Architecture

Towards a resilient future that meets global challenges



Architecture

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About Creative Denmark

Creative Denmark supports international stakeholders and decision makers in exploring solutions, products, and processes within the Danish creative industries. As a not-for-profit public-private partnership, the initiative connects international demand for innovative solutions with Danish creative companies and competencies. The aim is to raise awareness about the transformative potential of Danish creativity as a driver for sustainability and enhanced quality of life.



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Introduction



Building for society



Lars Storr-Hansen
CEO of Danish Association of Architectural Firms

National architecture policy as a tool for change.

Good architecture uplifts society. It is no coincidence that many European countries have introduced new architectural policies, or that leading politicians, including European Commission President Ursula von der Leyen, have supported the New European Bauhaus. More and more, politicians are recognising how architecture can help solve the challenges facing society.

One of the most urgent is the green transition. Danish firms lead in developing building solutions that reduce pressure on the climate and environment. They preserve, renovate and transform existing buildings, giving them new life. They also promote biodiversity and circular thinking in projects at home and abroad.

This progress is welcome, yet our societal response to climate change has been slow. Its impact is visible in extreme weather, heavier rainfall and rising seas. Architects play a vital role in climate protection, from managing cloudbursts in cities to protecting vulnerable coastal towns from storm surges.

In other areas too, architects are helping to lead the way. In larger cities, there is a need for more diverse buildings, meeting places that strengthen social cohesion, and more affordable housing. Smaller towns and villages threatened by depopulation and stagnation also need better conditions. Many new policies focus on these priorities. Increasingly, leaders, politicians and entrepreneurs are working with Danish architects to find solutions. Danish firms have never been stronger.

Resilience



Adapting to a shifting climate reality



Lykke LeonardsenHead of Program for Resilient and Sustainable City Solutions,
City of Copenhagen & Technical Lead, C40 Cities

Resilient cities are built on multifunctional solutions that meet climate and community needs.

Cities are feeling the effects of climate change now more than ever. We are seeing an increase in extreme floods, rising seas, heatwaves and drought across the world. Urban areas are especially vulnerable because of dense infrastructure, heat-retaining surfaces and limited green spaces. The question is no longer if we must adapt, but how.

Resilience and integrated planning are essential. No city can be fully protected from every extreme event, but thoughtful design can be implemented to limit damage and help cities recover quickly. This means planning for multiple hazards and creating multifunctional solutions.

Green infrastructure can manage stormwater during cloudbursts, provide shade and cooling during heatwaves, store water for dry periods, and support biodiversity year-round. These spaces can also serve as meeting places that support social life, cultural activities and local business. They improve health by encouraging walking and cycling, and strengthen community resilience.

In Copenhagen's Cloudburst Management Plan, architects, engineers and planners work together to create spaces that manage water when needed and function as usable public spaces the rest of the time. A park can transform into a reservoir and a path into a stream, all while respecting local identity and needs.

For Danish architects, adaptation is an opportunity to rethink how cities are designed. Through collaboration and multifunctional thinking, they are creating urban spaces that meet environmental challenges while making everyday life richer and more connected.

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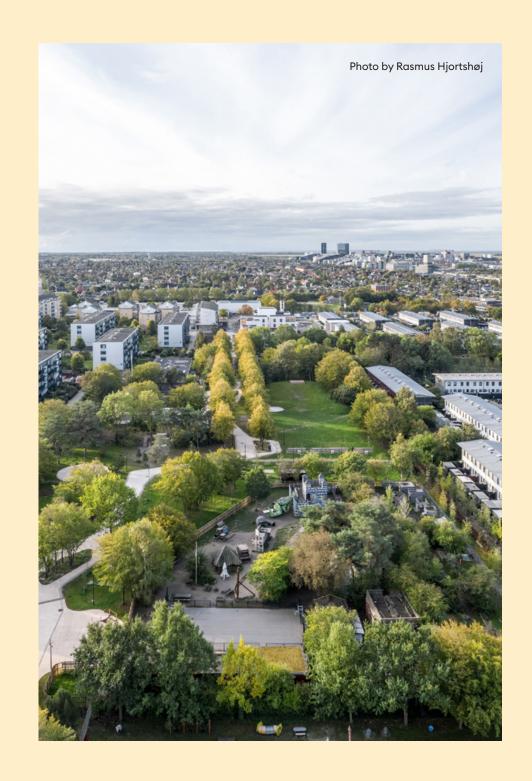
Connecting city life with nature

