

Energy Efficiency in Rental Housing

Policy Mixes for Efficient, Affordable and Secure Housing

Abhilash Kantamneni and Brendan Haley, PhD



Energy Efficiency in Rental Housing

Policy Mixes for Efficient, Affordable and Secure Housing

Abhilash Kantamneni, Brendan Haley

Suggested citation

Kantamneni, A., Haley, B. 2023. "Energy Efficiency in Rental Housing: Policy Mixes for Efficient, Affordable and Secure Housing" Efficiency Canada, Carleton University, Ottawa, ON.

© Efficiency Canada
c/o Carleton University
1125 Colonel By Drive
Ottawa, ON K1S 5B6
<https://www.energycanada.org>

Facebook: [facebook.com/EfficiencyCanada](https://www.facebook.com/EfficiencyCanada)

Twitter: twitter.com/EfficiencyCAN

LinkedIn: [linkedin.com/company/efficiency-canada](https://www.linkedin.com/company/efficiency-canada)

Instagram: [instagram.com/energycanada](https://www.instagram.com/energycanada)

Table of contents

About the authors	3
Acknowledgements	3
About Efficiency Canada	3
Introduction	5
Literature review: efficiency gap and energy justice in rental housing	7
Need for an energy justice perspective	11
Policy instruments for efficient buildings and secure housing for tenants	12
Methodology	12
Policy database.....	16
Efficient buildings policies	16
Tenant protection policies	18
Rental housing efficiency policies	20
Rental energy efficiency scenarios for energy justice	24
Analytical framework	25
Scenarios for energy justice	27
Scenario 1: expanding energy efficiency programming to renters.....	30
Scenario 2: meaningfully including tenants in deep retrofit projects	34
Scenario 3: Indoor cooling as an emerging tenant right in a warming climate	41
Discussion and recommendations	46
Energy efficiency and tenant protection policies can be complementary	46
Rental energy efficiency as energy justice	48
Empowering tenants in a net-zero future.....	49
Conclusion	51
How to use these results.....	52
Supplemental: rental energy efficiency policy database	53
Efficient Buildings Policies	53
Efficiency Rental Housing Policies	58
Tenant Protection Policies.....	64
Policies in Canadian Provinces	91
Affordability Covenants in the US	103
References	126

About the authors

Abhilash Kantamneni is an Efficiency Canada research manager specializing in energy poverty and low-income energy efficiency. He has a Master of Science in Physics, and in Computer Science from Michigan Tech, and a Bachelor of Engineering in Electrical Engineering from Anna University. Prior to joining Efficiency Canada, he worked with communities across US and Canada to achieve local priorities, including improved housing, increased good jobs and reduced poverty.

Brendan Haley is Efficiency Canada's Director of Policy Research. He has a PhD in Public Policy from Carleton University, a Master of Environmental Studies from York University, and a Bachelor of Science in Economics from Dalhousie University. Before joining Efficiency Canada on a full-time basis in September, 2018, Brendan was a Banting Postdoctoral Fellow at Dalhousie University.

Acknowledgements

This report is supported through the generous contributions of the McConnell Foundation.

The authors are grateful for the input, comments and feedback from Dr. Runa Das, Dr. Laura Tozer, Robbi Humble, Yasmin Abraham, Zee Bhanji, Diane Yoon, Abigail Jackson, Brian Gifford, Jacqueline Wilson, Ellie Montgomery, Maya Korbynn, and Judy Duncan that helped shaped this report. The authors are also grateful for Liza Kowalski's assistance with the policy database, and for the support from the rest of the Efficiency Canada team.

About Efficiency Canada

Efficiency Canada is the national voice for an energy efficient economy. Our mission is to create a sustainable environment and better life for all Canadians by making our country a global leader in energy efficiency policy, technology, and jobs. Efficiency Canada is housed at Carleton University's Sustainable Energy Research Centre, which is located on the traditional unceded territories of the Algonquin nation.

Introduction

Improving energy efficiency in rental units is critical to reduce emissions and improve tenant health and comfort. But as a policy goal, it faces tensions and concerns of unintended consequences. Increasing home energy efficiency improves housing amenities and marketability. Thus, policymakers might neglect promoting significant energy efficiency improvements in rental properties because they fear triggering evictions or rent increases. Political backlash from property owners and landlords is also a concern. However, neglecting energy efficiency upgrades in an attempt to keep housing affordable leads to inadequate housing quality. And, it does little to challenge the market dynamics driving the loss of affordable housing in private markets.

Climate change further increases the need to improve housing quality through energy efficiency. To reach net-zero emissions, we need to decarbonize Canada's housing stock—including private rental units. It's also an important public health measure. The likelihood of poor general and mental health is significantly higher for households unable to maintain comfortable indoor temperatures across all seasons (Riva et al. 2023). Finally, it's an increasingly important tenant right in the transition to a just and sustainable future.

This working paper addresses the question of how we can develop public policies to improve energy efficiency while also protecting and enhancing tenant rights. It highlights potential conflicts and trade-offs between these two goals, as well as complementarities. We argue tensions between energy efficiency and tenant rights are not inevitable. Rather, they are caused by narrow policy definitions that fail to consider how higher building performance can enhance tenant rights. We recommend that policymakers focus on a “policy mix” (Rogge and Reichardt 2016, Rosenow et al. 2016) that incorporates energy efficiency, tenant protection and rights enhancement and considers the impacts on different actors. We suggest potential problems or trade-offs can be avoided by constructing more comprehensive and compatible combinations of policies. Policymakers can avoid the need to weaken a particular energy efficiency or tenant right enhancing policy instruments if they ask the question “is the problem with the policy, or the policy mix?”

This paper consists of a literature review, a database of relevant policy instruments, and an analytical framework used to illustrate three scenarios that explore potential conflicts between energy efficiency improvements and tenant rights. It concludes with recommendations for rental energy efficiency policies and a proposed bill of rights.

Literature review: efficiency gap and energy justice in rental housing

In 2022, we reviewed existing literature on rental housing energy efficiency, noting little consideration of energy justice for tenants. Improving energy efficiency delivers multiple benefits, such as reduced energy bills and improved comfort at home. The societal benefits include lifting households out of energy poverty, mitigating climate change and improving living conditions related to income and social inequalities (Boemi and Papadopoulos 2019; Dong, Dou, and Jiang 2022; IEA 2022). Improving energy efficiency in the building stock is needed to reach net-zero greenhouse gas (GHG) emissions. The International Energy Agency net-zero by 2050 model suggests that over 85 per cent of existing buildings must be retrofitted to a zero-carbon-ready level by 2050 (IEA 2021).

However, many available energy efficient technologies, practices and behaviours are not adopted. This creates a difference in potential versus actual energy efficiency improvements often referred to as an “efficiency gap” (Allcott and Greenstone 2012; Gerarden, Newell, and Stavins 2015; Myers 2020). The efficiency gap is often explained by significant societal benefits from energy efficiency that are not fully captured by the private actors who face the costs of improving efficiency performance (Berry and Davidson 2016). This views the efficiency gap as an externality problem, which justifies public investment in upgrading buildings and/or higher energy prices.

However, energy efficiency is also beset by institutional failures. These can include rate designs that reduce the benefit of decreasing energy use (Nichols 2000); lack of high-quality information on benefits of retrofits; risk of non-performance; difficulty evaluating claims of private sellers of efficiency services (Collins and Curtis 2017); and high discount rates and loss aversion leading to prioritization of short-term risks over long-term benefits (Gillingham and Palmer 2014).

The challenges to improve energy efficiency are significantly increased in rental housing, especially with low-income occupants (Lang et al. 2021). Rental housing faces the challenge commonly referred to as the split incentive problem, neither landlords or renters have the appropriate incentives to invest in and implement energy efficiency

upgrades. A common lease structure involves renters directly or indirectly paying utility bills while property owners are responsible for capital and structural upgrades. Landlords have an incentive to provide home appliances and structural components (roofing, insulation, etc.) that have the lowest up-front costs regardless of their efficiency. Meanwhile their renters, who have high incentives to reduce their energy use and associated costs, have no interest in making capital improvements to properties they do not own (Bird and Hernández 2012). Even if the property owner grants renters permission to make major upgrades to the property, the renter may move out of the unit before they are able to recoup the upfront costs of energy upgrades through savings in utility bills (Better Buildings 2021).

The split incentive misalignment leads to an underinvestment in building performance upgrades in the rental housing sector (Maruejols and Young 2011). When energy efficiency upgrades occur they can be limited to shallower measures yielding returns on timescales relevant to lenders and landlords, and may not appear to make a difference in tenants' quality of life (Tower Renewal Partnership 2020, Camprubí et al. 2016, Yoon. 2022). Other institutional deficiencies can exacerbate the problem, such as a lack of information on energy costs of a rental unit providing landlords with little incentive to upgrade their rental properties to attract tenants (Myers 2020; Carroll, Aravena, and Denny 2016; Phillips 2012).

Delivering a retrofit in rental properties also faces increased coordination challenges. Coordinating retrofit projects with multiple tenants increases transaction costs (Williams 2008, TAF 2021). Energy using behaviours (Shove 2003) must also be managed across several households instead of one.

Tenant-landlord conflicts overlay repairs and renovations, including energy efficient projects. A fraught history of landlord-tenant relations can spillover towards making cooperation on energy efficiency investments difficult (Tower Renewal Partnership 2020, Pembina 2020). Tenant distrust of "outsiders" entering units increases challenges for energy efficiency program administrators and contractors (Reames 2016).

The tenant-landlord power relationship complicates energy efficiency strategies at the point of rental as well as before, during, and after a retrofit project.

At the point of rental, a landlord's ability to keep the energy performance of a rental unit hidden creates little incentive for them to upgrade the efficiency of the property to attract new tenants (Myers 2020; Carroll, Aravena, and Denny 2016; Phillips 2012). Tenants can oppose retrofits before the process even begins due to fears of rental price hikes (W. Anderson, White, and Finney 2012), displacement (Baeten et al. 2017), or due to concerns about health and safety (Palm, Reindl, and Ambrose 2020). During a retrofit, lack of tenant trust and engagement can lead to cost overruns due to construction delays, complexities of scheduling and maintaining safe unit access and lost productivity costs (Tower Renewal Field Guide, 2020). Retrofits in occupied buildings are complex projects. Sharing elevator access with residents, multiple in-suite access and entry, working alongside people's living quarters, moving or removal of construction material and renovation waste can all be disruptive for tenants (Tower Renewal Partnership, 2020). Tenants can be evicted under the guise of a landlord driven renovation to subsequently rent the unit at higher rates, otherwise known as renoviction (Herrero 2013; CMHC 2020).

After a retrofit takes place, tenants can experience rent increases. Landlords can use renovations as a tactic to increase rents above regulated caps (RenovictionsTO 2021). A landlord might also increase rental prices to recoup costs if the anticipated energy savings are not achieved (Silverman, Miller, and Biever 2022). The potential problems above are compounded for low-income tenants who are less likely to be able to afford rent increases, or who live in poor housing conditions that could benefit from energy efficiency upgrades (Großmann and Huning 2016; Bouzarovski, Frankowski, and Tirado Herrero 2018).

The challenges outlined above can lead to weakened energy efficiency policies. Public programs might focus on shallow retrofits failing to trigger significant tensions between landlords and tenants (Kantamneni and Haley 2022). Some jurisdictions have regulations requiring buildings perform to a higher energy efficiency and GHG emission standards (RFF 2020; IMT 2022) but may exempt affordable and rental housing from compliance due to concerns about the sector's capital, credit and staff capacity constraints (Sustainable Energy Partnerships 2020; Silverman, Miller, and Biever 2022; ACEEE 2020).

To reach net-zero GHG emissions, we need to retrofit almost every building. This requires upgrading the buildings where tenants live. Thus, shallow retrofits and exemptions from building performance are policy failures that must be solved.

Need for an energy justice perspective

The literature review highlights both the “efficiency gap” as well as social equity challenges related to power dynamics between landlords and tenants. Thus, we feel an energy justice perspective is warranted.

Principles of energy justice (Lewis, Hernández, and Geronimus 2019; Cooper 2019; Carley, Engle, and Konisky 2021) call for:

- **Distributive justice:** equitably sharing the benefits (and costs) of energy systems with a focus on fair outcomes for all.
- **Procedural energy justice:** fairly and meaningfully incorporating perspectives and priorities of marginalized communities into design and delivery of energy efficiency initiatives.
- **Restorative energy justice:** repairing past and ongoing harm caused by energy systems, decisions and (in)actions.

Excluding renters from energy efficiency initiatives means tenant populations are more vulnerable to climate impacts such as extreme heat events relative to homeowners (Lewis, Hernández, and Geronimus 2019; Gabbe, Mallen, and Varni 2022; Hambleton 2022). Diminishing energy efficiency initiatives for renters re-produces and exacerbates historic under-resourcing of traditionally marginalized communities and patterns of vulnerability (Middlemiss and Gillard 2015; Gillard, Snell, and Bevan 2017; Lewis, Hernández, and Geronimus 2019; Bouzarovski and Simcock 2017). It also puts tenants at risk of potentially regressive climate policies such as carbon pricing (Zhang and Baranzini 2004) and large fixed distribution charges for those unable to exit fossil fuel distribution networks (M. Anderson, LeBel, and Dupuy 2021). Therefore, weakening energy efficiency policies also fails to deliver energy justice or climate justice.

We do not view a lack of energy efficiency in rental apartments as a market failure that can be primarily fixed with pricing and/or subsidy policies. First, we recognize a large-scale transition to efficient and high-performance buildings requires a social and technical structural change (Smith, Stirling, and Berkhout 2005; Meadowcroft 2005; Haley and Torrie 2021). Second, we recognize tenants have a right to affordable,

appropriate and stable housing (UN 2009). These two goals must be considered simultaneously to realize the social, health and financial benefits of energy efficiency as well as to achieve a just and fair energy transition. Consequently, the problems of energy inefficiency in rental units along with the right to affordable and quality housing should not be separated.

In this working paper we will demonstrate the benefit of designing policy mixes including a large suite of energy efficiency policy and programs, as well as tenant protection and rights enhancing policies. A policy mix does not focus on a single instrument but a collection of instruments, as well as policy characteristics such as consistency, strategy, credibility and comprehensiveness (Rogge and Reichardt 2016; Haley 2018). Energy efficiency policy studies have previously argued that comprehensive and well targeted (Rosenow, Kern, and Rogge 2017) along with “complex” policy mixes (Kern, Kivimaa, and Martiskainen 2017) are the norm and successful in achieving societal climate and energy saving objectives.

To use the policy mix concept, we first introduce the individual policies. Next, we survey policy instruments relevant to rental energy efficiency and affordable, stable rental housing. Finally, we *mix them up* in search of policy solutions to deliver energy justice.

Policy instruments for efficient buildings and secure housing for tenants

Methodology

To analyze policy mixes, we must first understand individual policy instruments and the domains they originate from. We constructed a database of policy instruments relevant to energy efficiency in rental housing, as well as housing affordability and stability for tenants. We identified policy instruments through a review of academic research, policy reports and practitioner testimonials. Policies were classified under three categories: efficient building policies; efficient rental housing policies; and tenant protection policies. The classification is functional with overlapping boundaries between categories (figure 1). These domains are not often thought of together. In a later section, we develop an analytical framework and use scenarios to explore how a mix of

policies from these domains may interact to produce outcomes for different rental housing stakeholders.

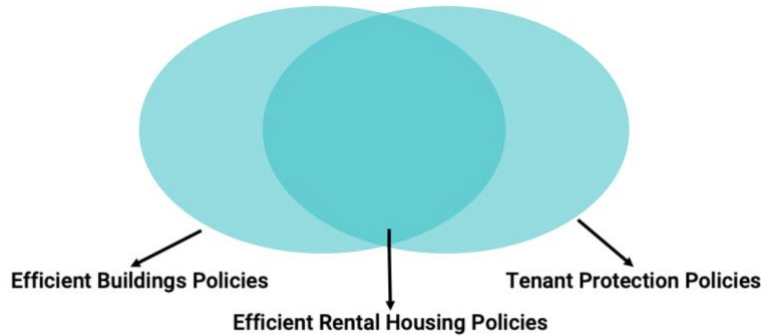


Figure 1: Classification of policies based on primary focus of policy instrument

Focus of policy instrument	Description	Example policies
Efficient buildings	Regulatory policies or programs focused mainly on improving the energy efficiency and energy performance of buildings, without explicit consideration for rental housing or specific instruments improving tenant housing security.	Mandatory energy labelling, minimum performance standards, on-bill financing, PACE financing programs, retrofit concierge services, weatherization programs, rebate programs.
Tenant protection	Regulatory policies largely focused on improving quality-of-life and housing stability for existing tenants, without specific consideration for improving energy performance and efficiency of their dwellings.	Rent controls, targeted outreach, rental assistance, eviction covenants, eviction diversion, renoeviction prevention, legal aid and counsel, indoor temperature standards.
Efficient rental housing	Regulatory policies or programs focused on improving energy efficiency of rental housing with	Affordability covenants, tenant liaison, building performance requirements for funding, rental

	explicit or implicit considerations for improving quality-of-life, housing affordability, security and stability for tenants.	energy disclosure, renter opportunity to own, renter right to make home improvements, rental appliance efficiency standards, green leasing.
--	---	---

Table 1: Categories of policy instruments relevant for energy efficiency and housing security in rental housing

Our search for relevant policy instruments began with key-word searches including search engines, national and international organizational policy reports, government and agency websites, research institutes and granting organizations. We relied especially on databases tracking building energy efficiency programs and policies developed by EPAH, ACEEE, Efficiency Canada, ENPOR, and IEA, and tenant protections policies indexed by Eviction Lab, CMHC and NILHC. The search was limited to national and subnational jurisdictions in Canada, European Union, United States and United Kingdom where authors are most familiar with the policy, programs and governance landscape.

The search was followed by coding, categorizing, analyzing, and synthesizing the qualitative data into a policy database. Each policy was coded into the database by policy instrument type. It includes a link to the policy documentation, the jurisdiction where the policy is implemented and a short description of policy details.

This database was assembled iteratively. Each initial search term would yield information about an initial set of policies, programs and databases in one jurisdiction, which would snowball into tracking down and coding the references to programs and policies contained within. After several new entries were made into the database, we would revisit the search process and exclusion criteria, making necessary changes to coding and classification.

We excluded the following:

- Policies and programs that seek to offer temporary relief from energy prices and/or provide tenants temporary respite from housing displacement or poor housing conditions.
- One-time and emergency assistance programs that offer temporary relief from mounting energy bills.
- Voluntary energy efficiency programs and pilot projects that are limited in scale, scope and depth of investments.
- Utility disconnection moratoriums that only defer disconnections for a season without addressing underlying issues such as inefficient homes.
- Energy rate subsidies that may lower energy bills but do not offer benefits from energy efficiency such as improved thermal comfort.
- Temporary tenant relief programs such as rent-caps or eviction moratoriums due to public health emergencies.

We also limited the database to retrofit policies on existing buildings so this database excludes policies and programs such as updated buildings codes for new construction.

While these policies have been excluded, we note that researchers and policymakers must account for the existence of such policy instruments in their own jurisdictions and how they may interact with new proposed mix of policies.

An initial draft of the database was reviewed by a group of 17 independent experts – four academics, six energy efficiency and rental housing practitioners, and seven front-line managers providing support services for tenants. The diverse group had expertise cutting across the domains of efficient buildings, tenant protections and rental energy efficiency and in the policy systems of Canada, United States, United Kingdom and the European Union. Drawing from data journal peer-review methodologies (Mayernik et al. 2015), the experts were asked to assess the completeness of the database. They were asked to consider:

1. If there were any policy instruments missing or inappropriate to include.
2. The quality of the data. Answering if the policy instruments were described in sufficient detail and clarity.

3. The usefulness and usability of the database. If the format, content, and presentation of the data help advance their own work.

The feedback and comments from expert reviews helped shape the final version of the database, available here as an attached appendix to this article.¹

Policy database

As of January 2023, we identified 190 policies, programs, or databases relevant to improving energy efficiency and housing stability for tenants in rental housing. The policies came from national and subnational jurisdictions in Canada, United States, United Kingdom and the European Union. Where possible and available, we link to externally maintained policy trackers. In total, the database contains 65 policies and programs related to efficient buildings policies, 81 policies related to tenant protection, and 35 policies related to rental housing efficiency policies.

In Tables 2, 3 and 4 we provide excerpts of policy instruments from the database grouped under our three main categories.

Efficient buildings policies

Policies in this category include regulatory policies or programs focused mainly on improving the energy efficiency and energy performance of buildings, without explicit consideration for rental housing or specific instruments improving tenant housing security.

Policy instrument or program type	Overview	Example policy
Energy Saving Kit programs	Income-qualified households receive a no-cost kit with simple, energy-saving	BC Hydro Energy Saving Kit program

¹ Available for download at : <https://bit.ly/EffCanRentalHousingPolicyDB>

	products such as LED lightbulbs that they can install themselves to reduce energy use.	
Rebate programs	Utility or government funded rebates and discounts on upgrades to energy efficient insulation, appliances, and lighting.	efficiencyPEI Energy Efficiency Equipment Rebates
Weatherization Program	Income-qualified households receive no-cost energy saving measures installed by qualified professionals following an audit to determine best energy saving opportunities and eligible measures.	US Department of Energy Weatherization Assistance Program
Property Assessed Clean Energy Financing (PACE)	PACE allows building owners and operators to finance energy efficiency improvements with no out-of-pocket costs and repay the loan as an additional assessment on their local property-tax bill.	Toronto Home Energy Loan Program
On-bill financing	On-bill or utility financing enables building owners and operators to finance the installation of eligible energy efficiency measures and repay the loan through a surcharge on their utility bills.	Holland (Michigan) On-Bill Loan Program
Building energy performance standards	Mandatory building performance standards require existing buildings to meet some performance benchmarks, such as energy use or carbon intensity.	EU directive on energy performance of buildings
Building energy labelling	Mandatory building energy labelling schemes require building owners and operators to have a clear way to easily communicate their energy use and energy efficiency to all stakeholders.	UK Energy Performance Certificates

Energy concierge services	Programs that work with buildings owners and operators to simplify the process of identifying best energy saving opportunities, accessing financing programs, procuring qualified contractors, managing the project, coordinating installation of measures, and ensuring regulatory compliance	EnergySmart Program, Boulder, Colorado USA
---------------------------	--	--

Table 2: Building energy efficiency policy instruments relevant to rental housing

Tenant protection policies

Policies in this category include regulatory policies largely focused on improving quality-of-life and housing stability for existing tenants, without specific consideration for improving energy performance and efficiency of their dwellings.

