



# An urban development project of the City of Linz

Foto: Pertlwieser  
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# Linz in figures

- 190.000 inhabitants
- 190.050 places of work
- 6414 Enterprises
- high Export rate

# Situation and area

- City of Linz: 9.600 ha
- solarCiy: 60 ha

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# Preconditions for the start



- 12.000 looking for a home in 1990
- City development only possible in Linz-Pichling
- Idea „solarCity“ was born

# Planning stages



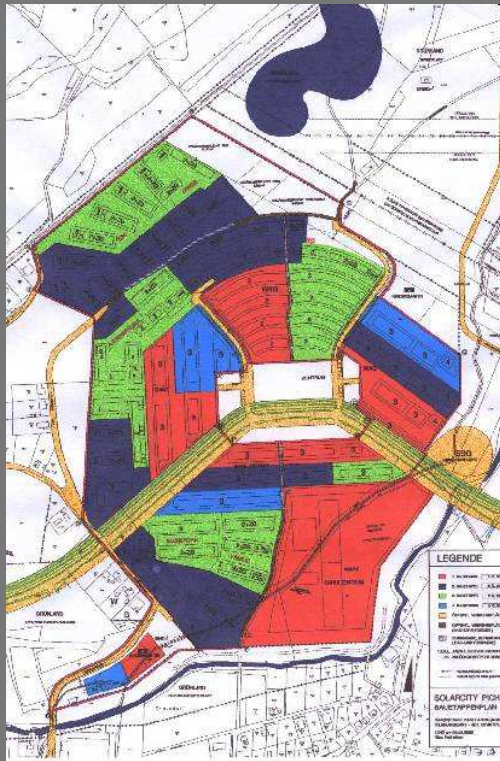
- 1992 masterplan Prof. Rainer
- 1994 EU-funding for the planning work
- 1995 READ-group planning (Foster, Rogers, Herzog)
- 1996 architectural competition (Treberspurg)
- 1997 landscape design competition (Dreiseitl)
- 1998 architectural competitions for kindergarten / school / town centre

# Urban development



- 1.294 flats
- Infrastructure
- 2 - 4-storey buildings
- South oriented facades
- Small density (floor space index 0,65)
- No mutual shading

# Stages of construction



- 1. stage 3.Q. 2001 – 1.Q. 2003
- 2. stage 2.Q. 2002 – 4.Q. 2003
- 3. stage 2.Q. 2003 – 4.Q. 2004
- 4. stage 2.Q. 2004 – 4.Q. 2005
- 15 building contractors

