



ENERGIZE · HARMONIZE · REALIZE

# 2013

## Sustainability Report

PetroChina Company Limited

CONTENTS

02	Message from the Chairman
04	Interview with the President
06	About PetroChina
08	Highlights in 2013
10	Corporate Governance
15	Communication with Stakeholders
62	Objectives and Plans
64	Performance Statistics
66	Approach to Reporting



18  
SUSTAINED ENERGY  
SUPPLY

19	Consolidating Resource Base
21	Optimizing Product Structure
21	Accelerating Construction of Pipeline Network
22	Developing Alternative Energy
23	Extending International Cooperation



24  
SAFE AND CLEAN PRODUCTION  
AND OPERATION

25	Improving HSE Management
26	Enhancing Operational Safety
29	Promoting Energy Saving and Emissions Reduction
31	Ecological Protection
33	Response to Climate Change



34  
CUSTOMER-FIRST  
MARKET SERVICE

35	Enhancing Quality Management
38	Focusing on Research and Development
39	Providing High-quality Products
41	Delivering Considerate Services
43	Stabilizing Oil and Gas Supply



44  
“PEOPLE-ORIENTED”  
EMPLOYEE DEVELOPMENT

45	Employee Rights
46	Occupational Health
47	Platform for Employee Development
49	Local Staff Development
51	Security in Overseas Operations



52  
GIVING BACK TO SOCIETY

53	Promoting Local Development
55	Poverty Alleviation
56	Supports for Education
57	Volunteer Activities
58	Contributions to Overseas Communities

## Message from the Chairman



Thank you for reading this report and for your continued support for PetroChina. 2013 has certainly proved to be an unusual and challenging year for us. The world economy has entered a period of significant readjustment, and global demand for energy has continued to grow. Competition in the oil and gas market has intensified, and this has increased the risks and challenges facing the Company's international operations. The Chinese economy is going through "three overlapping changes": a shift in the pace of economic growth, the temporary impact of structural adjustment and the absorption of China's early-stage stimulus program. Deeply-embedded structural problems and contradictions such as overcapacity and environmental limitations continued to manifest themselves, increasing the need for a change of course in the petroleum and petrochemical industries. As regards our own development, it became clear that the speed and scale of growth were out of sync with its quality and efficiency, and it was more difficult to maintain a stable growth performance. Complicated by natural disasters such as catastrophic floods, it was extremely difficult to achieve the double goal of "maintaining economic growth and efficiency". In addition, a number of senior executives of the Company

“

As the Company grows, we will actively fulfill our social responsibility to be a good corporate citizen and make new contributions to socio-economic development.

”

were put under investigation on suspicion of violations of statutory laws and regulations, which shocked the Company and the public. The above all posed unprecedented challenges.

Given these difficulties and constraints, our new Board of Directors and the top management carefully analyzed and determined current opportunities and challenges, and agreed to establish and implement a development policy that pursues quality, efficiency and sustainability, so as to establish PetroChina as a world-class international energy company by 2020. Our employees rose to the challenge and put themselves to work. As a result, our overall performance has been better than expected, with a number of highlights. We maintained good momentum in domestic exploration and production, continued to optimize refining operations, increased oil and gas sales and made strategic breakthroughs in our international operations. Technological innovation played an increasing role in driving development, and the transformation of our management and operations processes and methods continued. As part of the Company's responsibility to our shareholders, we expanded marketing communications, responded appropriately to stock price

volatility, and protected shareholders' interests. The Company enjoyed steady production levels, systematic operations and a stable workforce. We would like to express our appreciation to all stakeholders for their involvement and interest in our development and to the trust placed in the Company and our staff from society, and their recognition of our achievements, position and contributions.

PetroChina is a company that covers a wide range of businesses, has a great number of stakeholders and commands a lot of attention from the public. The Company is now going through a transition from development focused on increasing scale to development focusing on quality and efficiency. This transition constitutes a crucial juncture in our quest to build a world-class international energy company. The Company will continue its overall strategy to build on strong foundations, and pursue its development policy of quality and efficiency for sustainable growth. The Company affords top priority to the development of oil and gas operations, the deepening of corporate reform, the promotion of innovation as a driver of development, and the strengthening of management. The Company will continue to restructure, transform its methods, increase its dynamism and effectiveness, and ensure production targets are met. We will make special efforts in promoting safety and environmental protection, harmony and stability, and anti-corruption measures, and these three fundamental tasks will be prioritized to their highest level yet. In order to enhance our capabilities in risk prevention and emergency response, and improve performance in health and safety, we will continue to prioritize protecting people, the environment, safety and quality throughout production and operations. We will assign safety and environmental protection

responsibilities, widely promote personal safety action plans, and strictly implement safety and environmental measures in key areas and processes. With the objective of creating a harmonious and stable growth environment, we will spare no effort in solving the most pressing and practical issues faced by our employees, and to safeguard their legitimate rights and interests. In addition, we will strengthen contact and communication with investors, partners, customers, suppliers and other stakeholders and the public, and public welfare will be actively supported. The Company will reinforce anti-corruption mechanisms and protection by promoting the development of disciplinary procedures and preventative measures, enhancing leadership management and awareness, and increasing supervision over the exercise of power, with the aim of building PetroChina into a model of transparency and integrity.

