

## Neighborhoods renovation

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Urban renewal

**Address 1 - street** : Carrer Pi 08923 SANTA COLOMA DE GRAMENET , España

**Gross density** : 276.92 alojamiento/ha

**Population** : 1 100 hab

**Starting year of the project** : 2014

**Delivery year of the project** : 2017

**Key words** : Energy rehabilitation, public-private cooperation, overcoming barriers to rehabilitation



1.3 ha



2 080 599 €

Proposed by :



### ID CARD

This is a new intervention model for energy rehabilitation of neighborhoods with mostly pre-1980 residential buildings that present conservation and maintenance deficiencies. The council develops a first phase of mediation with the owners of an area of between 300 and 400 homes. It is offered as manager and facilitator throughout the rehabilitation process. Once achieved a minimum of complicity between the resident owners, the council assumes the hiring of technical projects which, once agreed upon with each community, are the basis for the urban boundaries of a conservation area and rehabilitation, which is set as the public interest in the operation.

This empowers the council to tender the works defined in technical projects, and to charge the appropriate fees to the owners, depending on the percentage of ownership of each.

These works will generate significant savings by scaling factors, and in turn allow higher savings in energy consumption up to 30% by the introduction of external insulation.

For the collection of fees, the council raises three systems that adapt to the situations of each owner;

- Legal and natural persons, can choose to pay in two installments, 50% at the beginning of the work of the sector and 50% to finish the work of the building.
- Individuals, if they choose domiciled receipt, pay in 60 monthly installments without interest. The average fee is around 60 euros.
- Natural persons, residents in the area and with incomes below 20,000 euros / year per household, may request an aid consisting of the total advance by the municipality of the cost of the work, and the registration of that amount, so that it can be liquidated when the transmission of the housing occurs.

The council assumes the management of collection fees, using the enforced recovery in cases of default, freeing communities of this burden. It should be noted that the default rate is very low.

All communities involved have signed cooperation agreements with the municipality, which shows the social support for the measure and simplifies the steps ahead of obtaining grants from third administrations.

Grants have been obtained from the Metropolitan Area of Barcelona and the IDAE, which account for about 30% of the cost of the work. These amounts are deducted from quotas.

The contiguity of buildings helps also address the improvement of the urban landscape. a contest of ideas of architecture is made and the winning solution is chosen by the neighborhood.

The project began with a pilot test in the Area of Conservation and Rehabilitation of Street Pirineus (Pyrenees ACR) which has involved thirty buildings and 360 apartments.

The mediation work began in 2014, the awarding of contracts occurred in 2015, currently the early stages of the field are already completed and it is estimated that the last phase will end in mid-2017.

The methodology has proven its viability and will be progressively implemented in the rest of the city.

## Programme

- Housing

## CO2 Impact

CO2 Impact : 224 tCO2

## Method used to calculate CO2 impact

The rehabilitation project of the buildings included in the Area of Conservation and Rehabilitation of the Street Pirineus, between Bruc and Olot of the municipality of Santa Coloma de Gramenet, includes a set of actions that are aimed at improving energy efficiency. The whole project acts on 32 multifamily buildings, 21 of which include energy improvement measures (Table 1). Generally, the action involves the application of external thermal insulation on the facade (main, rear and / or dividing, as appropriate). Isolation is SATE type or equivalent based on prefabricated plates expanded polyester insulation (EPS) of 50 mm thick and 1.35 m<sup>2</sup> • K / W. This action has been adapted to each of the buildings evaluated.

Table 1: Summary of the energy performance area

No. 21 multifamily buildings

No. 306 homes

Total area [m<sup>2</sup>] 16180

From the Energy Efficiency Certificate of each building it is possible to quantify the current situation and the improving in energy renovation involved. Then in Table 2 improved energy efficiency of buildings in terms of primary energy and CO2 emissions are as follows:

Table 2: Summary of improvement in energy efficiency.

