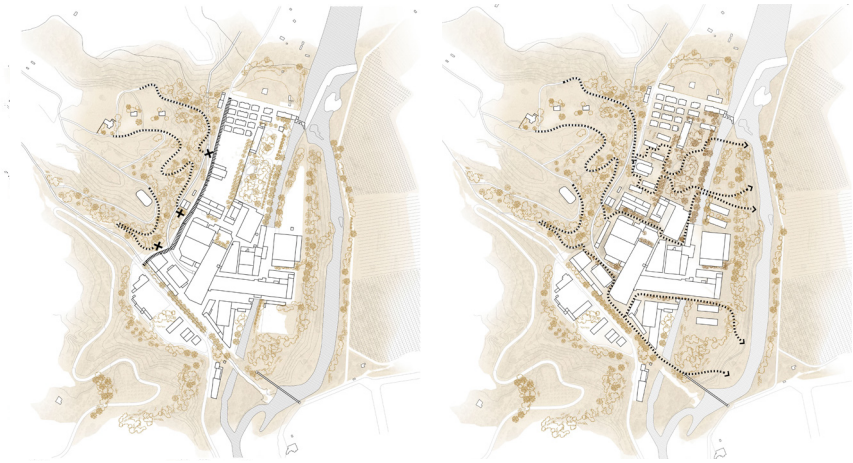
Deconfining the colony

_The wound, the barriers and the heritage

Colònia Sedó was born from an opportunity of taking, as much as possible, advantage of the natural resources of the surroundings in order to generate energy for industrial production. Despite exploiting those natural resources to produce all the energy required, it was not conceived to fit into the ecosystem and preserve it. In fact, the colony generated a 'wound' and a natural discontinuity between the mountain and the river. This wound is still present today.

The starting point of our proposal is the will of sewing this wound in order to achieve the maximum ecological continuity between the mountain and the river through the colony.
We believe that heritage preservation must go beyond preserving the physiognomy of the colony, we understand biodiversity as a kind of heritage that must also be restored and preserved.
Moreover, we strongly believe that **the colony will become a place to live and work in the time to come as soon as nature takes a main role in it.**



Current situation Proposal

In order to regenerate the landscape and to achieve a greater biological continuity of the green through the industrial settlement we propose 2 main interventions:

1. The suppression of architectural barriers and obsolete discontinuities achieving greater urban and biological permeability.

2. The strategic re-naturalization of a significant part of the free spaces of the colony.

These actions would bring a new condition that had been overlooked throughout the history of the colony: the REAL integration into the landscape. And it would not only repair the wound, it will **be the engine of a change in the life model of the colony**. This new model will be explained later.

Additionally, these strategies mentioned above will **improve the connectivity of the colony with its surroundings**. Access is limited nowadays, and, if we do not want to condition the regeneration of the site to major previous infrastructural transformations, we must maintain the existing ones and improve their conditions. On the other hand, the selective and strategic actions of removing architectural barriers will make the colony much more permeable and will allow users to enjoy **a wide variety of walking or cycling routes linking nature, the heritage in the colony and the heritage of its surroundings.**

_Urban regeneration

The current segregation of uses and spaces in the colony makes it even more difficult to revitalize the whole. We understand that the coexistence and interaction of the 2 worlds (industry and housing) has great potential that could be exploited finding opportunities for one to nurture the other and vice versa.

On the one hand, the industrial area requires availability of roads and accessibility linked to industrial activity that must be respected and not hindered, but which could be reorganised and optimized. Therefore, we propose the **selective refurbishment** of some roads linked to new pedestrian routes that will offer **a more domestic, green and pleasant circulation through certain areas of the industrial fabric**. These routes will extend to the northern part of the colony inviting the interaction that has always been deliberately blocked and will offer **circular itineraries** avoiding the current linear scheme within a single path, between the residential and industrial area.

On the other hand, the provision of **new community facilities** will also be a key aspect both in the revitalization of the colony and in encouraging interaction between the two worlds.

In this sense, we can find several buildings that, due to their strategic position, typology and historical load, could accommodate the new public and communal facilities (such as a semi-outdoors market, a nursery school, or a community centre amongst others).

