WE CAN MAKE THE WORLD FEEL AT HOME

LIVING SPACES ARE THE AREAS WHERE PEOPLE RESIDE, WORK AND SPEND THEIR LEISURE TIME.

People's living spaces play important roles in their physical and psychological health, their relationships and the quality of their work. This transformation pathway considers the needs of both urban and rural communities, and the combined efforts of public and private sector actors to create a built environment that provides adequate housing, workplaces, and spaces for leisure and community engagement. The urban planning, architecture, construction, maintenance, real estate, retail, hospitality and leisure industries all have roles to play.

EXPLORE THE LIVING SPACES PATHWAY BUSINESS ACTION AREAS

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OUR 2050 VISION FOR LIVING SPACES

HEALTHY AND INCLUSIVE LIVING SPACES, THRIVING IN HARMONY WITH NATURE

LIVING SPACES PROMOTE HEALTH AND WELLBEING

The way we think about and engage with the spaces in which we live and work has shifted radically. We recognize the influence of our living and working spaces on almost every aspect of our lives – from how we sleep to how we socialize, from how productive we are to how safe and secure we feel. By 2050, built environments facilitate the health and wellbeing of individuals and communities alike and have adapted to meet the needs of growing and increasingly urban populations.

AFFORDABLE HOUSING AND COMMUNITIES THAT WORK FOR ALL

Adequate, safe, resilient and affordable housing is available to all. Infrastructure provides inclusive access to fundamental services, economic opportunities and education. Urban environments integrate green and public spaces and ensure universal access to clean air, food, water and sanitation. Urban and rural planning respects and safeguards cultural identity and heritage. Human rights are protected and respected throughout the construction value chain.

