

Flipping the Green Switch:

a case for deferring stamp duty on residential retrofit in Ireland.





About us

We are the Chartered Institute of Building, and we stand for the science, ethics, and practice of built environments across the world. Everything we do is to improve the quality of life for those using and creating the built environment.

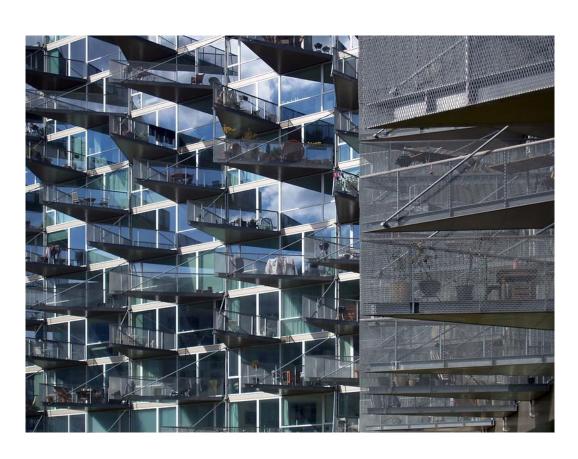
We have a role in the management, leadership, education, and development of our industry, guiding and educating our members as they embark on their careers.

Using both the cutting edge of technology and the foundation of hard-earned experience, we train the construction experts of the future. From tools and data for the day-to-day to degree qualifications for investing in a career, we train and shape workers and organisations who make our industry what it is.



Contents

- 04 Executive Summary
- 05 Introduction
- 06 Built environment emissions
- 07 The national housing stock
- 09 Uptake of residential retrofit
- 10 Current policy
- 11 Stamp duty
- 12 Policy proposal: deferring stamp duty on retrofit
- 13 Impact Analysis
- 19 Conclusion
- 20 References





Executive Summary

The residential sector is proportionally the highest contributor to built environment emissions, a sector which is itself is responsible for almost half of national emissions. Accordingly, policies to limit emissions from residential buildings have been implemented in recent years.

Nevertheless, the actual number of residential retrofits remains stubbornly below national targets. Clearly, additional sources of retrofit are needed to trigger the required increase. While national climate strategies focus on incentivising individuals to retrofit their properties, less attention is given to the significant non-household segment of the housing market. This paper presents a policy proposal to defer stamp duty on properties that have been purchased with the sole purpose of refurbishment. The aim of the proposal is to tap into the non-household segment of the market to create an additional source of retrofit. The merit of the proposal is assessed under several headings, and its potential broader impact on the housing market is discussed. Crucially, the deferral of stamp duty on residential properties purchased for refurbishment is not positioned as a stand-alone policy to deliver the required scale of retrofit nationally. If national emissions targets are to be achieved, the policy proposal must be accompanied by a wider residential decarbonisation strategy.





Introduction

With national climate legislation now in place in Ireland and Northern Ireland, attention has turned to sectoral emissions-limiting policies. Residential buildings account for a significant proportion of national emissions. In response, several policy attempts have been made to embed residential retrofit into the national housing stock. While uptake is increasing, the discrepancy between targets and actual rates of retrofit means additional measures incentivise consumer demand are needed. This paper examines a proposal to encourage retrofit through the tax system, specifically deferring stamp duty liability on properties that have been purchased with the sole purpose of improving their energy efficiency.

The first part of the paper outlines the current situation with respect to emissions in residential buildings; the policy situation in Ireland and Northern Ireland in terms of residential retrofit; and consumer uptake to date. Following that, to establish the case for widescale retrofit, a brief analysis of the housing stock across Ireland is provided. The proposal to defer stamp duty on retrofitted properties is outlined in the second part of the paper, followed by an analysis of its potential impact in the final part.



Flipping the Green Switch: a case for deferring stamp duty on residential retrofit in Ireland



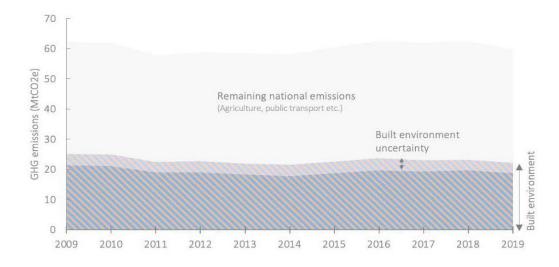
Built environment emissions

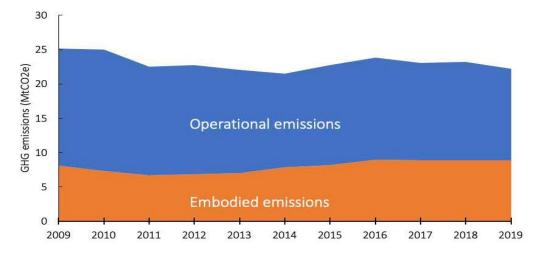
Ireland

The built environment sector accounts for 37% of Ireland's carbon emissions. Heating, cooling, and lighting buildings – operational carbon – accounts for 23% of national emissions, with the remaining 14% attributable to embodied carbon. ¹ Embodied carbon emissions result from mining, quarrying, transporting, and manufacturing building materials, in addition to construction activities, the repair, renovation and final disposal of buildings.

