

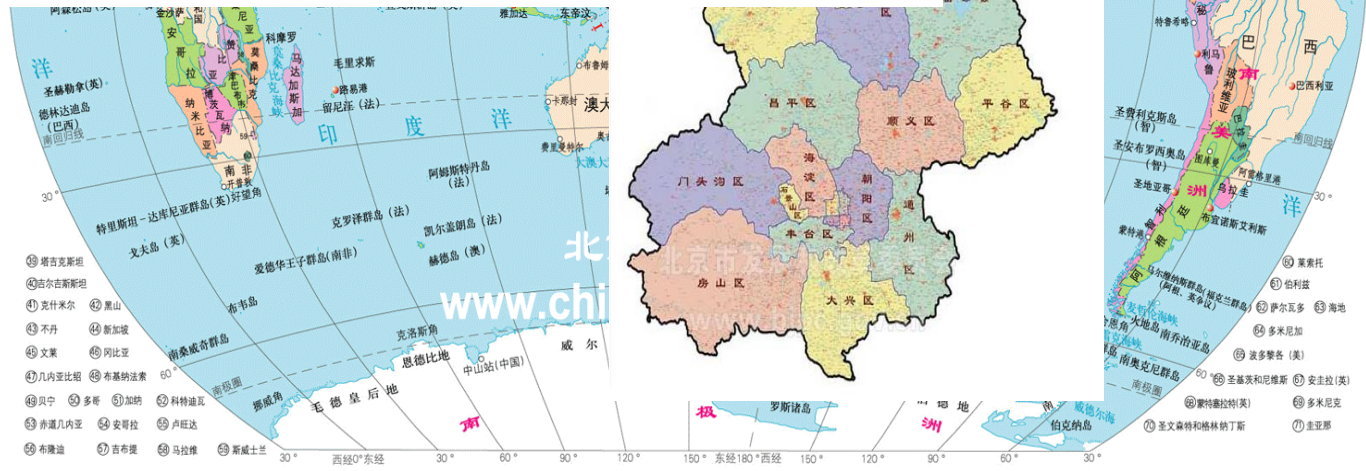
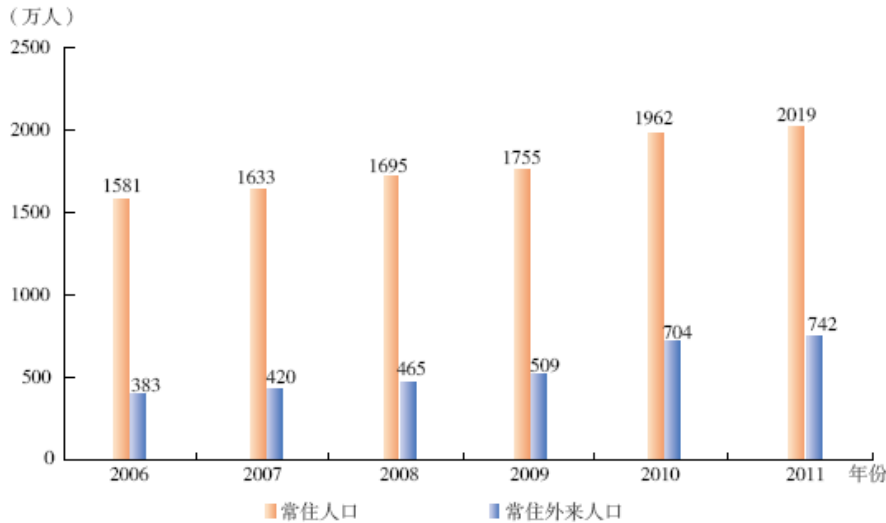
Some Idea about Low Carbon Beijing

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National Policy

- The Chinese government constantly sets great store by the issue of climate change and sustainable development. According to the principle of Common but Differentiated Responsibility, Chinese government put forward the goal of action to reduce the per unit of GDP carbon dioxide emissions in 2020 by 40-45 percent as compared to that of 2005.
- In 2011, China's Policies and Actions for Addressing Climate Change stated that by 2015, carbon dioxide emission per-unit GDP would be reduced by 17 percent and energy consumption per-unit GDP by 16 percent as compared with that in 2010.
- In 2011, President Hu Jintao mentioned that "We should actively promote the idea of green development and respect the choice independently made by APEC members to pursue green growth on the basis of their resource endowment, stage of development and capacity" in APEC.