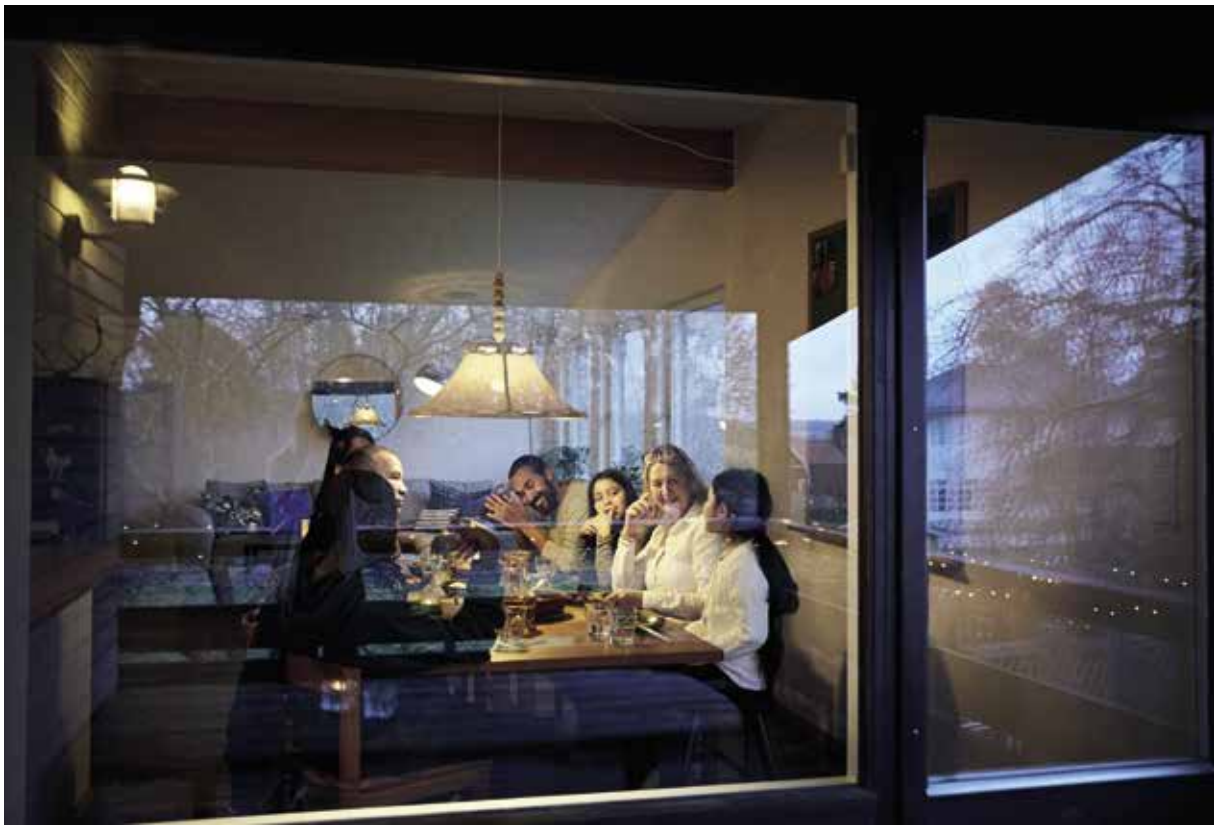
A NET-ZERO CARBON, RESILIENT, ADAPTABLE AND REGENERATIVE BUILT ENVIRONMENT

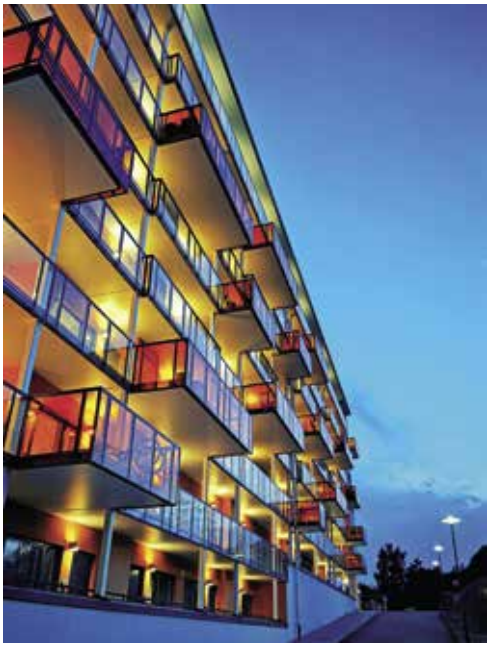
All buildings have net-zero operational carbon emissions. The carbon footprint of buildings (embodied carbon) has also been reduced to zero. Climate resilience is a key consideration in infrastructure planning. Cities depend on, value and maintain strong links to the environment and strive for restoration of the natural world.

LIVING SPACES THAT HARNESS THE POTENTIAL OF RECYCLED AND RENEWABLE MATERIALS

Buildings are designed to minimize material use and maximize suitability for renovation and adaptation. Recycled and renewable materials that are regeneratively managed sit at the core of construction.

KEY TRANSITIONS





BUILDING AND INFRASTRUCTURE DESIGN SHIFTS TO FOCUS ON USERS' HEALTH

- Occupants' health and wellbeing play an increasingly central role in building design and construction. Buildings are designed to be comfortable, safe and secure spaces that foster positive social interaction, healthy and active lifestyles, focused work, creative expression, relaxation and rest.
- Strict regulations reduce the use of hazardous materials in the built environment across design, construction, operation and deconstruction. Only materials that pose no health risk are used.
- Exposure to ambient and household air pollution declines as policies and investments support clean mobility and transportation, clean household energy and other innovations.
- Enhanced waste management, noise management, optimal temperature management and access to daylight all help people live and work free of risks to their health.

INFRASTRUCTURE AND BUILDINGS INCREASINGLY INTEGRATE AND RESPECT BIODIVERSITY

- The environmental footprints of buildings and infrastructure are minimized. Buildings generate their own energy onsite using renewable sources, and capture and treat their own water. All buildings are constructed from non-toxic and sustainably-sourced materials.
- Biodiversity becomes a key component of urban planning. Natural systems such as forests, mangroves and wetlands are increasingly valued for providing core infrastructure and ecosystem services. Green infrastructure helps solve an array of challenges from managing stormwater to improving air quality.
- Nature's value to cities and communities starts to be accounted for. This leads to stronger political and commercial efforts to protect nature effectively.
- Urban areas are designed to ensure universal accessibility to green spaces, connecting people with nature and the physical and psychological benefits it brings.

