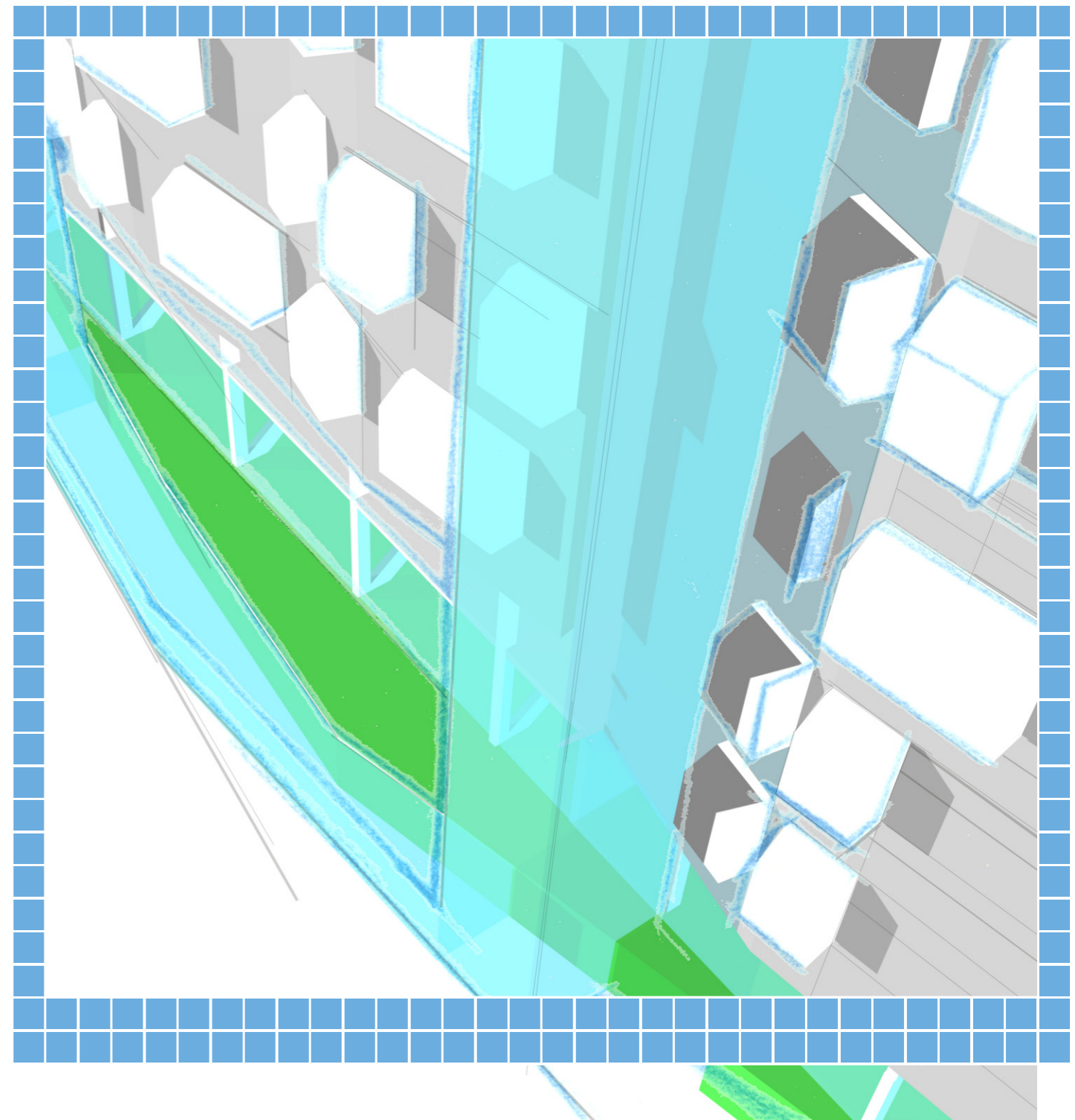
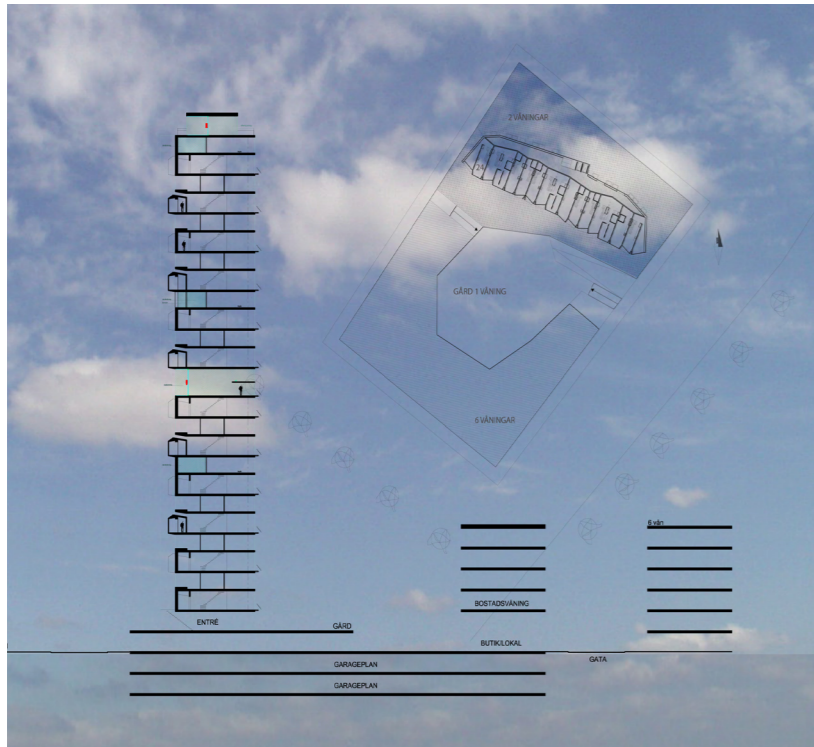


