



« VAUBAN SUSTAINABLE URBAN DISTRICT »

Freiburg, Germany

Period of implementation: 1993 - 2006 | Study case written in 2010

The Vauban Sustainable Urban District process took place in the German city of Freiburg between 1993 and 2006. It is based on the city government's aim of restoring an old military barracks based on ecological and social cohesion criteria, and creating a participatory process that would generate the NGO Forum Vauban and would have inter- and intra-administrative coordination structures to enable proposals emerging from the process to be implemented and permit a high degree of coordination between the public participation process and the local government. After 13 years of this process, the most important results are: the creation of more than 40 cooperative housing groups, which include energy efficiency and bioclimatic architecture criteria, have common services managed by the users and, in many cases, have significant levels of social inclusion of people on low incomes. Important community facilities have been created (some of which are managed by the inhabitants of the sustainable urban district, such as the Haus 37 centre) and impetus has been provided for numerous ongoing participation initiatives (consumer groups, cultural production groups, women's groups, etc.).



The **Inclusive Cities Observatory** was launched in 2008 by the UCLG Committee on Social Inclusion, Participatory Democracy and Human Rights with the aim of creating a space for analysis and reflection on local social inclusion policies. The initiative was developed with the scientific support of Professor Yves Cabannes (University College of London) and the Centre for Social Studies (CES) from the University of Coimbra. At present, the Observatory contains more than sixty study cases mostly developed between 2008 and 2010. Even though many of these cases refer to policies that have already come to an end, they still have much to offer: from capitalizing on the learning acquired by other local authorities to discovering suggestive and alternative means to address social inclusion challenges from a local perspective.

Context

City context

The city of Freiburg is situated in the State of Baden-Württemberg (Germany). It has a municipal area of 15,306 hectares (of which 6,533 are forest) and is located near the Black Forest and Switzerland. It has around 250,000 inhabitants and is the fourth largest city in the federal state (after Stuttgart, Mannheim, and Karlsruhe).

Decentralization context

The German political system is a bicameral parliamentary political system with a Federal Parliament, the *Bundestag*, and a Parliament consisting of the executives of the *Länder*, the *Bundesrat*. The country's federal system divides Germany into 16 states, the *Länder*, which each have their own government and parliament. Some *Länder* are divided into administrative regions that may be cities or urban districts. For the case reviewed here, the *Länder* is Baden-Württemberg. It is divided into four administrative districts (Freiburg is one, and its capital, Freiburg, is an urban district, or *stadtkreise*). Cities like Freiburg have competences including road construction, education, urban remodelling, and social welfare.

Institutional level of policy development: Municipal

Social context

The City of Freiburg's commitment to the environment dates back to Germany's Green movements in the 1970s (which were mainly anti-nuclear movements) and the fact that green parties have governed the city for decades. Among other initiatives, Freiburg has made major commitments to sustainable mobility (it has a 400 km network of bicycle lanes, and an important tram network) and to renewable energies (which have been installed in numerous public buildings, offices, homes, and religious buildings). It is also home to the Ecology Institute, the Fraunhofer Institute for Solar Energy Systems, the European Secretariat of the International Council for Local Environmental Initiatives, and the headquarters of the International Solar Energy Society (Fernández, Moran & Ramos 2007).

Policy development

The Vauban Sustainable Urban District is an ecological restoration process in old military barracks in the city of Freiburg, which were left empty after the withdrawal of French troops. Since the beginning of the project, the city council has been committed to fostering a process of public participation based on specific minimum levels of urban sustainability. During the 13 years that the project has been in existence, a sustainable urban district with a high level of social cohesion has been constructed, and it is now home to 5,000 people.

Background

In The neighbourhood originated in the construction of barracks on the outskirts of the city of Freiburg for Adolf Hitler's Wehrmacht troops. After the end of the Second World War, the military facility was occupied by the French army, which established a NATO base in the area, called the *Quartier Vauban*. The French troops left the area after the process of German reunification had been completed. The City of Freiburg purchased the area from the German government in 1992 in order to restore it and create an environmentally sustainable residential area.

