For Information
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LEGISLATIVE COUNCIL
PANEL ON ENVIRONMENTAL AFFAIRS
SUBCOMMITTEE ON IMPROVING AIR QUALITY

Progress of Measures under Pearl River Delta Regional Air Quality Management Plan to Achieve 2010 Emission Reduction Targets

Purpose

This paper reports on the latest progress of implementation of measures, including those under the Pearl River Delta Regional Air Quality Management Plan (Management Plan), to improve air quality and meet the 2010 emission reduction targets.

Background

2. To improve regional air quality, the Hong Kong Special Administrative Region (SAR) Government reached a consensus with the Guangdong Provincial Government in April 2002 to reduce, on a best endeavour basis, the emissions of four major air pollutants, namely sulphur dioxide (SO_2), nitrogen oxides (NO_x), respirable suspended particulates (RSP) and volatile organic compounds (VOC) by 40%, 20%, 55% and 55% respectively in the Pearl River Delta (PRD) Region by 2010, using 1997 as the base year. Achieving these targets will significantly help improve the air quality of the Region and relieve the regional smog problem.

3. Since September 2005, we have been providing biannual reports to the Panel on Environmental Affairs (EA Panel) on the progress of meeting the 2010 emission reduction targets. We last reported to the EA Panel in August 2010. This is the eleventh progress report.

Progress of Emission Reduction

4. We are making good progress in the implementation of local emission reduction measures. Emission levels of the four major air pollutants in 2009 dropped by 24% to 57% when compared with those in 1997. Among them, the reduction levels of NO_x, RSP and VOC had already exceeded the 2010 emission reduction targets. Details are as follows –

	Emission Level in 1997 (Tonnes)	Change in Emission Level during 1997-2009[1]	2010 Emission Reduction Target
SO_2	66,200	-24%	-40%
NO_x	124,000	-33%	-20%
RSP	11,500	-57%	-55%
VOC	68,800	-57%	-55%

5. As the two local power companies have retrofitted their coal-fired power generation units with emission reduction facilities in 2010 as planned, we expect that emissions of SO_2, NO_x and RSP from the power sector would further drop and that Hong Kong could fully achieve the 2010 emission reduction targets.

Latest Measures to Reduce Emissions from Major Sources

Transport Sector

6. To further step up the local efforts in reducing emissions from the transport sector, since July 2010, we have –

(a) introduced a regulatory framework for motor vehicle biodiesel; and

(b) tightened the statutory specifications for motor vehicle fuels to the Euro V standards.

7. We are also rolling out the following major initiatives –

(a) we are bringing the Motor Vehicle Idling (Fixed Penalty) Bill through the Legislative Council (LegCo) to introduce statutory prohibition against idling vehicles with running engines;

(b) we are monitoring the supply of Euro V vehicles with the aim to introduce Euro V vehicle emission standards as soon as practicable. Before the introduction, we will fully consult the relevant stakeholders including the transport trades;

(c) we are developing a proposal to strengthen the control of emissions from in-use petrol and liquefied petroleum gas vehicles, including the

[1] The percentage changes in emission levels between 1997 and 2009 are preliminary figures.

use of roadside remote sensing equipment and dynamometers for emission testing;

(d) we are preparing for pilot low-emission zones in busy corridors in Causeway Bay, Central and Mong Kok for franchised buses. We aim to increase as far as possible the ratio of low-emission franchised buses running in these zones from 2011/12, with the target of having only low-emission buses in these zones by 2015;

(e) we are preparing for a trial to retrofit Euro II and Euro III franchised buses with selective catalytic reduction devices to upgrade their emission performance to the Euro IV level. Subject to satisfactory trial results, the Government will fully fund the retrofit of the devices on all Euro II and Euro III franchised buses;

(f) subject to the approval of the Finance Committee (FC), we would fund the full cost of procuring six hybrid buses for use by the franchised bus companies along busy corridors to test the operational efficiency and performance of these buses under Hong Kong conditions and collect operational data. If the bus companies wish to test other greener buses such as electric buses, the Government will be ready to provide them with the same financial support;

(g) subject to the approval of FC, we are preparing for the setting up of the $300 million Pilot Green Transport Fund to encourage the transport sector to test out green and low-carbon transport means and technology by March 2011;;

(h) we are reviewing the findings of the consultation on a proposal to control emissions from non-road mobile sources. We aim to finalize the proposal and initiate the necessary legislative procedures in 2011 for implementing the scheme; and

(i) we completed a trial of domestic ferries using ultra low sulphur diesel (ULSD) in July 2010. We are reviewing the findings with a view to mapping out the way forward for encouraging ferry operators to switch to cleaner fuels or adopt other emission control measures.

8. In addition to the above, we have been implementing the following incentive schemes to promote a wider use of more environment-friendly vehicles –

(a) on the one-off grant scheme to encourage vehicle owners to replace their pre-Euro and Euro I diesel commercial vehicles with new ones, we made a special arrangement to allow vehicle owners who had

ordered new replacement vehicles before the application deadline in end-March 2010 to retain their eligibility for application of the grant until end-March 2011. We have received about 17,300 applications (representing about 30% of the eligible vehicles) including those made under the special arrangement. Since the introduction of the scheme, the number of on-road pre-Euro and Euro I diesel commercial vehicles has been reduced from about 59,000 to 35,000 (i.e. a reduction of about 40%);

(b) since April 2007, we have been providing a 30% reduction in First Registration Tax (FRT), subject to a cap of $50,000 per vehicle, to encourage the use of environment-friendly private cars. As at end-November 2010, we have approved about 16,700 applications. Since the introduction of the scheme, environment-friendly private cars account for about 13% of first-registered private cars;

(c) since April 2008, we have reduced FRT of environment-friendly commercial vehicles to encourage early take-up of these vehicles, which are currently pitched at the Euro V standards. As at end-November 2010, we have approved about 1,300 applications;

(d) since June 2010, businesses may claim 100% deduction under profit tax in respect of the capital expenditure incurred for purchasing environment-friendly vehicles. The new tax concession is applicable as from the year of assessment 2010/11; and

(e) since July 2010, we have been providing a one-off grant to encourage vehicle owners to replace their Euro II diesel commercial vehicles early by new ones compliant with the prevailing statutory emission standards. As at end-November 2010, we have approved about 590 applications, accounting for about 2% of the eligible vehicles.