*WSP is a global company that offers qualified consultancy services for the public sector and the environment. With more than 100 offices around the world, and 6000 employees, WSP is one of the largest consulting companies in Europe, and amongst the ten largest in the world. Operations are concentrated primarily in England and Sweden, but also extend to the rest of Europe, the United States, Africa and Asia. In Sweden, WSP is a nationwide consultancy company employing 1900 people. Operations are conducted through the business areas, WSP Analysis & Strategy, WSP Architecture, WSP Construction Design, WSP Environmental, WSP International Sweden, WSP Management, WSP Civils and WSP Systems.*

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A room with a view



## A room with a view

*“A room with a view” is close collaboration between architects and technology specialists at WSP. The project has been carried out free of assumptions, where new ideas have been put to the test of experience and knowledge. Both broad and in-depth expertise have been brought to bear, in order that the project can be fruitfully and comprehensively launched taking all aspects into consideration.*

The view is from a tall building. The location is the future Norra Station area, a place between a city and a park. The structure will be a landmark for the city, an expressive watchtower on the approach to Stockholm.

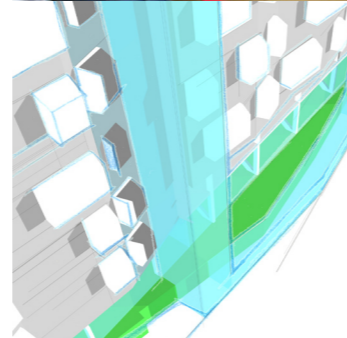
The insight is that we must begin to economise with our finite resources in a much more consistent way. The objective has been to create an energy-efficient residential structure by using safe technology in an innovative way. The interplay between architectonic design, good and sound structural engineering, as well as energy-efficient, reliable installations create energy conserving, environmentally friendly buildings with a good living environment.

