



Shanghai Flash

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For a cleaner tomorrow

-----Current situation on environmental protection in the Yangtze River Delta Region

The theme of 2009 World Environment Day raised by United Nations Environment Programs is “Your planet needs you; Unite to combat climate change”, which calls for global attention to environment in a broader scale. The Yangtze River Delta Region(YRD) boasts the **most developed economy** with continuous GDP growth but is also **a traditional manufacturing base** where may cause environmental damages. In recent years, joint efforts and various measures have been taken to improve current environment in this area.

I Policies and plans

1. Shanghai----- 4th Round of “Three-Year Action Plan”

With the coming 2010 World Expo, Shanghai quickens the pace of urban infrastructure construction while the public awareness of improving environment has been enhanced. Shanghai is carrying out various measures to improve environment quality in an all-round way. 2009 Shanghai Environmental Bulletin¹ released by the Shanghai Environmental Protection Bureau demonstrates that **Shanghai invested 42 billion RMB(6 billion USD)** in 2008, which accounted for **3% of Shanghai’s 2008 GDP**. In return, Shanghai has delivered a good report on reducing total pollutant discharges by achieving emission reduction of SO₂ and COD² by 10% and 9% respectively, with the expected goal of 5% and 4%.

Aiming the target of building Shanghai into a National Model City of Environmental Protection and an ecological city, the “**Three-year Action Plan for Environmental Protection**” was put into practice round by round. **2009** is the starting year of Shanghai’s **Fourth Round of “Three-Year Plan”³**. In **urban districts**, great efforts will be laid on **vehicle emission control, dust pollution control and noise pollution control** while in **suburban area** the major tasks are to underscore the completion of **waste water collection network, rehabilitation in waterways, industrial parks and agricultural land**.

¹ See detailed from the Shanghai Environmental Protection Bureau
<http://www.sepb.gov.cn/seicm/editor/filemanager/file/2009bulletin/cont.html>.

² COD: Chemical Oxygen Demand, which is an index reflecting the water quality by measuring the organic substances.

³ Three-year Action Plan: The plan was initiated from 2000 and is aimed at improving general local environment. The program is led by the Shanghai Municipal People’s Government and supervised by the Shanghai Environmental Protection Bureau, with the support of different authorities in charge. In this round, seven sectors are paid special attention, which are namely water, noise, air pollution control and prevention, solid waste disposal and utilization, industrial pollution control, circular economy and cleaner production, agriculture and country environmental protection and ecological protection and development.

2. Jiangsu----- “building a green Jiangsu”

Jiangsu boasts an area of 100'000 square kilometres and a population of 74 million and is one of the most developed provinces in China. Jiangsu, which is **rich in water resources**, is dotted with crisscrossed valleys of Yangtze River, Huai River, Taihu Lake as well as the Beijing-Hangzhou Grand Canal. As a consequence, it is a huge task for local governments to conduct water protection and to implement pollution reduction and treatment.

With Shanghai's industrial restructuring from the secondary industry into the tertiary industry in recent years, a number of present **manufacturing industries are transferred to the neighbouring provinces of Jiangsu and Zhejiang**, putting new challenges on environmental protection while bringing economic returns at the same time.

The objective of “building a green Jiangsu” is put forward by the Jiangsu Provincial Government in early 2004. According to the plan, **the average provincial forest coverage is expected to rise at 20% while the urban greenery coverage be up to 40% by the year of 2010**. The Jiangsu Environmental Protection Bureau said the fund of **5.3 billion RMB(0.8 billion USD)** especially **for environmental protection** was invested in 2008, which has a sharp rise by 22% than the previous year.

From 1997 to 2007, **15 cities⁴ in Jiangsu are honoured as “National Model city for environmental protection”**, which is an award approved by the Ministry of Environmental Protection, aiming at arising the public environmental protection awareness and setting an example for other cities to develop in an environmental-friendly way. This award will be re-evaluated every 3 years.

