Access to adequate housing in Ukraine:
a needs-based assessment for investment

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# Access to adequate housing in Ukraine: a needs-based assessment for investment

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Access to adequate housing in Ukraine: a needs-based assessment for investment


Introduction

The challenge of addressing Ukraine’s housing need is immense. According to the latest surveys by the International Organisation of Migration, the number of internally displaced persons (IDPs) in the country now exceeds 3,674,000, with 6,218,800 more fleeing over Ukrainian borders, seeking refuge in neighbouring countries. These needs have emerged within a housing system dominated by home ownership (95.5%), leaving a small (3.8%) and a weakly regulated rental sector to provide for most IDPs. Following decades of privatisation, a miniscule social housing sector (just 0.8%) is unable to accommodate those whose needs are not met by the private market.

This paper concerns the rehousing needs of IDPs, and the level and spatial distribution of capital investment required to address them. It builds on the findings of the RDNA2, recommendations of the international symposium hosted the Dutch National Environmental Assessment Agency (PBL) and subsequent report Rebuilding a Place to Call Home (Anisimov, Fedoriv, Tkachenko, Lawson, Buitelaar, 2023), as well as the recent Preliminary Assessment of Need for Social Housing completed for the European Commission (Lawson, Bobrova, Anisimov, Fedoriv, Verbytsky and Edwards, 2023). This paper also takes direction from Ukraine’s Recovery Plan with regards to building back better housing, also for internally displaced households.

The paper complements Ukraine’s own recovery aspirations as well as European accession ambitions to grow the Ukrainian economy in a sustainable way, and also reduce economic and social inequalities. It also builds on best available analysis of needs, such as the IOM’s recent Durable Solutions survey. This paper also aims to ensure tangible progress of Ukraine towards the Union’s social, economic, and environmental standards, as envisaged by the proposed EU Ukraine Facility. For the first time, research offers modelling not only at the national level, but also of the type and regional distribution of need for affordable, inclusive and energy efficient housing across each region of Ukraine. It estimates the needs-based allocation of capital investment required to guide longer-term supply-side housing recovery efforts.

The European Council in 2022 granted Ukraine candidate status and expressed a strong will to link reconstruction with reforms on its European path. In 2022, the EC outlined principles and pillars for Ukraine’s reconstruction efforts to further integrate Ukraine into the EU. It was envisaged that reconstruction should be in line with the European green and digital agenda; and it should strengthen resilience and respect fundamental principles of the rule of law, including on anticorruption, judiciary, public administration and good governance (EC, 2022).

While housing policy remains a direct competence of member states, the EU can support this by upholding the Human Right to Adequate Housing, progressing the Sustainable Development Goals, and helping member states to do what it takes to realise their obligations under the European Social Charter. It also seeks to inspire better living environments under the New Urban Agenda, EU Housing Partnership and the European Bauhaus. However, the EU can also...
undermine these important goals. For example, when definitions of Services in the General Economic Interest (SGEI) force social housing to narrowly focus on vulnerable households – as an ambulance service. This has undermined culturally valued and more socially inclusive and financially sustainable models, as in Sweden and the Netherlands, which have sought to prevent social exclusion and offer good housing for all. It also forces new member states to adopt a highly targeted approach, when they are least able to flourish socially and economically. Narrowing household eligibility can lead to the concentration of poverty, and consequently undermines the political legitimacy and wider social acceptance of social housing. This is a policy choice. The sheer scale of housing need in Ukraine demands a transformational market shaping approach, one which does not create ghettos of isolated poverty, but offers culturally enriching, inclusive and sustainable living environments for a prosperous and just recovery.

In Ukraine, local authorities have responsibility for social housing and need to develop their competence to identify and address the housing needs and improvements in living conditions required by various groups in their communities. IDP households are one such group. To prevent further isolation and social segregation of displaced households, active land and urban policies are required, that integrate attractive affordable social housing within existing communities, and rebuild a place to call home that complements the cities own vision and needs.

The EU seeks to improve housing conditions, through various policies, regulations and programs, such as the Energy Efficiency Building Directive, post COVID Recovery and Resilience Facility, Green Deal, Circular Economy, New European Bauhaus and Affordable Housing Initiatives as well as the various instruments of the European Investment Bank. In Ukraine, the Energy Fund has been supporting improvements in the energy efficiency of housing, working together with Ukraine’s homeowner associations. Ukraine’s housing policy has been a focus for expert advice for reform for many years (UNECE, 2013), but progress has been relatively slow and programs under-resourced (Fedoriv, 2019, Sukhomud and Shneider, 2023, Cedos, 2022).

Much more can be done to improve and rebuild needed housing in times of war and recovery. Ukraine’s own ‘Lugano Plan’ provides clear goals and tasks to transform the housing sector more rapidly. The Ukraine-focused international symposium Rebuilding a Place to Call Home directly responded to this Plan, making contextually relevant recommendations (Anisimov et al 2023). This paper builds on this visionary document and collaborative effort.

However, resources and capacity to fulfill these recommendations are severely lacking (Cedos, 2023, Sukhomud and Shneider, 2023, Fedoriv, 2019). Ukraine is bravely defending itself from Russian aggression and a great deal of it own resources are dedicated to securing a victory, also for Europe. Ukraine has diverted resources for recovery to support the ongoing war effort.

At the time of drafting this paper, the European Parliament had deliberated on the EC proposal for a Ukraine Facility to invest 50 billion euros in Ukraine’s own plan of recovery. The proposed Ukraine Facility will operate from January 2024 to December of 2027. The Plan, to be approved by the Commission, must be justified in terms of recovery needs, contain measurable targets and ensure adequate monitoring. Accordingly, the content of the plan is also to be “needs-based, coherent, comprehensive and adequately balanced response to the objectives set out in Article 3”. This includes structural reforms and measures to promote the convergence with the Union.

**Overall, the Plan is to raise the growth rate of the Ukrainian economy, reduce economic and social inequalities and ensure tangible progress of Ukraine towards the Union's social, economic, and environmental standards (Article 16 (2)).**

This paper contributes directly to this objective, informing a needs-based capital investment strategy for the development of affordable, inclusive and energy efficient housing for Ukraine’s recovery. It provides evidence for housing needs to be prioritised and models the investment requirements to address these needs. The modelling also demonstrates the cost effectiveness of an efficient capital investment pathway.
Preliminary assessment of housing need

Prior to the war on Ukraine, poor housing conditions prevailed – including overcrowding, lack of maintenance, energy inefficiency (and energy poverty) and severe unaffordability for low-to-middle-income groups entering the housing market in major cities. The recent rapid evidence review demonstrates the magnitude of housing needs, its dynamic spatial distribution and the vulnerability of households affected (Lawson et al, 2023).

By 2023, Russian aggression had further damaged over 817,000 homes, directly affecting two million residents, causing approximately 15–20 percent of all Ukrainian citizens to flee their homes and communities. This process has been costly from multiple perspectives and also very uneven. Some communities are overcrowded, while others are partly abandoned. It also means great pressure on households trying to find and keep a home. Recent data estimates that 745,000 internally displaced people (IDPs) in Ukraine hope to remain in their current location for the longer term. More than 3.3 million IDPs see returning home as their ultimate preference, while 142,000 IDPs are looking to resettle in another location more permanently (IOM, 2023).

Yet despite evidence of the significant housing need, official plans, programs, and funding offer no plan or long-term housing solutions. Only the thematic materials of the Lugano plan offer detailed actions and tasks. One year on, housing policy reform remains stuck on first base of general principles. There is no systemic assessment of needs, nor any mechanism to support needs-based capital investment approach. No public-interest housing providers have stepped in to provide long-term solutions, and there are households still living in containers, some since 2014. Policy remains focussed on preserving and expanding the pre-war home-ownership-oriented model, with more subsidies for mortgagees, and new vouchers for repairs and the continuation of temporary housing models.

This response can be accelerated through evidence-based policy research and engaged civil society focusing attention on good governance, integrated urban planning, and more purposeful investment in good quality, inclusive and energy efficient homes and places to live in. This report extends the evidence based to support investment in the housing sector.

Housing is integral to recovery efforts

Overall, housing polices have deep consequences for Ukraine’s recovery, mediating its ability promote stable economic development, social solidarity and environmental sustainability. Investments in improved housing conditions will need to be sufficient to attract returnees, particularly, young families, alongside (early) educational opportunities, jobs of suitable quality, and health care. However, private investment is unlikely without public co-investment. This can be in the form of broad-based affordable rental housing, also accommodating vulnerable households, providing a low-risk housing option for returning households and a more accessible, adequate and attractive reason to stay in Ukraine.

While safe, secure homes and neighbourhoods are integral to recovery efforts, care needs to be taken in their policy design. Typically, the housing sector is utilised to stimulate post crises recovery, as in post GFC and post COVID recovery plans (OECD, 2020 and EC, 2020). In a review of past GFC stimulus measures, the OECD (2020) raised critical concerns over white elephants and uneven beneficiaries, for example commercial banks and wealthier households. This can exacerbate post-crisis inequality and undermine public trust in government actions. Unconditional and un-strategic support for efforts already in the pipeline may not be appropriate. Poorly administered investments can lead to stranded assets or corruption, and excessive austerity measures can slow recovery or do more harm than good. Rather, needs based planning and evaluation should be an integral part of stimulus and recovery programmes. Green and social measures must be sufficiently large, timely and properly designed, be well-embedded into domestic settings, create quality jobs and mobilise further investment in renewable energy. Whole-of-government co-ordination can also help identify and mitigate potential divergence in the
achievement of different policy objectives. Monitoring, evaluation and transparent reporting are also required to ensure appropriate design of green and social stimulus to prevent rebound effects, limit market distortion, and ensure additionality of public funding by improving targeting. It is also important to ensure environmental and social externalities are taken into account and provide clear influential signals to better align incentives (OECD Review of Past Stimulus Measures, 2020).

In Ukraine, it is the housing sector, more than any other, that has been impacted by war. Damage to homes and living environments has driven massive population displacement, and consequently, eroded and extinguished social and economic life and livelihoods. More positively, the repair, reconstruction and renewal of homes and livelihoods has brought people back to renew the economy as well. There are clear social, economic and environmental justifications that reinforce the need for housing focus for recovery actions.

