



## **About This Report**

PetroChina Company Limited ("PetroChina", also referred to in the report as the "Company", "we" and "us") has published three Corporate Social Responsibility (CSR) Reports since 2006. As an important platform for communication and exchange between us and all our stakeholders including the public, this report can enable you to understand us better and also help us solicit your views and suggestions. The report of 2009 is renamed as Sustainability Report, to better present the concept and performance of scientific, safe, clean, economical and harmonious development, respond to concerns of all our stakeholders, and bear the corporate social responsibility as an international energy company.

The issues highlighted in the report are mainly related to our performances on economic, environmental and social responsibilities and sustainable development in 2009. However, the historical backgrounds of some matters were referred to as we intend to maintain a sense of continuity and provide comparison in the annual report. The information contained in the report was sourced from PetroChina's official documents, statistics reports and the summaries and statistics concerning the actual performance of social responsibilities by our subsidiaries and branch companies. All the information has been reviewed according to the rules and procedures set out in PetroChina's *Rules for Information Disclosure Control and Disclosure Procedures*.

The report is prepared based on the *Guideline on Preparing the Report on Performance of Corporate Social Responsibility* issued by the Shanghai Stock Exchange. The report has been prepared with reference to the *Sustainability Reporting Guidelines* issued by the Global Reporting Initiative (GRI) in 2006 and the *Oil and Gas Industry Guidance on Voluntary Sustainability Reporting* compiled by the International Petroleum Industry Environmental Conservation Association (IPIECA)/American Petroleum Institute (API). In addition, as a member of the UN Global Compact, we also illustrate the Company's progress in aligning with the 10 principles of the Global Compact, and will submit the report to the website of UN Global Compact (http://www.unglobalcompact.org).

The report includes a set of Forward-Looking Statements. Except historical facts, all events that may or will occur (including, but not limited to, premise, objectives, estimation and business plans) and descriptions of such events are categorized into the Forward-Looking Statements. Due to the presence of external uncertainties, actual outcomes or trends in the future may differ from those expected in the statement. The Forward-Looking Statements were made before December 31, 2009, for which PetroChina holds no responsibilities or liabilities for any modification thereof.

We sincerely hope that this report will increase your awareness of the issues concerning sustainable development of the whole society such as challenge on energy scarcity, climate change, environmental protection, poverty and underprivileged groups. These issues have direct impact on the sustainable development of PetroChina and the prosperity and progress of the society and the economy as a whole. We welcome any comments and suggestions. Your invaluable feedback will be helpful for us to fulfill our social responsibility more effectively and bring us greater impetus for further development. This report is published, along with the Company's Annual Report in March 2010, in simplified Chinese, traditional Chinese and English. The simplified Chinese version shall prevail in case of any discrepancy. Please visit our website (www.petrochina.com.cn) to read or download the electronic version of this report.

The Board and all directors of the Company warrant that there are no misrepresentation or misleading statements in or material omissions from the report and will jointly and severally accept full responsibility for the truthfulness, accuracy and completeness contained in this report.



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# From the Chairman of the Board

The year of 2009 is the most difficult year for the development of global economy since the new century, and is also an extraordinary year for the development of PetroChina. In face of the serious impact imposed by the international financial crisis, the Company earnestly implemented the concept of scientific development, rose up to the challenges, looked for opportunities amid crisis, and maintained the production and operation in an orderly and smooth state. The oil and gas exploration reached a new level, and it was the fifth peak year for reserve growth since the foundation of PRC. Daging Oilfield maintained a stable oil production of 40 million tons. With continued substantial increase in oil equivalent, Changqing Oilfield became the second largest oil and gas field in China. The production and sales of natural gas grew rapidly at a twodigit rate. The 10-million-ton refining and 1-million-ton ethylene facility of Dushanzi Petrochemical Company was completed and commenced operation. The sales volume, economic benefits and market share of refined products grew at the same pace. Line A of Phase I of Central Asia Gas Project and the west section of Second West-East Gas Pipeline also commenced operation. In respect of overseas business, we acquired a batch of large-scale oil & gas cooperation projects in hydrocarbon concentration areas such as Central Asia and the Middle East. In respect of scientific advancement and technical innovation, we made a series of new achievements and strengthened management. In respect of safety and environmental protection, various indicators remained stable in general and continued to improve. Besides, we achieved the goal one year ahead of schedule for energy conservation and emission reduction as set forth in the 11<sup>th</sup> Five-year Plan.

During the ten years since its establishment in 1999, PetroChina has fully performed the economic, environmental and social responsibilities. We focused our effort on oil and gas business, coordinated the development of domestic and overseas business, and brought the overall advantages of integrated operation into full play. As a result, great changes have taken place in the Company.

-Oil and gas business enjoyed rapid development, and the ability to ensure oil and gas supply was enhanced remarkably. The oil & gas exploration in China entered the new peak period for growth of reserves, which further consolidated the resource foundation. Crude oil production increased slightly, and the production of natural gas grew rapidly at two-digit rate for seven consecutive years, with marketable natural gas production 2112.2 bcf in 2009. The primary processing capacity of crude oil exceeded 130 million tons, representing an increase of 34%, the production capacity of ethylene reached 3.71 million tons, representing an increase of 150%, and 4 ten-million-ton refining bases, 4 large-sized ethylene bases and a batch of refining and chemical enterprises were established. In addition, great progress has been made in the construction of four major oil & gas pipelines, and the national oil & gas pipe network as well as the diversified supply guarantee system are taking shape. The sales business underwent leap-forward development, as the Company seized 38.2% domestic market share of refined products; the overseas oil & gas business entered into the phase of scale development, and the oil & gas cooperation areas were expanded continuously. PetroChina is developing into an international energy company, with its scale, strength and energy supply capacity enhanced greatly. In face of natural disasters and market changes, the Company for several times launched the contingency plans to guarantee and stabilize the market supply, and made all efforts to carry out rescue and relief, which has won us high appraisal from the government and the public.

— Great efforts were made to promote the safe development and green development, and the safety and environmental protection were satisfactory and we continued to look for room for improvement. The Company took safety and environmental protection as top priority. The philosophy of "Environmental Protection Priority, Safety First, Quality Foremost, People Oriented" was deeply rooted among the employees and implemented throughout production and operation. The Company has built up the unified and institutionalized HSE management system. Hazard control achieved great effect. The management control on production was



enhanced, and the emergency management system was improved gradually. Besides, we firmly carried out energy-conservation and emission-reduction, and effectively implemented 10 energy-saving projects and 10 emission reduction projects. The trials of circular economy were carried out orderly, and the growth of total energy consumption was controlled effectively while the production scale was expanded continuously. We have effectively controlled the unit energy consumption and greatly reduced the total emission of main pollutants. The Company proactively changed the development mode with the low-carbon energy represented by natural gas, fuel ethanol and coalbed methane enjoyed rapid development.

----- The development environment of the Company is more harmonious as we stick to the concept of "People Orientation and Contribute to the Society". Guided by the corporate policy of "Energize, Harmonize, Realize", PetroChina has implemented a strategy that strives to build an enterprise based upon a wide range of talents to strengthen human resources development. The corporate culture was further richened and developed. The Daging Spirit and Iron Man Spirit were further carried forward, and we continue to build up our team of employees in areas like operation management, professional technology, operation skills and internationalized talents. As a result, the overall quality of our employees was enhanced, as witnessed by a lot of teams and employees with outstanding performance. We continue to improve the production and living conditions of employees, thereby maintaining their social security. The poverty alleviation mechanism covering underprivileged groups was set up. The Company carried out strategic cooperation in all business areas. An atmosphere favorable for mutual support, mutual benefits and joint development was further consolidated. Poverty alleviation, disaster rescue and relief were carried out properly. We also actively involved in local community building and public-welfare undertakings. Our social responsibility performance was enhanced continuously.

The development of the Company in the recent ten years can be attributed to the following factors: institutionalized and effective corporate governance, fundamental principles of "legal operation, good faith and standardized management", and operation concept and mode aligned with international practice; adherence to technical innovation, core technologies for production breakthrough, and enhancement of technical strength and level; management innovation, a set of system with the characteristics of PetroChina and great improvement of operation efficiency, management level and risk management. The achievements mentioned above could not be made without the care, support, participation and supervision from our investors at home and abroad, employees, partners, consumers and clients as well as relevant organizations. I would like to take this opportunity to extend my heartfelt gratitude to them.

At present, as a result of the international financial crisis, a series of new changes and new situations occur in the global economy and the international petroleum market. China is still in the strategic opportunity period for its economic and social development. PetroChina also enters into the key period for developing into an international energy company. Proactive changes and unfavorable factors occur simultaneously, domestic and international factors affect each other, and development opportunities coexist with risks and challenges. Guided by the concept of scientific development, PetroChina will fully perform its economic, environmental and social responsibilities. We will continue to implement the resource, market and internationalization strategies, and seize the development opportunities, accelerate the change of development mode. We will also effectively push forward the structural adjustment, energy-conservation & emissionreduction program and promote technical innovation, to further enhance harmonious and sustainable development, so as to make new contribution to building a harmonious society and a harmonious world.

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Jiang Jiemin, the Chairman of the Board



## Dialogue with the President

In 2009, how did PetroChina deal with the impact imposed by the international nancial crisis and continue with the smooth and stable development?

In 2009, the Company experienced the greatest challenges. In face of the serious impact imposed by the international financial crisis, we calmly analyzed and responded to the situation with a series of effective measures. Firstly, we correctly analyzed the situation, which assured us to convert challenge into opportunity and overcome difficulties. Secondly, under the principle of "Market Oriented and Benefit Centered" and based on market demand and price changes, we properly arranged for production limit and oilfield production restoration, allocated the processing quantity of crude oil, shut down those low-efficiency and ineffective facilities, and realized the comprehensive balance among production, transportation, sales and storage. Thirdly, we strengthened the control on investment, ensured the investment in certain projects and reduced the investment in other projects, optimized the investment structure, and increased the return on investment. Fourthly, we seized the opportunities for development, accelerated the adjustment to layout and structure of businesses, and made efforts to achieve great breakthrough in international oil & gas cooperation, construction of transnational pipelines, adjustment to refining and chemical sectors, and building of oil & gas reserve capacity. Fifthly, we implemented the refined management, performed the activities under the theme of "Diligence and Frugality, Potential Tapping and Efficiency Improvement," and strictly controlled the production costs and non-production expenditures. These measures have achieved good effects, the production and operation of the Company maintained a smooth and sound state, and the overall performance indicators for 2009 were better than those as expected at the beginning of the year.

Climate change and energy shortage are the problems encountered by human being in the 21st century, and how does PetroChina, as an energy supplier and a large energy consumer, deal with these major challenges?

PetroChina believes that, to deal with the major challenges faced by human being, we should make great efforts to advocate and entrench the concept of green development, accelerate the change of economic development mode, and embark on the road of low-energy-consumption, low-emission, circular and sustainable green development. With respect to the development of low-carbon economy, PetroChina will not shirk from the responsibility and will take the lead.

Firstly, PetroChina attaches great importance to capturing and storing greenhouse gases at the sources. Planting trees in oil & gas fields, refineries and chemical plants has also been one of our ongoing efforts to that end. We sponsored researches, such as Absorption of Carbon Dioxide by Plants, to capture and reduce carbon. We also carried out large-scale forestry carbon-sequestration project in the desert in Xinjiang, initiated the large-scale forestry carbon-sequestration project in 7 provinces (municipalities) including Beijing and Hubei, and launched the project under the National 863 Plan for containing and utilizing carbon dioxide (namely CO<sub>2</sub> Flooding Test) in Daqing, Xinjiang and Jilin oilfields. All these projects and efforts have achieved important progress and good results.

Secondly, the Company endeavors to implement the 10 energy-saving projects and the 10 emission-reduction projects, so as to promote green production. Over the past four years, we fully promoted the application of leading suitable energy-saving and emission-reduction technologies in exploration, development, refining and sales systems. Those outdated technological processes have been upgraded. Those high-energy-consumption and high-emission equipment has also been phased out. Besides, we recovered the associated gas and eliminated the flares in refineries. The trail of circular economy is well under way in Dalian Petrochemical, Jidong Oilfield and Lanzhou Petrochemical. The unit energy consumption and total emission of main pollutants were reduced continuously, and we have completed the energy-saving & emission-reduction tasks as set forth in the 11th Five-year Plan one year ahead of schedule.

Thirdly, the Company makes great efforts to develop clean energy, and increase the supply of green products continuously. The production of natural gas has increased at a two-digit rate for seven consecutive years. The coalbed methane field in Shanxi Qinshui Basin with production capacity of 1 bcm per year, which is the first coalbed methane field put into commercial operation in China, has achieved scale development. The Company has been producing gasoline in accordance with the national standard III since December 5, 2009. In addition, we actively carried out international energy cooperation, built

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transnational oil-gas pipelines, and imported clean energy resources from overseas as planned. On December 14, 2009, the natural gas from Turkmenistan entered into China via Horgos Port in Xinjiang through an onshore natural gas pipeline.

Low-carbon economy is the fundamental approach to deal with climate change, and is also the inevitable choice for the Company's sustainable development. At the Copenhagen World Climate Conference, the PRC Government expressly stated that China would make great efforts to develop green economy, and by 2020, the non-fossil energy consumption would account for 15% of the primary energy consumption, and the carbon dioxide emission per unit of GDP would decline by 40%~45% as compared with that in 2005. PetroChina will respond with positive actions, and take the leading role in the development of low-carbon economy and green economy.

# In the winter of 2009, short supply of natural gas occurred in some regions of China. How did PetroChina deal with and alleviate this problem?

As the largest gas supplier in China, we bear the responsibility to meet the ever-increasing demands of clean energy by economic and social development, and to ensure the sustainable, safe and stable supply of natural gas. Since the beginning of the new century, the gas consumption market in China has developed rapidly, and the Company has regarded the natural gas business as the most important strategic and growing business. The investment has been strengthened for the exploration and development of natural gas, as well as the construction of gas pipe networks, underground gas storages, LNG stations and urban fuel gas pipe networks. During the past seven years, our gas production in China has grown at the two-digit rate, which has basically maintained the balance between supply and demand in domestic market. In addition, more efforts have been made to import gas and to promote the harmonious development of up, middle and down streams.

In November 2009, strong cold air struck many regions in China, and the temperature dropped sharply. The demands on natural gas rocketed, and in some regions natural gas was even in short supply. The Company immediately launched the emergency plan, and took four measures: Firstly, tapping the production potentials of gas fields, and taking temporary pressure-releasing measures in major gasfields to realize full-load production. Secondly, reducing the natural gas consumed in production process, including shut-down of many production facilities which take natural gas as raw materials and fuel. Thirdly, exploiting the reserved gas in underground gas storages ahead of schedule. Fourthly, making full use of the transmission capacity of gas pipelines. In November, we supplied 193.587 million cubic meters of gas per day on average, which was 40 million cubic meters higher than that in the previous month and reached the maximum of our production and transmission capacity. In addition, we reasonably adjusted the flow direction by reducing the supply to large industrial users to ensure residents' demands are met. By the middle of November, the short supply of natural gas in some regions was effectively alleviated.

Just like the power industry, the up, middle and down streams of natural gas business also require to be properly planned, and require sufficient peak shaving and emergency response capacity. Although our natural gas business develops rapidly, the production output still can't fully meet the rapidly-increasing consumption of natural gas. In particular, the transmission capacity and underground gas storages still lag behind, and the emergency peak shaving capacity is still insufficient in face of emergency consumption peak. Therefore, through formulating the emergency plan of peak shaving for natural gas business, we will make efforts to promote the building of peak shaving capacity; and will greatly enhance the routine and emergency peak shaving capacity by applying peak shaving in areas such as underground gas storages, gas fields, LNG, pipe network, and gas-consuming projects. In addition, the Company will closely cooperate with the relevant utilities, and make all efforts to guarantee the safe and stable supply of natural gas.