Power Sector

9. Power generation is the main source of air pollutant emissions in Hong Kong. To deliver the emission reduction targets, we have imposed emission caps on all power plants since 2005 and are progressively tightening them during licence renewals. We further brought the Air Pollution Control (Amendment) Ordinance 2008 through LegCo in July 2008 to give statutory effect to the emission caps for power plants in 2010 and beyond through a Technical Memorandum (TM). Stringent emission caps for 2010 were subsequently imposed on the two power companies through the First TM promulgated in December 2008.

10. In 2010, we reviewed the First TM and tightened the emission caps for the power sector from 2015 onward by maximizing the use of existing gas-fired generation units and prioritizing coal-fired generation units retrofitted with emission abatement facilities. The Second TM was promulgated in December 2010. Compared with the First TM, it further reduces the emission allowance for SO_2, NO_x and RSP by about 50%, 35% and 34% respectively.

11. To encourage Hongkong Electric (HEC) and CLP Power to take further steps to reduce emissions and sustain strict compliance with the environmental requirements, we set out a number of incentives and penalty arrangements in the new Scheme of Control Agreements signed with them in January 2008. These arrangements include –

(a) linking the permitted rate of return of the two power companies to their compliance with the emission caps. A higher rate of return will be provided for emissions lower than the caps. Likewise, the new arrangements provide for financial disincentives in terms of a lower rate of return for emitting more pollutants than permissible; and

(b) providing a higher rate of return to the power companies for their investment in renewable energy facilities and offering them a bonus in permitted return depending on the extent of renewable energy usage in their electricity generation.

12. Other major progress in reducing emissions from the power sector include the following –

(a) in August 2008, the Hong Kong SAR Government signed a Memorandum of Understanding on Energy Co-operation with the National Energy Administration to ensure a stable and long-term supply of nuclear electricity and natural gas from three different sources, namely offshore gas, piped gas and liquefied natural gas. In 2009, natural gas accounted for 23% of fuel mix for power generation in Hong Kong[2]. To improve air quality and address the challenges posed by global warming, we will actively explore ways to accelerate the increasing use of clean energy by, for example, increasing the proportion of natural gas to account for about 40% of Hong Kong's fuel mix for power generation[3];

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[2] The figure also includes nuclear power generation from Daya Bay.

[3] Please refer to footnote 2 above.

(b) on promotion of renewable energy, the Environmental Impact Assessment Reports on developing commercial scale off-shore wind farms in Hong Kong waters by both power companies had been conditionally approved. CLP was granted with an Environmental Permit in August 2009 for their off-shore wind farm proposal off Sai Kung, while HEC was granted with the same permit in June 2010 for their proposal off Lamma Island. Besides, HEC had commissioned a 550 kW thin film photovoltaic system in July 2010 on the roofs of the power station buildings to increase the use of renewable energy; and

(c) HEC completed installation of emission reduction facilities which have been put in operation successively since July 2009 and April 2010. For CLP, they completed two retrofit projects in July and October 2010 respectively and will complete the remaining two retrofits by 2011. With the completion of the emission reduction retrofits, the preliminary emission data for the first three quarters of 2010 showed that the power companies should be able to comply with the 2010 emission caps.

Other Sources

13. We are also implementing the following major initiatives to control emissions from other sources –

(a) we amended the Air Pollution Control (Volatile Organic Compounds) Regulation (Chapter 311W) in October 2009 to extend the control to other products, including adhesives, sealants, vehicle refinishing paints, marine vessel paints and pleasure craft paints, to limit their VOC contents in phases from January 2010; and

(b) under the Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) Regulation (Chapter 403C) amended in December 2009, the import of split-type room air-conditioners containing chlorodifluoromethane (HCFC-22) has been banned since July 2010.

Air Quality Objectives (AQOs) Review

14. We completed the public consultation on the proposed new AQOs and air quality improvement measures recommended under the AQOs Review and reported the findings to the EA Panel in June 2010. We also reported the key considerations in taking forward the recommended measures and the progress made on those measures for which concrete implementation programmes have been drawn up to the Subcommittee on Improving Air Quality of the EA Panel in July 2010. It will take us some more time to develop a comprehensive strategy on how best we should take

forward the air quality improvement measures and update the AQOs. Meanwhile, we are taking active steps to introduce further measures to reduce emissions from major sources as outlined in paragraphs 6 to 13 above.

Promotion of Energy Efficiency

15. Apart from the above, another effective way of reducing emissions is through enhancing energy efficiency and promoting energy conservation. In this regard –

(a) in November 2010, the Buildings Energy Efficiency Bill passed into legislation to improve energy efficiency in new and existing buildings by mandating compliance with the Building Energy Codes;

(b) we are continuing to promote the buildings energy efficiency funding schemes, with $450 million allocated from the Environment and Conservation Fund, to subsidize qualified building owners in carrying out energy-cum-carbon audits and energy efficiency projects. The schemes have been opened for application since April 2009. As at end-November 2010, we have approved more than 600 funding applications (amounting to more than $200 million);

(c) we have adopted a comprehensive target-based green performance framework for government buildings and set targets in various environmental aspects to promote environmental protection and energy conservation. We will also promote the use of energy efficient designs and technologies by means of demonstration projects;

(d) we plan to implement a district cooling system at the Kai Tak Development to supply chilled water to buildings in the region for centralised air-conditioning;

(e) we introduced a mandatory Energy Efficiency Labelling Scheme through the Energy Efficiency (Labelling of Products) Ordinance (Chapter 598) to encourage the use of energy-efficient products. The initial phase of the scheme, which covers three types of product (namely room air conditioners, refrigerating appliances and compact fluorescent lamps), has been fully implemented since November 2009. The second phase covering washing machines and dehumidifiers commenced in March 2010, with a grace period of 18 months for the trades to make necessary preparations;

(f) we are promoting the replacement of incandescent light bulbs by energy-efficient lighting installations through various means. We will

consult the public on progressively restricting the sales of energy-inefficient incandescent light bulbs through legislation; and

(g) we have conducted consultancy studies on energy wastage arising from excessive use of external lighting and are now consolidating the findings. We will work out a proposal to deal with issues relating to external lighting and consult the relevant panel of LegCo in the first quarter of 2011.

