

22@ Barcelona Plan

A programme of urban, economic and social transformation
22@ Barcelona Urban Planning Management - June 2012



Ajuntament
de Barcelona

22@ Barcelona

- 1** *Presentation of the 22@ Barcelona Plan* (p.2)
- 2** *The strategy of urban, economic and social renewal* (p. 3)
- 3** *Location: Centrality and Accessibility* (pp. 4,5)
 - 4** *A new city model* (pp. 6,7)
 - 5** *Main axes of urban renewal plan* (pp.8-13)
 - 6** *Structuring elements of the plan* (pp.14-28)
 - 7** *22@ Plan development* (pp. 29-40)
 - 8** *Economic regeneration strategy* (pp. 41-44)
- 9** *Social project for the citizens and companies* (pp. 45-47)
 - 10** *Magnitude of the plan* (p. 48)
 - 11** *Execution state* (pp. 49,50)

1 PRESENTATION OF THE 22@BARCELONA PLAN

The 22@Barcelona project, approved by the Barcelona City Council in 2000, involves the transformation of 200 hectares of industrial land in the center of Barcelona into an innovative productive district, aimed at concentrating and developing knowledge intensive activities.

As a project of urban refurbishment plan, it answers to the need to recycle the obsolete industrial fabric of the Poblenou Quarter, creating a diverse and balanced environment with production centres, social housing, facilities and green space aimed at improving both the quality of life and of the workplace.

As a project of economic revitalization plan, it offers a unique opportunity to turn the Poblenou District into an important scientific, technological and cultural platform, making Barcelona one of the most dynamic and innovative cities in the world.

As a project of social revitalization plan, it favours the networking of the different professionals working in the district and encourages and supports innovative projects that foster collaboration among companies, institutions and residents as well as social, educational and cultural organizations.

The transformation led by the 22@Barcelona project enables the creation of up to 3,200,000 m² of new business GFS to stimulate production activities in the city centre, 4,000 social housing units and 114,000 m² of new green spaces, transforming the old industrial land into an area of the highest urban and environmental quality.



2 THE STRATEGY OF URBAN, ECONOMIC AND SOCIAL RENEWAL

The urban fabric of the Cerdà's Eixample is the common feature which allows to introduce new diversity into the same urban structure. This attribute becomes the main factor in the transformation process of Poblenou and the integration of the project setting of the 22@ Plan into the rest of the city.

The 22@Barcelona project culminates the process of transformation of Poblenou, after the significant work carried out in the sector over recent years. It forms part of the strategy for the refurbishment of the Llevant (coastal) area of Barcelona, which concentrates the most significant of the operations currently under way:

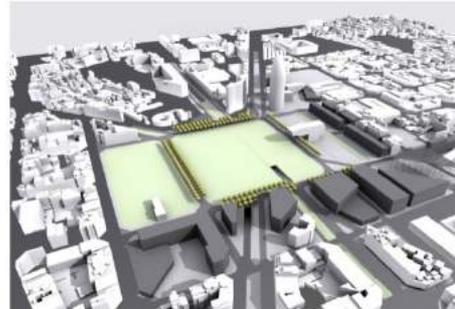
- The Sant Andreu-Sagrera plan, with the construction of the new Sagrera Intermodal Station, where the new high speed rail link is to enter the city. At the same time, 300.000 m² of new parcs, 660.000 m² of tertiary uses and 7.800 m² of new dwellings are going to be created in the Sant Andreu and La Sagrera districts.
- The urban improvements around the Glories square are transforming 378,019 m² of land. Through this renovation the city will gain 17,000 m² in green spaces, 50% of the total foreseen government protected housing and eight new public installations. At the same time, it is being proposed a new road solution that includes tearing down the current overpass and building a new, underground entrance and exit to the city.
- The infrastructures associated with the renovation of the Besos coast: Diagonal Mar, the Universal Forum of Cultures area and the renovation of the La Mina district.



3 LOCATION: CENTRALITY AND ACCESSIBILITY

The extraordinarily central location of the project, both with respect to the city and its metropolitan area, is one of its main assets. The elements which create centrality and connection at a metropolitan, national and international level become one of the keys in the attraction of multinational innovative activities.

The 22@Barcelona district is articulated around Avinguda Diagonal, which joins two of the city's main poles of economic and cultural activity: Plaça de les Glòries, the future home of Barcelona's new Cultural and Administrative Centres, with its own intermodal transport station, and the Barcelona International Convention Centre (CCIB), the largest in the South of Europe, capable of hosting international events of up to 20,000 delegates.



Glòries square project



Internacional Convention Center of Barcelona



3 LOCATION: CENTRALITY AND ACCESSIBILITY

With its comprehensive transport network, the 22@Barcelona district offers excellent all round access:

- La **Ronda del Litoral** (coastal ring road) connects the 22@Barcelona District with the rest of the Metropolitan Area of Barcelona.
- The **Metro** (L1, L4 and future L9), the Tram (Trambesòs) and the bus network link it to the rest of the city, and to the main townships along the metropolitan coastline.
- The new **metropolitan railway station** will connect the future Plaça de les Glòries Intermodal Transport Centre with El Prat International Airport.
- The future **High Speed Railway Station**, will connect Barcelona with the European High Speed Rail Network.
- **Bicing bicycle service** (www.bicing.com), a new form of public transportation the Barcelona City Council is establishing in the city of Barcelona, will have many stations in the Poblenou neighborhood.



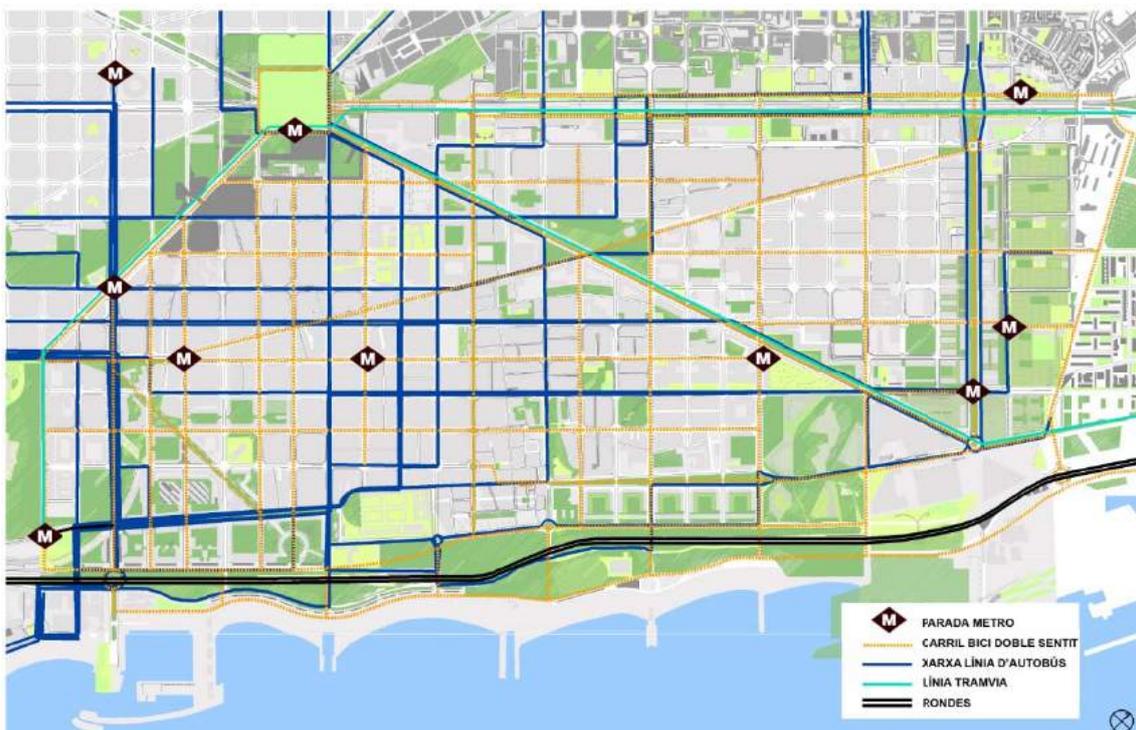
Litoral



avenue



station)



district

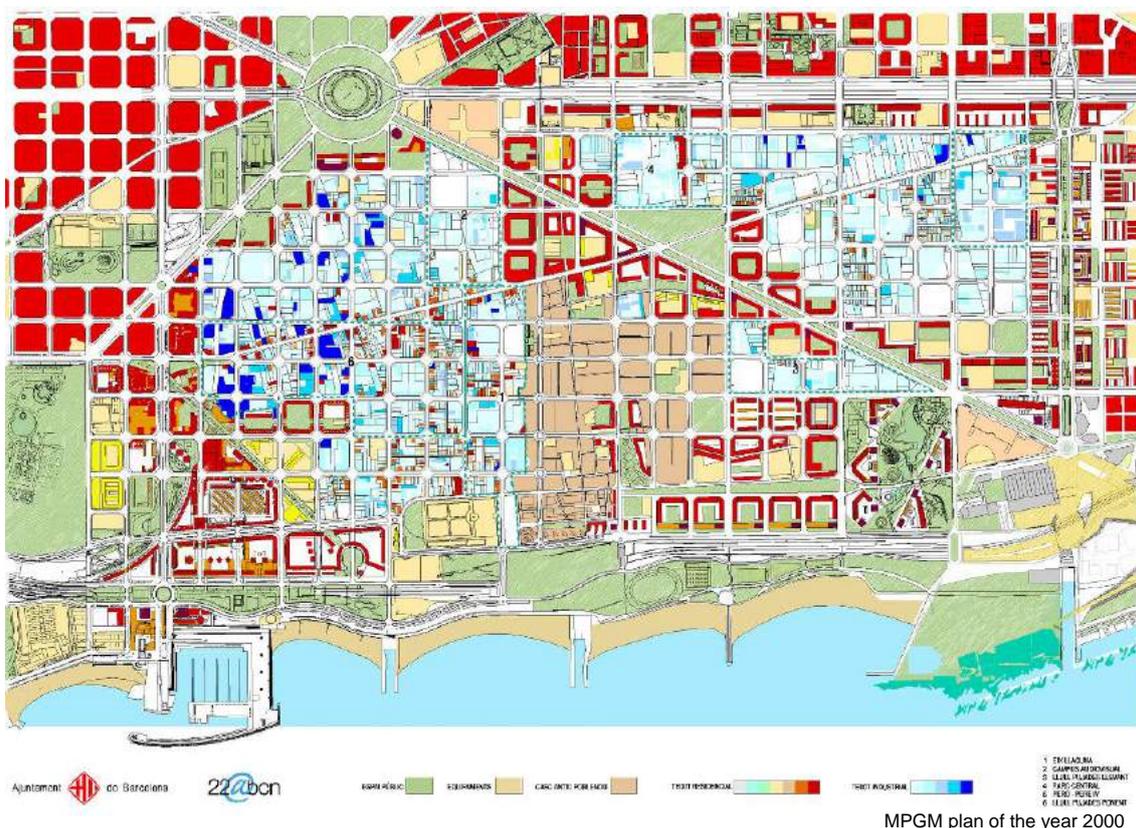
4 A NEW CITY MODEL

In order to create a new city model the 22@ Project is bringing the old industrial fabric into the current era through a progressive transformation, taking place over approximately 20 years, that adapts to both the area's preexisting elements and its new needs. Proposals must be based on the preexisting structures: maintaining streets and historic features and elements as the base of the new organization; the result must strike a balance between maintained, transformed and substituted elements.

