigated the following research question: *How can a local government's internal stakeholders support SPP in the delivery of NetZero targets in social housing?*

We contribute to extant SPP and stakeholder engagement literature, specifically within a local government, in two distinct, but inter-related, ways. First, we empirically identify benefits – cost savings, long-term plans, and guidance, and stimulating demands – that SPP brings to a local government in addressing its social value objectives. We also extend this literature by examining the role of SPP in the social housing context, a vital, yet under-explored, area of research (Hafsa, Darnall, and Bretschneider 2022) and a key issue for local governments (e.g. van Zoest, Volker, and Hermans 2019). Second, by positioning a local government and a diverse set of internal stakeholders within local government onto a stakeholder engagement framework (Greenwood 2007), we highlight tensions between internal stakeholder groups in SPP implementation, particularly for achieving NetZero objectives. Extending prior stakeholder engagement studies (e.g. Yuriev, Boiral, and Talbot 2022), we evidence a disconnect and tensions between organization-facing groups and customer-facing groups in SPP implementation. To deliver NetZero targets, local governments should consider priorities and concerns of each internal stakeholder group in SPP implementation.

Conceptual background

The role of strategic public procurement in social housing and the reduction of CO_2 emissions

SPP and social housing

Accounting for approximately one-third of government expenditure and 12% of gross domestic product (GDP) in OECD countries (OECD 2019), public procurement is used to bolster economic growth and achieve public policy objectives such as promoting innovation and sustainability (Amann et al. 2014; Patrucco et al. 2017). SPP, as a form of public procurement, goes beyond cost reduction and is used 'to pursue secondary policy objectives while delivering the goods and services necessary to accomplish their missions in a timely, economical, and efficient manner' (OECD 2017, 174). A host of different countries has launched value-based initiatives when procuring strategic products and services, going beyond cost reduction to incorporate wider strategic objectives such as social value creation (Pellegrino, Wernert, and Chartier 2022). For example, in mitigating the impact of COVID-19 on nations' citizens, workforces, and economies, SPP was central in maintaining the supply of critical healthcare products and services (Phillips et al. 2022, 2023).

Local governments employ SPP to deliver public services through strategic planning and delivery (Elbanna, Andrews, and Pollanen 2016), providing a fruitful context to further our understanding of social housing – the provision

of residential properties at affordable rates from local authorities/housing associations (Age UK 2022) – with a yet under-explored focus on internal stakeholders (Osborne et al. 2014). Social housing contributes to the social and economic well-being of an area (Wontner et al. 2020), delivering improved outcomes for community issues including crime, health, employment, and education (Monk, Tang, and Whitehead 2010). Compared to other sectors (e.g. education, transport), social housing has two distinguishing characteristics when implementing SPP. First, the majority of tenants have low accessibility to information on new products and/or services (Liu et al. 2023) – tenants might not fully understand the benefits of and are not comfortable with new products and/or services. Second, social housing contains a larger proportion of tenants with long-term illness and disability (UK GOV 2022). SPP in social housing is important for addressing not only NetZero targets but also social inequalities (Selviaridis, Luzzini, and Mena 2024).

We contend that SPP in social housing has been under-represented in SPP studies (e.g. van Zoest, Volker, and Hermans 2019; Wontner et al. 2020), and requires knowledge and information exchanges between groups of local governments' employees to ensure the delivery of key strategic objectives (Chen et al. 2022). There is a need to understand the roles of a diverse set of internal stakeholders, ensuring that, despite competing expectations, they deliver benefits to the service end-user, especially vulnerable citizens (Malacina et al. 2022).

SPP and reducing CO_2 emissions

Public procurement studies have demonstrated how SPP can be employed as a strategic policy tool (Guarnieri and Gomes 2019; Harland et al. 2021). In the Netherlands, government SPP policies have been used to help achieve environmental targets through including environmental criteria in government tenders (van Berkel, Jan, and Schotanus 2021); in the UK, SPP has supported the delivery of social value in key sectors such as local government and healthcare (Selviaridis, Luzzini, and Mena 2024) and in Denmark, SPP has been employed to aid transition towards a circular economy (Kristensen, Mosgaard, and Remmen 2021). Despite NetZero, few studies focus on how SPP can help drive the move towards low-carbon heat sources and benefit vulnerable citizens in the social housing sector. Within social housing, attention has centred on how renewable, low-carbon, energy efficient technologies such as solar panels and heat pumps help landlords achieve NetZero targets and tenants tackle the cost-of-living crisis through reduced energy bills (Best 2022; Lee and Shepley 2020), largely overlooking the role of SPP.

Much of UK social housing stock is old, necessitating the retrofitting of renewable technologies which, although costly, could be overcome through stable government strategies, policies, and procurement (Peel, Ahmed, and Saboor 2020). SPP could support local governments in assessing and selecting the right suppliers, facilitating the decarbonization process (LHC 2022) through a more developed and integrated supply chain (Dahlmann, Brammer, and Roehrich 2023; MCS 2023), enabling wider adoption of renewable energy technologies (LocalGov 2022). SPP may be integral in supporting local government e.g. working with suppliers, encouraging the transfer of skills from renewable energy sectors, supporting training on new technologies for relevant internal stakeholders and social housing tenants. SPP could ensure any renewable technologies procured are fit-for-purpose, meet sustainability targets, and

are easy to use and maintain by social housing tenants and support engineers, which could be enabled through close engagement with key internal stakeholders.

Internal stakeholder engagement

NetZero has created challenges, uncertainties, and diverse objectives for local governments, requiring engagement with a myriad of stakeholders (Holma et al. 2020). Stakeholder engagement – 'practices the organization undertakes to involve stakeholders in a positive manner in organizational activities' (Greenwood 2007, 317–318) – offers opportunities to prevent, minimize, and resolve these challenges (Hollebeek, Kumar, and Srivastava 2022). Prior SPP studies have focused on engagement with various external stakeholders such as citizens (Greco, Sciulli, and D'Onza 2015), businesses (Cutcher, Ormiston, and Gardner 2020), or charities (van der Wal 2020), with strong consensus that external stakeholder engagement benefits public organizations in addressing social and sustainability challenges (Turner et al. 2022), facilitating knowledge and resource-sharing (Selviaridis, Luzzini, and Mena 2024).

