

Energy efficient housing in large housing estates



Bundesinstitut
für Bau-, Stadt- und
Raumforschung

im
Bundesamt für Bauwesen
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New impulses from a nation-wide competition

Energy Efficient Housing in the UNECE Region
23 - 25 November 2009, Vienna

Topics



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- > Energy efficiency in housing
 - > Goals of EU
 - > Goals of German Government
- > Strategies of the German Government
- > Challenges for the housing industry
- > Competition – Approach
- > Competition – Participants
- > Competition – Results
- > Competition – Recommendations



Energetische Sanierung
von Großwohnsiedlungen

Energy efficiency in housing



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> **Goals of EU**

1. Kyoto Protocol (1997): Germany 2008 – 2012 decreases 21% of its greenhouse gases compared to 1990
2. EU Council decision (2007) + EU climate change package (2008):
 - 2020 Decrease of greenhouse gases of 20% resp. 30%
 - 2020 Proportion of renewable energies of 20%
 - 2020 Decline of consumption of primary energy of 20%

> **Goals of the German Government**

2020 Decrease of greenhouse gases of 30% resp. 40%

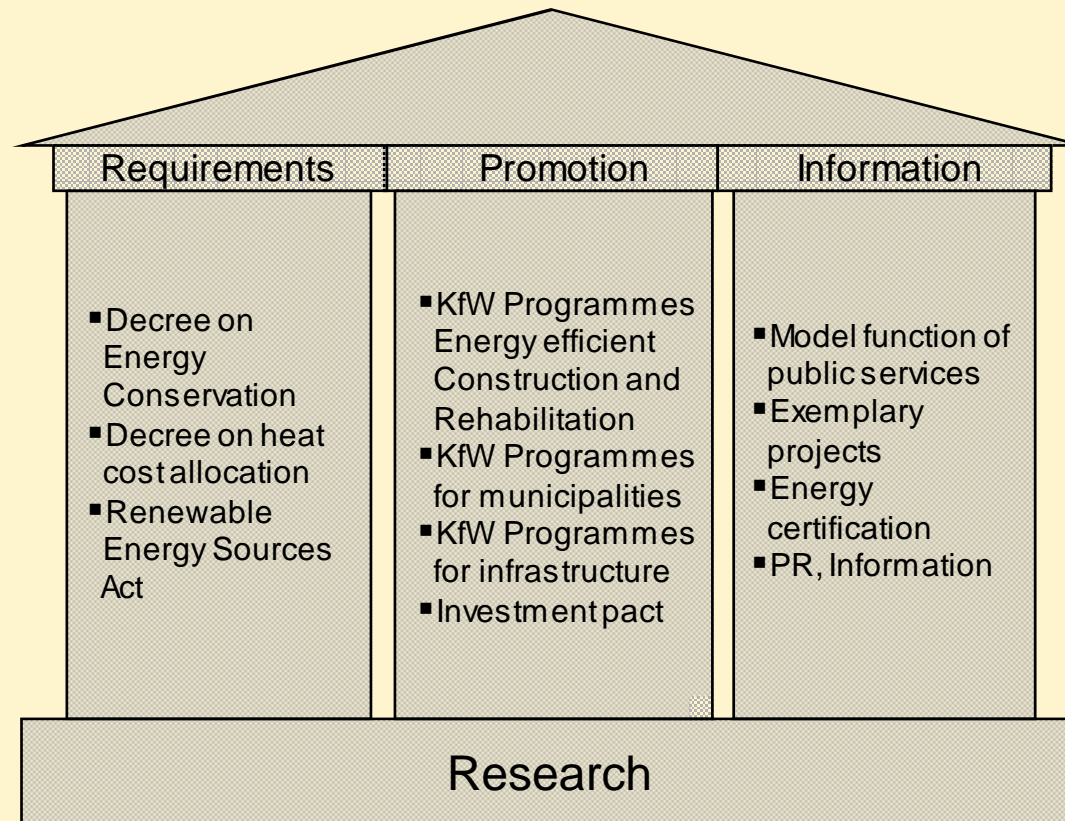
2020 increase of proportion of renewable energies at heat market of 14%