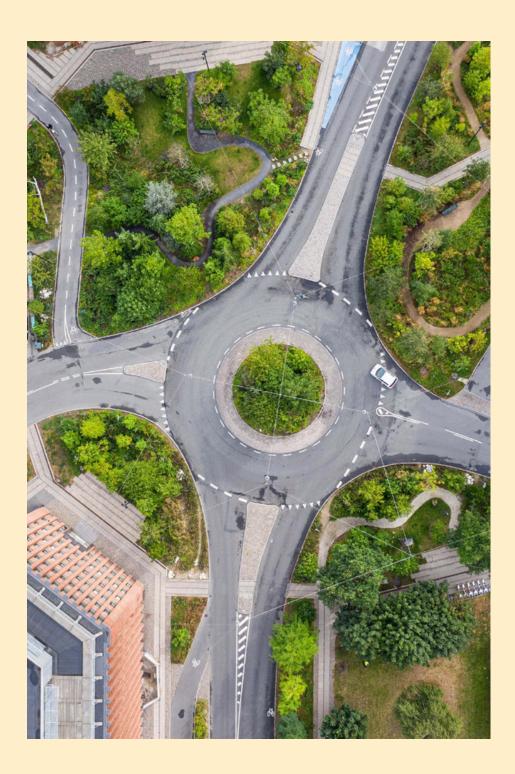
A renewed urban park designed to foster play, community and biodiversity.

 Remiseparken sits at the heart of Urbanplanen, a large housing development in Copenhagen. BOGL's redesign turns the underused park into a resilient urban oasis for locals and visitors. This renewal forms part of a broader plan to make Urbanplanen safer and better connected.

A concrete activity path runs through the park as a dynamic ribbon. It zigzags across the space and shifts in width and texture to link playgrounds with quiet zones and natural areas. Tactile surfaces and polished seating edges ensure accessibility and visual contrasts add a stronger sensory dimension. The path ties together cultural spaces, active zones, and natural woodland to create coherence across the park.

Remiseparken keeps its original woodland character while adding allotment gardens and self-built structures. The new features improve community access and environmental performance. A biodiverse alder grove strengthens local flora, and a flood-ready wadi system boosts climate resilience. BOGL's design combines social and ecological strategies to give Remiseparken a renewed identity as a space where people gather and nature thrives.





Where rain becomes a resource

A city-scale solution where rain, nature, and people coexist in the middle of busy urban life.

— Sankt Kjelds Square and the Bryggervangen area combine climate adaptation and public space in a cloudburst project in Copenhagen. The project demonstrates how neighbourhoods can become resilient to future cloudbursts, while also being a green space that enhances biodiversity and reduces traffic, air pollution, and urban heat.

The once grey and traffic-heavy space has had two-thirds of its asphalt removed and replaced with lush nature. Designed by nature-based design studio SLA, the project channels rainwater into green urban spaces that absorb and delay runoff. This eases pressure on the city's sewers and turns rainfall into a resource. The planting design now absorbs nearly 4 tons of CO₂ annually and lowers local temperatures by up to 8°C on hot summer days. Native biodiversity has flourished, green areas have grown by 121%, and flowers and bushes have multiplied by 30,000%.

The result is an urban forest with cleaner air, richer habitats and a more welcoming space. Paths wind beneath treetops, inviting residents to explore, play, and meet. By blending the blue, the green, the healthy, the active, and the social, Sankt Kjelds is not just protecting the city from future cloudbursts – it is redefining how urban spaces can make life in the city better for people and nature.

Putting 'place before building' into practice

Designed for community gathering today and easy disassembly in the future.

 Braunstein Taphouse shows how design can prioritise place before building. Standing on Køge's harbourfront in Denmark, it is both a landmark for Braunstein Brewery and a gathering point for the local community. Its presence strengthens identity along the waterfront and draws people to the area for social life and craft beer.

The design embraces flexibility and climate responsibility. With the harbour's future uncertain, ADEPT chose a simple steel construction with mechanical joints. Builders can take it apart and move it elsewhere without creating waste, giving the building a longer and more adaptable life. The approach also points to a method relevant for coastal areas facing rising sea levels, where buildings must adapt to shifting conditions.

The taphouse holds a taproom and event space alongside the brewery shop. People come to taste local craft, meet friends, and take part in brewery culture. Large windows open towards the water, while outdoor terraces extend daily life to the waterfront and create public edges that welcome passersby.

The building uses robust, low-impact materials with a clear reuse strategy. Braunstein Taphouse shows how circular design can create spaces rooted in community life today while remaining ready to adapt to tomorrow's needs, respecting both people and the planet.



