

## Eco-city of the green meadow in St Nolff

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**Address 1 - street** : Eocité du pré vert 56250 ST NOLFF, France

**Population** : 250 hab

**Starting year of the project** : 2007

**Delivery year of the project** : 2021

**Certifications** :



6 ha



2 700 000 €

### ID CARD

For the town of St Nolff, a rural town in the first ring of Vannes in the Morbihan, land pressure has greatly increased with its attractiveness and elected officials, challenged to lead sustainable development, have decided to build an exemplary eco-district in economic, social and environmental impact control.

The project, immediately baptized "Ecocity" is therefore oriented towards a high **density** (for the region) so that particular work has been carried out on the

morphology of the district and the building lots to find vernacular urban forms combining density, intimacy and quality of life.

In addition, a clear will of the community was to give priority to soft travel ( "**leave the car at the door of the neighborhood**" ).

Today, the inhabitants and the natural environment that welcomes them are organized in symbiosis and all have the necessary space to flourish.

## Programme

- Housing
- Public facilities and infrastructure
- Public spaces
- Green spaces

## Project progress

- Operational phase

## Procedure type

- Urban développement permit
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## Approaches used

- Ecodistrict national label
- Agenda 21

## Certifications

- Ecocité

## Photo credit

plans provided by SEM AEDM (photos Marie Lanson)

## TERRITORY

### Type of territory

Brittany is experiencing continuous economic and demographic growth in its last years. If this dynamism is positive, it is also synonymous with new requirements and has definite **land implications**. All the more so since there is a national phenomenon of household loosening which also contributes to increasing **urban pressure**.

As a result, artificialized surfaces are progressing very rapidly in Brittany: they have doubled in 20 years. Almost 4,000 ha were thus used each year for urban growth between 1985 and 2005, ie the equivalent of the urbanized area of Rennes. With job creation twice the French average and a population growing by 1.1% per year, the **Morbihan** department is particularly affected by these issues. The needs of the department are 7,800 housing units per year (including 1,200 social housing units).

The challenge for the municipalities is to **control the development** of their territory.

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The town of Saint-Nolff is located in the first **ring of Vannes** (ten kilometers) and near the Gulf of Morbihan. This town of just under 4000 inhabitants covers 26 km<sup>2</sup> and offers a peri-urban living environment in the countryside. The village, nestled at the bottom of the Condat valley, offers all services and local shops. Community life contributes to its dynamism.

The city is subject to a sprawl of space and strong land pressure. Since 1997, Saint-Nolff has been committed to using natural resources in a reasoned manner and to implementing a policy of sustainable and inclusive development, in particular during the revision of its PLU. In this logic, the municipality has been committed since 2005 to an Agenda 21 approach, the backbone of all the municipality's projects on land, local activities, urban development ...

It is in this context that the ecocity of Le Pré Vert was imagined and conceived, intended as an innovative living space with a reduced ecological footprint.

### Climate zone

## KEY FIGURES

### Number of residential units

Number of residential units : 130

### Number of social housing units

Number of social housing units : 35

## GOVERNANCE

### Project holder

Name : AEDM

Type : Para-public owner)

General description :

At the beginning of 2007, an opportunity allowed the town to acquire agricultural land of 5.7 ha, located in the northern sector of the town of Saint-Nolff, served by the RD 182.

She decided to set up her "ecocity" project there and on October 25, 2007, the municipal council adopted the initiation of the procedure and studies relating to the creation of the ZAC of the city of Pré Vert, through consultation. public.

The preliminary studies for the creation file are then entrusted to the semi-public company EADM: created in 2005, this departmental SEM has the Caisse des Dépôts and local banks as private shareholders. The community of St Nolff is one of its public partners and its mayor sits on the board of directors, as general councilor of the canton.

In July 2008, following the consultation to allocate the implementation phase of the operation, development, SEM EADM was selected as the concessionaire, then in March 2009, the implementation file and the program of public facilities being approved by the Municipal Council, the ZAC went into operational phase.

The project management of the servicing works is provided by the companies ATELIER AR'TOPIA and TEM under co-contracting.

The operation is broken down into three sections of unequal importance both in their respective operational perimeter and in the number of homes built. The third tranche was redistributed in 2014 in order to maintain a balance between the investments made by EADM and the demand for building lots.

