General Framework for the Fourth Three-year Action Plan of Environmental Protection in Shanghai

Shanghai Environmental Protection Bureau
Part 1 Review
Part 2 Current Situation Analysis
Part 3 Framework for the Fourth Three-year Environmental Action Plan in Shanghai
Part One Review

Phase 1
- Water Pollution Control
- Air Pollution Control
- Solid Waste Management
- Green Space Conservation
- Comprehensive Environmental Rehabilitation in Industrial Zones in Wusong and Taopu

Phase 2
- Water Pollution Control
- Air Pollution Control
- Solid Waste Utilization and Disposal
- Green Space Conservation
- Ecological Conservation and Improvement in Agriculture Sector
- Comprehensive Environmental Rehabilitation in Major Industrial Polluters and Areas

Phase 3
- Water Pollution Control
- Air Pollution Control
- Solid Waste Utilization and Disposal
- Industrial Pollution Control, Cleaner Production and Circular Economy
- Agricultural Pollution Control and Environmental Protection
- Ecological Conservation and Environmental Infrastructure Development in Chongming Island
1. Comprehensive Improvement of Local Environmental Protection

- Around 3% of local GDP used for environmental investment in eight consecutive years
- A smooth communication and coordination mechanism created to promote local environmental protection
- Three-year action plan highlighted as an important method for promoting comprehensive environment improvement
2. Strengthened Enforcement of Environmental Law and Regulation

- Emended *Shanghai Environmental Protection Ordinance*
- Implemented Environmental Impact Assessment
- Differential pricing policy for power plants with FGD devices
- Online monitoring on key polluting enterprises
3. Great Improvement in Environmental Infrastructure

- Incineration plants of Yuqiao and Jiangqiao built for domestic waste disposal; Meishang Waste Plant built for comprehensive utilization and safety disposal of domestic waste.
- Land fill sites built for centralized safe disposal of dangerous waste.
- FGD devices operated in 11 coal-burning power generation units of 5 power plants with 2 million kilowatt.
- 73% sewage treatment rate in urban area.
4. Breakthrough Achieved in Environmental Rehabilitation in Key Areas

- **Urban Area**: around 100 polluting enterprises closed down for industrial structure adjustment; No-coal Burning Area created within inner ring by disassembling boilers fuelled by coal or replacing them with cleaner energy;

- **Wusong Industrial Park**: significant comprehensive environmental rehabilitation conducted; major pollutants such as smoke and dust, SO\(_2\) cut off by more than 50%;

- **Taopu Industrial Park**: a successful transfer from traditional industrial park to metropolitan industrial park; odor problem eliminated in the Park
5. The Decrease Trend In Emission Intensity and Total Quantity of Major Pollutants

Emission Quantity Trend

Emission Intensity Trend
6. Generally Sound Environmental Quality

- 85% or above Good-air-quality rate maintained in five consecutive years

- The concentration levels of SO₂, NO₂ and PM are in decrease trend
6. Generally Sound Environmental Quality

- Greenery rate is 37.6% and green space per capita is 12 m²

- Water quality in Huangpu River, Estuary of Yangtze River and other drinking water sources is in good condition; black-and-odor waterways are eliminated in urban areas

- Yellow River, Suzhou River, Changjiang (Yangtze) River, and other drinking water sources have good water quality; black-and-odor waterways have been eliminated in urban areas.
1. Environmental Pressure caused by fast economy growth

- Major pollutants such as COD and SO$_2$ are in a decrease trend but the total emission of major pollutants maintains in high level.
- Current pollution emission reduction mainly rely on projects of pollution control. With the completion of these projects and continuously fast growth of population and local economy, resource consumption and pollution emission will remain in high level if there is no conversion of current extensive economic growth style.
Local SO$_2$ Emission Reduction Target in Eleventh Five-year Master Plan

2010年比2005年削减率（%）

Emission Reduction Rank No.1

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Local COD Emission Reduction Target in Eleventh Five-Year Master Plan

