Better Building(s)

Financing Human Rights-Based Decarbonisation in Europe’s Built Environment

Recommendations to Governments and Investors
This report guides practical action by policy-makers and by investors, to ensure that financing decarbonisation in Europe’s built environment is done in a way that leaves no-one behind, maximises social benefits, and is consistent with human rights commitments across the region.

- **For policy-makers**, the recommendations seek to guide decarbonisation finance in the built environment in a direction that upholds human rights commitments and secures strong social outcomes for all.
- **For investors**, the recommendations seek to shine a spotlight on the “S and G” (social and governance) dimensions of decarbonisation efforts in the built environment: generating a return on investment while mitigating risks to people and maximising positive social outcomes.

The report focuses on six inter-connected thematic areas: the right to housing; the right to health; workers’ rights; equality and non-discrimination; participation; and technology and human rights.

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Executive Summary

For Europe to meet its goal of reducing carbon emissions 55% by 2030 over 1990s levels, decarbonising its buildings will be essential: the region’s built environment currently accounts for 36% of its CO₂ emissions. Reducing these emissions will involve adapting, re-purposing and renovating existing buildings, minimising the carbon footprint of new builds and expanding access to green space in urban areas. Done right, this process presents a major opportunity to benefit people throughout Europe, helping to set the region on a just and sustainable track as it recovers from the COVID-19 pandemic.

The full benefits will not be realised automatically, however. Without effective policies and intentional collaboration, there are also real risks that the decarbonisation process could deepen inequalities within and between communities and regions.

This report provides practical recommendations and examples of innovation for policy-makers (at the national and local level) and for investors (at the portfolio and project level), on how to finance an inclusive decarbonisation of Europe’s built environment, in line with existing commitments to human rights and the UN Sustainable Development Goals.

The report focuses on Europe, given the region-wide momentum underway on decarbonising buildings, reflected in policy initiatives such as the European Green Deal, the EU Taxonomy, New European Bauhaus, updates to the Energy Efficiency of Buildings Directive, and planned inclusion of buildings in the EU Emissions Trading System. Its thematic focus areas and recommendations have applicability/adaptability to other regions, while recognising the importance of taking regional contexts into account.¹

The report provides background, practical examples, and recommendations in six deeply-interconnected areas:

The right to housing

Eighty million people in the European Union (EU) are overburdened by housing costs, and each night approximately 700,000 face homelessness. Meanwhile 22% of the low-income population lives in a dwelling with a leaking roof, rot, or damp walls, floors or foundation. Renovation of existing buildings targeted at improving their energy and carbon performance and the construction of high-performing new green buildings present the opportunity to improve housing quality – but they also entail the risk of further pushing up housing prices.

Necessary measures include: local and national governments implementing strong legal frameworks to protect the right to adequate housing; leadership and innovation by developers who factor affordable housing into their business models; responsible investment by private finance; and the expansion of community-based models such as community land trusts.

The right to physical and mental health

The built environment has always played an instrumental role in people’s physical and mental health, and the COVID-19 pandemic has further accentuated this. The decarbonisation of buildings can be harnessed to improve health outcomes across age groups, genders, and socio-economic backgrounds. At city-level, it can drive improvements in air quality, physical and mental health, and aim to address socio-spatial disparities in health risks. At project level, design can be harnessed to improve indoor air quality, comfort, access to nature and natural light, and the use of non-toxic construction materials.

Workers’ rights

Construction is Europe’s main industrial employer, employing approximately 15 million workers directly, and many more indirectly. However, cost pressures and industry fragmentation mean that workers – particularly migrant workers – are vulnerable to safety hazards, long hours, wage theft and other abuses. Green construction can bring improvements in working conditions, but only if accompanied by transformation of industry practices, supported by investors. At the same time, renovation strategies and the development of circular construction practices present opportunities both to create new jobs, including for those who traditionally face barriers to employment, and to localise supply chains.

Equality and non-discrimination

Private investment in green buildings gravitates towards wealthy urban centres, which can risk further deepening inequality within and between geographic regions. Through a combination of ground-up renovation strategies in partnership with social housing and community organisations, to top-

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3 “Timely European Initiative on Housing for All”, Jan 2021, at: https://eurocities.eu/latest/timely-european-parliament-initiative-on-housing-for-all/
down approaches that help channel finance into peripheral areas, including those transitioning from fossil fuels and heavy manufacturing, the benefits of green building strategies can be more equally distributed.

**The right to participation**

Active engagement and consultation of all citizens both in policy-making and in specific built environment projects can ensure decarbonisation investments are aligned with communities’ needs and are sustainable over the long-term, while reducing the risk of opposition. Examples range from national-level online citizen consultation on climate mitigation policy, to participatory budgeting initiatives at city-wide and neighbourhood levels, to co-creation on specific projects.

**Technology and human rights**

Climate action in the built environment is increasingly driven or supported by technological innovation: the EU is prioritising a “green and digital” transition, and multiple cities are adopting “smart-city” approaches that maximise the role of technology. The expansion of technology must come hand-in-hand with respect for the rights to privacy and data protection, and technological solutions should be designed and deployed with all end-users/beneficiaries in mind.

The examples cited throughout the report show that the decarbonisation of Europe’s built environment can be effective and fair in multiple ways. Maximising this potential will involve key factors of success being in place, including:

- national and local governments protecting human rights, and harnessing their role as change-agent, through regulation, fiscal policy, procurement and enabling innovation
- strong, effective collaboration between public actors and private finance
- shifts in financial models towards longer-term sustainable returns over short-term maximisation of profits
- effective engagement and co-creation with communities and workers
- and in the context of individual buildings and projects, project owners' and investors' commitment to avoiding harm and maximising social outcomes from the outset.
Introduction and Context
Introduction and Context

Scope

This report focuses specifically on actions that mitigate climate change in the built environment in Europe, given the policy momentum underway in that region - such as repurposing and retrofitting existing buildings, minimising the carbon footprint of new buildings and shifting to circular construction practices. Adaptation and resilience to climate change are also fundamentally important, given that climate impacts are already affecting people’s daily lives and wellbeing, and should be addressed in parallel.

The report also intentionally focuses on the actors that have the most leverage over what gets built, where, and how: policy-makers, providers of finance and building owners, as well as the important nexus between them.

Other actors around the built environment lifecycle – architects, construction and engineering firms, and building material manufacturing companies – all have important roles and responsibilities as well, both in their own operations and supply chains, and in their approach to policy advocacy. These are explored in more detail within the Framework for Dignity in the Built Environment and IHRB’s related report “Dignity by Design”.

Thematic focus areas

The report provides context and specific cases of positive action relating to decarbonisation processes in six deeply inter-connected areas:

- the right to housing
- the right to physical and mental health
- workers’ rights
- equality and non-discrimination
- participation
- technology and human rights

Decarbonising Europe’s Built Environment
In each section, readers will find an introductory snapshot, cross references to the relevant built environment lifecycle stages (within the Framework for Dignity in the Built Environment), the international human rights framing, context within Europe, and examples of good practice. Each section also provides recommendations for action at three levels: government policy; finance at the structural and portfolio level; and finance at the project level.

**Structure of the Report Recommendations**

**GOVERNMENT**

Steps that national and local governments can take through *policy and procurement practices* to protect human rights and ensure social equity while reducing emissions from real estate and construction.

**FINANCE**

Steps that institutional investors, insurers, and banks can take to mitigate risks to people and maximise social outcomes while decarbonising their real estate and construction portfolios: in terms of *how and where they allocate capital, and how they engage investees.*

**PROJECT**

Steps that public and private project owners and financers can take to mitigate risks to people and maximise social outcomes *throughout the lifecycle* of specific building projects that have carbon mitigation as a goal.

Grouping the recommendations in this way recognises that government and private investors are dependent on one another. Governments need the job creation, innovation and tax revenue generated from private investments, while private investors need the regulatory clarity and procurement context that is established by governments. In addition, many built environment projects involve a combination of public and private finance.

However, often local governments’ purpose of meeting the needs of those within their territory and/or jurisdiction (hereinafter referred to as citizens)⁴ – particularly the most vulnerable – can be at odds with private investors’ primary purpose of maximising returns for shareholders. Investors, for their part, can see an over-emphasis on policy as stifling innovation. The report recommendations seek to advance policies and practices that help address these tensions, and channel finance in ways that benefits everyone while addressing climate change.

⁴ The term “citizens” in this report is used in a broad sense, to refer to everyone living within a particular country or territory, regardless of official citizenship status.
Decarbonising Europe’s Built Environment

Europe has committed to reduce its carbon emissions by 55% (from 1990 levels), by 2030. To reach this target, decarbonising the built environment – i.e. reducing emissions from construction and real estate - will play a fundamental role, given that buildings are collectively responsible for 36% of the region’s greenhouse gas emissions.

This will require a multi-pronged approach, involving:

- re-purposing and retrofitting existing buildings, recognising that 85-95% of buildings in Europe will still be standing in 2050 – and that in the majority of cases repurposing an existing building has a lower climate footprint than building new
- reducing the carbon footprint of new buildings through their construction processes and their materials supply chains (i.e. embodied carbon) and in their operation and use;
- adopting circular construction practices;
- expanding green space in urban areas (which can contribute to both mitigation of and adaptation to climate change).

Done right, decarbonisation of the built environment presents significant opportunities to benefit people throughout Europe, setting the region on a just and sustainable track as it recovers from the COVID-19 pandemic. Decarbonisation processes can improve the quality of housing and public buildings, reduce fuel poverty, create new jobs (including for workers displaced from fossil fuel
industries), expand access to green space, clean the air that people breathe and improve health – while mitigating the extent of harmful impacts from runaway climate change such as floods, storms, and heat surges.