Policy instrument or program type	Overview	Example policies
Eviction covenant	Requires landlords who receive government assistance or capital funds to not evict tenants for a certain period of time after receiving the funding.	Kentucky Healthy at Home Eviction Relief Fund
Eviction diversion	Multiple streams of assistance such as mediation, conflict resolution, financial services and legal representation combined to divert landlord-tenant disputes away from court judgement or eviction.	Michigan Eviction Diversion Program

Targeted outreach	Proactive and targeted outreach to landlords and tenants to improve access to programs, supports and services that improve housing stability and reduce evictions.	Kentucky Fair Housing Education and Outreach
Mandatory notice requirements	Requires landlords to include plain-language information about rights the tenants are entitled to, the various supports available to tenants and how to access them, before proceeding to eviction.	Maine Act to Prevent Homelessness
Mediation	A confidential and voluntary process, overseen by neutral and trained observers, through which landlords and tenants work together to reach a mutually agreeable decision to resolve their disputes.	Massachusetts Housing Mediation Program
Rent control	Limits or caps on rent increases, either to an annual percentage or tagged to the consumer price index.	Massachusetts Emergency Rental Assistance Program
Legal counsel	Resource and provide tenants with free or low-cost legal aid, counsel and necessary supports to fight their eviction at a court or tribunal.	Toledo Tenant Legal Right to Counsel Ordinance
Tenant defence fund	Financial assistance to pay for legal aid for tenants fighting evictions.	Boulder Tenant Legal Defense Fund

'Just cause' for eviction	Preserves housing security by preventing arbitrary or discriminatory evictions by establishing clear guidelines and just causes for evicting tenants, such as failure to pay rent.	Manitoba Residential Tenancies Act
Security of tenure	Policies that guarantee tenants legal protection to maintain their residence. Notably, these could include provisions to ensure tenants return to their rental home in the aftermath of a temporary relocation to facilitate renovations.	BC Rental Tenancies Act: Tenant Right of First Refusal
Relocation assistance	Landlords are required to provide money, comparable accommodations and/or other supports when tenants are temporarily or permanently displaced from their rental unit for no fault of their own.	California Tenant Protection Act – Tenant Relocation Assistance
Renter opportunity to own	Give renters the right to purchase the rental home they are living in when the property is placed on sale by the landlord.	City of Baltimore: Tenant Right of First Refusal to Purchase

Table 3: Tenant protection policy instruments

Rental housing efficiency policies

Policies in this category include regulatory policies or programs focused on improving energy efficiency of rental housing with explicit or implicit considerations for improving quality-of-life, housing affordability, security and stability for tenants.

Policy or program type	Overview	References
Affordability covenant	Requires landlords receiving free energy upgrades to ensure the benefits of upgrades are passed on to tenants through affordable rents, comfortable homes or eviction protections.	Efficiency Nova Scotia Affordable Multifamily Housing Program
Building performance standards for funding	Affordable housing providers receiving capital funding for renovations must meet certain minimum building performance standards.	Arizona Department of Housing Rehabilitation Design Guidelines
Clothesline provisions	Policies that enshrine tenant rights to dry their clothes using a clothesline, ensuring no laws, bylaws or agreement will unreasonably infringe upon this right.	Nova Scotia Clothesline Act
Green leasing	A negotiated and updated rental agreement between landlords and tenants to share costs and benefits of energy efficiency measures.	Institute of Market Transformation Green Leasing Guidelines
Right to make minor energy efficiency upgrades	Grants renters the right to make certain energy-saving home improvements without obtaining property owner consent. These upgrades are limited to those that do not change the building's structure or equipment and involve	Hartford, Connecticut

	alterations that are easily removable or reversible.	
Right to request energy efficiency upgrades.	Landlords may not unreasonably refuse consent to tenants requesting energy efficiency upgrades under certain conditions.	The Energy Efficiency (Private Rented Property) (England and Wales) Regulations 2015
Tenant liaison	A single direct point of contact for tenants representing the interests and priorities of the tenants during the energy efficiency retrofit. Liaisons organize tenants and help them understand, assert, and secure their rights as well as ensuring landlords are meeting their responsibilities and obligations.	Best-practice recommendation found in: (Tower Renewal Field Guide 2020)
Rental energy disclosure	Requires landlords to disclose cost of utility and heating bills over the last period of time, usually 12 months, to prospective tenants.	Chicago Heating Cost Disclosure Policy
Rental housing performance standards	Necessitates landlords to upgrade their property to meet minimum building energy and/or emissions standards before they can be rented.	City of Boulder SmartRegs
Rental appliance standards	Landlords must install energy efficient appliances when replacing old appliances.	Ontario Residential Tenancies Act

Table 4: Rental housing efficiency policy instruments

In the next section we introduce our analytical framework to explore the implications for both energy efficiency and tenant well-being of various policy mixes created via different combinations of individual policy instruments presented in this section.

Rental energy efficiency scenarios for energy justice

We previously provided examples of individual policy instruments. Yet, reviews of successful rental efficiency policies supported by multiple stakeholders point to the need for evaluating rental energy efficiency under a mix of policies.

For example, (Lang et al. 2022) find that landlord support for strong energy efficiency policies increases when such policies are complemented with financial incentives and resources to help landlords reduce costs of energy upgrades. Beyond financial factors, a systematic review by (Lang et al. 2021b) finds that landlords are also motivated to retrofit by a desire to improve comfort and reduce costs for their tenants. As (Miu and Hawkes 2020) show, active landlords are less susceptible to 'split incentive' issues and more responsive to concerns and living experience of tenants.

Meanwhile, (Wrigley and Crawford 2017) find that improving tenant protections against evictions would result in greater uptake of energy efficiency upgrades by renters. While (Heffernan et al. 2021) find that tenant concerns about potential rent increases constraints retrofitting, (Mjörnell, Femenías, and Annadotter 2019) show that tenants are willing to work with their landlords to prioritize and pick energy efficiency measures in exchange for negotiating modest rent increases for a fixed time to recoup a portion of upfront costs of the upgrades.

This suggests that renter energy efficiency policies must consider appropriate and complementary tenant protection policies. The policy area aims to meet multiple objectives; with environmental as well as social justice dimensions and with multiple instruments when possible. Each policy category has its strengths and limitations. The implementation of a single policy could enhance one objective to the detriment of others, yet the same policy as part of a broader and strategically developed mix could lead to better energy efficiency and enhanced tenant well-being. The design of the mix of policies could be more important than the design of a single instrument.

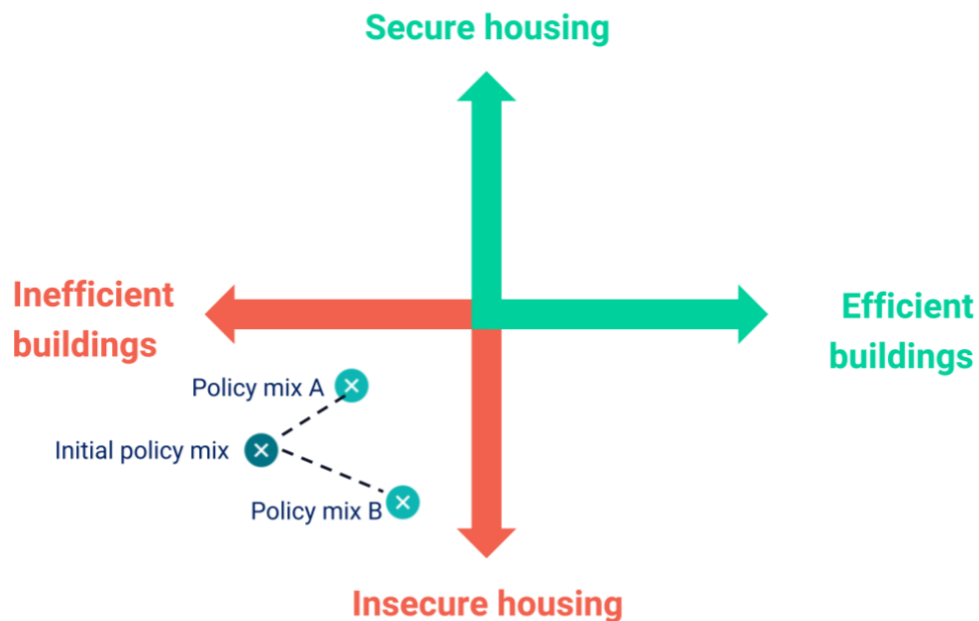
Thus, we must first create an analytical framework to explore the concept of policy mixes and not simply single instruments. Then, we will present three scenarios exploring potential conflicts between energy efficiency and housing security objectives,

and how they can be alleviated through expanded and refined policy mixes focused on energy justice principles.

Analytical framework

To analyze how various policy mixes could impact both building performance and tenant well-being, we will use an analytical framework based on a 2 x 2 matrix (figure 2), producing four quadrants. The horizontal axis represents a spectrum of low versus high building performance achieved through energy efficiency improvements and associated benefits such as improved comfort and health. The vertical axis represents a spectrum of weak versus strong tenant rights, which relates to a tenant’s ability to access necessities such as affordable housing and adequate housing quality, which are recognized as a “right to live somewhere in security, peace and dignity”.²

These two policy objective dimensions create four end-state outcome quadrants.



² <https://housingrights.ca/right-to-housing-legislation-in-canada/>

Figure 2: analytical framework

The bottom left quadrant represents both low building performance and weak tenant rights.

The top left quadrant has low building performance and strong tenant rights. In this quadrant, tenants might secure affordable housing and guard against eviction. Yet their housing quality is poor and the buildings they live in contribute to climate change through excessive fossil fuel consumption.

The bottom-right quadrant sees high building performance, yet weak tenant rights. Here, a tenant might live in a highly energy efficient building with associated benefits. But the landlord captures the economic benefits and displaces low-income tenants for upper income ones willing to pay a premium to live in a green and energy efficient building.

The top-right quadrant represents both strong tenant protections and high building performance. Tenants live in affordable, secure buildings that are highly energy efficient and compatible with achieving net-zero GHG emissions. The two objectives are self-reinforcing as better building performance delivers a tenant's right to a comfortable living environment, prepared to maintain occupant comfort when faced with climate related weather extremes.

Different policy mixes will contribute to distinct outcomes within this matrix.

Unintended consequences and complexity mean we cannot predict the exact impact of different policy mixes on achieving outcomes (Rogge, Kern, and Howlett 2017; Kern, Kivimaa, and Martiskainen 2017). This is why we do not present this analytical framework as a predictive tool. Rather, it is a tool for exploring the design of different policy mixes. It can highlight the trade-offs policymakers will encounter, gaps in a given policy mix, and the estimated magnitude of one policy mix versus another in achieving building performance and tenant rights. It is meant to encourage policy analysts to consider questions such as if a given policy mix is adequate to meet stated goals, if it can be reinforced, and what mixes are most likely to achieve outcomes in the upper right quadrant.

This framework highlights that the design of policy mixes strongly determines the achievement of high building performance through energy efficiency and realization of tenant rights. Policy trade-offs are not necessarily inevitable. Rather they are due to a failure to adequately consider a mix of policies, which might result from policy silos and blind spots (Rogge and Reichardt 2016; Kern, Kivimaa, and Martiskainen 2017; Haley 2018).

Below we will use a scenario method to explore the likely outcomes of different policy mixes.

Scenarios for energy justice

We now present three scenarios that explore potential conflicts between energy efficiency and housing security objectives, and how they can be alleviated through expanded and refined policy mixes.

A scenario is a narrative of the future with plausible cause and effect links, illustrated via key decisions and events impacting relevant actors. Scenarios inform planning and exploration of potential futures so present-day decision makers are better informed about likely consequences of their actions and prepared for future eventualities. They are not predictions or forecasts but rather a tool to minimize risks and increase the probability of achieving desired outcomes (Becker 1983; Glenn 2009).

Following the analytical framework, these narrative scenarios are explored from the perspective of various actors (tenants, landlords, policymakers, program administrators) navigating and changing a particular institutional environment created by a policy mix. We will describe how a tenant and landlord can find themselves in a given outcome quadrant as they navigate an institutional environment shaped by a policy mix. We can then describe how a change in policy can result in a movement to a different quadrant or placement within the matrix.

The scenarios were developed by the authors based on their exploration of the likely impact of different policy instruments in various combinations. Each scenario seeks to demonstrate the impact of different policy mix strategies to achieve energy justice.

Peer reviewers with expertise in tenant rights and/or renter energy efficiency reviewed each scenario to assess plausibility.

We employ these scenarios as a hypothetical construct to screen policy mixes and their outcomes for energy justice. Scenarios are not intended to be a full representation of the future or to be treated as forecasts or sensitivity analysis. Rather, we use scenarios as an ex-ante assessment tool to explore the diversity of plausible outcomes from the effects of each policy mix (IPBES 2017).

Drawing from the emerging and vibrant energy justice movement and associated literature (Lewis, Hernández, and Geronimus 2019; Cooper 2019; Carley, Engle, and Konisky 2021), we pick up on three strands of energy justice in these scenarios:

- **Distributive energy justice:** equitably distributing the benefits of energy systems, with a focus on fair outcomes for all is emphasized in **scenario 1**, where we explore the outcomes of policy mixes expanding energy efficiency access to renters as an under-resourced group that can be left out of conventional energy efficiency strategies.
- **Procedural energy justice:** fairly and meaningfully incorporating perspectives and priorities of marginalized communities into design and delivery of energy systems is the focus of **scenario 2**, where we explore outcomes of policy mixes for including tenants purposefully in the design and delivery of a rental housing deep retrofit.
- **Restorative energy justice:** repairing past and ongoing harm caused by energy systems, decisions and (in)actions is the focus in **scenario 3**, where we explore outcomes of policy mixes for delivering indoor cooling as a fundamental right in an era of warming climate and increasing susceptibility to heat-deaths.

These scenarios are presented within a Canadian geographical context, a country with ambitious climate goals³, a federated multilevel governance of climate, energy

³ The Government of Canada is committed to achieving net-zero emissions by 2050
<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html>

efficiency and housing, a formal recognition of adequate housing as a fundamental human right⁴, and a need for new energy services to adapt to a warming climate.

Under each scenario, we present an initial policy mix and two enhanced or refined policy mixes (A and B) developed with energy justice objectives. We explore the anticipated outcomes of these policy mixes and represent them graphically using our analytical framework as seen in Figure 3.

⁴ Canada's National Housing Strategy Act 2019 <https://laws-lois.justice.gc.ca/eng/acts/n-11.2/FullText.html>

Scenario 1: expanding energy efficiency programming to renters

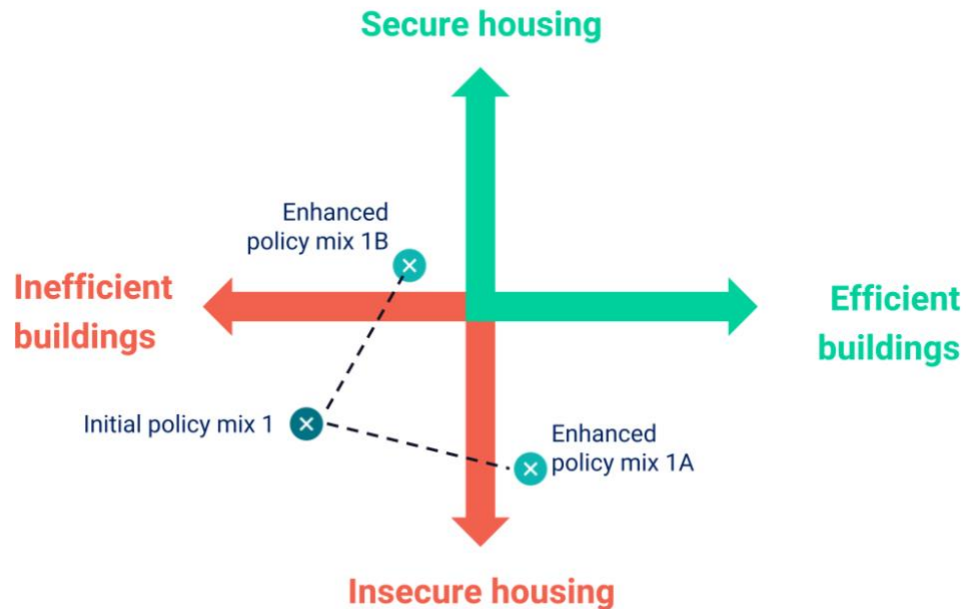


Figure 3: policy mixes for scenario 1

Policy mix 1

Consider a family renting a basement unit apartment. They rent from a private landlord and pay their own utility bills. Their home has poorly insulated walls, drafty windows and old appliances using a lot of energy. The family tries to be careful about turning off lights and unplugging appliances when they are not in use. Despite these efforts, energy bills stretch their finances, especially during the cold winter months.

Reducing energy costs and achieving thermal comfort and well-being inside their home requires major upgrades to their insulation and air-sealing, and upgrading their heating and appliances to more energy efficient models. The renters lack the means to make these upgrades. Their landlord is unwilling to pay out-of-pocket for efficiency upgrades and to go through the hassle of applying for energy efficiency programs on behalf of their tenants.

The jurisdiction does not have rent control. It also has a minimal 'just cause' eviction policy, which means the landlord can end the rental tenancy when they sell the rental premises. While the jurisdiction offers grants and no-interest loans to homeowners installing energy efficiency upgrades, landlords who wish to upgrade their rental properties do not qualify. The jurisdiction also has a low-income energy efficiency program where households with incomes below a certain income threshold are eligible for no-cost direct install energy efficiency upgrades. However, renters in private market homes in this jurisdiction do not qualify for this program⁵⁶.

The outcome: renters and rental housing are systematically marginalized and left out of this jurisdiction's energy efficiency initiatives. Therefore, the initial policy mix begins in the lower left quadrant where renters have neither secure and stable housing, nor do they live in efficient buildings or participate in energy efficiency programs.

Enhanced policy mix 1A

A new government makes distributive energy justice a core part of their mandate. They direct utility regulators to ensure that everyone can participate in and benefit from energy efficiency. They announce additional funding that leverages the delivery capacity of the jurisdiction's existing low-income energy efficiency program to reach more homes with more comprehensive energy efficiency upgrades. Renters and rental housing are eligible for no-cost energy improvements to their homes.

With consent from their landlord, the family applies for the no-cost energy upgrades program. A qualified and trained professional visits their home and performs an energy assessment to identify best opportunities for reducing energy use. The assessment

⁵ Private market renters are not eligible for major energy efficiency upgrades such as insulation upgrades, air-sealing or new high-efficiency furnace upgrades under most low-income energy efficiency programs in Canada. See Efficiency Canada low-income program database:

<https://www.energycanada.org/energy-efficiency-for-all-blog/>

⁶ Only a small minority of policies and programs related to improving energy efficiency of homes in the EU directly target and engage with Private Rental Housing, see ENPOR report on 'Analysis of Private Rented Sector Policies and Measures' <https://www.enpor.eu/wp-content/uploads/2021/09/PRS-Policy-Analysis-Report-Summary-1.pdf>

recommends adding new insulation, air-sealing cracks on the exterior walls and replacing their heating system with a high-efficiency furnace. Since their family income falls below the qualifying income threshold for the program, these upgrades are installed by trained contractors at no-cost to the tenants or their landlord. The renters begin to experience warmer homes and energy savings on their bills almost immediately after the energy savings measures are installed.

However, the installed energy efficiency upgrades also enhance the value of the property for the landlord. In a jurisdiction experiencing a housing crisis and with low-vacancy rates for rentals, an apartment with an upgraded heating system, warmer rooms and lower utilities bills can command higher premiums on the rental market. Knowing this, the landlord increases the rent on the property at the earliest opportunity after the upgrades are installed. Under the duress of being uprooted from a place they've called home for many years, the family is now under greater financial strain of having to pay higher rent to keep their home.

The outcome: policy mix 1A will lead to greater inclusion of rental housing participating in energy efficiency initiatives, with the likely outcome of more efficient buildings in the aggregate compared to the initial policy mix. This moves the indicator into the bottom right quadrant in our analytical framework shown in figure 3. However, the upgrades may also trigger tenant displacement due to having to pay higher rent or being evicted due to the landlord selling their rental unit. Compared to the initial policy mix we anticipate 1A to lead to less secure housing for tenants when their landlords participate in an energy efficiency initiative. These dynamics are reflected in Figure 3, with 1A shown at a lower y axis level than the initial policy mix.

Enhanced policy mix 1B

This policy mix includes affordability and eviction covenants alongside the no-cost programs and low-interest financing initiatives for renters from 1A.

Landlords who receive low-interest financing or no-cost energy efficiency upgrades are required to share the benefits of energy upgrades with their tenants through affordable rental costs, eviction freezes and housing stability requirements.

Landlords receiving energy efficiency upgrades for their rental properties are required to maintain their units at an affordable rental rate for a length of time after the measures are installed. Similarly, for a length of time after upgrades landlords are prohibited from evicting their tenants for the purposes of selling the property or renting at higher premiums. If the rental property must be sold due to other extenuating circumstances, the landlord is required to immediately repay the balance of the low-interest loan or pay back the full value of the no-cost upgrades. And if the sale of the property displaces the tenant, then the landlord must compensate the tenant to offset costs of relocation and finding a new place to rent.

