



Living smaller: acceptance, effects and structural factors in the EU

SPECIAL COLLECTION:
ENERGY SUFFICIENCY
IN BUILDINGS AND
CITIES

RESEARCH

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ABSTRACT

This article examines limits to per capita living space (i.e. living smaller and/or sharing living space) as a measure for achieving sufficiency in housing. It studies the acceptance, motivation and side-effects of voluntarily reducing living space in five European Union countries: Germany, Hungary, Latvia, Spain and Sweden. Insights are derived from an extensive collection of qualitative empirical material collected from citizen and stakeholder ‘thinking labs’ across the five case countries. Overall, the data reveal an initial reluctance among citizens to reduce living space voluntarily. They also point to some major structural barriers: the housing market and its regulatory framework, social inequality, or dominant societal norms regarding ‘the ideal home’. Enhanced community amenities can compensate for reduced private living space, though contingent upon a clear allocation of rights and responsibilities. Participants also reported positive effects to living smaller, including increased time for leisure activities and proximity to services. This was often coupled with urbanization, which may also be part of living smaller in the future.

POLICY RELEVANCE

Despite many challenges, European Union citizens can accept and embrace smaller living, given the right conditions. In particular, meaningful social contacts, good shared amenities and attractive neighbourhoods can lead to high satisfaction with smaller living conditions. Urbanization can serve as a major driving force to achieve this transformation, but it must be guided. Policy interventions are necessary to ensure a changing housing stock and more flexible use of the existing housing stock. Support for downsizing necessitates a reconfiguration of regulatory norms and economic incentives for building and planning. Equally important, ‘soft’ values of good community and mutual respect need to be fostered in a denser, smaller housing reality. Good governance becomes essential for housing to allow for flexibility in living situations and to manage conflicts. A shift in norms and values towards community and sharing is necessary and this requires active policymaking and good governance of urban spaces.

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1. INTRODUCTION

Construction, building materials and the energy used in buildings are a major contributor to greenhouse gases and climate change (IPCC 2022). The energy consumption of households represented 27% of the final energy consumption in the European Union (EU) in 2021 and over 60% of this energy use was for space heating (Eurostat 2023). Lettenmeier et al. (2014) suggest that an 85% reduction of resource use per capita in housing is needed. Efficiency improvements alone are insufficient to achieve this reduction (Barrett et al. 2022), not least due to frequent rebound effects (Vásquez et al. 2016; Chitnis et al. 2014). To transition successfully to a low-carbon society and meet global climate objectives, sufficiency approaches and measures will be required as well.

Discussions regarding sufficiency in housing commonly address the necessity for society to provide housing for all that meets basic needs, while drastically reducing current levels of resource use (Novy et al. 2024; Sandberg 2018). It is argued that this necessitates a change to ideas of what a ‘proper’ home looks like—including its size (Novy et al. 2024; zu Ermgassen et al. 2022). Specifically, scholars highlight the environmentally detrimental trend towards ever bigger houses (Cohen 2019). In Europe, the average per person living space has grown by 16% between 2000 and 2018 (Gynther 2021). Despite this, few studies have addressed housing sufficiency in terms of sufficient living space (Lorek & Spangenberg 2019; Sandberg 2018). Likewise, downsizing of living space is not a politically recognized solution in the EU. Despite a pledge for climate neutrality by 2050, and the centrality of energy-efficient and affordable housing in the European Green Deal, no mention is made of a need for downsizing average housing size in the EU.

This article aims to improve understanding of what a transformation towards sufficiency in housing means on an individual level and in terms of societal reforms. Specifically, it addresses the acceptance and motivations for reduced per capita living space, potential side-effects and the necessary societal shifts to support this lifestyle change.

2. LITERATURE REVIEW

2.1. WHAT IS HOUSING SUFFICIENCY?

Sufficiency in relation to housing is commonly discussed as a dichotomy of a lower limit (a decent minimum standard for all) and an upper limit (avoiding excess). Lower and upper limits are usually defined in terms of floorspace and bedrooms per inhabitant (Gough et al. 2024). The lower limit (housing need) is defined by the basic need for shelter focusing on decent, safe and affordable housing for all, especially those who cannot afford market prices, ensuring that everyone has access to shelter that meets minimum living standards (Bierwirth & Thomas 2019). The level at which this basic need is set depends not least on cultural norms and expectations; setting lower limits to housing consumption thus requires democratic debate (Novy et al. 2024), not least because to meet housing needs, sufficiency precludes limiting demand as well (i.e. setting an upper limit) (Bierwirth & Thomas 2019; Novy et al. 2024). While specific suggestions in the literature about where to draw this upper limit vary, from as little as 10–15 m² per capita (Rao & Min 2018; Vélez-Henao & Pauliuk 2023) to as much as 30 m² per capita (Grubler et al. 2018), there is little doubt that housing needs cannot be met sustainably unless housing demand is curbed.

