



*Adaptive Pathways Meeting (APM) on “Neutral neighbourhoods in Granollers, habitable and desirable”*

Results of APM and in-depth interviews based on AP guiding questions



Image of La Bòbila Sector. Source: Javier Fornieles

May 2024

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Granollers, first **Adaptive pathway meeting (APM)** was celebrated on Wednesday 3rd of April of 2024. The purpose of the workshop was to validate the objectives, scenarios, parameters and factors for the implementation of **RESCCUE tool** and **Parametric Design Tool**, in the next months. This implementation will be led by Aquatec and TSPA respectively, with the collaboration of Granollers city council.

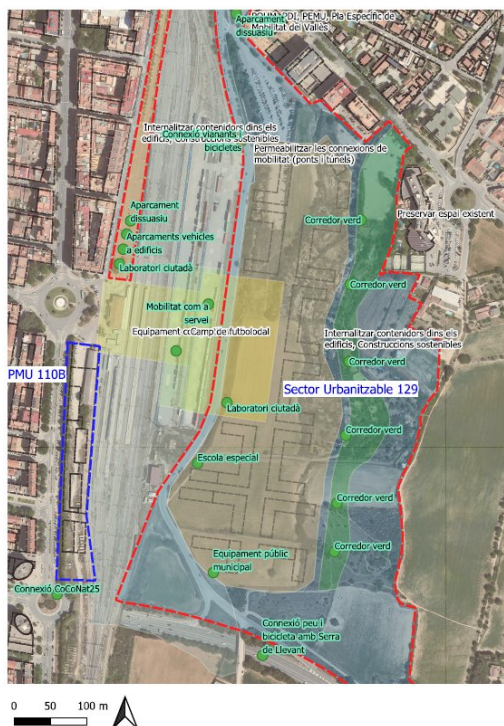
The participants to APM were a core group of their internal stakeholders from city council, in charge of technical and political responsibilities on urban planning, green infrastructure, energy transition and water cycle, mobility, public health and social services. The majority of them had assisted to the Needs & challenge and Vision workshops. In total, the APM was attended by 12 people:



- Next steps:
  - May-October'24:
  - 2nd part of APM (based on AP guiding questions, until end of April 2024)
  - TSPA-Granollers-AQUA: "Carbon and social footprint" definition associated with the scenarios, to be considered in the decisions making process of the future neighborhood (May-June 2024)
  - Sessions with cultural diversity groups with students of Adults' Municipal School and Learning Catalan Center (30th April 2024)
  - City council core group validation of preliminary results from RESCCUE tool and prototype definition from Parametric tool (September 2024).
  - ACTION workshop on neighborhood prototype (23th October 2024)
- Defining the legacy of UP2030 in the governance of the city and the development of the future neighborhood
- UP2030 Agreement on the transformative design of cities (voluntary adhesion of stakeholders and City Council)
- Closing

## 2. Vision workshop results:

The main results of the **VISION** workshop were presented:



Digitization of Vision WS results in GIS format

## 3. RESCCUE tool. Aquatec

After Vision WS results, Aquatec presented **RESCCUE** tool objectives and first scenarios for modeling. With preliminary results presented, the assistants validated different scenarios proposed.

### RESCCUE tool objectives:

- Tool developed within the framework of the European project RESCCUE (Resilience to Cope with Climate Change in urban areas).
- Methodology, database and decision-making support tool to choose the optimal strategy to achieve a neighborhood resilient to climate change, based on:
  - Implementation costs (and other expenses)
  - Efficiency of the measures
  - Associated environmental, social and economic co-benefits
- According to the results of the Vision workshop, it is necessary to consider:
  - Resilience against floods
  - Pushing solutions based on nature: sustainable urban drainage systems (SUDS)

- Connection with existing green spaces
- Contribution to the objectives of climate neutrality and social justice
- Promotion of technological solutions: warning systems and sensors

**RESCCUE tool methodology for its implementation:**

1. Pre-selection of resilience measures from the RESCCUE database.
2. Data collection: reference costs of implementation by each measure (€/m<sup>2</sup>).
3. Definition of indicators to quantify the efficiency facing floods:
  - Runoff volume (m<sup>3</sup>)
  - Peak flow (m<sup>3</sup>/s)
4. Simulation environment approach (neighborhood modeling in Infoworks ICM)
  - ❖ Validation of the resilience measures considered

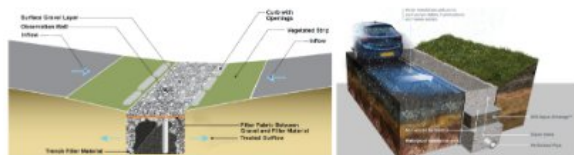
**Solucions Urbanes de Drenatge Sostenible (SUDS)**



Teulades verdes



Paviments permeables

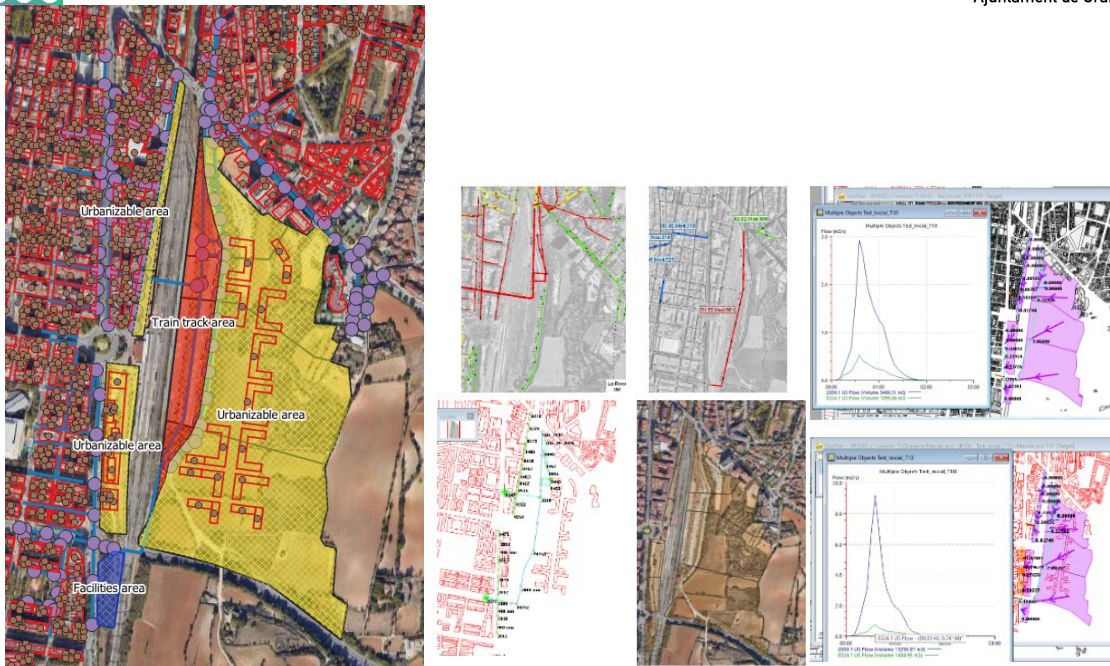


Rases d'infiltració



Basses de retenció/infiltració

- ❖ Presentation of the simulation environment



❖ Validation of planning criteria (land use, plots and streets)