The outcome: by limiting rent controls and eviction protections, this policy mix is likely to result in better housing security for renters compared to the initial policy mix and 1A. The no-cost programs and low-interest financing initiatives are likely to improve energy efficiency for participating rental buildings more than the initial policy mix. Therefore, in our analytical framework figure 3 the indicator for 1B is in the top right quadrant.

However, some landlords may simply choose not to participate in the programs due to the restrictions imposed by the affordability covenants. This will likely result in fewer rental housing units participating in energy efficient upgrade programs. In figure 3, we represent this by placing 1B farther to the left on the x-axis than 1A.

Policy mix 1	Enhanced policy mix 1A	Enhanced policy mix 1B
No rent control; minimal 'just cause' eviction policy; landlords and renters do not qualify for energy efficiency programs	Government directs utility regulators to ensure energy efficiency reaches and benefits all; expanded eligibility for efficiency programs now includes renters	Policy mix 1A + affordability covenants and eviction moratoriums for fixed period

Table 5: summary of policy instruments in scenario 1

Lessons learned

Scenario 1 examined rental energy efficiency through the lens of distributive energy justice.

Distributive justice is focused on outcomes—ensuring everyone can share in the benefits of living in an energy efficient home. Since financial factors and the complexity of retrofit projects are the biggest limitations to landlords investing in energy efficiency measures (Lang et al. 2021b), a policy mix that includes no-cost and turn-key energy upgrades will ensure low-income rental households that need it the most can participate and benefit. A policy mix built on a foundation of no-cost upgrades for low-income tenants can be augmented by financing solutions such as on-bill payments, green leases, and energy service agreements for other able-to-pay households.

Affordability covenants are a crucial complement to no-cost upgrades. They protect tenants against evictions, rent increases and other negative consequences as a direct or indirect result of energy retrofits. This gives tenants and program administrators bargaining power to ensure landlord participation in the program maintains the affordability of housing units, which might otherwise be marketed to upper income renters at higher rents.

[Scenario 2: meaningfully including tenants in deep retrofit projects](#)

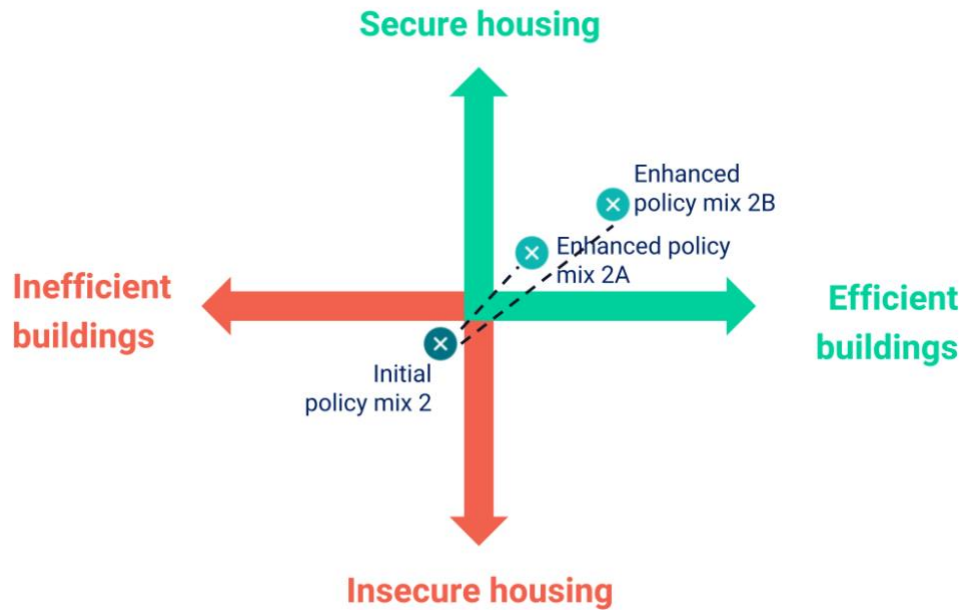


Figure 5: policy mixes for Scenario 2

Policy mix 2

Consider a group of tenants in a purpose-built mid-rise multifamily rental built before a time when energy efficiency was a standard component of Canadian building codes. The renters are a combination of families, single individuals, and seniors, with mixed incomes. Utilities are included in the rent and individual rental units are not sub-metered. The units rent at market-rate and the building is managed by a large corporate landlord who owns and manages several housing buildings in this jurisdiction.

As an older housing unit, rental costs in this building are more affordable than the median in the area. However, residents experience a variety of issues related to the condition and maintenance of their units. Common areas in the building are in a state of general disrepair. Hallways and stairwells are not adequately lit or ventilated, creating a sense of unease and insecurity. Tenants feel largely confined to their own units and unable to interact meaningfully with their neighbors.

Renters also feel the landlord is unresponsive to their complaints. Requests for maintenance upgrades and regular upkeep both inside the units and in common areas are systematically ignored. The backlog of unresolved repair requests keeps piling up, making it difficult for tenants to maintain a stable and comfortable home. These issues have had a significant impact on the health, comfort, wellbeing, and sense of belonging for tenants in this building.

Over the years, these negative experiences have coalesced into a deep gulf of distrust between renters and their landlord.

Gaps in trust and a fraught relationship with tenants means the corporate landlord does not consult with or include tenants in identifying energy efficiency improvements. Instead, the landlord chooses to prioritize measures based on ease of access to location (e.g. common areas) and return on investment calculations.

The outcome: despite the availability of financial incentives, the landlord only invests in shallow energy upgrades (e.g. LED lighting) that yield a quick return on investment. The corporation's investment criteria does not prioritize deeper measures such as insulation that would yield positive returns over the lifetime of the installed measures, while also improving thermal comfort for residents.

Therefore, this initial policy mix will lead to outcomes that fall just short of being placed in the (desirable) top-right quadrant in our analytical framework (figure 4).

Enhanced policy mix 2A

The government introduces mandatory building labelling. It identifies the worst-performing buildings based on metrics such as emissions and energy intensity. The jurisdiction has a dedicated retrofit fund that provides worst-performing buildings with the additional support and resources necessary to improve their energy performance. The landlord can now access novel financial tools such as PACE financing and forgivable loans that amortize the up-front costs over longer-term monthly payments.

This makes it easier to invest in and undertake comprehensive and deep retrofits that yield a positive return over the lifetime of measures.

But the deep retrofits are disruptive to occupant tenants. Measures such as building envelope improvements—adding insulation or replacing windows—create a lot of noise, dust and debris. Heating and cooling system upgrades require new ductwork and ventilation work, and Essential utilities like electricity and plumbing are shut off. In-suite measures such as air-sealing and interior top-up insulation require granting unit access to workers, disrupting tenant routines and temporarily turning their home into an active worksite.

To account for these potential negative impacts on tenants, energy efficiency program administrators recognize the importance of procedural justice. Landlords applying for incentive programs must demonstrate transparent engagement with their tenants and must secure their prior and informed consent for the retrofits.

The landlord hires an engineering consultant team to develop a scope of work, measures to be installed, project budget and timelines. Then, to meet the tenant engagement requirements of the funding package, the landlord distributes plain language information about the deep retrofit project to all units in the building. The landlord also invites residents to a town hall to discuss the project and holds open office-hours. Only a few tenants attend these meetings and feedback is limited.

Tenant engagement is poor as tenants are mistrustful of the new initiatives. This mistrust is more pronounced when potentially disruptive initiatives such as deep retrofits are prioritized over tackling the current pending backlog of repairs requested by the tenants. Despite strong tenant protections such as affordability covenants and anti-eviction policies, tenants worry that deep retrofits are a bad-faith strategy by the landlord to displace existing renters under the guise of disruptive renovations, and subsequently securing higher paying renters.

Some tenants from granting access to their units. In follow-up surveys conducted by the landlord, only a few tenants consent to all the measures. Without an active tenant

association, tenants are not able to organize collectively to negotiate a better deal with their landlord.

The outcome: unable to secure full informed consent from all tenants, the landlord must limit the scope of the retrofit project to minimally disruptive measures such as non-invasive exterior cladding upgrades. Comprehensive in-suite upgrades are deferred to the time when the units are empty during turnover between tenants. This increases overall project costs and complexity and extends timelines.

Therefore, this policy mix falls within the top-right quadrant. Compared to the initial policy mix, the targeted support and financial incentives for comprehensive upgrades help the building achieve more energy savings. Tenants in this policy mix have greater housing security compared to the initial policy mix due to rent stability from the affordability covenants required as a condition for accessing retrofit financing incentives.

Enhanced policy mix 2B

In this policy mix, the program design requires retrofit project teams. It must include a tenant liaison and prioritize funding to projects that minimally disrupt tenants.

The tenant liaison acts as a single trusted point-of-contact for tenants with respect to the retrofit project. They take time at the beginning of the project to build a relationship with every tenant and strive to understand their unique needs and priorities with respect to the retrofit project. They then communicate these requirements to the retrofit project team and advocates to ensure tenant needs and priorities are reflected in the project plan. By including tenants early in the project design and conceptualization, the liaison builds trust and cooperation between all the key stakeholders in this project—the landlord, tenants and the project team.

Working on behalf of tenants, the liaison negotiates a better deal with the landlord. First, they secure the landlord's commitment to provide alternative temporary accommodations for tenants during the installation of in-suite measures. Next, they

obtain rent discounts from the landlord as a measure of good faith and to compensate the tenants for the inconvenience caused during the retrofit project.

Crucially, the liaison brings the tenants and landlord into a productive and collaborative discussion on scope of the project, energy efficiency measures to be installed, anticipated timelines and project budgets. Through this process, the liaison mediates a green lease agreement between the two parties—the landlord will pay the upfront costs for additional in-suite measures that were requested and prioritized by the tenants. In exchange, tenants consent to a modest 2 per cent increase in rent for a fixed period of time (five years) so the landlord can recoup some of the up-front costs of those additional measures. After that time period has passed, the rents are frozen for the rest of the duration of the affordability covenant, which is a requirement of the program design for accessing project funding.

The tenant liaison then foresees all the complex logistical challenges of carrying out a retrofit project in an occupied building. They coordinate unit-access, alternative accommodations, site-clean up and returning the unit to the tenant after the measures are installed.

The outcome: compared to initial policy mix 2 and enhanced mix 2A, alternative accommodations during the retrofit project and extended long-term green-lease offers more tenant protections and housing security. Working with tenants to identify and prioritize additional energy efficiency measures, alongside securing their full cooperation for the retrofit project, unlocks far greater energy savings than the initial policy mix and Policy Mix 2A. Therefore, this policy mix falls well within the top-right quadrant.

Initial policy Mix 2	Enhanced policy mix 2A	Enhanced policy mix 2B
Affordability and eviction covenants only when accessing public funding	Mandatory building labelling; additional incentives for worst performing buildings;	Policy mix 2A + tenant liaison mandatory for accessing public funding and financial incentives;

and financial incentives for comprehensive retrofits		funding prioritized for projects that minimally disrupt tenants
--	--	---

Table 6: summary of policy instruments in scenario 2 policy mixes

Lessons learned

Scenario 2 examined procedural justice implications of involving tenants in different stages and at different capacities when undertaking a retrofit project.

Including tenants early in the retrofit project process is a normative goal for procedural justice. Securing tenant’s full cooperation for the retrofit project also reduces project complexity, makes efficient use of project budget, and (re)builds trust between landlord and tenants.

Tenant liaisons secure stable housing by helping tenants assert their rights, represent tenant priorities on the project team and bargain for a better deal on their behalf. In addition, tenant liaisons can help catalyze deeper energy savings and secure more efficient buildings by securing tenant cooperation, coordinating unit access and securing a mutually beneficial green-lease agreement.

Program design matters. While both scenarios nominally share the normative goals of procedural justice, prioritizing projects that minimize tenant disruptions are likely to yield better buildings and more secure rental housing.

Scenario 3: Indoor cooling as an emerging tenant right in a warming climate

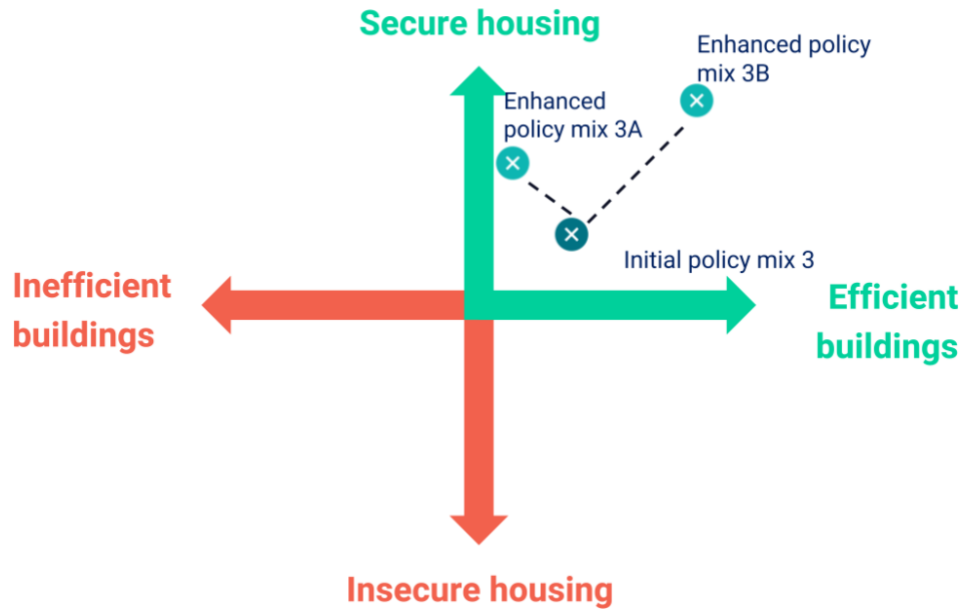


Figure 6: policy mixes for scenario 3

Policy mix 3

A group of tenants live in a high-rise building in a downtown core. The occupants are a mix of seniors and young people, with mixed incomes. The rents are affordable, and the landlord-tenant relationship is friendly and productive.

The jurisdiction has strong rent control and anti-eviction policies in place. There is an active tenant association that makes sure tenants understand their rights. They are also ready to facilitate access to legal representation in the event of disputes. The jurisdiction has a strong background in energy efficiency. It previously changed policies to provide a guarantee of tenure in event of displacement from a rental unit due to renovations. Thus, renovictions are not a significant concern. The building is relatively well insulated. It has an efficient natural gas boiler system, so tenants are proportionately comfortable throughout the year.

The major problem the building occupants face is dangerously high indoor temperatures during extreme heat events, which have occurred in the last number of years. The temperature rises dramatically within the building due to the urban heat island effect and west oriented windows that allow for unobstructed sun to shine in and significantly raise temperatures in one part of the building. This issue is especially concerning for seniors within the building. The tenant association and landlord previously organized check-ins throughout the building during heat spikes. Last year, a senior citizen tenant on the west side of the building was found deceased during an extreme heat wave and joined the statistics of “heat deaths” in the country⁷. This had a profound impact on the occupants of the building, who organized to solve the issue in their building and other buildings.

When they looked at the existing policy framework, the building occupants were surprised to find roadblocks and gaps.

Within the energy efficiency policy mix, the mass roll-out of air conditioning was discouraged by an electricity utility concerned about summertime peak demands. The landlord worries installing air conditioning will require very expensive electrical service upgrades and create safety and liability issues arising from improperly installed window causing injury or harm from falling out⁸. Utility demand side management programs are robust yet are focused on saving either electricity or natural gas. No framework exists to support beneficial fuel switching although it is under discussion. The jurisdiction has implemented mandatory building performance standards that require large multi-unit, residential buildings to meet certain minimum energy and GHG intensity targets, yet the building in this case will be compliant until 2040.

⁷ Following a heat wave in British Columbia in 2021, the B.C. Coroners Service found that two-thirds of those heat-related deaths were among people aged 70 and older, and 98 per cent of deaths occurred indoors. Most who died were in homes without adequate cooling systems, such as air conditioners or fans. <https://www.cbc.ca/news/canada/british-columbia/bc-heat-dome-coroners-report-1.6480026>

⁸ The unfortunate death of a toddler in Toronto in 2020 from a falling window AC unit prompted many landlords to implement policies prohibiting the installation of window AC units. See <https://www.thestar.com/business/2020/06/15/tenants-can-keep-window-ac-units-as-long-as-they-are-safely-installed.html>

The outcome: the tenant rights rules do not help the building occupants. There is a maximum temperature standard within the municipality that exists for buildings with air conditioning, yet this building does not fall under the rule due to lack of existing air conditioning.

Therefore, this case finds itself on the upper right quadrants. This is a case of relatively strong tenant rights and energy efficiency policies. However, the existing policy mix proves inadequate to grapple with the increased frequency of extreme heat events in a warming climate.

Enhanced policy mix 3A

In the absence of clear rules on the tenant's right to cooling, the landlord negotiates a working arrangement with the building occupants to institutionalize air-conditioner use. Tenants who request an air-conditioner added to their unit are charged a nominal annual fee (in addition to their rent) that covers the costs of equipment, installation, and energy-use of the air-conditioner units.

The landlord adopts corporation bylaws to assume the responsibility for purchasing, installing, and maintaining the window air-conditioners. The landlord also updates their procurement policy to allow for purchasing high-efficiency window units as a bulk-order at prices lower than retail. Qualified contractors ensure the window units are installed and maintained to the highest safety standards. The contractors return every winter to decommission the air-conditioning units, sealing them off appropriately for comfort and draft-proofing.

The landlord also upgrades liability policy with their insurance company to make cooling options available to all tenants by installing air-conditioners in common rooms, running them as cooling relief centers accessible to all tenants during the summer months. To reduce some energy use from all the additional cooling load, the landlord partners with the local utility to offer workshops and coaching on energy saving practices for tenants.

The outcome: tenants have increased access to cooling, either through in-unit window air conditioners or access to cooling stations in the building. However, increased energy

use from running AC leads to a less efficient building. due to the increase in energy use from running the air conditioners. Under the enhanced policy mix, an increase in air conditioning has increased tenant rights, yet has led to lower energy efficiency performance. Therefore, this case finds itself on the upper right quadrants.

Enhanced policy mix 3B

To improve in-unit cooling for all tenants, the active tenant association joins with other organizations to make “the right to be cool” a new tenant right. This initiative leads to a series of policy changes.

First, the building performance standard is reformed to include health and safety. The new rules expect building owners to always maintain internal temperatures no greater than 26 C regardless of whether the building had air conditioning or not⁹. Tenant rights organizations distribute digital thermometers to tenants to monitor their building temperatures. This data is accepted as valid evidence of non-compliance. This change will bring the building under the performance standard, with a requirement to fix the problem within two years.

This policy change is complemented by new directions to utility regulators to consider increased AC demand in baseline assumptions, and to then develop multi-fuel demand side management strategies to mitigate impacts. This results in multi-fuel resource planning between electricity and natural gas utilities, and fuel-neutral and GHG reduction goals for energy efficiency programs. Both electricity and natural gas utility demand side management programs could get credit for fuel switching initiatives that were “beneficial”. This means they could reduce overall GHG emissions and energy use and correspond with a strategy to mitigate peak demands. This encourages the use of strategies to deploy “two-way” ACs that can also operate as heat pumps. The resulting increase in summertime electricity demand is offset by larger energy savings (either electricity or natural gas) by using heat pumps for heating. To avoid significant summer

⁹ Few jurisdictions in Canada – such as City of Mississauga – regulate maximum indoor temperatures for rented and leased buildings, but buildings that are not equipped for air-conditioning units are exempt from this bylaw. <https://www.mississauga.ca/wp-content/uploads/2019/06/17163141/Adequate-Temperature-By-law-0110-2018.pdf>

and winter peaks, the programs include greater emphasis on building envelope improvements as well as “thermal battery” strategies to heat or cool buildings during off peak hours to ride through peak periods. Summer peak strategies in particular, included automatic exterior window shading and a long-term plan to increase tree shading in target neighbourhoods.

The roll-out of this new policy mix requires pilot projects and learning. Early tenant engagement and prioritizing buildings with strong consensus amongst tenants on the need for upgrades helps prioritize pilot projects. Installing automatic exterior shading provides an immediate solution. Installation and education of unit specific ACs (that also operate as heat pumps) increase cooling during off-peak periods in anticipation of hot days. Automatic thermostats provide potential to maintain cool temperatures even in the event of a heat wave causing temporary power outages. A longer-term plan is developed to upgrade the building envelope and replace the boiler system with an electric back-up at the end of its life. Since capacities for cooling are lower than heating, this allows time to meet the cooling need while collecting actual energy usage data to inform planning for bringing the building to a net-zero emissions standard required by the BPS policy by 2050.

The outcome: energy efficiency strategies have become more sophisticated and effective, while housing quality for tenants has improved and delivered on a new tenant right, “the right to be cool”. Therefore, this policy mix means this case moves even farther up the upper right quadrant.

Initial policy mix 3	Enhanced policy mix 3A	Enhanced policy mix 3B
Strong rent control; strong anti-eviction policy; tenant associations; guarantee of tenure in event of renovation; Demand Side Management plan discourage ACs due to concerns about summer	Initial policy mix 3 + updated landlord policies such as bulk procurement policy; bylaws; insurance and liability; educational programming	Initial policy mix 3 + building performance standard; expanded indoor temperature bylaw to include all buildings; utility regulators directed to consider increasing AC demands in baseline

demand peaks; municipal maximum indoor temperature bylaw for buildings with existing air-conditioning		assumptions; utility regulators directed to develop multi-fuel demand side management strategies
---	--	--

Table 6: summary of policy instruments in scenario 3 policy mixes

Lessons learned

This scenario examined the importance of an emerging tenant right in a warming climate – the right to cool temperatures. It examines a case where a relatively strong energy efficiency and tenant right policy mix proved inadequate to deal with an emerging energy need and a tenant right to cool indoor temperatures.