The social justification
Access to adequate housing is not only a basic human need, but a major enabler of return. Of the estimated 65 percent of refugees that want to return, 91 percent say that this depends on access to basic services, livelihoods and housing (UNHCR, 2023). Restoring and improving access to safe, adequate and affordable housing will be essential for the return of IDPs and refugees. It is also vital for social solidarity and human capital retention, development and formation – simply put, providing a healthy basis for community well-being, continuation of education and lifelong learning, and a productive workforce.

The economic justification
Social and affordable housing investment can also transmit strong economic stimulus and aid recovery efforts. It involves large scale expenditure with strong second round effects and has high employment intensity. It can produce durable assets which contribute to wider social wellbeing and economic productivity; and is also attractive to longer term capital investment. A program of social and affordable housing can reinvigorate collapsed or poorly performing links in chains of housing provision – from land readjustment to modular production and maintenance.

Strategically stimulating housing construction to address varying needs can also deliver longer term economic value⁶: supporting supply chains, producing valuable housing assets, generating economic multiplier effects. It will stimulate a technological boost by bringing the best available technologies to the sector, especially the ones focusing on energy efficiency and on management of climate risks. Recent research (WIFO, 2023) demonstrates the wider economic benefits of affordable rental housing, including to GDP and affordability⁶. Most importantly, affordable housing can deliver social value by providing access to healthy, secure, and affordable homes for Ukrainians to recover and prosper.

The ecological justification
Quantitative and qualitative improvement to housing stock will be necessary to attract people to return and resettle in Ukraine. Self-built, rapid and unplanned housing development, disconnected from supporting infrastructure and opportunities, inevitably generates further negative consequences for the environment. Policies, standards and support for sustainable residential construction and renewal are needed, not only to improve quality (comfort, access, facilities, amenity), but also to reduce energy consumption, reduce reliance on fossil fuels, reduce CO2 emissions, promote use of renewable low-carbon materials and energy sources, and ensure more sustainable, well-integrated urban development (UNEP, 2017, UN Habitat, 2023). Any program of conditional capital investment should incorporate building and urban planning standards to maximise green, inclusive and accessible outcomes for households and communities (EIB, 2020).

¹ In a recent interview for Pragmatika Magazine, residential developer for DIM group commented “Let me remind you that there are more than 40 related industries. Accordingly, these are jobs, taxes paid on time, as well as a construction multiplier at the level of at least 6,5 hryvnia, capable of becoming the engine of Ukraine’s recovery. That is, every hryvnia invested today in housing construction affects the economy seven times more.” https://pragmatika.media/en/buduvaty-ne-mozhna-zapvytytsia-stavymo-komu-na-miesti/
² The system of non-profit rental housing in Austria costs tax payer money – but has direct positive economic benefits for the households in the quality, energy efficiency and affordability of housing, and for the government reduces the amounts necessary for household subsidies (low housing related transfer expenditures in Austria) and shifts resources from high-income landlords to more construction and economy-wide consumption expenditures, and even after considering the costs (tax losses from higher income landlords, and exemptions from corporate taxes), non-profit housing generates considerable net gain for the economy and for households the quality of homes. See: https://non-profit.housing.wifo.ac.at.
³ Lawson, J RMIT University, van den Nouvellant, R. UNSW, Troy, L. University of Sydney and New Housing Policy (Ukraine)
Supply or demand side?
The housing sector has a central role in national economic stability, domestic capital formation, the functioning and stability of financial systems and most directly social and economic wellbeing. Since the GFC, COVID pandemic and affordability crisis, mainstream economists have moved beyond a once narrow focus on demand side measures to promote ownership, such as mortgage interest rate subsidies, to ensure access to secure and affordable rental housing. This goes beyond providing rent assistance and examines of the role of responsible housing providers. The cost to governments of assisting demand in poorly functioning rental markets has led to escalating or inadequate rent allowances, outpacing purposeful capital investment in affordable housing supply (OECD, 2020). While individual allowances can target household for assistance, they are ineffective when supply is inadequate and market mechanisms unresponsive. They may even grow inappropriate forms of provision and inflate costs overall.

Ensuring purposeful investment to shape better and fairer housing markets is critical for the building back better, green and social inclusion agenda (UNECE, 2022, OECD, 2020. Pawson, Martin et al, 2022). Policy tools for achieving a more balanced approach are provided in the UNECE, UN Habitat and Housing Europe study #Housing 20307 (UNECE, 2021).

Distinctive structural factors shaping housing systems – such as limited dedicated land supply for affordable housing, monopolistic land hoarding and speculation, sluggish and risk averse investment in housing improvements and new supply as well as deficiencies in production – all impede the ability of housing markets to meet expressed demand, an in Ukraine today. Many tenants in Ukraine have faced significant rent rises during the war, and even eviction when unable pay demanded increases. The ‘law of the jungle’ prevails for the 65 percent of Ukrainian IDPs who rely on the rental market for safety and security. Demand side subsidies are particularly ineffective when housing provision is dominated by for-profit commercial providers, as in Ukraine, and where rents are also unregulated and vacancies are low, also as in Ukraine.

There are many examples of across Europe of housing systems which combine and adapt housing demand and supply instruments to shape a more effective and secure forms of housing provision. They use their powers in spatial planning and land policy instruments, and also co-investment in responsible regulated providers and ensure affordability via rent indexation systems and provide housing allowances when needed.

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7 The extensive #Housing2030 website also contains the joint #Housing2030 report, links to good practices, and also a series of thematic podcasts https://www.housing2030.org/reports/
### Table 1: Supply or demand side? It depends on the context.

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<th>Supply side approach</th>
<th>Demand side approach</th>
<th>Combination of Supply and Demand side approach</th>
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<td>Advantages</td>
<td>Direct, rapid impact Procurement policy steers quality Builds assets.</td>
<td>Targeted to certain households.</td>
<td>Complementary impact ensuring needed supply is accessible to households in need. Can sustain a growing and reliant sector of purposeful housing with broader market outcomes</td>
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<tr>
<td>Disadvantages</td>
<td>More complex policies required. Requires commitment to a long-term vision. Requires good governance and regulation of supported providers</td>
<td>Administrative cost A recurrent cost to government that does not build up asset base. Does not influence quality or quantity of housing provided. Can have an inflationary impact in a scarce inelastic rental market.</td>
<td>Requires more sophisticated policy development, implementation and adaptation over time.</td>
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<td>Situation useful</td>
<td>When improvements in quality and quantity are unlikely without conditional co-investment. To ensure cost effective and sustained outcomes, supports mission focussed nonprofit providers.</td>
<td>When there are no market failures inhibiting quality improvements and quantity of supply, but incomes are insufficient to afford decent housing. To ensure cost effective targets households and sometimes caps support.</td>
<td>When both improvements to supply and improvements to household capacity are required. Supply, quality, access may also be improved by mission focused housing providers.</td>
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Ukraine’s housing recovery will require a strategic and well-designed supply side approach, guided by SDGs, ambitious European standards and also green procurement policies, to implement both decarbonisation and energy efficient standards and drive a more sustainable construction sector. Appropriate investment can accelerate the introduction of better, more sustainable construction technologies and contribute to urban planning supporting sustainable mobility, moving away from wide car-oriented boulevards and separation of residential, office and commercial zones towards a sustainable and also walkable “15-minute city.” (EIB, 2020)

The most productive and resilient European housing markets combine affordable with social housing provision, and use a range of supply side and demand side instruments to address locally defined needs, including land policies to ensure more inclusive housing communities, as illustrated in the diagram below:
The Lugano Plan

In June 2022, around 40 countries along with global organizations signed the Lugano Declaration to support Ukraine’s Recovery in phases: emergency response, repairing damaged infrastructure and the long-term transformation of Ukraine. This declaration also outlined guiding principles for this process, such as democratic participation, transparency, and sustainability. The 2022 Lugano plan was also provided for discussion in London 2023 and soon in Berlin 2024. Following best international practice, the ambitions of Ukrainian Recovery Plan should be understood and respected by international donors (Tzifakis, 2022).

The National Recovery Council identified 15 “National Programs” to boost Ukraine’s Recovery and achieve growth targets. Housing was conceived as effective infrastructure, which needs to be energy efficient, comfortable and integrated. Recovery efforts in the housing sector, which was considered an: engine of transformation, and involved two phases. Firstly, the upgrade of housing and regions infrastructure was envisaged via the launch of a housing upgrade program, giving priority focus to an Energy Efficiency program and new urban planning pilots (e.g., Bucha, Chernihiv) involving investments estimated to be around US$10 billion. Secondly, the recovery plan includes projects to ramp up and upgrade housing and regional infrastructure: involving both new-build and infrastructure upgrade, in line with the urban planning and sustainability best practices. This would involve the roll-out of an at-scale energy efficiency (“EE”) program and the thermal preparation of housing (incl. IDPs) for winter. This program aimed to ensure more than 20,000 housing units were thermos-modernized in 2022, and also 100,000 new housing units would be completed (some of which started before war). The timing of this effort was ambitious, and later included an additional 150-250 social housing dwellings to be built.
Figure 2 Presentation of the Ukraine’s National Recovery Plan, by UA government June 2022 to Lugano

Beyond the glossy Plan, much more detailed thematic materials were produced from the 24 working groups through an intensive meeting cycle preceding the Lugano Conference. The detailed report on “Construction, urban planning, modernization of cities and regions” outlines more specific goals and tasks and a relevant selection these are presented below, which indicate the direction envisaged for adequate housing.

Stage 3: January 2026 - December 2032

1. New local and regional programs for the realization of citizens’ housing rights have been adopted, state funding redirected towards housing associations, municipal housing companies rather than individuals December 2026

2. Mechanisms for providing housing for some categories of citizens entitled to state support have been improved, including municipal housing programs supported by the state December 2026

3. Integration of housing diversity, social inclusion parameter into the spatial zoning regulations and spatial planning regulatory framework December 2028

4. Creation of stable and viable non-profit municipal housing funds and/or municipal housing enterprises in urban hromadas of Ukraine with efficient and resilient economic budgets December 2026

5. New tools have been introduced to encourage the use of vacant land for housing development, in particular through renting (by improving land assessment and taxation) December 2032

Ukraine’s Plan provided not only a framework, but also the focus for relevant advice from European housing experts, for example when drawing on the UN report #Housing2030 (UNECE et al 2021) and shaping the agenda of the Symposium Ukraine Housing Forum. This interactive process further informed more concrete recommendations outlined in the report Rebuilding a Place to Call Home (Anisimov et al, 2023). Social policy think tank Cedos, contributed much to the public discussion, most lately on recommendations for the use of the EU’s Ukraine Facility to

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9 See presentation to the UN ECE Workshop on Safe, Adequate and Affordable Housing from September 2022 here: https://www.housing2030.org/event/housing2030-and-un4kharkiv-unece-workshop-affordable-decent-and-healthy-housing/

accelerated necessary housing reforms. Ukrainian housing experts continue to contribute by actively engaging in legislative proposals, supporting the establishment of a well-governed agency and housing fund, to invest in responsible nonprofit housing entities such as municipal entities and cooperative associations (Verbytskyy and Bobrova, 2023, Amann et al, 2023).