Smart pavements for cities

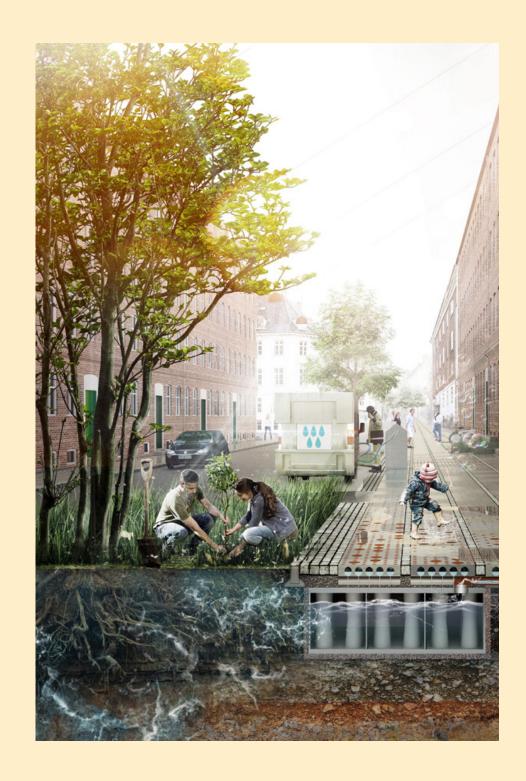
Tiles that turn pavements into hybrid infrastructure for urban resilience and water management.

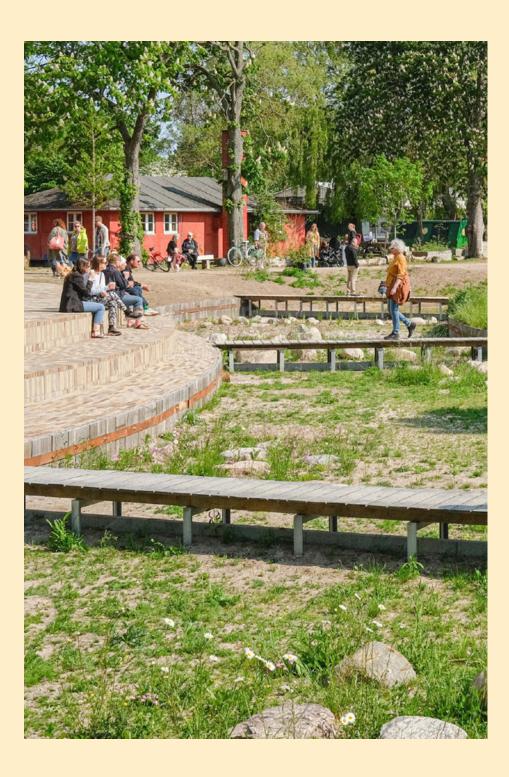
The Climate Tile turns pavements into climate infrastructure. Each tile collects rainwater through small openings and directs it into an underground storage unit. The stored water can later be reused during dry periods or guided to nearby plant beds, reducing flood risks, supporting vegetation, and easing pressure on sewers. This helps restore a more balanced water flow in urban environments.

A 50-metre pilot stretch in Copenhagen handles peak rain bursts and delivers daily water balance without changing how people use the space. Pedestrians walk across the surface, unaware of the smart water system working quietly below.

The Danish architecture studio THIRD NATURE developed the scalable system with a focus on socio economics and low climate impact, and ease of features like planters that support biodiversity or adapt the system as city needs evolve.

The Climate Tile offers a practical and long-lasting solution that supports both climate adaptation and everyday urban life. It shows how even the most ordinary parts of the city can help shape a more resilient future.





