

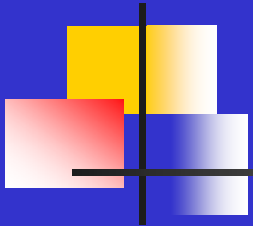
**Analysis of Sustainability in China's  
Overall Economic Stimulation Policy  
Package Based on Energy Saving and  
Emission Reduction**

---

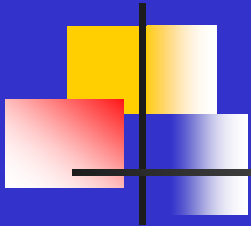
DR. Prof. JiXing

2009

09 17 Bangkok



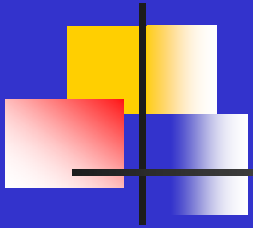
**in the third quarter of 2008:  
exports declined sharply,  
economic growth slowed down,  
and the pressure on  
employment kept on rising.**



In the first half of 2009,  
China's GDP grew by 7.1 percent  
investment and consumption  
maintained fast and steady  
growth.

Domestic demand played an active  
role in driving the economy  
forward.

6.66 million new urban jobs were  
created,



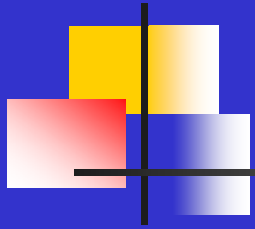
**income of urban and rural residents increased, overall social stability was maintained.**

**kept budget deficit and government debt at around 3 percent and 20 percent of the GDP respectively.**

**Banks' asset quality and ability to fend off risks were improved.**

# Changing challenges for China in the world financial crisis

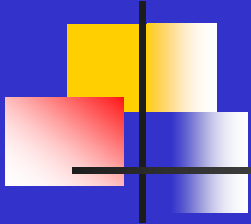
---



- In 2008, difficulties :
- heavy snow and sleet storms,
- the devastating earthquake,
- a complex and changing situation both at home and abroad.
- the world economic environment was getting tougher and more complex, with exacerbated financial volatility and notable economic slowdown.
- pressure for domestic price rises remained high.

# Changing challenges for China in the world financial Crisis

---

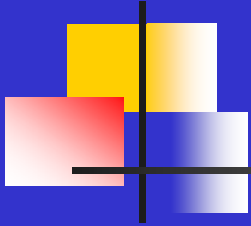


The foundation of agriculture was still weak. The constraint on development posed by energy and resources was severe.

- Some industries and businesses were having difficulties with production and management,
- whilst hidden problems still existed in the financial sector.
- At the beginning of 2009,
- challenges : the world crisis had inflicted a rather big impact on China's economy notably shrinking external demand

# Changing challenges for China in the world financial crisis

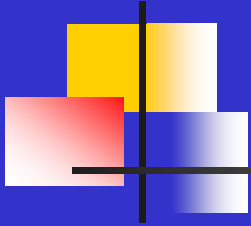
---



- overcapacity in some sectors,
- difficult business conditions for enterprises, rising unemployment in urban areas  
greater downward pressure on economic growth.
- at present, threats :
- the stabilization and recovery of the Chinese economy is not yet steady, solid or balanced.
- China still faces tremendous pressure from the decline in external demand.

# Changing challenges for China in the world financial crisis

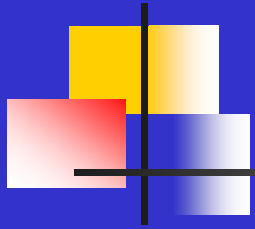
---



- China is under various constraints on expanding domestic demand in the short term.
- Some industries and businesses remain in a difficult situation,
  - the task of economic restructuring is daunting.
- Some of the stimulus measures will see their effect wane,
  - it will take time before those long-term policies show effect.
- potential risks, including inflation

# China's economic stimulation policy package

---



China mainly relies on expanding effective domestic demand, consumer demand, to boost economic growth.