As new instruments were added to the policy mix, it created potential tensions in other policy areas – in particular, the need to manage summer peak demands from increased air conditioning and potential increases in electricity demand. Yet, these tensions did not create intractable problems. By broadening the policy mix, more air conditioning was turned into an opportunity to improve fuel neutral and GHG emission performance.

The changes in the policy mix required a new collection of instruments and their interactions. Theoretically, this reinforces extensions of the policy mix concept to include “strategy” considerations, which include new objectives and planning procedures (Rogge and Reichardt 2016). In this scenario a new strategy expanding concepts of both tenant rights and energy efficiency policy was needed.

Discussion and recommendations

Energy efficiency and tenant protection policies can be complementary

Achieving climate goals by 2050 would require a large-scale transition of a majority current building stock—including rental housing¹⁰—to efficient and high-performance buildings. These goals must be considered simultaneously with renter’s rights to adequate, affordable, and stable housing.

As discussed in the literature review, a narrow focus on individual policy instruments can frame the dual objectives of efficiency buildings and secure housing as trade-offs. For instance, improving energy performance of buildings can lead to negative consequences for tenants such as rent increases and disruptions during and displacement after the retrofit. Weakening energy efficiency policies to shield tenants against disruptions can result in a substandard rental housing stock that is unable to meet the housing needs of the present and the future. Tenant-landlord power relationship and lack of trust can cause cost-overruns. And compound project complexity can lead to shallow retrofits.

Our scenarios highlight that trade-offs and conflicts between efficient buildings and housing security exist but are not inevitable. Such conflicts represent a failure to create the right policy mix that expands and enshrines housing security while also advancing building performance. Under the right policy mix, efficient buildings policies and tenant protection policies can be complementary and mutually reinforcing. For instance, a tenant protection mechanism such as an affordability covenant (scenario 1) can simultaneously ensure that benefits of energy upgrades primarily accrue to tenants; can fortify housing security for tenants by maintaining rents at affordable levels and preventing unjustified evictions; can boost public confidence in and support for policy interventions in rental housing; and ensure durability of public investments in no-cost energy efficiency programs for low-income renters.

We also note that potential conflicts between building energy efficiency and tenant protections are more obvious under certain policy mixes. For instance, against the backdrop of poor landlord-tenant relations (scenario 2), a requirement that landlords must secure informed consent of tenants prior to retrofits can lead to increased project

¹⁰ Canada, US, UK, European Union – 31%, 35%, 36% and 30% of housing units are home to renters, respectively. Source: OECD <https://www.oecd.org/els/family/HM1-3-Housing-tenures.pdf>

costs, delayed timelines, and deferred upgrades. However, this scenario also highlights the crucial role of program design characteristics in mitigating such conflicts between policy instruments. Policy mix 2B demonstrates that elements of the same policy mix can be better aligned by making relatively simple changes to program design elements such as requiring tenant liaison as part of the engagement strategy.

Our scenarios also underscore the importance of a policy-mix approach to exploring the policy arena for rental energy efficiency. A policy-mix approach brings attention to the dynamics of layering in policy instruments through conscious and planned policy design choices to achieve desired outcomes (Howlett and del Rio 2015). While the implementation of a single policy could enhance one objective to the detriment of others, the same policy as part of a broader mix could lead to better energy efficiency and enhanced tenant well-being. The objectives, strategy, process, and interactions of the mix of policies in a dynamic setting could be more important than the design of any single instrument (Rogge and Reichardt 2016). Scenario 3 explores how policy mixes to deliver a new tenant right to cool temperatures can involve much broader institutional changes to change strategic objectives and processes in energy systems to manage issues like peak energy demand and capture GHG reduction co-benefits.

Rental energy efficiency as energy justice

Thinking in terms of policy mixes can foreground concerns about justice and fairness in the outcomes of policy. Rather than focus on an exhaustive cost-benefit analysis of individual policy instruments, a policy mix approach can open normative goals of policy making to include social and economic issues (Rogge and Reichardt 2016) as well as process and learning objectives such as enhancing state capacity to deliver public policy objectives (Edmondson, Kern, and Rogge 2019).

The transition to net-zero buildings by 2050 and commitments to housing for all will require a major transformation of buildings, places, and communities. One of the biggest challenges associated with this transition is reckoning with ethical and practical questions about who makes the transition, who pays for it, who is more likely to benefit from it and who is at the risk of being left behind. Such questions cannot be answered by economic analysis or technical engineering alone. As Sovacool and Dworkin 2015

remark, while economics can account for efficiency, energy justice is needed for accountability.

Energy justice as an emergent research agenda and policy orientation makes evaluative and normative contributions to the design, delivery, and implementation of rental energy efficiency policies. In scenario 1, an energy justice perspective highlights how low-income tenants are historically underserved by energy efficiency programs and compels us to address this inequity through a policy mix of no-cost programs and tenant protection policies with the goal of ensuring benefits of energy efficiency are available to everyone, irrespective of income.

Scenario 2 shines a light on how retrofit projects in multi-family rentals are often a forgone conclusion for residents, who are seldom given opportunities to provide input to the project and/or receive post-retrofit support (Chahal, Swan, and Brown 2012). An energy justice perspective urges a consideration for fair and meaningful inclusion of tenant perspectives, needs and priorities in the planning, design and implementation of the energy retrofit project. Scenario 3 highlights how past and ongoing harms such as mortality due to extreme heat events can be addressed and perhaps repaired by centering energy justice in the orientation of energy efficiency policies to deliver right to cooling as an emergent tenant right.

Crucially, under every scenario examined in this paper the enhanced policy mixes that included energy justice considerations had improved outcomes in our 2x2 analytical framework. This suggests that centering energy justice in energy efficiency policy is not merely a normative goal but that we are unlikely to meet net-zero emissions objectives without energy justice for tenants.

Empowering tenants in a net-zero future

To ensure energy justice and fairness are embedded in the foundation of rental energy efficiency policy, we propose a tenant bill of rights in a net-zero future to inform future policy making and advocacy.

A right-based approach can call upon specific resources, actors and institutions to

orient where markets, institutions, energy efficiency policies and decarbonization strategies need to go in order to achieve national net-zero and housing goals. Tenants should have clear understanding, and ability to act on, their rights—before, during, and after the retrofit.

We suggest rental energy efficiency programs and policy mixes should be designed to deliver the following tenant rights:

1. **Right to information on energy performance:** Programs must be oriented in such a way as to provide clear and easy to understand information on energy performance of a unit to tenants *before* they assume tenancy, and *after* the measures are installed so tenants can understand benefits captured.
2. **Right to prior and informed consent of retrofit work undertaken in buildings:** *Before* the retrofit project, program implementers must actively engage tenants on their lived experience within the building and the role energy efficiency can play in improving housing conditions and solving problems that tenants prioritize. Program administrators must explain the upgrade process, expected benefits for the tenants, and relevant timelines. Consensus agreement on the retrofit plan should be reached amongst tenants before a project is triggered.
3. **Right to maintain residence and tenure:** *During* the project, if the retrofit requires temporary displacement from the rental unit, the tenant will receive similar quality or better-quality accommodation at the same rental rate. *After* the retrofit, tenants have the right to return to their previous unit or exercise the right of first refusal to return to the unit after the retrofits. Wherever possible, solutions such as exterior insulated panels allowing the tenant to stay within the unit with minimal disruption will be prioritized.
4. **Right to collective organization and to legal counsel:** Tenants with same landlords should be able to organize and bargain collectively for a better deal from their landlord. A tenant should have access to legal counsel and representation if they believe their rights have been violated *before, during or after* the retrofit process. This would include wrap-around supports, resources and services supported by a vibrant network of tenant advocacy groups, hot-line supports, drop-in advisory services, peer-to-peer guidance, and community legal-aid clinics.

5. **Right to well-being and stability at home:** A tenant should be able to achieve and maintain a reasonable degree of comfort, convenience, and well-being in their own home, particularly under the impacts of a changing climate. This includes the right to make non-structural upgrades to their homes to improve the quality of their life without restrictions from landlords and other institutions. This also reorients goals of energy efficiency policy towards delivering on emerging rights such as right-to-cooling.

Conclusion

This working paper addresses the question of how we develop public policies to improve energy efficiency while protecting and enhancing tenant rights.

In section one, we highlighted how existing literature on energy efficiency in rental housing has gaps with respect to consideration for issues of housing security and energy justice for tenants. We argued the twin goals of achieving efficient high-performance buildings and affordable stable housing for renters must not be separated.

We then argued for the benefits of taking a policy-mix approach for addressing these dual goals simultaneously. Rather than focus on cost and benefits of individual policy instruments, a policy mix approach can bring together a collection of instruments and characteristics for achieving societal climate and energy savings objectives.

To illustrate the policy mix concept, in section two we introduced a database of more than 200 policy instruments relevant to energy efficiency in rental housing, as well as policies for housing affordability and stability for tenants. The database provides links, descriptions, and other information on such policies currently in place across jurisdictions across Europe and North America. We identified policy instruments through a review of academic research, policy reports and practitioner testimonials. Policies were classified under three categories: efficient building policies; efficient rental housing policies; and tenant protection policies.

Then in section three, we introduced our analytical framework based on a 2x2 matrix. Using this analytical framework, in section four we explored the likely outcomes of

different policy mixes from the perspective of different rental housing stakeholders through descriptive scenarios.

Under each of the three scenarios, we explored potential conflicts between energy efficiency and housing security objectives. We examined how such conflicts can be alleviated using expanded policy mixes drawn from principles of energy justice. We show how energy justice is a necessary component to energy efficiency policies and programs for tenants. The 'tenant bill of rights' should serve as a guide for future policymaking and advocacy.

How to use these results

Each policy category and policy instrument in the policy database has strengths and limitations. We encourage policymakers to use this consolidated policy database as a launching pad to explore mixes of policies that can advance the dual objectives of efficient and secure rental housing for tenants.

Using scenarios to explore interactions between instruments in a policy mix only offers tentative conclusions. Outcomes of policy are not only determined by the mix of instruments, but also timing, operation, implementation, resources, process, politics and perceived legitimacy of their goals (Rogge and Reichardt 2016). We encourage researchers and policymakers to conduct empirical analysis, monitoring and evaluation to substantiate policy mixes and learning alongside implementing.

We recommend that principles of energy justice and fairness be baked into rental energy efficiency policies, and strongly encourage policy mixes that are designed to deliver a tenant bill of rights in a net-zero future.

Supplemental: rental energy efficiency policy database

The database of energy efficiency and housing stability policies has five worksheets and is available below. It is meant to be indicative, not exhaustive, of how and where the policies highlighted in this report are implemented in practice. It contains direct links and other information about each specific policy.

Rental efficiency policies

The rental efficiency policies worksheet tracks the energy efficiency policies for rental housing that are highlighted in this report and are in place in jurisdictions. This includes Building energy labelling, rental performance standards, energy disclosure policies etc. This information was pulled from other databases and sources such as ACEEE, ENPOR, etc.

Policy Instrument	Location	Name of Policy/resource	Notes
Building energy labelling	France	2019-1147 on Energy and the Climate	Starting from 2022, a mandatory energy audit will be required prior to the sale or rent of dwellings, informing the prospective buyer or renter of future energy costs.
Energy saving kits, rebates and direct install programs for renters	Many provinces in Canada		See Efficiency Canada's 'Efficiency For All' program database
Building performance as funding criteria for affordable housing	Washington	Evergreen Sustainable Development Standard	A building performance standard that all affordable housing projects that receive capital funds through the state Housing Trust Fund program must comply with.

Building performance as funding criteria for affordable housing	Alaska	Alaska Building Energy Efficiency Standard	<p>The Alaska Housing Building Energy Efficiency Standard (BEES) was established by the State of Alaska to promote the construction of energy efficient buildings. It sets building energy use standards for thermal resistance, air leakage, moisture protection, and ventilation.</p> <p>BEES is currently comprised of the 2018 International Energy Conservation Code (IECC), ASHRAE 62.2 2016, and Alaska Specific Amendments to both. A minimum 5 Star energy rating is required.</p> <p>All buildings that began construction on or after January 1, 1992 must comply with BEES if Alaska Housing or other state financial assistance is to be used in the purchase of a loan.</p>
Building performance as funding criteria for affordable housing	Arlington County	Affordable Housing Investment Fund	Requires that developers receiving funds meet one of several green building certifications
Building performance as funding criteria for affordable housing	Arizona	Arizona Department of Housing Design Guidelines	Requires new projects to receive a HERS score of 65 and rehabilitation projects to achieve a reduction in its HERS score.
Building performance as funding criteria for affordable housing	New Mexico	Minimum Design Standards	Requires rehabilitation projects to achieve a HERS score of 65 and new construction projects a HERS score of 55
Building performance as funding criteria for affordable housing	Florida	Required Green Building Features	Projects must adhere to appliance standards and ENERGY STAR construction standards

Building performance as funding criteria for affordable housing	North Carolina	NCHFA Design Standards	New construction must achieve ENERGY STAR Multifamily New Construction Program
Building performance as funding criteria for affordable housing	Illinois	Architectural standards, universal design, and amenities certification	Projects must adhere to appliance standards more stringent than code
Building performance as funding criteria for affordable housing	Minnesota	Minnesota Overlay	Projects must achieve Enterprise Green Communities certification with the Minnesota Overlay
Building performance as funding criteria for affordable housing	Vermont	Building Design Standards	New construction projects must achieve Efficiency Vermont's High Performance Track standard
Building performance as funding criteria for affordable housing	New York	Green Building Criteria	Projects must participate in one of the following: state programs, ENERGY STAR programs, Enterprise Green Communities Criteria, or other strategies for rehabilitation projects.
Building performance as funding criteria for affordable housing	Rhode Island	National Grid Residential New Construction Tier I Standard	New construction projects are required to meet the Tier I Standard and rehabilitation projects are required to reduce energy use 15% to 25% for a Tier I Standard.
Building performance as funding criteria for affordable housing	Pennsylvania	Energy Conservation and Green Building Criteria	Projects must pursue either 2020 Enterprise Green Communities, LEED-Silver or ICC 700 National Green Building Standard-Silver certification.

Building performance as funding criteria for affordable housing	New Jersey	Green Points	New construction must adhere to ENERGY STAR construction standards
Building performance as funding criteria for affordable housing	Maryland	Multifamily Rental Housing Programs	New construction must adhere to ENERGY STAR construction standards and rehabilitation projects must achieve a 15% reduction in energy use.
Building performance as funding criteria for affordable housing	Arlington County	Affordable Housing Investment Fund	Requires that developers receiving funds meet one of several green building certifications
On-bill financing programs targeting rental properties	USA	(many examples)	The Environmental and Energy Study Institute's Access Clean Energy Savings program is an ongoing initiative aimed to help utilities develop programs that empower their members/customers to reduce energy use, cut energy bills, and improve home comfort -- all with no upfront costs. EESI accomplishes this by working with utilities to establish "on-bill financing" programs. Case studies of 5 programs
On-bill financing programs targeting rental properties	Santa Clara, California	On Bill Repayment	This report examines a recent test of OBR at five affordable rental home properties in the City of Santa Monica, California.
Energy concierge services	Hartford	Energy Equity Challenge	Offers renters, landlords, homeowners, and property managers free or discounted energy audits and weatherization and promotes existing state and utility energy efficiency programs
Energy concierge services	Boulder County	EnergySmart	Helps landlords make decisions about efficiency upgrades, apply for available incentives, and navigate and evaluate contractor bids

Energy concierge services	Fort Collins	Epic Homes Program	Provides owner and renter-occupied single-family homeowners with several services barriers to completing energy efficiency and indoor environmental quality projects
Energy concierge services	Minneapolis	4D Affordable Housing Incentive Program	Helps owners of unregulated affordable housing qualify for the State of Minnesota's tax abatement
Energy concierge services	Hartford	Energy Equity Challenge	Offers renters, landlords, homeowners, and property managers free or discounted energy audits and weatherization and promotes existing state and utility energy efficiency programs.
Weatherization Program	USA	US Department of Energy Weatherization Assistance Program	See worksheet called Weatherization Program in the same workbook
Rebate Programs	USA	Database of State Incentives for Renewables and Efficiency	US database of utility and government funded rebates and discounts on upgrades to energy efficient insulation, appliances and lighting.
Rebate Programs	Canada	Efficiency Canada Scorecard Policy Database	Database of utility and provincial energy efficiency programs in Canada
PACE Financing	USA	PACE Nation Database	Database of Property Accessed Clean Energy programs offering low-interest and longer-term financing for residential energy efficiency upgrades

Building performance standards	USA	US DOE Building Energy Codes Program BPS database	US database of Building Performance Standards in states and cities
Building performance standards	EU	BPC Standards in EU	Database of Building Performance Certificates (BPC) policies in EU nations

Housing stability policies

The Housing stability policies worksheet tracks renter protection and housing stability policies highlighted in this report and are in place in jurisdictions around the world. This includes policies like affordability covenants, eviction diversion policies, right to legal counsel etc.

Policy Instrument	Location	Name of Policy/resource	Notes
Green leases	Australia	National Green Leasing Policy - trends	https://www.irbnet.de/daten/iconda/CIB_DC23084.pdf
Green leases	USA	Green Leasing Leadership Program	Cost sharing agreement between landlords and tenants that amortizes upfront costs of energy efficiency upgrades over long term such that immediate home upgrade benefits accrue to tenants while costs are spread out over time and recoverable through future tenants.
Rental energy disclosure	Chicago	Municipal Code of Chicago 5-16	Requires building owners to disclose the cost of heating from the previous tenants.

Rental energy disclosure	Colorado	HB21-1286	Requires some property owners to share benchmarking information with tenant.
Rental energy disclosure	Chicago	Municipal Code of Chicago 5-16	Requires building owners to disclose the cost of heating from the previous 12 months
Rental energy disclosure	Minneapolis	Rental Energy Disclosure	Requires some property owners to share benchmarking information with tenant.
Rental energy disclosure	Maine	Title 14§6030-C	Grants renters the right to obtain the unit's energy consumption and costs during the rental period
Rental energy disclosure	Gainesville	Rental Housing Ordinance	Requires landlords to provide information on the rental unit to potential tenants
Rental energy disclosure	Austin	Energy Conservations and Audit Disclosure Ordinance	Requires owners of multifamily buildings must disclose the energy guide to prospective renters
Rental energy performance standard	Manitoba	???	Proposed bill by Manitoba NDP (while they were in opposition) in 2018 "would require landlords who want to raise rents above the guideline set by the Residential Tenancies Branch to first show they have taken "reasonable steps to improve the energy, water and heating efficiency of their building"
Rental energy performance standard	San Francisco	Residential Energy Conversation Ordinance	Requires owners of property to install energy efficiency upgrades when selling or renting a property
Rental energy performance standard	San Francisco	Residential Energy Conservation Ordinance	Requires owners of residential buildings to complete energy efficiency upgrades when selling or renovating a property.

