RE-EVOLUCIÓN INDUSTRIAL
INDUSTRIAL RE-EVOLUTION

INDUSTRIAL RE-EVOLUTION is the proposal to develop and transform Torrent de l'Estadella, an industrial estate in the periphery of Barcelona. The main objectives of this scheme are: renature the industrial estate, closer to its original condition as an environmental torrent; connect and integrate the industrial area with the adjacent city, through a series of public space and infrastructure interventions; and ensure that Torrent de l'Estadella maintains its productive character, proposing a new hybrid-industrial building typology and generating points of reference for the city through icons. The project seeks to implement these objectives on three levels:

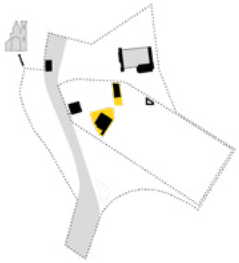
TERRITORIAL SCALE

Torrent de l'Estadella is part of Barcelona's metropolitan industrial belt and one of the few industrial zones which are still within the limits of Barcelona municipality. As a consequence, Barcelona's residential areas have grown around it, making the industrial estate a barrier within the city. In order to connect Sant Andreu de Palomar and El Bon Pastor neighbourhood, the proposal is concentrated on the north area of Torrent de l'Estadella generating a continuous link, not only between both neighbourhoods, but also adjacent to the new development "Supermanzana" Mercedes Benz.

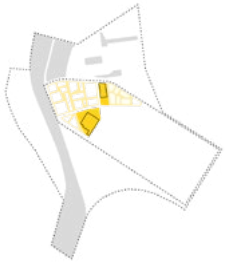
In terms of environmental aspects, Torrent de l'Estadella was originally a pluvial torrent, which was transformed into agricultural lands, and later on into the present industrial estate. Currently, a linear park is being developed adjacent to the site, not only improving the recreational activities and the ecological value of the area, but also connecting Torrent de l'Estadella with the city center of Barcelona. The proposal takes advantage of this park and extends its use all across the site, merging the ecological value of the Camí Comtal Park, with the tree-lined streets of El Bon Pastor neighbourhood and the Besòs River. The new Avenue of Torrent de l'Estadella will not only generate a pedestrian-friendly connection but will also improve the resiliency of the new neighbourhood. These resilient schemes include providing a permeable surface that fights torrential rains, and a tree canopy that improves the temperature below for pedestrians while providing a habitat for animal species.

The last territorial considerations are in terms of infrastructure: to connect the Torrent de l'Estadella industrial estate with the adjacent one below using the existing bridge that hovers above the train tracks, in order to improve industrial mobility and exchange of resources between industrial estates; and to build an eco energy plant that can supply heat and power to the new neighbourhood and surrounding residential areas.

1
Green Corridor



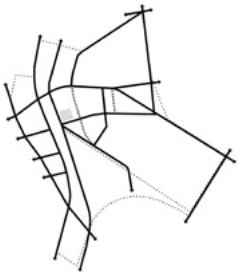
2
Periphery Icons



3
Public Space

4
Soft Mobility

5
Industrial Mobility



6
Traffic

URBAN SCALE

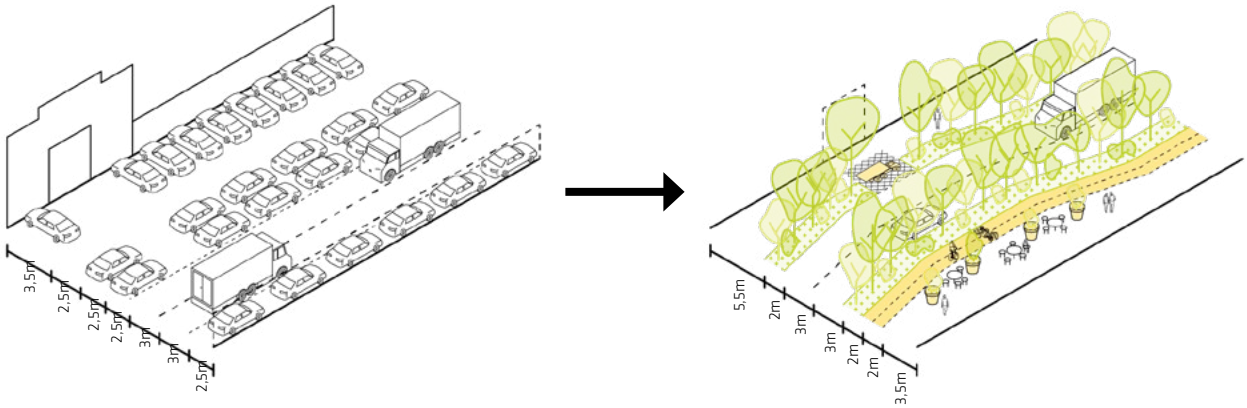
The proposal is conceived as a series of phases or urban stages to evolve the industrial estate into a hybrid livable-productive neighbourhood, while maintaining the industrial activity within each phase.

The first stage: the Re-Generative phase, consists of giving a second life to deteriorated or abandoned structures within Torrent de l'Estadella. At this stage, a series of hybrid buildings are developed adjacent to Camí Comtal Park, including a parking-residential-park structure that serves both Torrent de l'Estadella and Sant Andreu Comtal Station across the park; this building also creates a pedestrian connection between the site and the new park. In addition, two key buildings are also included at this stage: the Urban Living Room and the Eco Energy Plant. The Urban Living Room consists of the recondition of an existing industrial building and its transformation into a covered public plaza, while the Eco Energy Plant incorporates heat and power production across the site and provides it with a roof-park that can host multiple events.