Although embodied carbon emissions in the built environment sector are rising and – as CIOB has argued elsewhere – require a firm policy response,² residential operational carbon is proportionally the sector's highest emitter. It accounts for 43% of built environment emissions, and 16% of national emissions, with the increasing number of home-based workers likely to further inflate these figures in future. Residential operational emissions are therefore a priority area of national climate policy.

Figure 1: Built Environment Emissions in Ireland3







Northern Ireland

The situation is similar in Northern Ireland. Residential operational emissions account for 13.7% of national emissions, primarily due to the use of fossil fuels for domestic heating.^{4 5} The combination of the condition of the housing stock and the sources of energy used for residential fuel means that Northern Ireland has an acute problem when it comes to residential operational emissions. According to the 2016 House Condition Survey, 99% of dwellings in Northern Ireland had central heating, where 68% of them are oil-fired, 24% with central gas heating, and 8% including solid fuel, electric, and fuel systems.⁶ 72% of the population use open or closed fires as secondary heating solutions,⁷ with coal and peat still ubiquitous. Relative to other areas of the UK, the situation in Northern Ireland is severe; by comparison, only 4% of households in England and Wales rely on oil.⁸

Residential emissions in Northern Ireland are a confluence of several policy problems: an ageing housing stock; high levels of fuel poverty; poor health outcomes; lack of natural resources; and high dependence on imported fossil fuels. This convergence of socio-economic problems in the residential sector means that policies that target residential emissions will have wider benefits beyond achieving climate targets.⁹

The national housing stock

Ireland

A total of 2,124,590 permanent dwellings were counted in Ireland during Census 2022. This is an increase of over 120,000 units (6%) between 2016 and 2022. The number of occupied households increased by over 150,000 (9%) to 1.86 million while the number of vacant dwellings fell by over 16,500 (-9%) to 166,752.¹⁰

In terms of operational emissions:

- less than 25% of the housing stock has a Building Energy Rating (BER) of A or
 B
- 71% of buildings' energy demand is from fossil fuels and 29% from electricity¹¹

Despite advancements in the new build sector in recent years, Ireland's per dwelling energy use remains 7% higher than the EU average, driven largely by existing stock. ¹² In 2019, 80% of Irish homes and other buildings had a BER rating of C or lower.

While the peripheral location of new housing developments remains an issue from a sustainability perspective, ¹³ new build homes in Ireland produce comparatively low emissions owing to recently updated building regulations, which typically require a



BER of A2. Dwellings with this high level of energy performance are Nearly Zero Energy Buildings (NZEB). NZEB homes are 70% more energy efficient and emit 70% less carbon dioxide than those built under 2005 Building Regulations standards. However, most of Ireland's housing stock was built before the introduction of the current regulatory regime. The existing housing stock therefore requires urgent attention if residential operational emissions are to be brought in line with climate targets.

Northern Ireland

In April 2022, the total housing stock in Northern Ireland was 822,083. According to the 2016 Northern Ireland House Condition Survey – the latest available data – Northern Ireland's housing stock had 61,000 dwellings deemed below the Decent Homes Standard, 160,000 dwellings in fuel poverty, and 50% of dwellings were rated below the EPC target Band C.15

New Building Energy Efficiency Standards for Northern Ireland, which were introduced in 2022, require the energy efficiency of new houses to be improved by 40%, new flats by 25%, and new buildings other than dwellings by 15%. The changes in guidance reflect regulations introduced in Northern Ireland in 2014, specifying that all new buildings were to be NZEB by 2021. These changes are intended as an interim step toward the goal of net-zero carbon buildings. However, the vast majority of Northern Ireland's housing stock was built before energy efficiency become a national priority, and therefore requires urgent attention to arrest their operational emissions.



