

### **About This Report**

PetroChina Company Limited ("PetroChina", also referred to in the report as the "Company", "we" and "us") started publishing its own Corporate Social Responsibility (CSR) Report in 2006, being this the second issue. As an important platform for communication and exchange between us and all our stakeholders including the public, this report can help you have a better understanding about us while helping us obtain readers' perspectives and recommendations so as to continuously promote the Company's progress and development.

In contrast with our first report, this report has been improved in the following areas:

- Illustrating development objectives and strategies to provide you with a more comprehensive and systematic understanding of the Company;
- Describing our efforts in 2007 in innovation and sustainable development;
- Summarizing our key performance in social responsibility in 2007 at the beginning of each section;
- Establishing a mechanism to improve our performance in social responsibility and setting forth the Company's target and action plan for fulfilling social responsibilities in the following year;
- Stating PetroChina's entry to the UN Global Compact and illustrating the Company's progress in aligning with the ten principles in the Global Compact:
- Establishing a preliminary system for social responsibility performance indicators with PetroChina's characteristics for the first time and listing performance data in appendix;
- Listing an index referring 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).

We hope the above improvements will help the report better reflect PetroChina's actions and achievements in actively fulfilling its social responsibilities in 2007 in a more objective, comprehensive and transparent manner.

The matters involved in the report are mainly limited to those in 2007, but explanation to some matters has been dated back or carried forward to maintain the continuity and comparability of the annual report. The information contained in the report was sourced partly from PetroChina's internal formal documents and statistics reports and partly from the summarization and statistics of the actual performance of our subordinates in fulfilling their social responsibilities. All the information has been reviewed as per PetroChina's *Rules for Information Disclosure Control and Disclosure Procedures*. We sincerely hope that this report will increase your awareness on the issues concerning corporate social responsibility such as energy, climate change, environment, poverty and social vulnerable groups. These issues have direct impact on the sustainable development of PetroChina and the prosperity and progress of the society and economy in general. Your feedback will bring us greater impetus for further development.

This report is published in simplified Chinese, traditional Chinese and English. Please log on to our website (www.petrochina.com.cn) to read or download the electronic version of this report.

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## From the President and Chairman of the Board

Jiang Jiemin The President and Chairman of the Board of PetroChina



With the continuous advance of globalization, and especially China's rapid economic and social development, PetroChina has gained and will continue to gain enormous opportunities for development while facing a series of new challenges. In 2007, with the concept of scientific development and guided by the corporate policy of "Energize, Harmonize, Realize" and the core business management notions of "Honesty, Innovation, Performance, Harmony and Safety", we took the opportunity for development and actively responding and overcoming challenges. As a result, we obtained unprecedented performance. In July 2007, PetroChina joined the UN Global Compact, so we will adhere to the ten principles of the Global Compact and strive to improve our capability and performance in fulfilling social responsibilities.

With increasing thirst for energy in the domestic market, meeting supply is the greatest challenge PetroChina must face in the long-term while its main social responsibility is to make continuous efforts to increase oil and gas production, provide stable supply, satisfy the energy demand for economic and social development to the greatest extent and safeguard the country's energy security. By relying on scientific and technological innovations and increasing capital investment, we achieved significant breakthroughs, resulting in discoveries like the Jidong Nanpu Oilfield, with both the incremental oil and gas reserves reaching record highs; oil and gas production, crude runs and oil product output also breaking historical records; the market share of crude oil, oil product and natural gas in the domestic market increasing steadily and our capability in oil and gas supply and security being further improved. In the fourth guarter of 2007, some regions in China faced tight supply of gasoline and diesel oil. Although at full utilization, we further optimized and adjusted plans for overhaul and maintenance and managed to increase refining capacity. On the other hand, we enhanced transportation coordination and resource allocation and accelerated diesel oil import. Our efforts in striving to guarantee supply and stabilize the market received recognition from local governments.

Energy is a resource of great value to humankind and must be used in a more efficient and economic way. The more energy we consume, the higher the risk of environmental pollution is. Facing challenges of energy shortage, global climate change and ecological environment deterioration, we place at a vital position the establishment of a resource-conservative and environment-friendly enterprise, the protection and restoration of an ecological environment and the achievement of harmonious development between human and the nature. In 2007, we actively supported and implemented the China's National Climate Change Programme, contributed to the establishment of China's Green Carbon Fund jointly with CNPC, the State Forestry Administration and the China Green Foundation, and sponsored plantation programs and the bio-energy forest bases aiming at carbon sequestration. We initiated 10 energy-conservation projects and 10 pollutants reduction projects. Now, satisfactory results have been achieved by considerably reducing the discharge of main pollutants like oil discharge in waste water compared to the previous year, while increasing the scale of production. While fulfilling the target of cleaner production, we strive to provide clean energy to the society. Our gas supply continues to rise rapidly and our National-IV diesel oil is available in the Beijing market. Additionally, we have developed the Eleventh Five-Year Plan for New Energy Development to improve our aptitude in clean energy supply.



Petroleum and petrochemical industries face high risks in work safety as workers are often exposed to high temperatures, high pressure and abundant combustible and explosive materials. Although under the pressure and challenges for work safety from both the high-load production due to energy shortage and the enlarging production and operation, we proceeded with the "Foundation Year of Safety and Environment" program by strengthening control over hidden hazards, promoting the establishment of HSE management systems through improving rules and regulations, training and performance assessment, and signing safety and environmental responsibility contracts with staff members at all levels. As a result, steady improvement in safety and environment was achieved, with the total number of accidents dropping significantly and serious and extra-serious accidents kept under limits.

China is a large developing country, featuring an imbalanced socioeconomic development throughout its different regions, cities and rural areas. Being a major public company in China, PetroChina also faces many new challenges in promoting economic development and the construction of a harmonious society in the communities in which it operates. We always adhere to the concept of "people-orientation", respect the rights and interests of our staff, support their career development plans, safeguard their health and ensure that the Company's achievements in development and creation are shared among all staff. We made more efforts on social welfare activities, including contribution to poverty alleviation, education donation, donation to disaster relief, serving the Olympic Games and voluntary work. In particular, we sponsored "PetroChina National

Free Advertising for Agricultural Deep Processing", resulting in good socioeconomic returns. In overseas communities such as Kazakhstan and Indonesia, we always uphold business principles of sincere cooperation and mutual benefit. While developing the businesses, we strive to promote the development of local economies, participate in public welfare, support community development and improve conditions for local people, a fact which is highly regarded by local governments and people in host countries.

PetroChina is at a new starting point for development, facing unprecedented opportunities as well as challenges. We are fully aware that unremitting efforts are required in fulfilling corporate social responsibilities. We will always adhere to the policy of "Energize, Harmonize, Realize", maximize the overall interests of the Company and stakeholders, and make new contributions to the progress of a prosperous society and to the sustainable development of humankind.



## About Us

#### **Company Profile**

Corporate Policy: Energize, Harmonize, Realize Core Business Management Notions: Honesty, Innovation, Performance, Harmony and Safety

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 listed in NYSE (ADS code: PTR) and HKSE (stock code: 857) respectively in April 2000 and in Shanghai Stock Exchanges (stock code: 601857) on November 5, 2007. By the end of 2007, CNPC owned 86.29% equity of PetroChina.

PetroChina is extensively recognized by international capital markets with its excellent corporate governance and high profitability, ranking sixth in the "Global Top 250 Energy Companies" survey in 2006 published by Platts, an authority in the global energy sector, first in the Asia-Pacific region for five consecutive years in Platts's surveys; 41st in "Forbes Global 2000" published by the well-known Forbes in 2007: the leader of companies in mainland China and first in the "Top 50 Asian Enterprises" in 2006 listed by Business Week, having been selected as the First Most Profitable Company in Asia in 2006 by Finance Asia.

#### 1. 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 in two phases:

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

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

#### 2. Development Strategy

We will pursue scientific development, implement the three strategies for 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-saving, ultimately creating a harmonious enterprise.

#### (1) Resources

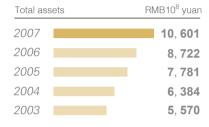
We base our strategy on maximization, diversification and orderly replacement of hydrocarbon resources by adhering to the principles of attaching equal importance to oil and gas, enhancing the exploration of domestic resources, increasing the acquisition of overseas resources, expanding the exploration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

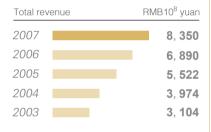
#### (2) Market

We will strive to sustain our leading position in the market and pursue the maximization of profits by making full use of scale economies and integrated operations from upstream to downstream businesses, solidifying mature markets, expanding high efficiency markets, exploiting strategic markets, developing international markets and continuously promoting competitiveness in both domestic and overseas markets.

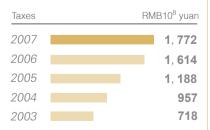
#### (3) Internationalization

We will adhere to the principles of active and prudent development, mutual benefit combining "coming in" with "going out", combining resources, market and technology with capital, focusing on oil and gas businesses, strengthening international cooperation and capital operation, putting more emphasis on overseas oil and gas exploration and development, developing mid-stream and downstream businesses in a prudent, effective and moderate manner, actively facilitating the diversification of sources for resource import, expanding the scale of international oil and gas trade so as to build PetroChina into a multinational company with strong competitiveness.









#### 3. Main Businesses

PetroChina is engaged in a broad range of businesses related to oil and gas, mainly including the exploration and production of oil and gas; the refining, transmission, storage and marketing of crude oil and oil products; the production and marketing of basic petrochemical products, their derivatives and other chemicals; and the transmission and marketing of natural gas.

As the largest oil and gas producer in China, PetroChina enjoys a clear beneficial position in China in terms of hydrocarbon resources, with multiple large hydrocarbon producing areas including Daqing, Changqing, Tarim, Xinjiang, Liaohe and Sichuan, among which, Daqing is the largest oil producing area in the country and one of the highest-yield hydrocarbon producing areas in the world.

PetroChina is one of the major producers and distributors of oil products in China with multiple large refineries and an extensive oil product sales network across the country.

PetroChina is also one of the main producers and distributors of chemical products in China. Our chemical plants are mostly integrated refining and chemical enterprises and their chemical products - such as ethylene, synthetic resin, synthetic rubber, synthetic fiber and fertilizers enjoy an important market share in China.

PetroChina is the largest natural gas transmission and marketing company in China. With a clear lead in resources, we enjoy a dominant role in the Chinese natural gas market with an existing main gas pipeline network across extensive areas and regional gas supply networks in Northwest China, Southwest China, North China, Central China and the Yangtze Delta.

PetroChina has made great progress in terms of its internationalization strategy. By the end of 2007, our hydrocarbon exploration and development businesses had been extended to 12 foreign countries and regions.

Our businesses cover all key operations in the petroleum and petrochemical industries and have formed a complete business network with optimized, efficient and integrated operations, which significantly improved operation efficiency and enhanced our core competitiveness and risk resistance. By the end of 2007, calculated by International Accounting Standards, our total assets had reached RMB 1,060.1 billion yuan with the total equity achieving RMB 776.3 billion yuan, we realized RMB 835 billion yuan of total revenue and RMB 145.6 billion yuan of net profit to our shareholders and paid RMB 177.2 billion yuan of taxes.

## About Us

#### Corporate Governance

We are committed to managing the company in compliance with the law, as we regard lawful, faithful and standardized operations as fundamental ethical and social responsibilities, to ensure a coordinated, effective and standardized work of the corporate governance structure, maximizing our value.

#### 1. Governance Structure

Pursuant to the applicable laws and regulations including the Company Law of People's Republic of China and the Mandatory Provisions for the Articles of Association of Companies to be Listed Overseas and the Articles of Association, we established a standardized corporate governance structure. The shareholders' meeting, Board of Directors and Board of Supervisors operate independently and effectively in accordance with the Articles of Association.

#### (1) Shareholders' Meeting

The shareholders' meeting is an organ of authority of the Company and shall exercise its functions and powers in accordance with the law. We hold a shareholders' meeting every year, in order to ensure that all shareholders enjoy equal status and are able to exercise their rights effectively.

#### (2) Board of Directors

Directors shall be elected at the shareholders' general meeting and accountable to the shareholders' general meeting. The Board of Directors exercise the following functions and powers: (1) to be responsible for the convening of 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 determine 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 proposals and loss recovery proposals, etc. Up to the end of 2007, there were 11 members in the Board of directors, including 3 independent non-executive directors.

There are four board committees, namely the Audit Committee, Investment and Development Committee, Examination and Remuneration Committee, as well as the Health, Safety and Environment Committee.

- The Audit Committee is mainly responsible for supervising the completeness and the process of financial reporting, evaluating the effectiveness of the internal control and risk management frameworks. and inspecting and monitoring internal audit functions.
- The Investment and Development Committee is mainly responsible for evaluating strategic programs, investment plans of major investment projects, and providing suggestions and recommendations.