#### Diesel oil leaked from Weinan Branch line of the Lanzhou-Zhengzhou-Changsha Re ned Product Pipeline at the end of 2009, how did the Company think of and deal with this accident?

In wee hours on December 30, 2009, diesel oil leaked from Weinan Branch of PetroChina's Lanzhou-Zhengzhou-Changsha Refined Product Pipeline, the diesel oil flowed into Chishui River and polluted Weihe River, some pollutants flowed into Yellow River, resulting in a fall of the water quality in Sanmenxia Reservoir Area in Yellow River beyond standard, and caused a serious aquatic environment pollution accident.

Immediately after the accident, PetroChina initiated the emergency plan, and the Company leaders went to the site for directing the emergency response/rescue operations. Based on the needs of on-site emergency rescue, the Company called in 12 professional rescue, construction and technical support teams comprising over 700 people from our subsidiaries in Shaanxi, He'nan, Hebei, Gansu, Ningxia and Shandong, set up 16 oil containment booms at 9 position in Chishui River and Weihe River, set up 5 oil containment booms and 2 activated carbon absorption zones in Sanmenxia Reservoir and its lower reach, dispatched the emergency equipment such as rescue vehicles, environmental monitoring vehicles, high-pole lamps, generators, rescue ships, and applied professional facilities such as oil absorption ships and oil gelling agents, to ensure that the rescue operations were carried out smoothly on the site.

Though the direct cause of leakage was the damage to pipeline owing to the construction activity of third parties, we still carried out careful review and identified the defects in management. We performed the investigation in the execution, management on operation and handling contingencies, and learnt lessons from this accident, so as to prevent the recurrence of similar accidents.

# Technical innovation is the prime power for the sustainable development of an enterprise, and what important achievements in the aspect of technical innovation were made by PetroChina in 2009?

PetroChina always attaches great importance to scientific advancement and technical innovation. In 2009, seven technological achievements were awarded the national technological prizes, and 30 key laboratories and test bases were set up initially. The fine exploration theory and technologies for hydrocarbon-rich sag was further improved. Important progress was made in the reef-shoal distribution of marine carbonate, the detection and prediction of fracture-cave contained reservoir from seismic data, and the fluid identification technology. The supporting technologies such as the water flooding improvement technology for highwater-cut oilfield, the steam driving technology for middle/deep viscous oil, the Steam Assisted Gravity Drainage (SAGD) technology for superviscous oil and the low-cost development technology for large-scale lowpermeability gas field were further improved; and breakthroughs were made in the development technologies for volcanic gas reservoir. In addition, the geological theories and exploration supporting technologies relating to lithology and foreland, as well as the unique technologies relating to high-water-cut oilfield, low-permeability oil & gas reservoir, middle/deep viscous oil development and tertiary oil recovery reached the internationally advanced level. As a result, great contribution was made to the stable production in Daqing Oilfield and Liaohe Oilfield and the reserve and production growth in Changging Oilfield. The industrial test in catalytic cracking processes for maximizing propylene production was completed successfully, and great breakthrough was made in the viscosity-reducing development technology for extra heavy oil. The industrial test for catalytic cracking gasoline hydrogenation technology obtained the expected effect, and the process package for largesized ethylene facility was independently developed. The supporting technology for re-using the wastewater from thermal recovery of heavy oil has been promoted and applied, and the model project of oil-containing sludge treatment technology has been completed successfully. All these have further shown the support given by technical innovation to the sustainable development of the Company.

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Zhou Jiping, the Vice Chairman of the Board and President

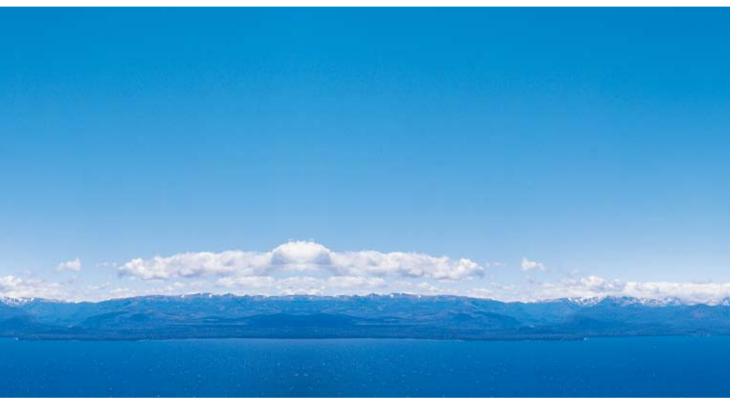
# C Energy Outlook



Global Energy Demand Will Grow Continuously in the Future

As the global economy, in particular the economy of emerging countries, grows continuously, it is expected that, during the period from 2011 to 2015, the global energy consumption will grow at the rate of about 2%, oil consumption will grow at the rate of about 1.2%, and gas consumption will grow at the rate of about 1.5%. By 2030, the global consumption of primary energy will grow at the average annual rate of 1.5%, among which, the oil consumption will account for about 30% of global total, and the gas consumption will account for about 28%. Since the power industry's demands on energy grow continuously, coal and natural gas are still the fossil energy sources for which the demands grows at the highest rate. New energy sources will develop rapidly, and it is expected that during the period from 2010 to 2020, the annual growth rate of renewable energy will reach about 7%, 5 times that of fossil energy. However, renewable energy will account for less than 1% in the total primary energy consumption, and fossil energy will still dominate the total primary energy consumption throughout the world.

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#### Energy Industry Will Face Dual Challenge Arising From Safe Supply and Environmental Protection

On one hand, the global oil & gas exploration and production are turning to low-permeability, heavy-oil and deepwater areas, and the continuously increasing difficulty in exploration and production will correspondingly increase the costs. At the same time, the concentration degree of oil and gas supply is becoming higher and higher. In 2030, the oil production in the Middle East and Central Asia-Russia Region will account for more than 50% of the global total production, about 3/4 of the natural gas reserves are distributed in the Middle East, East Europe and former USSR regions, and the contradiction between resources concentration and consumption market decentralization will further aggravate the problem relating to energy security. On the other hand, the impact of oil, gas and other fossil energies on global environment and climate is becoming increasingly greater, and the petroleum industry will face the challenge arising from environmental protection and climate change. The developing countries are still in the course of industrialization and urbanization, and will not enjoy the external conditions such as low-price energy based on which the developed countries completed the industrialization. In face of the pressure arising from economic development, energy security, environmental protection and climate change, the developing countries will be encountered with more challenges than developed countries in the course of implementation of sustainable development.

#### The Company Will Persist in Promoting the Green Development, and Make Efforts to Develop Itself into a Resource-Saving and Environmentally Friendly Enterprise

In face of the challenges brought by energy security and climate change, the development mode of oil & gas industry should be further changed, so as to meet the ever-increasing demands on clean energy in a more efficient, safer, energysaving and environmentally-friendly manner. PetroChina will adapt to the new requirements of economic and social development, attach equal importance to oil and gas businesses, and further accelerate the development of natural gas business; orderly develop new energy sources and accelerate the development and innovation for low-carbon technologies; strengthen the comprehensive utilization of resources, actively develop the circular economy, and realize the integration between resource saving and environmental protection; PetroChina will further expand the international oil & gas cooperation, and enhance the ability to optimize the allocation of resources throughout the world. The Company will keep supporting the sustainable development of the community, make efforts to obtain new competitive advantages and driving force for sustainable development, and to contribute to global energy development.

# About Us

## **Company Profile**

PetroChina was established as a joint stock company with limited liabilities under the *Company Law of the People's Republic of China* on November 5, 1999, as part of the restructuring of China National Petroleum Corporation (CNPC). It was respectively listed on the NYSE (ADS code: PTR) and the HKSE (stock code: 00857) in April 2000 and in the Shanghai Stock Exchanges (stock code: 601857) in November 2007. As at end of 2009, CNPC holds 86.285% shares of PetroChina.

PetroChina adheres to the corporate policy of "Energize, Harmonize, Realize" and a core business management notion of "Honesty, Innovation, Performance, Harmony and Safety"; persists in carrying out business in a more effective, safe and environmental friendly manner; pursues the balance among economy, environment and society; provides sustainable energy for economic and social development; and creates a better life for human.



## **Development Objective**

The development objective of building PetroChina into an international energy company with strong competitiveness has been set. We plan to achieve this objective through two phases:

Phase 1: From 2006 to 2010, we will endeavour to achieve sustainable, effective and rapid development, focus on our core businesses, keep developing emerging energy businesses, maintain the leading position in China and strive to build PetroChina into an international energy company.

Phase 2: From 2011 to 2020, we will endeavour to further consolidate our leading role in China, realize a quantum leap in international operations, promote our ranking in global oil companies, achieve a profit growth and return on investment equal to that of international level in the industry, significantly promote our competitiveness in international markets, strive to become one of the most important global producers and distributors of petroleum and petrochemical products, improve the composite transnationality index and build PetroChina into an international energy company with strong competitiveness.

## **Development Strategy**

We will pursue scientific development, implement the three strategies related to resources, market and internationalization and focus on the transformation of business growth models, the enhancement of independent innovative capabilities, the establishment of a long-acting mechanism of work safety, environmental protection and energy conservation, all with a view to creating a harmonious enterprise.

#### Resources

We base our strategy on maximization, diversification and orderly replacement of hydrocarbon resources by adhering to the principles of attaching parallel development of oil and gas, enhancing the exploration of domestic resources, increasing the acquisition of overseas resources, expanding the exploration of offshore resources, and increasing strategic reserves and developing substitution energy, so as to achieve rapid growth of oil and gas production, achieve breakthroughs in relation to emerging energy resources, consolidate our leading role in upstream operations in China and strengthen the foundation for the Company's sustainable development.

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Market

We will strive to pursue a sustaining leading role in the market and maximization of profit by making full use of the advantage in economy of scale we enjoy and integrated operations from upstream to downstream businesses, solidifying mature markets, expanding high efficiency markets, exploiting strategic markets, developing international markets and continuously promoting our competitiveness in both domestic and overseas markets.

#### Internationalization

We will adhere to the principles of active and prudent development and a win-win situation and the concept of combining "incoming" with "outgoing" and combining resources, market and technology with capital, focus on our oil and gas businesses, strengthen international cooperation and capital operation, place more emphasis on overseas oil and gas exploration and development, develop mid-stream and downstream businesses in a prudent, effective and moderate manner, actively facilitate the diversification of sources for resource import, and expand the scale of international oil and gas trade so as to build PetroChina into a multinational company with strong competitiveness.

#### **Core Businesses**

PetroChina is engaged in a broad range of businesses related to oil and natural gas, which mainly include the exploration, development and production of crude oil and natural gas, the refining, transportation, storage and marketing of crude oil and refined products, the production and marketing of primary petrochemical products, their derivatives and other chemicals, and the transportation and marketing of natural gas.

Our businesses cover all key operations in the petroleum and petrochemical industries and form an optimal, efficient and integrated business chain, which clearly improved operation efficiency, and enhanced our overall anti-risk capabilities and core competitiveness. In accordance with the International Financial Reporting Standards, as at December 31 2009, our total assets amounted to RMB1,450.3 billion, turnover amounted to RMB1,019.3 billion, the net profit attributable to owners of the Company amounted to RMB103.4 billion; while calculated by Chinese Accounting Standards, our total assets amounted to RMB1,450.7 billion, operating income amounted to RMB1,019.3 billion, the net profit attributable to equity holders of the Company amounted to RMB103.2 billion. We paid RMB204.5 billion of taxes in 2009.



## **Corporate Governance**

We are committed to operate the Company in compliance with the law. We regard due observance with the law, honesty and trustworthiness and standardization of procedures as the fundamental principles of operation to ensure a coordinated corporate governance structure with effective checks and balances, with a view to maximize our value.

## **Governance Structure**

Pursuant to the applicable laws and regulations including *Company Law of People's Republic of China* and listing rules and the Articles of Association of the Company, we established a standardized corporate governance structure. The shareholders' meeting, Board of Directors, Board of Supervisors and executive bodies operate independently and effectively in accordance with the Articles of Association.

#### Shareholders Meeting

The shareholders' meeting is an organ of authority of the Company and will exercise its functions and powers in accordance with the law. We hold an annual shareholders' general meeting to ensure that all shareholders enjoy equal status and are able to exercise their rights effectively.

#### Board of Directors

Directors shall be elected at the shareholders' general meeting and accountable to the shareholders' general meeting. The Board of Directors exercises the following functions and powers: (1) to be responsible for convening the shareholders' general meeting and to report its work to the shareholders in general meetings; (2) to implement the resolutions passed by the shareholders in general meetings; (3) to make decisions on the Company's business plans and investment proposals; (4) to formulate the Company's annual preliminary and final financial budgets; and (5) to formulate the Company's profit distribution proposal and loss recovery proposal. As at end of 2009, there were 14 members at the Board of Directors, including 5 independent non-executive directors. The Board of Directors has four board committees, namely the Audit Committee, Investment and Development Committee, Evaluation and Remuneration Committee, and the Health, Safety and Environment Committee.

#### Board of Supervisors

The Board of Supervisors is directly accountable to the shareholders' meeting, and consists of nine supervisors, including three employee representative supervisors and

two independent supervisors. The Board of Supervisors is responsible for reviewing the Company's financial situations as well as the financial statements and business reports submitted to the shareholders' meeting by the Board of Directors, whilst supervising the performance of duties and responsibilities by the Company's Directors, Presidents and other senior management in compliance with related laws and regulations.

## **Executive Bodies**

The management under the leadership of the President including the Vice President and the Chief Financial Officer - is the executive bodies of the Company. It is appointed by and accountable to the Board of Directors. In accordance with the provisions set out in the Articles of Association and the authorization of the Board of Directors, these bodies implement the resolutions of the Board of Directors and organize business activities including production and operations. The Company has adopted a management system of two-level (headquarters - regional company) administrative management and three level (headquarters - special company - regional company) business management. The Company's principal operations consist of four major segments, which are mainly operated by four branch companies, namely exploration and production, refining and chemicals, marketing and natural gas and pipelines branch companies.

## **Relevant Management Systems**

Sustainable development depends on institutionalized corporate governance. We facilitate the full performance of social responsibility by continuously improving the relevant management systems, to achieve sustainable development.

#### Internal Control and Risk Management System

PetroChina places great importance on internal control and risk management. In 2009, the internal control system was improved steadily with focus on enhancing internal control

execution and ensuring sustainable and effective operation. We have established the internal control system for newly-built units, and carried out conformance test to ensure compliance with regulating requirements; We also reinforced business process management, in particular, streamlined discipline management flow at headquarters, and extended to all the affiliated enterprises for implementation; we established and improved control regulations and strictly implemented internal control procedures along with ERP system establishment, to guarantee stable system operation; The Company performed risk assessment on operation and management, and improved risk control measures, to extend risk control range from financial statement to operational risk; The Company also strengthened internal control supervision, performed internal control audit and management review, and organized rectification of exceptions, to achieve sustainable and effective operation of internal control system.

## Health, Safety and Environment (HSE) Management System

We actively promote the establishment of health, safety and environment (HSE) management system, to strengthen integral HSE management. In 2009, as per the overall deployment of the *Plan for Establishment of HSE Management System*, we issued the nine principles of HSE management to reinforce the awareness of managers' responsibility and clarify horizontal and vertical responsibility division; and included the contractor's HSE management into the Company's HSE management system.

