



Financing people-centred climate action: a Just Transition Bond for the Northern Ireland Housing Executive

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Policy insight

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Summary

- The Climate Change Committee's most recent estimates suggest that Northern Ireland will need additional investment of £1.3 billion a year by 2030 in the transition to reaching net zero by 2050. A significant portion of this investment will need to be raised from private investors.
- This comes at a time of growing demand from institutional and individual investors for assets that contribute to climate action *and* deliver wider social objectives the 'just transition'. Green, social and sustainable bonds are taking a leading role and at a sovereign level, the UK has already raised £16 billion in its green bond issuance.
- A Just Transition Bond could be raised by the Northern Ireland Housing Executive as part of its investment programme to revitalise communities. This includes large-scale retrofitting to deliver energy-efficient homes with decarbonised heating, which will support green growth, and improve residents' health and wellbeing across communities. Northern Ireland could build on a growing number of examples of housing associations in the UK that are raising debt funding through 'social' or 'sustainable' bonds.
- Within the context of the cost-of-living crisis, which will not be over quickly, measures that can enable households to reduce their spending on heating have the potential to make a significant and positive impact to help financially squeezed and low-income households to cope with the pressures.
- The proceeds of this bond would be put towards ensuring a just transition and would draw on existing green and social measurement frameworks (e.g. the UK Sovereign Bond Green Financing Framework and Social Value Framework) as well as the policy direction set by the Northern Ireland Executive (e.g. NI Climate Change Bill) and the UK Government's net zero commitments.
- The Northern Ireland Housing Executive as a leading housing institution could become an international market leader through the design and delivery of a Just Transition Bond, which could catalyse wider action across the buildings sector and the economy.
- The funding could enable Northern Ireland to become a beacon for high standards in retrofitting and energy efficiency measures as well as a global example against which delivering a just and inclusive transition to net zero could be benchmarked.

1. The just transition landscape in Northern Ireland and the need to improve housing stock

There is a growing recognition internationally and within the United Kingdom that if we are to succeed in delivering the needed transition to the net zero economy, then consideration of the social risks and opportunities must be paramount in the decision-making processes of policymakers as well as business, financiers and civil society. COP26 signalled greater awareness of the critical role that justice and equity should play within this transition, with a litany of just transition initiatives emerging from the summit, including the UK Government signing a Just Transition Declaration (UKCOP26, 2021). While this Declaration may be focussed initially on international development aspirations, the Government's objectives of 'levelling up' and 'net zero' in combination signal the importance of ensuring that the opportunities from the net zero transition result in greater equity across regions and income groups (Curran, 2022).

Prioritising the social risks and opportunities from the transition is a necessity, as the economy has a concentration of jobs within carbon-intensive sectors and is heavily reliant on fossil fuels. Therefore, if Northern Ireland *does not* deliver a just and equitable transition, we could see negative social impacts in the form of:

- Significant job losses in carbon-intensive industries: Northern Ireland is the UK region with the greatest carbon intensity of employment (PWC, 2022).
- Continued and increased fuel poverty: with the current cost-of-living crisis, it is estimated that 40% of the Northern Irish population could be within fuel poverty this year (Dodge, 2022). The Department for Communities in Northern Ireland states the current fuel poverty rate in the country is 22% (Department for Communities, 2022).
- Stranded housing assets for low-income households, who could become unable to remortgage, sell or renovate their homes to the standard required (Thomas, 2021).
- Energy insecurity due to exposure to increasingly volatile fossil fuels markets.
- 'Locking in' Northern Ireland's dependence on oil: 68% of homes are still fuelled by oil and 72% of the population use open or closed fires as secondary heating solutions, with coal and peat common fuel sources in the region. This is striking when compared with other regions of the UK: only 4% of households in England and Wales rely on oil for household heating, for example (Barry and Madden, 2021).
- Currently 294,603 households in Northern Ireland are connected to natural gas (Utility Regulatory, 2021). Although not as polluting as kerosene oil, natural gas is still a fossil fuel and adds to Northern Ireland's carbon emissions.

