

## Supplementary File

**Table S1.** Publications with emphasis on the term 'environmental impact'

REF.	OBJECTIVE	METHODOLOGY	RESULTS
7	The research aims to determine a set of design indicators for affordable multifamily housing that can be employed to achieve greater satisfaction of the local population with similar projects in the future that contribute to improving their functional performance as a transition space between the interior and exterior of in order to guarantee the necessary privacy for the resident	Post-occupancy use assessment (POE) and a resident opinion survey were used on (10) apartment samples selected from (6) local affordable multi-family housing projects in the cities of Duhok and Erbil in Iraqi Kurdistan.	The research resulted in a set of conclusions that can enhance the design of the entrance space and increase its functional efficiency.
8	Design a sustainable residential building, more specifically a single-story structure, to accommodate four individuals from the economically backward section of the society.	The proposed design emphasizes the use of environmentally friendly materials and strives to achieve high energy efficiency by considering the site's natural environment and minimizing operational and embodied energy. In order to improve the quality of the internal environment and minimize the negative impacts of cement and steel, this project prioritizes the surrounding natural environment. Additionally, a	The results indicated that the proposed project not only has a lower cost, but also integrates the use of environmentally friendly materials, aligning with sustainable objectives.

		<p>life cycle assessment was performed to determine the design life of the building.</p> <p>Key sustainable building parameters such as natural lighting and ventilation were incorporated into the design to reduce operational energy consumption. Additionally, a cost analysis was performed to compare the proposed design with conventional construction methods.</p>	
28	Examine the feasibility of installing photovoltaic systems on the roofs of popular residential buildings in Israel.	<p>To plan and optimize photovoltaic system installation projects, we analyze the determinants of process efficiency, detect planning difficulties and consider the actions necessary to improve the well-being of various types of interested parties ("players"). Using game theory tools, these players are identified based on fifteen semi-structured interviews that allow analyzing their key and supporting roles and defining the parameters of their utility functions.</p>	<p>The "game" is analyzed both as simultaneous and serial, and its results show that the potentially crucial key actor is the Ministry of Construction and Housing (MOCH), which can choose between renting the roofs or purchasing the systems. Model analysis in the case study shows that, on average, each 10% transfer of income from the PV system to tenants will reduce household energy expenditure by 4.6% of gross household income, thereby alleviating energy poverty and strengthening trust and cooperation between all actors.</p>
10	Evaluate the best forms of sustainable design considering the interaction between artifacts and actors.	<p>Comparative analysis between the cases of Sweden and Cyprus.</p>	<p>Swedish actors' operational definition of sustainability is heavily codified and applied through interconnected artifacts. It is often a de facto definition of sustainability used by actors to define sustainability criteria and targets. Environmental databases for construction products act as black boxes, implicitly determining which aspects of sustainability are addressed in design decisions. On the other hand, Cypriot designers' work</p>

			on sustainability largely depends on their motivation, experience and ability to convince their peers.
11	Analyze the adoption of green building technology (GBT) to improve building performance.	Established a multi-objective suitability assessment model with maturity, economics and environmental burden and quality as assessment indices. Based on 43 cases of green-certified residential communities in Zhejiang Province, China, this study examined 37 common GBTs and evaluated them using the previously mentioned model.	A list of suitable GBTs was obtained, among which 11 technologies were identified as the ideal GBTs for popular housing, capable of improving the performance of buildings without unduly increasing their economic burden and construction difficulty.
32	Identify the possible monetary benefits of investments in energy retrofits.	We investigate whether energy efficiency is reflected in the property values of German single-family homes. Therefore, we examined potential heterogeneous effects across regions. With 422,242 individual observations at a 1 km <sup>2</sup> grid level from 2014 to 2018, this study adds to the existing literature by 1) examining the effect of energy efficiency on housing values for the entire country and specifically investigating regional disparities in this context and 2) Estimate an energy efficiency value/cost ratio to compare increased home values with initial investment costs and future energy cost savings. Finally, hedonic analysis was applied.	We found a positive relationship between energy efficiency and asking prices. If energy efficiency increases by 100 kWh/m <sup>2</sup> a, prices increase by an average of 6.9%. We also found evidence of regional disparities. The effects are significantly weaker in large cities than in other urban areas, while the impact in rural regions is much stronger. In line with this, housing shortages and higher per capita purchasing power have been identified as drivers of low energy efficiency premiums. Finally, there is evidence that about 98% of future energy cost savings are already reflected in higher housing value under myopic expectations regarding future energy prices.
29	This study aims to integrate clean energy into low-cost housing development for	We propose an ideal power system and examine the most significant design parameters that exhibit a desirable performance rate	For Uganda, the levelized cost of electricity (LCOE) with and without an optimizer ranged from US\$0.25/kWh to US\$0.36/kWh, while for

	sustainable cities in Uganda and Indonesia.	and power yield. This project was carried out in two stages: estimation of energy yield and detailed design of the energy system using two different software programs.	Indonesia, the LCOE ranged from US\$0.25/kWh at US\$0.3/kWh. The amounts of carbon dioxide reduction were 173,894 t and 122,742 t in Indonesia and Uganda, respectively. The technical-economic result of this study serves as a reference model for other developing countries that plan similar initiatives that can be replicated with local contextualization and assistance schemes.
30	Investigate the feasibility of statewide zero-energy affordable housing by analyzing historical data on climate, energy use, and solar system costs in the Commonwealth of Virginia	We propose a generalizable framework to analyze the feasibility of achieving net-zero energy affordable housing region-wide or statewide. To validate the framework, we employ a longitudinal sample of monthly energy use data from 2013 to 2016, obtained from 310 residential units from 15 LIHTC developments across Virginia. Statistical regression analysis, energy simulation and simulation-based risk analysis were developed.	The net present value (NPV) of zero-energy affordable housing investments can be positive with low risk. The investment value often varies depending on the building's definition of zero energy, climate characteristics, retail price of electricity and incentive rate. The results suggest that many other southern states could accrue the benefits of zero-energy affordable housing.
31	Explore the impact of current English government housing policy and alternative housing strategies on national carbon and biodiversity targets.	Using material flow and land use/biodiversity change models, we estimate that from 2022 to 2050, under current policy, housing alone would consume 104% of England's cumulative carbon budget (2.6/2.5 Gt [ 50% chance of < 1.5 °C]); 12% from construction and operation of new construction and 92% from existing stock. We look at solutions including improving affordability,	Transitioning to housing strategies that slow housing expansion and accelerate low-carbon retrofits would achieve lower emissions, but we show that they face an unfavorable political economy and structural economic barriers.

		reducing demand for homes as financial assets, macroprudential policy, expanding social housing and reducing underutilization of physical space.	
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**Table S2.** Publications with an emphasis on the term 'construction'

REF.	OBJECTIVE	METHODOLOGY	RESULTS
104	Answer the question: what are potentially efficient interventions to achieve sustainability in affordable housing?	The views of affordable housing experts (also knowledgeable about sustainable housing) around the world were solicited through a questionnaire survey to identify critical success factors (CSFs) for sustainable affordable housing. Analysis of relative significance of the data led to the identification of 13 CSFs. Furthermore, the agreement analysis revealed that there is no good agreement between respondents from the academic sector and those from the industrial sector regarding the ranking of the 13 FCS. Furthermore, through factor analysis, CSFs were grouped into four underlying components: developer-enabling CSFs; FCSs that facilitate family demand; mixed land use FCSs; FCS of land use planning.	The research findings seek to inform policymakers about FCSs for the efficient utilization of resources for the sustainable affordable housing market. A future study would establish a relationship between CSFs and success criteria for sustainable affordable housing.
105	Identify critical barriers (CBs) to sustainable affordable housing (HAS) from an	26 barriers were identified from a comprehensive literature review and an empirical questionnaire survey was carried out with 51 public housing experts	It revealed five components: related to green retrofit; related to the land market; related to incentives; barriers related to the real estate market and related to infrastructure. Furthermore,