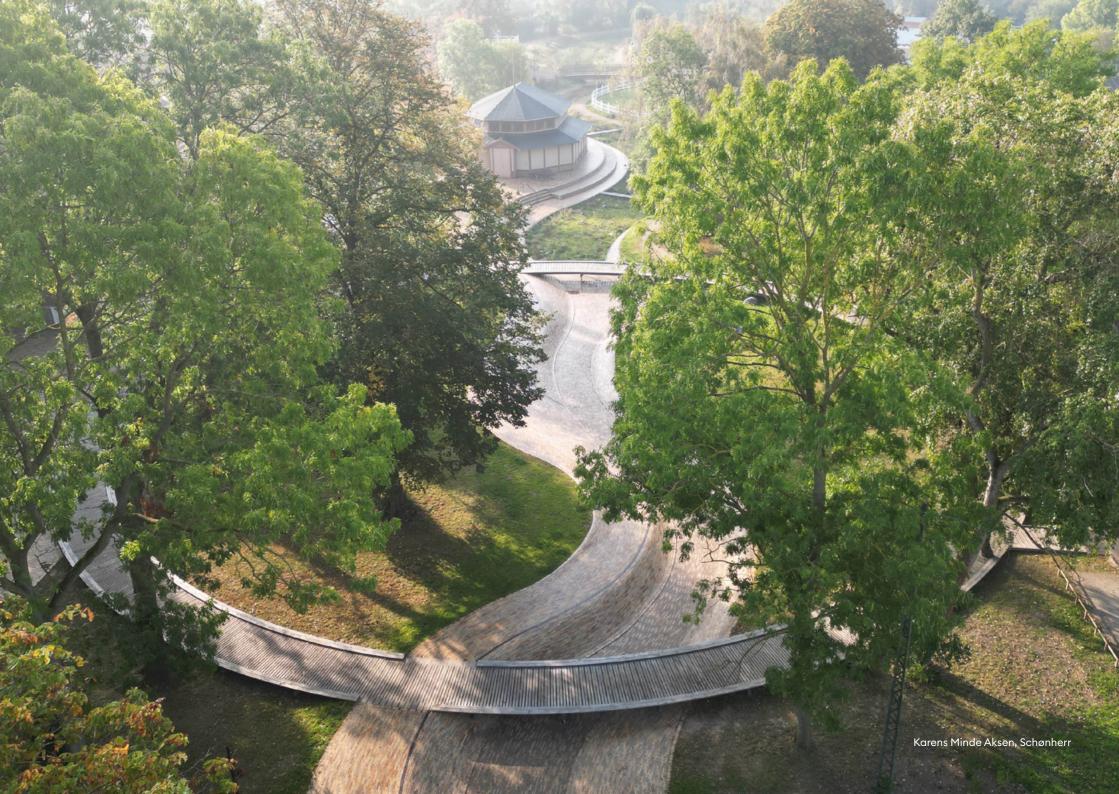
Shaped by water and life

A climate solution that enriches urban living by merging functionality, nature, and design.

Karens Minde Aksen is designed to manage cloudburst water and protect Copenhagen's Sydhavn district from future floods. It stretches 600 metres through the neighbourhood and can handle 15,000 m³ of cloudburst water. Designed by Schønherr, it creates a multifunctional area that prioritises sustainability, biodiversity, and community involvement. Previously, the area was at high risk of flooding due to its low-lying location, but it is now used to transport, store, and clean rainwater as a part of a long-term climate adaptation effort.

Through the park runs a riverbed of yellow bricks which serves both as a footpath and a water channel during heavy rain. It guides and channels water through a system that filters and cleans it via reed beds before reaching a rainwater lake. Newly planted shrubs and undisturbed areas around the system help the whole district to support biodiversity and create a thriving ecosystem for urban wildlife.

Karens Minde Aksen combines a technical climate solution with a community space shaped in close collaboration with local residents from the beginning of the design process. The result is a neighbourhood that reflects their needs and desires, with spaces for play, a dog-walking area, and even a horse stable. It is a clear example of how functional climate solutions can create value for both people and nature.



Transformation



Transforming the already built



Magnus Reffs Kramhøft Industrial PhD Fellow, Henning Larsen Architects

The construction industry's most immediate climate action is to preserve what already exists.

Every day, functional buildings face demolition simply because they no longer fit contemporary preferences. Yet these structures hold vast embedded resources and cultural memories that vanish with every swing of the wrecking ball.

Reusing and adapting buildings is essential if we are to meet global climate goals. Climate science identifies the existing building stock as vital to reducing environmental impact*, including the newer historic buildings we have not yet learned to love. These structures form a large share of the built environment and hold the potential of resuscitation for new needs.

Historically, buildings and materials were always reused. European civilisations turned war spoils into new structures, and medieval houses were built in such a vernacular style, they could be dismantled and reused. People maintained and repaired because construction required great resources, and pragmatism guided decisions.

This circular mindset offers lessons for respectful transformation. Every intervention draws on planetary resources. Reusing existing structures for new purposes where they exist, while balancing resources and heritage, is the least harmful path. A building's inherent qualities and construction techniques can guide the process. Done well, this creates architecture that is local and site-specific, in contrast to generic new builds.

We are moving toward a practice where maintenance and adaptation play larger roles, and where cultural capital flows to those who see potential in the overlooked. Adaptive reuse is less about preserving form and more about maintaining values. Obsolescence is turned into an opportunity, carried by historical traces and common sense.

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^{*}Intergovernmental Panel on Climate Change, 2023: Climate Change 2023: Synthesis Report and Building Performance Institute Europe, 2024, Prioritising existing buildings for people and climate.

