

Check against delivery

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Regional Approaches
to Climate Protection
in the Stuttgart Region

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What we can do in our metropolitan regions

Regional planning must find answers to the three major challenges facing our society:

- The demographic shift: our population is getting older, smaller, and more diverse.
- Economic globalisation means more, tougher competition for our jobs as well as our companies.
- Climate change and global warming will entail far-reaching consequences not only for the environment but for every aspect of our lives.

We can merge these three challenges into a sustainable development.

The conclusions drawn from our demographic shift and climate change are mutually enhancing. If we gear our regional development to a diminishing, ageing population, we can also come up with the right answers to the challenge of climate change.

Allow me to prove this with three examples:

- A diminishing population needs fewer new residential areas. A decline in the surface sealed off because of housing is a contribution to reducing greenhouse gases.
- An ageing population is increasingly reliant on public institutions being in the immediate vicinity. This calls for compact housing development with short distances, easing the burden on our climate.

- A diminishing and ageing population will increasingly demand to be nearer the development hubs alongside our suburban train system. This means maximising the use of our climate-friendly local rail network in the Stuttgart Region in the long term, enabling us to fund it in a sustainable manner.

I advocate looking at the demographic shift and climate change together, thus reinforcing our argument for sustainable development that spares natural resources. This concept of sustainability is bolstered by a third argument:

- More and more of our companies are asking for space in brown-field sites, sparing our unused natural resources. Permit me therefore to base my talk on the Stuttgart Region's endeavours for climate-friendly development on three pillars:
- Demographic requirements,
- Economic requirements and last but not least
- The challenge of climate change.

The demographic evolution throws up a new challenge for us:

Successful regional development with a smaller population

In the Stuttgart Region we have two population forecasts that predict a decline and not an increase in population.

From today's figure of 2.67 million the region's population will decrease by 30,000 by 2020.

Our population is ageing.

- The proportion of young people under 19 years of age will fall from today's 20% to 16% in 2020.
- At the same time the percentage of senior citizens aged 79+ will go up by 4% to just over 7%.

The implications for regional planning are:

We need fewer new housing areas than in the past.

We shall be gearing our zoning of new housing areas to the actual demand.

Both have negative impacts:

- Too few allocations of building land result in a perceived lack of space with the risk of real estate prices rising disproportionately.
- Too many allocations of building land result in unwarrantable land take causing excessively high infrastructure costs borne by the public purse or the owners. These higher location costs are a competitive disadvantage.

5 hectares too much industrial/commercial or residential building space in a municipality can be a local authority problem. 179 x 5 hectares equate to 1,300 football pitches of excess residential building space; that is a regional problem.

Despite a 1.6% decline in the population, the number of private households will increase by 70,000 until 2020. The reasons for this are:

- Society is continuing to be a society of singles.

- The next few years will see many of the baby-boomer generation set up their own households.
- The desire to improve housing conditions.

Altogether, the volume of new buildings, which averaged some 13,000 houses in the region over the last 10 years, will fall by half.

Allow me to explain by way of one example:

The demand for detached and semi-detached houses is strongest among the 30 to 45-year-olds. This population group will decrease by almost a quarter by 2025.

A decline in the population increases the importance of central towns and cities.

The upshot of the good economic development and the population growth in the last few decades is that public facilities, nurseries, schools, medical care, shops and stores, social and cultural institutions are in place basically in every municipality, more or less. That is regardless of whether the municipality is a small, lower, medium or higher-order centre.

For years there has been a counter-development.

- Small shops are dying out. Discounters and full-range distributors are gaining ground. These spacious retail trade outlets need more customers and therefore more residents in the immediate surroundings. The result is that the supply of retail outlets in smaller communities is deteriorating. District savings banks have been closing down their branches in small communities under the pressure from competition.

- We will have noticeably fewer schoolchildren. The number of children under the age of 6 will drop by 20,000. That means there will also be fewer schools and nursery groups.

