

## Volonne Eco-district

by Virginie Sancho / 2019-06-10 17:02:16 / Francia / 6933 / FR



Address 1 - street : 04290 CENTRE BOURG ,VOLONNE, France

Starting year of the project : 2017

Delivery year of the project : 2019

Certifications :



1.9 ha



2 677 375 €

### ID CARD

The Volonne project is part of the town center, which, in continuity with the historic village core, is the heart of the commune's social life. The Center-Bourg project aims to reinforce this centrality at communal and intercommunal scales:

- by redeveloping public spaces with amenities that meet the expectations of different users, in a shared and peaceful way,
- by rethinking the mobilities and the place of the car,
- developing the range of equipment, especially around children,
- offering new services, particularly around health,

- by improving the supply of housing (seniors and social rental). This project is part of an exemplary approach to its governance and design. It pursues ambitious objectives on the ecological level, and more generally on the 3 pillars of sustainable development, while remaining coherent and realistic with the financial capacities of a small municipality in rural areas.

The project obtained the labels:

- **QDM SILVER Level:** Mediterranean Sustainable Neighborhoods
- **BDM Level GOLD:** Sustainable Mediterranean Buildings for the health center, the residence of the Tour du Gue and the Femuy
- **Ecoquartier label Step 2**

## Programme

- Housing
- Public spaces
- Green spaces

## Procedure type

- Urban développement permit
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## Key points

- Governance
- Quality of life
- Economic development
- Mobility
- Resources
- Biodiversity
- Energy /Climate

## Approaches used

- Ecodistrict national label
- Others

## Certifications

- Ecodistrict national label
- Autre

## More info

<https://www.mairie-volonne.fr/index.php/ecoquartier/>

## Data reliability

Self-declared

## TERRITORY

### Type of territory

The town belongs to the **department of Alpes de Haute Provence** (04), in Provence-Alpes-Côte-d'Azur. It is located at the confluence between Sisteron, Digne-les-Bains and Château-Arnoux-St-Auban, on the east shore of the Durance.

It enjoys a **privileged access by road** thanks to the dense road and motorway network, locating Volonne 15 minutes from Sisteron 1 hour from Aix-en-Provence, 1h30 from Marseille 2 hours from Grenoble and Avignon 3 hours from Lyon and Nice 7 hours from Paris .

There is a concentration of transport infrastructure and agglomeration of municipalities along the Durance.

The population of Volonne is 1,700 inhabitants.

## Climate zone

[Cfb] Marine Mild Winter, warm summer, no dry season.

## KEY FIGURES

### Green areas, roofs included

Green areas, roofs included : 4 200 m<sup>2</sup>

### Number of residential units

Number of residential units : 33

### Number of social housing units

Number of social housing units : 33

## GOVERNANCE

### Project holder

**Name** : The commune of Volonne

**Type** : City

**General description** :

Client: Commune de Volonne and the lessor H2P

### Project management

**Description** :

Project management is structured on several levels. To help it in this management, the Commune has recruited an AMO "EcoQuartier" integrated municipal services. She set up:

- The technical coordination committee
- Technical meetings
- Specific committees
- Specific tools: PUP - Partnership Urban Project with a social lessor H2P
- Citizen Association: The project has been the subject of consultation of the population since 2015 by meetings "workshops" and the inhabitants are the actors.

#### **The tools put in place:**

- articles in the municipal newsletter and in the press
- photos and articles consultation
- posters and letters for participatory meetings
- presentation panels at the town hall
- participatory meetings

The exchanges allowed the following evolutions and improvements:

- positioning of the cafeteria next to the nursery school to limit the trips of toddlers,
- outdoor spaces, uses of the castle square, place of childhood, traffic loop on the Place Charles de Gaulle.

### Project stakeholders

Urban Council

**Function** : Other

[Construction21 company page](#) :

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MG Concept

**Function** : Technical consultancy agency

[Construction21 company page](#) :

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Adret economist Daniel Noël

Function : Environmental consultancy agency

Office of study fluids and environmental quality

[Construction21 company page :](#)

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Nation

Function : Technical consultancy agency

Office of study structure

[Construction21 company page :](#)

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R + 4 Architects

Function : Architecture agency

[Construction21 company page :](#)

<https://www.rplus4.com/>

## QUALITY OF LIFE

### Net density

17.37

### Social inclusion and safety

- Inclusion of social insertion clauses in the Business Consultation Files for VRD lots and / or Green Spaces.
- The school staff and the children of the communal kindergarten and primary schools) will be associated for the creation and the maintenance of the educational gardens and the place of the childhood.
- For example, during out-of-school activities, children will have to draw and then make the cobbled calade in primary schools.
- Family gardens will be made available to the inhabitants of the commune. A public meeting was held on the 16/05/2017 to present the project of allotment gardens to the inhabitants.

## ECONOMIC DEVELOPMENT

### Local development

The public health house, has obtained the label "Mediterranean sustainable building" silver level. 17 to 20 health professionals were hired. 453 m2 on 2 levels, extensive consultation with professionals.

An extension of the health center is being studied in the former treasury to accommodate other professionals wishing to share the premises and common means.

**Surface of shops:** existing on the course Paulon. The desire of the community is to reinforce this commercial reinforcement by rehabilitating streets and squares and not to add new commercial units.