The 22@ Project **overcomes the low density** that characterizes traditional industrial zones and opts for a dense and complex urban space, allowing for more efficient land use and creating an environment where different urban agents can interact and exchange information and generate the critical mass necessary to develop an agglomerative economy.



The "Catalan Manchester". An industrial past



4 A NEW CITY MODEL

Through a **system of incentives** that allow for better exploitation of this sector's urban areas, the urban regeneration processes contribute to the re-urbanization of all streets and generate land that is ceded free of compensation to the community –from a plot that was 100% private, 30% will become public - in order to create new green areas, amenities and subsidized housing.

With this option, we opt for a **high-quality urban model that is compact, diverse**, que enfront d'un model d'especialització del territori per usos -industrials- aposta per la mixtura que afavoreix la **cohesió social** i propicia un desenvolupament urbà i econòmic més **and sustainable**, because the resulting city will be more balanced, more heterogeneous, more ecologically efficient, more cohesive and more economic powerful.

We propose a **more compact and diverse city model**, which contrary to a model that designates specialized -industrial- land uses, opts for a mixture that favors social cohesion and fosters more balanced and sustainable urban and economic development. Therefore, productive activities co-exist with dwellings, commerce, and research, continued training and technology transfer centers in a high quality area that balances high density with open spaces and amenities.



Low density and functional obsolescence



Rehabilitation of the urban fabric. Mixtcity of uses



Coexistence between preexistence and transformation

Density

Diversity and Complexity

Flexibility

5 KEY POINTS IN THE URBAN REGENERATION PROJECT

MAIN AXES OF THE URBAN RENEWAL

The 22@ project, approved in 2000, is an urban-planning instrument that guarantees that industrial land in the Poblenou area will become an innovative urban environment, improving quality of life, efficiency of infrastructures and sustainability. This regeneration centers around the substitution of the old “22a” land use designation, which only allowed for industrial use of the land, for the new “22@” designation, which determines characteristics the regeneration must meet in order to attract and develop talent:



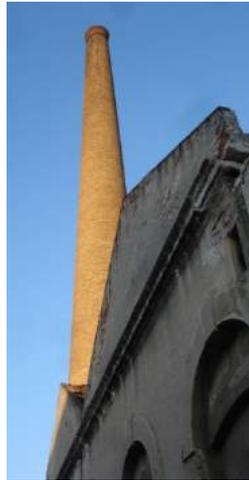
Innovative educational environment



New social housing



New public amenities



Industrial heritage protection



New green spaces



New advanced infrastructures



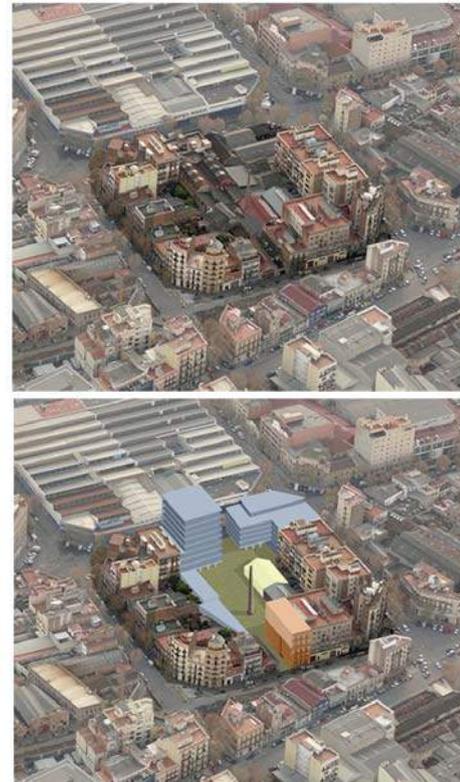
Bird's eye view of the 22@ context

MAIN AXES OF THE URBAN RENEWAL

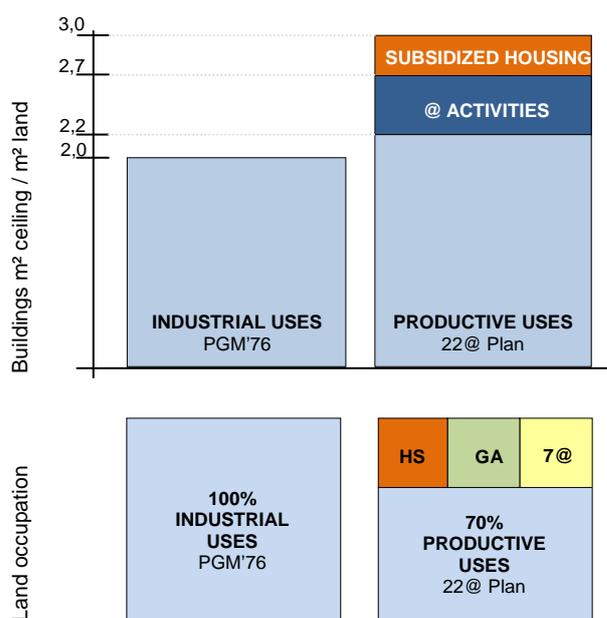
Density / Diversity and Complexity / Flexibility

A compact city favors synergies between urban agents and allows for more rational land use; for this reason, the transformation of industrial areas includes a higher building index, which attracts real-estate developers and allows them to contribute financially to the sector's new infrastructures. The project overcomes the low density that characterizes traditional industrial zones and increases the area's building index. This initiative means an increase in the area's net building index from 2 m²c/m²l to 3 m²c/m²l.

The increase in the private sector building index (from 2 to 2.7) and the re-designation of land are linked to certain obligations: payment of urbanization fees, obligatory presence of @ activities, land concessions, etc., which establish a system of incentives for transformation.



Subsector 8 i 9 (present and future)



RIGHTS

- More productive uses
22a -> 22@
- Higher building index
2 -> 2.7
- Advanced infrastructure

OBLIGATIONS

- Land concessions:
 - 10% for new amenities (7@)
 - 10% for new housing (HS)
 - 10% for new green areas (GA)
- Financing for part of the Special Infrastructure Plan
- 10% concession for urban-planning

MAIN AXES OF THE URBAN RENEWAL

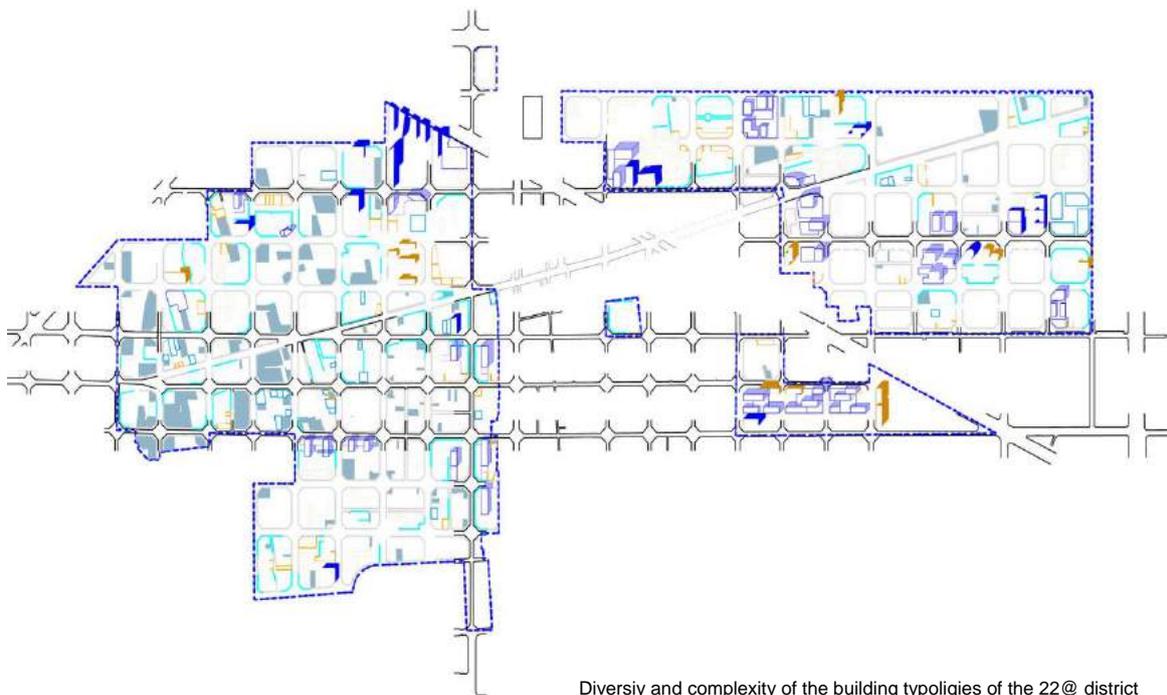
Density / **Diversity and Complexity** / Flexibility

Urban complexity favors information exchange and creates a more sustainable city because it allows people to live near their work, fosters social cohesion and guarantees the vitality of public spaces throughout the day. The 22@ project establishes that each plan to renovate industrial land for use in new productive activities must generate space for amenities, subsidized housing and green areas that contribute to the social development of the Poblenou area and improve quality of life.

The coexistence of different uses belongs to the current conception of the contemporary urban planning, unlike the "zoning" carried out during the 50's and 60's around Europe, betting on the specialization of the territory. Nowadays, the mixture of uses is one of the fundamental bases to city-making all around the world, and the 22@ Plan is a precursory Plan in this aspect.



Lluís Pujades Poblenou (past and present)



Diversity and complexity of the building typologies of the 22@ district

MAIN AXES OF THE URBAN RENEWAL

Density /Diversity and Complexity / **Flexibility**

Unlike traditional urbanization plans, the general regulation does not determine the final result of the transformation, meaning that it does not establish a detailed and precise organization of the area, but promotes a progressive regeneration that adapts to the characteristics of each part of the district through derived plans. This way, the plan encourages interventions of varying sizes and buildings of all types, which allows the end users' criteria of quality, functionality and uniqueness to be met, and favors the integration of important industrial elements in new projects in order to preserve the neighborhood's historical legacy.

