



Brussels:

Brussels-Capital Region: 19 districts

Office stock: 13 millions m²

Converted offices since 1997: 542,000 m², whose 358,000 m² into housing.

Unoccupied office space: Close to 10% in Brussels Capital-Region and 30% in Brussels's outskirts.

Source: Office Observatory of the Brussels Capital Region

Paris:

Central Paris: 20 districts

Office stock: 16 millions m²

Offices converted into housing since 2000: 230,000 m²

Source: APUR 2009 and APUR-SDPCPR

Amsterdam:

Office stock: 7.5 millions m²

Unoccupied office space: 1.3 millions m² (+ 17%)

Source: City of Amsterdam Press Office and PropertyEU

BRUSSELS: WHY SO EMPTY?

Time to turn unused office space
into other habitable functions



Aerial view of downtown Brussels. **Source:** BLOM 2004/2013.

Writer: Anders Böhlke is an architect based in Brussels. He manages the Executive Master in Real Estate at the Saint-Louis University in Brussels and works as an analyst at C.L.I. urban think tank.

Time in the real estate industry is very slow. Studies are long, permits even longer, construction takes months to years and buildings last decades to centuries. To adapt urban space to constantly evolving human needs and to address growing environmental challenges, we have to examine more closely how we use buildings.

In many European cities, most buildings of tomorrow are already built. In Brussels, the

renewal of the building stock reaches 1% of all buildings each year: it could take 100 years to replace or renovate the entire buildings. There are too many offices and too little housing space. Is functional conversion the key to the problem?

Anders Böhlke provides insights into the need to convert more empty office space into new lodging functions to help confront exponential demographic growth with three concrete examples that have already been carried out: a conventional one-family apartment, a retirement home, and an art school.

As the Capital of Europe, Brussels has experienced tremendous growth in the office building sector since the 1960s. As the market went international, many new professions appeared in the real estate industry; demand kept growing with the expansion of EU institutions and the successive European enlargements. For many years now, the pace has slowed and more than 10% of total offices are vacant (available, on the market, or unoccupied). There is too much office space for diminishing demand. This phenomenon is not foreseen to shrink, mainly for two reasons:

- Today's economic context is not conducive to new settlements from local or international companies. EU institutions also rationalize their implementations, as do companies. The actual demand in office space is mainly a replacement demand: companies move to new offices, leaving old ones behind.
- Since the design and techniques of office buildings evolved considerably throughout the last decades, the obsolescence of office buildings accelerates. Occupiers move easily to find better, well-equipped, up-to-date spaces.

Simultaneously, Brussels is facing a large demographic challenge. There is a need for at least 7,000 new housing units each year, but production is only two times that rate. Real estate developers have typically concentrated on traditional housing, and are beginning to look at other housing segments: elderly homes, student housing, and new hotel concepts.

If empty office space is available while population growth continues to increase demand, then converting office space into housing is an obvious response to address this challenge.

*

Adaptive reuse consists of recycling old buildings for a new use. This is not a new phenomenon, in Brussels or elsewhere. The renewal of cities and neighborhoods has often been based on the mutation of preexisting functions. In New York City, the first lofts appeared in buildings in which industrial or commercial activities were no longer viable. The Highline, an abandoned railway became a famous city park. An old office building became the Calhoun private

school. In London, the Tate Modern Museum settled in an old power station. In Brussels, an old custom rail building became offices and shops, stores became museums and nowadays offices become housing units. (see New York City, Green Urban Jungle, for more details on the conversion of the Highline Park, pages 39 to 50.)

Many houses in Brussels are at least a hundred years old. If they have been upgraded technically or refurbished, their layout has stayed relatively stable and has adapted easily to different functions: from one family home, to small offices, day nursery or divided into apartments. Typically, housing in Brussels shows adaptability.

On the contrary, office buildings have considerably evolved throughout the last decades, matching new occupier's needs (EU institutions) and following the evolution of work, workspace organization, technical progress, and information and communication technologies.

Obsolescence is not directly proportional to age. Recent buildings are in general much more specific and therefore less flexible



The Calhoun School, a private school located on Manhattan's Upper West Side, commissioned FXFOWLE to design a four-story addition to the original five-story building. The design, which resulted in an additional 2,800 square meters of space, resolves the formal and programmatic challenges entailed in expanding vertically and horizontally to the 1973 concrete and travertine building. The expanded school contains a two-story performing arts center, with a 234-seat black box theatre as the centerpiece. Surrounded by rehearsal spaces, set design shop, and music instructional spaces, the three-quarter round theatre provides flexible performance space for the arts department and specialized teaching space for all the arts. General purpose classrooms and science labs are included too. The 500 square meters gym is located on the top floor of the addition. A green roof tops the building. The school remained in operation throughout construction.

The Calhoun School, New York, NY
 Completion: 2005
 Awards: 2007 DesignShare, Merit Award
 Images: courtesy of the Calhoun School, James D'Addio

than before. Old office buildings from the 1950s and 1960s make often better homes than the ones build thereafter, only because their layouts an structures are simple.

The new construction and/or refurbishment of office buildings are considered outdated by the occupiers and the market at a higher rate than before. The lifetime of a building's use and function is much shorter than the shell – the actual building. And it is shrinking. Building lifespan was around 50 years after World War II and reaches only 15 years today.

Often offices are located in “grapes” or in central business districts (CBD). In Brussels, they are the two main offices districts: the European Quarter and the North District. Converting buildings in office districts is coherent with the political will to encourage the requalification of the mono-functional administrative areas. Implementing other functions such as housing in those neighborhoods helps increase their attractiveness.