# Solar architecture



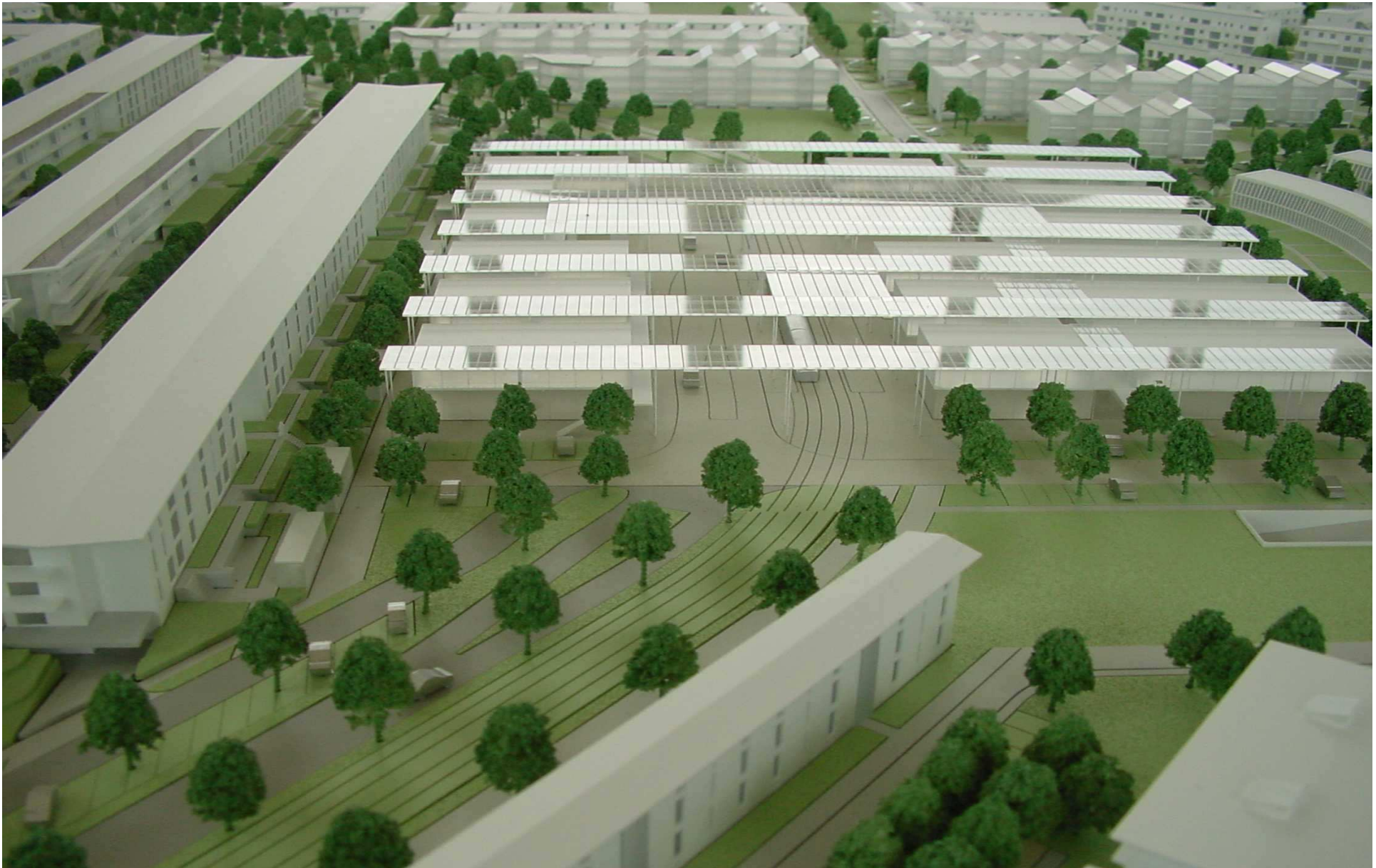
- Low-energy construction
- Passive houses
- Energy values
- Compact design
- High quality insulation
- Solar energy (passive/active)
- Catalogue of ecological construction units





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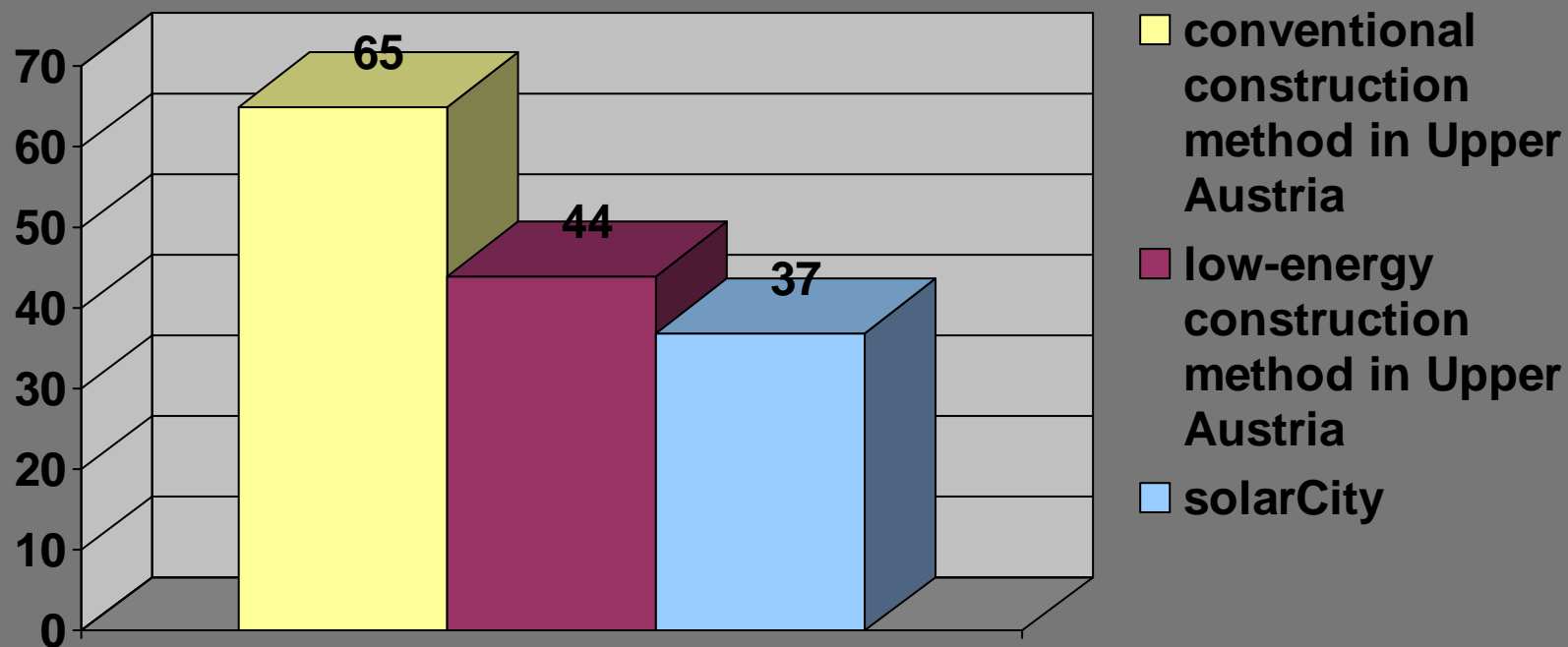




