

VIRTUES OF VERTICALITY

Amid France's construction pause, driven by regulation and a weak office market, we should rethink how verticality, paired with thoughtful planning, can foster sustainable, human-centered urbanism for future cities, write *Nayla Mecattaf and Jean-Luc Crochon* in their new book, *The Virtues of Verticality*.

The ball is in the court of the urban planners who shape the future of our regions. As we have seen, carbon emissions from the construction sector will soon cease to be the primary concern, thanks to research carried out, but global warming is already a reality. This understanding is fundamental in guiding our development. Density constitutes a tool, and verticality is a possible response to certain situations. Numerous examples around the world illustrate this approach.

Despite the fact that 80% of the world's buildings exceeding 200 meters were built in the last 20 years, the subject of the high-rise is not currently on the agenda in France. The challenging global environment and a sluggish office-building market complicate the task. However, it is during these times of crisis that projects are conceived and opportunities created, and regulatory measures must enable revival. Let us encourage initiatives and capitalize on our strengths in Paris and beyond, in those places where planning regulations authorize vertical development as a solution to meet market demands.

High-rise buildings have an amplifying effect. So, the question is not how much, but how this building

typology can help us to shape urban development by embracing its virtues. Verticality is not an obligation; it is discretionary. The introduction into regulatory tests of contextualized assessment elements that highlight the value of verticality presents no major risk. The real-estate market itself will moderate. It is an opportunity rather than a demand. As towers undergo their carbon transformation, a new kind of urbanism must be written. Let common sense prevail.

“A building that is 100% occupied is the highest certification, because its carbon is 100% useful.”

Challenge Preconceptions

Let's take advantage of this period of observation to address the issue and propose constructive solutions to preserve the spirit of these regulations while improving them. Without rewriting the existing texts, shouldn't we consider the relevance of regulations without context? Shouldn't we consider adding assessment criteria that could have a positive effect on the carbon footprint of construction?

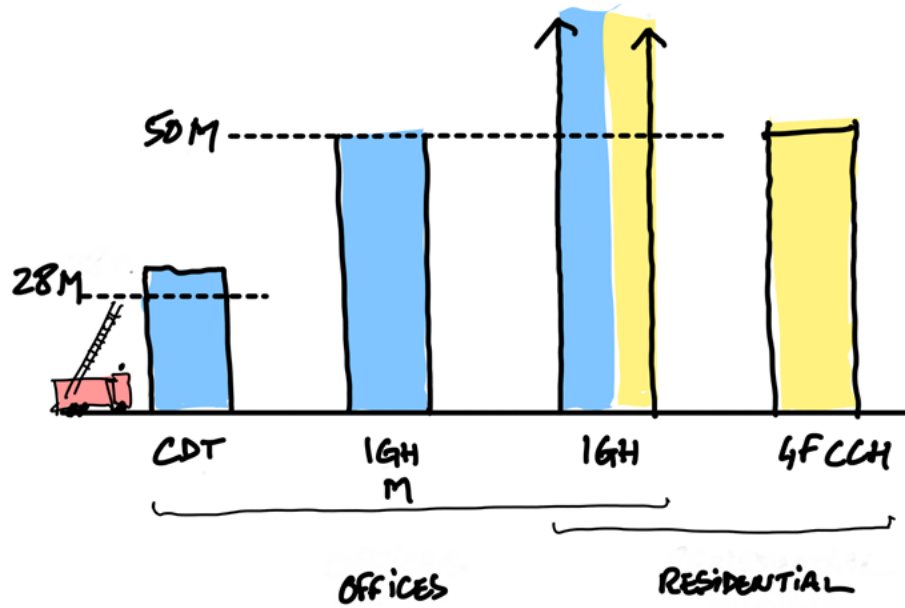
Location

Is it right that the carbon footprint for a building should be considered the same throughout France and its overseas territories? And that it should be the same in urban and rural areas?

It is surprising that these regulations are completely delocalized, or unrelated to the site of construction. A surplus of office space has followed the current crisis, resulting in high vacancy rates, but these are unevenly distributed, as they don't take into account the broader context and existing availability nearby.

Integrating this concept into the regulations would seem feasible and logical, and would allow densification only when relevant.

Right— Buildings subject to the “code du travail,” office high-rise and residential high-rise regulations (fourth category of the French Building and Housing Code).



CRO&CO ARCHITECTURE

Right— Trinity's 3,500 m² of landscaped space covers the roads, greening and reconnecting two formerly separated neighborhoods.



LUC BOEGLY

Proximity of Public Transport

It has been demonstrated time and again that the carbon footprint of the building users' transport is much greater than that of the building's construction. We should therefore introduce a carbon criterion based on the proximity of public transport. This would enable the development of a new form of urbanism which, logically, should enable local planning regulations to provide height exemptions around transport hubs. At the time of writing, cities such as London and Rotterdam appear to have already incorporated this into their urban regulations.

Introduce Use Intensity and Chronotopia

Because the concept of single-use buildings has had its day, briefs are evolving towards mixed-use.

Let's incorporate into the calculation of the building's carbon footprint an indication of the intensity of use on land that is already sealed, taking into account the capacity authorized by local planning regulations.

Let's incorporate into the calculation of the building's carbon footprint an indication of the intensity of use, relating the built area to the number of users.

Let's incorporate into the calculation of the building's carbon footprint an indication of occupancy times, relating the built area to time used.

