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MSc Sustainable Entrepreneurship

Master's Thesis

The perception of private landlords of housing in Groningen regarding heating and energy performance policies.

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5th of June, 2025

Abstract

This thesis investigates how small-scale private landlords in Groningen perceive and respond to sustainability policies related to heating and energy performance in student housing. As residential buildings represent a major source of CO_2 emissions, this landlord segment is increasingly subject to regulatory instruments such as energy label requirements, hybrid heat pump mandates, and local transition plans. Yet, little is known about how these policies are interpreted and acted upon by individual landlords operating outside institutional frameworks.

Based on eight in-depth interviews and guided by a multi-theoretical framework, drawing from the Theory of Planned Behavior, Policy Feedback Theory, and transition studies, this research identifies a nuanced set of behavioural determinants. Financial risk, administrative complexity, policy fragmentation, and limited trust in public schemes emerged as key barriers to engagement. While some landlords expressed openness to sustainability investments, particularly when aligned with maintenance cycles or supported by accessible subsidies, others adopted a reactive or disengaged stance due to uncertainty, perceived hassle, or low behavioural control.

The findings reveal that landlord decision-making is shaped by more than cost-benefit logic. Social identity, prior experiences with government schemes, and the perceived credibility of enforcement all contribute to behavioural outcomes. The study underscores the need for targeted, trust-building policy approaches that reduce complexity and recognise the everyday routines of small-scale landlords. Recommendations are offered for future research and practice, including longitudinal studies, experimental interventions, and greater integration of tenant-landlord dynamics in policy design.

Introduction

The built environment plays a central role in Europe's transition toward a low-carbon future. In the Netherlands, the residential sector accounts for approximately one-third of national energy consumption and a significant share of greenhouse gas emissions (CBS, 2023). In response, national and EU-level climate strategies increasingly emphasise energy efficiency and decarbonisation in housing. While social housing associations have made significant progress in improving energy performance, privately rented dwellings, particularly those owned by individual landlords, continue to lag behind (Filippidou et al., 2018; Visscher et al., 2016).

This issue is especially pressing in university cities such as Groningen, where the private rental sector accounts for a large share of student housing. These properties are often older, less insulated, and more fragmented in terms of ownership, making them more difficult to target with standardised interventions (Hoppe et al., 2021). Student housing, in particular, presents unique challenges: short tenant stays, capped rents, high turnover, and often minimal investment horizons for owners. As a result, small-scale private landlords in this context operate at the intersection of public sustainability objectives and private economic interests.

In response to climate goals, both the Dutch government and the European Union have introduced a wide range of policy instruments to promote residential energy efficiency. These include mandatory energy labels, minimum label thresholds for rental properties, subsidies for insulation and retrofitting, and a future obligation for hybrid heat pump installation starting in 2026 (Rijksoverheid, 2024). While these instruments are well-intentioned, the actual uptake of such measures among private landlords remains uneven and often limited (Klöckner, 2013). This discrepancy has raised concerns about implementation gaps and behavioural bottlenecks.

Previous studies suggest that small landlords may face unique and often overlooked barriers, including limited knowledge of applicable policies, low trust in governmental reliability, financial uncertainty, administrative burdens, and practical or technical constraints (de Best-Waldhober & Daamen, 2006; Stieß & van der Wulp, 2008). Moreover, their decision-making is shaped not only by market logic but also by individual norms, past experiences, peer behaviour, tenant relationships, and the presence (or absence) of credible institutional support (Steg et al., 2015; Wilson & Dowlatabadi, 2007). Many operate informally and part-time, making them more difficult to reach through conventional policy channels.

Despite their central role in the rental housing market, small-scale private landlords remain understudied and underrepresented in the academic literature and policy discourse on sustainability transitions. Their perceptions, motivations, and behavioural constraints are seldom investigated in depth. As a result, policy instruments are often designed with large property owners or professionalised landlords in mind, limiting their effectiveness in this segment of the housing market.

Understanding how these landlords perceive energy and heating policies is therefore critical. Such insights can improve the design and targeting of policy instruments and enhance the broader effectiveness of the energy transition in the private rental sector. This is particularly important in student housing, where housing quality, affordability, and sustainability intersect in complex ways.

This thesis explores the motivations, perceived barriers, and policy perceptions of small-scale landlords operating in the student housing sector in Groningen. It does so by applying a qualitative research design based on semi-structured interviews with a diverse group of landlords. The analysis is guided by a framework of 18 behavioural and contextual determinants, drawing on social-psychological, institutional, and practical perspectives on sustainable decision-making (Bressers & de Boer, 2013; Baum & Gross, 2022).

The following research question is central to this study:
How do private landlords of student housing in Groningen perceive energy and heating policies in relation to the sustainability of their properties?

By investigating this question, the study provides empirical insights into the lived experiences of landlords navigating an increasingly complex policy landscape and offers recommendations for improving support structures, trust-building, and communication strategies in the Dutch rental sector.

Theory

2.1 The Dutch private rental sector and student housing

In the Netherlands, student housing plays a central role in both higher education and broader social development. Independent living is seen as crucial to fostering autonomy, resilience, and life skills among young adults (Kences, 2023). However, the student housing sector is under increasing pressure. According to the 2023 Monitor Studentenhuisvesting, there remains a structural shortage of student accommodation, especially in university cities such as Groningen, which houses over 30,000 students.

Small-scale private landlords form the backbone of this market, owning around 40% of student rental units nationally (Kences, 2023). These landlords typically own a few properties, operate informally, and manage student tenants in shared housing with limited insulation or energy efficiency measures (Hoppe et al., 2021). Their role is vital but poorly understood in housing research, particularly regarding their interaction with sustainability policy.

2.2 Policy instruments for residential sustainability in the Netherlands

To reduce CO_2 emissions and improve energy performance, the Netherlands has introduced a comprehensive mix of national and local policy instruments. Nationally, landlords must meet energy label requirements, and new rules mandate hybrid heat pumps when replacing boilers from 2026 onward (Rijksoverheid, 2024). The *woningwaarderingsstelsel* (WWS) connects energy labels to maximum rent levels, offering indirect financial incentives. Additionally, the Good Landlordship Act and Rent Act govern quality, affordability, and landlord conduct.

Locally, municipalities like Groningen implement the *Transitievisie Warmte*, a long-term vision for phasing out natural gas, and sometimes introduce insulation funds or permit systems for room rentals (Gemeente Groningen, 2022). While these layered policies aim to guide landlords toward energy upgrades, their overlapping scopes may lead to confusion.