	international perspective.	from various countries around the world, which was then evaluated using factor analysis (in the CBS)	component classification agreement analysis showed high levels of agreement on 'incentive-related barriers' and 'real estate market-related barriers' between experts from developing and developed countries.
19	Suggest a cost-effective construction technique to construct an affordable house for economically weaker people (EWS).	Various economical materials such as EPS (expanded polystyrene), coconut shell, foundry sand, fly ash were used. A separate concrete mix ratio was designed and adopted for each economical material used in this work. 15 numbers of slab panels were tested for uniformly distributed load gradually increased with simply supported condition	The cost analysis for molding each slab was carried out and a material with an excellent cost-benefit ratio and high resistance was obtained.
13	It presents one of the largest surveys of indoor temperatures during winter in English social housing and discusses the need for a method to assess the risk of overheating in homes, particularly in social housing housing vulnerable groups of people who are often less able to tolerate or adapt to low temperatures.	Half-hourly temperatures were measured in the living rooms and main bedrooms of 124 social homes located in central England. Indoor temperatures were analyzed for two distinct periods of "heating season" and "winter" during the assumed occupied hours of 08:00 to 20:00 for living rooms and 20:00 to 08:00 for bedrooms.	The average living room and bedroom temperatures when occupied were 19.0°C and 18.7°C, respectively, during the heating season and 18.6°C and 18.2°C during the winter. The average room temperature during winter was 2.4°C lower than the minimum room temperature of 21°C recommended by the World Health Organization (WHO). Living rooms and bedrooms spent 39% and 46% of their occupied hours respectively below 18°C, which is recommended by Public Health England as a reasonable minimum indoor temperature for homes in winter. Older properties built before 1982 were found to be at significantly higher risk of low temperatures.
12	Identify and classify the	21 CSC were identified from a comprehensive literature	Factor analysis indicated that the various CSC can be grouped into

	various CSCs from the perspective of affordable housing experts around the world.	review, followed by a questionnaire survey on the 21 CSC identified.	six components: family satisfaction CSC, stakeholder satisfaction CSC, house operating cost CSC, time measurement CSC, location accessibility cost CSC, and CSC related to quality.
50	Explore housing providers' experiences of barriers to SAH adoption in Nigeria. The aim is to determine the degree to which each barrier contributes to the deprivation of housing rights of vulnerable members of society.	A multidimensional analysis of the problem challenging the acceptance of SAH. A comprehensive list of 43 barriers, classified into 6 categories, was determined through an extensive literature review. A cross-sectional questionnaire survey was designed and administered to 1,554 experts in the Nigerian real estate sector with expertise in affordable housing. Frequency analysis and Kruskal-Wallis H tests were used to classify and identify critical barriers.	The results reveal that housing providers' views on the criticality of these barriers differ significantly across professions and based on the nature of the service (academic or practical). A framework was developed to help housing providers and stakeholders prioritize their actions to implement SAH in the study area.
14	To evaluate a full-scale, low-cost green facade over a year for its effect on the thermal performance of an environmentally friendly affordable housing located in a humid subtropical climate.	Application of a practical solution with evaluation of real facades.	The benefits of the green facade became clearer during spring and summer, when the temperature of the shaded wall's outer surface was reduced by up to 9°C compared to the bare wall, and its thermal amplitude varied by 8.4°C, while the amplitude of the bare wall was more than twice that value. The plant layer decreased heat flux through the outer wall by up to 22.3 W/m <sup>2</sup> during summer and 8 W/m <sup>2</sup> during winter. These results show the potential of a low-cost green facade to improve the thermal comfort of sustainable housing projects.
15	Highlight the interrelationships between ambient temperature,	The synergies between the urban microclimate, indoor air temperature, housing characteristics and residents'	The results show that many homes operated outside health and safety temperature limits for substantial periods. The evidence

	housing design, income, thermal comfort, energy use and health and well-being in the context of social housing.	quality of life were investigated through subjective and objective assessments of indoor environmental quality in 106 low-income residences during the winter and summer of 2018–2019 in New South Wales.	of winter overheating and summer overheating suggests that improvements in building quality and urban heat mitigation are needed to minimize the impacts of low-performing housing and local climate.
20	Analyze how housing, which has long been governed by the liberal consensus, is being repoliticized.	We investigate Oslo's agenda to establish a 'third housing sector' beyond the privatized model and its role in popularizing alternative housing models. We focus on mobilizing and rearticulating the genealogy of housing failure in Oslo and alternative housing solutions.	We show how arguments and positions gain legitimacy by situating references to other situations and places in a multiplicity of local and foreign arenas.
16	Determine an optimal set of strategies to provide thermal comfort in popular housing through a sociotechnical methodology.	A new energy target compression analysis (ETPA) method is developed to identify the optimal solution using a weighted Aggregate Acceptability Index. Data on thermal comfort and willingness to accept it were collected from 1,267 low-income families in Mumbai, India.	There is a considerable gap in the acceptance of effective thermal comfort strategies by occupants of low-income housing, and interventions at the community and policy level can be useful in filling this gap. Pinch analysis identified four sets of strategies in order of priority ranking involving adaptive actions and retrofit techniques to achieve thermal comfort under acceptability constraints.
17	This study proposes a new Adaptive Comfort for Low Income Housing (ACL) model for low-income housing in Mumbai, India, through a longitudinal field study method.	6,266 observations were gathered from low-income housing located in the hot and humid region to examine the thermal comfort conditions of the vulnerable population. Lower thermal sensitivity and a wider comfort temperature range of 25.1°C to 31.9°C for occupants were observed compared to their affluent counterparts.	Existing national and international comfort standards have proven to be ineffective in predicting comfort conditions for low-income Indian occupants.



18	<p>The evaluation aims to investigate how this housing alternative can contribute to reducing the energy impact of the building by providing comfortable conditions for users. The work aims to investigate how thermal comfort can be characterized in depth, analyzing only air temperature, relative humidity and external conditions.</p>	<p>The article evaluates the cooperative housing La Borda (Barcelona) from two points of view: energy consumption at the building and residence level and the indoor environmental quality of six representative residences. A post-occupancy assessment was carried out where energy consumption, environmental data and user perception were collected to make a qualitative and quantitative analysis. Thermal comfort assessment combines different tools (adaptive comfort model, Givoni psychometric chart, Heat Index and surveys) to obtain a good understanding of the thermal behavior of homes and the perception of comfort, achieving satisfactory results.</p>	<p>The work demonstrates that La Borda is a model that contributes to reducing the energy impact of the building, which can be related to some of the characteristics of cooperative housing: sharing of goods and resources; community support; training initiatives; strong involvement during project design; and sustainable building design. However, some discrepancies were found between the different indicators and the users' qualitative perception.</p>
21	<p>The objective of the research is to investigate the feasibility of using PET bottles as an alternative construction practice for housing units for the urban poor as an "innovative method of building low-cost housing".</p>	<p>It also analyzes the various central and state government schemes and discusses about the participatory roles played by each sector for the proposed construction method. The primary study comprising data collection through questionnaire was carried out in the city of Bhubaneswar, a metropolitan area considered under the Smart City scheme. The last section summarizes the role of various government schemes, the participation of government, non-governmental organizations and people belonging to weaker economic sectors is</p>	<p>The study results show that at least 8,000 housing units of 37 m<sup>2</sup> carpeted area can be built using PET bottles for external walls and partitions.</p>

		necessary for the successful implementation of affordable housing.	
22	Analyze the two trend panel techniques, namely: Plaster and Ferro-cement in various technical aspects and the implication in popular housing.	Comparison.	<p>Social elements can be integrated into circular strategies by creating relationships with communities in the networks in which these strategies are situated.</p> <p>Such relationships, especially those established in the formulation and activities involved in implementing the strategy, allow communities to adapt ecologically-oriented circular strategies to their needs and perspectives, and increase community support for the ecological objectives of these strategies. Establishing such relationships with communities can be complex and expensive, requiring careful interactions between a diverse set of actors. However, if housing associations ignore this complexity, they may end up missing important social elements that lead to high costs at later stages and circular strategies that are unable to achieve long-term environmental benefits.</p>
23	Present the various on-site opportunities and challenges that arise during the implementation of prefabricated sandwich panel system technology and provide practical solutions to serve the growing Indian housing market.	Prefabricated sandwich panel system components (which fall into one of 6 categories) are discussed in detail.	Expansion of the OSC sector is recommended to support the rapid construction of affordable housing supply to meet growing demand, especially in metropolitan areas. Creation of OSC modules of flexibly integrated apartments allowing different sizes (e.g. 1, 2 and 3 bedrooms) of apartments to be created just-in-time (JIT) will significantly improve the mismatch between the type of affordable housing, wants and needs. Likewise, the study