Urban growth – reusing existing buildings:

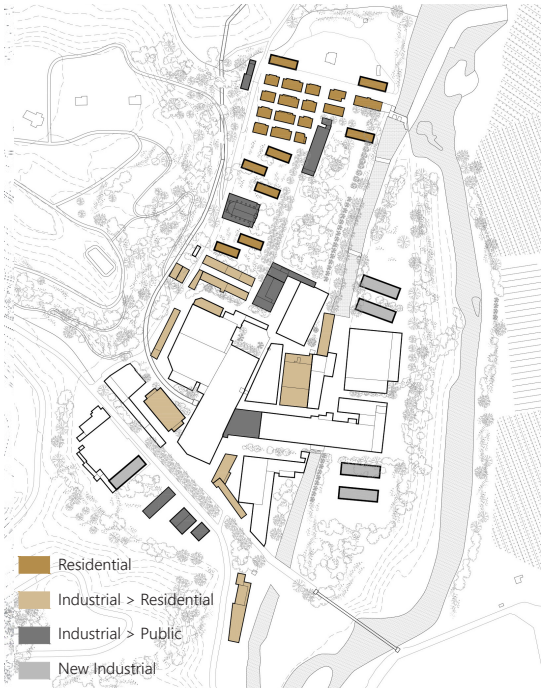
There are also a few buildings in the industrial area that could potentially be reused to host **the first (formal) housing growth in this area**. These buildings, apart from being linked to the 'domesticated' roads with a more comfortable access, also coincide with buildings typologies of dimensional conditions, solar catchment, ventilation, etc. that would facilitate the conversion into housing buildings.

A second type of residential growth would consist on reusing industrial buildings that, due to their strategic position, their precarious state of conservation and their large dimensions would potentially accommodate a unique residential program (student or researcher residences, house-workshops, etc.) **taking advantage of the shelter of the industrial structures.**

Half of the residential floor area expected to be increased according to the PMU 02 – POUM could be housed in the industrial area through the mentioned reusing strategies. That would significantly **minimize the footprint of new potential buildings in the residential area** and at the same time would **guarantee a real mixed-use model in the colony.**

0Urban growth – renovation and new buildings:

We believe that **the existing dwellings needs to be renovated** in order to achieve optimal comfort conditions for the housing units while maintaining its identity and heritage. At the same time, **the construction of new buildings, necessary to accommodate new users and new ways of life**, will be done primarily on land that has already been altered and denatured previously, avoiding new injuries or alterations. Those new buildings could reconstruct the original fabric of this area while recovering the erased memory and improving their conditions.



The construction of new buildings should be carried out in a progressive way, according to the real needs of each time. We believe that **the model of cooperative housing,** which promotes non-speculative land use and enhances community feeling and identity, would be the most appropriate. In addition, this new building would not occupy the entire footprint of the old demolished blocks, but would focus on **denser and more optimized growth, ensuring better lighting and ventilation conditions for the new buildings**. In this way we would achieve a progressive and controlled growth, according to demand and freeing the maximum of re-naturalized free space to ensure the continuity of the green.

Urban – natural spaces:

The proposed urban structure of streets and buildings **gives continuity to the historical fabric** recognizing its pre-existence. But, in contrast to the original architecture of the colony, it is committed to **enhancing the porosity of the ground floors** of both refurbished buildings and the new ones. In the latter, the incorporation of productive uses such as small businesses or workshops for the inhabitants of the cooperative housing will favour the local work of the service sector and will **reduce the displacements of the neighbours.**

The re-naturalized available free spaces will be able to accommodate **productive uses such as allotments**, encouraging healthy productive activity and user participation in the creation and maintenance of the colony's landscape.

_Urban metabolism – resources management – new vitalities

The paternalistic model of life in the colony expired and led the colony to its decline. We believe that the new model of life must be unequivocally based on the **principles of urban sustainability**.

To allow the transition from a linear metabolism (which has characterized the colony until the present day and has gradually degraded it) to a circular metabolism, it is necessary to address the different aspects of the system:

First of all, **a more circular economy in the colony should be promoted**. Unlike other degraded areas, the colony already has productive activity that creates jobs. This activity must be preserved and proper living conditions must be offered so that the workers can feed on the rest of the colony's offer and even live there. But regarding the arrival of new productive activities, those that would revert directly to the colony should be encouraged and prioritized.

