





# Financing of home improvements in the large housing estates in Berlin since 1992

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#### Large housing estates built with prefab. concrete slabs in Berlin-Hellersdorf







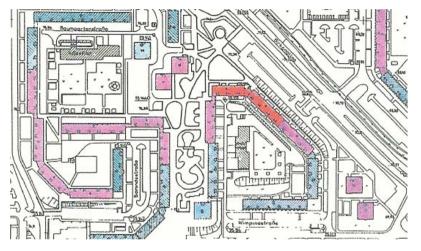


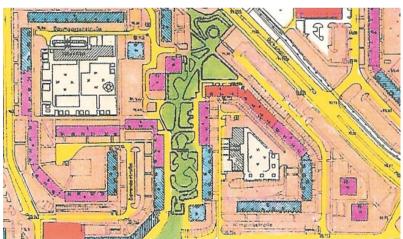
- Foundation of municipal housing companies and transfer of the publicly owned housing stock on them.
- Subdivision of settlement areas into public and private land (lots). Separation of public land (roads, paths, public green areas, public entities), transfer of private buildung land (lots) to housing companies.
- GDR construction loans, converted into public State loans ("Altlast" = "inherited debt", approx. 75 €/m²), had to be serviced.
- The legal obligation to privatize (sell) part of the housing stock allowed housing companies to generate equity.
- Federal law required the separation of operating costs from the rent and the gradual increase of rents to the level of local market rents.



#### Distribution of settlement areas: Separation of public land, transfer of private land to housing companies







- Small estate with 4 owners:

Public facilities (nursery, preschool, etc.) in gray
The mun. housing company (blue) and two cooperatives (red, purple)

Distribution of areas:

Public. space: streets, paths: yellow

Public green areas

Public facilities: white

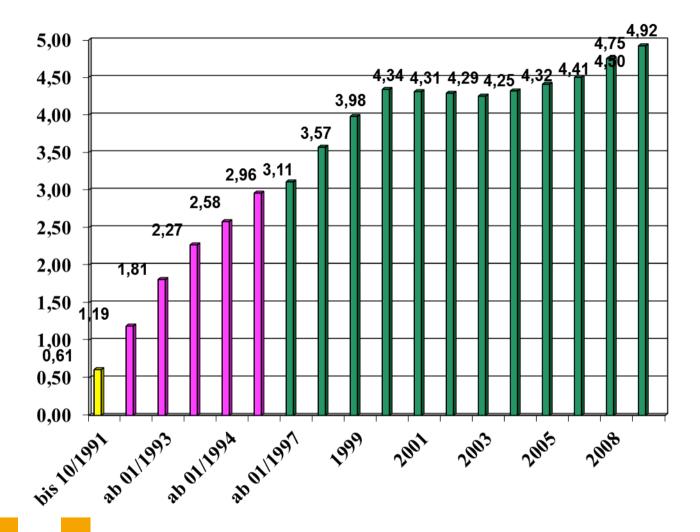
Private land of housing companies, including car parking space: pink



#### The development of rents **Development of basic rents [€/m² per month]**







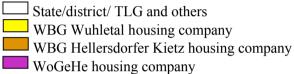


## Privatization of the housing stock - the Berlin-Hellersdorf example

Initial situation of ownership structure in 1990





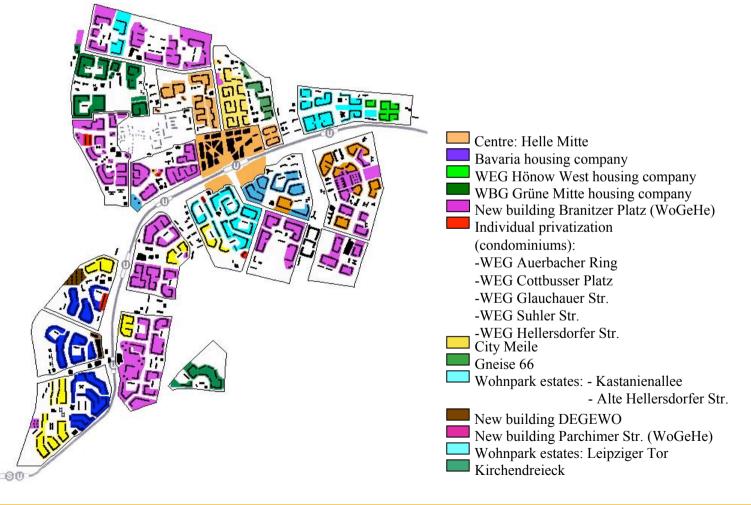




### Privatization of the housing stock - the Berlin-Hellersdorf example

Result of privatization: many different apartment owners









### Adaptation of prefabricated homes in the large settlements of East-Berlin to "western" quality standards

- Immediate activities since 1990, financed by public programmes of the city to improve the living environment: closing down of building sites, landscape gardening of courtyards, planting of trees along the streets, realisation of playgrounds – in consultation with residents
- Integrated urban development studies for the whole district and for neighbourhoods, technical studies concerning the actual state and rehabilitation needs of residential buildings, public surveys on the residents' wishes – all studies commissioned and funded by the city.
- Development of a catalogue of necessary measures, their costs, their technical solutions, priorities and a concept how to finance modernization with public and private funds. The estimated rehabilitation needs of buildings eligible for public funding amount to € 6,5 billion for 273.000 prefab housing units.
- Result: The Berlin long-term support programme, providing the necessary funds in the state's budget to preserve the prefab slab buildings and to improve their energy efficiency as a public priority. Any additional measures to improve the quality of living had to be funded by the landlords without public support.