- The Examination and Remuneration Committee is mainly responsible for arranging the performance evaluation for the President, supervising the evaluation for other senior management, considering, supervising and evaluating the incentive plans, remuneration systems and option plans of the Company.
- The Health, Safety and Environment Committee is responsible for supervising the effective implementation of the Company's HSE plan, advising the Board of Directors or the President on key decisions with respect to health, safety and environment, addressing inquiries on serious accidents and the liabilities thereof, and inspecting and urging the resolution of serious accidents.

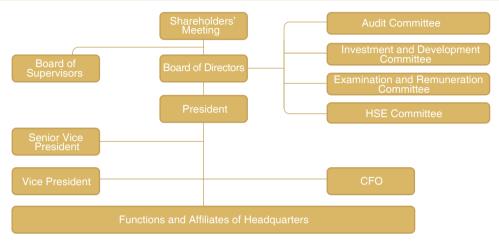
#### (3) Board of Supervisors

The Board of Supervisors is directly accountable to the shareholders' meeting, and consists of seven supervisors, including one employee representative 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 the applicable laws and regulations.

#### (4) Executive Agency

The management under the leadership of the President – including the Senior Vice President, the Vice President and the Chief Financial Officer - is the executive agency of the Company. It is appointed by and accountable to the Board of Directors. As per the stipulations under the Articles of Association and the authorities of the Board of Directors, the agency executes the resolutions of the Board of Directors and organizes business activities such as production operations. The Company adopts a system of two-level (headquarter - regional company) administrative management and three-level (headquarter - special company regional company) business management.

The Company's main businesses are involved in four major segments, which are mainly operated by four special companies, namely exploration and production, refining and marketing, chemicals and marketing, and natural gas and pipelines. The Company has 83 regional companies (subsidiaries), which are managed by related special companies in the field.



Corporate Governance Structure

#### Case Study

PetroChina Qingyang Petrochemical Company always considers the enforcement of employees' occupational ethics as a central way to improve quality, aggregate ideas and stimulate creative enthusiasm to drive corporate development. Moreover, focused on the construction of a harmonious, safe and incorruptible culture, Qingyang Petrochemical carries out regular training sessions on occupational ideals, ethics, discipline, skills and professional devotions, within the scope of namely the "Aggregation Project", "Care Project", "Warm Project" and "Sunlight Project", forming a company-wide authentic, legal, progressive, healthy and orderly environment. In the past two years, Qingyang Petrochemical has collected several awards, namely the awards for "National Excellent Unit for Corporate Culture Construction", "Leading Unit in Gansu Province for Legal Publicity and Education", as well as "Excellent Unit in the 10<sup>th</sup> National Staff's Occupational Ethics Ranking" in December 2007.

#### 2. Corruption Prevention and Punishment

We focus on enhancing employee ethics with rules and standards. In March 2004 and February 2005, we successively issued and implemented the Code of Ethics for Senior Management and the Code of Ethics for Employees.

- (1) The Code of Ethics for Senior Management specifies the required business conduct and ethics for senior management, including: acting honestly and diligently in the performance of their duties for the Company, being prohibited from engaging in any activity that might create a conflict of interest with the Company and complying with the Company's policy on disclosure controls and procedures. The Board of Directors shall have the right to supervise the compliance of this Code by the senior management of the Company, and grant the President of the Company the responsibility to implement this Code and observe its compliance hereof.
- (2) The Code of Ethics for Employees specifies the ethical professional conduct that all Company employees must abide by, including: following the corporate philosophy and guidelines, fulfilling the Company's core operation and management concepts; not participating in activities that may create a conflict of interests with the Company; being loyal to the Company, being honest and trustworthy. Authorized by the management of the Company, the Supervisory Department is responsible for ensuring employees comply with this Code.

Anti-corruption is the Supervisory Department's main responsibility, being in charge of giving guidance over opposing corruption and promoting incorruption; supervising and inspecting the compliance of the management with state laws and regulations and also the implementation of the Company's key decisions and regulations; hearing and accepting views from the public and staff against the management of the Company concerning illegal and violating behaviors, and resolving illegal and violating cases of the management, such as embezzlement, bribery and dereliction of duty. In 2007, the Company's supervisory departments, guided by the anti-corruption and punishment framework, strengthened the establishment of a system to prevent corruption from its origin; reinforced supervision and inspection; regulated management power; further supervised efficiency; improved corporate management capacity; enhanced internal training for management at all levels so as to consolidate the code of conducts among staff members, and also thoroughly investigated all illegal and violation cases.

# Stakeholders

Trust and support from our stakeholders is the basis for PetroChina to evolve and develop. We are dedicated to improving development quality and efficiency to maximize our long-term value, repaying our stakeholders with the 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	Government and shareholders	Employees	Customers and consumers
Objective and Focus	(1) National energy security (2) Stable market supply (3) Maximization of shareholders' long-term interests	(1) Safeguard of employees' interests (2) Development of employees' career (3) Realization of employees' value (4) Consideration of employees' health	(1) Offering safe, environmental and clean products (2) Improving service quality
Mode of Communication and Exchange	(1) Participate in the discussion on formulation processes of national energy policies and regulations, and share corporate experience (2) Lead and influence public policy in a positive way (3) Conduct senior-level dialogues with the government of host countries (4) Add to information disclosure	(1) Employee representative in Board of Supervisors (2) Set up labor unions (3) Hold staff congress (4) Add to information disclosure	<ul> <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) Add to information disclosure</li> </ul>
Key Actions	<ol> <li>(1) Realize A-share return</li> <li>(2) Participate in the drafting of the Energy Law of China, contributing to the improvement of the Energy Law in an active and continuing manner</li> <li>(3) Closely monitor and actively participate in the discussion of policies concerning climate change, energy reservation and pollutants reduction, combat climate change and make efforts to promote energy-saving and pollutants reduction</li> <li>(4) Assign to implement cooperation agreements between CNPC and relevant local governments on the development of biomass energy</li> </ol>	<ul> <li>(1) Support personnel training and skill education</li> <li>(2) Organize employees' occupational health examinations on a regular basis</li> <li>(3) Distribute the Health Manual for Petroleum Employees</li> <li>(4) Initiate the establishment of corporate annuity</li> </ul>	<ul> <li>(1) Further improve the quality management system and push forward product technology upgrade</li> <li>(2) Prepare brand plans and develop branded products</li> <li>(3) 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 gas for Olympiccities during the 2008 Olympic Game</li> <li>(4) Establish a uniform service station management system and conduct overall inspections for service stations</li> <li>(5) Reconstruct oil/gas recovery for service stations oil depots and tank wagons in Beijing and peripheral areas to eliminate pollution from oil/gas volatilization</li> </ul>
KPIs -	(1) Payment of taxes (2) Oil/gas production (3) Proportion of dividends distributed (4) Market value of stocks	(1) Frequency of occupational health examinations     (2) Amount of donations to employees suffering from hardships	(1) Sales of oil products (2) Sales of natural gas (3) Number of well-known brand awards

#### Contractors and suppliers

#### Relevant organizations (incl. relevant national and international industrial institutions)

#### Communities

- (1) Jointly abide by business ethics and national laws and regulations
- (2) Standardize HSE management
- (3) Mutual benefits
- (1) Host large multinational business negotiations and technical exchange
- (2) Play the role of an e-trading platform
- (3) Announce rules for the management of suppliers and contractors
- (4) Share management experience and technical standards
- (5) Contract negotiation
- (6) Routine business exchanges
- (7) Add to information disclosure
- (1) Strictly follow contractor access systems for engineering construction, and establish and improve rules and procedures for project bidding and construction supervision
- (2) Enhance communications and coordination with contractors, create a safe and healthy working environment for contractors. and develop the establishment of safety and security measures and emergency rescue networks
- (3) Comprehensively review and re-confirm qualifications of over 3000 suppliers on the Company's e-business transaction website (www.energyahead.com), and create a "sunshine transaction" e-platform to provide opportunities for equal competition to suppliers
- (1) Sales income
- (2) Total purchases through e-business
- (3) Number of partners

- (1) Participate in the study and discussion of relevant public policies and industrial standards
- (2) Focus on industrial trends and policy dynamics
- (3) Devote to driving the sustainable development of the enterprise and the industry
- (1) Share corporate experience
- (2) Participate in relevant activities
- (3) Facilitate international exchange
- (4) Add to information disclosure
- (1) Join the UN Global Compact
- (2) Exchange with the public over their various concerns
- (3) Participate in and support international environmental standardization

- (1) Protect environment in the community
- (2) Participate in the development of the community
- (3) Support public welfare activities
- (1) Promote dialogue with local governments
- (2) Support public welfare
- (3) Make community visits and promote exchange
- (4) Add to information disclosure
- (1) Carry out disaster relief and contributions for educational purposes
- (2) Conduct poverty alleviation to support the development of a new countryside
- (3) Support and drive the develop ment of local economies through major projects
- (4) Serve the Green Olympics
- (5) Organize activities for young volunteers
- (1) Dedication to public welfare
- (2) Number of young volunteers

Number of institutions participated

## Stakeholders

#### Shareholders

We regularize information disclosure as specified, improve internal control systems, follow regulatory rules of listing places, respect and consider the roles of independent non-executive directors and preserve the legal interests of investors. Since its public listing, the Company has been distributing dividends at 45% of net profit calculated by International Accounting Standards, ensuring a stable return to all shareholders.

#### **Consumers and Customers**

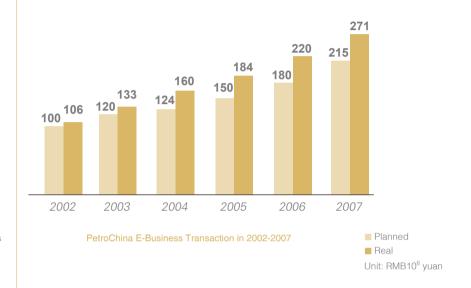
Our marketing philosophy is to make consumers our first priority and fulfill our promises. We stress on the importance of details and consistently keep improving on the basis of peopleoriented and excellence-orientated values. We are devoted to providing customers with high quality and satisfactory products, a safe and clean environment and attentive services.

We strictly follow the contractor access system for engineering construction, establish and improve rules and procedures for project bidding and construction supervision, and ensure an equal, open and fair selection of contractors and the quality of engineering development. We make full use of market mechanisms, promote and push forward construction management methods such as engineering, procurement and construction (EPC) and strengthen the supervision and management of contractors and the communication and coordination with them. Additionally, we require contractors to abide by the Company's HSE System Management Manual, create a healthy and safe working environment for them, stress on the safety and security of international investments and marine operations, enhance the construction of emergency rescue systems, with the principle that accessibility is granted when the work site is safe and has security measures in place, so as to ensure the safety of the contractors' personnel and properties and achieve a mutually beneficial platform for all.

We consider suppliers as our partners and pursue a win-win cooperation and mutual development with them. When cooperating, we are honest, loyal and equal to each other, following the Contract Law of the People's Republic of China and applicable laws of the host country. Additionally, we attach great importance to the qualifications, credit and performance of our partners and the reflection of publicly-recognized values.

#### Case Study

In June 28-30, 2007, the PetroChina (Shanghai) E-business Fair was successfully held, where over 500 suppliers and 1500 people from different circles congregated and agreed orders amounted to nearly RMB2.2 billion yuan. Moreover, this new technology and product forum was held for the first time, showcasing 34 new technologies and products. Currently, PetroChina's e-business transaction website has gathered over 3000 suppliers. As a result, the amount of e-procurement is consistently increasing while this standard and convenient platform and concentrated procurement help suppliers reduce transaction costs considerably. The Company strengthened technical cooperation with suppliers to jointly develop high level pipeline steel and special lines for the oil industry, enabling the production capacity and technical quality of high-level pipeline steels for domestic steel and iron companies and pipe manufactures to achieve new heights.



#### Media

The media is a major platform for information distribution and also key channel for the public to receive the Company's information, representing a communication bridge between the Company and the public. We highly respect the right the media and the public have to truth, supervising and researching information in a regular and orderly manner.

In 2007, we put more efforts into information dissemination with respect to focal and current issues. Through news releases, on-site interviews and website announcements, we delivered key information about the Company's production and operations in a timely and accurate manner. In particular, information about A-share return, which was greatly sought out by the media and public was distributed, for which, we actively coordinated with the media, smoothened liaison channels and consolidated communications, providing factual and accurate information for them to gain further insight of the Company, creating efficient and instant working conditions.

See section IV and V herein for more information concerning cooperation between the Company, employees and the communities.

# Innovation and Development

For an enterprise, innovation is a crucial aspect to surmount market competition, while also being a source to maintain dynamism and energy in internal operations. Taking independent innovation as the strategic basis for development and the key link of structure adjustment and transformation of growth models, the Company endeavors to transit the development dependence from quantity expansion to system, technology and management innovation, so as to consistently achieve structural, quality and beneficial development.

