

# BLOX

Denmark's world of architecture,  
design and new ideas



Realdania



# BLOX









# Urban life and sublime experiences

BLOX is a new destination in the heart of Copenhagen.

BLOX is home to the Danish Architecture Center, which offers architectural experiences and knowledge about our cities to a wide audience. BLOX will be the venue of exhibitions on design, architecture and urban development.

BLOX is located at the end of Vester Voldgade between the Black Diamond, which houses the Royal Library, and the Langebro bridge. With its waterfront location, BLOX draws the city towards the harbour, breathing new urban life into one of Copenhagen's oldest neighbourhoods. The city thus gains an open and inviting setting for everyday life with new recreational urban spaces, bridges,

a public playground, rental flats, a café, a restaurant, a fitness centre and a bookshop.

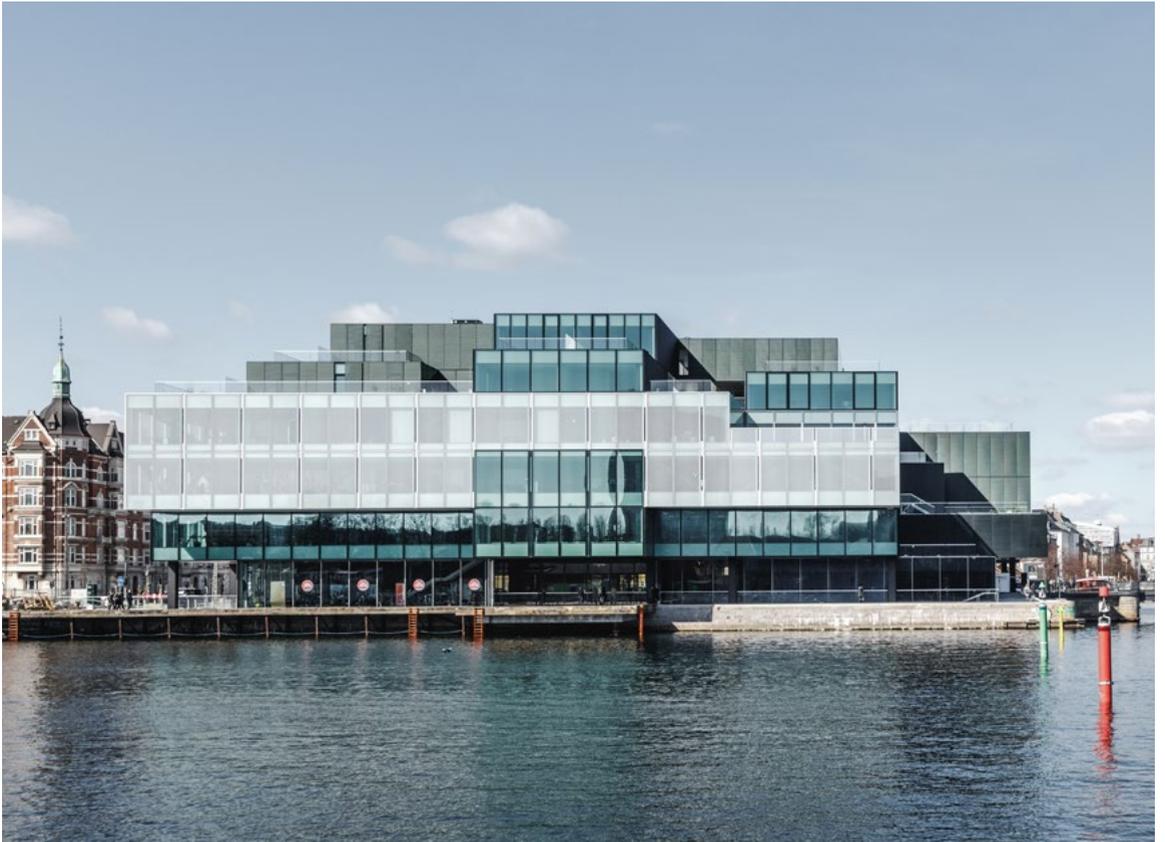
BLOX is also home to BLOXHUB, an interdisciplinary innovation environment for sustainable urban development with 500 open office spaces available to everyone involved in developing our cities. Through goal-oriented activities, BLOXHUB facilitates fruitful meetings between companies, organizations and researchers – and helps to disseminate the sustainable solutions that make our cities liveable.

In other words, BLOX is a place that buzzes with life, work, experiences and research and opens its doors to both professionals and the general public. BLOX enriches the neighbourhood with a new urban meeting

With its spectacular location and glass facades, BLOX offers visitors a view of the harbour.

**“To Realdania, BLOX is much more than a building. BLOX is an offer to all of Denmark and to Copenhagen – and, not least, to the many visitors from abroad who come to our city every year. The goal is to use the many interesting experiences offered by BLOX as a means of promoting urban life and bringing people together.”**

Jesper Nygård, CEO, Realdania





View from Frederiksholms Kanal towards BLOX. The area has been renovated to accommodate pedestrians, cyclists and recreational activities in the urban spaces surrounding BLOX.

place where people of all ages can meet, enjoy a cup of coffee or a meal, visit an exhibition, play or work out.

The originating idea behind BLOX was that it should serve not as a building for the few but for the many.

BLOX offers unique experiences in what was once a windswept and inaccessible urban space. Everyday life and the active use of urban spaces is exactly what Copenhagen is known for around the world: informal meetings, play and physical activity in the urban space. The attractive harbour-front setting sets a high standard.

With new city squares and bridges, BLOX ties the city together in new ways, linking areas that were once separated. Day and night, traffic on Christians Brygge flows through the building, and the new bicycle and pedestrian bridge Lille Langebro spans the harbour. Pedestrians can pass around and under

BLOX, which thus offers safe passage in an area previously dominated by heavy traffic.

BLOX has a holistic focus on sustainability and it generates life and attractions for locals and visitors in what was once a somewhat neglected part of the city. BLOX is active around the clock, not just during the daytime. The building boasts a number of environmentally sustainable features, including the solar cells on the roof, insulating glass facades and a link-up to Copenhagen's state-of-the-art district cooling system.

BLOX is located directly on the waterfront.



### Flats

The top two floors form a small community with 22 rental flats, each with its own rooftop patio. The size of the flats varies from approximately 100 to just under 200 m<sup>2</sup>.



### BLOXHUB

Along with the neighbouring buildings in Fæstningens Materialgård, a former military storage facility, established in the 17th century, BLOX serves as the base for the innovation hub BLOXHUB, where companies, organizations and researchers work with different aspects of sustainable urban development. BLOXHUB, which has about 10,000 m<sup>2</sup> office space at its disposal, was established by Realdania, the Ministry of Industry, Business and Financial Affairs and the City of Copenhagen.



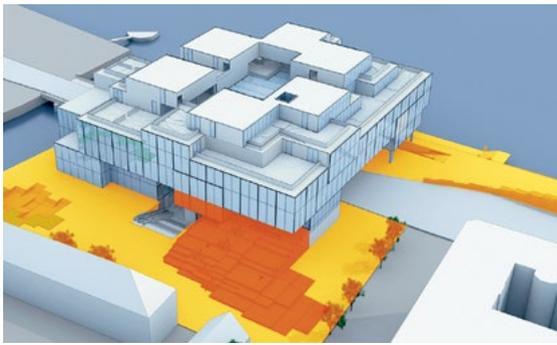
### DAC

The Danish Architecture Center [DAC] occupies a central location in the building. As Denmark's national architecture centre, DAC is a cultural attraction that can facilitate spectacular world-class exhibitions. As a natural meeting place in the city and for the people involved in the architecture industry, DAC appeals to a wide Danish and international audience. DAC has a floor space of 5,900 m<sup>2</sup>, including both exhibition and office facilities.