The full benefits will not be realised automatically, however. Without effective policies and real collaboration, there are risks that the decarbonisation process will generate and/or intensify human rights risks and deepen inequalities within and between communities and regions.

For example, if the large majority of green building finance gravitates to prime location urban centres, it will exacerbate existing wealth differences between these locations and peripheral and rural areas, as well as between regions. Green improvements can also push up home prices, further deepening the housing and homelessness crisis already affecting countries across Europe.

If climate action in construction is not accompanied by shifts in business practices, vulnerable construction workers (including migrant workers, who will increasingly be migrating as a result of the impact of climate change) will continue to risk exploitation on worksites and through supply chains, such as discrimination, unsafe working conditions, and non-payment of wages.

**Policy Context**

There are multiple policy commitments to rapidly decarbonise Europe’s built environment. In addition, governments have existing human rights obligations under international, regional and national laws. Recently, there has been a shift away from one-dimensional approaches: increasingly – including through COVID-19 recovery policies and investments – European initiatives on climate and on social dimensions are converging, recognising the interdependence between the two, as summarised in the graphic.

**Policy Drivers in Europe**

- **HUMAN RIGHTS**
  - International human rights commitments
  - EU Charter of Fundamental Rights
  - EU Pillar of Social Rights
  - Mandatory human rights and environmental due diligence

- **CLIMATE INITIATIVES WITH SOCIAL DIMENSIONS**
  - European Green Deal
  - Just Transition Fund
  - EU Taxonomy
  - Circular Economy Action Plan
  - Renovation Wave
  - New European Bauhaus

- **GREEN DIRECTIVES**
  - Energy Efficiency Directive
  - Renewable Energy Directive
  - Emissions Trading System

- **COVID-19 RECOVERY**
  - Next Generation EU, including recovery and resilience facility

10 “Extreme weather exiles: How climate change is turning Europeans into migrants”, Euronews, Feb 2020, at: https://www.euronews.com/2020/02/26/extreme-weather-exiles-how-climate-change-is-turning-europeans-into-migrants
Human rights

In addition to states’ commitments to international conventions and treaties, these include the **EU Charter of Fundamental Rights**, and the **European Pillar of Social Rights**. The latter has 20 Principles that include social dialogue and involvement of workers, gender equality, and housing. These commitments should be seen as the frame in which to ensure that climate action – including within the built environment – avoids harm and benefits all.

**Human rights due diligence**
The EU Parliament and a growing number of national governments, are introducing mandatory requirements that companies conduct human rights and environmental due diligence throughout their operations and supply chains: these apply across sectors, including construction and engineering firms.

**Overarching Climate Initiatives with Social Dimensions**

- **European Green Deal**
The *overarching set* of European Commission policies to guide Europe to become climate neutral by 2050 and ensure a just and inclusive transition.

- **Just Transition Fund**
Aims to provide financial support and technical assistance to the communities and workers most affected by the move towards a green economy, with the goal of mobilising at least 100 billion over the period 2021-2027 in the most affected regions.

- **EU Taxonomy**
A classification system with technical screening criteria aimed at channelling finance towards sustainable business activities. Buildings are one of the macro-sectors covered. The *Taxonomy* incorporates “minimum social safeguards” including adherence to the UN Guiding Principles on Business and Human Rights.

- **Circular Economy Action Plan**
*Measures* to increase sustainability throughout the full lifecycle of products, including through the minimisation, sourcing and re-use of construction materials.

- **Renovation Wave**
*Aims* to at least double the EU’s renovation rate of buildings, and renovate 35 million building units by 2030 - saving energy, improving people’s health and well-being, and creating jobs.

- **New European Bauhaus**
A *collaborative project* across the region that aims to “combine design, sustainability, accessibility, affordability, and investment in order to help deliver the European Green Deal”.

**COVID-19 Recovery**

A 750 billion *recovery plan* agreed by EU leaders in July 2020, including a 672.50 billion "recovery and resilience facility". Packages cover six areas: the green transition; digital transformation; smart, sustainable and inclusive growth and jobs; social and territorial cohesion; health and resilience; and policies for the next generation, including education and skills.

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11. As the Circularity Gap Report 2021 highlighted, interventions such as reducing floor space, resource efficient construction and circular construction materials are some of the most significant interventions needed to reduce emissions from materials, at: https://www.circularity-gap.world/2021#inventions. The World Green Building Council, through its "Building Life" campaign, is advocating for full lifecycle approaches to emissions reduction i.e. through building construction as well as use, at: https://www.worldgbc.org/buildinglife

12. As Buildings Performance Institute Europe (BPIE) has reported, 85-95% of buildings in Europe will still be standing in 2050. BPIE has stressed the importance of locally-driven long-term strategies for this, and provides innovative examples. See: “Long-term renovation strategies as key instruments to guide local renovation”, BPIE, Feb 2021, at: https://www.bpie.eu/publication/our-buildings-ltrs-as-key-instruments-to-guide-local-renovation/
Climate-Specific Directives Relating to the Built Environment

**Energy efficiency measures**

The **Energy Efficiency Directive** has binding measures to improve energy efficiency in generation, transmission, distribution and end-use consumption. It is accompanied by the **Energy Performance of Buildings Directive**, currently being updated. Together they aim to achieve a highly energy efficient building stock by 2050 and create a stable environment for investment decisions.

**Renewable Energy Directive**

Establishes a binding renewable energy target for the EU of at least 32% - meaning a greater number of buildings will have renewable energy as their power-source, and increasing numbers will install locally-generated renewables such as solar-panels.

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The Human Rights Approach

Internationally-recognised human rights encompass civil, political, economic, social and cultural rights. Human rights are indivisible and interdependent, which means that in order to guarantee civil and political rights, a government must also ensure economic, social, and cultural rights (and vice versa). There are basic principles that run throughout human rights standards and their implementation.

**Principles of a Human Rights Approach**

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**ACCOUNTABILITY**

Governments must create mechanisms of accountability for the enforcement of rights. Not only must rights be recognized in law and policy, but there must also be effective measures in place to hold governments accountable if the standards are not met – and for governments to hold third parties such as private sector actors accountable.

**PARTICIPATION**

People have a right to participate in how decisions are made regarding protection of their rights. Governments must engage and support the participation of civil society. Within the built environment this means that individual residents and communities must have clear avenues to have a say over the present and future of their neighbourhoods. Companies must consult local communities and other stakeholders prior to and during any project.

**NON-DISCRIMINATION**

Human rights are universal. They must be afforded to everyone, without exception, and guaranteed without discrimination of any kind. This includes not only purposeful discrimination, but also protection from policies and practices which may have a discriminatory effect. Within the real estate, design and construction industries, non-discrimination applies to the context of their operations, and also to the recruitment, retention and advancement of employees.

**TRANSPARENCY**

Transparency means providing information about decision-making processes related to rights, so that people know and understand how major decisions affecting rights are made.
Recognising the growing influence of the private sector over the realisation of human rights, in 2011 the UN Human Rights Council unanimously endorsed the “UN Guiding Principles on Business and Human Rights”, following a six-year multi-stakeholder process. The Principles are grouped into three pillars: the state duty to protect everyone within their territory/jurisdiction from human rights abuses involving business enterprises; the corporate responsibility to respect human rights; and access to remedy.¹³

The corporate responsibility to respect human rights applies to companies and also to investors (for example, the UN Principles for Responsible Investment is rolling out a strategy to advance human rights approaches among its members). One of the central elements of the responsibility to respect is “human rights due diligence”, which involves: identifying and assessing actual or potential adverse human rights impacts, integrating these findings and taking appropriate action, tracking effectiveness, and communicating on progress.

The Three Pillars of the
UN Guiding Principles on Business and Human Rights

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### International Bill of Human Rights

- Right to non-discrimination
- Right to participation
- Right to health
- Right to an adequate standard of living (including housing)
- Right to privacy
- Right to a living wage
- Right to take part in government
- Freedom of assembly

### ILO fundamental conventions

- Freedom from discrimination at work
- Freedom of association and right to collective bargaining
- Freedom from forced labour
- Freedom from child labour

### UN Sustainable Development Goals

- No poverty (Goal 1)
- Good health and wellbeing (3)
- Gender equality (5)
- Clean water and sanitation (6)
- Affordable and clean energy (7)
- Decent work and economic growth (8)
- Industry, innovation and infrastructure (9)
- Reduced inequalities (10)
- Sustainable cities and communities (11)
- Responsible consumption and production (12)
- Climate action (13)
- Peace, justice and strong institutions (16)

Human rights and labour rights are international legal standards.

The 17 Sustainable Development Goals and their 169 targets were agreed in 2015 in the **2030 Agenda for Sustainable Development**. They aim to stimulate action “in areas of critical importance to humanity and the planet” and are grounded in international human rights.

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14 Consisting of: Universal Declaration; International Covenant on Civil and Political Rights; International Covenant on Economic, Social and Cultural Rights

The Role of Finance

Public Finance

Decarbonising the built environment requires a combination of public and private finance, working effectively together.

Particularly in response to the COVID-19 pandemic there has been a re-visited role of public finance - the fundamental importance of governments establishing and re-enforcing social protection and setting out the direction of markets through their policies and their own investments. Done right, this does not constrain innovation but opens the space for it. As Aviva real estate’s head of ESG (Environmental, Social and Governance) has put it, “what’s important is for Government to signal to investors where it thinks the future lies”.

