Barcelona-
La Font del Gos (ES)

Volver a la Frontera/Barrio

Restoring environmental balance, advancing climate resilience, and fostering inclusive economic growth by resoiling degraded land, revitalizing productive habitats, and strengthening ecological corridors and social connections between La Font del Gos and the Barcelona Metropolitan Area.

1

scale

Territorial (XL)
+
Metropolitan (L/M)

territorial risks and metropolitan issues

Soil erosion, biodiversity loss, land degradation, lack of maintenance, exposure to climate-related hazards, and social and spatial isolation between Font del Gos and the Barcelona Metropolitan Area.

coordination and stakeholder

Consortium Parc Natural de Collserola

Transport Metropolitan de Barcelona (TMB)/ Ajuntament de Barcelona

dynamic strategy

S1-Resoiling existing forest ecosystems .... Climate change mitigation and adaptation through forest management
S2-Resourcing productive habitats through periurban and rural agriculture .... Inclusive economic growth by redistributing and reinvesting local resources
S3-Foster accessibility through improved public transportation .... Reduce social and spatial isolation

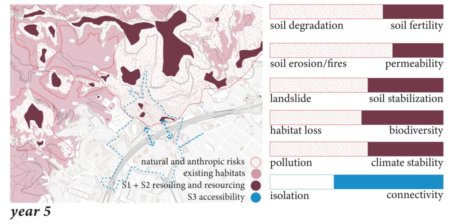
strategy replicability *adaptive data monitoring* *year 0 - n*

Dynamic Masterplan
adaptive data monitoring of land resourcing strategy

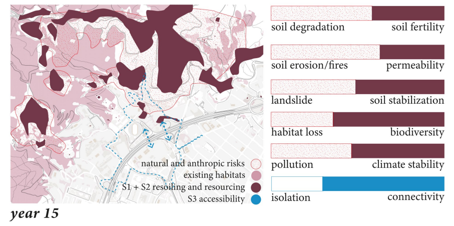
The graph shows how continuous data monitoring identifies risks like flooding, fires, aridity, and soil degradation using factors such as slope and land use.

The data guides adaptation by restoring forests and supporting sustainable agriculture, while promoting mitigation through improved public transportation connectivity to lower emissions.

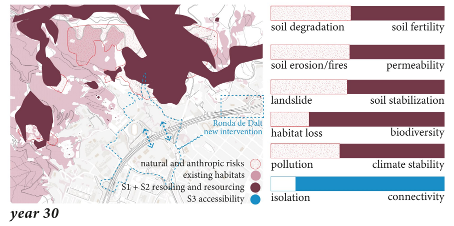
It highlights the project's integrated metropolitan and territorial approach and its expected positive impacts over 5, 10, and 15 years, promoting climate resilience for ecosystems and communities.