Designed well, the transition could lead to:

- Additional high-quality jobs
- Reduced fuel costs (particularly for low-income households)
- Revitalised communities
- A boost to new industries of the future (e.g. geothermal or green hydrogen energy).

For Northern Ireland, the Climate Change Committee's most recent estimates suggest that it will need additional investment of £1.3 billion a year by 2030 in the transition to reaching net zero by 2050 (Stark, 2022). A significant portion of this investment will need to be raised from private investors. To achieve this investment uptick, there will need to be a reversal of the investment trend in the region in recent years. Northern Ireland has suffered under-investment for decades in

human capital and infrastructure (FitzGerald and Morgenroth, 2020) and will require greater policy support and support from public finance to increase investment in a just and inclusive transition. The Northern Ireland Executive recently published its own policy frameworks in its *Energy Strategy* (in December 2021), outlining an ambitious pathway for the transition, including interim targets and an action plan to deliver a net zero energy system in the country. With an emphasis that the transition will "create jobs and more affordable energy", the policy is being designed with the social imperative at the forefront (Northern Ireland Executive, 2021).

Given the social sensitivities to the transition in Northern Ireland, now is the time to take significant action. Enhancing the energy efficiency of homes remains a challenge across the UK, but there is noticeable movement in terms of financial innovation and in policy (see Section 4 of the Energy Strategy for Northern Ireland). Furthermore, the Belfast Climate Commission (through the Place-based Climate Action Network) has published a Pathway to Net Zero for the city. The publication emphasised that Belfast could close the emissions gap to net zero by 2050 by simply choosing cost-effective options in housing, buildings, transport and industry (Gouldson et al., 2021).

With the passing of the Northern Ireland Climate Change Bill in March 2022, the country no longer lacks the necessary legislative basis for effective climate action, decarbonisation and greenhouse gas emissions reduction. To complement this legislative commitment and policy strategies, in this paper we propose a financial innovation through a public-private programme to deliver dramatic improvements in the quality of the Northern Ireland Housing Executive (NIHE) housing stock. Designed with the appropriate social guardrails (harnessing existing social standard frameworks such as the Social Value Framework) and aligned with net zero targets and the needs of tenants, a Just Transition Bond could provide an economy-wide multiplier economic impact while propelling Northern Ireland towards a low-carbon economy, all while providing decent jobs and homes, improved public health outcomes and a better quality of life for tenants and constituents through this crucial anchor institution in the region.

2. The growing market for sustainable finance

Financial markets and institutions have been rapidly adjusting to the risks and opportunities from the climate change crisis and are now waking up to the critical need to deliver net zero in a just and equitable fashion. These institutions have recognised the climate risks to their own portfolios and are now aware of the opportunity to invest in green projects across the globe. Financial regulation (in the EU and UK at least) will ensure that all financial institutions will be required to publish net zero transition plans and measure progress against them.

This momentum of change within the financial system will involve the mobilisation of capital into the low-carbon economy. There is a 'wall of money' that is preparing to invest in green. This is demonstrated through the way the Glasgow Financial Alliance for Net Zero (GFANZ) is driving action across financial institutions with £130 trillion assets under management (AUM). The Grantham Research Institute leads the Financing the Just Transition Alliance (FTJA),² which seeks to ensure that institutions approach their transition through a social justice lens. It brings together 53 financial institutions (banks, institutional investors, community financial institutions, NGOs and civil society organisations) to accelerate the financial sector support for a just transition to net zero. Through the FTJA, we have established partnerships with leading financial institutions that can support the design of green finance initiatives but also invest their own capital (while maintaining just transition principles).

This change in the sector has been characterised by the increased use of green instruments, funds and mechanisms that support the flow of this 'wall of money' to suitable projects. The growth of Green, Social and Sustainability (GSS) bonds has been particularly prominent. GSS bonds, Sustainability-linked bonds (SLBs) and Transition bonds reached nearly half a trillion pounds (\$US496.1 billion) in the first half of 2021 (Climate Bonds Initiative, 2021). This represents 59% year-on-year growth in the GSS bond market with \$2.1 trillion raised cumulatively to the end of June 2021. This growth will continue as financial institutions search for suitable financing instruments and mechanisms with which to deploy their capital and match their net zero pledges.