			<p>highlights the importance of policymakers streamlining the development application process in a way that supports affordable rental housing supply linked to demographics; as part of larger OSC high-rise developments where the apartment configuration may be modified or smaller purpose-built developments.</p>
24	<p>To evaluate and compare the performance of mass housing envelopes commonly constructed in India with alternative building envelope constructions.</p>	<p>These alternative construction scenarios are created with a materials library comprised of available alternative combinations of roof and wall systems, including some common emerging construction technologies standardized and advocated by the Indian Materials and Technology Promotion Council.</p>	<p>CSEB construction has the lowest initial embodied energy, LGFS offers minimal thermal discomfort, while the MC construction system reports the lowest construction cost. A predominance of lean envelope constructions is observed in the sets of Pareto optimal solutions considering the minimization of construction cost, thermal discomfort and energy embodied in construction.</p>
25	<p>Discuss the advantage of using sustainable building materials: Compressed Stabilized Earth Blocks (CSEB) OR red bricks.</p>	<p>Comprehensive analysis of the cost and impact on sustainability between these two materials.</p>	<p>Despite producing 2.37% less housing over a 20-year period, the GB scenario showed promising reductions in utility operational consumption and utility costs, as well as progress towards achieving broader national carbon reduction targets. Low-income tenants in the GB-AHBA scenario are expected to benefit from a 45-59% reduction in energy bills and 27% reduction in water bills versus a BAU-AHBA scenario. These savings are expected to provide a benefit of AU\$44,145,616 over 20 years, distributed to approximately 7,700 families who will benefit from this scheme. This can be thought of as a direct demand-side subsidy to tenants that offers reductions in overall</p>

			<p>housing costs. Substantial reductions in energy and water demand can provide opportunities to delay infrastructure planning, unlocking further financial benefits. Sustainable financing pathways through government-backed green bonds are forecast to provide an additional \$6,789,153 of capital for housing supply, and it is plausible that a national rollout of the GB AHBA could contribute 2.9% of the city's carbon footprint. Australia in COP emissions reduction commitment by 2030.</p>
26	<p>The present study deals with extensive data collection of various materials and techniques available for low cost housing and development of a strategic action plan to implement the same at the identified locations in India.</p>	<p>The research also discusses the role of prefabricated concrete processes, along with 3D concrete printers and their use in low-cost housing.</p>	<p>Replacing traditional burnt clay bricks with CSEB has been shown to improve the sustainability aspect of the building without compromising its economy. Based on the comparative analysis, the total sales price of the unit fell by 30%. Materials like CSEB could improve the process of building homes for the population at the lowest rungs of society where cost reduction is not a bonus, but rather a requirement.</p>
27	<p>Evaluate and guide the best choice of a wall system for use in civil construction, comparing two systems.</p>	<p>Examine and compare the thermal properties and total life cycle costs (LCC) of earthbag walls to commonly used fired brick walls - based on the Degree-Day method and life cycle cost analyzes of earthbag walls. buildings located in one of the hottest regions in Uganda. In-situ temperature and heat flux measurements were carried out in accordance with ISO 9869 and annual energy requirements obtained. Total</p>	<p>The results of this study suggest the earthbag wall system as an economically viable and technically viable low-cost construction option for rural areas and low-income housing in hot climatic conditions, a characteristic of sub-Saharan countries - so as to promote the regional development.</p>

		LCCs were calculated based on initial construction costs and annual energy costs attributed to the building's wall systems	
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**Table S3.** Publications with an emphasis on the term 'city'

REF.	OBJECTIVE	METHODOLOGY	RESULTS
78	Explain the mechanism of influence of SAR on house price fluctuations across the country.	This study adopts a fixed-effect panel regression model.	SAR policy design can be directed towards urban regeneration in addition to real estate development, and social, economic and environmental objectives must be integrated into the SAR process.
79	Quantitatively assess whether a national market-oriented housing program (MCMV) could account for disparities in the spatial outcomes of physical growth associated with different territorial governance arrangements during contrasting local government terms.	We analyzed the urban growth/expansion processes resulting from three consecutive periods of master plan implementation practices in a medium-sized Brazilian city (Araraquara, SP).	Although the MCMV program introduced extensive peri-urban expansion, especially towards spring preservation areas that today juxtapose social and environmental vulnerabilities in Araraquara, it was not solely responsible for the noticeable spatial trends observed after 2009.
80	This article analyzes the main municipal-level policies related to urban villages and urban renewal in Shenzhen.	Systematic literature search and content analysis.	The policies implemented in Shenzhen aim to formulate, modernize and consequently homogenize urban villages into “modern urban communities” through the following upgrades: development of urban infrastructure, improvement of sanitation conditions and

			<p>beautification of building facades. However, these approaches to “environmental improvement” were not primarily based on identifying and understanding the real causes of the “environmental problems” exhibited.</p>
81	<p>To examine the spatial distribution of Housing Choice Voucher (HCV) and Low Income Housing Tax Credit (LIHTC) housing units and their environmental attributes in the American city of Austin, Texas.</p>	<p>Binary logistic regression models were used to estimate various walkable environments around subsidized households.</p>	<p>Walkability characteristics varied between the two subsidized housing programs. HCV households were primarily in neighborhoods with high accessibility to amenities and significantly complete sidewalks, but had low density of crosswalks and traffic stops. Meanwhile, LIHTC households were found primarily in census block groups characterized by incomplete sidewalks.</p>
82	<p>Seek evidence on the impact of location on residents’ access to services.</p>	<p>Studying Nanjing, this article compares spatial access to services between Affordable Housing Communities and Other Housing Communities by measuring distances and imputing walking time between residential lots and facilities.</p>	<p>Affordable Housing Communities have significantly poorer access than Other Housing Communities due to poor neighborhood provision of low-level services and poor access to high-level services. Furthermore, residents in affordable housing have low levels of satisfaction, weak ties to the community and desire to move. The results emphasize that service provision must be planned to accompany the construction of affordable housing, so that these communities become better places to live.</p>

**Table S4.** Publications with emphasis on the term 'development'

REF.	OBJECTIVE	METHODOLOGY	RESULTS
33	<p>This work focuses on urban</p>	<p>In this work, 322 respondents comprising the</p>	<p>It was found that the tendency to support or oppose the</p>

	regeneration as an approach to favela transformation.	framework were systematically sampled from the Ashaiman slum settlement in Ghana. These interviewees were heads of families. The various groups identified in the community were based on: places of origin; location of residences; work places; income levels; and employment status.	implementation of urban regeneration had a significant relationship with where a person belonged within the groups described above.
34	Investigate the causal relationships between 'institutional', 'economic', 'social' and 'environmental' sustainability barriers, and assess their effects on sustainable housing.	A questionnaire survey was conducted with professionals in the regulated sector of the Ghanaian property market. The collected data was analyzed using partial least squares structural equation modeling (PLS-SEM).	<p>The path 'institutional barriers' to 'economic barriers' is supported at a significance level of <math>p &lt; 0.05</math> at a t-value of 2.125;</p> <p>The path from 'institutional barriers' to 'social barriers' is also supported at a significance level of <math>p &lt; 0.05</math> at a t-value of 2.132 and similarly 'institutional barriers' to 'environmental barriers' path of <math>p &lt; 0.01</math> at a t-value of 3,740. Between barriers and sustainable housing, both 'institutional barriers' and 'environmental barriers' have significant impacts on sustainable housing with t-values of 3.673 and 1.790 supported by <math>p &lt; 0.01</math> and <math>p &lt; 0.10</math>, respectively. Three underlying barriers, namely: 'bureaucratic delays', 'political instability' and 'weak enforcement of development control over land' all represented significant paths of 'institutional barriers'. Among them, 'political instability' has the highest loading, suggesting that it is the biggest barrier to sustainable housing. Essentially, the results revealed causal relationships between the four categories of barriers and a predictive model between the</p>

