

Flemish Government Smart Office 2023

In 2023, 3,800 Flemish civil servants moved to a circular office building in Brussels' North Quarter, on the site of today's WTC towers. The project, named Kantoor2023, achieves the score 'excellent' on the GRO sustainability meter and is a first in Flanders in terms of circular building. Ingenium is supervising Het Facilitair Bedrijf of the Flemish government in its pursuit of a project that links maximum sustainability to a flexible, comfortable and healthy working environment. The Smart Readiness Indicator is also tested on this building.

Highest possible score

Office2023 achieves the highest possible score on the GRO sustainability meter. Achieving the score "excellent" is not self-evident. The criteria by which sustainability is measured translate into concrete requirements that are sometimes difficult to reconcile. A classic example is daylight. Providing lots of daylight can lead to overheating in the summer, resulting in higher indoor temperatures. When designing Office2023, as many factors as possible were taken into account from the very first stroke of the pen. Thanks to that integrated approach, the building achieves an excellent score. The design scores well in all areas and benefits people, planet and profit. For example, the design scores well in terms of acoustics, there will be plenty of daylight, a panoramic view, excellent indoor air quality, etc. Furthermore, Office2023 is also a socially safe design. The mix of offices and residential floors prevents it from being dead at night. Public places such as a sports center, catering facilities, a conservatory ... ensure that even outside office hours there is something to do. And that everywhere. The building has no back facade, all sides are equally valuable and equally active.

Circular

Currently, the two WTC towers are being dismantled. The radiators, the ceilings, the carpet tiles ... are all going out. These materials are not considered waste, but raw materials. They also do not go to the landfill, but are reused, sold in which place they can be easily found if a material needs to be replaced. Thanks to the material passport, the technical properties and lifespan are known and you know how to dismantle this material. It is either recycled, so the cycle closes. Thus, up to 95% of the material can be recovered or recycled.

Even the new materials used in construction are given a materials passport and inventoried. This way one knows exactly which materials have been used in which place and they can easily find them if a material needs to be replaced. Thanks to the materials passport, the technical properties and lifespan are known and you know how to disassemble this material.

Energy efficient

Office2023 will achieve an E-level of E15. It will be a near-zero energy building. This means that little energy will be needed for heating, ventilation, cooling... and that the necessary energy will be obtained from renewable sources. There will be solar panels on the roof, but also in the canopies on the facades, which will also serve as sunshades. There will also be a cold-heat storage system whereby a heat and cold exchange with the groundwater will be installed, and energy-efficient appliances will be chosen.

Smart

Spurred by smart grids and other new energy technology coming to market to make buildings even more energy efficient, the European Commission's DG Energy launched a Smart Readiness Indicator (SRI). This indicator is under development and aims to indicate where there is still improvement potential for a given building. By applying the SRI, a number of additional opportunities are already being explored to make Office2023 even more energy efficient.

Ingenium

Unlike in many other projects, Ingenium is not acting in this project as a classical engineering firm for the engineering of the building. From a framework contract with HFB, Ingenium guides this project in the various phases of the change process, with specific attention to sustainability, energy neutrality and maintenance. During the evaluations and negotiations of the submitted price offers, we advise the client in matching high ambitions with realistic expectations..

During the development of the project, we follow up on the established principles. And also during the operation phase, supported by an adequate BIM model, we ensure the monitoring of the program of requirements through

Client

Het Facilitair Bedrijf

Location

Brussels

Sectors

[Smart office building](#)

Services

[Smart buildings](#)
[Commissioning](#)

commissioning.

In particular, we guide the Flemish Government in the implementation of several hundred charging stations in the parking lot, which is technically a real challenge.

This way of working strikes a balance between comfort of and for the user, the sustainability including energy neutrality of the building and the impact of changing legislation. Not an obvious balancing act for smart building experts.



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