In this sense, the emergence of new needs and demands caused by the arrival of new users, plus the necessary **productive activity derived from the process of regeneration of the colony** (urban space renovation, exploitation of gardens and associated infrastructures, construction of new cooperative housing ...) may have a place in the industrial area of the colony. If the new productive activity is nourished by the availability of existing spaces and infrastructures, and at the same time serves the needs of the colony, a more circular model of economy will be achieved.

Secondly, the management of energy, matter and materials must be included in the equation. In this sense, we should recognise the **valuable resources that can be found in the site with which we could promote changes of great relevance at a low environmental and economic cost.**
Those resources would be: the river Llobregat, the rainwater (and the natural slope), the existing roofs capable to produce solar energy, the waste material from the colony's activities (the existing ones + the expected ones) and all the organic waste obtained from forest maintenance and/or agro-industrial activities in the surroundings of the colony.

Based on these available resources, it is proposed to drive the energy transition through 3 vectors:
1. **Improving energy efficiency** (reducing demand) and achieving colony self-sufficiency.
2. **The production / generation of energy** through renewable sources (photovoltaic energy, hydraulic turbine and thermal energy from a mechanical and biological treatment plant).
3. **The energy market**.

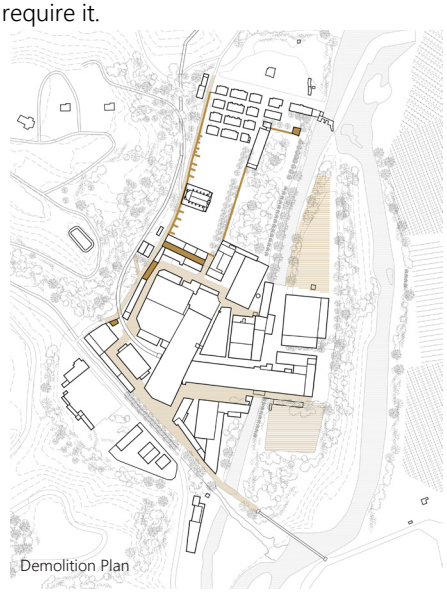
Given the proportions of the colony and the coexistence of industrial, residential and community use, it would also seem reasonable to propose a **centralized district heating installation** for the air conditioning of all buildings that require it.

<u>Recycling and reusing materials:</u>

The urban regeneration should be carried out taking advantage of local resources and trying **to close-loop the lifecycles of existing and new materials**:

The demolition of several existing barriers (delimitation walls, concrete platforms...) would generate a waste that can be reused in the reconstruction of new elements for urban spaces. The proposed system of platforms and paths, which solves the level difference between the mountain and the river through the colony with an agricultural logic, could be re-built with that waste material (in the form of gabions).

The selective demolition of some buildings without heritage value (also to generate permeabilities on the perimeter) and a significant surface of roads and hard platforms could also be used as a backfill to support the proposed new buildings.


Demolition Plan

<u>Construction of the new:</u>

In order to minimize external contributions for the construction of the new buildings, we propose to prioritize prefabricated and simple construction systems instead of specific and specialized systems. As a result, **a large part of the construction elements of the new buildings could be prefabricated in the colony's own industrial facilities** and at the same time the end users themselves could self-build some parts without the need for great technical knowledge.

A good example would be wood-construction. This could be obtained from nearby local sources and processed in the colony to be used as building material (structure, insulation, finishes ... etc.). This would greatly reduce the environmental impact and contribute to the circular economy, while also significantly reducing construction costs and encouraging the interest of future users to participate.