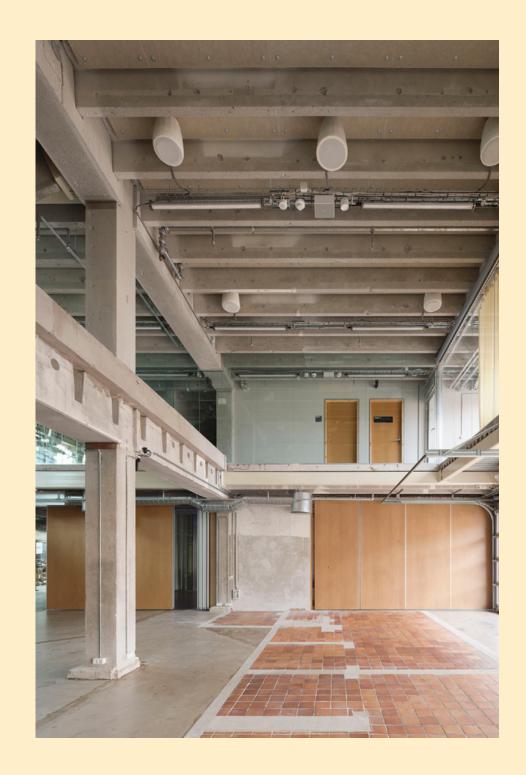
A retrofitted warehouse in Copenhagen

A transformation that cuts emissions and preserves materials.

Thoravej 29 sets a new standard for circular construction. This 1960s warehouse now serves as a 6,300 m² multifunctional hub redesigned by Pihlmann Architects. By reusing 95% of its original materials, the project reduced CO² emissions by up to 88% and avoided 90% of construction waste, both compared to building from scratch.

Concrete slabs became robust staircases. Surplus bricks from the old facade now pave interior and exterior floors. Various fixtures and fittings has been processed and repurposed as bespoke furniture. Every detail preserves the building's raw, industrial character while giving it new relevance and life.

Retrofitting at Thoravej 29 does more than reduce environmental impact. It keeps the building's history alive, gives it a meaningful role today, and ensures it remains relevant for the future. This approach proves that using what already exists can create spaces with depth, purpose, and lasting value.





School reborn as daycare with circular design

A former school transformed into a daycare with respect for its architectural heritage.

The Swan shows how circular design can breathe new life into existing structures. Once a school in Gladsaxe, it now stands as the world's first eco-labelled daycare. The project reused crushed concrete, bricks, roof tiles, façade panels, wooden rafters, and reclaimed wood to reduce CO2 emissions and create a building deeply rooted in its history and local identity.

Steel façades from the 1960s, old wooden rafters, and roof tiles remain part of the design, preserving the spirit of the original building while giving it a renewed purpose. Inside, reclaimed rafters shape an airy orangery with the schoolyard's original clock placed at its centre, connecting generations and creating a meaningful space for children to grow and learn.

The Nordic Swan Ecolabel recognises this project as more than a technical achievement. It shows how sustainable architecture can continue the stories embedded in buildings and transform them with care. By applying circular principles, the design creates spaces that nurture people, protect heritage, and respect the planet – proving that architecture can hold both past memories and future possibilities within its walls.



Adaptive reuse in a modern high-rise

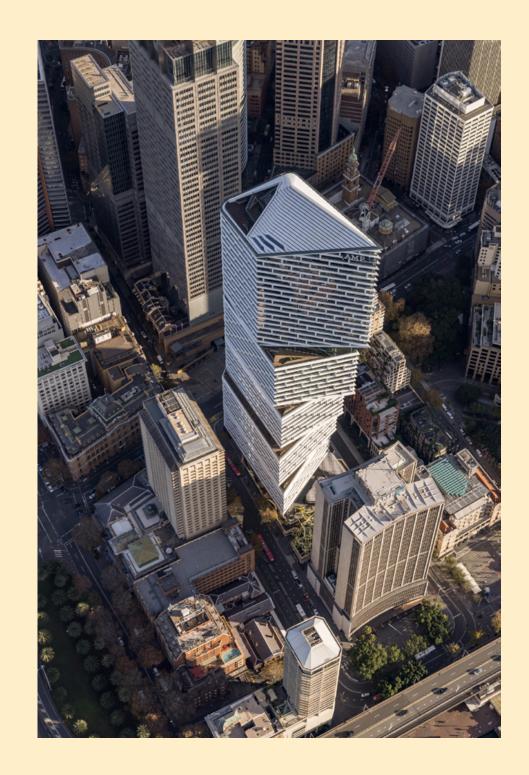
Redefining community life on Sydney's skyline through circularity and human-centred design.

