

# Making Space for Work in Urban Growth: The Case of Zaanstad Municipality, The Netherlands

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## 1 ABSTRACT

An Austrian architect and senior strategist shares his insights from his experience in the Netherlands. His case study describes how municipalities can make space for work within the tension of addressing urgent global transitions, using the Urban Development Plan until 2040 of Zaanstad municipality called “Making Space” as an example. Zaanstad is a Dutch city next to Amsterdam and her 170.000 inhabitants will rapidly grow with 25% in the coming fifteen years. Their spatial vision, entitled “Making Space”, focuses on growth with quality within the existing built environment: a “no-net-land-take” urban development plan. The vision establishes five basic principles: 1. Climate-adaptive design; 2. Promoting walking, cycling and public transport; 3. Developing space for work within the city; 3. Embracing energy transition and, as a 5<sup>th</sup> principle: Investing spatially for social return. The urban development plan emphasizes nature-inclusive design and attention to biodiversity and climate adaptation are the foundations for a prosperous urban development.

This paper stresses the importance of developing space for work within the urban weave. As the cradle of Dutch industry, Zaanstad has a history with more work than housing. In recent years, old factories have been transformed into purely residential areas – while keeping employment within reach would have been important. The aim of the spatial vision is to reserve substantial amounts of space for work in all new urban developments. This is not self-evident in the Netherlands, because the business model of constructing houses is much more attractive in the short term. On the other hand, realizing space for work in the city contributes to fewer commuters, better use of public transport and a better work-life balance in the entire metropolitan region around Amsterdam, of which Zaanstad is a part.

The vision “Making Space” proposes intensifying peripheral industrial estates (where 20% space can be gained), adding space for work in currently monofunctional residential areas and dedicating 30% of all new surfaces to work in new transit oriented developments around stations. The paper also hints on appropriate planning strategies and instruments such as building codes and zoning. The vision entails that jobs come closer, become more accessible to less privileged residents contributing to equity, and commutes decrease. Spatial quality and the quality of life in the city increase, and the ecological footprint becomes smaller. Drawing up the vision was a long and complex process. But it was freshly adopted at the end of 2024. This case shows that future-proof urban development is also possible in medium-sized cities through discussion, integral cooperation and a long-term approach

Keywords: spatial planning, land use, economy, work, combining functions

## 2 SHARING KNOWLEDGE AND LEARNING TO THINK ACROSS BORDERS

### 2.1 Learning from medium sized cities

This paper is a case study by an Austrian architect and senior strategist who studied in Vienna and Delft and worked half his life in the Netherlands. This case brings an interesting combination to Graz, to a conference on urban development for medium-sized cities in which global urgencies and growth are taking hold. This paper is about making space for the current global urgencies, such as climate adaptation, mobility and energy transition, but focuses on the need to make space for work within the city. It presents a case from Zaanstad, a rapidly growing medium-sized city of 170,000 inhabitants in the Amsterdam Metropolitan Area, that will grow more than 25% within the next 15 years. More about that later. This paper is not about the architectural design of buildings, but brings food for thought about architectural and strategic thinking in systems and transitions to this year’s REAL CORP conference. At the same time, the case of Zaanstad shows that second and third tier cities can also make an important contribution when it comes to qualitative growth, flexibility and innovation.

### 2.2 Mandatory thinking ahead to 2040 and beyond

In the Netherlands, with the introduction of the Environment Act (“Omgevingswet”) on January 1<sup>st</sup>, 2024, it is mandatory for all governments to draw up a vision on the physical living environment that looks ahead

until 2040. This applies to all 342 municipalities in the Netherlands, such as Zaanstad, but also to the 12 Dutch provinces and even the Kingdom as a state (17 million inhabitants). In practice, many smaller cities hire a consultancy firm to write such a vision, often due to a lack of staff. In Zaanstad, it was decided to write the vision in-house, and to tackle it thoroughly. In earlier years, the city had worked with smaller spatial plans aiming to relieve the housing shortage in the densely populated West of the Netherlands (the “MAAK.Zaanstad” programme). The vision “Making Space” is the first urban development plan that encompasses the entire municipality of 83 km<sup>2</sup> (of which 50% are open landscape), and for a long term: until 2040 and beyond. The thorough approach of the municipality of Zaanstad for this vision included testing the vision by means of an environmental impact assessment (“milieu effect rapportage”, MER). This assessment was then double-checked by the national MER committee. This paper is also brought to the attention of the REAL CORP conference audience because that MER committee stated in its explanation that this vision is one of the best of its kind in the Netherlands. So there were plenty of challenges, but also smart strategies that are worth sharing. *sagittis non. Nulla id turpis vel leo cursus vulputate. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas.*

