

## History and growth of the city of Torrelavega:

The history of Torrelavega is closely linked to its strong industrial and agricultural character, which has driven its growth over the years. With the development of railway and vehicular infrastructure, the city experienced significant expansion, attracting more industries and population.

As the city grew, divisions began to emerge between different areas, especially between the central and northern zones (name). Unfortunately, these areas remained disconnected in terms of infrastructure, social interactions, and the utilization of vacant spaces. This lack of proper connections further divided the residential areas between the north and south of the city, creating disparities in development and services between the two regions.

Moreover, the differing programs in industrial, service, and residential zones in such a compact space highlighted the need to find a unifying solution both programmatically and in terms of infrastructural connectivity.

It is crucial to recognize that the existing land in the city could serve as a valuable and unifying material. By maximizing the potential of this resource, it is possible to establish connections in all directions within the city, achieving better urban cohesion. Embracing a holistic approach to urban planning, the city of Torrelavega has the opportunity to overcome divisions and create a more inclusive and sustainable environment for all its citizens.

Through proper planning that promotes integration between different zones, improves infrastructure and social connections, and efficiently utilizes vacant spaces, Torrelavega can achieve more equitable and harmonious growth. By unifying the city in all directions, a more cohesive environment can be created, where all citizens equally benefit from the city's development and services.



## The richness of nature in Torrelavega:

The natural environment of Torrelavega has always been characterized by its diverse landscapes and ecosystems. However, over time, urbanization and industrialization led to the degradation of these natural areas. To address this, the city embarked on a process of renaturalization in various stages, aiming to restore the degraded natural zones and preserve the essence of its former character.

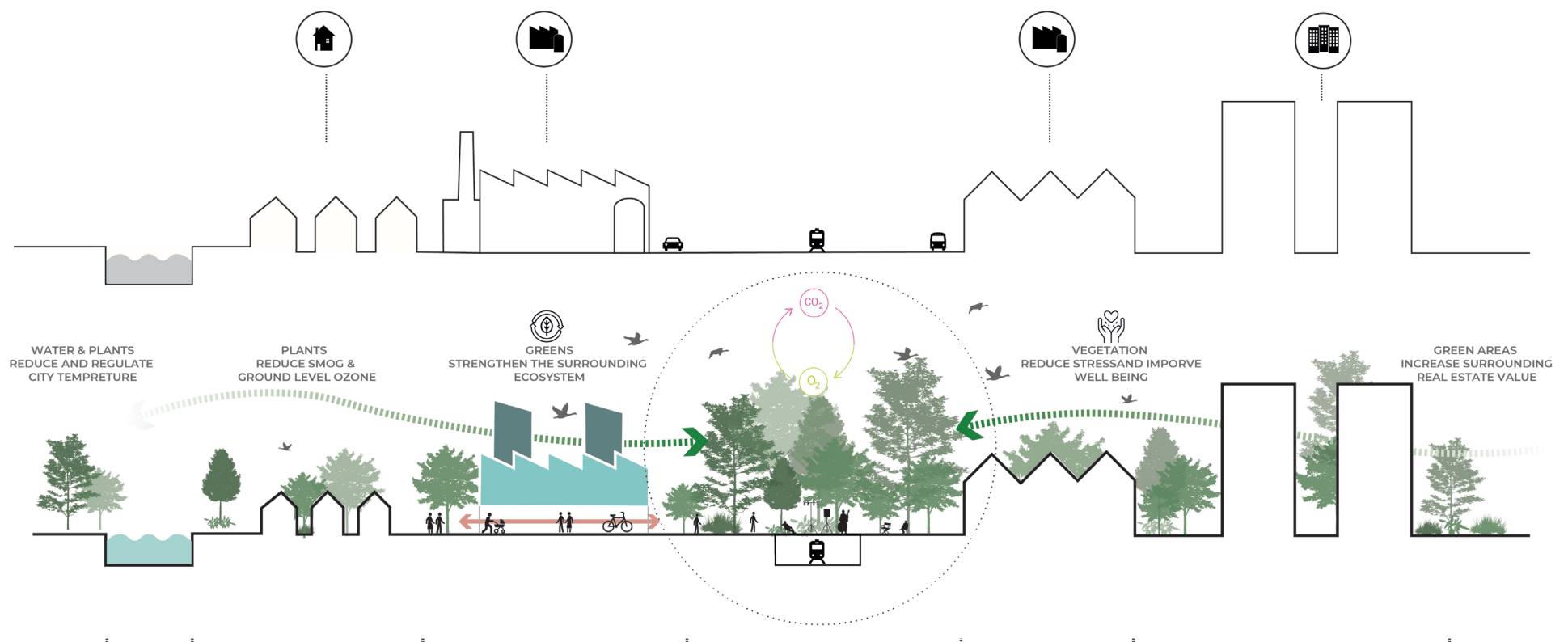
As part of our proposal, we prioritize the preservation and enhancement of nature within the city. We envision a transformation of public spaces into biodiverse landscapes, where green areas, parks, and urban gardens play a significant role in improving the city's air quality, providing habitat for wildlife, and offering recreational opportunities for its residents.

