











Sustainable urbanization

Sustainable urbanization means applying the most effective way to use resources, assets, and investments to ensure environmental, economic and social sustainability for residents and visitors. Affordable housing, along with infrastructure, governance, and municipal finance, directly supports making cities greener and more inclusive.



Cities that focus on creating a more diverse range of housing options to meet the needs of different household types and income levels, are more likely to achieve broader sustainability outcomes for the economy, livability and environment.

For many cities worldwide, managing land and housing is an essential tool to support sustainable growth. Housing needs to be integrated into planning schemes and city and national strategies, which can shift development towards more sustainable, inclusive and resilient development at larger scale.

TAKE AWAY POINTS

The role of urban planning is currently limited in guiding housing development in Phnom Penh, which is largely driven by National Government-approved development projects.

Access to decent housing has been recognized as a nationwide issue. The National Government can lead the way in creating an enabling environment for housing finance to support the affordable housing market, i.e. tapping into green finance. Solutions, however, need to be driven by local communities, provincial and municipal authorities, developers and other stakeholders to create a thriving housing ecosystem. Despite the existing policy framework for affordable housing, implementation is lagging: urban planning is needed for more effective coordination and implementation of existing strategies and policies in the fields of affordable housing and green construction. Phnom Penh Capital Administration, supported by the relevant ministerial and sub-national authorities, can lead the way in planning for more affordable and sustainable housing solutions.

Planning for affordable housing should encourage companies and investors to settle and invest in areas where affordable housing is situated to provide closer proximity to employment opportunities for key workers. PLANNING FOR AFFORDABLE HOUSING MAKES CITIES MORE SUSTAINABLE

	┍᠆ᡭ᠋᠆
	ā ——
Ľ	

Housing is central to people's quality of life. At the same time, residential areas usually make up the largest part of cities' urban zones. Zoning and land management policies are important urban planning tools to mainstream affordable and sustainable housing. They make it possible to¹:

PRIORITIZE NEIGHBORHOOD INTERVENTIONS

Urban planning can emphasize areas in the city of greater need for intervention, for instance bringing focus on areas where major economic poles are currently developing. Affordable housing situated within mixed-use and mixed-income development boosts city productivity and the economy by offering jobs in construction, and once construction is complete. lower-income populations will benefit from localised employment and market opportunities whilst reducing congestion and travel time. It enables labor mobility, opening a path to rising incomes, giving households more to spend on goods and services in their neighborhoods and, over time, enabling them to move up the income ladder and help drive city GDP growth. Eventually, cities which offer high quality of life and amenities to residents encourage highly skilled workers and tertiary sector companies to settle, which in turn can support attraction towards investors.

2/ DETERMINE THE TYPE OF INTERVENTIONS

Urban planning can set priorities and guide intervention at neighborhood level. For example, it can allow to determine the need to upgrade, renovate and/or retro-fit existing buildings in specific urban areas, rather than resort to destruction/ reconstruction, which tends to be more resource intensive and disruptive to people's lives. Another possible intervention would be to reserve land for mixed-use and mixedincome developments in urbanizing areas, where urban planning can support the implementation of policy in the construction of new sustainable and affordable housing.

ATTRACT AND DRIVE INVESTMENT INTO THE AFFORDABLE HOUSING MARKET

Planning serves as a function to coordinate stakeholders in the first stages of the housing value chain, such as investors and developers. In Phnom Penh, affordable and sustainable housing lacks attention from internationally backed developers. The market is led by nationally owned developers: while efforts are laudable, issues remain with access to capital, investment in innovative construction and materials and introduction of international experience and know-how to accelerate efforts to build smarter, greener and in more affordable ways.