Flipping the Green Switch: a case for deferring stamp duty on residential retrofit in Ireland



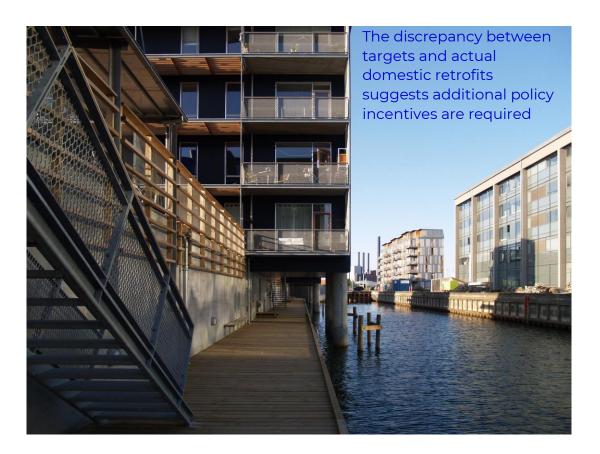
Uptake of residential retrofit

Ireland

By 2020, over 440,000 householders had availed of government supports through the Sustainable Energy Authority of Ireland (SEAI) to make their homes more energy efficient and to use renewable energy. In 2021, 15,457 homes were upgraded to BER B2 level. The Climate Action Plan envisages this scaling up to over 50,000 annually from 2024, to achieve a target of retrofitting 500,000 buildings to a B rating or above by 2030.

Northern Ireland

As discussed, domestic dwellings in Northern Ireland currently use more energy per unit than anywhere else in the UK or Ireland. To achieve national climate and energy strategy targets, a peak of 50,000 homes will need to be retrofitted annually, around three times the current level.¹⁸





Current Policy

Ireland

Ireland's target of retrofitting 500,000 dwellings by 2030 is appropriately ambitious. In fact, the scale of the required increase is so significant that there is scepticism as to whether it is realistic. Aligning incentives to bring consumer behaviour in line with policy ambitions will be necessary if the required uptick in retrofit is to become a reality. The detail around retrofit revealed in Ireland's Climate Action Plan is encouraging, and the 4 Pillars of the National Retrofit Plan strike a balance between consumer behaviour, finance, and skills:

- driving demand and activity
- financing and funding models
- supply chain, skills and standards
- structures and governance

Northern Ireland

Northern Ireland does not currently have a national retrofit strategy. There are plans to launch a pilot domestic retrofit scheme in 2022, the findings of which will inform potential new business models for ramping-up delivery. This will be aligned with other existing energy efficiency schemes and pilot projects. ¹⁹ Currently, all energy efficiency schemes in Northern Ireland implement retrofit measures for about 16,500 buildings per year. ²⁰ The UK's Climate Change Committee's Sixth Carbon Budget (6CB) advice suggests an 11% reduction in total domestic demand and 4% removal of emissions (based on 2016 levels) in Northern Ireland by 2050. This could be achieved if fabric retrofit measures were implemented in 410,000 existing Northern Ireland dwellings by 2050. ²¹ ²² ²³

While finance is crucial, evidence suggests that simply granting money for retrofitting programmes without grappling with consumer sentiment does not deliver significant results.²⁴ If investment is to have a meaningful impact, policy should be informed by the heterogeneity of household preferences. In 2020, the Zero-In on Northern Ireland Heat networking project initiated conversations on barriers and opportunities for heat decarbonisation in Northern Ireland among consumers and industry stakeholders.²⁵ The project found that consumers are willing to facilitate heat-sector decarbonisation, and that government leadership is crucial in this transition.²⁶



Given the scale of the challenge – the need to at least triple current retrofit uptake in both Ireland and Northern Ireland – there is broad agreement that new business models and additional incentives are required. With that in mind, a policy proposal to incentivise demand by deferring stamp duty on retrofitted properties, thereby creating a 'Green Flipping' business model is examined below.

Stamp Duty

Ireland

The rate of stamp duty on residential property is 1% on values up to €1 million and 2% on any excess value above €1 million. A new 10% rate on bulk purchases of houses (i.e., 10 or more in any 12-month period) was introduced in May 2021.²⁷

Northern Ireland

In England and Northern Ireland, no stamp duty is due on the first £250,000 of a primary residence property. The threshold is £425,000 for first-time buyers.

The rates in Northern Ireland are:

- 0% on any amount up to £250,000, (or £425,000 if you are a first-time buyer)
- 5% on any amount between £250,001 and £925,000, (unless you are a first-time buyer)
- 10% on any amount between £925,001 and £1.5 million
- 12% on any amount over £1.5 million²⁸

Policy Precedents

The tax system is frequently used by governments to achieve desired policy outcomes in the built environment. In Ireland, tax exemptions for refurbishing vacant property, refurbishing properties in city centres, and tax-free incentives for occupiers to rent out rooms in their property have been trialled in recent years.²⁹ In Northern Ireland, tax relief is available to construction firms for their spending on research and development to encourage innovation and increase productivity in the sector.

