

## Case 1 Freiburg, Germany: Eco-District Vauban

**Problems to resolve:** The city of Freiburg in Southern Germany is situated in a narrow valley with little space for physical expansion. However, due to a generally acknowledged attractiveness, the population is growing – mostly due to new arrivals to the city – and a city expansion had to be accommodated at the Southern periphery. Being governed by a mayor from the Green Party at the time – the town expansion was expected to become a Show Case for comprehensive ecological urban development.

### Means:

	Tool CUD 1: urban form – density nexus (Urban Design)
	Tool CUD 2: Transit-oriented Development (TOD)
	Tool CUD 3: Urban design improvements for better urbanity and decentralized land use

### Secondary Tools:

- ✓ Participatory planning,
- ✓ Ecological sustainability,
- ✓ Passive house building standards
- ✓ District heating
- ✓ Maximum energetic self-sufficiency,
- ✓ Car-free residential areas
- ✓ Car sharing and non-motorized transportation.
- ✓ Co-operatives,
- ✓ Urban farming,
- ✓ Transportation nodes,
- ✓ Emphasis on pedestrian and low-carbon public transportation mobility,





geometry favours the active modes of transport and, selectively, “filters out” the car. This is accomplished by reducing the number of streets that run through the neighbourhood. Instead, most local streets are crescents and cul-de-sacs (see drawing). While they are discontinuous for cars, they connect to a network of pedestrian and bike paths which permeate the entire neighbourhood. In addition, these paths go through or by open spaces adding to the enjoyment of the trip. The logic of filtering a mode of transport is fully expressed in a new comprehensive model for laying out neighbourhoods and districts – called the “fused grid”. → Tool CUD 3

**Discouraging parking of individual cars.** Most of Vauban's residential streets are described as y "free from parking spaces" (*stellplatzfrei*). Vehicles are allowed down these streets at walking pace to pick up and deliver but not to park, although there are some infraction as the system depends essentially on social consensus - there are few [official](#) controls. Each year, households are required to sign a declaration stating either that they do not own a car, or that they do, in which case they must buy a space in one of the multi-story car parks on the periphery, at a one-off cost of 17,500€ plus a monthly service fee. The city-wide car club has the greatest concentration of its 2,500 members in Vauban – at least ten of its cars are stationed around the district. [Thus, Vauban](#) has been successful to counteract the increase in traffic and congestion which has been affecting the larger region of Freiburg. At the eco-district level it was possible to counteract the increases in traffic and congestion, resulting from increasing population densities. → Tool CUD 3



*Eco-District Vauban in Freiburg, Germany<sup>iv</sup>*



*Vauban Solar Settlement, Vauban, Germany<sup>v</sup>*

**Lessons learnt.** Vauban's experience shows that (i) strategies for urban transformation are based on individual sector strategies. These are becoming part of the overall strategy to mitigate climate change; (ii) there is a local autonomy to decide on and adopt certain policies; and (iii) the local population plays an important role in implementing innovations.<sup>vi</sup>

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**Public Low-Carbon Transport to the city centre.**  
Source: Florian Steinberg



**Award-winning Solar Architecture**  
Source: Florian Steinberg

### Sources and Further Reading:

<sup>i</sup> [http://en.wikipedia.org/wiki/Vauban,\\_Freiburg](http://en.wikipedia.org/wiki/Vauban,_Freiburg)

<sup>ii</sup> Source: [http://en.wikipedia.org/wiki/Vauban,\\_Freiburg](http://en.wikipedia.org/wiki/Vauban,_Freiburg)

<sup>iii</sup> Source: China Development Bank Capital (CBDC). 2015. *12 Green Guidelines. CDBC's Green and Smart Urban Development Guidelines*. Beijing (draft). p.41 <http://energyinnovation.org/wp-content/uploads/2015/12/12-Green-Guidelines.pdf>

<sup>iv</sup> GIZ. 2013. Technical Offer, Europe-China Eco-Cities Link Project

<sup>v</sup> Source: Florian Steinberg

<sup>vi</sup> An Ecological Life Report from Freiburg. 2013. In: *Green*. #3. Beijing. pp. 134- 143; Green City Office (ed.). 2010. *Vauban Quartier Freiburg – A Guided Tour, The vision of a sustainable district becomes reality*, FWTM Management and Marketing for the City of Freiburg, Freiburg; Pouille, J. 2015. Die Stadt von morgen – vielleicht, in: *Stadtbauwelt* 206, Vol. 106. pp. 55-59; Hall, P. 2014. Freiburg: The City that did it all, in: Hall, P. 2014. *Good Cities, better lives: How Europe Discovered the Lost Art of Urbanism*. Routledge. London, pp. 248-276.