Policy goals

The Freiburg local authority aims to take advantage of the necessary remodelling and restoration of the area to implement an ecological restructuring plan for this part of the city, focusing on the following criteria: urban density, energy efficiency in building and urban planning, public spaces and green areas, the promotion of public transport use, and the development of public service facilities and infrastructures (such as schools and nurseries).

At the beginning of the process, the aims were to reverse the trend towards suburbanisation (creating a new territorial culture more consistent with the principles of urban sustainability) and to take action in one of the key areas in the exclusion of the city's younger population: the difficulties involved in access to housing (many of the homes to be built were to be allocated to young people). The initial project aimed to create homes for 5,000 people, with nearby facilities, and to create an economic fabric that would lead to the creation of 600 jobs.

Those were the initial objectives of the plan – the minimum aims of the Freiburg authorities for the ecological restoration process in the area. However, apart from some minimum levels, the Local Authority believes in a major degree of flexibility. This flexibility and the capacity for reinvention is guaranteed by the public participation process instigated by the NGO Forum Vauban. The participation process complements the initial objectives of the process by emphasising:

- The development of a new concept of mobility based on the idea of the 'car-free city' which advocates alternative types of mobility.
- Construction of other community facilities (a central market and community centre).
- The development of an environment suitable for the construction of homes.
- The promotion of self-management and the creation of housing cooperatives, establishing the groups responsible for the various tasks involved in the construction, maintenance, and management of buildings.
- Maintenance of the old street plan, the natural watercourse area, and the 70-year-old trees.
- Restoration of five warehouses in the old barracks to create a hall of residence for students.

Chronological development

1991 Withdrawal of French troops

1992 The City of Freiburg purchases the land from the German government. The SUSI (*die selbstorganisierte, unabhängige Siedlungsinitiative*) project begins.

1993 The project starts. The development plan for the Vauban residential area is approved.

1994 Forum Vauban is founded.

1995 The public participation process to define the project begins. Forum Vauban is the institution driving the process forward.

1996 First debate on the development plan for the area. Forum Vauban presents its report, entitled *Scientific Support for the Extended Participation Process*. A publicity campaigns start and the first co-building groups are formed.

1997 The LIFE project that will enable Forum Vauban to implement the concepts of sustainable mobility, energy efficiency, ecological urban development, and social participation begins.

1998 The first homes are built.

1999 The community development process and the second wave of construction of housing begin.

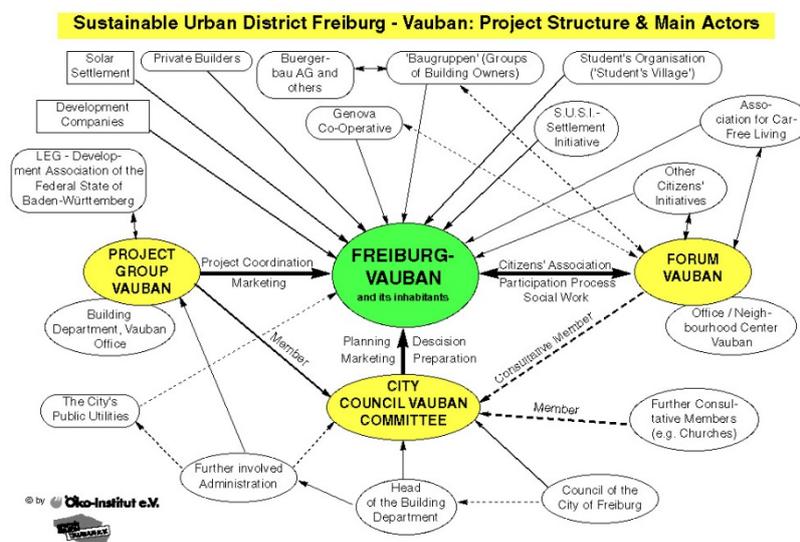
2001 The debates on the mobility model begin.

