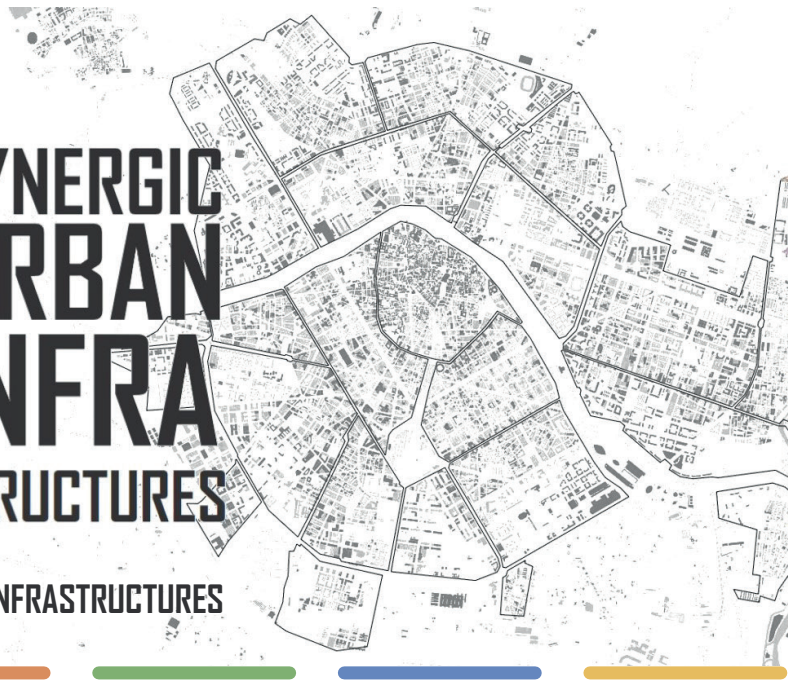
VLC SYNERGIC URBAN INFRA STRUCTURES



VALENCIA SUMMER SCHOOL ON SYNERGIC URBAN INFRASTRUCTURES

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4.3_TEAM 3. SYNERGY SCAPE

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4.3.1. Students, workflow, and process

The Group 3 consisted of six students, coming from all six involved universities: Monika Urbaniak (Bachelor student in Civil Engineering, Warsaw University of Technology), Dilara Ucar (Master student in Urban Design, TU Berlin), Raveena Gadkar (Master student in Transforming City Regions, RWTH Aachen), My An Dinh (Master student in Urban Ecological Planning, Norwegian University of Science and Technology), Mohamad Hamdache (Bachelor student in Architecture, Valencia Polytechnic University), Anushka Anand (Master student in sustainable architecture and landscape design, Politecnico di Milano).

In terms of the working process some points are to be highlighted. They choose a very explorative procedure using diverse methods especially for the definition of spatial scenarios such as cross-sections with zoom-ins and perspectives created with AI-programs. Still, they sticked to a structured processual thinking by integrating the concept of a timeline to their urban strategy. By using these methods, they tried to understand the concept of synergies not only horizontally on the map by connecting spaces, but also in the vertical structure of the city and in the processual concept of time.

By using the key strategies from the different toolboxes generated in the online phase for each urban infrastructure (task 1) and by applying the developed “synergy-meter” from task 2 to check the realizability of their planned interventions in task 3, the group kept a high interconnection between all three tasks and their outcome.

4.3.2 Co-designing with local stakeholders

After sketching the first ideas for the spatial concept, the students started to prepare for the workshop with the local stakeholders. Therefore, they decided to continue to use their main idea from the former task 2: using the Valencia City 2030 goals as reference for the development but reducing their number by combining them. This resulted in five goals for the workshop: 01 Keep areas green, 02 Improve social life, 03 Providing affordable housing, 04 Promote sustainable transport, 05 Keep the environment clean.