### Restaurant

The restaurant at BLOX faces Bryghuspladsen, the square at the end of Frederiksholms Kanal. It is open to the public and offers both indoor and outdoor seating, weather permitting. Bryghuspladsen is located in a sheltered space behind the buildings. It receives sunlight in the afternoons and evenings and offers a view along the canal towards the city.



### Outdoor space

The areas around BLOX have been converted into more than 5,500 m<sup>2</sup> of urban squares, passages, recreational areas and playground space. A series of open and inviting activity areas form a setting for cultural events. A new promenade along the harbour front, from the exhibition building to Langebro, has been established, and small boats can dock along the wooden harbour pier.



### Parking

Underneath the building is a fully automated 350-space public car park. The three-storey underground parking facility handles up to 180 cars an hour. Access to the car park is via a ramp that runs alongside Fæstningens Materialgård towards Vester Voldgade.



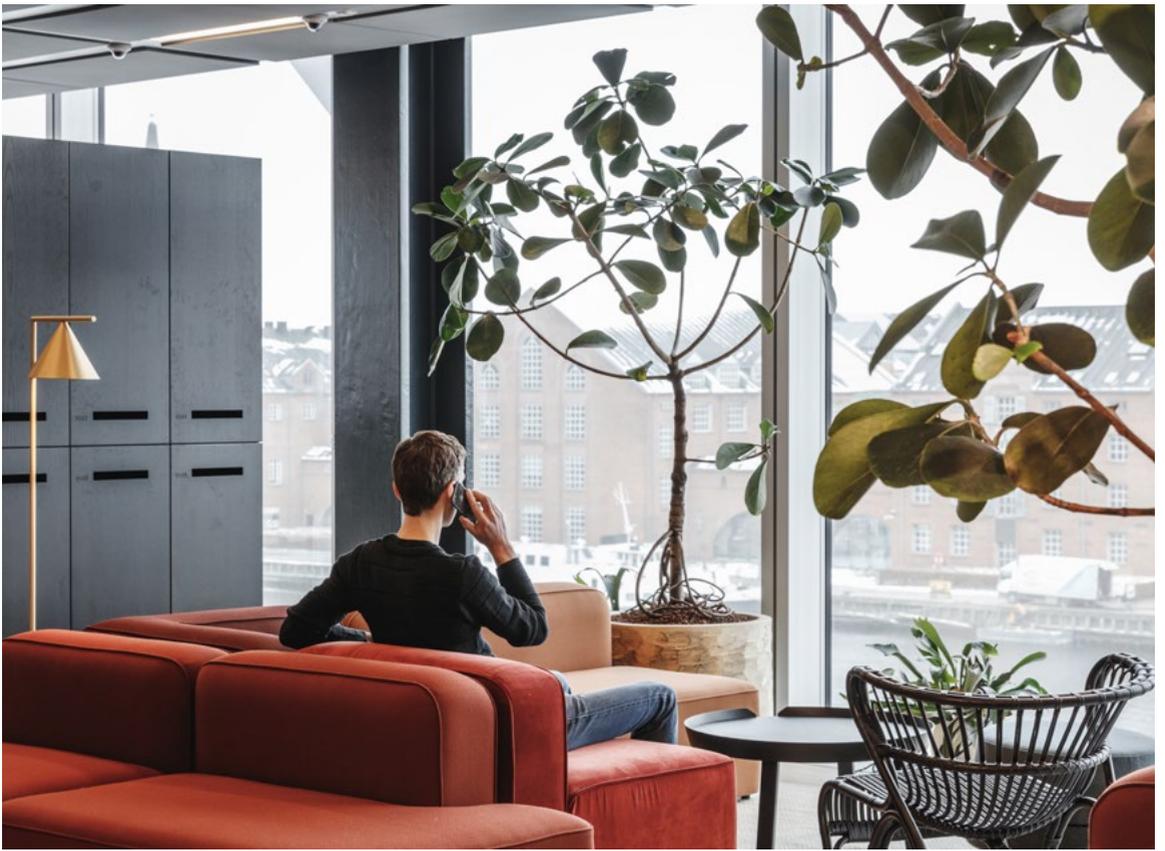
### Lille Langebro

The bicycle and pedestrian bridge Lille Langebro connects two parts of the city. The beautiful bridge extends from the urban Vester Voldgade to a new urban space by Langebrogade towards Langebro, close to the old embankment. As part of the Green Bicycle Route Network and the Harbour Ring, the bridge contributes to the recreational qualities and improves accessibility in the central part of Copenhagen Harbour. The bridge is scheduled to open in autumn 2018.



### Fitness

BLOX includes a fitness centre distributed over two floors in the building's north-east corner and offers a view of the harbour. There are plans to introduce cross-fit and other physical activities in the outdoor areas on the harbour front.



**“With BLOX we aim to promote the development and awareness of architecture and urban development as key agendas in society. This goal is pursued through broad exhibitions at the Danish Architecture Center (DAC) and activities in the innovation hub BLOXHUB, where many different people can meet in an effort to understand and address the challenges facing cities around the world.”**

**Jesper Nygård, CEO, Realdania**

**“DAC’s new ultramodern exhibition facilities will serve as a platform for conveying knowledge about architecture to a very wide audience. In combination with BLOXHUB, a forum for the many professional networks, this ensures that BLOX’s reach is both deep and wide.”**

Jesper Nygård, CEO, Realdania





Cars, cyclists and pedestrians can pass through BLOX, which does not turn its back on traffic but embraces it. Here, a view of BLOX's northern facade - which faces the Black Diamond.

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### **BLOX**

BLOX, a building disposing over 27,000 m<sup>2</sup>, is a new destination on Copenhagen's harbour front located between Langebro bridge and the Black Diamond, which houses the Royal Library. Funded and built by Realdania, BLOX is home to the Danish Architecture Center, the interdisciplinary innovation environment for global, sustainable urban development BLOXHUB, a restaurant with outdoor seating, a parking facility, a playground, a fitness centre and 22 rental flats. BLOX was designed by the Dutch architectural office OMA and opens in May 2018.

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### **Realdania**

Realdania is a philanthropic association with approximately 149,000 members, with membership open to anyone in Denmark who owns real estate. The association seeks to improve quality of life through the built environment, defined as the physical settings for our everyday life. Realdania's focus is on both present and future generations and seeks to promote sustainability and new knowledge and innovation. Since 2000, Realdania has supported more than 3,200 projects with a total of DKK 17 billion.

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# **Fun facts about BLOX**

# 1,000,000 hours

More than 1 million man-hours went into the construction of BLOX. The process involved people from Denmark, Poland, Germany, the United Kingdom, Romania, Iceland, Italy, the Netherlands and Portugal.

# The same weight as the Eiffel Tower

The building's total weight is approximately 80,000 metric tons, which includes 50,000 tons of concrete and 7,500 tons of steel/rebar, or the same amount of iron and steel as was used to build the Eiffel Tower. The rest of the building's weight is made up of glass, installations, cables, floors and furnishings.

