

Benchmarking of operating costs: Experiences in the housing sector in Germany

Siegfried Rehberg

Verband Berlin-Brandenburgischer Wohnungsunternehmen e.V., Berlin

Reinhard Zehl

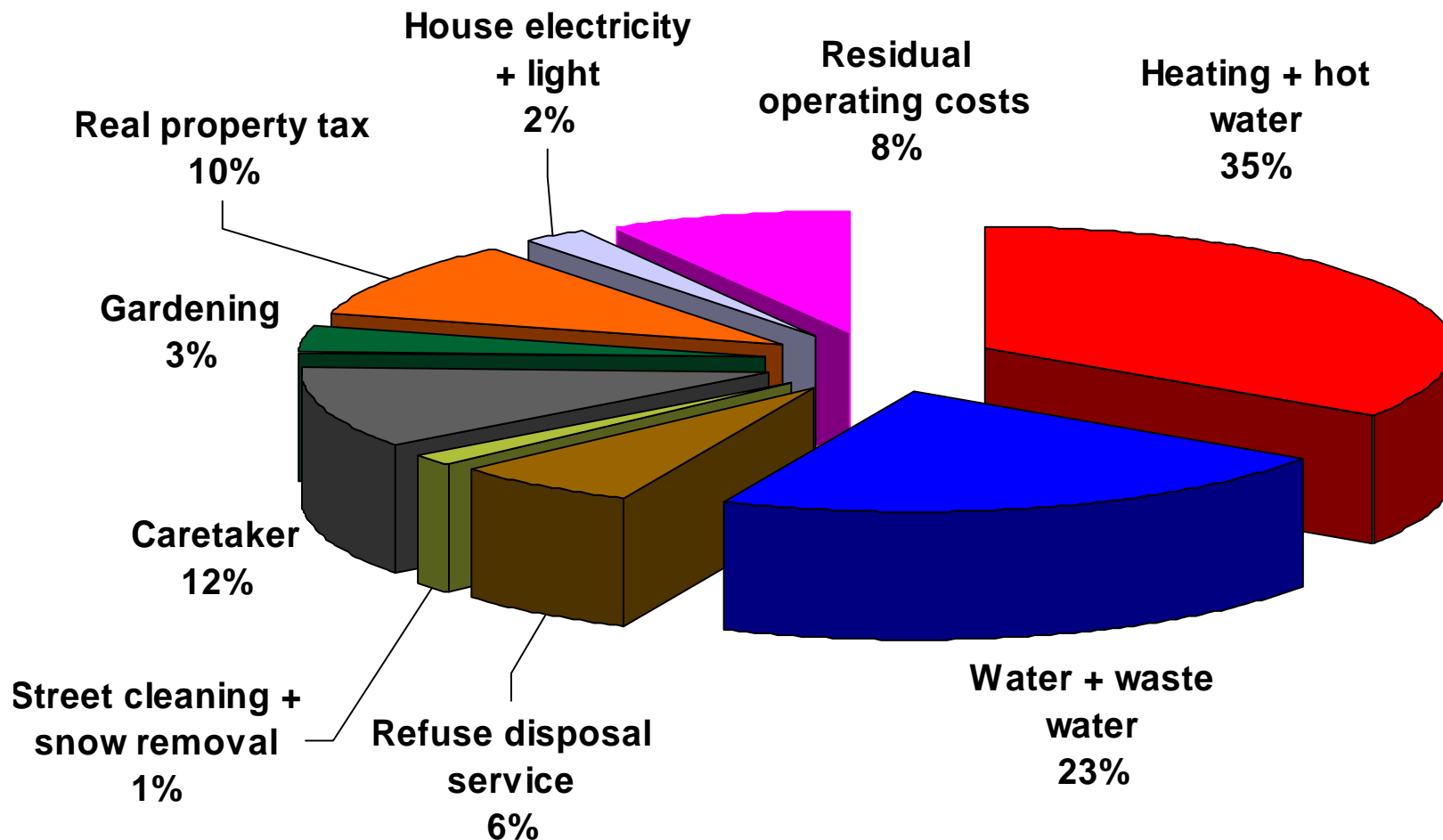
WohnCom GmbH, Berlin

Weimar, June - 8 - 2006

Outline

- **Problem**
- **Approach / Participants**
- **Implementation**
- **Results**

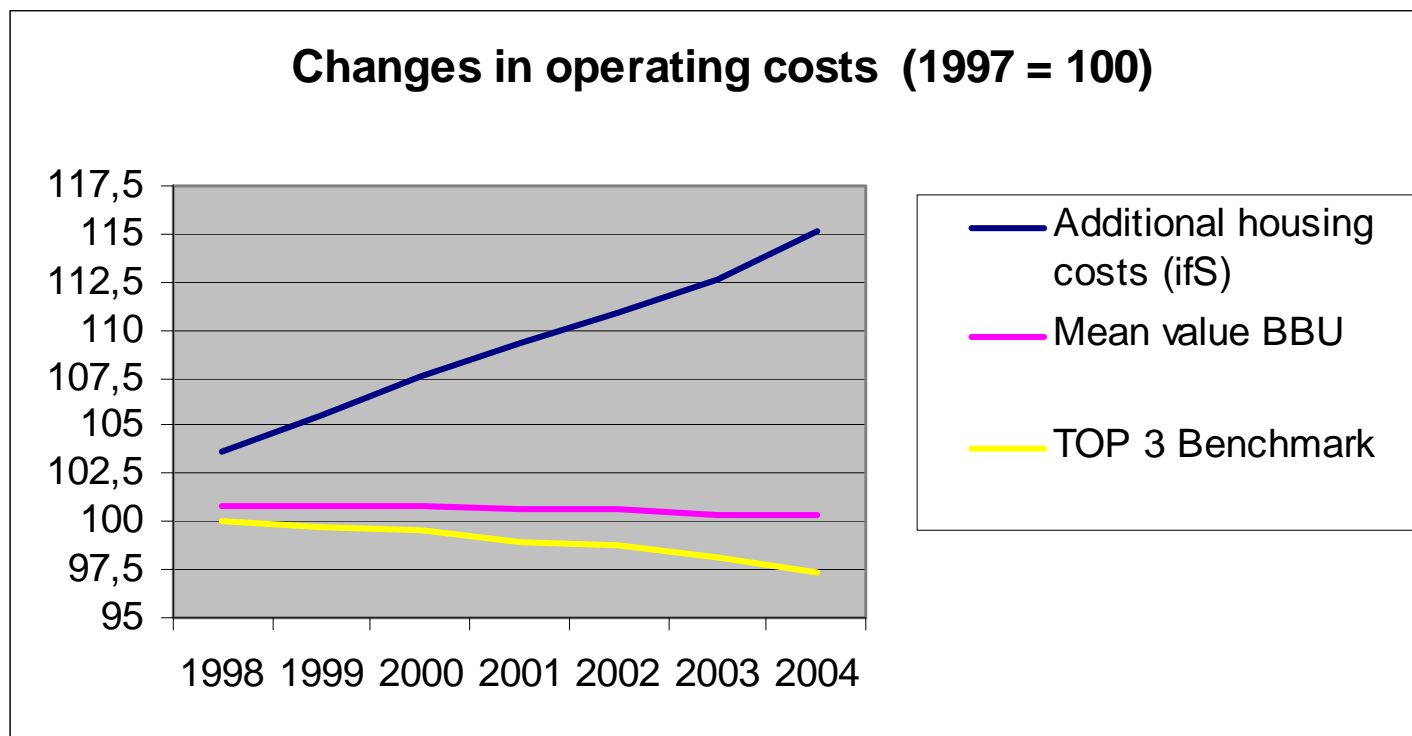
Types of costs and shares in the total operating costs in Berlin in 2004