### 1. Technology Innovation Leads to Increase in Reserves and Production, While the Company's Capabilities for Sustainable Development Improve

We persist in regarding technological advance as a key framework, enriching advanced geologic theories such as lithology and foreland basin theories; developing a series of world-leading technologies such as low-permeability reservoir development, high-efficiency heavy oil development and tertiary recovery. In addition, we develop and apply such refining technologies in the production of clean oil products and the deep processing of heavy oil and refining catalysts, which play an important role in breaking through technical bottlenecks in production and construction, improving production efficiency and economic benefits and narrowing the gap with international advanced standards.

In recent years, the Company increased technological investment and accordingly obtained much significant breakthrough in the exploration and development of oil and gas, providing a key foundation for the increase of oil and gas reserves and production. At present, the Company is equipped with ten core technologies. In 2007, the Company achieved more than 1000 key technology breakthroughs, taking a leading position in China's technological innovation front.

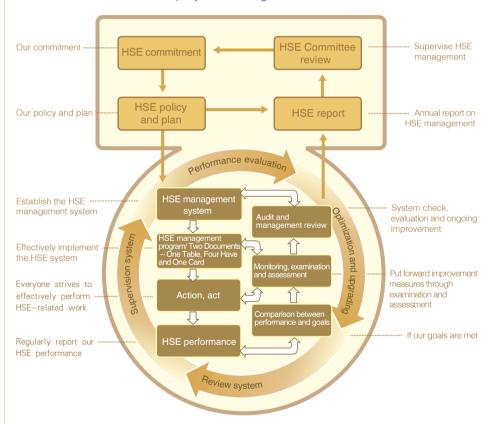
#### Core technologies of PetroChina

No.	Core technology	Application	Technology level
1	Oil and gas exploration in lithologic reservoir and foreland basin	Oil and gas exploration	Leading Internationally
2	Hydrocarbon reservoir generation for passive rift basin and rapid evaluation	Oil and gas exploration	Advanced Internationally
3	Lake basin lithofacies palaeogeography and integrated reservoir evaluation	Exploration and development	Leading Internationally
4	Source rock geochemical analysis and evaluation	Oil and gas exploration	Advanced Internationally
5	Tertiary recovery	Oil and gas development	Leading Internationally
6	Heavy oil development	Oil and gas development	Leading Internationally
7	Low-permeability oilfield development	Oil and gas development	Leading Internationally
8	Olefin-reducing catalyst	Refining and chemical	Leading Domestically
9	Two-stage riser catalytic cracking	Refining and chemical	Leading Domestically
10	Heavy oil slurry bed hydrocracking	Refining and chemical	Leading Domestically

### 2. HSE Management System is Improved and Accountability System is Strengthened

HSE goals: to pursue zero injury, zero pollution and zero accident levels; to reach internationally-advanced HSE management levels in the same trade; HSE policy: people-orientation; prevention priority; general participation; continuous improvement.

We actively promoted the establishment of a Health, Safety & Environment (HSE) management system, strengthening the integrated management of health, safety and the environment. In 2007, we issued a new edition of the HSE Management System Manual, which clearly describes the Company's HSE management system and implementation process, being a structural framework document for the Company's HSE management.



PetroChina HSE Management System and Implementation Process

Under the requirements for "uniform, normative and operable" standards, the Company pushed for the establishment of a HSE management system in a steady and orderly manner. In 2007, the Company reviewed and guided the HSE management system of 35 regional companies and issued the Instructive Opinions on Regularizing the Preparation of Two Documents - One Table for HSE in Grassroots Organizations. By the end of the year, all affiliated enterprises had completed the revision and update of management manuals and procedural documents, totally establishing and revising 8556 items of safety and environment regulations; 33900 grassroot teams (workshops) implemented the Two Documents - One Table for HSE according to uniform specifications.

## Innovation and Development

In August 2007, we signed an HSE service agreement with DuPont. Through overall cooperation, we completed the HSE management assessment for 4 affiliated enterprises and the HSE interviews for the Company's management and all departments, streamlined the HSE systems, defined a list of HSE regulations and systems applicable for the Headquarters' level and accelerated the HSE management process, keeping up with international standards.

With the establishment of an HSE management system, the Company accordingly unified HSE policies and strategic objectives, improved HSE systems and standards, normalized risk management of grassroot organizations and strengthened all personnel's HSE perceptions and consciousness.

#### 3. Establishment of Internal Control System Drives Management Innovation. and Risk-Prevention Capability is Significantly Consolidated

To keep up with the Company's rapid development, standardize operations and management, promote the Company's governance level and effectively prevent the risks in operation and management, PetroChina established an internal control system in August 2003. Guided by the COSO internal control framework, based on PetroChina's practical management and by reference to internationally-advanced management standards, we established the PetroChina Internal Control System Framework, prepared and issued the Internal Control Management Manual which was the first in domestic enterprises, perfected the working network, improved the internal control supervision system and examination criterion and built an internal control system covering all fields from operations to management.

Development objectives:

Meet the requirements of relevant laws and regulations at home and abroad

Comply with the Company's strategy and risk management trends

Covering the whole production process and operations structure as well as major operation management posts

> PetroChina's Internal Control System Framework

Based on the COSO internal control framework, referring to COSO's enterprise risk management framework

#### Framework contents:

Systematically describe methods and standards for the establishment of an internal control system, covering the following five elements:

- Environment control
- Risk assessment
- Activity control
- Information and communication
- Supervision

#### PetroChina Internal Control System Framework

In 2006, PetroChina's internal control system was formally put into place. In June 2007, the system was approved by PricewaterhouseCoopers (PwC) and assessed with "zero deficiency" in an internal control audit, becoming one of the first enterprises owned by major business groups to pass Section 404 of the Sarbanes-Oxley Act ("SOX") among the Chinese companies listed in the US. The system remains in good operation.

#### Social Assessment

In December 2007, the Establishment and Operation of Internal Control Systems in Major Multinational Petroleum Enterprises declared by PetroChina was awarded the first prize in the 14th Chinese Enterprise Management Modernization and Innovation Achievements by the Assessment Committee for Chinese Enterprise Management Modernization and Innovation Achievements.

With the internal control system, we formed a set of operation mechanisms to avoid risks in management and operation, updated the concepts of the management, increased the risk consciousness of all employees and realized the systematization and standardization of operation and management. Next, on the basis of effective control over financial reporting and to cater to the strategic development, we will strive to satisfy all requirements for overall risk management and improve the internal control system with risk management as the core, so as to provide a more powerful guarantee for the Company to realize strategic development.

#### 4. Primary Centralized Accounting was Initiated, and the Company's Risk Control Ability Greatly Promoted

PetroChina's financing informatization started back in the 1990s. By the end of 2004, all centralized accounting for regional companies was finished, the Company's accounts reduced from over 2700 to 94, the financial reporting process curtailed from 7 to 2 levels, statements of regional companies submitted 2 days ahead of time on average and the annual report disclosure time shortened by over 10 days compared to that at the beginning of listing, fulfilling the requirements for information disclosure in capital markets.

In 2005, the Company started research on centralized accounting practices in the Headquarters in order to establish its primary centralized accounting through a standardized system, optimizing the financial business process, inheriting the Financial Management Information System (FMIS) and integrating SAP, on the basis of centralized accounting in regional companies. In August 2006, based on a great deal of research and in virtue of the New Enterprise Accounting Standard issued by the PRC Ministry of Finance, the Company formally initiated the development of a primary centralized accounting. On August 31, 2007, PetroChina's primary centralized accounting project was successfully developed and implemented.

The Company has implemented the primary centralized accounting at headquarters. The Company's financial report was reduced from 2 to 1 level and accounts in China were consolidated from 94 to 1, forming a uniform accounting process and standard system throughout the Company, further promoting the quality of the Company's financial reporting and playing an important role in the establishment of a modernized financial management system, strengthening overall risk control.

#### 5. Breakthroughs were Achieved with Informatization, and the Company's Management Level Improved

In 2007, the Company further strengthened its centralized management with informatization and continuously pushed for the implementation of an overall information technology plan. As a result, a series of significant breakthroughs were achieved. For instance, the ERP system was widely applied in all chemical and marketing enterprises, playing a significant role in promoting overall management standards in the chemical and marketing segment. Special applications were widely put into popularization, and the production data management system for oil, gas and water wells were put online in oil and gas field enterprises; and HSE system was extended and operated in 65 units.

#### Social Assessment

The PRC Ministry of Finance highly endorsed the implementation of PetroChina's primary centralized accounting. It was considered as "a pioneering achievement, which is not only a breakthrough in enterprise accounting in China, but also a landmark for innovation among multinational groups and major oil companies internationally".

#### Case Study

On September 20 and December 13. 2007, PetroChina was invited to share its experience in the progress and practice of informatization at the National Informatization Popularization Meeting and the CIO Annual Meeting of Group Enterprises, respectively. The Company's experience in implementing uniform information systems as planned on the principles of "uniform planning, uniform standard, uniform design, uniform investment, uniform construction and uniform management" were adopted by many enterprises thereafter.

# **Active and Effective Energy Development**

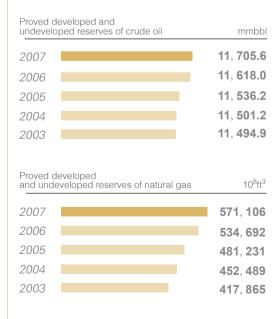


#### In 2007:

- We discovered the Nanpu Oilfield in the Jidong tidal zone of Bohai Bay and developed a trillion-m<sup>3</sup> Sulige Gas Field in the Changqing petroleum area, impelling the Company to another round of peak expansion in oil and gas reserves.
- We made efforts to transform the development mode. Crude oil increased steadily and natural gas increased fast. Moreover, we initiated a secondary development program, for the purpose of enhancing recovery ratio.
- We initiated an integrated cooperation project "Biodiesel from Wood". This project is operated by the Company in a practical manner, creating a pioneering energy-wood base with a total area of 68,000 hectares.

#### 1. Oil and Gas Exploration

A series of major discoveries were made and many reserves confirmed in Bohai Bay, Ordos Basin, Sichuan Basin and Junggar Basin with the use of improved technologies, advanced oil geology theories as well as other advanced technologies including extensive 3D seismic data acquisition and 3D pre-stack time migration processing techniques. In 2007, the proved developed and undeveloped reserves of oil and gas were 11,705.6 mmbbl and 571,106 108ft3 respectively, while reserve replacement ratios of oil and gas reached 1.104 and 3.238 respectively, indicating the Company is entering another peak momentum in reserve growth.



# 01. Active and Effective **Energy Development**

Special Case Study: Historic discovery of Jidong Nanpu Oilfield, PetroChina

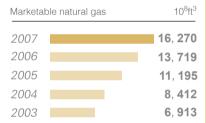


The Jidong tidal zone was first explored in 1988, enjoying independent exploration by the company and cooperative exploration with foreign oil companies in the subsequent 14 years, without any material breakthrough. Since 2002, PetroChina has strengthened fine 3D seismic explorations in conjunction with other supporting techniques – i,e extensive pre-stack time migration processing and interpretation, extended reach well and horizontal drilling as well as MDT logging, so that a series of technical problems in geological exploration and engineering construction could be overcome. In September 2004, significant breakthrough was made in the exploration of Well Laopu South-1, with 700m³/d of high-yield oil stream obtained in Ordovician. The oil stream gave a steady output of over 200 tons/day in the 22-month production test. With these efforts and after three years of exploration, four formations were discovered in the Jidong Nanpu Oilfield. The 3P oil/gas equivalent reserves, i.e. the proved reserves reviewed and verified by relevant state authorities and the probable and possible reserves verified by the Company, are up to 1.18 billion tons.

In the Jidong Nanpu Oilfield, the oil zone is thick, with an average single-well penetration thickness of 80-100m; single-well production is high - 80~100 tons/day for vertical well and 200~500 tons/day for horizontal well; reserves are highly abundant - up to 5.07 million tons/ km²; and physical properties of oil zone and oil quality favorable, with key target formations at buried depth of 1800m ~ 2800m.

The Jidong Nanpu Oilfield is the most exciting discovery in China's oil history in the past 30 years. Particularly, its discovery is significant for implementing the state policy to "stabilize the east and develop the west" in the oil industry, realizing steady growth and sustainable development of crude oil production in China, and enhancing energy security in the country. Additionally, it will boost economic and social development in the Jing-Jin-Tang region and even around Bohai Bay.

#### mmbbl Crude oil production 839 2007 831 2006 823 2005 2004 778 775 2003



#### Social Assessment

On December 26, 2007, two enterprises were awarded the Grand Prize for China's Enterprises at an awarding ceremony. PetroChina Daqing Oilfield Company was one of them

The Grand Prize for China's Enterprises, a general prize for China's industrial enterprises, was sponsored by 12 industrial associations including the China Federation of Industrial Economics. Adhering to the concept of devoting to the nation's development, respecting science and technology as well as technical innovation, the Daging Oilfield has achieved sustainable development and high and stable production for 27 consecutive years. The company was privileged about being an example to follow amongst its global peers while also contributing to China's economic development.