Furthermore, there is precedent for making alterations specifically to stamp duty to achieve national policy goals. A stamp duty holiday was introduced in the UK in mid-2020 to incentivise transactions in the property market after the slowdown in activity arising from COVID-19 pandemic lockdown measures.



Buyers completing a purchase on a property for less than £500,000 before 1 July 2021 did not have to pay stamp duty.³⁰ The UK Government introduced the holiday in the hope of maintaining transactions and, more broadly, driving economic growth.

In addition, to provide further access to home ownership amongst the electorate, shared ownership properties purchased by first-time buyers are exempt from stamp duty, providing the home's value does not exceed £500,000.

In Ireland, refunds of stamp duty paid on non-residential property which is later developed for residential purposes are available.³¹ This is to meet the wider national policy goal of increasing the supply of housing.³²

Policy proposal: deferring stamp duty on retrofit

The tax system – and stamp duty in particular – is frequently used as a lever to achieve wider policy goals. Could it also be used to reduce residential emissions? The proposal is to defer stamp duty liability³³ on properties that have been purchased – by individuals, groups, or businesses – with the sole purpose of improvement. Once the enhanced property has been resold, the stamp duty liability is paid. The crux of the proposal is to encourage investors to fix up older, less energy efficient stock for resale, thereby creating a 'green flipping' business model, providing an additional incentive to retrofit, and increasing the overall number of residential retrofits.

Policy as market maker

The following provisos apply:

- Works must make significant improvements to the energy performance of the property (measured through BER or EPC)
- Works must be carried out by suitably qualified professionals/VAT registered companies – ensuring quality design and works, and to avoid free-ridership (see 'free-rider' section below)
- Occupation is not permitted during the period of work
- Occupation by the renovator is not permitted after the works are complete, nor
 can the buyer become the landlord of the property
- The stamp duty incurred should not increase from the first purchase

The proposal is not a standalone measure which will achieve a sufficient reduction in residential emissions. However, as part of a package of measures, could it provide a stimulus to counter the stubbornly low number of residential retrofits?



Impact Analysis

A completely successful retrofit policy will happen at scale, enjoy wide uptake amongst the target audience, effectively mobilise private funding, and incentivise retrofits that would otherwise not have occurred. As Kerr and Winskel put it, 'retrofit policy faces the dilemma of trying to simultaneously maximise additionality, leverage and uptake, and rather than any single metric, policy effectiveness in this area should be considered in relation to multiple factors.'34 With the multifactorial aims of retrofit policy in mind, the impact analysis of the proposal is carried out under the headings of scale, uptake, leverage, additionality, free-ridership, and housing market impact.

Scale

Ireland

44,110 residential properties were purchased across Ireland in the 12 months to October 2021. This represents about 2% of the total housing stock of 2,124,590.³⁵ 16% of these transactions were new dwellings, 84% were second hand dwellings.³⁶ As above, all residential property in Ireland is subject to stamp duty; 1% on values up to €1 million, 2% on any excess value above €1 million, and 10% rate on bulk purchases of houses (10 or more in a 12-month period).

The application of stamp duty to all property transactions in Ireland means the proposal would happen at a proportionately larger scale than in Northern Ireland, where many properties fall below the stamp duty bands.

Northern Ireland

In Northern Ireland, 32,470 residential properties sold in the 12 months to July 2022, the highest rolling annual total since 2006/07. This is almost 4% of the total housing stock of 822,083.

As of September 2022, the UK Government raised the threshold for paying stamp duty. Stamp Duty will only be paid on home purchases of £250,000 or more, up from the previous threshold of £125,000. For first-time buyers, they will only pay the tax if their purchase is above £425,000, up from £300,000. In Northern Ireland, where the standardised house price is around £169,063, most homebuyers are now exempt. For example, between January and April 2022, if the new threshold had been in place, stamp duty would not have applied in 86% of sales. However, this is subject to change depending on the period of analysis. For example, data within Q2 2022 shows that 25% of transactions were at prices beyond £246,900. 38



Given that transacted properties account for a relatively small proportion of the overall housing stock, it is important to be clear as to the predicted impact of this proposal. While a 'green flipping' model would potentially increase the overall number of transactions, the baseline proportion suggests it would need to exist in a package of retrofit measures to achieve the requisite scale.