Public finance channelled towards decarbonisation efforts in Europe will come from multiple levels. For example, as part of the EU’s 1,074 billion euro multi-annual budget (2021-2027), and the 750 billion euro Next Generation EU initiative established to spur recovery from COVID-19 lockdowns, as well as from national budget initiatives, and from local municipal finance. State investment and development banks – such as the European Investment Bank and Germany’s Kfw – can play an important role providing capital, de-risking investment strategies, enabling financial sector learning, and creating trust for specific projects, while government pension funds wield significant influence through their capital allocation and engagement with portfolio companies.

Over-dependence on public finance, however, comes with risks – as governments can harness control over economies to further their own rather than broader public interests, engage in corruption together with private sector actors, and combine investment strategies with discrimination against particular groups, or with the curtailing of civil liberties.

Private Finance

The “S and G” in ESG (Environmental, Social, Governance): Towards a multi-dimensional investment approach

Private finance for decarbonising the built environment also involves multiple sources: from asset managers, insurers and banks, to private equity firms and developers. Across these actors, there is growing recognition – accentuated by the COVID-19 pandemic - that climate action must come hand-in-hand with managing social risks and opportunities. This was reflected in a 2020 stakeholder survey on the EU’s approach to sustainable finance: The results cited the two main obstacles that would stand in the way of mainstreaming sustainability in the financial sector as:

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16 See for example the work of the Institute for Innovation and Public Purpose, at: https://marianamazzucato.com/about/institute-for-innovation-and-public-purpose

• Non-sustainable short-term profit-seeking practices and greenwashing, and:
• Prevention of the social and economic risks related to the transition and the management of stranded assets.

As PwC’s Emerging Trends in Real Estate Europe 2021 puts it: “the industry is starting to evaluate its wider role in society more seriously – from addressing diversity and inclusion in the workplace to a far greater emphasis on the environmental, social and governance agenda…Though very early days, Europe’s real estate industry is moving slowly towards social impact becoming integrated in its overall investment strategies rather than through specialist funds or products.”

For private sector investors to successfully prevent harm to human rights, a shift in business models will be needed, away from short-term profit maximisation to a focus on longer-term returns connected with local needs (see section 1: Housing). For example, the Predistribution Initiative has highlighted ways in which expansion of certain capital structures – including growing corporate debt burdens and the expansion of private equity – can put pressure on companies that leads to business practices with negative results for stakeholders. Among these are cutting costs which relate to the quality of jobs and of goods and services (e.g. elderly care); increasing pricing, which affects rental homes; restructuring, with resulting job losses; and asset manager/corporate consolidation which can deepen economic inequality.

A review of disclosures of the largest banks, asset managers and insurers active in real estate and construction in Europe identified strong awareness and disclosure on the climate aspects of ESG, as well as growing awareness of the importance of the social dimensions (see illustrative examples provided in the table). However, overall there is still a lack of specificity on the social risks and opportunities for built environment investors; a risk of a “cherry-picking” approach in which investors address selected impact areas rather than addressing the full spectrum of social risks and opportunities associated with their investments; and an emphasis on the birds-eye level of portfolio review, rather than also engaging with specific impacts at the level of individual assets. This report helps to address these gaps, focusing on the social dimensions as they relate to decarbonisation.
Examples of Real Estate Investor Action

**Asset Managers**

- Norge Bank Investment Management (NBIM) has guidelines on the “Responsible Management of Unlisted Real Estate”
- Standard Life Aberdeen has developed a human rights index, and “ESG Impact Dial” for real estate, and has defined its approach to “Governments and Human Rights”
- Aviva’s “Sustainable Transition Loans Framework” is accompanied by a 1 billion GBP investment in “sustainable transition real estate debt”
- PGGM conducted a climate risk assessment of its real estate investments with Munich Re. This has “geo-tagged” all 4000 real estate assets, with precise location information on each. While climate-change focused, geo-tagging approaches such as this also open the opportunity to assess location-specific social dimensions

**Banks**

- Credit Agricole’s sector-specific policy on real estate includes human rights provisions
- ING publishes detailed annual human rights updates: see the update from 2020 and from 2019 (which features examples of construction sector engagement)

**Developers**

- Gecina has a joint initiative with Nexity to expand affordable low carbon rental housing in Paris
- And multiple developers are integrating social impact into the core of their business models, such as FORE Partnership in the UK, Revive in Belgium and Home.Earth in Denmark
Overarching Recommendations

TRIPLE BENEFITS FOR GOVERNMENTS, CITIZENS, AND INVESTORS:
The actions below will ensure that Europe’s built environment is decarbonised in a way that leaves no-one behind, mitigates risks to human rights and expands social opportunity, while creating new long-term investment opportunities, and ensuring that investors adhere to their human rights and sustainable development commitments.

GOVERNMENT

• Adhere to internationally-agreed human rights standards and the EU Pillar of Social Rights
• Establish a clear policy agenda for respecting human rights and expanding social outcomes in the context of decarbonising the built environment
• Guide equal distribution of the benefits of the green transition, and establish multi-level governance so that regional and city-level plans integrate national decarbonisation strategies
• Ensure effective coordination between departments of finance, planning, climate and environment, labour, health and housing
• Ensure that municipal governments are enabled financially and legally to set and implement inclusive climate policies that are responsive to local needs
• Ensure that procurement policies and practices - including those focused on climate mitigation - embed respect for human rights and harness opportunities for social outcomes
• Ensure adequate access to remedy for human rights abuses in carbon mitigation initiatives

FINANCE

• Ensure that the structure of investment vehicles, expected returns on investment and timeframes do not exacerbate human rights risks, and where possible contribute to an enabling environment for social outcomes
• Engage existing portfolio companies in construction and real estate on their human rights due diligence processes and opportunities to maximise social outcomes
• Strengthen the human rights dimensions within impact investment and ESG frameworks
• Support green building certifications in strengthening their criteria regarding social outcomes
• Participate in joint public-private financing vehicles that seek to channel climate mitigation finance to communities that are economically disadvantaged and/or transitioning out of fossil fuels

PROJECT

• Mitigate risks to human rights and seek to maximise social outcomes from the outset of the project - harnessing project requirements, requests for proposals, and contracts to do so. (The Framework for Dignity in the Built Environment provides a reference point for doing this, with questions to guide action, cross-references to human rights standards and the Sustainable Development Goals, and examples of innovation.)
• Identify opportunities to re-purpose existing buildings for social outcomes (such as affordable housing, education, community centres), rather than solely financing new builds
• Ensure effective collaboration between participants at all stages of the lifecycle
• Ensure adequate access to remedy for human rights abuses
The Right to Housing
The Right to Housing

HUMAN RIGHTS DEFINITION

As elaborated in international law, the right to adequate housing is multi-faceted, with minimum criteria that include: security of tenure; availability of services, materials, facilities and infrastructure; affordability; habitability; accessibility; location considerations; and cultural adequacy. See the Framework for Dignity in the Built Environment for the related international human rights standards and Sustainable Development Goals.

KEY WORDS

Affordability | Displacement | Forced evictions | Accessibility | Multidimensional poverty | Gentrification | Social exclusion | Homelessness | Energy poverty | Local needs | Accessibility | Socio-spatial equity | Participation

SNAPSHOT

Millions of Europeans still lack adequate housing. Proactive approaches by governments and investors will be needed to ensure that decarbonisation of the built environment does not exacerbate housing unaffordability and homelessness, and is harnessed in ways that improve living conditions and address energy poverty.

Eighty million people in the EU are overburdened by housing costs, while 22% of the low-income population lives in a dwelling with a leaking roof, rot, or damp walls, floors or foundation. Homelessness has risen an estimated 70% over the past decade, with some 700,000 people facing homelessness each night. And 30 million Europeans live in energy poverty, meaning they cannot afford to heat their homes properly in the winter.

In Europe, as in other regions, discrimination creates barriers to the right to housing – whether direct or indirect discrimination, or discriminatory harassment. Examples are reflected in legal action brought on behalf of residents, such as lawsuits over the demolition of Roma communities’ local needs.

18 The Framework for Dignity in the Built Environment is a tool to mitigate human rights risks and maximise social outcomes throughout the built environment lifecycle, at: https://www.ihrb.org/focus-areas/built-environment/framework-for-dignity-built-environment
19 “Timely European Initiative on Housing for All”, Jan 2021, at: https://eurocities.eu/latest/timely-european-parliament-initiative-on-housing-for-all/
21 “Europe needs a political strategy to end energy poverty”, Jacques Delors Institute, Feb 2021, at: https://institutedelors.eu/en/publications/europe-needs-a-political-strategy-to-end-energy-poverty/
22 “Three anti-discrimination legal concepts applied to the housing context”, Juan Carlos Benito Sanchez, in Housing Rights Watch, at: https://www.housingrightswatch.org/content/three-anti-discrimination-legal-concepts-applied-housing-context
housing in Greece,\textsuperscript{23} over threats of evictions of Roma communities in Bulgaria,\textsuperscript{24} and over Denmark’s evictions from neighbourhoods that the government has designated as “ghetto” areas.\textsuperscript{25}

Housing and homelessness advocates and members of the European Parliament have argued that:

“The Just Transition Fund and the forthcoming Renovation Wave must be shaped so as to tackle poor living conditions and poverty through carefully calibrated and targeted renovation that combines social and climate change mitigation objectives.” \textsuperscript{26} (emphasis added).

**Addressing Commodification and Ensuring Responsible Finance in Housing**

Lack of access to affordable housing in Europe has been exacerbated by a trend known as the commodification of housing. This involves an expansion of the involvement of private finance in developing and owning housing stock, often at the risk of prioritising the maximisation of short-term financial returns over the affordability and quality of the housing.

