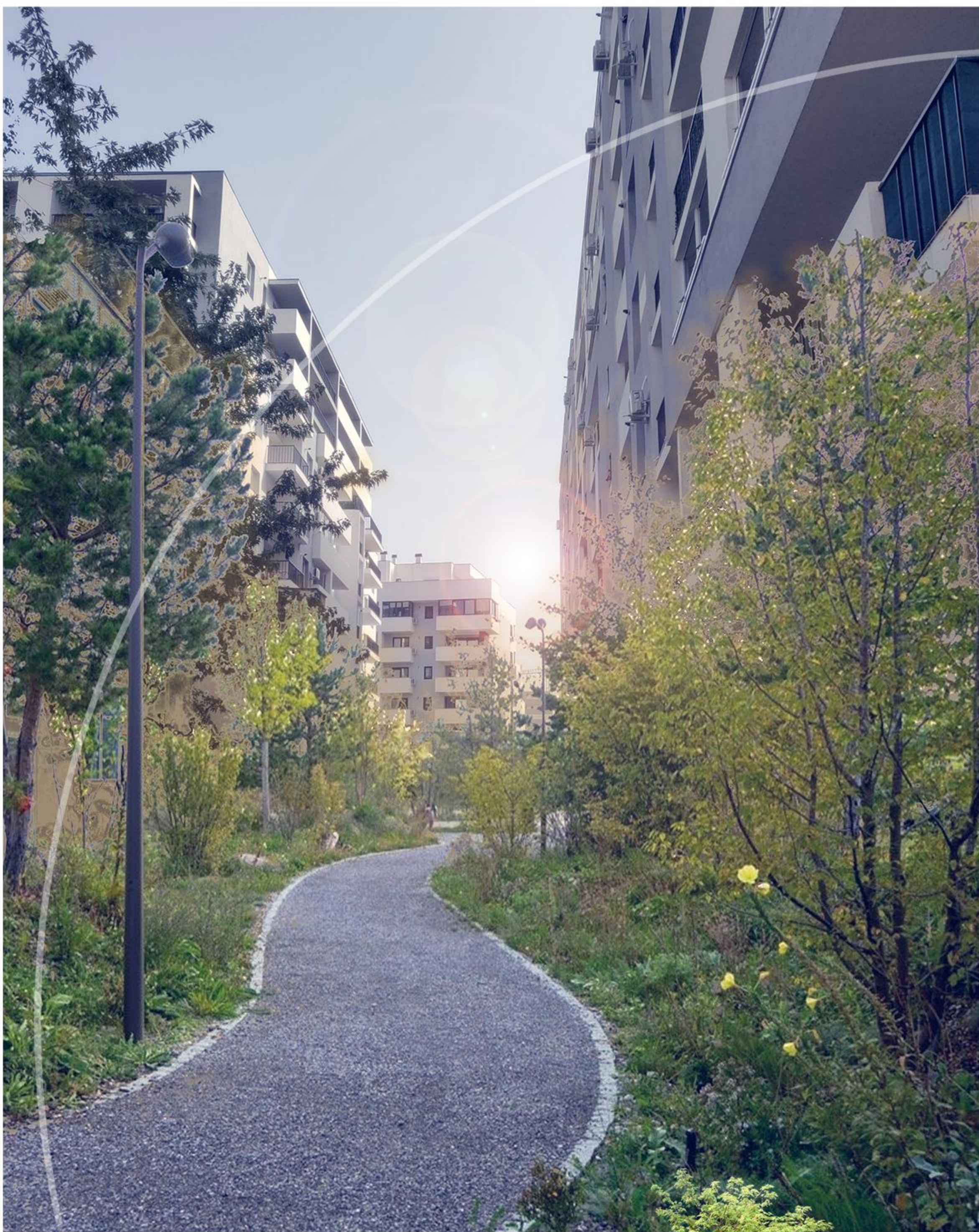


# Imagining greener cities: the development of a methodology for the simulation of urban green infrastructure in Romanian cities using AI tools

