



PRC: The Role of Urbanization in Sustainable Development

Li Shantong

**Department of Development Strategy and
Regional Economy,
Development Research Center of the State
Council**

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Summary

- **Role of cities in PRC's sustainable development;**
- **The boosting effect of urbanization in economic growth;**
- **Main problems facing PRC's urbanization process;**
- **Policy suggestions for promoting a healthy urbanization.**



The Role of Urbanization in the PRC's Sustainable Development

- Urban areas concentrate 45.7% of the PRC's population, 70% of its GDP, 50% of its total industrial output, 85% of the value added of its tertiary industry, 80% of the State tax revenue and over 90% of higher learning education and scientific research facilities;
- Urban areas are the main "contributors" of energy consumption and emissions in the country. In 2006, the energy consumption of 287 cities above the prefecture level accounted for 55.48% the total consumption in the PRC; their CO₂ emissions accounted for 54.84% of the total in the country;
- Choosing the modalities of urban development and the road to urbanization is very important for the PRC to shift its economic growth mode, promoting efficiency in resources utilization and taking the path of sustainable development.



The Boosting Effect of Urbanization in Economic Growth

- Population transfer to cities;
 - Gradual increase in the ratio of urban population to the total population;
 - Labor transfer from primary to secondary and tertiary industries.
- Changes in life style and consumption structure
- Industrial clustering toward urban areas
- Urbanization is a process of constant development of both a city area and its interrelated rural surrounds.
- The process of urbanization enhances people's quality of life as a whole.



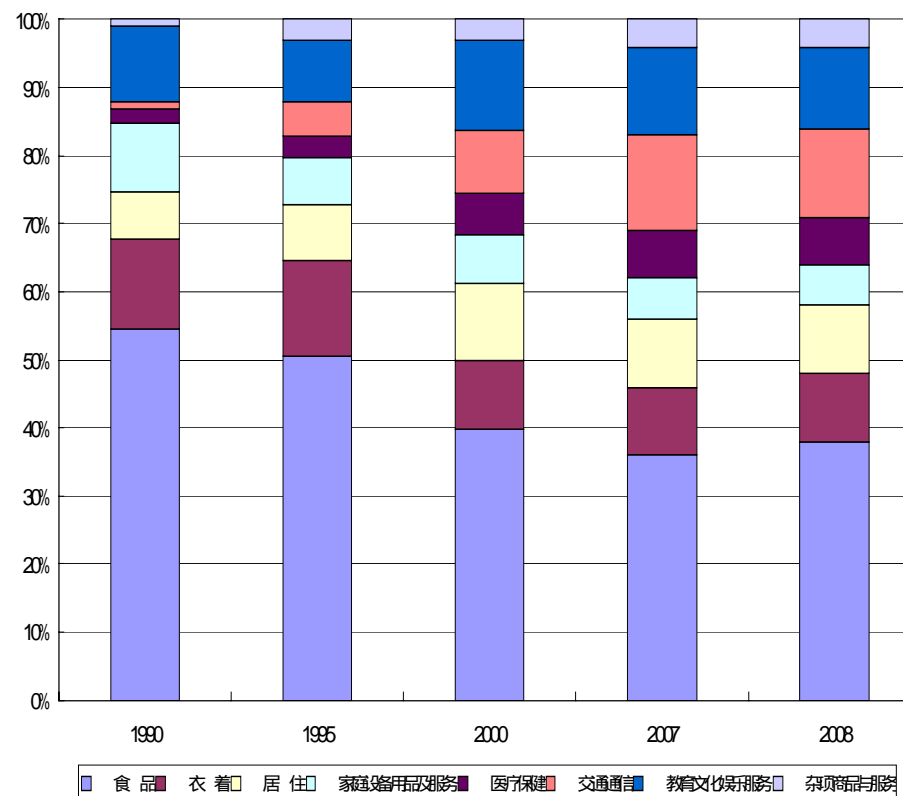
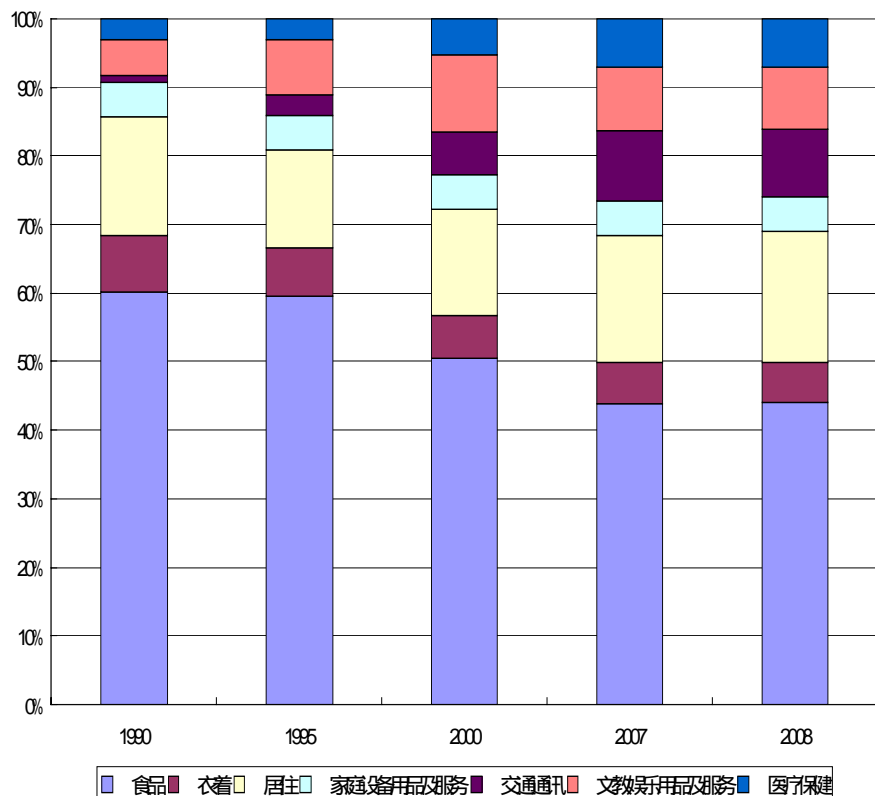
Urbanization optimizes resources allocation and raises society's labor productivity