## Results of the Berlin modernization programme for eligible measures



Total investment under this programme: €5,500 billion, approx.

Of which: estimated Federal funds (KfW) €4,000 billion, approx.

Berlin's subsidies of interests on loans

for about 60,000 units with higher needs €0,500 billion, approx.

(average costs: €33,000 per unit)

Obligatory financial contribution of landlords: €1,000 billion, approx.

Any additional measures to improve the quality of living and to raise comfort, such as elevators, larger balconies etc. had to be funded by the housing companies or associations themselves out of their equity or with bank loans.

**Results:** Complete rehabilitation of 65% of the housing stock

Partial rehabilitation of 35% of the housing stock

Only few housing units were removed by demolition







- Number of flats in prefab concrete slab buildings in East Berlin: 273,000 units
- Expected cost of complete renovation: €400 /m², approx.
- Including: Energy efficiency improvement: €140/m², approx.

(today: €185/m², approx.)

- Berlin Support Programme (1993/94 to 2005):
  - For units with a rehab. demand of up to €20,000 per unit, federal funds were to be used; up to €250,/m² could be funded by subsidized loans granted by KfW (no load for the Berlin budget!).
  - Investment share of the housing companies: 15%
  - For units with a rehab. demand above €20,000 per unit: Supplement funding by Berlin in the form of subsidized interest rates (peak funding) to keep rents within a socially acceptable range.

#### **Total financing of modernization The Hellersdorf example:**



Total investment: €1,050 million

including: subsidized modernization measures (75%, approx.)
 €787 million

- Publicly funded €669 million

- funded by housing companies €118 million (15% of subsidized costs)

including: non-subsidized measures (25%, approx.)
 €263 million
 (changes of flat outlines, additional lifts, addition of new

• The Hellersdorf housing companies had to bear themselves: €381 million, representing about 36% of the total investment.



balconies; redesign of entrance halls etc.)

## Comprehensive modernization "Schleipfuhl" estate in Berlin-Hellersdorf, arch. W. Brenne









### Financing example: one block of flats in the "Schleipfuhl" neighbourhood



#### Data:

•	No. of dwellings:	1,000
•	Floor space	62,000 m <sup>2</sup>
•	Subsidized modernization costs	€30,400 per unit
•	Altlast = "inherited debt" (€ 75/m²)	€ 4,650 per unit

#### Financing:

•	Obligatory equity (15%)	€ 4,560,000
•	Public loans, Fed. programme KfW*	€15.840,000
•	Public loans, Berlin Mod. programme*	<b>€10,000,000</b>
•	Total	€30.400.000

corresponding to €490,--/m² or €30,400,-- per unit

\*) Additional funding by Berlin was granted only for projects with approved rehabilitation needs of more than 20,000 €/unit – under condition, that previously received Federal funding by KfW (€255/m²) and private landlord`s contribution had been fully used. Berlin subsidies were generally granted as subsidized interest rates on bank loans, in some cases (the example above) as public loans with a subsidized interest rate.





# Financing example: block of flats in the "Schleipfuhl" estate, 1,000 units, calculation of annual regular expenditure and revenues



Annual regular expenditure	capital	1st to 4th year		5th to 10th year	
- Cost of financing (interes	ts)				
- obligatory equity (4,0%)	4,560,000	182,400		182,400	
- public loans KfW (4,0%)	15,840,000	633,600		633,600	
- publ. loans Berlin (7,5%)	10,000,000	750,000		750,000	
-"inherited debt" (6,6%)	4,650,000	<u>306,900</u>	1,872,900	<u>306,900</u>	1,872,900
- Repayment					
- Publ. loans KfW (5,0% from	om 5th year on)			792,000	
- Publ. loans Berlin (1,5%)		150,000		150,000	
- "Inherited debt" (1,0%)		<u>46,500</u>	196,500	<u>46,500</u>	988,500
- Management					
- Property management (€2	15 per unit)	215,000		215,000	
- Maintenance (€7	,15/m²)	443,300		443,300	
- Loss-of-rent-risk (2,0	%)	<u>56,000</u>	714,300	56,000	714,300
<ul> <li>Total annual expenditure</li> </ul>			2,783,700		3,575,700
Rent per month:		€3,76/m²		€4,86/m²	
Annual rental revenues (at fu		2,797,440		3,615,840	





#### **Result:**



In relaxed housing markets with a diversity of housing offers, the owner has to be careful in planning improvement measures with regard to the resulting burden (or rent)!