Economidou et al. (2024) show that fragmented policy landscapes and inconsistent local implementation reduce landlord engagement across EU states. These findings highlight the importance of clear communication and policy coherence, especially for actors with limited institutional support.

2.3 Private landlord behavior in sustainability transitions

Landlord behavior in response to sustainability policy is shaped by more than economics. Studies reveal that landlords, especially those with smaller portfolios, are often passive and rely on property managers or informal routines (Hoppe et al., 2021; van der Heijden & Boelhouwer, 2016). Their decisions depend on a mix of trust, prior experiences, perceived effort, and perceived fairness of policies (Wilson & Dowlatabadi, 2007; Klöckner, 2013).

Behavioral models of sustainability stress the influence of non-financial drivers: social norms, perceived agency, and past interactions with institutions. For instance, negative past experiences with complex subsidy procedures or inconsistent enforcement can erode trust and future compliance; a dynamic known as *policy feedback* (Pierson, 1993; Mettler & Soss, 2004). Especially in the context of fragmented governance, landlords may opt to “wait and see” rather than act.

2.4 Barriers and motivations for energy efficiency measures

A major barrier is the *split incentive* problem: landlords pay for energy upgrades, while tenants enjoy the benefits (Bird & Hernández, 2012; Gillingham et al., 2012). This disincentivizes investments like insulation or efficient heating, particularly in student housing where tenant turnover is high and rent adjustments are capped. Even when subsidies exist, small landlords often do not apply due to administrative burdens or lack of awareness (Boerenfijn et al., 2022).

Economidou et al. (2024) confirm that in many EU countries, including the Netherlands, landlords cite a lack of tailored information, overly complex eligibility criteria, and unclear policy signals as key reasons for inaction. Motivation is therefore shaped by more than financial calculus; values, simplicity, and credibility of policy delivery also matter (Steg et al., 2015).

Despite this, some landlords do act. Out of long-term investment logic, social responsibility, or tenant expectations. Peer influence and experiences with municipalities or property managers can also encourage action.

2.5 Knowledge gap and contribution of this study

Most research on sustainability in the built environment has focused on homeowners or institutional landlords. Small-scale private landlords, despite managing a large share of the rental stock in cities like Groningen, remain underrepresented in policy discourse and academic analysis (Kences, 2023).

Furthermore, the way these landlords perceive and experience policies is rarely studied in depth. Many studies assume rational cost-benefit logic, but overlook trust, communication, and personal interpretation. Key variables in behavioral sustainability models (Klöckner, 2013). As a result, interventions may fail not because of poor design, but due to how landlords *understand* and *experience* them.

This study aims to fill that gap by exploring the perceptions, motivations, and barriers of small-scale landlords in Groningen's student housing market. It draws on a structured framework of behavioral determinants to produce grounded insights into how policy is received and acted upon in everyday rental practice.

2.6 Theoretical perspectives on landlord decision-making

Understanding how small-scale landlords respond to sustainability-related policy requires going beyond rational choice assumptions. Traditional economic models assume that actors make decisions based solely on financial incentives or regulatory pressures. However, research increasingly recognises that real-world behaviour is shaped by a more complex mix of psychological, social, and institutional influences (Wilson & Dowlatabadi, 2007; Klöckner, 2013; Steg et al., 2015).

For instance, landlords may support sustainability in principle but refrain from action due to perceived administrative burdens, negative past experiences, or a lack of trust in public programmes. Especially in fragmented housing markets, such as the student rental sector in Groningen, these behavioural frictions can make or break the effectiveness of policy interventions (Haffner & Elsinga, 2021).

To analyse this complexity, this thesis adopts an integrated behavioural-institutional lens. The central framework used is the 18-determinant model developed by Baum and Gross (2022),

which is complemented by insights from policy feedback theory and literature on policy coherence and fragmentation. Together, these perspectives allow for a grounded yet multifaceted interpretation of landlord behaviour.

2.7 Analytical lens: The 18-determinants framework

Baum and Gross (2022) propose a framework of 18 behavioural determinants that influence how individuals respond to policy measures in sustainability transitions. These are grouped into four dimensions. Institutional (including rules, enforcement clarity, and previous experience with institutions), Economic (such as perceived costs, funding availability, and expected returns), Informational (related to communication, awareness, and clarity of policies), Psychosocial (including motivation, identity, norms, and perceived self-efficacy). This model is especially suited to qualitative analysis. It allows for structured thematic coding while remaining sensitive to contextual nuances, such as the informal landlord practices in student housing markets. Moreover, the framework aligns with the empirical goals of this study: to explore the *perceptions* and *interpretations* of landlords, not merely their actions.

The framework also indirectly accounts for the well-known *split incentive* problem (Bird & Hernández, 2012; Gillingham et al., 2012), which sits at the intersection of financial (economic) and motivational (psychosocial) factors. While this mechanism is important, it is insufficient to fully explain landlord behaviour. Hence the value of a broader approach like the 18-determinant model.

2.8 Policy feedback and fragmented governance

Two additional theoretical insights support and enrich the use of the 18-determinant framework in this study.

First, policy feedback theory (Pierson, 1993; Mettler & Soss, 2004) suggests that prior experience with policy instruments can shape future behaviour. Landlords who have encountered complex subsidy procedures, delays in payments, or inconsistent enforcement may be less likely to engage with new initiatives, even when they are rationally appealing. This feedback dynamic contributes to several institutional and psychological determinants, such as "trust in policy", "perceived fairness", and "policy fatigue".

Second, literature on policy coherence and fragmentation (Jordan & Lenschow, 2010; Rogge & Reichardt, 2016) highlights that landlords may face overlapping and sometimes contradictory requirements across governance levels. For instance, a national EPC obligation may coexist with municipal heating plans or subsidy schemes with different criteria. Such fragmentation can generate confusion and disengagement, which are reflected in determinants related to *clarity*, *credibility*, and *administrative burden*.

Rather than treating these perspectives as standalone frameworks, this thesis integrates them into the analytical use of the 18-determinants model. Interview data will be coded with these themes in mind, allowing for both theoretical consistency and empirical depth.

2.9 Application to interview analysis

The 18-determinant framework provides a practical coding structure for the thematic analysis of interviews. Each determinant is treated as a possible theme, but the analysis remains open to inductive additions if unexpected patterns arise. Codes are grouped along the four domains (institutional, economic, informational, and psychosocial), which are used to organise both the analysis and reporting in the findings chapter.