Beijing Overview



- a metropolis in northern China
- the capital of China
- an area of 16,000 square kilometers
- a population of 20 million
- Environment-friendly Beijing
- Culture-enriched Beijing
- Technology-empowered Beijing

Beautiful city



表1-1 2006-2011年北京市地区生产总值

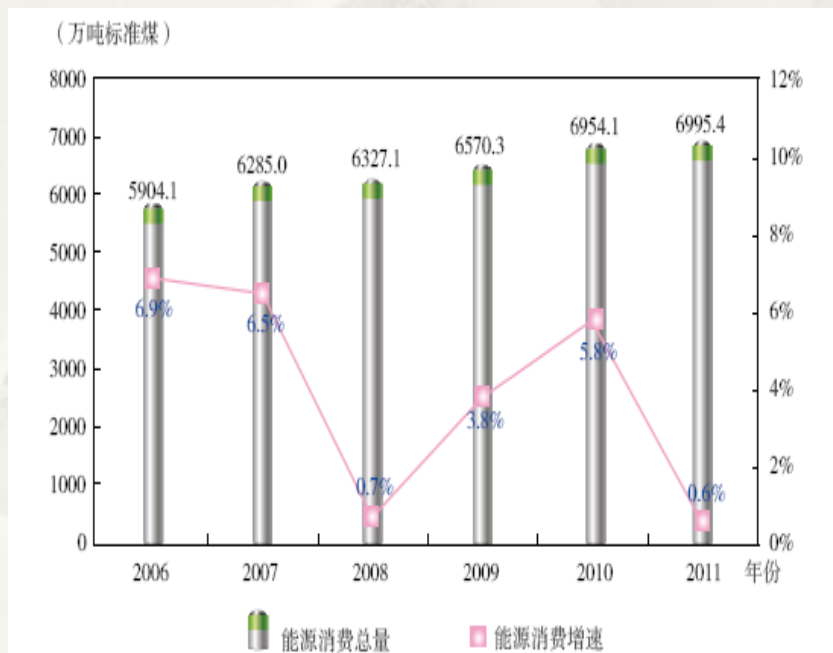
年份 \ 指标	地区生产总值 (亿元, 现价)	地区生产总值增长率 (%)	人均地区生产总值 (美元/人)
2006	8117.8	13.0	6488
2007	9846.8	14.5	7903
2008	11115.0	9.1	9286
2009	12153.0	10.2	9799
2010	14113.6	10.3	10910
2011	16251.9	8.1	12643

注：“十一五”期间北京市地区生产总值年均增长11.4%。

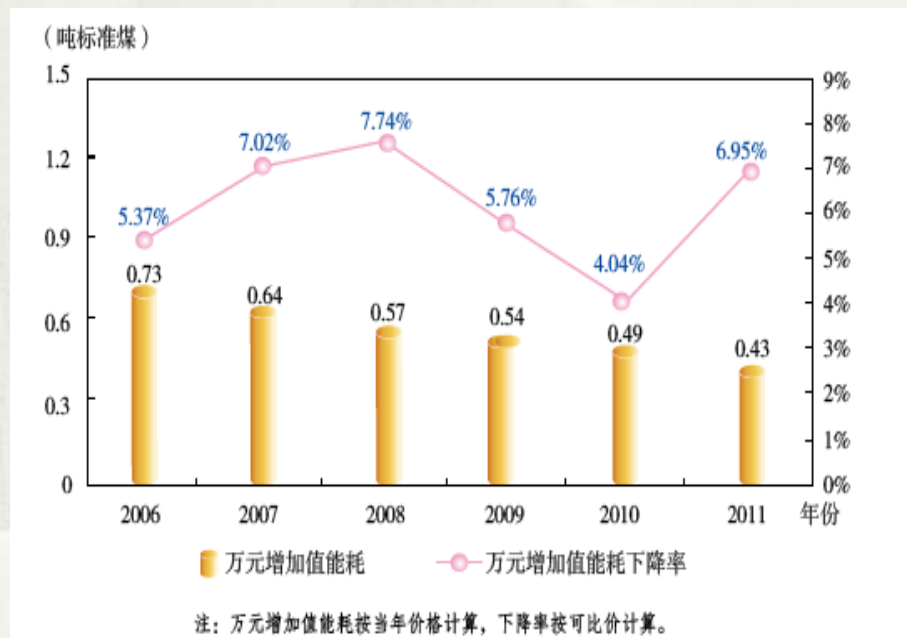
Effect of Low Carbon Energy Field

✓ The continuous improvement of efficiency of energy use.