- The transfer of labor force from low -productivity agriculture to higher productivity secondary and tertiary industries may effectively raise the productivity of the entire society.
- Over the past 30 years, the annual contribution of labor transfer to the economic growth has been, on average, 0.57 percent. In recent years, due to the accelerated development of urbanization, the contribution of labor transfer to the economic growth has shown a year-by-year increasing trend. During 1990 ~ 2008, the annual contribution of labor transfer to the economic growth was 0.7 percent on average.
- The agglomeration effect of urban areas may increase productivity.
- Effects of economies of scale and scope bring cost advantages.
- Promoting the division of labor and cooperation
- Enjoying regional and brand advantages
- The transfer of labor from rural to urban areas drove an improvement of human capital in rural areas as whole.
- The influx of large numbers of low-cost rural workers meets the needs of the cities for low-level labor; this was conducive to the rational allocation and effective utilization of the labor force, and lowered the population age structure and supply and demand costs in urban areas.



Urbanization enhanced the consumption level and structure, pulled investment demand, and accelerated the upgrading of industrial structure.

- In 2008, rural residents in the PRC allocated 69% of their total expenditure in such items as food, clothes and housing, while for urban residents the percentage was 58%. However, expenses for transportation, communication, education, culture and entertainment of rural residents was lower than that of urban residents.
- In 2007, urban residents' consumption of agro-products was 13 percent lower than that of rural residents. However, urban residents' expenditures in services was 8 percent higher than that of rural residents. This shows that with urbanization, the demand of residents for services would be on the rise, boosting economic growth through the development of the service industry.
- The savings rate of urban residents was higher than that of rural residents. In 2008, the average propensity of consumption of urban residents was 71.2%, while that of rural residents was 76.9%. The savings rate of urban residents was higher than that of rural residents by around 5 percent.



	Rural Residents			Urban Residents		
	Agro-products	Industrial Products	Services	Agro-products	Industrial Products	Service
1987	45	38	17	24	52	23
1992	43	39	18	24	49	27
2002	30	31	39	15	38	47
2007	21	37	42	8	42	50



Urbanization enhanced the consumption level and structure, pulled investment demand, and accelerated the upgrading of industrial structure.

- Growth of urban population will inevitably result in an expansion in size and an increase in the number of cities. The construction of urban infrastructure enables the advancement of urbanization.
- Urban infrastructure construction, which is a robust driver of economic growth, requires substantial amount of investment. In 2007, the fixed asset investment in municipal public utilities in urban areas reached RMB 641.9 billion, accounting for 4.68% of the total value of all societal fixed asset investment of the same period; the real estate investment reached RMB 2,528.8 billion. The two figures combined accounted for 23% of the total value of all societal fixed asset investment.



The Boosting Effect of Urbanization in Economic Growth

- Urbanization will increase the pace of PRC' economic growth. It will also boost economic growth factors such as allocation efficiency, increased savings and investment rates and enhanced human capital. Over the next twenty years, the average annual increase of 0.2 percent in the urbanization rate will boost an annual average GDP growth of 0.13 percent. By 2030, the increase in the urbanization rate by 4 percent will have brought 2.7% of increase in GDP.
- Urbanization will raise the income level of all residents and narrow the income disparity between urban and rural residents.
- The acceleration of the urbanization process will drive the transfer of rural labor to non-agricultural sectors, promoting the development of the service industry and causing a shift in production modes. By 2030, if the urbanization rate has increased by 4 percent, it will have led to 5 percent of labor transferred to non-agricultural sectors, and an increase of the service industry of 0.8 percent.