The response that is urgently required to this lesser demand for public facilities is co-operation between local authorities, inter-communal collaboration.

It also means that more than ever before central towns and cities have to take on supply functions for their smaller neighbouring municipalities. To ensure regionwide provision with public facilities, we propose not to reduce the number of central towns. Given the decline in the population, however, there is no need to increase that number.

The re-interpretation of self-development and development hubs

Self-development, to which even the smallest municipalities are entitled, means today zoning residential space in line with the demand arising from a naturally growing population, from the reduction in size of households and the disappearance of old dwellings.

Population growth in the future will make more houses, residential buildings and dwellings available from the existing stock. A diminishing or even only stable population and the precarious funding situation for public budgets will force us to make better use of existing infrastructure (water and sewerage, energy, refuse) and will increase the pressure on the use of existing housing stock, especially in smaller municipalities.

- In developing municipalities, the need for housing and facilities, without immigration, has to be ensured. We feel that this is feasible with a 1% increase in residential units every five years.

- Population migration has to concentrate on the development hubs. This ensures not only the requisite capacity utilisation of rail transport but also the supply function of the development hubs for the whole region, for which we envisage +1.5 % residential units in 5 years.
- Should the population in the Stuttgart Region increase contrary to forecasts, we shall cautiously include residential building focal points, again in the development hubs. This will give regional development room to breathe and enable it to react to a growth that we, and I must emphasise this, are not forecasting.

An ageing population imposes new demands on public facilities. People's decreasing mobility requires more than ever before that housing be located near supply facilities in the centre and an efficient local public transport system. This underscores the regional planning aim of re-using the existing building stock and brownfield sites. Building gaps have to be plugged before residential areas and shopping facilities are erected on greenfield sites.

Experience has taught us that businesses have changing needs:

- 19 out of 20 companies that approach our business promotion corporation about a location are looking for an existing company site, fully installed and developed. It is only in the producing sector that one in two companies is after a greenfield site.
- Of course, in the future we shall also have to allocate focal points of regional significance for industry and services. The demand focus has switched, though, from quantity to quality:
 - Firms are looking more and more for industrial estates, not because of smoking chimney stacks, but because they want to operate on a three-shift basis.

- There is a shortage of space for logistics firms. Nowadays logistics means jobs in manufacturing, services. They are a key factor for our region.
- Companies now regard a good local public transport network for their employees as the fourth most important locational factor.

In the Regional Plan, we shall identify and zone focal areas that are particularly suitable for industry, production and logistics.

We shall make provisions for companies to develop at their location and have no need to look around outside the Stuttgart Region.

In the Regional Plan we can make two major contributions to reducing CO₂ emissions:

- By developing housing patterns that enable mobility with fewer CO₂ emissions and
- By controlling land take.

Reducing CO₂ by a public transport-oriented settlement structure

Local public transport makes a clear contribution to reducing CO₂.

- When a person travels 1 km by car, the CO₂ emission is 176 grams.
- If a person travels by suburban rail, the emission level is 60 grams of CO₂.

In the Stuttgart Region, we are zoning development hubs along the suburban railway lines (S-Bahn). In the future, more than ever before the suburban railway will need the fare revenue from as many users as possible.

And to keep the suburban railway fundable on an ongoing basis, future increases in population through migration gains have to be accommodated in the municipalities alongside the development corridors.

Reducing CO₂ by compact housing development

Alongside the aim of a region of climate-friendly routes there is the aim of the shortest possible routes.

What we will achieve with green belts and green open spaces is that people will not have to travel 20, 30 or even more kilometres to the nearest recreational facilities to unwind in a natural environment.

The principle "inside before outside" will gain in importance. The Regional Plan enshrines the concept that before new building land on greenfield sites is allocated, the development potential in existing buildings or in building gaps has to be exploited.

In the future efforts will continue to encourage the loyalty of companies to municipalities with "organic" development. Service and industry focal points distributed throughout the region will ensure that workplaces will remain accessible throughout the region.