UN Rapporteurs on the Right to Housing have drawn attention to this trend and its social risks, emphasising that “new initiatives should be developed in order to bridge corporate and government finance, housing, planning and human rights”, and that “there’s a huge difference between housing as a commodity and gold as a commodity. Gold is not a human right, housing is”. Guideline 12 within the “Guidelines on the Implementation of the Right to Adequate Housing” calls on States to regulate business in order to prevent investments from having negative impacts on the right to housing, including by:

“Preventing any privatization of public or social housing that would reduce the capacity of the State to ensure the right to adequate housing; Maintaining a rental regulatory framework that preserves security of tenure and affordable housing for tenants, including through rent caps, controls or rent freezes where needed; Imposing taxes on residential real estate and land speculation to curb the short-term resale of properties and on residential real estate left vacant.”

Expanding housing and the decarbonisation process at the scale needed in Europe, will still require significant investment from private finance. When private investors do make investments in housing, it is important that they do so within the parameters of the right to adequate housing and the UN Guiding Principles on Business and Human Rights. Particularly in the case of social/public housing, it is important that partnerships with housing associations and protective measures are in place.

\textsuperscript{23} “I Elpida v. Greece”, ICCPR case digest, at: http://ccprcentre.org/decision/16727
\textsuperscript{24} Yordanova and others v. Bulgaria (App. N 25446/06), European Court of Human Rights, at: https://www.housingrightswatch.org/jurisprudence/yordanova-and-others-v-bulgaria-app-n%ef%bc%bd-2544606-24042012
\textsuperscript{25} “Residents sue Denmark over discriminatory ‘Ghetto Package’ eviction plan”, at: www.justiceinitiative.org/newsroom/residents-sue-denmark-over-discriminatory-ghetto-package-eviction-plan
\textsuperscript{26} “Housing’s role in Europe’s green transition”, Freek Spinnewijn, Manuel Domergue, Manuel Pizarro, Mounir Satouri, Rick Hathaway, Euractiv, Jul 2020, at: https://www.euractiv.com/section/energy/opinion/housings-role-in-europes-green-transition/
Mitigating Risks of “Green Gentrification” Leading to Rising Home Prices

Retrofits, green building projects and broader climate mitigation efforts in the built environment risk deepening existing barriers to access to adequate housing (see section 4: Equality and non-discrimination), a process sometimes referred to as “green gentrification”. In Gdańsk, Poland, for example, urban regeneration programmes consisting of residential demolitions and retrofitting of existing buildings have led to displacement of current residents as a result of inadequate due diligence and communications processes.

City-wide approaches to planning, policies to protect housing affordability and effective allocations of city budgets throughout all neighbourhoods are important measures to reduce these impacts. Barcelona Laboratory for Urban Environmental Justice and Sustainability (BCNUEJ) and ICLEI (Local Governments for Sustainability) have produced a comprehensive Toolkit for Urban Green Justice with 50 planning and policy tools to avoid gentrification and displacement in green projects, while also ensuring equal access to their benefits.

UK: Social Housing and Sustainability Reporting

In the UK, the ESG Social Housing Working Group launched the “Sustainability Reporting Standard for Social Housing” – the working group is a collaboration of 18 housing associations, banks, investors, service providers and impact investing organisations. As the report accompanying the standard says: “Ultimately the motivations underpinning investment into the social and affordable housing sector is critical. It is of fundamental importance that equity funding is aligned with and supportive of creating social value, not just financial value, and that financial returns are fair and do not extract excessive profit from the sector”. The standard, however, while covering areas that touch on human rights such as affordability, resident voice, staff wellbeing and supply chains, does not refer to human rights standards, including the right to adequate housing.

Expanding Access to Financing for Retrofits in Social and Affordable Housing

Across Europe, national and municipal governments are adopting policies and financing models that incentivise home-owners and affordable housing providers to retrofit their buildings. Examples include Home and Community Energy Grants in Ireland, the Superbonus 110% in Italy (a new measure in

response to COVID-19), the Energy Company Obligation (ECO) and District Heating Loans Scheme in the UK. At EU level, the European Local Energy Assistance (ELENA) provides direct funding for specific energy-efficiency local projects and is mainly directed towards households and homeowner associations.

**Vienna: Municipal Social Housing and Energy Efficiency**

In Vienna, approximately 60 percent of residents live in social housing – either owned directly by the city or by developers who have specific agreements on terms with the city, which subsidises the cost. Wiener Wohnen, the city’s social property management company aims to assist tenants in multiple ways, for example involving social workers to prevent evictions and homelessness. The European Investment Bank (EIB) has supported Wiener Wohnen with loans to improve the energy efficiency of its properties: between 2011 to 2016 nearly 100 municipal residential neighbourhoods with about 17,000 units benefited, with an estimated CO₂ reduction of 46,000 tonnes a year.²⁸

**Revive: Developer-led Approach to Energy-efficient Affordable Housing**

Revive is a private Belgian developer that specialises in regenerating industrial sites with a focus on energy-efficient affordable housing, and incorporates Sustainable Development Goal (SDG) objectives into their building projects. Revive also offers “future-proof” investment opportunities that must meet social, ecological and economic criteria. An example is the Vicinity Affordable Housing Fund which seeks to meet the high demand for affordable, quality and sustainable housing in the Belgian rental market. Vicinity offers a “housing as a service” concept and invests in nearly zero-energy buildings.

**Brussels: Community Land Trust Model**

Community Land Trusts (CLTs) develop and manage housing communities in a democratic way and ensure properties remain affordable. In Brussels, CLTB focuses on net-zero housing developments specifically for at-risk groups, and training residents to use eco-technologies. CLTB also looks to build “local energy cooperatives” and “social economy hubs”, creating opportunities for local production as well for sharing clean energy within the land trust and with other communities.

**Almere: Combatting Energy Poverty**

In Almere, Netherlands, public housing corporations work with energy suppliers to assist people who are unable to pay their energy bills and prevent them from getting into debt. People receive financial and energy counselling, and social housing units are equipped with solar panels and energy meters. Installations are pre-financed by the local housing corporation: monthly savings are enough to pay back the cost and reduce electricity bills.²⁹

Recommendations: The Right to Housing

**TRIPLE BENEFITS FOR GOVERNMENTS, INVESTORS, AND CITIZENS:**
The actions below will help to expand access to adequate housing for all while cutting carbon emissions from buildings, reduce energy poverty and overall levels of inequality in urban areas, and create new opportunities for long-term investment in housing with reliable returns.

**GOVERNMENT**
- Follow the **UN Guidelines** on implementation of the right to adequate housing
- **Protect against increased housing costs** that can result from building retrofits and green building requirements, for example, through rent caps, tenant protections, requiring a proportion of genuinely affordable housing in mixed use developments, and tying retrofit loans to future energy savings
- **Involve** homelessness and housing rights organisations in the design and implementation of decarbonisation strategies
- **Promote energy-efficiency retrofits** by:
  - providing incentives for home owners through tax-deductions and subsidies
  - negotiating special pricing with energy companies for volume business, at neighbourhood or district scale
- **Grow, finance, or establish public housing corporations**, to increase public housing stock, have greater control of the housing market, and generate revenue from the large number of rental properties
- **Consolidate** multiple housing initiatives within a housing development investment programme, which can include, for example, opportunities to re-purpose existing and vacant buildings for affordable housing

**FINANCE**
- Follow the **UN Guidelines** on the implementation of the right to adequate housing
- Avoid “extractive” short term pressure for high returns from housing investments, focusing on **long-term stable returns**
- Support and invest in **government-facilitated housing investment** programmes to ensure housing affordability – generating long-term financial returns from a large number of low-priced rents rather than from a low number of buildings with high-priced rents
- Engage portfolio companies on housing strategies that **maximise energy-efficiency** while protecting affordability for tenants
- Invest according to **local housing demands**

**PROJECT**
- Incorporate at least a proportion of **energy-efficient affordable housing** within multi-use developments
- Where possible, apply **energy performance contracting**, to finance elements of the project or upgrade from energy-efficiency savings, or from the renewable energy produced
The Right to Physical and Mental Health

Smog in Warsaw
Flickr/Radek Kolakowski
The Right to Physical and Mental Health

HUMAN RIGHTS DEFINITION
The right to physical and mental health as established by international standards encompasses not only health care, but also the social and economic underlying determinants of health, including access to adequate housing (See Section 1: Housing), and “healthy natural and workplace environments”.

DxD FRAMEWORK STAGE
02 Planning & Finance
03 Design
04 Construction
05 Management & Use

KEY WORDS
Visual | Acoustic and thermal comfort | Density | Memory | Privacy | Intimacy | Safety | Sense of community | Green space | Biophilic design | Right to architecture | Openness | Flexibility | Accessibility | Inclusion

SNAPSHOT
The built environment has always played an instrumental role in people’s physical and mental health: the COVID-19 pandemic has further accentuated this. The decarbonisation of buildings presents opportunities for interventions in planning, design, and construction that significantly improve health outcomes across age groups, genders, and socio-economic backgrounds.

Green Building and Retrofits: An Opportunity to (Re-)Design with Health in Mind

Approaching decarbonisation of the built environment from a physical and mental health-based approach will bring many benefits and opportunities, not only for health, but also from a wider societal and a business point of view. Improving health outcomes will reduce government expenditure on the treatment of illness and disease but can also reduce costs for business by reducing employee

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30 The Framework for Dignity in the Built Environment is a tool to mitigate human rights risks and maximise social outcomes throughout the built environment lifecycle, at: https://www.ihrb.org/focus-areas/built-environment/framework-for-dignity-built-environment
absenteeism and increasing productivity. Conversely, an ageing building stock, (re-)developments that overlook the opportunity to address health risks, and unmindful design will continue to pose risks to physical and mental health and drive up associated social and economic costs.