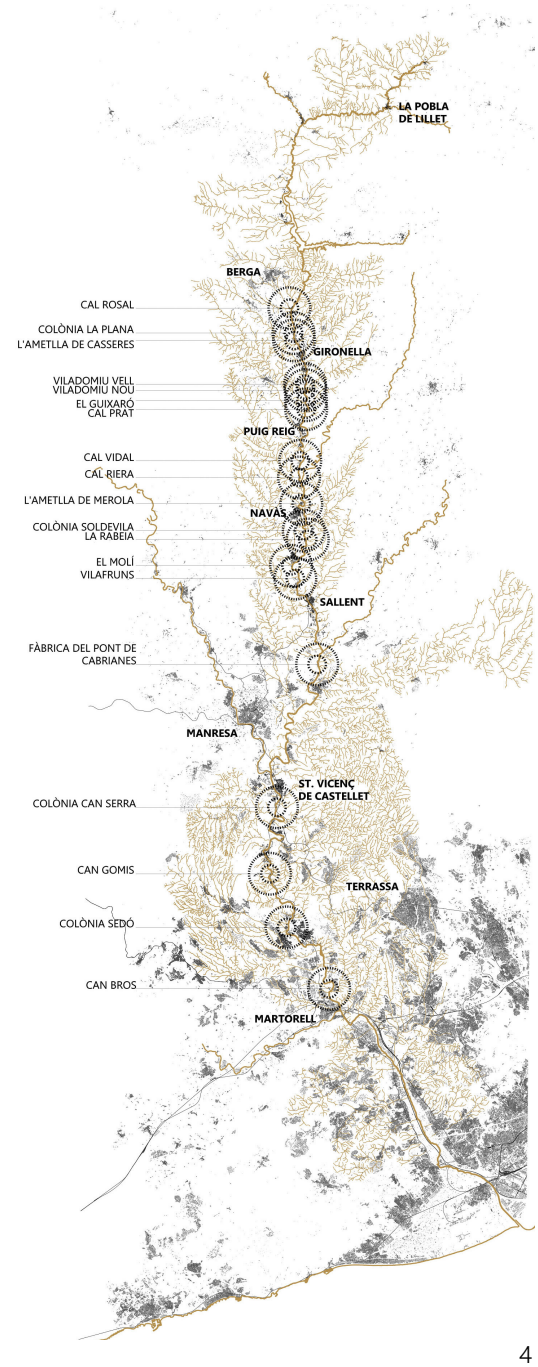
_Ecosystem – Territory – local scale

From all the possible urban models in the colony, the only sustainable one will be the one that can coexist with nature without degrading it and will use its resources without overexploiting them.

The new model proposed for the colony seeks for its **self-sufficiency** (in terms of resources) but also for a **positive impact** in the surroundings.

In a local scale, this impact would be translated into:

- A better **connectivity** of the colony making its borders more permeable and welcoming to inhabitants, workers and visitors. At the same time, the inhabitants and workers of the colony will be able to reduce their journeys, also reducing their emissions.
- Highlighting the colony's **heritage** will reinforce several routes that connect those with relevant heritage of the territory such as Santa Maria del Puig, Esparreguera's castle ruin, but also Olesa's and Esparreguera's heritage. Next to it, the natural heritage (such as Roques Blaves or the river Llobregat) will also be put in value being part of heritage hiking trails that would naturally include Colònia Sedó.
- The **waste management** system proposed in the colony, using organic waste as fuel to produce electricity and heat, could contribute in the maintenance of the surrounding forests and also could collect organic waste from close agro-industrial activity, becoming a waste recycling pole.
- The **new uses** proposed (or expected) in Colònia Sedó would for sure complement the offer of Esparreguera and Olesa, but would definitely provide the neighbours of Can Vinyals of new uses, spaces, products or even energy produced in the colony.
- **Abandoned buildings** such as Ca l'Esperança or the 'Casetes del Puig' could be re-activated (even with productive and didactic uses) since connections between them and the colony would be reinforced and they could profit from the closeness to the services and facilities.
- **Green energy** produced in the colony could actually sell the surplus to Esparreguera, Olesa, Can Vinyals or other interested consumers.



The local impact of the project can potentially have a bigger impact on the territory. The water sensitive urban design strategies seek for a cleaner (or less contaminated) water cycle. This would clearly have a direct impact on the river Llobregat and the biodiversity associated.
Achieving an **exemplary project** of regeneration of Colonia Sedó could have an impact on several abandoned or almost-abandoned industrial colonies along the river that have similar conditions and could find solutions on this case.