By using this approach, the thesis connects behavioural theory with the lived experiences of landlords, shedding light on how they interpret sustainability measures in the specific context of the Groningen student housing market. The framework also facilitates comparison between different types of landlords, based on their level of engagement, property portfolio, and management style.

2.10 Integrating behavioural, institutional and systemic perspectives

While the 18-determinant model offers a grounded behavioural framework, its interpretive power increases when viewed alongside broader theoretical perspectives that highlight systemic and experiential dynamics. This study therefore explicitly integrates three complementary lenses: the Theory of Planned Behavior (Ajzen, 1991), Policy Feedback Theory (Pierson, 1993; Mettler & Soss, 2004), and the Multi-Level Perspective on Socio-Technical Transitions (Geels, 2002).

The Theory of Planned Behavior (TPB) provides insight into how personal attitudes, social norms, and perceived behavioural control shape intentions. While often applied to consumers, this model is also relevant for small-scale landlords, who weigh sustainability decisions not only based on financial logic but also on self-efficacy, expectations of others (e.g., tenants or peers), and personal values. The interview data in this study show that even landlords with positive environmental attitudes may refrain from action due to low confidence in understanding rules, limited time, or unclear benefits. Thus demonstrating low perceived behavioural control. Furthermore, norms were often weakly perceived, particularly due to minimal tenant pressure and a lack of professional networks.

Policy Feedback Theory offers a valuable lens to understand how prior experiences with government policy shape future engagement. For landlords, a single negative encounter, such as a failed subsidy application or unclear eligibility criteria, can generate lasting scepticism. These experiences influence trust in future policies, perceived fairness, and willingness to engage voluntarily. Interviewees in this study frequently referenced past disappointments as reasons for their current hesitations. As such, this lens helps explain why seemingly rational incentives may fail to activate desired behaviour.

The Multi-Level Perspective (MLP) contributes a macro-level view by situating landlords as regime actors embedded in stable systems of rental routines, heating technologies, and legal norms. While policy pressure may come from the “landscape” level, such as national climate goals or technological innovations like heat pumps, landlords often lack exposure to disruptive “niche” solutions that could trigger transformative change. Instead, their responses tend to be incremental and opportunistic, aligning only when upgrades coincide with regular maintenance

or legal mandates. The MLP thus reinforces the insight that behaviour is embedded in broader infrastructures and temporal routines.

Together, these three perspectives provide analytical depth to the application of the 18-determinant model. They allow this study to bridge micro-level perceptions with meso-level routines and macro-level structures. Importantly, they contextualise landlord decisions not as isolated acts of rational choice, but as socially embedded, institutionally informed, and often path-dependent behaviours within a fragmented policy landscape.

Methods

3.1 Research Approach

This study employs a qualitative research design to explore how small-scale private landlords perceive and respond to energy-related housing policies, particularly those related to heating systems and energy performance. A qualitative approach allows for in-depth understanding of motivations, perceptions, and lived experiences. Actors that are often overlooked in quantitative housing research (Creswell, 2013).

The research is grounded in an interpretivist epistemology, which assumes that reality is socially constructed and that understanding human behaviour requires exploring the meanings individuals assign to their actions and environments (Bryman, 2016). The study focuses on how landlords interpret sustainability policies in the context of their role as property owners in the Groningen student housing market.

3.2 Data Collection

Data were collected through semi-structured interviews, allowing for open-ended, flexible dialogue while maintaining thematic consistency across respondents. The interview protocol included five thematic blocks:

1. Background and landlord role
2. Experiences with energy systems and insulation
3. Awareness and understanding of relevant policies
4. Motivations and barriers to sustainable action
5. Outlook on future sustainability improvements

All interviews were conducted one-on-one and lasted approximately 40 minutes. Interviews were recorded, transcribed, and manually coded using thematic analysis. Interviewees were invited through personal networks and purposive sampling to ensure relevance and diversity within the target group.

3.3 Sample and Participant Design

This study is based on eight real interviews with individuals who own or have owned student rental housing in the city of Groningen. Participants were selected using purposive sampling,

with the aim of including individuals who vary in experience, portfolio size, and management involvement. While all sharing a common focus on student tenants.

All participants provided informed consent and agreed to the recording and anonymised use of their interview data. To guarantee confidentiality, all identifying details have been removed or generalised, and no real names, organisations, or property characteristics are disclosed. Each participant is referred to by a neutral identifier.

This anonymised approach ensures compliance with university ethics guidelines and preserves the authenticity of lived experiences while preventing any personal identification.

3.4 Analytical Strategy

The interviews were analysed using thematic coding, guided by the framework of 18 behavioural determinants developed by Baum and Gross (2022). These determinants span four main categories:

- Institutional: trust in government, enforcement clarity, previous policy experiences
- Economic: cost-benefit reasoning, financial risk perception
- Informational: awareness of policy content, complexity of communication
- Psychosocial: personal norms, social identity, motivation

The transcripts were read multiple times to ensure familiarity with the data. Segments were then coded using deductive codes based on the determinant framework, with space for inductive observations when responses fell outside predefined categories. Each code was linked to specific quotations and themes, which were then synthesised in a comparative matrix.

This analytical structure enabled cross-case comparison while remaining attentive to individual variation. It also allowed the data to be interpreted systematically in line with the theoretical framework introduced in Chapter 3.

3.5 Ethical Considerations

The study adheres to the ethical standards of the University of Groningen and was approved through the institution's internal ethics procedure. While all interviews were real and conducted with actual landlords, all data are fully anonymised to protect the privacy and safety of participants.

Participants were informed of the study’s aim, their right to withdraw, and the anonymisation procedures in advance. Transcripts are stored securely, and identifiers have been removed from all analysis materials. Any identifying context, such as specific locations or property descriptions, has been generalised or omitted.

Findings

This chapter presents the empirical findings from eight semi-structured interviews with private landlords active in the student housing market in Groningen. Drawing on the framework of 18 behavioural determinants developed by Baum and Gross (2022), the findings are grouped into three broad analytical categories that correspond to the study's research questions: Motivations, Perceived Barriers and Policy Perceptions & Responses. Each section integrates quotes from interviewees with relevant theoretical insights and literature to interpret patterns in landlord behaviour. The findings reveal that private landlords are not passive recipients of policy but active interpreters, balancing economic, institutional, social, and practical logics in their decision-making. This section begins by exploring motivational factors that drive, shape, or limit pro-environmental action.