### Addressing Health Risks at City Level

Decarbonisation strategies for the built environment can help to address health and well-being challenges faced at the city level. For example:

- **Air pollution** continues to be a major contributor to illness and deaths,\(^{31}\) 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.

- **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 challenges: People who live in cities have a 20% higher risk of developing anxiety disorders, and a 40% higher risk of developing mood disorders,\(^{32}\) due to factors such as crowding, insecurity, noise, and unstable economic conditions and a lack of access to outdoor green and open spaces. Expanding access to green space can mitigate climate change, strengthen climate adaptation, and significantly improve physical and mental wellbeing.

- **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. Approaches to decarbonising the built environment must take these disparities into account, including through thoughtful approaches on distributing the benefits (see section 4: Equality and non-discrimination).

### Addressing Health Risks at Building Level

Decarbonisation strategies can also address health challenges that people experience at the level of individual buildings:

- 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.\(^{33}\)

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\(^{31}\) “Health must be the number one priority for urban planners”, WHO, Mar 2018, at: https://www.who.int/news-room/comments/detail/health-must-be-the-number-one-priority-for-urban-planners


• Living in **poor-quality housing** with inadequate indoor temperature and ventilation, causes humidity and mould that conduces to allergic and respiratory illnesses (See section 1: Housing). 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.

• **Lack of access to natural light** 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.

The World Green Building Council has developed, through extensive consultation, a “**Health and Wellbeing Framework**”. 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.

### Nature-Based Actions for Health, Well-being, and Resilience

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 through co-designed processes and active engagement of small and medium sized enterprises, to create new business opportunities. The eight cities are Bergen (Norway), Castelfranco Veneto (Italy), Chania (Greece), Dundalk (Ireland), Gzira (Malta), Leuven (Belgium), Novo Mesto (Slovenia) and Skelleftea (Sweden). The project involves multiple 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.

### Buildings Combining Climate Mitigation and Health Outcomes

Two hospital projects in Denmark and in Spain are effectively combining climate mitigation and health outcomes. The **New North Zealand Health Facility** in Hillerød, Denmark 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.

The **Psychopedagogical Medical Centre** in Vic, Spain is dedicated to people with mental illness. 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.

Both buildings have a low, flat design, aiming for a close relationship with nature and improving mobility.
Recommendations: The Right to Physical and Mental Health

TRIPLE BENEFITS FOR GOVERNMENTS, INVESTORS, AND CITIZENS

The actions below will 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.

GOVERNMENT

- **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

FINANCE

- **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

PROJECT

- **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
BETTER BUILDING(S)
Financing Human Rights-Based Decarbonisation in Europe's Built Environment

Workers’ Rights

Construction in Barcelona
Flickr/EU Parliament
Workers’ Rights

HUMAN RIGHTS DEFINITION

The ILO (International Labour Organisation) – a tripartite organisation between governments, employers and labour – has core conventions that cover discrimination, freedom of association, forced labour and child labour. Human rights law also covers aspects of workers’ rights, and includes a specific treaty on the rights of migrant workers.

DxD FRAMEWORK STAGE

04 Construction
05 Management & Use
06 Redevelopment

KEY WORDS

Worker health and safety | Migrant workers | Forced labour | Child labour
| Supply chains | Procurement | Diversity | Trade unions | Training and education | Job creation

SNAPSHOT

The extent to which the climate transition generates new jobs, the quality of those jobs, and who they are accessible to, will depend on concerted and collaborative efforts by government, finance and industry.

Decarbonisation and Industry Shifts: Implications for Construction Workers

Shifts towards decarbonisation and digitisation are driving major changes for workers throughout the construction industries. As the ILO has put it, “many, and perhaps most, existing jobs (such as plumbers, electricians, metal workers, and construction workers) will simply be transformed and redefined as day-to-day workplace practices, skill sets, work methods, and job profiles are greened”. New building practices, such as off-site assembly or prefabrication, will automate some tasks, while creating the need for new skills. And shifts towards circular materials may contribute to localising supply chains. However, many aspects of the construction industries as we know them today – and the accompanying risks to workers – apply to green construction just as they do to traditional construction.

The construction industry is Europe’s main industrial employer, employing approximately 15 million workers directly, representing 7.5% of the workforce. The industry is characterised by small firms (95% have fewer than 20 workers), multiple layers of subcontracting, and often thin-margins –
business models that can lead to labour abuses such as hazardous working conditions and long hours with inadequate pay, and a lack of accountability.

From traineeships through to executive leadership and board levels there is also still a lack of multiple forms of diversity, and a need to shift to a culture that promotes gender and racial representation and non-discrimination. Strengthening diversity throughout the industry – of backgrounds, skills and perspectives – will not only expand opportunities for those who have traditionally faced barriers but will strengthen the industry’s resilience and innovation in order to maximise the benefits of the climate transition.

High proportions of the construction workforce are migrant workers, in Europe as in other regions. More developed economies in Europe’s northern and western countries satisfy workforce shortages with workers migrating from Southern and Eastern EU countries, which in turn face their own workforce shortages and hire workers from outside Europe – a trend that the COVID-pandemic brought to the foreground. Migrant workers are particularly vulnerable to exploitation and less likely to have the means to redress when abuses occur. In interviews with migrant workers who were victims of severe labour exploitation in Belgium, France, Germany, Italy, Netherlands, Poland, Portugal and the UK, the Fundamental Rights Agency found pervasive fraudulent recruitment practices and wage violations, while half of the interviewees reported sub-standard working conditions.

Green building processes and renovation hold the opportunity to create significant new employment opportunities – McKinsey has estimated for example that investing in retrofitting two million homes for energy efficiency could create nearly two million jobs in a European country of 50-70 million people. But realising the full potential of this opportunity will involve important changes in the construction industries themselves. As an academic review of unions and the green transition in Europe puts it, the industry’s current social dimensions will “jeopardise the potential to secure environmental gains and yet tend to be disguised from view…” The transformation needed exemplifies the importance of addressing both environmental (e.g. greening of buildings) and social (e.g. transformation of construction employment and VET [vocational and employment training]) issues.

Materials Innovation and Circular Building Practices: Implications for Construction Workers

In addition to work-site changes, innovation in construction materials and moves towards circular construction also present opportunities for job creation, training and improving working conditions. Building materials supply chains – from cement and aggregates, to brick, to steel and copper (the latter featuring increasingly in the context of energy-efficient retrofits) – are long, complex, difficult to trace and therefore with high risks of worker exploitation, including forced labour, and other human rights abuses. In the United States, the Design for Freedom Working Group is bringing together construction and architecture companies to seek to expose and eliminate forced labour risks in the materials supply chain. And within Europe, emerging requirements in multiple countries as well as at the EU level on mandatory supply chain human rights and environmental due diligence will encompass construction as well as other industries.

As owners and contractors advance the traceability of materials to assess their carbon footprints, social risks could become easier to detect as well – with the potential for including social provisions within Environmental Product Declarations. And specific materials industry initiatives such as Responsible Steel and Copper Mark are advancing and implementing criteria on both greenhouse gas emissions and human rights provisions.

The salvaging and re-use of construction materials, for example through urban mining, can create local employment opportunities – provided that strong safety measures are in place given the hazardous nature of the work. Ronald Berger projects an additional global market of over EUR 600 billion in circular construction material practices by 2025, with a market share of 240 billion in Europe. Cities throughout Europe are working to innovate and overcome obstacles to circularity in building materials, such as Amsterdam and Brussels initiatives to monitor inclusive circular employment, and the “Circularity hubs” underway in Copenhagen, Hamburg, Vantaa in Helsinki, and in Greater London.

Circular Construction Practices in Amsterdam

Amsterdam has a circular strategy for 2020-2025 that encompasses the built environment as well as other sectors. The city’s initial scan of circularity opportunities found that building materials re-use strategies could create 700 additional jobs in the sector. The city also commissioned a road-map for embedding circularity into the construction tendering process and has committed to all the city’s invitations to tender in the built environment to be circular by 2023.
The Role of Construction Unions

Construction unions and local worker centres that support the needs of migrant and temporary workers will both have an important role to play, working with and advocating towards government and industry. Effective approaches tie the needs and priorities of workers closely to both the climate agenda and wider social agendas such as housing – this broadening of goals is particularly important given the declining density of unions in many European countries. The European Federation of Building and Woodworkers, for example, has called for the renovation wave to go “hand-in-hand” with affordable energy and with training and stable jobs for every worker. In Germany, IG BAU construction union has an alliance with tenants’ associations advocating for affordable housing.

Ethical Contracting for the Munch Museum in Oslo

The Munch museum in Oslo is a large project being designed to “Passive House” energy efficiency standards. The city has introduced new contracting processes that aim to reduce complex layers of subcontracting, prevent industry corruption and criminalisation, and ensure strong protections for workers (including immigrant workers). The model presents powerful opportunities for scaling, given that Oslo is the country’s largest procurer other than the Norwegian state, issuing contracts worth EUR 2.67 billion a year.

Recommendations: Workers’ Rights

TRIPLE BENEFITS FOR GOVERNMENTS, INVESTORS, AND CITIZENS
Acting on the recommendations below will lead to thriving economies with workers who are respected and fairly compensated and able to support their families, improved productivity, output and quality of work with reduced risk of project delays and time over-runs, and expanded local employment opportunities, leading to greater social cohesion.