The UK issued its first green sovereign bond as part of a series of issuances in 2021, ahead of COP26. This series has already raised £16 billion for investment across the UK (HM Treasury, 2021) and represents a world-leading approach in mentioning the 'just transition' within a financing framework (UK Government, 2021a) but also in committing to measuring the social co-benefits. This innovation in the sovereign bond structure had its origins in a collaboration by the Green Finance Institute, the Grantham Research Institute and the Impact Investing Institute (see Robins, 2020). There is now an opportunity to tailor a specific financing instrument in Northern Ireland.

Bond issuances within the housing sector

- L&Q launched a £300 million bond in January 2022 focused on reducing carbon emissions and improving energy efficiency in residential homes. This bond claims to be the first sustainability-linked bond and will require the housing association to reduce Scope 1 and 2 greenhouse gas emissions by 20% as well as building 8,000 new homes (50% of which must be affordable). This 10-year bond will mature on 31 March 2032 and is priced at gilts + 87 bps (Heath, 2022).
- Social housing provider Stonewater raised a £250 million sustainability bond in September 2021, which was ESG accredited. The funding was raised to support plans to deliver 6,250 homes by March 2024 (Heath, 2021).
- Public bonds with 'green' or 'sustainable' labels raised by social housing registered providers or via bond aggregators totalled almost £5 billion in 2021.

¹ Using the Sustainable Reporting Standard for Social Housing: www.stonewater.org/media/5617/esg-report-2020-21-final.pdf

² See www.lse.ac.uk/granthaminstitute/financing-a-just-transition for more information on the FJTA.

3. The opportunity – revitalise the NIHE with sustainable financing

The Northern Ireland Housing Executive's finance challenge

The NIHE, since its inception in the Northern Irish civil rights movement, has been regarded "nationally and internationally as a leading authority on 'best practice' on both housing management and community building", delivering significant social benefits to tenants and communities (NIHE, 2021a). The Executive continues to deliver for tenants and communities through its own vision to provide housing support, better homes, sustainable communities and quality public services. However, the NIHE recognises the need for its reform and revitalisation to deliver "additional, better, more energy efficient and appropriate homes" (ibid.).

This need for revitalisation was also raised in a strategic review of the NIHE by PwC in 2011. The review suggested there are challenges associated with designing and implementing a sustainable financial model that delivers on the landlord's housing investment needs while maintaining reasonable rents. Recommendations from that report included that the landlord function be transformed to a social enterprise mutually owned by residents, and that this enterprise should be responsible for the investment programme and all associated housing services. The Housing Executive signalled in its 50th Annual Report 2020-21 that it will follow these recommendations in some form. In particular, the social housing provider indicated that they were exploring new legal status options such as becoming a mutual which would allow for debt raising. Within its current legal status, the Executive is unable to raise private finance. In 2009, Savills estimated that £5.5 billion were required in the following 30 years in order to achieve the Decent Homes Standard³ across the housing stock in Northern Ireland (Savills, 2009). Savills is currently undertaking a more up-to-date review of the housing stock that includes the need to deliver net zero by 2050 (and which could inform a financial model for any proposed bond).

There is understandable reticence from different interest groups concerning a possible change in the legal articles of the NIHE or a transfer of swathes of housing stock to a mutual/cooperative landlord. This is because the NIHE is a 'popular landlord' and because housing association rents are generally higher than NIHE rents (Muir, 2015). Therefore, if there is a transfer of large amounts of the housing stock to a social enterprise company in mutual form and private finance is raised, there must be social guardrails on this finance to ensure that tenants and communities are provided with sufficient welfare support (as associated with the NIHE historically) and the finance delivers expected alignment with net zero ambitions for the economy.

