

EXAMPLES OF SUSTAINABLE NEIGHBORHOODS – ÉCOQUARTIER IN FRANCE*

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This paper examines the role of ÉcoQuartier-type eco-neighborhoods in France. It is based on the premise that the environmental transformation of cities can only be successful if it simultaneously promotes social inclusion, economic opportunities, and an improved quality of life for residents. Using the examples of the Port Marianne (Montpellier), Saint-Denis Olympic Village, and Docks de Saint-Ouen (Paris) projects, it analyzes the transformation of brownfields into inclusive, climate-resilient, and functionally mixed urban structures. Emphasis is placed on the importance of public regulation, especially the ZAC (Joint Development Zone) instrument, which enables the promotion of the public interest through affordable housing, high-quality public spaces, and civic amenities. The projects integrate environmental measures (green-blue infrastructure, energy efficiency, and climate change adaptation) with social aspects (housing diversity, inclusion, and participation), thereby strengthening the resilience of these areas and improving residents' quality of life. The aim of this paper is to highlight the potential of eco-neighborhoods in creating areas that not only respond to environmental challenges but also reduce spatial and social inequalities, thereby contributing to a higher-quality urban environment.

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Introduction

Today's cities face growing challenges related to climate change, social inequalities, and pressure to use land efficiently.

France is among the countries where an approach to planning is systematically supported by public policy. The ÉcoQuartier platform provides a comprehensive framework for the planning, implementation, and evaluation of urban projects with an emphasis on environmental performance, social diversity, and participatory processes. The ÉcoQuartier approach thus represents an applicable model for transforming urban areas into the sustainable and inclusive cities of the future. Brownfield transformation projects play a significant role in this, as they enable the efficient use of existing areas while creating new "regions of opportunity."

The ÉcoQuartier Methodological Approach

The ÉcoQuartier certification, administered by the French Ministry for Ecological Transition, promotes sustainable urban planning, construction, and management. It builds on the objective of the Grenelle de l'environnement Act of August 3, 2009 [1], under which the state is to support *"the implementation of exemplary sustainable urban planning projects,"* particularly in areas with significant housing development [2].

This certification integrates all aspects of sustainable urbanism and offers a lifestyle that addresses the challenges of climate, biodiversity, and social cohesion while utilizing local resources. It is not a standardized model, but a flexible approach based on a multi-criteria assessment of 20 indicators [3].

The methodological framework is structured into four areas – processes and management, functional use, spatial development, and climate – in line with the UN Sustainable Development Goals [4]. The assessment promotes an integrated and context-specific approach, emphasizing the need to respect local characteristics, culture, and traditions [3].

The ÉcoQuartier approach thus provides a tool for creating sustainable cities and regions in line with the 2030 Agenda [2].

At the same time, the approach connects stakeholders, promotes knowledge exchange, and supports local government capacity building. Signing the charter grants "ÉcoProjet" status, which provides access to expanded support such as experience sharing and expert recommendations, free training, technical assistance and consulting, as well as easier access to financing. Since 2013, more than 500 projects have been involved, confirming the initiative's significance [4]. The projects have resulted in 286 000 housing units (36% social housing), with 70% of the projects involving urban renewal and 30% brownfield regeneration. Support for small towns is also part of the Petites Villes de demain (Small Towns of Tomorrow) program [5]. A guide to sustainable development is available, accessible to all stakeholders in development projects regardless of the territorial context. The guide is the result of 10 years of experience and sets new public policy priorities, including the goals of "zero net land take," climate resilience, and social diversity objectives under the "Solidarity and Urban Renewal" Act [6].

Promoting community life, solidarity, and inclusion is one of ÉcoQuartier's commitments. The ÉcoQuartier certification promotes social and generational diversity, participation, and community life. Emphasis is placed on the accessibility of services, public spaces, and support for local initiatives. This commitment focuses on creating inclusive and supportive neighborhoods through diversity in housing and functions, as well as high-quality shared and public spaces. Key questions center on whether the project improves the quality of life for everyone (especially the vulnerable). Social cohesion and bonds among residents are key to a neighborhood's resilience to crises – they strengthen the ability to act collectively and reduce vulnerability, particularly among at-risk groups [7].

Eco-neighborhoods are well connected to the city via public transportation and bike paths, and they integrate housing,

services, and amenities, including facilities for seniors and people with disabilities. Safe public spaces, traffic reduction, and the creation of shared spaces (local markets, community and craft activities) play an important role in strengthening social interaction and inclusion [7].