GOVERNMENT

- Adhere to ILO standards and provide social protection for workers
- Ensure adequate legislation and enforcement on labour providers in construction
- Consult with trade unions in the context of long-term renovation plans and new green building developments
- Guide transition finance to create green construction training and jobs in territories and neighbourhoods impacted by the transition out of fossil fuels; deploy skills development for construction workers to adapt to the green and digital economy
- Ensure access to remedy for workers whose rights have been abused
- Work with product declaration bodies to extend the scope of Environmental Product Declarations to also encompass mitigation of forced labour and other labour rights risks

FINANCE

- Include respect for workers’ rights (on construction sites and through construction materials supply chain) within ESG and impact investment frameworks and in engagement with portfolio companies
- Invest in companies that are generating new employment opportunities in green construction and making those opportunities available to those most affected by the economic transformation
- Set and track diversity expectations for portfolio companies in construction and engineering, including gender and racial diversity considerations, at company and board level

PROJECT

- Ensure project contracts – with contractors and with sub-contractors - do not impose financial, time and other constraints that exacerbate the risk of harm to workers’ rights, passing risk “down the chain”, or restrict flexible working and gender parity
- Ensure measures are in place to respect the rights of all workers, including vulnerable migrant workers, and provide access to grievance mechanisms
- Maximise employment and training opportunities for women, local residents, and under-represented groups, including training in new green building and renovation skills
- Conduct human rights due diligence on materials supply chains: aim to mitigate risks to workers’ and other human rights through the supply chain and identify opportunities for local job creation through local material sourcing practices
4 Equality and Non-Discrimination
Equality and Non-discrimination

HUMAN RIGHTS DEFINITION

Cross-cutting throughout all human rights are the principles non-discrimination and of equal treatment before the law. And economic inequality itself has multiple implications for human rights: living in poverty, particularly extreme poverty, means that many human rights are out of reach – including access to adequate housing, basic sanitation and health services. Those living in poverty also often face barriers to participate meaningfully in political processes, and to obtain remedy for abuses.

DxD FRAMEWORK STAGE

Cross-cutting principles that should be upheld throughout the lifecycle

KEY WORDS

Poverty | Affordability | Diversity | Discrimination | Safety | Participation |
Accessibility | Migration | Gender | Race | Ability | Neighbourhood | Zoning |
Municipal budgets | Equal distribution

SNAPSHOT

Europe has deep inequalities both within and between geographical areas: the approach that policy-makers and investors take towards decarbonisation of buildings can either deepen or reduce inequality.

Despite many efforts to meet the Europe 2020 Poverty Target of lifting 20 million people out of poverty between 2008 and 2020, this has not been achieved. Olivier De Schutter, UN Special Rapporteur on extreme poverty and human rights sees this as “a defeat for social rights”. He states that “since the EU has experienced steady economic growth until very recently, the only explanation for this failure is that the benefits have not been evenly distributed”. He adds that the fight against poverty is “the missing piece” within the European Green Deal.

Social inequality can either be further exacerbated or addressed by the configuration of the built environment. In the context of poverty, urban inequalities, and polarisation, the role of governments and investors shaping the built environment is pivotal. Financial flows and the strategies behind them are important not only by their magnitude, but also by their direction within cities.

39 The Framework for Dignity in the Built Environment is a tool to mitigate human rights risks and maximise social outcomes throughout the built environment lifecycle, at: https://www.ihrb.org/focus-areas/built-environment/framework-for-digni-ty-built-environment
Socio-economic spatial disparities are also linked closely to racial and ethnic disparity, recognising, for example, that newly-arrived immigrant and refugee populations often live in areas outside city centres. An interactive map by the European Network Against Racism demonstrates the ways in which structural racism and inequalities in the labour market, housing and other areas meant that the risks of COVID-19 were borne disproportionately by racialised groups: people in refugee camps and Roma settlements were particularly vulnerable.

**Decisions about where investments flow have a direct correlation on how and what parts of the city are developed, who benefits, and who is left behind.** For understandable reasons, real estate investments are predominantly driven to the city’s most attractive areas with high potential of fast returns on investment (ROI).

An example can be seen in the unequal distribution of energy retrofits in Bucharest’s apartment buildings.\(^{40}\) Out of the six sectors (S) in Bucharest, S1, in the north, is the wealthiest and least dense in apartment buildings needing energy retrofit, while S3 and S4, in the south of the city, hold large housing estates from 1965-84. However, in 2014 the buildings retrofitted in S1 were more than double of those retrofitted in S3, and 5 times more of those retrofitted in S4. The same pattern of inequality was observed in terms of speed of the retrofits and the allocation of municipal budget.

Another example can be taken from the spatial distribution of green-certified buildings within cities. The Green Building Information Gateway, collects location data for green building certification. The maps below show the number of green-certified buildings in different urban areas in Europe.\(^{41}\) Concentrations are observed in central business districts and affluent areas that tend to host corporate offices, hotels, and high-end retail.

This pattern is observed in several European cities, out of which three examples are illustrative. In the three maps below there are more green-certified buildings inside the red circles than outside of them.

\(\text{To deliver inclusive climate action, cities must ensure that public policy is fair, processes have genuine engagement of all stakeholders, and that impacts and their distribution can be measured, monitored, and evaluated.}\)

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\(^{41}\) Maps and data are from The Green Building Information Gateway at http://www.gbig.org Maps were obtained through ‘Buildings tab’, ‘Cities and Countries’, ‘Search all GBIG Places’, Inputting the city: e.g. Paris, (if various options show for the same city, the one with the highest number of buildings was chosen), ‘Map tab’, and zooming in to the desired level. As the displayed number of buildings (blue circles) adjusts depending on zoom level, specific numbers may vary; however, the spatial distribution pattern is evident at any zoom level. Figures as of April 22, 2021
In Paris, from a total of 699 green-certified buildings on the map, 357 are clustered in the small area around the Place de la Concorde and the Champs-Élysées.

In Madrid, from a total of 470 green buildings displayed, 299 can be found along Paseo de la Castellana between the wealthy neighbourhood of Salamanca and the area of the Madrid Nuevo Norte project in Chamartín.
In Bucharest, while smaller in number than the other two cities, out of 16 green-certified buildings in the city, 11 are clustered in Sector 1 (the wealthiest and least dense in apartment buildings needing energy retrofit).

An increasing number of investors require green building certifications in their portfolios. The maps above highlight the need for joined-up policies that ensure a range of well-distributed investments in building efficiency, and strong economic incentives for green buildings outside of city centres and “other high-profile locations”.

**Actions that Can be Taken**

The EU’s Renovation Wave – which aims to renovate 35 million existing building units by 2030 – is emphasising a ground-up approach, aiming to identify and scale up innovative local strategies for energy efficiency retrofits. By incentivising innovation, partnering with organisations such as social housing associations, and ensuring the costs of renovation do not translate into rent hikes for low-income tenants, the initiative holds the potential to realise multiple benefits throughout and between urban areas. The World Green Building Council, Climate Alliance and BPIE are working on the “BUILD UPON” initiative with eight European cities to develop and implement a renovation strategy framework with environmental, social, and economic indicators.

A top-down approach is also important. Governments should show the way to private investment and purposefully direct capital flows to urban areas with the most need, such as traditionally excluded areas and those transitioning away from fossil fuels. Investment package “can link projects with high monetary return and those with high social return on investment. Governments, both national and

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42 See for example “Our Homes Our Deal” initiative of Housing Europe, at: https://www.ourhomesourdeal.eu/ and “There isn’t one renovation wave: A district-level approach is needed to move quickly and deeply”, Energy Cities, March 2020, at: https://energy-cities.eu/there-isnt-one-renovation-wave/
local, can also harness incentives such as tax breaks and subsidies to channel finance to specific areas.

**Working with Industrial Legacy Cities**

ICLEI’s (Local Governments for Sustainability) Urban Transitions Alliance is working with industrial legacy cities in Europe and beyond, helping them to share knowledge and discover new solutions. The participating cities work to define their own transitions and develop sustainable local economies, leverage their heritage for new economic opportunities, and improve their local environment and the lives of residents. One of the participating cities is the 2018 COP24 Summit host city Katowice, Poland, which was traditionally a hub for coal mines, steel factories and industrial plants. The city faced economic and unemployment challenges when these began closing, and is now driving a new chapter rooted in technological-economic growth, cultural development and ambitious climate action (including initiatives to increase the building efficiency of public buildings and to increase energy management expertise). The Urban Transitions Alliance has developed a framework for equitable transitions, based on three dimensions: equal access to benefits; participation; and opportunity.

**Energy-efficiency Retrofits at Märkisches Viertel, Northern Berlin**

The Märkisches Viertel neighbourhood in Northern Berlin became Germany’s largest low-energy settlement as a result of the energy-efficient renovation of 13,500 apartments in 1960s high-rise buildings. The project – financed by the Urban Restructuring in West Germany programme – specifically sought a balance between social, environmental and economic goals, ensuring that rents remain affordable for residents.

**Bremer Punkt Affordable Timber Housing Project**

The Bremer Punkt project, developed by GEWOBA and designed by Lin Architects Urbanists, was developed to help address the need for affordable housing (see section 1: Housing) in Bremen, while prototyping modular timber-built structures that allow for maximum flexibility in response to inhabitants needs: the buildings demonstrate an approach that can be scaled, and that illustrates innovation in green building approaches outside of flagship downtown areas.43

Zooming in from the wider spatial context, any building project has the opportunity to take steps to advance, rather than undermine social inclusion along economic, racial, gender, ability, age and other lines. This involves ensuring active input from users and surrounding communities both prior to the project and during its management and use stage (see section 5: Participation)44, making thoughtful design interventions, maximisation of the use of ground-level and public space around the building, and ensuring non-discrimination of users, workers, and local communities.

