

## Conversion of the CartoRhin wasteland

by [William Weltzer](#) / 2022-10-19 00:00:00 / France / 765 / FR



**Address 1 - street** : rue Jules GrosJean 68500 GUEBWILLER, France

**Starting year of the project** : 2017

**Delivery year of the project** : 2025



1.2 ha

Proposed by :  
 egis

### ID CARD

"The master plan has evolved and progressed to provide an airy and green layout. The development of a new district in the city center is not easy. There are many issues and constraints to consider. We are going to achieve something qualitative."

Francis Kleitz - Mayor of Guebwiller

In 2017, the City of Guebwiller initiated a redevelopment program on a 12,000 m<sup>2</sup> industrial wasteland in the hypercentre. At the end of the project in 2025, **the site will host various uses on a heavily vegetated space and giving pride of place to soft mobility :**

- Three building lots for 40 dwellings;
- 700m<sup>2</sup> of shops and tertiary services at the foot of residential buildings (cinema, brasserie, etc.);
- A public aerial car park and an underground car park reserved for residents for a total of 185 spaces;
- A large playground and shaded squares;
- Promenades and a "mail" that connects two main axes of the city.



Aerial plan of the project

## Reclaiming industrial heritage for a dynamic urban center

For more than a century, **the site was industrial** : from 1955 to the end of the 20th century, the company specializing in cardboard packaging CartoRhin was established there. In the 21st century, with the purchase of the space by the City in 2000, it was developed as a wasteland and parking lot. He will hold this position until 2013 with the demolition of a few buildings in order to install a cinema there.



CartoRhin at the beginning of the 21st century: wasteland and parking

The reconversion project for this wasteland really began in 2017. The City initiated a program aimed at taking advantage of this site, ideally located a few steps from the city center, and **making it an exemplary mixed, green and multi-generational space**. Emphasis will be placed on soft mobility, while perpetuating the parking function so as not to overcrowd the city centre.

From 2019 to 2020, the first phase of the project consisted of demolishing obsolete buildings, creating a first car park and greening the space. The 2nd phase carried out in 2022 focused on the development of public spaces and roads. Finally, the apartments will be delivered in 2025.

## Greening for resilient spaces

The objectives of the development concession were clear: **to include as many public spaces as possible that promote soft mobility and reintroduce nature into this former industrial wasteland**. The district will thus be resilient in the face of future climatic and natural hazards.

The CartoRhin site is a highly mineralized site with little vegetation leading to an urban heat island effect. The sector's development project relies on **plants in all their forms**: stem trees, clumps, bushy beds or even planted valleys welcome a varied and local vegetation carrying biodiversity. The shadows cast and the evapotranspiration of the plants bring a natural freshness to the Cartorhin sector. The new site is crossed by **a green diagonal which connects 2 main streets of the city**, the "mail", a tree-lined alley reserved for pedestrians and cyclists. Promenades, squares and a playground will be set up under the foliage of lime trees, liquidambar or prunus, to offer people from Guebwiller quality public spaces.

The ICEtool tool (see Energy/Climate tab) made it possible to **model the impact of development on the effect of urban heat islands** according to numerous parameters. Several scenarios were thus compared, then the one selected was compared to the initial state in order to assess the improvement generated.

At the end of the project, **more than 31% of the surface of the site will be planted, against only 3% initially**. The revegetation and the choice of fittings and materials have made it possible to **reduce the surface temperature by 6°C** (result obtained thanks to ICEtool), a true island of freshness in the hypercentre! In addition, thanks to exemplary integrated stormwater management, the space will relieve the network, especially in times of heavy rain.

### Programme

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

### Project progress

- Delivery phase

### Procedure type

- Urban développement permit

## Key points

- Quality of life
- Mobility
- Smart city
- Biodiversity
- Energy /Climate

## Photo credit

©Egis - Act 2 Landscape

## TERRITORY

### Type of territory

Guebwiller is a town of 11,000 inhabitants located at the foot of the Vosges, in the area of attraction of Mulhouse, in Alsace. Commune with an important industrial past, it is served by a motorway and the regional coach network. It is mainly made up of and surrounded by forests and semi-natural environments, which makes it imperative to control urban sprawl.

### Climate zone

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

## KEY FIGURES

### Green areas, roofs included

Green areas, roofs included : 3 600 m<sup>2</sup>

### Commercial floor area

Commercial floor area : 700 m<sup>2</sup>

### Housing floor area

Housing floor area : 2 600 m<sup>2</sup>

### Number of residential units

Number of residential units : 40

### Detail of subsidies

The total cost of the program is not known because the 3rd phase of work is not yet fixed.

For the 2nd phase, the project was submitted to two subsidy programs: Coeur de Ville and financial aid from the local water agency as part of the National Rainwater Plan.

## GOVERNANCE

### Project holder

Name : City of Guebwiller

Type : City

General description :

The City of Guebwiller initiated this project as part of an urban renewal policy intended to make its urban center more attractive and resilient.