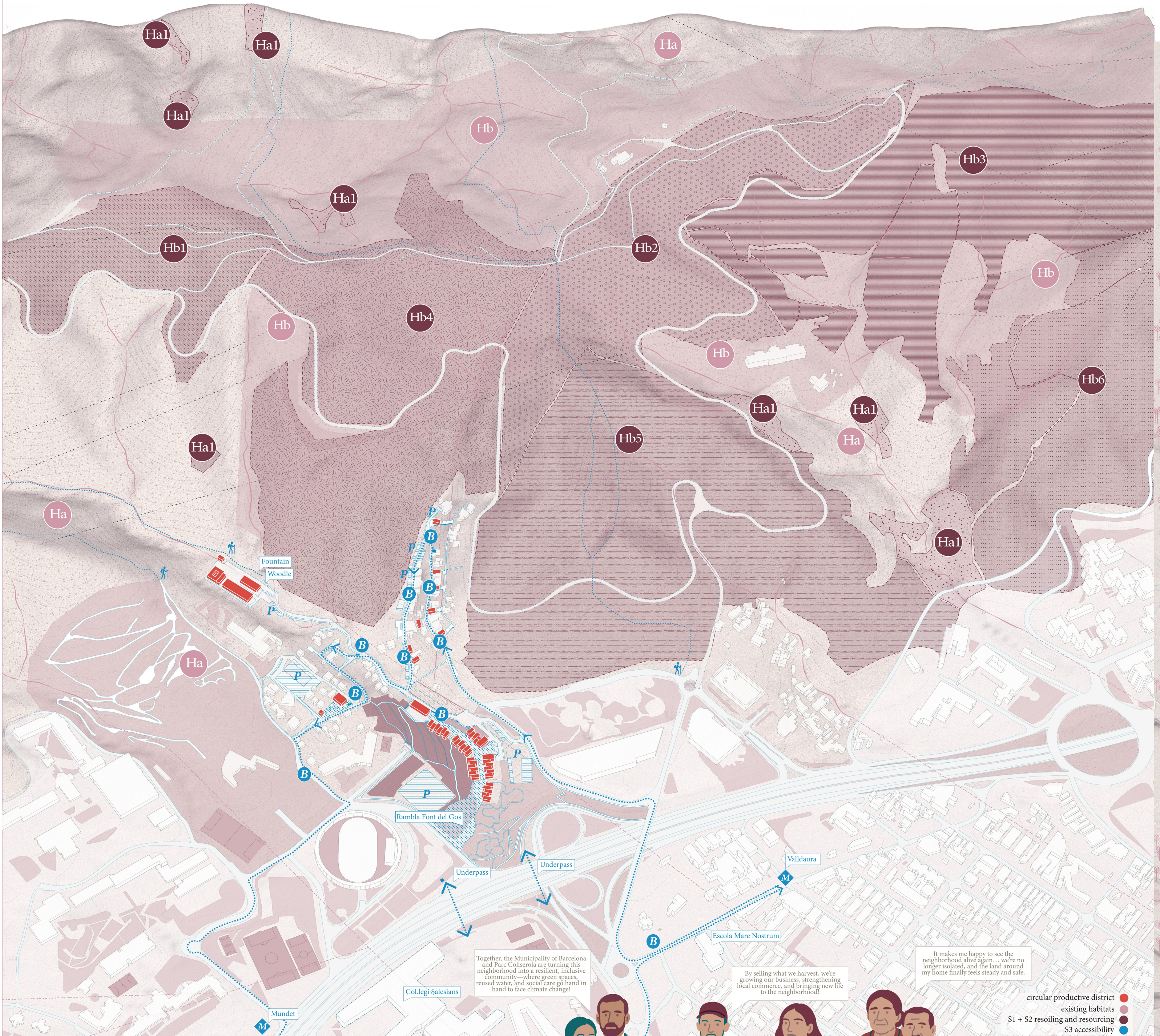
year 5



year 15



year 30


Ha1
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Hb5
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Ha1
Ha
Fountain
Woodle
P
B
Rambla Font del Gos
Underpass
Underpass
Valldaura
M
Escola Mare Nostrum
Col.legi Salesians
Mundet
M
Together, the Municipality of Barcelona and Parc Collserola are turning this neighborhood into a resilient, inclusive community—where green spaces, reused water, and social care go hand in hand to face climate change!
By selling what we harvest, we're growing our business, strengthening local commerce, and bringing new life to the neighborhood!
It makes me happy to see the neighborhood alive again… we're no longer isolated, and the land around my home finally feels steady and safe.

● circular productive district
● existing habitats
● S1 + S2 resoiling and resourcing
● S3 accessibility

Resoiling and Resourcing strategies (S1-S2)

existing habitats *applied strategies* *new productive habitats*
existing species from Parc Natural de Collserola

Ha Habitat: Mediterranean pine forest and mediterranean shrubs. Species: ***Pinus Halepensis, Pinus Pinea***

Hb Habitat: Mediterranean and sub-Mediterranean forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils.