#### 2. Oil and Gas Production

In 2007, PetroChina achieved continuous and steady growth in oil production and rapid growth in natural gas production. For the whole year, oil production amounted to 839 mmbbl while the marketable natural gas was 16,270 108ft3, up respectively 1.0% and 18.6% compared to the previous year. Both oil and gas production reached record levels for the Company's history.

PetroChina has developed 6 large-scale oil and gas fields with equivalent production exceeding ten million tons. Particularly, the Daging Oilfield Company remained the leader amongst domestic oil companies, with an annual crude oil production of 41.62 million tons, The Changging Oilfield Company became the second largest oil/gas field for PetroChina with gas production exceeding 10.0 billion m<sup>3</sup> and oil/gas equivalent production exceeding 20.0 million tons for the first time. The Tarim Oilfield Company became the largest natural gas production base in China, with the annual production of natural gas exceeding 15.0 billion m<sup>3</sup>. In 2007, the Jidong Oilfield achieved an oil production output of 2.13 million tons, 420,000 tons more than that in 2006.

In 2007, 806 horizontal wells were drilled, contributing significantly towards oil well stimulation. Pilot alkali-surfactant-polymer flooding in the Daqing Oilfield obtained an initial effect, forming a 10-million-ton production scale by "tertiary oil recovery". The Liaohe Oilfield saw great advance in steam flooding and SAGD for heavy oil, resulting in the enhancement of recovery ratios by 20 to 30%. The Sulige Gas Field in Changging obtained remarkable results in technological projects aiming at enhancing single-well production and cutting development costs, with 12 supporting techniques developed, which greatly contributed to the scaled and effective development of low-permeability and low-yield gas fields, driving gas production to exceed 10 million m<sup>3</sup>/day.

As for the oilfields characterized by high water cuts and high recovery percentages, PetroChina initiated a secondary development project, in order to ultimately increase recovery ratios. By "restructuring the geology prospecting system, rebuilding well networks and redesigning surface technical processes", PetroChina improved mature oilfields that have been recovered for over 20 years to enhance recovery ratio.



# 01. Active and Effective **Energy Development**

### 3. New Energy Development

Developing new energy is PetroChina's important strategy. Moreover, developing and utilizing unconventional hydrocarbon resources to replace and supplement traditional options and increasing the effective supply of oil and gas have been included in PetroChina's development plan. As a result, the Company established an industry-leading bioenergy research team and a new energy management department and put together a development plan. By the end of 2007, much important interim progress had been achieved.

- Coal-bed gas development began to take shape. PetroChina has set up a coal-bed gas laboratory - the most advanced in China - which holds three national patent technologies including coal-bed hydraulic fracturing, wireline coring and quick desorption of coal-bed gas. PetroChina launched the pilot coal-bed gas development in Qinshui Basin, Shanxi Province, where 600 coal-bed gas wells have been drilled with an annual production of 500 million m<sup>3</sup>. Additionally, a 3 billion m<sup>3</sup>/year coal-bed gas processing plant is currently under construction, which will be the largest in China. 200 equity coal-bed gas wells operating in the form of cooperatives, with an annual production of 150 million m<sup>3</sup> are present.
- Geological surveys and resource assessment were conducted on oil shale and oil sands.
- Ethanol gasoline sales covered 50% or more in market shares throughout China. By the end of 2007, we had established 88 ethanol gasoline distribution centers and reconstructed 5777 service (gas) stations in 9 provinces, including Jilin and Shandong, with accumulated sales of ethanol gasoline increasing to 17 million tons and accounting for over 55% of annual sales in China.
- An integrated project "Biodiesel from Wood" was initialized. In 2007, we set up 68,000 hectares of source wood bases. A 60,000-ton/year biodiesel industrialization demonstration project is under active construction in Nanchong, Sichuan Province, which is expected to start operation by the end of 2008.
- The evaluation, development and utilization of geothermal, wind and solar energy were promoted. Pilot projects related to the comprehensive utilization of geothermal energy were conducted in the Huabei Oilfield, where geothermal energy was effectively used for the power generation, heating and heat tracing of oil transportation.



### 4. International Oil and Gas Cooperation

We have been developing overseas oil and gas cooperation in a forward but prudent manner in order to increase the supply of oil and gas from both domestic and international sources. In 2007, overseas oil and gas investments had been extended to 29 projects with respect to oil and gas exploration, development, pipeline construction, refining and chemicals, as well as oil products marketing in 12 countries or regions, including Africa, Central Asia, South America, the Middle East and Asia Pacific.

We have also been expanding the scale and scope of external cooperation in China. In May 2007, the Changbei Gas Field, co-developed by PetroChina and Shell, was commercially put into operation. In the same year, PetroChina signed framework agreements on cooperation with Statoil and Royal Dutch Shell. More importantly, PetroChina signed with Chevron the Natural Gas Development and Production Agreement for the Northeast Sichuan Block in the Sichuan Basin, the largest onshore natural gas cooperation project in China, marking a new era for domestic cooperation on oil and gas development.



PetroChina's Central Processing Plant in Tuban Block in Indonesia

# Sustainable and Steady Supply of Oil and Gas



#### In 2007:

The planning of Guangxi Petrochemical Company's 10-million-ton refining project was initiated; Sichuan Petrochemical Company's 800,000-ton ethylene project, Daging Petrochemical Company's 1.20-million-ton ethylene expansion project and three other 10-million-ton technical upgrade/construction projects in Dalian. Dushanzi and Fushun were all well in progress;

Preliminary work in key projects such as the second West-East Gas Pipeline was successfully pushed forward, and the Lanzhou-Zhengzhou-Changsha Oil Product Pipeline was launched for construction;

The Beijing Oil & Gas Pipeline Control Centre, operated by Petro China, was completed and started for operation, It performed centralized control over 28 on-service long-distance oil and gas pipelines (running across 22,000 km in total) in China. As a result, the centralized distribution capacity of oil and gas has been significantly improved.

#### 1. Oil and Gas Supply

#### (1) Supply of Oil Products

PetroChina has rigorously observed the policies on price, quantity and quality issued by central and local government authorities in order to create a fair and quality market environment for consumers, while taking measures to ensure market supply.

- Refining and chemical enterprises maximized production capacity, resulting in crude oil refining experiencing a 4.9% year-on-year growth; product structure and operation of equipments have been optimized, and efforts made to improve the yield of diesel oil.
- Based on seasonal demand, PetroChina took a series of measures such as putting aside a summer stock of low-freezing-point diesel oil for winter utilization and inventory adjustment; in the fourth quarter, through reserve development and inventory reduction, 500,000 tons of delivery guaranteed supply at special periods for agricultural production, such as production in winter, transportation in spring as well as farming in spring and summer.
- PetroChina arranged imports to increase supply for the domestic market. The whole-year import of diesel oil and gasoline totaled 820,000 tons, bridging the gap in domestic energy supply.
- PetroChina increased efforts to procure resources from local refineries in order to increase market supply. The whole-year procurement of oil products totaled 2.90 million tons, alleviating pressure for market supply.
- PetroChina strengthened distribution and transportation logistics. Based on resources and transportation capacity, PetroChina optimized operation plans and strengthened cooperation with railways, ports and pipeline transportation departments, so as to ensure that west-east and north-south oil transportation met market demand.

Moreover, we set up a daily monitoring system and daily meetings to strengthen price supervision and also prepared emergency response plans, to better fulfill our responsibility of market supply. By the end of 2007, PetroChina-operated service stations reached 18,648, which further enhanced our capability to ensure steady supply.

#### Social Assessment

From October to December 2007, China underwent oil product shortages in the domestic market. Consequently, PetroChina took effective measures to ensure the steady supply of oil products, which was highly praised by governments at all levels as well as various sectors of the society. Many local governments, including Beijing, Sichuan, Xinjiang Uyghur Autonomous Region and Gansu, expressed their appreciation for PetroChina's contribution to resource supply and support to local economic development.

# 02. Sustainable and Steady Supply of Oil and Gas

#### (2) Supply of Natural Gas

PetroChina urged for the construction of a structural gas network and underground gas storages while accelerating the exploration of new gas fields. In 2007, the Lanzhou-Yinchuan Gas Pipeline was put into operation and four major gas areas (Tarim, Southeast, Changging and Qinghai) were connected to the structural gas network, improving the safety of supply from diversified sources. Seven underground gas storages were put into operation in Northern China and Jiangsu province, while 1.48 billion m<sup>3</sup> gas was accumulated during low-consumption seasons, helping to consolidate the ability to meet peak-season demand. Natural gas supply to the major cities and users were guaranteed by taking the advantages of pipeline networks and the coordinating of production, transmission, marketing and storage.

#### 2. Refining and Chemicals

In 2007, we improved production control management systems, enhanced equipment management and quality of maintenance and repair, and further upgraded equipments. As a result, we achieved overall "safe, stable, continuous, adequate and exceptional" production while crude runs and output of major refined and chemical products hit new highs. The whole-year refining load reached over 97.7%; output of gasoline, kerosene and diesel oil amounted to 71,381,000 tons and the output of chemical products totaled 15,550,000 tons, up 4.5% and 16.6%, respectively, compared to 2006.

We continued to enhance the adjustment of refining and chemical structures as well as optimize layouts, abiding by international technical standards and adopting world-leading techniques and equipments, so as to improve the quality and processing capacity of oil products. In 2007, seven key projects, including Huabei Petrochemical Company's 5-million tons/year refining reconstruction, Liaoyang Petrochemical Company's 200,000 tons/year ethylene reconstruction and a 800,000 tons/year PTA reconstruction, were completed and put into operation. Dagang Petrochemical Company's 5-million tons/year auxiliary refining project and Urumqi Petrochemical Company's 1-million tons/year hydrocracking project will be soon completed. The construction of four 10-million-ton technical innovation and new projects in Dalian, Dushanzi, Fushun and Guangxi as well as four major ethylene projects in Dushanzi, Sichuan, Daqing and Fushun are undergoing smoothly.

In March 2007, PetroChina signed with the Sichuan Government an agreement on the cooperation of a 10-million-ton refining project as well as a 800,000 tons/year ethylene project. In September 2007, the construction of Guangxi Petrochemical Company's 10-million-ton refining project was initiated. As national initiatives, these two projects played a strategic role in improving the overall layout of the refining industry in China, bridging the gap between the supply and demand of oil products and ethylene in the southwest, and promoting rapid and sound social and economic development in local communities.

#### 3. Pipeline Operation

Crude oil, natural gas and refining bases are mainly located in China's western and northern regions. However, the consumption is most predominant in coastal areas. The construction of pipeline networks connecting the supply bases and the market has been one of the key strategic moves of the Company to ensure supply.

In 2007, PetroChina continued to develop the construction of pipelines. The Dushanzi-Urumgi-Shanshan Crude Oil Pipeline, the Lanzhou-Chengdu Crude Oil Pipeline, the Jinzhou-Zhengzhou Oil Product Pipeline, the second West-East Gas Pipeline, and the preliminary work for the Natural Gas Pipeline Network in northeast China were all under smooth progress. The construction of the Lanzhou-Zhengzhou-Changsha Oil Product Pipeline and the Daqing-Qiqihar Natural Gas Pipeline has already been initiated. The Urumqi-Lanzhou Crude Oil Pipeline, the Daqing-Harbin and the Lanzhou-Yinchuan Natural Gas Pipeline have already started operations.

By the end of 2007, crude oil, natural gas and oil product pipelines operated by PetroChina totaled 10,559 km, 22,043km and 2,669 km respectively. Moreover, the Beijing Oil & Gas Pipeline Control Centre, operated by PetroChina, was completed and started operations. It performed centralized control over 28 on-service long-distance oil/gas pipelines (running across 22,000 km in total) in China. As a result, the centralized distribution capacity of oil and gas has been significantly improved.

#### 4. International Trade

PetroChina has been increasing its efforts in exploring oil fields and serving to enhance international trade. The company's actions including expansion to new regions, diversification of trading models, improvements in trading channels as well as competitiveness in global markets is steadily enhanced. To meet demand in the domestic market, PetroChina managed the import of crude oil and trading of oil products through existing railways, pipelines as well as seaways, which sustained the operation of domestic refineries and chemical enterprises while stabilizing the supply-demand cycle in the domestic resources market.

#### 5. Quality Improvement

Guided by the concept of "quality first, quality competition", PetroChina has adopted general international quality management standards and world-leading production standards and technology requirements, for the control of production processes and field quality. The Company has employed a random inspection system and applied a quality certification and verification system for key goods and materials purchased. Additionally, PetroChina has consolidated the quality management of key engineering projects and established a project leader and legal accountability systems to ensure life-long accountability for project quality. PetroChina has also adopted an on-site supervision system in factory for critical products, major equipments and bulk materials used for key projects, ultimately greatly improving product and service quality.