Based on HSE training for the mangers of all the affiliated enterprises in 2008, we held HSE training for the persons in charge of Headquarters functional departments and special companies, as well as new mangers in 2009. We held three exchange meetings for pilot work of HSE system promotion, to promote HSE management experience. We further compiled and issued 50 HSE system standards such as Process Hazard Analysis, Work Permit, and standardized the template of "Two Documents-One Table" (Documents for Operation Instructions, Operation Plans and On-site Inspection Table) for pipeline construction. We also promoted HSE information system, which is put online for all the units; and reviewed the operation conditions of HSE system for 37 enterprises by means of Headquarters review, external audit and cross review.

#### **Emergency Management System**

Guided by the national principle of "One Plan and Three Systems" (One plan: Public Emergency Plan; Three systems: emergency management system, operation system and legal system) for the establishment of emergency management system, we strengthened the building of emergency management system, by taking the risk management as the core, emphasizing on basic units and reinforcing the improvement of emergency response capacity. The "1+18" mode of emergency plan has been formed at the headquarter, the emergency response plans at various levels have been further enriched, the on-site response procedures in basic units have become more effective, and the plan system has been continuously improved. The command bodies and working bodies for emergency response have been continuously reinforced, the establishment of various systems has been continuously strengthened, and the working system of "united leadership, divided responsibilities and joint actions among departments" has been set up. By integrating various emergency response resources, the Company has preliminarily set up the specialized emergency rescue/response forces including five major emergency rescue bases/centers (namely the bases/centers for specialized firefighting, hazardous chemicals, oil & gas pipeline, blowout control and offshore emergency rescue), and got its emergency guarantee capacity improved steadily.

#### Corruption Prevention and Punishment system

In 2009, we strengthened anti-corruption campaign, guided by the anti-corruption and punishment framework. We reinforced anti-corruption training for management at all levels, and complied the educating materials such as Anti-Corruption Training Course of PetroChina and Guidance for Honesty of Senior Managers, based on the Regulations on Honest Business of State-owned Enterprises' Leaders, to build a solid moral culture; strengthened the establishment of a system to prevent corruption at source; and established a joint meeting system, to make full use of overall strength of supervisory departments and regulate management power. The Company also further carried out efficiency monitoring and inspection, with emphasis on engineering construction and operational management, to improve corporate management level; and also thoroughly investigated cases that involved illegal acts and violation of rules.





The newly-increased original oil in place ("OOIP") and original gas in place ("OGIP") have created a new record in the history. As calculated in accordance with the standards of United States Securities and Exchange Commission (SEC), the consolidated replacement ratio of oil and gas reserve is 1.32, and the year 2009 was the fifth peak year for reserve growth since the foundation of the People's Republic of China.



The gas production grew at a rate no less than 10% for 7 consecutive years. The Tarim Dina-2 Gas Field was put into operation, the Sulige Gas Field was constructed with the annual production capacity of 10 bcm, the production of natural gas from Tarim Oilfield Company and Changqing Oilfield Company respectively exceeded 17 bcm, the oil equivalent of Changqing Oilfield Company kept increasing by a wide margin, which made this Oilfield the second largest oil & gas field in China.



Great progress was made in the adjustment to refining and chemical sectors. The largest integrated refining & chemical project in China, namely the 10-million-ton refining and 1-million-ton ethylene project of Dushanzi Petrochemical, was put into operation; the ten-million-ton refining facility of Guangxi Petrochemical was completed basically; the integrated refining & chemical project of Sichuan Petrochemical, the ethylene projects of Fushun Petrochemical and Daqing Petrochemical were under smooth run.

Important breakthrough was made in the construction of transnational oil & gas pipelines. Line A of phase I project of Central Asia-China Gas Pipeline was completed and put into operation, and the construction of Russia-China Oil Pipeline was fully commenced; the construction of domestic oil & gas pipe networks progressed steadily, the Lanzhou-Zhengzhou-Wuhan section of Lanzhou-Zhengzhou-Changsha Refined Product Pipeline, the west section of Second West-East Gas Pipeline, the Yong-Tang-Qin Gas Pipeline, the Transmission Capacity Increasing Project for the First West-East Gas Pipeline and the Second Shaan-Jing Gas Pipeline were completed and put into operation.

Great breakthrough was made in overseas oil & gas cooperation. The Company won the oilfield service contracts of Rumaila Oilfield and Halfaya Oilfield in Iraq and acquired the operatorship for Halfaya Oilfield successively. We also signed oil & gas cooperation agreements with Russia, Turkmenistan, Uzbekistan and Kazakhstan. Besides, we successfully acquired Singapore Petroleum Company and Kazakhstan MangistauMunaiGas, and the overseas business chain and business layout were further improved.

From the Chairman of the Board Dialogue with the President Energy Outlook About Us

Focus on 2009 Stakeholders



The new energy business progressed steadily. The first scale-development project for coalbed methane in China, namely the coalbed methane project with annual production capacity of 1 bcm in Shanxi Qinshui was completed and put into operation, and the first joint assessment agreement for shale gas in China was signed. The oil sands codevelopment agreement was signed with the Athabasca Oil Sands of Canada and the acquisition was completed on 11<sup>th</sup> February 2010, which marked a new progress in the unconventional energy.



The main indicators relating to safety and environmental protection were continuously improved. No major out-of-control blowout accident, fire & explosion accidents, industrial production death accident or occupational disease accident occurred. As a result, the Company completed the energy-saving & emissionreduction tasks as set forth in the 11th Five-year Plan one year ahead of schedule.



The Company carried out strategic cooperation in all business areas. An atmosphere favorable for mutual support, mutual benefits and joint development was further consolidated. Poverty alleviation was carried out properly. We also actively involved in local community building and publicwelfare undertakings. Our social responsibility performance was enhanced continuously.

The technical advancement achieved great effects. Seven technological achievements won the National Science & Technology Awards, including: the EOR technology in thermal recovery of middle/deep viscous oil and the application thereof, as well as the technology for manufacturing extreme-pressure anti-wear additives and complexing agent for gear oil and the industrial application thereof.

The Company was ranked No. 9 in the "Top 250 Global Energy Companies" published by Platts Energy in 2009, which was the top ranking among enterprises in Asia & Pacific Region for seven consecutive years. The development project of Daqing Oilfield, the project of West-East Gas Pipeline, and the 10-million-ton refining and 1-million-ton ethylene project of Dushanzi Petrochemical was listed into the "100 Classic Construction Projects" for celebrating the 60<sup>th</sup> anniversary of the foundation of the People's Republic of China. PetroChina was awarded the China Ecological Contribution Prize by the National Afforestation Committee, the State Forestry Administration and the China Green Foundation.



Trust and support from our stakeholders is the basis for PetroChina to evolve and develop. We are dedicated to improving the quality of our development and our efficiency to maximize long-term value. We are also committed to showing our gratitude to stakeholders by delivering achievements of our development to maximize common interests of the Company and our stakeholders so as to achieve harmonious and mutual beneficial development.

### **Communication with Stakeholders**

Stakeholders	Objective and Focus	Mode of Communication and Exchange
Government and shareholders	<ol> <li>(1) National energy security</li> <li>(2) Stable market supply</li> <li>(3) Maximization of shareholders' long-term interests</li> </ol>	<ol> <li>Participate in the discussion on formulation processes of national energy policies and regulations, and share corporate experience</li> <li>Lead and influence public policy in a positive way</li> <li>Increase information disclosure</li> </ol>
Employees	<ul><li>(1) Safeguard of interests</li><li>(2) Development of career</li><li>(3) Realization of value</li><li>(4) Safety and health</li></ul>	<ol> <li>(1) Employee representative in Board of Supervisors</li> <li>(2) Set up labor unions</li> <li>(3) Hold staff congress</li> <li>(4) Increase information disclosure</li> </ol>
Customers and consumers	<ul><li>(1) Offering safe, environmental and quality products</li><li>(2) Provide quality services</li></ul>	<ol> <li>(1) Conduct activities to safeguard consumers' interests</li> <li>(2) Publicize product quality information</li> <li>(3) Conduct activities to guarantee quality service</li> <li>(4) Consult with customers and consumers</li> <li>(5) Increase information disclosure</li> </ol>
Contractors and supplier	<ol> <li>Jointly abide by business ethics and national laws and regulations</li> <li>Standardize HSE management</li> <li>Equal cooperation, mutual benefits</li> </ol>	<ol> <li>Host large multinational business negotiations and technical exchange</li> <li>Leverage on the role of the e-trading platform</li> <li>Share management experience and technical standards</li> <li>Contract negotiation</li> <li>Increase information disclosure</li> </ol>
Relevant organizations (incl. relevant national and international industrial institutions)	<ul> <li>(1) Participate in the study and discussion of relevant public policies and industrial standards</li> <li>(2) Focus on industrial trends and policy dynamics</li> <li>(3) Devoted to driving the sustainable development of the enterprise and the industry</li> </ul>	<ul><li>(1) Share corporate experience</li><li>(2) Participate in relevant activities</li><li>(3) Facilitate international exchange</li><li>(4) Increase information disclosure</li></ul>
Community	<ol> <li>(1) Protect the environment in the community</li> <li>(2) Participate in the development of the community</li> <li>(3) Support public welfare activities</li> </ol>	<ul><li>(1) Promote dialogue with local governments</li><li>(2) Make community visits and promote exchange</li><li>(3) Increase information disclosure</li></ul>

Key Actions	KPIs
<ul> <li>(1) Hold shareholders' meetings</li> <li>(2) Treat all shareholders equally, pay attention to comments from moderate and minority shareholders and communicate and have dialogue with them in numerous ways</li> <li>(3) Closely monitor and actively participate in the discussion of policies concerning climate change, energy reservation and emission reduction, and host the high-level forum on "Climate Change and Carbon Trade"</li> </ul>	<ol> <li>(1) Payment of taxes</li> <li>(2) Oil/gas production</li> <li>(3) Proportion of dividends distributed</li> </ol>
<ul> <li>(1) Support personnel training and skill education, and organize employees' occupational skill competition</li> <li>(2) Organize employees' occupational health examinations on a regular basis</li> <li>(3) Promote labor localization for overseas project</li> </ul>	<ul> <li>(1) Number of employees</li> <li>(2) Frequency of occupational health examinations</li> <li>(3) Number of staff members trained</li> <li>(4) Localization ratio of employees for overseas projects</li> </ul>
<ol> <li>(1) Further improve the quality management system and push forward product technology upgrade</li> <li>(2) Formulate branding plans, the fifth anniversary of uniform logo</li> <li>(3) Establish a uniform service station management system and conduct overall inspections for service stations</li> <li>(4) Increase the supply of clean products, such as natural gas and high-grade gasoline and diesel oil, to ensure the safe and stable supply of oil and gas for Shanghai World Expo</li> </ol>	<ul> <li>(1) Sales of refined products</li> <li>(2) Sales of natural gas</li> <li>(3) Number of chemical products</li> <li>(4) Number of service stations</li> </ul>
<ul> <li>(1) Strengthen concentrated materials purchase through www.energyahead.com, providing equal competitive opportunity for suppliers, and forming a strategic cooperative supplier system of PetroChina</li> <li>(2) Enhance communications and coordination with contractors, strengthen the contractors' HSE management, create a safe and healthy working environment for contractors, and improve safety and security measures and emergency rescue networks</li> <li>(3) Advocate cooperative partners to jointly fulfill social responsibilities</li> </ul>	(1) Total purchases through e-business (2) Number of partners
<ul><li>(1) Participate in the Global Compact China-Korea-Japan Roundtable</li><li>(2) Exchange with the public over their various concerns</li><li>(3) Participate in and support international environmental standardization</li></ul>	Number of institutions participated
<ul> <li>(1) Carry out disaster relief, poverty relief and contributions for educational purposes, and support the reconstruction of disaster areas</li> <li>(2) Support and drive the development of local economies through major projects (such as the Second West-East Gas Pipeline)</li> <li>(3) Organize activities for volunteers</li> <li>(4) Serve the Shanghai World Expo</li> </ul>	(1) Dedication to public welfare (2) Number of volunteers

# Sustainable and Effective Energy Supplies

It is our important mission to fulfill ever-increasing energy demands of social and economic development, and promote economic growth and social progress. To this end, we will continuously boost investment, develop innovative technologies, strengthen international cooperation, explore clean and renewable energy, and provide high-quality services to ensure stable market supplies.

- C Exploration and Development
- C Refining and Chemicals
- International Cooperation
- ♦ Oil and Gas Supplies
- New Energies

01



### Sustainable and Effective Energy Supplies

■ 1. Exploration and Development

2. Refining and Chemicals

3. International Cooperation

4. Oil and Gas Supplies

5.New Energies

## 1. Exploration and Development

Sufficient resources are preconditions for guarantee of sufficient supplies, and they are foundation for sustainable development of PetroChina. Giving prominence to exploration of oil and gas, the Company continued to implement the "Peak Growth in Oil and Gas Reserves" Program in 2009, with no reduction in investment or work intensity. A large number of strategic discoveries and great breakthroughs have been achieved in major exploration areas. In accordance with standards specified by the United States Securities and Exchange Commission (SEC), the consolidated replacement ratio of oil and gas reserve is 1.32.

With major oilfields entering high watercut stage, PetroChina intensified the campaign of Foundation Year of Development in 2009, to promote "Secondary Development" of maturing fields. We initialized full-scale projects to stabilize and enhance individual-well production and to further strengthen foundations for oil-gas field development. Besides, we also strengthened refined management, optimized production structures and productivity construction plans, and organized oil production activities in scientific ways to cope with market changes. Within the year, total oil production was 844 million barrels. Natural gas production accelerated rapidly, and marketable natural gas production of the year reached 2112.2 bcf.

Oil production in Daqing Oilfield Co., Ltd. exceeded 40 million tons in 2009. It was the seventh year for Daqing Oilfield to maintain production of over 40 million tons after keeping the annual production record of 50 million tons for 27 consecutive years. Oil equivalent production in Changqing Oilfield Company kept increasing by a wide margin in the year. It was the second consecutive year to maintain oil equivalent increase of 5 million tons, which was equivalent to putting a medium-sized oilfield into production each year. PetroChina Huabei Oilfield Company achieved significant achievements through refined management with reserve replacement ratio higher than 1 for 10 years in a row. In addition, return on investment of this company was also ranked high among enterprises of PetroChina.



Production Site of Tarim Dina-2 Gas Field

	1	
2009		11,263.0
2008		11,221.0
2007		11,706.0
2006		11,618.0
2005		11,536.2
	Proved reserves of crude oil	mmbbl
2009		632,440
2008		611,890
2007		571,110
2006		534,692
2005		481,231
	Proved reserves of natural ga	as 10 <sup>8</sup> ft <sup>3</sup>
2009		844
2008		871
2007		846
2006		831
2005		823
	Crude oil production	mmbbl

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#### Case Study Ð Construction of Hundred-Year Oil

Since its development in 1960, Daging Oilfield has attached great importance to technical advancement and innovation. During the course, Daging Oilfield established a whole package of geologic theories and technologies for exploration and development of large-scale continental sandstone oilfield. In total, Daging Oilfield has developed over 7,900 technological achievements, including over 120 achievements of national level, over 640 achievements of provincial level and over 1,800 national patents. Core technologies for exploration and development of large-scale continental heterogeneous sandstone oilfield are at globally advanced level. Achievements in exploration and development were recorded in science and technology history of China in range with the innovations of atomic bomb, hydrogen bomb and artificial satellite.