Current status Renewal Energy Savings

Primary energy consumption [GWh/yr] 2.2 1.4 0.85 39%

CO2 emissions [tCO2/yr] 561 336 224 40%

With this we conclude that from the energy actions carried out in the buildings included in the Area of Conservation and Rehabilitation of Street Pirineus between Bruc i Olot in the municipality of Santa Coloma de Gramenet it is possible to reduce 39% of primary energy consumption and 40% of CO2 emissions.

## Project progress

- Delivery phase
- Operational phase

## Procedure type

- Urban développement permit
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## Prescriptions and zoning

- Particular conventions

## Key points

- Governance
- Quality of life
- Economic development
- Energy /Climate

## Approaches used

- Local charter

## Data reliability

Self-declared

## TERRITORY

### Type of territory

City of 120,000 inhabitants, the project area is situated on a hillside. Most of the buildings are from the 60s and 70s.

### Climate zone

[Csb] Coastal Mediterranean - Mild with cool, dry summer.

## KEY FIGURES

### Refurbished floor area

Refurbished floor area : 1,30 ha

### Number of residential units

Number of residential units : 360

### Total investment costs (before tax)

Total investment costs (before tax) : 2 080 599 € HT

### Amount of the investment taken in charge by the local authorities

Amount of the investment taken in charge by the local authorities : 136 000 € HT

### Total of subsidies

Total of subsidies : 835 271 € HT

### Detail of subsidies

Metropolitan Housing Consortium of Barcelona (works) € 600,129.30  
City of Santa Coloma de Gramenet (technical projects) € 235,141.84

## GOVERNANCE

### Project holder

Name : City of Santa Coloma de Gramenet

Type : City

**General description :**

Project governance has several levels: - Politically, the project is led from the tenure of urbanism, with direct access to mayor's office. Generation of consensus with the owners is done by a monthly commission with all the presidents of communities, monitoring the advances of the project - issues that affect each community are discussed with each one of them internally appointing a project coordinator, architect, and bi-weekly meetings of coordination with the various departments involved in the project are made.

## Project management

**Description :**

A coordinator, Joan Manuel Gonzalez, architect, monitors the project, and is responsible for the bidding process and control of the works

The Municipal Urban Management Service, whose responsible is Charo Cardenas, assumes the administrative and legal management of the project as well as the secretariat of the monitoring committee

The Municipal Community Mediation Service, whose responsible is Cris González, assumes the support for community and relationship management with resident owners

Local Housing Office, whose responsible is Francisco Roldan, assumes direct relationship with the owners for document management and continuous information

The Internal Revenue Service and Intervention, led by Manoli Hervas and Aurelio Corella assume treasury management and collection procedures

The service has developed the necessary computer applications to manage the collection

## Project stakeholders

Jordi Mas Herrero

**Function :** Other

Deputy Mayor of Planning and Housing, delegated by mayor for the development of neighborhoods rehabilitation program

[Construction21 company page :](#)



## SOLUTIONS

- Urban project governance
- Citizen participation

## QUALITY OF LIFE

### Quality of life / density

High density levels

### Net density

276.92

### Culture and heritage

Buildings with no heritage value, its urban landscape is enhanced by a comprehensive intervention that has been democratically chosen by the neighborhood.

### Social diversity

The neighborhood has a higher immigration rate to 35%

### Social inclusion and safety

The project enhances social inclusion by promoting co-responsibility of the owners, and articulate various mechanisms of consensus-building, community-wide

and neighborhood, which allow a constructive dynamic from the rehabilitation process.

## Ambient air quality and health

The interventions improved thermal insulation in environments with energy poverty situations, it is demonstrated by a recent study by the Public Health Agency of Barcelona, which reduce mortality, especially among the group of older women living alone.

## SOLUTIONS

- Promotion of cultural/ historical identity

## ECONOMIC DEVELOPMENT

### Local development

The operation generates a very significant investment volume, located in a particular environment. New hires are generated and increased spending occurs in local shops and closest restoration.

## SOLUTIONS

- Business development

## RESOURCES

## ENERGY/CLIMATE

## SOLUTIONS

- Climate adaptation

## Contest

### Building candidate in the category



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