Energy consumption for every 10,000 Yuan of GDP dropped to 0.437 tons of standard coal in 2011.



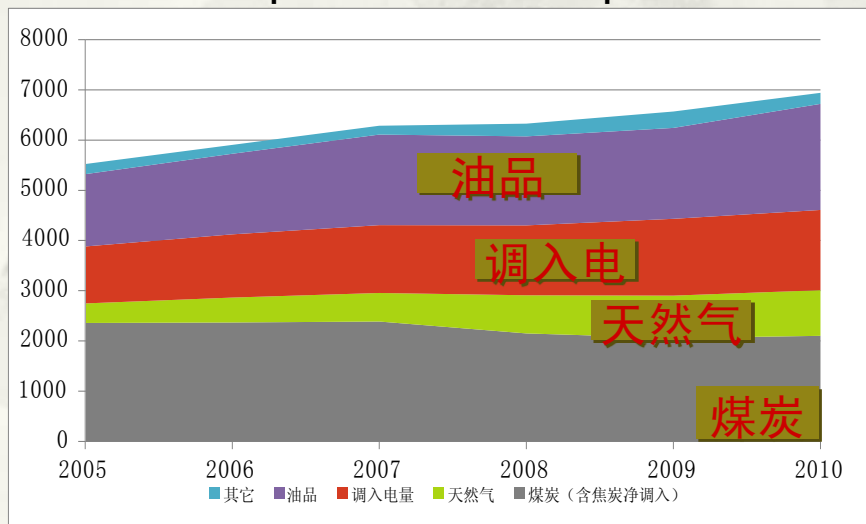
Energy consumption



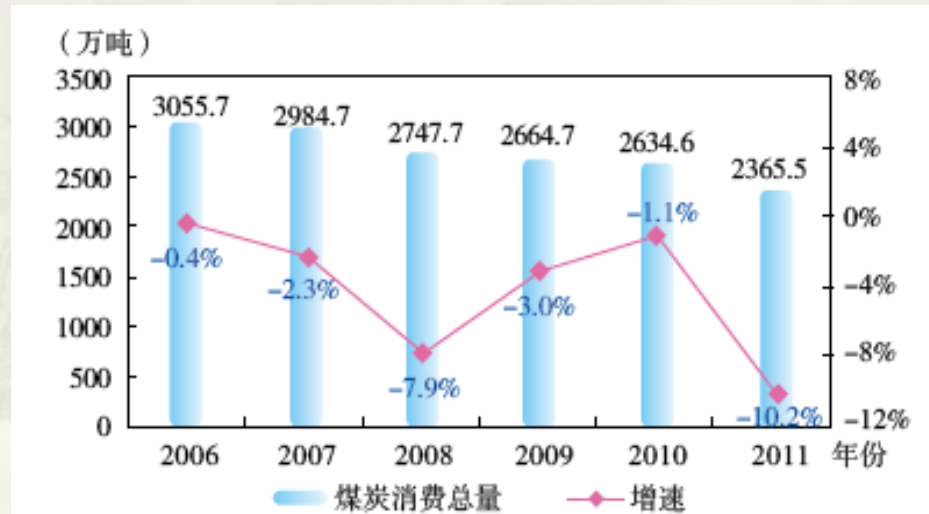
Energy consumption /GDP

✓ **Conspicuous achievements in structure of energy consumption adjustment.**

In 2011, clean energy consumption raise to 73.5 percent in the total primary energy consumption, a 30.6 percent increased compared with 2005. Coal consumption dropped to 26.5 percent of the total primary energy consumption from 42.9 percent of 2005.