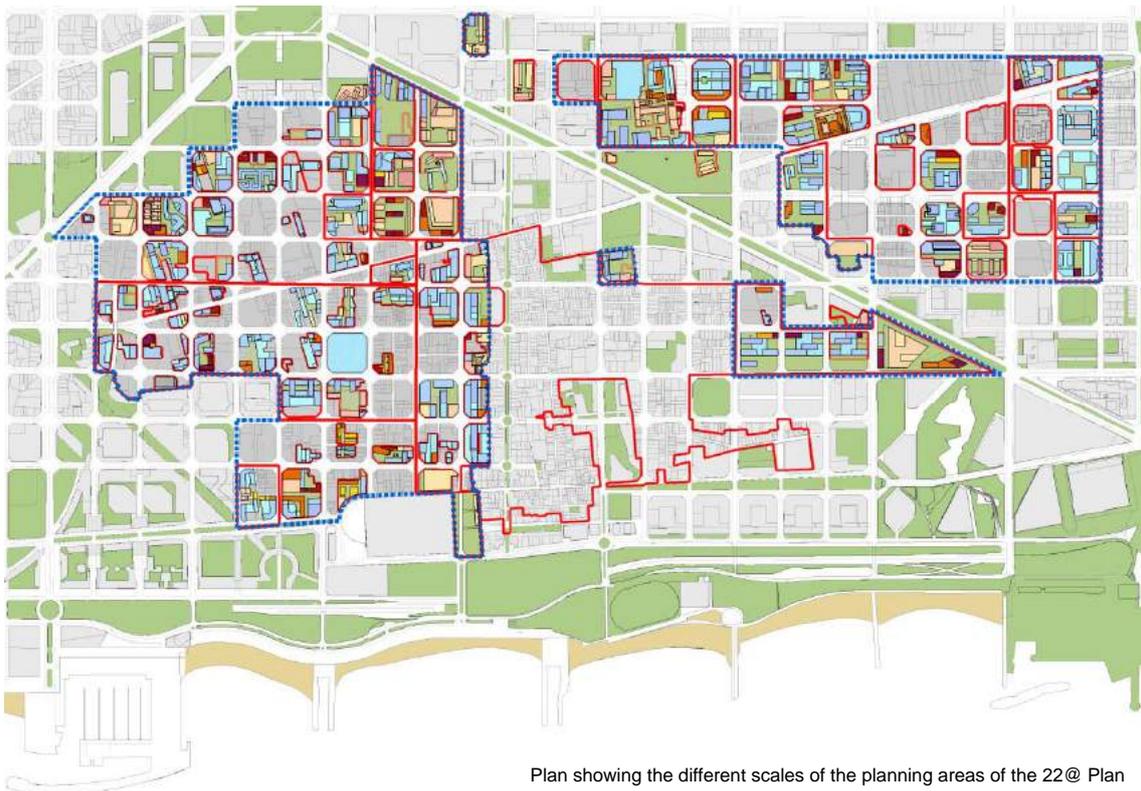
The 22@ project has been designed to allow for a progressive regeneration of industrial areas so that they can adapt to the different urban-planning, economic and social needs of each part of the area.



Can Framis (past)



Can Framis (present)



Plan showing the different scales of the planning areas of the 22@ Plan

MAIN AXES OF THE URBAN RENEWAL

Density /Diversity and Complexity / **Flexibility**

- The 22@ plan is flexible in **time**, allowing for progressive development adapted to the preexisting situation in order to avoid brusque changes in current use.

- The 22@Barcelona project is also flexible regarding the shape of **buildings**, only specifying the land owner's rights and obligations without establishing pre-determined morphological conditions for the transformations, thus allowing different projects to adapt perfectly to their respective functional needs.

- Likewise, the 22@Barcelona project is flexible in the regeneration **agents**, creating a system that combines public and private initiatives: The Barcelona City Council has defined the organization of six strategic sectors that act as reference points and urban centers and also encourage the regeneration of the rest of the area through private initiatives.

- The 22@Barcelona plan is also flexible in the **transformation mechanisms**, allowing for different types of derived plans, which adapt to different situations and requisites and can drive projects of varying magnitudes (whole blocks, half blocks, plots over 2,000 m², consolidated industrial buildings, façades, etc.)

Flexibility in the transformation mechanisms



Predetermined plans.



Full-block plans



Half-block plans



Plans for consolidated industrial buildings



Plans for consolidated fronts

Industrial Heritage

@ Activities

@ Public Amenities

New Housing

Public Space

Infrastructures

ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage /@Activities/ @Public amenities/ New housing/Public Space/Infrastructures

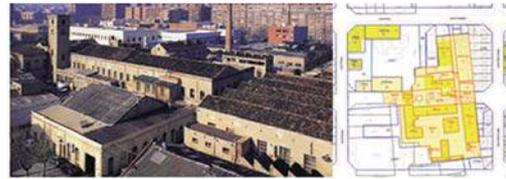
Heritage sites are one of the most solid signs of a society's identity, thus becoming key to analyze the cultural, economic and urban development of our cities. In the Poblenou area these heritage sites are linked to a specific productive process and to a technological system that began at the end of the 18th century, with the introduction of mechanization, and continues today.

The 22@Barcelona plan fosters the Poblenou neighborhood's characteristic spatial wealth and promotes a diverse urban model, in which new buildings and public spaces co-exist with historic sites and elements that represent the neighborhood's industrial past, creating an environment of great cultural value that combines tradition and innovation.

In order to encourage the process of recovering these symbols of Poblenou's industrial history the Poblenou Industrial Heritage Protection Plan has been developed, **preserving a total of 114 elements** (46 of which are already registered and 68 new additions), which will help guarantee the preservation of this historical and cultural legacy. In addition to protecting the area's heritage, the "Barcelona Center of Industrial Culture" will also be created, where a series of initiatives and mechanisms will explain the area's industrial heritage.

The Poblenou's neighborhood is characterised by its typological diversity of buildings which were built in different historical moments. Thus, the new interventions must be one of its own historical layers, in order to prove the success of the urban fabric and the capacity to adapt itself to the new needs coming up in our society, preserving the Industrial Legacy of Poblenou.

7 elements with a higher level of patrimonial protection



Can Ricart



"la Escocesa" Factory



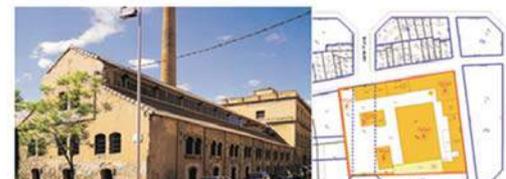
Vicente Illa S.A., Ca l'Illa



Frigo S.A. Procuts



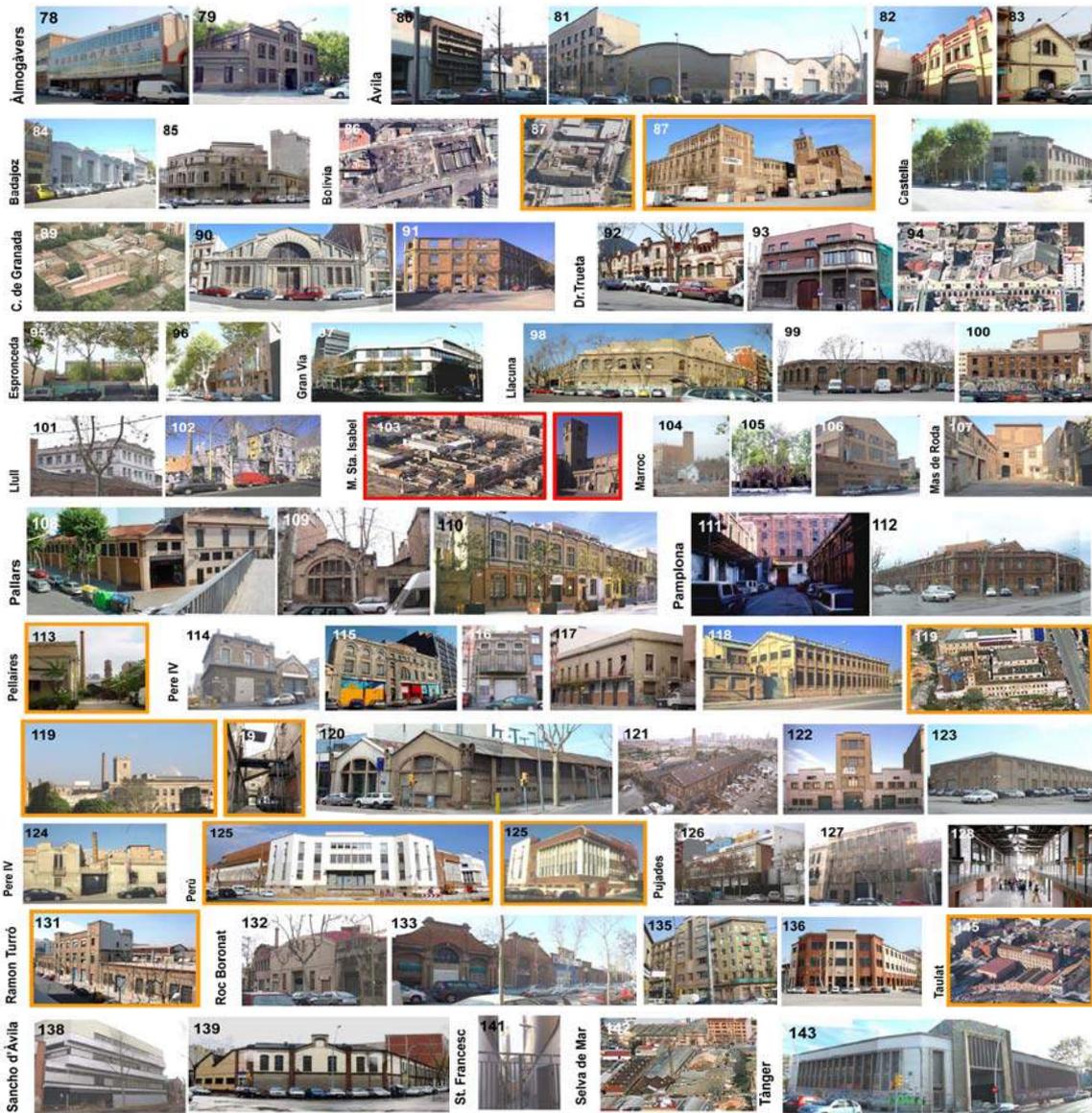
Can Gili Nou



Gal i Puigsec (Nowaday Palo Alto)



Waldes Industries



ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage /@Activities/ @Public amenities/ New housing/Public Space/Infrastructures

Re-use of industrial buildings

Nowadays many protected buildings are currently approved in their Urban Planning and some of them are already restored. There are some examples of different kind of restoration strategies.

Depending on the needs in the different areas, various uses of the restored industrial buildings are proposed:

- **@Activities**, such as the "Ametller's Warehouse", where the TEUVE company is placed; the *Metales i Platerias Ribera (Can Culleres)* factory, where the Alstom-Ecotecnia company is located, or the *Josep Canela e Hijos* factory, where the headquarters of the Market of Communication Commission will be placed.

- **@Public amenities**, such as the *Ca l'Aranyó* old factory, where the UPF is placed; *Can Jaumandreu*, where the UOC, Barcelona Activa and BIMSA are currently working or *Can Ricart*, where the future *Casa de les Llençües* will be placed; between others, like *Can Framis*, where *Vila Casas Foundation* is placed, or the *Francisco Munné* industrial enclosure, where the BAU School is located.

- **Non conventional housing**, for instance the *Sucre's Passage (Lofts)* or the *Can Gili Nou* enclosure, where mixed uses are placed, such as public amenities, economic activities and non conventional housing (Lofts).