Against this background, two housing sufficiency strategies are distinguished to address the need for an upper limit to housing size: reduction of living space and sharing living space, both resulting in less per capita living space (Sandberg 2021). A reduction of one’s living space implies downsizing (also referred to as ‘rightsizing’), i.e. moving to a property of a smaller size. Examples of downsizing that have recently received attention are the tiny house movement (Willoughby et al. 2020) and micro-apartments (Clinton 2018). Even the relocation from houses to higher density apartment buildings (often in more urban environments) usually involves a reduction in living space and can therefore be categorized as downsizing (Sandberg 2021).

Sharing living space, on the other hand, implies an increase in the numbers of occupants in the same living space. This can mean multi-generational families living under the same roof or sharing living space with friends or strangers. It contains a notion of increased social interactions and co-dependencies. One such form of shared living is co-housing, which involves the design of living spaces to foster community while retaining some household privacy (Riedy et al. 2019) and is said to reduce resource use per capita (Pérez-Sánchez et al. 2022).

2.2. MOTIVATIONS TO REDUCE PER CAPITA LIVING SPACE

In a recent study looking at the motivations individuals from five EU countries had to reduce their living space, Richter et al. (2024) identified four main categories as motivations to reduce living space: value-based, practical, economic and structural motivations.

Value-based motivations arise intrinsically, meaning they reflect the individual's values and worldview (Richter et al. 2024). Value-based living space reduction can derive from opposition to the current economic system, a notion of social fairness, concern for the environment or a range of other perspectives that question the dominant societal housing logic (Shearer et al. 2018). Resulting practices may include a desire to declutter, reduce the number of belongings and minimize the purchase of new items (Boeckermann et al. 2019; Hagbert 2016).

Practical motivations are grounded in convenience and necessities of daily life. Reducing living space is not the goal but rather a side-effect of other lifestyle decisions (Richter et al. 2024). One common driver is adjusting living arrangements following changes in family size or dynamic, such as when children leave home, partners separate or divorce, or students move in together seeking stronger social networks (Hagbert 2016; Thomas et al. 2019; Williams 2002). A preference for urban living to benefit from proximity to work, leisure and services is another common practical motivation (Clinton 2018). Third, a decision to reduce the area that needs maintenance and cleaning is discussed as motivation to live smaller (Cohen 2021), resulting in increased freedom (Boeckermann et al. 2019). The willingness to downsize due to practical considerations is often conditional, influenced by the perceived trade-offs between space and lifestyle enhancements (Hagbert 2016).

Economic motivations, such as rent, energy costs or property maintenance, may play a crucial role in downsizing living spaces (Richter et al. 2024). Bricocoli & Sabatinelli (2016) study young people in Milan and find economic constraints to be a strong motivator to move to shared accommodation. Affordability is also the main reason why people move to micro-apartments in Sydney (Clinton 2018), as well as in many other places that experience a housing affordability crisis (Shearer 2018). Even access to communal amenities, such as laundry facilities or guest rooms available for a nominal extra fee, can act as an economic motivator (Lorek & Spangenberg 2019). Lastly, economic motivation can materialize in the form of precautionary economic frugality to protect against perceived future economic uncertainty (Shearer et al. 2018).

Structural motivations here refer to the housing market and built-up environment. Downsizing or sharing accommodation due to structural motivations can be necessitated by a lack of other viable living arrangements (Richter et al. 2024), often exacerbated by the need to find accommodation quickly (Clinton 2018). In densely populated urban areas, smaller housing units are often more accessible, and good public infrastructure and amenities reduce the need for private space. A combination of smaller private living space and well-developed common spaces can be found in numerous cities. In Vienna, spacious common areas and easily accessible infrastructure, such as public baths, libraries, kindergartens, youth centres and medical care, are described as key factors for successful high-density living with high quality of life (Novy et al. 2024), and Barcelona's 'Superilles' or 'Superblocks' initiative similarly aims to enable higher quality living in dense living quarters by increasing green shared spaces and improving public infrastructure (Ajuntament Barcelona n.d.).

There is, of course, overlap between different forms of motivation for sufficient housing, e.g. enabling structural motivations are closely related to value-based motivations. A successful mix of good public infrastructure relies as much on material structures as on social motivations, culture norms and accepted aspirations (Boeckermann et al. 2019).

2.3. EFFECTS OF REDUCED PER CAPITA LIVING SPACE

Several effects from reduced living space have been documented in the literature. First, due to closer proximity to other people, there is increased conflict potential (Hagbert 2018). Bricocoli & Sabatinelli (2016) identify that having a negative or positive experience of living in a shared accommodation depends on whether individuals choose their housemates (more likely positive) or landlords have the final say in tenant selection (more likely negative). The social connections among ‘intimate strangers’ can also be interpreted both positively and negatively (Törnqvist 2024). Bricocoli & Sabatinelli (2016) report how the bedroom becomes the sole personal living space, with common areas underutilized. In a twist to this finding, co-housing groups can also exist physically and socially separated from surrounding neighbourhoods, having strong internal community sense, but resembling gated communities to the outside (Chiodelli & Baglione 2014).