That said, the revitalisation of the housing stock could be significantly supported by the raising of finance that protects these social safeguards. The NIHE has around 171,000 tenants and around 85,000 homes (NIHE, 2021b), and thus a £1 billion issuance (for example; more analysis is required) could provide a huge boost to the investment needs of the Northern Ireland Housing Executive.

The NIHE finance opportunity: a Just Transition Bond

If designed and structured in a socially optimal fashion with buy-in from all the necessary stakeholders (tenants, communities, local businesses, local politicians, community groups), the finance raised could have a transformative effect on the NIHE – and on the wider Northern Irish economy. Not only would this maintain the social standards of tenants and revitalise the NIHE housing stock, it would also provide wider benefits to the whole economy through aligned training programmes (e.g. Retrofit Skills Delivery Hub) and economic multipliers throughout the region.

³ Further information can be found on what constitutes a 'decent home' can be found at www.gov.uk/government/publications/a-decent-home-definition-and-guidance

The finance could be raised in the form of a Just Transition Bond. This would be similar to a GSS use-of-proceeds bond but the proceeds would be specifically aligned to just transition outcomes. By using a bond instrument, the ownership remains squarely with the tenants of the mutual and the communities impacted but the Executive would have access to funding to renovate its stock and reduce its carbon footprint. Welsh Water works on this basis, for instance, remaining in public ownership but accessing needed financing under amendable conditions from the market. As mentioned above, the UK Government Green Gilt raised £16 billion for net zero projects (UK Government, 2021b). That sovereign green gilt uses a Green Plus framework to measure the projects' impacts, i.e. it measures the social co-benefits of the projects (UK Government, 2021a).

Spending the proceeds

The bond could use and build on this green financing framework from the UK Government as well as the Sustainability Reporting Standard for social housing. Through the application of a just transition framework with a specific use of proceeds, the funding could be spent on a range of projects, including (but not limited to):

- Renovations of homes, including retrofitting homes to a high thermal energy standard and the installation of decarbonised heating systems.
- New homes for residents, built to a high energy emissions standard. (The Housing Executive is piloting new build housing with 'zero carbon in use' performance standards.)
- New energy transition projects, e.g. community energy projects, to ensure renewable energy contributes the majority of energy for homes.
- Energy/carbon literacy educational programmes to inform residents' energy decisions.
- Training and retraining programmes for an internal workforce to deliver needed retrofits for tenants and communities (including the potential to later hire out this workforce to private homeowners for energy efficiency needs).

The Grantham Research Institute's work on the just transition has traditionally viewed the risks and opportunities across four groups: workers; communities; supply chains and consumers (e.g. Robins et al., 2021). Using this framing to clearly define goals, reporting and the measurement of impacts can ensure the integrity of the spending within the bond framework:

- Workers The investment programme would create new employment opportunities, but the conditions of bond issuance would ensure that jobs created and associated workers would have the trade union-agreed high standards of labour and social rights.
- Communities The funding would be delivered with community engagement and input from communities as to where capital is deployed. These community engagement mechanisms will be vital to maintain the long-held best standard practice by the NIHE delivery of service (which include health benefits, high standards of social housing, education benefits, long-term care and inclusive design). There would also be aesthetic improvements made to community infrastructure through the work as well as clearly defined and measured wider social co-benefits from the funding.
- Supply chains This would be an opportunity to develop the retrofitting supply chain within Northern Ireland, delivering further economic opportunity but also ensuring that workers in the supply chain have their rights aligned with leading international benchmarks such as the ITUC Global Rights Index.
- Consumers Given the recent fossil fuel price volatility (which is likely to continue),
 coupled with the region's reliance on oil for domestic space heating, there is a greater
 need than ever to transition homes to renewable energy sources and improve energy
 efficiency to decrease the amount of energy used. This programme would reduce
 consumer exposure to this price volatility and reduce heating costs for tenants.

4. Structuring the bond

Working on the assumption that the NIHE would be registered as a society under the Cooperative and Community Benefit Societies Act 2014 (or that some significant portion of its stock would be), it would have the option to raise a bond. Given the new Cooperative would have significant assets as well as (at least perceived) sovereign backing, it would be eligible for good pricing on this debt raised.