sum = 2.01 euros/m²*month



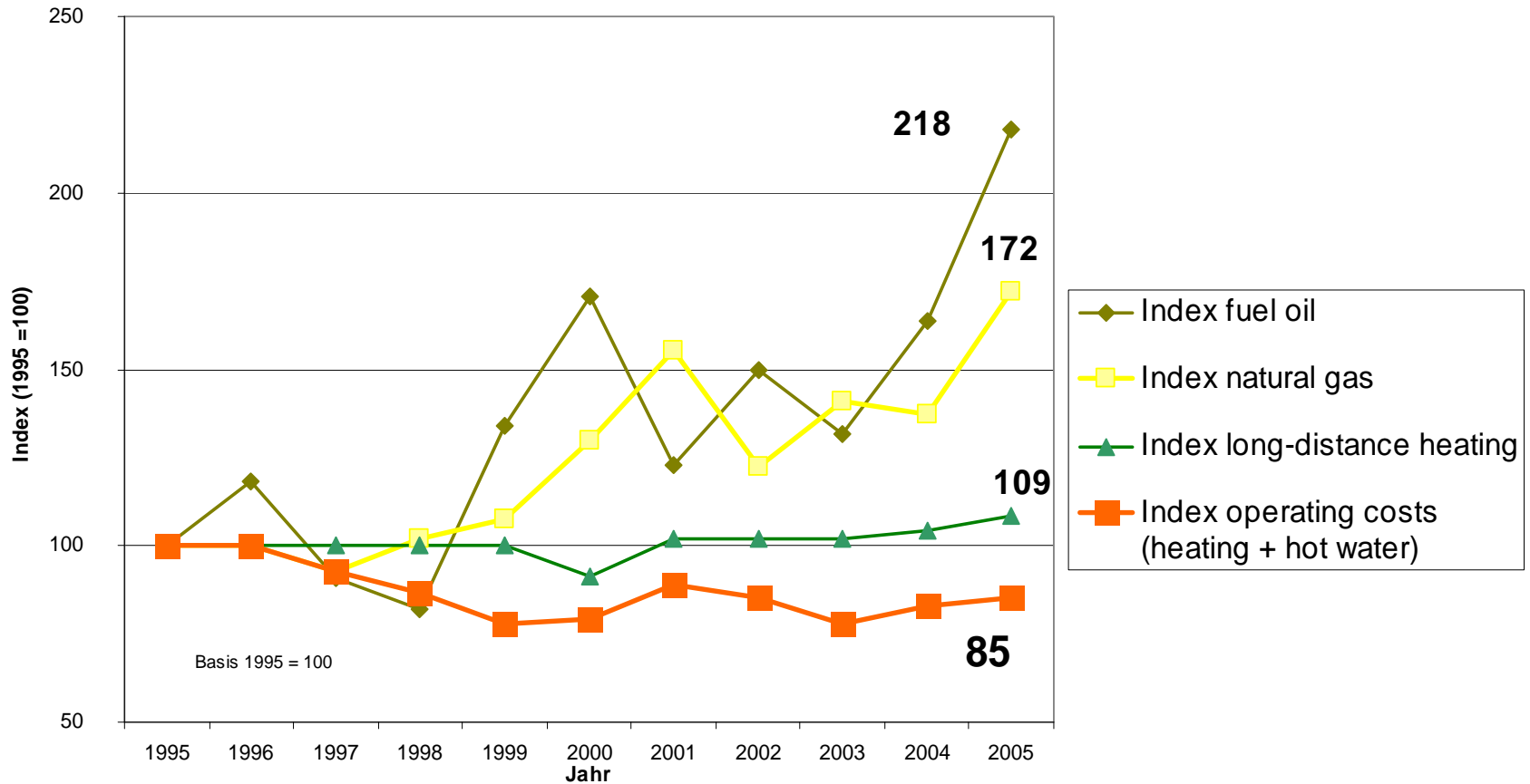
Cost reduction and "general" increase in costs