Habitatge no convencional



Can Gili Nou enclosure (Lofts, Hotel and Neighborhood Centre)



@ Activities

Ametller's warehouse. TEUVE



@ Public amenities

Can Framis. Vila Casas Foundation



Francisco Munné's industrial enclosure. BAU School



Can Jaumandreu. UOC



Ca l'Aranyó. UPF

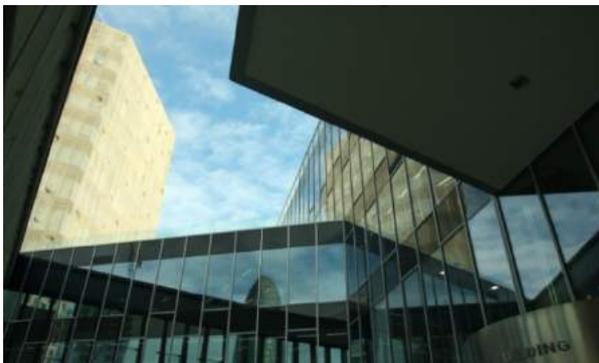
ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities/ New housing/Public Space/Infrastructures

The 22@ project favors the coexistence of non-contaminating productive activities and encourages the most innovative sectors, which receive the designation “@ activities” and are characterized by their intensive use of information and communication technologies and are made up of highly qualified workers. In order to encourage these activities that dynamize the economy, the 22@ project allows transformation plans that include no less than 20% @ activities to apply a higher building index. This strategy encourages developers to reach agreements with innovative companies and build spaces that are specially designed to meet their needs.



Intensive work on knowledge



Interface building



Toni Miró's studio. Flexible spaces



Interior view of Can Jaumandreu . UOC

ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities/ New housing/Public Space/Infrastructures

@ Activities are those that use knowledge as their main productive resource, regardless of the economic sector they belong to: they may work in the research, design, publishing, culture, data-base management or multimedia fields, and are characterized by their intense use of information and communication technologies and their low space per worker ratio. For this reason, they provide more jobs than traditional economic activities.

This way, thanks to the new urban designations, the 22@Barcelona project gives incentives to innovative activities that, together with the neighborhood's traditional activities, create a rich and varied productive fabric that favors competitiveness in all businesses.



Restored offices building. Pich Aguilera



Gaes headquarters. MIZIEN Arqitcetura



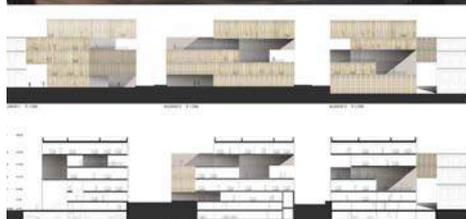
Offices building. sector Lluç Pujades Ponent. Josep Miàs



Telecommunications Market Comission. Batlle i Roig



Abacus headquarters. BCA Arqitcetura



Seu Bassat Ogilvy. PBA Arqitcetura

ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities / New housing / Public Space / Infrastructures

The 22@ project establishes that 10% of transformed land be reserved for public amenities, called 7@ amenities.

The Plenary Council of Sant Martí district approved The Public Amenities Plan of Poblenou in July 2001, which tries to show the needs of amenities in the future, searching for the balance between services and needs of the population. The majority of the new public amenities are situated in the 22@ context, as a result of the land concession obtained thanks to 22@ urban transformation.

The Plan destines, on the one hand, public amenities, which respond to different city scales, meant for the citizens:

Local endowments: Contribute to mitigate the lack of community oriented amenities in the neighborhood, in accordance with the Poblenou amenities plan, jointly elaborated by residents and the City Council, which calls for the construction of schools, community centers, residences for the elderly, etc.

- **City scale's Public Amenities:** they are complemented by the local facilities, and they are compound by, for example, universities (related by the future activities of the district) or cultural amenities. As a consequence of the great value of the industrial heritage of Poblenou, the History Museum of the city planned the construction of educational, research and disclosure centres which will explain both the factory's career path and the global explanation of the contemporary metropolis of Barcelona.



nèneh



ili Nou



ngües



iversity

ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ **@Public amenities** / New housing/Public Space/Infrastructures

Innovation and training centers:

Endowments linked to the productive system, housing, training, research and new technology based activities. Through this new concept of amenities, the 22@Barcelona district encourages synergies between universities, technology centers, research centers and productive activities. This measure helps increase general productivity, as it guarantees availability of a wide range of highly qualified human capital and promotes collaboration among the area's research groups, institutions and the companies around them.

Nowadays, all the catalan universities have a head office in the 22@ district. A tecnologic center is planned or built in each of the economic sectors (clústers).

@ Public amenities



Can Jaumandreu. Josep Llinàs



Edifici Media TIC. Enric Ruiz Geli



Barcelona Activa . TAC i Mercè Berenguer



Public amenities plan of the 22@district

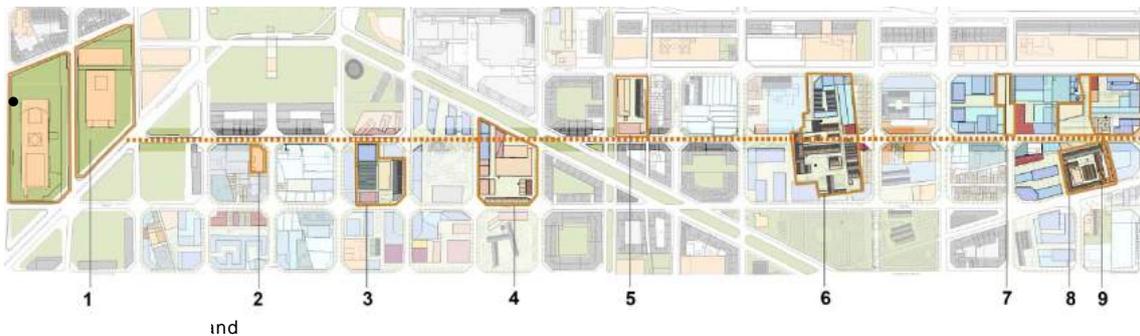
ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities / New housing/Public Space/Infrastructures

There are two main axes to articulate and revitalize the territory, which bring together different kind of public amenities: the city scale ones and the local ones. Those axes reinforce the Poblenou's social and urban fabric

The Bolivia axis crosses the whole Poblenou neighborhood, raising many city scale's public amenities, for instance The Auditorium and The National Theatre, the UB, UPF and UOC universities and cultural equipments like Can Ricart and the Escocesa industrial enclosure.

The Llacuna axis travels across Poblenou from north to south, creating another considerable axis on the area. It is enriched by the vitality of the Poblenou's Rambla, giving to the neighborhood the endowments which historically were missing. Amenities linked both to economic activities and to the resident population, complemented by public spaces, are raised in this street, becoming one of the main axes in the 22@ context.



ters



JOC



ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities/ **New housing** / Public Space/Infrastructures

The 22@Barcelona project has decisively opted for a mix of space dedicated to production and new housing, allowing people to live close to their workplace and favouring the development of local shops and trade, so guaranteeing the vitality of the area throughout the course of the day.

With this option the project recovers over 4,600 traditional homes built in the industrial areas and encumbered since 1953 when the County Plan established that the productive land in the city should be exclusively for industrial use. With the new 22@ classification, which accepts the coexistence of diverse urban use, the 22@Barcelona project regularises the presence of such dwellings for the first time in the last fifty years and favours their refurbishment.

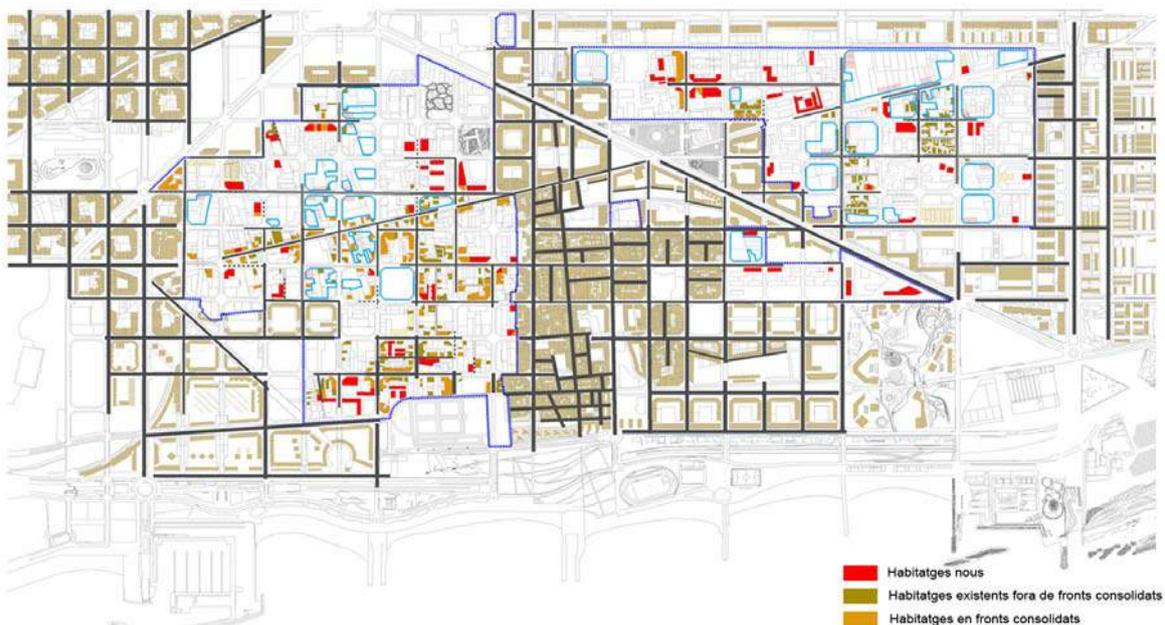
Additionally, it promotes the construction of 4,000 new government protected dwellings, which favors social diversity in Poblenou and guarantees that all streets and public spaces are navigable throughout the day. Currently 2262 flats are under construction or starting the construction process. These, in addition to the rest of the flats foreseen, will be ready within the next four years.



Dwellings building at Ciutat de Granada. Ortiz i Suñen



Dwellings building at Illa Necso. Ricard Mercadé



Housing plan in the 22@ context

ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities/ **New housing** / Public Space/Infrastructures

In order to foster the typological and social diversity of Poblenou, the 22@Barcelona project also provides for the opening of temporary worker residences, and for the conversion of certain industrial buildings into loft-type housing units if the degree of buildability is below that established for productive use, and if their preservation is of architectural, historical or artistic interest. In this way the 22@Barcelona project incentivates the preservation of the industrial architectural heritage of the district, offering non-conventional housing to further broaden the supply of housing.

With this kind of new residential use, the Project complements the diverse urban refurbishment initiatives undertaken in Poblenou over recent years and increases the number of homes in the District to 40,000. Thus the proportion of residential use, virtually 50% of all built-up space, guarantees a balance of living and working space.