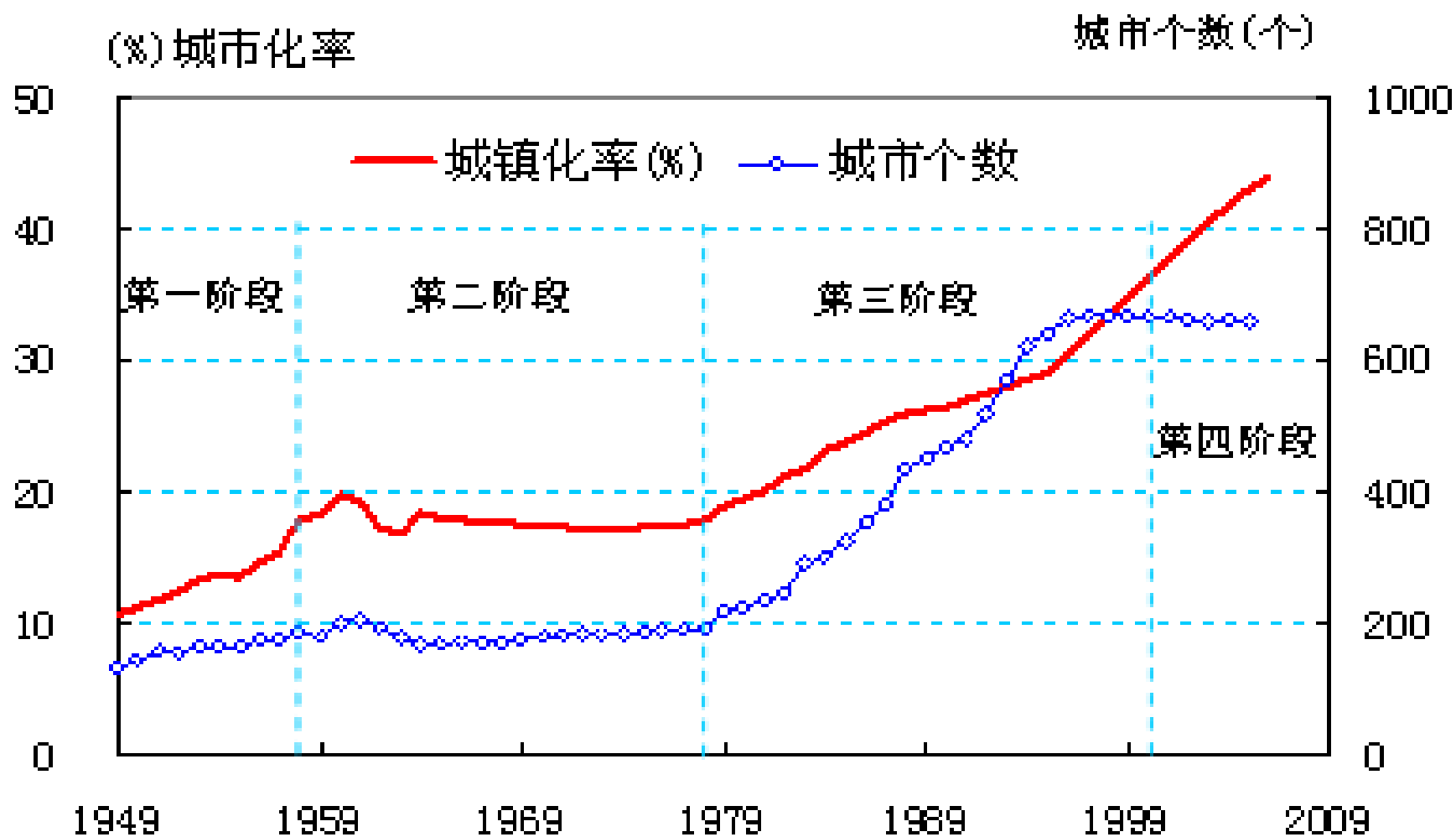


The PRC's Urbanization Process

- 1949 ~ 1957, the phase of startup and healthy development of urbanization
- 1958 ~ 1978, the phase of unstable development of urbanization
- 1979 ~ 1999, the phase of steady and fast development of urbanization
- 2000 ~ Now, the phase of accelerated urbanization development



PRC's Urbanization Process





Main Problems Facing PRC's Urbanization Process

Urbanization process relatively lag behind

Country/Region	2005 Per capita GDP (2000 Constant price, US\$)	Ratio (%) Urban Population to Total Population		
		19 78	19 98	2005
World Average	8199	46	55	57
Average of Low-income Countries	377	22	30	33
Average of Middle-income Countries	3079	46	57	60
Average of Mid-lower-income s	1872	41	52	55
Average of Mid-higher-income	5416	56	66	69
Average of High-income Countries	25046	74	79	80
PRC	1449	19	34	40
USA	37267	74	78	81
Japan	39075	58	65	66
Germany	23906	73	75	75
India	588	22	27	29
Indonesia	942	21	39	48
Egypt	1624	44	43	43
Philippines	1129	37	57	63
Brazil	35 97	65	80	84



Main Problems Facing PRC's Urbanization Process

- Stagnated urbanization process
 - A large number of non-locally registered permanent residents do not have access to the same public services as local residents.
 - The reason for the stagnated urbanization process is:
 - The PRC is extremely populous; for a 1 percent increase in the urbanization rate there will be a transfer to the cities of a rural population of over 10 million.
 - It is also related to the dual-economic policy restricting the flow of labor; this policy has been in place for a long time, and it is impossible to eliminate its long-lasting impact over the short run.



Main Problems Facing PRC's Urbanization Process

- Insufficient size of cities
 - Relatively large sized cities have higher productivity;
 - Easier for large cities to economize on their resources;
 - By international standards, cities in the PRC are small in size.