**Agreement on parameters to be analysed with the RESCCUE tool:**

- Analyse within the conventional scenario: evaluate the need to build infrastructures of rainwater storage (buried or on the surface).
- With reference to the implementation of green roofs: also consider the reservation of space for PV systems installation or evaluate the compatibility of both solutions.
- Possibility to take a profit from water drained by green roofs for self consumption of buildings (cleaning, irrigation, sewers, etc.).
- To be considered: the contribution of DUS' of Avinguda Sant Esteve (modeled by KNOWING project).
- To be considered: the delivering of regenerated water to NBS' and vegetation implantation (and other municipal uses).
- To be considered: the design of U-shaped buildings with a green interior area (i.e. urban gardens).
- MaaS facility, where the location of different mobility services is considered in combination with other uses: train and bus station, parking and a part of the building intended for other uses (33%).
- Relocation of the Municipal Educational Center for students with specific needs, plus a playground and the centralization of facilities and services in the same area.
- Leaving the rest of the present empty area as a green area/green corridor, etc.

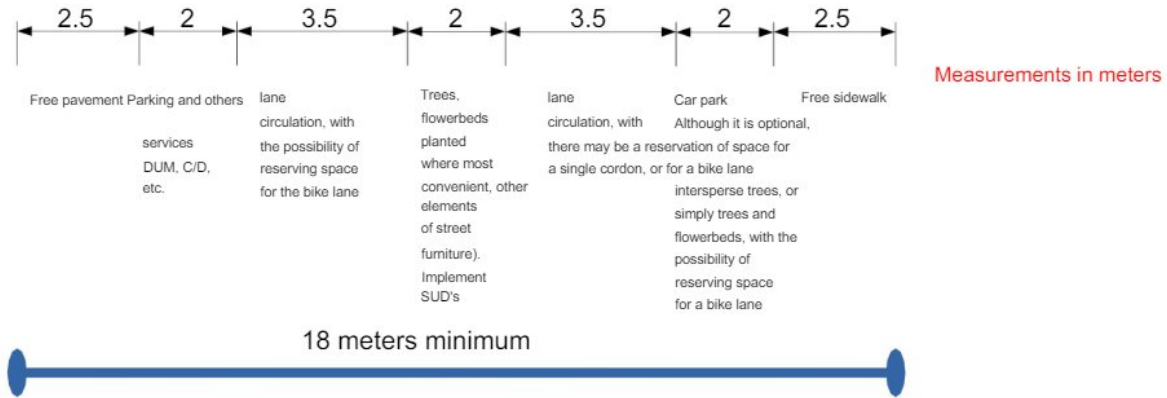


- Regarding the design of the streets, a proposal of 3 type of sections has been defined:

**UP2030 Sector of La Bòbila**

**Type sections according to mobility service, minimum sections by type of road**

**PERIMETER ROADS IN THE NEW SECTOR, minimum widths essential (parking can be in both directions, or only in one)**



As a criterion, always put trees interspersed between the parking lot

- The design of the street that leads to the mobility node (train station, buses and other services) must be wider and 30km/h

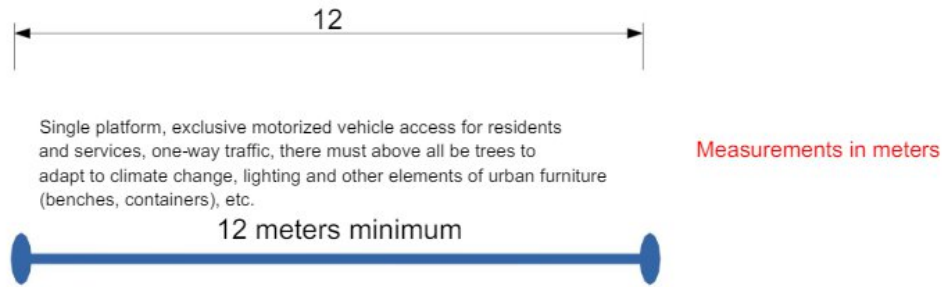
**CROSSWAYS (ACCESS ROAD TO THE FUTURE STATION), minimum widths essential**



- Streets and parking spaces on public roads must have permeable pavements
- Sidewalks immediately on the façades must be waterproof

- Infiltration ponds are better than retention ponds
  - Transversal streets are designed as *carrers d'estar zona 10*

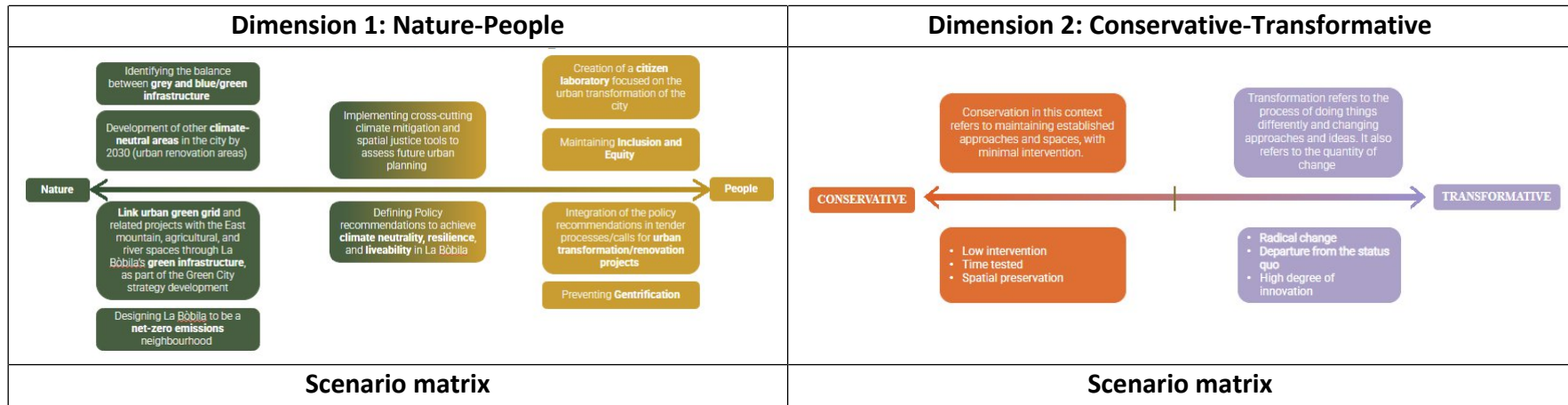
**INTERNAL ROADS IN THE NEW SECTOR, SINGLE PLATFORM minimum widths essential**