Student dormitories at Zamora street. BCA



Lofts at Sucre's Passage. Interior view



Dwellings building at Roc Boronat. SAAS



Dwellings building at Sancho d'Àvila. BAAS



Dwellings building at Almogàvers. F451

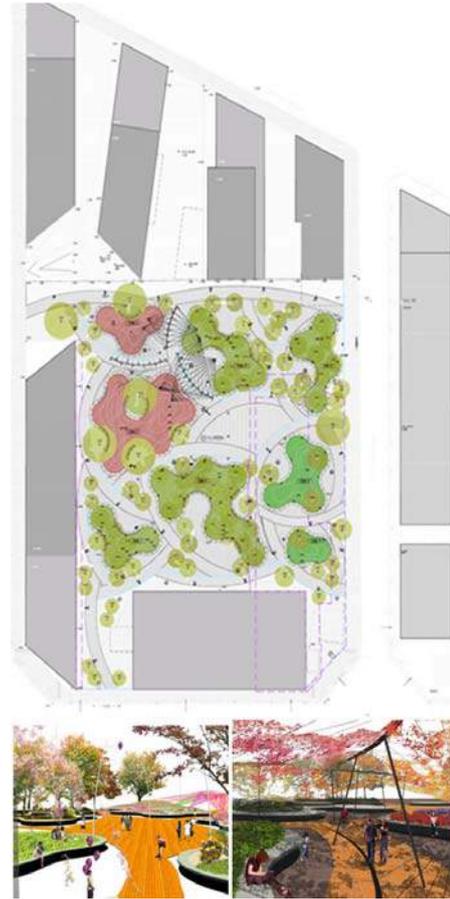
ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities/New housing/ **Public Space** /Infrastructures

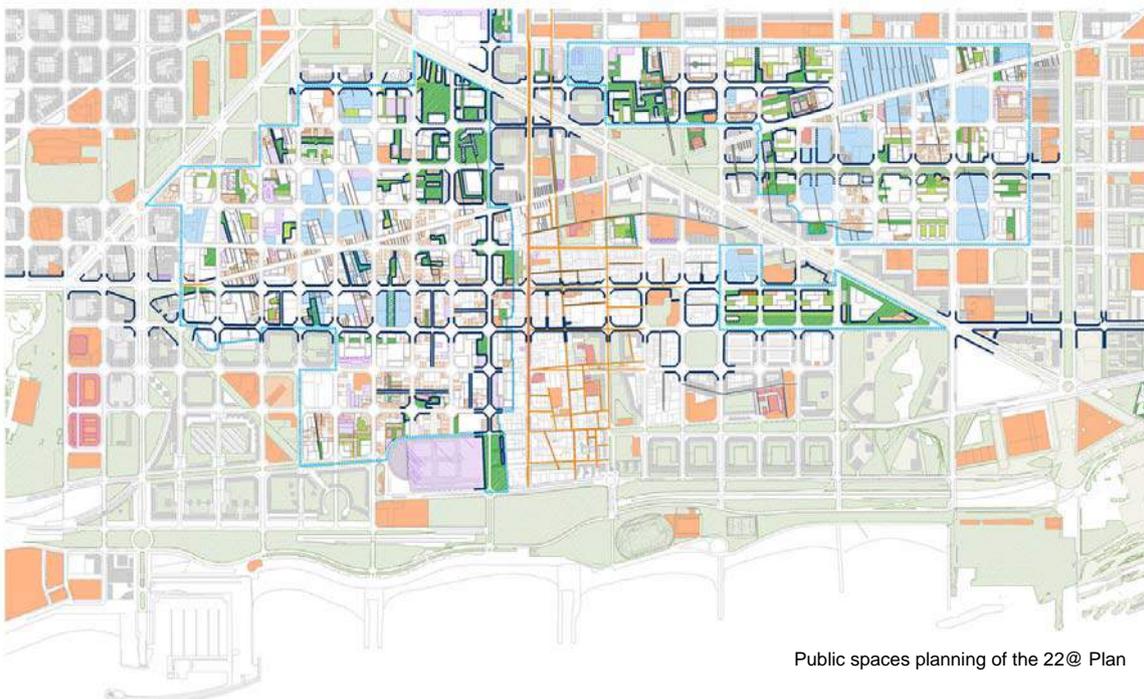
The 22@Barcelona project allocates 10% of what was previously industrial land to new green spaces (114,000 m²), while also establishing the highest standards of quality for the district's streets and public spaces.

Public spaces are the backbone of the urban structure, of relationships and activities, and therefore must be one of the main focal points of the city's configuration.

A series of measures have been proposed for the current structure of green zones, where the city-level spaces –Litoral Park, Glòries Square, Central Park, etc.– extend gradually toward smaller squares and residential streets, which are seen as a prolongation of the area's activities and, as such, become places for true interrelation among different users. These open spaces lie in the existing plot structure, at times recovering old alleyways or reinforcing elements of architectural interest, like smoke stacks or industrial warehouses.



Audiovisual Parc. Victor Rahola and Jorge Vidal



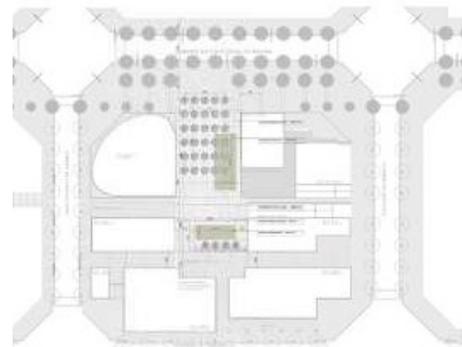
Public spaces planning of the 22@ Plan

ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities/New housing/ **Public Space** /Infrastructures

The traditional meeting point, “la Rambla del Poblenou”, will be complemented by new arteries like Pere IV, Cristóbal de Moura and Llacuna and Pujades Streets, which will give each sector cohesion and identity.

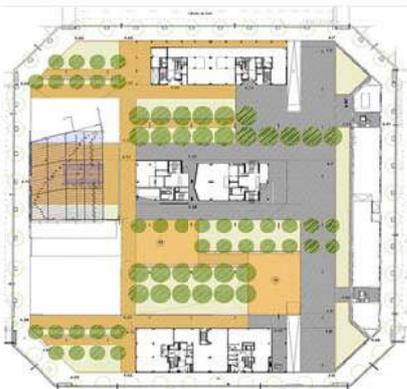
The concept of streets as the backbone of open spaces subtly modifies the way they are treated in order to improve pedestrian circulation and regulate motorized traffic. A new standard is introduced that optimizes pedestrian trips and rationalizes street distribution.



: block



BAAS



Old garages block TMB - M. Gabàs i A. Gabàs

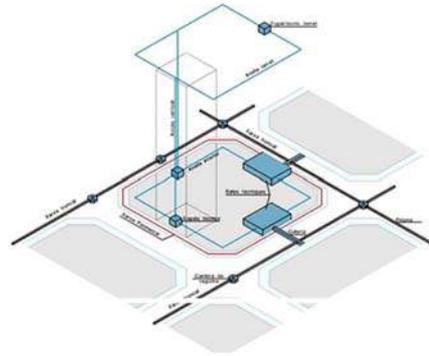


Camí antic de València - BCA

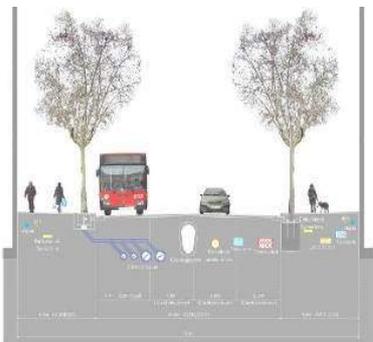
ESTRUCTURING ELEMENTS OF THE 22@ PLAN

Industrial heritage / @Activities/ @Public amenities/New housing/ Public Space / **Infrastructures**

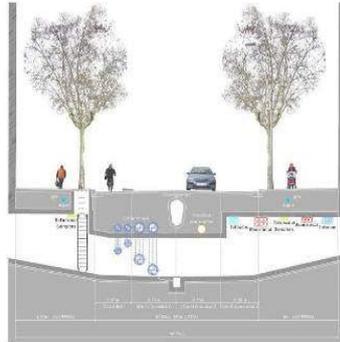
At the time of the approval of the 22@Barcelona plan in 2000, the infrastructure network of the industrial areas of Poblenou was found to be clearly wanting. To amend this situation the project establishes a new Special Infrastructure Plan (PEI) to re-urbanise the 37 km of streets in the 22@Barcelona and provide them with leading edge services and utilities.



Axonometric view of service rationalization



Section Primary street



Section secondary street



Primary Street. Tànger Street



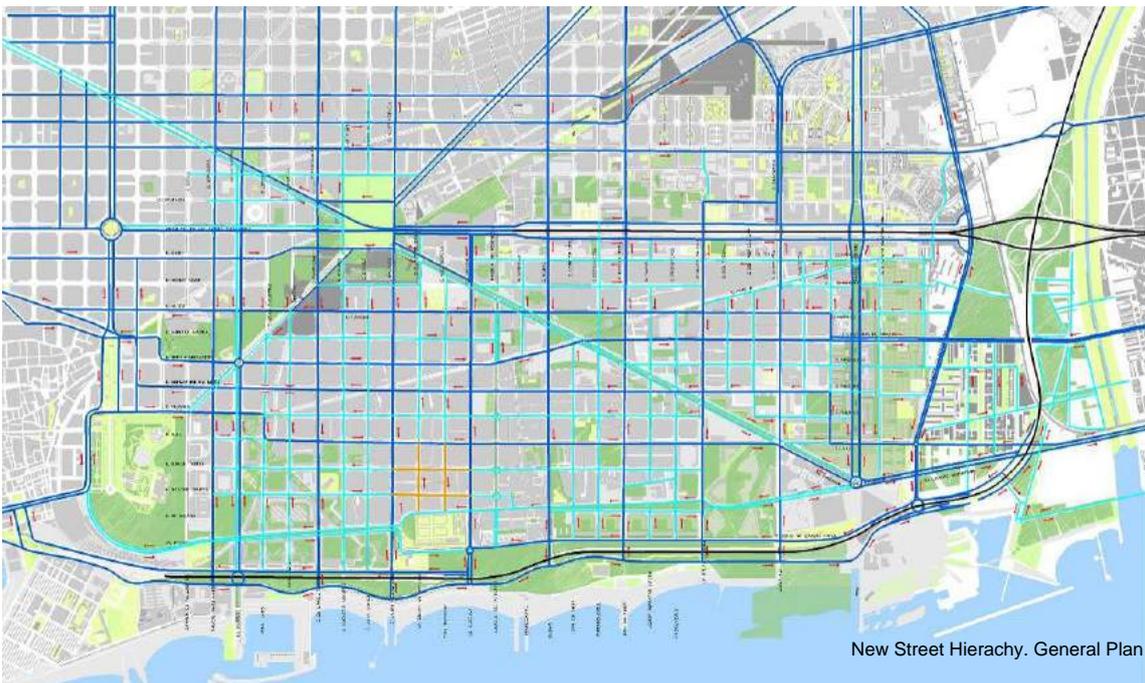
Street hierarchy. Primary street



Street hierarchy. Secondary street



Secondary Street. Roc Boronat Street



New Street Hierarchy. General Plan

ESTRUCTURING ELEMENTS OF THE 22@ PLAN

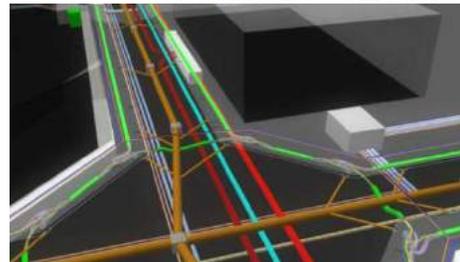
Industrial heritage / @Activities/ @Public amenities/New housing/ Public Space / **Infrastructures**