4.1 Motivations

The first group of behavioural determinants explored in this study relates to institutional dynamics. Namely, the degree of trust in government, perceived clarity of enforcement, and past experiences with policy instruments. These factors significantly shape how small-scale landlords in Groningen perceive and engage with energy-related policies.

A common thread across interviews was a moderate to low level of trust in national and local authorities. Several landlords expressed scepticism regarding the consistency and competence of government efforts in housing sustainability. This distrust was often rooted in perceptions of unpredictable policy changes and poor communication.

> "They change the rules all the time. One year the heat pump is the future, the next year it's off the table again. It makes me hesitant to invest at all." – Interviewee 3

Such sentiments align with findings by Haffner and Elsinga (2021), who note that inconsistent messaging and regulatory shifts discourage small landlords from engaging with sustainability initiatives. In this study, even landlords who were open to sustainability measures reported feeling uncertain about what was expected of them.

> "I don't mind doing my part, but it's like aiming at a moving target. You want clarity before you spend thousands of euros." – Interviewee 7

A small number of landlords did express greater trust in local authorities, particularly when municipal communication was more transparent or when landlords had prior positive experiences with subsidy procedures. However, this was the exception rather than the rule.

Policy Feedback Theory (Pierson, 1993; Mettler & Soss, 2004) suggests that previous interactions with government programs strongly influence future willingness to engage. This was clearly reflected in the interviews.

Several landlords reported frustration with past subsidy applications, citing administrative complexity, unclear eligibility rules, or long waiting times.

> "I once applied for an insulation subsidy, but it took months to get a reply. Then they told me the paperwork wasn't complete, even though I followed the instructions. That was the last time." – Interviewee 2

This kind of negative feedback loop appears to reinforce disengagement, even among those who are not opposed to sustainability in principle. By contrast, one landlord described a positive experience with a regional subsidy, which encouraged them to apply again later.

> "It was surprisingly smooth. The platform was easy, and the money came quickly. That gave me more confidence to consider other measures too." – Interviewee 6

These contrasting experiences highlight that implementation quality, not just the existence of subsidies, is critical to landlord engagement (Hoppe et al., 2021).

Perceived enforcement and policy clarity are crucial in shaping whether landlords feel obligated, or even able, to comply (Baum & Gross, 2022). The majority of interviewees described the policy landscape as fragmented and unclear, especially when it came to upcoming requirements like the hybrid heat pump mandate or EPC thresholds.

> "Honestly, I don't really know what the exact rules are anymore. I read about label C being required, but then someone else said it's not enforced. So what do I do?" – Interviewee 4

This reflects concerns raised in the literature on policy fragmentation and incoherence (Rogge & Reichardt, 2016). Several landlords reported relying on hearsay, online forums, or their property managers for updates. Rather than receiving direct or structured communication from government sources.

Interestingly, some landlords also expressed cynicism about enforcement capacity, suggesting that even if rules exist, they are rarely checked or penalised:

> "They can say what they want, but who is actually checking these houses? I've never seen an inspector." – Interviewee 8

This perceived lack of enforcement further undermines the policy's ability to motivate behaviour change, in line with broader findings on weak compliance environments (Bird & Hernández, 2012).

In sum, the motivational landscape is characterised by institutional distrust, perceived regulatory inconsistency, and mixed past experiences with policy instruments. Landlords are more likely to comply reactively, when policy measures are concrete, enforceable, and accompanied by clear guidance, than to take proactive sustainability steps. This highlights the importance of perceived reliability and responsiveness of governance systems in shaping sustainable landlord behaviour.

4.2 Perceived barriers

While motivations influence whether landlords want to act, perceived barriers determine whether they feel capable of doing so. This section analyses the practical, financial, and logistical constraints that landlords in Groningen experience when responding to heating and energy efficiency policies. Drawing from the behavioural determinants of perceived risk, resource availability, and opportunity structures (Baum & Gross, 2022), the data reveals how economic reasoning, regulatory complexity, and implementation bottlenecks constrain behavioural change.

Across interviews, economic considerations emerged as one of the most frequently cited barriers. Landlords consistently expressed concern over the high upfront costs of energy efficiency upgrades and the limited ability to recoup these investments through rent increases. Particularly in the student housing segment.

> "Installing a heat pump isn't cheap. And if I spend ten grand, what's my guarantee? The rent can't go up enough to make it back." – Interviewee 5

This reflects the well-known "split incentive" problem (Bird & Hernández, 2012; Gillingham et al., 2012), where landlords bear the costs of upgrades but tenants reap the benefits through lower energy bills. Several landlords pointed to the Dutch Housing Points System (WWS) as a structural constraint: energy improvements do not always yield sufficient additional points to lift the rent to a higher category.

> "The rent is capped. So even if I improve the label, the extra points might not push me into the next rent category. That limits the financial upside." – Interviewee 6

Even landlords who expressed a positive attitude toward sustainability emphasised that they would only act if it made financial sense. Some reported calculating potential returns on investment over ten or twenty years, often concluding that the payback period was too uncertain given future property plans.

> "If I were to keep the house for 20 years, sure, it makes sense. But who knows where I'll be in five?" – Interviewee 3

This uncertainty was magnified by concerns about inflation, contractor pricing, and changing policy requirements. Several landlords indicated that the administrative burden and time investment were themselves a barrier, especially for those who manage their rental properties part-time.

> "It's not just the money. It's the hassle. Calling installers, applying for stuff… It's a project. And I already have a full-time job." – Interviewee 1

This reflects how behavioural economics intersects with lived experience. Barriers are not only rational calculations about cost and benefit but include emotional and temporal dimensions. Effort, stress, and perceived complexity.

Time constraints and limited access to reliable professionals were also repeatedly mentioned. Many landlords indicated they lacked trustworthy contacts in the construction or installation sector. Some feared delays, poor workmanship, or misleading quotes, and lacked the technical knowledge to evaluate options.

> "Honestly, I wouldn't even know who to call if I wanted to insulate my attic. There are so many cowboys out there." – Interviewee 7

Others relied heavily on their property manager, who served as both an information filter and a decision-maker. In some cases, this arrangement enabled small-scale improvements; in others, it reinforced inaction.

