

The challenge of urban densification in Sweden: three case-studies on daylight and sunlight access in urban level.

A chronic housing shortage combined with an increase of population in Sweden has led to a boom of new construction in the country's cities. New developments are quickly being produced while spatial planning is still heavily reliant on traditional planning methods. Sweden constitutes an interesting case as densification is the preferred method to create more sustainable cities both financially and socially. The case for densification is also of course supported by a rapid increase in land prices. During the construction process, measures are taken to address the imminent climate change crisis but on the city scale the fast development affects the existing building stock not only in the energy use but in particular human health. With the Swedish climate's long dark winters, sustainability on a city level is connected to the access to daylight and sunlight for both indoor and outdoor spaces. The Swedish building code provides only limited protection for daylight access as the guidelines have not been updated in some time. New advanced ways of analysis and the introduction of the EN standard however can provide sophisticated tools both to planning professionals and citizens alike to ensure that cities densify in a considered manner. Three Swedish case studies both for indoor but also for outdoor public spaces will be analysed and presented in order to discuss the ways we can move towards a more sustainable and inclusive spatial planning.

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Keyword 2

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Keyword 4

Keyword 5

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