At the 50<sup>th</sup> anniversary for its discovery, Daqing Oilfield stipulated the "Sustainable Development Plan" in 2009. In the Plan, it was proposed: "Take energy replacement as the foundation to ensure stabilized production of 40 million tons; take technology and management innovation as the driving force, take development mode transformation

## eld in Daging

and new-type industrialization as the direction for future development. Full-efforts should be taken to ensure continuous stabilized production, to promote harmonious development, to construct a harmonious oilfield and to create an oilfield with brilliant one hundred years history. In this way, Daging Oilfield Company can be built into an internationalized energy company with strong vigor, competitiveness and great potential for future development".

In the first year for implementation of the "Sustainable Development Plan", Daging Oilfield followed the principles of "promote technical advancement driven by reserve indexes and guarantee stabilized oil production with technical advancement" and devoted great efforts in the "Three Major Projects" including secondary and tertiary production in Changyuan Oilfield, high-efficient development technologies for the periphery oilfields of Daging, and development of the Hailaer-Tamtsag Basin. In this way, total oil production reached 40 million tons. The Oilfield has made the first successful step in the starting point for sustainable development.



Production Site of Daging Oilfield

#### Accelerated Construction of a Key Case Study Energy Base in China Changqing Oil eld

Located in Ordos Basin, Changqing Oilfield belongs to typical reservoirs with "three lows" (low permeability, low pressure and low abundance). With 70% of major oil and gas reservoirs of less than 1md permeability, the Oilfield was considered by internationally recognized experts as marginal oilfield with no development potentials. Since its first development in 1970, Changqing Oilfield has integrated, established and mastered an entire package of major technologies, core technologies and key technologies for effective development of oil and gas fields with "Three Lows", through scientific researches, technical innovation and integration over several decades. With the permeability threshold for development programs reduced from 50md to 0.5md, the oil equivalent production of Changging Oilfield increased rapidly. Oil equivalent production exceeded 10 million tons in 2003, and reached 20 million tons in 2007 and kept increasing to a great degree in 2009. Currently, it has become the second largest oilfield in China. At present, Changqing Oilfield is planning to produce 50 million tons of oil equivalent in the year 2015 to become a key base for energy production in China.

#### Case Study Huabei Oil eld Rejuvenated through Implementation of Re ned Management

In the 1990s, Huabei Oilfield entered a development stage characterized by high watercut, with annual oil production declining from the peak more than 17 million tons to over 4 million tons, and with production cost-related pressure increased dramatically. Faced with huge pressure related to production stabilization and efficiency promotion in maturing fields, Huabei Oilfield actively promoted refined management, which is characterized by "refined management units, quantitative performance indexes and coordinate responsibilities and rights of management". The Oilfield implemented "Optimization of overall aspects, economic assessment of all elements and systematic control of entire processes" throughout investment, cost management, exploration, development and site management. Through implementation of the refined management, Huabei Oilfield achieved continuous oil production growth for 5 years in a row, with reserve replacement ratio larger than 1 over 10 years in a row. In addition, return on investment of this company was also ranked high among enterprises of PetroChina.

Sustainable and Effective Energy Supplies
1. Exploration and Development
2. Refining and Chemicals
3. International Cooperation
4. Oil and Gas Supplies
5. New Energies

## 2.Refining and Chemicals

In the year 2009, PetroChina integrated management over refining and chemical sectors to enhance resource utilization ratios for maximum economic efficiency. From January to May, PetroChina shut down production utilities in certain enterprises in response to high inventory of refined products. In addition, the Company reduced workloads intentionally to maintain safe and reliable production under low workload conditions. As market conditions turned to be more favorable after the second quarter of the year, PetroChina organized equipment maintenance and commissioning of new utilities in an orderly manner to increase processing workloads steadily. At the same time, PetroChina also optimized product structure and enhanced quality standards of refined products. Production of National III gasoline was promoted. Share of high-quality gasoline was up to 62.4% in total production, representing a year-on-year increase of 10.7%. Within the year, total crude oil processed was 829 million barrels; total refined product output was 73.195 million tons; total production of chemicals was 17.2 million tons, representing a year-on-year increase of 5.7%.

Significant progresses were achieved in structural integration of refining sectors: the 10-million-ton refining and 1-million-ton ethylene project of Dushanzi Petrochemical was completed and put into production; 10-million-ton refining facility of Guangxi Petrochemical was basically completed. In addition, integrated refining and chemical project of Sichuan Petrochemical, ethylene processing projects of Fushun Petrochemical and Daqing Petrochemical were under smooth run in the year.

## 3. International Cooperation

Full-scale utilization of domestic and overseas resources and development of both markets are important pathways for PetroChina to expand potentials for future development and to ensure safe and reliable resource supplies. It is the only way that leads the Company to become a global energy company with strong international competitiveness. PetroChina seized every favorable opportunity to promote its overall plan for overseas oil-gas resources utilization, and expand international cooperation for oil and gas development. In the two rounds of international bidding processes for oil and gas field development in Iraq, the Company jointly won the service contracts for the Rumaila Oilfield and Halfaya Oilfield, and acquired the operatorship of Halfaya Oilfield. Winning of these bids highlighted significant breakthroughs in cooperation with Middle East for oil-gas development. Line A of Phase I of Central Asia-China Gas Pipeline was built and put into operation successfully. Full-scale construction of the Russia-China Oil Pipeline was started. In addition, a large number of cooperation agreements for oil and gas development were signed with Russian, Turkmenistan, Kazakhstan, Uzbekistan and some other countries to enlarge resource bases for oil and gas supplies. New breakthroughs have been achieved in current overseas exploration projects, promoting proved reserves and production capacities to a higher level. Successful acquisition of Singapore Petroleum Company and Kazakhstan MangistauMunaiGas may provide new platform for internationalized operation. In the year, PetroChina produced 13.978 million tons of oil equivalent with a year-on-year growth of 13.1% in its overseas operations.

## Case Study Dushanzi Petrochemical and Re ning Base was Completed and Put into Production

The 10-million-ton refining and 1-million-ton ethylene project of Dushanzi Petrochemical Company was considered a landmark project for the China's Western Development Program. Foundation of the Project was officially laid in August 2005, and installation of production utilities started in June 2006. On August 28, 2009, the 10-million-ton atmospheric and vacuum distillation unit was constructed and put into production successfully. On September 21, 2009, the 1-million-ton ethylene core processing facilities were commissioned successfully. Completion of the project achieved several records for innovation in China. The project, entitled as one of the Top 100 Projects for the 60<sup>th</sup> anniversary of People's Republic of China, made significant contributions for the building of a harmonious Xinjiang.



Refinery Base under Dushanzi Petrochemical

## Case Study PetroChina Won the Joint Bid for Development of Iraqi Oil elds

On June 30, 2009, PetroChina and BP consortium successfully won the bid for service contract of the Rumaila Oilfield in the first round of international bidding for Iraqi oil and gas fields. Again, on December 11, 2009, a consortium formed by PetroChina, Total and Petronas successfully won the bid for service contract and operatorship of Iraqi Halfaya Oilfield. Rumaila Oilfield is located in Basra of Iraq, with the highest proved recoverable oil reserves among discovered oilfields in Iraq. Halfaya Oilfield is a new oilfield with expected oil reserve of 4.1 billion bbl. Both of these two development projects will be performed under technical service contracts, which may further enhance PetroChina's capacities related to supply of overseas oil-gas resources. Case Study Line A of Phase I of Central Asia-China Gas Pipeline was Completed and Put into Operation



Construction Site of Central Asia Gas Pipeline

Line A of Phase I of the Central Asia-China Gas Pipeline was completed ahead of schedule and put into operation on December 14, 2009, only 28 months after official startup of the Central Asia Natural Gas Cooperation Project (including Central Asia Natural Gas Pipeline Project and Amu Darya Natural Gas Project) on August 10, 2007. The Central Asia-China Gas Pipeline starts from Gedaim of Turkmenistan at the west, and runs through Uzbekistan and Kazakhstan before connecting with the west section of Second West-East Gas Pipeline in Horgos of Xinjiang, China. With total length of 1,833 km, the Pipeline made several new world records in terms of highest pipe grade, biggest construction difficulty and fastest construction speed. China, Turkmenistan, Kazakhstan, and Uzbekistan jointly participated in this key international oil and gas cooperation project. As a result, this project is of great importance to promote energy cooperation and realize sustainable development of energy sectors among these four countries.

In 2009, cooperation projects with overseas partners in oil-gas industry were promoted steadily, and oil equivalent production in these projects was 6.45 million tons. Gas production in Changbei Project, Changqing Oilfield remained stable and increased slightly; oil production in Zhaodong Project, Dagang Oilfield reached over 1 million tons for the sixth consecutive years.

Foreign trade continued to develop fast. With long-term contract, spot procurement, financing trade and various other activities, PetroChina organized import and export trades in a timely manner to actualize resource adjustment and guarantee oil-gas supplies.

## 4. Oil and Gas Supplies

Rapid socioeconomic development and continuous robust market demands for oil and gas have provided PetroChina with broad development space, and also lifted the responsibilities and pressures of the Company to ensure stable and reliable market supplies. PetroChina observed the guideline that calls for "appreciating the big picture, stabilizing supply, ensuring good quality and providing sincere services" to ensure proper market supplies and to achieve simultaneous social and economic development.

#### (1)Supply of Re ned Products

PetroChina observed the policies of Chinese governments on prices, quantities and qualities, to create a fair and high-quality consumption climate for consumers. Faced with fluctuating marketing environment in the year 2009, the Company devoted great efforts to intensify terminal marketing, accelerate construction of top-quality service stations, and enhance service guality. In addition, PetroChina adopted a management system characterized by daily monitoring and daily routine meetings, to intensify price monitoring and inspection and ensure stable supplies in the market. In particular, we contributed significantly to supply refined products for anti-drought salvation, for "farming periods in summer and autumn", and for the 60th anniversary celebration of Peoples' Republic of China. Lanzhou-Zhengzhou-Wuhan section of the Chinese longest Lanzhou-Zhengzhou-Changsha Refined Product Pipeline was completed and put into operation, which further enhanced oil supply capacities of PetroChina. Within the year, PetroChina supplied 101.253 million tons of refined products with a year-on-year rise of 12.2%. Total number of service stations reached 17,262.



Quality Fuelling Service

## Sustainable and Effective Energy Supplies

1. Exploration and Development

2. Refining and Chemicals

3. International Cooperation

4. Oil and Gas Supplies 5 New Energies

#### Case Study PetroChina Provided Services for Fa

After mid May 2009, rural areas across the country entered a period characterized by intensive harvesting, planting and management. To cope with ever-increasing demands, marketing branches of PetroChina devoted significant efforts to guarantee proper oil supplies for the "farming periods in summer". Sichuan Marketing Company assigned fuel dispensers in over 1,000 service stations for fueling of agricultural machineries. In addition, the Company dispatched oil tankers to deliver over 100,000 tons of diesel oil to farming fields. Guizhou Marketing Company set up "service area for farming periods in summer" in service stations, established green channels, and mobilized motorcycles to deliver oil to the farming fields. Henan Marketing Company made a RMB0.1 discount for every liter of oil consumed by agricultural machineries, and organized over 3,700 persons to serve as "volunteers for farming periods in summer", who provided safe and rapid services for agricultural machineries in over 380 service stations. Xinjiang Marketing Company set up logos of PetroChina's service stations in remote rural areas without service stations and in areas with high densities of agricultural machineries, and publicized telephones for mobile tankers,

#### (2)Supply of Natural Gas

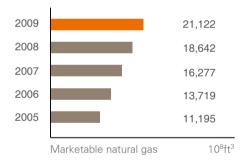
Natural gas is a high-quality, clean and efficient energy. Promoting development and enhancing efficient supply of natural gas are not only requirements presented by development of low-carbon economy and construction of environmental friendly society, but also an important pathway for sustainable development of the Company. PetroChina has considered development and utilization of natural gas as a fundamental business of strategic importance with top priorities for development. As Dina-2 Gasfield in Tarim Basin was under full-scale development, Sulige Gasfield of Changqing built up a 10 bcm/year production capacity, and the west section of Second West-East Gas Pipeline, Yong-Tang-Qin Gas Pipeline, and Transmission Capacity Increasing Project of West-East Gas Pipeline and Second Shaan-Jing Gas Pipeline were completed and put into operation in 2009, the gas supply capacity of PetroChina were further enhanced. In the year, the Company supplied 59.6 bcm of gas to domestic market with a year-onyear rise of 16.8%.

#### Services for Farming Periods in Summer in Rural Areas

which may deliver refined products to consumers' door steps as required. Xi'an Marketing Company organized volunteer teams equipped with 9 mini-tankers to deliver oil to remote rural areas around the clock.



Oil Sent to Farm Fields during "Farming Periods in Summer"



#### Special Topic Accelerated Development of Natural Gas Operations with Integration of Up, Middle and Down-Stream Sectors

In the past decade, PetroChina adhered to promoting integrated development of natural gas operations through integration of up, middle and down-stream sectors, so as to enhance gas supply capacities and meet ever-increasing gas demands in China.

Signi cant increases of gas reserves! In the past decade, PetroChina made continuous discovery of new gas fields through heavy investments and technical innovation. Increase of newly discovered proved OGIP grew substantially every year.

Rapid growth of gas production and supply volume: In the year 2009, marketable natural gas production reached 2112.2 bcf; total gas supply volume was up to 59.6 bcm, or 5.8 times the supply volume of 1999. Rapid increases of gas production and supply made great

contribution to safe and reliable gas supplies for residents, public utilities and key industrial clients.

Import and utilization of overseas resources through multiple channels: PetroChina actively promoted construction of four major transnational gas channels: First of all, Line A of the Phase I of Central Asia-China Gas Pipeline and the west section of Second West-East Gas Pipeline were completed and put into operation in late 2009. Natural gas from Central Area has been introduced to China successfully. Secondly, the framework protocol for importation of Russian gas was signed in October 2009. In addition, construction of the Russia-China Gas Pipeline was enlisted in the planning of PetroChina. Thirdly, PetroChina



Production Site of Sebei Gas Field of Qinghai Oilfield

1. Exploration and Development

2. Refining and Chemicals

International Cooperation
 Oil and Gas Supplies

■ 5.New Energies

has planned to import natural gas through the Myanmar-China Gas Pipeline, which is now under-construction by CNPC. Fourthly, PetroChina is accelerating construction of Dalian and Jiangsu LNG Terminals. In addition, construction of Tangshan and Shenzhen LNG Terminals were also enlisted in the Company's future plan. Upon construction of these terminals, it will be possible to import overseas LNG in large scale.

Accelerated construction and improvement of domestic gas pipeline network: With the construction of the First and Second West-East Gas Pipeline (West Section), the First and Second Shaan-Jing Gas Pipeline, Se-Ning-Lan Gas Pipeline, Zhongxian-Wuhan Gas Pipeline and crosslines, PetroChina has built a backbone pipeline network that connected gas fields and markets and covered domestic and overseas areas. By the end of 2009, PetroChina operated the gas pipelines with total length of 28,595 km, or 2.5 times the length of 1999. Accelerated construction of underground gas storages: Since underground gas storages may serve as one of major measures for emergency response, PetroChina has constructed 7 underground gas storages in Dagang and some other locations in the past 10 years, with total gas-supplying capacity of 1.71 bcm. In addition, more underground gas storage facilities in Huabei area and Jiangsu Jintan area are under construction.