#### Social Assessment

China.

Two products from four enterprises were given the "Famous Brand in China" award. These include: "Kunlun" heavy duty crude oil road asphalt produced by Liaohe Petrochemical Company, Karamay Petrochemical Company and Lanzhou Petrochemical Company, and "Kunlun" polyacrylamide produced by Daqing Refining & Chemical Company. "Kunlun" carbamide and compound/fixed fertilizer and "Daqing" compound fertilizer were awarded the title of "National Freeinspection Product" Fushun Petrochemical Company was awarded the "National Advanced Collective for Quality Assurance" by the Ministry of Personnel of China and the General Administration of Quality Supervision, Inspection and Quarantine of



# Safe and Clean Production and Operation



#### In 2007,

- We continued the campaign of "Foundation Year of Safety and Environment" to further strengthen the management and the execution of health, safety and environmental measures at grassroots level
- We implemented 10 energy-conservation projects and 10 pollutants reduction projects;
- The emission of industrial "Three Wastes (waste water, waste gas and waste residue)" all met the prerequisite standards, causing no serious environmental pollution, ecological damages, or serious occupational hazards and radioactive accidents;
- We actively responded to the issue of climate change by donating to China's Green Carbon Fund, activating the "Biodiesel from Wood" project and the construction of energy forests.

#### 1. Laying the Foundation

2007 was the fourth year for the Company to implement the "Foundation Year of Safety and Environment" . Stronger and more effective measures have been taken to strengthen management and execution capacity at grassroots level. As a result, the Company has achieved record highs in all indicators of safe production and environmental protection.

(1) Implement accountability systems for safety and environmental protection

In January 2007, Mr. Jiang Jiemin, the Chairman of the Board and President of PetroChina, signed the Safety and Environment Accountability Pledge with chiefs of affiliated companies. The Pledge defined the persons accountable, the accountability goals and accident-control indices, which were integrated into the annual performance appraisal of senior executives. By signing the pledge at each level, responsibilities were assigned and shared among senior executives, division heads and each unit at all levels. In 2007, 1,293 senior executives presented their safety operation reports.

Death rate caused by accident	Person/million working hours	Total accident rate	Accident/million working hours
2007	0.25	2007	0.03
2006	1.40	2006	0.07
2005	1.58	2005	0.09
2004	1.64	2004	0.13
2003	2.40	2003	0.14

(2) Further improve management standards, system and operation instructions of safety and environmental protection

In 2007, the Company issued and implemented a series of standards, such as Methods of HSE

# 03. Safe and Clean **Production and Operation**

Information System Management, Regulations on Classification of Major Dangerous Sources and Specifications for Safety Helmet Production and Utilization Management; established (and revised) several management systems, such as Opinions on Strengthening and Standardizing Frontline Team Management and Special Reward Methods for Reporting of Operation Hazards; compiled more than 800 operating instructions, 6,614 operating instructions on maintenance and over 24,000 operating sheets for refining units, while also prepared 337 operating instructions and 56,000 operational diagrams and revised 25,000 operating instructions on maintenance for chemical units. In addition, the Company formulated safety production procedures in consistence with program management, workflow standardization and operational guidelines. In December 2007, the PetroChina Research Institute of Safety and Environment Technology was established to support the Company with more consistent safety and environment strategy and technologies.

### (3) Strengthen risk control and emergency response system

We continuously improved the ability to prevent, manage and recover from crises and accelerated the enhancement of an emergency response/rescue system. In 2007, 4 of the Company's affiliated enterprises completed the formulation of 13 emergency prevention and control projects while the core part of the 3-level prevention and control project was completed; the Sichuan Oil/Gas Well Fire Fighting Company became an emergency rescue base for fires, integrated rescue, operation testing, training and drills. Besides, the Company further improved 13 emergency centers and 28 rescue teams for long distance oil and gas pipelines maintenance and repair in 6 regions such as China's North and Northeast regions. The Company also reinforced the construction of offshore emergency rescue and response centers and drills and built 3 offshore emergency rescue stations in Yingkou, Caofeidian and Tanggu, presenting the capacity to handle level-2 oil spill emergencies.



#### Social Assessment

Changqing Petrochemical Company, located near the bank of the Weihe River, abiding by the principles of "upright and civilized, harmonious with the nature" built in a safe HSE culture, unremittingly investigated hidden hazards, combated against the "three violations (violations in command, operation and labor discipline)", and strictly managed the production plant according to strenuous HSE standards. The "three wastes" and noise discharged in the plant were all kept under relevant standard levels. In 2007, Changqing Petrochemical Company was given the title of "Outstanding Company in Environmental Protection Contribution" in Shaanxi Province and won the exclusive title of "Green Enterprise and Green Community" by the Shaanxi government.

#### (4) Reinforce anti-violation measures

In 2007, the Company's affiliated enterprises formulated 1880 anti-violation mechanisms and instructions, built a personal safety operation record and carried out a score-based punishment system. Over 26,000 person-times were found and punished for violations, and more than 30,000 person-times were awarded for identifying and resolving hazardous situations and preventing the "three violations".

#### (5) Formation of the Green Team at grassroots level

In 2007, the Company aimed to achieve a zero injury, zero pollution and zero accident working environment. At individual units of production, refining and chemical, pipelines and marketing, green teams were formed at different levels, strictly following HSE standards and strongly advocating HSE culture and concepts. Environment-friendly facilities were installed and used according to HSE standards in order to enhance standardized management capabilities of field environmental protection at the grassroots level. In 2007, 108 grassroot units (workshops and installations) were recognized as Green Teams.

#### (6) Advanced training on safety and environmental protection

The Company reinforced the certification process for key posts with necessary operational and HSE training. HSE training materials for safety managers, overseas business managers, technical staff and HSE auditors were formulated; safety manuals for gas recovery operators, catalysis facilities, ethylene plant, oil transportation operators, oil depot and service station of compressed natural gas (CNG) were compiled and HSE training session were held 2,278 person-times to include the participation of safety managers, safety supervisors, HSE auditors, environment monitoring and offshore operation staff. As for the affiliated companies, training programs were organized for about 23,000 management staff at all levels, for over 274,000 person-times who changed or accepted new post and for 125,000 person-times for those in special operation posts.

#### Case Study

Tarim Oilfield Company invited DuPont Safety Management Consulting Company to implement a safety practice campaign. 157 person-times received 5 training sessions on safety leadership aimed at oilfield leaders and senior leaders in each unit; 209 person-times received 7 training sessions on safety practice aimed at operation zone managers and frontline managers; 351 person-times received 3 training sessions on safety management skills aimed at station leaders and team leaders.

# 03. Safe and Clean **Production and Operation**

#### 2. Energy-Saving and Pollutants Reduction

PetroChina is a major contributor to both energy production and energy consumption. Therefore, energy-saving and pollutants reduction is one of our social responsibilities as it is one of our inherent business requirements to reduce cost and improve efficiency. In 2007, energy-saving and pollutants reduction became an important mean for us to transform financial growth and optimize our business structure. We mobilized all staff to reinforce energy-saving and pollutants reduction enabled by technological advancements and internal support.

#### (1) Establish the implementation plan for energy-saving and pollutants reduction for 2008-2010

Overall goal: to achieve substantial enhancement in resource utilization efficiency with the discharge of "three wastes", to meet relevant standards; major economic and technical indices of resource consumption and environmental protection to reach top industry standards in the domestic market; major enterprises to reach world-class standards and pioneer in building resource-conservative and environment-friendly enterprises.

Key actions: improve the accountability system, increase efforts on technological innovation, promote energy-saving and pollutants reduction; speed up the replacement of work processes, technologies and equipment with low efficiency, high energy consumption, serious pollution and heavy emissions; establish energy consumption standards for facilities; create a database of best practices for energy-saving and pollutants reduction; prepare a practical manual to promote suitable technologies; implement measures to prevent hidden hazards to the environment and programs to reduce emissions from major pollutants stipulated in the "Eleventh Five-year Plan"; integrate energy-saving and pollutants reduction as performance indicators and strengthen the promotion among all staff.

Work focus: to carry out 10 energy-saving projects, 10 pollutants reduction projects and 3 test units for recycling.

10 energy-saving projects	10 pollutants reduction projects
energy system optimization	meeting exhaust gas emission objectives
substitution for internal oil utilization	SO <sub>2</sub> controls in coal electricity plants
associated gas recovery	building and reconstruction of desulfurization equipment
motor and electronic power system	using clean energy sources
oil/gas consumption reduction	meeting exhaust water emission objectives
equipment energy utilization efficiency improvement	oilfield exhaust water controls and pipeline network reconstruction
heating system optimization	refining exhaust water deep processing and recycle
energy calculation and monitoring	controls on pollution sources from production equipments
development and utilization of non-conventional resources	circular economy demonstration
integrated utilization of water resources	automatic pollution source on-line monitor system

#### (2) Carry forward clean production

In 2007, we established and carried out the Program for Automatic Online Monitoring System of Major Pollution Sources and improved the indices monitoring and examination system of pollutants reduction. We completed the review on 195 facilities for cleaner operation, and carried out 3,078 clean development programs. We rigorously implemented the "three simultaneous" system, i.e. simultaneous design, simultaneous construction and simultaneous commission for environmental impact assessment and environmental protection facilities along with main construction projects. Environmental impact assessment and environmental protection acceptance work were fully executed, hence controlling pollution from its origin and protecting ecosystems.

We conducted in-depth pollution control programs, with an investment of RMB3.22 billion yuan. 134 pollutants reduction projects and 350 environmental protection and pollution hazards treatment projects were completed; over 2,400 existing production facilities and equipment were evaluated; 63 facilities and equipment which were not in compliance were replaced; more efforts were taken to strengthen environmental management in sensitive areas such as operations in water reserve areas, monitoring of radiated sources and disposal of dangerous wastes; the technical archives for serious hazard sources and pollution sources were set up; labeling and classified dynamic monitoring systems were applied, so that major environmental risks were effectively controlled.

We closely combined pollution control with resource recycling so as to reduce the quantity and damage of wastes and, at the same time, reutilize wastes as resources. The recycling and reutilization of industrial waste water and gas was significantly increased.

#### (3) Energy-saving and pollutants reduction make a difference

In 2007, the Company reduced the consumption of standard coal by 1.24million tons and water by 47 million m<sup>3</sup>, achieving respectively 20.67% and 20.89% of the goals set by the "Eleventh Five-year Plan". In 2007, while maintaining the continuous increase of oil and gas production, crude runs and key chemical products, all major environmental protection indices remained stable, the oil discharge in waste water was 1,001 tons and 11.5% less than the previous year.

#### 3. Clean Energy

We are committed to developing and producing clean products, to providing clean energy for consumers and to supporting the protection of the natural environment and the establishment of an environment-friendly society.

#### (1) Natural gas

In 2007, in addition to taking effective steps to increase the supply of natural gas, the Company also launched three liquefied natural gas (LNG) projects in Tangshan, Dalian and Jiangsu. After bulding phase-1 of the three projects, annual capacity of LNG processing will reach 10million tons, providing 13.5 billion m<sup>3</sup> of clean natural gas to the domestic market per year.

# 03. Safe and Clean **Production and Operation**

#### (2) Ethanol gasoline

PetroChina has been actively developing ethanol gasoline. In 2007, the preparation and sales volume of ethanol gasoline reached 3.8mt, 14% higher than that in the previous year. The Company has completed a feasibility study on the ethanol fuel project of Nanchong, Sichuan. This project, enjoying an investment of RMB800 million yuan, is expected to generate an annual production of 100 thousand tons of non-plant based ethanol fuel, with completion and production launch being forecast for 2009.

#### (3) Quality upgrade of oil products

We have fully launched an upgrading program for product quality, through the development and application of new technologies, construction of new facilities and optimization of technical process, granting the Company the capacity to start mass production of National-III and National-IV motor gasoline and diesel oil.

In order to improve air quality during the Olympic Games, National-IV motor gasoline and diesel oil are required to be used in Beijing from January 1, 2008. PetroChina has been improving technology and testing concoctions to support this initiative. On April 26, 2007, PetroChina's first batch of National-IV O# diesel oil was available in Beijing for the public transport system to implement the emission standard in advance. Optimized concoction measures were taken in the Daging area with the production of National-IV 10# motor diesel oil starting on October 15 and National-IV 20# motor diesel oil on November 15. National-IV 35# motor diesel oil has been concocted by using hydro-cracking diesel oil in the Liaoyang. Jinzhou Petrochemical, where FFC gasoline hydro-upgrading facilities were improved to acquire 25000 tons/month production capacity of National-IV 93# motor gasoline in early November. On December 18, Dalian Petrochemical completed the concoction test of National-IV motor gasoline to attain the production capacity of 20000 tons/month and 10000 tons/month of 93# and 97# National-IV motor gasoline, respectively. Daqing Refining and Chemical and Huabei Petrochemical both presented the monthly production capacity of 10000 tons of 93# National-IV motor gasoline. Changqing Petrochemical has adjusted operating conditions of catalytic cracking and hydro-cracking to concoct and produce National-IV motor diesel oil. By the end of 2007, the Company presented production capacity of 75,000 tons/month and 80,000 tons/month of National-IV motor gasoline and National-IV motor diesel oil respectively.