S1-Resoiling existing forestry

S2-Resourcing productive habitats
by planting existing native species

Ha1 *Habitat*: Mediterranean pine forest and mediterranean shrubs. *Species*: ***Pinus Halepensis , Pinus Pinea***

Hb1 ha: 6 — *Habitat*: Mediterranean productive forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils. *Species*: ***Prunus avium*** *Products*: wild cherry

Hb4 ha: 8 — *Habitat*: Mediterranean productive forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils. *Species*: ***Ceratonia siliqua*** *Products*: carob

Hb2 ha: 6 — *Habitat*: Mediterranean productive forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils. *Species*: ***Prunus persica*** *Products*: peach

Hb5 ha: 40 — *Habitat*: Mediterranean productive forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils. *Species*: ***Vitis vinifera (macabeo)*** *Products*: vineyard

Hb3 ha: 6 — *Habitat*: Mediterranean productive forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils. *Species*: ***Prunus dulcis*** *Products*: almond

Hb6 ha: 40 — *Habitat*: Mediterranean productive forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils. *Species*: ***Galega officinalis, Hyparrhenia hirta, Papaver rhoeas, Convolvulus arvensis, Asphodelus spp., Echium vulgare, Borago officinalis, Capsella bursa-pastoris***

Hb4 ha: 2.5 — *Habitat*: Mediterranean productive forests and shrublands, dry grasslands on alkaline soils, and dry grasslands on acidic soils. *Species*: ***Olea europaea***

expected results

- Supports sustainable land use and local resource production
- Promotes climate resilience through adaptation and mitigation
- Improves soil permeability and urban drainage to reduce erosion risk
- Mitigates aridity by enhancing soil moisture and microclimate regulation
- Strengthens productive economies in peri-urban areas
- Enhances biodiversity by establishing and maintaining biological ecological corridors to connect habitats

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Volver a la Frontera/Barrio

Resourcing land and advancing circular systems reduce environmental impact, enhance biodiversity, and stimulate local growth and production by improving access, livability, public spaces, and community identity—attracting new workers and residents.

2

cross - scale

Metropolitan (M)
+
Local-Barrio (S)

metropolitan and local issues

Fragmented planning; social isolation; neglected urban area; lack of infrastructures, facilities and services; low quality public spaces; lack of job opportunities; lacking building legality; unsafe buildings; inadequate buildings maintanance.

coordination and local community partecipation

- Consortium Parc Natural de Collserola
- Transport Metropolitans de Barcelona (TMB) / Ajuntament de Barcelona
- Community Groups (residents; local businesses; social and cultural organisations; CO-OPS)
- Local Committees (Barrio Font del Gos)

circular and dynamic strategy

From land resourcing to circular production
Reducing production impacts through recovery
Improving livability through facilities
Improving accessibility at the local scale

foreseen scenarios

Sustainable local growth, attracting new workers and residents
Biodiversity enhancement, climate change mitigation
Enhancing community dignity, engagement and identity
Increased livability, improved public spaces, and slow mobility in the barrio

strategy replicability *year 0 - n*

Circular Productive Barrio
circular and dynamic strategy

1 *Land Resourcing*
Strategically identifying and activating underused urban land for productive agricultural use.

2 *Food and Botanical Production*
Utilizing the resourced land to cultivate vegetables, fruits, herbs, and other plants.

3 *Distribution*
Creating efficient, low-impact systems to distribute harvested produce - efficient, low-carbon, and community-based.

4 *"Prosumers" Consume*
Residents both grow and consume food, strengthening local food autonomy and engagement.

5 *Selling (local economies)*
Produce is sold through markets or co-ops, supporting small-scale entrepreneurship and economic resilience.

6 *Livability*
Facilities for prosumers enhance quality of life and empower peri-urban growth.

7 *Mobility / Accessibility*
Peri-urban farms and food hubs are connected by walkable, bikeable routes, and public transport (bus stops, monorails, pedestrian cross).

8 *Recovery and Sustainability*
Ecological restoration through circular systems—linking land, water, energy, and biodiversity management.

circular data monitoring

land production expected data

- Vineyards → 324 tons grapes →243,000L wine.
- Olive groves →162 tons olives → 25,920L oil.
- Fruits and herbs →300 tons.
- Total cultivated area: → 121.5 hectares.