Active development of unconventional natural gas resources: In 2009, the coalbed methane project with annual production capacity of 1 bcm was constructed and commercially operated in Qinshui Basin, Shanxi Province. At the same time, coalbed methane development projects were initialized in the eastern edge of Ordos Basin, in Heilongjiang and some other areas. In addition, PetroChina signed agreements with Shell for joint assessment of Fushun-Yongchuan shale gas in Sichuan Province.

## 5. New Energies

PetroChina has considered development and utilization of new energies as strategic measures of great importance to cope with challenges in energy and environment sectors, and to promote sustainable social and economic development. In the year 2009, PetroChina further intensified large-scale development of coalbed methane. The Company newly discovered coalbed methane geologic reserves of 38.5 bcm in Qinshui Basin, Shanxi Province. At the same time, the Company built a coalbed methane central processing plant with annual capacity of 1 bcm/year and a coalbed methane branch pipeline of the West-East Gas Pipeline in Shanxi. Besides, PetroChina signed agreements with Shell for joint assessment of Fushun-Yongchuan shale gas in Sichuan Province. We also signed oil sands co-development agreement with the Athabasca Oil Sands of Canada and the acquisition was completed on 11<sup>th</sup> February 2010. At the same time, PetroChina further promoted industrial experiments and resource assessments related to biodiesel, non-food fuel ethanol, oil shale and oil sand. In addition, the Company expanded researches related to utilization of geothermal, hydrogas and other new energies.



# Safe and Clean Production and Operation

The most important resources in the world are human beings and the natural environment we rely on. The ideas of caring for life and protecting the environment have been integrated into our working motto. We stick to the principles that give weight to a people-oriented, preventiondriven approach, and advocate total participation and continuous improvement to pursue zero injury, zero pollution and zero accident. We promote operations based on safe, clean and economic production and strive to establish a resource-saving, environment-friendly and productionsafety enterprise.

- Climate Change
- Foundation Management
- Energy Conservation and Emission Reduction
- Production Safety



2. Foundation Management

3. Energy Conservation and Emission Reduction

4. Production Safety

## 1. Climate Change

Climate change is a significant global issue that has attracted a considerable amount of attention. PetroChina gives a lot of weight to the effects of greenhouse gases emission control and reduction to alleviate climate change; and we fully support China's commitments made during the UN Climate Change Summit in Copenhagen, by adopting measures to reduce carbon emissions and increase carbon absorption in order to help mitigate the effects of climate change.

#### (1) Low-carbon Energy Development

PetroChina took an active attitude for development of natural gas, coalbed methane, biomass energy and other low-carbon energies. Wind energy, solar power and other renewable energies were also utilized in areas with necessary conditions. In the year 2009, the Company supplied 59.6 bcm of natural gas, representing a year-on-year rise of 16.8%; and also supplied 74 million tons of ethanol gasoline.

#### (2) Development of Forestry Carbon Sequestration

PetroChina actively supported and participated in the Carbon Sequestration Forest Project organized by the China Green Carbon Fund. In 2009, a large number of Carbon Sequestration Projects organized by the China Green Carbon Fund began to take shape as planned. Such projects include the 400-hectare Carbon Sequestration Forest Project constructed in Fangshan District, Beijing.

#### (3) Managing Greenhouse Gas Emissions

PetroChina attached significant importance to carbon emission and carbon footprints during its production activities and adopted multiple measures to minimize greenhouse gas emissions. In the year 2009, PetroChina organized 180 employees to participate in training related to statistics of greenhouse gas emissions. In addition, the Company modified "Regulations for Environmental Statistics of PetroChina", and officially included greenhouse gases such as carbon dioxide emissions into the statistics.

In the year 2009, PetroChina achieved significant progresses in two of its Clean Development Mechanism (CDM) projects. The N<sub>2</sub>O facilities of the CDM project in Liaoyang Petrochemical Company are in smooth operation, the annual reduction of N<sub>2</sub>O emission from which was up to an equivalent of 13 million tons of  $CO_2$ . The Phase I and Phase II of CDM Project in Tarim Oilfield for recovery of flared gas are under construction presently. It is expected that emission of up to 700,000 tons of carbon dioxide may be reduced.

#### (4) Participation in Carbon Reduction Discussions

PetroChina also attaches importance to discussions and exchanges on greenhouse gas (GHG) Control.

In November 2009, we participated in the first "Climate Change and Carbon Trade" Summit in China, which centered on environmental financial laws and regulations. During the summit, PetroChina shared its practice of GHG emission reduction regarding clean production, energy-conserving and emission reduction, technological innovation, international cooperation and the development of clean and low carbon energy.

## Case Study Development of Low-carbon Technologies in Jilin Oil eld to Promote High-ef cient Development of the Oil eld

Changling Gasfield of PetroChina Jilin Oilfield Company is characterized by deep formation, high geotemperature and high concentration of carbon dioxide in natural gas. Development of gasfields of this kind is difficult throughout the world. Since the year 2006, PetroChina has initialized the key technical research project of "Development of Gas with High CO<sub>2</sub> Contents and Integral Utilization of CO<sub>2</sub> in Jilin Oilfield" and the "Large-scale Experiment of CO<sub>2</sub> Flooding in Jilin Oilfield". Through hard works in the past 3 years, the Company has achieved significant progresses in CO<sub>2</sub> separation, corrosion protection technologies and field trial of CO<sub>2</sub>-flooding operations. In December 2009, the 1 bcm/year natural gas integral production project was constructed in Changling Gasfield. With combination of gas development, CO<sub>2</sub> storage and flooding operations, the Project yielded an effective reduction of CO<sub>2</sub> emission and its full utilization.

## 2. Foundation Management

Oil and gas industry is characterized by high risks and potential hazards. Extension of industrial chains, expansion of business areas and construction of new and large-scale projects presented a series of safety and environmental challenges. Accordingly, PetroChina devoted great efforts to strengthen HSE management through system construction, management optimization and strengthening of training programs. In 2009, PetroChina promoted effective management of safety and environmental protection activities through reinforcing construction of HSE management system, and strengthening grass-root and foundation works. The overall situation in safety operation and environmental protection is consistently getting more positive.

# (1) Implementation of the Safety and Environment Accountability System

In January 2009, Mr. Jiang Jiemin, the Chairman of the Board, signed the *Safety and Environment Accountability Pledge* with each of the persons in charge of affiliated enterprises for the third consecutive year. The Pledge defined the areas of responsibilities, accountability goals and accident-control indices and included the same in the annual performance evaluation of senior executives, concretely assigning annual targets of safety and environmental protection to top managers and supervisors of each division at all levels. Such targets were also cascaded down to each of the employees. In addition, overseas anti-terrorism activities were included in the *Safety and Environment Accountability Pledge*.

# (2) Accelerated Establishment of the Full-scale HSE Management System

PetroChina kept promoting the establishment of HSE management system and strengthening the integrated management. In 2009, PetroChina promulgated 9 principles of HSE management in accordance with *Plans for Promotion of HSE Management System* of the Company to strengthen responsibility consciousness of the management staff, and to clarify horizontal and vertical responsibility divisions. In addition, the management of contractors' HSE related activities was included within the HSE management system of PetroChina (See more details in the Section of HSE management system in the chapter entitled Corporate Governance herein).



Safety Inspection on Well Station of Southwest Oil & Gas Field

## (3) Strengthening Frontline Risk Management

In the year of 2009, the Company further improved the potential hazards identification and treatment mechanism by promoting "Two Documents-One Table" (Documents for Operation Instructions, Operation Plans and On-site Inspection Table) and "Four Haves and One Card" (have instructions, regulations, confirmations and supervisions, and the "one card" refers to work permit card) system, risk and operability analyses and other management tools to identify and analyze risks in production activities and to eliminate industrial risks encountered in relevant operations. In addition, the Company further improved relevant regulations and operation procedures to promote safety practices observation and analysis, and to accelerate construction of model work teams characterized by high skill, high efficiency, sound management, innovation and harmony. In this way, safety and environment consciousness and operability were enhanced effectively.

# (4) Establishment of a Long-term Effective Mechanism for Management of Potential Hazards

On the basis of successful completion of the "Three-Year Plan of Hazard Control from 2006 to 2008", PetroChina approved of the performances of the major hazards control projects in 12 enterprises in 2009. Besides, specific audits were performed for key hazards in 37 enterprises and post-inspection assessments were performed for completed hazards control projects. As at the end of 2009, PetroChina accomplished 5,048 hazards control projects with overall satisfactory performances.

- **2**. Foundation Management
  - Energy Conservation and Emission Reduction
     Production Safety

## (5) Ongoing Promotion Activities to Establish Frontline Green Teams

The Company continued to launch activities related to "frontline green teams (at workshops and plants)" at individual units of production, refining, chemical, pipelines and marketing, strongly advocated PetroChina's HSE culture and philosophy, organized and managed production operations in strict compliance with the HSE standards, installed and used environment-friendly facilities according to the HSE standards, and enhanced standardized management capabilities of field environmental protection in the frontline. In the year of 2009, 194 auditing projects were performed for key frontline teams (at workshop and plants) and 202 units won the title of "frontline green team (at workshop or plant)".

#### (6) Development of Safety Culture

Safety culture characterized by "Self Management" of employees is the ultimate goal for safety and environmental protection works of enterprises. PetroChina devoted great efforts to develop, promote and foster its unique safety culture. The Company included the development of safety culture in its overall plan of corporate culture development. Through highlighting safety concepts, principles, rules, adages and values, PetroChina continuously enriched contents of safety culture to guide safety activities of its employees. Accordingly, safety and environment operations are taken to a point where such operations are self-motivated and managed among individuals.



Exercise for Operation of Oil Containment Boom in Dalian Petrochemical

## 3. Energy Conservation and Emission Reduction

#### (1) Energy Conservation

PetroChina has considered energy conservation and emission reduction as the starting point for transformation of development mode and development of low-carbon economy. The Company, through promoting of valuable experiences in energy conservation and emission reduction, implemented key energy-conservation projects, reinforced the supervision and management work, accelerated the creation of energyconservative enterprises, and enhanced the utilization efficiency of energy and water resources significantly. In the year of 2009, PetroChina conserved energy equivalent to 1.71 million tons of standard coal. At the same time, total volume of water conservation goals achieved successfully.

In the year of 2009, PetroChina promoted the all-around energy conservation and emission reduction system developed by the Daging Oilfield in relevant oilfield companies. The new pattern is characterized by "giving higher priority to underground operations than surface operations, whereas considering both operations underground and above-surface". Daging Oilfield clarified detailed management regulations for energy and water consumption, together with emission of wastes in all sectors of the oil and gas production. Through promotion of the all-around energy conservation and emission reduction with integration of underground and surface operations, the reservoir engineering operations, production operations and surface constructions can be planned, implemented and managed simultaneously. Compared with conditions in the year of 2005, total volume of injected water increased 11.07%, fluid production increased 9.05% and total number of wells increased 48.51%, but with all these increases, total energy consumption decreased 3.32%.

Since 2009, PetroChina has attached importance to enhancement of heating furnace efficiency for refining and chemical process in the implementation of refined management. Accordingly, the Company performed full-scale benchmarking for energy efficiency of processing heating furnaces and clarified management principles and grading standards. To implement all-around monitoring of heating furnaces, PetroChina adopted monthly inspection, quarterly notification, professional inspections and competition, annual overall performance auditing and other necessary measures to promote management standards for heating furnaces.

In 2009, PetroChina implemented a series of energyconservation projects, including electricity-conservation upgrade of mechanical production systems, efficiency enhancement of surface pumps for oil and gas production, comprehensive application of energy-conservation technologies in steaminjection thermal production system, optimization of steam and condensed water system and utilization of low-temperature heat. At the same time, the Company stepped up supervision and assessment of implementation procedures and performances. In addition, PetroChina strengthened audits to energy-conservation sections in feasibility studies and preliminary design for investment projects of fixed assets. In this way, the high energy consumption and low efficiency projects can be eliminated from the source, at the same time, energy consumption of new projects can be controlled effectively.

PetroChina continued to improve statistical, monitoring, auditing, incentive and restrictive systems for energy conservation and emission reduction. The Company strengthened monitoring of energy-conservation performances of major energy-consumption and water-consumption equipment (systems). Measures were taken to ensure key units could use energy in a rational manner. PetroChina performed energy-conservation performance assessments to 11,361 key energy-consumption and water-consumption equipment (systems) and 15 steam pipes in 10 oilfields, 22 petrochemical enterprises and 4 pipeline operators.

#### (2) Emission Reduction

In 2009, PetroChina clarified indexes for reduction of pollutants emission, actively promoted the Top 10 emission reduction projects, and accelerated construction of emission reduction systems. In addition, PetroChina implemented trial operation of circular economy and enhanced assessment for emission reduction effects. Chemical oxygen demand (COD) discharge



Wastewater Treatment Station of Liaohe Oilfield

**3.** Energy Conservation and Emission Reduction 4. Production Safety

in waste water was 16,949 tons; oil discharge in waste water was 701 tons; sulfur dioxide discharge in waste water was 105,044 tons, representing a year-on-year reduction of 14.19%, 10.01% and 14.94% respectively.

PetroChina devoted great efforts to development of environmental protection technologies. In the past 4 years, the Company has established new environmental protection technologies in the following four sectors: boiler for recycling of heavily oil-contaminated waste water, recycling of waste water produced in petrochemical plants, clean production in drilling and downhole operations, and protection of ecological environment. Affiliated enterprises have been awarded with 35 prizes related to environmental protection technologies. PetroChina accomplished the research projects for Study on PetroChina's Emission Reduction Management System, Besides, the Company prepared Construction Plan for Environmental

Monitoring System of PetroChina, and promulgated the enterprise standard of Technical Requirements for Prevention and Control of Water Pollution in Case of Accidents.

PetroChina accelerated construction of Top 10 emission reduction projects, and performed relevant auditing to 47 major pollutant emission enterprises. The Company stepped up monitoring and control of water pollutions by affiliated enterprises in the areas of Songhuajiang River, Yellow River, Liaohe River, Bohai Bay and Three Gorges Reservoir; and also promulgated *Technica* [Regulations] for Management over Three-Level Emergency Preventative Utilities for Water Pollution, PetroChina summarized experiences accumulated through safeguarding air quality during the Beijing Olympic Games and made plans for reconstruction of oil and gas recovery facilities in the Yangtze Delta, Pearl River Delta and some other key regions.



#### Ð Case Study PetroChina Created Sound Ecological Environment in Kazakhstan

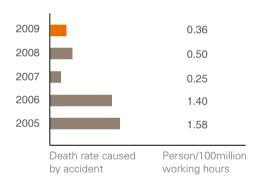
In Kazakhstan, PetroChina devoted great efforts to the construction of a system to protect the environment during production, control of pollutants and restoration of the ecological system. Such efforts are met with great achievements. Comprehensive gas utilization ratio of PetroKazakhstan(PK) was over 90%. In September 2009, PK won the Gold Prometheus National Award, the highest award for environmental protection in the petroleum industry of Kazakhstan, during the "Kazakhstan Energy Week". Accordingly, PK has become a role model for protection of local environment. By building 3 sets of waste water processing facilities, AktobeMunaiGas properly processed the oilcontaining wastewater and injected treated water back to formation to result in "Zero discharge" of industrial waste water.

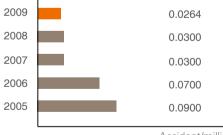


PK Won the Gold Prometheus National Award

## 4. Production Safety

In the year of 2009, PetroChina advocated the principles of "People-oriented Safety Management", "All Incidents are Preventable" and "Safety Comes from Responsibility, Design, Quality and Prevention". At the same time, the Company has taken production safety as the core value of the enterprises and implemented the concept in all sectors of production and operation to achieve ongoing improvements in production safety. Death rate related to accidents was reduced to 0.36 person/100million working hours, whereas the overall accident rate was reduced to 0.0264/1 million working hours.