Research on internal stakeholder engagement within the public sector is, however, rather limited (Hameduddin and Lee 2021). Recently, studies have started to explore the role of employees in non-profit organizations and found that employee engagement was positively associated with external stakeholder engagement (Winkler, Brown, and Finegold 2019). Knox and Marin-Cadavid (2023) considered two groups of internal stakeholders (managers and employees) in Scottish public organizations and highlighted structural practices (e.g. resource investment) and embedding practices (e.g. championing) could foster employee engagement, leading to improved outcomes for innovation projects in public organizations. Kujala et al. (2022) stressed the need to examine internal stakeholder involvement in decision-making.

While prior SPP literature has started to explore the role of internal stakeholders, these studies have often overlooked the important roles of different internal stakeholders (Freudenreich, Lüdeke-Freund, and Schaltegger 2020; Hofstad et al. 2022), subsuming them as one type of stakeholder (e.g. local government – Casady, Petersen, and Brogaard 2024), neglecting multiple internal stakeholder types and their possibly diverging roles in creating end-user value (Chen et al. 2022). The lack of analysis considering a range of different internal stakeholders is problematic, particularly for sustainability and social-related issues which necessitate expertise and resources from a diverse set of (internal) stakeholders (Freudenreich, Lüdeke-Freund, and Schaltegger 2020).

While stakeholder engagement is important for public and private organizations, it does not necessarily mean that organizations act responsibly towards their stakeholders (Greenwood 2007). Given our sustainability context, and specifically NetZero and social housing, it is vital for public sector organizations to operate responsibly for their various stakeholders, including vulnerable citizens. We are not merely interested in the engagement of internal stakeholder groups with regards to social housing and NetZero, but also how the engagement of various internal stakeholder groups addresses the needs (i.e. internal stakeholders act responsibly) of end-users. Building on Greenwood (2007, 302), we define 'the responsible treatment of stakeholders [. . .] as the organization acting in the interests of legitimate stakeholders' which considers stakeholders as claimants that the 'organizations owes perfect or imperfect duties' to. We argue that public organizations have responsibility to act in

stakeholders' interests when considering how to address and balance NetZero requirements and energy crisis challenges vis-à-vis the needs of their citizens. Pursuing sustainability targets requires strong integration between (internal) stakeholder engagement and organizational responsibility (Greenwood 2007; Winkler, Brown, and Finegold 2019).

Positioning a theoretical framework

We explored approaches for the integration of stakeholder engagement and organizational responsibility, applying Greenwood's (2007) framework, which includes two variables: (i) the engagement of stakeholders; and (ii) stakeholder agency. The engagement of stakeholders refers to activities for consultation, communication, dialogue, and exchange between and within stakeholders. High engagement involves numerous activities and/or the quality of these activities is high, whereas the converse represents low engagement. Stakeholder agency represents the number and breadth of an organization's stakeholder groups, referring to the responsible treatment of stakeholders. Single stakeholder consideration is when the organization considers one stakeholder group (low agency); multiple stakeholder consideration encompasses many stakeholder groups (high agency). The framework is divided into four quadrants offering a means to enhance stakeholder engagement for the development of organization

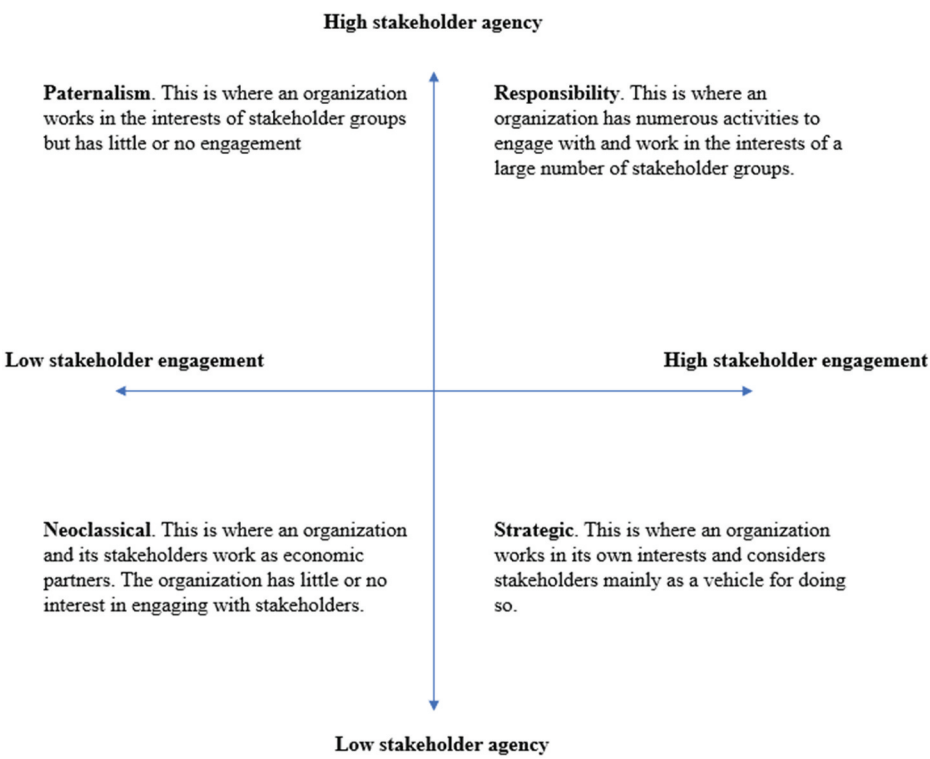

Figure 1. A framework for the relationship between stakeholder engagement and organizational responsibility (adopted from Greenwood 2007).

responsibility (Figure 1). We adopted this framework as it considers stakeholder engagement from an organizational level, emphasizing the relationship between organizational responsibility and internal stakeholder engagement (e.g. employee engagement). Also, the framework posits that an organization may be characterized by multiple quadrants, allowing the consideration of various internal stakeholder groups (Greenwood 2007). We focus on 'responsibility' (high stakeholder agency/high stakeholder engagement), 'paternalism' (low stakeholder agency/high stakeholder engagement) and 'strategic' (high stakeholder engagement/low stakeholder agency) quadrants as they explore engagement activities that internal stakeholders have undertaken to address the needs of the service user, particularly vulnerable citizens.