China made timely adjustment to the direction of macroeconomic policy,

adopted a proactive fiscal policy and a moderately easy monetary policy,

introduced measures to shore up domestic demand and put in place a series of related policies.

Together, they make up a systematic and comprehensive package plan aimed at ensuring steady and relatively fast economic growth.

The policy package covers 4 aspects:

# China's economic stimulation policy package

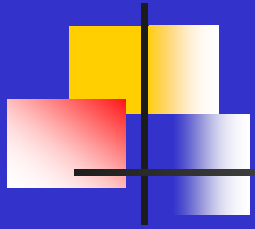


---

- a two-year program involving a total investment of RMB 4 trillion,  
which mainly went to 5 areas, including
- (1) government-subsidized housing projects,
  - (2) projects concerning the well-being of rural residents,
  - (3) railway construction and other infrastructural projects,
  - (4) environmental protection projects, and
  - (5) post-earthquake recovery and reconstruction.

# China's economic stimulation policy package

---



- also launched tax cut programs, including
- (1) comprehensive transformation of the value-added tax,
  - (2) the adoption of preferential tax policies for small and medium-sized enterprises (SMEs) and real estate transactions,
  - (3) the abolition or suspension of administrative fees for 100 items. These programs will save RMB 500 billion for businesses and households each year.

# China's economic stimulation policy package



---

made efforts to stimulate consumption and create domestic demand, The efforts can be categorized into two parts:

- Parts A: to increase income, for examples: (1) increasing subsidies for farmers,
- (2) raising the minimum purchasing price of grains,
- (3) introducing performance-based salaries for primary and middle school teachers,
- (4) increasing the basic Cost-of-Living Allowances for urban and rural residents;

# China's economic stimulation policy package



---

- Part B: to stimulate consumption, for examples (1) offering subsidies for the program of bringing home appliances, agricultural machinery, automobiles and motorcycles to the countryside and the program of exchanging used automobiles and home appliances for new ones,
- (2) cutting sales tax by half on small-engine, energy-conserving and environment friendly cars
- 7.31 million cars were sold in the first seven months and total retail sales of consumer goods rose by 15 percent.

# China's economic stimulation policy package



---

- 2.2 Cut interest rates and increase liquidity in the banking system.

cut deposit and lending rates of financial institutions five times one-year benchmark deposit and lending rates down by 1.89 percentage points and 2.16 percentage points respectively.

Thus the financial burden of companies has been greatly reduced.

The required reserve ratio has been lowered released around RMB 800 billion of liquidity

# China's economic stimulation policy package

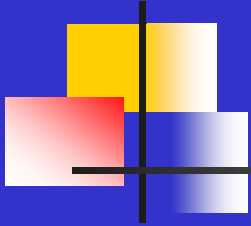


---

- 2.3 Implement ten industrial restructuring and rejuvenation programs and develop biology industry
- Ten industrial restructuring and rejuvenation programs are being carried out, including automobile and iron and steel, textile, equipment manufacturing, shipbuilding, electronic and information technology, petrochemical industry, light industry, logistics, and non-ferrous metal.

# China's economic stimulation policy package

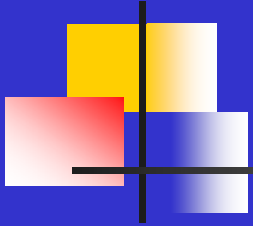
---



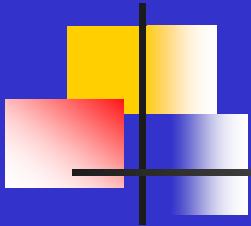
facilitating the merger and reorganization of enterprises, promoting advanced productive forces and improving industry concentration and the efficiency of resource allocation, encouraging enterprises to upgrade technologies and making technological renovation.

# China's economic stimulation policy package

---



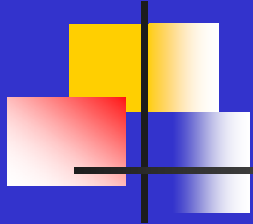
- Support enterprise in making extensive use of new technologies, techniques, equipment and materials to restructure their product mix, develop marketable products and improve their competitiveness. Rein in excess capacity and support the development of new industries of strategic significance so that the Chinese economy will be put on a more sustainable path.