We are committed to providing National-III and National-IV automobile gasoline and diesel oil for the designated markets in accordance with the phase-3 implementation schedule for emission standards of motor vehicles set by the state.

#### 4. Climate Change

Climate change is a global issue that attracts global attention. This issue is resulting in temperature rise, sea-level rise, the high frequency of extreme weather and climate conditions as well as the extinction of endangered species, having an increasingly serious impact on the ecosystem and living environment of human beings. Thus, this is an issue of great importance that demands prompt solutions.

PetroChina has acknowledged the positive results of greenhouse gas emission control and reduction to alleviate climate change and we fully support the China's National Climate Change

#### Case Study

PetroChina Xinjiang Oilfield Company engaged in pollutants reduction through forestation in 2001. From ground leveling, water delivery and irrigation canal construction, to the application of nursery stock fast-growth technology, comprehensive water-saving technology and remote monitor technology, the foundation and supporting facilities of the forestry base were established. By the end of 2007, 100,000 hectares had been planted with 48 million seeded trees. The total accumulated volume of timber reached 750,000m3 and greenhouse gas emissions reduced effectively. The ecological and social benefits of this project have been widely acknowledged. In October 2007, during the "EOR by CO<sub>2</sub>-drive and CO<sub>2</sub> Pollutants reduction" world academic symposium, Xinjiang Oilfield Company's pilot project on CO<sub>2</sub> pollutants reduction by forestation caught the attention of both Chinese and overseas experts.





Programme by taking measures to reduce carbon emissions and increase carbon absorption in order to contribute to alleviating climate change effects.

#### (1) Participate in the founding of the China Green Carbon Fund

There are two ways to reduce greenhouse gases: one is to reduce carbon emissions, the other is to increase carbon absorption. The forest is the largest carbon pool in the terrestrial ecosystem. According to research, every cubic meter of trees can absorb 1.83 tons CO2 and release 1.62 tons O<sub>2</sub>. Carbon sequestration is the term used to designate the process, activity or mechanism of eliminating CO<sub>2</sub> from the atmosphere. Forestry carbon sequestration is a process that, with plantation and management of forests, absorbs CO2 in the air by means of photosynthesis and sequestrated in plants or soil in the form of biomass. Such process is one of the most effective measures to reduce greenhouse gas emissions.

In July 2007, PetroChina contributed to China's Green Carbon Fund jointly initiated with CNPC, the State Forestry Administration and the China Green Foundation. The Fund is a national specialized public fund under the China Green Foundation designated to providing a platform for enterprises, organizations and individuals concerned about climate change to participate in activities such as tree planting and forest protection. CNPC has donated RMB300 million yuan to the Fund including RMB100 million yuan from PetroChina. The Fund is solely used to implement the forestry carbon sequestration campaign. It is estimated that 5 million tons to 10 million tons CO<sub>2</sub> would be sequestrated in the next 10 years.

#### (2) Cooperation in developing forestry bio-energy

China now has 4 million hectares of wood oil forestry. There are 154 kinds of plants with oil contents of 40% or higher. If the current plants are utilized to develop bio-energy, the annual biomass will be of about 300 million tons, equivalent to 200 million tons standard coal. If these resources are fully utilized, the consumption of fossil energy will be reduced by 10%. In addition, there are 57 million hectares of wasted land suitable for plantation and 100 million hectares of marginal land unsuitable for agricultural development in China. If these lands are used to plant wood oil trees, sustainable bio-energy can be attained by substituting fossil energy to reduce the emission of greenhouse gases and form large carbon pools to absorb CO<sub>2</sub> at the same time. Thus, bio-energy development through forestry is one of the best approaches in response to climate change.

In 2007, CNPC signed a cooperation framework agreement to develop forestry bio-energy with the State Forestry Administration and governments at provincial, municipal and autonomous region levels in Sichuan, Yunnan and Shandong, etc. Through this agreement, where PetroChina was responsible for the execution, we have actively nurtured the co-operation between enterprises and local authorities to enhance the development of energy forest bases and the transformation and utilization of bio-energy. By the end of 2007, we had constructed 68,000 hectares of energy forest bases in Sichuan, Yunnan as well as other provinces.

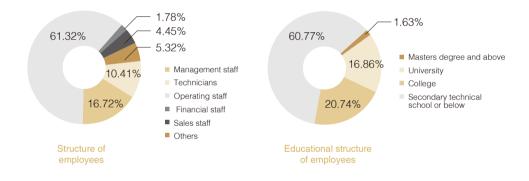
# "People-Oriented" – Employee Development



#### In 2007,

- We were awarded the China Advanced Unit in Promoting Open and Democratic Management;
- Wang Hai team at PetroChina Fushun Petrochemical Company was awarded the title of "China Learning Team";
- We activated the establishment of enterprise annuity system.

By the end of 2007, we employed 466,502 people (excluding temporary employees), among which there were 77,993 management staff, 48,570 technicians, 286,066 production staff, 20,731 sales staff, 8,308 financial staff and 24,834 others. The average age of employees at our Company is 38, and 7,616 employees hold at least a master degree, 78,667 employees hold bachelor degrees, 96,737 present college diplomas and 283,482 secondary technical school diplomas or below. Employees with university education account for 39.2% of the total. 154 thousand of our employees are female, accounting for 33% of the total.



### Social Assessment

In August, 2007, Qinghai Oilfield Company, Jilin Oilfield Company and Jinxi Petrochemical Company of PetroChina were awarded the title of China Model Enterprise with Harmonious Working Relations.

### 1. Employment System

Strictly adhering to the Labor Law of the People's Republic of China and other relevant regulations of listing places and strictly fulfilling international conventions approved by the Chinese government, we have established a sound employment management system covering labor contracts, insurance and benefits, performance evaluation, rewards and penalties, professional training, holiday systems and so on.

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. 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.

The Law of the People's Republic of China on Employment Contracts was issued in 2007 and will be effective from January 1, 2008 as a binding guide for us to carry out the management of labor contracts.

### 04. "People-Oriented" -**Employee Development**

#### 2. Employees' Rights

#### (1) Rights Protection

We actively and steadily promote the reform of remuneration and benefits systems and strive to establish a remuneration base that reflects the value and performance of the different posts, for every employee to achieve self-value, in particular for management staff, professional technicians and operating staff. In recent years, we have allocated resources to frontline employees and critical posts with hardship environments, and gradually improved the standard salary in these posts.

We always ensure employees' personal benefits are met. In compliance with national requirements for a multi-level social insurance system, we have provided insurance for retirement, medical care, work injuries, unemployment and maternity to our employees, and paid various insurance premiums in a timely manner. In December 2007, after three-year of preparations, the Company established the enterprise annuity system, which provides complementary pension and medical insurance, and further improves the compensation and benefits system and the security system, as well as guarantees the respect of all legal rights entitled to current and retired employees.

#### (2) Democratic participation

Strictly adhering to laws and regulations in China and respective countries of business such as the Trade Union Law of the People's Republic of China, we respect employees' rights to participate in trade unions and collective negotiations. Trade union organizations have thus been established in all affiliated companies. We strive to support democratic management systems at the grassroots level, such as meetings of employee representatives and sharing of plant affairs. We also guarantee employees' rights to know, to participate, to express, to monitor, and to protect their democratic rights with practical measures.

We have been supporting trade union organizations at all levels to fulfill the duties of organizing, guiding, serving and protecting employees' legal rights. We have structured employees to engage in diversified activities to contribute to the society, and strived to improve moral standards and scientific knowledge among employees, while promoting scientific innovation and the harmonious development of the Company. In 2007, PetroChina was awarded the title of China Advanced Unit in Promoting Open and Democratic Management and 15 affiliated companies including the Daqing Oilfield were awarded the China Advanced Unit of Open and Democratic Management.

#### 3. Employees' Development

Employees are a fundamental strength for the Company's development and an energetic power for serving the society and local communities. Ever since PetroChina was founded, we have implemented the strategy of building the enterprise based on diversified talents, established and continuously improved the mechanism of talent development, selection and allocation; catered for employees' needs and career development at different stages; respected employees' choices, and strived to provide a wide platform for employees to achieve their self-determined goals.

We established three teams - the management team, the professional technical team and the skills operating team - and ensured the creation of a favorable environment for talents to thrive

#### Social Assessment

In 2007, Wang Hai team of No.3 Refinery, PetroChina Fushun Petrochemical Company, was awarded the title of "China Learning Team"; Zhao Qifeng, an oil exploration worker in Liaohe Oilfield Company, was awarded the "China Top-ten Outstanding Young Technician"; Dong Yuexia, a chief geologist at Jidong Oilfield Company, was awarded the title of "China Top-ten Outstanding Youth".

in and grow. Measures such as open selection, competitive recruitment, job rotation and performance evaluation are adopted to form high-level management teams and improve management capability and quality. Measures such as undertaking research projects, leading important projects, holding academic exchanges, organizing further study and systematic training are adopted to form high-level professional technical teams and encourage independent innovation capability and technical leadership. Measures such as training systems improvement, promotion by evaluation, simulated training, on-job training, skill competitions and apprentice system are adopted to form high-level skill operating teams and improve operating capability. By the end of 2007, the Company employed 13 academicians from the Chinese Academy of Sciences and the Chinese Academy of Engineering, and almost 700 experts who enjoyed from government allowances, 108 professional technical experts, 79 high-skill experts and 1,200 experts in various fields.

#### 4. Employee Training

Employee growth and development is considered a core competency for the development of the Company, Adhering to modern corporate training concepts, we have carried out systematic training sessions for all employees, strived to establish a learning enterprise, cultivate intellectuality in employees, and present good interaction between employees' growth and the company's development. Following the "three team" strategy, we have established an organizational system with uniform regulations, clear management levels and powerful leadership; a training network base with appropriate functions, proper scale and high efficiency; a scientific training system with clear responsibilities and a full-time and part-time teaching team with various levels covering all main fields.

With emphasis on the development of skilled talent, we planned to build a grassroot operating team presenting high diligence, high quality, a suitable structure and a strong execution capability, in the three years following 2007. We strive to accomplish that all operating employees participate in the training, holding the certificates and master degrees necessary to operating knowledge and skills.



### 04. "People-Oriented" -**Employee Development**

In recent years, the accumulated investment in training exceeded RMB0.8 billion yuan, about 2.8 million employees-times have participated in training sessions and on average, each employee have taken more than 5 days on training every year. In 2007, we organized 115 core training programs with attendance of 9,151 employee-times; regional companies organized over 1,600 professional training programs with 520,000 employees-times and more than 98% of professional staff on key posts receiving training. In addition to the establishment of training bases, various on-job training and skill competitions effectively improved the skills of operating

Furthermore, each year, the selected outstanding management staff and technical experts have the opportunity to participate in professional training sessions in the areas including foreign language, international business, MBA and law programs at renowned universities and training institutes in China and abroad to cultivate an international vision and world-class operating skills and promoting an integrated and healthy career development.

#### 5. Employees' Health

#### (1) Preventing occupational diseases

Abiding by the principle of "prevention as the primary focus and combining prevention and treatment" with concept of "people-oriented and health first", we have observed the Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases, by undertaking occupational health monitoring for employees, strengthening the investigation of health hazards on work sites, improving operation conditions, highlighting prevention and control of occupational diseases, and creating favorable working conditions for all employees.

In 2007, occupational health checks were carried out for 137 thousand employees, and over 28 thousand harmful factors at work sites were inspected, covering over 97% employees and 97.5% of inspection rate respectively.



#### Case Study

In the No.2 PAM workshop of the No. 1 Polymer Plant in PetroChina Daging Refining and Chemical Company, psychological consultation has been carried out for workers. Management staff has recorded employees' information, including information on their behavior. state of mind, hobbies, friends, family and violations. They distribute investigation forms on a regular basis to discover and solve issues bothering the team or individuals at an early stage. Under special circumstances, they would arrange the transfer of specific employees to a risk-free post in order to help them. recover from stress or traumas through continuous psychological consultation, and prepare them to return to the frontline. Since its adoption at the end of 2006, this system has been well accepted by employees. As a result, employees' enthusiasm has been enticed, safe production is guaranteed and the whole team enjoys a more harmonious environment.

We have been paying special attention to the health management of employees during field work, with a focus on diet and hygiene of drinking water, prevention of sunstrokes and infectious diseases and the treatment of accidental injuries and diseases. We have also carried out a campaign - "Care about the Health of Frontline Workers" - to provide free clinic service, health instructions and psychological consultation to field workers. Some enterprises have been equipped with health check vehicles.