44 See also “Participation” within the Framework for Dignity in the Built Environment at https://www.ihrb.org/focus-areas/built-environment/framework-for-dignity-built-environment
Recommendations: Equality and Non-Discrimination

TRIPLE BENEFITS FOR GOVERNMENTS, INVESTORS, AND CITIZENS
The actions below will enable more equitable and effective distribution of public funding, reducing rather than accentuating existing socio-spatial inequalities, improving entire neighbourhoods, strengthening social cohesion and attracting new investment.

GOVERNMENT
- Develop decarbonisation policies and projects based on a detailed assessment of existing social contexts, potential impacts and risks to people, and social opportunities
- Create incentives and vehicles for private investment in climate mitigation initiatives in traditionally excluded areas and those transitioning away from fossil fuels and heavy industry
- Direct energy retrofit budgets to areas of high need and potential to contribute to decarbonisation efforts (such as peripheral, residential high-density apartment blocks); and package these retrofits into investment programmes that attract long-term private sector investment

FINANCE
- Conduct geo-spatial mapping of green building investments, and work together with national and urban development departments to establish green investment priorities in areas that have traditionally been excluded

PROJECT
- Invest in projects that combine decarbonisation strategies with meeting local needs such as affordable housing, centres for the elderly, daycare, community recreational and cultural centres, libraries and schools
- Ensure the project acknowledges, assesses and responds to/addresses the potential negative impacts on individuals and communities in its wider surrounding area
The Right to Participation
The Right to Participation

HUMAN RIGHTS DEFINITION
Participation is a cross-cutting human rights principle. Governments must engage and support the participation of people living in their territories and jurisdictions, with an emphasis on the most vulnerable. Within the built environment this means that individual residents and communities must have clear avenues to have a say over the present and future of their neighbourhoods. Companies must consult local communities and other stakeholders prior to and during any project.

DxD FRAMEWORK STAGE
Cross-cutting principles that should be upheld throughout the lifecycle

KEY WORDS
Stakeholder engagement | Consultation | Information | Negotiation | Inclusion | Participatory budgeting | Co-creation | Freedom of expression and association | Co-design | Digital participation | Partnerships | Neighbourhood associations | Citizen assemblies | Voice | Collective city-making

SNAPSHOT
Active engagement and consultation of all citizens both in policy-making and in specific built environment projects can ensure investment is aligned with communities’ needs and sustainable over the long-term, while reducing the risk of opposition.

The processes through which buildings (and the spaces they are connected to) are planned, designed and built has a direct impact, not only on their carbon and wider environmental performance, but also on future adaptability, flexibility, functionality and the quality of life for end users. The underlying decision-making processes can either include or exclude the people who these buildings and spaces are for, and those who form part of the neighbouring communities.

Frequent barriers to citizens’ rights to participation are:

- **Traditional top-down urban planning**, which over-emphasises the role of the urban planner or building owner as the sole decision-maker

- **One-dimensional approaches** to urban design and planning that emphasise technical aspects and overlook social considerations

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46 The Framework for Dignity in the Built Environment is a tool to mitigate human rights risks and maximise social outcomes throughout the built environment lifecycle, at: https://www.ihrb.org/focus-areas/built-environment/framework-for-dignity-built-environment
• **A lack of diversity and representation** among urban planning professionals

• **Non-recognition** of the value of local community knowledge

• Impacted residents are **unlikely to be organised** to have any leverage in project decision-making

• **A weak participatory culture** among citizens, in part, due to frustration and lack of confidence that their opinion will truly influence policy and project decision-making

• **Time-consuming participatory activities** that are incompatible with the daily lives of large sections of the population

Working together with end-users and local residents can open up opportunities that would not be realised without their input. And harnessing the know-how of local people and effective consultation with all stakeholders, can reduce the risk of opposition and project delays, increase community acceptance, and improve social outcomes.

Seeing “community capital” as complementary to financial capital not only improves relations with local communities, it also helps to actively engage local residents and businesses on the low-carbon aspects of the projects and ensure that overarching decarbonisation objectives are carried through into the use phase. Carrying out work jointly with local residents also helps grow communities with an interest in being part of the green transition.

Within participatory approaches in urban development projects, there are various **degrees** at which citizen participation can take place:

• Some approaches only offer a minimal degree of engagement e.g. **informing** citizens that a project is planned, or **consultation**, which invites citizens’ opinions, but their actual consideration within the final decision-making process is not guaranteed

• More engaging approaches entail a relation of **partnership** between citizens, government, and/or investors, negotiating and working together to find solutions that will accommodate the needs of the involved parties.

In practice, these approaches are not mutually exclusive, and often, projects that combine various methods for participation are highly successful.

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Illustrative Examples of Strategies for Participatory Decarbonisation

Partnership-based Governance in Manchester, UK

The Manchester Climate Change Partnership “is the city’s main mechanism for engaging and inspiring organisations and residents to act”. Its 70 members, covering 11 sectors – among them transport, academia, sports, housing and the media – collectively account for 20% of the city’s carbon emissions. Besides taking practical action on their own operations, members also influence the remaining 80% through their networks and supply chains, for example through staff, students, customers, tenants, football fans and worshippers. This devolved structure embeds participation throughout the process. Communication is not fixed to a particular consultation or action but is achieved through ongoing platforms of dialogue: for communities, business, and thematic groups such as health, labour, education, faith, older people, and youth. The bottom-up approach leverages input from the community to inform policy and removes barriers to climate change action.

Participatory Budgeting in Paris and Lisbon

The concept of collective decisions on how budgets are spent has spread from its origins in Porto Alegre, Brazil to many European cities. In 2021 for example, Paris is undertaking a major city-wide participatory budget, investing 65 million euro in project designs chosen by citizens. Among the popular topics of ideas are public space, combatting pollution and expanding green space (not only trees and plants, but also urban farms). In Lisbon, the BIP/ZIP (Bairros e Zonas de Intervenção Prioritária / Neighbourhoods and Areas of Priority Intervention) designates funding for participatory budget projects in specific priority neighbourhoods, aiming overall to reinforce the social and territorial cohesion of the municipality.

Online Consultation in the Netherlands

The online citizen consultation on Dutch climate mitigation policy is conducted by two universities (TU Delft and Utrecht) and a start-up, and funded by the Dutch Research Council. It uses Participatory Value Evaluation (PVE), a new method for evaluation of policy options that allows extensive participation, evaluates the social value of policy options, and raises awareness on the available policy choices and limitations. The tool allows citizens to “step into the government’s shoes” - examining various climate mitigation measures and their outcomes, while taking budget considerations into account. Citizens can also provide their own recommendations and explain their reasoning. The results will inform and help the new government fine-tune its climate policy.

Workshops to Shape City-Making in Dortmund, Germany

Dortmund’s city-wide Masterplan for Energy Transition was created through a participatory process aimed at gathering knowledge from citizens, scientists, energy industry experts, and business to develop a shared vision for the city’s energy future. Workshops, involving 400 people altogether, served as a platform to express concerns and collectively brainstorm solutions. It not only served to create consensus on the overall plan, which will be essential for citizens’ support, but also generated project ideas that were subsequently implemented by local companies and integrated into the city’s urban development plan, creating further opportunities for investment.
GrowGreen - Project-Level Participation in Six Cities

GrowGreen is an EU project with pilots in 6 European cities – Valencia (Spain), Wroclaw (Poland), Manchester (UK), Brest (France), Zadar (Croatia) and Modena (Italy). The initiative engages citizens in nature-based solutions projects, implementing a “Dissemination, Citizenry and Participation (DCP)” methodology:

- Dissemination refers to transparency and visibility of the project to keep an open conversation and ensure public commitment;
- Citizenry means strengthening community identity through actions created by and for the community to promote empowerment and autonomy; and
- Participation, in which active and engaged stakeholders take part from the planning to the evaluation phase of the project.

With the simultaneous digital transition (see section 6: Technology and Human Rights), many of these approaches can be implemented with the support of digital platforms for citizen participation. Options range from companies offering Software as a Service (SaaS) such as Kuorum and CitizenLab, to open source software such as Decidim and the Consul Project. This option has become particularly relevant in the face of COVID-19 when it is important to maintain and grow citizens’ role in city-making even while face-to-face participation is limited.

49 This methodology for citizen engagement was originally developed by Paisaje Transversal (https://paisajetransversal.com) and used by the GrowGreen Project. See also: http://growgreenproject.eu/wp-content/uploads/2021/03/GrowGreen-factsheet-2021-v02-1-2.pdf
Recommendations: The Right to Participation

TRIPLE BENEFITS FOR GOVERNMENTS, INVESTORS, AND CITIZENS
The actions below will contribute towards resilient and sustainable built environments, and engaged citizens and residents, fostering social cohesion and reducing community opposition to decarbonisation initiatives at project and wider city level.

GOVERNMENT

- Facilitate, enable the time for, and establish structures for participatory processes for decarbonisation plans and projects, with particular attention towards traditionally excluded groups, such as working women, children, minorities, elderly, people with disabilities, the homeless, and the LGBTQ community: processes include a spectrum from consultation through to co-creation

- Create an environment of collaboration and platforms for partnerships between municipal and national government, technical teams, investors, civil society, and cultural organisations

- Consider designating funding from municipal budgets towards participatory budgeting approaches and investment funds for hyper-local intervention

FINANCE

- Engage developers in portfolio to ensure that they have adequate provisions in place to consult end-users and local communities at the earliest stages of all projects, and throughout

- Consider applying a community benefits agreement to the project, whereby specified benefits are included in a formal agreement with local community members

- Increase the diversity of built environment professions working on the project, to include sociologists, anthropologists, urbanists, social workers, psychologists

PROJECT

- Ensure meaningful participation with end-users and local communities, with particular attention towards traditionally excluded groups from the earliest stages of the project and throughout its lifecycle – ensuring that engaged participants’ views have the opportunity to change project decision-making

- Create the space and processes for co-creation where possible, engaging end users and local communities directly in aspects of the projects’ design and use
Technology and Human Rights

“Your freedom is being violated” - Portugal
Technology and Human Rights

HUMAN RIGHTS DEFINITION

The human rights principles of non-discrimination, accountability, transparency and participation apply to the ways in which technology is applied and scaled within the built environment, just as they do to other aspects of its development. The right to privacy is also particularly relevant in terms of the ways in which people’s data is collected and used.

