

SPONGE CITY HEFEI

SUSTAINABLE URBAN DEVELOPMENT

assignment Design new Sponge City Hefei **location** Hefei, Hunan province, China
size 420 ha **client** city of Hefei **services** landscape design **status** in progress
team Oliver Seidel, Tim Mohr, Kelay Yu, Jesse Dobbeltstein **cooperation** Wasser
Hannover GmbH

What does sustainable urban development in China with a special focus on the sponge city principle look like?

The flagship project Airport City Hefei relies entirely on decentralized drainage, which should lead to an answer to the flood problem and the extreme weather events that will even become increasingly stronger in the future. Our focus was on the planned parks as central and profiling elements of the city.

The direct connection to the airport is a great advantage for the 150,000 expected inhabitants of the newly emerging living space due to short commutes.

With the aim of creating a metropolis with a low climatic footprint and a small impact on local ecosystems, four large parks with large unsealed areas are being created. The special sponge city principle provides for working with instead of against the water and implementing it as a characteristic element of Hefei. This helps the green-blue city to regulate the climate - especially in the very hot summer months. In addition to the climatic advantages mentioned, our argumentation of integrating the local river, which was originally supposed to be led around the city, creates a number of added values for Hefei. The four emerging parks will each have their own characteristics, depending on the respective demarcation area. For example, the ground in the west with many adjoining office buildings serves primarily as a place to relax during work breaks on the one hand and as an extended conference room with options for flexible work on the other.

The project, besides providing spatial qualities and creating urban spaces

that promote social interaction in cultural life aims to serve as an innovative hydrological system to protect the city in the event of more extreme weather occurrences and to ensure sustainable urban development.

As a result of all the interlocking concepts, Hefei forms a richly linked city with different biotopes and parks that work together with the social infrastructure and create a high-quality living space for the new China.



Overflight: ecological bank (dry weather)



Infographic: spatial vision



Render section 3: Normal water



Render section 3: Flooding



Bird eye view on Sponge City Hefei