green job+ local incomes expected data

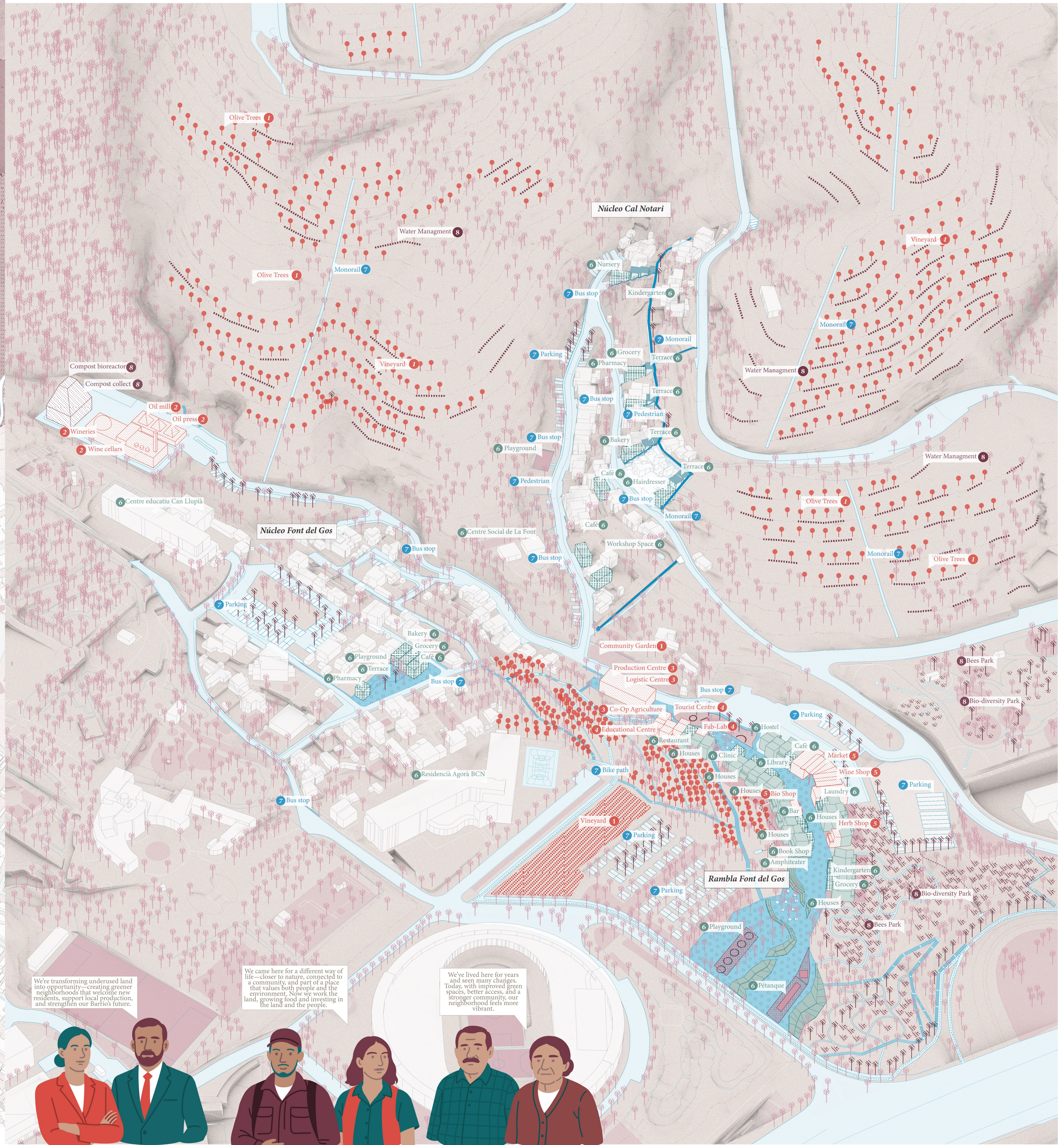
- 37 Full-Time Equivalent (FTE) workers:
- 25 permanent (agriculture, processing, retail, community services).
- 12 seasonal (grape harvesters, olive pickers, herb processing assistants).

infrastructure + housing expected data

- New housing: 15 new housing (10 to replace uninhabitable houses, 5 for new permanent incomes).
- Seasonal housing: 10 beds (4 shared rooms, 2 singles) with kitchen, bathrooms, lounge.
- Community services: kindergarten, wine bar, pharmacy, herb shop, local stores, info point.

energy and biodiversity expected data

Energy self-sufficient production powered by biomass from compost, solar panels, and integrated energy-efficient building systems—achieving net-zero additional energy demand—while enhancing biodiversity through the creation and preservation of ecological corridors that support local wildlife and habitat connectivity.