			barriers and sustainable housing. Thus, 'institutional barriers' are causal barriers that have multiplier effects on 'economic', 'social' and 'environmental' barriers.
35	Explore the context, motivation and outcomes of migrant settlements in peri-urban areas of Ghana.	Qualitative approach through in-depth interviews.	<p>The results suggest that low-income migrants opt for a rent-free stay in incomplete houses in peri-urban areas. One of the main reasons for this is the affordability challenge that low-income migrants face in the property rental market.</p> <p>Migrants choose to stay in incomplete houses because they offer more space for living and storage. The unavailability of services such as electricity and drinking water sometimes presented unique challenges for migrants, but was also considered a cost-saving mechanism. Employment prospects in peri-urban areas, such as housing construction, also contribute to the settlement of migrants in these areas.</p>
36	Focus on the details that make up the provision of affordable housing	Through a systematic review of academic literature with 58 articles published from 2012 to 2022, it examined the housing supply value chain, breaking it down into its three main components of housing financing, land acquisition and housing construction; to thoroughly investigate each as it relates to the urban poor.	Most scholars opine that better affordable housing provision strategies will merge bottom-up and top-down approaches to balance. Land acquisition is relatively less discussed in the literature.
37	Assesses housing challenges and enabling programs for affordable housing in the Kingdom of Saudi Arabia (KSA)	A survey of housing experts was conducted and responses were analyzed using the Relative Importance Index (RII) and Chi-square.	The results show that the main challenges are the high price of residential land (RII = 0.89), high construction cost (RII = 0.87) and high urbanization rate (RII = 0.76). The study found that participant demographic factors



	within Vision 2030.		led to significant differences in scores on six of the challenges investigated. Furthermore, the most effective facilitating programs were the value-added tax (VAT) exemption program (RII = 0.82), followed by the housing development program (RII = 0.73) and forms of ownership (RII = 0,73). Significant differences in scores for two of the enabling programs were found based on the age and gender of the participants.
38	Investigate why and how popular housing planning has been used in England and not in Portugal.	It is based on literature reviews and semi-structured interviews with government advisors, local authorities and academics,	The data shows that divergence in the adoption of planning obligations for affordable housing is the result of different but interdependent causes: path dependence (a concept that suggests that past events influence present and future events), ideology (values, beliefs and a political orientation general about how society should be and how to improve it), and planning cultures (collective social practices with their specific roots, legal traditions, ethos, etc.).
39	Investigate the emergence of slums in Ghana and evaluate traditional and innovative financing mechanisms to drive the country's redevelopment.	It assessed critical urban slum indicators, established critical infrastructure requirements for urban slums, and examined traditional and innovative urban slum financing tools to develop more socially equitable and inclusive infrastructure. This research adopted a quantitative research strategy framed in the positivist paradigm and deductive reasoning. Surveys were used to solicit responses from selected	Emerging findings revealed that 'housing quality' was the most critical measure of urban slum conditions, followed by 'access to improved sanitation'. Furthermore, the results also stated that 'virtuous sanitation' was the most important infrastructure requirement, followed by 'proper disposal of waste facilities'. Cumulatively, the results suggest that the most prevalent and effective traditional financing tool was incorporating a slum infrastructure development

		stakeholders using purposive sampling. Data were analyzed using mean score classification, one-sample t-test and relative importance index (RII).	fund and using taxes and capacity building urban local bodies (ULB) with increased municipal budgets. Finally, in relation to innovative forms of financing, the public-private partnership (PPP) proved to be the most effective, followed by the municipal bond.
40	Analyze the “pockets of resistance” that the Kingdom of Morocco has faced in implementing the VSB program (“Villes Sans Bidonvilles” or “Cities without Slums”)	Using two case studies, I demonstrate how favela residents' responses to the relocation scheme delayed the VSB process for several years and, in fact, caused authorities to offer a resettlement (remarriage) option that was preferred by residents.	The social 'non-movement' of favela residents brought tangible benefits to them, and led to the “socialization of the state” through the replacement of the government's resettlement program with a resettlement scheme that they preferred. Against all odds, the art of slum dwellers' presence induced a dramatic shift in housing policy in their favor.
41	Develop and validate a housing insecurity scale for slums and informal settlements in the global South.	Using a complementary set of qualitative and quantitative techniques, we developed the scale from data collected from three slums in Ghana (N = 1,036) on deprivation and housing characteristics, slum severity, resource insecurity, health outcomes, and sociodemographics. After item generation, domain identification and content validation, we identified a set of 28 items, which were tested for tetrachoric and biserial correlations. We then extracted an optimal number of factors and tested dimensionality using confirmatory factor analysis and second-order confirmatory factor analysis. This was followed by tests of reliability, external validity, unidimensionality of the	The resulting scale is a multidimensional multilevel scale composed of 17 items that are subdivided into three subscales: lack of essential utility ( $\alpha = 0.63$ ), deficiency of the built environment ( $\alpha = 0.80$ ) and challenges rental ( $\alpha = 0.82$ ). The composite scale is reliable, with an alpha coefficient of 0.83. Concurrent and predictive criterion validity, convergent and discriminant validity, and known group comparisons supported the validity of the scale. The assumptions of subscale unidimensionality, local independence, invariant item ordering and monotonicity were verified. This is one of the few comprehensively validated scales developed to measure housing insecurity in slums and

		subscales, local independence, invariant ordering of the items and monotonicity.	informal settlements in the global South.
9	Urban densification has been implemented since the 1980s and has produced strongly exclusionary real estate markets with negative socio-spatial implications. The article explores the mechanisms behind these results to uncover how the systematic prioritization of environmental sustainability and green growth goals in densification planning, coupled with a lack of legal tools and economic resources to provide affordable housing, have shaped the production of exclusionary outcomes. , limiting the possibilities of combining urban densification and housing accessibility at the local level.	Case study in Oslo, with qualitative analysis of policy documents and interviews with key informants.	Effective absorption of HAS is crucial to prevent and reduce the adverse effects of housing deterioration, inaccessibility and unsustainability. It will also allow vulnerable members of society to enjoy the numerous benefits of SAH implementation.
42	Compare strategies for	Multiple case study approach through	The state government's authoritarian strategy can lead

	resolving sustainable housing issues in three urban states in Malaysia.	interviews with real estate sector actors supported by online media and public reports. The twenty participants consisted of policymakers, housing developers, civilian citizens, and social interest groups.	to inefficiencies and eventually accelerate changes in the network. The adoption of a collaborative strategy through strategic networks, however, helps to meet the growing housing demands of the city's inhabitants. Collaboration also aligns with the conflicting interests of different actors.
43	Analyze the plurality of informal urban practices that characterize contemporary Italy in the sphere of housing, focusing on their complex connections with a variety of public institutions (e.g. laws, regulations, policies and practices) and further aims to develop an innovative research approach for informal housing in Italy, overcoming the traditional boundaries between research 'objects' and observing the political uses and forms of institutionalization that are implemented in informal housing.	The article discusses five cases of urban informality in Italy: the occupation of popular housing in Milan; gypsy camps in Rome; the borgate romane (large irregular neighborhoods in the capital, built in the 1960s and 1970s and which went through a long and complex process of regularization); unauthorized construction by the middle class of second homes in the coastal areas of southern Italy; Illegal subdivision of agricultural land as a standard mechanism for urban expansion in Casal di Principe, Naples.	Three main ways in which public institutions favor and shape the production of informal housing were identified: structural characteristics, action and inaction. Informality can also be seen as the response of actors to regulatory and political frameworks that assume the existence of political, economic and institutional conditions that are not currently in force in certain places and under certain circumstances. This lack of legitimacy and effectiveness has led to a variety of widespread informal practices.
4	Estimate the transfer of clean technology	The 69 construction companies were identified in five cities in Rio Grande do	These studies identify poor performance versus sustainability needs of current

	between construction companies in Brazil dedicated to the construction of affordable housing	Sul. The cities were Canoas, Caxias do Sul, Passo Fundo, Pelotas, Porto Alegre. Then, a network analysis identified the degree, betweenness, proximity and density.	low-cost construction. As a result, it identifies technology transfer capabilities that allow medium-term gains for Brazilian construction companies. Finally, we developed technology transfer indicators to understand the complexity of the production of affordable housing in Brazil.
44	Literature review on the topic "building socially fair and environmentally sustainable cities", with an emphasis on government-led housing.	This review considers the hybrid notion of fair sustainability and how these ideas are reflected in government-led housing, using South African examples to reflect on practical application. Seeks to understand the trade-offs and structural barriers to fair sustainability as a prerequisite for realigning these interactions within society, over time and at all scales	Progress toward fair and sustainable housing in theory and practice requires engaging with conflicting rationalities through transdisciplinary research and broadening knowledge approaches to consider non-dominant perspectives.
45	Analyze the determinants of residents leaving housing complexes.	Using a sample from the Income Dynamics Panel Survey, this article looks at individual characteristics and neighborhood factors associated with longer duration periods.	The results suggest that departures from public housing may be largely due to changes in housing policy and social welfare programs rather than household characteristics and neighborhood conditions.
46	Analyze how municipal planning authorities deal with the shortage of affordable housing in a context of urban densification. Specifically, we ask: How do municipal planning authorities promote	A neo-institutional analysis approach was used to better understand (1) the basic mechanisms of how land policy instruments impact accessibility and (2) why specific instruments are activated to defend affordable housing objectives. qualitative case study analysis of four Swiss urban municipalities.	The mere availability of land policy instruments is not enough, but the strategic activation of specific instruments is important.

