

SNAPSHOT - MONTPELLIER: PARC MARIANNE ECODISTRICT



KEY POINTS

- Parc Marianne Ecodistrict aims to provide sustainable housing in an area designed to reduce flood risk and urban heat island effects
- The NBS has been designed and implemented through collaboration and controlled land use practices
- Key actors are the municipality and the master architect firm
- Non-differentiated pricing on municipal land sold to developers allowed a strong sustainability focus
- Citizen engagement is sought through 'living in the NBS' in the operational phase

ABOUT THE PROJECT

NATure-based URban innovATION is a 4-year project involving 14 institutions across Europe in the fields of urban development, geography, innovation studies and economics. We are creating a step-change in how we understand and use nature-based solutions for sustainable urbanisation.





Sustainability challenges and opportunities

The City of Montpellier is faced with strong population growth and flood risk connected to increasing climate extremes, such as longer periods of drought, more intense rainfalls and sea level rise. These challenges affect the city's rich biodiversity and the citizens' quality of life and well-being.

Montpellier, due to its location at the Mediterranean Sea, is in one of 35 hot-spots of biodiversity on the planet. At the same time, Montpellier is France's eighth largest and fastest-growing city.¹ Densification and organized expansion are seen as key measures to reduce urban sprawl, placing increasing pressure not only on the built environment and urban services, but also on green spaces. The Parc Marianne Ecodistrict is an example of "**organized sprawl**"², where new homes have been built in combination with green and blue infrastructure to reduce flood risk and to improve the city's liveability and the health and well-being of its inhabitants. Green spaces and the green image of the growing city are not only important for the municipality to counterbalance urban densification and heat island effects, but also for its citizens, who have expressed a preference to live in a green city: "**We made a public consultation in another district and we made some simulation like SIM city. And we realized that people accept density if there is a lot of landscape around, a lot of green.**"³

Solution story and key actors

The Parc Marianne Ecodistrict was built between 2010-2018 as part of a larger new-district development, Port Marianne, as a direct response to the immense population growth of Montpellier while integrating sustainable solutions to tackle flood risk, heat island effects and climate change.

Port Marianne was built on 80 hectares which had originally been used for vineyards, fields and warehouses. Parc Marianne is one of the three development areas of Port Marianne, besides Rive Gauche and Republic, occupying 35 hectares. In 2003, as a result of an architectural competition led by a semi-public organization, SERM (Société d'Équipement de la Région Montpellieraise), three different architectural firms were selected for the development of the three areas. The Architecture-Studio, in close collaboration with SERM and the City, became responsible for the design of Parc Marianne.⁴ Following the vision of the former mayor George Frêche, the area was to be designed to better connect Montpellier with the sea.⁵ In fact, Montpellier has a long history of building on floodplains and channelling rivers to avoid becoming a swamp. For Parc Marianne, also built on a former floodplain, the "**idea was to work with nature, not against it. The idea was density and nature.**"⁶ The natural retention basin collects and directs stormwater to the sea or lagoons. These measures not only reduce flood risk, but also have recreational and biodiversity benefits. Additional sustainability measures of Parc Marianne include connectedness to the tramway system, enhanced bicycle infrastructure, fewer car parks, green sidewalks and sustainable energy sources. As a result, Parc Marianne was certified with the ecodistrict label in 2015.⁷



Governance strategies

Two key governance strategies characterize the implementation of Parc Marianne Ecodistrict. One is the City of Montpellier controlling land prices. The other is the City's and the master architect's collaboration by commonly setting the rules for the new district development.