Green infrastructure is gaining in importance for a good living climate.

In summer 2005, we conducted a climate survey of the entire region from the air. Using an infrared camera, we measured the air temperatures at ground level at different times of day. The result is staggering. In places close to one another there are differences in temperature of up to 15 degrees Celsius.

Green belts and green open spaces are gaining in importance for the creation of cool air and for the supply of fresh air in our residential and

working areas. The green structure guaranteed by the Regional Plan for the whole region is increasingly becoming a climate framework.

This will have a very practical impact. Zones for the creation of cold air and climate arteries are to be kept free of building development. Building areas must be dictated by climate requirements.

The traditional grey infrastructure, as our American colleagues call it, is vital for a European metropolitan region. With the airport, Stuttgart 21 and the New Trade Fair we are opening a gateway to the outside world. We are making our contribution to the Stuttgart Region's integration in European and international networks. With the suburban railway we are networking it internally.

An effective European metropolitan region needs this grey infrastructure. This calls, however, for an equivalent green infrastructure.

The value of green infrastructure

Equivalence means equal standing, not compensation, repair or a bolton.

Green infrastructure is an independent, self-legitimizing and therefore self-supporting pillar for the competitiveness of our region and for the quality of life of the people living in the most densely populated conurbation in Germany, with 722 inhabitants per square kilometre.

In the competition among locations, the Stuttgart Region is reliant on the development of its own talents. But it also needs the in-migration of committed, future-oriented people. Of course, these people are coming to us because there are more and better jobs here than anywhere else in Germany and Europe. Residents and in-migrants want to develop not only in their work, at the office, in the factory, but also personally in the natural environment with green spaces, vineyards, cultural and natural landscapes.

- The landscape park and regional planning are mutually advantageous. By enhancing the value of our remaining landscapes, the aim is to make them more liveable and experienceable for the region's inhabitants. At the same time, this valorisation shall make people aware of the need to use the remaining space cautiously. The dual objective is to develop the space by a road system that is adapted to the natural situation, and to reduce land take.
- For centuries, agriculture in our region has created cultural landscapes of high quality and uniqueness. Like the rock gardens in the Ludwigsburg district, in which the folk of Swabia have combined the pleasurable and the useful – wine as an economic asset and commodity for enjoyment.
- Another aim we have with the landscape park is to take the technical feats that have a strong affinity with the natural environment, such as the hydroelectric power stations on the Neckar, and maintain, restore and make them accessible again.
- The Neckar has to be experienced as a river again.

Take the opportunities for economic development

Material and energy efficiency

More than ever, climate change requires that the economy creates products and services with fewer materials and less energy. Our Regional Assembly already made this a focus of its budget in 2006, earmarking funds for an initiative launched by the Stuttgart Region's Business Promotion Corporation (Wirtschaftsförderungsgesellschaft Region Stuttgart mbH).

Fuel cells

The Stuttgart Region has profiled itself as a centre of excellence for the development and application of fuel cell technology. The f-cell congress organised every year by the Stuttgart Region's Business Promotion Corporation is one of the most important's of its kind in the world.

Renewable energy sources

Whilst the issue of renewable energy focused for a while primarily on rural areas, the Stuttgart Region's Business Promotion Corporation is now pushing ahead with concrete projects for renewable energy sources in the Stuttgart Region as well. The Albaufstieg, Bioprom and Policity projects co-funded by the European Union identified and broke down barriers to their widespread use, gave energy producers ongoing advice and promoted pilot plants.

Clean Technologies cluster initiative

German environmental technologies are already being exported all over the world. A global eco-boom could turn the sector into the most important branch of industry. This is the clear result of a study conducted by the management consultants Roland Berger in conjunction with the Fraunhofer Institute for System and Innovation Research and the German Institute for Economic Research commissioned by the federal government.

Energy and material efficiency, renewable energy sources, sustainable mobility and sustainable water management are the markets of the future. And in these respects the Stuttgart Region is well set.

Signed

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