Logistics Framework

Adaptable structure for a garbage collection company, Brussels, Belgium

Summary and appraisal of the project by the jury

As declared by the architects, the project – located along the Willebroek Canal in a fast-growing district of Brussels – has to satisfy the particular current needs of a waste collection company, while simultaneously being able to adapt to changing future circumstances. Addressing this double agenda, the project proposes a carefully designed framework that is both specific and general. Whereas its specificity pertains to the building’s integration in the urban fabric (establishing a green corridor between a residential neighborhood, a small park, a new courtyard, and a canal), its structure is functionally indeterminate, allowing the building to transform in time according to future needs. Its primary concern is the presence of a garbage company, but the project also offers a high potential to be highly adaptable to other scenarios. The building stages its daily activities in the midst of a vibrant neighborhood, foregrounding the co-dependence among seemingly incompatible functions in the city.

The design’s adaptable framework as well as its minimal deployment of architectural and technical means was considered a remarkable contribution to sustainable construction by the members of the jury panel. The proposed scheme’s twofold approach to the task at hand – offering a careful urban integration of the facility as well as providing a non-specific structure that can accommodate future needs – was greatly appreciated as the discussions unfolded. Particularly valued was the design’s underlying premise to re-integrate logistics infrastructures in the city (such as those needed for garbage collection), rather than displacing them to peripheral locations and keeping them out of sight, or to speak. Bringing infrastructure to the fore, the design merges economic and aesthetic considerations, offering a form of resilient architecture that turns limitations into a quality.

A good city has logistics: a driving force for a healthy urban metabolism

The evacuation of garbage is part of the elementary flows that make a city operate. As a logistic activity it is often considered a source of nuisance and incomprehension. However, the role of logistics and industry is vital to sustaining the success of the city’s economy. Their proximity is indispensable for efficient operation and transport. The project area has to overcome the apparent contradiction between city and logistics, between the residential area Neder-Over-Heembeek and the logistic area of Meudon Park. The existing Meudon Park separates the residential area from the industry near the canal. The new forested area in the center of the site creates a green tentacle that connects both urban fabrics. The central green space is designed as a resilient buffer area that separates different environments while also forging a link between them. The greening is a social core at the center of the working environment. It brings people together. Employees can have a chat on the way to their cars, have lunch in summertime or organize a staff party under the trees. The greenery acts as a filter for fumes, fine dust, and noise – caused by the vehicles of NET Brussel. The trees minimize environmental disruption and create high comfort working spaces, maintaining quality of life in the neighborhood.

A good city is adaptive: a generic urban and building typology

Sustainable development requires flexible and generic building types that can adjust to changing circumstances. The building of NET Brussel is conceived with a carefully designed framework that is both specific and general. Its primary purpose is the presence of a garbage company, but the project also offers a high potential to be highly adaptable to other scenarios. The building stages its daily activities in the midst of a vibrant neighborhood, foregrounding the co-dependence among seemingly incompatible functions in the city.

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Project data

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Client: NET Brussel
Project background: Public commission
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Image 1: The supporting urban structure points to党政 and the generic building conditions open spatial system with flexible and universal guided allow for an urban resilience, varying from an industrial plus mix to a residential plus mix. They create a long term possibility of introducing housing in an industrial area where it is currently not suitable. The actual design (parking, vehicle maintenance, offices, robotic and buses center) is situated more towards the industrial end of the scale.

Image 2: Sustainability concept: reducing the demand of energy by implementing energy-saving measures (greening as passive cooling, adequate orientation, overhanging slabs for sun protection, thermal insulation, heat recuperation, electric vehicles, etc.), using sustainable sources of energy (district heating, wind pump, photovoltaic panels, heat loop, etc.), recovering recuperation and reuse (greening, buffer, compensation, etc.) and generic building typology (load carrying slabs, big spans, etc).

Image 3: Situation of the project in the northern segment of the canal area.

Image 4: Two levels: the canal level and the residential level, connected by the base and the green area.

Image 5: The front façade communicates with the canal and with the public space. The slab connects functions.

Image 6: Washing zone, vehicle control, entrances and fitness under the party under the trees. The greenery acts as a filter for fumes, fine dust, and noise – caused by the vehicles of NET Brussel. The trees minimize environmental disruption and create high comfort working spaces, maintaining quality of life in the neighborhood.


Image 8: View from the forested area towards the vehicle ramp and the parking places.

Image 9: Adaptable structure for a garbage collection company, Brussels, Belgium

Image 10: Floor plans (ground level, mezzanine level of the social building, parking level) and section.