For the bond raise to have integrity and deliver on the needs of the Housing Executive and its tenants and their communities, the process must align with principles of transparency (through reporting, monitoring and verification), value-for-money for the issuer, and the just transition. Furthermore, as the design is progressed, it would be essential that investors are engaged to ensure they are comfortable with the innovative structure and can feed back on their expectations.

The Just Transition bond would be a direct issue by the NIHE social enterprise entity and would aim to negotiate a low, fixed-income rate of repayment. The tenure of the bond would ideally be 30 years (in line with the UK Government's Affordable Homes Programme standard) and have well defined use-of-proceeds to provide assurances to investors from a financial and social perspective. However, there may need to be a series of issuance, perhaps at different tenures. This may also involve creating instruments of different tenures that are aligned to the needs of different types of investor (banks or institutional investors). This will be a modelling challenge for the next steps in delivery (see Section 5).

Given the NIHE's inexperience in bond issuances and working with private finance, it would be ideal for it to create a partnership with the UK Infrastructure Bank. This partnership could be in two forms: (1) to deploy some of the UKIB's own concessional capital as well as its guarantee book to the bond raise, but also (2) to provide technical assistance and guidance on raising capital through its local authority support programme. This partnership would ensure that terms of the bond issuance are even more favourable for the NIHE and investors but also align perfectly with the UKIB's dual mandate of supporting the levelling up agenda and the delivery of net zero.

Monitoring, reporting and verification

As stated above, the bond could use the Green Plus framework used by the UK Green Sovereign bond as a framework for measuring the impact of the programme. It should also have a clear use-of-proceed framework, which could draw on the Sustainability Standard for Social Housing. Given the need for integrity in the use of proceeds, it would also make sense to include a dedicated monitoring and verification of outcomes programme. This could be an opportunity to leverage expertise within Northern Ireland's two universities and further education colleges, where researchers could develop training and skills programmes and monitor the social benefits, verify the quality of outcomes and publish research on the social benefits of the investment programme to the NIHE as well as the wider social, environmental and economic benefits to Northern Ireland.

Necessary supportive policy programmes

Given there will be a significant demand for construction workers with not only the skills to build highly energy-efficient new homes but more importantly to retrofit existing stock, there could be supply chain issues if the investment programme is not accompanied by policy programmes to retrain construction workers to ensure they have sufficient skills to deliver retrofits to a high standard. This could be remedied by a partnership with the government-endorsed social enterprise TrustMark to ensure that workers delivering this work are properly assessed and meet their PAS 2035 standard for retrofit roles. Belfast has already secured funding for a retrofit skills

⁴ For further information see www.trustmark.org.uk/tradespeople/pas-2035

academy, which could be aligned with the investment programme and also scaled up with support from the Northern Ireland Executive.

Consideration should also be given to mandating the need for Building Renovation Passports (developed as part of the Coalition for the Energy Efficiency of Buildings [Green Finance Institute, 2020]). This would ensure that all housing units have a digital log of the work completed and would support a long-term renovation roadmap for the Housing Executive.

Catalysing momentum for just transition finance in Northern Ireland

Finance will be only one part of delivering the revitalisation of the Housing Executive. Accompanying policy programmes are required to ensure that Northern Ireland has a suitably skilled workforce. If well designed and aligned to the investment programme, there could be significant spillover benefits beyond the NIHE housing stock and its tenants:

- New, quality jobs could be created in the construction and energy sectors, which will
 produce multiplier economic benefits through new job opportunities and more localised
 supply chains, but also through reduced energy bills associated with better quality, energyefficient housing.
- The investment programme could be used by the Executive to bring down supply chain costs associated with retrofitting by building up retrofit skills within Northern Ireland, responding to the scale of the NIHE housing stock and the challenge to retrofit. This could make Northern Ireland a beacon for high standards of regional retrofit of buildings and a benchmark for other regions globally. Furthermore, reducing supply chain costs would improve the business model for private homeowners and the new social enterprise could even hire out an internal workforce as an additional revenue stream (the Wales Optimised Retrofit scheme has adopted such a model). Therefore, across Northern Ireland there would be an acceleration towards energy-efficient, low-carbon homes.
- The NIHE is a community lynchpin and has the opportunity to be a regional anchor institution in delivering the country's transition to net zero, but it will be even more effective if community support can be established and a just transition movement can be built within Northern Ireland. This would focus not only on the built environment but also on delivering a just and equitable net zero transition across all sectors (notably transport, energy and agriculture) in a way that suits the needs of the region. This would mean bringing together different groups of stakeholders, including:
 - Local politicians across all parties and national level political support
 - Local community representatives, including trade unions and environmental groups
 - Local finance including banking, institutional investors (pensions) and credit unions
 - Local business and their representatives e.g. the Federation of Master Builders will be an important partner
 - Universities and further education colleges
 - Civil society, cultural and religious leaders.

5. Next steps

As stated in the NIHE's 50th Annual Report for 2020-21, the housing provider is currently working with the Department for Communities to deliver an outline business case for the revitalisation of the organisation's housing stock. This will include "a range of options on how finance can be raised", hence there is an opportunity now to ensure that if the Executive wants to raise private finance, it is on amendable terms and on a basis conducive to a just transition for tenants and communities across Northern Ireland.

We propose the following next steps to progress this proposal and accelerate Northern Ireland's own progress towards its newly legislated net zero target. The steps should be split into two parts: a) progressing a financial modelling and measurement framework for the just transition financial instrument; and b) further stakeholder engagement and feedback.

A. Financial modelling and just transition measurement framework

The NIHE has taken steps to evaluate its current housing stock and the renovation needed to enable it to reach the Decent Homes Standard across all units as well as what is needed to make progress on its net-zero-by-2050 target, which is a significantly higher performance standard than the Decent Homes Standard. As stated earlier, Savills (2009) has estimated the investment requirement to meet the Decent Homes Standard and this proposal has tried to suggest a fundraising option for the Executive. The next stage of the proposal will need to go further, to:

- Create a financial model for the funding requirement for the NIHE revitalisation plans, to cover:
 - The mix of capital private finance (from the bond raise), public financing and other sources (e.g. crowdsourcing for individual projects).
 - Revenue streams rental incomes, comfort charges,⁵ carbon credits and outcome payments.⁶
- Develop a just transition measurement framework that can be used to provide transparency on the use of proceeds for any just transition instrument. This should draw on and leverage existing similar frameworks, such as the Sustainability Reporting Standard for Social Housing.⁷

B. Further stakeholder engagement and feedback on the proposal for a Just Transition Bond

This should involve greater refinement of the proposal through engagement with key stakeholders, including:

- 1. Continuing discussions with NIHE on how the proposal aligns with its revitalisation plans and how to proceed to the next stage of modelling the debt raise.
- 2. Testing the proposal with stakeholders to receive their feedback and buy-in. This consultation would involve:
 - Meetings/roundtables with Northern Irish policymakers.
 - Workshops to test the different aspects, e.g. finance structure with investors and just transition metrics.

⁵ These are periodic charges held against a property for energy efficiency work undertaken. Generally, these will be pre-agreed, account for a proportion of the energy savings from the renovation and support repayment of capital raised for the work.

Outcome payments (sometimes known as social impact bonds) involve payment for delivery of service provision. More detail can be found here: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/459680/OBP-explainers_sm_v2.pdf

⁷ For further information on this standard: https://esgsocialhousing.co.uk/

- 3. Working with the NIHE as well as the Strategic Investment Board of Northern Ireland to evaluate fundraising options, and holding consultation with the investment community and other key stakeholder groups; PCAN and the Grantham Research Institute at LSE would both be keen to do this.
- **4.** Working to define a timeline and identify if the next stage could be funded (to bring in suitable expertise to scope the bond issuance delivery).

The Grantham Research Institute would like to build on this proposal and work with academic partners within PCAN to progress these next steps.

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