Rental energy performance standard	France	2019-1147 on Energy and the Climate	Starting from 2023, rents frozen for properties with poor energy efficiency ratings and illegal to rent our worst performing properties
Rental energy performance standard	England and Wales	Energy Efficiency in Private Rental Property, England and Wales, Regulations 2015	Private domestic and non-domestic landlords will need to ensure that their properties reach at least an E EPC rating, or have installed those improvements that could be funded using available Green Deal finance or subsidies available to pay for them, before granting a tenancy to new or existing tenants
Rental energy performance standard	Boulder, USA	SmartRegs	SmartRegs requires all licensed rental housing in the City of Boulder to meet a basic energy efficiency standard. SmartRegs compliance is just one component of the rental license approval process. Average cost of less than \$3k per residential property.
Rental energy performance standard	Boston	Buildings Emissions Reduction and Disclosure Ordinance	Requires affordable housing sector to comply with buildings emissions reduction standards and establishes an investment fund to support policy compliance within the sector
Rental energy performance standard	Gainesville	Rental Housing Ordinance	Incorporates minimum energy efficiency performance criteria in residential rental permits
Rental energy performance standard	City of Boulder	SmartRegs	Requires that all long-term rental property owners meet an energy efficiency standard to maintain their rental licenses
Rental energy performance standard	Gainesville	Rental Housing Ordinance	Incorporates minimum energy efficiency performance criteria in residential rental permit

Rental energy performance standard	Burlington	Minimum Energy Efficiency Standards Ordinance	Requires residential rental properties that on an annual basis use 90,000 BTUs or more per conditioned square 61 foot for space heating purposes to meet minimum energy efficiency standard.
Rental energy performance standard	Boston	Building Emissions Reduction and Disclosure Ordinance	Requires affordable housing sector to comply with buildings emissions reduction standards and establishes an investment fund to support policy compliance within the sector.
Rental energy performance standard	NYC	Local Law 97 of 2019	Requires buildings with 35% or greater units subject to rent control to comply with prescriptive energy conservation measures. Local Law 116 of 2020 amended Local Law 97 such that buildings with fewer than 35% of units subject to rent control must comply with building performance standards established by Local Law 97.
Rental energy performance standard	Montgomery County	Bill No. 16-21	Allows qualified affordable housing to modify compliance with interim or final performance standards
Rental energy performance standard	Washington DC	Clean energy DC Omnibus Act of 2018	Offers financial assistance, technical assistance, and delayed compliance schedule for affordable housing required to comply.
Rental energy performance standard	Flanders		Roof insulation on rental property required to have R-value of at least 4.25

Renter right to make energy efficiency improvements	Hartford	Code of Ordinances Section 18-51.M.	Grants renters the right to make certain energy-saving home improvements without obtaining property owner consent. These upgrades are limited to those that do not change the building's structure or equipment and involve alterations that are easily removable or reversible.
Right to dry clothes on a clothesline	Nova Scotia	Clothesline Act	2 The purpose of this Act is to ensure no law, by-law, covenant or agreement prevents, prohibits or unreasonably restricts the installation, placement or use of a clothesline outdoors at a single-family dwelling or on the ground floor of a multi-unit residential building.
Right to request energy efficiency improvements from landlords	England and Wales		private landlords will not be able to unreasonably refuse consent to a tenant's request for energy efficiency improvements where Green Deal finance or subsidies are available to pay for them.
Affordability covenant	British Columbia	Energy Efficiency Retrofit Program	The Energy Efficiency Retrofit Program provides funds for non-profit housing providers to make electric and gas energy upgrades. The housing provider must continue to provide affordable housing for low and moderate income households for a minimum of 10 years.
Affordability covenant	Belgium	Grants for Social Insulation Projects in Rental Buildings	The Flemish government provides grants for social insulation projects for rental apartments, where the tenant is considered low-income or vulnerable, covering roof, wall and window insulation. The grants are facilitated by a project promoter that manages discussions between tenants and the landlord, and submits the application to the regional utility. The landlord cannot raise the rent as a result of the insulation improvements

Affordability covenant	United Kingdom	Nyth Nest Scheme (Making Wales Cosy)	Free, impartial energy advice service provided by the Welsh Government, and if eligible (low income and energy inefficient home), a package of free home energy efficiency improvements. Landlords must provide consent for the energy improvements and meet eligibility criteria (such as registration with Rent Smart Wales, having a valid tenancy agreement, gas safety record etc). Landlords must sign an agreement stating that they cannot raise the rent for 12 months following the improvements
Affordability covenant	Nova Scotia	Affordable Multifamily Housing Program	Requires landlords to maintain housing at affordable renting rates if enrolling in a no-cost energy efficiency program for their rental properties
Affordability covenant	Minneapolis	Green Cost Share 4D Energy Efficiency Program	Offers matching funds for qualifying properties undertaking an energy efficiency or other clean energy project
Affordability covenant	Dallas	Comprehensive Housing Policy - Rental Rehabilitation Program	Requires rental units that use Rental Rehabilitation Program funds for energy efficiency projects to maintain affordability for 10 years
Affordability covenant	Cincinnati	Warm up Cincy	Offers matching funds for qualifying properties undertaking an energy efficiency or other clean energy project. Improvements proposed must directly reduce the cost of electricity bills and result in verifiable energy savings for low-income tenants.
Affordability covenant	Chicago	Revised Affordable Requirements Ordinance	Residential units receiving financial assistance from city must comply with affordability covenants
Affordability covenant	Milwaukee	Rental Rehabilitation Loan Program for Targeted Investment Neighbourhood	:Steers the city's federal HOME funding allocation toward one- to four-unit rental properties that are affordable to those

Tenant liaison	British Columbia	Case study led by Pembina Institute	Report says "BC Housing now requires a tenant liaison on every retrofit project it undertakes" but I cannot find evidence of this
----------------	------------------	-------------------------------------	---

Indoor temperature standards	Every Canadian province		See supplemental sheet A3
------------------------------	-------------------------	--	---

Indoor temperature standards	Missisagua, Canada	Adequate Temperature By-law	describes the temperature landlords must maintain inside rental residential units at different times during the year, including maximum temperature of 26 C in the summers.
------------------------------	--------------------	-----------------------------	---

Tenant protection policies

The tenant protection policies worksheet tracks building efficiency policies specific to rental housing or tenant protection policies specific to energy efficiency. They include policies such as rental housing standards, clothesline act etc.

Policy Instrument	Overview	Location	Name of Specific Policy	Notes	Level of Government?
Eviction covenant	Require landlords who accept emergency assistance payments to not evict tenants for a certain number of days after payment recieved.	Kentucky	Healthy at Home Eviction Relief Fund	Based on KY program that Requires landlords who accept emergency rental assistance (ERA) to not evict for any past rent due not covered by the ERA program, give 30 days' notice for any future eviction (not to be initiated until at least 45 days after assistance concludes), and agree to terms of Kentucky's Healthy at Home Eviction Relief Fund	State

settlement agreement, including submitting all necessary paperwork.

Eviction covenant	Require participating landlords to not evict tenants for a certain period of time after receiving assistance, and forgive fees, penalties and interest portions of rent exceeding fair market rent.	Lafayette	Lafayette Emergency Assistance Program	Assistance with paying rent when facing an emergency.	Municipal/ Local
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	Louisiana	Louisiana Emergency Rental Assistance Program	The Louisiana Emergency Rental Assistance Program provides emergency rental and utility assistance to Louisiana residents who are at risk of experiencing homelessness or housing instability, as well as landlords struggling to collect rent due to the COVID-19 pandemic.	State
Eviction covenant	Require participating landlords to not evict tenants for a certain period of time after receiving assistance.	Anne Arundel County, Maryland	Eviction Protection Process	Help tenants remain in their homes while providing funding to landlords as federal and state eviction moratoriums end	Local/ Municipal
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	Baltimore		News article stating that some landlords are refusing to accept eviction prevention funds.	Local/ Municipal

Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	Prince George's County, Maryland	Emergency Rental Assistance Program	Rental assistance program where applicant can receive funding and other means of assistance through program.	Local/Municipal
Eviction covenant	Requires landlords to sign agreement to not pursue evictions if rent arrears are covered through emergency assistance	Boston, Massachusetts	City of Boston Rental Relief Fund	Financial Assistance to applicant.	Local/Municipal
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	St. Paul, Minneapolis	Zero Balance Project		Local/Municipal
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	Hinds County, Mississippi	Hinds County Emergency Rental Aid	Rental aid for tenant.	Local/Municipal
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	Douglas County, Nebraska	DC ERAP	The Douglas County Rent & Utility Assistance Program (DC ERAP) makes federal funds available to assist eligible low-income renter household that are unable to pay past due and/or future rent and utilities due to the COVID-19 pandemic. These funds are paid directly to landlords and utility providers on behalf of the tenants	Local/Municipal
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	Middlesex County, New Jersey	COVID-19 MIDDLESEX COUNTY EMERGENC	The Middlesex County (County) Emergency Rental Assistance Program (MCERAP or Program) is a rental assistance program designed to provide financial assistance and relief in the form of a grant	Local/Municipal

			Y RENTAL ASSISTANCE PROGRAM	to low- and moderate-income households residing in a rental unit (Unit) in Middlesex County that are unable to pay rent and utilities due to the COVID-19 pandemic.	
Eviction covenant	Prohibits landlords from filing for eviction proceedings for 90 days after payment of rent arrears.	N/A CANNOT BE FOUND	EXECUTIVE ORDER NO. 12D		
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving emergency rent assistance.	Oyster Bay, New York	TOWN OF OYSTER BAY EMERGENCY RENTAL ASSISTANCE PROGRAM	The Town of Oyster Bay Emergency Rental Assistance Program (the "Program") has funds available to assist renters residing within the Town of Oyster Bay (the "Town") who are struggling to pay their rent and utilities during or due to the coronavirus pandemic. The Long Island Housing Partnership ("LIHP") has been retained to administer the Program. Funds are made available and allocated by the U.S. Department of the Treasury ("Treasury")	Local/Municipal
Eviction covenant	Require landlords to not evict tenants, raise rents or collect late fees for a certain period of time after receiving rental assistance.	Yonkers, New York	Yonkers Emergency Rental Assistance Program		
Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	New York	New York Emergency Rental	The New York State Emergency Rental Assistance Program (ERAP) will provide significant economic relief to help low and moderate-income households at risk of experiencing homelessness or housing	State

Assistance Program instability by providing rental arrears, temporary rental assistance and utility arrears assistance.

Eviction covenant	Require landlords to not evict tenants for a certain period of time after receiving assistance.	North Carolina	NC Housing Opportunity and Prevention of Evictions	The NC Housing Opportunity and Prevention of Evictions (HOPE) Program is an initiative serving 88 counties that provides rent and utility assistance to eligible low-income renters experiencing financial hardship due to COVID-19. The program works to prevent evictions and utility disconnections in order to promote housing stability during the ongoing pandemic. The NC Office of Recovery and Resiliency, a division of the NC Department of Public Safety, administers the HOPE Program.	State
Eviction covenant	Ban evictions during and certain period after a 'major disaster' or emergency	Washington State	SB 5160	Addressing landlord-tenant relations by providing certain tenant protections during and after public health emergencies, providing for legal representation in eviction cases, and authorizing landlord access to state rental assistance programs	State
Eviction diversion	Require landlords to apply for rental assistance before applying for eviction	Connecticut	EXECUTIVE ORDER NO. 12D	Requires landlords to apply for rental assistance and give tenant 30 days notice to leave property before filing for eviction until 9/30/21. Any filing stayed 30 days.	State

Eviction diversion	Require courts to stay eviction for a certain period of time if rental assistance is underway	Arizona	Emergency Rental Assistance Program	The DES Emergency Rental Assistance Program (ERAP) now offers rent and utility assistance to eligible Arizona renters impacted by the COVID-19 pandemic. Eligible households may receive up to \$3,500 per month in combined rent and utility assistance for a maximum of 18 months or a total of \$63,000 in benefits paid. This 18-month total is the combined total of partial and full months of past-due, current, and future months (this includes all ERAP assistance payments). No further assistance can be paid after 18 months of ERAP benefits have been distributed	State
Eviction diversion	Require landlords to testify they've applied for emergency assistance or participated in mediation before moving forward with eviction	California	Assembly Bill No. 832	This bill extends certain rental assistances. Refer to link to see extensions.	State
Eviction diversion	Eliminate late fees and interest on rent if arrears are paid anytime during eviction process	Colorado	SB21-173 Right in Residential Lease Agreements	Concerning rights related to residential rental agreements, and, in connection therewith, making an appropriation.	State
Eviction diversion	Prohibit evictions for tenants owing under a certain threshold amount for tent	District of Columbia	B24-0096 "the Eviction Record Sealing Authority	Can't evict tenants for owing less than \$600. Requires 30 day notice and information on tenants rights from landlord before proceeding to eviction	State

and
Fairness in
Renting
Amendmen
t Act of
2021”

Eviction
diversion

[Requires summons issued in rental eviction cases to include a notice regarding availability of court-based rental assistance](#)

Illinois

MR. 30370

As the Governor’s eviction moratorium begins to sunset, courts are expecting a surge in eviction filings that will require significant resources to properly process and litigate. Accordingly, in the exercise of the general administrative and supervisory authority over the courts of Illinois conferred on this Court pursuant to Article VI, Section 16 of the Illinois Constitution of 1970 (Ill. Const. 1970, art. VI, sec. 16); and in view of the substantial resources available to Illinois renters and landlords to prevent evictions, including the launch of a statewide Court-Based Rental Assistance Program, and the need to ensure appropriate referral of new eviction filings to State and local resources that may be of assistance to both landlords and tenants, IT IS HEREBY ORDERED that:
1. All summons issued in residential eviction cases shall include the attached, or substantially

State

similar, notice regarding the Court-Based Rental Assistance Program. The notice shall be attached to a copy of the summons filed with the Clerk of the Circuit Court. Local Circuit Courts may modify this notice with more relevant local information, if applicable.

2. This order shall remain in effect until further order of the Court.

Eviction
diversion

[Require courts to advise landlords and tenants to first seek assistance of eviction diversion resources and ask if parties are interested in participating in a dispute settlement conference. Stay eviction for 90 days if both parties are participating in pre-eviction diversion program in good faith.](#)

Indiana

Order
establishin
g Pre-
Eviction
Diversion
Program

A program that gives more assistance to landlords and tenants when it comes to eviction.

State

Eviction diversion	Requires landlords to offer tenants a reasonable opportunity renew leases unless they have good cause not to.	Baltimore	Ordinance 21-0031	Landlord-Tenant - Lease Renewals For the purpose of requiring, absent certain good cause circumstances, landlords to offer tenants a reasonable opportunity renew leases; providing for the manner of notice for which a landlord must send renewal notices or decline-to-renew notices; establishing a presumption of offer and acceptance, absent certain circumstances; providing for the effect of the subtitle; providing for certain administrative and criminal penalties; and providing for a special effective date.	Local/Municipal
Eviction diversion	Grant tenants the right to pay rent or arrears anytime during the eviction process, requires landlord to accept rent.	Montgomery County, Maryland	Renters Avoiding Evictions & Working with Landlords	Tips and assistance for avoiding evictions.	
Eviction diversion	Establish Eviction Diversion program that requires landlords to receive 90% of unpaid rent from third party, in return for dismissing evictions, late fees and 10% of amount due.	Michigan	Senate Bill 690	The supplemental would provide appropriations for fiscal year (FY) 2019-20, mostly from the Federal Coronavirus Relief Fund (CRF), for various efforts related to the coronavirus disease 2019 (COVID-19) pandemic. The supplemental includes line item appropriations of \$880.1 million Gross and Federal with \$0 in General Fund/General Purpose (GF/GP) funding. Of the total funding, \$851.0 million would come from the CRF. Table 1 summarizes the appropriations in the supplemental.	State

Eviction diversion	Require courts to stay eviction proceedings for a period of time if a tenant has made an application for rental assistance.	Michigan	Administrative Order No. 2020-17	Since the early days of the pandemic, state and national authorities have imposed restrictions on the filing of many landlord/tenant cases. As those restrictions are lifted and courts return to full capacity and reopen facilities to the public, many will experience a large influx of landlord/tenant case filings. Traditionally, the way most courts processed these types of cases relied heavily on many cases being called at the same time in the same place, resulting in large congregations of individuals in enclosed spaces. That procedure is inconsistent with the restrictions that will be in place in many courts over the coming weeks and months as a way to limit the possibility of transmission of COVID-19. In addition, courts are required to comply with a phased expansion of operations as provided under Administrative Order No. 2020-14, which may also impose limits on the number of individuals that may congregate in public court spaces.	State
Eviction diversion	Require landlords to inform tenants of rental assistance programs and provide sufficient time to apply for rental assistance before filing for evictions	Minnesota	HF4	Omnibus Housing Bill.	State
Eviction diversion	Grant tenants the right to pay rent anytime during the	Mississippi	Senate Bill 2461	Landlord-tenant law; revise provisions of to create procedures and protection for evictions	State

[eviction process, requires landlord to accept rent.](#)

Eviction diversion	Require courts to stay eviction proceedings for a period of time if a tenant has made an application for rental assistance.	Nevada	AB486	Establishes provisions relating to property	State
Eviction diversion	Prohibit evictions in cases in which tenant fails to pay rent due to pattern of rent increases	Kingston, New York	INT-0214-2014	Authorizing the amendment to chapter 332 of the code of the city of kingston entitled "rental properties" to prohibit evictions without good cause	Local/Municipal
Eviction diversion	#VALUE!	Akron, Ohio	Ordinance No. 111-2021	Create legal defences in an eviction matter for tenants who attempt to tender all past due rental payments to a landlord and capping the amount of reasonable late fees that a landlord may impose on a tenant; and declaring an emergency.	Local/Municipal
Eviction diversion	Grant tenants the right to pay rent or arrears anytime during the eviction process, requires landlord to accept rent.	Toledo, Ohio	Ordinance O-294-20	Enacting Chapter 1770 of the Toledo Municipal Code, Tenant's Right to Pay to Stay; and declaring an emergency.	Local/Municipal
Eviction diversion	Require courts to stay eviction for a certain period of time if rental assistance is underway	Oregon	Senate Bill 278	Printed pursuant to Senate Interim Rule 213.28 by order of the President of the Senate in conformance with presession filing rules, indicating	State

				neither advocacy nor opposition on the part of the President (at the request of Senate Interim Committee on Human Services)	
Eviction diversion	Require courts to stay eviction for a certain period of time if rental assistance is underway	Oregon	SB 278A	Protects tenants who applied for rent assistance, protects landlords, supports distribution of federal rent assistance	State
Eviction diversion	Require landlords to apply for rental assistance, go through eviction diversion before applying for eviction	Philadelphia Municipal District, Pennsylvania	Amended No. 15 of 2021	Residential Eviction Moratorium and Exceptions. Service of Writs and Alias Writs of Possession	Local/Municipal
Eviction diversion	Mandate landlord participation in free eviction diversion program, automatically enroll landlords receiving emergency assistance.	Philadelphia	210920	Amending Chapter 9-800 of The Philadelphia Code, entitled "Landlord and Tenant," to provide for an eviction diversion program, to make associated changes related to the landlord and tenant relationship, and making certain technical changes, all under certain terms and conditions.	Local/Municipal
Eviction diversion	Requires landlords to apply for emergency financial assistance on behalf of tenants before pursuing eviction	Virginia	House Bill No. 7001		State
Eviction diversion	Require courts to stay eviction for a certain period of time if rental assistance is underway	Spokane, Washington	Notice Regarding City Council Meetings	bridge gaps between existing programs, and to reduce uncertainty for tenants and for landlords as the state implements post-COVID-19 long-term housing recovery strategies.	Local/Municipal

Mandate landlords to share resources	Require landlords to provide links and information about legal-aid before, during renting and on eviction notices	District of Columbia	B24-0096 "the Eviction Record Sealing Authority and Fairness in Renting Amendment Act of 2021"	Requires 30 day notice and information on tenants rights from landlord before proceeding to eviction	State
Mandate landlords to share resources	Require landlords to attach "plain language notice" to all eviction notices, including key information for tenants about eviction resources, how to request mediation and how to access rent relief and legal assistance	Maine	An Act To Prevent Homelessness by Establishing an Eviction Mediation Program	Require landlords to attach "plain language notice" to all eviction notices, including key information for tenants about eviction resources, how to request mediation and how to access rent relief and legal assistance	State
Mandate landlords to share resources	Require landlords to attach "plain language notice" to all eviction notices, including key information for tenants about eviction resources, how to request mediation and how to access rent relief and legal assistance	Texas	Forty-Fourth Emergency Order Regarding The COVID-19 State of Disaster	Require landlords to include information about rental assistance and other supports and to inform tenants of their legal rights. as a part of the eviction notice	State

Mediation	Landlords required to first enter mediation and attempt to secure emergency rental assistance before initiating eviction proceedings	Massachusetts	Housing Mediation Program	The State of Massachusetts has developed a two-tiered eviction process that has integrated the ERA program into eviction proceedings. In the first tier, landlords and tenants work with a mediator who can direct them to ERA resources to cover qualified rental arrears. This state-funded program also engages legal aid services, as well as housing reinstatement services, for those cases where tenants ultimately experience eviction.	
Eviction diversion	Requires landlord to cease eviction proceedings if tenant has applied for emergency rental assistance.	Mississippi	Rental Assistance for Mississippians Program (RAMP)	The State of Mississippi received \$200 million dollars from the U.S. Department of Treasury's Federal Emergency Rental Assistance Program (ERA) to aid individuals who have been monetarily impacted by COVID-19. This funding can be used for rental assistance, rental arrears, as well as utilities and home energy costs including electricity, gas, water and sewer, trash removal, and energy costs, such as fuel oil.	State
Mediation	Requires landlords to participate in mediation sessions requested by tenants as part of the eviction process.	Hawaii	HB1376 HD2 SD2 CD1 Relating to the Landlord-Tenant Code	Extends the required period for a notice of termination of the rental agreement from five days to fifteen days. Requires landlords to provide notice with specified terms and enter into mediation. Delays when a landlord may seek possession of a dwelling unit if the tenant schedules or attempts to schedule mediation. Requires landlords to provide the notice of termination of the rental agreement to a mediation center that offers free mediation for residential landlord-tenant disputes. Restricts when a landlord may exercise these remedies depending	State

on the amount of rent due. Appropriates funds.
Repeals certain provisions one year after expiration of the governor's final eviction moratorium emergency supplementary proclamation related to the coronavirus disease 2019 pandemic or 12/31/2022, whichever is sooner

Mediation	Require landlords to engage in mediation and delay filing an action for summary possession if a tenant schedules or attempts to schedule a mediation;	Hawaii	HB1376 HD2 SD2 CD1 Relating to the Landlord-Tenant Code	The purpose of this Act is to: (1) Extend the period for a notice of termination of the rental agreement from five days to fifteen calendar days; (2) Require landlords to engage in mediation and delay filing an action for summary possession if a tenant schedules or attempts to schedule a mediation; (3) Require landlords to provide specific information in the fifteen-calendar day notice to tenants, which shall also be provided to a mediation center that offers free mediation for residential landlord-tenant disputes; (4) Restrict when a landlord may exercise remedies, depending on the number of days that have elapsed following the expiration of the governor's eviction moratorium and the amount of	State
-----------	---	--------	--	---	-------

rent due; and

(5) Repeal these amendments made to Hawaii's residential landlord-tenant code one year after the expiration of the governor's final eviction moratorium or December 31, 2022, whichever is sooner.

