

Best Practices in Sustainable Community Design

Origin of presentation

- **May 2009 DSC meeting.**
- **Staff requested to research best practices and leading edge developments internationally**

What was our approach?

- **Discussions with councillors, peers and associates to identify projects**
- **Further internet research identified additional projects**
- **Research to gather specifics of identified projects**
- **Summarized and distilled research to identify commonalities**

Projects

- **Dockside Green, Victoria BC Canada**
- **Vauban, Freiburg, Germany**
- **Malmo, Sweden**
- **Kronsberg, Germany**
- **Viikki, Finland**
- **Dongtan, Chongming Island, Shanghai, China.**
- **Masdr, Abu Dhabi, UAE**
- **Nieuwland, Amersfoort, Netherlands**
- **BedZed, Beddington, Surrey, England, UK**

Commonalities

- **Energy Conservation/Generation**
- **Transportation**
- **Built Form**
- **Municipal Involvement**

Energy Generation/Conservation

- **Sustainable energy sources, biofuels, solar, wind, wave and geothermal.**
- **Need to foster on-site energy production**
- **Using what we have more efficiently**
- **European cities not as dependant on fossil fuels**

Transportation

- **Efficient, convenient, clean, safe, and affordable public transport**
- **People live closer to schools, local food and employment (daily life needs within walking distances)**
- **More dense/urban developments – less reliance on the automobile.**

Built Form

- **Higher densities utilize infrastructure more cost effectively**
- **Typically higher densities ranging from 83 persons per hectare to 400 persons per hectare.**
- **Building heights range from 2 stories to 25 storey apartments.**

Municipal Involvement

How the Municipal or other levels of Government assisted:

- 1. Providing the land**
- 2. Financial assistance**
- 3. Speedy approvals on Green Projects**

Dockside Green



Dockside Green

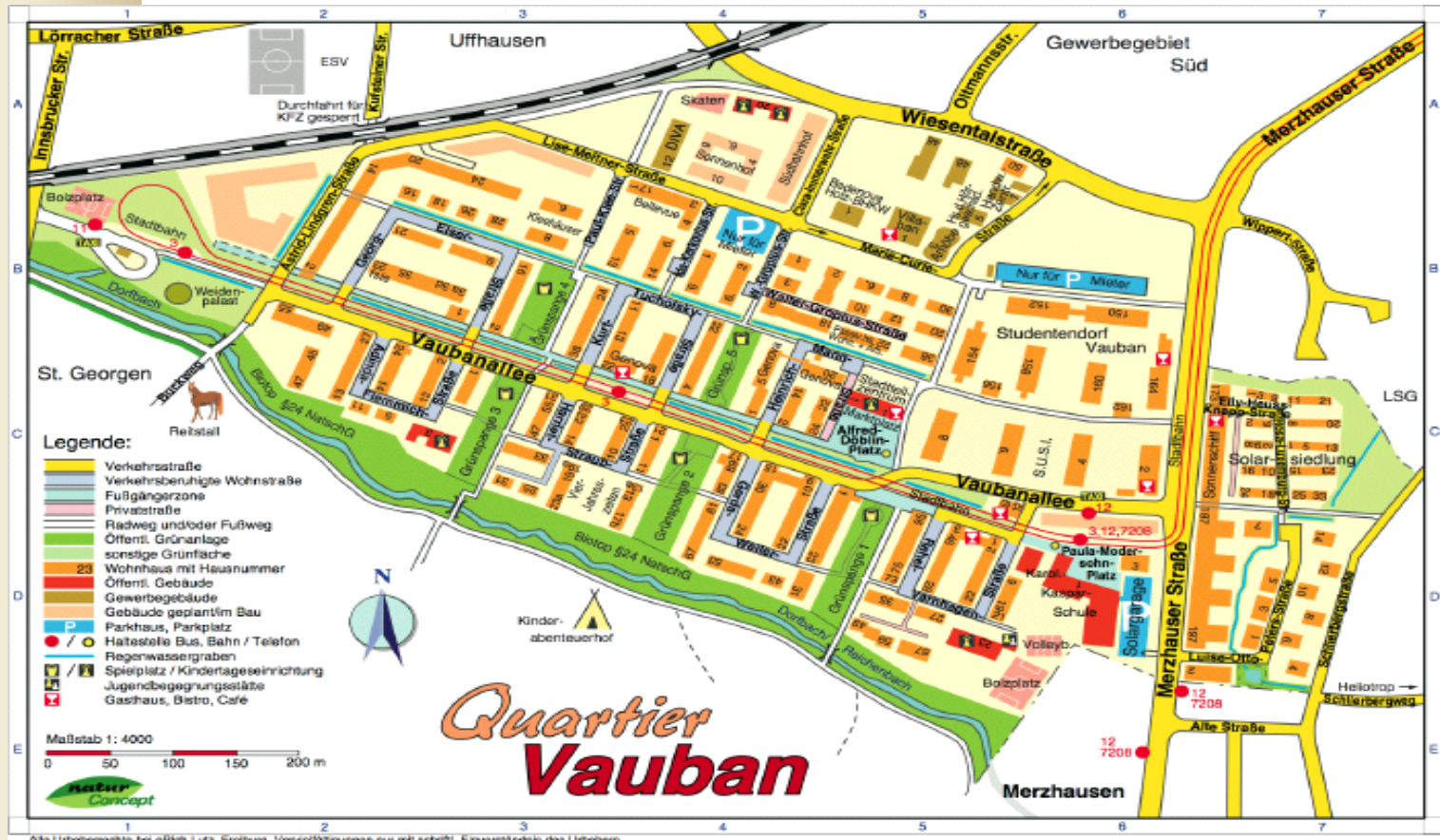
Green Roofs



Biomass Heat Generation Plant



Vauban, Freiburg, Germany



Vauban, Freiburg, Germany



**Light rail heading into
Vauban**

**Solar panels on residential
buildings**



Masdar, Abu Dhabi



Masdar, Abu Dhabi



light rail line

Personal Rapid Transit automobiles



Bo01, Malmo, Sweden



Bo01, Malmo, Sweden



Artist Rendering of City of Tomorrow

Diverse architecture



Markham Context

- **Urban growth centres and key development areas**
- **Direct municipal involvement**
- **Green Energy Act**
- **LEED – NC/ND**
- **Transit delivery**
- **Growth Management Strategy and implementing OPA**
- **Green Print**

Questions