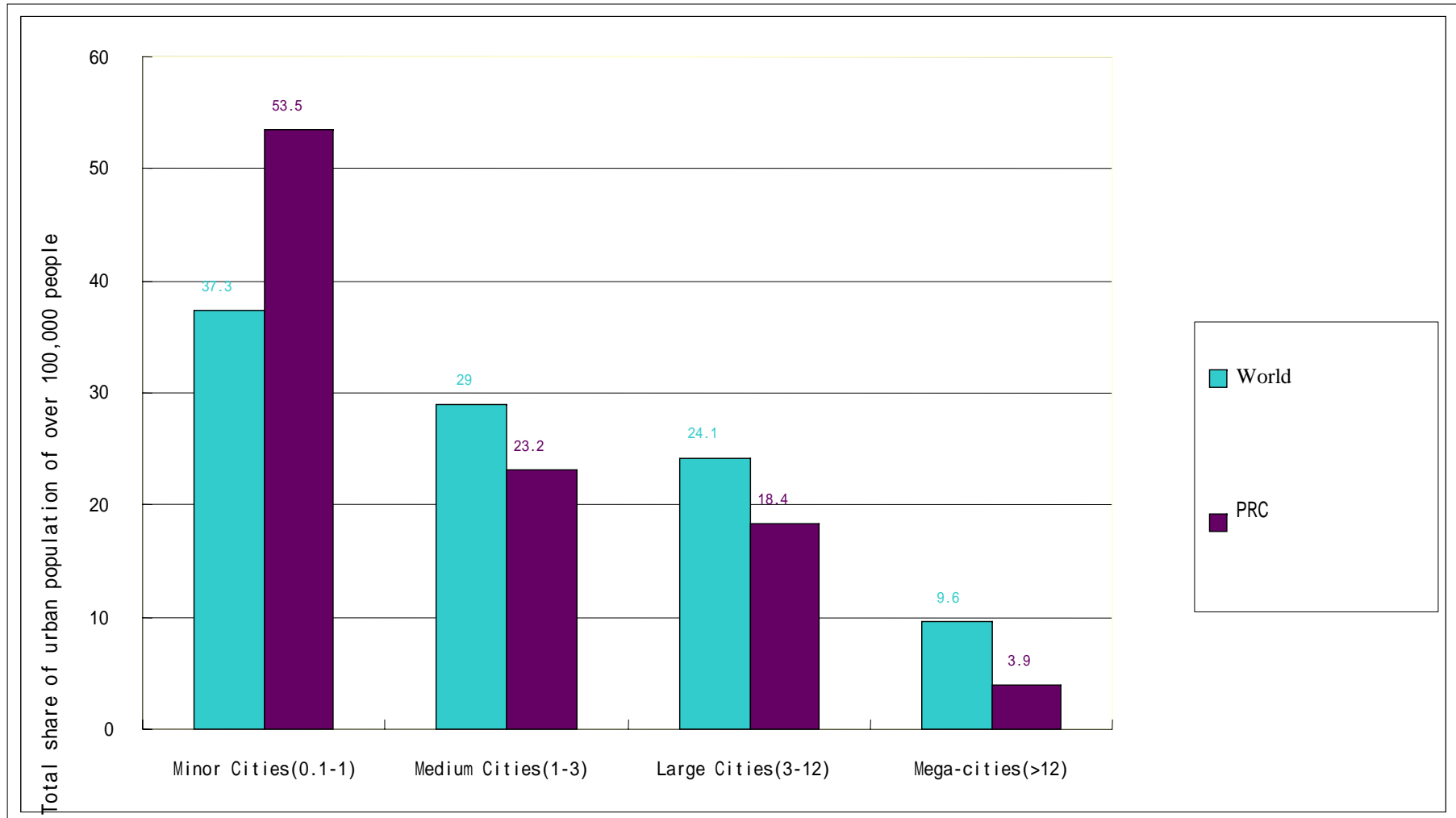
Main Problems Facing PRC's Urbanization Process

- Cities in the PRC are small in size, by international standards

Country or Region	Ratio (%) of population in mega-cities to total population	
	1990	2005
World Average	14	18
Average of Low-income Countries	10	12
Average of Middle-income Countries	18	24
Average of Middle-lower-income Countries	16	17
Average of Middle-higher-income Countries	24	29
Average of Euro region	28	27
PRC	14	15
USA	40	42
Japan	42	44
Germany	40	42
Malaysia	6	5
Indonesia	9	11
Philippines	14	14