> "If my manager recommends something, I'll usually agree. But I don't go looking for stuff myself." – Interviewee 5

Access to subsidies was another barrier. Although most landlords were aware that subsidies exist, many had either had negative experiences with application procedures or felt overwhelmed by the paperwork and eligibility conditions. A few landlords described abandoning an application halfway due to unclear rules or slow response times.

> "I tried once. They asked for so many documents and then still rejected it. I don't want to go through that again." – Interviewee 4

Only one landlord described a positive and frictionless experience with a local subsidy platform. An exception that highlights the importance of implementation design.

Even landlords who are willing and financially able to invest in sustainability often delay action until a "natural moment" arises. This includes instances when maintenance is already planned, such as a roof replacement or boiler failure. In those situations, landlords are more likely to integrate energy measures opportunistically.

> "I always link it to maintenance. If the kitchen needs to be redone anyway, that's when I'll consider energy stuff." – Interviewee 1

This behaviour aligns with the idea of "opportunity structures" (Baum & Gross, 2022), which suggests that sustainability measures are most likely to be adopted when they can piggyback on other routines, reducing the marginal effort required.

In sum, perceived barriers among small-scale landlords are complex and often cumulative. High investment costs, limited rent flexibility, time scarcity, weak access to trustworthy contractors, and cumbersome policy instruments interact to reduce the likelihood of sustainable housing upgrades. These barriers are not static; rather, they depend on timing, confidence, and external support structures. Without stronger alignment between policy incentives and the realities of part-time, small-scale property management, sustainability ambitions are unlikely to translate into action.

4.3 Policy perceptions & responses

The final category of behavioural dynamics centres on how small-scale landlords perceive and respond to the policies themselves. Beyond motivations or barriers, their engagement is shaped by awareness, perceived clarity, trust in authorities, and moral or social norms surrounding sustainability. This section explores how these factors combine to influence decision-making and sheds light on the broader governance context of the energy transition in student housing.

A recurring theme in the interviews was confusion and frustration regarding the content and communication of sustainability policies. Most landlords were aware of concepts like the Energy Performance Certificate (EPC) or the upcoming hybrid heat pump requirement, but few had a clear or consistent understanding of what these policies entailed.

> "Honestly, I don't really know what the exact rules are anymore. I read about label C being required, but then someone else said it's not enforced. So what do I do?" – Interviewee 4

This reflects broader concerns in the literature about fragmented and incoherent policy design (Rogge & Reichardt, 2016). Rather than providing clarity and guidance, the current landscape of Dutch sustainability policy appears to foster uncertainty and hesitation. Most landlords reported relying on indirect or informal sources, online forums, property managers, or tenants, rather than receiving direct communications from municipalities or national agencies.

> "Sometimes students forward me stuff from the municipality. That's how I learn." – Interviewee 8

> "I usually just ask my property manager. If he doesn't know, we Google it." – Interviewee 2

The ambiguity surrounding policies is compounded by doubts about enforcement. Several landlords expressed a belief that new requirements were more symbolic than actionable, particularly when it came to energy label enforcement or heating system mandates.

> "They can say what they want, but who is actually checking these houses? I've never seen an inspector." – Interviewee 8

This perception undermines the credibility of sustainability policies and reduces the incentive for voluntary compliance. From the perspective of behavioural theory, such perceptions weaken both the subjective norm and the perceived behavioural control. Two key elements in the Theory of Planned Behavior (Ajzen, 1991). Without a sense that others are acting or that rules are enforced, landlords feel little urgency to adapt.

Despite this, a minority of landlords expressed stronger engagement with policy goals, especially when municipal communication was proactive or past interactions had been positive. For example, one landlord recalled a clear and simple subsidy process that encouraged future participation.

> "It was surprisingly smooth. The platform was easy, and the money came quickly. That gave me more confidence to consider other measures too." – Interviewee 6

This supports findings from Policy Feedback Theory (Pierson, 1993; Mettler & Soss, 2004), which argues that experiences with past policies strongly shape future engagement. In this study, good policy design and smooth implementation had a disproportionately positive influence on behaviour.

Besides formal engagement with rules, landlords also described their internal justifications for (non-)compliance. For some, moral and social considerations played a secondary but visible role. A few landlords felt a sense of duty toward their tenants or the broader climate agenda, even if it was not always a decisive factor.

> "Look, we all have to do our bit. I don't see why landlords should be an exception. If I can insulate properly, I do." – Interviewee 6

Others saw sustainability as a box to tick or a government responsibility, distancing themselves from any deeper obligation.

> "The government sets the rules. I follow them. But I'm not going to go beyond that just to feel green." – Interviewee 7

This divergence reflects the role of identity in shaping environmental decision-making. Some landlords identified primarily as responsible caretakers, others as strategic investors. Those with

a more relational identity, often shaped by personal experience or tenant relationships, tended to be more open to small sustainable improvements.

> "I might not manage the day-to-day, but I still want the place to be decent. I've been a student myself, I know what it's like." – Interviewee 8

Still, even those with positive intentions admitted they often waited for enforcement or policy deadlines to act. This was especially the case when policies were unclear or perceived as unstable.

> "They change the rules all the time. One year the heat pump is the future, the next year it's off the table again. It makes me hesitant to invest at all." – Interviewee 3

In sum, landlords' perceptions of policy are shaped by three intertwined dynamics: poor communication, weak enforcement, and personal interpretation of moral responsibility. While policies exist, they are often poorly integrated, under communicated, or inconsistently enforced. Landlords rarely ignore them outright, but neither do they treat them as reliable roadmaps for action. Most appear to adopt a wait-and-see approach, responding when policies become enforceable or when they coincide with broader investment plans.