There can also be rebound and spillover effects from living smaller. Economic savings from reduced expenses for utilities, rent or maintenance result in additional purchasing power for the individual, which can lead to higher consumption in other domains (e.g. more travelling) (Chitnis et al. 2014). Große et al. (2019) found that there was a correlation between smaller urban living and increased flying for Copenhageners. Hagbert & Femenías (2016) observe that the nature of some shared living solutions can cause residents to ‘double up’ on personal possessions instead of fully embracing shared resources. This would suggest the potential for rebound effects with living smaller; however, Andersson & Nässén (2023) found that residents with pro-environmental values in Sweden spent more on apartments in urban areas than detached houses, and were more likely also to have lower climate impacts in other consumption domains, suggesting that motivations for living smaller can be key to whether rebound or spillover effects occur.

2.4. SOCIETAL SHIFTS TO SUPPORT REDUCED PER CAPITA LIVING SPACE

A reduction in living space can be facilitated by a range of societal shifts. Among the most important are shifts in policies, the building sector, the housing market and cultural norms.

Public policy and regulations play a substantial role in advancing or hindering downsizing. It has been suggested that policymakers can support downsizing by relaxing regulations on minimum dwelling size, incentivizing the construction of smaller units and supporting redesigning existing large dwellings to accommodate more occupants (Sandberg 2018). An overhaul of rules surrounding land title transfer, mortgage arrangements, property transfer fees and property rights (e.g. assets in co-housing arrangements), and removing planning barriers to co-housing and other shared living arrangements is also discussed (Gaspard et al. 2023; Riedy et al. 2019). Hagbert & Femenías (2016) and Kitzmann (2023) argue for adapting building codes to encourage downsizing and multifunctionality. Cohen (2019) proposes innovative taxation, such as a graduated property tax scheme, to discourage the trend towards larger houses and promote smaller, more sustainable living spaces; and Thomas et al. (2019) argue for living space advice, moving support, the integration of communal and co-housing into urban development plans, and a cap on per capita living space.

The building sector also has a significant role to play in changing housing infrastructure. Hagbert & Femenías (2016) emphasize the necessity for innovation among developers, consultants, architects and residents to challenge contemporary normative housing designs and to prioritize environmental sustainability and community living. zu Ermgassen et al. (2022) attribute a mismatch between supply and demand (e.g. overproduction of pricy large housing and a shortfall in affordable housing) to the construction sector’s significance for the economy and employment, as well as vested interests, which all encourages policymaking that enshrines the status quo and favour solutions that are ‘more of the same’. This leads to housing currently often being produced to meet rising demand based around ability to pay, not to meet basic needs. Bierwirth & Thomas (2019) argue for a reversal of the trend of new housing constructions having ever larger floor areas. Construction projects focused on reduced living space require different standards for space flexibility and common areas (Hagbert 2016), including the quality of the surrounding green space (Boeckermann et al. 2019).

Financial and market adjustments are also discussed in the literature. Riedy et al. (2019) note that co-housing does not automatically result in lower costs, which they attribute to factors such as location and design. Risk aversion in the property industry and complexities in land title arrangements, make securing finance for co-housing projects challenging. The uncertainties around the market value of shared living and co-housing arrangements can make financial institutions hesitant to provide loans (Hagbert 2016). Bratt & Keyes (1998) also argue for a need to expand the traditional duopoly of public and for-profit models to include non-profit organizations as providers of affordable housing solutions.

Finally, *cultural norms* play an important role in shifting to reduced living space. Bohnenberger (2021) and Foye (2017) note that both downsizing and shared living are at odds with the status and desirability associated with large housing. Currently, small-sized dwellings are often stigmatized (Sandberg 2018), and the dominant societal housing norms around luxury and material consumption are hard to replace (Lessard 2022; Penfold et al. 2018). Reimagining ‘home’ inevitably raises questions about ownership-centric lifestyles. Cohen (2021) and Hagbert (2018) argue that shifting cultural values away from viewing houses primarily as consumer goods and towards less ownership-locked-in lifestyles is necessary. Novy et al. (2024) underscore the importance of considering housing not just as a physical structure (noun) but also in terms of the socio-cultural practices associated with living (verb). Some argue that this even means the challenging of conventional nuclear family-oriented design in favour of more flexible and diverse housing compositions (Hagbert & Femenias 2016).

3. METHODS

All empirical data for this paper were collected as part of the EU’s Horizon 2020 research project EU 1.5° Lifestyles, in so-called ‘thinking labs’: interactive workshops with an emphasis on the co-creation of ideas and knowledge, which were held with citizens and stakeholders between September 2022 and February 2024 in the five project case countries: Germany, Hungary, Latvia, Spain and Sweden. ‘Citizen thinking labs’ (CTLs) were held in three iterations and ‘stakeholder thinking labs’ (STLs) in two iterations (Figure 1). Project case countries differ in geographical location, historical backgrounds, cultural contexts and socio-economic conditions, thereby providing an encompassing yet differentiated view on EU member states. Housing across the five countries shows some similarities but also substantial differences (for further details, see file number 1 in the supplemental data online).