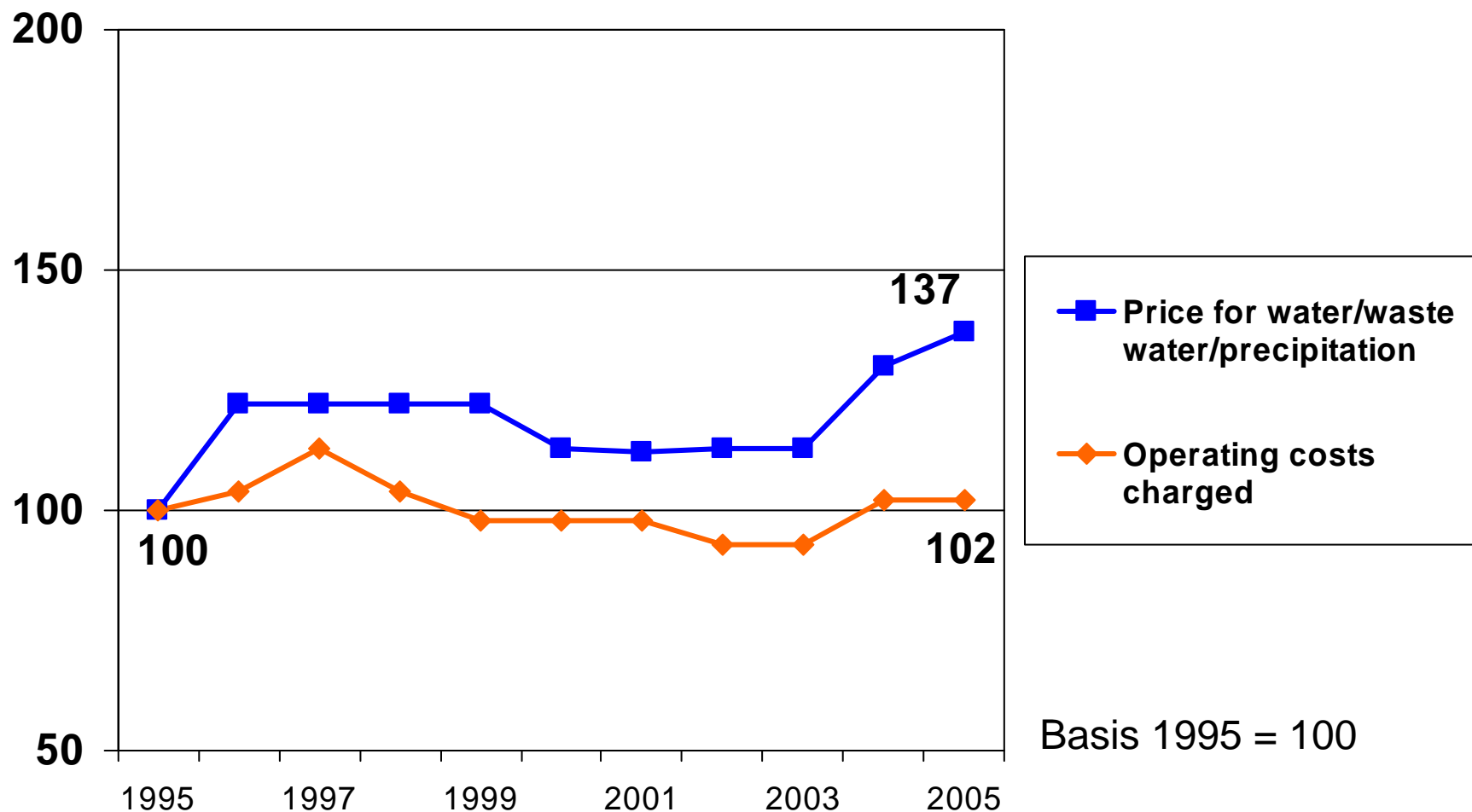
General cost development and optimized operating costs

Due to successful cost management, the Benchmarking users were able to counter the general trend by slowing down cost increases or even reducing costs effectively.

Development of energy prices and operating costs for heating/hot water of BBU member companies in Berlin



Index of water prices and operating costs for water / waste water / precipitation of BBU member companies in Berlin