Co-operation with Guangdong Province and Mainland

16. To achieve the 2010 emission reduction targets, the Guangdong Provincial Government is working in earnest to implement the emission reduction measures under the Management Plan, which focus on power plants, motor vehicles and the more polluting industrial processes. New initiatives include the following –

(a) starting to supply National IV standard motor vehicle fuels – National III standard motor vehicle fuels are now in supply in the entire PRD Region. Guangzhou has started to supply National IV standard petrol since August 2010;

(b) tightened the emission standards for light duty petrol vehicles and gas-fired vehicles in the PRD Region to the National IV standards (which are on a par with the Euro IV standards) since September 2010;

(c) implementing the amended "Regulation on the Prevention and Control of Pollution from Motor Vehicles in Guangdong" since September 2010 to strengthen measures for reducing vehicle emissions. Some of these measures include promoting the production and use of clean energy vehicles and energy efficient and less polluting vehicles, implementing strengthened vehicle inspection and labeling regulatory schemes for in-use vehicles, as well as implementing road use restrictions on motor vehicles not meeting relevant standards;

(d) completed retrofitting all cement, ceramic and sheet glass manufacturing enterprises in the PRD Region with highly effective dust extractors and desulphurization systems in September 2010;

(e) completed installation of vapour recovery system at petrol filling stations, oil depots and tanker trucks in the PRD Region in October 2010;

(f) implementing new pollutant emission standards for boilers as well as cement, furniture manufacturing, printing, shoe-making and surface coating of automobile manufacturing industries since November 2010; and

(g) continuing to close down serious polluting industries (including cement plants as well as iron and steel plants with low production capacity).

17. In accordance with the environmental cooperation initiatives agreed in the Framework Agreement on Hong Kong/Guangdong Cooperation signed in April 2010, the two governments will continue to implement the emission reduction measures under the Management Plan with a view to further improving regional air quality. For details on progress made in taking forward the measures, please refer to **Annexes A to E**. The two governments will conduct a final assessment of the delivery of the 2010 emission reduction targets by both sides in 2011. In addition, the two sides are actively undertaking a study on the post-2010 arrangements for emission reduction in the PRD Region, which is aimed for completion in 2011.

18. Furthermore, we are working on the following joint initiatives with the Mainland authorities to improve regional air quality –

(a) we are working with the Economic and Information Commission of Guangdong Province to implement the five-year Cleaner Production Partnership Programme. The objective is to encourage and facilitate Hong Kong-owned factories operating in the PRD Region to adopt cleaner production technologies and practices, thereby reducing emissions and enhancing energy efficiency. As at end-December 2010, about 1,030 applications have been approved under the Programme. In addition, the two sides have jointly presented the "Hong Kong - Guangdong Cleaner Production Partner" commendation to 115 Hong Kong-owned enterprises to galvanise their efforts in pursuing and promoting cleaner production; and

(b) in October 2010, the two sides jointly released a report on the monitoring results of the PRD Regional Air Quality Monitoring Network for the first half of 2010. We aim to complete the report covering the whole year of 2010 in April 2011..

19. Members are invited to take note of the above information.

Environment Bureau / Environmental Protection Department
January 2011

Annex A

Pearl River Delta Regional Air Quality Management Plan
Enhanced Control Measures of Hong Kong Special Administrative Region

Measure	Implementation Programme	Progress (Up to 30 November 2010)
Encourage replacement of diesel light buses with ones using clean fuel	Since 2002, the Government has offered incentives to diesel light bus owners to encourage replacement of diesel light buses with liquefied petroleum gas (LPG) or electric ones.	The incentive scheme was introduced in August 2002 and completed in December 2005. As at end-November 2010, there were about 2,800 public LPG light buses, accounting for approximately 64% of the entire public light bus fleet.
Require retrofitting of particulate removal devices on pre-Euro diesel vehicles (Item completed)	Since April 2007, pre-Euro diesel vehicles have to be installed with approved particulate removal devices.	Financial assistance was provided in phases from December 2002 to December 2005 to retrofit pre-Euro heavy-duty diesel vehicles with catalytic converters. All together, about 36,500 eligible vehicles were installed with catalytic converters. Since April 2006, all pre-Euro heavy-duty diesel vehicles (including franchised buses), except those operate under long-idling situations (including lorries with cranes mounted, concrete mixers, pressure tankers and gully emptiers), were required to be installed with approved emission reduction devices. Since April 2007, this requirement was extended to "long-idling" vehicles.
Retrofit Euro II and Euro III franchised buses with selective catalytic reduction (SCR) devices	To study the feasibility of retrofitting Euro II and Euro III franchised buses with SCR devices	In the 2010-2011 Policy Address, the Government proposed to fund a trial to ascertain the feasibility of retrofitting Euro II and Euro III franchised buses with SCR devices to reduce emissions of nitrogen oxides (NOx) from the franchised bus fleet. Subject to satisfactory trial results, we propose to fund the capital costs for installing SCR devices to Euro II and Euro III franchised buses. We have set up a task force to prepare for and monitor the trial. It comprises representatives from the franchised bus

Measure	Implementation Programme	Progress (Up to 30 November 2010)
		companies operating routes serving busy corridors in the urban areas, overseas and local experts, bus and bus engine manufacturers, SCR device suppliers, as well as the relevant government departments. The task force is preparing for the trial, aiming at launching it in around mid-2011.
Encourage vehicle owners to replace pre-Euro and Euro I commercial diesel vehicles with Euro IV models (Item completed)	From April 2007 to March 2010, the Government offered a one-off grant to vehicle owners to encourage the early replacement of pre-Euro and Euro I diesel commercial vehicles with new ones compliant with the prevailing statutory emission standards (which is now the Euro IV emission standards).	From the introduction to completion of the scheme, the number of on-road pre-Euro and Euro I diesel commercial vehicles has decreased from about 59,000 in 2007 to 36,000 (i.e. by about 40%).
Encourage vehicle owners to replace Euro II commercial diesel vehicles with Euro IV models	Since July 2010, the Government has introduced a one-off grant scheme to encourage vehicle owners to expedite replacement of Euro II diesel commercial vehicles with new ones compliant with the prevailing statutory emission standards (which is now the Euro IV emission standards). The scheme will run for three years.	As at end-November 2010, we have approved about 590 applications.
Encourage members of public to use environment-friendly private petrol vehicles	Since April 2007, a 30% reduction in the First Registration Tax (FRT) has been offered to purchasers of environment-friendly private petrol vehicles, subject to a cap of $50,000 per vehicle.	As at end-November 2010, a total of about 16,700 environment-friendly private petrol vehicles were approved under the scheme.