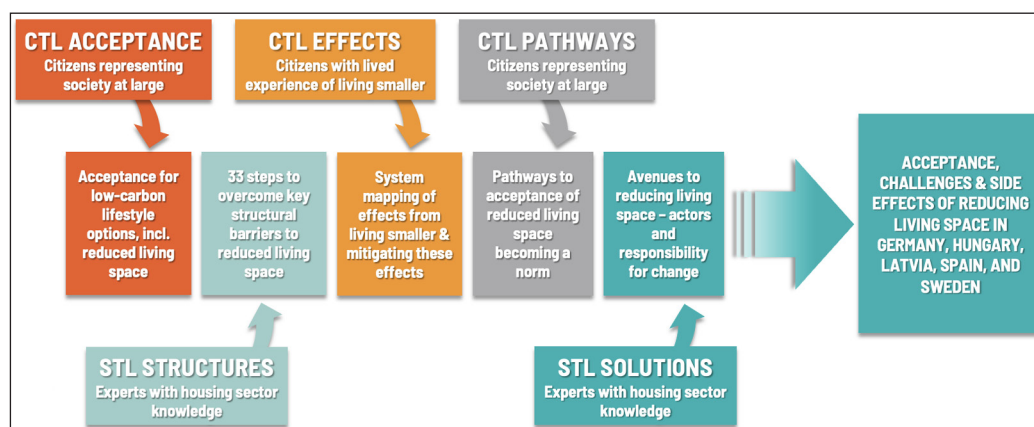


Figure 1: Multi-step methodology.

The CTLs focused on questions of individual acceptance of and experience with low-carbon lifestyle changes. The aim of the first CTL (CTL Acceptance) was to assess citizens’ acceptance for 50 different low-carbon lifestyle options in the key consumption domains of nutrition, mobility, leisure and housing (Vadovics et al. 2024). The second CTL (CTL Effects) brought together citizens who had implemented key lifestyle options, with one group in each case-county comprising people who had downsized their personal living space (Richter et al. 2024). The third CTL

(CTL Pathways) focused on pathways to acceptance for smaller and shared living becoming the norm in the near future. In this CTL, groups of citizens each focused on two lifestyle domains out of the four, thus two groups of citizens in each of the five case countries worked with a vision of housing that included living smaller being the norm in the future (Domröse et al. 2024).

The STLs focused on the question of societal change. Participants from civil society, academia, business, policy and media were brought together to discuss overcoming challenges to socio-ecological transformation. The first STL (STL Structures) focused on how seven key structural barriers and enablers identified in EU 1.5° Lifestyles (Hirth et al. 2023; Kreinin et al. 2024) materialize in different consumption fields, and on exploring steps to overcome the barriers and enhance the enablers among them. The second STL (STL Solutions) utilized a focus group approach, engaging small groups of approximately three expert-participants for an average duration of two hours. The discussions concentrated on themes identified in all previous CTLs and STLs. For housing, which was one of six key areas of the focus groups, the primary focus was on identifying pathways and responsible actors for the reduction of per capita living space. For a detailed description of the CTLs and STLs, see file number 2 in the supplemental data online.

Overall, the diversity in participants and the dialogue-oriented facilitation ensured that a wide range of perspectives on the needs, concerns and obstacles related to a reduced living space drawn from personal expectations and lived experiences as well as expertise was expressed in the ‘thinking labs’. All empirical data from these workshops were collected in pre-prepared documentation sheets by each thinking lab organizer, translated into English and analysed applying deductive, software-assisted content coding.

4. RESULTS

The results are presented in three sections: the acceptance and motivations for living smaller; the effects from living smaller; and the societal shifts needed to facilitate living smaller or shared living.

4.1. ACCEPTANCE OF AND MOTIVATIONS FOR REDUCED LIVING SPACE

When the participants of CTL Acceptance were asked which of 18 low-carbon behaviour changes related to housing they would be most and least willing to implement in the future, giving up excess square metres and moving to shared housing were the overall least favoured choices in every case country. ‘I will give up excess square metres’ had an average approval rating of 29%. The average acceptance for ‘I will choose shared housing’ was 21% (see Table 1 for country-specific values).

	GERMANY	HUNGARY	LATVIA	SPAIN	SWEDEN
‘I will give up excess square metres’	25%	15%	23%	42%	38%
‘I will choose shared housing’	13%	11%	28%	33%	19%

Table 1: Acceptance levels of reducing per capita living space among the CTL Acceptance participants

The low acceptance levels for both sufficiency housing options seems to have several explanations. In all case-countries, the complexity of the housing market was discussed as an important hindrance. The housing market is perceived as rewarding long-term ownership, as property is value-creation in the long term, that can be handed over as a safe investment to children. This incentivizes ownership as an investment. Connected to this, several participants pointed to the difficulty of securing housing, in particular in urban areas. This meant that the process of finding suitable smaller housing was perceived as difficult and risky. Often, smaller housing was associated with a more urban lifestyle and the urban housing market was described as challenging.

Another obstacle discussed, in particular regarding ‘shared housing’, was a concern for lost personal freedom and privacy. This concern was also associated with increased fear of conflicts. That shared housing could imply disruptions to daily routines and personal convenience was a

major concern brought up across the case countries. This feeling was particularly acute where shared housing or smaller living would imply the necessity to move. Participants pointed out that they did not want to lose established social networks, e.g. with neighbours, due to the need to move.

