*Case Study Report*

# Healthy Cities
## A Human Right

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**Abstract**

*The Institute for Human Rights and Business (IHRB) is a leading international think and do tank with the mission to shape policy, advance practice, and strengthen accountability to make respect for human rights. IHRB's Built Environment Programme promotes human rights in the planning, design and construction of cities, connecting research and practice. This report uses a rights-based approach to study and address urban problems, specifically the right to physical and mental health. It introduces IHRB's 'Framework for Dignity in the Built Environment', which guides decision-making throughout the built environment lifecycle: managing risks to human rights and maximising social outcomes. A total of six case studies are presented on the implementation of the human-rights approach. The first three demonstrate effective urbanism and planning being used to maximise health outcomes specifically. The last three are ongoing cases or pilot projects carrying out the implementation of IHRB's 'Framework for Dignity in the Built Environment'. The paper also provides insights on how health risks can be addressed and provides practical recommendations for governments, investors, and project managers.*

**Keywords**

*Human rights, dignity, health, built environment*

## 1. Problem: Health Risks at City and Building Levels

The world is experiencing two major issues: the impact of climate change and acute socio-spatial inequalities. This is manifested as high levels of noise, pollution, crowding, ineffective waste management, and multiple other urban problems that have a direct impact in the quality of people's health. The health needs of entire neighbourhoods are often disregarded: due to lack of access to health facilities and services, or by not considering accessibility nor the needs of children, women, or senior citizens in urban planning and design. These misses can put pressure on the city's health system, exacerbate public health problems and socio-spatial injustice, and ultimately affect the human development and potential of citizens to contribute to society. The following are common, current and real health risks at city and building level:

### 1.1. Health Risks at City Level

- **Air pollution** continues to be a major contributor to illness and deaths; in addition to pollution from transport and industry, built environment processes from construction, management and use (in terms of the energy sources used, and waste generated), to demolition and redevelopment - can be highly polluting (Neira, 2018).

- **Urban heat islands** (UHI) are built areas that are significantly warmer than rural areas or other parts of their surroundings, due to the dominance of concrete surfaces, building façades, cars traffic and other features that absorb more heat. UHI have multiple damaging effects on human health including heat exhaustion, cramps, and heat strokes, as well as driving up the need for increased energy use for cooling.
- **Anxiety and other mental health risks:** People who live in cities have a 20% higher risk of developing anxiety disorders, and a 40% higher risk of developing mood disorders, due to factors such as crowding, insecurity, noise, and unstable economic conditions and a lack of access to outdoor green and open spaces (Adli, 2011).
- **Disparities in health risks**: Low-income communities, racial minorities, and elderly people are often exposed to greater health risks in their built environment, and/or have greater vulnerabilities that are often not included in city planning.

### 1.2. Health Risks at Building Level

- In Europe, a combination of **household and ambient air pollution** is estimated to cause over half a million premature deaths annually, with an unequal burden of disease in low- and middle-income countries double that of high-income countries (WHO, 2018).
- Living in **poor-quality housing** with inadequate indoor temperature and ventilation, causes humidity and mould that conduces to allergic and respiratory illnesses. In hotter climatic zones, which are now expanding as a result of climate change, the lack of proper insulation and shading leads to indoor overheating and heat stress.
- **Toxic construction materials or processes** with polluting content can have detrimental effects on the health of workers and residents, causing a number of body dysfunctions and disorders.
- Very high-density planning yields to building typologies with **limited access to natural light** for all inhabitants which impedes mental function and memory.
- **Inadequate structures** to accommodate special needs: Many old buildings are not adequate for the special needs of physically and mentally impaired members of society and ageing residents, such as a lack of elevators, ramps or wide spaces for wheelchairs.

## 2. Global Context: Building Opportunities for the Right to Health

Given the major social and environmental issues today, effective urbanism –planning and governance– is of paramount importance. Inclusive planning that considers both people and planet can enable cities to be more sustainable and resilient, thus improving the quality of life and wellbeing of their inhabitants. Prioritising design that expands access to green space can mitigate climate change, strengthen climate adaptation, and significantly improve physical and mental wellbeing. Approaches to the built environment should also consider the socio-spatial disparities, including through thoughtful approaches on distributing the benefits of inclusive and healthy design.