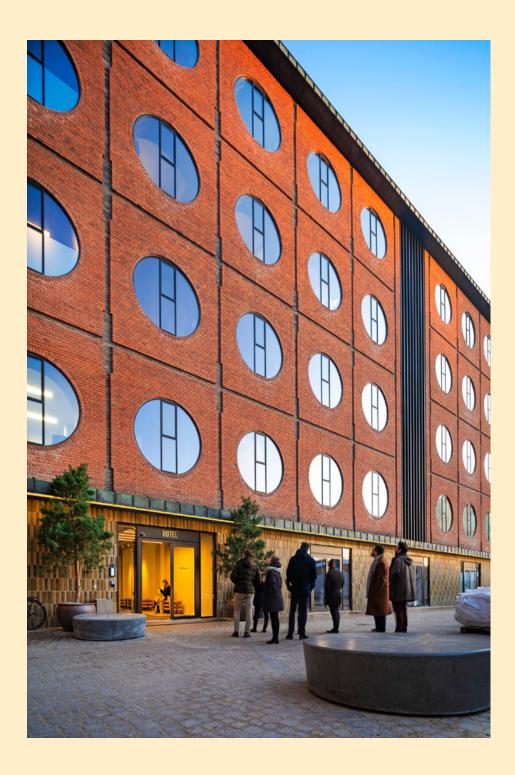
— Quay Quarter Tower by 3XN redefines what high-rise buildings offer people and cities. The tower stands 206 metres tall near Sydney's Opera House and upcycles the AMP Centre instead of replacing it. The AMP Centre, completed in 1976, had reached the end of its usable life. This transformation extends its structure's purpose for decades and sets a new benchmark for adaptive reuse.

The project keeps 65% of the existing beams, columns, and slabs and retains over 95% of the core. This choice saves more than 7,500 metric tons of embodied carbon in concrete. New floorplates extend from the north side to add valuable space while limiting waste.

Five stacked volumes shape the tower as a vertical village. Each volume holds a large atrium with shared amenities and social spaces. People connect across multiple floors, which strengthens community life high above the city. A new podium at street level adds retail and a public roof garden. These features bring nature and daily life into a neighbourhood once overlooked.

Quay Quarter Tower shows how circular design and a human focus can transform urban towers. The project extends material life, reduces environmental impact, and creates spaces where people thrive together.





From brewery to boutique hotel

Hotel Ottilia blends 19th and 20th-century brewery architecture with contemporary design.

Two Carlsberg brewery buildings have been transformed into a boutique hotel that honours industrial heritage and provides modern comfort alongside thoughtful design. Maltmagasinet, constructed in the 1880s, and Lagerkælder 3, built in the 1960s, form a distinctive space that respects the original architecture and the rich history of the site.

The project started with a thorough analysis to preserve as many original features as possible. Architects maintained exposed concrete surfaces, steel beams, silos, and historic machinery to uphold the buildings' raw and authentic industrial character. These brewery structures stood as reminders of a time when industrial architecture balanced functionality with careful aesthetic design. The striking façade, decorated with 60 golden discs, remained a key visual feature. Vertical windows let natural light enter discreetly, preserved the building's original rhythm, scale, and atmosphere.

This project proves how historic industrial buildings can embrace new purposes without losing their soul or identity. The hotel now welcomes guests into a space where history and modern comfort exist in harmony. It has created an experience that connects past and present and asks visitors to engage with the heritage of the brewery within a setting that feels both authentic and welcoming.

Housing for all



Build a city



Anne Mette BoyeChief City Architect, City of Aarhus

Photo by Ida Wang

Inclusive cities begin with inclusive development.

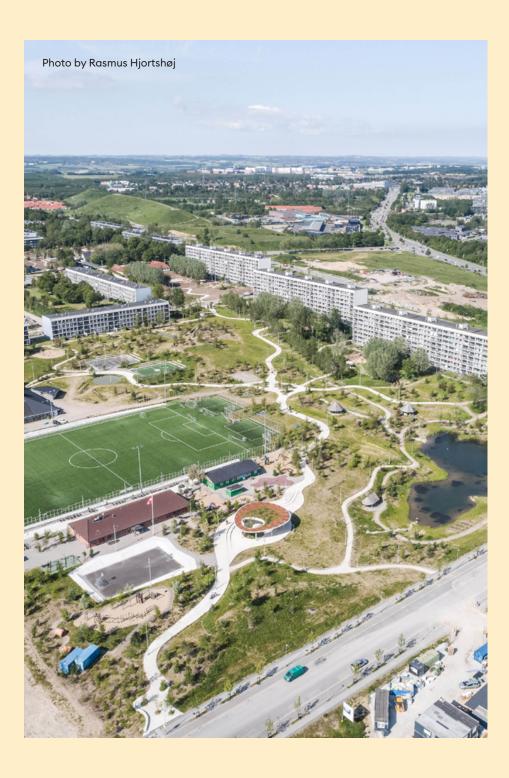
Cities exist for their citizens. This truth may seem obvious, yet it is constantly challenged. Urban development has always depended on capital, but when profit dominates, we risk producing square meters instead of homes, and market-driven housing types that fit everyone and therefore no one.