Let's incorporate into the calculation of the building's carbon footprint an indication of space made available for external use.

Introduce Re-use

Let's incorporate into the calculation of the building's carbon footprint an indication of levels of re-use, considering the regulations specific to each refurbishment project, promoting and encouraging this approach while addressing questions of guarantees and responsibility.

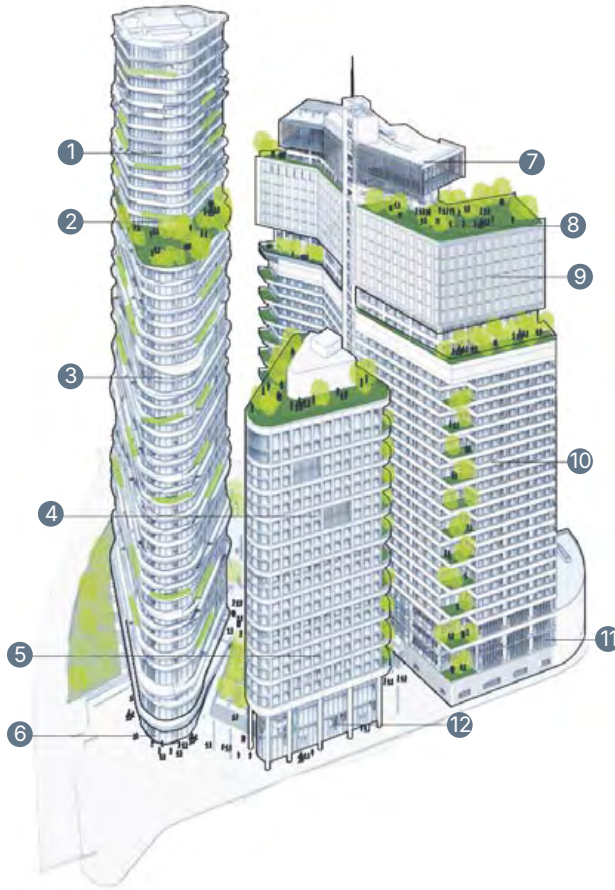
But above all...



L'AUTRE IMAGE

Left and right—Odyssey, Courbevoie, France, elevates the principles outlined in this article to the next level.

- ① Offices (57,300 m²)
- ② Café
- ③ Gym/Restaurant/
Business center
- ④ Co-working (7,000 m²)
- ⑤ Co-living (5,200 m²)
- ⑥ Retail units (1,200 m²)
- ⑦ Public amenities /
Roof terrace (3,500 m²)
- ⑧ Hanging gardens
- ⑨ Hotel / Gyms
(13,300 m²)
- ⑩ Offices (42,000 m²)
- ⑪ Retail units /
Restaurant (3,400 m²)
- ⑫ Retail units (1,200 m²)



CRO&CO ARCHITECTURE + CROMESTUDIO

Humanize

In France, the benchmark environmental rating is the high environmental quality (HQE). In 2010, we registered the trademark “HQhE” with the National Industrial Property Institute (INPI). This rating incorporates the notion of use and user at the heart of the project, with a second “h” introducing the human factor (high human and environmental quality). The aim of this was as a reminder that the construction of a building should not be an end in itself, but rather a means of meeting the needs of its users and their well-being. In the words of Mies van der Rohe, “Form follows function.” While the idea is not new, it is important to remember that certification for the sake of certification is meaningless. Our greatest reward is

to see our buildings come to life thanks to their occupants, to observe their satisfaction and remember that a building that is 100% occupied is the highest certification, because its carbon is 100% useful. To be desirable and widely acclaimed, you must put “human” at the heart of the project.

Make it Desirable

We are convinced that a return to office is underway, as it is both advisable and necessary to the recreation of a balanced society. As a place to come together, the workplace plays a crucial role in creating or recreating social links between individuals. When you’ve finished school, what better place to meet new people? Architecture has a responsibility to design places and atmospheres that contribute to the

well-being of those who frequent them. We are therefore committed to designing desirable workplaces that encourage social interaction and collective intelligence.

We put the idea of serendipity at the heart of our designs, incorporating spaces that allow users to cross paths with each other by chance and spontaneously. This takes shape with the creation of spaces that are welcoming and have a strong sense of identity, and with the desire to get together and chat, particularly for the hyperconnected and well-informed younger generations. A true gift from above, natural light is enhanced by the virtues of verticality, which offer their benefits to a wide public. Finally, by sharing breath-taking views over the city, this urban form amplifies feelings of well-being and connection with the city. The virtues of verticality encompass the joys of verticality.

Trust

The carbon footprint of 100%-leased building is 100% useful, and cooling islands, which help to mitigate the effects of global warming, are the key to urbanism of the future. The question is not to understand the regulatory framework, but rather to understand whether a project is appropriate for its context. Verticality is an urban solution that, when appropriate, also makes sense from an environmental point of view. Of course, it is not suitable everywhere, and we have fully understood its inextricable link with transport hubs. It remains a tool available in policies to densify areas and preserve the planet from the continuous nibbling away of its fertile land. Rebuilding the city on the city will ensure this evolution.

When design is led by common sense, doesn’t it produce architecture that is harmonious and elegant? Might this be an implicit response to the question of what constitutes beautiful architecture? *Nayla Mecattaf and Jean-Luc Crochon are principals of Cro&Co Architecture and CroMe Studio. This essay is excerpted from their new book, The Virtues of Verticality.*