Effective urbanism yields to positive health outcomes which, in turn, reduce government expenditure on the treatment of illnesses and diseases, but can also reduce costs for business by reducing employee absenteeism and increasing productivity. Conversely, an ageing building stock, (re-)developments that

exacerbate health risks, and unmindful design will continue to pose risks to physical and mental health and drive up associated social and economic costs.

There are various steps being taken in the right direction. For example, The World Green Building Council (WGBC) has developed, through extensive consultation, a "Health and Wellbeing Framework" (WorldGBC, 2020). Its multiple principles cover steps to protect people from air pollution, preserve water quality, take measures to promote physical activity, support mental and social health through building and community design, reduce transmission on infectious diseases, and expand access to nature.

In July 2022, the UN General Assembly passed a resolution recognising the "right to a clean, healthy, and sustainable environment as a human right" (UN, 2022). While the resolution is not legally binding, and the UN has no direct enforcement power, it does send a strong signal to member states on the priorities that should drive their policies. According to the Center for International Environmental Law (CIEL), the announcement "signals a new era of rights-based environmental policy" (CIEL, 2022). It also rises expectations on the next steps and subsequent guidance, tools, programmes, and projects from the UN to support the implementation of this resolution; as well as on the member states to align their national policies and strategies to guarantee this "new" human right.

## 2. Human Rights Approach

The right to physical and mental health encompasses health care and the social and economic determinants of health, including adequate housing, and "healthy natural and workplace environments". Therefore, this approach presents opportunities for planning, design, and construction to improve health outcomes across age groups, genders, and socio-economic backgrounds.

The **Institute for Human Rights and Business** (IHRB, 2009), is a leading international think and do tank with the mission to shape policy, advance practice, and strengthen accountability to make respect for human rights in various industries. In specific, IHRB's Built Environment Programme (IHRB, 2019) works to promote human rights in the planning, design, construction and (re)development of the built environment, connecting research and practice.

The human rights approach in the built environment is an integral roadmap to socially and environmentally sustainable urban development. Therefore, it proposes human rights principles and social considerations for all and each stage of the built environment lifecycle. The right to mental and physical health should be present throughout the lifecycle, and specially at the design stage.

The built environment lifecycle (Figure 1) provides the foundation and the macro perspective of *where/what stages* planners should pay attention to protect and respect human rights. To provide further details on *what to do exactly* at each stage of the built environment lifecycle, this approach is further developed into, and complemented with, the '*Framework for Dignity in the Built Environment*' (IHRB, 2020). The Framework aims to help: "*communities* shape decisions that impact their lives and neighbourhoods, *governments* establish the regulatory, planning and procurement context for just, thriving urban areas, *investors* manage social risks (the "S" in ESG) and channel investment into sustainable projects that meet locally-defined needs, and *architects and engineers* respect dignity and human rights through their operations and supply chains. All these actors are key to ensure the right to health is not only respected and strived for in urban design, architecture, and urbanism.


*Figure 1 - The 6 stages of the Built Environment Lifecycle and key human rights principles. Source: IHRB*