	affordable housing in densifying cities?		
47	Assess differences in the design of municipal housing supply concepts for the university cities of Giessen and Marburg	The very high degree of similarity between the two cities in terms of framing conditions allows for a comparative assessment of the concepts.	The influence of the extent of stakeholder participation on the implementation and effects of concepts cannot be determined. However, there are indications regarding the rigor of the formulation of concepts.
48	Expand the range of research carried out on practical barriers to the more extensive use of publicly owned land for housing development.	In-depth interviews with key professionals involved in identifying, planning, selling, purchasing and developing housing on public lands. Five potential barriers - ownership restrictions; financing and financing; legal and planning; quality; and market obstacles - are identified and explored.	While the importance of barriers will vary, policy intervention and/or behavioral change by local authorities will be required if we are to use public land stock more extensively for new housing development.
49	Explore how social housing associations can introduce circular strategies and integrate social elements, alongside ecological elements, within these strategies.	This article first explores the circular strategy options that can be adopted by neighborhood associations. From there, the article explores how social elements can be integrated into these strategies by establishing relationships with communities in the network of neighborhood associations.	By carrying out an in-depth case study, we identify possible circular strategies for housing associations and indicate how community relationships can be established within these strategies. The results highlight that community relationships in vision formulation and activities involved in executing circular strategies can help create synergies between the ecological objectives of circular strategies and the perspectives and needs of communities. On the other hand, the results indicate that not establishing relationships with communities or only establishing relationships in strategy outcomes can be detrimental to both community needs and the ecological objectives of circular strategies.

106	<p>Housing affordability is typically assessed in economic terms, but concerns about housing affordability transcend the mere cost of housing and its relationship to income, to broader issues of social well-being and sustainability. Therefore, the objective of this study is to identify the opinions of households regarding the evolution of the affordable housing sector, in addition to other interested parties.</p>	<p>In this regard, a comprehensive list of 81 potential sustainability performance criteria (SPC) was determined through review of existing literature. Based on this, a questionnaire survey was designed to assess the opinion of households residing in the 26 urban areas of Nigeria on the criticality of these SPC. Through statistical analysis, 30 critical sustainability performance criteria (CSPC) were established</p>	<p>This study posits that currently, housing affordability concerns in urban areas of Nigeria cannot be narrowly defined by financial attributes.</p>
51	<p>Indicate how local data can inform policies to redress inequalities, including those aimed at preventing disadvantage from suburbanization as cities grow and gentrify.</p>	<p>Spatial and area socioeconomic variation in urban liveability (access to social infrastructure, public transport, open space, healthy food choices, local employment, street connectivity, housing density and housing affordability) was examined and mapped across 39,967 residential statistical areas in metropolitan Australia (n = 7) and largest regional cities (n = 14)</p>	<p>Urban liveability varied spatially, with inner-city areas more liveable than outer suburbs. Disadvantaged areas in larger metropolitan cities were less livable than advantaged areas, but this pattern was reversed in smaller cities.</p>
52	<p>This paper aims to examine how the presence of different types of social and affordable housing</p>	<p>Using population census data in 1988 and 2002 from Warsaw, Poland, from two periods characterized by different housing policies and tenures, the article</p>	<p>The results suggest that limitations on tenure conversions are necessary to achieve a long-term social mix. Furthermore, there is a need for affordable housing providers to</p>

	<p>providers impacts the level of the social mix and changes in the social mix resulting from tenure conversions in the housing stock owned by different providers.</p>	<p>argues that social mix was mainly associated with a combination of housing and property tenures, but only in 2002</p>	<p>diversify and specialize in meeting changing housing needs and dynamic housing aspirations.</p>
53	<p>This article examines how land use regulations applied in the formal sector can influence housing outcomes in the formal and informal sectors, using the Buenos Aires metropolitan area as our case study. In particular, it addresses the question of whether land use regulations may contribute to the presence of informal settlements by restricting opportunities in the formal sector.</p>	<p>Our theoretical model provides a direct test of an exclusion hypothesis whereby mandatory land use regulations limit the absorptive capacity of the formal sector, thereby creating spillovers into the informal sector. The basic model is also extended to accommodate two alternative adjustment mechanisms whereby households move to municipal jurisdictions with more appropriate land use regulations (the Tiebout mechanism) or to locations further from the city center where costs from the ground are lower (the Alonso mechanism). We also employ two distinct but complementary datasets. First, we conducted a survey of representative households living in informal settlements and nearby formal areas. The other dataset is derived from an innovative fusion technique applied to Argentina's Census and National Expenditure Survey (ENGH).</p>	<p>At an empirical level, our results confirm the existence of a rent premium for accessing the formal housing sector, consistent with the predictions of our model. Our results also show a strong interconnection between infrastructure provision and housing outcomes, which highlights the important role of infrastructure in both the design of formal sector housing developments and the provision of essential housing services, broadly defined.</p>



3	<p>This research aims to advance the challenges of planning for sustainability, proposing a methodological approach in a context of great data scarcity to support decision makers in the development of popular housing projects. The main objective is to reconcile urban growth with residential satisfaction and the preservation of natural resources.</p>	<p>We developed two Cellular Automata (CA)-based residential development scenarios to identify suitable locations for future affordable housing projects: urban densification (UD) scenario and restricted urban sprawl (CUS) scenario. Both scenarios are based on indicators of residential preferences and measures taken to combat the negative effects of urbanization. Landscapes were evaluated by quantifying their spatial patterns using a pre-selected set of six class-level landscape metrics. Then, standard deviation and regression analysis were conducted to evaluate the accuracy of the CA simulation and the assessment of pattern changes in the simulated scenarios.</p>	<p>The results reveal Algeria's low capacity to meet the housing deficit according to the conditions established for each scenario. The results show a combination of aggregated and dispersed growth patterns for both scenarios, finding trade-offs between the advantages and challenges of urban densification and urban expansion. The resulting values indicate the good performance of the CA and confirm its effectiveness in predicting the future locations of housing projects.</p>
54	<p>Model the conflict (favela population x authorities) through Game Theory and shed light on the different parameters that influence the decision-making process and, finally, propose a management model to limit the spread of needy communities as much as possible .</p>	<p>Applying the model to the city of Hassi Bahbah using ABM, the game modeling results allowed us to extract the delta threshold that will allow decision makers to know when they should make decisions.</p>	<p>The results showed the lack of a clear vision on the part of the designer to provide sufficient economic space for the entrance, which arose from the variation in the area of the entrance space and the direct proportionality of the relationship with the total area of the apartment. This increase could have a negative impact on the rest of the apartment's space or increase in cost as a result of an increase in the total area.</p>
55	<p>This research investigates the</p>	<p>The evaluation of interviews with residents paired with</p>	<p>Identified agents of exceptional</p>