The second stage: the Re-Integrating phase, includes the replacement of several existing buildings with new hybrid residential-industrial buildings, as well as an improvement of the public space within buildings.

The last stage: the Re-Evolution phase, consists of the integration and activation of all structures within the site, including new structures and re-integrated ones. By this stage, some buildings will start evolving and changing their use, such as the parking building integrating co-working spaces within, or new more permanent uses in the urban living room.

The new streetscape of the neighbourhood will be composed of the Avenue of Torrent de l'Estadella, shared-industrial streets, and a series of pocket plazas. The new avenue will convert the existing car-parking-oriented road into a pedestrian-friendly street. The avenue will smoothly meander to avoid speeding; be framed with indigenous vegetation and trees to provide shadow and reduce the environmental temperature; and transform all the space once used by parked cars into a bike path and extensive public space. The streets or alleyways in between buildings will be used as shared-industrial streets: spaces shared by pedestrians, cyclists, local and industrial vehicles. Buildings are intentionally misaligned within each block in order to generate pocket plazas all across the site. These plazas will not only provide public and recreative spaces, but also work closely together with a network of vegetated roofs to enhance the ecology and biodiversity beyond the area of intervention.



Current Torrent de l'Estadella **Future Torrent de l'Estadella**

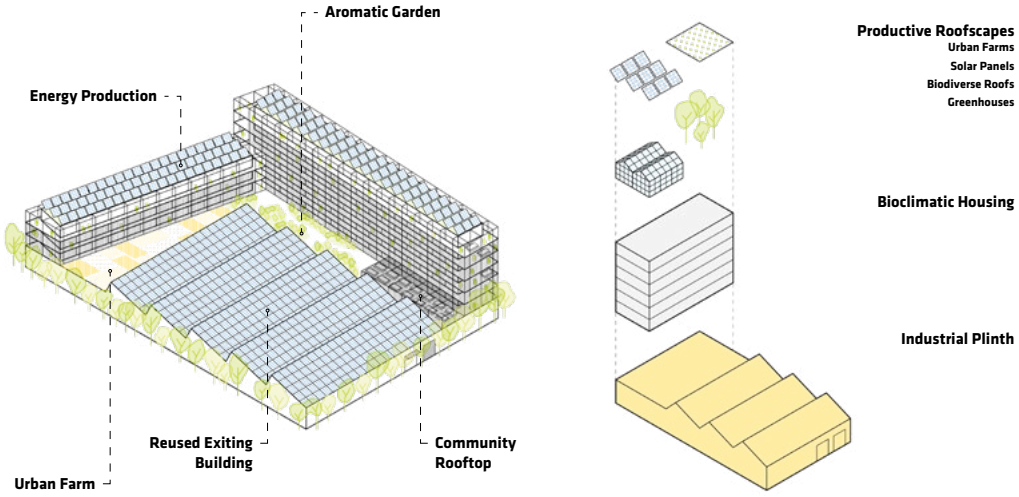
BUILDING SCALE

All the buildings that compose the proposal of Industrial Re-Evolution share three schemes: maintain the industrial and productive character of the site today; improve the immediate environment, either by providing sustainable strategies that benefit humans and enhance biodiversity; and re-establish and serve as a reference of what a liveable-industrial estate should be.

The base scheme for any of the structures is a hybrid-industrial building: a construction characterized by having a productive-industrial plinth on the ground level; a mix of other programs above it, mostly bioclimatic houses; and a productive roofscape, that can generate energy, host vertical farms, or engage in enhancing the local biodiversity. Buildings will also be clad using artificial-industrial materials to match the surrounding site, but also to distinguish their character from a traditional housing complex.

During phases 1 and 2, several existing buildings will house other functions and be added plug-ins to extend their usable life without the immediate need of replacing them. Some of these buildings might even be fully integrated with the new structures and reused to compose new hybrid buildings.

The current industrial estate lacks having an urban, architectonic, and landscape character. Industrial Re-Evolution strives to change this through its urban and built interventions, by providing the periphery with a new center, a new urbanity, a new character, and a new architecture, creating points of reference for the city and new emblematic icons:



Hybrid-Industrial Building Diagram

Urban Living Room

Urban Living Room consists of the rehabilitation and reconditioning of an existing building of notorious historical value. The scheme consists of maintaining the roof and structure to create a covered urban plaza that can host multiple uses. These uses range from more temporary, such as a street market, to permanent ones, such as hosting a co-working space or even light industrial programs. Each nave can act independently or work together as a complex. The plaza and landscaping surrounding the urban living room act as an extension of it, and allow for other programs and uses to take advantage of them.

Creative Parking

The presence of parked cars in the current industrial estate consumes all horizontal free space. To relieve this a creative parking is proposed to generate public space. The parking structure acts as an infrastructural artifact within the site and has various functions: allow for controlled parking at Torrent

de l'Estadella and the future Sant Andreu Comtal Station; create a connection and extension of Camí Comtal Park; provide a series of residential towers with privileged views of the new park; and allow for a transformation of its interior into a co-working space, once the demand for parking reduces.

Eco Energy Plant

The most iconic building in the proposal is the Eco Energy Plant: a district heating biomass power plant that doubles into a roofed park. The energy plant is able to transform local waste produced by surrounding neighbourhoods and the industrial estate into a renewable source of heat and energy to be used by the new buildings. This infrastructural system can also be implemented beyond the site and serve the housing zones within Sant Andreu de Palomar and El Bon Pastor. The power plant is shaped in order to create a lush vegetated park on its roof to be used as an extension of the public realm. This will not only enhance the biodiversity within the site but also will be able to host multiple outdoor activities such as cultural and physical events.