Strategies of the German Government for more energy efficiency



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Challenges for the housing industry

- > Market settings differentiate by regions and city districts
- > Simultaneity of shrinkage and growth – also in city districts/ quarters
- > Shrinking population, on-going aging process, social stability
- > Growing vacancy rates in structurally weak areas, relaxed housing markets and inadequate housing stocks
- > Above average additional costs in non-renovated stocks
- > New buildings: growing energetic standards
- > Existing stocks: preservation and modernisation but also market-adjustments by demolition and upgrading of surrounding

An approach focused only on single buildings does not reach far enough!

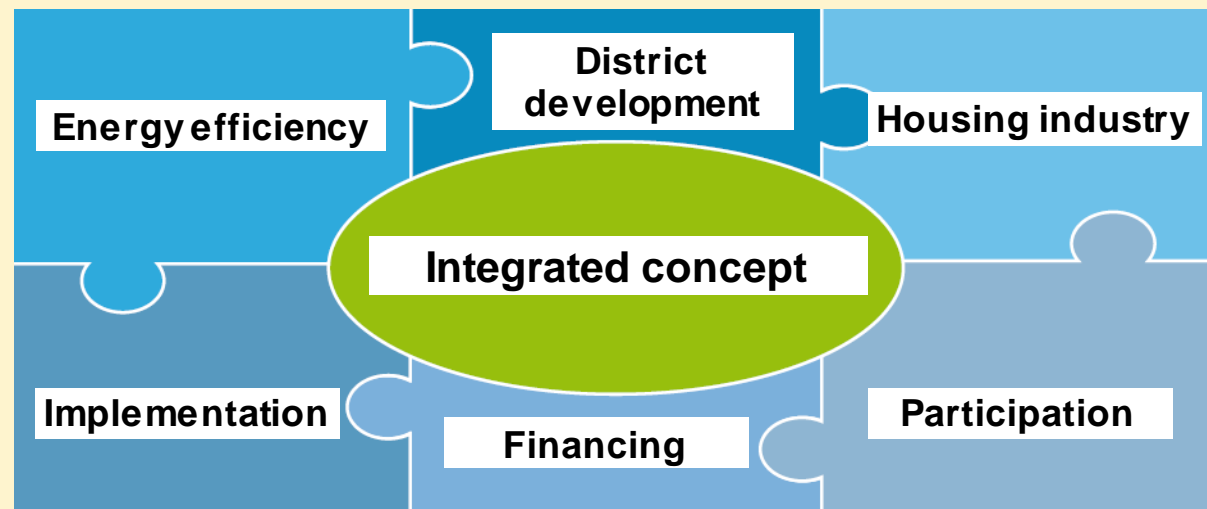
Competition „Energetic Renewal in Large Housing Estates“ - Approach



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- > competition „Energetic Renewal in large Housing Estates“ from January until July 2009
- > strategies of housing associations, co-operations and private owners to develop their stocks (minimum 1.000 units)
- > approach of energetic renewal: not only focused on single dwellings but whole quarters
- > bottom-up approach: integrated concepts worked on by actors of housing industry
- > Thinking holistically!
- > promoted by federal government



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Competition „Energetic Renewal in Large Housing Estates“ - Participants