Participants also pointed to social norms preventing them from living smaller. Their comments point to a whole range of social norms associated with housing that discourage smaller living: from the norm of owning your own house, investing for the future or seeking independence there appears to be an interwoven net of social norms that discourages smaller living. Hungarian participants, for example, pointed out that the strong social norm to own a house collides with the negative experience of forced sharing during the Soviet era.

On the other hand, factors that motivated a move to smaller and shared living were provided by *CTL Effects* participants, who had already reduced their living space. They provided a range of motivating factors that supported their decision, from value-based reasons (reduce environmental impact, excess space being unethical) to practical reasons (changing family composition such as a divorce or children moving out, a desire to live more centrally, or a more convenient and less stressful lifestyle) and economic pressures (raising rents, overheads or mortgages).

4.2. EFFECTS OF REDUCED LIVING SPACE

In *CTL Effects*, participants were asked to report their lived experience about the effects reduced living space had had on their lives.

Challenges arising from a lack of space were expressed in multiple ways by the participants. Smaller or shared living made socializing more difficult, preventing participants from having people over for dinner or staying the night. Consequently, additional costs from having to pay for family to stay elsewhere when visiting were reported. Many participants described seeing friends and family less often. The lack of space also resulted in some participants having trouble fitting their existing furniture and clothes into their new living arrangements. Even a lack of food storage space was described because it prevented previous routines of buying in bulk and resulted in higher food costs.

The participants also confirmed fears expressed by *CTL Acceptance* participants about an experienced loss of privacy, peace and quiet, which was particularly pronounced in cases where they had started sharing space with others. Participants reported a worsened mood, a feeling of confinement, and increased conflicts with family, co-habitants and neighbours. For some, the reduced space meant that several hobbies were more difficult to undertake, e.g. playing an instrument or gardening. Other participants reported physical discomfort from increased noise levels and poorer air quality, negatively impacting their mental comfort and their sleep.

However, participants also described desirable side-effects. For instance, some participants perceived the forced decluttering as a positive aspect. Being forced to plan the acquisition of goods more carefully, as well as the need to share items with neighbours and friends, was described as freeing and 'feeling right'. Participants reported developing skills to optimize their homes, disposing of unnecessary items and purchasing fewer new items.

Almost all participants expressed satisfaction with less time spent maintaining, furnishing and cleaning their living space. They described positive effects on their mental health and social life, having more time for leisure, personal care and more active modes of transport. Relaxing, outdoor activities and learning new skills were mentioned, as well as more time spent with friends and family. The reduced stress levels from home maintenance resulted in a perceived increased quality of life.

Another reported gain from living smaller—again, matching the perceived advantages discussed in *CTL Acceptance*—was the ability to move to a more central (and often more expensive) location, with better access to infrastructure and facilities. Some reported a feeling of better health because

of this, as well as increased local engagement and consumption practices, resulting in enhanced connections within the neighbourhood. Connected to this, several participants described doing more of their activities, e.g. socializing and studying, in common spaces instead of at home.

4.3. ENABLING FACTORS FOR LIVING SMALLER

In the *CTL Pathways*, in which participants were prompted to think about a future in which they lived smaller or shared housing with the help of a 2030 lifestyle vision, shared living continued to be evaluated mostly negatively by participants, while downsizing received more neutral or positive feedback. However, the acceptance for both smaller and shared living increased when participants were prompted to discuss that such a change could be facilitated by changes in society.

One change that participants described as necessary is a more flexible housing market, e.g. promoting housing exchange platforms or the removal of perceived administrative barriers for housing exchange, which would facilitate adjustments to changing personal and economic circumstances, as well as protection from a perceived risky rental market.

More common spaces (sports facilities, playing areas, barbeque areas, etc.) were also discussed as an important feature for a possible future of living in smaller or shared accommodations. These spaces need to be suitable and available for activities that typically would take place in private homes, such as socializing and sharing meals. In general, smaller and shared living spaces were described as acceptable only in the case of surrounding amenities being superior to current living arrangements, e.g. more greenery and walkable neighbourhoods.

Another major enabling factor discussed was the potential for cost savings. From moving to smaller apartments to subletting rooms in larger dwellings, participants saw the possibility of reduced living expenses. This was seen both as a possibility to free resources for other types of consumption, a way to be able to live in better locations, e.g. more central, in better-quality dwellings, or in nicer areas, or simply a way to deal with rapidly increasing housing costs. Some participants also discussed the possibility of freeing up time from maintenance and cleaning, which is part of taking care of large homes.

Stakeholders in *STL Structures* also addressed the shortcomings of the current housing market. They discussed the need to reduce the importance of property ownership, among others by facilitating rental arrangements. Other suggested interventions to the housing market were more modular living arrangements and a maximum limit per capita living space, housing match programmes and shared holiday homes.