- Financial support policies are being improved, a sound credit guarantee system installed and market access eased for the benefit of SME development. By the end of July, 52.4 % of the investment made by the central government had gone to government-subsidized housing, projects for better rural livelihood and social programs.

# China's economic stimulation policy package

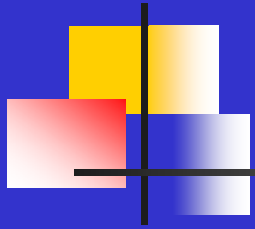
---



- 24.7% had been channeled into areas such as independent innovation, economic restructuring, energy conservation, emission reduction and ecological enhancement. 22.9 % of the investment had been used for major infrastructure projects.
- China implemented the National Program for Medium- and Long-Term Scientific and Technological Development with a special focus on 16 key projects.

# China's economic stimulation policy package

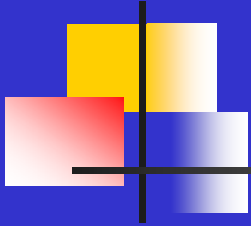
---



- On one hand, take breakthroughs in key technologies that are vital to industrial transformation and upgrading, speed up the development of new strategic industries, and give priority to research, development, and industrial application of new energy, new materials, bio-medicine, third generation mobile communications, and the integration of telecommunications networks, cable TV networks and the Internet.

# China's economic stimulation policy package

---



- Develop low carbon economy and green economy to gain commanding position in the international industrial competition. On the other hand, China pays attention to the upgrading of traditional industries through new and high technologies and advanced applicable technologies to increase the level of modernization in agriculture, manufacturing and the traditional service sector.

# China's economic stimulation policy package

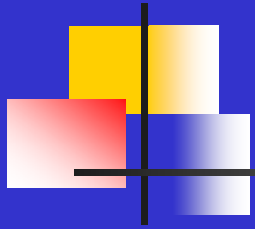


---

- 2.4 Improve social safety net
- Increase basic pension for enterprise retirees;
- Upgrade the standard of unemployment insurance and workers' compensation;
- Raise the level of basic cost of living allowances in both urban and rural areas, welfare allowances for those rural residents without family support;
- Offer special allowances and assistance to entitled groups;

# China's economic stimulation policy package

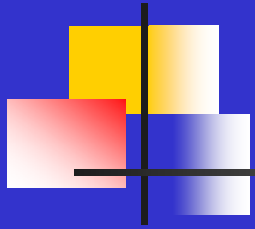
---



- Advance the reform of the medical and health system so that everyone will have access to basic medical and health service. It is estimated that governments at all levels will invest RMB 850 billion for this purpose. China has introduced a new rural old-age insurance program in 10% of the counties across the country on a trial basis with a total coverage of 90 million people. The central government has set aside 42.9 billion yuan to provide medical insurance for all retirees of the closed or bankrupt state owned enterprises.

# China's economic stimulation policy package

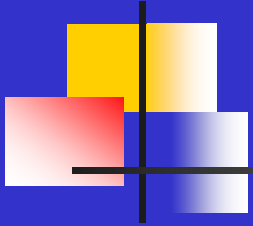
---



- Increase public funds for compulsory education in rural areas, offer more financial support to students from poor families and improve the well-being of middle and primary school teachers. In 2009, the central budget for education, medical and health care, social security, employment, government-subsidized housing and other programs will be 29.4% higher than that of last year.

# China's economic stimulation policy package

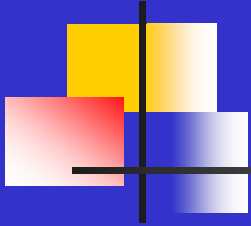
---



- Implement active employment policy, help college graduates and migrant workers find jobs and provide more government-funded jobs in public service.