**Ukraine’s faltering journey and fragmented international efforts**

While Ukraine has taken several tentative steps to implement its Recovery Plan goals, the transformative role of the housing sector has not been mobilised and any effective instruments to channel investment towards needed housing improvements and supply at the national and municipal level. Policies continue to boost Ukraine’s super home ownership pathway – but few applicants are able to sustain a mortgage. So far, all of Ukraine’s housing schemes involve demand side support for homeowners, providing subsidised loans for the purchase of existing dwellings or payments to existing owners to accommodate IDPs. These include a mortgage scheme for UDP housing via the Ministry of Regions funded by the German Government and its development KfW; a mortgage subsidy program for home purchasers (Ministry of Finance); a nascent Voucher Scheme (E Hope with the involvement of the World Bank) and various pilot schemes by international donors.

There have been no reforms to improve conditions in the rental sector, where most IDPs are forced to live. The government has ceased to monitor housing needs, or rental conditions and waiting lists are no longer functional. While the rental segment is of increasing importance, there have been no reforms to the rental market for example concerning the increase in legal contracts, improving standards, preventing rent hikes, discrimination or evictions). Such reforms would cost little to the budget. No active policy to support responsible landlords or tenants, which could reduce risks to households, provide flexibility, and promote easier access to quality housing.

There are direct payments made to households that host IDPs, providing 30 UAH per person per day (Прихисток - прихисти своїх, prykhystk.gov.ua) to approximately 30,000 host families in 2022. Municipalities also receive compensation for the costs of providing additional services to IDPs, such as kindergarten places.

Derzhmolodzhytlo the Social Housing Youth Fund (SHYF) was originally established for the purposes of supporting co-operatives for young households, but increasingly funds mortgages and is guided by international development bank KfW. SHYF is also responsible for the implementation of housing programmes, and even has regional offices (55 local programs in 13 oblasts but they have not created many housing apartments (Shnaider, 2023). However, donor funds are now exhausted and further funds for national programs have not been approved.

In the recent past (2021 to mid 2023) SFYH has provided a small number of home loans to randomly selected and approved IDP households able to sustain a 30-year mortgage, which has been funded by the German bank for reconstruction and development (KfW). At a recent international meeting (UNECE, October 2023) the progress this program was described as being of 24.5 million euro in total volume to finance the purchase of existing housing, with an additional 1 million euro for implementation, supervision and auditing. The program offered a register, from which applicants were randomly selected, for homes loans offered at favourable conditions. These conditions were 3% per annum, with a 6% down payment; for a duration of 30 years.

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12 According to a Kyiv residential developer “The main thing is the purchasing power of the population. The crisis caused by the war hit purchasing power hard. The government’s mortgage support program helps correct negative trends, and the circle of people who can take advantage of preferential lending is gradually expanding. Our specialists always analyze whether the issue of purchasing power will not reach its critical limit, beyond which the projects will become too risky” Natalia Dubyk, project manager of the Greenville company interviewed by Pragmatika, 12 October 2023 [https://pragmatika.media/en/buduvaty-ne-blohiya-zyvyta-zhywyta-stravmo-komu-na-mistse]

13 Currently households receive very low levels of support to cover the utility costs of accommodating IDPs in private accommodation. The private rental market is weakly regulated; since February 2022 rents have risen rapidly in the western oblasts, up to 225% in Lviv (Faltyt quoted in CEDOS, 2022). There is a lack of safety and security, and discrimination, and rents bear little relationship to dwelling size or quality,” Lawson and Gayda, 2022/29
Suitable dwellings were defined as being of a reasonable size, being 52.5 square meters for a family of 1-2 people and allowed for an additional 21 square meters for each additional family member, thereby enabling significantly larger than typically dwellings. Existing dwellings purchased had to be built less than 50 years ago or reconstructed less than 35 years ago.

A total of 644 loans were issued between 2021-mid 2023 to credit eligible randomly selected applicants. Lending volume of 892.6 million UAH (23.2 million euro) has exhausted available funds. Applicants registered their interest in the program via the governments Diia digital application and were then selected once or twice a year via random computerised draw.

Loan repayments on mortgages were to be pooled in a fund and revolver for future applications. The chief administrator of these funds is the Ministry of Reintegration, with implementation carried out by the SFYH, a supervisory committee, which met seven times over the life of the program. Funds also covered the internal audit by a private consultant, IPC GmbH Audit company "RSM UKRAINE" limited liability company. In 2023, a verbal agreement between KfW and the Ministry of Reintegration will possibly extend the program by 17 million euro, which would enable a further 425 soft loans to be allocated, from a list of 32.7 thousand registered applicants on Diia (Komnatnyi, presentation to UNECE housing policy workshop 2023). Clearly the scale of this program is not sufficient to meet interest in the program. Further analysis is also required to assess whether applicants are able to sustain a mortgage, especially when savings have been exhausted eroding.

More recently, since November 2022 the Ministry of Finance has taken the lead on housing finance offering deep demand side support.to commercial banks offering substantially discounted home loans for eligible households. The Ministry of Finance of Ukraine, the Ministry of Digital Transformation and PrJSC established "Ukrfinzhito" in 2020 to offer reduced interest on home loans. Eligible are war veterans and their family members; participants in hostilities, persons with disabilities as a result of the war, families of deceased war veterans, as well as families of deceased Defenders of Ukraine; as well as internally displaced persons. Analysis of monthly online allocations reveals that beneficiaries are primarily security personnel in safe areas.

Public subsidy, in the form of interest rate gap subsidy, is paid via the Ministry of Finance to participating banks via private entity. The deep and long duration of the subsidy enables 3-7% interest on home loans for 20 years, supported by 20% household deposit. Five participating banks lend to households who purchase dwellings in projects completed by approved developers, and in apartments that are less than three years old. Since November 2022, 1,200 loans have been issued of the 136,159 applications received. Expansion of this program could pose a deep cost to the public purse, and waste international resources. Furthermore, this program does not expand adequate choices for those most in need. Low to moderate-income IDPs in war-affected areas are unable to benefit from this support. The insecurity of war, lack of collateral and possibly the precarious nature of their incomes makes them ineligible for this deep and long-term subsidy.

Another program since November 2023, involves a system of Vouchers have been offered to war-impacted property owners for the repair and partial replacement of their damaged or destroyed dwellings. This can be applied for via the Diia app, and bone fide recipients can cash in the Voucher via preferred providers. It has been supported by the World Bank but also anticipates expenditure from frozen Russian assets. It has run into difficulties associated with ownership and land title verification and multiple cadastre systems.

In 2023 the COE funded a strategy for IDP housing but highlighted the absence of a systematic mechanism for assessment of need for long term housing, to be able to estimate the scale of durable solutions to be developed. Furthermore, it suggested that local housing funds were either insufficient or absent to fulfill municipal responsibilities in social housing and that a process for attracting investment to this task needed significant reform (COE, 2023).

Several small, valuable pilot projects are being undertaken and should inform more durable solutions in the rental market. The paragraphs below provide an overview of these current efforts,
which involve municipal housing projects supported by the European Union and Nordic Energy Finance Corporation (NEFCO), as well as pilot programs for affordable rental housing managed by the International Organisation of Migration (IOM) and funded by the German Government.

The EU has funded critical housing investments for IDPs in Ukrainian municipalities using repurposed funds from an interrupted program on energy efficiency and municipal waste, through the Neighbourhood Investment Platform (NIP). This is managed by the Nordic Energy Finance Corporation (NEFCO) and according to its official website14, has involved refurbishment of existing municipal infrastructure to rapidly renovate and construct energy-efficient housing in small and medium-sized municipalities in western and central Ukraine in ten cities: Chernivtsi, Chortkiv, Ivano-Frankivsk, Khmelnytskyi, Kivertsi, Kovel, Lutsk, Rivne, Zolochiv and Zviahel. The scale of the effort is modest, and the total EU contribution is EUR 19.4 million. According to NEFCO, between 1.5 million to 2.5 million euro allocated per project for technical design, construction work and materials, project management and monitoring. Projects repurpose existing municipal social infrastructure (dormitories, health care institutions, administration buildings, schools and day-care centres) to host IDPs. It is estimated that 1,800 IDPs will benefit this improved IDP accommodation.

At around the same time, the EU/NEFCO social housing grant program got underway early 2023. While it is too early to evaluate completed projects, a media report15 Whose house is on the edge? How cities choose locations for future capital housing for immigrants was published in May 2023. This investigation suggests potential learnings and shortfalls which could inform a more systematic evaluation and approach to IDP housing. Concerns highlights include the isolated locations of proposed IDP housing developments, often on the outskirts of the city, disconnected from transport and services, in areas with few employment prospects, or in areas of previous incomplete and unsuccessful developments.

Figure 3: Sketch project of a new residential complex for immigrants in Poltava.

Source: Image source: Ukrbuildinvest LLC in Isachenko (2023)

Positive examples of IDP housing within the urban fabric are also featured in the article, including Vinnytsia which has its own municipal housing program for the past 10 years. According to urban planner Nazar Kovalenko: "the city builds a house at its own expense and sells apartments at cost price to certain categories of the population — families with many children, veterans, IDPs, and public sector employees." The city has established guarantee arrangements with local banks to ensure the bank provides loans on preferential terms to citizens who have received the right to buy

14 NEFCO (2023) "New Nefco-EU funded action to provide homes to internally displaced persons in 10 Ukrainian cities" https://www.nefco.int/news/new-nefco-eu-funded-action-to-provide-homes-to-internally-displaced-persons-in-10-ukrainian-cities
out social square meters.” According to the Kovalenko the average cost of this housing is 10-30% cheaper than the primary market price. Social policy NGO Cedos has been working with the city on its housing strategy and they both co-operated organising the Ukraine Urban Forum.