Radiation-related health management has been another area of importance; we have carried out occupational health check and individual-level testing. We have also improved the information management of occupational health records and ensured the collection of occupational health files and the trial operation of the health monitoring process is sound and smooth. Additionally, we established a radiation health filing system, and provided emergency rescue training and drills to improve the ability of self-protection, self-aid and mutual aid.

#### (2) Promoting health knowledge

In 2007, PetroChina developed and distributed the Health Manual for Petroleum Employees to all employees to help them establish correct and useful health concepts, master health knowledge and adopt healthy lifestyles. We encouraged employees to participate in the national promotion week of the Law of Prevention and Treatment of Occupational Diseases, held training on occupational health and promoted general knowledge of occupational diseases. As a result, the employees' ability to monitor occupational health and prevent disease has been greatly improved.

#### (3) Caring about psychological health

For many years, PetroChina workers have inherited and developed the "Iron-man Spirit", shared the same goal with our motherland and made great contributions to the development of the Chinese oil industry. With the changing social environment and expansion of business scale, oil workers and management are facing new challenges and issues, some of which result in psychological matters. By addressing employees' psychological health, we eliminate potential hazardous factors for safe production. Taking the emotional changes of employees into consideration, we help our staff to relax and adjust their mindsets to enjoy their working environment and work itself. In 2007, we invited professional doctors to provide psychological consultation for employees and advise them on methods to better cope with work pressure.

### **Repaying the Society**



Summary of social welfare activities the Company participa	ted in 2007 (RMB 10,000 yuan)
Categories	Sum
Poverty alleviation	14,957
Educational promotion	4,549
Disaster relief	2,483
Donation for the Establishment of the Chinese Green Carbon Fund	10,000
Total	31,989

#### 1. Promotion of Economic Prosperity

The Company could not enjoy such a development without the support of local governments and its people. As a result, the fast development of our main business is also focused on effectively supporting and promoting local economic growth and social development.

#### (1) Materials and equipment purchase to support the development of relevant industries

In 2007, the Company carried out on-line procurement via the e-business platform to make procurements amounting to RMB21.7 billion yuan. The main materials purchased included: special steel pipe and steel materials for oil and gas production, electronic instruments and meters, mechanical equipments, among others, which stimulated the development of the steel, electronics, mechanical manufacturing and building materials industries.

#### (2) New oil and gas field development promotes the rise of small towns

In recent years, PetroChina's new oil and gas fields have been developed one by one. Roads, water, power and communication lines followed our foot steps. The production and living infrastructures around the oil and gas areas were constructed to promote the development of service industries such as restaurants, retail businesses and construction, which



consequently created job opportunities and brought prosperity to these small towns.

#### (3) Refineries and petrochemical industry stimulate local economic growth

In recent years, the Company has regularly launched many new refineries and petrochemical projects on a yearly basis. Besides creating many new job opportunities, the significant increase in refining and chemical products has contributed to the growth of local GDP. Additionally, these projects have broadened local prospects with the potential to extend petrochemical industry chains, build petrochemical zones and develop high value added products.

### 05. Repaying the Society

#### 2. Enthusiasm for Social Welfare

#### (1) New model of poverty alleviation by information

Since January 1, 2007, the Company has implemented a poverty alleviation by information project - "PetroChina National Free Advertising for Agricultural Deep Processing" . We purchased 19 advertising slots at CCTV 7 and 12 TV channels in 10 provinces to broadcast information on agricultural deep-processing projects for more than 100 key poverty-alleviation counties, which has benefited 45 counties in 23 provinces, municipalities and autonomous regions. A number of agricultural deep-processing projects funded investments to expand markets and increase the income of farmers. This project has built an "information bridge" for the development of new villages.

#### (2) Ongoing poverty alleviation in selected areas

The Company is consistently and actively engaged in poverty alleviation projects organized by the government at various levels, having successively carried out poverty alleviation projects in Xinjiang, Tibet, Sichuan, Chongqing, Gansu, Ningxia, Qinghai, Shaanxi, Inner Mongolia, Hebei, Heilongjiang, Jilin, Liaoning, among others. Initiatives included building roads and water channels, laying power and communication lines, donating to education, reconstructing dangerous buildings, relieving disasters, etc. .

#### Special Case Study

Since 2001, the Company has implemented poverty alleviation projects with CNPC in the counties of Tuoli, Nileke, Balikun, Qinghe, Jimunai and Chabuchar in the XinJiang Uyghur Autonomous Region. At present, the economic situation of the above six counties and production and living conditions of local farmers and herdsmen have all been significantly



A primary school in Xinjiang built with PetroChina's donation

Action one: Donation to education. In 2007, PetroChina sponsored and constructed the No.2 Primary School in Xinjiang Nileke County. This school covers an area of 2.27 hectare and is expected to hold 48 classes, being the biggest primary school in the whole county. In this school, there are 84 teachers and staff, with highly qualified teachers and sound teaching facilities. The multi-function building contains music rooms, art rooms, model rooms, computer rooms, reading rooms and laboratories.

Action two: Skill training, In 2007, PetroChina invested to build a poverty alleviation training base in Saertuohai Village, Qinghe County, Xinjiang with 30 brick-concrete buildings for poor households. Thirty poor households were randomly selected to live in the training base during a training period of 3 years, which were then followed by another 30 households. After 3 years of training and practice, they can obtain a stable income as they master one or two production techniques and learn operation and management skills, so they poverty can be permanently eradicated.

Action three: Water irrigation. In 2007, PetroChina donated funds for the construction of an irrigation project to link the north trunk channel and the Yuyitasi channel in Saertuohai Village, Qinghe County of Xinjiang, which would effectively improve the irrigation conditions of 893 hectares of forage grass in the Yuyitasi and Kezileyuyongke villages of Saertuohai County. In addition, the Company also donated funds for a drip irrigation project for 60 hectares of farmland in Hannanlike Town, Shule County of Xinjiang, which effectively relieved the farmland from drought, and created potentials for the improvement of the farmers' income.

#### Case Study

In late June 2007, the areas along the Huai River and the southern part of Anhui suffered from a catastrophic flooding - the most serious since 1954. The southern mountain area of Anhui and part of Dabie Mountain surrounding areas were hit by torrent disasters, resulting in heavy losses. We were deeply concerned about the conditions in the region and donated RMB 6 million yuan to these areas.



#### (3) Disaster relief

"When disaster struck, help came from all sides." It is not only the virtue of Chinese People, but also the tradition of PetroChina. Whenever a serious natural disaster happens, we will reach out with our helping hands, and immediately send our care, money and materials to the disaster area. In 2007, certain cities and regions of China suffered from serious natural disasters such as flooding, drought, and earthquakes. We took the crises as our responsibility and sent disaster relief funds to Anhui, Shandong, and Chongqing.

### 05. Repaying the Society

#### (4) Voluntary work

In the communities where PetroChina operates, there are teams of young volunteers formed by our employees helping people all year round. Driven by the spirit of volunteerism - "Dedication, Fraternity, Mutual-aid and Progress", they carried out volunteer activities such as "Let our frontline workers feel relieved, happy and warm", "Alleviate poverty and bring warmth to 100 households", donated to the education plan of "Big hands hold little hands" and the "One helps one" service, all of which rekindled the spirits of Chinese oil worker. In 2007, the Company's young volunteers developed into 2,600 teams with more than 65,000 members.



#### Case Study

South 1 pressurizing station in the Wuliwan operation area of No.3 Oil Production Plant, PetroChina Changqing Oilfield Company, is located in the poor mountain area of Zhouhexiang Town in Jingbian County, Shanxi Province. In September 2003, female workers at the South 1 pressurizing station discovered the nearby Mayaoxian primary school in Xunjiansi village, where 4 grades of over 30 pupils sat in one classroom, with the school building and desks extremely old and shabby. The school only had one teacher who could only teach Chinese and mathematics. The school was on the verge of closing down. They proactively decided to contact the village and donated funds and materials, and at the same time, volunteered to teach English, music, physical education, arts and moral courses to the pupils.

The volunteer work by South 1 station moved other female workers in the Wuliwan operation area, and all of the 22 young female workers engaged in the education of supporting activities for the Mayaoxian primary school. Additionally, the activities of these women in Wuliwan motivated young workers in the No.3 Oil Production Plant. 28 volunteer teams with more than 100 young volunteers were formed and education-supporting relations with 15 neighboring primary schools established. They provided the pupils with desks and stationery, school uniforms, whilst helping with school renovation works. Up till now, the accumulated donation funds amounted to RMB 150,000 yuan and the voluntary teaching time accumulated to more than 1800 hours.

At present, Mayaoxian primary school has rejuvenated from the worst to the best school for the last two consecutive years according to local inspections. Local populations praised the female workers of the South 1 pressurizing station, complimenting them with comments such as: "They are really wonderful girls." They made it possible for our children to see the world".

#### 3. Serve the Green Olympics

In order to meet the environmental requirements of the Olympics, the natural gas demand of Beijing in 2008 will achieve a record high of 6.8 billion cubic meters, with an increase of 2.3 billion cubit meters compared with 2007. During the Olympic Games, all the Olympic facilities -Olympic stadiums, flame, athlete village, media village - will all use natural gas, and 600 to 800 new buses will consume compressed natural gas (CNG). We take servicing and supporting the Olympics as our obligation and mission. In 2007, the Company established the Implementation Plan to Guarantee Air Quality during the Olympics and took the following three actions to contribute to the Green Olympics:

- We accelerated gas field constructions at the upstream, built 7 underground gas storages in Northern China, and adjusted the pipeline network to achieve centralized control, guaranteeing stable and safe gas supply during the Olympics.
- In April 2007, the Company started to supply Beijing public transport with National-IV diesel oil, and committed to providing full supply of National-IV gasoline and diesel oil to Beijing from January 2008.
- We conducted oil-gas recovery and reconstruction for 10 oil depots, 921 service stations and 169 tank wagons in Beijing, Hebei and Tianjin, to eliminate pollution from oil and gas volatilization.



### Objectives and Plans

In 2008, we will continue to, with the concept of scientific development and guided by the corporate policy of "Energize, Harmonize, Realize", implement the three strategies for resources, marketing and internationalization, accelerate the development of our main businesses and actively promote the development into an international energy company. While maintaining rapid development, we will attach great importance to the improvement of quality; while increasing economic output, we will pay attention to the improvement of efficiency; while seeking growth, we will pursue harmony with resources, the environment and the society and the alignment with the overall development of our staff, so as to enhance our integrated capacity, international competitiveness and ability to achieve sustainable development.

Item	Objectives for 2008	Action Plans for 2008
Production and supply of oil and gas products	To maintain a steady supply of oil and gas products and petrochemical products to the domestic market	<ol> <li>To implement reserve peak growth programs and discover more reserves of scale and high quality;</li> <li>To proceed with secondary development projects in mature oilfields and maintain or increase production levels, improve the efficiency of the development of new oilfields and sustain the steady growth of domestic crude oil production;</li> <li>To accelerate productivity and maintain rapid growth of domestic gas production;</li> <li>To accelerate the construction of the second West-East Gas Pipeline, proceed with the construction of the Lanzhou-Zhengzhou-Changsha oil product pipeline as planned and continue improving the capability to maintain steady market supply;</li> <li>To proceed with the adjustment of overall arrangements and structures of refining and chemical sectors, improve refining capacity, develop an overall plans for domestic and overseas resources and maintain sustainable growth of domestic crude runs and oil product production;</li> <li>To strengthen international cooperation and trading in oil and gas businesses.</li> </ol>
Production safety and environmental protection	To eliminate extra-serious accidents, minimize serious accidents, and reduce small accidents, and further decrease casualties and pollutant discharge	<ol> <li>To strictly implement the accountability system of safety and environmental protection and establish safety and environment targets and a responsibility investigation system;</li> <li>To continue with the establishment of the HSE management system, improve HSE management manuals and relevant procedures and regulations;</li> <li>To continue with the "Foundation Year of Safety and Environmental Protection" program, formulate and issue safety working orders to avoid violations and put more efforts into preventing against the "three violations";</li> <li>To fully accomplish the three-year plan for control over hidden hazards to work safety and the environment, and establish an effective hazard control mechanism;</li> <li>To enhance the management of contractor safety and the safety in key operations and critical areas and hold project owners responsible for work safety of the projects;</li> <li>To continue with the ten pollutants reduction projects, reduce the volume of waste, recycle waste into resources, make it harmless and develop a recycling economy.</li> </ol>
Resource conservation	To improve the comprehensive utilization efficiency of energy	To proceed with the ten energy-saving projects, promote innovations in energy-saving technology and replace high energy-consuming facilities and equipments;     To incorporate energy-saving and pollutants reduction as compulsory indicators of performance assessment system and establish a long-term energy-saving and pollutants reduction mechanism.