DxD FRAMEWORK STAGE

02 Planning & Finance
03 Design
05 Management & Use

KEY WORDS

Privacy | Data protection | Discrimination | Facial recognition | Transparency
Accessibility | Consultation | Digital rights | Artificial intelligence | Surveillance
Blockchain

SNAPSHOT

Climate action in the built environment is increasingly driven or supported by technological innovation. It is important to ensure that technology is harnessed in ways that enable citizen participation and respect the rights to privacy and data protection, and that technological solutions are designed and deployed with all end-users/beneficiaries in mind.

The Use of Technology in Decarbonising the Built Environment

Technological advances play an important role in scaling up the decarbonisation of the built environment. This includes innovation in materials, at the design and construction stages (such as pre-assembly of building parts and improvements in energy, heating and cooling systems), and at the management and use stage (such as sensors and “smart” devices to maximise efficiency in energy and water use, and to monitor occupancy levels).

50 The Framework for Dignity in the Built Environment is a tool to mitigate human rights risks and maximise social outcomes throughout the built environment lifecycle, at: https://www.ihrb.org/focus-areas/built-environment/framework-for-dignity-built-environment
Twenty-four EU member states and Norway and Iceland have signed a declaration to accelerate the use of green digital technologies. Businesses large and small will play an essential role in this acceleration. In March 2021, 26 CEOs formed the “European Green Digital Coalition”, supported by 45 SMEs and start-ups, to invest in the development and deployment of greener digital technologies; measure their impact by joining forces with NGOs and other organisations; and co-create “recommendations and guidelines for green digital transformation of these sectors that benefits environment, society and economy.”

The scaling of environmental technology also comes with social risks: of abuses of privacy and data protection rules, discrimination, deepening inequality through unequal deployment or access, as well as a prioritisation of technological solutions per-se which can detract resources and attention away from key underlying structural issues covered elsewhere in this report, such as access to housing, and social inclusion. Harnessed effectively and with the adequate safeguards in place, however, technology can strengthen participation and develop lasting climate, economic and social benefits.

Protecting Privacy and Data Rights

“Smart building” and “smart city” approaches that harness technology for environmental and social outcomes frequently entail the collection of large quantities of data, and with that, questions around privacy, data protection and use. A relatively small number of companies dominate the smart city space, such as General Electric, IBM, Cisco Systems, Siemens AG, Microsoft, Oracle, SAP, Intel, Arup, Alcatel, Hitachi, Fujitsu, and NEC—meaning that these firms are able to control ever growing, large pools of data on residents’ lives.

Increasingly, there are concerns about and resistance to this level of control and the lack of transparency with regard to use of that data. An illustrative case from Canada is that of Sidewalk Labs and the Toronto Waterfront project – which had a strong climate and sustainability component, as well as strong reliance on technological innovation. Concerns over digital rights, and that the company was developing a neighbourhood as a corporate top-down “testing lab” contributed to widespread opposition to the company’s plans. Sidewalk Labs has now pulled out of the project, and the city has relaunched its approach with an emphasis on affordability, low-carbon design and local and minority-owned businesses.

Beyond Data Protection

On the one hand, privacy plays out in multiple ways in the built environment in ways that extend beyond the use and protection of data: as the UN Rapporteur on the right to privacy has written: “All aspects of privacy – not just spatial privacy or informational privacy are important in the built environment,

and need explicit incorporation in all stages of the built environment lifecycle, most particularly in the planning, design and management stages”. And at the same time, the human rights dimensions of technology go well beyond privacy - including access to the benefits that technology brings, ensuring non-discrimination in the way technology is applied, and transparency and accountability for the ways in which data is collected: this applies both at the level of city projects and partnerships. “Cities for Digital Rights” is a coalition of municipal governments working to put commitments on digital rights into practice.

Technology as an Enabler for Participation

There are multiple ways in which technology can be harnessed to strengthen resident participation – an approach that UN Habitat is advancing through its People-Centred Smart Cities flagship programme. This can happen through engaging residents, including those who have traditionally been excluded from decision-making processes, in city- and neighbourhood-wide climate plans, for example Barcelona’s participatory development of its 2018-2030 Climate Action Plan. And it can equally happen at the level of individual assets: potentially, technology could enable users of buildings and spaces to share concerns and ideas via regular online user satisfaction feedback loop surveys about its use throughout its lifecycle back up to owners. Throughout these methods, specific interventions are needed to ensure access to technology for those who traditionally face barriers to access (See also Section 5: The right to participation).
Recommendations: Technology and Human Rights

TRIPLE BENEFITS FOR GOVERNMENTS, INVESTORS, AND CITIZENS
Action on the recommendations below will lead to the development and scaling of new climate mitigation technologies that have wide application throughout the built environment, are adaptable to local communities’ needs and do not enable discrimination, while protecting people’s privacy and data.

GOVERNMENT
- Ensure adequate privacy and data protection standards are in place and implemented, including in “smart cities” and in the application of smart technology within buildings (e.g. censors for energy efficiency or user capacity)
- Harness technology to engage populations that are often excluded from decision-making in mitigation climate policy and programmes
- Ensure that the benefits of technological innovation – including for climate mitigation - are accessible to all and well distributed, and that steps are taken to ensure cultural acceptability
- Ensure that technological approaches to climate mitigation do not divert attention and resources away from addressing underlying issues of social exclusion and inequality

FINANCE
- Invest in companies that are developing innovative climate mitigation technologies that can be widely used and have appropriate digital rights safeguards in place
- Engage companies that are developing “smart city” and “smart buildings” approaches - including the companies involved in the European Green Digital Coalition - on their processes to ensure transparency, participation, non-discrimination and accountability - and that the technologies used are aligned with the needs of the local community
- Require all investee companies to have strong digital rights policies and practices
- Encourage technology companies to apply universal design principles to the solutions they develop
- Set and track gender and racial diversity expectations for technology companies in portfolios, at company and at board level

PROJECT
- Be transparent about the use of technology in the project and engage users and residents on its use
- Ensure climate mitigation technologies (such as censors for energy efficiency) have strong privacy and data protection measures in place
- Identify ways in which technology can engage residents and users in the operation and use of the building throughout its lifecycle
Recommendations

Visitors admire the green wall and sustainable architecture at the Musee du Quai Branly, Paris. Climate Visuals/Rene Spitz
Recommendations and Conclusion

This report has provided specific recommendations to guide a rights-based approach to decarbonising Europe’s built environment: see overarching recommendations (page 19), and issue specific recommendations on housing (page 25), health (page 30), workers’ rights (page 36), equality and non-discrimination (page 43), participation (page 49), and technology and human rights (page 54).

While focused on Europe, in the context of specific policy drivers underway in the region, many recommendations and insights from this report are also applicable to / adaptable to other regional contexts.

With an underpinning in human rights, decarbonising Europe’s built environment can generate significant social benefits. In turn it will gain the widespread support that is needed to move at the necessary scale to combat the climate crisis. Maximising this potential will involve key factors of success being in place:

• national and local governments protecting human rights, and harnessing their role as change-agent, through regulation, fiscal policy, procurement and enabling innovation
• strong, effective collaboration between public actors and private finance
• shifts in financial models towards longer-term sustainable returns over short-term maximisation of profits
• effective engagement and co-creation with communities and workers
• and in the context of individual buildings and projects, project owners’ and investors’ commitment to avoiding harm and maximising social outcomes from the outset.

This report intends to stimulate ongoing conversation, collaboration, and action by multiple actors in all parts of Europe to drive inclusive decarbonisation of the built environment.

The report forms part of IHRB’s global programme Dignity by Design. IHRB is working to integrate rights-based approaches to the built environment together with its partners in the Coalition for Dignity in the Built Environment (Raoul Wallenberg Institute, Rafto Foundation and the Australian Human Rights Institute at the University of New South Wales). The programme drives change along two tracks:

• Policy advocacy, to embed higher standards in government regulation, procurement, investor frameworks and industry initiatives;
• Pilot projects in specific contexts. These projects demonstrate leadership and share lessons-learned – inspiring others to follow suit, and contributing to a growing global community of practice.

Throughout the programme there is a strong emphasis on breaking out of silos and fostering collaboration, recognising that the built environment is complex and dynamic, and that change at scale will involve multiple actors coming together behind shared goals.
This report guides practical action by policy-makers and by investors, to ensure that financing decarbonisation in Europe’s built environment is done in a way that leaves no-one behind, maximises social benefits, and is consistent with human rights commitments across the region.

- **For policy-makers**, the recommendations seek to guide decarbonisation finance in the built environment in a direction that upholds human rights commitments and secures strong social outcomes for all.

- **For investors**, the recommendations seek to shine a spotlight on the “S and G” (social and governance) dimensions of decarbonisation efforts in the built environment: generating a return on investment while mitigating risks to people and maximising positive social outcomes.

The report focuses on six inter-connected thematic areas: the right to housing; the right to health; workers’ rights; equality and non-discrimination; participation; and technology and human rights.