There have also been several important experiments with models of municipal rental housing undertaken by the international Organisation of Migration (IOM). Before the escalation of the war, the IOM’s Affordable Housing Program had developed over 500 apartments for both IDPs and the local households in the cities of Kramatorsk and Severodonetsk. The AHP team includes governance and legal experts, project design and development professionals, as well as a national network. It is now shifting operations to the west of the country in five oblasts and developing several new models of municipal rental and rent to purchase housing. An international assistance agreement between the IOM, the Municipality and Ministry of Occupied Territories aim to establish efficient mechanisms for the implementation of the Housing Project; conduct, as deemed necessary, regular consultations on facilitation of management, construction and property-related issues within the Housing Project, their harmonization to EU good practices; provide support in the development of enhanced procedures and operational methodologies for the Housing Project; and provide capacity building activities for the Kramatorsk Municipality and organize meetings of the working groups, trainings, workshops and study visits.

The organisation of the envisaged affordable housing projects is outlined in the diagram below.

**HOUSING PROJECT AT SNAPSHOT**

![Diagram of Housing Project at Snapshot](image)

*Figure 4 IOM's Housing Project Concept*

There is synergy with the IOM’s project and legal assistance has been provided by the Austrian government as part of the EU New European Bauhaus Ukraine initiative in the form of a model legal framework for affordable rental housing, the so-called the Common Good Housing law.

This law comprises four main pillars: cost recovery rents, surpluses are revolved, assets are tied up to prevent private extraction, business activities must focus on the mission of affordable rental housing and the entity is also subject to governance and compliance requirements. The model law is derived from Europe’s most successful and growing affordable rental housing systems, as found in Vienna, Austria and is offered to Ukraine and European partners for adaptation to national housing reforms towards the establishment of a well governed social and affordable housing system, that can also attract and sustain long term investments for generations (Amann, 2023, Amann et al, 2023).
Figure 5 Presentation of Common Good Housing: a legislative approach to recovery in Ukraine (Amann, et al, 2023)
European guidance and experience on housing investment

As mentioned in the introduction, the proposed Ukraine Plan for use of the EU Facility, is currently being drafted by the Ukraine Government for approval by the Commission. The EC requires that this Plan offer a needs-based, coherent, comprehensive and adequately balanced response to the objectives set out in the Facility regulation (COM (2023)0338 – C9-0210/2023 – 2023/0200 (COD)). Article 3 concerns lifting the growth rate of the Ukrainian economy, reducing economic and social inequality and ensuring tangible progress of Ukraine towards the Union’s social, economic, and environmental standards. Of particular relevance is Article 3 (c), which specifies that the Facility must foster the transition to a sustainable, climate neutral and inclusive economy and a stable investment environment, as well as rebuild and improve Ukraine’s social infrastructure, including its housing stock. We return to the use of the Facility in the conclusion, but first we consider policy guidance on investment in housing in the section below and later the scale and distribution of Ukraine’s need for such investment.

The development of Ukraine’s plan, incorporating housing, takes place in the broader context of European regional action plans, European Union policies and OECD guidance that can inform its own approach to adequate housing and needs based capital investment. In recent years, the Ukrainian government has been involved in the development of the Regional Action Plan: Place and Life in the ECE (2021), which contains specific goals concerning financing and funding of affordable housing, which are summarised in the Table below.

Table 2 Goals, targets and actions of Place and Life in the ECE A Regional Action Plan 2030, endorsed by Ukraine.

<table>
<thead>
<tr>
<th>Goal B3: Finance and funding</th>
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</thead>
<tbody>
<tr>
<td><strong>Rationale: Finance and funding</strong></td>
<td>Together with purposeful housing delivery models and consumer support can enable policy makers to shape housing finance systems to ensure investment expands and protects affordable housing opportunities.</td>
</tr>
<tr>
<td><strong>Target Action B3.1 Financial regulation</strong></td>
<td>Regulate finance systems to promote housing market stability and prioritise sustainable investment to expand the supply of climate neutral, affordable and inclusive housing.</td>
</tr>
<tr>
<td><strong>Target Action B3.2 Investment</strong></td>
<td>Develop, support and enforce the implementation of responsible credit norms and standards, (e.g., deposit ratios, loan to income and loan to value ratios) which prioritise access to first home buyers, prevent over indebtedness and also stabilise house markets.</td>
</tr>
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The EIB has invested in green, social and affordable housing in Poland, Slovenia, Lithuania, Ireland, Germany, Finland for construction, renewal, renovation and retrofitting to meet local housing needs and development goals.

<table>
<thead>
<tr>
<th>Target Action B3.3 Frameworks, funds and capacities: The establishment of effective financial frameworks, public purpose financial intermediaries and revolving funds that channel investment towards expanded access to affordable, adequate and sustainable housing</th>
<th>B3.3.1 Establish special purpose financial intermediaries to support households and affordable housing providers that may otherwise have limited access to the private market. B3.3.2 Develop and support financial investment frameworks and their compliance that channel long-term low-cost investment to social and affordable housing assets. B3.3.3 Improve the capacity of households to afford decent housing, by stabilizing housing prices, improving and securing household incomes and, when required, provide adequate assistance in the payment of housing costs. B3.3.4 Encourage stable, fair rent setting and indexing systems which support adequate, well maintained and affordable provision.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target Action B3.4 Mechanisms and instruments: New legal mechanisms that shield residents from excessive financial risks and burdens as a consequence of the design and enforcement of credit norms, consumer protection, financial literacy and regulation of financial products. Taxation instruments that support and promote affordable, adequate and sustainable housing outcomes.</td>
<td>B3.4.1 Prevent and mitigate the risks to households associated with predatory lending and over-indebtedness. B3.4.2 Design and enforce taxation codes to encourage the efficient use and more equitable distribution of land and dwellings; discourage speculation in land and housing markets; and attract investment in recognised affordable housing projects. B3.4.3 Take specific measures to counteract housing speculation in order to protect scarce affordable housing resources. B3.4.4 Provide assistance to households who are unable to afford decent housing.</td>
</tr>
</tbody>
</table>

Housing is one the primary sectors through which social cohesion and energy efficiency policies of the EU are actualised, which in turn has a direct impact on the quality of life of households. The Cohesion Policy, Fit for 55, Green Deal and its Just Transition, Renovation Wave and New European Bauhaus, as well as the ongoing Energy Performance of Buildings Directive, Energy Efficiency and Renewable Energy Directive and the Affordable Housing Initiative (as part of the EU Renovation Wave) are all highly relevant to Ukraine’s recovery efforts. They are also relevant to Ukraine’s journey towards EU membership. These policies are also implicit in the proposal for an EU Ukraine Recovery Facility. Improving Ukraine’s housing, guided by EU policies, will be central to EU supported recovery efforts.

Since the COVID 19 pandemic, the EU has accelerated its efforts to channel investment towards a more socially inclusive and also green recovery. EU Cohesion policy (2021-27) has supported affordable housing efforts, via the ERDF and Cohesion Fund for sustainable development. The post COVID Recovery and Resilience Facility emphasized the renovation of buildings for climate neutrality, including social and affordable housing. Recovery Plans supported investments in retrofitting and energy efficient housing to reduce energy poverty, create local jobs, and improve the quality of housing to improve comfort and reduce reliance on fossil fuels.

The EIB is the EUs development finance institution and also the worlds largest green bank. The EIB has outlined its investment framework in the guide ‘Social and Affordable Housing with the EIB: Advanced finance for a basic need’ available here: [https://www.eib.org/en/publications/social-and-affordable-housing-with-the-eib](https://www.eib.org/en/publications/social-and-affordable-housing-with-the-eib). The EIB has adopted a framework for investment in social and affordable housing which integrates rather than segregates households of differing needs and low to middle incomes. The EIB outlines the following requirements for investment: a clear policy and regulatory framework for housing; focus on social and affordable rental housing; aims to improve social cohesion and the quality of life; combats urban sprawl, and creates vibrant integrated neighbourhoods served by sustainable transport solutions. EIB financing excludes market rate housing except in cases of strong energy performance. The EIB can work with national financial intermediaries, aggregating borrowing demands, where housing associations are too small.

The EIB has invested in green, social and affordable housing in Poland, Slovenia, Lithuania, Belgium, France, Ireland, Germany, Finland for construction, renewal, renovation and retrofitting to meet local housing needs and development goals.
Public funding for affordable housing is increasingly available via EU Cohesion Policy. This is demonstrated by dedication of EUR 6.6 billion funds towards housing between 2014 and 2020. Notably, the latest Multiannual Financial Framework, provides significantly increased investment in sustainable neighbourhoods. This includes the promotion of energy efficiency in housing. Multilateral-governmental banks such as the European Investment Bank (EIB) and the Council of Europe Development Bank (CEB) lends to member countries for these goals – and Ukraine is now a member of both these banks. Some European countries have their own development banks, as in Poland, the Netherlands, France or systems of public savings and loan banks, as in Germany and Austria.

The EU has a history of investing in reforms of neighbouring countries seeking accession, based on EU thematic priorities and rewarding performance and progress towards these, while allowing increased flexibility to respond to the evolving needs of the partners in their path towards accession. For 2021-2027 it will invest 14 billion in pre-accession countries. There are currently five thematic priorities when providing any assistance: first EU efforts relating to the rule of law, fundamental rights and democracy; secondly and building on this are efforts to improve good governance, ensure EU acquis alignment, and promote good neighbourly relations as well as strategic communication; thirdly, the EU prioritizes the Green agenda and sustainable connectivity; fourthly, competitiveness and inclusive growth; and last but not least fifthly, EU assistance promotes territorial and cross border cooperation.

The EU has invested in the Western Balkans, via the Western Balkans Investment Framework (WBIF). This is a joint initiative of the EU, financial institutions, bilateral donor and beneficiaries, aimed at enhancing harmonisation and cooperation in investments for the socio-economic development of the region and contributing to the European perspective of the Western Balkans (WBIF, EU, 2023). The framework also includes funds to improve energy efficient housing.

As mentioned earlier, the European Commission has proposed the establishment and regulation of a Ukraine Facility of 50 billion euros to invest in Ukraine’s recovery. This comprises three pillars. Firstly, grants and loans, secondly complementary measures to attract public and private investment, such as necessary reforms and guarantees and thirdly, technical assistance and bilateral support for pre-accession measures and also interest rate subsidies provided in associated concessional loans. There is much discussion going on now amongst the EU Parliament, Council, NGOs and civil society on the potential of this Facility for the modernisation of Ukraine’s building stock, including housing.