Keep in mind in all sections: underground services and sewers should be implemented on the sides of the roads and not in the center (conventional urbanisation).

### 4. Parametric Design Tool. TSPA

The following point of the session was the presentation of **Parametric Design Tool** that will be developed by **TSPA**. The main dimensions and scenarios matrix, used by the tool, were presented to the assistants. The objective was validate which are the more suitable for La Bòbila future neighborhood:





Find below the results obtained from the dynamics proposed by TSPA by the Parametric Design Tool:

### Results for Dimension 1: nature-people

One of the premises that stands out is the importance that the future neighborhood of La Bòbila does not become a sleepy town. That is why it is important to establish an optimal population density value.

You also need an optimal number of facilities, economic activity and business opportunities.

It is necessary for the area to have green infrastructure to give comfort to people where there are sufficient green spaces that produce natural shadows. Revalue green spaces as a value to attract people to the neighborhood searching for climate shelters, quality of life, air, playgrounds, etc.

Must be very careful when it comes to achieving a climate-neutral neighborhood and avoid the risk of gentrification and social exclusion.

### Regarding Dimension 2: Conservation-Transformation

The participants clearly see the Transformation scenario.

### Scenarios Matrix

Regarding preliminary scenarios, the most desirable scenarios for participants are the Sustainable Ecopolis and the Urban Innovation Hub and the concepts associated with them.

### Interactive exercise


Regarding the interactive exercise planned by TSPA, during the session urban factors were discussed with assistants. Due to the lack of time for the session, main factors were presented, and during April 2024 Granollers' team will do in-depth interviews with city council technicians and the people responsible for different municipal services to specify factors and get an agreement.

## Mobility

### Modal Split in La Bòbila


Active Mobility refers here to walking and cycling as primary modes of movement within and through La Bòbila.

**Active** ←



Motorized mobility implies precedence being given to vehicles, such as cars, motorcycles, buses.

→ **Motorized**




**Active Mobility**

- Personal mobility device regulations
- Take into account public transport for the new neighborhood
- Guarantee motorized accessibility to the new transport node

**Comments & Findings:**

Active Mobility  
 Personal mobility device regulation  
 Take into account public transport for the new neighborhood  
 Guarantee motorized accessibility to the new transport node



This project has received funding from the Horizon Innovation Actions under the grant agreement of 101090005.


1

## Mobility

### Transportation Technology


Conventional or traditional public transportation systems like buses, trams, metro, trains. Established systems.

**Traditional Public Transportation** ←



A focus on new mobility systems, including shared bikes, scooters, ride shares, etc. Also a focus on small, electric mobility, and Mobility as a Service (MaaS).

→ **Shared & e-Mobility**




**Public transportation (80%) and shared & e-Mobility (20%)**

- Technicians from mobility service pointed that shared mobility can be paid/organised by private initiative

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2

## Infraestructure & Environment

### Land Coverage Balance

Built-up area refers to existing and newly constructed areas. In general, this includes roads, buildings, sidewalks, and other paved surfaces.

This refers to green spaces of all forms, including public parks, naturalized spaces, and water bodies.

Built-up Area

Green & Blue Space



#### Comments & Findings:

**Green & Blue spaces**  
 It is committed to more green than blue, and future built areas must be integrated in the green  
 Maintenance costs must be considered  
 It is necessary to have vegetated roofs to guarantee shadows (trees)  
 New generation of green spaces, whose characteristics should be natural functions, balance water balances (rains and droughts); landscape's and leisure's values.  
 Build a natural environment within the streets, such as aligned trees, rain gardens, pocket gardens, green and permeable.

### Green and blue spaces

- It is committed to more green than blue, and future built areas must be integrated in the green
- Maintenance costs must be taken into account
- It is necessary to have vegetated roofs to guarantee shadows (trees)
- A new generation of green spaces, whose characteristics should be natural functions, balance water balances (rains and droughts); landscape and leisure values.
- Build a natural environment within the streets, such as aligned trees, rain gardens, pocket gardens, green and permeable.
- If large green spaces are desired, the built-up area will have to be compacted.
- Integrate green in buildings and built areas. Green network solutions.

## Infraestructure & Environment

### Green & Blue Space

Green space primarily dedicated to various recreation activities. Focus on providing spaces for relaxation and play. Playgrounds, football, lawns, etc.

Green spaces dedicated more towards particular objectives. More focus on nature-based solutions, such as water absorption spaces, community germaculture gardens, etc.

Typical

Innovative



#### Comments & Findings:

**Innovative, and some of typical**  
 Large parks are fine, although nature needs to be integrated into the spaces.  
 Nature based solutions, should be implemented to address the city's environmental and social problems  
 Take advantage of the space where horticulture already exists to promote an urban agriculture project  
 Spaces should consider landscape aspects, such as Serra de Llevant, must be preserved for its landscape value  
 Forestry and agricultural  
 Blue infrastructure should recover the historical memory and thus know where in previous episodes of rain there had been damaged  
 Torrential rain lamination spaces are proposed at the headwaters where the water must be retained, for example, storm cuts  
 In order to achieve all the proposals, it is necessary to incorporate inclusive participation.

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## Infraestructure & Environment

### Built Environment

"Typical" here refers to more traditional urban spaces, infrastructure, and building methods.

"Smart" here refers to the adoption of innovative technologies to augment utilities, infrastructure, and construction.