In summary, we identified two specific gaps in the stakeholder engagement literature. First, a lack of research applying the framework in the public sector, particularly in the SPP context – most extant studies assumed engagement in the public sector as similar to the private sector (Levitats, Vigoda-Gadot, and Vashdi 2019). The SPP context has several unique challenges (e.g. higher legal constraints and limited economic resources - Patrucco et al. 2023), and there is a need to empirically examine internal stakeholder engagement in public organizations as internal stakeholders frequently develop, implement, and manage SPP activities (Johnson and Klassen 2022). Second, while public organizations have various functional units, Greenwood's (2007), and recent works (e.g. Knox and Marin-Cadavid 2023; Winkler, Brown, and Finegold 2019), considered only one or two groups of employees and failed to encapsulate the plethora of internal stakeholders in public organizations. Most extant studies focused on outcomes of internal stakeholder engagement rather than organizational factors (e.g. leadership and communication) influencing internal stakeholder engagement (Yuriev, Boiral, and Talbot 2022), especially when considered alongside organizational responsibility. We address these two issues, forming our study's second research gap, and respond to calls by Levitats et al. (2019) and Yuriev et al. (2022) to consider more specific groups of internal stakeholders, as this will further contribute to our understanding of internal stakeholder engagement and organizational performance.

Methods

Research setting and design

Consistent with the objective of identifying an explanation of a complex phenomenon in its natural context (Eisenhardt and Graebner 2007), we employed an abductive, in-depth single case study design (Siggelkow 2007). We investigated how key internal stakeholders within a social housing directorate of a local government involved in the transition towards renewable heating technologies interact for the delivery of NetZero targets. The empirical fieldwork paralleled the theoretical conceptualizations in our study, and the abductive approach presented a more accurate picture of the cumulative research process that is interwoven with the development of concepts and our empirical findings (Dubois and Gadde 2002).

We purposefully sampled and investigated a range of internal stakeholders working within the Housing and Landlord Directorate of BCC in the South West of England (Supplementary material 1). The Directorate is responsible for the strategy, feasibility, and delivery of refurbishment programmes to council-owned homes, providing

sustainable and affordable housing to some of the poorest parts of the local population. With its focus on addressing NetZero targets and the energy crisis in the social housing sector, the selected case is ideal in addressing our research question. The case was chosen after conducting five pilot interviews with key informants representing internal stakeholders, and after analysing initial secondary data (e.g. local government and national reports).

Our research context is BCC, one of the largest UK social landlords and committed to sustainability and carbon reduction over all its social housing stock (BCC 2022). BCC acknowledged the vital role of its suppliers in addressing its NetZero targets through the 'Procurement and Contract Management Strategy' (BCC 2023). Through an effective procurement strategy, BCC aims to provide energy retrofit solutions, stimulate demand of renewable heating technologies, and provide appropriate funding support (BCC 2020b).

Our sampling logic was: (i) a local government decarbonization initiative with a particular focus on vulnerable citizens; (ii) various internal stakeholder groups within a local government who must work together for the benefit of end-users; and (iii) the context – NetZero targets and the energy crisis in the social housing sector represented a timely setting and a pertinent and core issue not only for the UK, but other governments around the world.

Data collection and sources

Our study combined primary (interviews) and secondary data sources (government reports and policy documents), which were collected live during ongoing engagement with key internal stakeholders (Supplementary material 2), using a three-step recursive strategy. First, we obtained initial insights into the Directorate's work with a variety of different stakeholders, current social housing challenges they face, and the work they have been doing with and for vulnerable parts of the population they serve. This included five pilot interviews with internal stakeholders and analysis of internal public organization and external documents (Supplementary material 3), producing an extensive background on BCC (Supplementary material 1), its Housing and Landlord Directorate, its vision and strategy for stakeholder engagement, particularly its work on social housing. By selecting an action that has been taken, considered, or suggested to address challenges faced by the Directorate as the unit of analysis, we provide better insights of the complexity and performance issues within a local government.

Second, we conducted, recorded, and transcribed semi-structured interviews with 31 internal stakeholders involved in social housing (Supplementary material 4) to better understand how they interacted to decarbonize social housing stock. To obtain reliable information from our interviewees (Alvesson 2003), we employed a semi-structured interview guide (Supplementary material 5) to question internal stakeholders. We sampled interviewees based on the following criteria: (i) worked for BCC (i.e. are internal stakeholders); (ii) had experience of social housing and undertook activities impacting vulnerable citizens; (iii) were involved in NetZero/energy efficiency initiatives in the social housing sector; and (iv) represented disparate functional and hierarchical roles to capture perspectives from different stakeholder groups. The rich datasets allowed us to triangulate data and to access diverse perceptions (Golden 1992). We continued gathering data until theoretical saturation was achieved.

Third, we checked our detailed case report and insights with informants representing key internal stakeholders, which led to minor changes and clarifications for the case report. This step also included reference to further secondary data sources. In addition, we applied specific measures and criteria to ensure validity and reliability of our case findings (Gibbert, Ruigrok, and Wicki 2008, Supplementary material 6).