Uptake

Stamp duty is often considered a bad tax by economists. Arguably, levying an extra cost on transactions disincentivises turnover of housing and leads to an inefficient use of stock.³⁹ ⁴⁰ Conversely, housing enjoys relatively light tax treatment in Ireland and Northern Ireland, which makes it appealing as an investment asset, thereby increasing demand and prices.⁴¹ Maintaining stamp duty may reduce the appeal of housing as an investment, thereby tempering demand from investors and dampening price rises. In any case, while direct causal links are difficult to establish given the complexity of housing market dynamics, changes to stamp duty have been associated with increased transactions.⁴²

Scanlon et al.⁴³ acknowledge the difficulty of establishing direct causal links between the 2020/21 UK stamp duty holiday and transactions. The unique circumstances during this period, such as delayed activity due to lockdowns, and purchases brought forward to benefit from the holiday before it ended, add further complexity to a potential causal relationship. Nevertheless, they found that there were 140,000 additional transactions annually during the 2020/21 stamp duty holiday in the UK.⁴⁴

Using data on property transactions in the UK between 2004 and 2012 Best & Kleven argue that a temporary removal of stamp duty increased housing market activity by 20% in the short term. Their study found that removing stamp achieved additional transactions both by bringing forward transactions and by generating additional transactions.⁴⁵ Looking at the 2009 UK stamp duty holiday, Besley et al. estimate an increase in transactions of properties affected by the tax holiday of around 8%.⁴⁶

Uptake of stamp duty incentives achieving wider policy goals within the housing market, such as increasing the supply of units, have also been observed. In Ireland, there has been significant uptake of the Residential Development Stamp Duty Refund Scheme,⁴⁷ which provides for a refund of a portion of the Stamp Duty paid on the acquisition of non-residential land where that land is subsequently developed for residential purposes.



The difficulty in drawing direct causal links between changes to stamp duty and additional housing units has already been mentioned. Nevertheless, the Irish Government's impact analysis concludes that the Residential Development Stamp Duty Refund Scheme has contributed to the delivery of over 15,000 housing units in the first four years of its existence. Given that the average number of annual housing completions in Ireland between 2018 and 2021 was approximately 20,000,48 this is a significant number. While it is unlikely that all these units are additional, the scheme nevertheless enjoyed considerable uptake.

Overall, evidence from the UK and Ireland suggests that the housing market is quite receptive to changes to stamp duty. In the context of the policy proposal to encourage investors to fix up older, less energy efficient stock for resale, removing stamp duty could be effective in stimulating interest in the retrofit market. However, the number of transactions in the housing market is a relatively small proportion of the overall stock, and many properties in Northern Ireland would fall outside the bands of stamp duty. The policy is therefore not a stand-alone solution and would need to exist within a suite of measures if the requisite scale of residential retrofit to meet national emissions targets is to be achieved.

Leverage

'Leverage' refers to mobilising private funding for retrofit using public funds. The question addressed below is: how efficiently would the proposal leverage private investment? While the proposal does not involve direct public spending, an income stream is being sacrificed to pay for the deferral of stamp duty.

Northern Ireland

99.3% (£8,610 million) of UK Stamp Duty receipts in 2020 to 2021 came from transactions in England. Northern Ireland accounted for 0.7% (£60 million) in receipts in 2020 to 2021. Stamp Duty receipts in Northern Ireland fell significantly from £80 million to £60 million between 2019 to 2020 and 2020 to 2021. 50

Ireland

According to Revenue's Annual Report for 2021,⁵¹ the total stamp duty collected amounted to some €1.5 billion net, of which €216 million was from residential property. €1.5 billion accounted for approximately 2.2% of total tax receipts, €216 million accounts for 0.3% of total tax receipts.



Figure 2: residential stamp duty yield 2014 - 2022⁵²

g a. c c	rigaro Errocia citamp daty ficia 2011 2022								
Year	2014	2015	2016	2017	2018	2019	2020	2021	2022 (to May)
Stamp Duty (€ Millions)	102	123	132	175	171	179	160	216	88

As a proportion of the overall tax take, residential stamp duty is relatively small in both Northern Ireland and Ireland. Coupled with the additional market activity removing stamp duty brings about, deferring it as per the proposal would not come at a proportionally high revenue cost to government.

Unsurprisingly, higher degrees of leverage correlate with loans compared to non-repayment financial assistance such as grants and tax incentives. Nevertheless, policies requiring higher private payments understandably tend to be less attractive to households, can lead to less uptake, and reduce the overall number of retrofits.⁵³ The proposal is a tax incentive aimed at embedding a 'green flipping' business model in the second-hand housing market and requires a large capital outlay to buy the property in the first instance. Therefore, it is likely to appeal to the cash-rich, investor segment of the housing market, rather than to households.