Measure	Implementation Programme	Progress (Up to 30 November 2010)
Encourage use of environment-friendly commercial vehicles	Since April 2008, a reduction in FRT has been offered to purchasers of environment-friendly commercial vehicles.	As at end-November 2010, a total of about 1,300 environment-friendly commercial vehicles were approved under the scheme.
Encourage the use of electric vehicles (EVs)	Since 2009, a series of measures was introduced to promote the use of EVs in Hong Kong.	FRT for EV is waived for a period of five years till March 2014. In August 2009, the Government took the lead in procuring its first batch of 10 Mitsubishi i-MiEVs. In July 2010, to facilitate further adoption of EVs in Hong Kong, we signed a cooperation framework agreement with Nissan Motor for advance supply of EVs to the Hong Kong market. The two local power companies will launch an EV leasing scheme soon, so that a wider section of the community may gain access to EV driving experience.
Encourage the use of zero emission or more environment-friendly franchised buses	To test the operational efficiency and performance of hybrid buses.	In the 2010-2011 Policy Address, the Government proposed to fund the full cost of procuring six hybrid buses for use by the franchised bus companies along busy corridors to test out their operational efficiency and performance. We are discussing with the franchised bus companies operating routes serving busy corridors in the urban areas on the arrangements of conducting the trial, and will seek support and funding approval from the Legislative Council (LegCo) for the programme.
Require drivers to switch off idling vehicles with running engines	Subject to the passage of the Motor Vehicle Idling (Fixed Penalty) Bill, to implement the ban on idling vehicles with running engines as soon as possible.	The Motor Vehicle Idling (Fixed Penalty) Bill was introduced to LegCo in April 2010. The relevant Bills Committee of LegCo is scrutinizing the Bill.

Measure	Implementation Programme	Progress (Up to 30 November 2010)
Strengthen control of emissions from petrol and LPG vehicles	To consult stakeholders on proposals to strengthen the control of emissions, including the use of roadside remote sensing device and chassis dynamometer for emission testing.	The Government will consult the stakeholders after working out the proposals.
Tighten emission standard for in-use diesel vehicles	To study the further tightening of dark smoke emission standard for in-use diesel vehicles.	The Government is studying the matter and will consult the transport trades when ready.
Enhance vapour recovery systems in petrol filling stations (Item completed)	In 2004, the Air Pollution Control (Petrol Filling Stations) (Vapour Recovery) Regulation was amended to require the recovery of petrol vapour emitted during vehicle refuelling at petrol filling stations, with effect from March 2005.	Since March 2005, all newly built petrol filling stations have to be installed with vapour recovery systems. Since March 2008, all petrol filling stations have been retrofitted with such systems to recover petrol vapour emitted during refuelling.
Tighten motor fuel standard (Item completed)	By 2005, the motor fuel standard was tightened to the Euro IV standard (since 2002, the motor diesel standard has already been tightened to the Euro IV standard).	In January 2005, the Euro IV petrol standard came into effect.
	To introduce the supply of motor vehicle fuels meeting the Euro V standard.	In July 2010, the Euro V motor vehicle fuel (including diesel and unleaded petrol) standards came into effect.
	To develop specifications and regulations on the use of biodiesel as vehicle fuel in Hong Kong.	In July 2010, the regulatory control on motor vehicle biodiesel came into effect. The regulation sets out the specifications for pure motor vehicle biodiesel and the requirements for motor vehicle biodiesel blends. It also requires that labels be posted at the selling points if the biodiesel content in a motor vehicle biodiesel blend exceeds 5%.

Measure	Implementation Programme	Progress (Up to 30 November 2010)
Tighten emission standard for newly registered vehicles	Since 2006, the Euro IV emission standard was adopted. (Item completed)	In January 2007, the Euro IV emission standard was introduced for all newly registered vehicles.
	To follow the European Union (EU) in adopting the Euro V motor vehicles standard for tailpipe emissions.	Since April 2008, the Government has been providing tax concessions on purchases of Euro V commercial vehicles. Given the current supply situation of these vehicles in Hong Kong, we are not yet ready to follow EU to tighten the vehicle emission standard to the Euro V level. We will keep in view the vehicle supply situation and tighten the emission standard as soon as practicable.
Designate pilot low-emission zones (LEZs)	To examine the feasibility of setting up pilot LEZs at busy corridors to restrict franchised buses with high exhaust emissions from entering the zone.	The Government plans to designate pilot LEZs in busy districts such as Causeway Bay, Central and Mongkok. We aim to increase as far as possible the ratio of low-emission franchised buses running in these zones starting from fiscal year 2011-12 and that only low-emission buses will run in these zones in 2015.
Use of cleaner fuels by ferries	To look into the use of cleaner fuels by local ferries.	In August 2009, the Government launched a trial of local ferries using ultra low sulphur diesel (ULSD, with sulphur content not more than 0.005%). In July 2010, the trial was completed. We are analysing the trial findings so as to map out the best way forward for reducing emissions from local ferries.
Control emissions from non-road mobile sources	To draw up a scheme to control the emissions of non-road mobile sources in light of the outcome of the consultation with the trades, with a view to starting the legislative proceedings in 2011.	The Government has drawn up a proposal on the control scheme. We have consulted the trades on the proposal. We are reviewing the proposed control scheme in light of the outcomes of the consultation.

Measure	Implementation Programme	Progress (Up to 30 November 2010)
Reduce volatile organic compounds (VOC) emissions from printing process, paints and consumer products	To introduce legislation to require the labeling of VOC content on VOC products. (Item completed)	Since April 2007, the Government has enforced the Air Pollution Control (Volatile Organic Compounds) Regulation in phases to restrict the VOC content of architectural paints/coatings, printing inks and six major types of selected consumer products (i.e. air fresheners, hairsprays, multi-purpose lubricants, floor wax strippers, insecticides and insect repellents). Lithographic heatset printing machines are also required to be installed with emission control devices. In October 2009, the Regulation was amended to extend the control to adhesives, sealants and vehicle refinishing paints, as well as vessel and pleasure craft paints. Since January 2010, these additional control measures have been introduced in phases.
	Legislation will then be introduced in phases to reduce the use of products with high VOC contents and to impose emission standards for the printing process.	
Reduce emissions from power stations	Effective and flexible mechanisms will be set up to control the total emissions of sulphur dioxide (SO_2), NOx and respirable suspended particulates (RSP) from power stations to achieve respective emission reduction targets by 2010.	CLP Power Hong Kong Limited (CLP) has been installing flue gas desulphurization (FGD) systems and denitrification systems for four of its coal-fired generating units, each of 677MW. The emission reduction systems for two of the units are now in full operation, while the commissioning of the remaining two units will be completed in 2011. In addition, CLP has been increasing the use of ultra low sulphur coal. Hong Kong Electric Co. Ltd. (HEC) has also installed low-NOx burners and FGD systems for two of its coal-fired generating units, each of 350MW, and a FGD system for a coal-fired generating unit of 250MW. In March 2010, all of HEC's installation works were completed. In October 2006, HEC commissioned its first natural gas generation unit of 335MW.