Typical

Smart



#### Comments & Findings:

Smart city

### Smart

- The idea for the future planning of La Bòbila is to implement innovative solutions

## Functions & Services

### Density of amenities & commercial activity

"Low" here refers to low amount of amenities and commercial activity; predominantly residential uses.

"High" here refers to a bustling neighbourhood with a large amount of amenities such as restaurants, shops, offices, cinemas, etc.

Low

High



#### Comments & Findings:

The density of equipment and commercial activity is determined to be average  
It is desirable that it is an attractive neighborhood, that there is a generative use  
It is necessary to think about singular aspect to locate in the neighborhood, such as a local product market, revaluation, circular economy, and that in this way generate attraction towards the new neighborhood

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## Functions & Services

### Distribution pattern of amenities

'Distributed' here refers to amenities being mixed and distributed throughout the neighbourhood. Blocks and buildings themselves contain mix of uses.

'Centralized' here refers to the concentration of amenities. This could include market spaces or shopping centre type spaces.

Distributed ←

→ Centralized



#### Comments & Findings:

Centralized and specialized

## Centralized and specialized

## Functions & Services

### Parking amount in La Bòbila

'Low' here refers to little to no parking spaces in the neighbourhood.

'High' here refers to parking providing sufficient or even a surplus of parking for the local residents of La Bòbila, essentially relieving demands of adjacent neighbourhoods.

Low ←

→ High



#### Comments & Findings:

The parking offer is proposed to be average and concentrated in specific areas. A space with an important offer and that acts as a park and ride, near the transport node, is planned, with respect to the design of the inner streets of the neighborhood, it is planned that there will be no offer of parking on the road, and that the residential offer will be within the buildings themselves.

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## Functions & Services

### Parking distribution pattern in La Bòbila

'Distributed' here refers to parking being distributed throughout La Bòbila, such as with street parking or parking within buildings.

Distributed

'Centralized' here refers to the concentration of parking in parking lots or dedicated parking structures.

Centralized



#### Comments & Findings:

Centralized Street parking should be avoided, throughout internal streets of the new sector of La Bòbila, it is the only way of avoiding cruising for parking  
 Urban Goods Distribution (UGD) (DUM distribució urbana de mercaderies) at the surroundings of the new sector  
 HUB of goods  
 The offer of parking space is considered that should be combined between parking lots and high-rise buildings, "mechano" type

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- The offer of parking space is considered that should be combined between parking lots and high-rise buildings, "mechano" type

## Building Typology

### Building Density

Low urban density features fewer buildings and people spread out, leading to a quieter, more spacious environment compared to densely packed urban areas.

Low

'High' here refers to very urban densities, which may be manifested in very different typologies, especially in respect to building heights.

High



#### Comments & Findings:

High and compact

- High and compact

## Building Typology

### Building Typology Diversity

"Homogeneous" here refers to a consistent, and more regulated approach to building typologies.

"Heterogeneous" here refers to a wide variation in building types, heights, and architectural styles.

Low diversity;  
homogeneous



Wide Variation;  
heterogeneous



**Comments & Findings:**

Heterogeneous  
Mixed land uses (housing, restaurants, stores, activities, services, etc.)  
Creation of opportunities in the new sector of La Bòbila

### Heterogeneous

- Mixed land uses (housing, restaurants, stores, activities, services, etc.)
- Creation of opportunities in the new sector of La Bòbila

## Urban Morphology

### Block Size

"Small" Blocks here refer to urban blocks with little space between intersections.

"Large" Blocks here refer to urban blocks which have greater distances between intersections. Blocks contain large number of parcels and larger open spaces inside.

Small Blocks

Large Blocks



**Comments & Findings:**

Large blocks  
Urbanization within large blocks will be more economical to build. This model will help to reduce costs.

### Large Blocks

- Urbanization within large blocks will be more economical to build. This model will help to reduce costs

# Urban Morphology

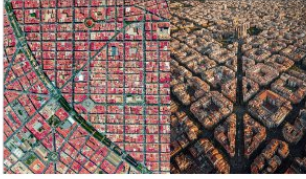
## Street Network Form

'Grid' blocks here refers to orthogonal networks which follow straight streets, producing rectangular blocks.

'Organic' networks refer to urban forms which follow a distinctly non-linear morphology according to the topography. Curving, irregular blocks and streets result.

Orthogonal grid

Organic



### Comments & Findings:

Orthogonal grid

Orthogonal grid





**From your point of view, which would be the most appropriate format?**

- |   |    |              |
|---|----|--------------|
| 1. Guide to recommendations (general principles)            | —> | <b>50%</b>   |
| 2. Document of a more technical nature (specific proposals) | —> | <b>33.3%</b> |
| 3. Others   | —> | <b>16.7%</b> |

## 6. Presentation of the “UP2030 Agreement on the transformative design for cities”, Partnership Commitments. Memorandum of Understanding (MoU) Structure

The session finalized with the presentation of Memorandum of Understanding (MoU) elaborated by UP2030 project “Climate City Contract”, considering the adherence to the MoU by the stakeholders of the UP2030 project participatory process and the City council. Find below the draft version prepared by Granollers’ team (in Catalan).



### **Adhesió al Compromís UP2030 per al disseny transformador de ciutats**

És sabut que la qualitat de vida és més gran en pobles i ciutats pensades i dissenyades amb la perspectiva de la salut de les persones i la sostenibilitat ambiental. Des de la pandèmia s’ha accentuat el valor de l’espai públic per garantir la qualitat de vida als barris, i s’ha evidenciat la necessitat de recuperari-la i adaptar-la perquè proporcioni a la ciutadania entorns saludables i oportunitats de cohesió social.

El projecte UP2030 té com a objectiu proporcionar a les ciutats un conjunt de solucions per contribuir a la transformació ecològica necessària per assolir els objectius de la missió europea sobre ciutats intel·ligents i neutres en carboni el 2030. Aquesta missió vol promoure ciutats capdaverteres en la protecció del clima perquè actuin de motor i guia, i així assegurar que totes les ciutats de més de 50.000 habitants arribin a ser climàticament neutres el 2030.

En el projecte UP2030, onze ciutats europees, de pesos associats i del sud global, provenen i validen aquestes solucions. Es fomenta la col·laboració amb xarxes de ciutats, professionals, les plataformes de la Missió de la Comissió Europea i altres projectes europeus.