Data analysis

The data analysis followed three steps: Step 1 (open coding) including uploading our primary and secondary data to NVivo, a data analysis software for coding recurring themes within our revelatory case. We coded data in parallel with data collection, relying on informants' terms for open coding. We then grouped similar statements to develop our first-order codes, and to inform our following steps. In our second step (axial coding), we compared the open codes with stakeholder engagement and SPP literature, substantively coding our data into aggregate codes which were used to perform axial coding and to identify relationships between codes. These codes and further codes emerging from our datasets (e.g. communication; information sharing) were grouped into first- and second-order categories. Informed by an iterative analysis process of empirical data and theory, thick descriptions of the processes and insights were produced (Corbin and Strauss 1990). We ensured transparency by having evidence of how these themes and concepts are interrelated, and having key informants review our descriptions, insights, and interpretation. Lastly, in step 3, codes and empirical insights were discussed between all authors to seek consensus and understanding of concepts and their relationships, and thus forcing 100% inter-coder reliability between the authors (Supplementary material 7).

Findings

Decarbonizing social housing stock

Local government, social housing, and NetZero

Before unpacking key challenges in the social housing sector, we briefly explore the context in which these challenges occurred. Based on our findings, two issues within the energy market emerged which had impacted (UK) social housing: (i) increased energy prices; and (ii) NetZero and the switch to renewable heating systems combined with a lack of strategic foresight of how to transition towards renewable heating systems.

For issue (i), gas is the predominant heat source for social housing; gas combination boilers are commonplace and installed in around 80% of UK homes (BEIS 2022). Gas heating systems are easy to operate (Hanmer and Abram 2017), and fitted when gas prices were historically low, benefitting social housing tenants, preventing many from slipping into fuel poverty (Fouquet 2016). Since January 2021, energy prices have been reaching all-time highs (BEIS 2022), pushing many energy suppliers out of the market (Ofgem 2022) and social housing tenants are struggling with increased energy bills (IH 2022). For issue (ii), with heating for homes and workplaces accounting for around a third of all UK carbon emissions, the UK Government is pushing towards the use of renewable heating technologies, aiming for all new heating sources being low carbon

by 2035 and the decarbonization of social housing (HM GOV 2021). Few heating emissions systems installed in UK social housing properties meet these criteria; often those installed provide inferior solutions and cost more to operate (ONS 2020).

SPP and the decarbonization of social housing stock

We identified three opportunities for BCC to decarbonize its social housing stock through SPP. First, SPP could reduce the decarbonization cost; the cost for heat pump installation is much higher than for gas boilers. Thus, a bulk procurement scheme could decrease heat pump costs and a long-term relationship with suppliers could enhance knowledge and skills relating to heat pump installation and maintenance (BCC 2020a). An interviewee (OM2) noted '*we need to learn and get back-up from manufacturers* [renewable technology suppliers]'. Learning needs to be communicated clearly across internal stakeholders if the benefits are to be realized.

Second, SPP could provide clear guidance and long-term plans to BCC on decarbonization practices. Local governments operate under high political and social pressures and tight restrictions, clear guidance could help local governments' internal stakeholders avoid making mistakes (e.g. selecting the wrong heat pump suppliers), and overcome resistance to changes, which can delay the decarbonization process. A long-term plan could increase the bidding cycles (rather than yearly bidding cycle (BCC 2020b)), helping the selection of the right supplier. As one asset manager (AM3) noted '*we are using the same contractor over and over and they have only got so much capacity*.'

Third, SPP could demonstrate the potential and stimulate demand of renewable technologies. BCC, through its procurement power, could set out high energy efficiency standards, driving demand for renewable heating technologies. BCC acknowledged a programme of works across the council to achieve decarbonization targets: there were '*a series of workshops with councilors to inform future investments in social homes*' (SM1). Such a programme requires an upgrade in skills and training for internal stakeholders.

While SPP offers three opportunities for the local government to decarbonize its social housing stock, persuading internal stakeholders to work together to exploit these opportunities remains a priority, as one senior manager highlighted that '*we have to engage people at all the various levels, and we have to keep engaging them throughout*' (SM2). In the following sections, we identify and present the challenges associated with pursuing these opportunities.

Internal stakeholder engagement for NetZero

Internal stakeholders within the Directorate have different priorities and perceived levels of required input in making the transition to renewable heating sources, which may impact tenants should their views be overlooked. For procurement, the biggest issue was the scale and range of tenders they are involved in, in tandem with tight deadlines: *'The problem we have is that the council procures an awful lot of goods, works and services. The internal stakeholders can be demanding, but rightfully so, because they need to get work done as quickly as possible*' (OM5).

For customer-facing staff, gas central heating (GCH) is familiar and easy to operate; the shift towards renewable heating sources required a major change in mindset:

'*Personally, it is the only heating type I have ever known* [gas]. *I know exactly what to do and how to use it'* (HO3). For gas engineers, there were differences in opinion between new and longer-serving engineers: '[BCC] *needs to search for the young ones who are keen to see their future. But that is not me'* (GE7).

The differences in priorities and perceived levels of interest between the identified internal stakeholder groups had led to challenges in the decarbonization process. We unpacked the challenges and practices that BCC faced when seeking to engage the various internal stakeholder groups in activities to ensure BCC operated in a responsible manner, that the benefits of moving towards the use of renewable heating sources were delivered to the service users, particularly vulnerable citizens, and that their needs were addressed. We identified three key challenges in achieving this goal (Table 1): (i) lack of a clear and coherent strategy; (ii) resistance and lack of motivation to change; and (iii) lack of training on new sustainable approaches for internal stakeholders.

Challenge: lack of a clear and coherent strategy

Our findings suggest that although SPP could reduce the cost of decarbonization, there is a need for clear communication across the Directorate's internal stakeholders which could be realized through a clear and coherent strategy regarding the retrofit of renewable heating technologies in social housing, commonly termed the 'heating strategy' by BCC employees. We uncovered disagreement between different stakeholder groups within the Directorate in terms of such a strategy's existence with a clear difference of opinion between organization-facing and customer-facing groups.