Measure	Implementation Programme	Progress (Up to 30 November 2010)
	To control total emissions from power plants and allow emission trading. (Item completed)	Since August 2005, emission caps have been set and tightened progressively during the renewal of Special Process Licences (SPLs), with a view to reducing emissions for achieving the 2010 emission reduction targets. In July 2008, the Air Pollution Control (Amendment) Ordinance 2008 was enacted. It provides for stipulating the emission caps for the power plants in Hong Kong in 2010 and beyond in the Technical Memorandum for Allocation of Emission Allowances in respect of Specified Licences (TM). Power plants are also allowed to conduct emission trading as an alternative means for compliance with the emission caps. The Government promulgated the first TM in December 2008. It provides a clear statutory framework for imposing the respective 2010 emission caps on the power companies.
	To further reduce power plant emissions in 2015 and beyond	In December 2010, the Government promulgated the Second TM to substantially tighten the emission caps on power plants for 2015 and beyond (i.e. SO_2 -50%, NOx -35% and RSP -34%).
	To promote the wider use of clean energy.	The Memorandum of Understanding (MOU) signed between the Government and the National Energy Administration in August 2008 ensures a continuous supply of nuclear electricity and natural gas to Hong Kong in the coming two decades, with a view to promoting wider use of clean fuels and reducing emissions from power plants. After signing the MOU, the Government and the energy enterprises on both sides have followed up on the implementation of the MOU. The Shenzhen-Hong Kong spur line of the Second West-East Natural Gas Pipeline and the liquefied natural gas (LNG) terminal in Shenzhen to be jointly constructed by energy enterprises of both sides are anticipated to be completed in

Measure	Implementation Programme	Progress (Up to 30 November 2010)
		2013. In September 2009, the Government gave approval to CLP to extend the contract for supply of nuclear electricity from Daya Bay Nuclear Power Station (Daya Bay) for another term of 20 years from May 2014 to May 2034. In February 2006, HEC commissioned its first commercial scale wind turbine power generation unit of 800kW in Hong Kong. In August 2009, CLP was granted with an Environmental Permit for its off-shore wind farm proposal off Sai Kung. In June 2010, HEC was also granted with an Environmental Permit for their off-shore wind farm project off Lamma Island. In July 2010, HEC installed a 550 kW solar thin-film photovoltaic system.
Reduce emissions from industrial and commercial processes (Item completed)	To mandate the use of ULSD in industrial and commercial processes.	LegCo passed the Air Pollution Control (Fuel Restriction) (Amendment) Regulation, which came into effect in October 2008.
Enhance energy efficiency of buildings (Item completed)	To introduce mandatory implementation of the Building Energy Codes (BEC).	In December 2009, the Government introduced a Bill for the mandatory implementation of BEC to LegCo. In November 2010, the Bill was passed.
	To implement a comprehensive target-based green performance framework for government buildings.	In April 2009, the Government issued an internal circular on the implementation of a comprehensive target-based environmental performance framework in government buildings. Targets on various aspects of environmental performance have been set for new and existing government buildings. We will continue to implement this target-based framework and promote energy saving in government buildings.

Measure	Implementation Programme	Progress (Up to 30 November 2010)
Mandatory Energy Efficiency Labelling Scheme	To launch the Mandatory Energy Efficiency Labelling Scheme.	In November 2009, the initial phase of the Mandatory Energy Efficiency Labelling Scheme, which covers three types of products including room air conditioners, refrigerating appliances and compact fluorescent lamps, came into operation. In March 2010, the second phase of the scheme, which extended its coverage to washing machines and dehumidifiers, commenced with a grace period of 18 months.
Encourage and facilitate adoption of cleaner production technologies and practices	A five-year programme to be launched to give professional and technical support to Hong Kong-owned factories in the Pearl River Delta (PRD) Region to adopt cleaner production technologies and practices.	In April 2008, working with the Guangdong Provincial Economic & Trade Commission (now the Economic & Information Commission of Guangdong Province) and major Hong Kong industry associations, the Government launched the Cleaner Production Partnership Programme to encourage and facilitate Hong Kong-owned factories in the PRD Region to adopt cleaner production technologies and practices. In August 2009, the Government and the Economic & Information Commission of Guangdong Province jointly launched the Hong Kong-Guangdong Cleaner Production Partners Recognition Scheme. The Scheme aims to recognize those Hong Kong-owned factories that have performed well in this area, and to encourage them to continue to pursue cleaner production.

Annex B

Pearl River Delta Regional Air Quality Management Plan
Enhanced Control Measures of the Guangdong Provincial Government

Measures	Implementation Programme	Progress (Up to 30 November 2010)
Use cleaner energy	To reduce gradually the energy consumption per 10,000 Yuan GDP. To establish by 2010 a diversified energy production and supply system that is safe, stable, economical, efficient and clean. (Item completed)	The energy consumption per 10,000 Yuan GDP of Guangdong for 2009 was 0.684 tons of standard coal equivalent, down 4.27% as compared with that in 2008. The energy consumption per Industrial Added Value of Guangdong was 0.809 tons of standard coal equivalent, down 6.94% as compared with the 2008 level. To reduce reliance on more polluting fuel like coal and oil, Guangdong is developing two new natural gas projects apart from the Guangdong Liquefied Natural Gas (LNG) Project – (a) CNOOC Zhuhai Natural Gas Pipeline Project, with a capacity of about 1.19 million tonnes/year, utilizes natural gas from the South China Sea since February 2006; and (b) Zhuhai LNG Receiving Station Project, with a capacity of 3 million tonnes/year for Phase I, is expected to be commissioned partially by 2010. The power plants that have been converted to the use of natural gas as fuel include Zhongshan Hengmen Power Plant, Zhuhai Hongwan Power Plant (since February 2006) and Shenzhen Nanshan Power Plant (since April 2007).

