

Abstract: Thesis, David Naim, October 2011:

“Urban planning in response to the impact of demographic shifts and climate change within city districts. Urban design proposal for the Real site at the Krupp Park in Essen Altendorf.”

Demographic shifts and climate change are among the key factors influencing how urban environments will be planned and developed over the coming years, and not only in Germany. Even if communities will only feel the full impact in future, forward-looking plans must be drawn up now to provide answers to demographic- and climate-related challenges. In particular, urban planners must look at how demographic and environmental changes must be addressed on the level of individual neighbourhoods, since that is where responses to both trends can be applied in practice.

The goal of this thesis is to determine which aspects relating to demographic shifts and climate change must be accounted for when urban planning takes place at the neighbourhood level. In addition, a case study of the Real site, which borders the Krupp Park in Essen Altendorf, is used to show how these concerns can be included in urban design efforts. In doing so, the thesis focuses on the area of climate adjustment. The topic of climate protection is not a subject of this investigation.

The theoretical underpinnings of these specific aspects are discussed and then applied to the case study. Following that, an overall concept is developed that includes an urban planning proposal and recommendations for measures capable of responding to demographic developments and climate change at the city district level. The thesis also includes a checklist of considerations to keep in mind when planning urban neighbourhoods.

Key considerations include adjustments needed within neighbourhoods to take increasing heat levels and extreme precipitation into account, as well as inter-generational measures that focus on demographic shifts, such as those that address the needs of older residents and families with children. For example, given the rising proportion of older residents within urban populations, one critical aspect is how planners can reduce the effects of rising temperatures within any given neighbourhood.