ZAC Scheme

The Joint Development Zone is a public urban planning tool enshrined in law (Article L 311-1 of the French Urban Planning Act) that enables the promotion of the public interest – particularly in the form of public spaces such as parks, infrastructure, community amenities, and affordable housing. Its purpose is to consolidate and prepare land for development and its subsequent use by public or private entities. Thanks to this tool, it is possible to systematically coordinate land development and ensure that newly created neighborhoods adhere to the principles of sustainable development [8].

The relationship between ÉcoQuartier certification and the Zone d'aménagement concerté (ZAC) tool is very close, but they are not identical concepts. Simply put, the ZAC is a legal and organizational tool for land-use planning that enables the public sector (a municipality, metropolitan area, or public development agency) to actively manage the transformation or development of an area. ÉcoQuartier, on the other hand, is a system for evaluating and certifying sustainable neighborhoods. It assesses, for example:

- energy efficiency,
- adaptation to climate change,
- water management,
- biodiversity,
- social mix,
- accessibility of services,
- resident participation,
- quality of public spaces.

In France, most major ÉcoQuartier projects have been developed within the framework of ZACs. The reason is simple: the requirements for ÉcoQuartier certification are difficult to meet without strong public oversight of land development. ZACs provide tools that make it possible to:

- integrate environmental goals into land-use planning,
- ensure social diversity in housing,
- coordinate infrastructure development,
- preserve the long-term quality of public spaces,
- align private investment with public goals.

Examples of Creating Inclusive and Supportive Urban Neighborhoods

Three projects with ÉcoQuartier certification were selected as examples of creating inclusive and supportive urban neighborhoods. All are being implemented under the ZAC scheme. The selection is based on their high representativeness and the fact that they involve the redevelopment of former brown-fields. These sites exemplify integrated urban development, in which environmental goals are linked to housing affordability, public amenities, mobility, job creation, and improving residents' quality of life. It is precisely this combination that is a fundamental prerequisite for a just transition, the goal of which is not only the ecological modernization of the area but also the mitigation of social and spatial inequalities.

Port Marianne, Montpellier

The Port Marianne eco-neighborhood in eastern Montpellier was created through the transformation of the area to address climate challenges, flood risks, and dynamic population growth [9]. In 2015, it received the ÉcoQuartier certification, confirming its excellence in sustainability, the environment, mobility, and quality of life. The implementation of a transport link to the city center via a tram line triggered extensive development projects [10]. The project (400 ha, 50 000 residents) exemplifies just transition – combining urban development with the protection of natural resources and social inclusion [9].

The Lez River and the central park play a key role in adapting to climate risks (water retention, environmental cooling), while also creating high-quality public and recreational spaces.



Port Marianne – Koh-I-Noor project, adaptation of the façade to maximize the cooling effect of the adjacent river

Social diversity is ensured by a balanced mix of housing (24% social, 23% affordable, 53% market-rate) [9]. Functional mix (housing, work, services, education), together with high-quality public transportation and bike paths, reinforces the concept of “short distances,” accessibility of opportunities for various groups of residents, and inclusive development [10]. In addition to residential spaces, the neighborhood is seeing the development of new amenities such as offices, shops, and services [10], along with public spaces that are bustling with life. Various street activities take place here, and there is also a lively bar and restaurant scene.

The area is divided into socially and functionally diverse sections, each with its own distinct atmosphere. Within these sections, various teams of designers, architects, and urban planners have divided their areas of responsibility. The architectural identity of each section will help strengthen residents' sense of community and serve as a positive example. Within the ZAC framework, unifying regulations were defined for various elements, such as recurring “box-like” effect, roof forms, greening of block

cores, lighting and street furniture, uniform architectural details, and so on. [9].

The new neighborhood creates an attractive environment for different generations – from students to families – and supports the local economy and community life [11]. A high school and a university are located here [10]. The newest urban district, Port Marianne, attracts students and young professionals with a wide range of activities and entertainment venues. Families come here to have lunch in the sun on terraces overlooking the water. [11]. The urban design also responds to local climatic conditions (building orientation, ventilation, greenery), thereby increasing the area's environmental and social resilience [10].