energy consumption structure



Coal consumption

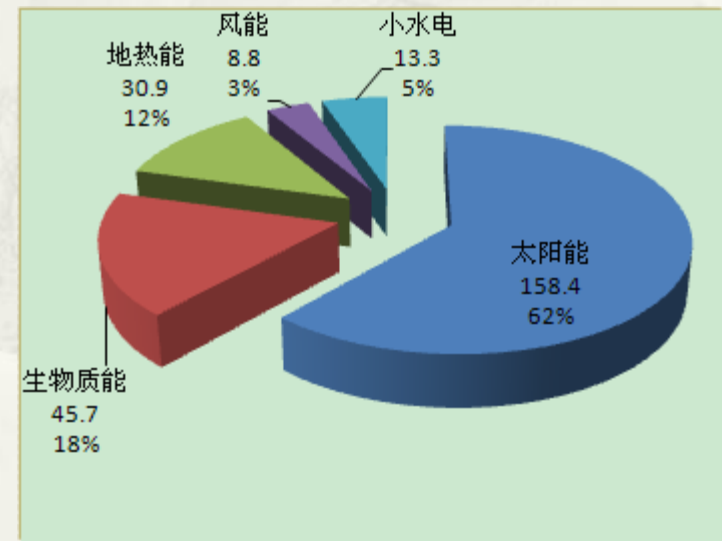
✓ **Rapid development in new and renewable energy resources.**

Beijing has limited [new and renewable energy resources](#).

Even so, new and renewable energy consumption equaled 2,571 thousand tons of standard coal, a 10.6 percent increased compared with 2010. A number of new and renewable energy demonstration projects have been build.



New and renewable energy consumption



New and renewable energy consumption structure

Demonstration Projects



Concentrating solar power plant

Some Idea about Low Carbon Beijing

Optimizing the industrial structure

- Put the adjustment of the industrial structure in the key place of low carbon city development.
- Control over low-duplicated construction, eliminate industries with high consumption and high pollutant emission, and backward productivity.
- Expedite the transformation of traditional industries with advanced and applicable technology.
- Push forward the development of the service trades.
- Foster and develop emerging industries of strategic importance, and speed up the formation of pioneer and pillar industries.

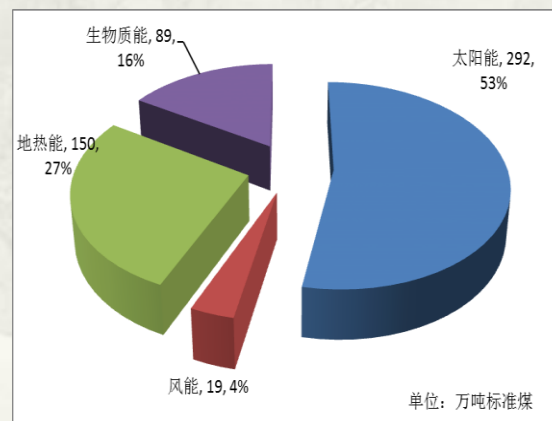
Vigorously developing new and renewable energy

- Actively making use of solar energy. Promote diverse patterns of solar energy development by integrating intensive exploitation with distributed utilization. Such as distributed photovoltaic power generation systems, solar water heaters.
- Developing and utilizing biomass energy and other types of renewable energy.



Vigorously developing new and renewable energy

- The central city achieves without terminal coal, and coal consumption decreases from 23.65 million tons in 2011 to 15 million tons in 2015, and emissions from coal combustion drop about 60 percent.
- In 2015, new and renewable energy consumption equals 5.5 million tons of standard coal, accounting for 6 percent in the total energy consumption.



New and renewable energy consumption structure

Promoting energy conservation in key fields.

- Strengthening energy conservation in industry.
- Promoting building energy conservation.
- Pushing forward energy conservation in transportation.
- Promoting energy conservation among all citizens.



