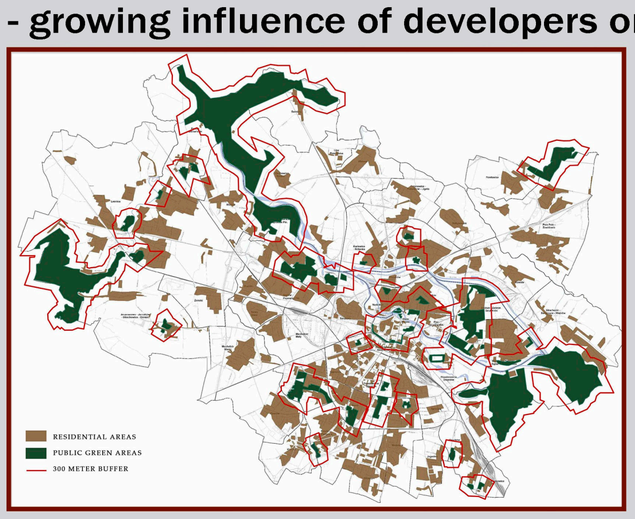
WROCŁAW UNIVERSITY
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WROCLAW (POLAND) AND CLIMATE CHANGE

The purpose of this work is to identify the threats arising from insufficient binding planning records in Wroclaw that contribute to climate change. However, improvement actions that have been implemented are also indicated. It requires the involvement of local authorities, various groups of clients and above all conscious residents to combat climate change.

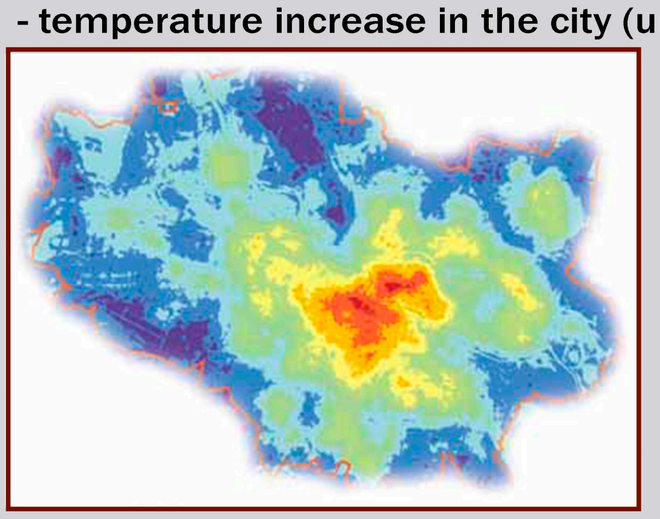
THREATS AND EFFECTS:

- growing influence of developers on building urban tissue



More and more well-drained land is concreted and built-up. Meadows, arable land and wasteland are built up.
The city is expanding, residents have less and worse access to public green areas.

- temperature increase in the city (urban heat island)



In Wrocław, the urban heat island is a frequent phenomenon and intensifies the spatial diversity of climatic and bioclimatic conditions. In clear and windless weather is to be expected
the largest differences in air temperature between the urbanized and surrounding areas. The excess heat can reach 9’ Celsius.

- concreted streets - approx. 30% of all sealed surfaces = >
=> excessive runoff of rainwater from urbanized areas



It has been estimated that 30% of the sealed area in Wrocław is occupied by roads. Some of them do not even have a developed green belt that could retain rainwater and reduce the amount of outflow from roads to the sewage system

- increasing demand for electricity



During hot days, more and more electricity is consumed for air conditioning and refrigeration equipment, both in homes, workplaces, and means of transport, and therefore more water is used to cool reactors.

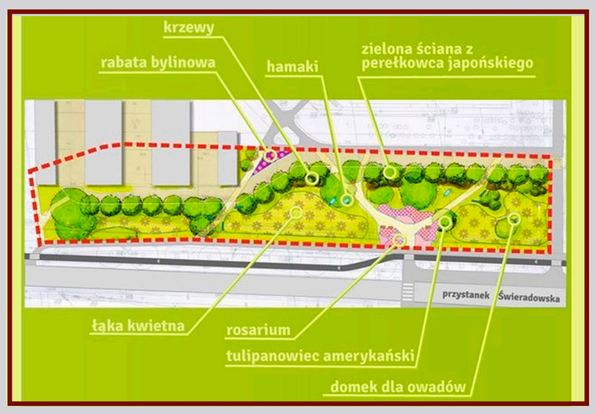
IMPROVEMENT ACTIONS:

- pilot project indicating areas of the city with excessive temperature



The project concerns the connection of 10 sensors in different parts of the city informing, among others about temperature and humidity. They have to say which areas of the city and at what time they have excessive temperatures. Thanks to this, it will be known if more greenery is needed or water curtains.

- projects for developing street areas with greenery



As part of the Wroclaw Civic Budget, projects have been submitted for greening streets along pedestrian and tram routes. It is a connection between a convenient passage for residents, as well as a green wall serving as a natural noise absorber, which is produced by passing trams. What's more, the vegetation would cool off on hot days, and in the case of rain it would take excess water from the soil.

- activation of residents in activities supporting the development of green areas



In Wrocław there are several dozen initiatives related to greening the city. Among others the pilot project "grow into WROcław" was initiated, which met with great interest among parents of the youngest residents of the city, creating the Parks of the Young Wroclawian.

- project to create a „green wedge” in the southern part of the city



In the southern part of Wrocław, works are underway to create a "green wedge of the city", including by moving from areas used for agriculture to recreational and sports functions in greenery, maintaining the ventilation function of the city, leaving natural areas - taking care of biodiversity

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