Olive Trees 1
Olive Trees 1
Water Managment 8
Monorail 7
Núcleo Cal Notari
Nursery 6
Bus stop 7
Kindergarten 6
Monorail 7
Parking 7
Grocery 6
Pharmacy 6
Terrace 6
Terrace 6
Bus stop 7
Pedestrian 7
Terrace 6
Bakery 6
Bus stop 7
Playground 6
Café 6
Hairdresser 6
Terrace 6
Bus stop 7
Monorail 7
Café 6
Workshop Space 6
Vineyard 1
Monorail 7
Water Managment 8
Water Managment 8
Olive Trees 1
Monorail 7
Olive Trees 1
Compost bioreactor 8
Compost collect 8
Oil mill 2
Oil press 2
2 Wineries
2 Wine cellars
Vineyard 1
Pedestrian 7
Centre educatiu Can Llupià 6
Núcleo Font del Gos
Centre Social de La Font 6
Bus stop 7
Bus stop 7
Parking 7
Bakery 6
Grocery 6
Playground 6
Café 6
Terrace 6
Pharmacy 6
Bus stop 7
Community Garden 1
Production Centre 3
Logistic Centre 3
Bus stop 7
Co-Op Agriculture 3
Tourist Centre 4
Educational Centre 4
Fab-Lab 4
Hostel 6
Parking 7
Restaurant 6
Houses 6
Clinic 6
Café 6
Market 5
Library 6
Wine Shop 5
Houses 6
Houses 6
Bio Shop 5
Laundry 6
Bar 6
Houses 6
Herb Shop 5
Houses 6
Book Shop 6
Amphiteater 6
Kindergarten 6
Grocery 6
Houses 6
Bike path 7
Residència Agorà BCN 6
Bus stop 7
Vineyard 1
Parking 7
Parking 7
Parking 7
Rambla Font del Gos
Playground 6
Pétanque 6
Bees Park 8
Bio-diversity Park 8
Bio-diversity Park 8
Bees Park 8
We're transforming underused land into opportunity—creating greener neighborhoods that welcome new residents, support local production, and strengthen our Barrio's future.
We came here for a different way of life—closer to nature, connected to a community, and part of a place that values both people and the environment. Now we work the land, growing food and investing in the land and the people.
We've lived here for years and seen many changes. Today, with improved green spaces, better access, and a stronger community, our neighborhood feels more vibrant.

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A resilient, low-carbon neighborhood that thoughtfully integrates sustainable, resource-efficient housing, renewable energy systems, and inclusive, vibrant public spaces—significantly enhancing everyday living, strengthening community life, and improving the dignity and safety of existing new homes.

3

scale

Local-Barrio (S)

local issues

Social isolation; lacking physical accessibility to houses; neglected urban area; lack of facilities and services; low quality public spaces; lacking building legality; unsafe buildings; inadequate buildings maintanance.

coordination and local community partecipation

- Ajuntament de Barcelona
- Community Groups (residents; local businesses; social and cultural organisations; CO-OPS)
- Local Commettees (Barrio Font del Gos)

local strategy and actions

New facilities for everyday living and community use.
Building a resilient and low carbon neighborhood.
Building new public spaces, with recyclable, and local materials.
Renewble energy system and material reinforcement.