Item	Objectives for 2008	Action Plans for 2008
New energy	To take the initiative in new energy sectors	<ol> <li>To actively promote the development and utilization of non-conventional oil and gas resources such as coal-bed gas;</li> <li>To proceed with the construction of bio-energy forest bases and biodiesel from wood projects;</li> <li>To promote the production of ethanol fuel from non-grain plants, the evaluation and development of geothermal energy, and the development and utilization of wind energy and solar energy.</li> </ol>
Staff development and occupational health	To improve quality of the workforce and facilitate overall development of staff	<ol> <li>To develop a scientific staff evaluation system, improve staff selection and allocation systems, widen channels for employee recruitment and turnover, and standardize the remuneration distribution system;</li> <li>To advocate and implement the Law of the People's Republic of China on Employment Contracts, enhance staff recruitment planning, standardize staff recruitment management and optimize human resource allocation;</li> <li>To strengthen technical training, enhance employees' motivations and commitment to work, improve discipline through education and enhance employees' overall competence to perform duties;</li> <li>To improve the corporate annuity system, develop and implement employee health and welfare programs, standardize and unify welfare policy, reserve more remuneration to frontline employees and improve employees' overall working conditions.</li> </ol>
Support to soical welfare activities	To improve methods for poverty alleviation and enhance the social impact of welfare activities	To continue the engagement in social welfare activities such as poverty alleviation, disaster relief, education donation and young volunteers' activities and put more efforts on development-oriented poverty alleviation activities such as providing technology and education.

#### 1. The Global Compact

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. In July 2007, PetroChina participated in the UN Global Compact. We are committed to observe and support the Ten Principles advocated by the Global Compact in the four fields of human rights, labor rights, environment protection and anti-corruption, using the Ten Principles to guide our practices in fulfilling social responsibilities. Starting from this year, we will disclose our progress in aligning with the Ten Principles in the Global Compact in our annual report.

#### Ten Principles in the Global Compact

#### **Human Rights**

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2: make sure that they are not complicit in human rights abuses.

#### Labour Standards

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: the elimination of all forms of forced and compulsory labour;

Principle 5: the effective abolition of child labour; and

Principle 6: the elimination of discrimination in respect of employment and occupation.

#### Environment

Principle 7: Businesses should support a precautionary approach to environmental challenges;

Principle 8: undertake initiatives to promote greater environmental responsibility; and

Principle 9: encourage the development and diffusion of environmentally friendly technologies.

#### Anti-Corruption

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

#### 2. Performance Statistics

Classification	Indicator	2003	2004	2005	2006	2007
	Total assets (RMB10 <sup>8</sup> yuan)	5,570	6,384	7,781	8,722	10,60
	Total revenue (RMB10 <sup>8</sup> yuan)	3,104	3,974	5,522	6,890	8,350
	Net profit to the shareholders of the Company (RMB10 <sup>8</sup> yuan)	698	1,038	1,334	1,422	1,456
	Taxes (RMB10 <sup>8</sup> yuan)	718	957	1,188	1,614	1,772
	Proved developed and non-developed crude reserves (10 <sup>6</sup> barrels)	11,494.9	11,501.2	11,536.2	11,618.0	11,705.6
	Proved developed and non-developed gas reserves (108 tt3)	417,865	452,489	481,231	534,692	571,106
Economic	Oil and gas equivalent production (10 <sup>6</sup> barrels)	890	919	1,010	1,059	1,110
responsibility	Crude oil production (10 <sup>6</sup> barrels)	775	778	823	831	839
	Marketable natural gas (10 <sup>8</sup> ft <sup>3</sup> )	6,913	8,412	11,195	13,719	16,270
	Total length of crude pipeline (km)	9,141	9,167	9,391	9,620	10,559
	Total length of oil product pipeline (km)	2,276	2,460	2,462	2,413	2,669
	Total length of natural gas pipeline (km)	15,144	18,995	20,340	20,590	22,043
	Crude runs (10 <sup>6</sup> barrels)	621	710	752	785	824
	Ethylene production (10 <sup>4</sup> tons)	182	185	189	207	258
	Death rate caused by accident (person/million work hours	) 2.40	1.64	1.58	1.40	0.25
0-1-1	Total accident rate (number/million work hours)	0.14	0.13	0.09	0.07	0.03
Safety and environment	Oil discharged in waste water (tons)	1,481	1,585	1,219	1,131	1,00
responsibility	Energy conserved (104 tons of standard coal)				141	124
	Water conserved (10 <sup>4</sup> m <sup>3</sup> )				7,477	4,700
	Number of employees (10 <sup>4</sup> )				44.6	46.7
	Number of employees receiving occupational health checks (10 <sup>4</sup> )				13.6	13.7
Social responsibility	Contribution to poverty alleviation (RMB10,000 yuan)					14,957
	Education donation (RMB10,000 yuan)				1,645	4,549
	Donation to disaster relief (RMB10,000 yuan)				8,011	2,483

Note: unit conversion
1 equivalent barrel=1 barrel of crude=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)

#### 3. Indicator Index

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
1. Strate	gy and Analysis				
1		1.1	Statement from the most senior decision maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	•	P2-3,4,27
2		1.2	Description of key impacts, risks, and opportunities.	•	P2-3,6,7,14,31
2. Organ	izational Profile				
3		2.1	Name of the organization.	•	Cover,P4
4		2.2	Primary brands, products, and/or services.	•	P5,23,25,32
5		2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	•	P6-7
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.	•	P5,21
8		2.6	Nature of ownership and legal form.	•	P4
9		2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	•	P21,25
10		2.8	Scale of the reporting organization	•	P5,35
11		2.9	Significant changes during the reporting period regarding size, structure, or ownership	•	P4
12		2.10	Awards received in the reporting period.	•	P14,15,19,23,28,35
3. Repor	t 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.	0	
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).	0	

Page and place in the report	Involved or not involved in the report	Contents	GRI	IPIECA/ API	No.
Cover,P48,50-55	•	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	3.11		23
P50-55	•	Table identifying the location of the Standard Disclosures in the report. Identify the page numbers or web links where the following can be found.	3.12		24
P48	•	Policy and current practice with regard to seeking external assurance for the report.	3.13		25
		gement	ments and Eng	rnance, Commitm	4. Gove
P6-7	•	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	4.1		26
P2	•	Indicate whether the Chair of the highest governance body is also an executive officer.	4.2		27
P6	•	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	4.3		28
P8-9	•	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	4.4		29
P6,36	•	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	4.5		30
P7,14-15	•	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	4.6		31
P6-7	с,	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic environmental, and social topics.	4.7		32
P4	•	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	4.8	ENV-6	33
P6,14-15	•	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.	4.9		34
P6	•	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	4.10		35
P6-7,14-15	•	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	4.11		36
P24,33	•	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	4.12		37
Cover,P9,48	•	Memberships in associations (such as industry associations) and/or national/international advocacy organizations.	4.13		38
P8-9	•	List of stakeholder groups engaged by the organization.	4.14		39
P8-11	•	Basis for identification and selection of stakeholders with whom to engage.	4.15		40

### 3. Indicator Index

No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
41		4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	•	P8-11
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.	•	P8-11
Economi	c Performance Indi	icators			
43	ECO-1	EC1	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.	•	P5,10,36,41
44		EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	•	P2-3,14-15
45	ECO-1	EC3	Coverage of the organization's defined benefit plan obligations.	•	P36
46		EC4	Significant financial assistance received from government.	<b>•</b>	P4
47	ECO-A2	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	•	P36
48	ECO-1	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	<b>e</b>	P10
49		EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation.	<b>•</b>	P35
50		EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	•	P41-45
51		EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	•	P17-21,33,45
Environm	nental Performance	Indicators			
52		EN1	Materials used by weight or volume.	0	
53		EN2	Percentage of materials used that are recycled input materials.	•	P21,33,47
54	ENV-5	EN3	Direct energy consumption by primary energy source.	•	P2,30,31
55	ENV-5	EN4	Indirect energy consumption by primary source.	0	
56		EN5	Energy saved due to conservation and efficiency improvements.	•	P30-31
57		EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	•	P20,33
58		EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	•	P20,30,33
59	ENV-A7	EN8	Total water withdrawal by source.	0	
60		EN9	Water sources significantly affected by withdrawal of water.	0	
61		EN10	Percentage and total volume of water recycled and reused.	0	
62	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.	0	
63	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.	0	

	IPIECA/ API		Contents	Involved or not involved in the report	Page and place in the report
64	ENV-9	EN13	Habitats protected or restored.	0	
65		EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.		P32-33
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.	0	
67		EN16	Total direct and indirect greenhouse gas emissions by weight.	<b>⊖</b>	P31,49
68	ENV-3	EN17	Other relevant indirect greenhouse gas emissions by weight.	<b></b>	P33
69	ENV-3	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	<b></b>	P27,30-31,49
70		EN19	Emissions of ozone-depleting substances by weight.	0	
71	ENV-4/A6	EN20	NO, SO, and other significant air emissions by type and weight.	$\Theta$	P31,49
72	ENV-A6	EN21	Total water discharge by quality and destination.	<b></b>	P31
73		EN22	Total weight of waste by type and disposal method.	0	
74	ENV-1/A1	EN23	Total number and volume of significant spills.	0	
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.	•	P30-31,33
78		EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	0	
79		EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations.	0	
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.	0	
81		EN30	Total environmental protection expenditures and investments by type.	•	P31,33
Social Pe	erformance Indicato	rs			
Labor Pr	actices and Decent	Work Perfo	rmance Indicators		
82		LA1	Total workforce by employment type, employment contract, and region.	•	P35
83		LA2	Total number and rate of employee turnover by age group, gender, and region.	0	
84		LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	. 0	
85		LA4	Percentage of employees covered by collective bargaining agreements.	•	P35-36
86		LA5	Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	0	
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.	0	P13,38,39

### 3. Indicator Index

No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
88	H&S-4	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	•	P2-3,27,38-39
89		LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.		P8-9,39
90	SOC-9	LA9	Health and safety topics covered in formal agreements with trade unions.	•	P38
91		LA10	Average hours of training per year per employee by employee category.	•	P38
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.	•	P36-38
93		LA12	Percentage of employees receiving regular performance and career development reviews.	0	P35,37
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.		P6,35
95		LA14	Ratio of basic salary of men to women by employee category.	•	P35
Human F	Rights Performance	Indicators			
96	SOC-1	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	0	
97	SOC-1	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	0	
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.	0	
99	SOC-4	HR4	Total number of incidents of discrimination and actions taken.	0	
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.	•	P36
101		HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	<b>•</b>	P35
102	SOC-7	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.	•	P35
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.	•	P36
104		HR9	Total number of incidents of violations involving rights of indigenous people and actions taken.	•	P35
Society I	Performance Indica	tors			
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.	•	P33,41-45

No.	IPIECA/ API	GRI	Contents	Involved or not involved in the report	Page and place in the report
106		SO2	Percentage and total number of business units analyzed for risks related to corruption.	•	P7
107		SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	<b>e</b>	P7
108	SOC-2	SO4	Actions taken in response to incidents of corruption.	<b>\(\rightarrow\)</b>	P7
109		SO5	Public policy positions and participation in public policy development and lobbying.	<b>-</b>	P6,8,35
110		SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	0	
111		S07	Total number of legal actions for anticompetitive behavior, anti-trust, and monopoly practices and their outcomes.	•	P14
112		SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations.	0	
Product I	Responsibility Perf	ormance Ind	licators		
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.	•	P31-32
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.	•	P25
115		PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	<b>⊖</b>	P25
116		PR4	Total number of incidents of non-compliance with regulations and voluntary code concerning product and service information and labeling, by type of outcomes.	s O	
117		PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	<b>\( \)</b>	P25
118		PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	<b>\(\theta\)</b>	P10,25
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.	0	
		BBO	Total number of substantiated complaints regarding breaches of customer	0	
120		PR8	privacy and losses of customer data.		

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### 4. Glossary

Recovery ratio	The ratio of cumulative production during field producing period to original oil reserve.
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 sub-economically recoverable reserves.
Volume of marketable natural gas	The volume of natural gas that can be sold at the market, excluding natural gas flared, consumed in re-injection and lost in the course of production.
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.
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.
Workplace check rate	The annual ratio between the actual number and the due number of checks at the workplace with occupational health threats.
Serious accident	Any event which results in 3 to 9 fatalities or 10 to 49 serious injuries or poisoning cases, or an economic loss from RMB5 million yuan to RMB10 million yuan, or significant social impact.
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 excludes holidays, sick leave and other absences.
Environment	The appearance of actions and activities of organs, including air, water, soil, natural resources, plant, animal and human, as well as their relationships.
Oils (mineral oils)	Compounds of hydrocarbons in waste water. This includes all substances collected by certain solvents, as well as all substances extracted by solvents from acidified samples, which stay fixed during the experiment.
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 a heavier pollution of reductive substances in the water body.





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