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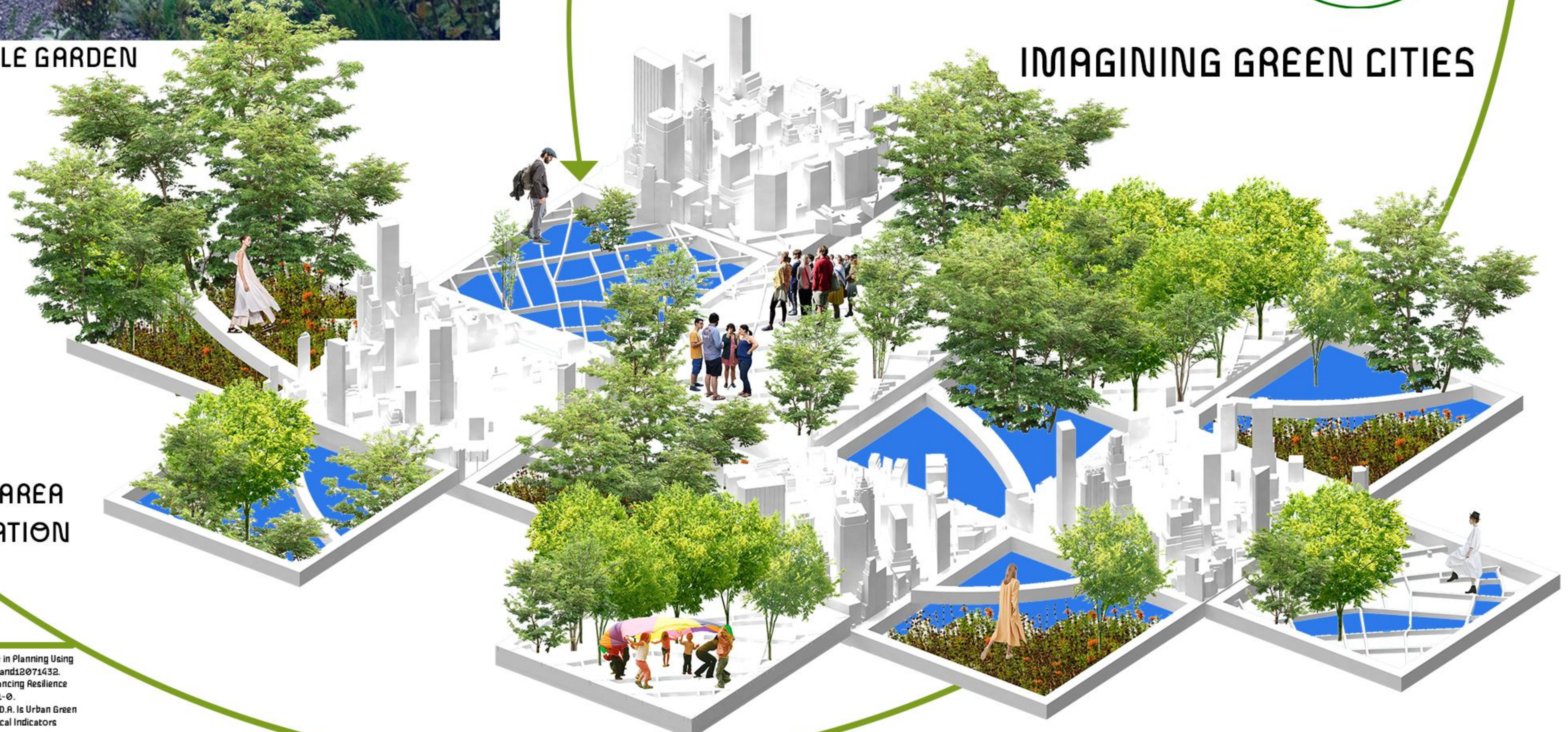
**INSTITUTIONS** The National Institute for Research and Development in Constructions, Urbanism and Sustainable Spatial Development URBAN-INCERC  
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AI SIMULATION OF A POSSIBLE GARDEN