Amidst the challenges posed by climate change and its associated social and environmental impacts, our proposal emphasizes the creation of eco-corridors as

the key agents to guide the complex transformation processes. These eco-corridors serve as interconnected pathways that facilitate the movement of wildlife and promote biodiversity throughout the city.

By integrating nature into the urban fabric, we aim to achieve a harmonious coexistence between the built environment and the natural world. This approach not only enhances the city's resilience to climate change but also fosters a stronger sense of community and connection with the natural surroundings.

Through this vision of reimagining public spaces as biodiverse landscapes, Torrelavega can embrace its ecological heritage and contribute to the larger effort of creating sustainable, livable cities for future generations. By safeguarding and restoring the richness of nature within the city, we can create a healthier, more vibrant, and ecologically responsible urban environment that benefits both humans and wildlife alike.









## Public space as new urban center

The public space is conceived as a powerful structure capable of overcoming divisions and regenerating a city that has been affected by limiting scars. Its transformation goes beyond eliminating barriers to create a new and vibrant area for gathering and communication. It not only connects neighborhoods and the city center but also establishes a link with the surrounding region, becoming the gateway to the city.

The genesis of this urban approach begins with two significant architectural gestures. Firstly, the underground passage of the railway line achieves a total and seamless reconnection between both sides of the current thoroughfare, creating a sense of continuity in the urban space. Secondly, a broad reconnection space is proposed between the former axis that united the city center and the modern proposal for the new Torrelavega railway station. This will be accomplished by demolishing the old structure that served as a train station, relocating its operations to an industrial building reconverted into a new and modern station, fitting the scale of our city.