Mediation	Provide access to eviction mediation services provided by volunteer court-certified mediators to help landlords and tenants resolve eviction cases without the need for a trial before the judge. Low income tenants can seek legal consultation with an attorney for free.	Rock Island County, Illinois	Eviction Diversion Program	provides tenants and landlords with the opportunity to resolve eviction cases without the need for a trial before the Judge.	Local/ Municipal
-----------	---	------------------------------	----------------------------	--	---------------------

Mediation	Requires landlords and tenants enter a mediation process before pursuing evictions	Massachusetts	Third amended Housing Court Standing Order 6-20: Continuation of temporary modifications to court operations based on the coronavirus (COVID-19) pandemic and recent legislation affecting summary process cases	Related to housing court cases, such as evictions and the ability to show up virtually to court.	State
Miscellaneous	Turning foreclosed housing into affordable rentals	Milwaukee	City Foreclosure Rental Rehabilitation Program	Encourages landlords to purchase and renovate city-owned tax foreclosed properties	https://city.milwaukee.gov/DCD/CityRealEstate/CityHouses

Miscellaneous	Employment support for those facing evictions	Detroit	Rapid Jobs Program	The Detroit at Work Rapid Jobs program connects residents facing eviction to in-person jobs that are available now.	Municipal/Local
Miscellaneous	Establish municipal code enforcement board / special magistrate with jurisdiction to enforce landlord infractions of tenant support bylaws	Daytona Beach, Florida	Ordinance No. 2021-323	Violation of tenant rights treated as civil infraction in accordance with municipal code enforcement procedures	Municipal/Local
Miscellaneous	Limit late fees if rent is paid within reasonable time	Nevada	AB308	Revises provisions relating to landlords and tenants.	State
Miscellaneous	Establish confidentiality of court records to limit creation of tenant blacklists	New Jersey	Assembly, No. 4463	Establishes confidentiality of court records of certain eviction actions initiated during COVID-19 pandemic.	State
Miscellaneous	Requires landlords to provide financial relocation assistance to tenants who vacate their homes due to rent hikes and qualify for the assistance.	Seattle, Washington	CB 120173	AN ORDINANCE relating to relocation assistance for economically displaced tenants; requiring the payment of economic displacement relocation assistance to households that are vacating a housing unit after receiving notice of a rent increase of ten percent or more or of less than ten percent where the cumulative effect for the household's tenancy is ten percent or more; and adding a new Chapter 22.212 to the Seattle Municipal Code.	Local/Municipal
Miscellaneous	Landlord licencing and requiring good cause before issuing eviction notice	City of Beacon	CHAPTER 173 OF THE CODE OF THE CITY	A LOCAL LAW to amend Chapter 173 of the Code of the City of Beacon concerning rental properties to prohibit eviction without good cause	Local/Municipal

OF
BEACON

Miscellaneous	Right to end lease early under certain circumstances without facing penalties or evictions	Nebraska	LB320 - Change provisions relating to landlords and tenants		State
Rent control	Limit rent increases to certain percentage of consumer price index	Santa Ana, California		Page not found.	
Rent control	Rent control or limits on rent increases during COVID and public health emergencies	Montgomery County, Maryland	Bill 30-21	Expedited Bill 30-21, Landlord-Tenant Relations – Restrictions During Emergencies – Extended Limitations Against Rent Increases and Late Fees	
Rent control	Rent control or limits on rent increases, even if tenants change	Saint Paul	Chapter 193A of the Legislative Code	In order to retain or find adequate rental housing, many residents of the City of Saint Paul pay a substantial amount of their monthly income for Rent; that the present shortage of residential Rental Units and the prevailing Rent levels have a detrimental effect on the health, safety, and welfare of a substantial number of Saint Paul residents, particularly persons in low and moderate income households, and persons on fixed incomes	Local/Municipal

				who reside in the City; that residential Tenants constitute over 50% of the residents in Saint Paul; that residential Tenants suffer great and serious hardship when forced to move from their homes; that the community is impacted by housing instability when rent increases outpace incomes; and that the welfare of all persons who live, work, or own Property in the City of Saint Paul depends in part ensuring that Saint Paul residents have access to affordable housing.	
Rent control	Require minimum notice period before rent hikes	Seattle, Washington	CB 119585	AN ORDINANCE relating to residential rental properties; requiring a minimum of 180 days' prior written notice to tenants whenever the housing costs to be charged a tenant are to increase; and amending Sections 7.24.030, 22.202.080, and 22.206.180 of the Seattle Municipal Code.	Local/Municipal
Right to legal counsel	Provides tenant protections during and after public health emergencies, including right to counsel.	Washington State	SB 5160	Addressing landlord-tenant relations by providing certain tenant protections during and after public health emergencies, providing for legal representation in eviction cases, and authorizing landlord access to state rental assistance programs.	State
Right to legal counsel	Right to counsel for all tenants facing eviction	Seattle, Washington	CB 120007	AN ORDINANCE relating to residential evictions; guaranteeing the right to legal counsel regardless of ability to pay for any residential renter in Seattle responding to an unlawful detainer suit; and adding a new Section 22.206.195 to the Seattle Municipal Code.	Local/Municipal

Right to legal counsel	Provide a universal and codified right to counsel for tenants				
Right to legal counsel	Establish right to free legal counsel for income qualified tenants facing termination of lease	Connecticut	Substitute House Bill No. 6531	An act concerning the right to counsel in eviction proceedings, the validity of inland wetlands permits in relation to certain other land use approvals, and extending the time of expiration of certain land use permits.	State
Right to legal counsel	Allow non-lawyer representations for tenants in eviction proceedings	Delaware	Order adopting Rule 57.1	Tenants can be represented for free by a Qualified Tenant Advocate who is trained and supervised by state legal aid agency.	State
Right to legal counsel	Right to counsel programs for low-income and at-risk households.	Louisville, KY	Ordinance O-132-21	An ordinance creating a new chapter of the Louisville/Jefferson County Metro Government Code of Ordinances ("LMCO") providing for limited legal representation to the indigent in eviction court and amending ordinance no. 073, series 2020 related to the fiscal year 2020-2021 operating budget to appropriate \$400,000 to the office of resilience & community services to fund eviction prevention services authorized herein (amendment by substitution) (as amended)	Municipal/ Local

Right to legal counsel	Mandates that any person at risk of losing their home in eviction court has the right to an attorney.	New Orleans	AMENDMENTS TO ORDINANCE CALENDAR NUMBER 33,682	Amendments to the Right of Counsel Program for tenants concerning evictions.	Municipal/Local
Right to legal counsel	Right to counsel programs for low-income and at-risk households.	Montgomery County, Maryland	Expedited Bill 30-21, Landlord-Tenant Relations – Restrictions During Emergencies – Extended Limitations Against Rent Increases and Late Fees	On April 23, 2020, the County Council enacted Expedited Bill 18-20, the COVID-19 Renter Relief Act, which prohibited landlords from raising rent above certain guidelines during the COVID emergency declared by Governor Hogan, and for a 90-day period after the expiration of the emergency. Expedited Bill 30-21 would extend the prohibition against raising rents above the guidelines until 1 year after the expiration of the emergency. In addition, the bill would prohibit charging fees for late rent payments for 1 year after the expiration of the emergency. As amended by the PHED Committee, the bill would prohibit charging late fees only for those renters who demonstrate economic hardship due to the COVID-19 pandemic. The COVID emergency declared by Governor Hogan expired on August 15, 2021. Therefore, the rent stabilization under the COVID-19 Renter Relief Act	Municipal/Local

is scheduled to expire on November 15, 2021. If Expedited Bill 30-21 were adopted, then the rent stabilization (in addition to late fee relief) would extend until August 15, 2022

Right to legal counsel	Right to counsel programs for all tenants facing eviction.	Baltimore	Ordinance 20-0625	Landlord-Tenant - Right to Counsel in Eviction Cases For the purpose of establishing a mechanism to provide to counsel for individuals in certain matters involving eviction; providing that the Commissioner of the Department of Housing and Community Development oversee the provision of counsel for individuals in certain matters involving eviction in Baltimore City; setting forth certain additional duties of the Commissioner of the Department of Housing and Community Development and the Affordable Housing Trust Fund Commission; providing for an additional member of the Affordable Housing Trust Fund Commission as permitted by the City Charter; defining certain terms; requiring an annual report to the Mayor and City Council regarding certain metrics; providing for the severability of certain provisions; requiring licensed landlords to disclose	Local/Municipal
------------------------	--	-----------	-------------------	---	-----------------

to their tenants certain information regarding the right to counsel in eviction matters.

Right to legal counsel	Right to counsel programs for low-income and at-risk households.	Detroit, Michigan	Ordinance Amending Chapter 22	Guarantees counsel for tenants facing eviction who are at 200% or below of the federal poverty level and covers homeowners at risk of mortgage and property tax foreclosures. Initial funding for legal aid includes \$6 million from the American Rescue Plan Act and \$12 million in private funding over the next 3 years.	Local/Municipal
Right to legal counsel	Right to counsel programs for low-income and at-risk households.	Minneapolis	Amending Title 7 of the Minneapolis Code of Ordinances relating to Civil Rights.	Amendments relating to eviction.	Local/Municipal

Right to legal counsel	Right to counsel programs for all tenants facing eviction.	Kansas City, Missouri	Ordinance 211067	Amending Chapter 35, Code of Ordinance, entitled "Housing" by creating a new Article III, entitled "Tenants' Right to Counsel, " consisting of Sections 35-20-through 35-25; directing the City Manager to identify funding for the Tenant's Right to Counsel Program ("the Program") within 90 days; and directing the City Manager to implement various portions of the Program with varying deadlines, with the goal of increasing tenant access to legal representation in eviction and other proceedings related to rental housing	Local/Municipal
Right to legal counsel	Right to counsel programs for all tenants facing eviction.	NYC		The bill would require the Office of Civil Justice Coordinator to establish programs to provide all tenants facing eviction with access to legal services within five years. Low-income individuals with eviction cases in housing court would have full legal representation, while other tenants would receive brief legal assistance. By October 2017, the Office would also establish and begin implementing a program to provide legal services to all New York City Housing Authority (NYCHA) tenants in administrative proceedings to terminate their tenancy. Each year, the Office would hold annual public hearings and issue reports on the progress and effectiveness of the programs, as well as the amount of funding needed to continue its implementation.	Local/Municipal

Right to legal counsel	Right to counsel for all tenants facing eviction	Toledo, Ohio	Ordinance 418-21	Enacting Chapter 1768 of the Toledo Municipal Code, Tenants' Right to Counsel in Eviction Proceedings; authorizing the appropriation and expenditure of \$250,000 from the unappropriated balance of the General Fund; authorizing the Mayor to enter into an agreement with Legal Aid of Western Ohio; and declaring an emergency.	Local/Municipal
Right to legal counsel	Allow legal representations for tenants in eviction proceedings	Texas			State
Targeted outreach	Targeted outreach for 'at-risk' populations and renters to maintain housing security and stability to prevent evictions	Multiple states (Massachusetts, Kentucky, Tennessee, Philadelphia)	Emergency Rental Assistance Program, Eviction Diversion	<p>Many grantees have found that partnerships with their local court systems and legal services organizations are critical tools for preventing housing insecurity and helping landlords recover from rental arrearages. While court systems and eviction procedures vary across states and localities, these grantees have engaged with local courts, legal aid organizations, and other stakeholders to reach households with the greatest need for assistance—those facing imminent eviction. These partnerships have often included streamlined procedures that reduce the eligibility documentation required from households in these situations.</p> <p>Efforts by ERA grantees are sometimes complementary to broader eviction diversion programs. These efforts play an important function in cases where the landlord had already started</p>	Federal

eviction proceedings. In addition to expediting ERA applications, they often prevent evictions by utilizing the support of legal service professionals and mediators in interventions at the early stages of the court process. ERA grantees have also found court data helpful for informing targeted outreach efforts to landlords and/or high-need geographic areas.

Targeted outreach	Targeted outreach and partnerships with landlord and property management groups to prevent and reduce evictions				
Tenant defence fund	Establish Eviction Prevention Fund permanently funded through a small amount (\$100) fee on real estate transactions	Washington State	House Bill 1277	Providing for an additional revenue source for eviction prevention and housing stability services.	State
Tenant defence fund	Establish a fund to codify and provide legal right to counsel during evictions	Boulder, Colorado	Ordinance No. 8142	Property tax on landlords \$75/year to fund a 'No Eviction without Representation' Tenant Legal Defense Fund	Local/Municipal
Renter opportunity to own	Gives tenants the right to purchase a single-family home where they live when the home is placed on the market for sale	Baltimore	Article 13 Subtitle 6		

Renter opportunity to own	Gives tenants the right to purchase the unit where they live when the unit is placed on sale	Takoma Park	Municipal Code Chapter 6.32
Renter opportunity to own	Gives tenants the right to purchase the unit where they live when the unit is placed on sale, but does not apply to single-family homes (including condos and co-ops)	Washington DC	Tenant Opportunity to Purchase Act
Renter opportunity to own	Gives tenants the right to purchase a single family home where they live when the home is placed on the market for sale.	Baltimore	Article 13 Subtitle 6

Policies in Canadian provinces

The Policies in Canadian provinces worksheet features select policies highlighted in this report and tracks the extent to which they are operational or available in Canadian provinces. This includes tracking provision of legal-aid services for renters, renoviction prevention policy, indoor temperature standards etc.

Province	Yes/No	Notes
Does the province offer legal aid for renters?		
BC	Yes	TRAC's Housing Law Clinic Lawyer can provide free legal advice and/or representation for individual tenants requiring help enforcing Residential Tenancy Act protections or group of tenants filing resolution as a group
AB	No	No dedicated tenant legal representation, but general legal and advice may be available to some low-income tenants from local and general legal aid clinics. (see Link)
SK	No	No dedicated tenant legal representation, but general legal and advice may be available to some low-income tenants from local and general legal aid clinics. (see Link)
MB	Yes	<p>The Advocacy Unit provides a range of legal services to eligible and income-qualified tenants who face housing-related issues such as:</p> <ul style="list-style-type: none"> Eviction Health and/or safety issues with your rental unit Tenant and Landlord claims
ON	Yes	Free legal help for income-qualified tenants that have problem with landlords
QC	No	No dedicated tenant legal representation, but general legal and advice may be available to some low-income tenants from local and general legal aid clinics. (see Link)
PEI	No	Renting PEI is a project of Community Legal Information, funded by the PEI provincial government. We assist tenants and landlords on Prince Edward Island by providing legal information, referrals, as well as support during the rental hearing process. We also deliver workshops on tenants' and landlords' rights and responsibilities. Community Legal Information is a registered charity. We provide free legal information through our phone line, website, e-mail, publications, and outreach efforts. We also provide lawyer referrals for Islanders who need legal advice and would like to connect with a lawyer.

NB	No	No dedicated tenant legal representation, but general legal and advice may be available to some low-income tenants from local and general legal aid clinics. (see Link)
NS	Yes	Nova Scotia Legal Aid provides free legal information, advice and representation on Residential Tenancies issues for tenants. To get start to finish help with your case (full representation) you must be getting income assistance or have an equally low income. Contact Nova Scotia Legal Aid for further information.
NL	Not sure	Legal Aid does not cover all types of legal matters. Once you have been found to qualify financially for Legal Aid, the Client Services Officer will pass your application on to a lawyer who will meet with you and make a decision as to whether your case is of a type covered by Legal Aid.

Does the province have an indoor temperature standard?

BC	Yes	At the outside winter design temperature, required heating facilities shall be capable of maintaining an indoor air temperature of not less than a) 22°C in all living spaces, b) 18°C in unfinished basements, c) deleted, and d) 15°C in heated crawl spaces. BC's residential tenancies act does not specify minimum indoor temperature, leaving it to the municipalities to enforce through bylaws. Here's an example from Victoria with indoor temp 21.
AB	Yes	16 degrees Celcius. The Minimum Housing and Health Standards are enforced by Alberta Health Services, Environmental Public Health. If a tenant thinks the landlord is not meeting health or safety standards, the tenant should inform the landlord, in writing, of the problem. The tenant can request that the landlord take steps to fix the problem. If the landlord does not take those steps, the tenant could contact Health Link at 811 to speak with an inspector

SK	Not sure	Needs clarification, but online forums had people stating that landlord must maintain minimum temperature of 21 degrees Celcius. Emailed Saskatchewan Residential Tenancies about minimum temperature laws, replied with “our legislation does not explicitly state this information. You could contact your local building and health inspectors. A fire marshal may be able to answer this question as well”.
MB	Yes	From 7:00 a.m. until 11:00 p.m., the temperature must be at least 21°C (70°F). From 11:00 p.m. until 7:00 a.m., the temperature can’t be lower than 18.3°C (65°F). If a tenant believes that the landlord is not meeting the requirement, they should contact their local Environmental Health Office.
ON	Yes	The exact definition of heat in Ontario as a “vital service” requirement is: heating from September 1 to June 15; and in most cases, maintaining a minimum temperature of 20 degrees Celsius (as set out in Section 4 of O. Reg. 516/06). If the temperature is below the legal minimum, you should advise the landlord in writing of the results of your investigation reminding the landlord that the heat must be set at the lawful level. If the problem continues, you should contact your local government and ask for an inspection. In many cities, you just call 311 to do that. If you report a heat issue to the City, the City will contact your landlord and give them an opportunity to raise the heat for the inspection. You might also consider applying for an abatement of rent at the Landlord and Tenant Board. (see https://www.acto.ca/6-questions-renters-ask-about-heat/)

QC	Mixed	<p><u>There is no minimum temperature in the law. Nevertheless, the Tribunal administratif du logement (TAL, formerly Régie du logement or rental board) says that it is generally accepted that the temperature cannot fall below a certain level – around 21 degrees Celsius – in normal weather conditions. If the landlord is responsible for heating the apartment, the tenant can do these things:</u></p> <p><u>Inform the landlord that there is not enough heat (verbally or in writing).</u></p> <p><u>Give the landlord a reasonable amount of time to fix the situation.</u></p> <p><u>If nothing is done, send the landlord a demand letter.</u></p> <p><u>If the landlord still fails to fix the situation, the tenant can file a complaint with the TAL (see here: https://educaloi.qc.ca/en/capsules/heating-and-rental-housing/)</u></p>
PEI	Mixed	<p><u>If your heat is provided in your rental agreement, you have the right to have a temperature of at least 65 F (around 18.3 C). If you pay for your own heat (separate from your rent) but use your landlord's heating equipment (for example, a furnace), your landlord must ensure that it is in working condition. If your landlord does not address your concern in a reasonable amount of time, you can contact Environmental Health and request an environmental health inspection. Use the online reporting tool to request an inspection.</u></p>

NB	Yes	<u>Every dwelling shall be provided with a heating system capable of maintaining a room temperature of twenty-one degrees Celsius at 1.5 metres above floor level in all habitable rooms, bathrooms and toilet rooms when the temperature outside the dwelling is -30 degrees Celsius. Where the temperature in a dwelling or dwelling unit is not controlled by the occupants thereof, such dwelling or dwelling unit shall be heated to twenty-one degrees Celsius during the hours between seven o'clock in the morning and eleven o'clock in the afternoon. the temperature required thereby applies only during the hours specified and such temperature may be reduced and maintained at eighteen degrees Celsius during all other hours. Where a landlord on whom a notice under subsection (1) is served fails to comply with his obligations within the time prescribed by regulation the tenant may so advise a residential tenancies officer by notice in writing, dated and signed by the tenant, and shall include a copy of the notice served on the landlord under subsection (1)</u>
NS	Yes	<u>Landlords aren't allowed to turn off the heat to a unit, even if tenants owe rent or there is a dispute. If tenants are responsible for heating the unit, tenants need to keep it warm enough to prevent damage. The temperature on the premises should be 20C° to 22C°. But bylaws for heating in Nova Scotia are usually set and dealt with by municipalities. fastest way for tenants in Halifax to initiate a customer service request is to call 311, but people can also go to a contact centre a register a formal complaint. From there, the file is sent to a building official, who contacts the complainant to set up an inspection. Some tenants also go through province's residential tenancies department with Service Nova Scotia.</u>
NL	Not sure	<u>Could not find minimum temperature. Every dwelling shall be provided with a heating system capable of maintaining a room temperature of not less than 20C (St. Johns bylaw)</u>

Can landlords raise rent after a renovation?

BC Yes, but with conditions [Landlords can only increase the rent once in a 12 month period by an amount permitted by law or an additional amount approved in advance by an arbitrator – they need to use the right form and give the tenant three full months' notice of the rent increase. Rent Increases - Province of British Columbia \(gov.bc.ca\)](#) A landlord may apply for an additional rent increase if they have incurred eligible capital expenditures or expenses to the residential property in which the rental unit is located. The Residential Tenancy Regulation will allow landlords to apply for additional rent increases when they have completed necessary repairs to the rental unit or building. These provisions encourage landlords to invest in their rental properties by allowing them to recover some of those costs through modest rent increase approved by the Residential Tenancy

AB Yes [There is no limit on how much a landlord can increase rent, but a landlord can only increase the rent after a year has passed from either the start of the tenancy or when the last rent increase was made](#)

SK Mixed [Fixed Term Tenancies: No increases are allowed during a fixed-term lease unless the landlord and the tenant agree to the amount of the increase and when an increase is to come into effect at the time they enter into the fixed term tenancy. Landlords must inform the tenant at least two months before the end of the tenancy, whether or not they are willing to renew the lease. If a landlord is willing to renew a term lease, the notice must include the proposed terms of renewal, including any change in rent.](#)

MB Yes [Your landlord can usually increase your rent only once every 12 months. You must be given three months prior written notice of a proposed rent increase. Residential Tenancies Branch | Province of Manitoba \(gov.mb.ca\)](#)

ON

Mixed

[Ontario is a rent-controlled province for the most part, with a few exceptions. This means that a landlord can only increase your rent by a limited amount each year. Newer buildings are not rent controlled and landlords do not need to follow the same guidelines. Can increase by a limited percentage. How often can a landlord increase the rent? \(settlement.org\) Landlord must give 90 days written notice before they increase rent. Yes. Your landlord can apply to the Landlord and Tenant Board for an "Above Guideline Rent Increase" if certain repairs, renovations, and/or replacements are made by the landlord. For more information about "Above Guideline Rent Increases," see here \(Rent increases - CLEO \(Community Legal Education Ontario / Éducation juridique communautaire Ontario\)\). What you need to know about Ontario's rent control changes: Reasonable Doubt - NOW Magazine \(nowtoronto.com\)](#)

QC

Mixed

[The lessor must give the lessee 10 days' notice prior to the start of work, so long as the lessee does not need to vacate the premises or does not need to do so for more than a week. If the dwelling must be vacated for more than a week, at least three months' notice is required. The lessor cannot raise the rent on the dwelling during the term of the lease because of major work they have done. However, they may do so at the end of the lease, provided notice is given in accordance with the law. The lessor also cannot change any other conditions in the lease during the term of the lease. For example, if the lessor has always assumed the heating costs for the dwelling, the lessor must continue to assume the heating costs until the lease ends, even if the repairs involved replacing the oil furnace that used to heat the entire building with a new system that heats the dwelling individually. Once the work is completed, the lessor must return the dwelling to the lessee in clean condition.](#)

PEI Yes, but with conditions [PEI has rent control laws. Landlords can only increase rent once a year, and must provide 3 months' written notice to the tenant. Landlords must give a tenant notice of a rent increase on an approved form Form 10 – Notice of Rent Increase. Rent increases are attached to the unit, not the tenants.](#)

NB Not sure [Don't think renovictions are possible in NB, due to this news article. N.B. landlords openly discussed ways around rent caps in video posted to YouTube | CBC News A landlord can increase rent as long as the tenant is given the proper amount of notice in writing. Written notice 6 months before rent increase will start. Rent increases \(gnb.ca\)](#)

NS No [Any new or extra costs for services originally included in the lease \(like parking\) or removing services originally included in the lease \(like electricity no longer being included in the rent\) are also considered a rent increase and must be within the 2% rent cap](#)

NL Yes [A landlord may not increase the rent more than once in a 12 month period or during the 12 months immediately following the start of a rental agreement. However, if the rent increase is due to the landlord providing additional services or privileges that were not provided in the original agreement, the landlord may increase the rent more than once in a 12 month period, without notice to the tenant, if the landlord has written agreement of the rental increase from the tenant. There is no restriction on the amount of rental increase a landlord may implement.](#)

Can landlords and tenants resolve differences through mediation without going to court or tribunal?