# China's economic stimulation policy package

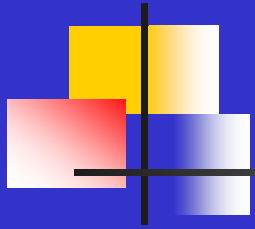
---



- In order to achieve these goals , many governmental documents have been or are being formulated. For example, there are 165 detailed rules related to the 10 Industry Rejuvenation Plan, 66 of them have been issued, and 99 are still under evaluation. The names of documents from the central government are shown in table-1

# China's economic stimulation policy package

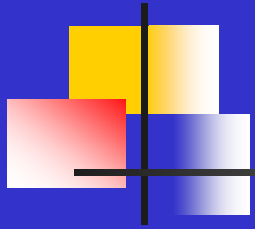
---



- <Several Policies for Promoting Faster Development of the Biology Industry> (4)
- <Plan for Adjusting and Rejuvenating the Logistics Industry> (5)
- <Implementation Plan for Promoting the Boost of Domestic Demand and Encouraging the Subsidized Trade-in of Automobiles and Home Appliances> (6)
- <Opinions on Deepening Economic Restructuring in 2009> (7)
- <Guiding Opinions on Formulating the Plan for Comprehensive Utilization of Crop Stalks> (8)
- <Technology Policies for Disposal and Treatment of Sludge and Prevention and Control of Pollution by Urban Sewage Treatment Plants > (9)
- < Policies for Developing Resource-saving and Environmental Friendly Highway and Water Transport > (10)

# China's economic stimulation policy package

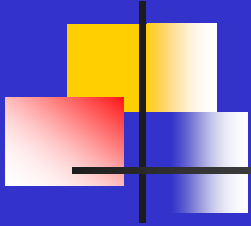
---



- <Several Opinions of the State Council on Supporting and Promoting the Development of Traditional Chinese Medicine> (11)
- <Opinions of the Ministry of Industry and Information Technology on Maintaining the Steady and Fast Development of the Shipbuilding Industry in Current Situation >(12)
- <Regulation on Administration of Collection and Disposal of Waste Electrical Appliance and Electronic Products>(13)
- <Scheme for Providing Incentives for Pollution Control to Soon Solve Salient Environmental Problems in Rural Areas>(14)
- <Several Opinions of the State Council on Promoting the Reform and Development of Chongqing Municipality in a Comprehensive Way >(15)

# China's economic stimulation policy package

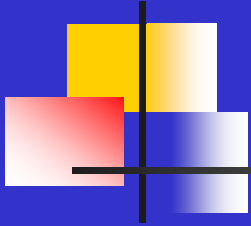
---



- <Several Opinions of Central Committee of the CPC and the State Council on Promoting the Stable Development of Agriculture and the Sustainable Increase of Farmers' Income in 2009> (16)
- <Circular of the General Office of the State Council on the Work of Rectifying the Over-packaging of Commodities> (17)
- <Measure for Releasing Information on Power Dispatch Prioritizing Energy Efficiency> (18)
- <Arrangement for the Work of Energy Conservation and Emission Reduction in 2009> (19)
- <Interim Measures for Supervision and Administration of Trading of Power Generation Rights> (20)

# China's economic stimulation policy package

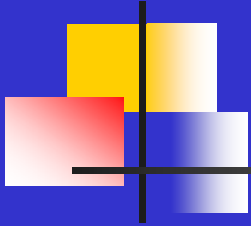
---



- <Several Opinions of Central Committee of the CPC and the State Council on Promoting the Stable Development of Agriculture and the Sustainable Increase of Farmers' Income in 2009>(16)
- <Circular of the General Office of the State Council on the Work of Rectifying the Over-packaging of Commodities>(17)
- <Measure for Releasing Information on Power Dispatch Prioritizing Energy Efficiency>(18)
- <Arrangement for the Work of Energy Conservation and Emission Reduction in 2009>(19)
- <Interim Measures for Supervision and Administration of Trading of Power Generation Rights>(20)