CITIES AND BUILDINGS PAVE THE WAY TOWARD NET-ZERO CARBON

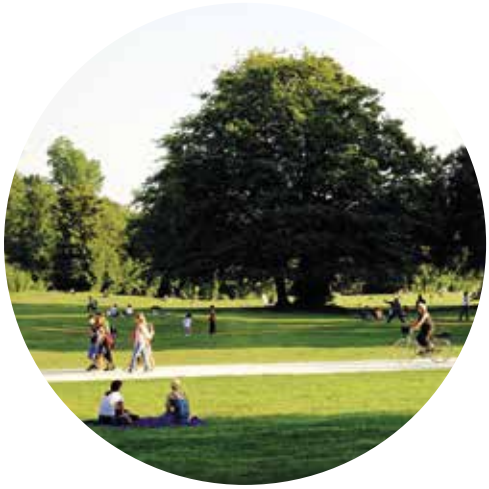
- Cities, in partnership with national regulators, implement strong policies and programs to reduce GHG emissions in existing building stocks and ensure that new buildings are constructed with the lowest possible footprint. By 2030, all new buildings operate at net-zero carbon and there has been a reduction in embodied carbon of at least 40% from 2020 levels. This reaches 100% by 2050.
- Electricity grids are upgraded to meet escalating demand from net-zero energy sources.
- New and refurbished buildings are highly energy efficient and come to include renewable energy production capacity and/or energy storage capabilities by default.
- The agreement and adoption of common metrics along the building and construction value chain help to establish clear decarbonization pathways, facilitating the transition to net-zero.
- Fast-growing cities discourage urban sprawl and steer infrastructure investments toward more compact and efficient growth.

THE EMERGENCE OF RESILIENT URBAN AND RURAL COMMUNITIES

- Long-term resilience is integrated into urban and rural infrastructure and planning, with planners enhancing their capacities to adapt, learn and transform.
- Cities and local authorities lead societies in adapting to major climatological changes and embracing resilience. This includes resilience to extreme weather events, changing sea levels, water scarcity, increased temperature, lower agricultural harvests and fewer material resources.
- Buildings' capacity to manage storm-surge flooding and heat waves is enhanced. Water is collected and diverted to new uses, green spaces are used to reduce drought, and technological advancements support heat regulation and healthy indoor climates.
- Cities and communities foster resilience to other potential environmental and social shocks, including pandemics.
- Universally accessible early warning systems and emergency planning are put in place globally. Urban and rural inhabitants are well-prepared to roll out emergency protocols.

A SHIFT TOWARD CIRCULAR LIVING SPACES THAT MINIMIZE CONSUMPTION AND WASTE

- Circular thinking is increasingly adopted across built environment business models, ownership structures, construction practices and management, creating a range of market and employment opportunities.
- Incentives and innovations support a drastic reduction in material use in buildings. Building standards are developed and enforced to ensure new buildings are designed to increase their suitability for renovation and recycling. Older buildings are preserved, rather than demolished, and serve new functions.
- Policies stimulate the widespread application of secondary and renewable bio-based construction materials that are modular and deconstructable.
- Accurate sustainability performance information becomes available for all building materials, enabling the development of reliable life cycle assessments. The use of building passports is mainstreamed and scaled.
- Service-based models grow substantially. Many companies expand their product offerings to include construction and maintenance services, enhancing efficiency and enabling closed product loops. Reuse, repair and refurbishment markets also grow, generating significant employment.



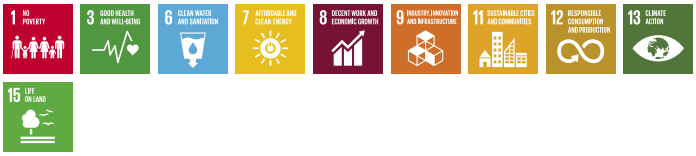
CITIES ARE MADE TO WORK FOR ALL

- Government and business partner to ensure high-quality, affordable, accessible and adaptable housing is available for people at all socio-economic levels.
- Neighborhoods are designed and redesigned to be accessible, inclusive, safe and secure. They provide access to opportunities for employment, food, culture, healthcare, mobility, education, and healthy and active lifestyles.
- Cities are developed in a way that safeguards cultural and natural heritage.
- Consulting with local stakeholders, planners and architects design inclusive, green and bio-diverse community spaces, and create multifunctional buildings that support a range of interactive recreational activities.
- Infrastructure adapts to meet the needs of ageing populations, with accessible, connected and inclusive housing.