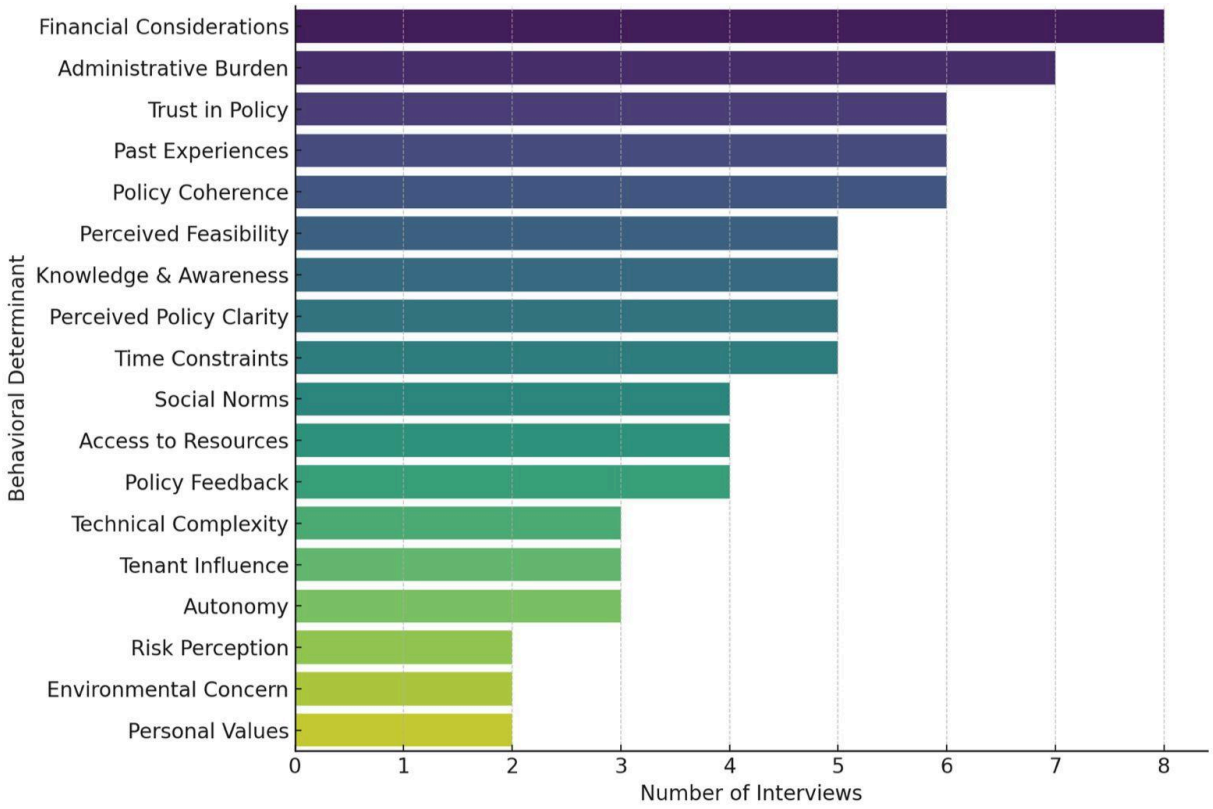

Figure 1. Overview of behavioural determinants influencing landlord engagement with energy-related policies in the student housing sector.

Beyond general confusion, landlords often expressed concern about the *pace* at which policy expectations evolve. The hybrid heat pump requirement from 2026 was frequently cited as an example of a top-down intervention that lacked clarity or proper framing. Several interviewees misunderstood whether the rule applied universally or only under specific renovation conditions. Others were unsure whether the timeline had been formally adopted or was still under political negotiation. This uncertainty resulted in a reluctance to make pre-emptive decisions.

"I heard something about 2026 and hybrid pumps, but then someone said it only counts when you replace your system. So is it mandatory or not?" – Interviewee 2

Such confusion is not trivial. It shapes whether landlords perceive policies as credible and enforceable or as symbolic gestures that can be ignored. The reliance on informal information channels, such as WhatsApp groups, tenants, or online forums, often led to contradictory interpretations, contributing to what one respondent called a "grey zone" of policy understanding.

A few landlords also voiced frustration that communications from the municipality or national government lacked timing sensitivity. They reported receiving announcements or emails too late, or not at all, and suggested that better alignment with key property management moments, such as summer maintenance windows or tenant turnover, would increase the chance of engagement.

"The email about that label thing came in November, but by then I had already signed the new lease. That moment's gone." – Interviewee 4

These reflections reinforce the idea that not only content, but also the *delivery strategy* of communication, matters for landlord behaviour. If landlords do not receive policy information in time to act, even well-designed measures may be ignored.

These insights not only reflect patterns found in existing literature but also offer grounded nuance to how such dynamics play out in the context of Groningen's student housing market. As such, they provide a valuable empirical lens through which to revisit the theoretical models presented earlier. In the next chapter, the findings will be critically assessed through these conceptual frameworks, drawing broader implications for sustainable housing governance and outlining directions for future research and practice.

Discussion

This study explored how small-scale private landlords in Groningen perceive and respond to sustainability-related policies, particularly those related to energy performance and heating systems. The findings demonstrate that landlord behaviour cannot be reduced to a simple cost-benefit equation. Instead, it emerges from a complex and dynamic interplay of institutional trust, financial incentives, information processing, identity, and operational realities. These multiple influences help explain why policy ambitions often meet limited uptake on the ground.

The Theory of Planned Behavior (Ajzen, 1991) provides a useful lens for interpreting this complexity. Many landlords expressed positive attitudes toward sustainability in principle, yet their perceived behavioural control was low. Practical constraints, such as time limitations, lack of technical expertise, and uncertainty about subsidy eligibility, often overruled good intentions. Furthermore, subjective norms were weak or inconsistent. Although some landlords noted that student tenants occasionally asked about insulation or energy labels, such signals were not strong enough to shift behaviour, particularly given high tenant turnover. This disconnect between intention and action is a recurring challenge in environmental behaviour literature.

In addition to psychological and social dimensions, past interactions with government policy played a critical role in shaping landlord behaviour. Policy Feedback Theory (Pierson, 1993; Mettler & Soss, 2004) suggests that experiences with earlier policies influence current engagement. This study confirms that negative experiences, such as bureaucratic obstacles or perceived unpredictability in policy direction, fostered scepticism and passive compliance. Several landlords saw sustainability policies as politically driven or inconsistently enforced, eroding trust and reducing willingness to act unless strictly required. This helps explain why compliance was often reactive rather than proactive.

At a broader level, the Multi-Level Perspective on Transitions (Geels, 2002) positions landlords as regime actors embedded in existing rental and heating infrastructures. Although external pressures, such as national climate targets and municipal visions, were acknowledged, most landlords lacked access to niche innovations or support systems that could facilitate transformative change. Without clear alignment between policy incentives and the routines of small-scale landlords, only incremental or opportunistic improvements were likely to occur. As such, structural and systemic barriers must be considered alongside behavioural factors.