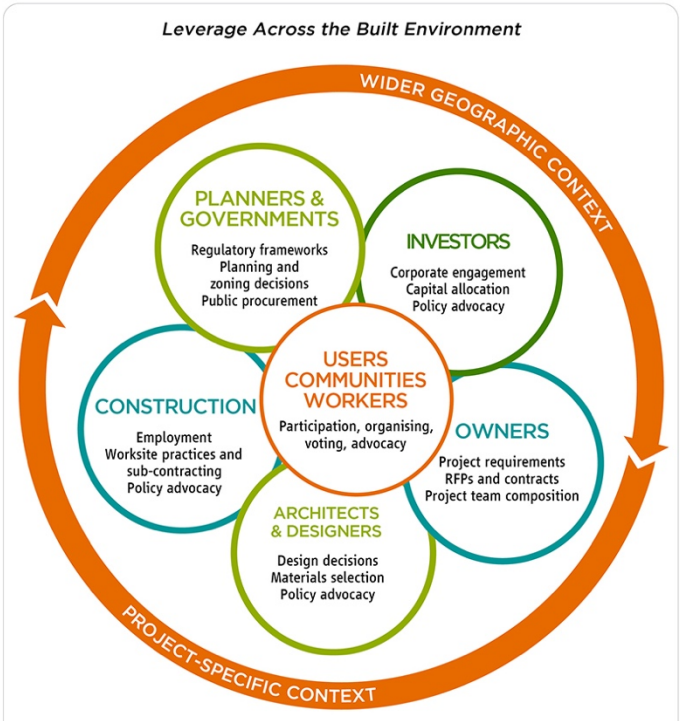


*Figure 2 - Actors of production and consumption processes of the Built Environment. Source: IHRB*

Figure 2 visualises the plethora of actors that are involved in production and consumption processes of the Built Environment. It conveys the continuum of human rights risks and responsibility across the lifecycle, their inter-connectedness, and points of leverage between them. The distribution of power between these actors largely determines the purpose of the production of the built environment e.g. if it responds to narrow economic interests or also to the needs and to the right to a healthy environment of users of space: local communities, workers, and specially the most vulnerable (IHRB, 2019)

The human rights approach that IHRB proposes is very comprehensive and detailed policy and practice Framework (IHRB, 2020), which is globally applicable and locally adaptable. It guides decision-making for all actors involved in the lifecycle, and help them evaluate their decisions, plans, policies, strategies, and actions to ensure they respect the right to a healthy environment and to mental and physical health, among other human rights principles. It is therefore a contribution to planning theory and practice "in the search of a new planning agenda for urban health, socio-spatial justice and climate resilience" (ISOCARP, 2022).

## 4. Implementation of the Right to Health

There are several actions, projects, and good examples building momentum and opening up opportunities to realise the Right to Health in the built environment. The following are **three case studies** that elucidate how it is possible to plan, design, and build in an inclusive way and mindful of health needs:

- At a city level, the EU Horizon Project VARCITIES is developing "Visionary Nature-based Actions for Health, Well-being and Resilience" in eight pilot cities in Europe: Bergen (Norway), Castelfranco Veneto (Italy), Chania (Greece), Dundalk (Ireland), Gzira (Malta), Leuven (Belgium), Novo Mesto (Slovenia) and Skelleftea (Sweden). The project involves examples in which health and well-being principles can be embedded in the built environment in cities with differing geography, climate, culture and financial resources. Examples range from the regeneration of former landfill areas, hospitals, and parks, to an "Outdoor Learning Hub", to a "Healing Garden" for the elderly and Alzheimer's patients (VARCITIES (EU), 2020).
- The New North Zealand Health Facility in Hillerød, Denmark is combining climate mitigation with health outcomes. The new Health Facility is updating and expanding the existing hospital. The project integrates sensory gardens, maximises sunlight, and brings natural surroundings to every room. Its design was carried out in consultation with patients and employees, which is key to learn and understand the needs and wants of the end users, and thus ensure that the facilities are useful, purposeful, and enjoyable (Region Hovedstaden, 2021).
- Also, the Psychopedagogical Medical Centre in Vic, Spain is dedicated to people with mental illness. This centre aims to maximise the positive benefits for people from contact with nature. Patients can cultivate the vegetation at the site as part of their rehabilitation therapy. The centre is made out of interconnected modules, with an energy-efficient construction system that adapts energy demand and improves patients' comfort according to their activity and the external temperature. The building also has a low, flat design, aiming for a close relationship with nature and improving mobility (ArchDaily, 2022).