In June 2020, almost all of the lots had been sold (only 3 lots remained available).

### Project management

Description :

Project management was carried out by AEDM (carrier).

### Project stakeholders

AEDM

Function : Developer

## QUALITY OF LIFE

### Quality of life / density

The Ecocity project is geared towards high **density** for the region (23 dwellings per hectare) so that particular work has been carried out on the morphology of the district to find urban forms combining density, privacy and quality of life.

The result is a ground plan where the shape and size of the plots are voluntarily variable and random : **irregularity, offsets and diversity** are sought.

The district is organized like a village, with a continuity of terraced houses and narrow alleys. The groves and large green spaces provide a peaceful aspect to the neighborhood.

## Social diversity

Rather than a succession of operations by "blocks of operations", the project offers **a social mix and** project owner to the plot. Consultation and support for future buyers are a strong point of the project.

The distribution of accommodation is as follows:

- 55% of free lots, including around fifteen plots reserved for first-time buyers
- 10 to 15% of housing open to developers and investors
- 7% of social housing, in rental home ownership
- 23% social housing

Social housing is spread over all the plots. Their constructions were carried out by the OPH Bretagne Sud Habitat (7 housing units) and the ESH Armorique Habitats (9 housing units) and Aiguillon construction (16 housing units).

All the plots are accessible to people with reduced mobility, which makes it possible to accommodate people with disabilities and to be compatible with the future needs (linked to aging) of current occupants.

*Today, the objective of social and intergenerational diversity has been achieved, with peaceful cohabitation.*

## ECONOMIC DEVELOPMENT

## TRANSPORT

### Mobility strategy

One of the central points in the reflection of the project concerned mobility, with a clear desire to give priority to soft journeys.

To "**leave the car at the neighborhood door**", shared parking lots have been distributed around the outskirts.

The heart of the district is thus a peaceful space where movements are mainly made on foot.

**Shared car parks** are planted and hidden on the outskirts of the area and located a maximum of 60 meters from any building. There are a total of 1.8 parking spaces / accommodation.

The car parks have been made of standard materials, those based on earth / stone deteriorating with very frequent use. The use of electric vehicles is encouraged by the presence of shared terminals on these parking areas.

A network of alleys, alleys and paths then serves the district:

- The **few narrow streets** are mixed (pedestrians & cars);
- The **alleys** are also suitable for vehicles but can only be used in exceptional circumstances (moving, rescue, work);
- The **paths** are pedestrian only.

In all cases the plots are accessible to people with reduced mobility.

A **pedestrian** alley leads to the town center located 700 meters away and which brings together public facilities (schools, town hall, post office, sports, cultural facilities, etc.), shops and local services.

Twelve round trips by **bus**, running every hour, are provided between the town and the center of Vannes, providing an alternative to the car for trips in built-up areas.

The grounds are all located within 300 meters of a bus stop.

## SOLUTIONS

Calm heart

- Security
- Soft transportation
- Parking management



## RESOURCES

### Water management

While anchoring to the natural terrain facilitates water management, the program paid particular attention to this issue:

- The roads have been limited in order to **reduce waterproofing** to a minimum;



- Drains and storing and infiltrating ditches collect road **water** (with plants treating hydrocarbons / zero harmful phytosanitary treatment);
- **Roof water** is collected for domestic use (garden, washing, sanitation) and tanks have been installed in vegetable gardens;
- The lower part of the land is not urbanized in order to maintain a gravity descent, without a lifting station.

## Waste management

The collection points are grouped together at the entrance to the parking areas and integrated into the plantations. A space is reserved for the collective composting of plants.

## SOLUTIONS

Example of valley, for water management

- Water management
- Waste management



## BIODIVERSITY

### Biodiversity and natural areas

The creation of ecocity is part of the will of the community to "build and develop with the concern of preserving social and environmental balances".

Since the ZAC is located on agricultural land surrounded by natural fringes, particular attention has been paid to the preservation of the biodiversity they shelter.

The following developments illustrate the actions carried out to leave a central place to a natural environment that promotes the protection of biodiversity.

- The hedges, plant fences and bocage slopes which surround the architecture;
- Vegetable gardens,
- Shared wooded areas;
- The pedestrian path which leads to the town center and which is part of the ecological corridors to preserve the local fauna (insects, reptiles, rodents, hedgehogs, game ...).
- The development of a green corridor to connect the Kerloc valley;

Today, nature is omnipresent in the ecocity and invites itself in little domesticated forms to every corner of the plot or alley, to the delight of the inhabitants.