In the participatory workshop, they used these goals to let them be placed on the map by the local stakeholders, depending on where they think they are needed the most (Figure 4.3.1). During the workshop the student from Valencia took the role of the moderator, as he was the only one speaking Spanish fluidly. The other students supported him by placing the goals on the map and did the graphic recording on the map with the answers of the local stakeholders. In the sessions with the English-speaking guests all the group members participated in the discussion.

The team used the results of the workshop to define different user groups depending on their personal characteristics, usage of the site, and demands. Based on the information from the workshop, they designed a first version of the spatial strategy that encompasses key strategies (e.g., improving waterfront accessibility, establishing community gardens, etc.) aligned with one of the goals (e.g., enhancing social life). This conceptual plan shows the synergies that can be realized by implementing these strategies, along with indicators to measure their effectiveness.

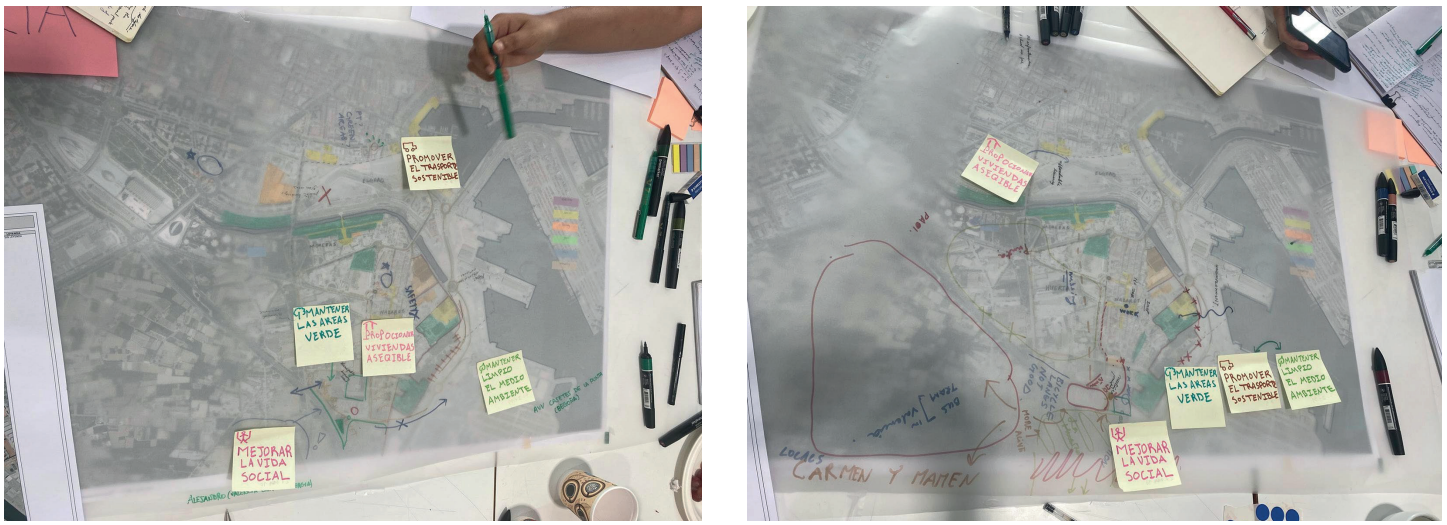

Figure 4.3.1. Graphic recording during the stakeholder (source Team3: Urbaniak, Ucar, Gadkar, Dinh, Hamdache, & Anand, 2023)

4.3.3. Summarizing the spatial strategy

The key strategies are implemented on the area and result in different spatial actions (Figure 4.3.2). One main strategy leads to the generation of local ***connections***, such as between El Cabanyal, Nazaret and El Grau, between Turia Park by creating new green public spaces, and between the neighborhood of Nazaret and the sea by reimagining the wall not as a border. Furthermore, the connection of the site through green corridors with the city of Valencia and the natural park of Albufera strengths the *integration* of the area in its context. Another main action is to *revitalize* existing structures, in terms of the existing building stock in Nazaret, but also the agricultural fields of la Huerta. In addition, new development areas for *social housing and mixed-use* functions combined with *new forms of mobility and transport connections* enhance socially diverse and inclusive (public) spaces. There is also the goal to integrate *energy communities*.