2010年比2005年削减率(%)

7% decrease  15% decrease

Emission Reduction Rank No. 6
2. Pollution Control and Management in Key Areas and Sectors Need Further Implementation

- Safety disposal capability of domestic waste is not adequate enough; most sledges in sewage treatment plants cannot be disposed safely.
- Acoustic noise in urban transport is serious; motor vehicle pollution is in an increasing trend; dust pollution on some roads is severe.
- Environmental protection in suburb and countryside need a further improvement in sewage collection rate, the effective treatment of sewage and disposal of domestic waste, non-point pollution source control, water pollution control.
3. Problems of Traditional Pollution Decreasing While Risks of New Pollutions Increasing

- The levels of Ammonia Nitrogen and total phosphorous are rising significantly; Eutrophication level of water body is serious
- Secondary pollution problems such as ozone and regional smog caused by air-borne particulate, aerosol and VOCs start to appear; the frequency of acid rain is increasing annually
4. Environment Expectancy Needs to Be Transferred into Further Awareness and Actions

continuous efforts need to be made to emphasize the environmental responsibility of every citizen, enterprise and government and to transfer current producing and life styles
5. The Competence of Environmental Supervision and Management Need Further Improvement

Capability Gap

- Monitoring
- Law Enforcement
- Scientific research
- Emergency Response
Part Three the Framework of the Fourth Three-year Environmental Action Plan

Objectives

- To control local emission load of major pollutants by national requirement
- To achieve around 90% good-air-quality rate annually
- To renovate black-and-odor urban waterways
- To guarantee the safety of drinking water
- To expand public green space by 13.2 m² per capita in urban area and to achieve greenery rate by 38%
Key Sectors and Tasks

- Water Pollution Control
- Air Pollution Control
- Acoustic Noise Control and Solid Waste Utilization and Disposal
- Industrial Pollution Prevention and Control
- Circular Economy and Cleaner Production
- Environmental Protection in Agriculture and Countryside
- Ecological Conservation and Development
1. Water Pollution Control

- Projects of drinking water source conservation in Qing Caosha
- Sewage collection networks are completed; sludge generated are treated safely
- Rehabilitation of urban waterways
2. Air Pollution Control

- FGD devices are required to install for local power plants fuelled by coal
- New automobiles are required to meet National IV Standard of Automobile Emission in 2009; all vehicles in use are needed to pass the I/M test annually
- Oil gas recovery projects are introduced in oil stations, oil depots and tank trucks
3. Acoustic Noise Control and Solid Waste Utilization and Disposal

- To launch noise control projects in noise-sensitive areas along expressways and urban arteries; to promote public awareness and law enforcement of noise control on motor and non-motor vehicles
- To maintain the sanitary disposal rate of garbage by 85% above; to achieve the complementary standard of rubbish leakage disposal
- To complete the centralized collecting, transferring and disposal system for medical waste
4. Industrial Pollution Prevention and Control

- To complete comprehensive environmental rehabilitation in Wujin Industrial Park
- To promote the construction of infrastructure of centralized heating system and environmental quality monitoring system in some old industrial parks with good condition
- To complete the adjustment of industrial structure in polluting enterprises
5. Circular Economy and Cleaner Production

- To initiate pilot projects of circular economy, such as projects in Shanghai Chemical Industrial Park and Bao Steel
- To create national ecological industrial parks in Jingqiao Export Processing Zone, Zhangjiang High-tech Park and so on
- To establish recollecting and recycling networks for electronic waste
- To implement compulsory auditing procedure for cleaner production and encourage voluntary cleaner production
6. Environmental Protection in Agriculture Sector and Countryside Area

- To establish demonstration sites of pollution control on non-point pollution sources in agriculture
- To renovate villages
- To build standard public toilets in countryside
7. Ecological Conservation

- To construct Green Expo Park
- To develop Chongming Eco-island
- To expand public green space in urban areas
Thank You!

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