Controlled land prices made it possible for the City of Montpellier to buy the site for the construction of Parc Marianne and consequently develop long-term plans for the area. ***"The vision of the City was important. They bought a lot of land in the 1980s and 1990s and so they could plan for the long term. [...] And we always planned with the politics, it was an iterative exchange."***⁸ The project was financed through developers buying parcels of the municipally-owned land. The developers' plans for the parcels were presented in a competition, which was held by SERM. The plans had to comply with concerted development zone regulations (Zones d'Aménagement Concerté): ***"We have a plan for the development of the city with all the regulations, zones etc."***⁹ Within these zones, the City has decision-making power over whether and how to implement public infrastructure, for example in terms of planning design, water or energy. The plans also had to fulfill the requirements set by the master architect, for example in terms of plot, height, volume, distances, materials, and aesthetics.



Business models

Local financing through land-use rights, supported by local policies was a key economic driver for the design and implementation of the Parc Marianne Ecodistrict.

The City of Montpellier has control over land prices in the municipality. In turn, the implementation of the City's long-term sustainability goals and long-term planning is mainly governed through municipal land purchase and ownership. The new district development project, Port Marianne, and the Parc Marianne Ecodistrict sub-project, have economically, socially and environmentally benefitted from this governance structure. The land was sold to developers investing in urban development; the price was the same for all parcels. The total investment made by developers was about €110 million. The pre-set requirements, including environmental and social sustainability criteria, had to be fulfilled by the developers. The non-differentiated parcel pricing allowed developers to focus on sustainability aspects of the project. ***"Because the price was uniform, the added value was created on the investor's concept."***¹⁰



Citizen engagement

Parc Marianne Ecodistrict lacks a comprehensive participation process. The three participatory events were rather for information than for collaboration. The decisions were made between project partners, typically including the City of Montpellier, SERM, the master architects and the developers.

The City's approach to citizen engagement during the participative processes has been guided by the slogan **"you must keep a strong policy"**.¹¹ It is mainly based on previous experience with citizen engagement, where diverging opinions were voiced, usually by the same 100 people, without any decisions being made. Public participation has also been perceived by government representatives as confrontational. This view was explained by France having been part of the highly-centralized Roman Empire: **"We've inherited the Roman approach and it's rather clientelistic. So basically we're sending out the info to the media and we see what comes back to us."**¹² Additionally, **"people don't feel so responsible for how they will live. I think they don't think that what they have to say would be so important."**¹³ The success of the Parc Marianne Ecodistrict, however, is designed to move toward active citizen engagement in the future, where citizens will actually be 'living with the NBS'. The interest and habits of the people living there will play an important role, not least in terms of energy use and care for community gardens.



Innovation pathways

New governance structures paved the way for more innovative NBS. The semi-public regional organization's (SERM) role of connecting key actors, together with the City's and the master architect's willingness to combine different solutions to address challenges in a sustainable manner, allowed for more innovation.

The creation of a retention basin that is also a park is a good example of NBS with multiple benefits. It not only addresses the challenge of flooding, but also creates habitat for plants and animals as well as a space for social activities. The park can also be used as pasture for sheep, promoting urban agriculture.¹⁴ Biodiversity, however, is not explicitly taken into account in the planning of new districts in Montpellier. **"...Ten years ago Montpellier was a more innovative city regarding conservation, biodiversity, urban greening and things like that..."**¹⁵ An interesting spill-over effect of Parc Marianne Ecodistrict is the development path Georges Charpak Park has taken. Due to citizen demand for more parks and the new water retention regulations Georges Charpak Park, the natural retention basin of Parc Marianne, is also becoming a multifunctional NBS.

¹Centre de ressources Trame verte et bleue n.d.; ^{2,9,12}Representative of Metropolis(1), 2018; ^{3,11}Representative of Metropolis(2), 2018; ^{4,6,8}Architect(1), 2018; ⁵NGO representative, 2018; Architect(1), 2018; Martin, B., Lorgéré, I. 2014; ⁷Representative of Metropolis(2), 2018; Ministère de la Cohésion des territoires, 2017; ¹⁰Architect(2), 2018; ¹³NGO representative, 2018; ¹⁴City representative, 2018; ¹⁵Scientist, 2018; Photo credit: Anja Werner, 2018.