### Project management

#### Description :

A development concession was awarded to CITIVIA for this program. In 2017, the firm Sortons du bois studied the project and designed an urban master plan, integrating a significant part of vegetation. For the second phase of the work, a new project management group was formed in 2021 by Egis and Acte 2 paysage. The latter respected the initial master plan, but increased the proportion of revegetation. The design of the housing is managed by the consortium made up of the firm Oslo architectes and the promoter Pierre & Territoires.

## Project stakeholders

Let's get out of the woods

**Function :** Urbanism agency

Design of the urban master plan.

<https://sortonsdubois.fr/>

Oslo architects

**Function :** Architecture agency

Housing design.

<https://www.oslo-architectes.fr/>

CITIVIA

**Function :** Contractor

<https://www.citivia.fr/fr>

Yes

**Function :** Construction manager

Landscaping, designer of the ICEtool.

<https://www.egis-group.com/fr>

act 2

**Function :** Construction manager

Landscaping.

<http://acte2paysage.fr/>

Stone & Territories

**Function :** Investor

<https://www.pierres-territoires-alsace.com/>

## QUALITY OF LIFE

### Quality of life / density

This program is directly in line with a desire to limit urban sprawl on the natural environments surrounding the municipality. This 12,000 m<sup>2</sup> space had been unoccupied for several years, despite its ideal location, behind the town hall and close to the city centre.

Emphasis was placed on the quality of the new space, designed as an inhabited park more than housing surrounded by vegetation.

### Social diversity

Among the objectives of the program imposed by the contracting authority, this space must attract several generations. Thus, the playground adjoins places for strolling, resting, pétanque courts, a brasserie, a cinema, etc. It is a joyful and welcoming place to live, offering services for everyone.

## ECONOMIC DEVELOPMENT

## TRANSPORT

## Mobility strategy

The strategy implemented in this program aims to promote soft mobility through development, while offering an alternative to the many parking spaces that were present on the wasteland. She also asked for a reflection on the meeting between these different mobilities, so as to think of the spaces to facilitate cohabitation.

The parking lot for future accommodation is underground so as to free up space on the surface. The two public car parks offer parking spaces for visitors to the nearby city center. On the other hand, the "mail" is reserved for soft mobility.

## RESOURCES

### Water management

The roads and green spaces have been designed for exemplary sustainable management of rainwater, right from the study phase. The development corresponds to the doctrine that requires rainwater to infiltrate as close as possible to where it falls, without being discharged into the network.

Beyond the reduction of the impermeable surface thanks to the significant share of vegetation, two aspects have been worked on:

1. The green spaces have several valleys and basins to promote the retention and infiltration of rainwater, even in periods of heavy rainfall;
2. The pavements have a reservoir structure thanks to the use of a porous material combined with draining cobblestones. Infiltration thus takes place directly in the structures and the coating makes it possible to clean up runoff water.

### Soil management

Studies have been carried out on soil pollution at this former industrial site. The first two phases of work were not carried out in the areas covered by the plant, so the quality of the soil was satisfactory. For housing, soil decontamination will be necessary.

## BIODIVERSITY

### Biodiversity and natural areas

Green frame

## ENERGY/CLIMATE

### Climate adaptation, resources conservation, GHG emissions

The significant greening of the space makes it possible to create islands of freshness in this mineral city. These will promote the thermal comfort of residents and passers-by during heat waves. The program therefore echoes a strategy for adapting to the effects of climate change.

## SOLUTIONS

ICEtool

#### Description :

The ICEtool tool developed by Egis makes it possible to characterize and assess the phenomenon of urban heat islands in order to design facilities that limit extreme overheating. It is based on the QGIS software and published in open source, in order to offer a simple and accessible method to any actor in urban planning.

Many parameters can be entered: surface albedo, materials used for buildings and flooring, urban form, presence of water and vegetation, organization of space, etc. Thus, the initial space can be compared to a future project and several variants of the layout can be confronted in order to maximize the impact on surface temperatures.

The advantage of this tool lies in its simplicity, speed and accessibility. The goal is not to produce extremely precise models - complex microclimate models already exist - but rather synthetic and readable simulations that can inform choices during the design phase of a development project.

[The results of the ICEtool modeling for the requalification of the CartoRhin wasteland](#)

- Climate adaptation

<https://www.construction21.org/france/articles/h/en-finir-avec-la-surchauffe-urbaine-grace-au-numerique.html>

Company :



## Reasons for participating in the competition(s)

- Construire la ville sur la ville : lutter contre l'artificialisation des sols et dépolluer d'anciens sites industriels ;
- Végétaliser pour réduire l'effet d'îlot de chaleur urbain : un tiers de la surface du quartier est planté afin de maintenir les températures et le confort d'été des habitants a un niveau raisonnable face aux canicules futures ;
- Redynamiser les centres urbains de petites villes en offrant des espaces agréables, des logements et des services de proximité adaptés et attrayants ;
- Promouvoir la cohabitation des diverses mobilités grâce à des zones de stationnement pour tous et à des espaces réservés aux mobilités douces ;
- Développer un outil permettant d'anticiper les températures aux sols et ainsi d'adapter les aménagements et matériaux choisis dès la phase d'étude.



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