Initiative Berlin-Brandenburg and summary of costs

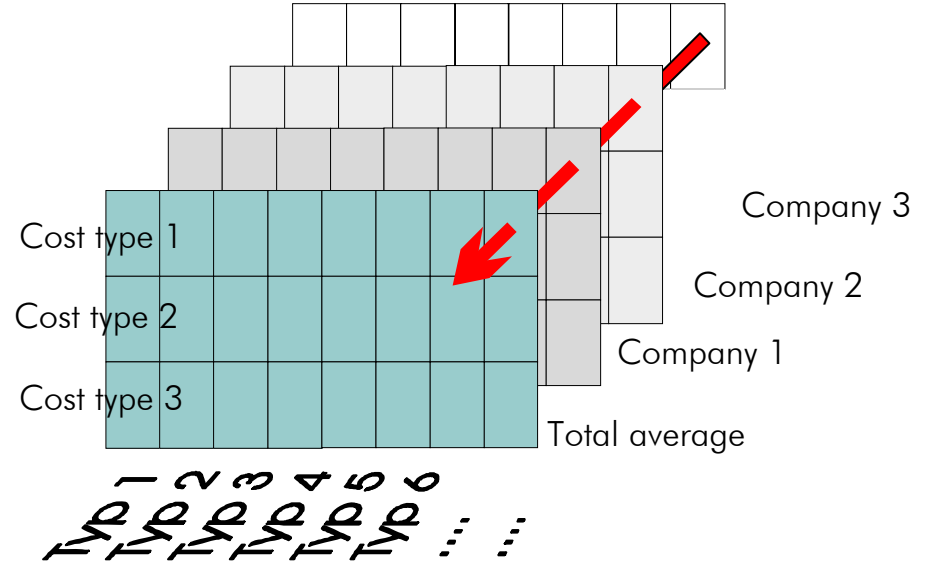
1. II. Calculation regulation

2. BBU / WohnCom working group (1998)

3. Regional working groups of the associations to establish comparisons of operating costs

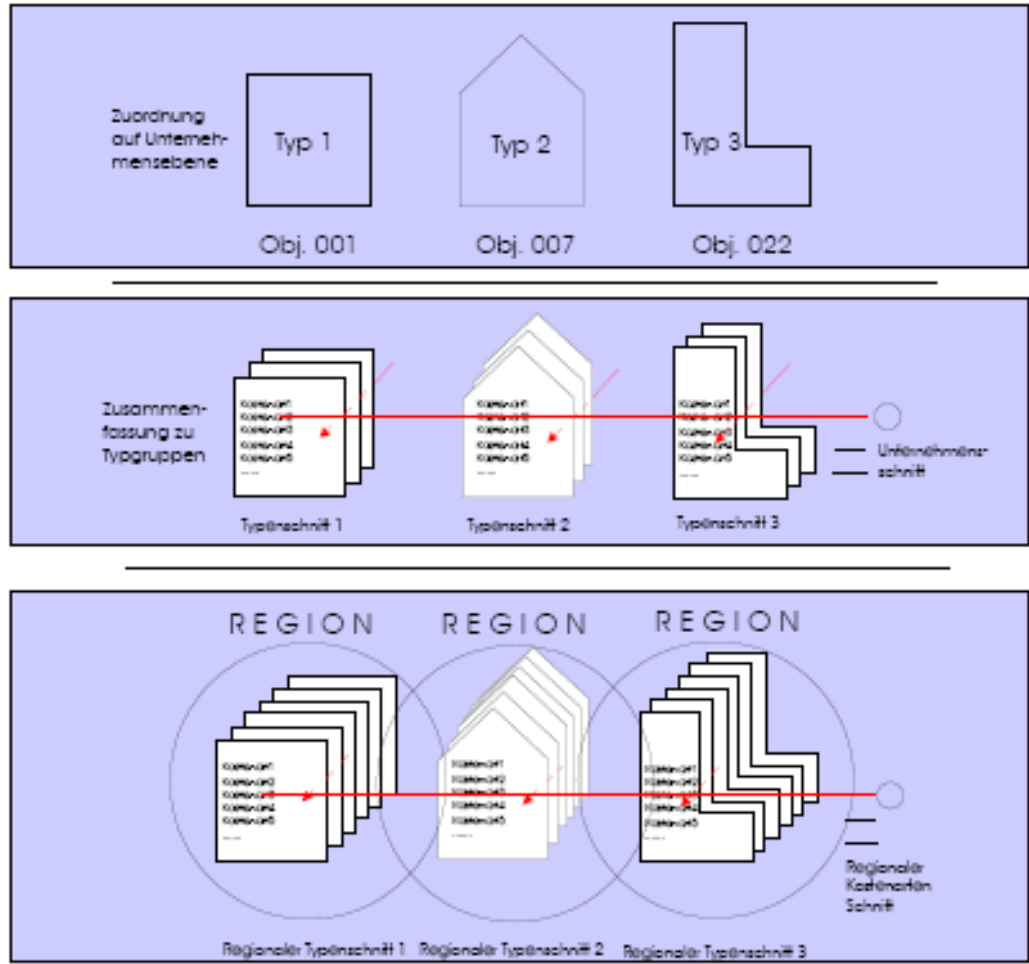
4. Working group GdW head Prof. Bach

5. Geislinger Konvention (2001 to 2002)





Benchmarking - Concept (type classification and mean values)