Organization-facing groups were aware of a heating strategy but acknowledged it may have not been apparent to the rest of the organization. According to one senior manager: *'I think there is a strategy, but whether it has enough visibility is a different question'* (SM1). In the past, the leadership team tried to promote collaboration by keeping everyone informed, but this had an adverse effect as when they '*bombarded people with information they turn off*' (SM1). Asset managers suggested more than one strategy existed, raising further confusion in terms of engaging with other internal stakeholders: *'BCC does not have one specific strategy. That is obviously problematic when communicating with your colleagues inside the organization*' (AM1).

Procurement felt that communication regarding the strategy was good, due to their engagement with other internal stakeholders within the Directorate which allowed them to seek more clarity when necessary: '*We have two procurement specialists that are solely responsible for the work that they undertake. So they built up a really good sort of stakeholder relationship, they know who all the managers are* [. . .] *So if there are any procurement questions, they know who to go to'*. (OM5).

Customer-facing staff opined that the heating strategy had not been shared or communicated. Past communications were *'often ignored*' (GE7) due to differences in communication style: *'I just glanced over the emails. The Directorate's communication style is very different to ours, and we need more clarity*' (GE7). Customer-facing staff were concerned that, without clear communication, the strategy could be misinterpreted, adversely affecting the end-users, particularly vulnerable citizens: *'I think we are worried about making the wrong decisions and this will have a negative impact on some of our most vulnerable citizens*' (HO1). Furthermore, customer-facing groups were fearful of raising concerns: '*People felt very blamed, so that stopped ownership, and*

Table 1. Challenges faced by a PSO's internal stakeholders when seeking to implement renewable heating technologies.

Challenges	Brief description of challenge	Related quotes
Lack of clear and coherent heating strategy	Internal stakeholders are unaware of a heating strategy	*'I am sure there is a strategy, but I am not aware of one. Unless I am guided to it, I am not going to go and look for it because of my other workloads'*. (HO2)
		*'I think we are kind of probing around the outside edges of getting a strategy together, but I do not think there is one as yet'. (*AM2)
	Concern that the heating strategy is ineffective	*'So however basic that looks, we have got a strategy to get from A to B. How we get there? I think we are not, I do not feel that we are fully prepared'*. (SM4)
		'Our strategy. It's not. It is two different things I would say. That is not a strategy in my eyes. A strategy is a clear path'. (OM3)
	The heating strategy has not been communicated well	*'I guess we were not always clear in communicating what we wanted, and how it should be done'*. (SM1)
		'They do tell us stuff; it is not that great. I know everybody moans about it, but I do not think it's that great really'. (HO2)
Resistance and lack of motivation to change	Stakeholders lack motivation to change	*'I know, and I am guilty of it myself. You think I am not getting more money?* [for doing additional work] *When I get the same money, why would I bother?'* (GE3)
		'*We also needed some kind of bonus scheme to get the engineers to do more work and install new technologies*.' (GE5)
		"*We can offer things like that* [examples of wrong heating practices at social houses] *from our teams, but I wouldn't want it to feel like a bolt on to your normal wrong lever because you've got some things to have to think about*. (HO2)
	A culture of resistance to change exists	*'The one thing I have learned with the Council* [PSO], *I do not think they like to change much'. (GE8)*
		'Nothing changes. Nobody really listens. So just carry on, do the best you can'. (GE9)
		'Very ageing organization [the Directorate] *in terms of structure management and we've got a lot of people who do not want to embrace renewables'*. (OM3)

(*Continued*)

Table 1. (Continued).

Challenges	Brief description of challenge	Related quotes
	Resistance to change from customers (social housing tenants)	'*We also needed some very good information that can convince people* [social housing tenants] *that this is the right way forward.*' (GE13). '*What we are going to need to do is get that message out to residents about how these systems work and the differences between gas and air source heat pump for example or ground source or renewable . . . but that is going to involve some pretty significant teamwork and communication across* [the Directorate]'. (AM2)
Lack of training on new sustainable approaches	Customer facing stakeholder groups had little or no understanding of renewable heating technologies	*'So we have got a huge education and training exercise to do with wider, just not just residents, but all staff members or a customer facing and contact points with customer. There's because we need to. We got to market this to people'*. (AM4) '*We* [call centre staff] *don't know too much. I never seen one really, really working. I mean, I have not seen it like how you set it up. How you do that'. (CA1)*
	Senior and middle managers had received no formal training on renewable heating technologies	*'So I would say that my knowledge* [of renewable heating] *is quite limited from a technical point of view I'm aware of renewables'*. (SM1) *'Well it happens* [knowledge of renewable heating] *to be very limited and the only reason that I engage in conversations about renewables is a because it is on our political agenda'*. (SM4)

it stopped growth. It stopped service improvement. [. . .] *I guess we were not always clear in communicating what we wanted, and how it should be done*' (SM1).

In summary, there was clearly a disconnect between the senior, organization-facing groups and those employed in customer-facing roles regarding the existence of a coherent heating strategy that was understood by all internal stakeholders: *'Ideally, you have a consensus understanding of the strategy amongst all key stakeholders'* (GE7).

Applying the stakeholder engagement framework, the customer-facing groups felt a responsibility to ensure that, in delivering BCC's heating strategy, the needs of vulnerable citizens were being met but could not raise concerns in terms of their ability to do so. In contrast, the organization-facing stakeholders were paternal in their approach – implementing a strategy that aimed to deliver benefits to the citizens they serve, including vulnerable citizens, but failed to do so in a manner that engaged other internal stakeholders; those in customer-facing roles were not certain it was being delivered in a way that truly benefitted vulnerable citizens. Conversely, procurement was in a position where staff felt they could engage with relevant stakeholders to ensure they were interpreting and implementing the strategy correctly and aligning it with BCC's procurement

policy, bridging both the paternal and responsibility quadrants of the stakeholder framework.

