

## The long-term value of construction and strategic optimisation for technology and lifestyle changes during the next decade

Conventional wisdom tends to see urbanisation as a near-unstoppable trend for the next decades or even century. We're drawn to big cities by a wider choice of jobs and partners (both business & private), while smaller towns, villages, and even suburbia seem decaying. Logically, strategies of companies in the construction industry should be based on the construction of (ever-denser) cities.

However, conventional wisdom could be wrong. A number of trends and tech developments imply that future habitation in Europe could be moving in a very different direction – in which case strategies in the construction value chain should be very different too.

In this brief piece, we'll only touch upon some of the reasons to suspect that things might develop in a different way. Obviously, we can't possibly know what will happen in the next decade.

First, what has been happening? Big cities have been growing, but so have smaller cities, at least in some cases. In my own country, Denmark, most towns with more than a few thousand inhabitants have been growing. Where high streets appear desolate, it's because shopping has moved to the web, and communal, social life has moved to sports arenas etc. The growth of big cities isn't the only trend in town.

In the near future, the pull of ever-more expensive big cities may decline further for a number of reasons.

One: The drawbacks of telework are disappearing as more productive tele-creativity environments are introduced and as cultural norms adjust to web-based interaction, partly due to generational change. Can you manage a development team with people you've never met in person? No big deal if you already did that as a teenager in a global role playing game! We can live a lot further from town if we only need to check in for face2face a few times per month. And the chance encounters, important to corporate culture, can be on the web too (though we still need better solutions for this than generally found in 2017).

Two: Autonomous cars are fairly close to reaching a level where they may replace traditional cars. Yes, there are technical, legal and emotional barriers, and yes, there have been a few

accidents, but technology will develop strongly the next 5-8 years and the barriers will fall. Autonomous cars will change transportation strongly, as they are much better suited to car-pooling & sharing of hired cars than existing cars. Transport in a shared taxi will be much cheaper than driving your own car.

Combine teleworking most days, cheap door-to-door transport without wasting much time (as you work, sleep or whatever en route), and the increasing cost of living near employment hotspots, some people will opt for living closer to nature, in villages or small towns with a good life for families (a safe life for free-range kids, a fun, stimulating, civic environment for adults, teleworking-café, good local foodstuffs, etc.), at a much lower cost than living in a cramped city flat or a dull suburb.

Is this for everybody? No, but it need not be. If just 5-10% of families choose this, instead of larger cities, it's a huge change in the pattern of living – and in the market for future construction. It may become the dominant market for new construction.

### Who will build and own in this vision?

In general, increasingly we opt for access instead of ownership (Like using a shared car instead of having your own). And of course, rental homes have been around for a long time. In residential construction, living for rent may be hampered by e.g. the structure of taxation and the possibility of capital gains as a home-owner. But you could have the same capital gains if you own shares in a housing provider, and tax systems can be changed.

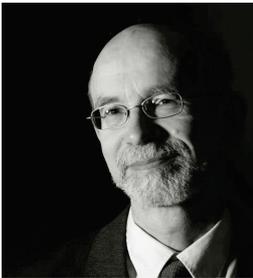
This could offer big, societal gains. ICT trends permit increasingly efficient use of resources, e.g. through closer monitoring of users/residents and immediate adjustment of resource use; with further optimisation based on big data. Thus, housing providers should have a 'Bricks'n Chips'-strategy, with houses full of sensors integrated into large-scale building management systems.

Imagine buildings and whole villages with integrated life cycle control (cradle to cradle). The scenario is a learning system, with optimal operations and preventive maintenance, obviously for buildings and perhaps to some extent even for social systems (like support when a kindergarten needs extra help). Housing providers with integrated, community-wide, life cycle responsibility will have a clear incentive to ensure that things run well, to protect their brand: Monitoring civic life, and adjusting with appropriate interventions when relevant. (Urban

planning of these new towns should adjust to the new life styles, but I'll leave that discussion for another article).

For the construction value chain, the strategic environment may change strongly. With a different geography of construction we need different construction systems, suited for different types of construction. More importantly, with cradle-to-cradle responsibility and life-cycle building management systems, we will expect a close integration of suppliers into closed or semi-closed partnerships, very different than the more or less free competition seen today.

How likely is this vision to come true? Hard to say! Note that suburban life wasn't a trend until conditions were right (commuter rail, and later the car). When technology changes, society changes, occasionally with huge impacts on construction. Also note that there are more arguments for (and against) the vision sketched above, we can't discuss all angles in a short piece as this. Medium- and long-term strategies of companies in the construction value chain should take into account these potential markets, which may have a deep impact on the organisation of most of the value chain, challenging existing business models.



## CONTACT

Mr. Anders Bjerre  
Copenhagen Institute for Futures  
Studies, Denmark  
[abj@cifs.dk](mailto:abj@cifs.dk)  
[www.cifs.dk](http://www.cifs.dk)