

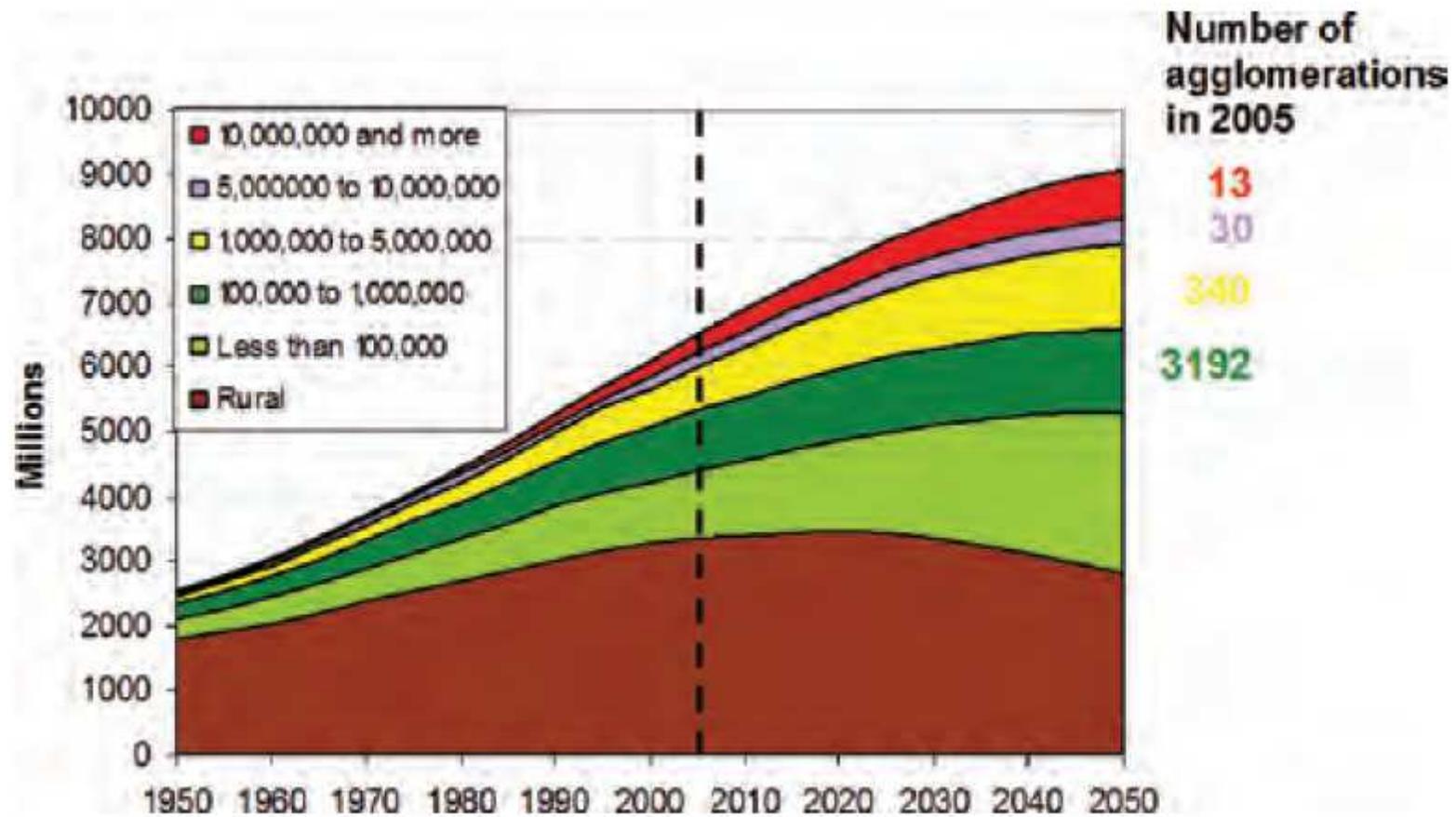
**Seminário sobre Inventários de Emissões de Gases de Efeito Estufa para Cidades - GPC**

**Palestra magna**

**A contribuição das cidades no enfrentamento ao aquecimento global**

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23/05/2013



**Table 18.3** | Population in urban locations by city size class in 2005.

Size class	Total City population	Proportion of total urban population
	2005	
	<i>Millions</i>	<i>%</i>
Total urban population	3,167	100
<100,000	1069	34
100,000–1,000,000	932	29
1,000,000–5,000,000	673	21
5,000,000–10,000,000	209	7
>10,000,000	284	9

Source: UN DESA, 2010.

The world is already predominantly urban, with the urban environment housing more than 50% of global population and accounting for even larger shares in economic and energy activities. Almost all future population growth of some three billion people to 2050 will be absorbed by urban areas. This urban growth is the combined result of natural increases in urban populations plus migration from rural to urban areas such that the increase in rural population in many developing countries will be overshadowed by population flows to the cities.