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To construct natural gas trunk pipeline and the associated works. To complete Phase I in 2005 that will have a capacity of 3 million tonnes/year. In 2009, to complete Phase II that will increase the total capacity to 7 million tonnes/year and finish construction of a number of natural gas power plants. (Item completed)	The capacity of Guangdong LNG Project Phase I has been expanded from 3 million tonnes/year to 3.7 million tonnes/year and gas supply was started in mid 2006. Phase II with total capacity expanded to 7 million tonnes per year was also completed by end-2009. Four newly built natural gas power plants (with a total of 11 generating units) have all been commissioned in 2006 and 2007. Residents in Shenzhen, Guangzhou, Dongguan and Foshan can also use natural gas supplied through pipeline network.
	To improve by 2005 the 500KV dual circuit annular core transmission grid to ensure transmission of electricity from western provinces. (Item completed)	The five AC and three DC main transmission channels from western provinces have been completed.
	To rationalize the distribution of new power stations. Apart from proper construction of generating units for combined heat and power supply and those thermal power plant projects which have been reported to the State for planning and building, no more new coal-fired and oil-fired power plants will be planned for building in the Pearl River Delta (PRD) Region.	Being implemented.
	To gradually enlarge the scale of electricity transmission from western provinces to Guangdong.	Being implemented.
Control sulphur content of fuel	To control the use of high sulphur fuel (sulphur content of coal and fuel oil should be below 0.8% in the acid rain control zone by	The measure was implemented. By 2010, enterprises which have not installed desulphurization system would

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	2005). (Item completed)	have their fuel sulphur content controlled at below 0.7% for coal and below 0.8% for fuel oil. Those not meeting the limits would need to use sulphur fixing agents or sulphur removal agents.
Reduce emissions from coal-fired and oil-fired power stations	To phase out small-scale thermal power generating units. Power plants with a capacity equal or above 300 MW to account for over 70% of the total installed capacity in the region in 2005, which is 35% higher than that in 2000.	The Guangdong Provincial Government announced its plan in March 2007 to close down small thermal power generating units with a total capacity of 9,660MW in the Province by end-2010, including those with a total capacity of about 7,100 MW in the PRD Economic Zone [units of about 1,600 MW closed down in 2007, 3,600 MW in 2008 and 1,900 MW in 2009 (**Annex C**).] As at end-2009, small thermal power generating units with a total capacity of 12,090 MW in the Province had been closed down.
	To install flue gas desulphurization (FGD) systems at the power plants in Shajiao, Huangpu, Taishan and Zhuhai by 2005. (Item completed)	In 2008, generating units installed with FGD systems have increased by a capacity of 3,800 MW, amounting to a total capacity of 27,800 MW. Large scale thermal power generating units in Guangdong have all been equipped with FGD systems.
	To require all oil-fired and coal-fired generating units of capacity above 125MW to be equipped with FGD systems by 2007. (Item completed)	
	To require all coal-fired and oil-fired power plants to adopt low nitrogen oxides (low-NOx) combustion technologies in case of alteration or expansion. (Item completed)	Low-NOX combustion technologies have already been required at all units in case of alteration or expansion.

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To require all coal-fired and oil-fired power plants under construction, alteration or expansion to install flue gas denitrification systems.	Being implemented.
	To promote the installation of low-NOx combustion device at existing coal-fired and oil-fired power plants.	Being implemented.
	To study the feasibility of installing flue gas denitrification systems for existing power plants.	The Development and Reform Commission of Guangdong Province has issued relevant policy document and notification on the need for existing power plants to install denitrification systems.
	To require all power plants under construction, alteration or expansion to install FGD equipment, particulate removal devices and automatic continuous emissions monitoring system (CEMS). (Item completed)	The measure was implemented. The existing coal-fired generating units of capacity above 125MW had put in place CEMS by end-2008, with a view to allowing the relevant authorities to have instant on-line access to the CEMS data.
	To enhance technological improvements of existing power plants and to implement cleaner production. Newly built power plants have to meet the advanced standard on cleaner production in the country. (Item completed)	The measure was implemented. New power plants in the region have adopted the new power plant emission standard.

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To materialize the subsidization policy for thermal power plants to desulphurize by giving concessions, support and assistance in land acquisition for desulphurization systems and import of essential equipment so as to facilitate the full implementation of desulphurization projects. (Item completed)	From 1 July 2006, power plants with desulphurization system receive extra RMB 1.5 cents per unit when the electricity is sold to the power grid.
	To offer better sales terms (e.g. higher rates and grid connection priority) to power plants that are equipped with FGD and denitrification systems.	Extra RMB 1.5 cents per unit and grid connection priority have been offered to power plants with FGD systems. Better sales terms for power plants with denitrification systems are under preparation.
	To establish a province-wide quota administration system for total emissions of sulphur dioxide (SO_2) and to study the emissions trading mechanism of SO_2.	Being implemented.
	To implement more stringent air pollutant emission standards for thermal power plants. (Item completed)	The new "Guangdong Emission Standards of Air Pollutants for Thermal Power Plants" has been implemented to further tighten the air pollutant emission standards since August 2009.
Control emissions from industrial boilers and industrial processes	To phase out coal-fired boilers with a capacity of less than 2 tonnes/hour in the urban areas of cities. By 2005, to stop using such coal-fired boilers in build-up areas of key cities. To require all large and medium-size industrial boilers to install desulphurization systems or adopt clean combustion technologies to reduce emissions.	The operation of coal-fired boilers of less than 2 tonnes/hour has been largely phased out in the urban areas of cities in the region. Removal devices for particulates must be installed onto all industrial boilers. Restaurants located in sensitive areas and those having major impact on public livelihood must be installed with devices to purify cooking fumes.