These actions and strategies are summarized under the concept title *SynergyScape: Connecting Communities*.

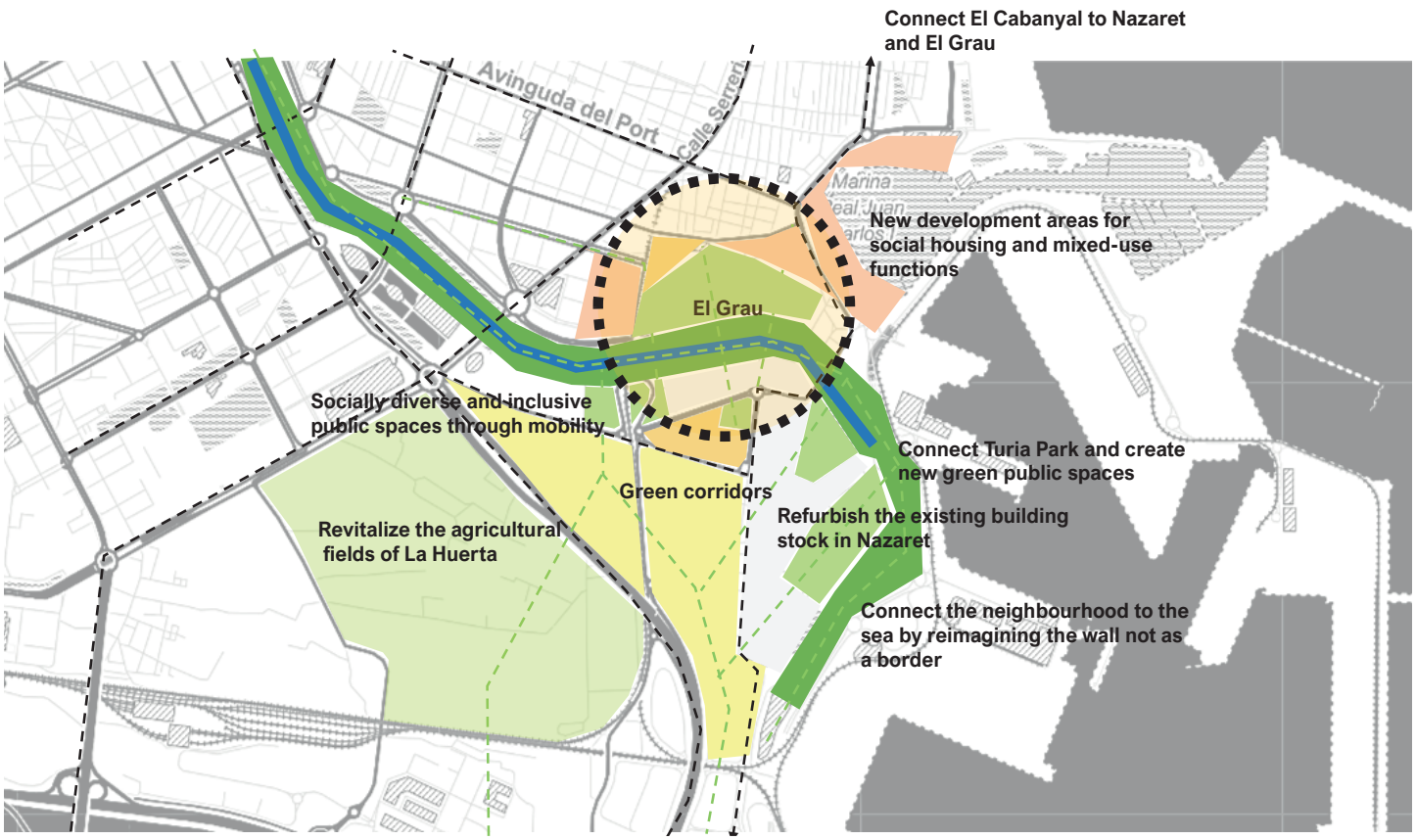

Figure 4.3.2. Spatial strategy (source Team3: Urbaniak, Ucar, Gadkar, Dinh, Hamdache, & Anand, 2023)