Challenge: resistance and lack of motivation to change

Again there was a disconnect between the organization-facing staff and those in customer-facing roles. Senior managers within the Directorate tried to initiate, support, and direct change to meet NetZero targets, but were overwhelmed by the enormity of these requirements: *'I think the scale of change makes it really challenging for us, and the fact that there has been so much change around what good looks like'* (SM1). Senior managers had to tackle a lack of motivation to change behaviour and activities, particularly within the customer-facing groups. SM2 admitted: '*I have never experienced anything like it. I get real resistance, and some of that is cultural'*.

Operations managers found it difficult to encourage different internal stakeholders to work together and take on new risks: *'We found it very difficult because there was not a culture – people are not collaborative because it affected their day-to-day, and they were not really willing to take the risk. I guess people were too scared to make changes'* (OM1).

Within procurement it was noted that although there was resistance to change, there were those striving to make a difference: '*There will always be certain areas of the organization or certain colleagues that are resistant to the change because they have been doing the same thing for ten years and they like what they are doing* [. . .] *I think Bristol is a very progressive city and we do have a lot of people that are you know, pushing for these changes'* (OM5). Procurement recognized the need for earlier engagement in projects to ensure alignment with BCC's NetZero agenda: *'If we can begin to look at projects earlier and earlier, that is where we can put more emphasis on how we can do things differently, know when we need to be included in the sustainability element'* (OM5).

For customer-facing stakeholders, call-centre staff felt positive about reflective practices within the service delivery process; that it promoted engagement with other internal stakeholder groups: *'We have monthly meetings where we summarize all the problems the back office is having and try to understand the problems so we can fix them'*. (CA1).

Gas engineers were particularly resistant to change and pointed towards a culture of low motivation and performance: '*If someone is not performing at their job, it does not matter. It was just brushed under the carpet. Nobody really listened or changed anything'* (GE9). Repeatedly, the gas engineers indicated that they would work harder if they were renumerated: *'I am not going to fit* [new technology] *for the same amount of money I am on now. We need bonus schemes to get the guys to do more work'* (GE5).

In applying the stakeholder engagement framework, in terms of resistance to change there is evidence of different behaviours amongst the internal stakeholder groups. Again the organization-facing groups adopted a paternalistic approach, attempting to drive through change, despite resistance from customer-facing groups. Procurement attempted to bridge the divide, taking on stakeholder engagement as a form of responsibility, identifying the need for early engagement and collaboration in the decision-making process. Such responsibility was evident in customer-facing roles; call-centre staff actively engaged with other groups to improve their knowledge and understanding of any issues that needed to be addressed. However, gas engineers were strategic in their approach with many acting in their own interests.

Challenge: lack of training on new sustainable approaches

The move towards more sustainable approaches within BCC has required development of new skills and training for all relevant internal stakeholders. We found a lack of training on new sustainable approaches across all stakeholder groups, which acted as a barrier to collaboration as there was a disparity in knowledge and understanding across different stakeholder groups.

Within the organization-facing groups, operations managers, who were responsible for ensuring the smooth transition towards the use of renewable heating sources, acknowledged that they themselves had received no formal training on renewable heating technologies, but had some understanding of the products from experience: *'Because of the experience, I have knowledge of it, but I do not think we* [OMs] *include ourselves so much in the training'* (OM2). Asset managers followed a similar vein: '*Nothing, I have not had anything apart from my surveyor type of qualification I went through*' (AM2). The organization-facing staff were not aware of the level of training received by those in customer-facing roles: *'I would be surprised if our housing officers, call center staff had any training'* (OM1).

The lack of training became an issue for procurement: *'The sustainability criteria required for the tenders increases the time that has taken because there is training that stakeholders need to undertake and it is important to just keep pushing on because the goal of NetZero, the problem of climate change, it is not going away'* (OM5). Procurement acknowledged the need for close engagement with the Directorate's internal stakeholders, ensuring the needs of the service users were met. *'It is about trying to make procurement as approachable as possible, making sure everyone knows who we are because obviously we are at the center of sourcing contracts.* [. . .] *the responsibility of writing the spec and deciding what they want to do will always lie with the services because they are the experts. We know the procurement rules and we announce the tenders, but we would always defer to their decision'* (OM5).

Training appeared to be a major issue for customer-facing staff, who frequently cited a lack of training on new technologies (e.g. installation, maintenance), leading to further confusion and uncertainty amongst internal stakeholders, impeding the adoption of renewable heating by tenants. Call-centre staff admitted they had received no training and had developed their understanding independently: *'I have looked on those different websites and read about it'* (CA2), and *'we had never seen these new systems, and we knew how it works just based on the documents they provide us*' (CA1).

Housing/Letting officers had similar experiences: '*I get my knowledge pretty much from that* [information brochures for tenants] *and my own experience*' (HO1). The gas engineers had received some training on renewable heating technologies such as heat pumps but acknowledged the lack of training for other internal stakeholders: *'They* [OMs] *put together some really good training for us on heat pumps.* [. . .] *Other customer-facing groups such as the call center staff, and housing officers had never received training on renewable heating'* (GE4).

Evidently, tensions existed between the different stakeholder groups, which could negatively impact the service delivered to the end-users. The organization-facing groups adopted a paternal approach to training, acknowledging a need for all internal stakeholders within Directorate to understand sustainable approaches and renewable heat technologies but lacked awareness of what level of training and understanding existed within groups. The customer-facing groups had adopted a responsibility approach e.g. the call-centre staff and housing/letting officers had independently

developed their own understanding to ensure they could help and support the end-users. The gas engineers have learned on the job and through direct interaction with the new heating technologies. Again, procurement acted as a bridge between the different groups, engaging with the different internal stakeholders to ensure that the needs of the end-users were being met but that procurement directives were followed and adhered to, and the sustainability criteria were being met.