# **Around BLOX in 30 seconds**

It would take the world's fastest sprinter, Usain Bolt, about 30 seconds to run around the building's 74 × 75-metre basic footprint.

# **Rooftop community**

The top two floors of the building contain 22 flats with individual and shared rooftop gardens placed around the large skylight above DAC's exhibition space. The total residential space amounts to 3,300 m<sup>2</sup>, with flats varying in size from approximately 100 to 200 m<sup>2</sup>. The average size of a Danish home is 112 m<sup>2</sup>.

# 100 children's rooms

The playground space is 1,200 m<sup>2</sup>, the equivalent of 100 children's rooms of 12 m<sup>2</sup> each.

# 33 Olympic-size swimming pools

The excavated soil amounts to 82,000 m<sup>3</sup>, weighing 140,000 metric tons. That much soil would fill 33 Olympic-size swimming pools. It weighs as much as 28,000 elephants. If the elephants were lined up in a row, the line would reach from BLOX all the way across the island of Funen to the city of Fredericia. The soil made up 4,000 lorry loads, which were driven to the city of Køge, where it was used for the expansion of the harbour.

# Gråbrødretov and Frue Plads

Urban spaces and playground spaces make up about 5,500 m<sup>2</sup>, almost twice as much as the Gråbrødretov square in central Copenhagen, which is approximately 2,830 m<sup>2</sup>. Bryghuspladsen is more or less the same size and similar dimensions as Frue Plads (the square between the Church of Our Lady and the University of Copenhagen), about 2,760 m<sup>2</sup>.

# The size of Amalienborg Palace

BLOX has a total floor space of approximately 27,000 m<sup>2</sup>, the same as the total floor space of Amalienborg Palace (26,500 m<sup>2</sup>) or four soccer fields, and almost the same as the nearby Black Diamond.

# Generating enough electricity power to power 23 households

BLOX is a low-energy building with a solar cell unit on the roof that generates enough electricity to power 23 average households for a year.

# 8,500 m<sup>3</sup> rainwater

Copenhagen sewers are spared 8,500 m<sup>3</sup> of rainwater a year, equivalent to the annual amount of wastewater from 55 households. The rainwater from BLOX is separated out on the roof and the open squares around BLOX and led directly into the harbour.

# **20,000 bicycle wheels a day**

The Lille Langebro bridge reduces the pressure on the nearby Langebro bridge. On an average weekday, Langebro is used by up to 40,000 cyclists, who often feel unsafe in the dense traffic. As many as 3,000 pedestrians and 10,000 cyclists are expected to use the new bridge on a daily basis.

# **A two-kilometre line of cars underground**

The fully automated parking facility under BLOX has room for 350 cars. Spaced closely together and tucked away safely underground. That frees up street-level space for urban life.



# Innovative architecture

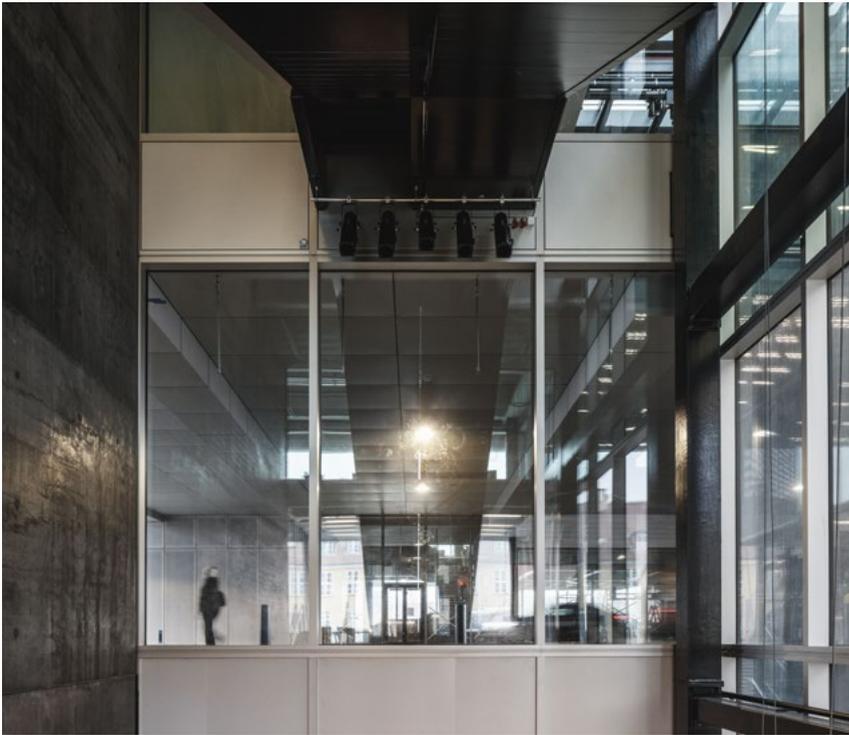
BLOX was designed by the Dutch architectural office OMA (Office for Metropolitan Architecture), one of the world's most influential and award-winning offices. OMA is reputed for its ability to handle complex projects with many mixed functions. With its many different users and functions, BLOX is like a small city within the city. The building's architecture links the city's urban spaces with the building's inner life and connects parts of the city that were previously separated by heavy traffic. Architecture brings functions, professional environments and experiences together in a new, extraordinary meeting place. This is reflected in the building, which consists of boxes placed in a staggered pattern to form a terraced landscape. The boxes also mark the different functions in the building and creates a varied expression.

BLOX addresses the city in its own unique way, with respect to both size and materials.

The green glass of the facade references the verdigris on Copenhagen's characteristic copper spires and mirrors the sky and water that frame this waterfront city. BLOX blends into its environment by not exceeding the height and size of the former royal brewhouse, Chr. IV's Bryghus, and the surrounding housing blocks and by respecting the main lines of sight in the area.

A general feature of the architecture is transparency. Inside the building, the interior glass facades make it possible to look into the many different rooms and staggered levels in the building. From the large central exhibition hall, the traffic can be seen gliding silently through the building and the harbour space. Similarly, one can look into both the offices and the fitness centre from within the building, producing a sense of the building being alive with activity and surprising experiences.

The interior and exterior glass facades of BLOX produce transparency and reflections throughout the building.

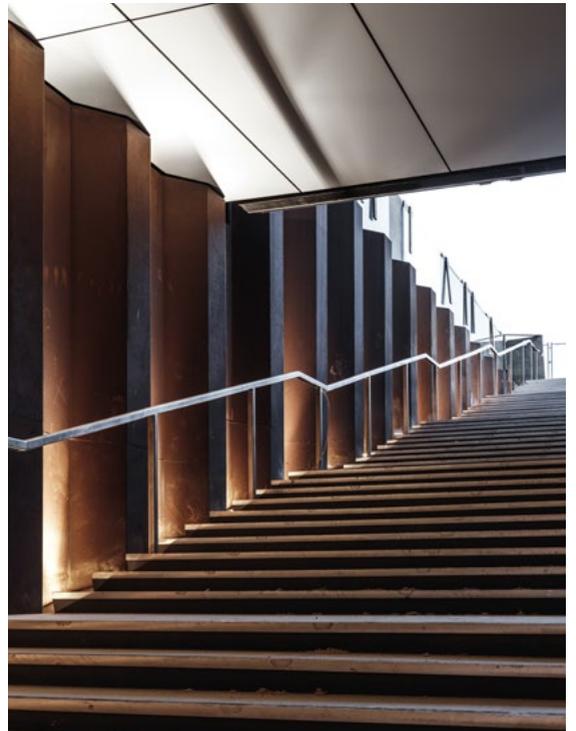


Concrete, glass and steel come together in BLOX.