The Facility can provide a much-needed impulse for housing sector transformation. For now, we examine the evidence base to determine the scale and focus of this investment.

16 Western Balkans Investment Framework (WBIF) is explained here: [https://www.wbif.eu/about/about-wbif](https://www.wbif.eu/about/about-wbif)
Moving forward from RDNA2 with AHAT IOM needs analysis

The RDNA2 report estimated total reconstruction and recovery needs exceeding US$411 billion and the ambition to shift towards a less energy-intensive and more resilient, inclusive, and modern approach – to build back better, or according to the Ukrainian government Build Forward Greener. Housing comprised 17 percent of estimated investment needs. Damage and needs arising have continued to escalate since. The RDNS2 report provided early guidance on the prioritization of this growing need and the need to phase recovery efforts, which we return to below:

“(i) ensuring a pragmatic, differentiated, and flexible approach to balancing the most urgent needs with what can be achieved in the medium term, considering the impact of war in different geographic areas; (ii) focusing on building back better for a more sustainable future, including harmonization of Ukraine’s legislation and policies with European Union law and standards and the acquis communautaire; and (iii) ensuring the readiness of Ukrainian institutions, systems, and regulations for transparent and efficient long-term recovery and reconstruction programs, taking into consideration external and private support and the still recent reforms on the devolution of power and decentralization in Ukraine.” RDNS2, 2023:14

According to the RDNS2 (2023) “The timeframe will depend on the availability of financing, but also on the absorptive capacity of the Ukrainian budget, implementation capacity and coordination among line ministries, subnational authorities, civil society, and community-based organizations, and other implementing agencies; the readiness of the private sector to support and help implement capital investments; the availability of materials and labor; and the future trajectory of the war. However, there will be a tremendous social and economic cost, borne especially by the poorest and most vulnerable, if the most urgent needs are not met in the short term. “ Ibid, 2023:13

Our exploratory needs-based investment analysis follows this logic: pragmatic, differentiated and flexible, harmonising with UA and EU aspirations, and the need to ensure efficient use of limited resources through good governance and most efficient investment pathway.

The Affordable Housing Assessment Tool (AHAT) was developed through research exploring how new build social and affordable housing projects that were funded and financed across diverse regions in the Australian context (Randolph et al 2018). It was influential in lifting the investment ambitions of national and regional governments, and today supports Housing Australia in its role as a national housing finance agency.

One of the key contributions of early AHAT research was that investment in social and affordable housing is often driven by financial feasibility requirements rather than a profile of households in need (Randolph et al, 2018). This finance first approach took root following decades of declining government support for social housing generally, the erosion of housing policy capacity and shift in towards market-based social policy formulations. It also led to the rise of ‘subsidy capture’ approaches, leading to increases in rent assistance and other support payments, and also the weakening of more direct provision approaches. Today, customised PPP Availability Payment deals are emerging, and are a challenge not only for regulatory transparency but also public budgets (Lawson and Davies, 2021).

AHAT was developed to help turn this process around and invert this question so that housing needs were the priority and funding requirements were tailored to meet this need. This approach
also enabled a more transparent assessment of alternative investment pathways, which established the relative cost effectiveness of capital investment approaches (-24%) (Lawson et al, 2018).

An overview of the logic of the AHAT model is outlined below:

1. Identify need for housing
2. Assess development costs
3. Model development and operation cost/revenue over time (20-30 years)
4. Test impact of different policy lever scenarios
5. Compare feasibility and costing under different scenarios

The AHAT tool is a cashflow model that estimates costs and revenues over long period of time (i.e., 30 years), which is similar to the standard approach to estimating feasibility of any development project. Figure 8 below diagrammatically lays out the logic flow and basic structure of inputs and outputs in the AHAT model. The key difference to the finance first approach is there are no assumed financial hurdles to generating feasible outcomes, as many of these parameters are largely arbitrary and based on subjective expectations generated by financial intermediaries. Ultimately these expectations are going to be negotiated in conjunction with policy ambitions and likely constraints on funding imposed by governments. The AHAT model allows for testing different policy scenarios and combinations to allow for a more informed discussion on the trade-offs and constraints imposed by the funding environment. Critically, this tool allows the exploration of the relative costs to government under different policy settings.
Housing need assessment for Ukraine

As outlined in the introduction to the paper, this analysis applies the AHAT tool to analyse the housing needs for Ukraine’s IDP households and, in turn, the capital investment needed to meet that need. The first phase of the analysis is to quantify the estimated housing need. This need is spatially disaggregated to oblast, both to inform future investment division, but also to reflect costs and revenues in different parts of the country.

Our explorative application of the AHAT model to Ukraine draws on the IOM general population survey, round 13\textsuperscript{27}. The survey is a computer assisted telephone interview based on a random digital dial sample. The IOM survey is a robust data set, spatially disaggregated to oblast, widely

\textsuperscript{27} See further data notes from the IOM and in the appendix.
used (informing the HNO-OCHA, for example) and regularly updated. Round 13 of the survey, undertaken in May 2023, included many questions relating to the household situation of internally displaced households: their current living conditions, household composition, incomes, vulnerabilities and settlement aspirations. The IOM general population survey has some limitations for this analysis. First, there are large regions in the east of Ukraine that were not surveyed (Donetska, Zaporizka, Luhanska and Khersonska Oblasts and Autonomous Republic of Crimea). Second, the sample, while statistically representative at a national level, they are only indicative at the oblast level. Third, there is some potential for a mobile phone-based survey to skew the sample (to a younger population). Mostly, though, the limitation is that the survey is a snapshot in time, while the internally displaced population and their long-term intentions are rapidly changing.

Beyond the data source, a limit to this method is that the need for housing is likely to be far broader than the identified internally displaced population. The focus on IDPs excludes, among others, international refugees with intentions to return to Ukraine and households with unmet housing needs before the war. However, IDPs represents an immediate need for housing, and prioritising their immediate housing needs follows the rationale of the RDNA2 (p.13-14). This work is explorative, indicative only, and has many limitations, but it can certainly be built on with focussed attention and resources.

The remainder of this section provides an overview of how the IOM survey data has been analysed. The analysis comprised three steps.

1 **Locate need, based on IDP intentions**
   Depending on the household intentions, to return, integrate or resettle, the location of housing needed for IDP households will vary.

2 **Calculate count of dwellings needed (and typical size), by oblast**
   Household size and composition will vary by location, which has a bearing on the number, type and size of dwellings needed to house the IDP.

3 **Calculate typical income (before war and now), by oblast**
   Household economic capacity will vary by location, which has a bearing on the rent that can be afforded and also anticipated longer-term need for housing.

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**Locate need based on IDP intentions.**

<table>
<thead>
<tr>
<th>IDP households</th>
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<tbody>
<tr>
<td>Already returned to origin, or intend to return</td>
<td></td>
</tr>
<tr>
<td>Lacking housing at origin*</td>
<td></td>
</tr>
<tr>
<td>Need at origin (~160k nationally)</td>
<td></td>
</tr>
<tr>
<td>Need at destination (~340k nationally)</td>
<td></td>
</tr>
<tr>
<td>Combine need for each oblast</td>
<td></td>
</tr>
</tbody>
</table>

~7% of returnees identified as "high" on lack of accommodation access nationally, but rate varies by oblast. Rate of returnees lacking housing applied to those intending to return.

*Figure 7 Logic applied when defining IDP need for housing support.*

While the medium-term intentions of IDPs will be extremely varied, their intention can be distilled to two categories for the purposes of this analysis (see Figure 7). First, there are those who do not
intend to return to their place of residence before being displaced. That is, they either intend to integrate in their current location, or they intend to resettle elsewhere. For this category, it is assumed that they are, or will be, in need of a durable home in their intended destination.

Second, there are those who intend to return or have already returned to their place of residence before being displaced. For this category, it is assumed that they are returning to an existing dwelling, so will not necessarily be in need of a durable home upon return. However, due to various circumstances – inter alia: lost income, damaged dwelling or a lack of suitable housing before being displaced – a proportion of those returning who will be in need of a durable home upon return.

The IOM survey asks participants to rate their access to suitable accommodation. Of those who have already returned, some 7% nationally identified their lack of suitable accommodation as ‘high’. This rate varied significantly by oblast, from below 2% to above 20%. This proportion of returnees for each oblast is taken to be in need of a durable home in their place of origin. The same proportion of those intending to return are similarly taken as being in need of a durable home in their place of origin.

The count of need for each oblast is, then, the combined need from those integrating or resettling in that oblast, and those returning to that oblast with a lack of access to suitable accommodation. Overall, around two thirds of housing need stems from IDPs planning to integrate in their current location or resettle in a new location, although there is a high degree of variability (see figure 8).

![Source of housing need](image)

**Figure 8** Distribution of source of housing need, by oblast, based on IDP intention.

**Converting IDP to housing need**

The IOM survey asks multiple questions about the household composition of IDPs. For the purposes of this analysis, the key figure is household size, as it allows for a population figure to be
converted to a household (and so dwelling need) figure. The national average size of IDP households is 3.5 people/household, which is higher than the average household size of the overall population at around 2.6 (Ukraine Statistics service). This figure also varies by oblast, with the average household size ranging from 2.5 people to 4.9 people. The distribution of household sizes is shown in Figure 9. The corollary is that the ~1.42 million IDPs identified as needing housing translates to a need for around 500,000 dwellings.

### Identifying economic capacity

The IOM survey asks multiple questions about the household deprivation and economic capacity. For the purposes of this analysis, the key figure is household income, as it allows for an estimate of the rents that these households can afford (taken as 30-40% of household income). Rents become a key source of revenue for a housing project. The national average monthly of IDP households is 12,000UAH, which is lower than the average income of the overall population at around 14,500UAH (Ukraine Statistics service). This figure also varies by oblast, with the average household income ranging from approximately 8,500UAH to 14,500UAH. The distribution of household incomes is shown in Figure 10.

Of note, this analysis is based on current household incomes. The IOM survey also reports household incomes from before the war. Pre-war incomes give an indication of future earning potential, at a notional time of ‘recovery’. First, many households will not return to their pre-war earning potential. But more significantly, the pre-war incomes of IDP households in need of housing was also low, averaging 13,500UAH nationally. This suggests those intending to resettle or integrate away from their pre-war homes, or those returning but lacking suitable housing upon return, are more likely to be households with limited earning potential, and more likely to be in need
of housing even before the war. By extension, it suggests that the need for housing is not likely to be a short-term need.