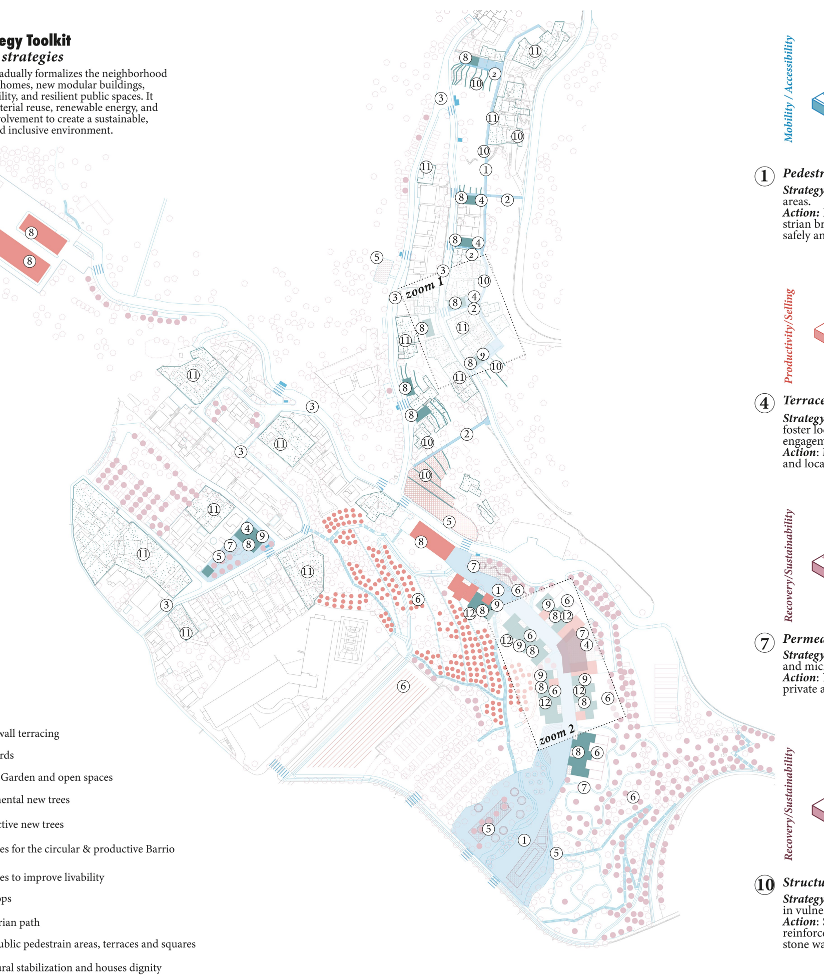
foreseen scenarios

- Dignity and safety of existing housing.
- New circular housing, with flexible and adaptable layout.
- Promotion of community, sharing places for social integration .
- Energy efficiency that models sustainable living and circular resource cicles.

strategy replicability

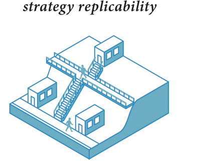
Local Strategy Toolkit
integrated strategies

The strategy gradually formalizes the neighborhood with upgraded homes, new modular buildings, improved mobility, and resilient public spaces. It emphasizes material reuse, renewable energy, and community involvement to create a sustainable, low-carbon, and inclusive environment.

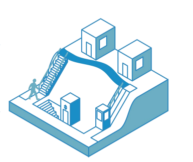

zoom 1
zoom 2

Legend

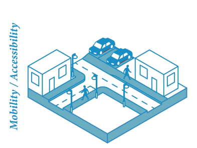
- Stone wall terracing
- Vineyards
- Urban Garden and open spaces
- Ornamental new trees
- Productive new trees
- Facilities for the circular & productive Barrio
- Facilities to improve livability
- Bus stops
- Pedestrian path
- New public pedestrain areas, terraces and squares
- Structural stabilization and houses dignity


Mobility / Accessibility

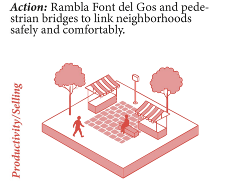
① *Pedestrian Infrastructure*
Strategy: Reconnect fragmented urban areas.
Action: Rambla Font del Gos and pedestrian bridges to link neighborhoods safely and comfortably.


Mobility / Accessibility

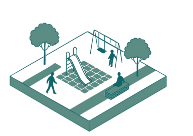
② *Vertical Mobility Solutions*
Strategy: Ensure inclusive mobility across elevation changes for all, including elderly and disabled residents.
Action: Elevators, stairs, and monorails.


Mobility / Accessibility

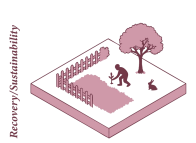
③ *Urban Street Enhancements*
Strategy: Redesign streets as safe, multifunctional public spaces.
Action: Lighting, parking, and sidewalks.