There is substantial interest from institutional investors in the Irish⁵⁴ and Northern Irish⁵⁵ housing market. Combined with the policy of local authorities and Affordable Housing Bodies (AHBs) to purchase housing on the open market, this means that the cash-rich, non-household buyer segment of the market is substantial (see 'Additionality' section below). Therefore, current housing market composition may lead to significant leverage for the proposal.

Additionality

Will the policy provide more retrofits than would otherwise have been the case? If the proposal were to be embedded in the business model of local authorities, AHBS, and investors, as other tax arrangements and housing policies have been, it could lead to a significant amount of additional residential retrofits.

Ireland

Non-household entities (public and private) accounted for 21%, or 9,666 of second-hand or 'existing' housing transactions in 2021.⁵⁷ ⁵⁸ On the assumption that most second-hand homes would benefit from an energy efficiency upgrade and that investors and public bodies would take advantage of the proposal, this could lead to a substantial proportion of the housing stock being retrofitted on an annual basis.



While these are arguably optimistic assumptions, even in a pessimistic scenario in which less than half of non-household transactions are incentivised by the proposal to retrofit, and non-household to household transactions are not considered (2,920), the potential additionality is 7% of all transactions resulting in a retrofit. Coupled with Ireland's existing regulatory regime, which typically requires new build housing to have a BER of A2, over time this policy could therefore make a significant contribution to the additionality of retrofit in Ireland.

Figure 3: Existing dwellings, units in market transactions – sectoral flows, 202159

rigare of Existing arrolling of arms in market transactions according to the party								
Sectoral Flow	Existing Apartments	Existing Homes	Existing Dwellings					
Household to Household	5,189	30,742	35,931					
Non-household to household	760	2,160	2,920					
Household to non- household	1,801	2,272	4,073					
Non-household to non-household	1,341	1,332	2,673					
All sectoral flow types	9,091	36,506	45,597					
Net Flow								
Household to Non- household	1,041	112	1,153					

Northern Ireland

The Northern Ireland Statistics and Research Agency (NIRSA) does not collect data on the division of existing dwelling transactions between household and non-household entities. However, given the increasing interest of institutional investors in the Northern Ireland residential sector⁶⁰ and the role of the Northern Ireland Housing Executive and AHBS in the housing market,⁶¹ it is likely that there are a significant number of transactions involving non-household entities. The proposal could act as an additional incentive for investors to become involved in the Northern Ireland residential sector, which could in turn lead to additional retrofit.

Free riders

Does the proposal avoid excessive free ridership? Specifically, does it avoid beneficiaries that would have carried out retrofit in the absence of the proposal? While the mechanism of investors buying and renting or selling property – 'flipping'– is embedded in the housing market in Ireland and Northern Ireland, 62 there is limited data on accompanying energy upgrades. It is, therefore, difficult to say with certainty what degree of free ridership the proposal would lead to.



However, the significant presence of investors in the second-hand housing market presents an opportunity to take advantage of market composition to instigate an additional stream of retrofit. Ireland's retrofit strategy focuses on individuals investing in retrofit but does not acknowledge the significant investor segment of the market and how it can play a role in retrofitting at scale.⁶³

Germany has a high share of deep, large-scale residential retrofits, partly because investors and building owners are well-informed about the different options and associated benefits. German owners and investors are required to hire a certified expert to review retrofit options prior to project approval. This suggests that requiring the use of certified professionals, as per the proposal, could build on existing 'flipping' practices in the market to create an additional stream of retrofit and address free-rider concerns.⁶⁴

Housing Market Impact

Given the existing disequilibrium in the housing market, would the proposal have unintended consequences? Specifically inducing additional demand and the further commodification of housing? If successful, the proposal would result in additional demand for existing housing. It would be remiss not to mention the impact that additional demand could have on the housing market, given that Ireland and Northern Ireland are experiencing a housing affordability and availability crisis.

The tax treatment of land and housing across Ireland is currently light by international standards, and this has led to significant interest in housing as an investment asset. Both countries rely almost exclusively on private development for housing supply, with publicly led housing delivery having retrenched over the last 30 years, albeit the Northern Ireland Housing Executive has recently become involved in direct delivery again. Additional demand would put further pressure on an already stretched sector and may ultimately lead to increased prices thereby worsening affordability. However, if the proposal were introduced alongside wider housing market reform, specifically resuscitation of direct public delivery, as CIOB has previously suggested, ⁶⁵ rather than inflating the market, investor involvement in the housing market could be repurposed to achieve sustainability goals.



