

# Freiburg, Germany

## District Vauban: a sustainable model for “learning while planning”

Initiated in the mid-1990s, the eco-district of Vauban, located at the periphery of Freiburg, is the result of a successful collaboration between civil society, the municipality, engineers and architects to achieve a sustainable, collectively-envisioned urban environment.

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August 2014

### The project in brief

The City of Freiburg initiated the reconversion of an old French barrack site in 1995, to house more than 5000 people and provides roughly 600 jobs. Vauban is a unique example of, “learning while planning”, according to its motto. The highly bottom-up and participatory nature of the planning, development and implementation of the district, served as a laboratory for the integration of institutions, services and systems. As a result of the City’s innovative planning schemes, Vauban represents a model of integrated planning for ecological optimization and social equity.

Today, the district features energy efficient housing, including 92 passive houses and 10 “PlusEnergy” houses. Beyond that, the majority of the site benefits from the provision of onsite renewable energies (solar 65% and cogeneration 80%). Additionally, due to collaboration between future residents, urban planners and the City, the district devised a cutting-edge car-free concept, a CHP (co-generation plant) as well as some of the district’s most notable features, such as the neighborhood center and market place.

### What makes it "Urban NEXUS"?

The district emerged from an institutional Urban NEXUS framework of joint collaboration. From the grassroot-level up to the level of the City's administration, stakeholders were represented primarily through the Project Group Vauban (administrative cooperation), the Gemeinderätliche AG (a City Council committee enacted to serve Vauban) and Forum Vauban (the legal body to represent civil society).

The City of Freiburg coordinated the development of the site, sold the plots and provided legal frameworks for the operations. Whereas, Forum Vauban ensured future residents voices were heard through intensive collaboration between the City. During the planning phase, the City uniquely clustered future residents together with urban planners, engineers, architects and builders in “Building Groups” “Baugruppen”, whereby future inhabitants jointly planned their habitat, together with experts. This ensured ecological quality and diversity in both the social composition of neighborhoods and visual aspects of the district, in contrast to conventional top-down approaches observed elsewhere in the city. The Vauban project was financially supported by the LIFE program of the EU Commission.



<b>Date</b>	1994-2009
<b>NEXUS Sectors</b>	Green Building +Transport+Water +Energy+Social
<b>NEXUS Innovations</b>	Design + Technology; Law + Policy; Communications + User Behavior
<b>Scale</b>	District
<b>Budget</b>	500 million EUR

## Urban NEXUS Definition

The Urban NEXUS is an approach to the design of sustainable urban development solutions. The approach guides stakeholders to identify and pursue possible synergies between sectors, jurisdictions, and technical domains, so as to increase institutional performance, optimize resource management, and service quality.

It counters traditional sectoral thinking, trade-offs, and divided responsibilities that often result in poorly coordinated investments, increased costs, and underutilized infrastructures and facilities. The ultimate goal of the Urban NEXUS approach is to accelerate access to services, and to increase service quality and the quality of life within our planetary boundaries.

ICLEI / GIZ 2014

## Further Reading

Vauban official website "<http://vauban.de>"

Energy Cities case example Vauban: [http://www.energy-cities.eu/IMG/pdf/Sustainable\\_Districts\\_ADEME1\\_Vauban.pdf](http://www.energy-cities.eu/IMG/pdf/Sustainable_Districts_ADEME1_Vauban.pdf) (20 Aug 2014)

Gregory, R., 2011, Germany, Freiburg, Green City. The EcoTipping Points Project, January: <http://www.ecotippingpoints.org/our-stories/indepth/germany-freiburg-sustainability-transportation-energy-green-economy.html> (20 Aug 2014)

Inclusive City Observatory report, 2010, Freiburg, Germany: Vauban Sustainable Urban District: [http://www.uclg-cisd.org/sites/default/files/Freiburg\\_2010\\_en\\_final.pdf](http://www.uclg-cisd.org/sites/default/files/Freiburg_2010_en_final.pdf) (20 Aug 2014)

GIZ and ICLEI, 2014, Operationalizing the Urban NEXUS: towards resource efficient and integrated cities and metropolitan regions, GIZ Study: [www.iclei.org/urbanexus](http://www.iclei.org/urbanexus)

## Scope for improvement

Vauban's residents were selected based on interviews, strengthening the sense of community but also reducing diversity. Conceived as a socio-economically mixed area, it is in fact inhabited by middle and upper-middle classes. When planning districts such as Vauban, it is important to ensure diversity, as was the case in the eco-district, Hannover, Kronsberg (Case Study Nr. 04). The district of Vauban is candid about its deficit of affordable housing for low-income residents. The problem was the lack of federal and state subsidies for building them. This underscores the importance of ensuring adequate funding for socially inclusive projects of this scale.

## Replication

The success of the Vauban district can be attributed to a strong participation and the comprehensive collaboration between the City and the civil society. Some examples of failed eco-districts and cities (such as Dongtan in China) have highlighted the need for citizens' involvement in shaping their environment. Granting a legal status to Forum Vauban, together with alternative modes of construction such as Building Groups (Baugruppen), provides a stable and sustainable basis for a lively district. This experiment is an example of how a City can organize various stakeholders for successful outcomes, revealing the benefits of participatory approaches in shaping both high ecological standards and quality of life.

## Acknowledgements

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On behalf of:



The Urban NEXUS project 2013-2014 was funded by GIZ on behalf of BMZ to develop the "Operationalization of the NEXUS approach in cities and metropolitan regions". The Urban NEXUS project included: a baseline study and report (GIZ and ICLEI, 2014), the identification and preparation of case studies and shorter case stories, and the design and implementation of action-oriented pilot projects supported by the German Development Cooperation. ICLEI, as implementing partner of the Urban NEXUS project, is responsible for the content of this Case Story.

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