

# Open laboratory for the 17 UN SDGs



PROJECT:  
Residential



COMPANY:  
NREP



LOCATION:  
Ørestad, Copenhagen

## Challenge

UN17 Village’s roots go back to 2018, when Nrep won the rights to develop the final undeveloped site in Ørestad, one of the newer districts in Copenhagen. Nrep’s bid was based on the idea that real estate plays a role in the global agenda. Real estate emits 40% of climate emissions and is where we sleep, live, work, play, and where our children grow up. We wanted to put our proposal into a global context and the link to the UN Sustainable Development Goals (SDGs) blossomed from here.

Hence, this became a project with people and sustainability as the primary focus. The UN 17 is about making cities, communities and residential developments inclusive, safe, resilient, and sustainable. It is also about ensuring resilience against the negative influences of climate change.

We faced multiple challenges along the way such as maintaining a good business case by putting the SDGs into a local real estate context and finding solutions for conflicting SDGs.

## Solution / Approach

- Having settled on addressing the SDGs, we started interpreting them in a Danish real estate context, which led to the six core themes: water, energy, biodiversity, materials, community, and health. From this framework, we came up with a long list of 300 initiatives, of which 200 were selected based on the most sustainability impact for the investment. Through initial

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LCA analysis we incorporate various materials and construction principles with lower CO2 emissions (including choice of building system, insulation, and concrete. a).

- We consider the UN17 a laboratory to test and develop solutions to increase sustainability in the built environment.
- You will see lots of evidence of upcycling across the UN17 Village. The initiatives include upcycled roof tiles and recycled painted aluminum for facade cladding, recycled glass mixed into the concrete staircases and small, sawed-off pieces of wood that are reused to build roof houses and sheds.
- On the disassembly side, we have worked on designing sustainable building systems that can be environmentally disassembled at end-life. This includes our wooden construction building, which is Denmark's tallest residential building (24 meters, 7 stories). In the actual apartments and the interiors, we chose Rotpunkt kitchens, which are made from 90% upcycled wood. The fabric for the furniture in the common areas is made from ReWool, and the seats and backrests are made from upcycled plastic. We also have indoor climate-labelled materials and surfaces that reduce harmful gases to the indoor climate.

- We are establishing inclusive green public spaces with focus on social interaction and security. We have implemented measures to make healthy choices for both people and the planet, such as choosing bicycle over the car, stairs over elevators and set up charging stations for electric vehicles.
- Finally, we focus on recycling and recovering waste from the construction site and collecting and reuse rainwater. UN17 collects rainwater from roofs and courtyards and reuses it for recreational purposes and watering of plants.

## Results

When the UN17 Village is fully completed in 2024, it will consist of five residential buildings, housing approximately 1,100 residents in a total of 535 apartments.

### Building design:

- > Four out of five buildings have wooden facades, and one with upcycled aluminum.
- > One of the buildings is designed to achieve status as the most healthy apartment building in Denmark (with certifications to support it).
- > The total CO2 reduction for the UN17 Village is 31% compared to the new requirements for the Danish Building Regulations.

- > The UN17 Village will have 1,700m2 of PV panels creating Denmark's largest energy community. This will increase consumption of locally produced renewable energy.
- > The buildings are designed to collect over 1 million litres of rainwater per year for reuse.



### Target groups

- > One building will house people aged 40+ and is based on a co-housing model.
- > A second building targets 20-35 year old tenants and will house our serviced-living platform Noli studios.
- > Others provide larger units for families and feature a mix of sizes to cater for all age groups.
- > We are creating the foundation for communities in each of the buildings to thrive, and we are already seeing signs of a genuinely inclusive community taking form.
- > The project is targeting WELL certification, DGNB Heart and DGNB Platinum.

### Story

UN17 Village is the first development in the world that addresses and incorporates all 17 UN Global Goals through an innovative method in one complete solution. This approach to future construction challenges the status quo in a holistic project that seeks new standards and partnerships with an ambition to increase social, environmental, and economic sustainability. We have thus laid the foundation for an open laboratory to create and disseminate building solutions of the future that are based on the UN Global Goals. Our ambition is for UN17 Village to be a contributor to a more sustainable approach in the built environment and the lives people lead within it. We hope that stakeholders across the construction industry will follow suit and get involved in close and innovative collaborations.

### Urban Partners

Founded in the Nordics in 2005, Urban Partners is a family of vision-aligned investment businesses that unite insights, capabilities and capital within the urban ecosystem to create thriving places and decarbonize the built environment. We comprise four active verticals, one is Nrep who is our real estate equity business focusing on customer-centric and sustainable real estate. Nrep is the investor, developer and operator of the UN17 Village. .

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