2002 Vauban has 2,700 inhabitants.

2007 Vauban has 4,700 inhabitants.

Stakeholders, beneficiaries and participatory methodologies

One of the key factors in the success of this process is that the Government of Freiburg created a series of permanent institutions enabling coordination and transversal work between the various areas of the local government (and with other national public institutions). Among these are the 'Vauban Project Group' (the administrative body where the local authorities involved in the process coordinate their work) and the 'Freiburg Local Authority Vauban Committee' (a Local Authority forum for the exchange of information, debate, and preparation for decision-making) These two institutions are the most important in the process, as well as Forum Vauban. The diagram below shows the various institutions involved in the process:



Beneficiaries

First, the direct beneficiaries of this ecological rehabilitation plan and the construction of a Sustainable Urban District are the almost 5,000 people who live there. In this group, the benefits obtained start with the acquisition of a home and also include access to public facilities and high quality green public spaces, the opportunity to participate in various social and cultural initiatives, and the construction of social and community networks – all mechanisms that facilitate social cohesion. Part of the literature emphasizes that children are particular beneficiaries of this process, as the urban environment constructed is especially appropriate for their development. Among those that can be considered indirect beneficiaries of the process

are the various groups of agricultural and livestock farmers and producers of ecological products that have access to a direct market through consumer groups and weekly open markets.

Participation processes implemented

The Vauban Sustainable Urban District process initially took place at the same time as a major participation process. Soon after the French troops left the barracks, a group of young squatters occupied some of the buildings as housing and as a social-cultural centre. Despite some disagreements with the city authorities, the squatters were allowed to stay in four of the barracks. This led to the SUSI self-governed initiative and the beginning of a restoration process of the barracks along ecological lines. This restoration process (involving significant levels of self-construction) enabled the cooperative to be structured internally and its internal diversity to be valued. SUSI is now a cooperative providing rental housing and numerous common public spaces where numerous social initiatives are underway.

After the City of Freiburg purchased the barracks and implemented the plan for the ecological and social restoration of the area, the participation process was based on a major information and publicity initiative on community and ecological planning, as a result of which Forum Vauban and the City authorities were able to contact future inhabitants of the area. Forum Vauban was initially supposed to create 15 *Baugruppen* (cooperative construction groups), each of which was to consist of between 5 and 15 families. These groups enable the population not only to save up to 30% on the final cost of their homes, but also act as forums for their participation in the design of the own buildings, in which the ecological and social criteria promoted by the restoration plan for the area are implemented (and in many cases exceed the initial expectations of the City of Freiburg).

Participation at this stage of the process was not only limited to designing the homes, but instead, thanks to the impetus provided by the work of Forum Vauban, the 'Baugruppen-co-ordination group' was created to exchange knowledge, information, and problems; and social and community networks began to be established, which became the cornerstone of the participation process after the design phase of the homes had been completed.

One of the key factors in the process for participation in the construction of the Vauban Sustainable Urban District was the construction of environmental alternatives in urban regeneration. This has not only included the participation of residents (and future residents) but also involved meetings and workshops with experts in various fields (health, construction, community development, mobility, etc.) in order to generate interaction between different types of knowledge so that the solutions proposed can combine various approaches and deep local roots. As a result, one of the main objectives of the project between 1997 and 1998 was research focused on the creation of alternatives in bioclimatic construction, sustainable mobility, and energy efficiency. Another of the most important initiatives that took place at this level was the UrbanVisions International Conference (1999), which was jointly organised by Forum Vauban and ICLEI (International Council for Local Environmental Initiatives) and was attended by 130 people from 21 countries.

The first residents moved into Vauban in September 1998. While the housing construction work continued and the cooperative groups were established, the public participation process underwent significant changes, continuing to focus on urban design but also looking towards community work. The key actors in this process were not the *future* residents, but instead the *new* residents and the objective was to create social networks between these new residents and to implement social and community initiatives. This was the beginning of the organisation of various activities aimed at adding impetus to the process and the socio-cultural life of the

sustainable urban district (e.g., festivals, trips). Around 40 workshops on the sustainable urban district process (which set out the basic philosophy of this process, *'Planning that Learns'*) also took place, covering the following subjects:

- Bioclimatic construction: Green facades, construction using local wood, building with high energy efficiency, renewable energies, etc.
- Information on the management of cooperatives and social economics and financing of the various initiatives.
- Design of public spaces: from the community centre to streets, green spaces, squares

In the early 2000s, the City government agreed to allow one of the barracks to be used for a community centre that was self-managed by the residents of the sustainable urban district. Self-management initially involved a participatory process for the design of the centre and its rehabilitation process, followed by the management of the activities.

