**Urban structure types**

**URBAN STRUCTURE TYPES**

**WITH HEAT STRESS IN 2050**
- 01 closed perimeter block development
- 02 open perimeter block development
- 03 line construction
- 04 town center
- 05 residential areas mean density
- 06 residential areas with large structures
- 07 business use
- 08 higher houses with residential use
- 09 areas with large structures

**NO HEAT STRESS UNTIL 2050**
- Settlement structure
- Sensitive use
- Heat stress only daytime
- Heat stress only nighttime
- Areas with high heat stress
- (climate redevelopment necessary, § 136 BauGB)

**POTENTIAL BY CHANGING URBAN STRUCTURES**
- Potential by climate optimized build-up
- Potential of climate optimized renovation
- Potential of climate optimized open spaces
- Construction burn on open spaces

**BENEFIT SYSTEM**

**BENEFIT AREAS**
- Areas with bioclimatic benefit
- Areas with bioclimatic benefit but limited use
- Areas with bioclimatic benefit forest

**CONNECTING SYSTEM**
- Connecting systems 1 priority
- Connecting systems 2 priority
- Trees
- Shrubs with new additional trees
- / Mainly streets with N-S or N-O-S direction
- / Mainly streets with N-S or N-O-S direction
- New additional trees
- to produce connecting shadow ways in the quarters
- Greenery as microclimatic recreation areas
- Playgrounds
- Schoolyards
- Supp. small recreation areas

**ADDITIONAL COMPONENTS AND POTENTIALS**
- Playgrounds and schoolyards in the green network
- New installation of pocket parks
- Protection of existing trees inside of building blocks
- Protection of demolition, unsealing
- and greening inside of building blocks
- Looking for possibility of pocket-parks in business and industrial areas
- Construction of open spaces

**WATER IN THE OPEN SPACE**
- Water bodies
- Water playgrounds and fountains
- Looking for additional usable waterbodies

**RELVENT CLIMATIC FUNCTION**
- Areas with benefit of cold air
- Local cold air path with benefit
- Regional cold air path with benefit
- Connecting to produce cold air production areas
- Cold air coming from open space
- Other open spaces

**Measures**

**HIGHER LEVEL MEASURES**
- M 01 Preservation and creation of cool air production areas and cold air paths
- M 02 Preservation and creation of large green areas (open space and forest)
- M 03 Connecting of open space (ög park and large green spaces)
- M 04 Reduction of anthropogenic heat emissions

**LOCAL LEVEL MEASURES**
- M 05 Demolition (decongestion)
- M 06 Unsealing
- M 07 Greening of courtyards and backyards
- M 08 Increase of surface albedo (reflection)
- M 09 Shading of streets, places, and buildings
- M 10 New installation of pocket-parks

**MEASURES ON BUILDINGS**
- M 11 Energy-related modernisation of building
- M 12 Roof greening
- M 13 Facade greening
- M 14 Roof greening

**SUPPLEMENTARY SOCIAL MEASURES**
- M 15 Neighborly help projects

**URBAN CLIMATIC FRAMEWORK PLAN**

**HEAT**

**Legend**

**PLAN FRAMEWORK**

**STADTGEBURTSTAG KARLSRUHE 2015**

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