![Figure 10 Distribution of IDP household monthly income, by oblast](image)

**Assessment of need for affordable housing amongst IDPs across each oblast**

Applying the assumptions and logic outlined above and acknowledging the strengths and limitations of the IOM survey data, Figure 11 shows the geography of need for adequate affordable housing. This need, along with regional estimates for household size and income, inform the analysis of needed investment in the next section.

This geography demonstrates both the need in the eastern part of the country, most adversely affected by the war, the need being created by resettling populations gravitating to the major cities in the western part of the country, and Kyiv which matches both these descriptions. Also of note, there is incomplete data for multiple oblasts where need is also likely to be high. The method employed in this analysis can readily be updated as newer, or more comprehensive data, becomes available.
Figure 11 AHAT modelling of IOM IDP housing needs due to lack of access to adequate housing (authors)
Production costs and model outputs by region

With this clarity on the geography of need we now move forward with the volume and spatial allocation of investment required. The cost inputs we used are outlined in more detail below.

Source input data:

Input data has been based on best estimates from publicly available information, however it needs noting that they are approximations and lack some geographic nuance that would be needed to address locational differences in cost and housing typologies. This could be addressed with additional time and resourcing.

Land

Land costs have been assumed to be zero, in line with expectations that government will provide land inputs for social housing development (transfer, lease), as is commonly the case in EIB funded projects. Market based land costs can be modelled but would ultimately increase the total development costs.

Construction

Construction cost estimates have been based on industry report of current construction costs (https://globalhappenings.com/economy/206857.html?amp). Some regional variation is noted in these sources, but this is incomplete across Ukraine, with estimates currently higher in Kyiv region at around 1000 euro (38,000 UAH). It is likely that this overestimates costs in some areas, and also does not account for the different building types that may be require across different regions (i.e., apartments versus townhouses). Additional allowances have been made for professional and administrative fees. (per sqm, converted to typical dwelling size from ‘needs’ data).

Operations

Operating costs include allowance for repairs, planned maintenance and sinking funds, (relative to capital costs), vacancy and bad debt, and admin and service changes (e.g., tenancy management, insurances, taxes) with these measures determined relative to rental income.

Capital

Cost of borrowing, etc. has been based on expectations on commercial lending rates. It has been noted that there have been some recent and significant moves to adjust the cash rate downwards, and that this is likely to continue into the future, have significant impact on likely lending rates. For the purposes on this model, 16% cash rate has been assumed. For models incorporating discounted financing, rates have been based on EIB expectations on loans attached to funding package proposals. Loan terms for modelling have been assumed for 25 years.

Taxes – allowances have been made for VAT of 20% on all cost inputs, and land taxes.
Rental revenue – derived from income estimates of housing ‘needs’ data, by Oblast. Rental revenue limited to 40% of household incomes.
Escalations (materials, rents, operating costs, inflation) – Costs escalation has been assumed relative to current rate of inflation (7%). It is also worth noting that there is a downward trend in inflation, however there is much uncertainty on longer term prospects.

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28 A Ukrainian developer of residential apartments said in a recent interview ‘you need to have accurate data. …It is important to know how many people have lost their homes and how many of them really need a new one.” This is not disputed, and our research has used available online sources, including UA government, EIB and local construction industry views to determine the cost of decent standard residential properties. However, a more thorough validation is required and should also produce procurement benchmarks. Isachenko, I (2023) Interview with Natalia Dubyk “Prices are currently rising due to the increase in the cost of construction: construction materials, logistics operations, etc. have become more expensive. A return to the pre-war level can be expected only with the stabilization of the military and political situation in the country. In other words, we have to wait for the end of the war.” https://pragmatika.media/en/buduvaty-ne-mozhna-zupyviat-vyvody-misto/
Model outputs

Result of modelling is estimated cost of program; that is, the subsidy needed (spatially aggregated), per dwelling by oblast, to maintain feasibility of ‘for-purpose’ housing construction program. Three different funding models have costed to estimate the average funding requirement per dwelling to produce a feasible development scenario. Each of the models assumes a not-for-profit delivery and operation however is assuming standard margins for the trades and building process itself. For-profit developer led approaches will only increase total funding required commensurate with expected returns of developer/operators. Each of the three models are described below:

Model 1 Capital investment model

Upfront capital funding provided to cover development costs. Discounted finance is also incorporated only to the extent that tenant incomes can sustainably cover repayments, after accounting for operating costs.

Model 2: discounted financing model

With development costs funded by discounted loans. Funding would need to be provided to fill the gap between surplus rental revenue (after operating costs) and repayment requirements on loaned money (on a 25-year loan term).

Model 3: private finance model

This conceptually the same as model 2, except where finance is sourced through commercial lenders at commercial rates. Similarly, funding requirements are based on the gap between surplus rental revenue (after operating costs) and repayment requirements on loaned money (on a 25-year loan term).

Model outputs can also use ‘need’ data to develop scale of program, by oblast, and phasing of program (including future sales to tenants). Comparison of program costs is provided on a regional basis in the following table, which illustrates the varying subsidy needed (spatially aggregated), per dwelling by oblast, to maintain feasibility of ‘for-purpose’ housing construction program.
Table 3 Number of needed dwellings required by Oblast, comparative cost of capital investment, discounted finance and private finance models, total costs for 500,000-unit program.

<table>
<thead>
<tr>
<th>Oblast</th>
<th>Dwellings</th>
<th>Capital Investment Model</th>
<th>Discounted finance model</th>
<th>Private finance model</th>
</tr>
</thead>
<tbody>
<tr>
<td>UA05 VINNYTSKA</td>
<td>9,000</td>
<td>552</td>
<td>696</td>
<td>1,529</td>
</tr>
<tr>
<td>UA07 VOLYNSKA</td>
<td>6,000</td>
<td>407</td>
<td>513</td>
<td>1,063</td>
</tr>
<tr>
<td>UA12 DNIPROPetrovskA</td>
<td>31,000</td>
<td>2,055</td>
<td>2,588</td>
<td>5,436</td>
</tr>
<tr>
<td>UA14 DONETSKA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UA18 ZHYTOmYRSKA</td>
<td>10,000</td>
<td>707</td>
<td>891</td>
<td>1,803</td>
</tr>
<tr>
<td>UA21 ZAKARpatskA</td>
<td>4,000</td>
<td>219</td>
<td>276</td>
<td>651</td>
</tr>
<tr>
<td>UA23 ZAPORIZKA</td>
<td>3,000</td>
<td>199</td>
<td>250</td>
<td>526</td>
</tr>
<tr>
<td>UA26 IVANO-FRANKIVSKA</td>
<td>11,000</td>
<td>742</td>
<td>935</td>
<td>1,943</td>
</tr>
<tr>
<td>UA32 KYIVSKA</td>
<td>73,000</td>
<td>4,274</td>
<td>5,383</td>
<td>12,177</td>
</tr>
<tr>
<td>UA35 KirovoHradska</td>
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<td>327</td>
<td>412</td>
<td>872</td>
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<tr>
<td>UA44 LUHANSKA</td>
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<tr>
<td>UA46 LVIVSKA</td>
<td>25,000</td>
<td>1,358</td>
<td>1,711</td>
<td>4,054</td>
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<tr>
<td>UA48 MYKOLAIVSKA</td>
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<td>1,372</td>
<td>1,729</td>
<td>3,661</td>
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<tr>
<td>UA51 ODESka</td>
<td>29,000</td>
<td>1,718</td>
<td>2,164</td>
<td>4,860</td>
</tr>
<tr>
<td>UA53 POLTAVSKA</td>
<td>10,000</td>
<td>557</td>
<td>702</td>
<td>1,637</td>
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<tr>
<td>UA56 RIVNENSKA</td>
<td>5,000</td>
<td>278</td>
<td>350</td>
<td>817</td>
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<tr>
<td>UA59 SUMSKA</td>
<td>19,000</td>
<td>1,281</td>
<td>1,615</td>
<td>3,356</td>
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<tr>
<td>UA61 TERNOpILSKA</td>
<td>9,000</td>
<td>582</td>
<td>733</td>
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<td>UA63 KHARKIVSKA</td>
<td>107,000</td>
<td>6,666</td>
<td>8,397</td>
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<td>UA65 KHERSONSKA</td>
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<tr>
<td>UA68 KHmelnynTska</td>
<td>17,000</td>
<td>1,003</td>
<td>1,264</td>
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<td>UA71 CHERKASKA</td>
<td>11,000</td>
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<td>UA73 CHERmIVTSkA</td>
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<td>UA74 CHERNHIvSKA</td>
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<td>764</td>
<td>963</td>
<td>2,172</td>
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<td>UA80 KYIV</td>
<td>77,000</td>
<td>3,931</td>
<td>4,950</td>
<td>12,206</td>
</tr>
<tr>
<td>TOTAL</td>
<td>500,000</td>
<td>30,006</td>
<td>37,796</td>
<td>84,212</td>
</tr>
</tbody>
</table>

Source: the authors

The regional variation in costs mostly reflects the geographic differences in the numbers of dwellings required, with some differences attributable to the capacity of households to pay affordable rents. However, what is eminently clear from the modelling is that direct capital funding offers the lowest costs option, with privately financed options adding significant cost (+181%). This is the result of the combination of high interest payments, and the length of time that this debt would need to be paid which is through tenant rental income. The table costs all 500,000 dwellings, though in reality achieving this target would likely take many years, and costs would reflect ambition on scale and phasing. A ten-year program would therefore represent a cost of approximately 3 billion euro per annum.

An assessment of empty and unsold dwellings has not been conducted for this research, as collecting and analysing such data is beyond the resources of this voluntary research effort. This paper has been a voluntary exercise, and the results are explorative and indicative only. All assumptions need careful validation and refinement. Also, the rent setting, allocation and affordability benchmarks need much wider policy discussion. With more adequate opportunities for engagement and resources, further work would produce a more robust needs estimate and production costs with a much higher degree of geographic nuance and specificity. Differing standards for accessibility, cultural preferences, urban morphology and density for different needs and across different areas could be produced. From this, better benchmarks for procurement costs could also be developed as well as more realistic consideration of price dynamics and supply chains. Finally, key policy interventions that intersect with housing development, such as land,
planning regulation, tax settings could also be included in a more robust assessment of overall program costing.

