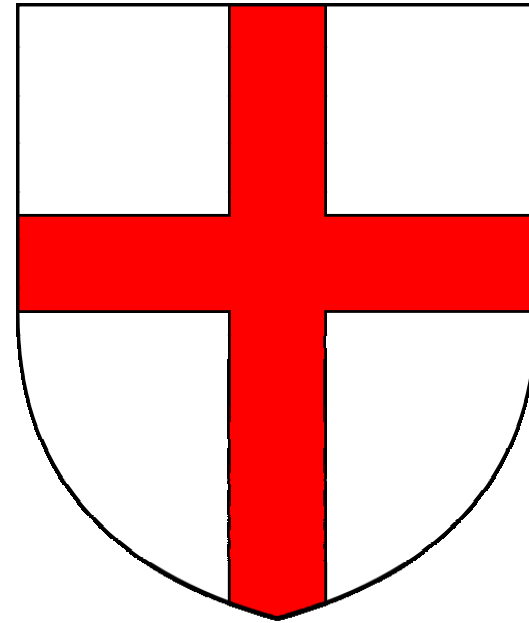


# Sustainable Energy in Freiburg



A summary by Fabian Schwär

Intern in Mayor Cieslewicz's Office, Summer 2008

Madison-Freiburg Sister City

# Sustainable Energy in Freiburg

Freiburg already has a good efficient climate protection and wants to go on improving it with:

- Sustainable Urban Development
- Solar energy
- Wind energy
- Sustainable Mobility
- Sustainable Recycling



# Sustainable Urban Development

- The plan is to reduce land use and pollution as far as possible:
  1. More rowhouses, best example is the district „Vauban“
  2. Higher buildings to use space more effectively
  3. Bigger compactly shopping-malls
  4. Better Mobility to reduce traffic (less cars needed)
  5. Making parks bigger and cleaner for better environment



# Solar-energy



- Many solar-collectors on public buildings like soccer-stadium or the „Sunship“
- Able to produce the energy for the whole building and save excessive to sell it
- Especially in Freiburg Solar-energy is very efficient because there are more sun-days than in other major cities



# Heliotrop - The Solar Building

- Finalized in 1994
- The idea is to have a house producing all the energy that it needs
- Type of construction: lumber
- 2 inhabitants
- The roof produces more energy than the whole building uses
- Optimal use of stormwater
- Opportunity to turn the building toward the sun
- Eco-friendly recycling



# Wind-energy

- Using wind to produce energy with wind generators
- In the past wind was already used for wind mills and water pumps
- Windgenerators are not too expensive and once built they are efficient for years
- Available in every areas (coast, mountains, inland)
- Opponents argue that wind generators would destroy the beautiful appearance of the nature around Freiburg



# Sustainable Mobility

- Public traffic and transportation is perfectly designed  
e.g. able to get by trolleys every 5 minutes through nearly the whole city
- About 500 kilometers bike paths in and around Freiburg
- Lowest motor vehicles density in all of the major cities in Germany



The main station – a traffic nodal point



# Farmer's Market



- Farmers all around Freiburg try to sell their own cultivated, fresh vegetables and fruits



# Farmer's Market

- Fresh food and other stuff like flowers is sold on the place around the „Münster“



# Sustainable Recycling

- Rigorous waste separation: when there are separate waste containers, the following stuff have to be disposed of discretely:
  - paper - glass - plastic - organic apatement - metal - electronic stuff - bulky items
- Nearly all garbage is tried to recycling to discourage waste and for environment protection
- Production of secondary raw material is promising and raising

