



GARDENS IN THE SKY

After a protracted ban on buildings more than seven storeys high and with the Olympics approaching, Paris is falling back in love with big urban projects. But will plans for a garden skyscraper end in highrise remorse? By **Matthew Ponsford**



The historic Tour Montparnasse will be transformed into a beacon of sustainability, with new transparent shell cladding and ‘forests’ that will improve air quality

Planting a tree on top of a tower, where high winds thrash, takes more careful preparation than you might realise, explains architect Stefano Boeri. But growing a forest that covers a skyscraper means rethinking architecture from the soil up.

Boeri is the visionary behind a pair of residential towers in Milan studded with 800 trees and several thousand shrubs and plants. Named Bosco Verticale, it is the first real-world example of the “vertical

orbiting suburbs – home to the other relics of a time when Paris built big, the hulking post-war housing estates known as the Grands Ensembles.

Breaking with the concrete and glass facades of those 20 century giants, the new fairytale projects have won officials’ approval by promising to be anti-skyscrapers. Far from overbearing their surroundings, these monuments to nature will provide verdant vistas, cleaner air and butterflies, birds and biodiversity, their designers claim.

Boeri is hopeful that his own project can add new twists – like a wooden frame and variegated planters – to his success in Milan and he says he sincerely wants other architects to “do better” than he has, pushing the vertical forest concept further in Paris.

Others see a crisis ahead.

With only the Bosco Verticale to look to as a working prototype in Europe, plus other tree-trimmed structures taking shape far away in China, there is little solid evidence that garden skyscrapers will bring the benefits of cleaner air and greater biodiversity to a city like Paris, especially where trees are being lost or overshadowed to build them.



The Bosco Verticale in Milan is the first real-world example of the vertical forest concept

Tellingly, Boeri calls the Milan tower a “prototype but at the same time an experiment”. The towers achieved their goal of hosting 20,000 plants and attracting families who take passionate care of their gardens, Boeri says, plus tests indicate the trees have cut energy consumption in summertime by cooling the building naturally.

But the architects continue to subject the building to studies to learn more lessons about the extent to which it absorbs CO2 and dust particles, as well as the diversity of species that can live there.

And there’s no guarantee that all developments will share Boeri’s steely commitment to the “vertical forest” vision.

Design podcast 99 Percent Invisible has highlighted the extra challenges “treescrapers” face translating concept to completion. It details how concrete and steel needed to support to trees’ weight and plants’ irrigation systems push all but the most committed architects to pair back greenery. All this extra steel and concrete has a carbon cost, too.

Penelope Komites, Paris’s deputy mayor, in charge of parks and biodiversity, says vertical forests form part of a broader plan to green Parisian streets, which will bring undoubtable environmental and social benefits.