# China's economic stimulation policy package

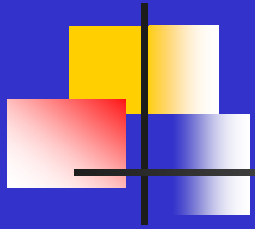
---



- <Several Opinions of Central Committee of the CPC and the State Council on Promoting the Stable Development of Agriculture and the Sustainable Increase of Farmers' Income in 2009> (16)
- <Circular of the General Office of the State Council on the Work of Rectifying the Over-packaging of Commodities> (17)
- <Measure for Releasing Information on Power Dispatch Prioritizing Energy Efficiency> (18)
- <Arrangement for the Work of Energy Conservation and Emission Reduction in 2009> (19)
- <Interim Measures for Supervision and Administration of Trading of Power Generation Rights> (20)

# China's economic stimulation policy package

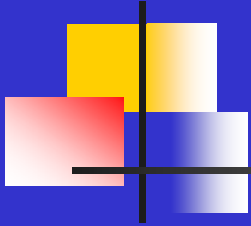
---



- <Several Opinions of the State Council on Promoting Sustainable Development of Resources-oriented Cities> (21)
- <Decision of the State Council on Promoting the Economic and Intensive Use of Land> (22)
- <Measure for Administration of Prevention and Control of Environmental Pollution Caused by Electronic Waste > (23)
- <Measures for Auditing the Levy of Pollutant Discharge Fee > (24)

# China's economic stimulation policy package

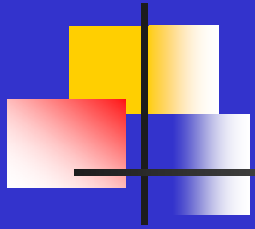
---



- <Circular of the General Office of the State Council on Thoroughly Launching the Nationwide Energy-saving Campaign> (25)
- <Measures for Administration of the Paid Use of Plastic Shopping Bags at Commodity Retailing Places> (26)
- <Regulation on Energy Saving in Civil Buildings> (27)
- <Regulations on Energy Saving by Public Institutions > (28)

# China's economic stimulation policy package

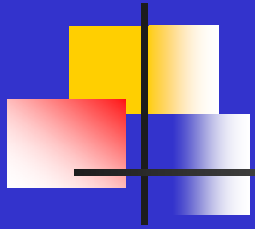
---



- **3. Analysis of Sustainability in the Policy Package**
- The sustainability of these policies covers 4 parts, including
- (1) rely on the science and technology to get sustainable force for economic development;
- (2) strictly control the expanding of high-energy-consuming, heavily polluting and resource-dependent industries;
- (3) develop circular economy in many areas; and
- (4) focus on energy-saving and emission reduction.

# China's economic stimulation policy package

---

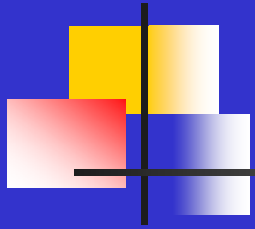


Science and technology is a powerful engine of economic growth.

Rely more on science and technology in making breakthroughs and boosting development, encouraging innovation and upgrading in science and technology to provide scientific and technological support for China's sustainable economic development at a higher level, developing high-tech industrial clusters and creating new social demand and new economic growth areas.

# China's economic stimulation policy package

---



- Strictly control the expanding of high-energy-consuming, heavily polluting and resource-dependent industries.
- Revise the <Industry Structure Adjustment Index>;
- Strengthen the evaluation of land use, energy saving, impact to environment in the Ten Industry Adjustment and Rejuvenation Plan;
  - Use information to upgrade the traditional industry, especially the high energy consuming and heavily polluting industries;

# China's economic stimulation policy package



---

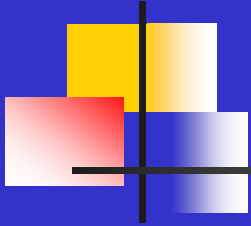
**Phase out backward production capacity. In 2009, China is phasing out 15 Million KW capacity of small coal power plants, 10 million-ton capacity of iron and 6 million-ton of steel, 50 million-ton capacity of cement production, 500 thousand-ton capacity of paper making, 700 thousand-ton capacity of iron alloy, and 6 million-ton capacity of coke;**

**Take strong measures to facilitate the merger and reorganization of enterprises, publicize the name list of enterprises with backward production capacity which should be phased out;**