The passage under BLOX for pedestrians visiting DAC or for those opting for a safe way to get across the busy road. The mix of rough and refined materials recall the site's historical function as an industrial port.

One of the main challenges was the physical conditions of the plot. It has water on two sides and includes a busy road that is used by 25,000 vehicles a day, and which could not be shut down during construction. Although the site is one of the most attractive and centrally located sites in the city, the heavy traffic made the location one of the most deserted. BLOX is placed right on the harbour front, inspired by the Venetian canals where the houses are in direct contact with the water. A wooden pier allows pedestrians to walk around the building along the water. The pier creates a new large city square, sheltered and sunny, between Fæstningens Materialgård and BLOX.

BLOX creates a sense of being a vibrant urban space. Urban life and the urban space are drawn into the building itself. DACs Passage, the passage under BLOX, is both a public space with exhibitions and events and a safe shortcut that avoids the heavy traffic.





The architecture is adapted to align with the surrounding buildings, and the building's playground and ball cage invite the local children inside.







# New connections in the city

Over just a few decades, Copenhagen – not least Copenhagen Harbour – has undergone a historic transformation. The harbour has changed from an active industrial port with polluted water, an area that the city turned its back on, to a lively blue park that embraces the city, with water clean enough to swim in.

BLOX is part of the trend of cities moving closer to the water. As with Musikkens Hus in Aalborg and Dokk1 in Aarhus, more inviting and active harbour areas play an important role in the future of Danish cities. Central harbour areas are activated and made accessible to the citizens as spaces in which we can live, work and have new experiences. BLOX is an attraction that offers recreational spaces and events on the waterfront and creates a link

with the Copenhagen Cultural District and the many existing cultural institutions in the area.

BLOX activates the last part of Copenhagen's inner harbour front, allowing joggers, cyclists and pedestrians to move all around the harbour via an uninterrupted promenade. The new open square between Fæstningens Materialgård and BLOX, the cycle and pedestrian bridge Lille Langebro leading to the island of Amager and the major renovation of Frederiksholms Kanal, which is now safer for pedestrians and cyclists, have greatly improved the area as a whole.

In addition to Lille Langebro, the new footbridge across Frederiksholms Kanal to Søren Kierkegaards Plads and the Black Diamond revitalizes what used to be a deserted area just

With a bustling everyday life in the form of restaurants, playgrounds and urban spaces, BLOX is an integral part of the new neighbourhood on Frederiksholms Kanal.



The green colour of the facade is a reference to the verdigris of Copenhagen's traditional copper roofs and spires.

a few hundred metres from Rådhuspladsen, the city hall square.

Lille Langebro, shaped like a simple curved line, connects the urban Vester Voldgade to a new urban square by Langebrogade towards Langebro, close to the old embankment area. The bridge is part of the Green Bicycle Route Network and the Harbour Ring and is located where the original Langebro was located from the late 17th century until the early 20th century. It opens a recreational, green and historical link stretching from Ørstedsparken via Vester Voldgade to the Christianshavn embankment and on to the Holmen islet. The bridge lands just south of BLOX and makes an active contribution to the urban life in the area around BLOX.

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### **Lille Langebro**

Lille Langebro was built by Realdania in cooperation and the City of Copenhagen. The bridge is a gift from Realdania to Copenhagen, with Realdania By & Byg in charge of planning and construction. When completed, ownership will be transferred to the City of Copenhagen. The bridge is expected to be completed in the autumn of 2018.

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The Lille Langebro bridge for cyclists and pedestrians connects the island of Amager with Vestervold and central Copenhagen.



With its waterfront location, BLOX is part of the trend that has seen cities being drawn towards the harbour, which are being converted into blue parks.



Wis hensyn  
sejl langsomt

POWER

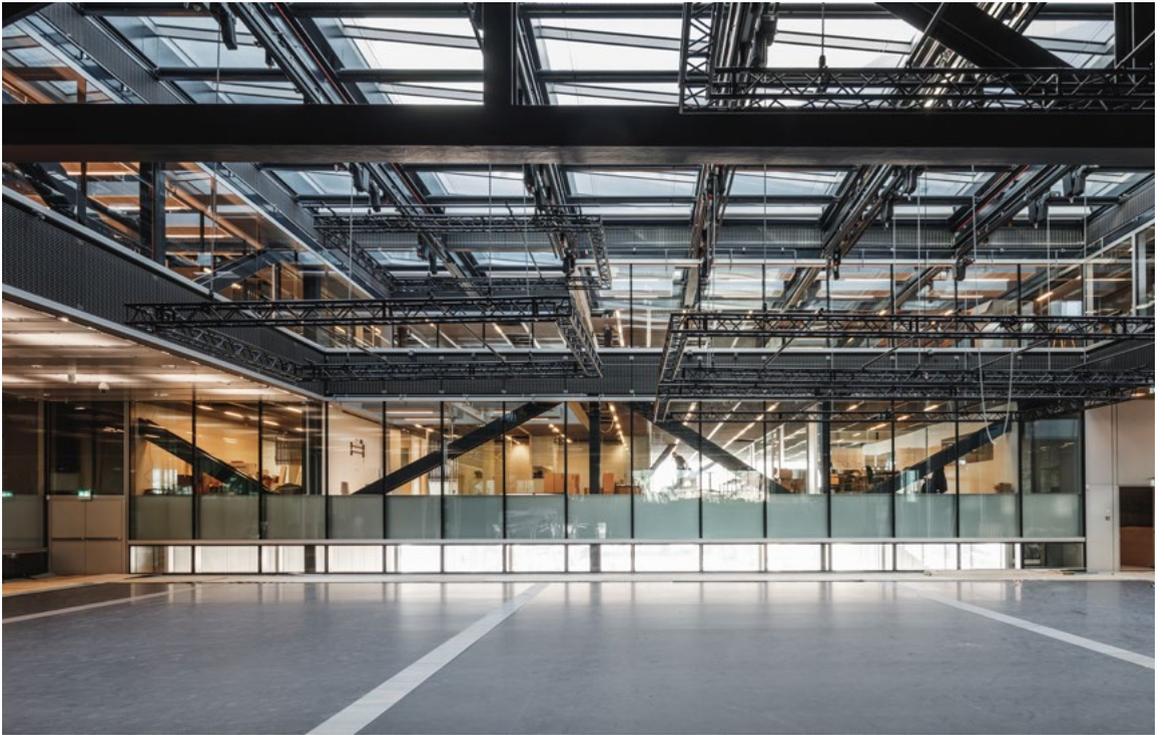
# One of the world's leading architecture centres

The new exhibition facilities in the centre of BLOX give the Danish Architecture Center [DAC] an ideal setting for presenting architecture, construction, design and urban development. With state-of-the-art high-tech exhibition rooms, DAC sets new standards for engaging and innovative communication, on a par with the leading architecture centres around the world.

DAC expects around 200,000 exhibition visitors annually, including many from abroad. The exhibition rooms set the scene for exciting experiences for children and adults alike. Families can build their own LEGO city together or engage in other types of creative learning. The café serves coffee and lunch from the large rooftop patio overlooking the

harbour, and the DAC shop sells books and design objects. The ultramodern conference facilities and the large hall will form a setting for networking, debates and presentations. DAC at BLOX will become a natural meeting place in the city and for people in the industry, attracting a diverse Danish and international audience. Entrance to DAC is via the main entrance, DACs Passage.