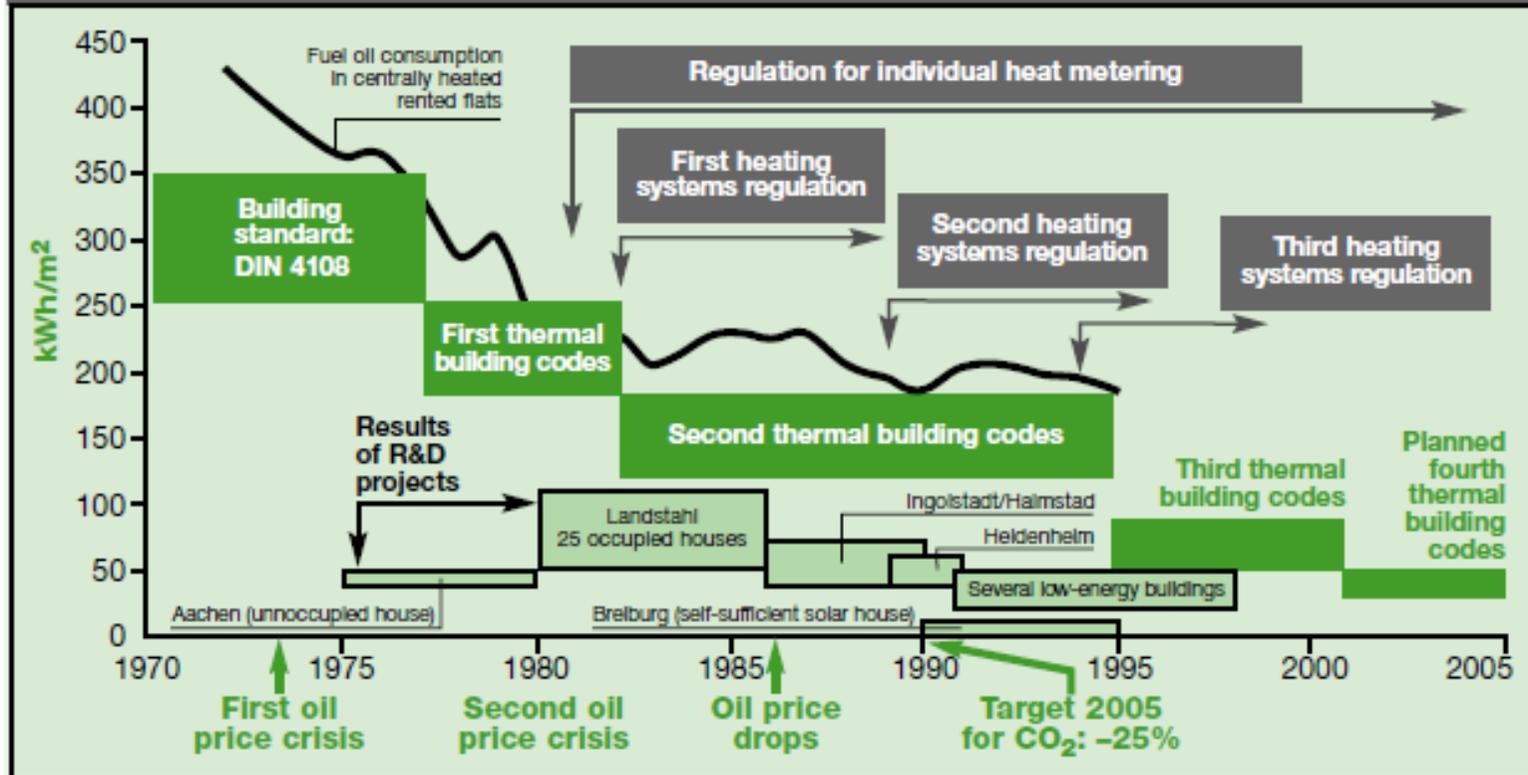
## Urbanization

- Currently, about half the world population lives in urban areas, which also account for an overly large share of global economic output and energy use (an estimated 60–80% of the global total).
- Projections invariably suggest that almost all future population growth of some three billion people by 2050 would be absorbed by urban areas, which would also account for a majority of economic and energy demand growth.
- By 2050 the global urban population is expected to approach 6.4 billion people – about the size of the entire global population in 2005.
- In contrast, the global rural population would plateau around 2020 at 3.5 billion people and decline thereafter

## **Energy and cities**

- The overall design of cities and their components affect the energy use to a large degree. For buildings, energy use for thermal purposes can cost-effectively be reduced by 90% or more, as compared with current standard practice.
- Next to buildings, urban density, form, and usage mix are also important determinants of urban energy use and efficiency, especially in transportation.
- Avoiding spatial lock-in into urban sprawl and ensuing automobile dependence should, therefore, be an important urban policy objective.

Interrelation between research to lower costs, proof of technical feasibility, and heating and insulation regulation in Germany



Source: EC, 1999b.

# History of Commercial Building Model Energy Codes