Explaining the catalyst El Grau

As the El Grau area is unused by now but also acts as a very important steppingstone between the city of Valencia, Nazaret and the harbor, the students identified El Grau as the first impulse area that can catalyze the urban transformation in the other parts of the site. Consequently, nearby areas will connect to one another through infrastructure synergies. In addition, the revitalization of the Turia riverbed is perceived as a fundamental issue for the connection of El Grau and Las Moreras.

Adding vertical synergies

To expand the idea of synergies, the students generated a cross-section from El Grau to Las Moreras up to Nazaret illustrating both existing and potential synergies and connections in different areas, encompassing both horizontal and vertical synergies (Figures 4.3.3 and 4.3.4).

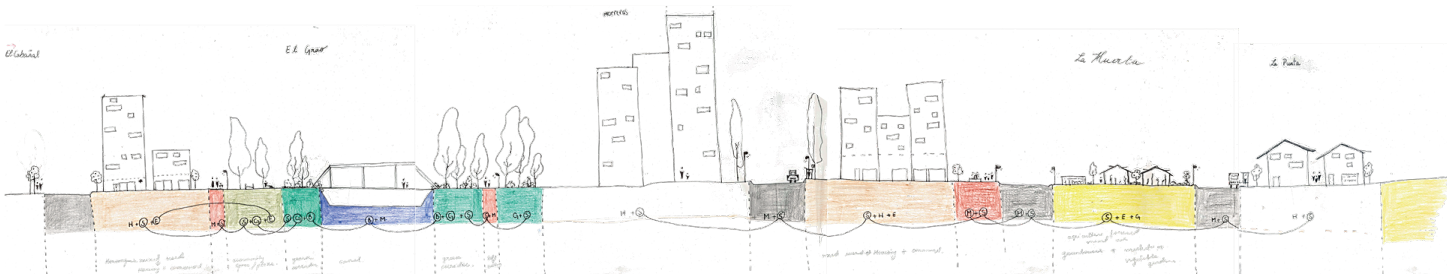

Figure 4.3.3. Conceptual Cross-section between El Grau, Las Moreras and Nazaret (source Team3: Urbaniak, Ucar, Gadkar, Dinh, Hamdache, & Anand, 2023)

Figure 4.3.4: Zoom-in: the new housing concept in El Grau and the generation of synergies between different urban infrastructures (source Team3: Urbaniak, Ucar, Gadkar, Dinh, Hamdache, & Anand, 2023)

Creating a strategy timeline

As displayed in Figure 4.3.5, all the actions included in the spatial strategy are applied on a timeline over a 20-year period, aligning these actions with the defined five goals and the identified synergies.

Conclusion and fields of action

As a conclusion the students of team 3 defined six fields of action to activate the potential of the case study site, also in terms of its added value for the city of Valencia. Each action is belonging to one of the six urban infrastructures, even there are overlaps.

They recommend expanding the continuity of the existing green spaces coming from the city center up to the Turia Park (Green infrastructure). This is followed by an overall better connectivity to the city center and within neighborhoods (Mobility infrastructure). They underline the importance of more access to the seaside (Blue infrastructure). They recommend a housing infrastructure that consists of a diverse and affordable housing stock (housing infrastructure). This can foster diversity and inclusivity by integrating communities (Social infrastructure). As a final point, they suggest sensitizing communities towards renewable energies (Energy infrastructure).