**Publicize the index of energy saving equipment and high energy consuming equipment.**

# China's economic stimulation policy package

---



Develop circular economy in many areas

- This work is divided into two parts:
- On the macro-policy layer, there are 6 parts of work: (1) implement the circular economy stimulation law; (2) make circular economy development plan in some key industries and key areas; (3) special fund to support technological research and development, new technology demonstration and dissemination, and capacity building;

# China's economic stimulation policy package



---

- (4) make circular economy evaluation index and build statistics system;
- (5) make management index of pollution in key electronic-information industries, stimulate the recycle and reuse of used electric and electronic appliances; and
- (6) make standard and policy for the implementation of <Circular of the General Office of the State Council on the Work of Rectifying the Over-packaging of Commodities>.

# China's economic stimulation policy package

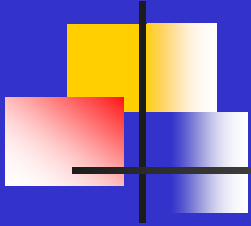


---

- (4) make circular economy evaluation index and build statistics system;
- (5) make management index of pollution in key electronic-information industries, stimulate the recycle and reuse of used electric and electronic appliances; and
- (6) make standard and policy for the implementation of <Circular of the General Office of the State Council on the Work of Rectifying the Over-packaging of Commodities>.

# China's economic stimulation policy package

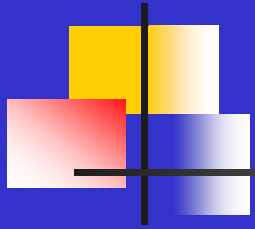
---



On the micro-economy layer, there are 13 tasks in 2009, including (1) carry out re-manufacturing trial work for automobile accessories, issue related regulations, and set up re-manufacturing label system; (2) speed up the establishment of national eco-industrial park; (3) make re-use development plan for the metal industry and the key and large scale equipment re-manufacturing plan;

# China's economic stimulation policy package

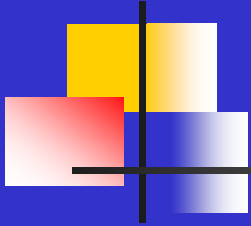
---



(4) develop circular economy in the mineral industry, develop comprehensive utilization of mineral resources, speed up the construction of key projects such as the utilization of plaster from de-sulfur and de-phosphorus process, and comprehensive utilization of crop stalks; (5) forbid further use of brick made from clay and on-site cement-sand agitation to avoid PM pollution; (6) develop some residential community based used product collection center, sorting center and collecting, buying-selling market of used products;

# China's economic stimulation policy package

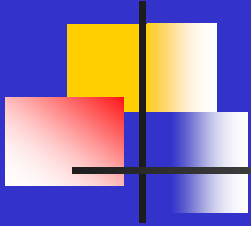
---



(7) re-use of sewage in towns and cities; (8) re-use of kitchen leftovers; (9) stimulate the re-use of building wastes as resource in disaster-stricken areas; (10) continue to implement the paid-use of plastic shopping bags at commodity retailing places;

# China's economic stimulation policy package

---



(11) use alternative materials as packaging box for machinery and electric products to save wood; (12) develop circular economy in agriculture and set up 10 demonstration cities; (13) develop circular economy in the sugar industry and the natural rubber industry;

# China's economic stimulation policy package



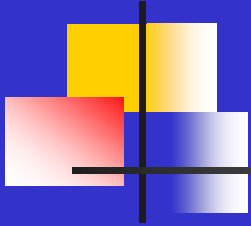
---

- **Energy-saving and emission reduction**

This work will be carried out in 23 areas: (1) implement the energy saving national action in 1000 enterprises to build the energy saving capacity of 20 million tons of standard coal; (2) make and issue guidelines for energy saving and emission reduction in industries including iron and steel, construction, electronics, electric and information, military industry and other medium and small scale enterprises; (3) enlarge the implementation area of mandatory energy efficiency labeling system, make and issue implementation rules of energy efficiency labeling system for 6 industrial products, including electric fan, micro-wave heater, and industrial boiler, etc.;