The new infrastructure plan represents a total investment of over 180 million and provides the sector with a modern power supply grid, centralised climate control and pneumatic refuse collection systems. The design of such new grids and networks places the emphasis on energy efficiency and the responsible management of natural resources, while also providing for significant improvements to be made to the diverse urban services and utilities:

- The new fibre optic grids ensure free competition between service providers and telecommunications content. The service galleries are freely accessible, facilitating the laying of new cable and minimising the need for any future roadwork, as well as improving the sustainability of the urban environment.
- Compared to traditional systems the new centralised climate control system (DH&C) offers an increase in energy efficiency of over 40%.
- The new power grid guarantees the quality of the electricity supply, offering five times more power than the current system.
- The new mobility plan for the sector aims to ensure that as of 2010, over 70% of the journeys made by people in the 22@Barcelona district will be by public transport, on foot or by bicycle. To such ends it proposes significant improvements to the public transport network, establishes an extensive network of cycle lanes (29 km) and streamlines the flow of vehicles. It also guarantees the availability of parking spaces for both workers and visitors throughout the sector, and introduces new mechanisms to reduce noise and environmental pollution.
- WiFi project, which is led by the IT Municipal Institute, is a project that is aimed at spreading wireless WiFi technology throughout the 22@Barcelona district. Its goal is to provide public spaces with a variety of connection services, attractive enough both to private service providers and to the administrations and Universities of the area.



New streets urbanization at 22@ district



Virtual view of the new services network



New services network



New telecommunications and electric net



Registerables galleries

Derived Plan:

Predetermined plans

Privately Developed Derived Plans

22@ PLAN DEVELOPMENT

Derived Plans

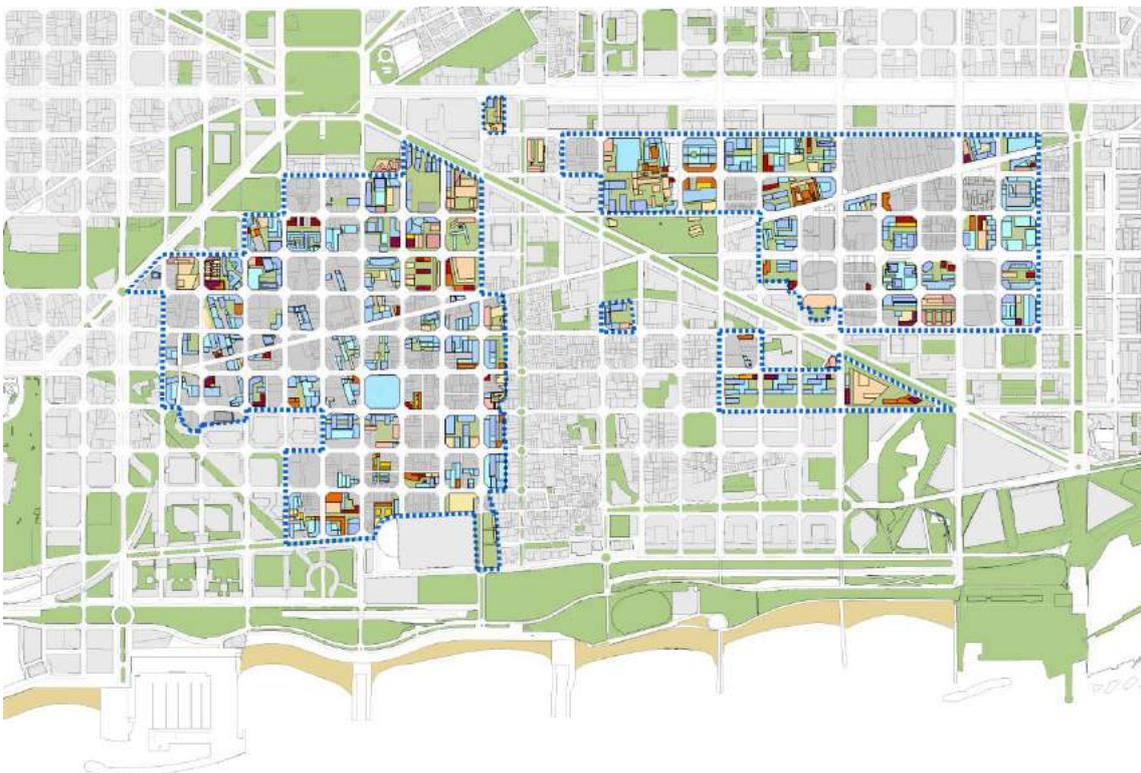
The transformation process's complexity necessitates a flexible system of derived plans that allows for both the projects sponsored by the City Council and others in areas that have not yet been defined, which share the same objectives and contents, and can be developed through private initiatives.

Likewise, the plan recognizes existing dwellings that are the result of historical urbanization processes and defines improvement and renovation conditions for their façades, as well as allowing for new housing development: a) reusing existing industrial buildings that meet specific characteristics; b) government subsidized housing.

These provisions obey urban-planning considerations that lend coherence to the different regulating instruments, favoring diverse usage and architectural typologies.

The MPGM allows for different derived planning instruments to develop the plan. Including Special Plans:

- a) for interior remodeling in the predetermined plans (art. 16 MPGM22@);
- b) for remodeling of full/half blocks (art. 17 MPGM22@);
- c) for remodeling of 2.000-m² plots (art.17.3 MPGM22@);
- d) for consolidated industrial buildings (art.10 MPGM22@);
- e) for housing consolidated fronts (art.9 MPGM 22@);
- f) for public amenities development (art. 14 MPGM22@).

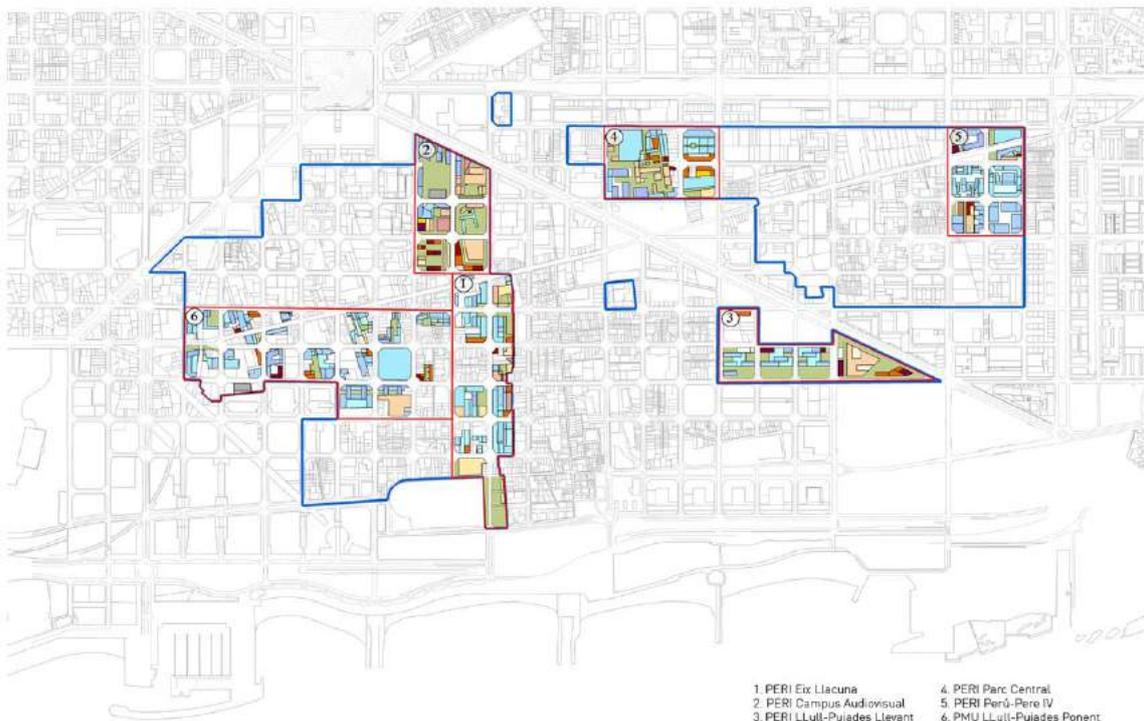


22@ PLAN DEVELOPMENT

Predetermined Plans

Following the approved criteria, the modification of the PGM proposes actions on the main urban arteries and in strategic areas, for which the operations and parameters to be developed are defined through Special Plans. The main objectives of the predetermined sectors of the Special Plan are:

1. To develop strategic areas in Poblenou that, through urban-planning and public management, will lead the transformation of the neighborhood and become benchmarks for this part of the city.
2. To lend coherency and unity to the fabric and spaces in each sector, applying the appropriate updated or experimental urban-planning instruments –predetermined shapes, maximum height ordinances, flexible control of architecture, process management, etc. Morphological cohesion will give each sector its own identity and sense of place.
3. To ensure the appropriate mix of uses to guarantee functional complexity. It will be necessary to locate amenities and open areas strategically and study compatibility among different uses of the space.
4. To give sufficient continuity to residential areas, made up of different types of street façades, buildings and experimental designs, in order to form arteries or centers with a clear sense of social belonging –which is difficult in non-residential areas where space is normally used on a temporary basis– and guarantee the presence of small shops that are usually found in residential areas.
5. To explore the diversity of spaces and constructions that is one of this neighborhood's distinctive traits.
6. To develop specific professions in each sector according to its location.



22@ PLAN DEVELOPMENT

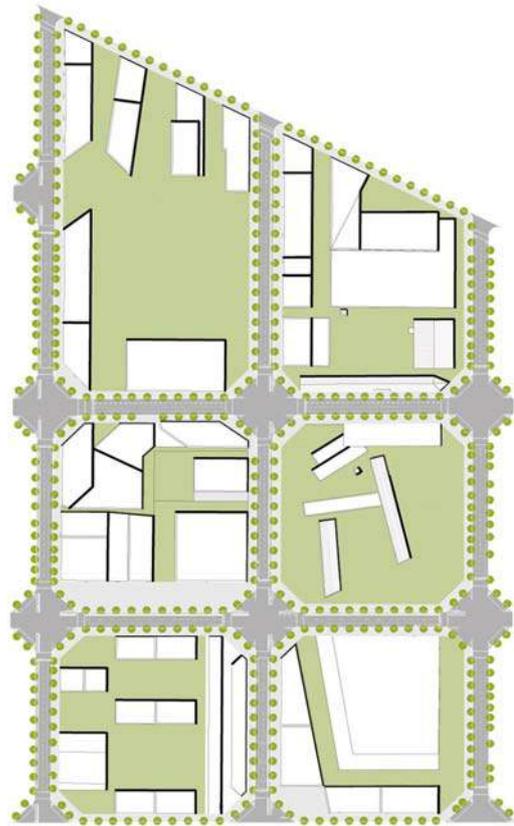
Predetermined Plans

Audiovisual Campus

The capacity of the old Ca l'Arañó factory and the associated open space and amenities, as a backbone of the area, allow the surrounding blocks to be organized around activities connected to culture and new audiovisual mediums.