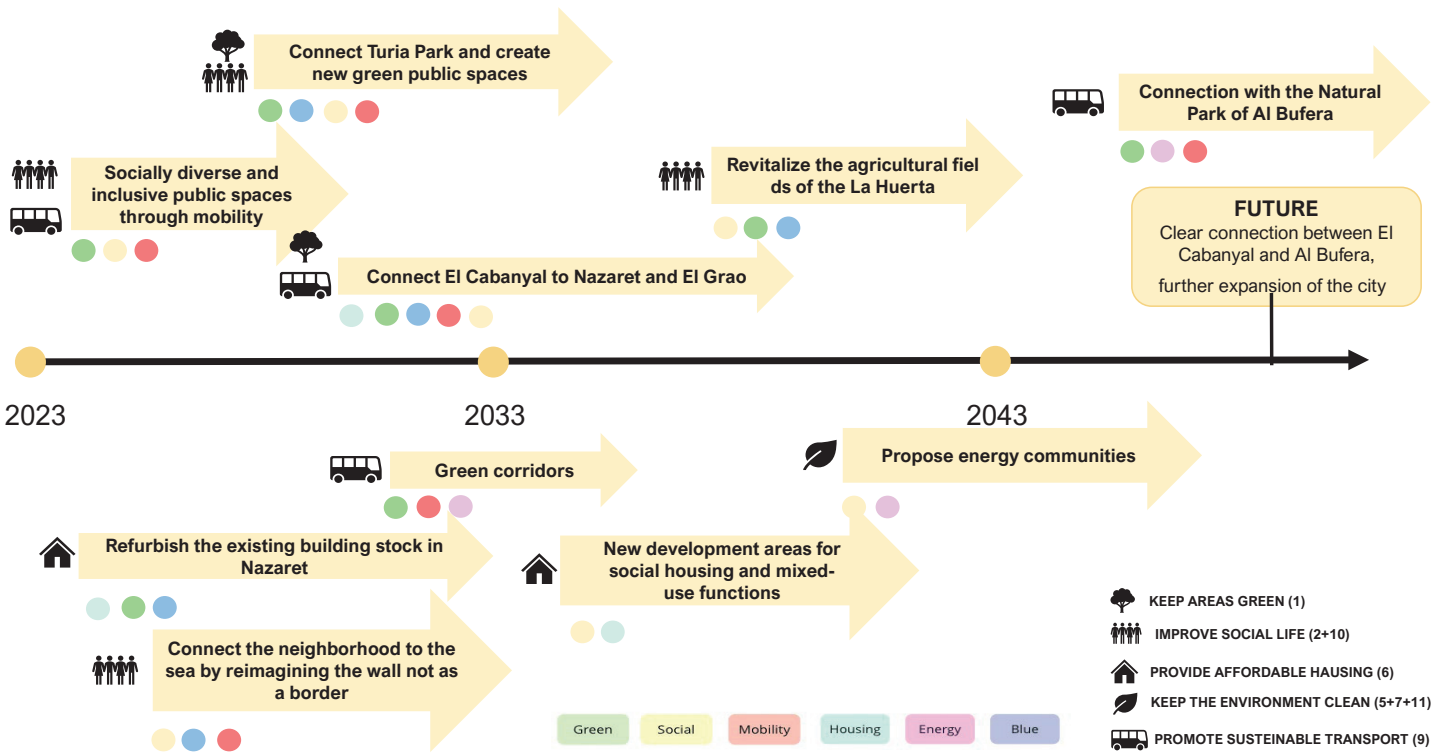

Figure 4.3.5. Timeline of the implementation of the spatial strategy. Symbols represent the five overarching goals defined by the team; colored circles represent the affected infrastructures for each action (the more colors in one action, the more synergies that action generate between different infrastructures). (source Team3: Urbaniak, Ucar, Gadkar, Dinh, Hamdache, & Anand, 2023)