3. Zhejiang----- “811 Three-Year Plan”

Located in the south part of the Yangtze Delta Region, Zhejiang is similar with Jiangsu in area but has a smaller population of 51 million. Zhejiang, whose environment rated very good in 2008, is among the forefront of environmental protection in the whole country. **Hangzhou(2001), Ningbo(2001), Shaoxing(2002) and Yiwu(2007) won the award of “National Model City for Environmental Protection”**.

For the Zhejiang Province, the year 2008 marks the beginning of another round of “811 Three-Year Plan”, which is a systematic action outline of working priorities and urgent problems to be solved. **The “811” refers to the 8 main water systems throughout Zhejiang and 11 key supervision areas⁵ for serious pollution at the provincial level**. After continuous effort and investment, the river quality displays great improvement and it will secure the quality of sanitary and drinking water of local residents. As to the 11 major polluters, certain production lines have closed or forced to upgrade to meet the standard.

II Progress and deficiency

1. Shanghai

a) Air quality:

The air quality was fine or good on 328 days, nearly 90% throughout the whole year of 2008, says the Shanghai Environmental Protection Bureau. Inhalable particles remained the major pollutant. **Blown dust** is nowadays one of the **leading pollutant sources** and Shanghai is launching dust control policies. First of all, Shanghai will be the first city to **implement the National Automotive Phase IV Standard from Nov 1st 2009**, which equals the post-2006 Standard IV in EU countries and is definitely to exert a positive impact on improving air quality during the Expo. Shanghai has around **1.37 million autos** by the end of 2008, with **330'000 autos far from current emission standard**. The government will compensate 5'000 RMB to

⁴ These cities are: Zhangjiagang(1997), Kunshan(1998), Suzhou(1999), Jiangyin(2000), Changshu(2001), Taicang(2001), Yangzhou(2002), Nanjing(2003), Wuxi(2004), Jin Tan(2004), Liyang(2004), Changzhou(2004), Zhenjiang(2004), Nantong(2006), Taizhou(2007).

⁵ 8 water systems in Zhejiang are Shaoxi River, Beijing-Hangzhou Grand Canal, Qiantangjiang River, Yongjiang River, Jiaojiang River, Oujiang River, Feiyunjiang River and Aojiang River. 11 key supervision projects lie in the seriously pollutant plants and in the industrial parks of 10 cities around the Zhejiang Province.

those who discard old cars and purchase new ones⁶. What's more, **the management on major municipal building sites will be stricter** and periodically spot checks will be organized by Shanghai Environmental Protection Bureau and Shanghai Urban Construction and Communication Committee.

b) Water quality:

Shanghai boosts 50 sewage plants by the end of 2008, with the leading processing ability of 6.7 million cubic meters per day. The Three-Year Plan places a high value on **expanding the sewage collection nets and channels** in the suburban areas, as increasing numbers of industrial parks settling down and the accelerating process of urbanization call for high demand for sewage treatment. The relevant authorities frame **a subsidy policy⁷ to offer urban sewage treatment plants with incentives on reducing COD emission** exceeding the requested volume.

c) Noise Control

In 2008, the intensity of regional ambient noise in Shanghai met the standard required for different functional areas. Three noise standards, issued by the Ministry of Environmental Protection, started to implement in Shanghai from Oct. 1st 2008. **The Sonic Environmental Quality Standard** (GB3096-2008) identifies the applicable areas and ranges. **The Noise Standard in Industrial Area Boundary** (GB 12348-2008) specifies the measuring methodology on functional regions and noise sensitive buildings. **The Social Activity Noise Standard** (GB 22337-2008) is to limit indoor noise made by fixed equipments.

2. Jiangsu

The Taihu Lake, the national 3rd largest lake, is renowned for its unique and pretty scenery. However, owing to eutrophication, serious **algae bloom broke out in middle 2007**, bringing drinking water crisis of local people's daily life. The Jiangsu Provincial Government has injected a financial fund of 2 billion RMB(0.3 billion USD), together with 12 billion RMB(1.7 billion USD) social funds, into the polluted water collection and treatment.