The Saint-Denis Olympic Village

The Saint-Denis Olympic Village was created for the 2024 Summer Olympics as a catalyst for transforming a former industrial site into a modern, eco-friendly neighborhood [12]. It was a troubled,



Port Marianne

underdeveloped neighborhood on the outskirts of Paris, but the construction of a metro station in conjunction with the development of the Olympic Village led to a transformation of the social and economic environment.

ÉcoQuartier Saint Denis is located near the newly built Pleyel multimodal hub, which handles around 250 000 passengers daily [13]. Following the 2024 Olympic Games, the area was transformed into a fully-fledged urban neighborhood, inhabited by both new and original residents. Despite rising real estate prices, driven by improved transport accessibility, rent control is in place to maintain the social affordability of housing. The neighborhood is designed for diverse groups of residents – families, students, seniors, and people with reduced mobility – and is complemented by essential community amenities, including schools and sports facilities [14].

The vision for the ÉcoQuartier Saint-Denis is based on the pillars of sustainabili-

ty (biodiversity, controlled carbon footprint, quality of life), accessibility (for people with physical, sensory, and cognitive disabilities, as it also served Paralympians during the Games), and social cohesion (integration and diversity).

Spanning 52 ha, it offers 2 800 apartments for approximately 6 000 residents [12] and serves as a model for integrating environmental goals with social inclusion. Green-blue infrastructure and biodiversity conservation enhance the ecological stability of the area and quality of life, while the project also integrates urban gardens and natural elements [13]. At the same time, it addresses climate challenges through bioclimatic design, renewable energy sources (geothermal energy, photovoltaics), and adaptation measures to rising temperatures in the city [12].

The transformation aims to create a mixed-use area that is vibrant and pleasant to live in, offering a variety of options (housing, workspaces, shops,

manufacturing facilities, etc.). The glimmer of old bars has been replaced by fresh food shops. However, Saint-Denis remains a city of contrasts [14].

Docks de Saint-Ouen, Paris

The Docks de Saint-Ouen district, awarded the Eco-District certificate (2012), represents the transformation of former docks into a mixed-use, inclusive, and environmentally innovative area. The brownfield transformation (100 ha) involves the creation of more than 5 000 housing units, including affordable housing, and the development of public transportation (a new metro station), which improve access to opportunities. ÉcoQuartier is served by metro lines and the RER regional railway [15].

The project connects the historic city with the Seine and creates new opportunities for living, working, and recreation within a metropolitan context. The goal is also to create a neighborhood with an identity rooted in history, diversity, and inclusivity. From the design stage, it integrates all issues related to the project's environmental impact. Based on predefined objectives, measurable indicators were established to monitor the overall process. Key indicators include, for example: the number of square meters of green space per resident, the percentage of rental apartments, the number of shared parking spaces, the percentage of renewable energy, and so on [15].

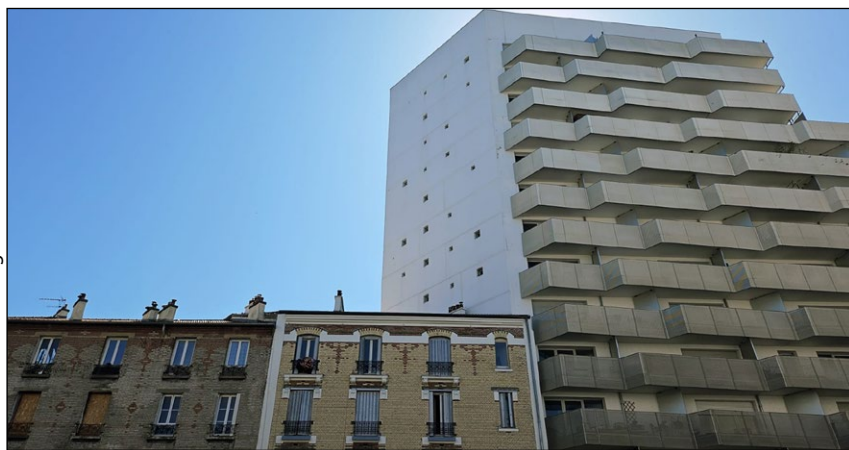
The project also implements a comprehensive sustainable mobility policy. This involves eliminating space for cars and constructing approximately 30 hectares of new public spaces. A key element is the 12-hectare climate park and green-blue infrastructure, which ensure adaptation to climate change (water retention, cooling) while creating attractive public spaces for community life [16]. The Climate Park consists of valleys, ponds, and large sunken areas designed to retain rainwater. It is bordered by a modern hydraulic system, a massive reservoir with a filtration system. The retained water is used to irrigate the park's greenery and to moderate the climate on hot days [15].