## SOLUTIONS

Route of the future green corridor

- Management of natural areas



## ENERGY/CLIMATE

### Climate adaptation, resources conservation, GHG emissions

See Mobility and Resources

### Energy sobriety

Whether built by landlords or individuals, the energy balance required for houses is **the BBC standard**, which implies a **consumption target of less than 50 KWh / m<sup>2</sup> / year**, including heating, domestic hot water, ventilation, lighting.

The positioning of the ZAC land has definite advantages in achieving this objective, in particular by the amount of sunshine available to it.

The houses were also designed according to a **bioclimatic architecture**:

- South orientation;
- Calculated drop shadow;
- Joint ownership;
- Limited opening to the north;
- Deciduous vegetation in the South, East and West;
- Structural sun shades of the facade (eaves, projections, balconies, etc.);
- Mobile sun shades (exterior or interior blinds);
- Interior ventilation system;

- Energy efficiency of buildings.

## Energy mix

The developer had the district connected to the gas and electricity networks. The installation with a heating network was considered irrelevant for supplying low-consumption houses.

The heating system is left to the choice of the manufacturer:

- Donors have opted for electric or gas solutions;
- Individuals have most often opted for pellet stoves.

## SOLUTIONS

Example of BBC social housing

- Renewable energies



## BUILDINGS

### Buildings

The district is organized like a village, with a continuity of terraced houses and narrow alleys. The objective of the community is thus to propose an urban development confined to the borough, which is coherent, balanced and harmonious for a preserved quality of life.

Most of the accommodations are designed as village houses with a small garden: the plots are stretched out and the homes overlook the alleys while the gardens face south. The collectives in "R + 1 + C" look like houses.

The architectural freedom is left to the taste of the purchaser while respecting a harmony and a general coherence. In return for an average price lower than the prices observed in the municipality, the effort required from future buyers is to build a high-performance housing BBC.

## Contest

### Reasons for participating in the competition(s)

The ecocity of the green meadow is a fine example of an eco-district: a precursor to its launch, it remains very suitable for current issues, such as the aging of the population and climate resilience, but also the health crisis.

Its main strengths are its peaceful character and its proximity to nature: in a context where teleworking is becoming widespread, the possibility of being able to take advantage of such a setting during a short break is a privilege!

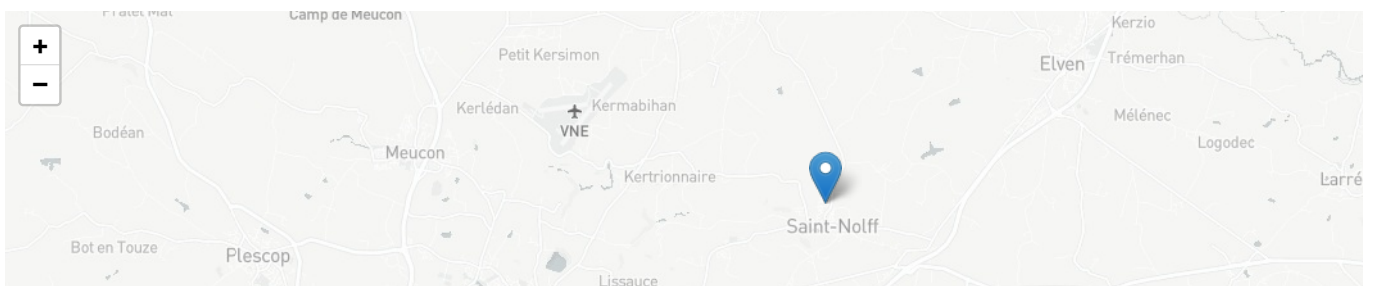
It is fully in line with the energy transition objectives with its low-consumption buildings and its "road diet" approach. Moreover, the success of this program with the 130 families who have settled there demonstrates the attractiveness of small-sized plots, which make it possible to limit urban sprawl. This approach is all the more virtuous in that it has contributed to the low price of plots and therefore to developing social diversity in a sought-after neighborhood.

All those who participated in this subject (in particular the many individuals who built their houses in BBC) came out of this beautiful experience.

### Building candidate in the category



Quartier Durable





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