### 3 MAKING SPACE FOR TOMORROW

#### 3.1 Urban growth with quality

Zaanstad gave its vision the title “Making Space” in the last phase of its conception. The title indicates that the vision does not intend further urbanisation and sealing green fields, but focuses on creating space for qualitative growth within the current built environment: a “no-net-land take” urban development. This is special for two reasons. Firstly, such an approach requires clever design solution and coordination with many stakeholders; it is therefore not the “easy way”. Secondly, the Dutch national government had a rather pragmatic and short-sighted vision: growth, according to them, was “adding just another street” (“straatje erbij”). However, the current housing shortage with waiting times of up to 14 years for an apartment in Zaanstad represents a fundamentally different urgency, which also requires a fundamentally different strategy, and thinking for a longer time frame than an election period.

#### 3.2 Five principles address global urgencies and transitions

Housing shortages and exploding apartment prices in the Amsterdam Metropolitan Area are just a few of the urgent developments to which the vision “Making Space” must provide answers. In a country below sea level (100% of Zaanstad is below zero, and the soft peat soil is continuously subsiding), climate adaptation is one of the greatest urgencies. In addition, the region requires answers to a whole range of other urgencies; the road network is already overloaded and requires a mobility transition; the dependency on gas from abroad and the stop of domestic gas extraction in the Netherlands (Groningen) require an energy transition, also due to the sustainability ambitions, the nitrogen crisis and the war in Ukraine. The ageing society makes the healthcare system unsustainable in the long term, which requires a transition for healthcare. The poor water quality in European comparison, or the radical decline in biodiversity have not been mentioned then. In short, there are many reasons for more future-proof urban development. The vision “Making Space” tries to find answers to these urgencies and necessary transitions. With regard to the spatial factors, five principles have been drawn up, which form the heart of the vision. These will now apply always and everywhere. These five are: 1. Designing space invitingly, green-blue and climate-adaptive 2. Making way for walking, cycling and public transport 3. Further developing space for work within the city 4. Taking initiative in the energy transition, and last but certainly not least: Principle number 5. Investing spatially to yield social returns. These five principles have been developed by talking to residents, entrepreneurs, social and institutional partners in the city and the region. The authors of the environmental vision, held spatial ateliers to draw together, and during covid-19 there were interactive webinars. As soon as it was allowed again, the writers went into the neighbourhoods to talk to the citizens. Together they looked for “Key Projects”, clearly defined areas where a major contribution to the qualitative growth of the entire city could be concentrated. Ultimately, fourteen of these areas were pointed out; but it was also discovered that some ambitions were actually needed everywhere, not just in a specific area; from these ambitions the five principles of the spatial vision have been developed. Today, there are even t-shirts with these five principles printed upon them. The alderman for Spatial Planning even wore such a shirt during the debates over the vision in the town hall.

## 4 ZAA NSTAD, A CITY OF WORK

### 4.1 The ecosystem as the base for sustainable development

The vision “Making Space” is extensive, with many maps, artist impressions and photographs of municipal Natura 2000 areas on display. It does not make sense to try to discuss the entire vision in a concise paper. It would be obvious to explain the principle number one of “green-blue spaces” in more detail. Nature inclusivity helps to build a solid foundation, as the “wedding cake” model of the sustainability goals of the United Nations (UN SDGs) drawn by the Stockholm Center of Resilience shows. A strong and stable ecosystem is the prerequisite for future-proof development. In the Netherlands, attention is now being paid to biodiversity and climate adaptation; that is also necessary in a country below sea level. What we can learn from this process, is that conversations about complex topics are possible, also with a wide range of stakeholders and supposed opponents. People learn from each other and come up with practical and applicable solutions. They do that for the benefits generated for the planet, the economy, real estate value, for a positive impact on health, even for more safety against climate disasters; and that’s a good thing.