Additional Approaches

- Waste management
- Prevention and control of pollution
- Increasing forest carbon sink
- Implementing emission permits trade of carbon





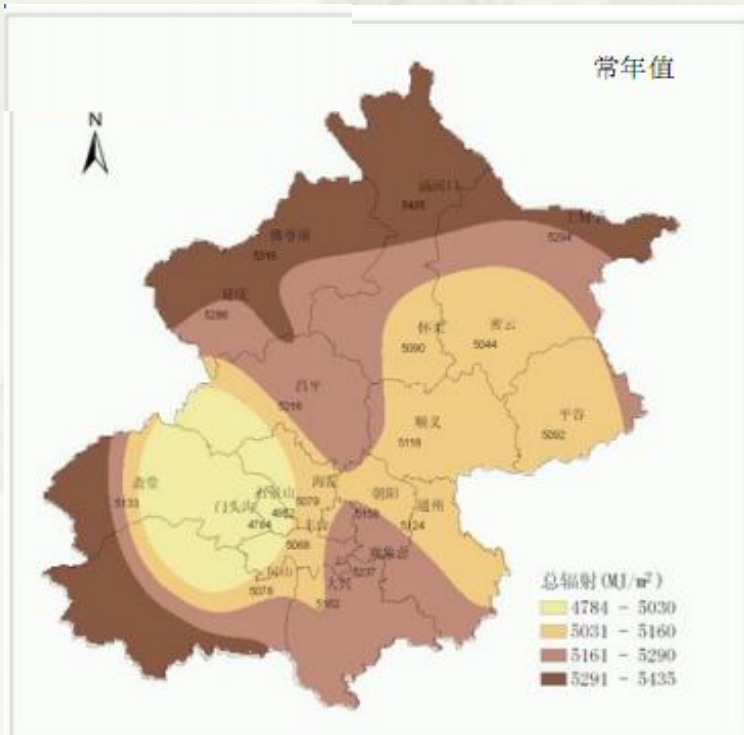
Thank you!

Renewable resources distribution

Solar energy

Sunshine hours: 2600h

Annual average available hours: 1300h



Geothermal energy (tons of standard coal)