El projecte UP2030 donarà suport a les ciutats per: actualitzar les polítiques de planificació i disseny; cocrear amb les parts interessades la planificació i les vies de transformació ecològica; millorar la qualitat de vida dels barris; assolir acords de governança, finançament, desenvolupament de polítiques i presa de decisions per a la planificació urbana; incorporar activitats per conscienciar i transferir coneixement entre les ciutats europees i més enllà.

### **Finalitat del Compromís UP2030 a Granollers**

El desenvolupament del projecte UP2030 a Granollers centra les seves intervencions en el futur desenvolupament del sector de La Bòbila, comprès entre l’estació de Rodalies de Granollers Centre, el Camí de Santa Quitèria i la carretera de Valldorriol. En relació a aquest futur barri de la ciutat, s’han identificat les necessitats i els reptes, s’ha codefinit una visió i un full de ruta a desenvolupar per esdevenir un barri habitable i desitjable, amb la perspectiva de la descarbonització, la resiliència d’infraestructures i serveis davant el clima extrem, i la cohesió social. Aquest full de ruta pot ser útil per a la transformació d’altres sectors de la ciutat.

El Compromís UP2030 per al disseny transformador de ciutats servirà com a document fundacional per aplicar la visió i els objectius codefinit per al futur barri de La Bòbila, que ha tingut en compte la implicació d’institucions, empreses, entitats i ciutadania en general.

7. Photos of the APM:









## 8. Conclusions from in-depth interviews, based on Adaptive pathways guiding questions

In-depth interviews carried out to technical managers of 5 municipal services were based on the Adaptive pathways guiding questions document, elaborated by TSPA and UIC. The objective of the in-depth interviews were validate the pilot' objectives, analyse the risks and obstacles along the diverse pathways identified by each of the objectives, and finally the alternative actions to overcome the obstacles. Furthermore, the proposals were put in the timeline of a short (0-1 year), medium (1-3 years) and long-term (3-6 years).

Technical managers who had answered the questions were people from the following services: Environment and green spaces - Xavier Romero and Àlex Bella, Urban planning - Montse Òdena and Erika Blancas, Energy transition and water cycle - Josep Lluís Castell, Mobility - Laura Llavina and Pau Vilaplana and Strategic planning and citizenship - Gemma Roquet.

Interviews had been planned with prompts for objectives provided in the template prepared by TSPA and UIC, it has also considered the risks associated with the project's main objectives, as well as other associated standard risks, such as social risks, social acceptance, financial risks, trade-offs between climate neutrality and resilience, governance, etc. Finally, the questions of the interviews have been adapted based on the field of expertise of each person interviewed.

Regarding objective validation:

### 1. Designing La Bòbila to be a net-zero emissions neighbourhood

*Q1) How would you define the criteria and technical requirements necessary for La Bòbila to achieve carbon neutrality? (Think about things like carbon embedded in buildings, mobility and food?)*

#### Urban planning:

Planning, Compactness, uses, population density, urban project, orientation, type of housing, balance, efficiency, between public services and inhabitants.

Long term 3 - 6 years

#### Energy transition and water cycle:

Water cycle: technology enables the water balance, Barcelona model ordinance, regenerated water, grey water collection. Economizing elements of drinking water. Extension of the current ordinance.

Energy: self-consumption, energy communities, electric vehicles, electric vehicle charging points, electrical vehicle supply equipment EVSE, energy balance of vehicles, utilization of surpluses for buildings.

Sustainable mobility: public transport with frequency and appropriate means, car sharing, personal mobility vehicles, electric vehicles.

Urban gardens: environmental education, km0 products, eco-systemic improvement

Between short (coordination and planning) and mid term (most relevant implementations) 0 - 3 years

#### Mobility:

Reduction/minimization of transport emissions: low-emission axes, promoting pedestrian use, coexistence with all modes of transport. Prioritize spaces for pedestrians (side walks wider than standards) but also take into account other modes of transport such as the bicycle, personal mobility device, public transport and vehicles, regarding access to peripheral garages (superblocks). Possible new LEZ.

Inter-modal station, centrality of the new neighborhood: being an inter-modal node, access to a high volume of vehicles is expected. Therefore, a transversal axis with greater capacity is needed (bus route, etc.). Direction to a guided parking lot.

Peripheral location of loading areas and Urban Goods Distribution areas.

It is necessary to provide an electric charging station, electric lines, and photovoltaic solar panels to supply public transport.

Short term 0 - 3 years

#### Strategic planning and citizenship:

Participatory sessions, training and training of people (climate neutrality, sustainability). Using participation spaces that are already in operation. Involving influential people in the city.

Mid term 1 - 3 years

*Define risks or barriers for identified pathways (per objective)*

#### Urban planning:

Coverage of the buildings themselves for parking charges. That all uses (housing, economic activity, service, etc.) absorb the demand for parking. Break the infrastructural barrier to have direct access to public transport from the new sector of La Bòbila.

#### Energy transition and water cycle:

Associated obstacles such as tempos, coordination, lack of resources such as time.

Risks: that it is seen as something naive, that people do not believe it. This should be the standard from now on. It should raise awareness in other neighborhoods and areas.

#### Mobility:

Future station/inter-modal space will generate emissions, as it will be an attractor pole for travel.

Cruising for parking may be generated in the new neighborhood due to the inter-modal station

*Risk mitigation strategies (per objective)*

#### Urban planning:

The transport network must serve to speed up the modal exchange needs for the rest of the city.



Space conducive to the use of private vehicles.



Ajuntament de Granollers

Management and the mayor's office must mark the roadmap and monitor it, but above all they must believe in it. They need to boost the resolution of the obstacles.

#### Mobility:

To minimize the emissions generated by the inter-modal station, the current LEZ could be extended to Serrat and Bonastre square and Colom promenade.

This intermodal station is an opportunity to relocate the current bus station, which is already saturated.

Opportunity to create a parking offer in the new intermodal space, in height, "Mecano" type, and the installation of electric vehicle charging point services (EVCPS).

### *Q2) How could the community be involved in the definition of guidelines and Key Performance Indicators (KPI) to achieve carbon neutrality in La Bòbila? What challenges could you foresee in this process?*

#### Urban planning:

Organize the citizen participation process prior to the drafting of the plan

Long term 3 - 6 years

*Define risks or barriers for identified pathways (per objective)*

#### Urban planning:

That there is a technician present to be able to redirect, limit and focus the debate to redirect biases. Therefore, the figure of the professional moderator, citizen participation is needed.