### 4.2 A city with a tradition of working and industry

For the REAL CORP audience, this paper zooms in on another Zaanstad principle, namely the “development of space for work within the city”. Why is that necessary? How do you make space for work? And what does making space for work require in developed countries, in the European Union? These aspects are particularly relevant for medium-sized cities, such as Zaanstad, because their organizations are large enough to shape such a transition, but also small enough to be flexible and innovative. In an overarching sense, making space for work concerns the balance of functions. This entails not only spatial aspects, but also aspects of a larger ecologic and economic system. Let’s start with a brief description of Zaanstad. From a tourist perspective, the Zaanse Schans is an international top attraction. This collection of historic windmills along the Zaan river is destination number five according to internet searches for the most important sights in the Netherlands. What makes this open-air museum so interesting (apart from the 2.5 million visitors per year) is its history. It is the remnant of the once more than one thousand mills that stood in the region. The wind-powered mills were used for all kinds of things: paint pigment, mustard seed or grain were ground, wood was sawn and of course water was pumped. All in all, the region was perhaps the cradle of European, and certainly the Dutch industry; easy supply and removal of goods via the river, and plenty of entrepreneurship and free wind energy made the area of today’s Zaanstad a concentrated industrial estate. After the transition to steam engines, large factories and industrial estates arose along the river Zaan. Until a few decades ago, there were probably more jobs than houses in the city. Locals traditionally went to live right next to their mills and factories. Without any objections and close to your work! For a period Zaanstad was the main working city of the Netherlands, and generations of local citizens called “Zaankanters” worked in the industries, from cleaners to machinists and directors. The industry today has a strong focus on “food”, vegetable oils, and almost all cocoa that is processed in Europe comes from Zaanstad (next to Antwerp). Verkade is a well-known chocolate and biscuit brand. And of course, Albert Heijn Delhaize, an international supermarket chain, has its origins in Zaanstad.

### 4.3 Work got pushed out of the city

In recent years, factories have merged, modernized, relocated or sometimes completely failed to keep up with the times and therefore went bankrupt. And like everywhere else, in Zaanstad too, the economic focus is shifting from the manufacturing to the service sector. For decades, old factory sites, warehouses and business premises were transformed into residential areas. The demand for houses in the region around Amsterdam is enormous. Zaanstad is easily accessible by motorway and has six train stops, a legacy of the sub-municipalities that merged exactly 50 years ago to form the “City on the Zaan”: “Zaanstad” is an invented name from 1974. In Zaanstad, as in other cities, work was removed from old port areas and densified city centres, shifting it from the heart to the edge of the city; in Zaanstad, the work moved towards the North Sea Canal. In Amsterdam towards the sea; and in Rotterdam, new land was even reclaimed in the sea, approximately 42 km by car from the old location in the city centre. The example of Rotterdam shows, moving work to the edge of the city involves considerable distances and many additional transport movements, certainly for employees. But in the densely populated West of the Netherlands today there are no “edges” left where work could be moved towards. On the contrary, in the Amsterdam Metropolitan Area,

there is demand for hundreds of hectares of industrial estate. Transformation of the green landscape is not an option; these are often protected European Natura 2000 areas. Apart from the breeding grounds of the national bird, the black-tailed godwit, the open landscape in Zaanstad is also the basis for the well-functioning ecosystem, and a much-needed recreational area in the immediate vicinity, also for people on a tight budget (of which there are plenty in Zaanstad).

## **5 MAKING SPACE FOR WORK IN CITY**

### **5.1 Good reasons why to make space for work**

As we see from the huge demand it is necessary to make space for work. But how? The colleagues at the city hall in Zaanstad would prefer that 30% of the newly developed surfaces is intended for work. A wish that can easily be understood, if you see that the balance of employment compared to living space has become skewed due to the focus on transformation into residential areas in the past years. This happened of course also because in the urbanized area of the Dutch Randstad, where Zaanstad is located, developing homes is financially much more attractive than developing space for work. The quick money is in the construction of homes. Price hardly matters, let alone quality: prices of homes are regularly outbid, and an average home in the Netherlands already costs 420,000 EUR in 2024. In the West of the Netherlands, that price is almost half a million now, and out of reach for many. Building houses remains necessary, but building only homes is not enough. It offers comfort to administrators and developers, but it is short-sighted. In fact, nobody wants cities to grow monofunctionally, but qualitatively. In such a way that employment remains in the city, and more jobs are added. Not only affordable housing, but also affordable business space is necessary. In the ideal city, there is also space for work nearby, in addition to amenities and greenery. Employees do not have to commute long distances. You can walk, cycle (certainly with a comfortable e-bike) or take public transport to work, perhaps even reachable within 15 minutes. That is not only a desirable vision of the future. There is also no alternative: The car-based traffic system has already reached its limits, not talking about sustainability or emissions, but simply about the traffic volume of the cars itself. The regional transport authority has calculated that one of the major access roads to Zaanstad can handle the car traffic of one thousand additional homes. And we know that there are already 16,000 homes on the drawing board. So there is another transition required besides the mobility transition: making space for work.