**Conclusions on need based capital investment requirements.**

**Housing system transformation**

Building greener together requires moving on from permanent humanitarian assistance and a status quo maintained by vouchers. The scale of effort required has the potential for a more transformative and market shaping approach (UNECE, Housing Europe and UN Habitat, 2021). This paper provides the basis for a strategic, balanced and cost-effective approach that promotes prosperity, addresses social inequality and builds more sustainably.

At the time of drafting this paper, revised principles of housing policy were being proposed and reformed of social and affordable housing legislation is finally on the government’s agenda. NGOs and civil society, with the assistance of the international community are becoming more informed and engaged in this discussion. Best practices are being shared but deeper engagement and adaptation is required for their ‘best fit’. Model legislation, concerning the mission, operating principles and auditing standards, has also been offered as part of the New European Bauhaus. A major EU Facility is being negotiated. Clearly it is timely to examine the level and type of housing investment required and progress the development of implementation architecture.

While the immediate and primary focus in 2022 and 2023 has been on rapid repairs of buildings damaged by the war, more attention is now being given to durable solutions. The IOM is now surveying IDPs on their housing futures. This paper informs the needs-based financing of this effort. We outline a program of affordable energy efficient housing, integrating households in need of adequate housing. We focus on the needs of internally displaced households searching for accessible affordable long-term solutions. Rebuilding a good place to call home will also accelerate Ukraine's regional economic development and energy independence.

**Implementing a program for recovery**

Ukraine’s housing recovery won’t happen spontaneously. It will require bringing together fragmented but important actors to devise a coherent and balanced and well-governed approach.

Currently, the Ministry of Finance has an influential role subsidising private banks to offer home loans to some households, while the Ministry of Community Development, Territories and Infrastructure has been appointed as the administrator of budget funds for reconstruction works, including the construction of new housing. Responsibility for IDP housing rests with Ministry for De-Occupied Territories. Social policy also has an important role in social and rent assistance.

Yet under decentralisation, implementation of social housing rests with the municipalities. While they are closest to the needs they need supportive guidance, co-funding and increased professional capacity development to fulfill this role effectively. IOM is pioneering work with municipalities in some oblasts, but more comprehensive and long-term support is needed. At the very least, a co-ordinating housing agency will be required to provide committed leadership and work much more pro-actively and effectively with differently affected communities.

Following on from international advice and best practices outlined in the report *Rebuilding a Place to Call Home*, we recommend the establishment of a responsible Ukraine Housing Agency to implement a large scale program of capital investment, incorporating both a research and policy development role, and also with capacities in monitoring, auditing and enforcement. This Agency would inform policy and develop housing programs, to improve housing conditions, and assist municipalities to plan for and through responsible regulated entities procure needed housing supply. The Agency would also guide, monitor and regulate defined Registered Entities, under new
legislation. These Entities, linked to municipalities, would need to operate in a way that is able to provide affordable rental homes, which are professionally managed and sustainable and respond to local needs. This necessary builds on an independent, expert evaluation of current pilot projects, such as IOM’s Housing Project and EC-NEFCO, as well as learnings from HOAs and EE).

A repurposed or renewed, Ukraine Housing Finance Institution would perform the role of special financial intermediary, building on European best practices (OECD, 2023 (Latvia report). This would be able to channel conditional grants, loans and guarantees in order to attract investment on the best terms. A suitably governed Housing Fund can draw on the experience and best practice of similar bodies across the UNECE region (Lawson, 2013).

Together, Agency Financial Intermediary can further the decentralisation agenda by providing policy guidance, capacity building and strategic investment to grow municipal housing responsibilities in land-use policy, integrated urban planning and also the establishment of municipal housing enterprises as well as commissioning practices which comply with EU Procurement Directives. Related work has been undertaken to explore their roles and best practice in Commissioning processes for housing (see ENHR papers Anisimov et al, 2023 and Amman, et al, 2023 and CEDOS, 2023 on the Facility, UNECE et al, 2021 on Scotland’s HDNA method, and SGS, 2017 on international review of commissioning).

Figure 13 Commissioning process best practice (drawing SGS 2017)
### Table 4: Indicative implementation schedule reflecting the Ukraine Plan and accelerated by Ukrainian policy holders, NGOs, EU peers and the EU Facility

<table>
<thead>
<tr>
<th>A potential program for systemic transformation</th>
<th>2024</th>
<th>2024</th>
<th>2025</th>
<th>2025</th>
<th>2026</th>
<th>2026</th>
<th>2027</th>
<th>2027</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tasks over four-year period at 6 monthly intervals</strong></td>
<td>Q1-2</td>
<td>Q3-4</td>
<td>Q1-2</td>
<td>Q3-4</td>
<td>Q1-2</td>
<td>Q3-4</td>
<td>Q1-2</td>
<td>Q3-4</td>
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<tr>
<td>Joint UA-EU Task Force including UA Ministry of Reconstruction/Territories/Economy/Social Policy/Finance, co-ordination Council for Reforms, including NGOs, EIB and IOM. Involvement of European peers (Austrian IIBW, Irish HFA, Finnish ARA, French CDC, Housing Europe)</td>
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<tr>
<td>MoR Rapid evaluation of current pilot projects (IOM, IFC, EU funded EE dormitory conversions, NEFCO projects, EIB-EU contracted TA)</td>
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<tr>
<td>MoR Learning from audits of municipal capacity and potential for fulfilling their role in housing (CEDOS report and NHP NEB outcomes, EIB-EU contracted TA)</td>
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<tr>
<td>MoR and EU to confirm commissioning principles – integrated into communities, quality energy efficient standards, affordable inclusive rent policy, needs based allocation of grants and loans, allocation policy responsive to local needs, rent policy covers finance and operating cost, builds up equity.</td>
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<tr>
<td>Progress needs based investment in housing projects top 10 cities in need, create collaborative project learning platform with these participants to share and accumulate implementation capacity.</td>
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<tr>
<td>Ukraine Housing Agency established to work with municipalities to implement policy (policy design, research, implementation monitoring, audit and regulation) (e.g., building from Finland’s ARA and MAL approach)</td>
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<tr>
<td>Ukraine Housing Financing Institution established with investment mandate, supervision established (drawing on similar intermediaries and European peers IHFA, CDC, Munifin)</td>
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<tr>
<td>Support architecture of consumer advocacy (tenant organisations, peer assistance Dutch WOONBond and German TU and building on Cedos work on this)</td>
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<tr>
<td>Consolidation of best practice Municipal Housing Entities (Housing Agency co-ordinate peer input from Austrian Common Good law, Polish Steszin, Dutch VNG and AEDES, and Finnish and German municipal Housing Companies, also with a focus on well governed Responsible Entities and integrated planning.</td>
<td></td>
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<tr>
<td>Obligations of municipalities clearly established, urban planning, construction and management innovations promoted, peer review progresses reforms. Necessary legal reforms in place and commissioning processes.</td>
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<tr>
<td>Standard procedures for promoting and funding housing projects institutionalised and good practices and learning shared as the norm by Housing Agency.</td>
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<tr>
<td>Expand program to cover all regions and cities, as a permanent role of UA and municipal governments.</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Continual evaluation, improvement and consumer input accountability of Housing Agency and Financial Intermediary</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>
**Required capital investment.**

Evaluation of past stimulus efforts suggests that efforts must be sufficiently large, timely and properly designed to generate good growth, create jobs and bring about lasting environmental and social benefits (OECD, 2020). Building Back Better was coined to motivate nations designing their recovery following the COVID 19 pandemic (OECD, June 2020). The SDGs featured strongly, and social inclusion become an integral part of Green Deals, e.g., the EC Just Transition Fund (EC, 2020). Today’s EU Recovery Plans incorporate renewable energy, retrofitting, digitisation, and efforts towards a more circular economy. Social and affordable housing providers are also key conduits for EU funds renovating over 4 million homes. Investment in these providers transmits a powerful economic stimulus and also promotes political legitimacy, social solidarity and trust in public institutions.

For Ukraine, our research demonstrates a significant need for around 500,000 units of affordable and social housing is required – based on the assessment of IOM Durable Solutions Data. Clearly this level of need cannot be addressed over night or without guidance. Strategic vision and institutions, as outlined above, will soon need to prepare a regulatory framework for a well governed approach. Setting targets is part of this process. In the first phase, we envisage an establishment target of 40,000 units, allocated proportionally across each Oblast, to build appropriate delivery capacity. This share of residential construction activity is similar to that in France, Finland and Austria, where social housing construction accounts for around 22% of residential production. Ukraine’s output in 2020 was 185,000, this given the anticipated downturn, an initial 40,000 target is plausible and desirable. Absorbing additional social housing construction will be strengthened and streamlined over years 6-10, to reach the overall target of 500,000 units.

Over coming months there will be much discussion over the absorption capacity of Ukraine’s construction sector to cater for recovery needs, and the involvement of many international partners in this process. A large-scale program of social and affordable housing production can accelerate the transformation of the residential building sector, through improvements in standards of building materials, the techniques of production and sustainable and circular construction processes, as well as asset management and operational policies. A major residential program can also reform poorly performing segments of the housing system, such as chaotic and multiple forms of land administration. Technical assistance to digitise and streamline the cadastre, linked to guidance for municipalities to conduct their own land and housing policies. This is needed to facilitate municipal roles in land assembly, parcel readjustment and spatial planning, which are required for more affordable housing and integrated neighbourhoods.

As mentioned earlier, development banks have an important market shaping role improving financial flows and also housing outcomes. Integrated environmental and social planning is pursued through the EIB, avoiding harmful impacts and rejuvenating locations for a better living environment. Typical EIB Framework Loans promote compliance with the relevant EU directives on Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) and take into account ecological concerns, environmental studies and public consultations. As the Green Bank, capital investment provided by EIB aims to ensure financed homes are energy efficient and in line with the Directive on the Energy Performance of Buildings. Most importantly the EIB has a clear framework for and experience of investing in affordable and social housing (EIB, 2020).

The EU can play a leading market shaping role through the EU Facility and the EIB. Capital investment in the form of stranded residential assets, public or private land contributions and also green procurement grants can kick start development program and lever investment required. Financing in the form of mortgage debt provided for social and affordable housing can also be more secure with an effective governance and regulatory framework. Underlying equity (land and grants) and subordinated public loans, as well as guarantees provided under the EU Facility (Pillar 2). The repayment of private investment debt is supported via long term business plans of...
affordable rental housing providers, including a feasible rent setting and indexing policy and sound asset management. An EU guarantee, provided as part of the EU Facility, would be linked to a Ukraine Housing Fund securing strategic investment in approved affordable and energy efficient rental housing provided by regulated Registered Entities (UNECE et al, 2021, Amann, et al, 2023), thereby lowering financing costs and limiting demand side subsidies.

