

FairKlima Capital

Building Future Cities

Affordable & Sustainable Housing
Analysis for China





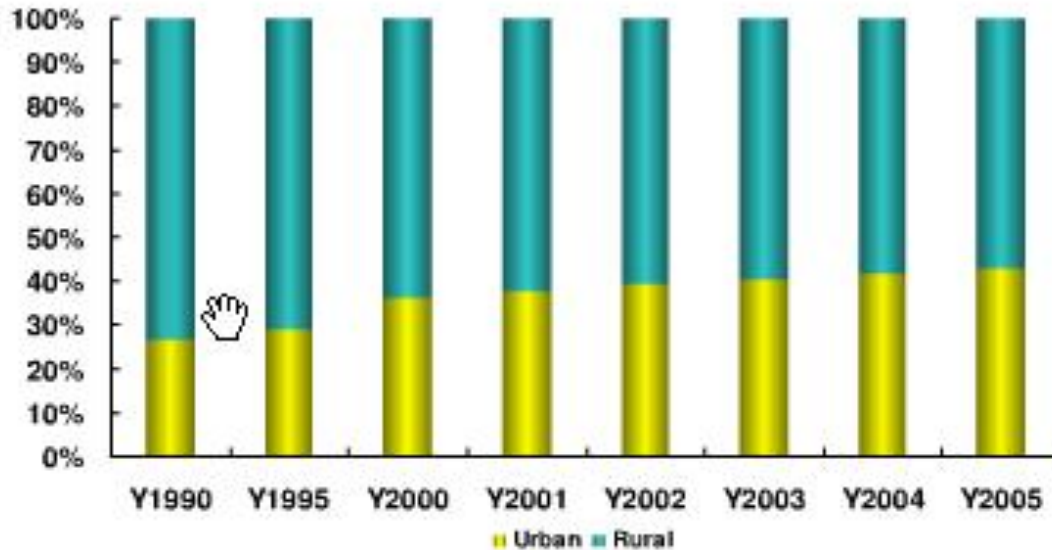
Daniel Foa, Caixin, December 2010







The Relevance of Cities



- Every year about 18 million people flood from rural areas to cities during the past four years
- The trend is not expected to stop in the near future.
- The Proportion of Urban population is estimated to reach 75% by 2050

Year	Y1990	Y1995	Y2000	Y2001	Y2002	Y2003	Y2004	Y2005
Urban (%)	26.41	29.04	36.22	37.66	39.09	40.53	41.76	42.99
Rural (%)	73.59	70.96	63.78	62.34	60.91	59.47	58.24	57.01