## TRANSPORT

### Mobility strategy

- Requalification by reducing the right-of-way of the Fémuy crossroads with optimization of traffic directions and parking (30 places) - A portion of the land at this junction is used for the construction of the health center
- Reinforcement of the two bicycle parking lots by 6 new parking lots
- Creation of an electric vehicle terminal
- Creating pedestrian paths to cross the island
- Zone 30 and crossing platform
- Securing the bus stop and pedestrian movements
- Recalibrating the RD4 to create a more generous sidewalk
- Plantation of an alignment structuring the entrance of city
- Securing the boulevard with urban and landscape treatments



## SOLUTIONS

Description :

## RESOURCES

### Water management

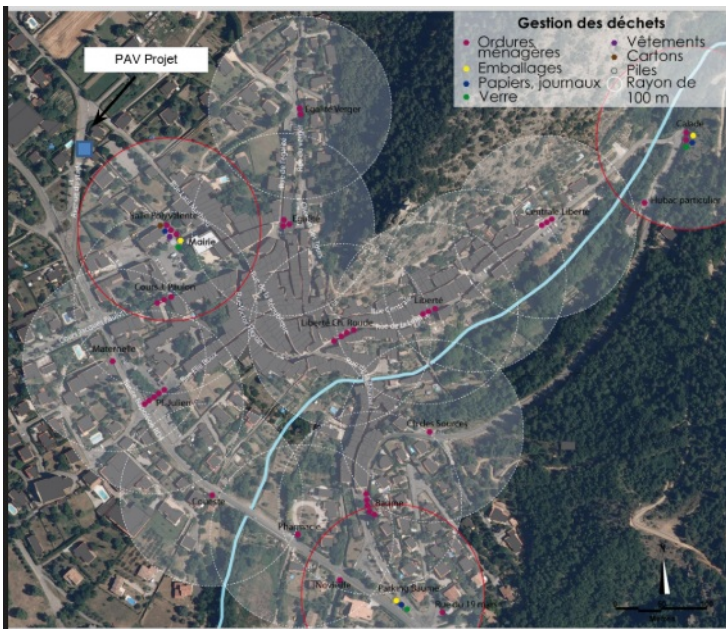
- The separation of sanitation networks. (non-existent separating network)
- The creation of gutters and gates draining to capture the runoff and to route them to the collection works.
- The valorization of a part of the roof waters by storage in vats allowing the watering of various gardens (nursery)
- Maintaining existing natural outlets (filioles / ditches)

### Waste management

- Creation of voluntary points of contribution within the scope of the project
- Composting: incitement by the town hall for the inhabitants
- Establishment of shared composting between social housing and family gardens.
- Collection of green waste and recovery at the scale of the municipality: once a year: grind
- Green site charter and approach accompanied by the Building Federation and Ademe 31
- The project makes an important use of biosourced materials: wood structure, wood fiber insulation, wood frame.

figures:

- 95% of existing asphalt from recycled construction site
- Recycling rate of construction waste: DIB 81% - IRON 100% - WOOD 95% - GRAVATS AND INERT 85%
- Recovery rate of demolition waste: 100%



## SOLUTIONS

- Waste management

## BIODIVERSITY

### Biodiversity and natural areas

- Creation of a place of childhood, privileged meeting place
- Crossing path support of soft modes and lined with family gardens with varied atmospheres
- Shared green spaces: educational gardens, collective orchard and meadow, family gardens, free play area, plots
- Maintenance of existing plants: Only 3 trees were cut down. The maintenance of cypresses and walnut trees in place necessitated the fragmentation of the housing project into several buildings
- Zero phyto management implemented actively



## PALETTE VEGETALE - RECOURS A LA FLORE INDIGENE

### EXEMPLE D'ARBRES INDIGENES D'OMBRAGE



Ficus à large feuille - Eucalyptus acuminé support à l'ombre et à l'ombre hétérogène - Alnus glutinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa

### BORQUETS ET HAIES ARBUSTIVES



Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa



Alnus glutinosa - Ficus à large feuille - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa

### VIVACES ET ARBUSTES BAS INDIGENES POUR DES MASSIFS ORNEMENTAUX



Alnus glutinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa - Prunella spinosa

## ENERGY/CLIMATE

### Climate adaptation, resources conservation, GHG emissions

- The health house is planned in passive cooling by well
- Establishment of shaded spaces on the public space, and maintenance of a sunny area for the winter.
- All the buildings are instrumented for a follow-up during two years: differential counting of the consumptions, probe of temperature, display of the consumptions, follow-up of the office of study environmental quality.
- An important work is put in place to ensure maximum summer comfort: Natural ventilation at night, solar protection, air brewers, passive cooling, strong vegetation.

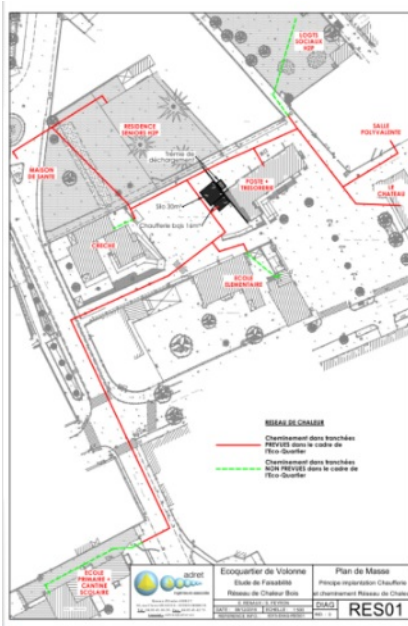
### Energy sobriety

- RT 2012 - 20% for public facilities and social housing
- New public lighting: autonomous and LEDs

### Energy mix

- The project involves setting up a wood heat network, with 9 buildings connected at term.
- Electricity suppliers are 100% renewable energy

### Heat networks



### Building candidate in the category



Grand Prix Ville Durable



Prix du public