	Asa Branca favela in Rio de Janeiro through the lens of social cohesion to find entry points for such structural adaptation.	empirical observations identifies a series of trends towards or away from their spatial and social consolidation. Understanding the dynamics can explain the White Wing's persistence despite the disturbing events in its history.	importance for the perseverance of the community. Some of Asa Branca's longtime residents make notable leaders. Additionally, there is a high frequency of community events and related non-monetary activities. exchanges between residents. Furthermore, it was observed that the residents' association supports the community.
56	Understand how municipalities deal with the implementation of housing projects with pluralistic policy objectives.	The performance of the policy objective of accelerating housing production is studied by exploring how value conflicts between these quantitative and qualitative objectives are addressed. A survey among Dutch municipalities and two additional in-depth case studies.	The non-conformity of the acceleration of housing production is not only the result of exogenous processes, but also of accumulated political decisions that favor qualitative ambitions. The case studies reveal that municipalities especially struggle with trade-offs between qualitative and quantitative objectives.
57	This article maps the potential for environmentally and socially sustainable housing options based on the collective building model (Baugruppen) in Australia.	A case study was carried out to detect the role that contemporary socio-spatial tensions, together with urban and environmental unsustainability, play in creating housing precarity. As part of this, the possibility of housing change based on the Baugruppen model was explored through a prospective project in Queensland and completed projects in Victoria.	The case study findings demonstrated that the existing housing model is contributing to conditions of spatial injustice and urban unsustainability. Furthermore, they revealed the limited feasibility of a paradigm shift.
58	This article questions the factors that influenced the refusal of many families to participate in the resettlement	Using a combination of ethnography, archival review and interviews with local people and housing developers, the article examines the different circumstances and factors that shape residents'	We conclude that residents' demands for inclusion diverge from and transcend the authorities' plans for the provision of social housing in the new city of Tamesna.

	process that was ostensibly designed to meet their housing needs.	reactions to the resettlement process.	
5	<p>Review inclusive housing policy and present a solid introduction to a territorial development policy instrument CULD that supports, among other objectives, the creation of affordable housing in Germany.</p> <p>Includes a description of this model that has social, economic and planning objectives.</p>	<p>Content analysis incorporating related literature, city documents and practical projects.</p>	<p>Local CULD models are powerful land management tools to achieve socially equitable land use and increase land transfer potential to increase the prosperity of urban regions. They can utilize increased land values through urban planning and public infrastructure to refinance the expenses of urban developments, and they can provide a sufficient stock of affordable housing to local residents to create a social mix in cities. In this way, CULDs can make a significant contribution to the economic and social objectives of sustainable urban development.</p>
59	<p>Analyze access to housing with municipal actions that allow or restrict residential development.</p>	<p>Using city-level data, we examine municipal approval of residential development in American cities. Municipal permits are the focus because of their role in enabling housing development.</p>	<p>The central finding is that municipal approval of residential development varies markedly across urban areas, with cities' jurisdiction and organized interests influencing the approval or restriction of residential development.</p>
60	<p>Explore two important questions: (1) how the initiative affects housing search behavior in the real estate market; and (2) how new public housing should be developed, whether it is to be compatible with the host</p>	<p>Improved spatial econometric model, incorporating spatial and temporal information.</p>	<p>(1) the announcement of the initiative leads to a 5% change in market time for private housing in East Kowloon; (2) people on private properties prefer to live near public housing developed by the private sector.</p>

	neighborhood - by the public sector or with private sector participation.		
61	Evaluate the performance of housing programs from the perspective of beneficiary families.	We investigated how changes in the residential experiences of renters who recently moved into public rental projects and how these experiences affect their residential satisfaction using quasi-longitudinal research and qualitative interviews.	Satisfaction is less determined about the housing itself than the enhanced sense of stability, independence, and security that public rental housing offers low-income families.
62	Analyze the problem of housing shortages and the subsequent growth of informal housing.	Using Delhi as a case study, we revisit past problem-solving experiences from a 'wicked problem paradigm'. Then taking an evidence-based approach.	We demonstrate that it actually has inherent traits of 'evil' and 'superevil' that explain such indefiniteness and intractability. Such findings inform us to approach the problems of informal housing with a new conceptual framework – not just for Delhi, but for most postcolonial cities in the Global South that struggle with similar embedded evil.
63	This article examines the extent to which informal practices spill over into public policy and reconfigure homelessness governance.	Through the analysis of the institutional adoption of the 'tiny home' village model in Portland as a way of housing the homeless.	It points out that, although political struggle and advocacy were crucial in the regularization of the first homeless villages by public authorities, the way in which the village model is currently being institutionalized tends to depoliticize the way in which they are operated as to replicate some of the constraints associated with congregate shelters.
6	Develop scenarios that can achieve a specific regulatory objective: an environmentally sustainable and socially fair future	Two scenarios are constructed – ecological modernization and degrowth – that reflect different degrees of social change, ranging from conventional to radical. The	The results indicate that large affordable housing buildings in New York City tend to have more efficient and newer systems than market-rate buildings; however, this finding is explained by the tendency for

	housing development.	scenarios are applied to the two selected cases from the regions of Milan and Oslo, based on statistics from the contextual housing system and documentary analysis on planning and housing.	affordable housing buildings to be larger, newer, and taller than their market-rate counterparts. It also found that improvements recommended by the auditor were somewhat different between affordable and market-rate housing, possibly due to differences in the types of energy systems between the two housing units, and a greater prevalence of air sealing recommendations was observed. for affordable housing buildings, indicating a potential disparity in building maintenance. Although the results of this analysis do not indicate a link between building system characteristics and energy load, they do suggest that retrofit programs or building performance standards may need to consider particular characteristics and challenges of affordable housing buildings in their policies.
64	This article shares the commitments to economic and social justice that underlie these views in that successful opposition to new housing construction is understood as (i) improving the lives and capacities for self-determination of local inhabitants and (ii) promoting the left and egalitarian causes in general.	Articles on the supply of new housing and its effects were collected through keyword searches. Relevant articles were reviewed and compared.	It presents evidence that building dense additional housing at all income levels (i) improves the lives and self-determination capabilities of people in the vicinity of the new housing and (ii) promotes a range of egalitarian causes, for example by facilitating subsistence pressure that high housing costs inflict on workers and reducing the total environmental damage caused by human settlements.

65	By focusing on different interests between actual housing ownership, this study demonstrates that the informal housing market is an obstacle to the redevelopment of precarious settlements.	Our research is based on an extensive quantitative and qualitative survey of two favelas in Buenos Aires and seeks to better understand inhabitants' preferences for spatial planning policies.	Urban redevelopment of precarious settlements would contradict the existing informal housing market. The importance of this research lies in understanding the numerous conflicts of interest surrounding housing ownership in the informal housing market, which need to be resolved before reurbanization in precarious settlements takes place.
66	This article discusses the current status of HP programs in the US and Libya from a sustainable perspective, with a focus on the social aspect.	It evaluates the attempts that have been made to provide potential solutions to these social problems based on a comparison of the HP situations of the two countries.	The study highlighted how both countries could benefit from each other's HP programs. It provides recommendations that decision makers can use to improve HP situations and application processes based on Traditional Libyan Housing (TLH) and neighborhood resources in both countries that can help improve the social environment of HP for current projects and futures.
67	Carry out a historical analysis of various State strategies regarding their role in providing housing to citizens and define the relevant results and also seek to demonstrate the seriousness of the current problem and propose a conceptual basis that can help to outline new strategic tasks	Historical and logical analyzes of recent trends caused by long-standing legal limitations that have not been taken into account in most housing policy studies.	The main problem with housing policy is the mismatch between housing supply and the lack of legal and financial opportunities for sustainable satisfaction.
68	To establish an accurate understanding of	Based on the sustainable livelihood analysis framework and with	Although the overall results do not reveal any direct link between specific asset capital