SOURCE:
National
Bureau
of Statistics,
China, 2006

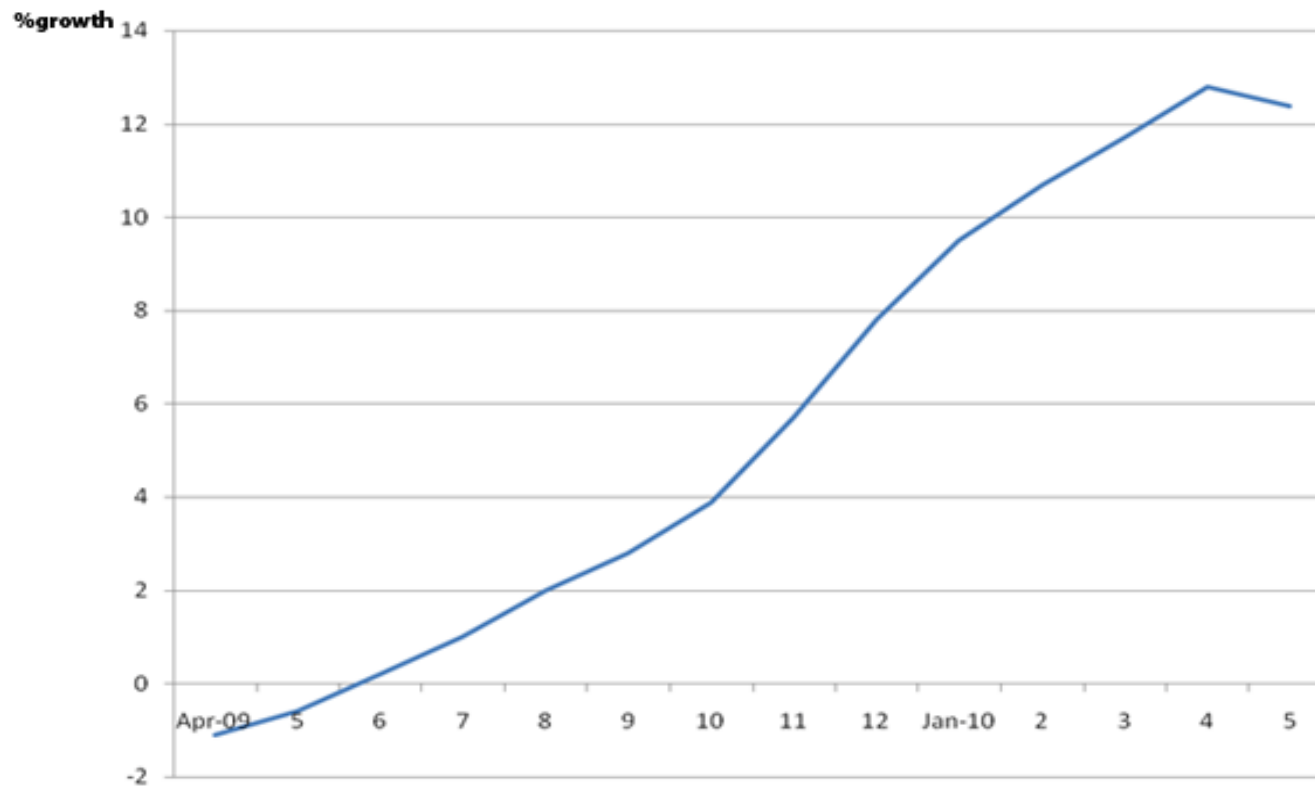
Housing Market Conditions

- Home prices in China rose 25.1% year on year in 2009
- Currently, residential real estate development is geared to high-end and high-margin properties
- GDP contribution by real estate can constitute up to 25-35% of the GDP (in leading cities)