BC No [If landlords and tenants cannot resolve disputes on their own, the next step is going straight to arbitration](#)

AB No [The Residential Tenancy Dispute Resolution Service offers landlords and tenants an alternative means of resolving serious disputes outside of court. This service is designed to be faster, more informal, and less expensive than the courts, but landlords and tenants will still have to gather evidence and have their case heard and adjudicated.](#)

SK	No	If landlords and tenants cannot resolve disputes on their own, the next step is going straight to arbitration
MB	Yes	Mediation is a confidential process to help landlords and tenants discuss problems, think of possible solutions and reach their own agreements. Mediation can take place in meetings, conference calls or separate telephone conversations.
ON	Yes	During mediation, a neutral person talks with the landlord and the tenant to help them reach an agreement that is acceptable to both sides. Mediation is voluntary; no one has to participate. Both the landlord and the tenant must agree to mediate for mediation to take place.
QC	Yes	The Tribunal administratif du logement has a conciliation service. This is a simple, fast, voluntary and confidential service that allows you to meet with the other party with a conciliator present, so you can try to find a solution to your dispute
PEI	No	-
NB	yes	The goal of mediation is to resolve the disagreement as quickly as possible without having the Residential Tenancies Officer decide for you
NS	Yes	Mediation is a confidential process where the Residential Tenancy Officer acts as a neutral third party to help tenants and landlords come to an agreement with each other. Mediated solutions are usually preferable because both sides can potentially achieve their goals without having a hearing.
NL	Yes	Mediation involves the use of an independent, neutral, and respected person by to parties in a dispute to reach agreement on how the issue will be settled.

Can landlords evict tenants to undertake renovations in the unit?

BC	Yes, under conditions	<u>Effective July 1, 2021, under new legislation, if a landlord wants to end a tenancy for extensive renovations or repairs, they need to apply for an Order of Possession from the Residential Tenancy Branch. There will be a dispute resolution proceeding where an arbitrator will decide if ending the tenancy is the only way to complete this work. Any notice received on or after July 1, 2021 is invalid and the landlord must end the tenancy under the new process by applying to the Residential Tenancy Branch</u>
AB	Yes, under conditions	<u>If the landlord wishes to do major renovations on the property that require the building to be empty (this does not include things like painting or regular maintenance), they must give the tenant one year's notice to terminate a periodic tenancy agreement</u>
SK	Not sure	-
MB	Yes	<u>Tenants have right of first return to the unit once renovations are complete. The province calculates the length of notice a landlord has to give before terminating a tenant's lease based on the vacancy rate. For fixed-term leases in Winnipeg, the length of notice is currently four months from the end of the lease. If a tenant has children who go to school nearby, they can stay until the end of the school year.</u>
ON	Yes	<u>A landlord may also apply to terminate a tenancy on the basis that the landlord: (1) will demolish the rental unit; (2) needs vacant possession to do extensive repairs or renovations; or (3) intends to convert the rental unit to non-residential use</u>

QC	No	<u>Illegal to evict tenant simply to renovate. Unless it is necessary for a tenant to leave during repairs, they can remain in their apartment while the work is being done. In cases where it is necessary for the tenant to leave for a few days, the tenant has the right to go back home when the work is done. Tenant does not have to pay rent for the time it takes to make the major upgrades and landlord has to pay for the place the tenant is temporarily staying in. Tenants may be evicted only in exceptional circumstances when the landlords is demolishing the unit, substantially enlarging te unit or changing the use of the unit (to an office, for example)</u>
PEI	Yes	<u>Tenants who receive a notice of eviction for major repairs or renovations have the right of first refusal. This means that once renovations are done, a landlord must offer the rental unit to the original tenant if the tenant chooses to exercise their right of first refusal.</u>
NB	Yes	<u>Based on The Residential Tenancies Act in New Brunswick, the landlord can terminate a lease agreement with a tenant under limited circumstances including if, "the premises will be renovated to such an extent that vacant possession is necessary to perform the renovation."</u>
NS	Yes, under conditions	<u>Landlords must reach agreement with tenant regarding ending lease for renovations, landlord must provide sufficient advance notice and give tenants sufficient compensation</u>
NL	Yes	<u>Landlord may evict tenants to make repairs or renovations to the residential premises so extensive that the residential premises is required to be vacant, but need to provide at least 6 month notice which may be ammended by tribunal in case of "undue hardship" experienced by landlord or tenant</u>

Affordability covenants in the US

Finally, Affordability covenants in the US spreadsheet lists the binding covenants places on landlords in the US participating in the federal low-income program (Weatherization Assistance Program). The workbook lists how affordability covenants vary across states, and how they ensure benefits of federal investments in rental energy efficiency are shared with tenants through affordable rents, eviction moratoriums and housing stability requirements.

US State	Rent Increase restrictions	Eviction Restrictions	Restrictions on property sale	Tenant notification	Enforcement	Landlord financial contributions required?
Alabama	Unknown time period but rental increase is not allowed unless it is proven that it does not relate to weatherization	Unclear	Unclear	N/A	Unclear	No rented unit will be weatherized without at least 25% financial participation from building owners.
Alaska	18 mos. with exception if “demonstrably related” to matters other than WAP work Provides a limiting definition for matters justifying increases	18 mos.	LL obligations “run with the landnotice. and LL must give any buyer official notice.	Tenants must sign WAP agreement	tenants = 3d party beneficiaries of WAP agreement Tenants advised to contact AK Legal Services for assistance	Grantees are required to solicit an owner contribution for rental dwelling units to be weatherized. All rentals units are subject to the contribution requirements. WAP will provide free upgrades upto a certain \$\$ amount, then match dollar for dollar any owner contribution upto an additional amount. (amounts vary based on type

of unit, single detached or MURB)

[Arizona](#)

One year

One year

Covenants bind landlord and successors to terms

N/A

Each sub-grantee is to have a grievance process in place if any client is denied services, rent is increased due to the improvements on a weatherized rental property within the first 12 months after completion of the weatherization or other concerns or issues about

N/A

WAP. The process must be given to the client in writing, at the time of intake.

Arkansas	One year	N/A	N/A	N/A	In the event of a dispute between the tenant and property owner regarding a rent increase, the subgrantee will attempt to resolve the dispute; if that fails, the tenant will be referred to legal aid by the subgrantee	Does not require landlord contributions for single-family units, encourages or requires landlord contribution for MURBs for projects that do not meet cost-effectiveness tests of 1.0
--------------------------	----------	-----	-----	-----	--	---

California	24 mos. if based "solely" on WAP work Gives examples of "allowable factors" for rent increases Rent schedule required	None	60 days	LL must provide copy of WAP agreement to tenants.	Tenant complaint to WAP agency, with an option for a "fair hearing" at the state level.	owners and renters receive equitable treatment under this program, as long as no "undue enhancements" to the dwelling occur. Landlord contributions may vary by subgrantee.
Colorado	Permanent if due to increased value "due solely to weatherization"	None	Not currently for sale	Tenants must sign WAP agreement and receive a copy	Tenant complaint to WAP agency then referral out to legal aid	N/A
Connecticut	24 mos. with exception if LL can demonstrate increase is unrelated to WAP work Successor tenant protection	Permanent. LL has burden to demonstrate eviction is unrelated to WAP work	6 mos	tenants must sign WAP agreement and receive a copy	tenant complaint to WAP agency and possible referral to legal aid Penalty for invalid eviction or rent increase = repay WAP funding and possible court action	N/A

Delaware	Unclear	Unclear	Unclear	Unclear	Contact the Energy Coordinating Agency	N/A
Florida	12 mos. with exception if “demonstrably related” to matters other than WAP work	12 mos.	12 mos. unless buyer agrees to assume LL obligations or LL repays WAP funding (pro-rated) LL must give 30-day notice to WAP agency	Agency “shall provide” copy of WAP agreement to tenants	Tenant complaint to WAP agency WAP agreement says “tenants, present and future...may enforce this agreement” Penalty for default by LL = repay WAP funding for affected unit(s)	N/A
Georgia	2 years from the time the work is completed	Unclear	Unclear	Unclear	Can contact the WAP Agency	Landlord contributes financially

[Hawaii](#)

Cannot increase rent,
time not specified

Cannot evict
tenant except
under good,
specific reasons

Unclear

Unclear

Can contact
local WAP
agency

N/A

[Idaho](#)

12 mos. for any
reason Permanent if
related to WAP work

Unclear - 12 mos.
or permanent.

12 mos. unless
LL
repays WAP
funding

Tenants
must sign
WAP
agreement
and receive
a copy

Tenant
complaint to
WAP agency

N/A

[Illinois](#)

12 mos

12 months

12 months
unless buyer
agrees to
assume LL
obligations

WAP agency
must
provide
copies of
WAP
agreement
to tenants

Tenant
complaints
referred to
specified legal
aid agency

N/A

Indiana	12 mos. with exception if not related to WAP work	Unclear – WAP manual says agencies “must ensure protection of the lowincome household from improper eviction”	Unclear – WAP manual says agencies “must ensure protection of the low-income household from...improper sale of property”	Unclear	Tenant complaint to WAP agency
Iowa	12 months	Cannot evict without a clear cause	Unclear	Unclear	Can contact the Iowa Department of Human Rights
Kansas	12 mos. with exception if not because of WAP work	Permanent if eviction related to WAP work	Varies by agency (non-12 mos) no liens permitted	Tenants "shall be provided" with copy of WAP agreement	Referral to legal aid or state LL-T mediation services
Kentucky	18 mos. with exception if owner can demonstrate unrelated to WAP work	None	18 mos. unless buyer agrees to assume LL obligations or LL repays WAP funding	Agency provides copy of WAP agreement to tenants	Tenants are "intended beneficiaries" of WAP agreement with the right of enforcement

Louisiana	Unclear	Unclear	Unclear	Unclear	Unclear
Maine Maine	No rent increases allowed	No Evictions allowed	In the event the Landlord sells the Property within one (1) year of the completion of the WAP and/or CHIP improvements, the Landlord agrees to pay the Agency an amount equal to the cost of the WAP and CHIP improvements made to the Property as of the date of sale.	Unclear	Contact WAP Agency

Maryland	Unclear	Unclear	Unclear	Unclear	Local Weatherization Agency
Massachusetts	12 mos. for any reason with exception for rental under a state or federal subsidy program Additional restrictions when heat is included in rent Permanent if related to any increase in the value of the property "due solely to" WAP work	12 mos. Additional restrictions when heat is included in rent	12 mos. unless buyer agrees to assume LL obligations or LL repays WAP funding	Tenants sign WAP agreement	Terms of WAP agreement incorporated into leases or rental agreements and supersede any conflicting provisions unless those provisions provide greater protection Tenants may recover damages, attorney fees and court costs

[Michigan](#)

Landlord agree for 2 years - not to raise rent, not to evict (with some exceptions) and not to sell the property. If sold, weatherization cost has to be repaid. If renters don't pay utilities, then landlord agreements lasts 7 years and landlord must demonstrate other benefits (improved safety, comfort) accrue to tenants. If landlord violates any terms of agreement, tenant as beneficiaries of this agreement can assert any direct claims against The Owner in any action or special proceeding in any court of appropriate jurisdiction.

12 mos.

24 mos. unless buyer agrees to assume LL obligations or LL repays WAP funding (pro-rated) LL must give 30-day notice to WAP agency

Tenants sign a synopsis of WAP agreement terms Agency must provide tenants copy of WAP agreement upon request

Terms of WAP agreement incorporated into leases or rental agreements and supersede any conflicting provisions Tenants are 3d party beneficiaries of WAP agreement with a private right of action and may use the WAP agreement in court

[Minnesota](#)

No rent increases unless it is not related to WAP work

Unclear

Unclear

Unclear

Unclear

Landlord will contribute in certain situations

[Mississippi](#)

The allowable exceptions to the prohibition of the two (2) year rent increase include increases due to higher property taxes, insurance premiums, necessary replacement (or extensive repairs) to appliances, plumbing, or wiring. These allowable costs must be spread over the period of one (1) year.

A condition of the agreement includes the agreement not to raise the tenant's rent for two (2) years (some exceptions apply) beginning on the date of the weatherization projection completion (that 26 is the approved post inspection date). Additionally, the owner cannot evict the tenant without cause during that period. Should the owner chose to violate the agreement, he or she may be billed for the pro-rated share of cost of

The owner agrees that the dwelling is not presently being offered for sale and agrees to give the subgrantee agency thirty (30) days' notice of the sale should the property be offered for sale prior to the expiration of the rental agreement. At least ten (10) days prior to the sale, the owner agrees to obtain a notarized statement of the purchaser's consent to assume the rental

Unclear

Unclear

Landlord participation is encouraged but not mandatory. Participation maybe provided through donated materials, monetary assistance or a combination of the two.

the
weatherization
project.

agreement
obligation. If
this consent is
not obtained,
the owner
agrees to pay
the full cost of
the
weatherization
project based
on the pro-
rated number
of months
remaining in
the rental
agreement.
Should the
property be
transferred via
a will or heir
ship, the same
obligations
would be
placed on the
new owners

[Missouri](#)

Rent cannot be increased without just cause for two years

Tenant cannot be evicted for two years, except on lease violations

Owner shall not sell premises unless the Buyer agrees to assume all obligations contained in this agreement.

Unclear

Unclear

If the property is a Multi-Family Complex (more than 5 units per building), I agree to provide a minimum of a twenty-five percent (25%) cash contribution of estimated labor and material project costs before weatherization work can begin on the unit(s).

[Montana](#)

60 months with exception if increase "reflects" matters other than WAP work
Successor tenants protected

Evictions permitted "except in accordance with Montana law"

None

None specified

Tenants are third party beneficiaries of WAP agreement with right of enforcement

[Nebraska](#)

Cannot increase the rent as a result of the improvements made by the weatherization of the home

Cannot evict or remove the tenant from the dwelling for a period of one (1) year after the final approved inspection of the property, so as long as he/she complies with all ongoing obligations and responsibilities owed to the landlord

N/A

N/A

N/A

N/A

[Nevada](#)

12 mos. if increase is because of increase to value from WAP work, but "normal rent adjustments" permitted

12 mos. if eviction is to evade WAP rent increase restriction

12 mos. if sale is intended to evade WAP rent increase restriction

None specified

Tenant complaint to WAP agency
Penalty for LL violation of WAP agreement=
repayment of WAP funding

[New Hampshire](#)

for one year from the completion of the weatherization work the rent will not be raised based on the improvements made by that work.

N/A

N/A

N/A

N/A

N/A

[New Jersey](#)

The Owner agrees that rent shall not be raised because of the increased value of dwelling units due solely to weatherization assistance provided under this program.

The Owner agrees not to evict or remove the tenant from the weatherized dwelling unit as long as the Tenant is in compliance with all ongoing obligations and responsibilities.

N/A

N/A

N/A

N/A

[New Mexico](#)

12 mos. with exception for matters unrelated to WAP work

None

12 mos.

None specified

Tenant complaint to WAP agency

New York	Permanent if because of WAP work with exception for standard increases permitted under applicable rentcontrol or stabilization ordinances	24 mos. if tenants pay for heat directly 60 mos. if heat incl. in rent	24 mos. if tenants pay for heat directly/60 mos. if heat incl. in rent – unless buyer agrees to assume LL obligations or LL repays WAP funding	WAP agency must provide mandatory synopsis of WAP agreement terms to tenants	Tenants have private right of action for rent increase in violation of WAP agreement WAP agreement supersedes conflicting provisions in LL-T agreements	
North Carolina	negotiable period of not less than two years for raising tenants rent due to weatherization	not evicting the tenant if they comply with all ongoing obligations to the owner	N/A	N/A	N/A	N/A
North Dakota	12 mos. with exception if unrelated to WAP work	12 months	12 months	Tenants sign WAP agreement	Tenant complaint to WAP agency	

Ohio	Permanent with exception if unrelated to WAP work	12 months	Covenants run with the land and can be recorded; restrictions differ among agencies	Tenants sign WAP agreement and receive synopsis of WAP terms	Terms of WAP agreement incorporated into lease
Oklahoma	N/A	N/A	N/A	N/A	N/A
Oregon	Varies (24/12 mos.) with exception if unrelated to WAP work LL must reduce rent for tenants who pay for energy use as part of rent payments or show specific health and safety benefit received	Varies (none/12 mos)	Varies (24/12 mos.) unless buyer assumes LL obligations or repays WAP funding Use of liens encouraged but not required by state	Varies – some agencies requires tenants to sign WAP agreement, others don't	Tenant complaint to WAP agency
Pennsylvania	18 mos. with exception if demonstrably related to matters other than WAP work	18 mos	None	Tenants sign WAP agreement	Tenant complaint to WAP agency WAP agencies required to

					track complaints
Rhode Island	The agreement protects against rent increases and evictions for a minimum of two years (with exceptions) after weatherization work has been completed.	The agreement protects against rent increases and evictions for a minimum of two years (with exceptions) after weatherization work has been completed.	N/A	N/A	N/A
South Carolina	Rent will not increase due to the improvements made by the weatherization work for a period of at least one (1) year	N/A	N/A	N/A	N/A

[South Dakota](#)

Unclear

Unclear

Unclear

Unclear

Unclear

Contribution required

[Tennessee](#)

Once services have been provided, the building owner may not increase the current rent charged per unit within the building for a minimum of three (3) years

Unclear

Unclear

Unclear

Unclear

Not required to contribute

[Texas](#)

24 mos. with exception if unrelated to WAP work

24 mos

24 mos. unless buyer assumes LL obligations or LL repays WAP funding (pro-rated); Notice to WAP agency required

Tenants receive copy of WAP agreement

Tenant complaint to WAP agency
Penalty for LL default = prorated repayment of WAP funds

WAP
agreement
allows for lien

Utah	6 mos. with exception if unrelated to WAP work	12 mos. Detailed notice procedures and binding arbitration for eviction disputes	12 mos	Tenants receive copy of WAP agreement	WAP agreement is for the "primary benefit of the Lessee" Penalty for LL default = repayment of WAP funds
Vermont	Unclear	Unclear	Unclear	Unclear	Unclear

Virginia	The property owner must also agree that no rental increase may occur for two (2) years unless the increase is not related to weatherization services performed	Unclear	Unclear	Unclear	Unclear	Landlord will contribute
Washington	Permanent: "Weatherization improvements cannot be used to justify any rent increase."	None	12 mos. unless obtains buyer agreement to LL obligations or repays WAP funding (prorated)	Tenant must receive mandatory WAP fact sheet	Private right of action with damages and attorney fees	
West Virginia	Rent increase not allowed for two years	None	Unclear	Unclear	Unclear	
Wisconsin	12 mos. with exception if unrelated to WAP work	None	None	Optional fact sheet/notice for tenants	Tenant complaint to WAP agency	

[Wyoming](#)

12 mos. with
exception if unrelated
to WAP work

Permanent if
related to WAP
work

12 mos.

Unclear

Tenant
complaint to
WAP agency

References

- ACEEE. 2020. "Mandatory Building Performance Standards: A Key Policy for Achieving." <https://www.aceee.org/white-paper/2020/06/mandatory-building-performance-standards-key-policy-achieving-climate-goals>.
- . 2023. "Energy Equity for Renters Policy Tracker." 2023. <https://www.aceee.org/energy-equity-renters-policy-map>.
- Allcott, Hunt, and Michael Greenstone. 2012. "Is There an Energy Efficiency Gap?" *Journal of Economic Perspectives* 26 (1): 3–28. <https://doi.org/10.1257/jep.26.1.3>.
- Anderson, Megan, Mark LeBel, and Max Dupuy. 2021. "Under Pressure: Gas Utility Regulation for a Time of Transition - Regulatory Assistance Project." <https://www.raonline.org/knowledge-center/under-pressure-gas-utility-regulation-for-a-time-of-transition/>.
- Anderson, Will, Vicki White, and Andrea Finney. 2012. "Coping with Low Incomes and Cold Homes." *Energy Policy*, Special Section: Fuel Poverty Comes of Age: Commemorating 21 Years of Research and Policy, 49 (October): 40–52. <https://doi.org/10.1016/j.enpol.2012.01.002>.
- Aydin, Erdal, Nils Kok, and Dirk Brounen. 2017. "Energy Efficiency and Household Behavior: The Rebound Effect in the Residential Sector." *The RAND Journal of Economics* 48 (3): 749–82. <https://doi.org/10.1111/1756-2171.12190>.
- Baeten, Guy, Sara Westin, Emil Pull, and Irene Molina. 2017. "Pressure and Violence: Housing Renovation and Displacement in Sweden." *Environment and Planning A: Economy and Space* 49 (3): 631–51. <https://doi.org/10.1177/0308518X16676271>.
- Becker, Harold S. 1983. "Scenarios: A Tool of Growing Importance to Policy Analysts in Government and Industry." *Technological Forecasting and Social Change* 23 (2): 95–120. [https://doi.org/10.1016/0040-1625\(83\)90049-5](https://doi.org/10.1016/0040-1625(83)90049-5).
- Berry, Stephen, and Kathryn Davidson. 2016. "Improving the Economics of Building Energy Code Change: A Review of the Inputs and Assumptions of Economic Models." *Renewable and Sustainable Energy Reviews* 58 (May): 157–66. <https://doi.org/10.1016/j.rser.2015.12.220>.