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# Heating energy (kWh/m<sup>2</sup>.a, average values)





# Kindergarten

- 12 - group Kindergarten
- Planning: Schimek (AUT)
- Timber construction with reinforced concrete
- Solar architecture
- Passive house standard

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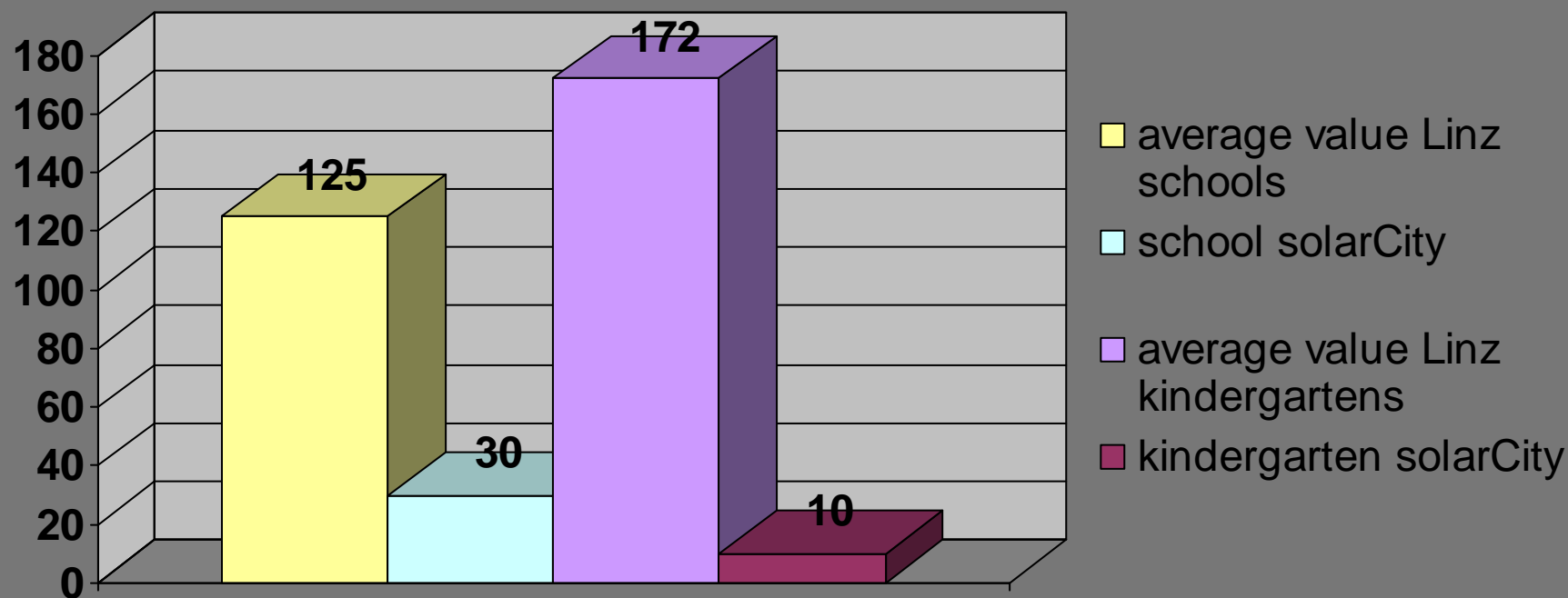
# School

- Primary school / day care
- Planning: Michael Loudon (AUT)
- Reinforced concrete, prefabricated elements
- Low-energy construction
- Pilot project „waste-water free estate“

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# Heating energy school, kindergarten (kWh/m<sup>2</sup>.a, average values)