	<p>the links between the subsistence assets possessed by slum households and their housing conditions, this study specifically focuses on the case of Dhaka.</p>	<p>reference to the World Bank's 2016 Urban Informal Settlements Survey, a specific set of indicators is developed to assess livelihood resources in different slum pockets of Dhaka and its connection with housing in favelas. Subsequently, correlation analysis of all household (secondary) data is carried out to derive broader conclusions, and an in-depth comparative analysis is carried out for two contrasting slum groups</p>	<p>and housing conditions, financial and natural capital are considered to be the key factors in determining the level of subsistence assets. It was further found that the slums with the highest level of livelihood are more located on the outskirts of Dhaka city, while the contrasting groups of slums are situated more in the central areas. Furthermore, the comparison of housing conditions reveals that households with a higher level of subsistence assets have better access to durable and permanent alternatives for their housing structure.</p>
69	<p>Discuss affordable housing development on <i>brownfields</i> .</p>	<p>Presents a conceptual model for analyzing and overcoming economic and financial barriers to addressing community and environmental concerns, as well as verifying how it holds up in practice through case studies covering the development of three large industrial areas that integrate public housing in the city of San Francisco.</p>	<p>The findings argue that viability needs to consider both internally and externally cost-effectiveness for high-quality affordable housing units in large-scale <i>brownfield environments</i>.</p>
70	<p>Investigate what we could learn from the literature to improve the collection and representation of geospatial information for such projects.</p>	<p>We systematically reviewed the literature on informal settlement upgrading interventions for which geospatial information was used. We classified geospatial information into three categories – physical, socioeconomic and boundaries – based on the phenomena they described and categorized the data acquisition methods.</p>	<p>The results show that most studies collect geospatial information that enumerates and measures empirically observable characteristics (e.g., structures, infrastructure, public services, mobility network, soil description) and characteristics of informal settlement occupants (e.g., socioeconomic status ). Data collection methods ranged from primary sources such as paper surveys, handheld/mobile GPS devices, vehicle-mounted cameras, etc.,</p>

			to secondary sources such as space, airborne, and web-based platforms. Few studies have made use of unmanned aerial vehicles (UAVs).
71	Examine the assumption that slum redevelopment results in improved housing quality.	Longitudinal study of an in-situ redevelopment policy in Ahmedabad, India, comparing the housing quality of a resettled community over two time periods, 2.5 and 8.5 years after redevelopment to determine the durability of changes in quality of housing in the medium term. I use a mixed methods protocol employing a standardized observer-based housing quality assessment tool with subscales to identify specific aspects of housing quality that have improved/deteriorated and collected qualitative data from interviews and focus groups.	The analyzes reveal an improvement in general housing conditions post-redevelopment in the short term, although this improvement is not uniform across subscales. However, this improvement is not sustainable, as the rebuilt settlements show severe levels of deterioration in the medium term. Qualitative results suggest that in reconstructed settlements, residents feel a diminished sense of control and ownership that prevents them from investing in structural improvements and maintenance of the settlements.
72	Exploring the association between public housing supply and inclusive urban growth in China.	Includes theoretical and empirical research. A data-driven method that provides analysis of China's socioeconomic situation is adopted. Based on national observations, the structural equation model is applied to test the impact of public housing supply on inclusive urban growth.	The results contradict the stereotype and indicate that, at this stage, the increase in the supply of affordable housing not only contributes to urban social integration, but also does not impede urban economic growth.
73	This article studies two distinct, but still commonly "unaffordable" city contexts: Amsterdam and Miami, seeking to respond to the decline in housing	Reconstructs how both cities responded differently to common housing challenges, prioritizing interventionist public (Amsterdam) and entrepreneurial public (Miami) housing strategies. And it reveals how similar the underlying logics and	Both cases reveal a (i) progressive shift in the provision of social housing from lower income groups to middle income groups and (ii) the increasing importance of market logics within the public housing sector in general. The article concludes that both cities



	affordability after the crisis, from a comparative perspective.	market outcomes of both approaches have become.	struggle to meet affordable housing needs in what are, after all, neoliberal housing contexts.
74	This research extends previous literature by examining individual perceptions and beliefs about the impact of public housing on neighboring housing prices.	Examines the specific characteristics of residents that affect their negative beliefs in housing price change due to public housing in Seoul, Korea. We use a logistic regression method to examine significant characteristics that influence the belief of housing price depreciation due to public housing developments.	The results showed that variables such as income category, apartment living, negative physical image of public housing, positive and negative environmental changes due to public housing and socioeconomically advantaged neighborhoods were positively associated with the belief of housing price depreciation due to public housing. On the other hand, female gender, older age, self-employment, existence of public housing, and preference for the mixed-income approach were negatively correlated with the belief of nearby housing price depreciation. Furthermore, these characteristics that affected negative belief in public housing in relation to changing nearby housing prices varied across both income and age groups of residents.
75	This study analyzes the history of compensatory housing development in China and explores its effectiveness in the context of sustainable urbanization.	The suitability of the housing voucher policy was tested in Zhejiang province, and an interview with experts was conducted to evaluate the proposed housing subsidy system.	This study provides an effective alternative housing subsidy policy that can facilitate the settlement of floating population in cities and also contribute to sustainable urbanization.
76	This article explores how group model building (GMB) workshops, as a systems thinking	Through a case study with two housing associations (HAs) in England. The paper presents a causal loop diagram (CLD) describing English HAs' decision-	The CLD illustrates how frequent policy changes and disconnected objectives can create disruptive challenges for HA's long-term decision-making, increasing short-term

	tool, can tease out complex causal mechanisms to inform policy design.	making around sustainable and healthy housing in response to housing policy.	decision-making and compromising the delivery of housing policy goals as an unintended consequence.
77	Propose a theoretical framework that reveals the interconnection between paradigm shifts in housing policy and the driving forces underlying the institutional arrangement of state entrepreneurship.	This article conducts national- and city-level studies in China to illustrate this framework.	This article concludes that various political, economic and social forces have led to two paradigm shifts in housing policy – from the socialist welfare paradigm to the marketization paradigm and then to the new phase of the state intervention paradigm. This article argues that state entrepreneurship facilitates China's adoption of different housing policy paradigms to better respond to adjusted development objectives and to manage crises that have occurred in different periods.

**Table S5.** Publications with emphasis on the term 'cost'

REF.	OBJECTIVE	METHODOLOGY	RESULTS
83	Analyze disaggregated project-level delinquency information for the section of the program that serves families in the lowest income bracket (Track 1).	Analysis of program performance in six metropolitan regions.	Results show a general level of default of 28% at the end of 2015. We identified four hypotheses to explain this high level of default: peripheral location of the units, insufficient income to cover current costs, moral hazard in program management and organized crime in some projects. Our analysis shows that in 4 of the 6 regions, low-income projects in peripheral locations have substantially higher levels of default and that low-income families have higher levels of default.
84	This article draws on the sociology of policy instruments to shed light on the	Ministry of Defense Estates London (MoDEL) project case study.	Choices have been institutionalized in binding financial calculations and contractual agreements that actually limit the use of public

	tacit policy choices and unequal distributional effects of land-based finance and shows how these choices were institutionalized in binding financial calculations and contractual agreements.		lands, neglect alternatives, increase land values, and exacerbate exclusionary effects.
85	Offering new insight into the profitability of social housing, which has important implications for policymakers and private sector investors.	Case study on a social housing renovation project in Garbutt, Townsville, Australia.	By applying the Real Option approach, the profitability of the social housing project is actually significantly higher, compared to what has been demonstrated when traditional methods such as net present value are used.
86	The aim of this article is to explore the views of practitioners and experts on the suitability of self-built group housing as a development model for zero carbon homes.	A Policy Delphi study was carried out both at a national level in England and at a regional level in the South West of England. In this iterative, contactless research method, online questionnaires were used to collect data from the same panel members in three rounds. Panel members were selected from seven groups: public sector, specialist groups, housing associations, housing developers, designers, contractors and financial institutions.	The findings highlight that panel members believe group self-build is suitable as a development model for delivering zero-carbon homes and sustainable communities. The advantages identified include: energy efficiency, accessibility, quality, innovation and sustainable communities.
87	Identify which type of government policy has the greatest influence	This article investigates six different types of government policies often used to stabilize the Chinese property market. To this	According to the results, among all government policies of interest, land policy plays the most important role in influencing housing prices.