¹Arguments presented in the section above were extracted from multiple analysis on various cities. Here are a few references:

- Analysis on the links between affordable housing supply and urban productivity in Sydney and Melbourne: Pill, M., Gurran, N., Gilbert, C. and Phibbs, P. (2020) Strategic planning, 'city deals' and affordable housing, AHURI Final Report 331, Australian Housing and Urban Research Institute Limited, Melbourne, http:// www.ahuri.edu.au/research/final-reports/331, doi: 10.18408/ ahuri-7320301. - Analysis of the shift from national to local urban planning mechanisms and tools in major metropolitan areas in the USA: Spauster, P., Lo, L., Freemark, Y. (2021) The Rise of Market-Reliant Affordable Housing Tools, Findings from the National Longitudinal Land Use Survey. Urban Institute. https://www.urban.org/ research/publication/rise-market-reliant-affordablehousing-tools - Estimations of cost savings which come from affordable housing provision in Australia: https://mckellinstitute.org.au/research/ articles/how-government-investment-in-housing-can-boostthe-economy/

Developing affordable and sustainable housing contributes to reducing operation costs, thus increasing restidents' capacity to pay for services and reducing grid loss for most urban services. For instance, if affordable and sustainable houses are planned within the city, encouraging denser urbanization, this will slow the pace for the expansion of energy and water grids. Residents will have shorter commutes to work, reducing road traffic. Energyefficient housing will consume fewer city resources and will be less polluting. Reduced maintenance costs for households leave more resources available to pay for urban services. Planning for affordable housing can launch a virtuous circle of sustainable urbanization.



AFFORDABLE HOUSING MAKES CITIES MORE INCLUSIVE



Adequate housing is a human right: it is, at its core, the right to a place to live in dignity and security. For vulnerable groups, housing plays a key socio-economic role. It is central to household resilience in the face of shocks and stresses – such as the one caused by the Covid-19 pandemic², or natural disasters. As the World Bank has already pointed out, "the impacts of disasters and climate change are more than twice as significant for poor households than others, because they tend to live in the most vulnerable areas, often with weak housing standards and limited or no access to credit or insurance.³"

Housing in Phnom Penh requires considerable attention to keep it affordable to all - currently, nearly 70 % of residents would take on too much financial risk if they buy at available market prices. Specific attention is needed to provide housing solutions for the lowest 25% on the income ladder. If innovation in terms of construction techniques and financial solutions can be leveraged⁴, urban planning can support the development of sustainable and affordable housing for the most vulnerable. Onsite upgrades, for instance, offer opportunities to formalize urban poor settlements, avert economic evictions and rapid gentrification, and directly support the integration of vulnerable groups.

²COVID-19, along with conflict and climate change, has [reversed] global poverty reduction [...] for first time in over twenty years. "World Bank. 2020. Poverty and Shared Prosperity 2020: Reversals of Fortune. Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/34496 License: CC BY 3.0 IGO."

³"Hallegatte, Stephane; Vogt-Schilb, Adrien; Bangalore, Mook; Rozenberg, Julie. 2017. Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development; Washington, DC: World Bank. © World Bank. https://openknowledge.worldbank.org/handle/10986/25335 License: CC BY 3.0 IGO."

⁴ "Refer to paper 2 and 3 on the housing value chain and financial inclusion. https://openknowledge.worldbank.org/ handle/10986/25335 License: CC BY 3.0 IGO."

THE STUNG MEANCHEY ON-SITE UPGRADE PROJECT

from a marginalized settlement to a new neighborhood.

In 2018, Phnom Penh Capital Administration (PPCA) initiated renovation work on the Stung Meanchey canal, as part of the City's Drainage improvement plans. An Urban Poor Settlement consisting of 570 households had developed on stilt housing above the canal. On-site relocation of households was organized and each household received a land plot upon completion of the canal's renovation. However, the canal renovation project hadn't considered how to support local authorities and communities in developing this new "official"

neighborhood, after allocation of land plots. To address this, PPCA agreed to set up a joint project with the Association of Sub-national Administration Councils (ASAC), financed by the International Association of Francophone Mayors (AIMF) and the European Union.