Total accident rate

Accident/million working hours

## Case Study Improved Operation Safety in Changqing Oil eld

In recent years, PetroChina Changqing Oilfield Company has entered a peak production period of increased reserves and production. With multiple construction projects covering a large scope and work forces from various regions, the Oilfield experienced significant pressure related to production safety. In the year of 2009, Changqing Oilfield modified and circulated HSE Management Manual and Procedure Document to further improve its HSE management system and standard operational procedures. Great efforts were devoted to build a safety supervision system at three levels. Accordingly, a controlled supervision and management system with management by Party A, supervision by a third party and QHSE procedures fully controlled was established. Besides, we also strengthened review of Contractors' qualifications and HSE management to provide technical supports, training and safety education to technical service providers and construction teams positively. With a new operation system characterized by dominance by Party A, self-discipline of Party B and supervision by the third party, production safety management was elevated to a new stage.

#### (1) Emphasis on Traf c Safety

The Company further strengthened management over traffic safety by implementing local management system and strengthening supervision responsibilities for traffic safety of passengers. In additions, great efforts have been devoted to enhance safety concepts and technical training of drivers to eliminate severe traffic accidents.

# (2) Reinforced Construction of Emergency Response System

PetroChina issued the *Guiding Opinions on Formulation* and Revision of Emergency Plan and the General Rules on Formulation of Emergency Plan, revised the overall emergency plan, and improved 18 special plans, so as to continuously improve the emergency plan system. The key points of works relating to emergency response have been summarized and distributed, and the works relating to emergency management have been routinized gradually. The Company set up the emergency rescue/response center to copy with blowout

1. Climate Change

2. Foundation Management

3. Energy Conservation and Emission Reduction

**4**. Production Safety

incidents which has been designated as the national-level oil & gas field rescue base, and strengthened the establishment of offshore emergency rescue/response center. In addition, the Company held the exercise of special emergency plan for blowout incidents, arranged for Liaohe, Dagang, Jidong Oilfields to hold the exercise for response to offshore & onshore emergency, and organized the professional skills contest for firemen throughout the company, so as to further improve various emergency rescue abilities. Furthermore, we extensively publicized the *Emergency Response Law of the People's Republic of China*, and carried out the special inspection on implementation of the *Emergency Response Law of the People's Strengthen their emergency management works*.



Exercise for Prevention and Control of Blowout

#### (3) Holding of Safety Knowledge Contest

In April 2009, PetroChina held the Safety Knowledge Contest within its organization. Within a month, the Company received entries from over 518,000 employees, family members and the public. 382 individuals with excellent knowledge were awarded. Through extensive participation of employees and general public, PetroChina further enhanced safety consciousness of the entire society and promoted safety management of the Company.

#### (4) Security in Overseas Operations

PetroChina attached great importance to security of its overseas employees. The Company established sophisticated antiterrorism management system and the leading team provides necessary emergency response resources and establishes information system for security management in overseas operations. In addition, PetroChina established cooperation links and emergency response systems with local governmental agencies, Chinese embassies and security agencies in countries where the Company operates. Furthermore, the Company stepped up assessment of safety risks, improved emergency evacuation plans, organized trainings related to anti-terrorism and emergency handling, and issued safety warnings in a timely manner. In the year of 2009, no accidents involving physical injuries of employees occurred in PetroChina' s overseas projects.

#### Case Study PetroChina Offered Anti-terrorism Training

In the year of 2009, PetroChina engaged international anti-terrorism experts to serve as instructors in the training for management staff and operators working in high-risk countries. These training programs were organized with combination of classroom teaching and outdoor field practices. Contents of these training programs include anti-terrorism safety management, identification of security risks, personal protection and psychological guidance. During the year, 1,200 management staff and 17,000 operators were trained in different batches. In addition, PetroChina included clauses related to overseas anti-terrorism responsibilities in the *Safety and Environment Accountability Pledge*; established risk assessment and pre-warning mechanisms, and effectively prevented safety-related incidents from happening in its overseas operations through intensified control over risk procedures and construction of the anti-terrorism safety system.



# "People-Oriented" — Employee Development

Our employees are the most precious resources at PetroChina. Our values are based on a "peopleoriented" approach and we take employees' overall development as one of the key objectives of corporate development. We strive to achieve optimization of both corporate values and employees' benefits.

- C Employees' Rights
- C Training and Cultivation
- Growth Path
- Occupational Health



#### "People-Oriented" — Employee Development 1. Employees' Rights

2. Training and Cultivation

- 3 Growth Path
- 4. Occupational Health

## 1. Employees' Rights

PetroChina always adheres to the concept of "people orientation". We respect and maintain the rights and interests of our employees, solve the problems of great concern to our employees, and guarantee all the employees can share the achievement of corporate development.

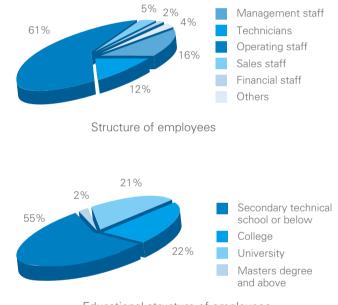
#### (1) Rights Protection

We strictly adhere to the *Labor Law of the People's Republic* of *China*, *Labor Contract Law of the People's Republic of China* and other relevant regulations of jurisdictions in which our shares are listed, and we rigorously fulfill international conventions endorsed by the Chinese government. We have established a sound employment management system covering labor contracts, remunerations, insurance and benefits, performance evaluation, rewards and penalties, professional training and vacation. We always ensure employees' personal benefits are met, and guarantee that all legal rights entitled to current and retired employees are upheld.

We provide equal opportunities and fair treatment to all employees regardless of their nationality, ethnic group, race, gender, religious beliefs and cultural backgrounds. We strictly prohibit the use of child labor, force labor and mandatory work requirements in any form. Female and male employees enjoy equal rights in the Company. Additionally, PetroChina has always promoted employment opportunities for local residents, females and ethnic minorities at local communities. As at the end of 2009, international and local personnel in our overseas businesses accounted for 84% of the total.

#### (2) Democratic Participation

Attaching great importance to democratic management, participation and supervision, the Company established the trade unions, and the Democratic Management System and Factory Affair Publicizing System through staff representatives associations. Besides, the Company further materialized the authorities of the staff representatives associations, regulated and improved the staff representatives association system,



Educational structure of employees



Employee Exchanging Information on Operation

and proposed new ways and methods for publicizing the democratic management of factory affair, so as to enhance the democratic management level.

The Company and all the affiliated enterprises established multiple channels to communicate with employees at all levels and adhered to perform democratic procedures, through holding Staff Congress, Democratic Discussion, and Staff Representative Meeting. In this way, employees' opinions were solicited, and employees were encouraged to participate in enterprise operation and management. In addition, the labor relations coordination mechanism was improved, so as to achieve harmonious labor relations.

#### (3) Remuneration and Motivation

The performance evaluation and remuneration system are further improved. We strive to establish a remuneration base that reflects the value and performance of employees in different positions so that every employee can realize their self-worth. In recent years, we have allocated resources to key researchers, frontline employees and those working in harsh environment, thereby gradually improving the salary standard in such positions. We widely promoted such activities as selection of model worker, advanced worker and talented youth contributing to innovation, so as to motivate and reward employees.

## 2. Training and Cultivation

Talents are the core competence of the Company. We adhere to applying the modern enterprise training concept, improve the establishment of training bases and networks, carry out training for all the employees, so as to cultivate knowledgeable employees, create a learning enterprise, and realize a positive interaction between employee growth and corporate development. In 2009, the Headquarters of the Company organized over 180 key training programs, with an attendance of 11,500 persons; regional companies held 1,750 training courses, with an attendance of 530,000, and the training ratio of senior technicians and key operators amounted to over 98%.

The Company persists in sending a group of excellent managers and key technicians each year to well-known universities and training institutes home and abroad to participate in trainings on foreign language, international business, business management, law and other disciplines, thereby enhancing their international insights and operating capacity, and promoting their overall and healthy growth.



Indonesian Employees after Training in China University of Petroleum

## Case Study All Participants in the Three Employee Training Programs Completed Their Training

In 2009, PetroChina Fujian Marketing Company organized and participated in 347 training courses, with an attendance of 4,649, including: training for managers (28 courses, attendance of 960), training for operators (77 courses, attendance of 2,672), training for dispatched fire and safety supervisors (161 courses, attendance of 826), training courses held by the senior management (81 courses, attendance of 191). The ratio of participants completing each of the compulsory training program, internal training program and induction program reached 100% throughout the year.

## 3. Growth Path

Employees are a fundamental strength supporting the Company's development and a driving force of the Company's service to society and local communities. Since its foundation, PetroChina has implemented a strategy that strives to build an enterprise based upon a wide range of talents. It has established and continuously improved the mechanism of talent development, selection and allocation, catering to employees' needs and career development at different stages. It also respects employees' choices, and strives to provide a wide platform for the self realization of employees.

We have established three teams – the management team, the professional technical team and the skills operating team – and

"People-Oriented" — Employee Development 1. Employees' Rights ■ 2. Training and Cultivation

Growth Path
 Occupational Health

ensured the creation of a favorable environment in which all talents can thrive and grow. Through our efforts, the quality of the three teams has been enhanced continuously. As at the end of 2009, the Company had 12 academicians from the Chinese Academy of Sciences and China Engineering Academy, 735 experts entitled to Government Special Allowance, 121 senior technical experts, 97 senior experts of technical skills, and over 1,300 other experts.

### Case Study Career Planning for College Graduates

With great emphasis on cultivating new employees, PetroChina Dalian Petrochemical Company has carried out orientation training and rotation training for newly employed college graduates every year, provided them with 2-year basic learning and practicing opportunities, helped them to make career planning, followed up the training effects and practicing status, and developed staged learning plans based on their personal features. After each stage ends, evaluation will be performed, and those qualified will enter the next-stage training. Through oriented training, this company strives to enable every employee to become business backbone.

### 4. Occupational Health

PetroChina attached great importance to occupational heath, and strengthened the implementation of such works through positive prevention and management reinforcement. We actively carried out physical examination of occupational health for employees, and performed prevention, control and detection of occupational disease hazards at workplaces. The occupational physical examination rate reached 96%, and the occupational physical examination rate of employees engaging in the radiation work and personal measuring and monitoring rate reached over 98%.

With great emphasis on occupational health management and service at workplaces, the Company actively promoted identification and detection of occupational health hazards at workplaces, and organized to carry out special prevention and control activities for dust and poison hazards. We evaluated the occupational health hazards for construction projects carefully, and completed multiple occupational health preevaluation works for the projects such as "High-sulfur Gasfield in East Sichuan" and "Compressor Station of Lan-Yin Gas Pipeline". In the principle of enhancing occupational health management during operation, we strengthened health and disease prevention works for the employees involved in seasonal operation, actively carried out prevention and control over infectious diseases and endemic diseases, and conducted emergency rescue and treatment for injured and sick employees in accidents and disease outbreak.

The Company organized the affiliated enterprises to participate in the National Knowledge Contest of Occupational Safety and Health, held by State Administration of Work Safety, Ministry of Health, and All China Federation of Trade Unions. We also brought the general occupational health knowledge to workshops and sites, and provided occupational health training and consultancy for employees. 290,000 employees in affiliated enterprises participated in the contest, among which, 29 affiliated companies including Daqing Oilfield Co., Ltd. and Liaohe Oilfield Company won the Excellent Awards in the contest, 7 employees won the Excellent Organizer Awards, and 3 others were awarded for their individual excellence.

The Company gave prominence to psychological health of the employees, organized the affiliated enterprises to implement the Employee Assistance Program (EAP) aiming at alleviating employees' psychological pressure, held knowledge seminar on employees' psychological health, and care for every employee in mental aspect.

#### Case Study Caring Employees' Psychological Health

Attaching importance to psychological health of the employees, PetroChina Liaohe Oilfield Company established the EAP project team, and cultivated 255 psychological consultants and over 59 EAP project managers from the employees with its own fund; sent out 8,000 questionnaires, to carry out psychological health and pressure investigation for the researchers, female employees, single employees, employees with children participating in college entrance examination, family members of overseas employees, and held 48 psychological guidance seminars pertinently. Besides, this company also set up an online column and an employee hotline, printed handbooks, held psychological health lectures, and provided psychological health consultancy for employees. In this way, EAP has brought benefits to tens of thousands of households and employees.



### **Giving Back to Society**

Since our fortune comes from society, it is our responsibility to give back to society. We pay attention to the livelihood of people, support educational undertakings, participate in the construction of communities, promote the allround development of economy and society, and make efforts to build a harmonious society.

- Promote the Development of Local Economy
- Overty Alleviation
- **Support for Education**
- C Employee Voluntary Activities
- **Service for World Expo**
- Construction of Overseas Community



#### Giving Back to Society

1. Promote the Development of Local Economy
 2. Poverty Alleviation

- 2. FOVERLY Alleviation
- 3. Support for Education
- Employee Voluntary Activities
   Service for World Expo
- 6. Construction of Overseas Community

### 1. Promote the Development of Local Economy

The Company will not grow without the support of local governments, communities and residents. In turn, the construction and development of new oilfields, the construction of oil & gas pipelines, the construction of new refining and chemical projects, as well as the continuous growth in production and varieties of refining and chemical products also powerfully support and drive the development of local economy and society, and create a lot of employment opportunities for local communities.

In the construction of the Second West-East Gas Pipeline, with the successful application of domestic manufactured X80 steel, China's overall ability of pipeline construction reached the internationally advanced level in terms of material technology conditions, pipe manufacturing, design and construction. The pipeline project also drove the rapid development of relevant industries in China (including metallurgy and manufacturing industry); and generated great social and economic benefits.

#### 2. Poverty Alleviation

We seriously fulfill the responsibility for poverty alleviation, actively help poverty-stricken areas to get rid of poverty and develop their local economy. We actively participated in the poverty alleviation activities in some poverty-stricken counties and towns in Xinjiang, Tibet, Sichuan, Chongqing, Gansu, Ningxia, Qinghai, Shaanxi, Inner Mongolia, Hebei, Heilongjiang, Jilin and Liaoning. In addition, by donating funds, renovating dangerous housing, giving assistance in rescue and relief and providing information, we gradually improved the living conditions of local residents. In 2009, PetroChina invested a total of RMB58.28 million in poverty alleviation.



Children Supported and Helped

#### Case Study Hohhot Petrochemical Extends Help and Love

In 2009, Hohhot Petrochemical Company fulfilled its social responsibility through actions. For example, this company established the "Love Contact" system, determined the object of help, set up youth volunteer teams and formed the long-acting mechanism. By assisting to build the dehydrated vegetable factory and town-level vegetable market, this company helped Juli Village, Liuhu Town, Tuquan County of Xing'an League in Inner Mongolia to build 20 vegetable greenhouses for cultivating edible fungus. The Manshui Bridge in Wubashi Village, Shaerqin Town, Tumotezuo County of Hohhot built with assistance from this company was completed and put into service in September 9, from then the local residents no longer need to wade across the river.