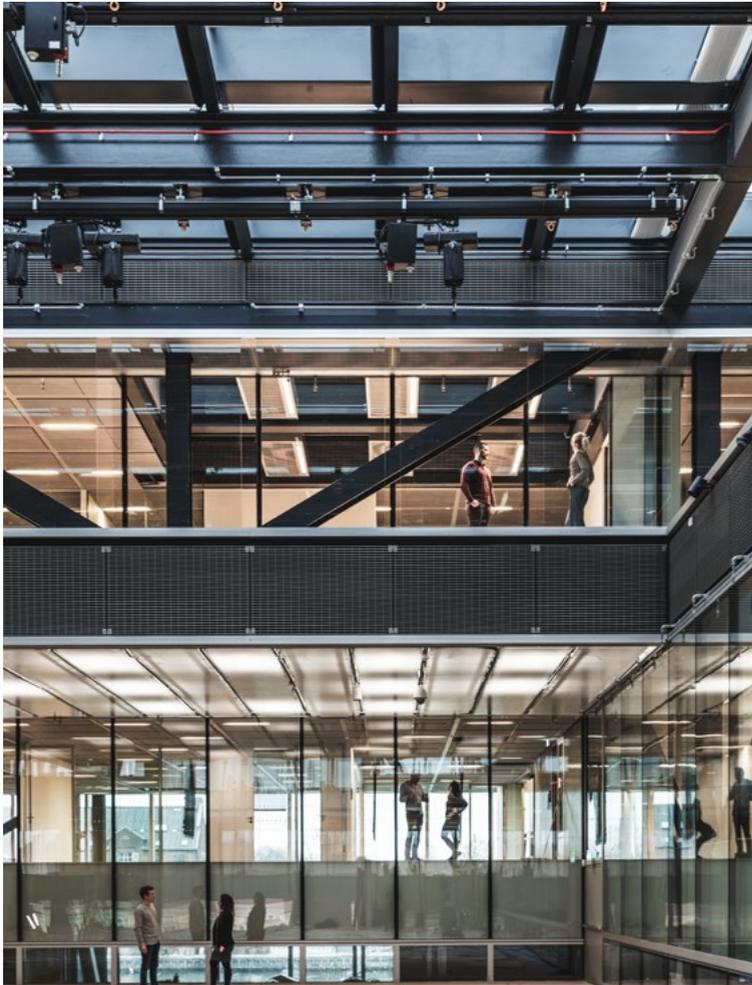
The building leans over the water and gives its visitors a view of both sky and water.



**“The exhibitions and activities at DAC are a broad invitation to the citizens of Copenhagen and to tourists to step inside the world of architecture. We will strive to further insight into the development of urban spaces and to showcase how quality and innovation in our built environment shape our everyday activities and quality of life and the sustainable development of society. DAC aims to become an internationally agenda-setting destination for knowledge about architecture, construction, urban development and design.”**

**Kent Martinussen, CEO, DAC**

With its new multi-functional exhibition facilities, DAC can stage world-class events.



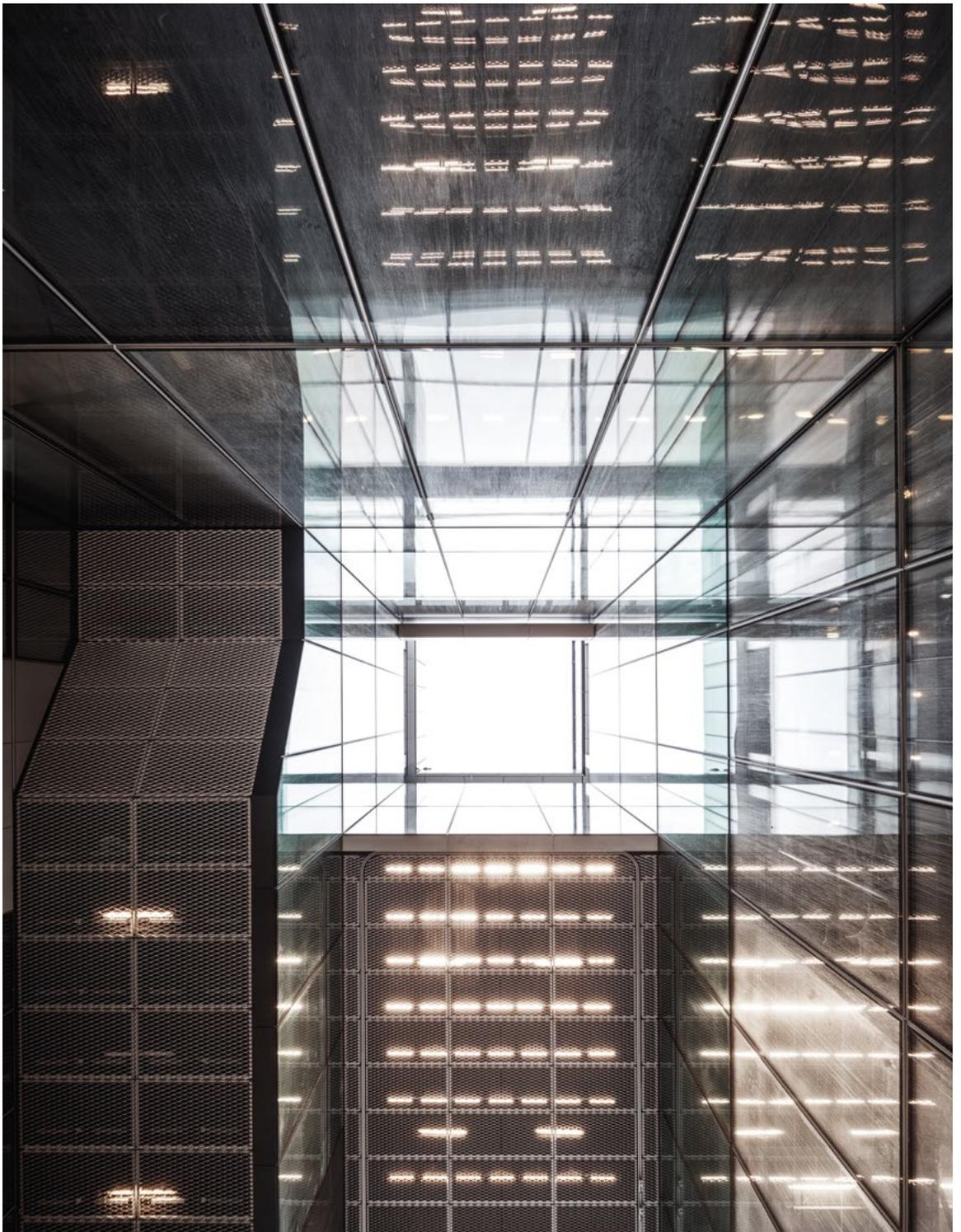
The ceiling in the main exhibition hall is like a stage ceiling, fitted with controls for lighting and sound and a system of rails for moving large objects.