Photo © archive of Magali Boursier



Olympic Village Saint-Denis, April 2026

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Transformation of the Saint Denis district, April 2026



The Docks de Saint-Ouen neighborhood



Hydraulic tank at Docks de Saint-Ouen

The park integrates various functions and activities for all age groups, thereby strengthening social cohesion and quality of life [17]. The park, with its promenade, offers various types of social uses and experiences. It stands out for the spaciousness of its areas and its unique atmosphere, which enhances aesthetic experiences. It utilizes a sequence of escalating compositions, views, and orientations toward the distant city, the countryside, or the park itself [16]. The park features a variety of community activities, such as: an educational greenhouse, which forms the central point of the park, connected to community gardens, service and utility buildings, meeting spaces, a kitchen, a large space for experiments and events, a large skatepark, an amphitheater, playgrounds, and more. The park's functional zones serve multiple age groups. The zones are designed specifically for this park and make maximum use of the topography and context of the site. They incorporate playful water features [17].

The Eco-District also utilizes innovative energy solutions (e.g., heat recovery from the incinerator), thereby reducing dependence on fossil fuels. The buildings are designed using bioclimatic principles. By taking into account climatic characteristics, such as sunlight, as well as the physical properties of the site, it has been possible to optimize the orientation, morphology, and design of the buildings and homes [15].

Conclusions

A common feature of all three examples is the use of public regulation through the ZAC tool and the implementation of the principles of the ÉcoQuartier program. The projects apply an integrated approach to land-use development that combines climate adaptation, energy measures, the use of green-blue infrastructure, and support for sustainable mobility based on accessible public transportation. At the same time, there is an emphasis on the social and func-

tional diversity of housing, the quality of public spaces, and the accessibility of public services. Creating economic opportunities is also a key component, particularly through the creation of new jobs in the service sector, public amenities, and local economic activities. All three projects also focus on connecting the urban environment with natural elements.

The Port Marianne project is based on integrating the urban structure with the Lez River, creating public spaces, and providing connections to public transportation, while also contributing to the development of services and local economic activities. The Olympic Village in Saint-Denis represents the transformation of the area through the use of investments linked to the Olympic Games, with the aim of creating a new residential neighborhood in an area with long-standing socioeconomic deficits (Seine-Saint-Denis). Docks de Saint-Ouen represents the regeneration of a former industrial site into a mixed-use urban neighborhood featuring housing, public spaces, and environmental measures, including energy solutions and a connection to the Seine riverfront.

An important common element of all three projects is the promotion of participation and community life, which strengthens social cohesion, increase residents' sense of belonging to the area, and contribute to the urban environment's resilience to social, economic, and environmental crises.

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SLOVENSKÝ ABSTRAKT

Príklady udržateľných štvrtí – ÉcoQuartier vo Francúzsku, Monika Šmiralová

Príspevok sa zaoberá úlohou ekologických štvrtí typu ÉcoQuartier (eko-štvrť) vo Francúzsku. Vychádza z predpokladu, že environmentálna transformácia miest môže byť úspešná iba vtedy, ak súčasne podporuje sociálnu inklúziu, ekonomické príležitosti a zvyšovanie kvality života obyvateľov. Na príkladoch projektov Port Marianne (Montpellier), Olympijská dedina Saint-Denis a Docks de Saint-Ouen (Paríž) analyzuje premeny brownfieldov na inkluzívne, klimaticky odolné a funkčne zmiešané mestské štruktúry. Dôraz je kladený na význam verejnej regulácie, najmä nástroja ZAC, teda zóny spoločného rozvoja, ktorá umožňuje presadzovať verejný záujem – dostupné bývanie, kvalitné verejné priestory a občiansku vybavenosť. Projekty integrujú environmentálne opatrenia (zeleno-modrá infraštruktúra, energetická efektívnosť, adaptácia na zmenu klímy) so sociálnymi aspektmi (diverzita bývania, inklúzia, participácia), čím posilňujú odolnosť území a kvalitu života obyvateľov. Cieľom príspevku je poukázať na potenciál ekologických štvrtí pri vytváraní území, ktoré nielen reagujú na environmentálne výzvy, ale zároveň zmierňujú priestorové a sociálne nerovnosti a prispievajú tak k kvalitnejšiemu mestskému prostrediu.