### Case Study Love from Jilin Oil eld Warmed Thousands

Since 2005, Jilin Oilfield Company has persisted in implementing the concept of "Offering Love and Helping Underprivileged Groups" and mobilized employees to carry out a charity activity. By the end of 2009, this company totally donated RMB22.03 million to Songyuan Charity Federation. In particular, this company has donated a total of 270,000 pieces of cotton-padded clothes and quilts to since its launch of a campaign in 2009 to help the earthquake-stricken Heishui County of Sichua. In 2009, Jilin Oilfield Company was awarded by China Charity Federation the "China Charity Prize for Enterprises Which Make Outstanding Contribution."

### 3. Support for Education

To support education undertakings is an important part of our support for social advancement and development. By setting up various scholarships and subsidies, donating funds for building primary schools and subsidizing poor teachers and students, the Company actively makes contribution for the development of education undertakings in China. Since 2007 when the "China Oasis Education Aid Action" was launched, PetroChina has donated RMB1.1 million, to assist poor children in the desert areas of 8 provinces (autonomous regions) including Inner Mongolia, Shanxi and Qinghai, and donated electrical teaching equipment to some schools. In 2009, PetroChina won the "Special Contribution Prize for China Oasis Education Aid Action" jointly awarded by China Green Foundation and other organizations. In 2009, PetroChina donated a total of RMB37.82 million in education supporting activities.

#### Case Study Lanzhou Petrochemical Supports the Fundamental Education of Dongxiang Minority

Dongxiang County in Gansu is the only Dongxiang minority autonomous county in China. Liujia Village in Baihe Town of this county has 277 children of school age, who had to study in the school which is 5km away because there was no school in the village, and the enrollment rate is only 33%. In May 2009, Lanzhou Petrochemical Company invested RMB300,000 and built a 6-year primary school composed of 6 classrooms and 6 offices with total building area of 407 square meters for the village. In September of this year, this school passed the joint acceptance inspection carried out by the relevant government departments in Dongxiang minority autonomous county and was put into service. In the same year, 73 children of school age from the village were enrolled in the school, and the enrollment rate was raised to 60%.

#### Case Study Employee Volunteers from PetroChina Green and Beautify Homeland

The employee volunteers from PetroChina, by voluntarily planting trees, clearing away garbage and distributing leaflets, carried out the activities for greening and beautifying homeland. In 2009, the volunteers from Fushun Petrochemical Company planted 34,000 trees, more than 50,000 shrubs and more than 260,000 flower plants, built 127,000 square meters of grassland and constructed 17.4 hectares of green areas. Tuha Olifield Company constructed the "Demonstration Forest by Youth Volunteers" and planted more than 400 trees. The volunteers from Shanxi Marketing Company planted more than 1,000 trees, and distributed more than 50,000 leaflets to promote environmental protection. On the Day of Youth Volunteer, Urumchi Petrochemical Company printed and distributed to local residents more than 1,000 education leaflets of energy-conservation, water-saving and environmental-protection.



Employee Volunteers Cleaning Habitat for White Swans

#### 4. Employee Voluntary Activities

In the areas wherein we carry out business, a lot of volunteer teams composed of the company employees carry out volunteer actions all the year. They voluntarily help those employees which encounter difficulties, help poor students, take care of widowed seniors and disabled persons, voluntarily plant trees and protect environment. In 2009, the number of employee voluntary service teams increased to 3100, the number of youth volunteers reached 70,000 persons, and the persons benefiting therefrom reached 260,000.

#### 5. Service for World Expo

After becoming a cooperation partner of 2008 Beijing Olympic Games, PetroChina became the worldwide partner of World Expo 2010 Shanghai (hereinafter referred to as the World Expo), and will participate in the World Expo as a sponsor and an exhibitor.

Supply clean refined products: In order to prepare for the World Expo, Shanghai IV Standard began to be implemented for the gasoline and diesel oil of motor vehicles in Shanghai as of November 1, 2009. The Company fully initiated the program for upgrading the quality of refined products, and actively increased the production of new-standard diesel oil and high-

**Giving Back to Society** 

1. Promote the Development of Local Economy

- 2. Poverty Alleviation
- **3**. Support for Education
- 4. Employee Voluntary Activities 5. Service for World Expo
- 6. Construction of Overseas Community

grade gasoline. In 2009, the Company supplied18×10<sup>4</sup> tons of Shanghai IV Standard gasoline and diesel oil to Shanghai, and made contribution to a green World Expo. We also printed and distributed the joint service card, and offered services for vehicles in the World Expo at designated locations.

Create a clean environment: The Company actively promoted the implementation of oil & gas recovery projects, and put 102 oil & gas recovery facilities into service throughout the downtown area of Shanghai, to achieve the goal of reducing the emission of oil and gas, and contribute to the cleanliness of the air in the city.

Carry out the energy-saving & environmental-protection knowledge contest: In June and September 2009, the Company organized the "PetroChina World Expo City Star" activities such as energy-saving & environmental-protection knowledge contest and "fuel-saving master" competition, under the theme "to disseminate energy-saving knowledge, to develop an energy-saving habit, and to build the environmentalprotection image." Among these activities, the energy-saving & environmental-protection knowledge contest won active response and participation from the public, in which, 55,000 entries were received within 15 days, and 100 persons from the public as well as 100 middle and primary school students were given the title of "PetroChina World Expo City Stars". The fuel-saving master competition lasted for three months, in which, 107 applications were received and 50 inventors of new fuel-saving technologies and products were given the title of "PetroChina World Expo City Stars".

#### 6. Contributions to Overseas Communities

Over a long period of time, PetroChina has been adhering to the principle of "cooperation for mutual benefits and joint development", and committed itself to developing the long-term and stable cooperation with the countries where it operates. While developing its own business, the Company provides the local communities with job opportunities and cultivates their own talents while improving the living conditions of their residents and making contributions to the development of these local communities.

#### Special Topic Cassava Project Launched for Promoting the Development of Venezuelan Indian Community

Located in Anzoátegui, Venezuela, Caico Seco is a village which means "dry low-lying land" in Spanish. Four years ago, there was no tap water in Caico Seco, and this village with a population of 200 was the poorest community within a radius of several hundred kilometers. Cassava bread is one of the most favored staple food in Venezuela. Though Caico Seco has the tradition of cassava cultivation, the community is unable to benefit from any economies of scale owing to the unavailability of funds and technologies. In 2005, PetroChina invited the agricultural experts from Guangxi Agricultural Scientific Research Institute to investigate into and evaluate this area, and then, on the basis of the natural environment as well as the conditions of soil and labor, decided to implement the cassava cultivation & processing project in this community. We also invited Chinese agricultural experts to improve the variety and quality of local cassava and increase the output of cassava by applying the cassava cultivation technologies from China.

In 2007, after a joint venture between PetroChina and a Venezuelan party was established to jointly invest and expand the cassava cultivation area to 30 hectares and increased the processing facilities to 13 sets. In 2009, this factory created 26 jobs, and could produce 1,600 pieces of cassava breads each day, with the maximum production capacity of 3,000 pieces per day. Such production scale enables this factory to rank No. 1 in Anzoátegui. Implementation of the cassava project in the past four years has revitalized this remote Indian village. In 2009, the annual revenue arising from this project reached US\$35,000, which was partly used to expand the production scale, and partly used to improve the living conditions of the residents. So far, 26 households have successfully got out of the poverty line. Julio Correa, a villager and the leader of the plant, said that they were expanding market, which would further improve people's living conditions once settled.



Local People Processing Cassava Bread

### Objectives and Plans

In 2010, we will fulfill the three responsibilities for economy, environment and society by continuing to implement the three main strategies in the areas of resources, marketing and internationalization of operations, as guided by the concept of scientific development. We will focus on enhancing the independent innovation capacity and strengthening the enterprise management foundation, and actively promote the transformation of development mode, so as to enhance our integrated capacity to achieve harmonious and sustainable development.

Item

Production

and supply

of oil & gas

products

Objectives for 2010

To maintain a

steady supply of oil

and gas products

and petrochemical

products to the

domestic market

#### Action Plans for 2010

1. To continue to accelerate the "Peak Growth in Oil and Gas Reserves" Program, organize oil and gas production scientifically; pursue large-scale effective and scientific exploration, give prominence to prospecting and risk exploration; make good plans for oil-gas field development based on stabilizing and improving single-well production.

2. To organize refining and chemical production based on market demand, greatly enhance profitability; adhere to the principle of processing the products suitable for the market, strengthen production organization, allocate processing loads properly, and put emphasis on key project construction and works related to putting into production.

3. To accelerate marketing network construction, adopt pertinent marketing strategy, and further improve retailing capacity and ensure market supply.

4. To actively promote construction of oil-gas pipelines and domestic backbone pipeline networks, maintain continuous and fast growth of natural gas business, enhance the capability to overcome/reshape peak demands, and guarantee safe and stable gas supply.

5. To further consolidate and expand international oil-gas cooperation, maintain effective and sustainable development of overseas business scale; organize the execution of newly signed key projects; attach importance to exploration and development of current projects; select opportunities to carry out M&A of oil-gas assets and companies; and further play the role of foreign trade in adjustment and supply maintenance.

6. To strengthen technical innovation, provide great support for core business development; adhere to the principle of "closely related to production", continue to reinforce organization and implementation of key technical projects, give prominence to summary, integration, promotion and application of technical achievements, and further improve the independent innovation capacity of the Company.



To enhance teambuilding among workers and frontline construction, and further improve the integral quality of the team. 1. To consider the improvement of the employees' quality as an important basis for longterm corporate development, and push forward business management, professional techniques, and the building of teams of high-skilled talents, especially of high-quality international talents.

2. To promote on-the-job training, and give prominence to the training of employees in key posts and overseas employees.

3. To strengthen frontline team-building, carry out activities to develop the "Five Groups".

4. To implement the occupational hazards detection, strengthen occupational monitoring and protection, improve the working environment, and further promote occupational health management.

4. Glossarv

Item

Objectives for 2010

Action Plans for 2010



To give prominence to production safety, environmental protection, energy saving, and emission reduction, and achieve a better position on safety and environment protection. 1. To continue to adopt effective measures to solve real problems, improve responsibility system for production safety and environmental protection, and enhance HSE management level.

2. To reinforce monitoring of production safety and environmental protection for key fields and technologies, and improve incentive and restrictive mechanism.

3. To strengthen hazards control, put an end to accidents of a serious nature or above, enhance repressing accidents, and reduce casualty accidents in general production process.

4. To improve the organization system of emergency management, emergency plan system, and running mechanism, and enhance integrated capacity in responding to multi-type crises.

5. To greatly accelerate the activity of "Building Resources-saving Enterprise", and actively promote the successful experiences of advanced units in energy saving and consumption reduction.

6. To give prominence to the implementation of 10 energy-saving projects and 10 emission-reduction projects, through technical advancement, technical upgrade and management enhancement.



To actively undertake social responsibility, support charities, and promote the construction of harmonious society. 1. To actively support and participate in social welfare activities, reinforce and improve the uniform management of charitable donations, and promote the social impact of charitable activities.

2. To strengthen communications with local governments and actively integrate the enterprise into the local economic development.

3. To continue efforts on poverty relief, disaster relief, donation for education and employee voluntary activity, and to reinforce the development-oriented poverty relief, such as science & technology and education.

4. To establish long-term effective mechanisms for poverty relief, guarantee capital investment, and improve aiding measures to actively offer help to people with difficulties and resolve their problems.

## Global Compact and Us

The Global Compact is a global framework initiated and advocated by the United Nations aiming at the promotion of sustainable development and the collective improvement of social well-being through responsible and innovative business practices. As a member of the UN Global Company, we participated in the first Global Compact China-Korea-Japan Roundtable in November 2009, and delivered the speech on "Fulfilling Social Responsibility for a Bright Future". We are committed to observing and supporting the 10 Principles advocated by the Global Compact in the fields of human rights, labor rights, environment protection and anti-corruption, using the 10 Principles to guide our practices in fulfilling social responsibilities. And we will continue to disclose our progress in keeping with the 10 Principles in the Global Compact in our annual report.

Ten Principles in the Global Compact	Corresponding sections herein
Human Rights	
1.Businesses should support and respect the protection of internationally proclaimed human rights; and	3.1 Employees' Rights
2. make sure that they are not complicit in human rights abuses.	3.1 Employees' Rights
Labour Standards	
3.Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	3.1 Employees' Rights
4.the elimination of all forms of forced and compulsory labour;	3.1 Employees' Rights
5.the effective abolition of child labour; and	3.1 Employees' Rights
6.the elimination of discrimination in respect of employment and occupation.	3.1 Employees' Rights
Environment	
7.Businesses should support a precautionary approach to environmental challenges;	2.1 Climate Change
8.undertake initiatives to promote greater environmental responsibility; and	2.2 Foundation management 2.3 Energy conservation and emission reduction
9.encourage the development and diffusion of environmentally friendly technologies.	2.1 Climate Change
Anti-Corruption	
10.Businesses should work against corruption of all kinds, including extortion and bribery.	About Us

### Performance Statistics

Classi catio	n Indicator	2005	2006	2007	2008	2009
	Total assets (RMB10 <sup>8</sup> ) *	7,854	8,803	10,696	11,962	14,503
	Turnover (RMB10 <sup>8</sup> ) ※	5,541	6,914	8,375	10,726	10,193
	Net profit (RMB10 <sup>8</sup> ) %	1,334	1,435	1,468	1,145	1,034
	Taxes (RMB10 <sup>8</sup> )	1,188	1,614	1,722	2,227	2,045
	Proved crude reserves (10 <sup>6</sup> barrels)	11,536.2	11,618.0	11,706.0	11,221.0	11,263.0
	Proved gas reserves (10 <sup>8</sup> ft <sup>3</sup> )	481,231	534,692	571,110	611,890	632,440
Economic	Oil equivalent production (10 <sup>6</sup> barrels)	1,010	1,059	1,117	1,182	1,196
	Crude oil production (10 <sup>6</sup> barrels)	823	831	846	871	844
	Marketable natural gas production (10 <sup>8</sup> ft <sup>3</sup> )	11,195	13,719	16,277	18,642	21,122
	Total length of crude oil pipelines (km)	9,391	9,620	10,559	11,028	13,164
	Total length of refined products pipelines (km)	2,462	2,413	2,669	5,656	8,868
	Total length of natural gas pipelines (km)	20,340	20,590	22,043	24,037	28,595
	Crude runs (10 <sup>6</sup> barrels)	752	785	824	850	829
	Ethylene production (10 <sup>4</sup> tons)	189	207	258	268	299
0.4	Death rate caused by accidents (person/100 million work hours)	1.58	1.40	0.25	0.50	0.36
Safety	Total accident rate (incidents /million work hours)	0.09	0.07	0.03	0.03	0.0264
	Oil discharged in waste water (tons)	1,219	1,131	1,001	779	701
	Energy conserved (10 <sup>4</sup> tons of standard coal)	_	141	124	176	171
Environment	Water conserved (10 <sup>4</sup> m <sup>3</sup> )		7,477	4,700	5,336	3,188
	COD discharge in waste water (ton)	23,416	22,264	23,427	19,751	16,949
	SO <sub>2</sub> discharge in waste gas (ton)	93,936	108,614	127,498	123,500	105,044
	Number of employees (10 <sup>4</sup> )	_	44.6	46.7	47.8	53.92
Employee	Percentage of employees receiving occupational health checks		97%	97%	96%	96%
	Contribution to poverty alleviation (RMB10 <sup>4</sup> )		_	14,957	12,272	5,828
Social	Education donation (RMB10 <sup>4</sup> )	_	1,645	4,549	12,968	3,782
welfare	Donations to disaster relief (RMB10 <sup>4</sup> )	_	8,011	2,483	9,009	935
	Environmental protection (RMB10 <sup>4</sup> )	_			876	569

Note: The data marked with % are restated due to business combination under common control.