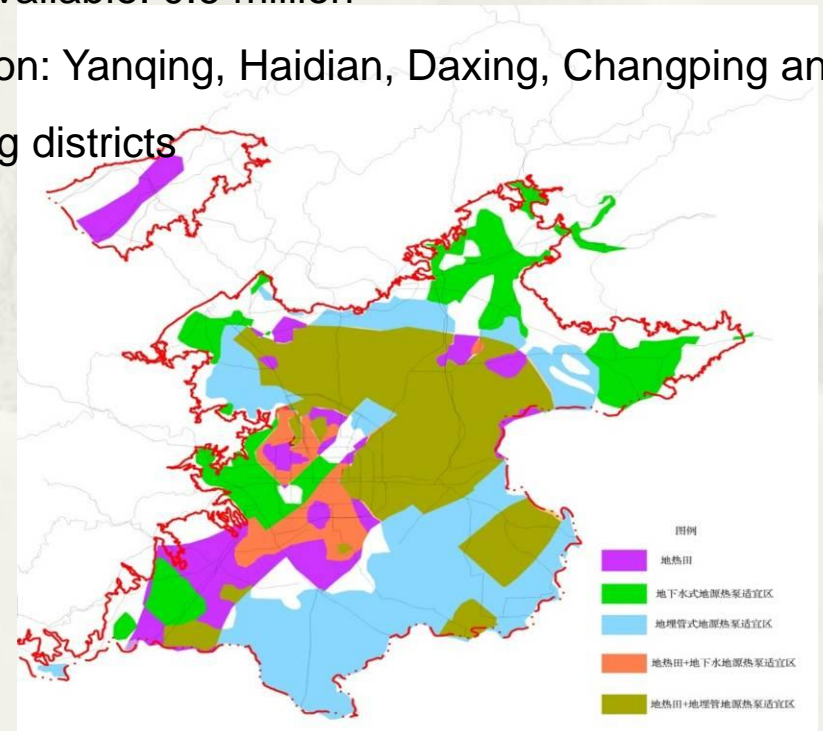
Geothermal reserves: 200 million

Annual available : 3.5 million

Reclaimed water and industrial waste heat: 10million

Annual available: 0.6 million

Distribution: Yanqing, Haidian, Daxing, Changping and Chaoyang districts



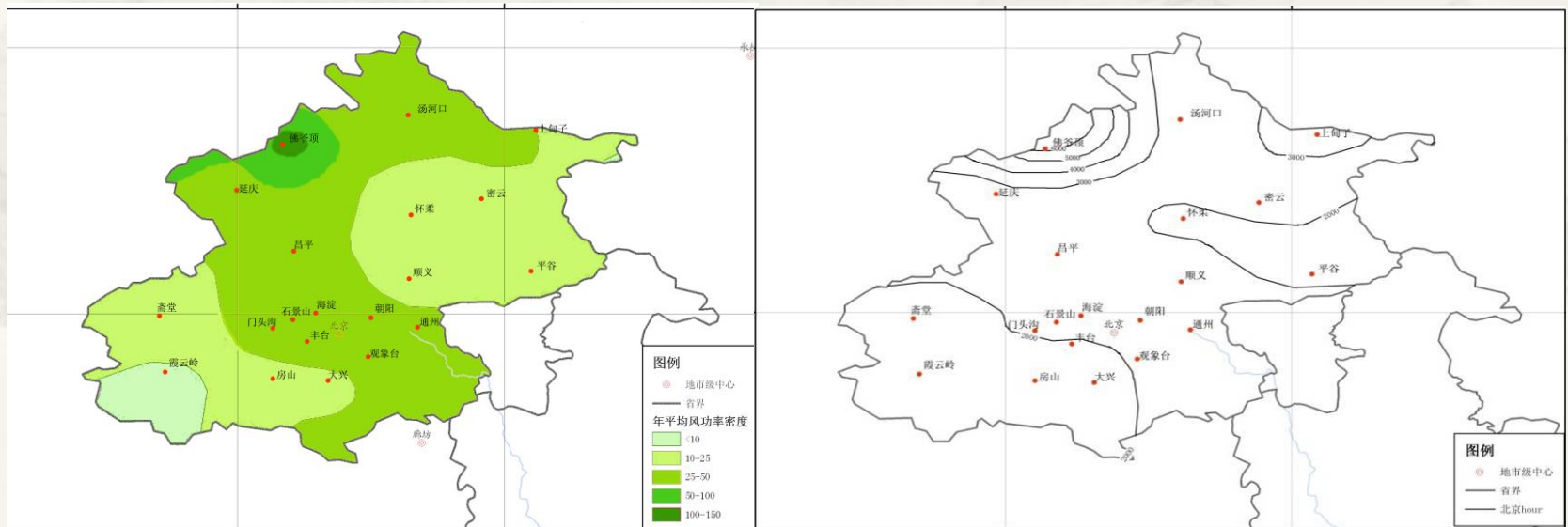
Renewable resources distribution

Wind energy (kilowatt)

Wind reserves: 4.6 million

Available quantity: 450 thousand

Distribution: Yanqing, Miyun and Mentougou districts



Average wind power density color map

The average effective hours distribution map

Promoting energy conservation in key fields.

➤ **Strengthening energy conservation in industry.**

Advance and apply technologies in the fields of energy conservation for the purpose of eliminating backward technology, equipment and products, and developing energy-saving and high-value-added products and equipment, such as mobile communication, computer and network, biological industry and new energy manufacturing industry.



Promoting energy conservation in key fields.

➤ Promoting building energy conservation.

Construct green buildings and comprehensively advance energy conservation in buildings. Promote energy-saving renovation of existing buildings, and set quotas for energy consumption by public buildings.

Made and implement an energy-saving plan for public institutions, and strengthen the establishment of a supervisory system for energy conservation in public buildings, such as heat metering and improving the old heat-supply network.

Promoting energy conservation in key fields.

➤ **Pushing forward energy conservation in transportation.**

Give priority to public transport, actively develop rail transportation, and rationally encourages green commuting. Implement the fuel economy standard of the world's advanced level for automobiles, and popularizes energy-saving and environment-friendly vehicles.

Eliminate old automobiles and locomotives. Vigorous efforts are made to optimize the transportation structure and develop green logistics. Develop and popularize new energy vehicles, and make scientific plans for the construction of supporting facilities, including compressed natural gas filling and electricity charging facilities.

Promoting energy conservation in key fields.

➤ **Promoting energy conservation among all citizens.**

Effort in energy-saving education and publicity. Bring into being a green mode of consumption and green lifestyle among all citizens, and strengthen the public awareness of the importance of resource conservation.

Mobilize all sectors of society to participate in energy conservation by conducting relevant activities in residential areas, schools, government organs, the armed forces and enterprises. All these measures help build a long-term mechanism of energy conservation with the participation of all sectors of society.