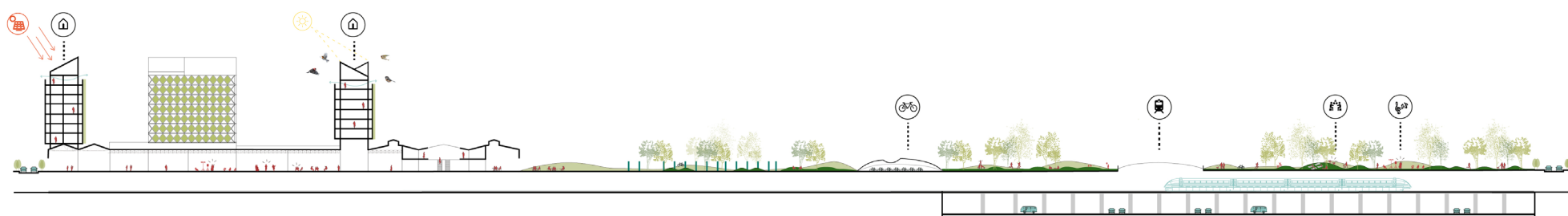
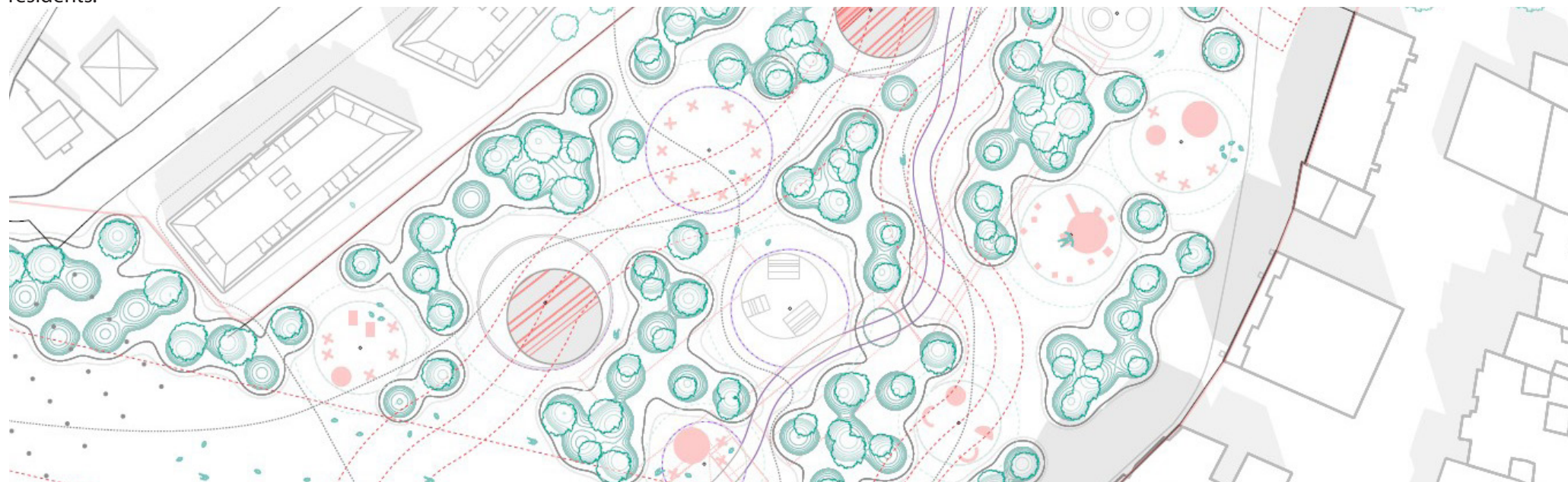
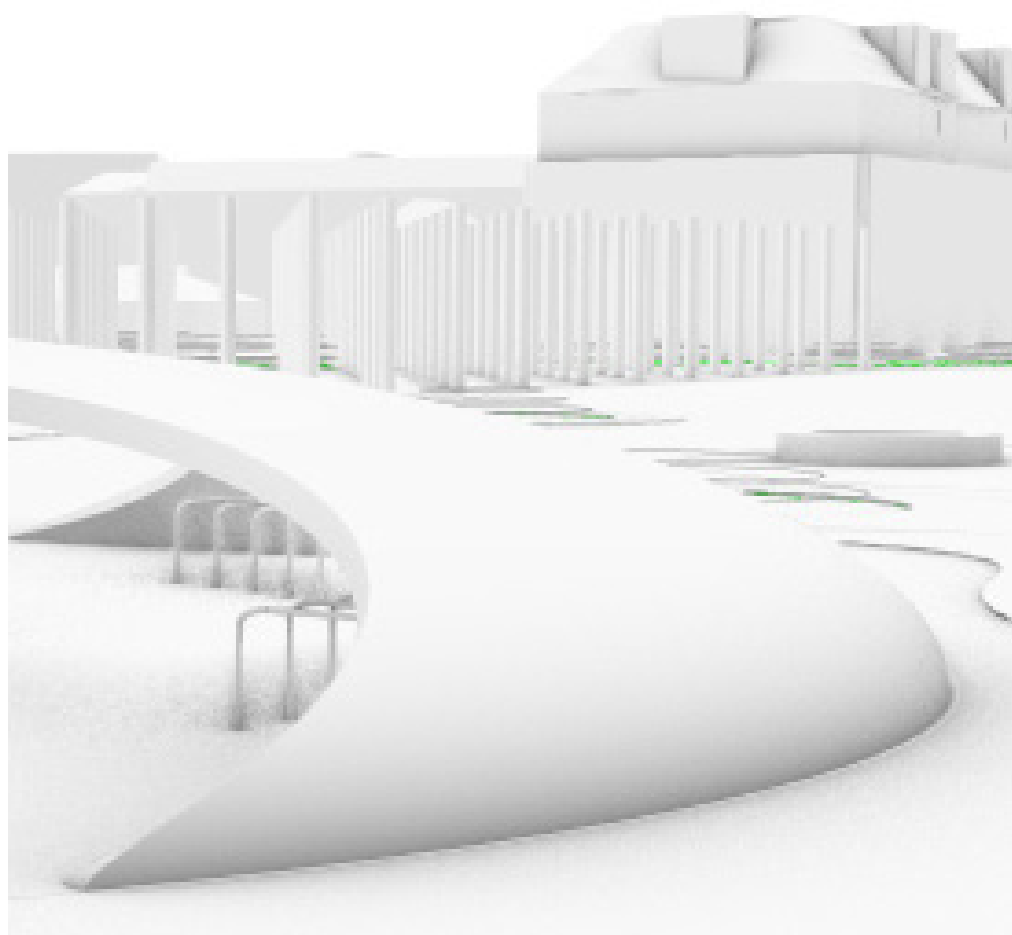
The environmental strategy focuses on consolidating disconnected parks and ecological corridors within the urban area, generating an environmental continuum that extends beyond the city from the center to its immediate surroundings. The projection of this new central green area aims to take advantage of the space recovered after burying the railway line, reconnecting the public space previously limited by physical barriers. The incorporation of a substantial tree mass into the city will not only serve an essential environmental function but will also act as a buffer layer that mitigates the impact of activities in the marked public space, benefiting the residents of the surrounding areas.