# Family centre

- Contact- and advisory centre
- District management
- Planning: Stummer (AUT)
- Low-energy construction

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# Town centre

- Supermarket, medical supply, pharmacy, bank, community centre,...
- Planning: Auer+Weber (GER)
- Linear framework structures enclosing 2-storey buildings
- Low-energy construction

# Castoral Care Centre

- Ceremonyroom, Meditationsroom, Rectory, Rooms for Jung People, Apartments und Courtyards
- Planning: Pointner&Pointner (A)
- Building Owner: Diözese Linz
- Low-energy construction

# Heating energy supply

- Thermal solar collectors
- District heating



# Waste disposal



- Pilot project „waste-water free estate“
- Grey water cleaned in sand bed filter
- Rainwater management system



# Traffic



- Network of pedestrian- and cyclepaths
- Underground garages
- Tram
- Medium-term rapid rail system

# Nature and open space

- Open space concept bei studio Dreiseitl
- Expansion Kleiner Weikerlsee
- Natur reserve Traun-Danube
- Park landscape
- Revitalisation of the Aumühlbach

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# Socio-structural plan

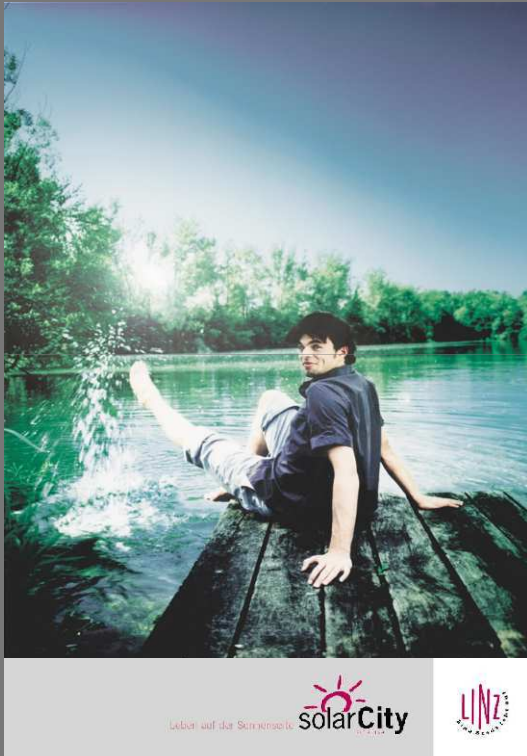
- Quality agreements between development companies and Linz-City
- Mix of legal forms (40% rent, 10% purchase, 50% hire-purchase)
- Consideration of new family structures
- Mixed age structure of the future residents
- Development of a district management/local preview centre
- Involvement of the future users

# Specific issues for women



- Concept Ulla Schreiber (GER)
- Aspects of „subjective security“
- Illumination concept
- Readability of the location

# Marketing



- Corporate Identity
- Location marketing
- Public relations
- Architecture model 1:500
- Virtual reality (AEC)
- Internet-homepage  
[solarcity.linz.at](http://solarcity.linz.at)

# Planning/development

- 21 architects and civil engineers (AUT, GBR, GER)
- 15 development companies
- Municipality of Linz

# Project organisation

- Project contract
- Project supervisory board
- Communication and administration network
- Controlling
- Project documentation

# Costs

- Residential construction: 125 million Euro
- Infrastructure: 75 million Euro
- Total: 200 million Euro



# International awards

- 1998:  
United Nations (UNCHS) „Best Practice“
- 1999:  
Earth Society Foundation, nomination for environmental award
- 2000:  
Federal Ministry for Transport, Innovation and Technology -  
competition „House of the Future“ - public support
- 2001:  
bremen partnership award - one of the 5 best projects worldwide

# Innovations

- Masterplan
- Urban development according to the rules of eco-solar construction
- Low-energy construction in social housing (agreements in contracts)
- Thermal solar collectors
- Catalogue of ecological construction units
- Pilot project „waste-water free estate“ (88 flats and school)
- Comprehensive landscape design
- Design log for open space (vegetation, ways, furnishings)
- Rainwater management system
- Socio-structural quality agreements with the development companies
- Balanced mix of legal forms (rent, purchase, hire-purchase)
- Location-marketing in social housing
- Virtual reality as a planning and communication instrument
- Project-organisation (project-contract, objectives, costs, timetable)

July 2000



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February 2001



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August 2001



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February 2002



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May 2002



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October 2002



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March 2003



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June 2003



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September 2003



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February 2004



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July 2004



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December 2004



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June 2005



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September 2005



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May 2006



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August 2006



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