Productivity/Selling

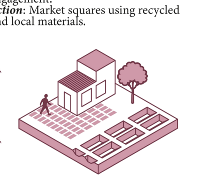
④ *Terraces and Market Spaces*
Strategy: Reactivate unused areas to foster local economies and community engagement.
Action: Market squares using recycled and local materials.


Livability

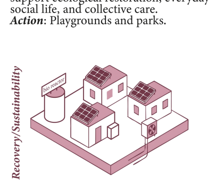
⑤ *Public Spaces*
Strategy: Transform underused spaces into active, inclusive public realms that support ecological restoration, everyday social life, and collective care.
Action: Playgrounds and parks.


Recovery/Sustainability

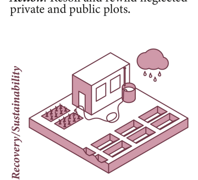
⑥ *Biodiversity Restoration*
Strategy: Restore ecological balance and environmental quality.
Action: Resoil and rewild neglected private and public plots.


Recovery/Sustainability

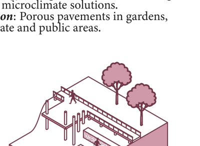
⑦ *Permeable Surfaces*
Strategy: Integrate sustainable drainage and microclimate solutions.
Action: Porous pavements in gardens, private and public areas.


Recovery/Sustainability

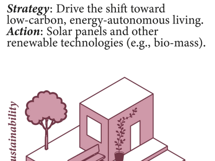
⑧ *Renewable Energy Integration*
Strategy: Drive the shift toward low-carbon, energy-autonomous living.
Action: Solar panels and other renewable technologies (e.g., bio-mass).


Recovery/Sustainability

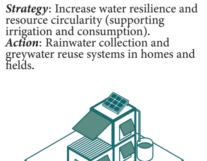
⑨ *Water Harvesting Systems*
Strategy: Increase water resilience and resource circularity (supporting irrigation and consumption).
Action: Rainwater collection and greywater reuse systems in homes and fields.


Recovery/Sustainability

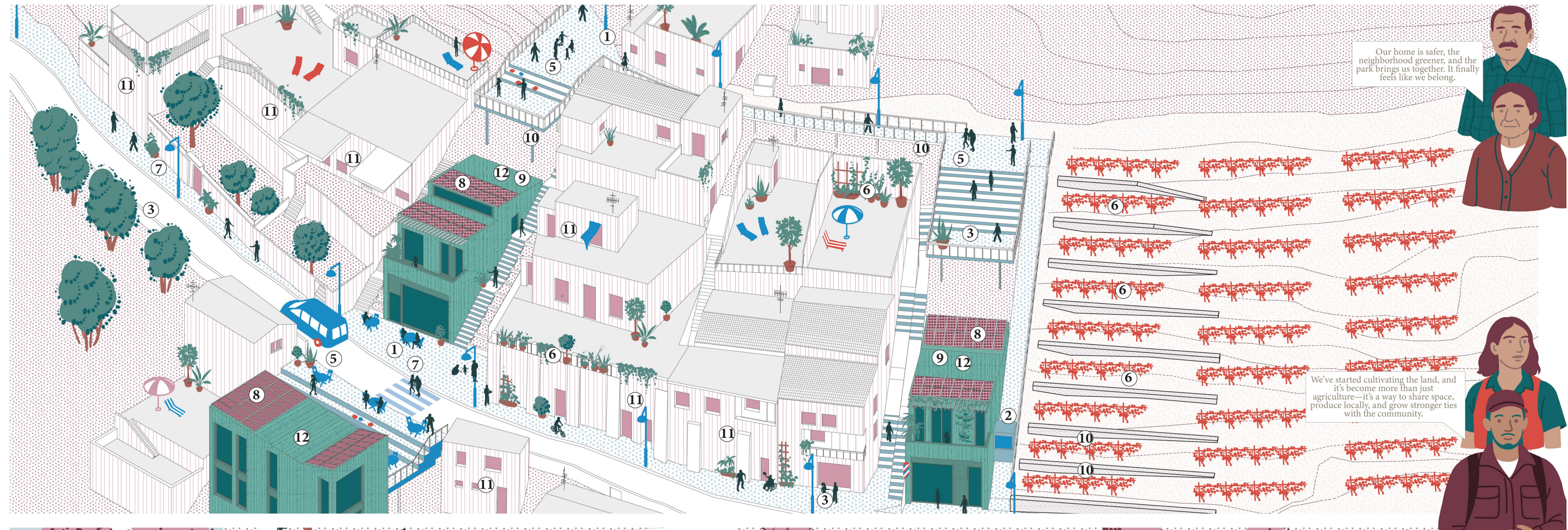
⑩ *Structural Stabilization*
Strategy: Strengthen physical resilience in vulnerable built environments.
Action: Soil consolidation and structural reinforcement (e.g., pile foundations; stone wall terracing).