Course of optimization

Establishing transparency

Structure Data collection Plausibility

Benchmarking

Internal and external comparisons

Variance analysis

Causal research History

Initiating measures

Best practice Documentation

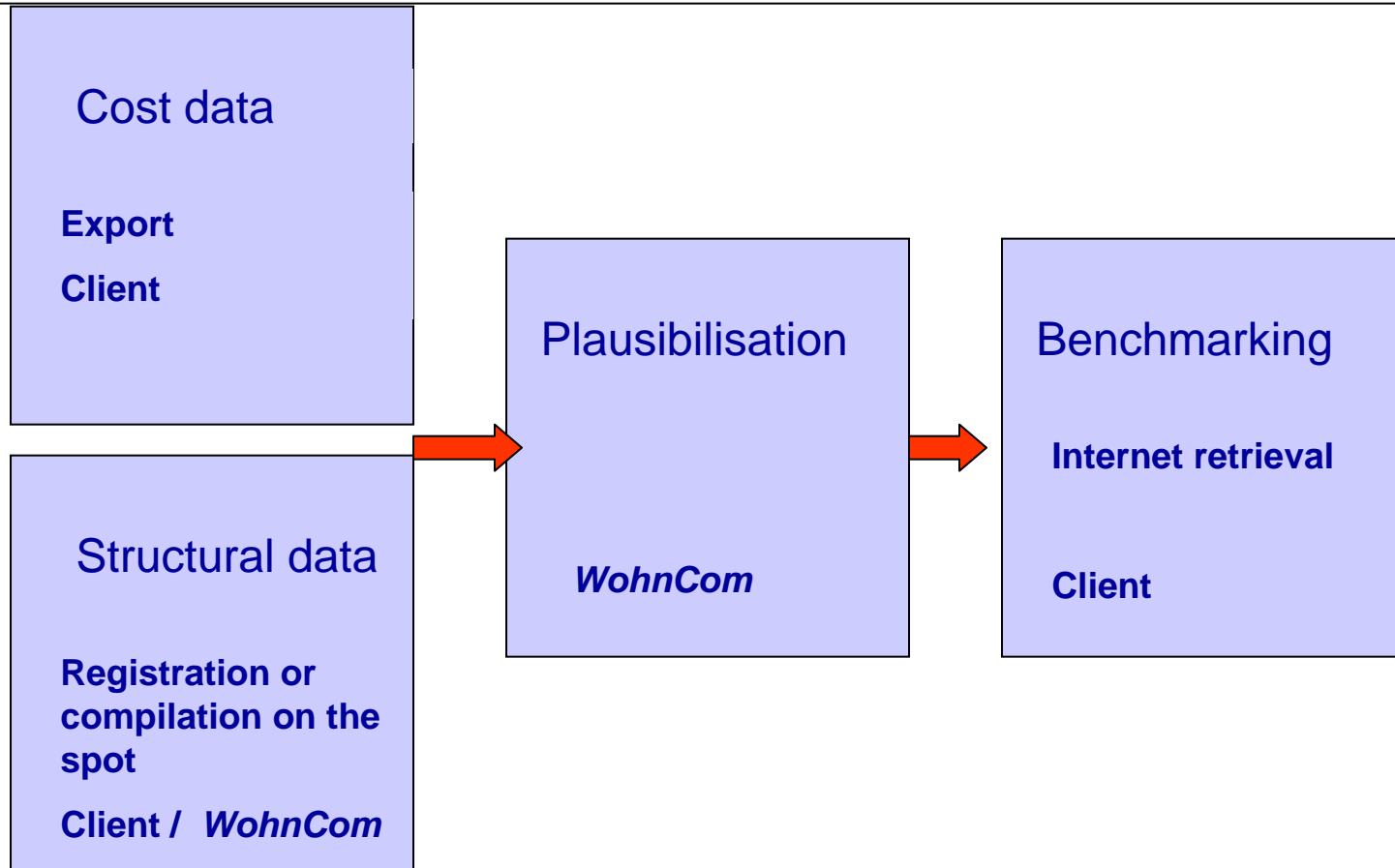
Reviewing success

Target achievement / Target agreement





Participation and course of Benchmarking Analysis





Benchmarking - Concept (evaluation example)

Analysis via internet



*HU = housing unit

Benchmarking - Concept (evaluation examples)

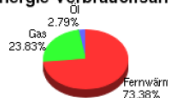
Analysis via internet – Energy consumption and CO2

CO2 Monitoring des Jahres 2002 für alle Objekte und Energieträger

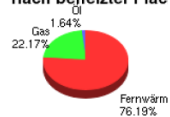
Objekte	Wohnfläche in qm	Energieträger	CO2_F_Heiz	CO2_Heizung in Tonnen
Alle Objekte	770.799,18			18.057,49
5162	18.085,98	Gas	0,24	761,67
4822	12.221,64	Gas	0,24	590,31
7461	14.101,06	Gas	0,24	441,52
3833	12.748,00	FW	0,24	379,75
3764	12.382,17	FW	0,24	368,86
4799	17.850,38	Gas	0,24	331,86
3905	7.391,56	Öl	0,31	301,13
4803	26.914,22	Gas	0,24	276,79
3746	9.906,50	FW	0,24	234,93
3890	7.303,83	FW	0,24	231,88
3704	7.086,04	FW	0,24	217,37
3907	7.296,32	FW	0,24	214,70
3911	8.062,59	FW	0,24	212,50
3886	7.211,62	FW	0,24	211,02
3705	7.080,19	FW	0,24	192,98
3871	7.210,60	FW	0,24	192,28
3812	8.179,25	FW	0,24	191,26
3909	6.642,98	FW	0,24	189,51
3823	8.350,05	FW	0,24	184,29
3729	4.919,17	Öl	0,31	182,09
3824	7.206,27	FW	0,24	178,11
3778	7.280,27	FW	0,24	175,95
3910	4.929,93	FW	0,24	171,20
5292	3.368,75	Gas	0,24	168,64
3906	4.991,97	FW	0,24	157,45
3896	4.922,73	FW	0,24	156,28
3901	4.843,47	FW	0,24	153,64
3897	4.834,71	FW	0,24	149,63
3899	4.917,33	FW	0,24	147,29
3895	4.814,84	FW	0,24	141,98
3730	4.911,23	FW	0,24	140,75
3879	4.432,56	FW	0,24	139,49
3864	4.915,10	FW	0,24	133,21
3872	4.445,16	FW	0,24	132,49
3893	4.862,23	FW	0,24	131,94
3880	4.370,01	FW	0,24	128,86
3885	4.896,78	FW	0,24	127,30
4832	3.932,11	Gas	0,24	124,17