The participation of women in the process is significant within the many social and community initiatives that take place in the neighbourhood. There has been a women's committee since 1997, when seminars on the subject were held, and it has become one of the most important actors in the process.

Workshops and debates on the mobility model for Vauban began in 2001, leading to the creation of the idea of a 'car-free neighbourhood' which had been under consideration since the beginning of the project.

The types of participation increased and became more diversified as the project progressed and created new ways of relating to the territory. For example, groups and shops were created that work with and purchase ecologically produced and locally sourced products and food, as well as weekly market of agricultural products organised every Friday since 1999.

Institutionalization and financing

Institutionalization processes

It is a Development Plan approved by the government of the City of Freiburg.

Financing

The initial budget allocation from the City of Freiburg amounted to U.S.\$85,000,000.

The budget for cleaning and decontamination of the area and creating some of the facilities (including the primary school, the community centre, and some nurseries) came from the Redevelopment Fund of the Federal State of Baden-Württemberg (U.S.\$5,000,000) and loans granted to the City authorities.

Many of these loans were repaid by selling land for homes (construction groups were eligible for grants and tax rebates from both the central government and the federal state government of Baden-Württemberg).

The participation and community work process had the following budgetary support:

- Government of Freiburg: U.S.\$200,000
- German Environment Foundation (Deutsche Bundesstiftung Umwelt, DBU): U.S.\$200,000 (1996-2002)

- European Union LIFE Programme: U.S.\$700,000 (1997-1999)
- Donations from partners: U.S.\$10,000 a year

Outcomes and reflections

Key results and achievements

Housing: One of the most significant features in the Vauban experience is that it has created an extremely diverse range of housing. As well as the private promotions, cooperative groups have also emerged (which have generated participatory processes in their management and have enabled people on low incomes to join). There were 40 cooperative groups in 2006. As well as the SUSI experience mentioned previously, Forum Vauban also created the Genova Cooperative. It is a self-managed rental cooperative (founded in 1997). Its inhabitants are mainly young people, elderly people, and people on low incomes who live in buildings containing 36 or 40 homes. In each phase, spaces for deliberation have been created in which the members of the cooperative design the buildings (aspects including the facades, orientation, collective areas, and the scale of housing are decided collectively). Construction takes place based on ecological criteria such as the use of local materials, solar panels, and rainwater collection mechanisms. Apart from construction, the cooperative is also responsible for the collectively owned property of the house, as well as a hostel and the launderette.

Energy: The installation of photovoltaic panels and solar energy is encouraged, as well as a plan to reduce household consumption. The sustainable urban district also has a very efficient cogeneration plant to provide heating for the entire area which runs using wood chips. The obligation to reduce energy consumption will lead to the development of various initiatives in the housing blocks, such as the 'energy plus' project, which contains 10 passive housing units that produce more energy than they consume.

Water resources: Ecological treatment of water takes place throughout a large proportion of the urban structure. First, there are the green areas which enable 80% of water from rainfall to be filtered onto natural land. There is a combined sewerage system in some facilities and homes.

Urban mobility: There are two very important initiatives in this field: the 'car-free neighbourhood' and 'the parking-free neighbourhood', with priority given to pedestrian and bicycle mobility. The consolidation of these two programmes means that no car parks can be constructed in the lots, and the only area where it is possible to park is on the perimeter of the residential area. Car mobility (except for medical and other emergencies) is limited to loading and unloading (with a maximum speed of 5 km/h in the residential area and 30 km/h in the rest of the district). The urban distribution network of facilities and services (and workplaces in the neighbourhood) means that all journeys can be made on a bicycle or on foot. There are tram, bus, and trains line that link the area with the centre. Around half of Vauban's population does not have a car, and an association to share the use of cars and vans has been created.

Also worthy of note is the construction of community facilities such as Haus 37, nurseries, and education centres and employment initiatives that have created more than 400 jobs.

Another of the most significant results of this process is associated with the implementation of various types of participation, ranging from urban planning to the management of community facilities, the design of homes, and social and ecological initiatives of various types. These processes have led to the consolidation of social networks and shared responsibility processes

in the management of the territory that facilitate the social cohesion of children, women, young people, and low income groups.