Stakeholders also addressed the need for a shift in values and norms. They discussed this primarily as a long-term goal, with a vision for what one group described as a ‘lagom’ lifestyle culture, adopting the Swedish word for ‘not too little, not too much’. They also suggested strengthening communities, as well as actions taken against loneliness through shared homes.

In the *STL Solutions*, experts also acknowledged the complexities involved in reducing housing floor space in an environment where spacious homes are emblematically linked to ideas of a good life and often even promoted by regulatory frameworks. They pointed out that smaller living and shared living are typically viewed unfavourably due to a range of factors such as historical experiences, instances of smaller living born out of necessity and media portrayals emphasizing larger living spaces. Furthermore, they recognized the lock-in effect of the existing housing stock in light of the preferability of house renovation compared with new construction from a sustainability perspective.

A notable point of discussion among the *STL Solutions* experts was the concern that an excessive focus on reducing floor space might undermine a broader approach to the promotion of sustainability aspects in housing design and development. For instance, Hungarian specialists were particularly sceptical about the idea that reducing floor space is the smartest way to reduce CO₂ emission in the Hungarian housing sector, doubting the policy’s ability to adapt to the nuances of existing housing inventories as well as its ability to lead to overall carbon footprint reduction.

In contrast, Swedish and German experts underlined the necessity of demonstrating to the public that smaller living arrangements could, in fact, improve quality of life to dispel the belief that downsizing equals sacrificing comfort and wellbeing.

To promote the adoption of smaller and shared living spaces, experts proposed the enhancement of data and insights regarding the current housing portfolio to identify opportunities for smaller living, the establishment of a stronger rental housing market and the implementation of higher real estate taxes for larger properties. Further recommendations included the design of versatile living spaces to accommodate changing family dynamics and life circumstances, the utilization of vacant dwellings and matchmaking services to support home exchanges. To support these initiatives, the crucial role of intermediaries, such as housing associations, was underscored in all case countries. Despite their potential, these entities are often overlooked and, in some cases (e.g. Hungary) such actors are not common in the housing sector.

Moreover, experts emphasized the importance of supplemental policy initiatives aimed at safeguarding the interests of underprivileged communities. Among various proposals, they recommended increased financial support for low-income households and enhanced financing options for smaller housing. These measures aim to correct market imbalances and foster fairness in the housing sector, ensuring that smaller living arrangements are chosen by preference rather than out of necessity. In this respect, some experts advocated for the adoption of a ‘housing doughnut’ model, which balances ecological sustainability with social welfare and wellbeing, alongside the promotion of social housing initiatives.

5. CONCLUSIONS

This article sets out to explore barriers to, and enablers for, smaller living. It focuses on the acceptance, motivations and effects from living smaller, highlighting the societal shifts needed to enable and foster reductions in per capita living space (see Figure 2 for an overview of the results).

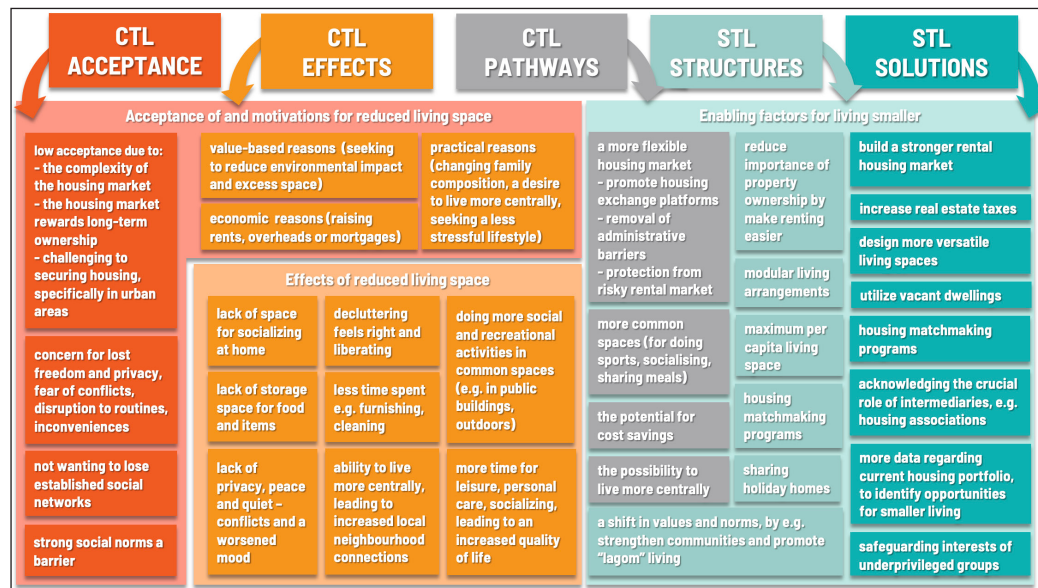


Figure 2: Study results.