	on the dynamics of housing prices in China.	end, we develop a dynamic stochastic general equilibrium model, including special aspects of the Chinese real estate market, such as land ownership and government policy mechanisms.	
88	<p>Assess whether land value capture policies involve the process of “giving back to progress”;</p> <p>Through donation actions, developers increase their symbolic capital or reputational prestige, leading to new profit opportunities, as opposed to the logic of maximizing profits or retribution for acts of charity.</p>	<p>Application of concepts from economic and cultural sociology, including Beckert's fictional expectations, Goffman's framing analysis, and Bourdieu's forms of capital.</p>	<p>Housing construction, as well as the analysis of building maintenance and operation, demonstrates that in post-socialist countries, State financing must maintain its role in the sustainable life of the population.</p>
98	<p>Analyze the impact of remittances on four different aspects of housing investment – expenditure, affordability, quality and household assets in Sri Lanka.</p>	<p>Housing expenses are calculated based on household spending on housing rent, home construction or repair costs, and utility bills, while housing affordability is measured by the shelter poverty rate. The housing quality index is developed based on the structure of the housing unit, housing services and location. A general asset index was developed using 45 domestic assets. The propensity score matching method was</p>	<p>Although there are differences across sectors and income groups, remittances positively and significantly affect housing spending, affordability and assets, but the impact on housing quality is minimal.</p>

		employed in the present study, overcoming the issue of self-selection.	
89	A timely study of possible future governance around affordable housing, the multiple case studies here identify places that have CLT and land banking, and where nascent local government initiatives focused on creating permanent affordable housing are facilitating collaborations between local CLTs and land owners.	Exploring the themes and dynamics of these emerging collaborations with qualitative methods, the authors evaluate how CLTs can leverage collaborations with land banks as a tool to expand permanent housing and community control.	Land banks promote neighborhood stability, which can be best served by their collaboration with CLTs.
91	Develop a system dynamics model to simulate the demand and supply of demographic-linked affordable rental housing in South East Queensland (SEQ).	An off-site prefabricated housing supply (OSC) strategy is compared with a traditional build-out (BAU) approach to investigate the effectiveness of OSC techniques to reduce informational asymmetries during the planning phases of development to deliver housing affordable rentals best suited to housing needs in SEQ.	The study finds that reducing planning and construction lead times through OSC methods can improve the supply of demographic-linked rental housing by approximately 6.6% overall compared to BAU in SEQ.
90	This article explores how a recent shift toward bond-based financing mechanisms	A new system dynamics model is developed to predict a business as usual (BAU) and green building scenario framed around the Australian Affordable	The study determined that the green building structure would provide 2.37% fewer housing units overall due to higher initial capital costs. However, it offers substantial long-term energy and

	<p>provides an opportunity to integrate green building practices and influence regional social, environmental, and economic outcomes. The objective (of the model) is to examine how a mandate on green building standards, along with the use of green bonds versus conventional bonds, impacts the social, environmental and economic outcomes of the structure over a 20-year horizon, in the southeastern metropolitan area. from Queensland, Australia.</p>	<p>Housing Bond Aggregator (AHBA) policy framework.</p>	<p>water efficiency benefits, improved accessibility for tenants due to reduced utility costs, deferred water and energy infrastructure benefits, and considerable contributions to Australia's carbon emissions reduction targets. . Tenants are expected to benefit from a 45-59% reduction in energy consumption and a 27% reduction in water bills. Additionally, a shift to affordable green building policy could contribute to 2.9% of the Australian Conference of the Parties (2030) carbon emissions reduction target if applied nationally.</p>
92	<p>This study explores the relationship between tourist activity and housing affordability using a sample of Croatian municipalities. Specifically, the study investigates how tourist accommodation, concentration,</p>	<p>This study explores the relationship between tourist activity and housing affordability using a sample of Croatian municipalities.</p>	<p>The results obtained reveal the deteriorating effect of the intensification of tourism on the ability of local residents to pay for housing. The results indicate a particularly strong impact of tourism seasonality, suggesting the presence of common negative externalities, such as employment fluctuations, difficulties in maintaining economic status and income instabilities, in locations prone to seasonal tourism fluctuations.</p>

	seasonality and general vulnerability to tourism influence housing affordability in this tourism-driven emerging European country.		
93	Reveal rare qualitative insights into tenants' experiences and attitudes towards energy efficiency renovations in an affordable housing context and the extent to which they feel motivated and able to influence the renovation project.	Participatory observations were carried out at tenant meetings, as well as semi-structured telephone interviews.	An empirically driven typology is developed indicating that tenants have different interests and attitudes towards energy efficiency renovations. Six different types are identified: satisfied; the demanding, the conservative, the resigned, the skeptical and the resistant.
99	The analysis presented here examines whether the underlying characteristics of buildings and their energy systems may contribute to the affordable housing resident disparity in New York City, where low-income households in the United States experience higher-than-average energy burdens (defined	Combines an energy audit dataset of 7,328 multifamily buildings with a database of properties that receive local, state, or federal housing subsidies.	The results of this analysis indicate that equipment installed at the building level in large (50,000+ square feet) affordable residential buildings in New York City is more efficient than in market-rate buildings, but this trend largely disappears when the general characteristics of the building are considered. , such as location, size, or age. Significant differences are also observed in the types of systems installed in public and market housing, as well as the types of energy efficiency recommendations made by energy auditors.

	as the proportion of household income spent on energy utilities), and many of these households struggle to simultaneously pay rent, energy and basic household needs.		
100	Identify the salient features of these two financing provisions in low-income urban settlements of Bangladesh: NGO microcredit and the community group savings program.	Two different cases from the city of Gopalganj and Khulna are presented, analyzed and compared to deepen the understanding of how housing finance is operationalized in practice.	Both cases illustrate that access to land, security of tenure and technical assistance and/or Capacity building are central characteristics that are not sufficiently addressed to make these models sustainable. Furthermore, the argument that microfinance models (as opposed to group savings schemes) do not have the same potential effect in creating networks of trust and social capital has been partially refuted. The group guarantees that it operates in microcredit models and also offers a certain degree of social capital. However, they miss the kind of empowerment of communities to negotiate with the state that is enabled through group savings schemes.
94	The paper proposes a new framework for disentangling and quantifying the contribution of each individual housing characteristic to quality change. It can be applied to many commonly used hedonic	Using data from Belgium for 2011 to 2021.	The quality of homes sold has increased substantially, primarily due to improvements in energy efficiency. As energy performance will continue to improve to meet European climate targets, statistical agencies should incorporate it into the construction of their house price indices to avoid overestimating price growth.



	house price indices and allows for non-linear, time-varying prices for various housing characteristics.		
95	Analyze the relationship between family savings and house prices.	It uses a quasi-experiment that removed home-buying restrictions to examine the causal effect of home ownership on migrant households' savings through a difference approach and instrumental variable estimation.	We find that migrants' savings rate decreases significantly after migrants buy houses, falling below the local hukou population. A more in-depth analysis reveals that this effect of home ownership can be explained by the effect of consumption, and not by the purchase of housing or the increase in family income. Our findings indicate that hukou-based policies, including the allocation of public goods and the right to purchase private goods such as homes, will harm both migrants' well-being and sustained economic growth.
101	Analyze the intersection of poverty, housing, and health among low-income weatherization program participants in the United States.	This article extracts survey data from four weatherization program evaluations to provide new insights into the characteristics of families and their homes that enter weatherization programs. These data enable assessments of similarities and differences by housing type (single-family, mobile home, and multifamily) and region that can provide insights into health and social determinants of non-energy health impacts accruable by different weatherization programs . These data also provide an opportunity to assess more	Weatherization programs can go beyond limiting eligibility criteria to income poverty to better target their programs to families suffering higher levels of financial hardship, material deprivation, and health problems. Programs could also consider collaborating with the health sector and public health to identify and refer families most in need of their services.

		specific aspects of poverty and health.	
96	<p>Operating temperature results from a reference case were compared with six Virtual Assessment Models, using the Design Builder® Dynamic Thermal Simulation tool from a probability perspective. The main objective was to determine the minimum use of active systems with different volumes of indoor air and improve comfort conditions to promote sustainable living in social housing.</p>	<p>The analysis was carried out under an adaptive comfort range according to three different climatic conditions in Mexico, adopting a Numerical Theoretical Method.</p>	<p>The main conclusions can be divided into two parts: a) the impact of indoor air volume on thermal performance was evidenced over a proportion of time in three representative climates of central Mexico, and b) no relationship was found between indoor air volume and thermal comfort in cold subhumid climates; in the temperate subhumid climate, the same number of hours of comfort was found in two different models, and in the hot subhumid climate, an inversely proportional relationship was found between indoor air volume and hours of comfort.</p>
97	<p>Examines the effects of introducing additional LIHTC developments in urban neighborhoods to determine whether the concentration of these affordable housing properties negatively affects local home values.</p>	<p>We combine an interrupted time series model with a difference-in-difference approach to estimate price effects in Chicago and surrounding Cook County, Illinois.</p>	<p>We find some evidence that standalone and cluster LIHTC developments generate positive price spillover effects into surrounding neighborhoods; subsequent LIHTC projects do not negatively affect prices. Benefits are strongest within a quarter mile of the development, but lesser impacts are more prevalent up to a half mile from LIHTC property. Positive impacts remain strong for at least 10 years after initial development. The cumulative price effect is positive in both the lowest and highest income areas</p>

			and most significant in the lowest income areas.
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