Taihu is surrounded by 4 cities(Wuxi, Suzhou, Yixing, Huzhou) in Jiangsu and Zhejiang Provinces, which should take coordinative measures from the sources to react to the water pollution. The related supervision authorities set stricter regulation in 6 industries of textile, chemistry, papermaking, steel manufacturing, electroplating and food. Over 960 companies in these industries are requested to execute new emission standard.

In order to better react the river pollution problems, the Jiangsu Government is importing advanced technology and experience from abroad. At present, **Jiangsu has a close relationship with Singapore in the field of waste water treatment**. The two parties have signed 18 projects with partly finished and the rest still on-going, including 1 ecological industrial park, 1 water supply project and 16 waste water treatment plants in Nanjing, Suzhou, Zhangjiagang and Yangzhou etc. **Japan also collaborates with North Jiangsu cities**, where are short of advanced equipment and technology. A three-year pilot project has already been launched in Suqian City from December 2008.

3. Zhejiang

The "811 Three-Year Plan" provides a definite instruction of major tasks and thus has gained positive feedback: 2008 COD and SO₂ emission is successfully reduced by 5% and 7% than 2007, which is much better than the set goal. It is common consensus that to be environmental friendly is superior than blindly pursuing GDP growth. Take the Jiaxing City for example, the papermaking and printing industry attribute 30% of local GDP but bringing over 60% of total pollutant discharges. Considering the both sides, the Jiaxing City began to conduct new standard from 2009, including market access restriction and tightened emission requirements.

⁶ These cars are specially referred to passenger cars and trucks only. Private cars with high pollution are not included in the policy but the driving range will be limited at rush hour.

⁷ News from Shanghai Environmental Protection Bureau: <http://www.sepb.gov.cn/news.jsp?intKeyValue=15743>.

According to the policy, the sewage treatment plants, divided by different processing volume and location, are qualified to be rewarded when the COD concentration is under 80mg/L, 60mg/L, 50mg/L and 40mg/L respectively.

It is estimated that **resources regeneration industry** is the most potential one in the 21st century, seeing from the fact that the shortage of resources supply globally. Although China has not issued completed laws in this field, more and more companies notice the business opportunities and are entering the market. Take the city of **Taizhou** in Zhejiang Province as an example, the **E-waste recycling industry** has been one of the leading industries and becomes a new GDP growth point. Thanks to the quick development of the industry, Taizhou is not only self-sufficient but also **provides the local hardware manufacturers with abundant cheap metal material**, realizing a win-win result despite of pressure caused by rising costs.

III Joint efforts

The First Joint Conference on Environmental Protection of the Yangtze Delta Region took place in Shanghai in April 2009, which stressed the respective tasks of 3 provinces. **Shanghai is launching the air pollution controlling program and Zhejiang initiates regional supervision system while Jiangsu conducts the improvement of the regional green credit policy**⁸.

In addition, Shanghai, Jiangsu and Zhejiang have signed **2009-2010 Cooperation Agreement on Environmental Protection** in the Yangtze Delta Region, which emphasizes the joint efforts from 3 provinces in water, electric power plants and air quality control.

These three provinces are gradually promoting the same charges for sewage treatment and disposing pollutants. **Comprehensive administration and facilities in cross-regional rivers** along the Yangtze River and Hangzhou Bay will be integrated and shared.

Conference on Air Quality Notification/Forecasting and Emission Inventory Development in the Yangtze River Delta was held in June 2009 in Shanghai, with the purpose of discussing regional data-sharing, joint consultation and promoting closer cooperation in the region. The desulphurization process in most coal-fired power plants are ordered to complete by 2010 and newly application for building the heat-engine plants will be strictly controlled in the YRD to ensure the air quality during the World Expo.

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⁸ Green Credit Policy: it is a policy carried out by the Ministry of Environmental Protection in 2007, in order to balance the relationship between economy and sustainable development. It is a concretion of financial instruments applying in the environmental protection area. Banks are requested to tighten the lending to the energy-intensive and highly polluting industries.