Main Problems Facing PRC's Urbanization Process

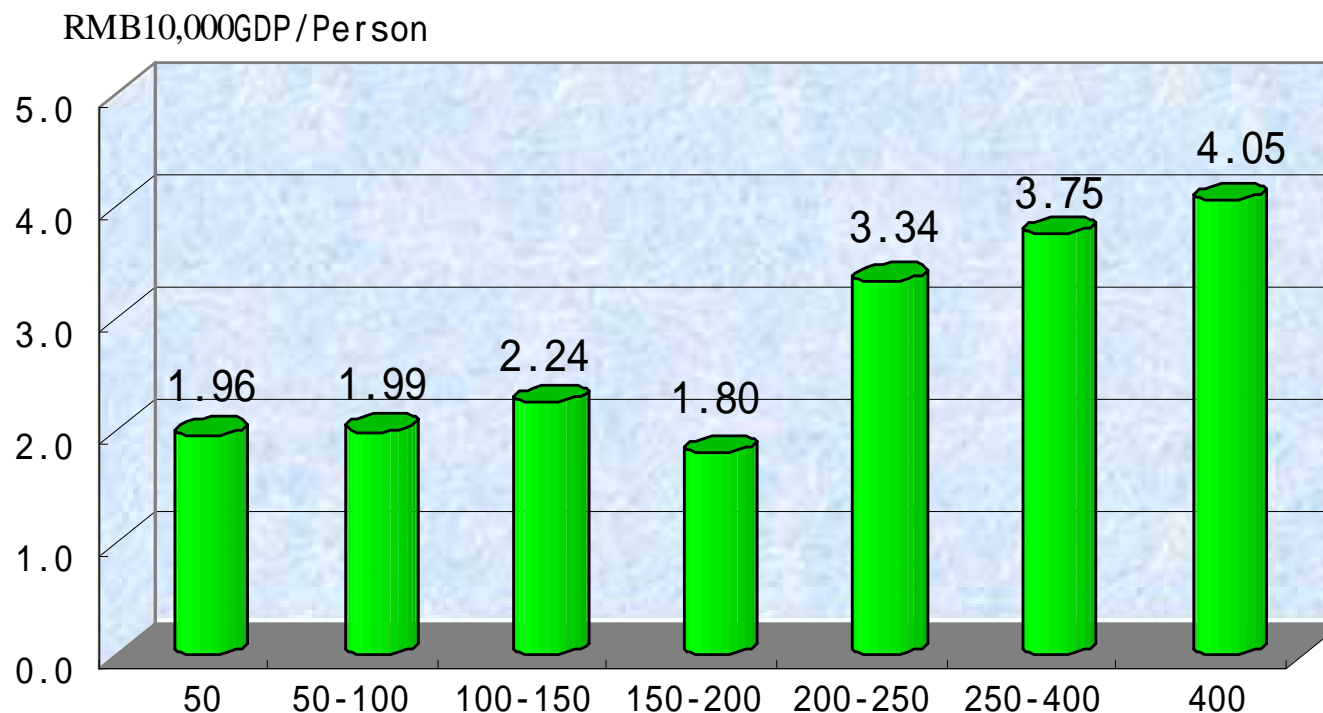




Comparisons of Size and Operation Efficiency of Cities in the PRC



Larger Cities Have Higher Operation Efficiency

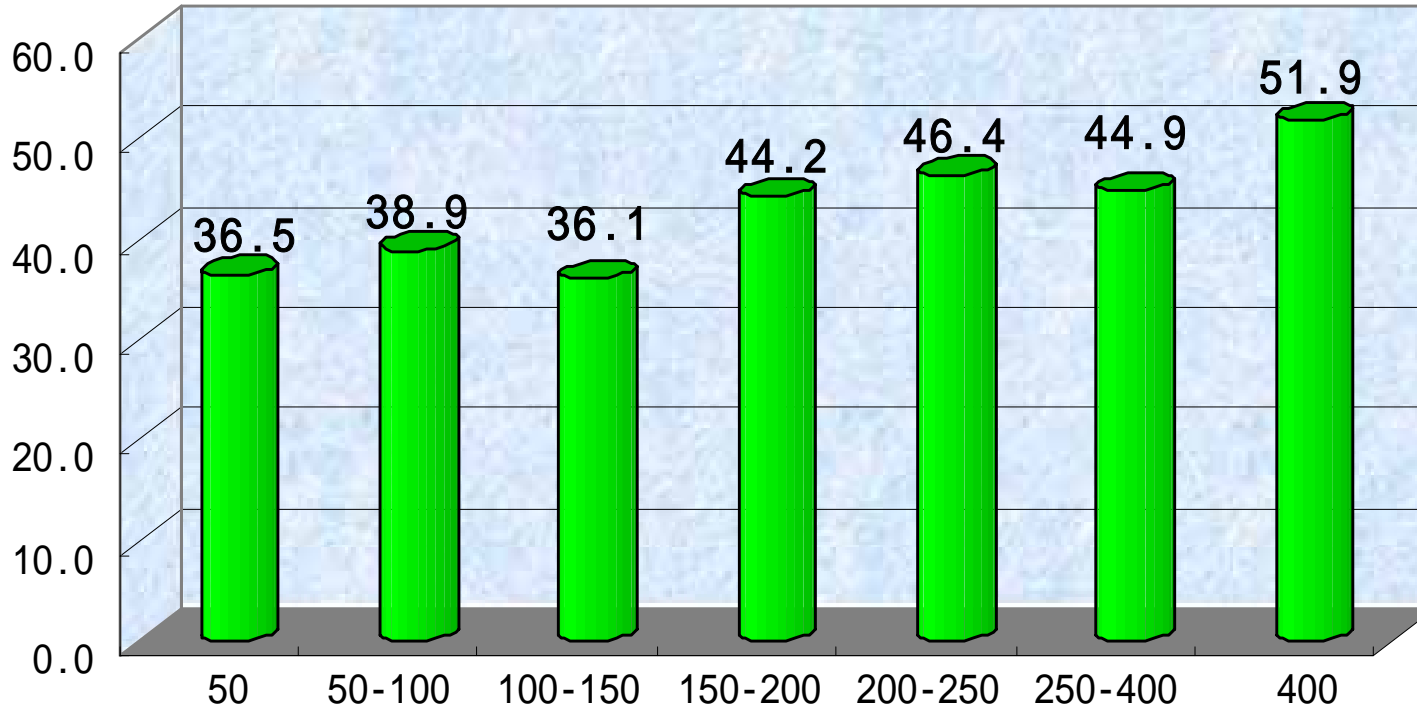


Statistic Chart of Per Capita Output of Cities above the Prefecture Level in the PRC (2005)



Larger Cities More Conducive to Developing the Service Industry

Ratio (%) of the Tertiary Industry



Ratio of Service Industry of Cities above the Prefecture Level in the PRC (2005)