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To phase out all coal-fired boilers with a capacity of less than 4 tonnes/hour, as well as coal-fired boilers which are less than 10 tonnes/hour in capacity and in use for more than eight years. (Item completed)	As at 31 October 2010, a total of 8,039 industrial boilers in the region have been phased out or retrofitted.
	To tighten emission standards for local boilers by 2010, so as to reduce emissions from industrial boilers and other boilers (e.g. commercial boilers). (Item completed)	The Guangdong "Emission Standard of Air Pollutants for Boilers" was released and came into force on 1 November 2010.
	To continue phasing out various production technologies and installations that have caused serious pollution by emitting SO_2, smoke and particulates.	To implement on a mandatory basis a system to phase out enterprises, various production technologies and installations that have caused serious pollution. In principle, no construction of new cement plants and extension of cement plants will be planned in the PRD Region. Future development will focus on projects of new dry-type cement plant with daily production capacity of more than 4,000 tonnes. Projects of new dry-type rotary kiln cement plant with daily capacity of 2,500 tonnes and below will be prohibited. Programmes are being implemented to phase out high energy consuming and highly polluting cement plants, production lines of vertical kilns, dry hollow kilns, Lepol kilns and wet process kilns. The relocation project of Guangzhou Cement Plant, completed by end-2005, was estimated to reduce particulate emissions in the Region by

Measures	Implementation Programme	Progress (Up to 30 November 2010)
		approximately 3,000 tonnes/year. Some cement production units located in Sanshui area in Foshan City were closed down by end-2007. All existing vertical kiln cement production units were closed down by end-2008. Guangdong announced in January 2008 a plan to phase out all serious polluting cement plants in the province with a total production capacity of 38 million tonnes by 2010. Of these, a total production capacity of 28.53 million tonnes is located within the PRD Economic Zone (**Annex D**). As at end-September 2010, Guangdong had phased out cement plants with a total production capacity of 57 million tonnes. Guangdong announced in October 2007 a plan to phase out iron and steel plants (a total production capacity of 16 million tonnes) (**Annex E**) by end-2010. As at end-September 2010, Guangdong had phased out iron and steel plants with a total production capacity of more than 11.64 million tonnes.
	To actively study the technologies for controlling emission of nitrogen oxides (NOx) from stationary sources such as power plant boilers, industrial boilers and restaurant boiling water furnaces.	Emission of NOx from stationary sources such as electricity station boilers, industrial boilers and restaurant boiling water furnaces will be under control in 2010.
	Location and planning of industries causing serious pollution will be strictly determined and administered centrally. The system of environmental assessment of construction projects will be enhanced.	Being implemented.

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To require all cement, ceramic and sheet glass manufacturing enterprises in the PRD Region to install highly effective dust extractors and desulphurization systems. (Item completed)	All cement, ceramic and sheet glass manufacturing enterprises in the PRD Region had been equipped with highly effective dust extractors and desulphurization systems by 30 September 2010.
	To draw up the Guangdong "Emission Standard of Air Pollutants for Cement Industry". (Item completed)	The Guangdong "Emission Standard of Air Pollutants for Cement Industry" came into force on 1 November 2010.
	For industrial sectors such as petrochemicals, steel, non-metallic mineral products, paper and paper products, textile and dyeing, technological improvement at existing enterprises will be enhanced and cleaner production will be implemented. New projects have to meet the advanced standard on cleaner production in the country.	Being implemented.
Reduce the emission of volatile organic compounds (VOC)	To replace by 2003 paints using VOC with xylene as the main solvent.	Completed. Since 1 January 2006, all water-based paints and adhesives are required to comply with the technical requirement of environment-friendly products. All water-based paints and adhesives bearing an environment-friendly label have to comply with the VOC content limit.
	To draw up VOC emission standards for furniture manufacturing, printing, surface coating (automobile manufacturing) and shoe-making industries. (Item completed)	The four standards came into force on 1 November 2010.

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	Initiate tasks for vapour recovery at petrol filling stations, tanker trucks and oil depots. To fully implement motor fuel vapour emission standard for all oil depots, tanker trucks and petrol filling stations. (Item completed)	Guangdong announced in March 2008 a plan to complete vapour recovery work at oil depots, tanker trucks and petrol filling stations in the major PRD cities by end-2010. Since 2009, the work plan for installing vapour recovery systems at petrol filling stations, oil depots and tanker trucks is being implemented in phases. The installation work in the PRD Region was completed on 31 October 2010, covering 2,097 petrol filling stations, 57 oil depots and 809 tanker trucks in total.
Reduce tailpipe emissions from motor vehicles	To commence the construction of a regional rapid light-rail system by 2005. To construct expressways in major cities, such as the district expressway in Southern Guangzhou and the Shenzhen-Shenping Express Trunk Road.	Phase I of Shenzhen-Shenping Express has been commissioned. Rail system between Guangzhou and Zhuhai started construction in December 2005. The system, 144km in length with a maximum speed of 200km/hr, is expected to be completed by 2009.
	To develop green transport by implementing clean vehicle action programmes in major cities of the Region. To encourage the use of clean fuels, develop electric vehicles, actively promote the use of advanced clean fuel motor vehicles and step up the development of public transport.	<u>Shenzhen</u> - Formulated the "Medium to Long Term Planning for the Development of Clean Vehicles in Shenzhen". - Drew up and implemented the 2003-2008 general work programme for the use of clean fuel in public transport vehicles. - The National III emission standard has been implemented ahead of schedule for newly purchased public transport vehicles as well as replacements. In 2007, the number of replacements amounted to 1,874, making a total of 8,702 public transport vehicles complying with the National III

Measures	Implementation Programme	Progress (Up to 30 November 2010)
		emission standard in the city. (Item completed) - Selected in January 2009 as one of the first pilot cities to demonstrate and promote energy-saving vehicles and vehicles powered by new energy. Subsidies are provided to public service organizations to encourage purchase and use of energy-saving vehicles and vehicles powered by new energy. - A total of 50 new generation hybrid public transport vehicles were put in use in Shenzhen at end-2008. (Item completed) <u>Guangzhou</u> - Active promotion of liquefied petroleum gas (LPG) public transport vehicles. There were over 6,700 LPG-driven public buses in Guangzhou, accounting for 80% of all public buses in the city (as at end-2007). The 16,700 taxis in the city have largely been converted into LPG taxis. (Item completed) - At present, there are 28 LPG refilling stations. (Item completed) - New generation hybrid public transport vehicles started to run in Guangzhou in January 2008. <u>Huizhou</u> - From 1 August 2007, all new public transport vehicles are required to comply with the National III emission standard.