Applying Greenwood's (2007) framework

The challenges experienced and the roles adopted by various internal stakeholders in the decarbonization process for NetZero helped us to apply Greenwood's (2007) framework. We positioned BCC in the 'responsibility' quadrant because, as evidenced in our dataset, BCC undertook numerous activities to engage with and work in the interests of various stakeholder groups to address NetZero challenges and create social value. Additionally, building on our data insights, we positioned the groups of internal stakeholders on the framework (Figure 2). We observed that various internal stakeholder groups can be positioned in different quadrants. More specifically, the organization-facing groups adopted a paternal approach, acting in what they believed to be the interests of the different stakeholder groups and the service users. The organization-facing groups also engaged and consulted with different internal groups (e.g. call-

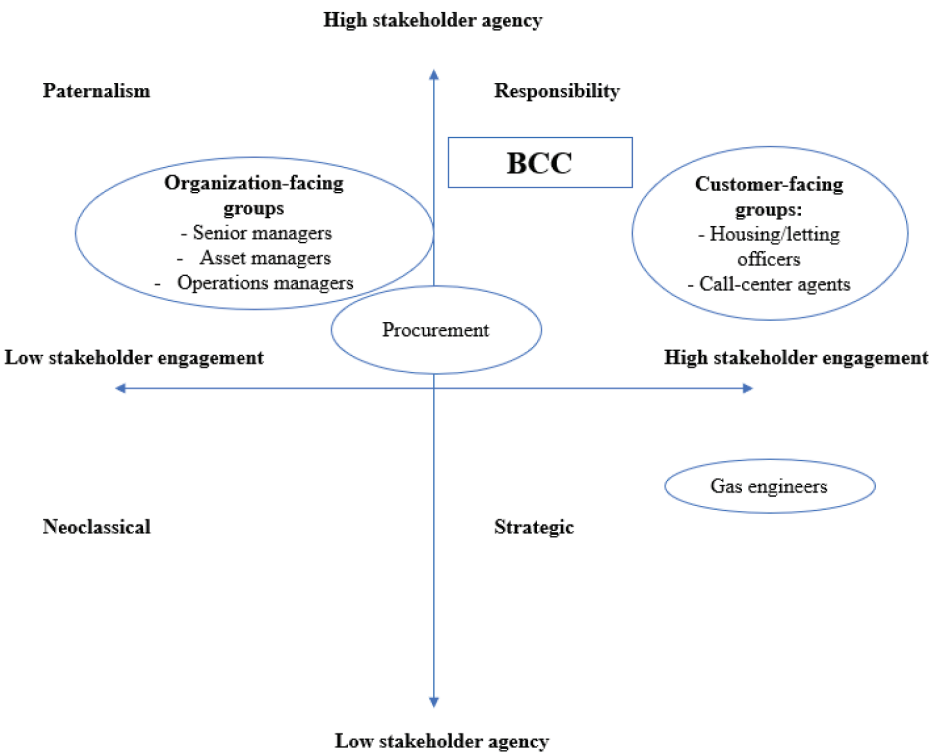

Figure 2. Adapted framework for the relationship between stakeholder engagement and organizational responsibility at BCC.

centre staff, housing/letting officers, and gas engineers) when communicating the heating strategy and addressing resistance to change. However, we observed that the organization-facing groups appeared to be unaware of the level of understanding that the different internal stakeholder groups had in terms of sustainability approaches, processes, and the new heating technologies.

The majority of customer-facing groups, on the other hand, adopted a responsibility approach. They engaged with the end-users and other groups to ensure the interests of the service users were addressed, that BCC's heating strategy was implemented and that the service users were able to use the new heating technologies properly. Conversely, as a customer-facing group, the gas engineers appeared, at times, to act strategically and in their own interests and were particularly resistant to change and the move towards the use of renewable heating technologies. Interestingly, procurement straddled both paternal and responsibility quadrants, working with the organization-facing groups to implement the heating strategy in line with procurement directives, but also working with the customer-facing groups to ensure that the needs of the end-users were being met.

Discussion

Theoretical contributions

We contribute to extant SPP and internal stakeholder engagement literature, focusing on the collaboration amongst a diverse set of internal stakeholders within a public organization for the delivery of NetZero targets (which benefits vulnerable citizens).

First, we offer empirical insights on how SPP of a local government may aid the decarbonization of social housing stock. Generally, public organizations implement SPP to create social value (Selviaridis, Luzzini, and Mena 2024). For local governments, SPP is crucial in delivering benefits to service users. Studies have examined SPP in different contexts, such as local government and healthcare (Selviaridis, Luzzini, and Mena 2024) and circular economy (Kristensen, Mosgaard, and Remmen 2021). We extend this literature by examining the role of SPP in the social housing context, a vital, yet under-explored, area of research (Hafsa, Darnall, and Bretschneider 2022) and a key issue for local governments (e.g. van Zoest, Volker, and Hermans 2019). We contribute to the literature on the relationship between public organizations and SPP (e.g. Patrucco et al. 2019) by empirically providing insights on benefits (environmental, social, and economic well-being) that SPP could bring to a local community. In our research context, these benefits are significant as many social housing tenants are vulnerable citizens who spend most of their income on energy costs.

We reveal three benefits that local government can achieve when seeking to decarbonize its social housing stock through SPP: (i) reducing the decarbonization cost, (ii) providing guidance and clear long-term plans for decarbonization practices, and (iii) demonstrating the potential and stimulating demand for renewable heating technologies. These opportunities highlight the importance of SPP in addressing a public organization's social value objectives (Caldwell et al. 2017; Selviaridis, Luzzini, and Mena 2024).