To understand housing for all, we must see the city as both urbs (the built fabric) and civitas (urban life). A diverse, sustainable, and cohesive city life depends on an equally diverse physical structure. Linking urbs and civitas is the responsibility of urban governance, ensuring investments support civic life as well as buildings.

Denmark has a strong tradition of planning for affordable housing through housing associations, financial models, and supportive legislation. Municipalities can require 25% non-profit housing in new developments – a tool Aarhus consistently applies. This ensures mixed housing offers across central, suburban, and peripheral districts, in both new construction and adaptive reuse. The transformation of the former county hospital 'Amtssygehuset' exemplifies this approach: old hospital buildings are turned into homes and cultural spaces, combining rental and owner-occupied housing, units for people with disabilities, social housing, and even a community for both homeless youth and students.

Yet, affordability and tenure models alone do not create belonging. Architectural design plays a crucial role in fostering homeliness and identity across life phases and situations. Building a city, therefore, means designing with care for both urbs and civitas.

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Urban renewal with social impact

From a disadvantaged residential area to an attractive urban district.

Gellerup and Toveshøj are two neighbourhoods in Aarhus, Denmark. Both were once seen as disadvantaged areas with limited connections to the rest of the city. Today, they are transforming into attractive urban districts where people feel safe and welcome. A long-term plan aims to create neighbourhoods that offer high-quality homes, public spaces, and daily life amenities.

New roads and pathways open the area to surrounding districts and remove physical and social barriers. Public and private housing developments now stand side by side and a city park adds green space for residents to gather, exercise, and relax. The large sports and culture campus brings cultural activities and learning opportunities to the heart of the neighbourhoods. Student housing and new townhouses attract residents of different ages and backgrounds which builds a more diverse community.

The next phase focuses on modernising existing homes to improve quality of life and energy performance. New townhouses will create streets with a human scale and active edges. Each area gains its own distinct identity to strengthen local pride and belonging. Together, these changes turn Gellerup and Toveshøj into mixed urban districts that support livability and opportunities for everyone who lives there now and in the future.

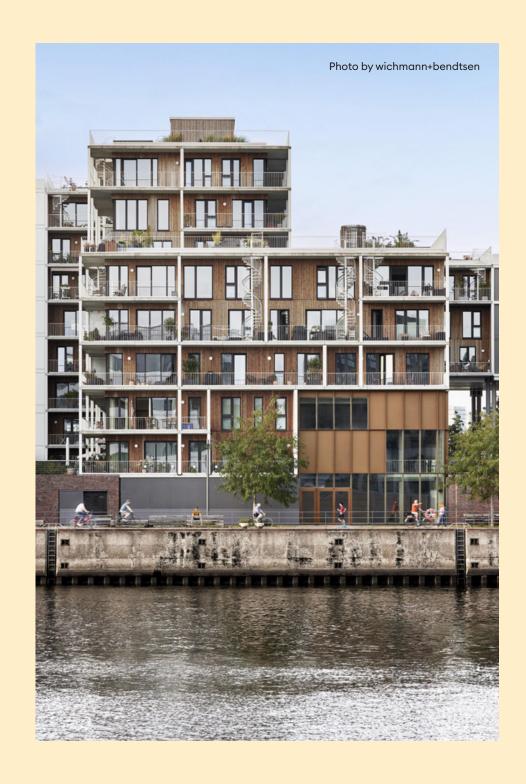
A collective way of living

The Beehive is a new housing model in Hamburg's HafenCity built to connect lives and strengthen community.

Life in Hamburg's HafenCity now includes a building where neighbours share more than an address. Residents not only have their own homes but also work and meet in shared spaces that bring everyday life into closer contact. The building supports interaction without forcing it, and it creates a setting where neighbours can form lasting bonds.

A group of creative families shaped the project to reflect their idea of a home that grows with its community. Inside, spaces adapt to different needs where some homes open to gardens, others feature workshops or quiet corners for retreat. Workspaces sit beside living areas which allows professional life to flow into the social fabric of the building.

At the heart of the building, shared spaces invite residents to cook, eat, and celebrate together, while neighbours from outside join for exhibitions or performances. The rooftop greenhouse produces herbs and vegetables throughout the year, supporting shared meals and gardening projects. Shaded seating areas face the water which give space for conversation or quiet reflection. The Beehive demonstrates how architecture can support community life while respecting individual needs.



Flexible housing for students

Temporary villages reuse containers to offer affordable, flexible student housing.