Housing Market Conditions

Illustrated

Year over year home price growth in 70 large and medium-sized Chinese cities



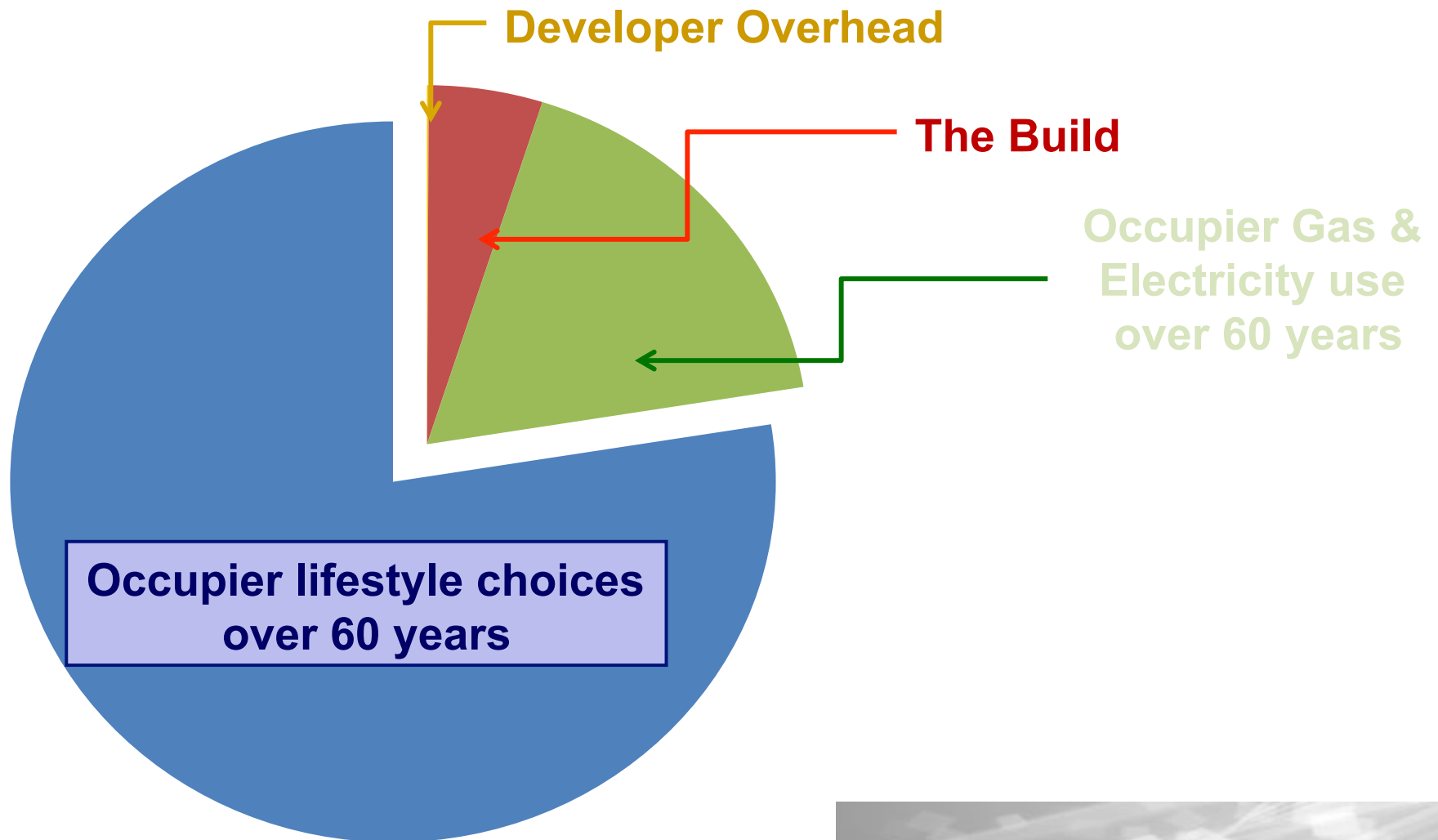
China's Urbanization

- Currently, China's urbanization rate stands around 47%
- The rate could rise to 65% by 2030, according to the China Development Research Foundation
- Equivalent to 400 million migrant workers over the next two decades

Goal and Targets

- China plans to build as many as 5.8 million affordable, low-rent houses, as well as to reconstruct dilapidated houses for 1.2 million rural households this year (2010)
- China has set an aggressive 2011 construction target of 10 million subsidized, affordable housing units for local governments
- 300 million square meters of *solar water heating capacity by 2020*

Challenges: Lifetime contribution to CO2 emissions





Defining “Sustainable Housing”

- Housing projects labeled as
 - Green Building
 - Eco-friendly Residential Housing
 - Environmentally-friendly Residential Housing
- Aimed at saving natural resources, energy conservation, environmental protection & healthy living

Obstacles Solutions



- Collusion between property developers and local governments (land sales accounting for as much as 30% of their annual revenues)
- Land sold on highest price basis. Environmental leadership not compulsory
- Lack of financing incentives for green/affordable building by the government
- Government should require developers of affordable housing to have a long-term stake in the operating cost of the buildings
- Government should encourage banks to step up their green financing programs for customers to purchase green homes.
- Banks should offer a mix of lower interest rate “green loans” that will lower TCO further and also larger loans that will help reduce the upfront cost to purchasers.

Financial Sources

1. Central government;
2. Investment from property developers;
3. Local governments' land revenues;
4. New Era City investment funds

Work-in-Progress

- China has invested RMB 470 billion in affordable housing projects to date in 2010, equal to approximately 60% of this year's target;
- The central government has selected 28 cities, such as Beijing, Tianjin and Chongqing, to pilot low-income housing construction with loans supported by the housing public accumulation fund system;
- Local governments are experimenting with new ways of funding the projects, including REITS, and the central government has budgeted over RMB 60 billion to transfer to local governments.

Sustainable Affording Housing Projects

- Beijing government vowed to build or purchase 134,000 units of welfare housing in 2010.
- Shanghai government pledged to build 700,000 welfare apartments by 2012.
- A Commission of Housing and Urban-Rural Development regulation, enacted on September 19, 2008, requires government low-income housing projects utilize clean energy equipment.
- Ministry of Housing and Urban Development, a total of 133 projects covering affordable housing, rebuilding shanty areas and public rental housing have been approved as pilot projects in this initiative, with the total amount of loans reaching around 49.3 billion CNY.



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