The Urban Planning of this sector concentrates most of the ceiling of economic activity in the Diagonal Avenue, generates large pieces of public amenities and green areas and gets over 500 new social housing. Many restored patrimonial elements will coexist with new public spaces.

The total area of the intervention field is 119.489 m². 14.398 m² are destined to economic activities, 7.408 m² to social housing, 1.912 m² to technical services, 27.714 m² to green areas, 32.846 m² to public amenities and 4.493 m² to new roads.



Ca l'Arañó



MediaTIC building. Enric Ruiz Geli



Bird eye's view of the Audiovisual Campus



Economic activities building at the Diagonal Avenue

22@ PLAN DEVELOPMENT

Predetermined Plans

Llacuna's axis

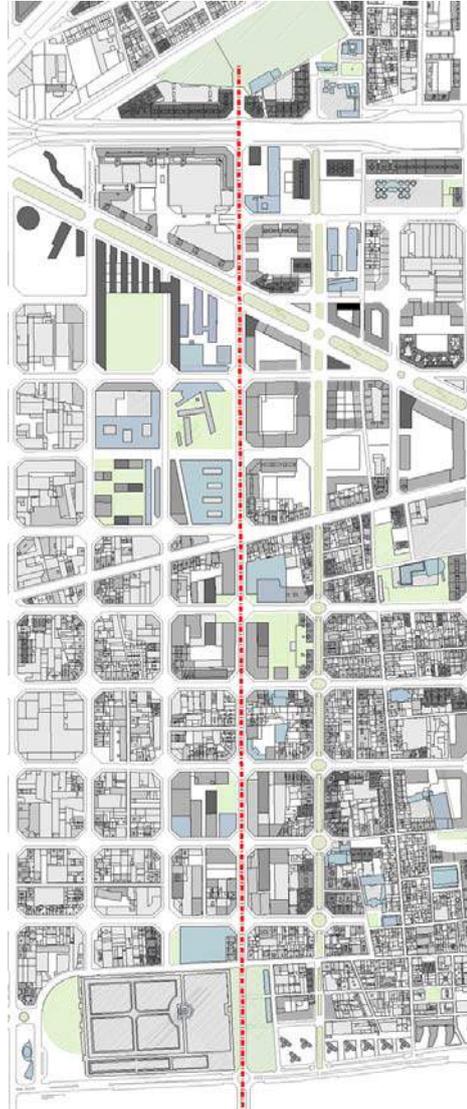
Will create a main artery, transforming Llacuna Street. The new artery will form a triple system together with the Rambla del Poblenou and Sant Joan de Malta street, where endowments will be shared and this new axis will profit from the urban vitality of the historical streets, raising the urban quality of the area.



Gaes building - Mizien

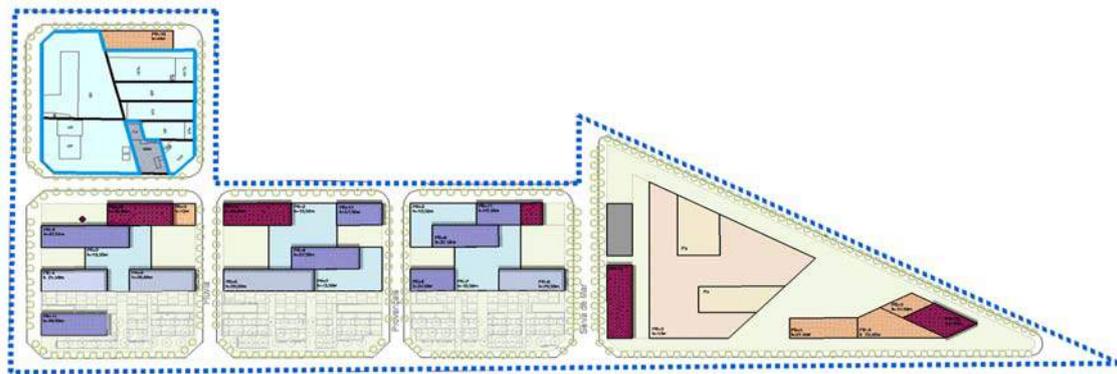


Offices building - BCA



Predetermined Plans

Pujades-Llull (East)



The blocks between Pujades and Llull streets, that face Diagonal Avenue, are of utmost importance thanks to their proximity to the new Diagonal-Mar area and the project will define façades along almost three city blocks.



Lull-Pujades Llevant area (before)



Lull-Pujades Llevant area (present)



View of a public space on the area

22@ PLAN DEVELOPMENT

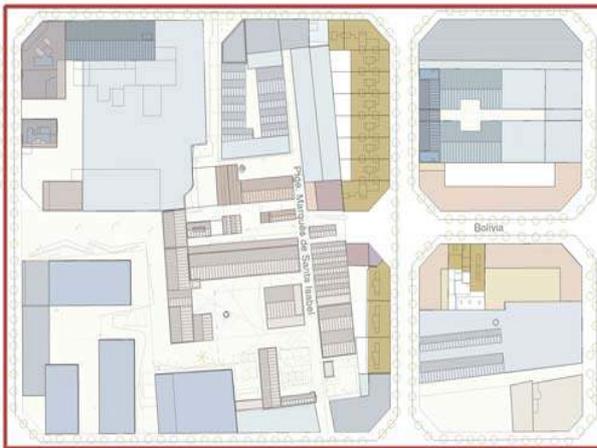
Predetermined Plans

Central Park

A strategic operation is planned that will unite this important center of activity that looks into the park created at Diagonal / Pere IV to the *Can Ricart* old industrial enclosure. The *Can Ricart* factory is one of the main singular industrial establishments of the former Sant Martí municipality. It was listed as a cultural good of national interest in the historical complex category. The proposal was formulated in base of four main points: the preservation of the industrial heritage, the urban space, running powerful uses for the present and future and making a feasible proposal to start up.



Casa de les Llengües model. EMBT



Can Ricart's industrial enclosure



Bird's eye view of the Central Parc plan

22@ PLAN DEVELOPMENT

Predetermined Plans

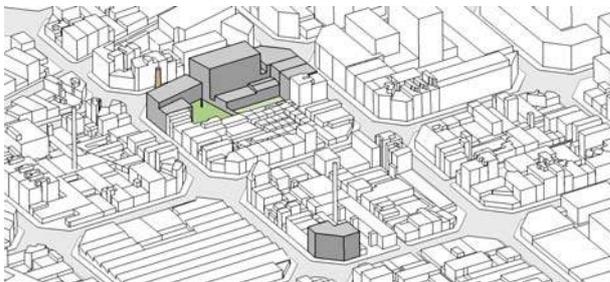
Pujades-Llull (West)

Three horizontal bands of blocks around these two streets will join the traditional center of Poblenou with the city center, through a combination of productive uses and housing.

In this area, in contrast to the others, there is a high presence of conserving buildings, standing out its complexity and diversity of the existing urban fabric with small plots and a strongly divided property. This is the reason why the kind of intervention to be made is establishing on lower dimension areas, being aware about the preexistences, as a small scale interventions in relation with the urban context.



BAU school



Sector 10. Urban Planning management of 22@ Plan



Offices building - Josep Miàs



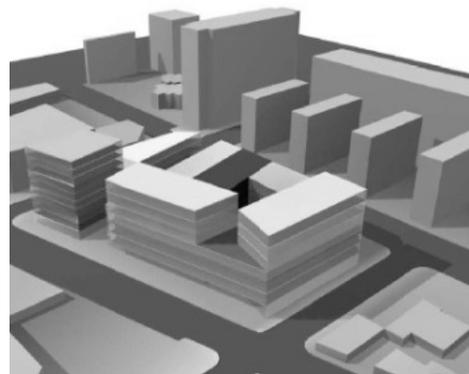
22@ PLAN DEVELOPMENT

Predetermined Plans

Pere IV-Perú

As a strategic element at the northern end of Pere IV, this will help create a focal point and increase traffic penetration.

The urban system made up of these elements will form a powerful structure, leading to a high-quality urban area. Outside this scheme, transformation projects can take place without a predetermined location, as the basic organization of the area is guaranteed and the grid layout allows for specific transformations to be brought about independently from other operations.



ellings
ildings



ascón

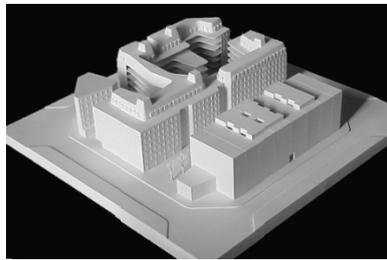
22@ PLAN DEVELOPMENT

Privately Developed Derived Plans

In order to permit a flexible transformation of the territory, the 22@ Plan allows for different derived planning instruments depending on the magnitude of the area to be transformed and the pre-existing conditions of the space.

To this end, the plan defines 5 different types of plans:

1 Full-block plans or half-block plans: if the block is divided by an alleyway: Whole blocks are put in order in this plans, they are used to be private plans, they hand over the 30% of the land to public amenities, green areas and social housing and they achieve 3 m²ce/m² I of buildability, 0,3 are destined to social housing.



2 Plans for 2.000-m² plots: they are priority with respect to the full-block plans and they can achieve 2,2 m²ce/m² of floor area ratio with @ activities exclusively. The rest of buildability and assignment will be carried out when the rest of the block is developed.



22@ PLAN DEVELOPMENT

Privately Developed Derived Plans

3 Plans for consolidated industrial buildings: Applied in existing industrial buildings which superate the 2,7 m²ce/m² of floor area ratio, considered as a consolidated buildings, in such a way they can change the use by making the economic assignment.



4 Plans for consolidated housing façades: in a grup of plots used by dwellings where some of them are used for industrial uses, they can change the original use into dwellings when the specific use is social housing.



5 Special urban plans for public amenities development: in order to be specific about the use and m²ce/m² of buildability of the new equipments generated by The Predetermined Plans, full-block or half-block plans.



22@ PLAN DEVELOPMENT

Innovative projects

As well as this flexible system of derived plans, there are new innovative urban projects that have been developed during these 12 years of transformation. Three of them are worth mentioning:

- **22@ Urban Lab:** It is a platform to experiment new urban products and services. The goal is to foster the use of the city as an urban lab, as a test space for innovative solutions that are not still on the market. This project started in 2004 and has strengthened the role of Barcelona as an innovative city.
- **Smart City Campus:** The urban development of this sector will allow the maintenance and renewal of important listed buildings, and the creation of new ones adapted to the new needs. This space will be an innovative lab to improve the efficiency of resource management and the integration of innovative technologies, to serve both, the city and its inhabitants. The Smart City Campus was created at the end of 2011 and will become a new urban innovative space that will gather companies, institutions, R+D centers, and universities involved in the ICT, Ecology and Urbanism fields.
- **Self-efficient block:** A new program of self-efficient blocks is being fostered by the City Council's Urban Habitat Department. Its main purpose is to create an energetic-efficiency based urban model, where the autonomous production of resources, the urban green, the sustainable heating and cooling system, the use of electric vehicles and water recycling, among others, play an essential role. One of the two chosen blocks is located in the 22@ district, and the design criterias are now being refined in collaboration with the Barcelona's Agency of Ecology.