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To require all new motor vehicles to fully meet emission standards. To step up annual inspection and on-road spot checks of in-use vehicles. To strengthen the control of in-use vehicles to ensure that over 90% of motor vehicles in the cities within the Region will meet tailpipe emission standard by 2005.	The National II emission standard was implemented on 1 July 2005. A recommended catalogue of motor vehicles complying with the National III emission standard was introduced on 1 July 2006 to encourage and support the sale, import, purchase and use of motor vehicles on the catalogue. Starting from 1 July 2008, all newly registered motor vehicles in the PRD Region have to comply with the National III emission standard. Starting from 1 July 2009, all newly registered motor vehicles in the Guangdong Province have to comply with the National III emission standard. Furthermore, starting from 1 September 2010, new light duty petrol vehicles and gas-fired vehicles in the PRD Region are required to comply with the National IV emission standard. <u>Guangzhou</u> - The requirement for all newly registered vehicles to comply with the National III emission standard was advanced to 1 September 2006. - The "blacklist" of vehicles with excessive emissions was first published on the Guangzhou Environmental Protection website in August 2007. <u>Shenzhen</u> - A catalogue of motor vehicles complying with the National III emission standard has been implemented since 1 July 2007. - A reporting and joint investigation system for smoky vehicles has been established.

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To introduce subsidy policy for replacement of "yellow-label vehicles" (i.e. petrol vehicles with the pre-National emission standard or below and diesel vehicles with the National II emission standard or below).	The subsidy policy was rolled out in September 2009 to tie in with the national policy of subsidizing "replacement of old vehicles with new vehicles". The policy offers subsidy to owners ranging from RMB 3,000 to 6,000 for vehicle replacement. In 2010, a total of 81,700 "yellow-label vehicles" were phased out.
	To strengthen management on regular inspections of in-use motor vehicles to make sure that the required environmental performance is met.	The in-use motor vehicles inspection / maintenance system is being progressively implemented and improved. Non-compliance motor vehicles are prohibited from using the roads. "Regulation on the Prevention and Control of Pollution from Motor Vehicles in Guangdong" was promulgated on 2 June 2010. (Item completed) <u>Shenzhen</u> The pollutant emissions inspection and mandatory maintenance system for motor vehicles has been implemented since 1 December 2007.
	To experiment a labeling system on the environmental categorization of in-use vehicles in key cities, and to regulate and restrict vehicles of certain categories using the road according to the ambient air quality.	The environmental labeling system on in-use vehicles has been implemented in Guangdong since March 2009. A total of 4.898 million labels were issued in the PRD Region as at 31 October 2010. (Item completed) Since March 2010, the PRD Region has gradually implemented the "Regulation of the National-wide Vehicle Inspection and Environmental Labeling System for Motor Vehicles", with a view to implementing the "yellow-label" and "green-label" schemes for vehicles running in the Region. The regulation also applies to cross-boundary vehicles from Hong Kong. Some PRD cities are progressively phasing in road use

Measures	Implementation Programme	Progress (Up to 30 November 2010)
		restriction measures for "yellow-label" vehicles. <u>Shenzhen</u> - An environmental labeling system for motor vehicles has been introduced. - Road use restriction measures for "non-green-label vehicles" have been further enhanced since 1 July 2009. The restriction zones for "yellow-label vehicles" are being gradually expanded. Shenzhen aims to restrict "yellow-label vehicles" from using main roads in city by 2011. - The vehicle inspection and environmental labeling management system established by the Ministry of Environmental Protection has been implemented since August 2010. (Item completed) <u>Guangzhou</u> - Starting from 1 January 2008, motor vehicles are granted environmental labels in accordance with performance. - The national-wide vehicle inspection and environmental labeling system for motor vehicles was introduced in November 2010. (Item completed)

Measures	Implementation Programme	Progress (Up to 30 November 2010)
	To vigorously promote the sale of motor vehicle fuel complying with the National III standard in the province. (Item completed)	The Guangdong Province already announced the local National III standard for motor fuel in August 2006. The extension and reconstruction project of Sinopec's Guangzhou subsidiary was commissioned on 9 September 2006. The company is now capable of producing motor fuel complying with the National III standard. All petrol filling stations in Shenzhen and Guangzhou have been supplying National III standard motor fuels since April 2007 and May 2008 respectively. From July 2008, the supply network has been expanded to cover Zhongshan, Dongguan and Zhuhai. It has been further expanded to cover Huizhou in July 2009. As at 31 July 2010, Guangdong extended supply of National III standard motor fuels to the entire PRD Region.
	To give consideration to advance introduction of the National IV standard motor fuel. (Item completed)	Preparation of fuel standard has been completed.
	To promote the sale of vehicle fuels complying with the National IV standards in the PRD Region.	Guangzhou advanced the supply of National IV standard petrol to 1 August 2010.
	To study ways to control the growth of motorcycles in key cities.	Motorcycles have been banned from entering the urban areas in Guangzhou and Dongguan since 1 January 2007 and 1 September 2007 respectively.

Annex C

Schedule for Closing Down Major Small-scale Thermal Power Generating Units in Cities of Pearl River Delta Economic Zone between 2006 and 2010

City	Capacity to be Closed Down (MW)	Time and Capacity (MW)			
		2007	2008	2009	2010
Guangzhou	2,336	570	500	1,265	-
Shenzhen	765	682	83	-	-
Zhuhai	229	-	229	-	-
Huizhou	250	-	250	-	-
Dongguan	350	-	-	350	-
Zhongshan	519	-	519	-	-
Foshan	2,043	-	2,009	34	-
Jiangmen	549	399	-	150	-
Zhaoqing	147	-	-	147	-
Total	**7,187**	**1,650**	**3,591**	**1,946**	**-**

Annex D

Schedule for Phasing Out Cement Plants in Cities of Pearl River Delta Economic Zone during 11th Five-year Plan Period

PRD City	Capacity to be Phased Out (Million Tonne)
Guangzhou	12.77
Shenzhen	-
Zhuhai	0.3
Huizhou	1.9
Dongguan	3.03
Zhongshan	0.29
Foshan	9.34
Jiangmen	-
Zhaoqing	0.9
Total	**28.53**

Annex E

Schedule for Phasing Out Iron and Steel Plants in Guangdong Province between 2007 and 2010

Time	Production Capacity of Steel Plants to be Phased Out (Million Tonne)	Production Capacity of Iron Plants to be Phased Out (Million Tonne)
2007	3	0.1
2008	1.91	0.37
2009	2.77	-
2010	7.34	1.15
Total	**15.02**	**1.62**