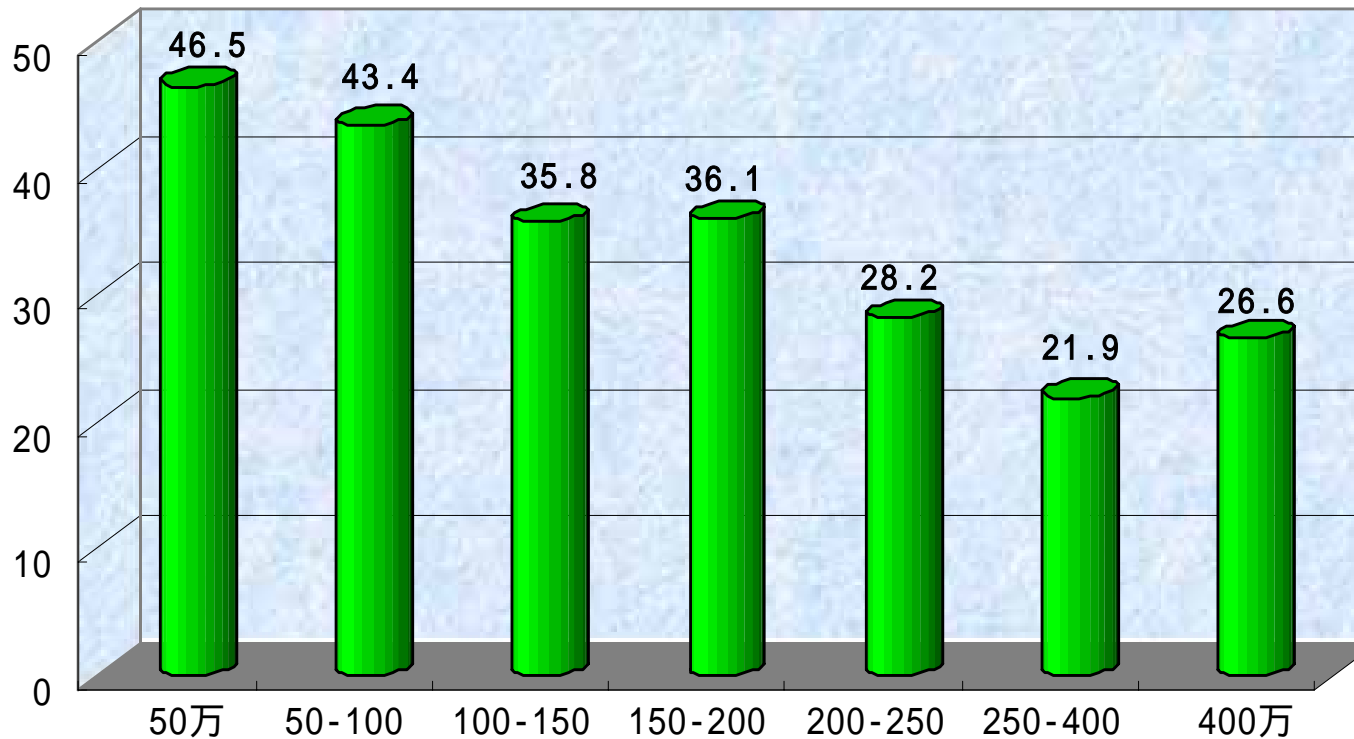
Larger Cities More Conducive to Economizing Land Resources

	No. of Cities	2000			2005		
		City Population (10,000 people)	Built Areas (Square km)	Per capita Land use (sm/person)	City Population (10,000 people)	Built Areas (Square km)	Per capita Land use (sm/person)
4 municipalities directly under the Central Government	4	3690	1686	45.7	5054	3024	59.8
Super-mega-cities (≥2 million people)	39	8329	5088	61.1	13742	8307	60.5
Mega-cities (1 – 2 million people)	70	8120	3951	48.7	9815	5704	58.1
Large cities (500,000-1 million people)	102	6710	4092	61.0	7472	5340.15	71.5
Medium-&-small cities (≤500,000 people)	43	1520	1277	84.0	1666	1516	91.0
Total	258	28368	16094	56.7	37749	23891	63.3