Conclusion

The scale of the discrepancy between targets and uptake for residential retrofit means additional measures are urgently needed to embed retrofit into the housing stock. While existing climate strategies rightly emphasise the role of individual households in performing retrofit, less attention is paid to the role of investors. The growing presence of institutional investors has arguably been the most marked trend during the resuscitation of the housing market in Ireland and Northern Ireland over the last decade. While there are mixed views on whether this is a welcome development, the reality is that economic tailwinds will continue to make residential property an attractive investment. From a policy perspective this means that there is a powerful actor within the housing market that can be tapped to achieve an uptick in residential retrofits.

The proposal is not a silver bullet. Its focus on a particular segment of the market, and its limitation to transacted properties mean that it would need to exist within a suite of measures if operational residential emissions are to be brought under control. Nevertheless, evidence suggests that the market reacts to changes to stamp duty. Therefore, this proposal could potentially underpin a much-needed new source of residential retrofit.





References

- ¹ R. O'Hegarty, S. Wall and O. Kinnane, <u>Whole Life Carbon in Construction and the Built Environment in Ireland</u>, 3 October 2022
- ² J. Fleming, <u>Levelling the playing field, not Scotland's built environment: a case for retrofit over demolition?</u> August 2022
- ³ ibid.
- ⁴ Northern Ireland Statistics and Research Agency (NISRA), <u>Northern Ireland Greenhouse Gas</u> Emissions, June 2022
- ⁵ Committee on Climate Change, Reducing emissions in Northern Ireland, February 2019
- ⁶ Northern Ireland Housing Executive (NIHE), <u>Housing Condition Survey: Main Report 2016</u>, May 2016
- ⁷ The Department of Agriculture, Environment and Rural Affairs (DAERA), <u>Northern Ireland</u> Continuous Household Survey Heating Questions Report 2016/17, May 2018
- ⁸ Policy Exchange, <u>Network problems: The peculiar case of home heating in Northern Ireland</u>, April 2018
- ⁹ M. Norouzi, S. Colclough, L. Jiménez, J. Gavaldà, D. Boer, <u>Low-energy buildings in combination</u> <u>with grid decarbonization</u>, <u>life cycle assessment of passive house buildings in Northern Ireland</u>, Energy and Buildings, Volume 261, April 2022
- ¹⁰ Central Statistics Office, <u>2022 Census</u>, June 2022
- ¹¹ C. Callaghan, The energy efficiency of Irish homes, August 2019
- ¹² Sustainable Energy Authority of Ireland (SEAI), Energy in Ireland 2018 Report, December 2018
- ¹³ Dublin InQuirer, Where Are We Building Homes These Days?, February 2021
- ¹⁴Department of Housing, Local Government and Heritage, <u>New Energy Efficiency Standards</u> <u>for New Dwellings</u>, October 2021
- ¹⁵ NIHE, Housing Condition Survey: Main Report 2016, May 2016
- ¹⁶ Stroma, New Building Energy Efficiency Standards for Northern Ireland, April 2022
- ¹⁷ Department of the Environment, Climate and Communications (DECC), <u>Annual Report 2021</u>, 2021
- ¹⁸ Department for the Economy, <u>Energy Strategy for Northern Ireland: Consultation on Policy</u> Options, March 2021
- ¹⁹ Energy Saving Trust, Delivering a new energy strategy for Northern Ireland, February 2022
- ²⁰ ARUP, Research into the Future of Energy Efficiency Policy in Northern Ireland, October 2020
- ²¹ Climate Change Committee, <u>The Sixth Carbon Budget: The UK's Path to Net Zero</u>, December 2020
- ²² R. Raslan, P. Symonds, Y. Schwartz, <u>Analysis Work to Refine Fabric Energy Efficiency Assumptions for Use in Developing the Sixth Carbon Budget</u>, February 2020
- ²³ S, Ogunrin, I. Vorushylo, O. Okpako, N. Hewitt, <u>Domestic Energy Efficiency Scenarios for Northern Ireland</u>, Energies, April 2022
- ²⁴ T. Meles, L. Ryan, S. Sanghamitra, <u>Heterogeneity in preferences for renewable home heating systems among Irish households</u>, Applied Energy, Volume 307, February 2022
- ²⁵ I. Vorushylo, S. Ogunrin, R. Ghosh, C. Brandoni, N. Hewitt, Zero-In on NI-Heat, July 2020
- ²⁶ S, Ogunrin, I. Vorushylo, O. Okpako, N. Hewitt, <u>Domestic Energy Efficiency Scenarios for Northern Ireland</u>, Energies, April 2022
- ²⁷Department of Finance, Report of the Stamp Duty Tax Strategy Group 21/14, September 2021
- ²⁸ Gov.uk, Stamp Duty Land Tax: Residential property rates
- ²⁹Department of Finance, Property-Related Tax Issues: Tax Strategy Group 22/04, July 2022
- ³⁰ Compare the Market, <u>Stamp duty holiday explained</u>, September 2022
- ³¹ Revenue Irish Tax and Customs, Residential Development Stamp Duty Refund Scheme
- 32 Revenue Irish Tax and Customs, Residential development refund scheme, May 2022