Office conversion is also an important way to include an efficient concept of

the energy embodied in buildings: “gray energy”. Re-occupation of empty buildings is a very important saving compared to energy put into the process demolition and reconstruction.

Brussels have seen numerous office buildings conversion (see book cover below).

The analysis of realized projects shows that mainly up-market apartments have been produced so far through this process. This is due mostly to the high cost of the transformation works. This fact shows the limit of the practice because housing is not just about one-family homes.

The lack of social housing, student housing and elderly homes is important in Brussels: demand is huge and waiting lists grow each year. Social housing represents around 8% of the total housing stock, which is 2-3 times less than in neighboring European cities, such as Amsterdam, Paris, or London.

The future of office conversion relies largely on types of unconventional housing and other facilities, such as schools, which derive from necessary demographic

adaptation. Adapting to existing shells, conversion projects will have to optimize the respective layouts – sometimes rethinking the way we live, proposing new ways of designing space.

4 SOLUTIONS

- **Improve access to information:**

In real estate, data is less accessible than in other sectors and sometimes difficult to compare (different methods of calculating surfaces, vacancy rates, facial rents vs. real rents...)

- **Fight against empty buildings:**

Identifying those buildings, putting additional taxes on empty space, you can encourage and support studies of convertibility.

- **Move to convertibility:**

Designing projects to fit the rules of housing and offices, you can facilitate future transformation facing the evolution of needs.

- **Facilitate the conversion:**

By knowing the occupiers needs, implementing incentives for studies and analysis, you can accelerate building permits for conversion.



About the book:

Yesterday's Offices, Today's homes is based on the analysis of a sample of some 200,000 m² of offices converted over the past 15 years in Brussels and showcases 25 examples of transformation in three main axes: the agents of change, the motivations for the transformations, and the location criteria. Based on Brussels advanced knowledge on the subject and other experiences of large European cities, this book considers the future of functional mutations in the city and the appeal to achieve the objectives of diversity and sustainable development. The book should help encourage the owners of empty buildings to examine the potential for reuse of the property efficiently and profitability.

To order a copy, contact : info@cli.be

Authors: Christian Lasserre, Pierre Laconte, Anders Böhlke, Béatrice Dooreman.

Editor: Region Bruxelles-Capitale

Available in French and Dutch with an insert in English
Out in March 2013.



Typical suburban offices turned into a retirement home. Source : Altiplan° Architects.



A retirement home

Recently converted into a retirement house, this building was for many years, one of the best-known addresses in Belgian media: RTL. The conversion of the building was made without any significant changes to its façade or structure. The blueprint shows how easily open space was compartmentalized into cells, suitable for this particular type of housing. The internal initial design – as a single company headquarters – is well-adapted because of its large common areas. The transformation shows what can be expected of future developments in this type of office buildings located in suburban districts, facilitating conversion into hotels, rooms, and studios without major structural changes.

Year of construction: 1993

Architect: Polak-Stapels

Year of transformation: 2008

Operator: Orpea Belgium

Architect: Altiplan° Architects



Former VAT building on the Place Morichar in Saint-Gilles. **Source** : Region Bruxelles-Capitale.

A public art school

Built in 1974 as offices and leased for more than 30 years to the Belgian Ministry of Finance, this building was converted into an art school (L'Ecole Supérieure des Arts St-Luc Bruxelles) in a central district of Brussels. The school identified this building as ideal for its activity: in addition to the proximity to the historic headquarter of the school, the building presented many advantages:

- The size of the building allowing for the grouping of scattered activities
- Large and rational floors not too deep to be naturally illuminated
- A good fire safety (three staircases for evacuation)
- Conformed sanitary equipment
- Absence of asbestos
- A high ceiling suitable for large workshops
- Opening frames providing natural ventilation
- Movable partitions

In terms of the environment, the building is located on a square where a recreational green area has been redeveloped. Students moved in without any major structural changes to the building other than refurbishment. Municipal authorities requested that the students make proposals to illustrate the façade visually without breaking the transition from being a public administration building to an art school. This is an excellent example of cooperation between the municipality, the institutes and the owners.

Year of construction: 1974

Year of transformation: 2011

Operator: Instituts Saint Luc Brussels

Architect: OZON architecture

In comparison, the Calhoun School in New York City (p. 34) resolved the problem of the need for outdoor space and the lack of a playground in a dense urban area by putting an accessible green area on the rooftop of the building (a semi-intensive green roof).



New balconies were built inside the façade. **Source** : Bureau d'Architectes Emmanuel Bouffieux.



Curtain wall façade before transformation work.
Source : Bureau d'Architectes Emmanuel Bouffieux.

Single-family apartments

This building is perfectly representative of a small office block from the 1960s, designed in an era where most of the office operators also provided housing. The curtain wall façades and their interiors marked the obsolescence of these buildings. At a time when many offices located in the adjacent streets to Avenue Louise had trouble finding occupants, this transformation was one of the first to turn old offices in large apartments. 🌱

Year of construction : 1958
Architect : R. Goffaux
Year of transformation : 2004
Operator : LAM real estate
Architect : Bureau d'Architectes Emmanuel Bouffieux

About C.L.I. :

C.L.I. is a Belgian consulting firm specialized in urban studies with expertise in office building conversion and market analysis for the Brussels-Capital Region and the private sector since 1995. In Brussels, C.L.I. contributed to the implementation of a new town-planning rule for new office buildings to fit housing regulations. C.L.I. also worked with different Ministries, developing projects to implement rewards and fees to incentivize owners to analyze the feasibility of conversion projects with young architecture companies. Led by Christian Lasserre, the C.L.I. team includes Anders Böhlke and many other contributors from architecture and city-planning.