A prominent theme in this study was the fragmentation and perceived incoherence of sustainability policy. Landlords reported difficulty in navigating overlapping rules and subsidy schemes at both the local and national levels. This finding resonates with Rogge and Reichardt's (2016) concept of policy incoherence, where unaligned policy instruments produce uncertainty rather than clarity. Participants frequently relied on informal networks, property managers, or online forums for information, rather than official communication channels. The result was often

confusion, misinformation, or disengagement. Particularly among landlords operating informally or with limited time.

In addition to confusion about the scope and hierarchy of policies, several landlords expressed concern about the lack of sector-specific communication. Many policies were perceived as being written for large institutional players or homeowners, rather than for small-scale student landlords. This reflects a disconnect between the framing of sustainability measures and the lived realities of part-time, informal property managers. The absence of tailored communication materials or decision support tools specifically for this actor group exacerbates the feeling of exclusion. This finding mirrors concerns raised by Ambrose (2015), who notes that when policy fails to speak directly to its intended audience, engagement suffers. Not because of opposition to the goals, but because landlords cannot recognize themselves in the messaging. Several interviewees explicitly asked for clearer "roadmaps" or examples tailored to situations like theirs, indicating a need for more context-sensitive outreach.

Financial reasoning remained central to many landlords' decision-making, but not in isolation. The "split incentive" barrier, where landlords bear the cost of improvements while tenants receive the energy savings, was often cited (Bird & Hernández, 2012; Gillingham, Harding, & Rapson, 2012). However, landlords also considered rent regulation constraints, property portfolio strategies, and the administrative burden of subsidies. These findings suggest that economic reasoning is entangled with perceived effort and risk. Investments were more likely when tied to maintenance cycles or when landlords had a long-term stake in the property, echoing Baum and Gross's (2022) concept of "opportunity structures" that lower the threshold for action.

Landlord identity also emerged as an important, yet underexplored, factor. While some participants viewed themselves as responsible stewards and expressed a moral duty to provide decent housing, others identified primarily as investors. This distinction shaped their engagement with sustainability. For some, environmental improvements were a matter of personal ethics; for others, only financially justifiable changes were considered. These identity-based differences are rarely captured in policy design but may explain significant variation in compliance and engagement levels.

Furthermore, the interviews highlighted that some landlords operate within informal or semi-professional frameworks, which complicates assumptions often made by policy designers. For example, landlords who own only one or two properties may lack access to the administrative tools, networks, or strategic advice that institutional housing providers take for granted. As such, behavioural interventions must account for varying degrees of formality, professionalism, and support structures. This includes recognizing that for many respondents, sustainability upgrades are not only financial or technical decisions, but also questions of identity. Whether they see themselves as investors, caretakers, or simply reluctant participants in a changing policy landscape. Recognizing this heterogeneity is crucial. Future strategies will

need to go beyond economic nudges or informational campaigns and instead consider how emotional, social, and logistical dynamics shape landlords' actual capacity to engage with sustainability agendas.

Importantly, operational feasibility was a limiting factor even among motivated landlords. Many respondents cited time constraints, a lack of reliable contractors, or unfamiliarity with technical solutions as reasons for inaction. This indicates that even well-designed policy instruments may fail if they do not account for implementation capacity at the household or portfolio level. The role of intermediaries, such as property managers or trusted installers, was crucial in bridging this gap, though not always accessible to smaller or newer landlords.

Taken together, the findings point to the need for more integrative policy approaches. Effective strategies should not only provide financial incentives but also reduce informational complexity, improve institutional trust, and align sustainability efforts with landlords' routines and identities. Communication could be improved through a centralised digital portal offering clear, up-to-date, and practical guidance tailored to landlord profiles. Moreover, policies might be more effective if designed to activate landlords during key transitional moments, such as renovations or tenant changes, when they are more open to improvement.

While this study contributes to a growing understanding of the behavioural dynamics shaping sustainability transitions in rental housing, it also has limitations. The focus on Groningen means the findings may not be generalisable to landlords in different legal, economic, or housing contexts. Additionally, the study relied on self-reported perceptions and intentions, which may not always translate into behaviour. Future research could expand the geographic scope, explore longitudinal patterns of engagement, or test interventions such as advisory platforms or co-investment schemes. Special attention could also be given to the role of intermediaries and their potential to facilitate change across different types of landlord profiles.

In conclusion, the study reveals that landlord engagement with sustainability is not just a question of incentives or obligations, but a matter of context, trust, identity, and capacity. Recognising this complexity is vital for designing policies that move beyond compliance and toward genuine behavioural change.

Conclusion

This thesis has examined how small-scale private landlords in Groningen perceive and respond to sustainability-related policies, with a particular focus on heating and energy performance regulations in student housing. Drawing on eight qualitative interviews and supported by a multi-theoretical framework, the study reveals that landlord behaviour is not simply a function of cost-benefit analysis or policy compliance, but instead emerges from the interplay of institutional trust, informational clarity, personal identity, economic incentives, and operational feasibility.

The findings suggest that even when landlords are open to sustainability in principle, behavioural change is often hindered by low trust in government, fragmented policies, unclear communication, and a lack of perceived behavioural control.

One of the central insights of this study is the critical role of prior experiences and institutional trust in shaping policy responsiveness. Landlords who had encountered administrative difficulties or inconsistent policy messaging were more likely to adopt a passive stance toward new sustainability measures. This reinforces the relevance of Policy Feedback Theory in the housing domain, where memory of past interactions with government schemes can foster either engagement or cynicism. Similarly, informational barriers, particularly the perceived complexity and incoherence of policies, emerged as a key determinant of inaction, echoing existing research on the importance of policy design and communication clarity.

While economic reasoning remains an important motivator, this study suggests it cannot be fully understood in isolation. The well-documented "split incentive" dilemma, where landlords bear the cost of improvements and tenants reap the benefits, was indeed confirmed. However, additional factors, such as perceived administrative burden, the unpredictability of rental returns, and rent regulation constraints, complicated the financial logic. Many landlords expressed willingness to act if sustainability investments could be aligned with maintenance schedules or if subsidies were easy to access and understand. In this regard, opportunity structures, moments when landlords are already inclined to act, were identified as promising entry points for policy intervention.

This research also highlights heterogeneity among landlords in terms of values, capacities, and identities. Some respondents saw themselves as caretakers or socially responsible actors and were more willing to consider sustainability measures beyond legal compliance. Others viewed themselves primarily as investors or time-constrained individuals with little inclination to engage unless strictly required. These findings underscore the need for a more nuanced understanding of the rental sector and challenge the assumption that all landlords respond to policy levers in the same way.