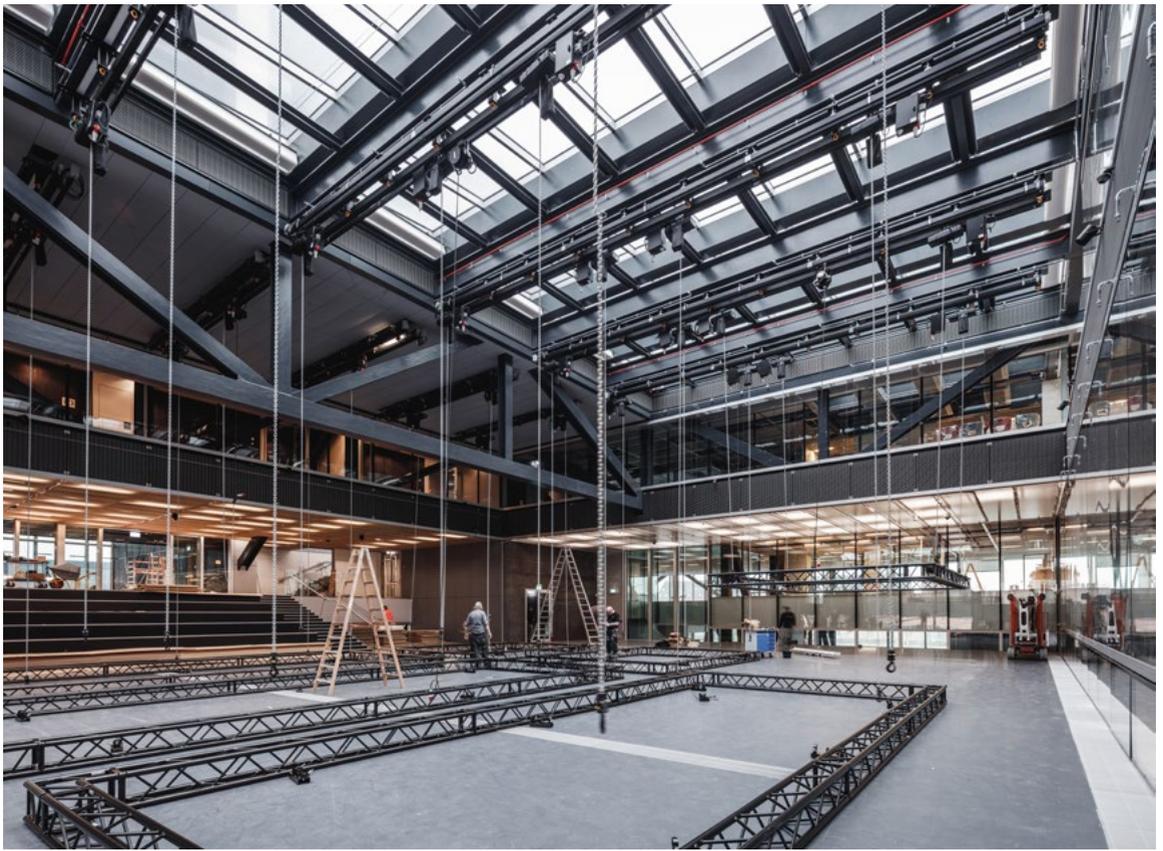
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### **Danish Architecture Center**

The Danish Architecture Center is Denmark's national centre for the development and communication of knowledge about architecture, construction and urban development. The purpose of the Danish Architecture Center is to promote general interest in architecture, urban development and landscape development and to serve as a platform for networking activities, debate and knowledge that facilitate innovation and sustainable development across the building sector.

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Getting the building's main exhibition hall ready for the first exhibitions.

**“The purpose of having BLOXHUB and DAC under one roof is to let communication and knowledge development go hand in hand. This will spark an interesting conversation. BLOXHUB breaks down interdisciplinary boundaries and thus creates optimal conditions for new ideas to arise, to the benefit of our cities.”**

**Anne Skovbro, CPO, Realdania**

Throughout the building, BLOX offers views of the city, water or sky.



# The city's harbour in constant development

The old Langebro swing bridge, located where the current Langebro spans the harbour today. The old bridge existed from 1903 until around 1930.

The story of the Bryghus site, on which BLOX is built, is the story of a city in constant development, not least the busy industrial harbour. The Bryghus site is located on the Frederiksholm islet, a central part of Copenhagen that is separated from the Slotsholmen islet by Frederiksholms Kanal. Frederiksholm did not exist prior to the 1660s and was created gradually through reclamation in the harbour. The original building on the site from 1772 was the royal brewhouse, Kongens Bryghus, which lends its

name to the nearby street Bryghusgade and the Bryghusbroen bridge. By the 1870s, rapid industrial development had turned Bryghuset into an actual industrial facility.

Under King Christian IV, many embankments and fortifications were built around central Copenhagen, including the western embankment Vestvolden, which was levelled in 1873, turning Vester Voldgade into one of Copenhagen's most important arteries. Some years later, in 1906, the Royal Library was built. By now, the brewhouse was rather run



The current Langebro with two bascules was built next to its predecessor during the early 1950s. Note that the railway was located south of the current bridge on a low swing bridge.



One of the first Langebro bridges, located between Vester Voldgade and Langebrogade. Between 1690 and 1903 there were several wooden bridges in this location.

down, and production here was discontinued in 1923.

Langebrogade was modernized in 1930. The old swing bridge was replaced with a temporary bridge that was in use until the current Langebro was built, in 1954. The new bridge was relocated from the end of Vester Voldgade to Vester Boulevard, now named H.C. Andersens Boulevard.

In 1941 the first architectural competition for the Bryghus site was held. Among the programme requirements, the new structure had to 'be worthy of the site' and – as today – should preferably contain functions that were in the city's general interest and benefited large segments of the population. The competition failed to yield a winning project, however, as none of the proposals were found suitable by the panel of judges.

In October 1960 the remaining buildings on the Bryghus site burned down. For the

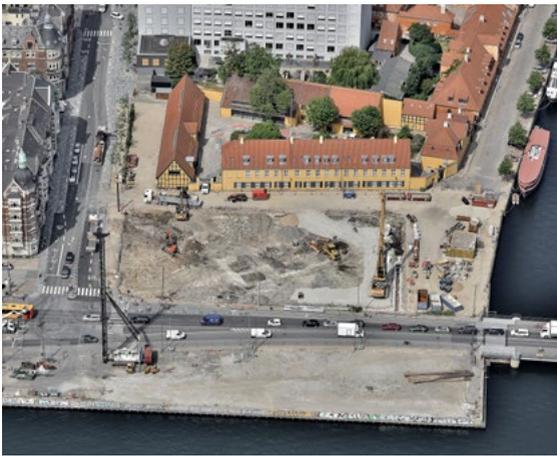
following 50 years, the site served as a temporary playground and car park. In 1994 the Ørestad Development Corporation took over the site, and in 2005 Realdania's subsidiary Realdania By & Byg bought the plot with the intention of creating a new building and a city square of high architectural quality in order to improve the area and help tie the city and the harbour together. In 2006 the overall vision for the project was articulated. The architect was selected in an international interview competition based on prior invitation.

Five offices were invited to an interview, and among them the Dutch firm OMA was selected. The groundbreaking took place in May 2013.