The design's underlying concept draws inspiration from organic entities that react to external forces, taking nature with its curvilinear forms and adaptability as a reference. The aim is to restore nature to a central place in the city while simultaneously integrating spaces for human activities that were previously restricted due to industrial and railway limitations. Similar to clearings in a forest, various uses and users appropriate internal park spaces, giving life to places of gathering, encounter, and action.

Certain parts of the public space are designed to generate a connection with lower layers of the project. Instead of seeking the disappearance of the railway from the surface, efforts are made to maintain its presence through visual connections that keep the presence of the train alive, now circulating beneath the city.

The circulation is integrated longitudinally and transversely throughout the project, creating connections between previously inexistent surrounding neighborhoods. This design promotes smooth mobility and facilitates access to various points in the city, fostering social interaction and a sense of community. In addition to pedestrian walkways, an exclusive cycle path is added, along with structures that encourage bicycle use within the city. This proposal embodies the intention of creating a better-integrated city with multiple sustainable transportation options, from trains to individual means.

In summary, this project aims to revitalize the urban public space and promote social and environmental integration in Torrelavega. By creating a space that embraces both nature and human activity, a welcoming and sustainable environment will enrich the lives of all citizens and strengthen the ties between the city and the surrounding region. Our vision is an urban renaissance where community values and respect for the environment converge, shaping a promising future for our city and its residents.





## The old "Talleres Obregón"

When taking into account the small scale, we approach the old "Talleres Obregón". This industrial block is currently almost in disuse and the intention is to renovate it to give it a second chance, without losing the industrial character that is so present in the collective imaginary of the inhabitants of Torrelavega. The building tries to accommodate different uses: commuter station, industrial, economic, public and residential.

### An industrial program adapted to the 21st century

The main idea of the program of this new complex is to continue with the industrial tradition of the site, but adapting it to the 21st century by implementing the "Industry 4.0", while hybridizing with other uses such as public services, residential and a mobility hub that connects the city with Santander and other nearby towns.

"Industry 4.0" includes disciplines such as big data, Internet of Things, Artificial Intelligence, cybersecurity, Cloud Computing and Additive Manufacturing. Torrelavega must be a pioneer in Spain and in Europe in coping with this type of industrial development and must become the main focus of industry 4.0 in Spain. For this reason, with the help of national and European funds, the aim is to ensure that this place is colonized by researchers and developers from Cantabria (thanks to an agreement with the University of Cantabria) and the rest of Europe with mobility grants. The houses on the upper floors of the building will serve to accommodate researchers who need it.

The open, fluid and dynamic space on the ground floor makes it possible to combine this economic activity with others with changing and flexible jobs. There are also endowment spaces for the town hall such as exhibitions or research samples. In addition, this is combined with the insertion in the building of the underground train station, making it possible to create a new hub with synergies between different strata of society.

All this allows us to go from a plot with obsolete industrial uses in today's society to a new industrial, mobility and residential hub.

### Raw Materials

In the first place, the commitment is leaving the original materials exposed, raw, with their material and industrial qualities with which they were conceived (bricks with stucco, exposed metal pillars, collaborating sheet metal floors,...). This, despite being an ideological position, supposes an economic saving to guarantee the economic viability of the proposal. In addition, this measure makes it possible to reduce the carbon footprint with a cycle of actions: "reuse, reduce, recycle".

### Integration with the environment

Regarding the integration with the immediate surroundings of the square, we propose accesses that achieve significant permeability with the adjacent public space on the ground floor. One access for the station and the other to the technology hub. The entrances to the dwellings can be made through these entrances or through more private entrances that lead directly to the cores in the back streets.

### An open station

The station is understood as an open space. A station open to public space and citizens. For this reason, this is a space that is not actively heated and is conditioned by passive techniques such as adequate ventilation and biophilic design is proposed. This means that the station is more accessible to the public and has the consequent energy savings.

The residential blocks that rise above the current level of the roof are achieved by reinforcing the current steel structure with concrete cores on the ground floor. Once the current roof is exceeded, a cross-laminated timber structure (CLT) is proposed with the consequent reduction in carbon emissions. A lattice with vegetation to the south allows passive conditioning of the houses and protects them in summer.

The open, fluid and dynamic space on the ground floor makes it possible to combine this economic activity with others with changing and flexible jobs. There are also endowment spaces for the town hall such as exhibitions or research samples. In addition, this is combined with the insertion in the building of the underground train station, making it possible to create a new hub with synergies between different strata of society.