Participants anticipated a deterioration in their quality of life within smaller and shared living arrangements, a prognosis that was, to a certain degree, corroborated by individuals who had direct experience, experts with macro-level understanding of housing and observations reflected within relevant scholarly discourse. There was a pronounced unanimity among participants in identifying the challenges associated with smaller living spaces. The perceptions that living conditions would reduce personal freedom and privacy, be exacerbated by constraints within the housing market, and contradict prevailing societal narratives that favour spacious homes, ownership and autonomy, were largely confirmed by participants who had experience with

living smaller and previous literature findings (e.g. Bricocoli & Sabatinelli 2016). Housing experts highlighted problems with smaller living coming from a housing market that works against this goal, similar to the findings of some previous studies (Hagbert & Femenías 2016; Gaspard et al. 2023). Both participants and experts also point out that currently dominant ideas of desirable housing are at odds with the idea of smaller living (Bohnenberger 2021; Sandberg 2018).

What these results suggest is that a focus only on ‘transitioning support’—i.e. the facilitation of people finding and moving into smaller and shared spaces, or even financial support for the transition (cf. Thomas et al. 2019)—is insufficient to change how people view and experience smaller living. There appear to be real downsides to living smaller, and unless those are addressed, encouraging people to live smaller can easily result in a lower quality of life once the transition is completed. This bears the risk that focusing only on supporting the transition to smaller living results in frustration and a renewed desire to live larger, undermining the goal of achieving society-wide smaller living in the long run.

The results instead point to the necessity for fair and equal steps towards smaller living, not least to counter the dominant social narrative of the desirability of increased living space. This could explain the similarly negative experiences across the five case countries, despite housing looking quite different (see file number 1 in the supplemental data online). In this study, the negative sentiment towards smaller living could be observed across the five case countries, with no noticeable difference between, for example, Latvia, which has a relatively low average floor area per person (29.6 m²) and a problem of overcrowding (41.7%) compared with Sweden (48.7 m² per person, 17% overcrowding) (see file number 1 online). This implies that a subjective perception of what is sufficiently large housing is primarily driven by relative comparison with the immediate environment, rather than objective measurements such as floor area (m²) per person. This stresses the importance of social norms and relative equality for the acceptance of reduced living space. A sense of inequality that arises from proximal comparison seems partly to explain similar reactions to relative downsizing, despite greatly differing starting points. This found expression in experts discussing more radical policy measures to ensure fair and equal downsizing being necessary. Stakeholders in the *STL Structures* suggested bans and taxes for floorspace minima and maxima, and changes to property rights, as well as a more diffuse need for deep shifts in values, structures and the economic system which currently shape the trajectory of housing. There was a strong consensus around ensuring access to adequate and affordable housing to meet housing needs, including support for low-income households, and addressing widening disparities in the housing market due to escalating real estate prices and rents, as well as limiting demand for overconsumption, as also reflected in literature (Novy et al. 2024; zu Ermgassen et al. 2022).

Despite many challenges, the findings also reveal a more optimistic scenario. Several positive side-effects and solutions emerged from the data, coupled with participants expressing an attraction to a future where the disadvantages associated with smaller living spaces are effectively mitigated. In particular, meaningful social contacts, access to good shared amenities and an ability to live in central, easily navigable, green, amicable and safe locations, combined with more leisure time and lower costs, proved to be an attractive vision to practically all participants. This suggests a receptivity among participants towards embracing a compact living model, provided that the inherent challenges are addressed and resolved, and the transition happening in a fair manner underscoring the potential for a paradigm shift in attitudes towards smaller living. The research presented in this article also indicates an awareness for the need of a societal dialogue addressing inequalities among many stakeholders, and a willingness among EU citizens from various backgrounds to engage in it.

5.1. POLICY IMPLICATIONS

One of the most impactful societal developments for the future of housing is urbanization. Participating experts as well as the literature (e.g. Wiedenhofer et al. 2018) suggest that this megatrend can contribute to more sustainable housing. Modern urban lifestyles match the identified necessities for smaller living, such as the possibility to find meaningful social connections, good and accessible amenities, and the availability of desirable living quarters. Support for the

downsizing potential inherent in urbanization necessitates a reconfiguration of regulatory norms and economic incentives for building and planning as well as societal norms relating to wellbeing and freedom. Introducing sufficiency in housing requires a departure from traditional building and planning practices towards initiatives that encourage a better alignment between household needs, dwelling sizes and socio-ecological limits, as well as a broadening of the scope of building and housing policy to include wider aspects of living well in urban environments (see also [Novy et al. 2024](#)). This was evident from the suggestions by experts in the ‘stakeholder thinking labs’ (STLs), focusing, for instance, on bans of new single-family houses. As experts pointed out, sustainable urban planning and building regulation must consider the role of multifunctional living spaces as part of broader urban sustainability transitions with more adaptable zoning laws and enable alternatives ([Ford & Gomez-Lanier 2017](#)). Some Swedish municipalities have begun proactively engaging with co-housing projects. In particular, the creation of ‘lighthouse’ projects, involving partnerships between municipalities, end-users, researchers and the private sector, can facilitate idea-driven development, capacity-building and showcase modern communal living arrangements, space-efficient housing, and the integration of technology in social and spatial organization ([Blomberg & Kärnekull 2019](#)).

