

Leveraging NbS for public engagement and participation for low-carbon cities. The case of Kydon's Green Wall in Chania, Greece



Chania's city centre is one of the oldest, densest, and lower-income areas, lacking green or free spaces. It is dominated by car traffic and limited public space, while large parks lie outside the centre. Small playgrounds exist, but office buildings and scarce greenery make inner-city living challenging. During the tourist season, the population doubles, intensifying infrastructure pressures and urban heat island effects. In the heart of this area lies the Kydon car park, a public-private garage owned by a municipal company.

This concrete-dominated site presented an opportunity for a green and sustainable transformation. Increasing access to greenery can help reduce local temperatures, improve air quality, and promote social and environmental justice for both residents and visitors. The project followed a step-by-step approach, including concept design, technical studies, preparation of public tender documents, and approvals from the Architectural Design Committee and the Antiquities Authority. Extensive research was done by the company both in Greece and abroad to find experts, due to the fact that there were no specialists or companies in Chania with relevant knowledge or experience regarding green implementations.

During the design phase, Kydon sought to involve a range of local stakeholders, including community members and city representatives, in order to identify how the parking facility could be greened to maximise benefits

NBS INTERVENTION

Green Wall on the facade of a garage building.

for diverse users. However, these efforts faced several challenges, including limited engagement and scheduling difficulties. Some of these challenges may have stemmed from scepticism about whether a local company (even if municipal) would genuinely implement an NbS.

Despite these obstacles, Kydon continued to pursue a participatory approach. Additional efforts were made to improve communication and involvement, including installing information boards on site and creating a website and email newsletter to keep the local community informed about the project's progress. At the same time, representatives from the municipality and other local organisations were regularly invited to meet, discuss, and engage with the project. Particular attention was given to involving municipal staff who could support or promote similar initiatives within the city administration.

After deciding to proceed with a green wall composed of jasmine plants—a species closely associated with the city—and completing preparatory works such as painting and waterproofing, a new opportunity for engagement emerged. The intervention itself became a visible focal point for involving the community. Activities were expanded to include local actors in the implementation phase and to engage schools, both to raise awareness and to foster a sense of stewardship. Initial planting activities with a local school increased visibility and sparked broader interest. As a result, participation grew, and representatives from the municipality, local organisations, and residents became more actively involved. Additional workshops were organised with schools, pupils (including those with disabilities), citizens, and local organisations, leading to broader support



and the development of a complementary intervention in the surrounding area.

Green walls were constructed on the Kydon car park building and complemented by an additional intervention in the surrounding space—a green roof on the external area of the garage. This intervention was developed through a co-exploration and co-implementation approach and will be financed through a separate programme. Covering approximately 400 m² across the east and north façades, the installation is among the largest of its kind in the European Union. The project enabled local actors to co-explore community needs, co-produce complementary interventions, and participate in decision-making processes.

More than 3,000 plants contribute to improved air quality, reduced local temperatures, and enhanced urban aesthetics. The “Jasmine

Wall,” constructed using modular VP systems (metal frames, pots, plants, and irrigation), supports carbon sequestration and has been associated with a local temperature reduction of approximately 1°C. Overall, the project demonstrates how nature-based solutions can strengthen urban resilience, advance ecological justice, and foster community engagement.

More than 200 people took part in workshops, and over 1,000 residents were reached through public events. Informational signage along the wall continues to raise awareness and encourages similar initiatives. The green wall has become a visible reference point in the city, providing environmental benefits while also strengthening Kydon’s role as a local actor. To ensure long-term performance, ongoing maintenance and monitoring are in place, and data collected through sensors and evaluations are being used to inform future interventions.

“For Chania this was a step further not only in terms of innovation and knowledge regarding the implementation of NbS ‘s but also in terms of mindset and overall approach towards participatory processes. Through this process we realized how important and necessary it is to involve citizens and be able to express their opinion and they realized it too. It definitely takes effort to get someone involved but it was worth it”. Petroula Anastasiadou, Kydon S.A., Chania, Greece



KEY MESSAGES

- Actively involve as many citizens and social groups as possible during the overall process. Opportunities for engagement do not end in the design phase: NbS implementation can play a crucial role in increasing interest and encouraging broader stakeholder collaboration.
- Communicate consistently: Ongoing outreach and persistence were needed to build trust and overcome initial scepticism.
- Connect to local context: Involving schools and using locally meaningful elements strengthened ownership and support.