Mandant: test

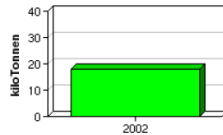
CO2-Emissionen na Energie-Verbrauchsna



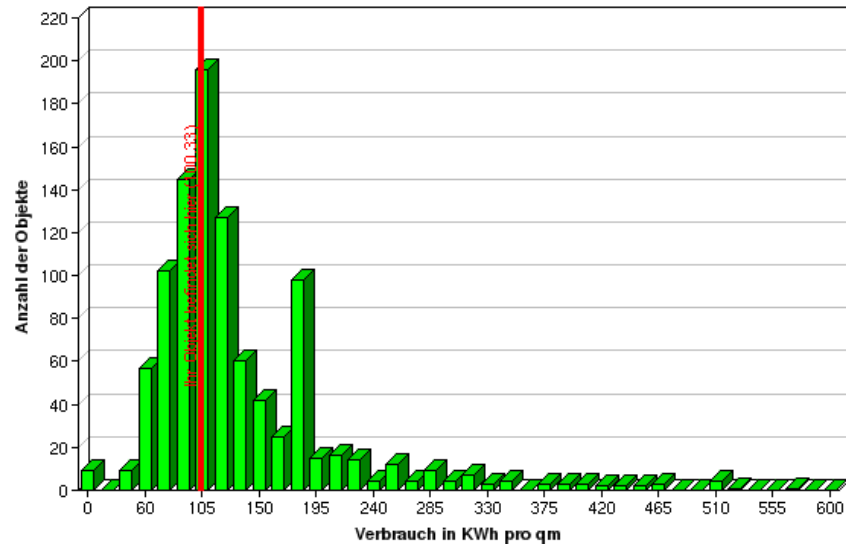
Energieträger-Ante nach beheizter Fläc



Jahresübersicht CO2



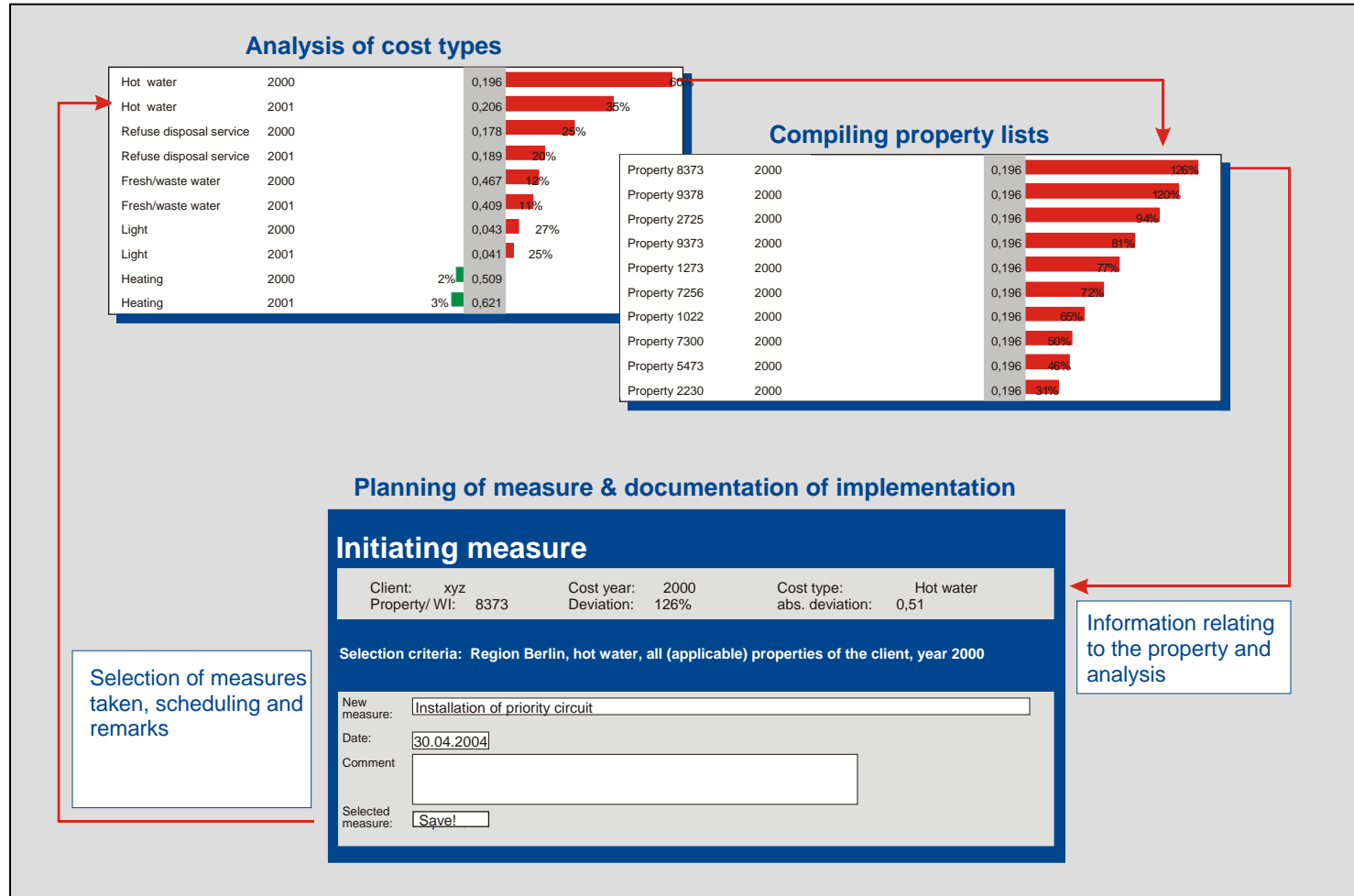
Energietraeger FW alle Typen im Jahr 2002