Expert moderation with expert accompaniment in urban planning and from the perspective of Granollers.

*Risk mitigation strategies (per objective)*

#### Urban planning:

That when creating the debate, focus on issues that do not refer to urban planning or local competition.

### **Q3) What challenges could you foresee in this process?**

#### Strategic planning and citizenship:

That the participants are sufficiently representative of the population. The private (productive) sector must be involved.

Involve the community, where there must be experts to help understand the complexity of the criteria. Ideally, they would be experts in the field with previous experience.

Short term 0 - 1 year

**Strategic planning and citizenship:**

Complexity to involve those people who are generally not involved in participatory processes and who are often key people and who represent diversity

*Risk mitigation strategies (per objective)*

Lack of imagination on the part of the participants.

A broad view is needed.

Involve those people who usually do not participate.

**2. Identifying the balance between gray and blue/green infrastructure****Urban planning:**

Technical advice specialized in the design of urban spaces, green spaces.

Maximum soil permeability

What to consider?

Mid term 1 - 3 years

**Energy transition and water cycle:**

Utilization of water, reuse.

Indigenous and resilient vegetation.

Short and mid term 0 - 3 years

*Define risks or barriers for identified pathways (per objective)***Urban planning:**

Not having the technical support before the writing to know what needs to be taken into account when establishing the criteria. Expert consultation prior to writing, so you don't have to correct afterwards.

**Energy transition and water cycle:**

Be late.

*Risk mitigation strategies (per objective)***Urban planning:**

It is proposed that there be interdepartmental commissions and in relation to the rest of the city. It is necessary to be able to work easily between technicians. It would be interesting to have the same space to have interdepartmental availability → interrelation, it is a common project, of the city, not fragmented between services (silos).

Organize interdisciplinary working groups for each project.

Motivate good understanding and sharing between technicians.

### 3. Maintaining Inclusion and Equity

#### Q1) What are the criteria the municipality should follow to ensure inclusion and equity within La Bòbila?

##### Urban planning:

Social housing with official protection → 30-50% (minimum)

Affordable housing for rent and publicly owned

Mixture of uses to avoid gentrification and it becoming a commuter town

Different types of housing

Mid term 1 - 3 years

##### Energy transition and water cycle:

Encourage cooperatives that already have principles of sustainability. People should be conscious with sustainability.

There should be some bases, subsidies with criteria such as age (young people, 3rd age), income level, ecological awareness, etc.

Short term 0 - 1 years

##### Mobility:

Promote mobility on foot, sustainability and accessibility. The wider sidewalks also guarantee access for people with reduced mobility.

Public transport, intermodality, equity must be facilitated

P&R, guarantee free parking for this modal exchange (maintaining or modifying the existing one), which is well connected with public transport, on foot or other modes of active mobility.

Removal of architectural barriers, with correct lighting, fountains, trees, pedestrian routes, etc.

Short term 0 - 1 years

##### Strategic planning and citizenship:

Urbanism designed for people. A space for living, walking, activity with services, diversity of uses of public space. If you think with people, you have to take into account all ages, universal accessibility.

Short an Mid term 0 - 3 years

*Define risks or barriers for identified pathways (per objective)*

##### Urban planning:



### Energy transition and water cycle:

Segregation, gentrification/snobbery.

#### *Risk mitigation strategies (per objective)*

### Urban planning:

Reduce costs and general expenses in urbanization, to be able to allocate more budget to solutions based on nature and others.

### Energy transition and water cycle:

Addressing aspects of inclusion, such as initiatives such as housing first, involving Granollers Promocions (affordable rent).

The social aspect is very important.

Segregation and snobbery must be avoided.

## **Q2) What are the strategies could be implemented to ensure that the needs of different groups are being addressed in the spatial development of La Bòbila?**

### Urban planning:

Establish a participatory process involving ADIF, Incasòl, ...

It would be interesting to find the uniqueness so that the new sector becomes attractive and promotes interaction with the rest of the city and outside.

An attraction pole would be very positive to attract operators to create interest and economic viability.

Mid term 1 - 3 years

### Mobility:

Connection with the city center. Adequate frequency of public transport. Solutions needed in the short term.

Short term 0 - 1 year

### Strategic planning and citizenship:

Feminist perspective of urban planning criteria are already defined. They must be enforced.

Short term 0 - 1 year (To have the indicators from the ground up, technical work must be done to adjust the criteria).

Mid term 1 - 3 years (Public participation to finish adjusting criteria).

#### *Define risks or barriers for identified pathways (per objective)*

### Urban planning:

Not finding the expected singularity and ending up becoming an exclusively residential neighborhood. Generate high expectations that cannot be carried out due to a matter of space and topography.

*Risk mitigation strategies (per objective)*

**Urban planning:**

Tools like the Parametric design tool, for example.

**Mobility:**

TRANSGRAN (conurbation public transport): Group social criteria between the 4 municipalities of the conurbation (currently public transport in the conurbation is in deficit). Any modification of the transport route must be agreed between the 4 municipalities.

**Strategic planning and citizenship:**

It is necessary to agree with what is the criterion to follow. Evaluate monitoring indicators and make them public.

**Q3) How could you envision a system that assesses whether Granollers' principles of equity and inclusion are - over time- being maintained? How could this be monitored throughout the future development La Bòbila and beyond to the occupation of the site?**

**Urban planning:**

Define specific and temporary indicators associated with official protection or public endowment.

Long term 3 - 6 years

**Strategic planning and citizenship:**

Validate that the criteria are applied, for example trees that provide more shade; accessibility that there really is sufficient sidewalk space; that there are no architectural barriers, more uses of public space, wealth and value of public space, etc.

**4.Preventing Gentrification**

**Q1) The issue of gentrification and affordable housing can affect different services. Does your own service have knowledge on this topic? How do you intend to collaborate with other services? If there is already a collaboration, what could be done to strengthen it?**

**Strategic planning and citizenship:**

Yes, from the moment they participate in the project, they can help prevent gentrification. It is necessary to take advantage of the existing and known proposals, to learn from the experience of others.

Mid term 1 - 3 years

*Define risks or barriers for identified pathways (per objective)*

### Strategic planning and citizenship:

Risk of gentrification.

