Wood buildings: a solution to urbanisation and ESG

Timber buildings can be delivered faster and offer huge sustainability benefits over steel and concrete. **Lars Schnidrig**, CEO of Corestate Capital Group, explains.

here are two megatrends shaping the development of the property sector in Germany and Europe: urbanisation and demographic change. Studies predict that by 2050, more than 80% of the German population will live in cities. In the Munich region alone, more than 20,000 apartments will need to be built each year to 2030 to address the housing shortage.

At the same time, the number of households will increase as more and more people are living alone. The German Statistical Office calculates that by 2035 44% of all households will be one-person dwellings.

Thus, the scarcity of living space has become a pressing challenge in large cities throughout Europe. In Germany, this is shown, among other indicators, by an ongoing public and political debate about the right measures to create affordable living space. The issue is also top of the agenda for local governments.

SINGLE OCCUPANTS

Those seeking one-person households are especially affected by the housing shortage. This concerns people in different stages of their lives, from students, to young professionals, to mobile best agers. They generally prefer a central residence over a couple more square metres of living space. At the same time, these social groups have different needs in terms of wellbeing, service and social interactions.

Today, there is already one asset class that addresses exactly these needs: micro living. The micro living asset class includes the student housing, business and serviced apartments segments. It provides fully furnished residential units for a limited period of time with some communal facilities and services. Within this asset class, Corestate already offers a broad range of solutions, not only in Germany – where we are the market leader – but also in other European countries such as Poland and Spain.

Considering urbanisation and demographic change, the property sector is facing the question of what innovative building concepts should look like that need to take into account two aspects: the scarcity of housing in large cities and the associated price development; and the changing needs of modern societies, especially with regard to sustainability.

NEW BUILDING CONCEPTS

At Corestate, we are exploring a new building concept to answer this question: prefabricated timber modules. These modules can be used to densify existing urban space, as they can be placed on top of existing buildings – for example on rooftops of car parks, shopping centres or many other types of city buildings.

We are building on our expertise in the area of wood construction methods: Corestate has already delivered the 'Woodie' student housing complex in Hamburg where the apartments are completely made of wood. Woodie won the Best Residential Development category at the MIPIM awards in 2019.

Corestate is partnering with TheBoxx Solution, as they provide state of the art timber module constructions for our micro-living projects but also in other asset classes. The modules are prefabricated and ready to be installed on site, which offers various advantages during the building process: for example, prefabricated cross laminated timber (CLT) modules can shorten the construction time by up to 50%. This has an impact on building costs that can be reduced by up to 30%. Wooden buildings are also very durable – they can achieve a lifetime of several hundred years.

Timber construction is already a growing trend: the German authorities have approved more wooden buildings in the last few years – two years ago, they already made up 18% of annual building permissions. The city of Munich has declared its goal to become the leading wood



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Lars Schnidrig, Corestate Capital Group



building city in the world. Comprising 570 flats the city is planning the largest wooden housing scheme in Germany.

What's more, the benefits of timber constructions are evident when it comes to ESG. Why is that so important? The real estate sector is one of the key areas in the European Union's move to reduce EU-wide CO₂-emissions. Real estate buildings are the biggest single polluter in the EU, contributing 36% of overall carbon dioxide emissions. Ambitious plans such as the EU Green Deal will on the one hand further increase the pressure on the property sector to reduce CO₂ emissions and on the other push up demand for sustainable real estate investment products.

SUSTAINABLE PRODUCT

Wood is a natural building material and thus offers many advantages from an ESG perspective. It acts as a CO₂ storage whereas the production of steel and concrete for conventional building materials sets free large amounts of CO₂. Also, timber modules reduce the energy consumption of buildings as they are very energy efficient. The modules are produced locally in Bavaria and the woods used come from a regional, sustainable forestry. In addition, they can be fully recycled or used for other purposes. Finally, wood is a health-promoting material.



In a nutshell, prefabricated timber modules tie perfectly into Corestate's ESG strategy and underpin our role as first mover in the industry. Corestate recognised very early the increasing demand from investors for ESG-compliant products. Therefore we are now able to satisfy this demand as one of the pioneers with very customisable, sustainable investment products.

As one of the leading European real estate investment companies, it is our responsibility to help tackle the property industry's CO₂ footprint. Since we are not only able to offer investments in modular timber constructions within Germany, but also in other European countries, we are supporting the EU's efforts to fulfil CO₂ emission targets across various member states.

Above: The 'Woodie' student housing development in Hamburg, where apartments are completely made from wood. Left: A wooden housing scheme is planned in Munich. It has declared its goal to become the leading wood building city in the world