Regulatory and stakeholder attention needs to go beyond an immediate focus on planning and building regulations in support of transitioning to smaller spaces. It is also important to create and support institutions that focus on fostering community building, success in sharing as well as conflict counselling in settings of shared living spaces. Planning decisions play a role in this, insofar as the shaping of spaces has a substantial influence on enabling dialogue and wellbeing in communal and public areas. But consideration also must be given to ‘soft’ outcomes, such as fostering good communities, and to avoid creating communities of ‘intimate strangers’ ([Törnqvist 2024](#)). Sharing is not always easy, and community life requires negotiation and compromise. Good governance becomes essential if housing is to become more convivial and shared, both to allow for flexibility in living situations and to manage conflicts. In this context, it also needs to be ensured that individuals have a say in who they share their daily lives with ([Bricocoli & Sabatinelli 2016](#)). Where this is not taken into consideration, planning for smaller living can backfire, with people experiencing their living conditions as worse. Environmental gains also become questionable, in such a situation (for the phenomenon of ‘doubling up’, see [Hagbert & Femenías 2016](#); and for rebounding to compensate for unsatisfying daily living conditions, see [Chitnis et al. 2014](#)).

Moreover, measures to foster a broader societal dialogue on upper and lower limits to per capita housing space are needed, as participants in the thinking labs noted. Sufficiency in housing requires a reconfiguration of societal norms of wellbeing and freedom. Transitioning to smaller living spaces and sharing is difficult as long as dominant norms of wellbeing and status centre on (signalling) material consumption. Similarly, support for corresponding regulatory norms is challenged by a concept of freedom that adopts an individualistic perspective and a focus on ‘freedom from state intervention’ (see also [Gumbert & Bohn 2021](#)). This realization of the need for a change in societal norms and for strategic action in its pursuit by political and civil society actors also aligns with Hagbert’s (2018) suggestion that a conceptual shift is necessary to view the home as a convivial place that connects individuals with social, infrastructural and ecological systems.

In sum, a transition to sufficiency in housing requires changes in regulatory norms regarding building and planning, but also in support of societal dialogue and norm change. Relevant actors included policymakers and planners, but also civil society actors and economic actors and professions, such as architects, building companies and housing cooperatives, and investors. Most fundamentally, perhaps, it requires societal dialogue on the interplay between societal housing needs and socio-ecological limits, as well as transparency on the relevant current conditions and a subsequent perceived fairness in any transitional process.

5.2. RESEARCH IMPLICATIONS

This article points to urbanization as an opportunity to achieve smaller living due to the natural need for higher density and the availability of good shared infrastructure. However, it is unclear to

what degree urbanization by itself results in changing values and norms around living space and sharing. Whether or not urbanization positively contributes to people's willingness to share, and influences their norms around housing, are important questions to address.

This study also illustrates that a variety of examples and attempts to change the dominant paradigm of housing already exist across the EU. What often remains unknown is the potential of such solutions on housing overall. Furthermore, the path from niche to mainstream for more radical sustainable forms of living deserves more attention. Considering the diverse perspectives of citizens and stakeholders based not only on expectations but also especially on experiences and perception of structural factors is thus an essential part of research in this regard to support solutions people are willing and able to adopt. This article showed the potential of thinking labs focused on dialogue and co-creation as a promising approach towards these ends. Thinking labs also provide the opportunity to explore differences between various countries, which this article has shown indications of, but would require more attention.

Lastly, this study illustrates the complexity of achieving a shift towards smaller, sustainable housing. Expert participants pointed out that such a shift most likely requires a planning and policymaking process that includes experts from fields as diverse as urban planning, architecture, mental and physical healthcare, energy infrastructure planning, etc. Academic and practitioner work should be dedicated to the design and testing of such 'holistic' planning processes.

5.3. LIMITATIONS

This article relies on a qualitative dataset. Even when quantifications were attempted, those are not representative of the case-country population. While great care was given to the recruitment of participants and the study design, statistical representation cannot be achieved.

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COMPETING INTERESTS

The authors have no competing interests to declare.

DATA ACCESSIBILITY

The research for this paper was conducted as part of the EU's Horizon 2020 project EU 1.5° Lifestyles. The project is an open data project, which means that by the end of the project, all data will be made available. All data will be published on Zenodo. At the time of writing of this article, preparations are underway, but not completed, for the open availability of the data. Upon publication, the data will be made available. In the meantime, the corresponding author can be contacted for data accessibility.

ETHICAL APPROVAL

For the design and implementation of Thinking Labs with citizens, the authors followed the International Sociological Association's code of ethics (<https://www.isa-sociology.org/en/about-isa/code-of-ethics>). The EU 1.5° Lifestyles project received ethical clearance based on the information provided in the proposal on Ethics & Security. Case country partners checked local rules for ethics approval. Informed consent was obtained from all participants (see data file 2 in the supplemental data online). All data collected in the labs, including survey data, were handled according to General Data Protection Regulation (GDPR) rules and as defined in the Statement of Ethics & Data Handling of the EU 1.5° Lifestyles project. The information collected from participants was encrypted to protect their identity and to prevent identification by third parties. The information is stored securely, and only authorized persons have access to it.

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