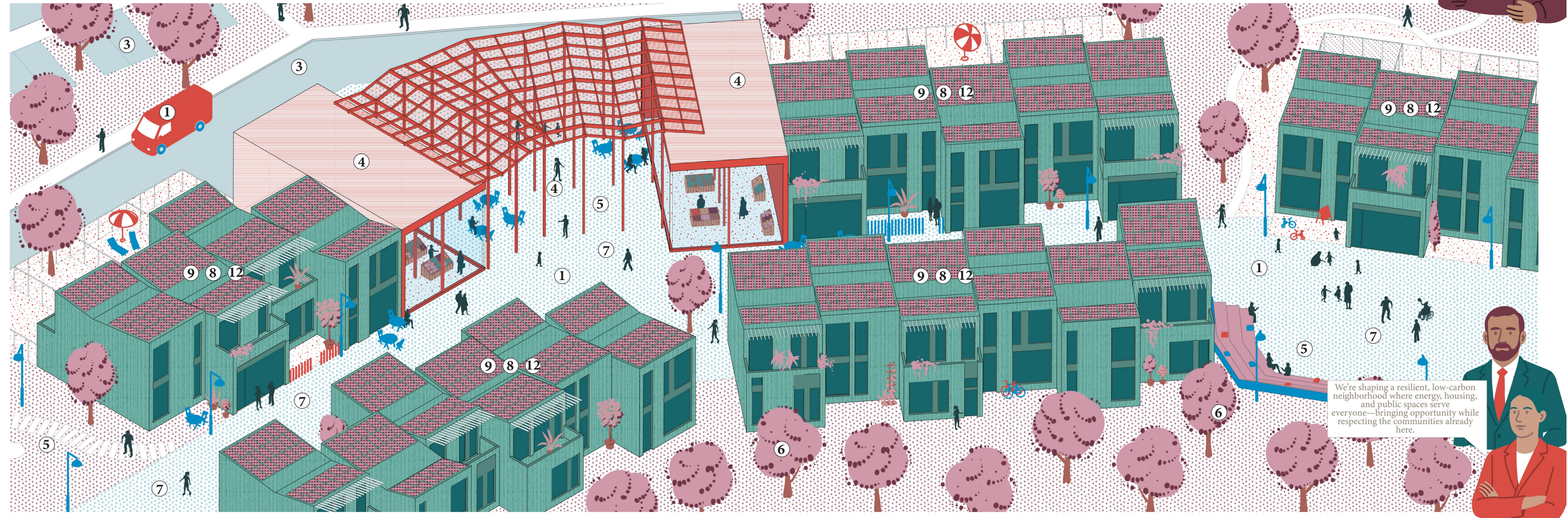

Recovery/Sustainability

⑪ *Houses dignity*
Strategy: Reinforce identity and pride through small-scale architectural upgrades.
Action: Enhance building facades and entrances with color, greenery, and design features.


Livability

⑫ *Sustainable new-build housing*
Strategy: Promote environmentally responsible and energy-efficient living through new house design.
Action: New low-carbon, energy self-sufficient homes, building system with prefabricated timber frame dry assembled.


Our home is safer, the neighborhood greener, and the park brings us together. It finally feels like we belong.
We've started cultivating the land, and it's become more than just agriculture—it's a way to share space, produce locally, and grow stronger ties with the community.


We're shaping a resilient, low-carbon neighborhood where energy, housing, and public spaces serve everyone—bringing opportunity while respecting the communities already here.