The building will provide many residences in a small area; a home with 26 storeys with room for 160 flats of varying size and character.

The design originated in a fundamental idea that a very well insulated building envelope encloses a compact structure with a repetitive carcass. A high degree of prefabrication permits great flexibility in planning.

The sun will be used as the primary light and energy source. This gives the building its transparent and varied south facade. Architecture and technology interact and potentiate each other, and the building's physics and configuration unite, such as in the ventilation chimneys and the highly insulated glass facade.

The flexible carcass provides varying and airy flats. Most are two-storey flats. The entrances, with their high ceiling, allow room gathering and



cooking. The room opens onto the city, with large window sections and balconies. Further in is space for working and multimedia in a studio. The second storey is more private and has an attractive view over the city and park.

The illumination in the home differs between the two sides. The inner rooms are characterised by a diffuse overhead light from the north, while the south-side illumination varies in accordance with weather and season. Laminates in the glass shade or transfer light into the flat as needed.

New technology simplifies communication, housework and security. Verdant greenhouses placed among the flats provide meeting space for the residents. There are also rooms for laundry, parties and relaxation. The ground storeys have space plans for work, socializing and meals near the home. The basement will have shared cars and recharge stations for environmentally friendly vehicles.

The southern facade utilises solar heat for the building's energy supply. Heat pump technology and the ground beneath the building will be exploited for naturally stored geothermal heat which will be augmented with surplus solar heat during the summer. The system gives the building a very low need for supplemental energy.

The super-insulated hybrid windows have integrated air cooling and air warming. New solar shading technology prevents unwanted excessive temperatures, simultaneously transmit light into the ceiling, and provides the sensation of daylight in the innermost reaches of the room.

A heavy building framework with a low-temperature self-regulating floor heating/cooling maximises the exploitation of direct solar insolation and surplus heat from household appliances. This gives a comfortable indoor climate and the possibility of air conditioning in the summer.

Ventilation must be controlled in a tight and well-insulated building. The forced air supply and exhaust air system, which can be controlled on demand by the residents, provides highly efficient heat recovery. The system permits filtering of supply air and screening out a noisy external environment.

By carrying through the EPCM concept, a stable focus is preserved throughout the entire process. An all-embracing responsibility is assumed for the project's totality: function, quality, costs and deadlines. The reference calculations provide the ongoing possibility to control the costs toward a realistic investment from an early planning phase. Planning, procurement and building processes are carried out by a well-oiled team in open dialogue with the contractor.

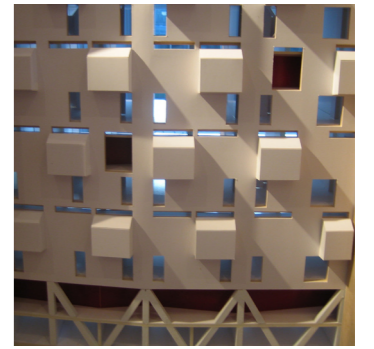
By using needs analyses and simulation, the concept can be adapted to various orientations, siting and conditions. We are also preparing the energy system to be ready for future technology, such as electricity production from solar cells and fuel cells, for both electricity and heating.

The exhibition is a moment of contemplation in the middle of an ongoing effort, where we look forward to dialogue about living and working.

The goal is to be able to realise a project in the near future where the consumption on non-renewable energy is virtually nought.

The concept "A room with a view" has been adapted into a residential building. With the proposition "The parts that make the whole" WSP participated in Hammarby Sjöstad's Environmental Technology Competition. The proposition shared 1st prize with the motivation: "a systematic and well executed presentation of combinable technical solutions to accomplish a low overall energy consumption...".

We are also developing "A room with a view" into concepts for hotels, retirement homes and more traditional residential habitation.



Stockholm will get a new view  
and a new insight, a public  
space that presents new vistas.