- Better Buildings, DOE. 2021. "Issue Brief: Low-Income Energy Efficiency Financing through On-Bill Tariff Programs." Clean Energy for Local Communities Accelerator.
https://betterbuildingssolutioncenter.energy.gov/sites/default/files/IB%20LI%20EE%20Financing%20through%20On-Bill%20Tariffs_Final_0.pdf.
- Bird, Stephen, and Diana Hernández. 2012. "Policy Options for the Split Incentive: Increasing Energy Efficiency for Low-Income Renters." *Energy Policy* 48 (September): 506–14. <https://doi.org/10.1016/j.enpol.2012.05.053>.
- Boemi, Sofia-Natalia, and Agis M. Papadopoulos. 2019. "Energy Poverty and Energy Efficiency Improvements: A Longitudinal Approach of the Hellenic Households." *Energy and Buildings* 197 (August): 242–50.
<https://doi.org/10.1016/j.enbuild.2019.05.027>.
- Bouzarovski, Stefan, Jan Frankowski, and Sergio Tirado Herrero. 2018. "Low-Carbon Gentrification: When Climate Change Encounters Residential Displacement." *International Journal of Urban and Regional Research* 42 (5): 845–63.
<https://doi.org/10.1111/1468-2427.12634>.
- Bouzarovski, Stefan, and Neil Simcock. 2017. "Spatializing Energy Justice." *Energy Policy* 107 (August): 640–48.
<https://doi.org/10.1016/j.enpol.2017.03.064>.
- Camprubí, Lluís, Davide Malmusi, Roshanak Mehdipanah, Laia Palència, Agnes Molnar, Carles Muntaner, and Carme Borrell. 2016. "Façade Insulation Retrofitting Policy Implementation Process and Its Effects on Health Equity Determinants: A Realist Review." *Energy Policy* 91 (April): 304–14. <https://doi.org/10.1016/j.enpol.2016.01.016>.
- Carley, Sanya, Caroline Engle, and David M. Konisky. 2021. "An Analysis of Energy Justice Programs across the United States." *Energy Policy* 152 (May): 112219. <https://doi.org/10.1016/j.enpol.2021.112219>.
- Carroll, James, Claudia Aravena, and Eleanor Denny. 2016. "Low Energy Efficiency in Rental Properties: Asymmetric Information or Low Willingness-to-Pay?" *Energy Policy* 96 (C): 617–29.
- Chahal, Sharon, Will Swan, and Philip Brown. 2012. "Tenant Perceptions and Experiences of Retrofit." In *Proceedings of Retrofit 2012 Conference, University of Salford, Salford*, 24–26.
- CMHC. 2020. "Evictions and Eviction Prevention in Canada."

- . 2021. "Evictions: New Typologies and Analysis for the Canadian Landscape." 2021. <https://www.cmhc-schl.gc.ca/en/professionals/housing-markets-data-and-research/housing-research/research-reports/housing-needs/research-insight-evictions-new-typologies-analysis-canada>.
- Collins, Matthew, and John A. Curtis. 2017. "Identification of the Information Gap in Residential Energy Efficiency: How Information Asymmetry Can Be Mitigated to Induce Energy Efficiency Renovations." Working Paper 558. ESRI Working Paper. <https://www.econstor.eu/handle/10419/174291>.
- Cooper. 2019. "Section 1 - Defining Energy Justice: Connections to Environmental Justice, Climate Justice, and the Just Transition." *Initiative for Energy Justice* (blog). December 23, 2019. <https://iejusa.org/section-1-defining-energy-justice/>.
- Dong, Kangyin, Yue Dou, and Qingzhe Jiang. 2022. "Income Inequality, Energy Poverty, and Energy Efficiency: Who Cause Who and How?" *Technological Forecasting and Social Change* 179 (June): 121622. <https://doi.org/10.1016/j.techfore.2022.121622>.
- Du, Qiang, Xiao Han, Yi Li, Zhe Li, Bo Xia, and Xiqian Guo. 2021. "The Energy Rebound Effect of Residential Buildings: Evidence from Urban and Rural Areas in China." *Energy Policy* 153 (June): 112235. <https://doi.org/10.1016/j.enpol.2021.112235>.
- Edmondson, Duncan L., Florian Kern, and Karoline S. Rogge. 2019. "The Co-Evolution of Policy Mixes and Socio-Technical Systems: Towards a Conceptual Framework of Policy Mix Feedback in Sustainability Transitions." *Research Policy*, Policy mixes for sustainability transitions: New approaches and insights through bridging innovation and policy studies, 48 (10): 103555. <https://doi.org/10.1016/j.respol.2018.03.010>.
- Efficiency Canada. 2023. "Canada's Energy Efficiency Policy Database." <https://database.energycanada.org/>.
- ENPOR. 2023. "The Energy Poverty Dashboard (EPD) • ENPOR." *ENPOR* (blog). 2023. <https://www.enpor.eu/energy-poverty-dashboard/>.
- EPAH. 2022. "Energy Poverty Policies in the EU." 2022. https://energy-poverty.ec.europa.eu/discover/policies_en.

- Eviction Lab. 2020. "COVID-19 and Changing Eviction Policies Around the Nation." Eviction Lab. 2020. <https://evictionlab.org/covid-eviction-policies/>.
- Femenías, P., A. Knutsson, and L. Jonsdotter. 2020. "What Does Energy Mean for People? Perspectives on Renovation and Energy Retrofit among Swedish Tenants." *IOP Conference Series: Earth and Environmental Science* 588 (5): 052066. <https://doi.org/10.1088/1755-1315/588/5/052066>.
- Gabbe, C. J., Evan Mallen, and Alexander Varni. 2022. "Housing and Urban Heat: Assessing Risk Disparities." *Housing Policy Debate* 0 (0): 1–19. <https://doi.org/10.1080/10511482.2022.2093938>.
- Gee, Patricia, and Lucrezia Chiappetta. 2013. "Engaging Residents in Multifamily Building Retrofits." In *Retrofitting the Built Environment*, 155–69. John Wiley & Sons, Ltd. <https://doi.org/10.1002/9781118273463.ch12>.
- Gerarden, Todd, Richard G. Newell, and Robert N. Stavins. 2015. "Deconstructing the Energy-Efficiency Gap: Conceptual Frameworks and Evidence." *American Economic Review* 105 (5): 183–86. <https://doi.org/10.1257/aer.p20151012>.
- Gillard, Ross, Carolyn Snell, and Mark Bevan. 2017. "Advancing an Energy Justice Perspective of Fuel Poverty: Household Vulnerability and Domestic Retrofit Policy in the United Kingdom." *Energy Research & Social Science* 29 (July): 53–61. <https://doi.org/10.1016/j.erss.2017.05.012>.
- Gillingham, Kenneth, and Karen Palmer. 2014. "Bridging the Energy Efficiency Gap: Policy Insights from Economic Theory and Empirical Evidence." *Review of Environmental Economics and Policy* 8 (1): 18–38. <https://doi.org/10.1093/reep/ret021>.
- Glenn, Jerome C. 2009. "Scenarios." In *Futures Research Methodology*, edited by Jerome C. Glenn and Theodore J. Gordon, Version 3.0. The Millennium Project.
- Großmann, Katrin, and Sandra Huning. 2016. "Displacement through Energy-Efficient Retrofitting? Impacts, Actors and Policies." In *Congreso Internacional Contested-Cities; Publicaciones Contested: Madrid, Spain*, 1–12.
- Haley, Brendan. 2018. "Integrating Structural Tensions into Technological Innovation Systems Analysis: Application to the Case of Transmission Interconnections and Renewable Electricity in Nova Scotia, Canada." *Research Policy* 47 (6): 1147–60. <https://doi.org/10.1016/j.respol.2018.04.004>.

- Haley, Brendan, and Ralph Torrie. 2021. "Canada's Climate Retrofit Mission." *Efficiency Canada* (blog). June 15, 2021. <https://www.energycanada.org/retrofit-mission/>.
- Hambleton, Julia. 2022. "Report: Recommendations for Municipalities, Extreme Heat and Rental Housing." Canadian Environmental Law Association. September 21, 2022. <https://cela.ca/report-recommendations-for-municipalities-extreme-heat-and-rental-housing/>.
- Heffernan, Troy W., Emma E. Heffernan, Nina Reynolds, Wai Jin (Thomas) Lee, and Paul Cooper. 2021. "Towards an Environmentally Sustainable Rental Housing Sector." *Housing Studies* 36 (3): 397–420. <https://doi.org/10.1080/02673037.2019.1709626>.
- Herrero, Sergio. 2013. "When Renovations Have a Hidden Agenda: Renoviction." *People and Energy Collective* (blog). June 20, 2013. <https://urban-energy.org/2013/06/20/when-renovations-have-a-hidden-agenda-renoviction/>.
- Howlett, Michael, and Pablo del Rio. 2015. "The Parameters of Policy Portfolios: Verticality and Horizontality in Design Spaces and Their Consequences for Policy Mix Formulation." *Environment and Planning C: Government and Policy* 33 (5): 1233–45. <https://doi.org/10.1177/0263774X15610059>.
- IEA. 2021. "Net Zero by 2050 – A Roadmap for the Global Energy Sector." <https://www.iea.org/reports/net-zero-by-2050>.
- IEA. 2022. "Energy Efficiency." International Energy Agency. <https://www.iea.org/reports/energy-efficiency>.
- IEA. 2023. "Policy Database – Data & Statistics." IEA. 2023. <https://www.iea.org/policies/about>.
- Kantamneni, Abhilash, and Brendan Haley. 2022. "Efficiency for All: A Review of Provincial/Territorial Low-Income Energy Efficiency Programs with Lessons for Federal Policy in Canada." March 30, 2022. <https://www.energycanada.org/low-income-report/>
- IMT. 2022. "Map: National BPS Coalition Participating Jurisdictions - IMT." 2022. <https://www.imt.org/resources/map-national-bps-coalition-participating-jurisdictions/>.
- IPBES. 2017. "Policy-Screening (Ex-Ante) Scenarios | IPBES Secretariat." <https://ipbes.net/node/16150>.

- Kern, F., P. Kivimaa, and M. Martiskainen. 2017. "Policy Packaging or Policy Patching? The Development of Complex Energy Efficiency Policy Mixes." *Energy Research & Social Science* 23 (January): 11–25. <https://doi.org/10.1016/j.erss.2016.11.002>.
- Lang, Michaela, Ruth Lane, Kun Zhao, and Rob Raven. 2022. "Energy Efficiency in the Private Rental Sector in Victoria, Australia: When and Why Do Small-Scale Private Landlords Retrofit?" *Energy Research & Social Science* 88 (June): 102533. <https://doi.org/10.1016/j.erss.2022.102533>.
- Lang, Michaela, Ruth Lane, Kun Zhao, Stephanie Tham, Katrina Woolfe, and Rob Raven. 2021a. "Systematic Review: Landlords' Willingness to Retrofit Energy Efficiency Improvements." *Journal of Cleaner Production* 303 (June): 127041. <https://doi.org/10.1016/j.jclepro.2021.127041>.
- . 2021b. "Systematic Review: Landlords' Willingness to Retrofit Energy Efficiency Improvements." *Journal of Cleaner Production* 303 (June): 127041. <https://doi.org/10.1016/j.jclepro.2021.127041>.
- Lewis, Jamal, Diana Hernández, and Arline T. Geronimus. 2019. "Energy Efficiency as Energy Justice: Addressing Racial Inequities through Investments in People and Places." *Energy Efficiency* 13 (3): 419–32. <https://doi.org/10.1007/s12053-019-09820-z>.
- Maruejols, Lucie, and Denise Young. 2011. "Split Incentives and Energy Efficiency in Canadian Multi-Family Dwellings." *Energy Policy* 39 (6): 3655–68. <https://doi.org/10.1016/j.enpol.2011.03.072>.
- Mayernik, Matthew S., Sarah Callaghan, Roland Leigh, Jonathan Tedds, and Steven Worley. 2015. "Peer Review of Datasets: When, Why, and How." *Bulletin of the American Meteorological Society* 96 (2): 191–201. <https://doi.org/10.1175/BAMS-D-13-00083.1>.
- Meadowcroft, James. 2005. "Environmental Political Economy, Technological Transitions and the State." *New Political Economy* 10 (4): 479–98. <https://doi.org/10.1080/13563460500344419>.
- Middlemiss, Lucie, and Ross Gillard. 2015. "Fuel Poverty from the Bottom-up: Characterising Household Energy Vulnerability through the Lived Experience of the Fuel Poor." *Energy Research & Social Science* 6 (March): 146–54. <https://doi.org/10.1016/j.erss.2015.02.001>.

- Miu, Luciana, and Adam D. Hawkes. 2020. "Private Landlords and Energy Efficiency: Evidence for Policymakers from a Large-Scale Study in the United Kingdom." *Energy Policy* 142 (July): 111446. <https://doi.org/10.1016/j.enpol.2020.111446>.
- Mjörnell, Kristina, Paula Femenías, and Kerstin Annadotter. 2019. "Renovation Strategies for Multi-Residential Buildings from the Record Years in Sweden—Profit-Driven or Socioeconomically Responsible?" *Sustainability* 11 (24): 6988. <https://doi.org/10.3390/su11246988>.
- Myers, Erica. 2020. "Asymmetric Information in Residential Rental Markets: Implications for the Energy Efficiency Gap." *Journal of Public Economics* 190 (October): 104251. <https://doi.org/10.1016/j.jpubeco.2020.104251>.
- Nichols, David. 2000. "The Role of Regulators: Energy Efficiency." *Pace Environmental Law Review* 18: 295.
- NILHC. 2022. "Tenant Protections Policies Database." National Low Income Housing Coalition. 2022. <https://nlihc.org/tenant-protections>.
- Palm, Jenny, Katharina Reindl, and Aimee Ambrose. 2020. "Understanding Tenants' Responses to Energy Efficiency Renovations in Public Housing in Sweden: From the Resigned to the Demanding." *Energy Reports* 6 (November): 2619–26. <https://doi.org/10.1016/j.egy.2020.09.020>.
- Pembina Institute. 2020. "Retrofitting with Tenants in Place." [//www.pembina.org/pub/retrofit-tenants-case-study](http://www.pembina.org/pub/retrofit-tenants-case-study).
- Platten, Jenny von, Mikael Mangold, Tim Johansson, and Kristina Mjörnell. 2022. "Energy Efficiency at What Cost? Unjust Burden-Sharing of Rent Increases in Extensive Energy Retrofitting Projects in Sweden." *Energy Research & Social Science* 92 (October): 102791. <https://doi.org/10.1016/j.erss.2022.102791>.
- Phillips, Yvonne. 2012. "Landlords versus Tenants: Information Asymmetry and Mismatched Preferences for Home Energy Efficiency." *Energy Policy* 45 (June): 112–21. <https://doi.org/10.1016/j.enpol.2012.01.067>.
- Reames, Tony. 2016. "A Community-Based Approach to Low-Income Residential Energy Efficiency Participation Barriers." *Local Environment* 21 (February): 1–18. <https://doi.org/10.1080/13549839.2015.1136995>.
- RenovictionsTO. 2021. "AGI Report | RenovictionsTO." <https://renovictionsto.com/agi-report>

- RFF. 2020. "Building Performance Standards: Lessons from Carbon Policy."
<https://www.rff.org/publications/reports/building-performance-standards-lessons-carbon-policy/>.
- Riva, Mylène, Sophie Kingunza Makasi, Kimberley C. O'Sullivan, Runa R. Das, Philippe Dufresne, David Kaiser, and Sébastien Breau. 2023. "Energy Poverty: An Overlooked Determinant of Health and Climate Resilience in Canada." *Canadian Journal of Public Health* 114 (3): 422–31. <https://doi.org/10.17269/s41997-023-00741-0>.
- Rogge, Karoline S., Florian Kern, and Michael Howlett. 2017. "Conceptual and Empirical Advances in Analysing Policy Mixes for Energy Transitions." *Energy Research & Social Science*, Policy mixes for energy transitions, 33 (November): 1–10. <https://doi.org/10.1016/j.erss.2017.09.025>.
- Rogge, Karoline S., and Kristin Reichardt. 2016. "Policy Mixes for Sustainability Transitions: An Extended Concept and Framework for Analysis." *Research Policy* 45 (8): 1620–35. <https://doi.org/10.1016/j.respol.2016.04.004>.
- Rosenow, Jan, Tina Fawcett, Nick Eyre, and Vlasia Oikonomou. 2016. "Energy Efficiency and the Policy Mix." *Building Research & Information* 44 (5–6): 562–74. <https://doi.org/10.1080/09613218.2016.1138803>.
- Rosenow, Jan, Florian Kern, and Karoline Rogge. 2017. "The Need for Comprehensive and Well Targeted Instrument Mixes to Stimulate Energy Transitions: The Case of Energy Efficiency Policy." *Energy Research & Social Science* 33 (November): 95–104. <https://doi.org/10.1016/j.erss.2017.09.013>.
- Sovacool, Benjamin K., and Michael H. Dworkin. 2015. "Energy Justice: Conceptual Insights and Practical Applications." *Applied Energy* 142 (March): 435–44. <https://doi.org/10.1016/j.apenergy.2015.01.002>.
- Shove, Elizabeth. 2003. "Converging Conventions of Comfort, Cleanliness and Convenience." *Journal of Consumer Policy* 26 (4): 395–418. <https://doi.org/10.1023/A:1026362829781>.
- Silverman, Benjamin, Jessica Miller, and Quinn Biever. 2022. "Building Performance Standard Module: Housing Affordability." Institute for Market Transformation. <https://www.imt.org/wp-content/uploads/2022/05/IMT-Housing-Affordability-CW5.pdf>.
- Smith, Adrian, Andy Stirling, and Frans Berkhout. 2005. "The Governance of Sustainable Socio-Technical Transitions." *Research Policy* 34 (10): 1491–1510. <https://doi.org/10.1016/j.respol.2005.07.005>.

- Sustainable Energy Partnersips. 2020. "Minimum Energy Standards for Rented Properties - An International Review.Pdf." <https://www.energy.gov.au/sites/default/files/BEET%2010%20Minimum%20Energy%20Standards%20for%20Rented%20Properties%20-%20An%20International%20Review.pdf>.
- TAF. 2021. "The Case for Deep Retrofits." https://taf.ca/custom/uploads/2020/09/TAF-Business-Case-Deep-retrofits_2020.pdf.
- Tower Renewal Field Guide. 2020. "Tower Renewal: A Field Guide to Retrofits in Occupied Buildings – Tower Renewal Partnership." <http://towerrenewal.com/research-reports/tower-renewal-a-field-guide-to-retrofits-in-occupied-buildings/>.
- Tower Renewal Partnership. 2020. "Advancing Building Retrofits." https://eppdscrmssa01.blob.core.windows.net/cmhcprodcontainer/sf/project/archive/publications/nhs/research_and_planning_fund_program/cugr_advancing-building-retrofits_jan-21.pdf.
- UN. 2009. "The Right to Adequate Housing." Office of the United Nations High Commissioner for Human Rights. https://www.ohchr.org/sites/default/files/Documents/Publications/FS21_rev_1_Housing_en.pdf.
- US Treasury. 2023a. "Culturally and Linguistically Competent Outreach - Emergency Rental Assistance Program." U.S. Department of the Treasury. January 23, 2023. <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/emergency-rental-assistance-program/promising-practices/outreach>.
- . 2023b. "Intentional Landlord Engagement." U.S. Department of the Treasury. January 23, 2023. <https://home.treasury.gov/policy-issues/coronavirus/assistance-for-state-local-and-tribal-governments/emergency-rental-assistance-program/promising-practices/landlord-engagement>.
- Williams, Beth E. 2008. "Overcoming Barriers to Energy Efficiency for Rental Housing." MIT.
- Wrigley, Koel, and Robert H. Crawford. 2017. "Identifying Policy Solutions for Improving the Energy Efficiency of Rental Properties." *Energy Policy* 108 (September): 369–78. <https://doi.org/10.1016/j.enpol.2017.06.009>.

- Xu, Xiaojing, and Chien-fei Chen. 2019. "Energy Efficiency and Energy Justice for U.S. Low-Income Households: An Analysis of Multifaceted Challenges and Potential." *Energy Policy* 128 (May): 763–74. <https://doi.org/10.1016/j.enpol.2019.01.020>.
- Yoon, Diana. 2022. Climate Mitigation from a Renter-Centered Perspective: A Case Study of Boulder's SmartRegs Program (Master's thesis, York University). Retrieved from: <https://yorkspace.library.yorku.ca/xmlui/handle/10315/40658>
- Zhang, ZhongXiang, and Andrea Baranzini. 2004. "What Do We Know about Carbon Taxes? An Inquiry into Their Impacts on Competitiveness and Distribution of Income." *Energy Policy, An economic analysis of climate policy: essays in honour of Andries Nentjes*, 32 (4): 507–18. [https://doi.org/10.1016/S0301-4215\(03\)00152-6](https://doi.org/10.1016/S0301-4215(03)00152-6).