Main obstacles

The most important problem in the experience of the Vauban Sustainable Urban District is that although some housing initiatives have made a commitment to internal diversity, the residents in others are very uniform (young middle-class students). Furthermore, the incentives for including people with low incomes disappeared when many of the anticipated grants and subsidies to do so were abolished.

Overall assessment and replicability

The sustainable urban district initiatives that have become widespread in Europe over the last decade, and recently in some cities in Latin America, are a commitment to restore urban spaces or to generate new developments based on overall criteria of sustainability. This comprehensive formula condenses the necessary urban transformations (mobility, connection with the city, design of the public space, type of housing, facilities, bioclimatic architecture, etc.), environmental transformations (energy efficiency and self-sufficiency, management of waste and water cycles, respect for the pre-existing environment, minimisation of consumption of resources such as land, etc.) and social transformations (public appropriation of the environment, reinforcement of local identity, participation by inhabitants, the inclusion of social diversity, and the economic dimension).

There are various similar experiences in Europe. In the Spanish case, the benchmark example is the Trinitat Nova Sustainable Urban District¹ in the Nou Barris area (on the outskirts of Barcelona) which came about as a result of one of the country's most important community development plans. In Italy, the Contratti di Quartiere have become widespread all over the country, at varying degrees of intensity since the mid-1990s, and examples include the Quartiere di Savonarola in Padua (Licari & Dondoni 2006). In England, there is the Coin Street project.²

Further information

This case was researched and written by Alfredo Ramos under the supervision of Dr. Stefania Barca at the Centre for Social Studies, University of Coimbra, Portugal, in 2010.

UCLG Committee on Social Inclusion, Participatory Democracy and Human Rights

Website: <https://www.uclg-cisd.org/>

Contact information: cisd1@uclg.org | +34 933 42 87 70

References

Arenillas Parra, T. (ed.), 2003, *Ecología y Ciudad*, Barcelona: El Viejo Topo.

Bettini, V., 1998, *Elementos de Ecología Urbana*. Madrid: Trotta.

¹ <http://habitat.aq.upm.es/boletin/n15/aivel.html>

² <http://ecosistemaurbano.org/tag/coin-street/>

Fernández Casadevante, J.L., Morán, N. & Ramos, A., 2010, De cuartel militar a laboratorio de vida alternativa: El ecobarrio de vauban en Friburgo. *Papeles de cuestiones ecosociales*, 111. Madrid: CIP-Ecosocial.

HABITAT-Biblioteca CF+S, 2002, Construcción del barrio sostenible de Freiburg-Vauban, Friburgo, Alemania. <http://habitat.aq.upm.es/dubai/02/bp312.html> [6 September 2010].

Licari, G. & Dondoni, M., 2006, Sviluppo di comunita e partecipazione: Il caso dei Contratti di Quartiere, in G. Licari & R. Barone (eds.), *Sviluppo Locale Partecipato e Sostenibile*. Padova: CLEUP.

Magnaghi, A., 2000, *Il Progetto Locale*. Turín: Bollati Boringhieri.

Santiago, P., 2008, The vision of a sustainable district becomes reality. Paper presented at the *III Seminario Internacional de Comarcas Sostenibles*.

United Cities and Local Governments, 2008, *First Global Report on Decentralization and Local Democracy* (GOLD Report). Barcelona: UCLG.

Velázquez, I. & Verdaguer, C. (eds.), 2008, *Manual para el diseño de ecociudades en Europa. Libro I: La ecociudad, un lugar mejor para vivir*. Proyecto ECOCITY.

Verdaguer, C., 2000, De la sostenibilidad a los ecobarrios, *Documentación Social*, 119. Madrid: Caritas.

Verdaguer, C., 2003, Por un urbanismo de los ciudadanos, in T. Arenillas Parra (ed.), *Ecología y Ciudad*, Barcelona: El Viejo Topo.

Verdaguer, C., 2010, De los ecobarrios a las ecociudades. Una formulación sintética de la sostenibilidad urbana. *Papeles de cuestiones ecosociales*, 111. Madrid: CIP-Ecosocial.