Larger Cities More Conducive to Utilizing Water Resources in an Efficient Manner

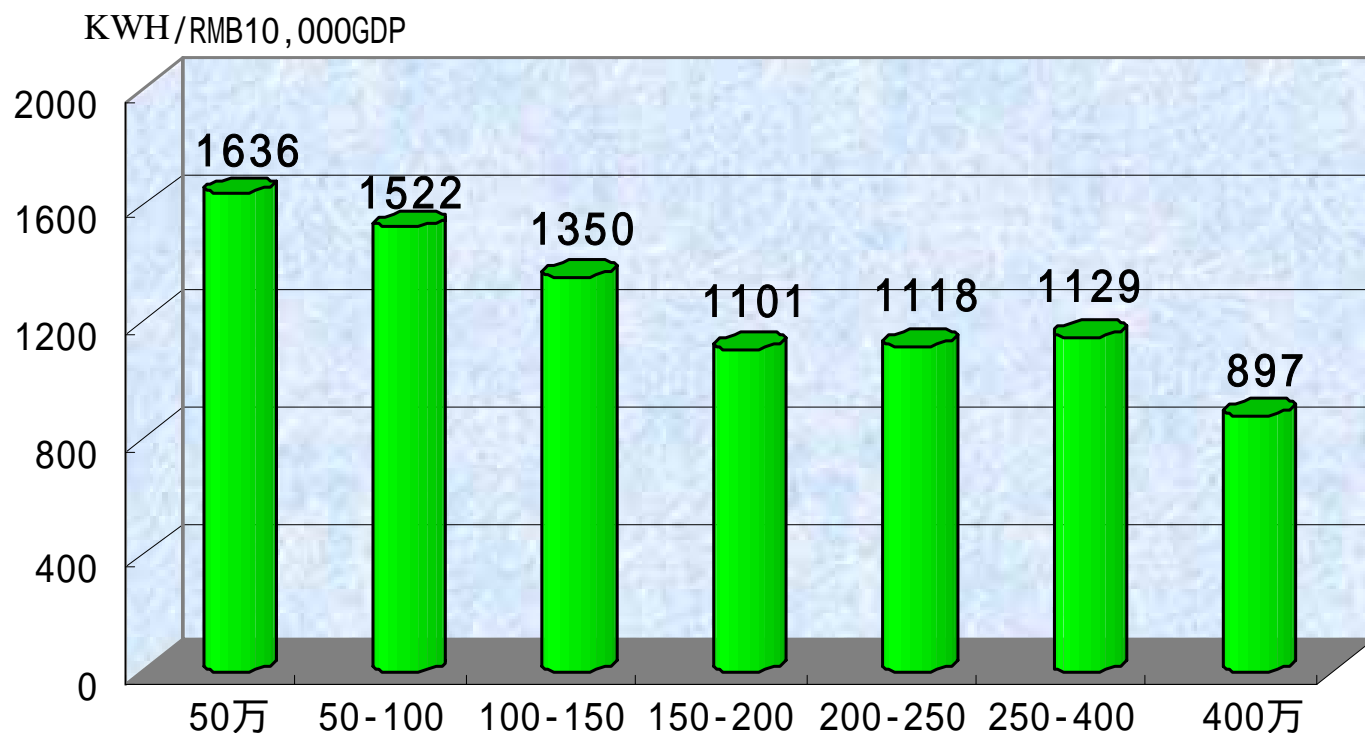
tons of water/RMB10,000GDP



Water Consumption in Unit Value Added of Cities above the Prefecture Level in the PRC (2006)



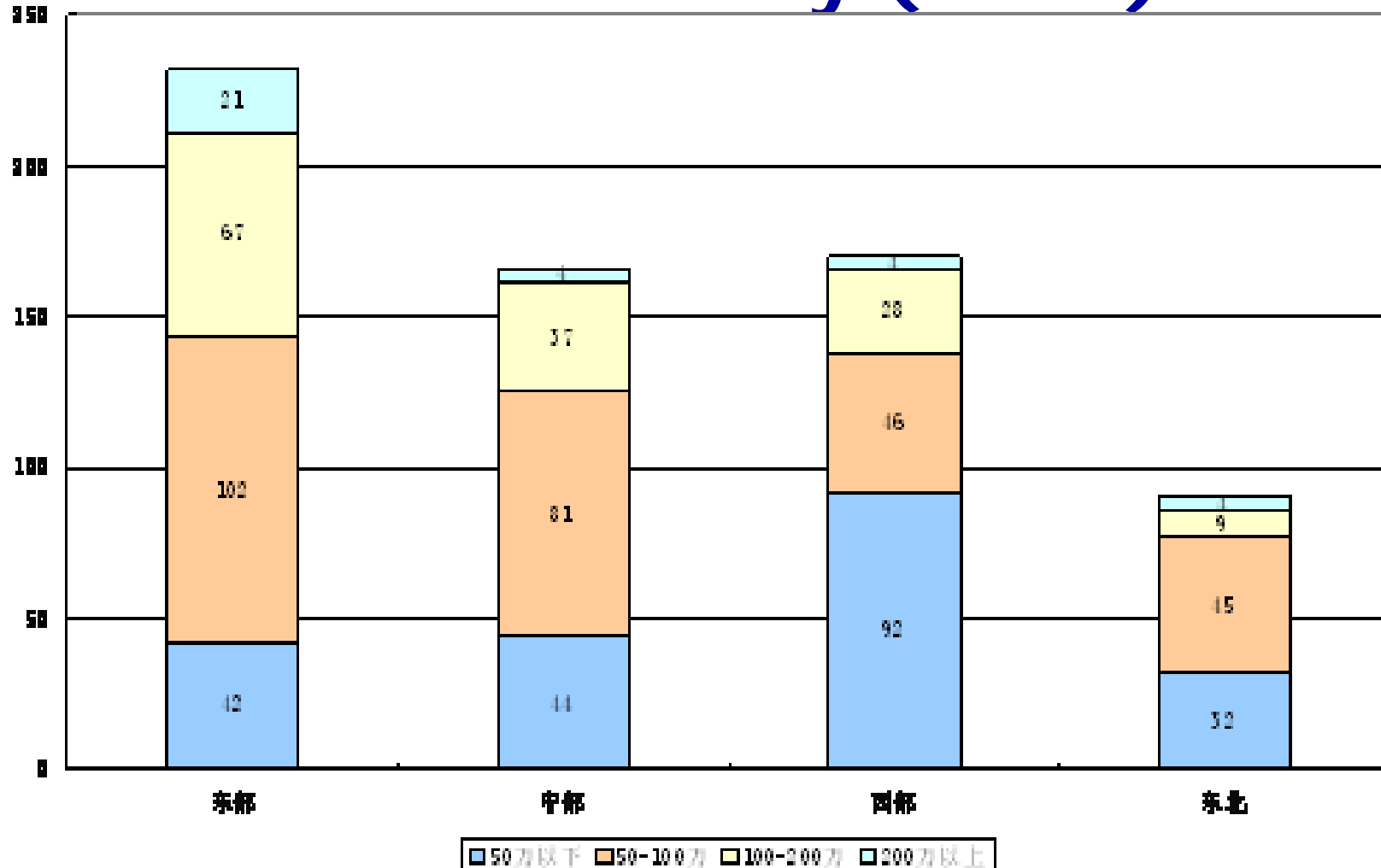
Larger Cities More Conducive to Effectively Using Energy Resources



Electric Power Consumption in Unit Value
Added of Cities above the Prefecture Level in the PRC (2006)



Regional Distribution of Cities by Size in the Country (2003)





Main Problems Facing PRC's Urbanization Process

- **Low efficiency of resources utilization in urban areas**
 - Low rate of land utilization;
 - Relatively low energy usage efficiency;
 - Significant consumption and severe shortage of water resources
 - The situation of water supply and demand becomes increasingly severe. In a normal year, there is a shortage of approximately 40 billion cubic water in the country; of over 600 cities, 400 have insufficient supply of water and 110 have a severe shortage of water.