Unit conversion:

1 equivalent barrel=1 barrel of crude oil =6,000 cubic feet of natural gas=169.9 cubic meters of natural gas

1 cubic meter of natural gas=35.315 cubic feet of natural gas

1 ton of crude oil=7.389 barrels of crude oil (assuming a API gravity of 34)



In preparing this report, we referred to the reporting elements and performance indicator indexes proposed by Global Reporting Initiative (GRI) and compared the index to this report with the indicators listed in *Oil and Gas Industry Guidance on Voluntary Sustainability Reporting* compiled by International Petroleum Industry Environmental Conservation Association (IPIECA) /American Petroleum Institute (API).

No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
Strateg	y and Analysis				
1		1.1	Statement from the most senior decision maker of the organization (e.g., CEO, chair, or equival senior position) about the relevance of sustainability to the organization and its strategy.	alent	P2-3,26
2		1.2	Description of key impacts, risks, and opportunities.		P2-5,8-9,26
Organi	zational Profile				
3		2.1	Name of the organization.		Cover,P8
4		2.2	Primary brands, products, and/or services.		P9,20-21
5		2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.		P10
6		2.4	Location of organization's headquarters.		Cover
7		2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	or 🗖	P19,29,39
8		2.6	Nature of ownership and legal form.		P8
9		2.7	Markets served (including geographic breakdown, sectors served, and types of customers/ beneficiaries).		P19-21
10		2.8	Scale of the reporting organization		P9,33
11		2.9	Significant changes during the reporting period regarding size, structure, or ownership		P8
12		2.10	Awards received in the reporting period.		P13,19,29,37-38
Report	Parameters				
13		3.1	Reporting period (e.g., fiscal/calendar year) for information provided.		Cover
14		3.2	Date of most recent previous report (if any).		Cover
15		3.3	Reporting cycle (annual, biennial, etc.)		Cover
16		3.4	Contact point for questions regarding the report or its contents.		Cover
17		3.5	Process for defining report content.		Cover
18		3.6	Boundary of the report. See GRI Boundary Protocol for further guidance.		Cover
19		3.7	State any specific limitations on the scope or boundary of the report.		Cover
20		3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.		
21		3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.		Cover
22		3.10	Explanation of the effect of any re-statements of information provided in earlier reports, the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, of business, measurement methods).		

7	3.	Indicator Index	
	4.	Glossary	

No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
23		3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.		Cover,P42
24		3.12	Table identifying the location of the Standard Disclosures in the report. Identify the page number or web links where the following can be found.	's	P44-49
25		3.13	Policy and current practice with regard to seeking external assurance for the report.		P42
Gover	rnance, Commi	tments,	and Engagement		
26		4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.		P10-11
27		4.2	Indicate whether the Chair of the highest governance body is also an executive officer.		
28		4.3	For organizations that have a unitary board structure, state the number of members of the higher governance body that are independent and/or non-executive members.	st 🔳	P10-11
29		4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.		P14-15
30		4.5	Linkage between compensation for members of the highest governance body, senior managers and executives (including departure arrangements), and the organization's performance (includ social and environmental performance).	ing	P10,26
31		4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.		P10-11
32		4.7	Process for determining the qualifications and expertise of the members of the highest governar body for guiding the organization's strategy on economic, environmental, and social topics.		P10-11
33	ENV-6	4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant economic, environmental, and social performance and the status of their implementation.	to	P8
34		4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles.	•	P10-11
35		4.10	Processes for evaluating the highest governance body's own performance, particularly with resp to economic, environmental, and social performance.	ect	P10
36		4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.		P10-11
37		4.12	Externally developed economic, environmental, and social charters, principles, or other initiative to which the organization subscribes or endorses.	S	P25
38		4.13	Memberships in associations (such as industry associations) and/or national/international advoctorganizations.	acy	Cover,P15,42
39		4.14	List of stakeholder groups engaged by the organization.		P14-15
40		4.15	Basis for identification and selection of stakeholders with whom to engage.		P14-15
41		4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.		P14-15
42		4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.		P14-15

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## Indicator Index

No.	IPIEC API	;A/	GRI Contents	Involved or not involved in the report	Page and place in the report
Ecor	iomic Perfor	mance Ir	dicators		
43			Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.		P9,34,37-39,43
44			Financial implications and other risks and opportunities for the organization's activities due climate change.	to 🔲	P2-7
45			Coverage of the organization's defined benefit plan obligations.		P33-34
46			Significant financial assistance received from government.		P8
47	ECO-A2	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significar locations of operation.	t 🗖	P33
48	ECO-1	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.		P14-15
49		EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.		P33
50		EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.		P37-39
51		EC9	Understanding and describing significant indirect economic impacts, including the extent c impacts.	f	P17-23
Envir	onmental Pe	erforman	e Indicators		
52		EN1	Materials used by weight or volume.		
53		EN2	Percentage of materials used that are recycled input materials.		P23
54	ENV-5	EN3	Direct energy consumption by primary energy source.		P28-29
55	ENV-5	EN4	Indirect energy consumption by primary source.		
56		EN5	Energy saved due to conservation and efficiency improvements.		P28-29
57		EN6	Initiatives to provide energy-efficient or renewable energy based products and services, an reductions in energy requirements as a result of these initiatives.	d 🔲	P23,25
58		EN7	Initiatives to reduce indirect energy consumption and reductions achieved.		P23,28-29
59	ENV-A7	EN8	Total water withdrawal by source.		
60		EN9	Water sources significantly affected by withdrawal of water.		
61		EN10	Percentage and total volume of water recycled and reused.		
	ENV-9	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.		
62					
62	ENV-9	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.		
	ENV-9 ENV-9	EN12 EN13	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas. Habitats protected or restored.		P38

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	4.	Glossary	

No.	IPIEC/ API	<sup>4/</sup> GRI	Contents	Involved or not involved in the report	Page and place in the report
66		EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.		
67			Total direct and indirect greenhouse gas emissions by weight.		P43
68	ENV-3	EN17	Other relevant indirect greenhouse gas emissions by weight.		P28
69	ENV-3	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.		P25,28,43
70		EN19	Emissions of ozone-depleting substances by weight.		
71	ENV-4/A6	EN20	NO, SO, and other significant air emissions by type and weight.		P28,43
72	ENV-A6	EN21	Total water discharge by quality and destination.		P28
73		EN22	Total weight of waste by type and disposal method.		P28
74	ENV-1/A1	EN23	Total number and volume of significant spills.		
75		EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.		
76		EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.		
77		EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.		P25-29
78		EN27	Percentage of products sold and their packaging materials that are reclaimed by category.		
79		EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.		
80		EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.		
81		EN30	Total environmental protection expenditures and investments by type.		
Soci	al Performan	ce Indicator	'S		
Labo	or Practices a	and Decent	Work Performance Indicators		
82		LA1	Total workforce by employment type, employment contract, and region.		P33
83		LA2	Total number and rate of employee turnover by age group, gender, and region.		
84		LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.		
85		LA4	Percentage of employees covered by collective bargaining agreements.		P33-34
86		LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.		

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## Indicator Index

No.	IPIECA API	GR	I Contents	Involved or not involved in the report	Page and place in the report
87	H&S-1	LA6	Percentage of total workforce represented in formal joint management–worker health and safety committees that help monitor and advise on occupational health and safety programs.		P33
88	H&S-4	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work- related fatalities by region.		P30,34
89		LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.		P35
90	SOC-9	LA9	Health and safety topics covered in formal agreements with trade unions.		P35
91		LA10	Average hours of training per year per employee by employee category.		P34
92	SOC-5	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		P34
93		LA12	Percentage of employees receiving regular performance and career development reviews.		P34
94		LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.		P33
95		LA14	Ratio of basic salary of men to women by employee category.		P33
Huma	an Rights Perfo	rmance Ir	ndicators		
96	SOC-1	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.		
97	SOC-1	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.		
98	SOC-5	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.		
99	SOC-4	HR4	Total number of incidents of discrimination and actions taken.		
100		HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.		P33
101		HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.		P33
102		HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.		P33
103	SOC-5	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.		
104		HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.		P33
Socie	ty Performance	e Indicato	rs		
105	SOC-8	SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.		P37-39
106		SO2	Percentage and total number of business units analyzed for risks related to corruption.		P11
107		SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.		P11
108	SOC-2	SO4	Actions taken in response to incidents of corruption.		P11

7	3. Indicator Index
	4. Glossary

No.	IPIEC API	A/	GRI	Contents	Involved or not involved in the report	Page and place in the report
109		SO5		Public policy positions and participation in public policy development and lobbying.		P14-15
110		SO6		Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.		
111		SO7		Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.		
112		SO8		Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.		
Proc	luct Respons	sibility	Perfo	rmance Indicators		
113	H&S-5	PR1		Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures.		P20-23
114	H&S-5	PR2		Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.		P5
115		PR3		Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.		P20-23
116		PR4		Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.		
117		PR5		Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.		
118		PR6		Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.		P15,20-21
119		PR7		Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.		
120		PR8		Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data.		
121		PR9		Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services.		

Involved partial Involved not Involved

# **Glossary**

Recovery	The percentage of oil (gas) produced from underground oil (gas) reservoirs in the oil (gas) in place.
Reserve replacement ratio	The result of dividing annual net incremental reserves by annual oil and gas production. It can be further classified into oil reserve replacement ratio, natural gas reserve replacement ratio and oil and gas equivalent reserve replacement ratio.
Proved reserves	The estimated quantities of crude oil and natural gas which the assessment and exploration demonstrate with reasonable certainty to be recoverable and economically beneficial in future years from known reservoirs, during reservoir assessment, in accordance with the standards of China, with relative error within ±20%. Proved reserves include proved geologic reserves, proved technically recoverable reserves, proved economically recoverable reserves and proved subeconomically recoverable reserves.
Volume of marketable natural gas	The volume of natural gas that can be sold in the market, excluding natural gas flared, consumed in re- injection and lost in the course of production.
Liquefied natural gas (LNG)	Liquefied natural gas is formed after the natural gas produced from gas field goes through the processes of dehydration, de-sulphuration, drying and fractionation and converted to a liquid from gaseous state at low temperature and high pressure.

Ethylene	The simplest member of the olefinic hydrocarbon series and the intermediate feedstock for producing synthetic resin, synthetic rubber, organic products, etc.		
Primary Energy	Primary energy is energy found in nature that has not been subjected to any conversion or transformation proces It is also named as natural energy, which includes: fossil fuel (such as raw coal, crude oil and natural gas), nucle fuel, biomass, water, wind, solar energy, geothermal energy, ocean energy and tidal energy, etc. Primary energy can be classified into renewable energy and non-renewable energy; the former refers to the natural energy whic can be re-generated, such as solar, wind, water and biomass energies, all of which come from the sun and are renewable; the latter cannot be re-generated, which mainly includes various fossil fuels and nuclear fuels.		
Renewable energy	Renewable energy is energy found in nature that is inexhaustible and can be regenerated and replenished. It has little or no harm to the environment, with widely-distributed resources, and is suitable for on-site development and utilization. Renewable energy includes: solar, wind, water, biomass, geothermal and ocean energies, etc. The Renewable Energy mentioned in China Renewable Energy Law refers to the non-fossil energies such as wind, solar, water, biomass, geothermal and ocean energies, etc.		
HSE	HSE is the abbreviation of Health, Safety and Environment. HSE management system integrates the elements of organizational structure, responsibility, method, procedure, process and resource, which are necessary for implementing HSE management. These elements are integrated in an advanced, scientific and systematic running mode, which are interconnected and interacted, forming a dynamic management system.		
Serious accident	An accident which has caused the death of 10 to 30 persons, or the serious injury of 50 to 100 persons, or the direct economic loss of RMB50 million to RMB100 million.		
Million work hours	One million work hours approximately equals to the total work hours of 500 workers in a year. The total working hours of an employee includes those for training and overtime, yet holidays, sick leave and other absences are excluded.		
Environment	The appearance of actions and activities of organs, including air, water, soil, natural resources, plant, animal and human, as well as their relationships.		
COD	Chemical Oxygen Demand. The consumption of oxidants while processing water samples with strong oxidants. It serves as a composite index for pollutants discharged into the water body and their potential impact on the environment. A higher COD represents heavier pollution of reductive substances in the water body.		
Greenhouse gas	Greenhouse gases are gases in an atmosphere that absorb and emit solar radiation, such as vapor, CO <sub>2</sub> , and most refrigerants. They function as the greenhouse to absorb solar radiation and heat the air inside, which make the earth surface warmer. The greenhouse gases in nature include: H <sub>2</sub> O, CO <sub>2</sub> , O <sub>3</sub> , CH <sub>4</sub> , N <sub>2</sub> O, CFCs, PFCs, HFCs, HCFCs and SF <sub>6</sub> , etc.		
Carbon sequestration	Carbon sequestration refers to the process, activity and mechanism of removing CO <sub>2</sub> from atmosphere. Forestry Carbon Sequestration is one of effective measures to reduce greenhouse gases, which absorb CO <sub>2</sub> in atmosphere through photosynthesis of trees and other plants, by adopting afforestation and forest management measures, and sequestrate CO <sub>2</sub> in the woods and soils in the form of biomass.		
Occupational diseases	Ailments caused to a worker by exposure to occupational health threats in his/her working environment, such as dust, radioactive substance and other poisonous or harmful substances.		
Occupational health checks	Physical examination of workers exposed to occupational health threats. Items and frequency of checks should be determined by the category of health threats, and by stipulations in the <i>Items and Frequencies of Occupational Health Checks</i> . These include checks before, during and at the end of a worker's assignment, as well as emergency checks.		
Stakeholder	Person, group or organization that has direct or indirect stake in an organization because it can affect or be affected by the organization's actions, objectives, and policies. In a narrow sense, Stakeholders include investors, employees, customers, and suppliers, etc. Along with social development, Stakeholders in a broad sense occurs, which include: creditors other than shareholders, employees, consumers, suppliers and other trading partners; government authorities, local residents, local communities, media, and environment protectionists; and even the objects that are directly or indirectly affected by the enterprise operation activities such as natural environment, future generation, and non-human species.		
Low-carbon economy	An economic development mode to minimize consumption of coal, oil and other high-carbon energies and achieve win-win effect between socioeconomic development and environmental protection, through technical innovation, system innovation, industrial transition and new energy development, guided by the concept of sustainable development.		

### **Feedback Form**

Your opinions will help to improve our sustainability performance and the subsequent reports. Thank you for your attention and support.

 1. What is your appraisal for the 2009 Sustainability Report of PetroChina?

 □ Very Good
 □ Good
 □ Fair
 □ Poor

2. Which part of the 2009 Sustainability Report of PetroChina are you interested in?

□ From the Chairman of the Board □ Dialogue with the President

□ Energy Outlook □ About Us □ Focus on 2009 □ Stakeholders

Sustainable and Effective Energy Supplies

□ Safe and Clean Production and Operation

□ "People-Oriented" — Employee Development

□ Giving Back to Society □ Objectives and Plans □ Performance Statistics

3. Which improvements would you like to be made in the 2010 Sustainability Report of PetroChina?

4. Do you have any advice on the further performance of social responsibilities by PetroChina?

5. Your occupation or identity?

Public Official	Consumer	Employee
🗆 Scholar	Partner	🗆 NGO
🗆 Media	Community Repres	sentative

Investor
 CSR-related Institution
 Other

6. If a reply is required, please give the contact information (Your personal information will be used for contact only)

Name	rei.
E-mail	Mailing address

You may also log on the website of the Company and download the electronic version of reports for previous years.





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