### **5.2 How do you practically create space for work in the city?**

The goal of making space for work is of course not mainly to prevent a traffic collapse, but also to contribute to an attractive economic and social ecosystem. Developing cities with quality, where high spatial quality goes hand in hand with the quality for a working environment in order to promote an attractive business climate, innovation and inclusiveness. This ensures an economic ecosystem that is ready to anticipate upon the upcoming protein transition, and all the other transitions and innovations, which we can now only suspect are coming. From the perspective of the design of the physical living environment, the further development of Zaanstad this means making space for work by a couple of practical steps: Firstly, on a larger planning scale this can be done by welcoming companies from future-proof sectors of the industry. Secondly, when it comes to planning tools for a plot, it is necessary to include not only maximum but also minimum building heights in urban development and, for example in zoning plans. Thirdly, in industrial estates this means not only allowing maximum nuisance contours, but also allocating companies that actually need the contours for these emissions. By allocating “the right company on the right spot” 20% extra space can be created, according to the experts from the economic department. Fourthly, on the architectural scale, space can be created by stacking functions. Better use of space, by densifying, and a higher Floor Space Index (FSI). For example: Solar cells above a roof top parking lot on top of offices placed above a manufacturing hall. Developing stacked, sustainable and flexible business complexes will be the building type for work for the future.

### **5.3 In which parts of the city a focus on work is feasible**

In addition to the five basic principles, the vision “Making Space” also lists a number of concrete “key projects” that contribute to qualitative growth with an emphasis on work. Firstly, this means, for example, that peripheral industrial estates will not be transformed into residential areas, but that employers and business owners will have the certainty of doing business there and to be able to invest for the next 25 years.

So the vision is making a transformation possible, but then within industrial estates from an FSI of 0.6 to an FSI of 2: more square meters of work on the same plots. And more sustainability. Secondly, in existing monofunctional residential areas, work is added according to the new urban typology of the “productive neighbourhood”. This new form of development combines living and working. This can be done by reorganizing ground floor parking in built form, topping up lower buildings and by doing so realizing affordable business space in the central areas of the neighbourhoods. Thirdly and finally, the locations around the six train stops that have been largely neglected up to now will be redeveloped. They will become destinations where easily accessible space for living, working and facilities come together. This includes housing, shops, restaurants and hotels, but certainly also co-working, small scale and innovative manufacturing and easily accessible office locations.

## 6 CONCLUSION

The reactions upon this spatial vision from local and regional partners were mainly positive. Parties such as the housing corporations want to actively participate in learning how to work with the vision. It took three exciting evenings in which the vision “Making Space” was discussed in the municipal council. One thing stood out: for one politician the vision was too detailed, and for another too general. For yet another, it was a vague mirage, and for their opponents not visionary enough. All in all, the vision was pulled into all directions, but did not move in any particular way. Such long evenings are part of the political game, which anyone who works for government will recognize. But it also meant one thing: That the direction of this spatial vision was right in the middle of all party politics, and therefore in fact their common denominator. Just before Christmas 2024, the vision was adopted. That moment of joy was the concrete reason to write this paper. Because if the medium-sized Zaanstad can work integrally, think of the long term and come up with a vision for future-proof urban development, if this city can involve many stakeholders and finally thirteen local political parties embrace the vision ... in short: If a medium-sized, poor city like Zaanstad, where the ground is literally disappearing from under your feet, can make a truly sustainable urban development plan: Then it can be done elsewhere too. If we can do it, so can you!

## 7 REFERENCES

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