The project has allowed PPCA to set up a series of specific activities to support both the Commune Authority and the community in the process of developing a new upgraded neighborhood. A technical

A neighborhood approach to urban planning is complementary to comprehensive planning of the city: it would guide the implementation and allow close monitoring of the housing policy's application and efforts from housing stakeholders at neighborhood scale. Developing affordable and sustainable housing, including for the most vulnerable groups, is the basis for creating sustainable neighborhoods.

support team was set up within PPCA, composed of Cambodian professionals, tasked with supporting community members to build quality housing, as well as designing public community spaces for the neighborhood, including a community center. A construction materials' bank is also planned in order to support the poorest families in the construction of their house. and capacity development was organized for local authorities and communities to understand issues to address.

"Affordable housing is best implemented as an integrated agenda to achieve improved health, affordable & essential services, equitable education & employment opportunities."

AFFORDABLE HOUSING MAKES **CITIES GREENER** & CAN UNLEASH **GREEN FINANCE**

At city-level, housing has great potential to drive increased sustainability, which in turns plays on the long-term affordability of housing for homeowners, thanks to reduced utility and maintenance costs, as well as for the city, thanks to reduced consumption of urban services, especially water and energy. Greening existing and new housing stock can be achieved using various approaches and technologies.

Strong political support could enable the development of climate-linked investments, with collaboration from international financial institutions. These funds could in turn enable

the scale up of the development of the necessary affordable housing stock thanks to increased financing options available for developers to produce greener and more affordable housing. Such financial tools could leverage the potential positive outcomes of green housing and support the Royal Government of Cambodia's ambition of making Phnom Penh a regional model of sustainability.

The following examples of green finance are tools largely driven by either national or local authorities and supported by international financial institutions.

CLIMATE FINANCE FOR GREEN HOUSING

Recognizing the positive potential of climate finance in the housing sector, the World Bank established a climate auction pilot program for green housing in 2019, by issuing green bonds to investors which guarantee a minimum price for carbon abatement. The bond proceeds are then used to provide market incentives to cover the extra costs associated with green features in dwellings including: passive energy design, efficient appliances such as lighting and hot water heaters, and low energy building materials. The funds from the auction proceeds are awarded to developers who can deliver carbon-neutral and resource-efficient dwellings at the lowest cost per square meter.

GREEN **MORTGAGES FOR CIVIL SERVANTS** IN SOUTH **AFRICA**

The key benefit of the climate auction scheme for housing is that low-income home buyers receive the lifetime savings of green features while developers can offer the homes at the cost of a conventional home. The scheme has the potential to support a green mortgage program which lowers lending costs by considering the risk reduction associated with the lower long-term costs and increased asset value associated with certified green dwellings.

Another prominent example of green mortgage design for affordable housing is the product offered by the South-African housing and rental corporation International Housing Solutions (IHS). The International Finance Corporation helped structure a green mortgage product

targeting affordable housing which blends climate finance from the Global Environment facility to offer concessionary terms for low-income residents. However, the IHS green mortgage program mainly provides gap finance to social servants (who earn on average USD 225 to USD 578 per month).

HOW

NATIONALLY APPROPRIATE MITIGATION ACTIONS (NAMA)

SUPPORT ACCESS TO GREEN FINANCE IN FAVOR OF AFFORDABLE HOUSING:

the case of ECOCASA, Mexico NAMA is another way to mobilize green finance to increase housing affordability. The EcoCasa mortgage program was underwritten by the Inter-American Development Bank (IADB) and blends commercial finance with subsidies from the Mexican Government and climate finance to deliver an adaptable and affordable new product.

It is important to note that justification for the IADB underwriting corresponds to the potential of the incremental green building investments to generate life cycle carbon emission reductions directly related to construction and operations.

This financial scheme has also been able to support green mortgages which provide additional market incentives for developers and homeowners with more favorable financing terms. However, the credit line is based upon expected additional economic carbon impacts associated with expected reduction in congestion in urban transport systems during housing construction.

The successful EcoCasa program in Mexico is one of the best examples of a green mortgage program that has extended to the lowest rungs of the affordability spectrum in the global green housing market.