**Evaluation examples from
www.energy-bench.com**

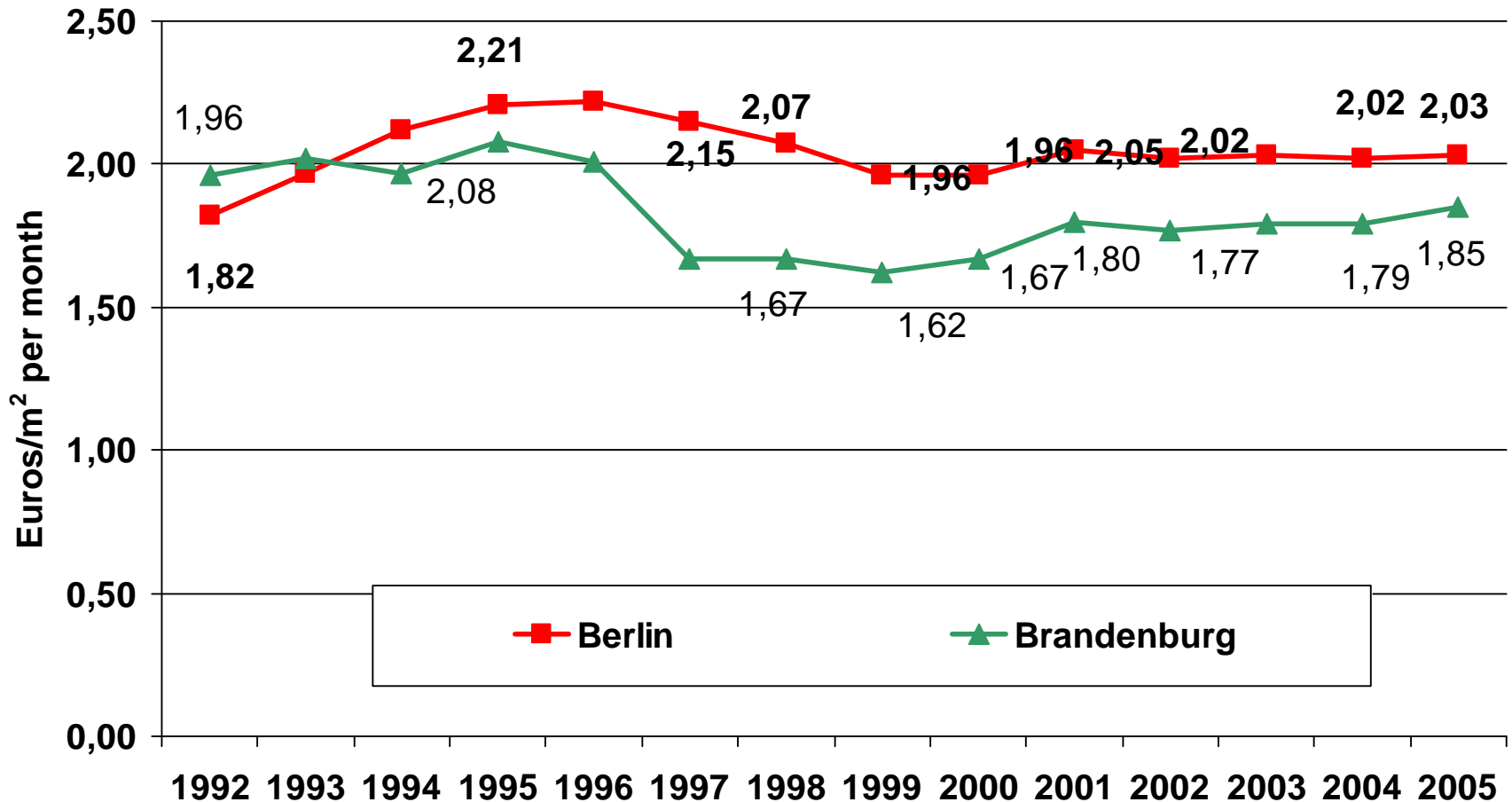


Benchmarking - Concept – Extension through “Set of Measures“



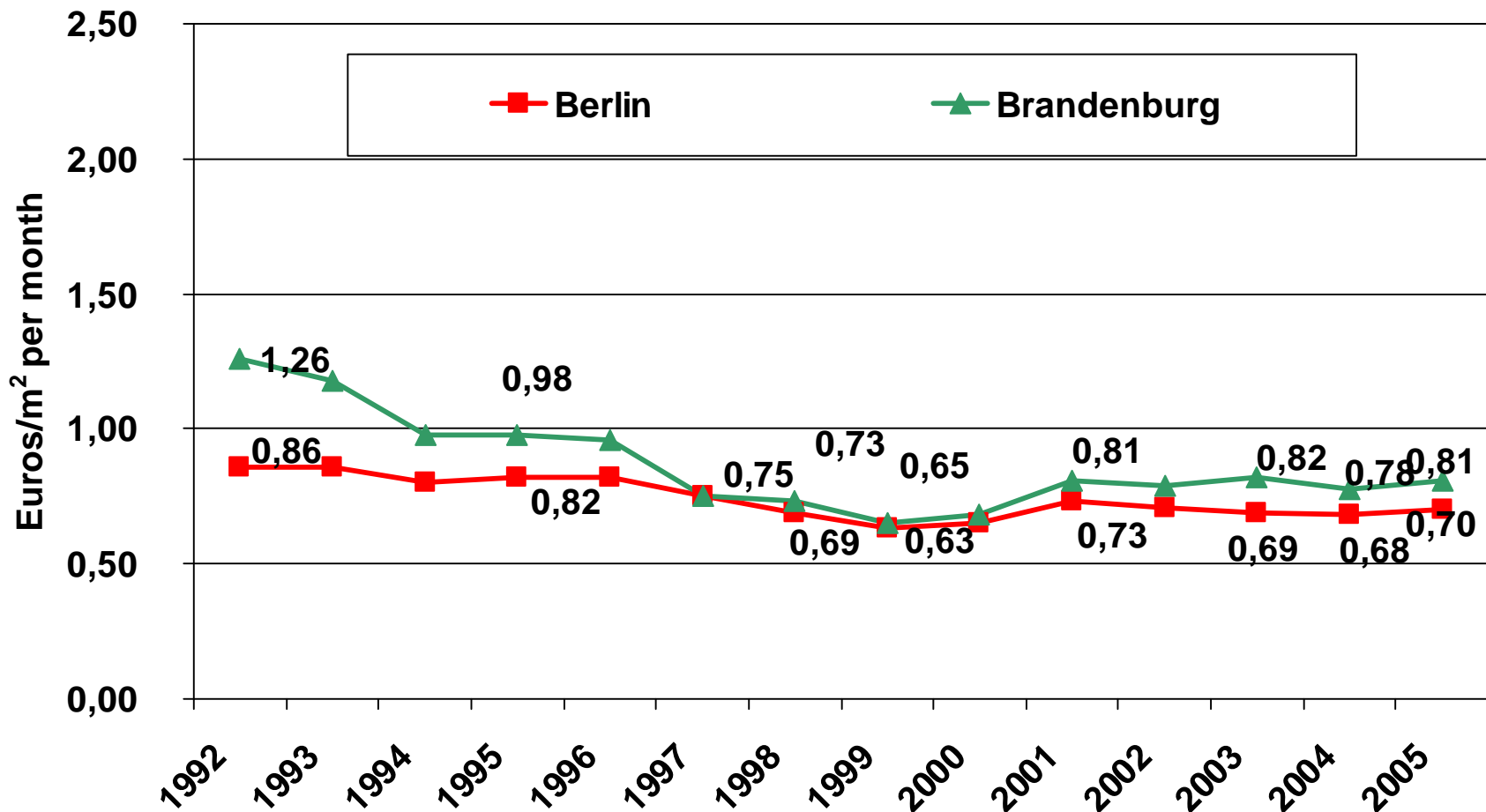
Average total operating costs of the housing stock

(Basis: 190 Housing enterprises, 610.000 flats;
Annual statistics of the BBU and mean values of operating costs of housing companies - without lifts)