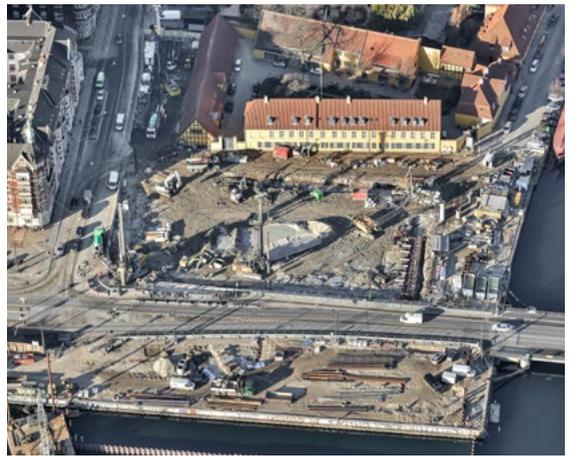
One of the many locations of the Langebro bridge. This version was in front of the housing block Ny Christiansborg from 1930 until the 1950s.



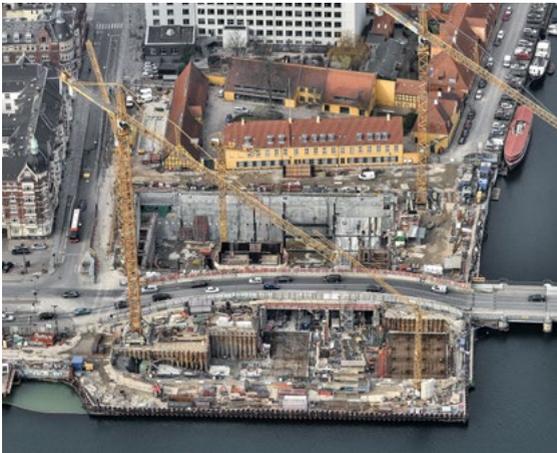
Bryhusgade. In the background a glimpse of the royal brewhouse, Chr. IV's Bryghus. To the right, the building on the Bryghus site.



July 2013



November 2013



February 2015



June 2015



September 2016



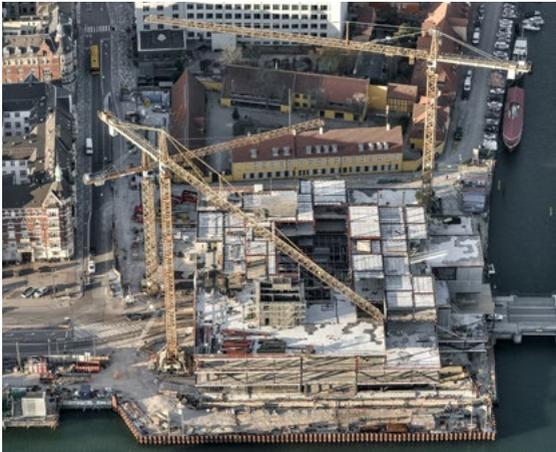
February 2017



April 2014



September 2014



December 2015



April 2016



July 2017



January 2018



# Future sustainable cities

One of the main purposes of BLOX is to promote sustainable urban development in a broad sense. BLOX thus forms the setting for activities aimed at the general public as well as more narrowly defined professional networks. BLOXHUB, a part of BLOX, is an interdisciplinary innovation environment for global, sustainable urban development founded in June 2016 by Realdania, the Ministry of Industry, Business and Financial Affairs and the City of Copenhagen. BLOXHUB, which has offices on the second and third floors at BLOX and in the nearby Fæstningens Materialgård, built in 1740, is an open office space with room for about 550 desks for people working with urban development. Fæstningens Materialgård is home to a dynamic start-up and research environment, and in the BLOX building the members of the hub have access to a virtual-reality cinema, a video studio, various types of workshops, facilities for gathering urban data and a lounge that can be used as a workspace, for

meetings and as a venue for topical, professional debates and social events.

BLOXHUB was established in direct response to the increasing urbanization and the growing need for climate adaptations and sustainable urban solutions. Addressing these major challenges requires an interdisciplinary environment where different professions work together. BLOXHUB facilitates fruitful meetings between companies, organizations and researchers and helps to develop and disseminate solutions that make future cities liveable. BLOXHUB is expected to play a role in the global development of good sustainable solutions for urban development, in part through a strong global network. Via partnerships with the Ministry of Foreign Affairs and other key global actors, BLOXHUB will match members up with relevant clients and potential project partners abroad. More than 150 urban developers in Denmark and abroad are members of BLOXHUB.

**“Today, half of the earth’s 7 billion people live in cities. The United Nations projects that by 2050 the global population will reach 10 billion, two thirds of whom will live in cities. Thus, over the next 33 years, our cities will have to accommodate about 3.5 billion new inhabitants, as many as the current number of city-dwellers. This can either be seen as a disaster or as a great opportunity for promoting sustainable development. We believe in the latter, and BLOXHUB is going to contribute to that.”**

Torben Klitgaard, director, BLOXHUB





Anne Skovbro, CPO, Realdania, and Frank Jensen, lord mayor of Copenhagen, debating at a BLOXHUB event.

**“It has been exciting for Realdania to be involved in establishing BLOXHUB as an interdisciplinary innovation environment for big companies, start-ups and research teams. We hope to see the BLOXHUB association grow, so that more people can get involved in building a community that can address some major challenges to our society. It is important to us that both the Danish state and the City of Copenhagen are involved in the project, as that ensures a broad engagement.”**

Anne Skovbro, CPO, Realdania

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### **BLOXHUB**

BLOXHUB is an interdisciplinary innovation environment with 550 open office spaces for everyone involved in developing our cities. Through bespoke activities, BLOXHUB facilitates fruitful meetings between companies, organizations and researchers and helps to disseminate the sustainable solutions that make our cities liveable. BLOXHUB was founded in June 2016 by Realdania, the Ministry of Industry, Business and Financial Affairs and the City of Copenhagen.

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# The BLOX community

The establishment of BLOX has created a new point of gravity in Copenhagen. A new neighbourhood has emerged where professional networks thrive side by side with the city's everyday life.

To ensure a wide ownership of BLOX and broad input to its many functions, extensive dialogue with local citizens and a large number of meetings with neighbours have been a natural part of the project. The BLOX Showroom at Fæstningens Materialgård has allowed the public to follow the project's development. The showroom has had more than 15,000 visitors since it opened in September 2014.

Gehl Architects, world-renowned for their ability to generate life between buildings

and to create human-friendly cities, have conducted several in-depth urban space analyses. These analyses have been used to ensure that the area functions as an attractive space in which to move and spend time.

Several elements help make BLOX a natural part of the city's life: the DAC café, a fitness centre, a restaurant with both indoor and outdoor seating and, not least, a playground that is open to local kids and also contains facilities that local day-care institutions can use. The playgrounds have been developed in a collaboration between the project architects, the nearby day-care institutions at Vartov and Den Classenske Legatskole. The large square between Fæstningens Materialgård and BLOX is a pleasant space for both locals and visitors.



The footbridge leading to Søren Kierkegaards Plads significantly improves the natural flow of people through the area. BLOX completes the sequence of city squares that was initiated when the Black Diamond was built and allows many different ways of using the space, e.g. for markets, sport and other recreational activities. For pedestrians the harbour promenade offers an opportunity to walk around the BLOX building along the water. Lille Langebro contributes to movement across the harbour, promising to make the Harbour Ring into an equally popular route for runners as the route around the Copenhagen Lakes.

The 22 flats on the top two floors ensure that the areas in and around BLOX are lively around the clock. The underground parking facility not only removes parked cars from the nearby streets and squares but also generates a natural flow of people in and around the building.

Through the lit glass facades, passers-by can see the many activities taking place in the building around the clock.