Projects to attract activity : clusters

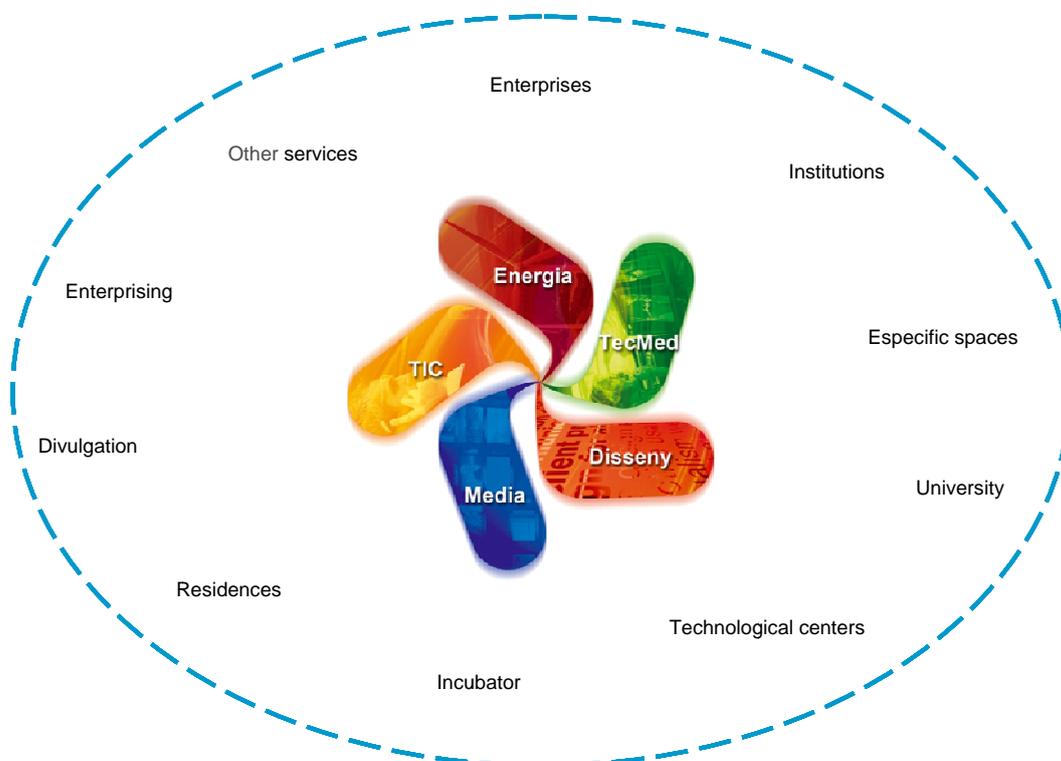
Services for companies

ECONOMIC REGENERATION STRATEGY

Projects to attract activity: the 22@Barcelona clusters

When the 22@Barcelona Plan was approved, the 200 hectares that make up the area specifically mentioned in the plan held a low place of importance in the city: due to the extension of the area, the activities undertaken on the area's industrial land only represented 4.96% of the city's active productive surface and 1.78% of the city's economic activity. At that time, the whole area of Poblenou only represented 6.75% of the city's active productive surface and 4% of the city's economic activity.

22@Barcelona focuses on creating projects that promote the competitiveness and international projection of companies and institutions located in the area that can become "motors" of the economic development of Barcelona's new productive center. These initiatives create clusters in different areas in which Barcelona can take on a leading role, concentrating companies, public organizations and benchmark science and technology centers in sectors that are considered strategic, including: Media, Information and Communication Technologies (ICT), Design, Biotech and Energy.



ECONOMIC REGENERATION STRATEGY

Projects to attract activity: the 22@Barcelona clusters/ Services for companies

The coexistence of innovative and dynamic companies with local district ones -shopping, small workshops, service sector- configure a rich productive fabric. This environment favours the synergy in pro of knowledge and the processes of innovation and allows the improvement of the competition as business group and the quality of life of the citizens that live and work in the 22@Barcelona district.



To achieve this objective, the creation of several projects is emphasized in order to promote the competition and international projection of the companies and institutions present in the territory as a whole which are susceptible of becoming engines of the new productive centre of Barcelona. These enterprises allow the creation of cluster areas into several fields of knowledge that Barcelona is susceptible to obtain international leadership, by means of the concentration in the area of companies, public institutions and scientific and technologic centres of reference of those sectors considered strategic: Media, Information and Communication Technologies (ICT), Medical Technologies (MedTech), Energy and Design. And in each of these fields, some factors are meant to be secured for a cluster to be successful:



- Presence of companies which serve as reference in the sector,
- Support and presence of the most relevant institutions,
- Existence of spaces for small and medium.sized business,
- Settlement of universities, continuous education and professional centres,
- Active technology centres,
- The creation of specific business incubators,
- The construction of residences for professionals,
- Spaces of exhibition and spreading of the innovation and works of the sectors,
- Specific services and spaces for entrepreneurs of every area,
- Granting a group of specific services: aids, access to venture capital, networking, etc



ECONOMIC REGENERATION STRATEGY

Projects to attract activity: the 22@Barcelona clusters/ **Services for companies**

As an agent of economic development, the 22@Barcelona company actively participates in the economic promotion of this productive district, boosting its **capacity to innovate** and driving both the **attraction and retention of talent**, as well as the **international projection** of its business, science and teaching activities.

To this end, 22@Barcelona leads a number of projects that aim to make the district a privileged space for the growth and development of companies that provides a number of services with high added value for companies established in the district.":

- **The 22@Network Association** of Businesses and Institutions was created in 2004 with the aim of participating actively in the district's development and consolidation process. The association is an excellent meeting place for companies and workers in the district and currently has 90 associated companies and institutions. 22@Network offers the following services:

> **Welcome plan**, for new companies and institutions that move to the district. These sessions take place every trimester with collaboration from 22@Barcelona. Their main objective is to explain the characteristics and advantages of the district.

> **Work commissions**, which work as networking opportunities and project generators.

> **Network workshops**, aimed at companies and professionals to deal with a variety of topics of interest in the business world.

- **Space search**: 22@Barcelona advises and accompanies businesses through the search process, looking for spaces that meet their individual needs and offering up-to-date information on spaces that are currently vacant, or will be in the near future, in order to help companies plan their move.

- **The Innoactiva program** aims to increase the possibilities of access to public finance for R+D+I projects through the assessment and support to companies in the city in their project proposals with the handling of assistance and subsidies and the support for justifications before various authorities and public institutions.



SOCIAL PROJECT FOR CITIZIENS AND BUSINESS

Projects aimed at bringing together the business and local world

Through 22@Espai, an initiative to establish personal relations, the 22@Barcelona District fosters the establishment of new formal and informal networks of relations aimed at establishing joint or cooperative ventures between local and international firms. Likewise, 22@Barcelona is based on innovative projects that foster collaboration among companies, institutions and social organizations from the area, with the objective of improving the talent and quality of life in the district and reinforce the feeling of belonging. Amongst the most outstanding of the projects currently under way we find:

Targeting the professional:

-22@Space for personal relationship:

22@Barcelona started up this project with a view to promoting relations between individuals and organisations to construct a community that values talent and supports professional qualification, innovative business and the quality of life of the district.

-The 22@Àgora Programme: a programme of activities built around the different events organised in the district by diverse stakeholders (UB, the Barcelona Digital Foundation, UOC, UPF, 22@Network and 22@Barcelona), aimed at disseminating local activities and consolidating a culture of innovation.



SOCIAL PROJECT FOR CITIZIENS AND BUSINESS

Projects aimed at bringing together the business and local world

Targeting the public in general:

- **22@Districte Digital:** The objective of this initiative, which is markedly social in nature, is to support innovative projects that foster collaboration among companies, institutions and social organizations in order to improve the talent and quality of life found in the district and reinforce the feeling of belonging..

Amongst the most outstanding of the Districte Digital projects currently under way we find:

- The computer recycling project
- To increase the multimedia classroom cofinanced by red.es agency
- The start-up of the third edition of the Virtual Memory of the elder of Sant Martí District
- 22@Projecte Educatiu: to foster the training of all local secondary school students offering all sorts of diverse educational opportunities related to the activities.
- The program Families on the net is aimed toward families with children in public school aims to teach the parents of these children more about computers.



10 SCALE OF THE 22@ BARCELONA PLAN

Area: 198.26 Ha (115 Eixample City Blocks).

Potential total GFS: 4,000,000 m².

Production Activity: 3,200,000 m².

Other uses (facilities, housing ...): 800,000 m².

Housing:

- Regularisation of 4,614 existing homes
- Creation of 4,000 new social housing units (at least 25% rented)

New green space: 114,000 m² land.

New facilities: 145,000 m² land.

New jobs: 150,000.

Investment in infrastructure plan: 180 million €



11 STATE OF EXECUTION. JUNE 2012

Since the beginning of the project the refurbishment of 70% of the industrial land has been started, under 141 plans for urban amelioration. Said projects will result in obtaining over 3.031.503 m² of over ground GFS for new production facilities, social housing, facilities and technical services.

The real estate sector has decisively supported the Project: 85 of the 141 plans approved are promoted by the private sector, of which planning permission has been granted to build 694.860 m² of over ground GFS for production activities, and 1.886 new dwellings of social housing.

The balance of economic activity of the first 10 years in Poblenou – the 22@ area and its sphere of influence – may be summed up by the presence of 7,000 companies employing 90,000 workers. Of this total, 4,500 companies, employing 56,000 workers, have established themselves here as from the year 2000. An average 72% of the workers of the district's @ companies are university-educated.

Also significant is the construction of diverse technological centres and company incubators, such as the Biomedical Park, the MediaTic building and Barcelona Activa, among others, and the presence of universities in the territory – Pompeu Fabra University (UPF), University of Barcelona (UB), Polytechnic University of Catalonia (UPC) and the Open University of Catalonia (UOC) –, which are supplemented by other educational institutions and post-graduate schools.

As a result, the number of people working in Poblenou has risen significantly. There are currently between 100.000 and 130.000 new workers and that number is predicted to reach 150,000. Consequently after the transformation Barcelona the city's economy activity will be increased from 4% to more than 15% of the city.



11 STATE OF EXECUTION. JUNE 2012



- Àmbit del Pla 22@
- | | | |
|-------------|----------------------------------|------------|
| Habitatge | Servis Tècnics | Zona Verda |
| Activitats | Edificis industrials | |
| Equipaments | Edificis industrials consolidats | |