### 2.1. Implementation of the 'Framework for Dignity in the Built Environment'

IHRB works with partners in the Coalition for Dignity in the Built Environment (2019) to implement the Framework in various cities globally. This is done through a combination of specific pilot projects committed to ensure rights are respected throughout; as well as with strategic communications and working closely with policy-makers and practitioners. Below are some examples, where the human rights

approach, and specifically, the IHRB Framework for Dignity in the Built Environment is being implemented, and helping citizens realise their right to health:

- *Bergen Inclusion Centre, Norway:* The city is home to a growing refugee and migrant population, and has also committed to be a "human rights city". The pilot – due for completion in December 2023 - involves the conversion of a former school building into a centre that both provides a language school and other services for newly-arrived refugees and migrants, as well as facilities open to the neighbouring community. The pilot project team, led by Bergen City Architects, is working to implement the Dignity in the Built Environment Framework throughout the building project lifecycle. (IHRB, 2019). Design and Architecture Norway (DOGA) has featured the Bergen inclusion centre as a best-practice example in its "National Roadmap for Smart and Sustainable Cities and Communities" (DOGA, 2019)
- An example of implementation of this approach comes from *Cartagena de Indias*, Colombia, whose "less-known face is a mesh of struggles in the inner neighbourhoods" (Rivera & Short, 2022). There is a loud soundscape, air pollution, unmanaged waste, and asphyxiating mangroves, which damage the natural environment, and make the urban environment unhealthy for people. The City Planning Department is in the process of drafting a new "Territorial Ordering Plan" (POT), which will be valid for the next 12 years of urban planning. The human rights approach is being incorporated into the participatory process of drafting the document, and into the programmes and strategies of the Plan to ensure people can exercise their "right to the city" and their right to live in a healthy, clean, and safe environment (Lefebvre, 1968).
- Guayaquil's *Municipal Public Housing Company* (EPMV, 2022) in Ecuador is also interested to strengthen the social considerations of housing development programmes, including access to green public spaces, effective waste management, proper hygiene, comfortable population density, among others. Emphasis has been placed on designing and providing housing developments for low-income families with the same high-quality and healthy environment that is commonplace in high-income neighbourhoods. This principle of *equality and non-discrimination* is key to the human rights approach. IHRB is currently working closely with EPMV to implement further more useful parts of the '*Framework for Dignity in the Built Environment'.*

## 5. Broader Impact: healthy, inclusive, and just cities

### 5.1 Recommendations for governments, investors and project managers

Based on the above-mentioned human rights approach, the *Framework for Dignity in the Built Environment*, and the related research on the six case studies presented, the authors are able to conclude that the rights-based approach facilitates to envision, plan, design and develop healthy built environments, and the delivery of higher quality of life for the citizens, among additional benefits and additional human rights.

The actions below are recommended for public policy-makers, financial institutions, and project manager to bring *triple benefits* for them and the local communities, the direct and ultimate users of the spaces they construct and regulate. These recommendations aim to reduce outdoor and indoor air pollution and improve residents' short and long- term physical and mental health, as well as address health disparities between neighbourhoods. This will lead to lower health care costs and increased worker productivity, generate an attractive environment for further investment, and strengthen users' and communities' approval of buildings, places and their local representatives.

**For Governments**

- Align built environment decarbonisation strategies with physical and mental health strategies, and ensure effective coordination between departments of urban development, climate and environment, and health
- Channel finance to building retrofits of hospitals, medical centres and care centres for the elderly
- Expand access to green public spaces in the city, which advances decarbonisation and health goals – ensure free and unconditional access for all citizens

**For Financial Institutions**

- Invest in companies that are developing clean and circular approaches to construction materials, minimising pollution and the resulting impacts on health
- Invest in companies that are developing nature-based approaches to climate mitigation and adaptation; ensure these companies have adequate human rights due diligence processes in place
- Require that portfolio companies engaging in housing development adhere to the WHO Housing and Health Guidelines (WHO, 2018)

**For Project Managers**

- Assess and address physical and mental health risks and opportunities through all stages of the project, monitor outcomes and address concerns as they arise
- Incorporate evidence-based design to develop physically and mentally healthy projects

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