- 33 Including the Higher rates of Stamp Duty Land Tax associated with additional property ownership.
- ³⁴ N. Kerr, M, Winskel, <u>Household investment in home energy retrofit: A review of the evidence on effective public policy design for privately owned homes</u>, Renewable and Sustainable Energy Reviews, May 2020
- ³⁵ GeoDirectory, Residential Buildings Report: Q4 2021, January 2022
- 36 ibid.
- ³⁷ The Irish News, <u>Stamp duty effectively abolished for most of north's housing market</u>, September 2022
- ³⁸ Ulster University, Northern Ireland Quarterly House Price Index for Q2 2022, November 2022
- ³⁹ I. Davidoff, L. Andrew, How Do Stamp Duties Affect the Housing Market?, June 2013
- ⁴⁰ C. Hilber, T. Lyytikäinen, <u>The Effect of the UK Stamp Duty Land Tax on Household Mobility</u>, SERC Discussion Papers No. 115, July 2012
- ⁴¹ J. Ryan-Collins, Why can't you afford a home?, October 2018
- ⁴² T, Besley, N. Meads, P. Surico, <u>The Incidence of Transaction Taxes: Evidence from a Stamp Duty Holiday</u>, Journal of Public Economics, November 2014
- 43 K. Scanlon, C. Whitehead, F. Blanc, <u>Lessons from the Stamp Duty Holiday</u>, July 2021
 44 Ibid.
- ⁴⁵ M. Best, H. Jacobsen, <u>Housing Market Responses to Transaction Taxes: Evidence from Notches and Stimulus in the U.K</u>, Review of Economic Studies, June 2017
- ⁴⁶ T, Besley, N. Meads, P. Surico, <u>The Incidence of Transaction Taxes: Evidence from a Stamp</u> Duty Holiday, Journal of Public Economics, November 2014
- ⁴⁷ Department of Finance, <u>Capital & Savings Taxes & Stamp Duty Tax Strategy Group 22/09</u>, July 2022
- ⁴⁸ Central Statistics Office, New Dwelling Completions, Q2 2022, July 2022
- ⁴⁹ Particularly in Northern Ireland, where the standardised average house price is £198,890.
- ⁵⁰ HM Revenue and Customs, <u>UK Stamp Tax statistics 2020 to 2021 Commentary</u>, October 2021
- ⁵¹ Revenue Irish Tax & Customs, <u>Annual Report 2021</u>, May 2022
- ⁵² Department of Finance, <u>Capital & Savings Taxes & Stamp Duty Tax Strategy Group 22/09</u>, July 2022
- ⁵³ N. Kerr, M, Winskel, <u>Household investment in home energy retrofit: A review of the evidence on effective public policy design for privately owned homes</u>, Renewable and Sustainable Energy Reviews, May 2020
- ⁵⁴ Independent.ie, Revealed: Ten biggest landlords now own 17,000 homes, February 2022
- ⁵⁵ FT Adviser, Ten spots for buy to let named, October 2019
- ⁵⁶ Savills, Northern Ireland Market Review and Outlook 2022, April 2022
- ⁵⁷ Central Statistics Office, Residential Property Price index
- ⁵⁸ Department of Public Expenditure and Reform, <u>An Overview of the Irish Housing Market and Policy</u>, November 2021
- ⁵⁹ Central Statistics Office, <u>Residential Property Price index</u>
- ⁶⁰ Savills, Northern Ireland Market Review and Outlook 2022, April 2022
- ⁶¹ Department for Communities NI, Housing Supply Strategy 2022-2037, December 2021
- ⁶² Department of Public Expenditure and Reform, <u>An Overview of the Irish Housing Market and Policy</u>, November 2021
- 63 Government of Ireland, National Retrofit Plan, February 2022
- 64 Ibid.
- ⁶⁵ R.Sweeney, J.Kilroy, <u>Job Quality in the Irish Construction Sector</u>, April 2021

Photo Credits

Pages 3,8,9: Seir + Seir, Copenhagen (creative commons)

All other photos: CIOB.org



Written by Joseph Kilroy

JKilroy@ciob.org

The Chartered Institute of Building 77 Sir John Rogersons Quay Dublin 2 Ireland

Tel: +353 (1) 5138950

ciob.org

Registered Charity No. (England and Wales) 280795 (Scotland) SCO41725

INVESTORS IN PEOPLE® We invest in people Silver