Low Energy Utilization Efficiency

Changes of energy consumption by unit production output in some countries

	Tons of oil / GDP				US\$100 million
	1980	1990	2000	2003	2004
PRC	2288	1498	758	746	810
USA	353	273	236	221	216
Japan	123	108	111	107	108
EU (25 countries)		234	202	200	198
India	594	682	668	611	607
OECD	278	228	208	201	199
Non- OECD	714	741	556	548	556
World Average	360	322	280	278	280



Main Problems Facing PRC's Urbanization Process

- **The urban ecology was destroyed with relatively severe environmental pollution.**
 - Air quality in urban areas have generally improved in recent years, but pollution remains serious.
 - Water pollution in urban areas is relatively severe.
- **The infrastructure is insufficient with the low level of public services provided to residents.**
 - Traffic jams in large cities, poor living conditions of residents, severe environmental and noise pollution, shortage of water resources, low availability of running water and natural gas, low ratio of road hardening in medium and small cities, lack of facilities for sewage and waste treatment.
 - Public serves provided to urban residents are insufficient with weak capacity in social security.
 - Services provided for migrant workers, such as housing, medical care, employment and pension insurance are far from desirable.
- **The professional division of labor is insufficient with the irrational industrial structure.**



Policy Suggestions for Promoting the Healthy Development of Urbanization

- **Optimizing urban distribution, promoting regionally-coordinated development and enhancing overall competitiveness**
 - In optimized development zones and key development zones with a strong carrying capacity in environmental resources and a good urbanization foundation, it is necessary to promote city clusters to take advantage of synergies and distribute the benefits of development.
 - In regions with scattered population and weak carrying capacity in environmental resources, where it is difficult to form city clusters, it is necessary to focus on developing a few large cities as centers agglomerating population, economic activity, and the provision of public services while diminishing pressure on environmental resources.
 - It is necessary to form city clusters with a reasonable spatial distribution across regions in order



Policy Suggestions for Promoting the Healthy Development of Urbanization

- **Promoting urban development in an intensive manner, improving urban functionalities and forming the rational pattern of large, medium and small cities**
- Encourage existing cities with good carrying capacity in environmental resources to further agglomerate population and develop city groups; to produce demonstration effects with mega-cities as reference; to enhance functionalities of medium-sized cities; expand the size of medium and small cities to harness advantages of scale and agglomeration, promoting the development in an intensive manner.
- Enhance the land usage efficiency. Based on the development of the city, to plans and land use quotas must be timely adjusted, determining the balance of measures in different regions according to the inflows and outflows of population and the speed of economic growth.
- Jointly plan rural and urban land uses and coordinate the relationship between the two.
- Small towns absorb surplus rural population and drive rural economic and social development, and therefore, they are key element in comprehensive urban and rural development.



Policy Suggestions for Promoting the Healthy Development of Urbanization

- Strengthening urban planning, enhancing resource utilization efficiency and improving the urban environment
 - Establish coordination mechanisms between relevant planning instances, such as the urban development general plan, the plan for economic and social development, the regional plan, the land use plan and the main-body functional district planning .
 - Strengthen urban management and enhance efficiency in resource utilization, prerequisites for sustainable development and the improvement of the environment.
 - Upgrade the industrial structure, increasing the ratio of industries with low-energy consumption and high added value and stimulating the development of tertiary industry, the key direction for the in urban industrial structure adjustment.
 - Encourage large cities to join the high-speed transportation system with large capacity and create a green urban transportation system with high efficiency and low pollution.
 - Strengthen the research on and dissemination of green architecture and building energy saving technologies, especially the energy saving for large buildings with severe energy consumption.
 - Establish a price system conducive to efficient resource utilization



Policy Suggestions for Promoting the Healthy Development of Urbanization

- **Reforming the urban fiscal system, strengthening the capacity for public services and improving the quality of life for residents**
 - Establish a fiscal and taxation system with a balance between financial and business powers, and form a mechanism for income tax increase with urban population growth.
 - Explore and establish financing modalities relevant to the construction of public utilities, and due to limited public capital, attract non-governmental and commercial funds to partner in urban development.
 - Continue to strengthen the construction of infrastructure, increase the capacity for public services and improve the life quality of residents.
 - Provide basic public services for migrant workers to an appropriate degree.



Policy Suggestions for Promoting the Healthy Development of Urbanization

- It is necessary to guide consumption behavior and advocate a good way of life.
 - Advocating economical resources consumption
 - ✓ Government's consumption and procurement to choose green products and recycled products at first priority and prohibit over-consumption of resources and extravagant consumption to set an example for peoples' everyday life;
 - ✓ Popularize technologies that reduce consumption, and encourage the use of products that reduce the consumption of energy and resources, reducing quantity of discarded goods and transforming them into usable resources to improve the consumption cycle.
 - ✓ Strengthen education in consumption, mobilizing all stakeholder groups to engage extensively in activities towards the best use of energy and resources.
 - Advocating the importance of recycling, promoting the classification and redemption of garbage, the re-use domestic water, and an increase in the usage of recycled paper.
 - Adjusting the cost and benefit of energy consumption through the means of price and taxation and induce consumers to consciously adjust their consumption behavior through interest stimulation.
 - Attaching importance to promoting comprehensive programs aiming to guide family consumption behavior in order to facilitate public



Thank You.