**Urban planning to integrate affordable and social housing.**

Ukraine and urban governments around the world, also play a market shaping role through the use of different land policies. These include land valuation, taxation and reinvestment, land use definition and user rights, pro-active acquisition and site re-assembly, conditional leaseholds (and recycling income from these), as well as more direct co-development to activate needed, underutilised or brownfield sites. By engaging in land value recapture and use traditional land use zoning instruments much more purposefully cities can rapidly transform their housing markets, as in Seoul, Vienna, Helsinki and Paris (Lawson and Ruonavaara, 2020). Most recently, international attention has been given to the role urban policy in addressing impacts of migration and displacement, with UN Habitat (2023) recommending that responsible governments:

> Future-proof urban plans and policies by incorporating demographic, environmental and security projections to anticipate potential land, property, housing, services and infrastructure needs resulting from migration and displacement.

Some national regional and local governments do this very effectively, such as Finland, Scotland and Vienna, which create long term strategies and also Comprehensive Housing Needs Assessments to plan for and ensure the supply of needed affordable housing. Helsinki and Vienna acquire land in advance and lease this for purposeful housing development. This is one of the most effective and direct policy tools, and a key reason why these cities have strong affordable rental sectors. Thus, ensuring access to well located development and redevelopment sites for affordable rental housing is a key role of local government and should be enabled for recovery to succeed.

We have incorporated this into our modelling of needs-based capital investment.

Ukraine has also undergone a progress of decentralisation. Part of this process has shifted responsibility for social housing to municipalities. However, to date this has been transferred without increasing their capacity development, for example through clear guidance and adequate funding resources. Some cities have moving forward and embracing this new role, while others are overwhelmed and under resourced. There is also pressure once again to centralise decision making on recovery projects and also deregulate environmental assessment processes, including spatial planning and land policy instruments. Excessive centralisations would send a poor signal to local authorities but guidance, capacity building and resources are needed – and require a strategy to deliver in order to avoid poor recovery outcomes. As recently shown, new affordable housing developments are often on the edge of cities, isolated and car dependent. Unregulated development will only exacerbate this problem and could also lead to reliance on self-build solutions, further causing urban sprawl.

**Legal Framework to govern providers.**

Finally, a word on the governance of housing providers, who make use of scarce public investment and manage vital social infrastructure. A sound legal framework can ensure the good governance of regulated Responsible Entities. Ukraine’s own National Recovery Plan specifically mentions the goal of establishing a coherent municipal, cooperative and non-profit housing system (Ukraine Recovery Council, 2022:139-149) in the Thematic Materials on Spatial Policy, setting the task of incorporating new non-profit housing law, land policies and urban plans to respond to local housing needs and funds, offer an efficient pathway forward.
European best practices can also inspire in Ukraine’s efforts to fulfill this goal, as already presented via the European Symposium Rebuilding a Place to Call Home (Anisimov, Fedoriv et al 2023), and various symposia and workshops of Cedos, the UNECE, New European Bauhaus, and the Technical Working Group on Housing and Land as well as Vienna House. This effort has been deepened by the detailed research of the European Network on Housing Research Working Group ‘Crises and Recovery’. The research by Amann et al (2023) has elaborated the Common Good Housing approach, where investment is channelled via regulated entities, such as housing cooperatives, limited-profit housing associations or municipal enterprises, with operating conditions legally defined. Learning form the pilot projects underway and adaptation of a sound model could also fulfill Ukraine’s own ambitions outlined in the Lugano plan (2022).

**Final statement**

This report offers one stepping stone towards Ukraine’s ambitions to *build forward greener* and meet the requirements of EU ambitions for Ukraine promoting economic prosperity, addressing social inequality and ensuring a more sustainable future. It acknowledges the key role of housing sector in this process. The report informs thinking about the approach to housing demand and supply, scale and distribution of housing need and the level and type of investment required.

The work has benefitted from the collaborative, voluntary efforts of policy experts and researchers from across Ukraine, Australia and Europe, as well as access to up to date, unique data sets from the IOM’s Durable Solutions Team. The research has adapted the AHAT tool to model ‘need’ data to develop a scale of program, by oblast, in a way that allows for phased implementation. Comparison of program costs is provided on a regional basis, as in Table 5 below. This illustrates the varying subsidy needed to maintain the feasibility of a ‘fit-for-purpose’ affordable rental housing construction program.

The regional variation in costs mostly reflects the geographic differences in the numbers of dwellings required, with some differences attributable to the capacity of households to pay affordable rents. It demonstrates that direct capital funding offers the lowest cost option, with privately financed options adding significantly to costs (+181%). This is the result of the combination of high interest payments, and the length of time that this debt would need to be paid, which is through tenant rental income. The table costs all 500,000 dwellings, though in reality achieving this target would likely take many years, and costs would reflect ambition on scale and phasing. A ten-year program would therefore represent a cost of approximately 3 billion euro per annum.

The contribution of a program of affordable rental housing can be accounted for and justified in many ways: to the achievement of the SDGs, improvement of Ukraine’s national accounts GDP and human development HDI and in avoiding the cost of not delivering adequate housing to IDPs. This costing has not been the focus of research here. Time is of the essence and resources are limited. However, future research and policy efforts can certainly be applied to demonstrate these important and cumulative values.

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31 This model legal framework has been circulated to the Technical Working Group on Housing and Land Policy, the UNECE Senior Expert on Ukraine and was also presented various public fora online and in person (Kyiv, Lodz, Brussels and Lviv) setting out principles and operating requirements, regulatory bodies to ensure compliance, and conditional subsidies to renovate, develop, manage and maintain homes to serve local housing needs in a manner that is financially sustainable and offers value for residents (Amann et al, 2023). New Housing Policy and IEFW are co-operating on further analysis of this framework to suit Ukraine’s needs and context.
Table 5: Number of needed dwellings required by Oblast, comparative cost of capital investment, discounted finance and private finance models, total costs for 500,000-unit program.

<table>
<thead>
<tr>
<th>OBLAST</th>
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<td>+0%</td>
<td>+26%</td>
<td>+181%</td>
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</table>

Source: Lawson, van den Nouwelant and Troy, with contribution from New Housing Policy Ukraine (2023)
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Appendices

Notes on IOM data
The IOM data presented in this report was commissioned by the International Organization for Migration (IOM) and collected by Multicultural Insights through a rapid representative assessment of the general population in Ukraine to gather information on displacement, acting as the high-level source to inform the targeted response to assist the war-affected population. In Round 13, the methodology of the General Population Survey (GPS) has been adapted to produce data representative at a lower administrative level – the oblast, with 20,000 random respondents surveyed to produce population figures and assess the geographic distribution of the displaced and returnee populations, and with the findings from 5,297 follow up interviews of IDPs, returnees, and residents providing insights to the internal displacement and returns, mobility intentions and flows, needs, and situation. According to the IOM the data has the following limitations: the exact proportion of the excluded populations is unknown, and certain considerations are to be made when interpreting results. Those currently residing outside the territory of Ukraine were not interviewed, following active exclusion. Population estimates assume that minors (those under 18 years old) are accompanied by their adult parents or guardians. The sample frame is limited to adults that use mobile phones. It is unknown if all phone networks were fully functional across the entire territory of Ukraine for the entire period of the survey; therefore, some numbers may have had a higher probability of receiving calls than others. Residents of areas with a high level of civilian infrastructure damage may have a lower representation among the sample – one may assume the needs in the report are skewed towards under-reporting. Among the people surveyed are not those residing in the Autonomous Republic of Crimea (ARC) or the NGCA Donetsk and Luhansks.
### Financing criteria – is it fit for purpose?

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>Performance indicator</th>
<th>Characteristic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost effectiveness</td>
<td>Maximum delivery of social housing, at benchmark standard and cost.</td>
<td>Clarify all costs to government, both direct and indirect and ascertain their contribution to the supply and quality of social housing dwellings produced.</td>
</tr>
<tr>
<td>Cost reducing</td>
<td>Minimal financing costs for social housing delivered at benchmark standard and cost</td>
<td>Impact of financing costs on overall unit costs, commensurate with the risks and comparable with the cost of public finance</td>
</tr>
<tr>
<td>Rent reducing</td>
<td>Financing model places minimal pressure on tenants’ rents</td>
<td>Impact of funding and financing on rent levels and the indexing of rents, at an individual, project and provider level.</td>
</tr>
<tr>
<td>Equitable</td>
<td>Optimise allocation of available subsidies to benefit lowest income households and those with complex needs.</td>
<td>Greatest allocation of direct and indirect subsidies to address greatest need: deeper subsidies for complex needs, shallower subsidies for less complex needs.</td>
</tr>
<tr>
<td>Appropriate risk allocation</td>
<td>Appropriate and fair allocation of risk across key players: government, providers, investors and tenants.</td>
<td>Risks allocated appropriately and managed to reduce financing costs and improve housing outcomes. Rate of return commensurate with investor risk.</td>
</tr>
<tr>
<td>Impact on public finances</td>
<td>Allocation from government budget is predictable, stable and affordable for government over time</td>
<td>Cost to government well defined, stable, able to be anticipated and agreed on by government. Protects health of public finances.</td>
</tr>
<tr>
<td>Robustness</td>
<td>Mechanism maximises economic and financial stability and moderates’ volatility.</td>
<td>Ability to provide appropriate levels and costs of finance in adverse market conditions</td>
</tr>
<tr>
<td>Feasibility</td>
<td>Mechanism attracts long term, political and stakeholder support.</td>
<td>Contributes to social housing policy objectives. Supported by peak industry bodies, providers, administrators and governments.</td>
</tr>
<tr>
<td>Effective delivery</td>
<td>Optimised application of professional and industry standards in delivery.</td>
<td>Reinforces adherence to regulations, best practice and promotes ongoing, improvements in social housing management</td>
</tr>
<tr>
<td>Enhances capacity</td>
<td>Maximum professional standards of delivery of social housing under given finance arrangements.</td>
<td>Conditions of finance reinforce performance of registered providers. Subsidies require providers to adhere to applicable standards. Supports preferred housing providers to improve and increase the supply of social and affordable housing.</td>
</tr>
</tbody>
</table>

**Source:** Social Housing as Infrastructure (Lawson et al, 2018)