*Risk mitigation strategies (per objective)*

### Strategic planning and citizenship:

Diversify uses, do complementary activities. Mixed use, that the new sector becomes an attractive pole for the rest of the city, for example for the offer of facilities.

## SPECIFIC ACTIONS

### 1. Creation of a citizen laboratory focused on the urban transformation of the city

**Q1) How do you imagine the collaboration between the Citizen Laboratory, the local government and municipal services? What will be needed in order to foster the collaboration?**

#### Urban planning:

There must be interlocutors so that there is a return of the actors of the citizen laboratory.

Long term 3 - 6 years

#### Strategic planning and citizenship:

Differentiated, open physical space, managed from the ground up, with resources for innovation, such as the Barcelona Bithabitat project: <https://bithabitat.barcelona/>; <https://osonalabcity.cat/>

Mid term 1 - 3 years

*Define risks or barriers for identified pathways (per objective)*

#### Urban planning:

That the interlocutors are real representatives of the neighborhood, it is necessary to avoid those voices that are not representative.

#### Strategic planning and citizenship:

The risks will basically be management and administrative, since it will not be easy to promote the innovative model. Lack of political will or prioritization.

*Risk mitigation strategies (per objective)*

#### Strategic planning and citizenship:

Look for existing examples of success. Seek European funding (e.g. Next Generation Fund).

**Q2) More specifically, how will you ensure its financial sustainability? Who will ensure the different tasks and responsibilities?**

### Strategic planning and citizenship:

Financial sustainability will be guaranteed through dynamism, ideas likely to receive awards. Assignment of spaces to companies that pay for use.

The responsibility and who will look after the laboratory must be the City Council and the academy (university).

## 2. Implementing cross-cutting climate mitigation and spatial justice tools to assess future urban planning (RESCCUE an Parametric tool)

### Q1) Which priorities are at risk of competing with each other? (climate neutrality – resilience – social inclusion)

#### Urban planning:

Danger of technical design and regulatory solutions causing construction costs to skyrocket. It will be necessary to reduce costs in order to comply with the regulations. The regulations refer to the % of free, social housing, etc. It is necessary to try to achieve economic viability, because otherwise, many people in social need will not be able to cope either.

Mid term 1 - 3 years

#### Energy transition and water cycle:

The first two goals compete with the third goal. Social inclusion is more expensive, achieving the first two objectives could lead to an increase in the cost of living, and consequently it will be difficult to be socially fair.

Short term 0 - 1 year (This tool implementation should already be applying)

#### Mobility:

They should not be incompatible if the design is appropriate. Incompatibility of modal exchange and neighborhood with low emissions, although GHG emissions could be compensated for in the city as a whole, minimizing intercity trips to the rest of the city.

Short and mid term 0 -3 years

#### Strategic planning and citizenship:

The infrastructures towards climate neutrality and social inclusion, in any case, should not be contradictory since to achieve climate neutrality or resilience it is necessary to consider social inclusion.

THERE IS NO SOCIAL INCLUSION WITHOUT CLIMATE NEUTRALITY

Short term 0 -1 year (Planning and collaboration are necessary from the start)

### *Define risks or barriers for identified pathways (per objective)*

#### Urban planning:

Difficulty reaching people with more difficulties. Climate neutrality versus social inclusion.

### Energy transition and water cycle:

That the results of the pilot do not become a standard/reference for other neighborhoods. The 2nd objective is technical and the 3rd objective is political.

### Strategic planning and citizenship:

Contradiction between objectives

*Risk mitigation strategies (per objective)*

### Strategic planning and citizenship:

Consider the right to habitability (housing, health, etc.)

## Q2) How do you propose integrating resilience and justice considerations alongside carbon-neutrality to prevent negative externalities?

### Urban planning:

Solutions must be made cheaper and balanced. Innovation, shared solutions, energy communities, etc.

*Define risks or barriers for identified pathways (per objective)*

### Urban planning:

Costs, solutions, risk, economic infeasibility. Risk that when something is shared, no one takes responsibility.

*Risk mitigation strategies (per objective)*

### Urban planning:

Have maintenance contracts. Information and dissemination. culture.

## Q3) How will you facilitate the collaboration among different municipal departments to develop holistic policy recommendations for La Bòbila's transformation? (mobility, housing, waste management services among other)

### Urban planning:

Available for maximum collaboration.

### Energy transition and water cycle:

Facilitate collaboration between municipal services → WORKING GROUP, very transversal and including all levels of the administration. If it is necessary to coordinate through an external company.

### Mobility:

Create spaces for participation. Mobility is transversal to most city projects. Area strategy where the criteria for each service are already established. This participation must be directed and with resources that allow

participation to be more agile and effective (tools to share documents, plans, etc.). Work tools plus mechanisms.

Short term 0 -1 year

#### Strategic planning and citizenship:

Diverse Working Group. You have to think very carefully with the people involved. Expertise with breadth of views and sensitivity is necessary.

*Define risks or barriers for identified pathways (per objective)*

#### Energy transition and water cycle:

Not giving enough importance to the work group. Lack of coordination.

#### Strategic planning and citizenship:

Sometimes it is difficult to mix people from different positions.

Often, the technical profile is the most effective.

*Risk mitigation strategies (per objective)*

#### Strategic planning and citizenship:

Interdisciplinary working groups with external collaboration (coordination).

### 3. Integration of the policy recommendations in tender processes/calls for urban transformation/renovation projects

#### Q1) How can the three objectives of the pilot be integrated into the tender processes?

#### Energy transition and water cycle:

Based on technical prescription documents.

Short term 0 -1 year

#### Mobility:

Integration can be done through a contest of ideas and projects arising from it. Framework documents with minimum requirements. Integrate the citizenry to respond to demands and social needs.

Short term 0 -1 year

#### Strategic planning and citizenship:

The criteria that emerged must be evaluation criteria. It will be necessary to promote new processes: competition of ideas, involving research centres, etc. That it is not only an internal development.

## Q2) How to coordinate the technical and sectoral approaches to achieve the 3 transversal objectives for the neighborhood (neutrality, resilience and equity)?

### Energy transition and water cycle:

Through a well-organized working group.

### Mobility:

Creation of a working group with a representative of each service involved. And make a return and follow-up.

That the consensus document itself incorporates the concept of neighborhood (main axes, inclusion of greenery, accessibility, etc.)

### Strategic planning and citizenship:

The concerted criteria that are defined should be implemented in any other development.