RESPECT FOR HUMAN RIGHTS IS EMBEDDED ACROSS THE CONSTRUCTION AND MATERIALS SECTORS GLOBALLY

- Urban and rural areas are developed in a manner that respects the rights and needs of local communities and displaces no one.
- Construction projects ensure fair living wages for workers and strive to attain the highest possible standards of health and safety.
- Governments, cities and businesses come together to ensure that modern slavery, forced labor and child labor are eliminated from the construction sector and the value chains of the materials upon which it relies.
- As construction practices evolve, workers are continually upskilled, reskilled and empowered to prosper.

RELEVANT SDGs



1.5 By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters.

3.4 By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and wellbeing.

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity. Substantially reduce the number of people suffering from water scarcity.

7.3 By 2030, double the global rate of improvement in energy efficiency.

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.7 Take immediate and effective measures to eradicate forced labor, end modern slavery and human trafficking and secure the prohibition and elimination of child labor.

8.8 By 2030, protect labor rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

9.1 Develop quality, reliable, sustainable and resilient infrastructure to support economic development and human wellbeing, with a focus on affordable and equitable access for all.

9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally-sound technologies.

11.1 By 2030, ensure access for all to adequate, safe and affordable housing and basic services, and upgrade slums.

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

11.5 By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the economic losses relative to gross domestic product caused by disasters, with a focus on protecting the poor and people in vulnerable situations.

11.6 By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.

11.7 By 2030, provide universal access to safe, inclusive and accessible green and public spaces, in particular for women and children, older persons and persons with disabilities.

12.2 By 2030, achieve the sustainable management and efficient use of natural resources.

12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

12.8 By 2030, ensure that everyone has relevant information and awareness for sustainable development and lifestyles in harmony with nature.

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

13.2 Integrate climate change measures into national policies, strategies and planning.

13.3 Improve education, awareness-raising and capacity on climate change mitigation, adaptation, impact reduction and early warning

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

LIVING SPACES

ACTION AREAS FOR BUSINESS 2020 – 2030

01 Implement short-, medium- and long-term science-based targets to reduce the whole life carbon footprint of built structures toward net-zero emissions. Collaborate with clients, suppliers and all actors across the built environment to ensure targets are met and to drive net-zero construction and renovation measures.

02 Contribute to the development of national and sectoral decarbonization roadmaps, and engage with authorities at the regional, national and local levels to advocate for the targets, building codes and planning, permitting and procurement processes needed for a sustainable built environment.

03 Unlock the potential of digitalization to facilitate data recording and transfer among stakeholders and across life cycle stages to promote more holistic urban planning, greater transparency and enhanced efficiency across the built environment sector.

04 Create ways for occupants to play a role in minimizing the environmental impacts of their living and working spaces.

05 Develop circular business models to maintain the value of materials and resources throughout the lifetime of built structures. Innovate to make circular options more cost-competitive, convenient and dependable.

06 Future-proof buildings and infrastructure to withstand environmental, social and health-related shocks through urban planning, performance standards and construction practices.

07 Develop and adopt science-based targets for nature, which factor in impacts from material extraction to construction to building end-use. Integrate nature-based solutions into design and construction efforts.

08 Innovate and collaborate on new techniques and models to ensure the delivery of quality affordable housing that promotes health and wellbeing, in both existing and new developments.

09 Conduct and enhance due diligence in line with the UN Guiding Principles on Business and Human Rights with a view to respecting human rights and ensuring decent working conditions throughout the construction value chain, including in the informal economy.

10 Develop comprehensive strategies to support a just transition for workers that may be affected by emerging construction methods, materials and technologies.