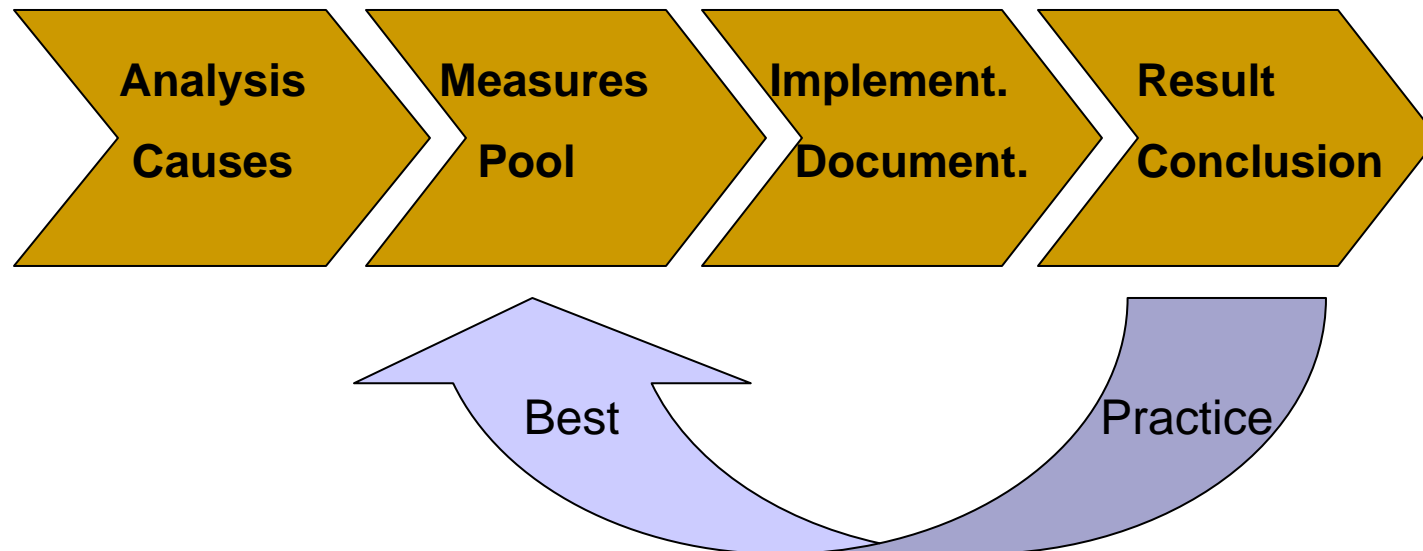
Average warm operating costs of the housing stock

(Basis: 190 Housing enterprises, 610.000 flats; Annual statistics of the BBU and mean values of operating costs of housing companies - without lifts)





Benchmarking – Achievements of the competence pool



The “knowledge“ gained from the measures or their results will be automatically integrated in the measures pool and makes simple measures in rated form to best-practice proposals.

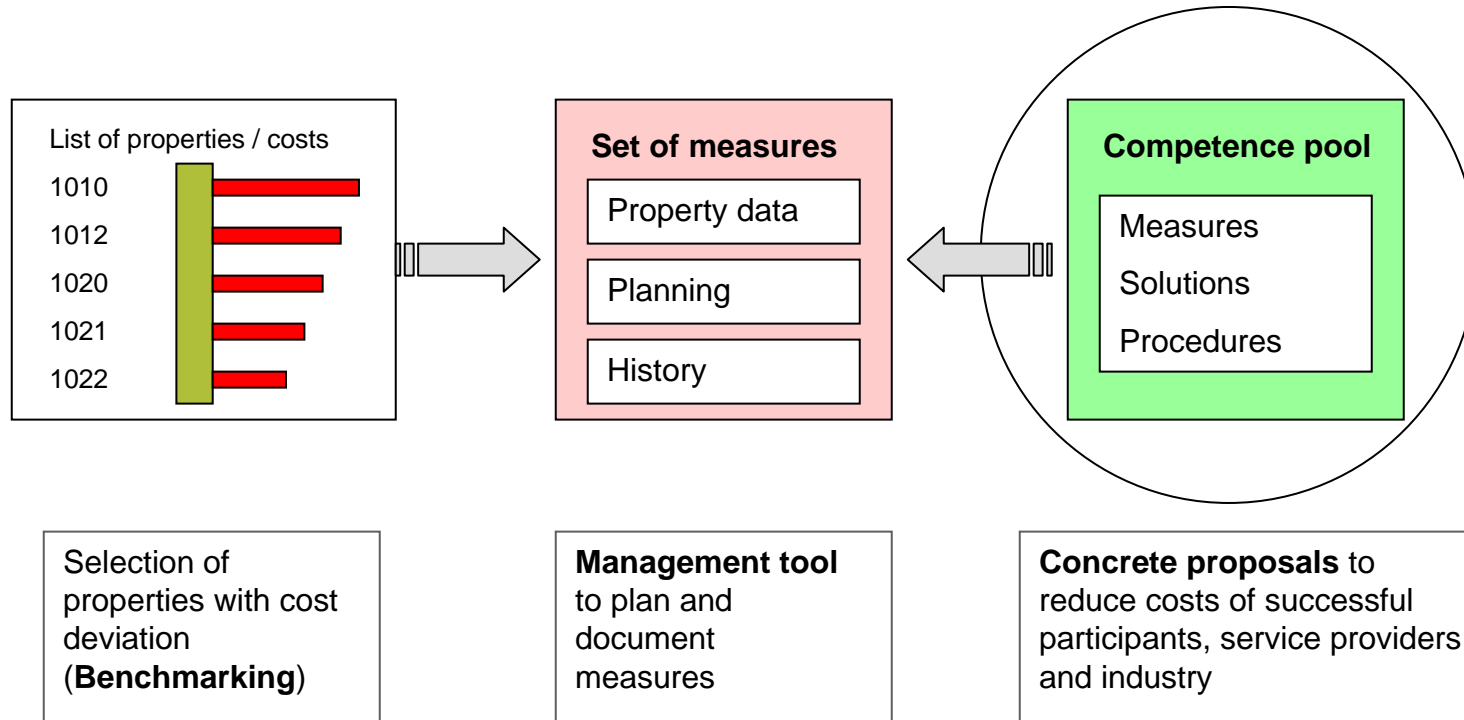
Know how in two areas:

Firstly optimization approaches = which measures ? (Professional competence)

but secondly = how to implement in organisations ? (Method competence)



Benchmarking – Success of the competence pool



Benchmarking - Concept

Internet-based evaluation

Anonymous data processing

Integration in process courses

Regional specifications

Moderated working groups of users

Work in associations