Second, we respond to Hafsa et al. (2022) and address a critical knowledge gap about challenges in SPP implementation. We demonstrated the role of a local government in engaging with different groups of internal stakeholders for the delivery of

NetZero targets. We conceptualized stakeholder engagement through the interactions between different groups of internal stakeholders. Prior SPP studies have mainly focused on external stakeholder engagement (e.g. Cutcher, Ormiston, and Gardner 2020; van der Wal 2020), neglecting internal stakeholder engagement (e.g. Hameduddin and Lee 2021; Yuriev, Boiral, and Talbot 2022). In contrast, we studied a range of different internal stakeholder groups as they are particularly important for local governments in delivering solutions to complex problems, supporting desired behaviour, and implementing operational policies (Yuriev, Boiral, and Talbot 2022). We highlighted different activities and degrees to which internal stakeholders engage and support a local government's organizational responsibility. In this aspect, we extended the internal stakeholder engagement literature (e.g. Knox and Marin-Cadavid 2023; Yuriev, Boiral, and Talbot 2022) by showing that each group of internal stakeholder has different needs and that a standard, 'one-size-fits-all' approach cannot be used when implementing SPP within local government.

Specifically, building on Greenwood's (2007) framework, we extended Yuriev et al. (2022) to focus on organizational factors affecting internal stakeholder engagement. We highlighted a disconnect and tensions between organization-facing groups and customer-facing groups in SPP implementation. Organization-facing groups work to benefit a local community and formulate decarbonization strategies. Customer-facing groups implement these strategies and face front-line issues with the implementation (e.g. resistance from citizens). Tensions emerge from this disconnect as each group has different priorities and concerns. Thus, public organizations need to identify and consider the priorities and concerns of each stakeholder group when implementing strategies (Hansen et al. 2024).

Also, in line with Mitchell (2022), we found that (internal) stakeholder support is important in strategic implementation. While gas engineers mostly acted on their own interests, procurement attempted to connect different internal stakeholder groups. This could be attributed to the fact that, compared to the gas engineers, procurement is well-connected with organization-facing groups and has greater access to information on decarbonization strategies. Procurement operated in the responsibility quadrant through high stakeholder engagement to ensure the needs of the end-users were met (particularly vulnerable citizens) and benefits delivered but also acted paternally to ensure the overall strategy was followed and adhered to. Thus, procurement brokered the tensions between the two opposing groups. Here, we highlighted the need for of clear guidelines and information when implementing strategy (Lee 2022). We also stressed the role of SPP in engaging internal stakeholders to deliver sustainable outcomes for citizens.

Boundary conditions and further research

Whilst we offered distinct contributions to SPP and stakeholder engagement literature, our study's boundary conditions offer valuable opportunities for future research. Although our study positioned insights for local governments to address sustainable and social (inclusion) grand challenges in the UK social housing sector, future studies should explore local governments in other countries and sectors. Following the argument by Best et al. (2019), context will frame the exchange at multiple levels – micro, meso, and macro. Future studies may expand our in-depth analysis of interactions at the meso level to explore the impact (and interplay) of micro and macro levels. Our

study explored the challenges faced and the key activities undertaken by a local government and its internal stakeholders, future research could explore the collaboration across different tiers of government in the provision of public services (Guarneros-Meza and Martin 2016). Different internal stakeholders within local government may have divergent perspectives of what constitutes public value, and how and when it should engage with outside stakeholders. We focused on six groups and mapped them into three quadrants of Greenwood (2007)'s framework. Future research could consider more groups of internal stakeholders and look at the remaining quadrant of Greenwood (2007)'s framework and include service users' (including vulnerable citizens) experiences and expectations of service delivery.

Practical implications

For SPP, the findings of this study may encourage (procurement) managers to identify and undertake activities with internal stakeholders and question whether their service offerings deliver value and have support and engagement from those responsible for implementing a new approach (the internal stakeholders), ensuring the needs and concerns of the service end-user, particularly vulnerable citizens, are addressed. There is an initial risk that closer and more frequent internal stakeholder engagement could drive up costs, but this would be mitigated through numerous benefits that could potentially deliver longer term cost savings.

Our findings drew out a need for clear and coherent communications regarding strategy. A clear communication strategy would raise awareness amongst the various internal stakeholders, including procurement, emphasizing the benefits. To ensure that a public organization is operating in the 'responsibility' quadrant, all internal stakeholders must be on board, working together to deliver energy savings to the customer, particularly vulnerable citizens, and achieve NetZero targets. Various communication tools including short, informative videos, and graphics could be employed to transfer information between key internal stakeholders, ensuring the benefits of renewable heating technologies were fully understood by all internal stakeholders and recognized as a way of delivering value to the service end-users.

To address resistance to change, performance measurement systems (PMS) could be used to address and overcome cultural resistance to change from internal stakeholders. PMS measures outcomes, efficiency, and effectiveness at various levels of the organization. PMS could clarify the performance objectives of each internal stakeholder, motivating them to work together towards a shared goal (NetZero targets). Regular formal performance appraisals could reinforce day-to-day activities through communicating ongoing expectations and clear targets, countering resistance through focusing on coaching and developing an individual's behaviour rather than measuring outputs.

In overcoming a lack of training on sustainability approaches, there is a need to promote knowledge transfer between different internal stakeholders to build up knowledge and understanding, which would ultimately benefit the service users. Through engagement with internal stakeholders working closely with the end-users, procurement could make sure the tender documents contained specifications closely aligned to the needs of the end-user, ensuring the delivery of goods and services that are both fit-for-purpose and that contribute towards achieving NetZero targets.

Conclusion

This paper explored the roles of different internal stakeholders, their engagement and the implications for SPP in achieving NetZero targets. We theoretically positioned that prior studies, with their focus on external stakeholders, have overlooked the importance of internal stakeholder engagement in ensuring the responsible treatment of service users, particularly within the context of social housing. The findings revealed the strategic role of public procurement in addressing grand challenges (e.g. decarbonization in social housing) and empirically demonstrated the importance of internal stakeholder engagement in SPP. We hope that our findings will encourage further research on SPP to augment our understanding of the roles adopted and challenges faced by different groups of internal stakeholders in delivering NetZero targets.

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