CHOOSING A RESIDENTIAL AREA FOR THE SIMULATION



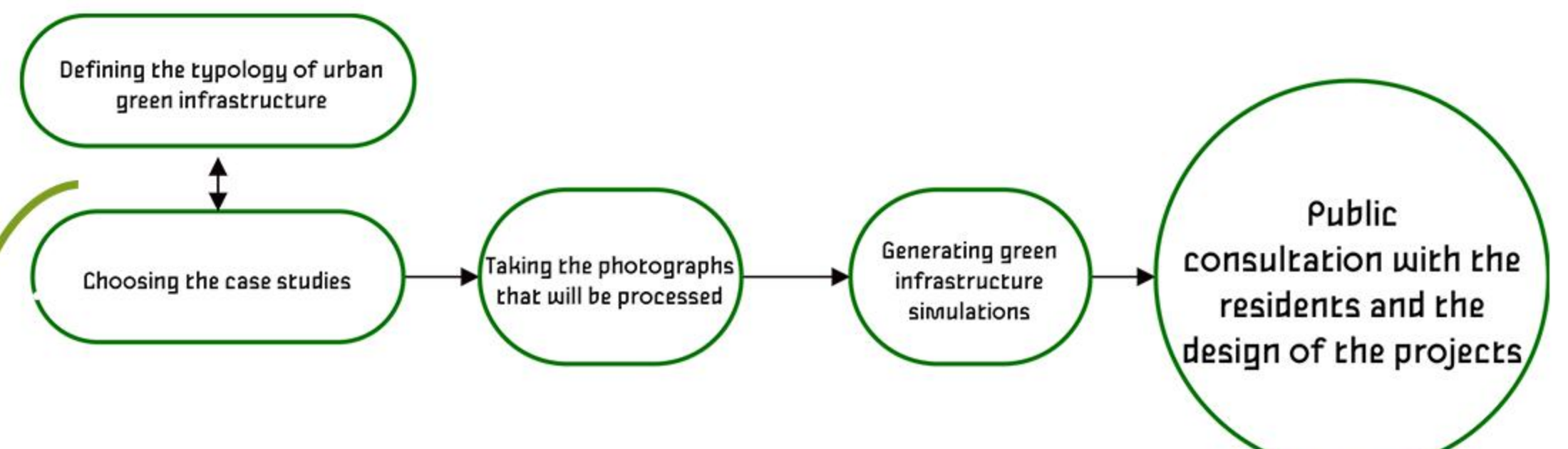
IMAGINING GREEN CITIES

THE SUMMER OF 2023 MARKED ONE OF THE HIGHEST NUMBERS IN HIGH TEMPERATURE RECORDS IN EUROPE. URBAN SPACE IN PARTICULAR IS AFFECTED BY THE CURRENT CLIMATE CRISIS. THE DIRE EFFECTS OF THE CLIMATE CRISIS REVERBERATED DEEPLY. AS THE URBAN LANDSCAPE BORE THE BRUNT OF THIS ENVIRONMENTAL IMBALANCE, A CRITICAL JUNCTURE IN ROMANIA'S EVOLVING LEGISLATIVE LANDSCAPE EMERGED. AN ONGOING TRANSFORMATION OF ROMANIAN URBAN REGULATIONS OPENS THE DOOR FOR PRIVATE ENTITIES TO POTENTIALLY CONVERT AND ERASE URBAN GREEN SPACES. AGAINST THIS BACKDROP, OUR STUDY DELVES INTO THE REALM OF POSSIBILITIES FUELED BY AI REPRESENTATION TOOLS, OFFERING A POTENTIAL DIRECTION FOR ENVISIONING SUSTAINABLE URBAN SPACES IN BUCHAREST.

FOCUSING ON THE INTERSECTION OF TECHNOLOGY AND ECOLOGICAL BALANCE, OUR RESEARCH USES AI AS A TOOL TO CONJURE IMAGES OF POSSIBLE VIBRANT AND ECOLOGICALLY BALANCED PUBLIC SPACES. COMBINING THE TANGIBLE (EXISTING URBAN SPACES IN BUCHAREST) WITH THE VIRTUAL (ILLUSTRATIONS OF POSSIBLE GREEN INFRASTRUCTURES), WE WORK WITH ON-SITE PHOTOGRAPHY, SKETCHES AND AI-DRIVEN ENVISIONING TOOLS.

WE AIM TO SHIFT THE CURRENT CAR-CENTRIC URBAN DISCOURSE TOWARDS A MORE COMPELLING ONE: A CONSIDERATION OF FOSTERING HEALTHIER LIFESTYLES BY CONSIDERING THE POTENTIAL OF GREEN INFRASTRUCTURE WITHIN OUR CITYSCAPE.

OUR RESEARCH CONCLUDES WITH A VISUAL TAPESTRY OF WHAT BUCHAREST COULD BECOME: A CITYSCAPE ADORNED WITH THRIVING GREEN SPACES, PROMOTING A HARMONIOUS COEXISTENCE BETWEEN URBAN AND ECOLOGICAL ASPIRATIONS. THROUGH THIS COLLECTION OF IDEAS, WE AIM TO SPARK A COMMON DESIRE FOR A FUTURE THAT'S BOTH SUSTAINABLE AND FILLED WITH THE PRESENCE OF NATURE. IN DOING SO, IT SEEKS TO TRANSFORM THE CITY INTO A SYMBOL OF RESILIENCE IN THE FACE OF THE CHALLENGES POSED BY CHANGING CLIMATIC CONDITIONS.



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