By adding a 'wall' to Søren Kierkegaards Plads, BLOX turns this city square into a more inviting space for life to unfold.

**“Since we launched the BLOX project in 2007, it has been important for us to involve as many actors as possible. Building in the middle of the city means there are many considerations that need to be taken into account. We have made dialogue a priority throughout and more than 15,000 people have visited our showroom, for example. The playground at BLOX was developed in cooperation with the local day-care institutions and the local school. Dialogue, meetings, discussions and so forth have made BLOX a much better project. We are going to continue the dialogue to ensure that BLOX is a new popular destination in Copenhagen – to as many people as possible.”**

Peter Fangel Poulsen, head of project, Realdania By & Byg





# Timeline

The biggest crane in Copenhagen Harbour puts a bridge deck into place above Frederiksholms Kanal. BLOX in the background.



A section of the playground on Bryghuspladsen.



### **2005 The site is purchased**

Realdania's subsidiary Realdania By & Byg buys the Bryghus site in 2005 with a view to creating a new building and an urban space of exceptional architectural quality that will improve the area and help tie the city and the harbour together.

For many years, the Bryghus site was waiting for the right project to connect the city and the harbour.



## 2006 The idea stage

The overall vision for the project is formulated and an urban space as well as an urban history analysis is carried out. The architect is selected in an international interview competition where five architectural offices are invited to discuss their ideas and their understanding of the task at hand. Among them, the Dutch firm OMA is selected. The concept brief is drawn up.

The Bryghus site was mainly used for parking. Today, parking has moved to BLOX's underground car park.



### **2007–2009 The building programme is formulated**

The building programme is formulated. The building programme contains a more detailed description of the client's demands and requests for the finished building. A programme with the preliminary site assessment concerning environmental, geo-technical and archaeological issues is prepared. The conceptual design is developed and includes the initial drawings and models of the construction and describes the main lines of the structure, including the overall shape of the building, the distribution of square metres for the various functions and the types of materials to be used.

There has been significant local interest in the project from day one. The involvement of the local community has played a key role in the project.



### **2010–2013 Preliminary and main project**

The project proposal is drawn up. It contains a more detailed design brief for the building as well as basic drawings and models for the project. The project proposal is turned into a preliminary project that forms the basis for a building permit application. The main project is prepared, describing the construction stages in detail. Following a bidding round, cost appraisals are obtained and agreements are entered into with the contractors.

From the initial sketches to the finished building, the project has undergone multiple permutations. Here an early volume study by OMA.



### **2013–2017 Groundbreaking**

The groundbreaking takes place on a sunny day, 13 May 2013, by the City of Copenhagen, Realdania, Realdania By & Byg, DAC and OMA in front of Fæstningens Materialgård, on the site where BLOX now stands. Peter Fangel Poulsen of Realdania By & Byg and Kent Martinussen from DAC lead the way.

Groundbreaking. From the left: Ayfer Baykal (then mayor, Technical and Environmental Administration, City of Copenhagen), Jesper Nygård (then chairman of the board for Realdania, now CEO), Kent Martinussen (CEO, DAC), Flemming Borreskov (then CEO, Realdania), Peter Fangel Poulsen (head of project, Realdania By & Byg) and Ellen van Loon (partner, OMA).



The finished building, ready to play its part in Copenhagen's future.

### **2018 Official opening**

The building is officially opened in May 2018 by HM Queen Margrethe and is subsequently celebrated with a party where everyone is invited. At the opening, DAC's inaugural exhibition is presented, and the many other facilities and activities in the building are opened to the public. the fitness centre, restaurants, play-grounds and all the many other attractions that make BLOX a new setting for urban life.





### **BLOX facts**

BLOX is much more than a building; it is a new destination on Copenhagen's harbour front located between Langebro bridge and the Black Diamond building that houses the Royal Library. BLOX was funded and built by the private association Realdania. The building is home to the Danish Architecture Center's exhibitions and activities and BLOXHUB – an interdisciplinary environment promoting innovation and sustainable urban development.

- BLOX is a building surrounded by city squares, a footbridge across Frederiksholms Kanal and the future Lille Langebrø (cycle and pedestrian bridge) between BLOX and Christianshavn.
- In the centre of the building is the Danish Architecture Center, which offers exhibitions, guided tours, events, a design shop, a café and conference and training facilities.
- BLOX also forms the setting for BLOXHUB, an interdisciplinary innovation environment for sustainable urban development.
- Restaurant, with outdoor seating, playground, fitness centre and 22 rental flats at the top of the building.
- Fully automated, underground parking facility with room for 350 cars.
- Low-energy building fitted with solar cells and connected to district cooling provided by HOFOR – Greater Copenhagen Utility.
- The site previously had a dense concentration of buildings, including Kongens Bryghus (the King's Bewhouse), among other buildings. The buildings burned down in 1960, and until 2006, when Realdania By & Byg bought the site from the City of Copenhagen, it was used as a playground and a privately operated, temporary car park.
- The City of Copenhagen and Realdania collaborated on developing the area around Blox.
- The groundbreaking took place in May 2013 and the official opening in May 2018.
- Lille Langebro was opened in autumn 2018.
- BLOX is Denmark's world of architecture, design and new ideas.

### **BLOX in figures**

- The total floor space is 27,000 m<sup>2</sup>, of which 17,000 m<sup>2</sup> are above ground.
- There are 5 storeys below ground and 5 storeys above street level.
- The building's ground plan is 74 m × 75 m.
- The height is 25 metres above terrain – matching the nearby buildings.
- The recreational outdoor spaces and play-ground space amount to 5,500 m<sup>2</sup>.

### **They designed and built BLOX**

- Realdania's subsidiary Realdania By & Byg was the client and owns BLOX.
- BLOX was designed by the world-famous Dutch firm OMA – Office for Metropolitan Architecture.
- COWI and Arup were the engineers for BLOX.
- Züblin is the general contractor for BLOX, assisted by a large number of competent sub-contractors.
- Lødige delivered the fully automated parking facility.
- Metallbau Früh delivered the facades.
- Gehl Architects conducted several urban space analyses, which were a valuable contribution to the development of BLOX as a new destination in Copenhagen.
- The turnkey contractor for Lille Langebro was a joint venture between Mobilis Danmark and Hollandia Infra.
- Lille Langebro was designed by an international team headed by the British engineers BuroHappold Engineering in cooperation with the architects WilkinsonEyre and Urban Agency.

Additional information at [www.blox.dk](http://www.blox.dk)

### **COLOPHON**

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Except for the following:

- P. 7: Rendering of BLOX and Frederiksholms Kanal: OMA – Office for Metropolitan Architecture
- P. 8 – 9: Structural overview : OMA – Office for Metropolitan Architecture
- P. 29: Rendering of the Lille Langebro bridge: BuroHappold
- P. 36 – 39: Old photos of Copenhagen Harbour and city: Unknown Photographer
- P. 40 – 41: Aerial photos of BLOX under construction: Dragør Luftfoto ApS
- P. 44 – 45: BLOXHUB event: BLOXHUB
- P. 51: BLOX and the biggest barge in the Nordic region: Michael Levin
- P. 52 – 53: The Bryghus site: BLOX
- P. 54: Neighbourhood event: Heine Pedersen
- P. 55: Volume study: OMA – Office for Metropolitan Architecture
- P. 56: Groundbreaking: Rune Evensen

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