Operational constraints such as time limitations, access to reliable professionals, and technical knowledge were also found to be major bottlenecks. Even among those who were positively disposed towards sustainability. In many cases, the willingness to invest was present, but the practical feasibility was lacking. This gap between motivation and capacity points to the importance of intermediary actors (e.g., property managers, installers, advisory services) and the need to integrate them into future policy design.

In terms of practical implications, the study suggests several concrete avenues for policy improvement. Communication strategies should be simplified, centralised, and tailored specifically to small-scale landlords. Interventions should be timed to coincide with maintenance or tenant turnover moments. Trust in public programs can be rebuilt through prompt, transparent,

and user-friendly subsidy schemes. Moreover, policies should not only provide financial incentives but also foster a sense of legitimacy, empowerment, and professional pride among landlords.

This research contributes to a growing literature that approaches sustainability transitions not only as technological or regulatory challenges but as behavioural and relational processes. It shows that landlords' engagement with climate goals depends on how well these goals are embedded in their routines, identities, and institutional environments.

Future research could build on these findings in several directions. Longitudinal studies might track how landlord attitudes evolve in response to policy shifts, new subsidy frameworks, or changing tenant expectations. Comparative studies across regions or countries could shed light on the role of local governance and housing cultures. Additionally, experimental work could test specific interventions, such as digital decision tools, simplified applications, or peer-learning networks, to assess what actually motivates behavioural change in practice.

In conclusion, the Dutch rental sector's contribution to climate goals will depend not only on tightening regulations or offering subsidies but on recognising and responding to the lived realities of landlords. This study underscores that meaningful policy impact requires not only compliance mechanisms but also trust, timing, and tailored support. Only then can small-scale landlords become active and willing partners in the sustainability transition.

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Appendices

Appendix A: Interview Guide

Introduction for Interviewees

> Thank you for participating in this interview. This conversation is part of a Master's thesis research project at the University of Groningen. The goal is to better understand how small-scale private landlords in Groningen perceive and respond to sustainability-related policies, particularly those related to heating and energy performance in student housing.
>
> The interview is semi-structured, meaning I will ask open-ended questions, but you are welcome to elaborate or bring up related experiences that come to mind. Your responses will be anonymised and treated confidentially.
>
> Do you have any questions before we begin?

Section 1: General Background

1. Can you briefly describe your rental activities in Groningen?
2. How many properties do you rent out, and what type of tenants do you usually have?
3. How involved are you in the day-to-day management of your properties?

Section 2: Motivations for (or against) Sustainability Investments

4. What is your general view on sustainability in housing?
5. Have you ever taken steps to improve the energy performance of your property (e.g., insulation, new heating systems, double glazing)?
6. What motivates or would motivate you to invest in energy efficiency measures?
7. To what extent do tenants (e.g. students) influence your decisions about the condition or sustainability of your properties?
8. Do you see yourself as someone with a responsibility to contribute to sustainable housing?

Section 3: Perceived Barriers & Practical Constraints

9. What are the main reasons you may not (yet) have taken sustainability measures?
10. How do you view the financial side of investments (like insulation or heat pumps)?
11. Have you looked into subsidies or government support schemes? Why or why not?
12. What kind of time or logistical challenges come with improving your properties?
13. Do you face challenges finding the right contractors, advice, or guidance for upgrades?

Section 4: Perception of Policies & Responses

14. Are you familiar with current or upcoming sustainability-related housing policies (e.g., energy label requirements, heat pump mandates)?
15. How clear or confusing do you find these policies?

16. Do you feel these policies are well-communicated and fairly enforced?
17. Have you had any experiences with policy implementation or subsidies (positive or negative)?
18. Do you trust the national or local government when it comes to these kinds of housing regulations?
19. How do you typically stay informed about new regulations or sustainability options?

Section 5: Closing Questions

20. Looking ahead, do you expect to take further steps in making your properties more energy-efficient? Why or why not?
21. If there was one thing that would make it easier or more attractive for you to invest in sustainability, what would it be?
22. Is there anything else you'd like to add that we didn't cover?

Appendix B: Coding Structure

This appendix presents the coding structure used in the thematic analysis of the eight interviews conducted with small-scale private landlords in Groningen. The structure was developed deductively based on the research questions and theoretical framework, and inductively refined during the coding process.

Main Theme 1: Motivations for Sustainability Engagement

Code 1.1 Environmental Attitudes

- Moral responsibility
- Belief in contributing to climate goals
- Alignment with personal values

Code 1.2 Tenant Expectations and Social Norms

- Influence of student tenants
- Perceived peer or social pressure
- Changing attitudes over time

Code 1.3 Professional Identity and Role Perception

- Investor vs. caretaker identity
- Level of personal involvement
- Desire for professional pride

Main Theme 2: Perceived Barriers to Action

Code 2.1 Financial Risk and Return

- High upfront costs
- Long or uncertain payback periods
- Split incentive dynamics (tenant vs. owner benefit)
- Rent regulation constraints (WWS system)

Code 2.2 Time and Logistical Constraints

- Lack of time due to other commitments
- View of sustainability as an “extra” task
- Preference to act only during maintenance cycles

Code 2.3 Knowledge and Contractor Access

- Difficulty finding reliable professionals
- Dependence on property managers
- Limited technical know-how

Main Theme 3: Policy Perceptions and Institutional Factors

Code 3.1 Policy Awareness and Clarity

- Awareness of energy label requirements
- Confusion about hybrid heat pump rules
- Misunderstanding of deadlines or legal status

Code 3.2 Trust in Policy and Institutions

- General distrust in national or local authorities
- Suspicion about policy consistency
- Frustration with previous subsidy experiences

Code 3.3 Perceived Enforcement

- Lack of inspections or sanctions
- Belief that rules are not seriously monitored
- Wait-and-see attitudes

Code 3.4 Policy Fragmentation and Complexity

- National vs. municipal contradictions
- Overload of parallel targets, schemes, and rules
- Administrative burden

Cross-cutting Theme: Behavioral Logic

Code 4.1 Opportunistic vs. Strategic Action

- Link to maintenance cycles
- Incremental upgrades rather than holistic retrofits
- Acting when the moment is “right”

Code 4.2 Informal Decision-Making Tools

- Reliance on peers, tenants, or property managers for information
- Use of online forums or hearsay
- Lack of use of formal channels or official websites