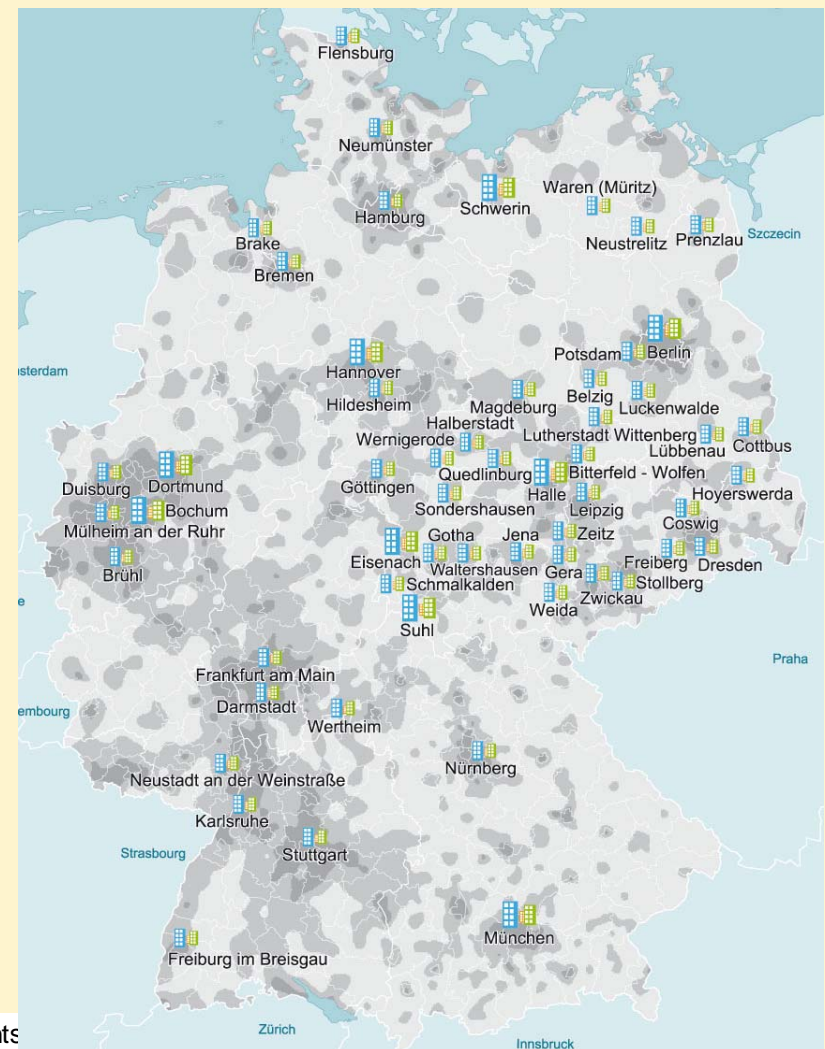


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- > 76 contributions
- > from 59 different cities
- > size of areas: 600 to more than 15.000 units (in total: 200.000 units)
- > housing associations and co-operations are predominant
- > 5 gold, 10 silver, 14 bronze awards
- > 19 concepts with recommendation for realisation
- > subsidised by means of economic stimulus package
 - 2,2 m Euro for compilation of concepts
 - 2,2 m Euro for prices/ implementation

Regional origin of participants



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Competition „Energetic Renewal in Large Housing Estates“ - Results



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- > Great reaction and engagement
- > Great impulses for new, integrated approaches
- > Participation of inhabitants of great relevance
- > Competition as start signal for companies' action – implementation during the forthcoming years
- > Companies want to continue this process actively – learning effect
- > Support for participating companies by exchange of information
- > Transferability of results should be ensured:
public relation and
scientific research during
implementation of concepts



Competition „Energetic Renewal in Large Housing Estates“ - Conclusion



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- > A holistic approach needs an initiative and an initiator!
- > Socio-politic aims have to be in accordance with economic needs
- > Economic efficiency is of greatest importance, therefore embedding in promotional programme is advantageous
- > Private owners of large housing estates are difficult to reach, even with public campaigns
- > The realised and planned strategies of concepts in the competition show that actors should develop and choose the instruments to implement holistic approaches

=> Actors of housing industry need binding target-settings

**Thank you very much for your
attention!**



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Contact:

Rolf.Mueller@BBR.Bund.de

Tel.: 022899 - 401 1201

Nadine.Walter@BBR.Bund.de

Tel.: 022899 - 401 1656