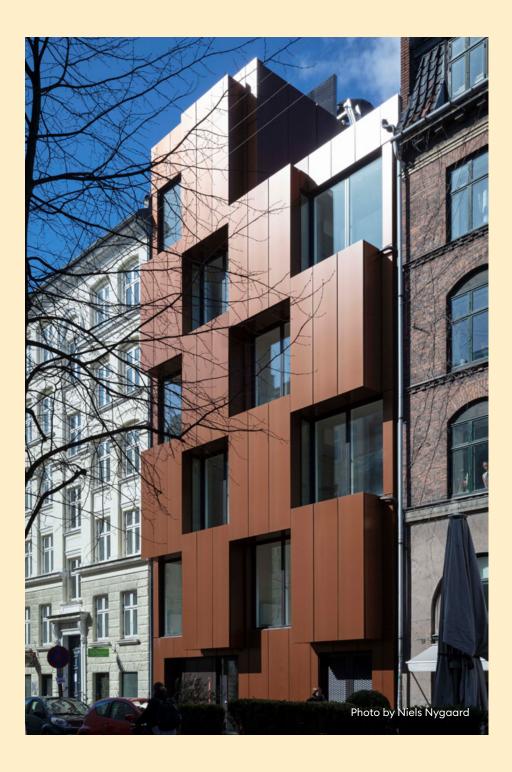
CPH Village rethinks student housing by turning shipping containers into affordable and flexible homes. The first village stands at Refshaleøen, a former shipyard in Copenhagen, and was developed by Arcgency with a site plan created in collaboration with Vandkunsten. The design follows principles of disassembly so units can relocate and find new use elsewhere. This modular approach reflects the reality that vacant, affordable land in cities often sits only temporarily available. Former industrial sites remain usable while awaiting permanent development.

The village remains temporary, but the buildings last. This approach supports high-quality materials and circular construction. When redevelopment begins on the site, the village moves to extend its lifespan and avoid waste. The raw, simple design keeps dents and screws visible as reminders of each container's life at sea.

Each unit fits into a 40-foot container. Homes include a shared entrance and bathroom with two private rooms, each with a large window and a kitchenette. CPH Village uses modular design and community-focused solutions to address the student housing shortage. The project shows that temporary spaces can create lasting impact by making homes that disassemble and adapt to new futures.







Supportive youth housing

Helping young people transition into independent city living.

 Nansensgade Youth Housing stands in central Copenhagen as a socially driven residential project by Christensen & Co Architects. The building provides homes for vulnerable young people who need support as they move towards independent living. It combines compact design with social care to create stable, inclusive housing in the heart of the city.

The architecture reflects the rhythm of the surrounding street with warm materials and distinctive window niches that add depth and character. Inside, nine small apartments give each resident a private kitchen, bathroom, and bay window overlooking daily city life. A rooftop terrace offers outdoor space with views across Copenhagen. Individual heating and utility systems teach residents how to manage their own energy use and build practical life skills.

The design balances privacy and community. Residents live in their own homes while staying connected to social support programmes in the city. This helps build confidence and supports their journey into adult life. Nansensgade Youth Housing shows how architecture can shape a more inclusive city by creating places that support people through life's transitions.

Perspective



Spaces for connection



Nina Kovsted Helk CEO of the philanthropic association Realdania

Photo by Mathilde Bech

Architecture impacts how we relate to others and experience life itself.

Architecture has always responded to society's challenges. Now it must continue to do so in a time of growing polarisation, climate crisis and weakened global security. Those who work with the built environment see every day how it shapes both individual lives and society as a whole. This is now confirmed by one of the largest studies of quality of life ever undertaken.

Realdania asked 122,000 Danes about their quality of life. The survey shows that relationships are the single most important factor in experiencing life satisfaction, and that there is a clear link between high quality of life, trust and security. People who feel satisfied with life tend to feel safer and therefore place more trust in others.

We build quality of life when we create homes and neighbourhoods where shared experiences matter, and when we design cities and public spaces that bring people together. According to Danes, even a nod from a neighbour or a brief chat with the local shopkeeper can make a difference.

By providing spaces to meet, architecture enables interaction. Our study shows that apartment residents have stronger ties with neighbours when they share a green, inviting courtyard rather than one filled with bins and bikes. People need opportunities to meet, to share activities, or simply to greet one another. That is how quality of life grows. The message from one of the world's happiest peoples is clear: every "hi" counts. Let that define the way we build our communities.

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What defines architecture for a resilient future – and how can it address global challenges?

The built environment influences daily life and long-term development. As global challenges evolve, architecture plays a direct role in shaping places that care for both people and the planet.

This publication highlights how Danish architects and designers use resilience as a guiding principle. Some transform existing structures. Others respond to climate uncertainty or work to create lasting access to housing.

The featured cases show how these efforts become tangible. Each project reflects a strong connection to its context while offering ideas that can be scaled or adapted elsewhere. Together, they point to new ways of building that support communities and strengthen our shared future.

Founding partners of Creative Denmark