Short and mid term 0 -3 years

*Define risks or barriers for identified pathways (per objective)*

### Strategic planning and citizenship:

If the established criteria are not known to everyone, it will be difficult to implement them.

*Risk mitigation strategies (per objective)*

### Strategic planning and citizenship:

Disclosure and dissemination and consider them from strategic planning/coordination.

## 4. Development of other climate-neutral areas in the city by 2030 (urban renovation areas)

### Q1) Which are the costs of developing other climate-neutral neighborhoods in the city?

#### Urban planning:

Housing park with low climatic services. Balance between urbanization costs and the value of the estates.

#### Energy transition and water cycle:

Costs, there is little available space in the city as a whole. With regard to rehabilitation, he chooses to be a possibilist, not to aspire to large volumes but to establish realistic short-term goals such as rehabilitation: especially betting on photovoltaic, energy efficiency and the rehabilitation of public roads (sewer).

It would be necessary to do a cost-efficiency analysis and bet on the most efficient ones. But in each case it will be different. In the case of new neighborhoods, mobility can be affected.

Short term 0 -1 year, Costs: Energy efficiency rehabilitation and improvement of public roads. Short-term planning, later on, choosing where it is most necessary to intervene

*Define risks or barriers for identified pathways (per objective)*

Return expectations for the developer's initial investment.

**Energy transition and water cycle:**

Over-costs, which can result in refurbishments for energy efficiency in buildings, are often difficult to carry out in consolidated communities, as communities do not have enough capacity to cope with them.

*Risk mitigation strategies (per objective)*

**Urban planning:**

Have a rule that guarantees that it will be applied, and that it is public from the beginning.

**Energy transition and water cycle:**

Return expectations for the developer's initial investment.

**Q2) Based on the methods and innovations used for La Bòbila, which do you believe are the most feasible and appealing for replication in other neighborhoods of Granollers?**

**Urban planning:**

Everything related to public space is where the City Council can influence.

Long term 3 - 6 years

**Energy transition and water cycle:**

It would be necessary to analyse with a feasibility and cost matrix to see the possibilities of moving forward, because it depends on each sector.

**Q3) How will the community be involved in the development of these new climate-neutral areas?**

**Urban planning:**

Citizen laboratory, can be exported to other areas.

Long term 3 - 6 years

**Energy transition and water cycle:**

Citizens must be motivated to get excited and get involved.

**5. Proposal to connect the urban green network defined by CoCoNat25 and other transformation projects with the open spaces system of the Sierra de Llevant, agriculture and river areas, through the green infrastructure of the La Bòbila sector**

**Q1) What characteristics do you believe are essential for the green infrastructure of La Bòbila to be inclusive for all groups? (Elderly, children, etc.)**

**Urban planning:**



Easy connection with the rest of the city (urban plot). Look for routes along the ridge that are accessible and consider gender aspects.

#### Energy transition and water cycle:

Inclusiveness of the green axes, accessibility of the itineraries. Take advantage of the spaces and provide them with services (toilets, tables, etc.). Ensure security especially at night.

Short term 0 - 1 year

#### Mobility:

Creation of shadow corridors that connect the city. Typology of trees and roots so that the maintenance of the public space is viable. Guarantee that the itineraries for pedestrians are accessible (think types of hedges, flowerbeds, rubber, etc.). Crossing spaces for pedestrians. That the main itineraries are inclusive for all groups

#### Strategic planning and citizenship:

Accessible, open spaces, maintenance guided by co-responsibility, development of community projects, etc.

Short term 0 - 1 year

#### Green spaces:

The green network must be inclusive, taking into account lighting, accessibility, the amount of free space, pavements, furniture. Food production area (or as social reinforcement). Urban gardens as a therapeutic space, perhaps a social entity can manage it.

Short and mid term 0 -3 years

#### *Define risks or barriers for identified pathways (per objective)*

#### Energy transition and water cycle:

Security especially at night.

#### Strategic planning and citizenship:

Operational obstacles.

#### Green spaces:

For inclusion, there is a lack of free space to establish the necessary surfaces for green areas. Fragmenting a park too much into different uses can make the park lose value and uses, and ultimately social inclusion.

#### *Risk mitigation strategies (per objective)*

#### Energy transition and water cycle:

Intervene less in the public space, until now there was too much intervention "constructively speaking". Improved smart lighting.

#### Mobility:

Innovation and design in the green space of urban areas, include inclusive actions in the Aigüestortes National Park as an example.

#### Strategic planning and citizenship:

It is necessary to comply with what is established.

#### Green spaces:

Good space design cannot generate great risks, there are regulations on trees, the lack of sidewalk space, street section and section is basic. The design of the urbanization is determined by the network of trees.

### Q2) Will the green spaces of La Bòbila be inclusive through active modes of transport?

#### Urban planning:

Must be.

#### Mobility:

Yes, green spaces can be created with recreational areas that can attract families, that can be accessed by bicycle, with defined itineraries, etc. (compacted saulón, for example). This also promotes sport and active mobility.

### Q3) Are other scales of governance involved in the development of the Green City Strategy? (i.e., regional or national stakeholders). If yes, how are you coordinating with them? How could this collaboration be enhanced?

#### Urban planning:

Through collaboration agreements. ADIF (Railway Infrastructure Administrator).

#### Strategic planning and citizenship:

Yes, the conurbation with the 4 neighbouring municipalities and coordination with Diputació de Barcelona (Regional government). Showing the project, establishing dialogue space. Establishing visits to the sector.

#### Green spaces:

It would be ideal to belong to a larger area. Above all, the collaboration is with the Diputació de Barcelona from where work guides and technical regulations are obtained. You take part in talks and courses offered especially by the Diputació de Barcelona. Working groups of the Network of cities and towns towards sustainability.

#### *Define risks or barriers for identified pathways (per objective)*

#### Urban planning:

ADIF and the Ministry, as there may be a conflict of interest.

#### Strategic planning and citizenship:

Be able to lead.

#### Other proposals pointed by **strategic planning and citizenship**:

Other proposals for action: Participation must be considered from the beginning but providing the expert view. It must be representative. Being a new space, it is necessary to work with external people (universities,

competitions to propose alternatives, etc.). There must be participation, but it remains to be seen at what point. It is necessary to facilitate basic knowledge. It must be guaranteed that what is done is for the common good. If the participants are not representative, it can have a negative impact. As it is a new development space, work should be done with external people (universities, competitions) business as usual must be turned around.