# China's economic stimulation policy package

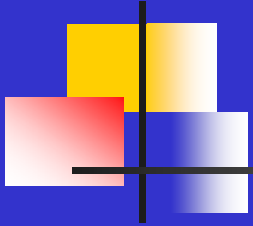
---



(5) carry out energy saving management campaign in 50,000 water boiler operation sites; (6) in 2009, increase the ratio of constructing projects which implements energy saving standard to 90%; (7) reconstruct the heating facility in existing residential buildings in northern part of China. In 2009, 60 million square meters will be reconstructed which shall charge users according to the heat volume they use instead of the room area;

# China's economic stimulation policy package

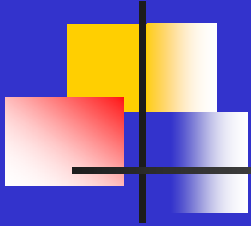
---



(8) enlarge the application of renewable energy in all kinds of buildings; (9) develop public transportation systems; (10) strictly implement the gasoline mileage standard for vehicles, implement the system of disusing outdated vehicles, better the system of reclaiming the outdated vehicles;

# China's economic stimulation policy package

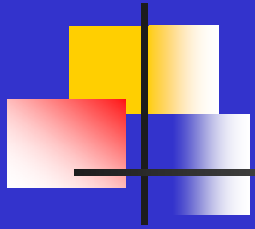
---



- (12) develop electricalization in the railroad system; (13) optimize flight routes, initiate electricity-saving projects in airports, carry out research on encouragement and punishment systems for energy saving and emission reduction in the civil aviation industry; (14) establish measuring and evaluating systems in the transportation industry;

# China's economic stimulation policy package

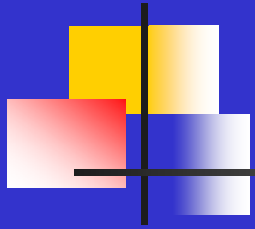
---



- (15) set aside 7 billion RMB to encourage the subsidized trade-in of automobiles and home appliances; (16) encourage the energy saving in six kinds of buildings, including government office buildings, schools, science and technology museums, entertainment sites, hospitals, and gymnasium buildings; (17) establish energy saving evaluation systems in publish institutions;

# China's economic stimulation policy package

---



- (18) carry out statistics auditing and publicizing work on large scale public buildings; (19) encourage the construction of agricultural biogas devices with financial aid from the central government; (20) provide incentives for pollution control to soon solve salient environmental problems in rural areas; (21) advance energy saving and emission reduction in the retailing sector;

# China's economic stimulation policy package



---

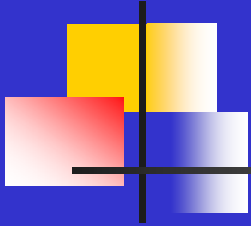
(22) in 2009, China will build the capacity of saving 75 million tons of standard coal, will stimulate the widespread applications of 10 kinds of appliances, including air conditioner and refrigerator which has high energy efficiency and 120 million pieces of energy-saving lights, support 13 big cities including Beijing and Chongqing to build demonstration sites for energy saving and new energy vehicles; increase the waste water treatment capacity of 10 million cubic meters per day, waste water in 36 big cities will be centrally treated. De-sulfur equipment will be installed to coal-fired power plants with total capacity of over 50 MW, and 20 de-sulfur units will be installed to iron steel plants;

# China's economic stimulation policy package



---

- (23) implement fuel tax to reduce oil consumption. The reform on fuel tax is based on the principle of equality, normality, frugality and burden reduction. Equality embodies the principle of paying for what you consume; normality means converting fees such as road and waterway maintenance and management fees into fuel tax. It can also be regarded as a way to reduce fuel consumption.



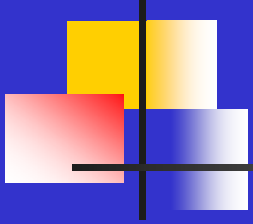
please Contact :

---

Dr. professor Jixing  
[happyjixing@yahoo.com](mailto:happyjixing@yahoo.com)

[jx@cae.cn](mailto:jx@cae.cn)

Office:0086-10-59300280 ,59300290  
0086-10-13911234502



**Thank you**