As the Company grows, we will actively fulfill our social responsibility to be a good corporate citizen and make new contributions to socio-economic development.

Zhou Jiping, Chairman of the Board

## Interview with the President



↔ **The Company has set a goal to “become a world-class international energy company by 2020”. What is the meaning of “world class”—can you explain in more detail?**

World-class normally means the world’s average, advanced or leadership levels. When we say world-class, it means meeting the indicators of the advanced level, mastering the core technologies in the oil and gas industry, and being capable of leading industrial development and participating in the allocation of global resources. It also means having a voice in the international market and being able to influence it, and becoming a leading green and sustainable company.

We conducted a benchmark analysis in comparison with the world’s top 10 oil companies. There were 32 indicators in seven areas, including company scale, profitability, management efficiency, technological innovation, international operations, brand value and staff quality. According to this analysis, 11 of our indicators are near to or the same as the average score generated by the benchmarked companies. Of those, some indicators, including total assets, operating income, refining capacity and market capitalization, gain a higher score than the average of the top five benchmarked companies, ranking us as at a leading level. Some of our dominant upstream technologies are world leading, while our brand value and credit rating are at an advanced level. In addition, we enjoy comparative advantages such as the integration of upstream and downstream operations and a unique culture. At the same time, nearly two-third of our indicators have yet to reach the average of the benchmarked companies, particularly in terms of profitability, management efficiency, technological innovation,

international operations and overall staff quality. While we are modest, we are determined to address these gaps, acknowledge our deficiencies, and to improve our quality and efficiency, and catch up even faster than we are doing now.

↔ **The goal is to “become a world-class international energy company”. What are your objectives and specific measures to achieve this?**

We have established the following six objectives: to maintain our lead in total asset size and our advanced operating performance level, to enjoy clear advantages from technological innovation, to conform to international-level management standards, to become a world-renowned brand, and to have an excellent quality of staff.

To achieve these objectives, we need to prioritize a few key areas, integrate strategies and promote them in a holistic manner.

First, we must adjust and optimize the business structure, continue promoting the construction of five key domestic oil and gas production areas, try our best to gain economies of scale in reserves and to achieve efficient production. We should accelerate the development of natural gas operations as they are strategic, growing and value-added, and we must work hard to increase the overall value of natural gas operations. We should consolidate and expand major areas of overseas oil and gas cooperation, complete the four major oil and gas channels, build three oil and gas international operations centers, and keep improving the capabilities of international operations. Refining operations and marketing networks should be adjusted and optimized to speed up closing the gap between us and the world’s advanced level companies and enhance our value.

Second, we must promote innovation-driven development, continue the three technological innovation projects, and accelerate the development of major technologies that can be internationally-competitive. We must also accelerate the application of the results of technological achievements as well as their standardized utilization, actively establish an open and inclusive platform for technological innovation, widely promote the development and application of information technology, and develop the ability to lead the technological development of the industry.

Third, we should promote our development through our staff. This means intensifying our efforts to develop and bring in high-level talent, to make the most of our employee’s strengths and avoid taking a one size fits all approach to staff utilization. We should also strengthen staff training to enhance overall quality, and turn our rich human resources into a competitive advantage.

Fourth, we should regulate the company’s management, integrate traditional and modern management models, improve management standardization platforms, and improve basic

management skills such as quality, measurement, standardization, and systems and processes. The Company will optimize investment management, implement strict cost management, closely control operational risks, work hard to improve operational quality and efficiency, and improve the level of modernization, international management and management performance. At the same time, we should strengthen our branding, actively fulfill our social responsibilities, act as a good corporate citizen, and work hard to build PetroChina into a world-famous brand.

↔ **The Chinese government has put forward wide-ranging requirements to deepen overall reform. What do you think of the reform, and how can it be achieved?**

The Chinese government has announced its decision and arrangements for comprehensively deepening reform, which is of far-reaching significance. The deepening of reforms provides a fundamental solution to many issues we face. We will pay attention to the overall plan regarding company reform requirements, and deepen reforms through regulating business decision-making, maintaining and increasing the value of assets, participating in fair competition, increasing business efficiency and company dynamism, and fulfilling social responsibilities, so as to develop modern and international corporate governance systems and management capabilities. By 2020, a corporate governance system suited to a world-class international energy company will be established and improved, which will add dynamism to our institutional mechanisms and systems and promote a sophisticated and standardized system of management, scientific and rational business structures, industry-leading business models, and clear competitive advantages in the market.

We will deepen reforms and make substantial breakthroughs in the following six major areas. First, by optimizing and improving our corporate governance model; second, by deepening ongoing reorganization and restructuring; third, by establishing and improving market mechanisms; fourth, by improving the systems and mechanisms for technological management; fifth, by deepening reforms in the allocation of personnel and labor; sixth, by establishing a robust mechanism for the limitation and supervision of the exercise of power. In 2014, we will take part in the reform and reorganize where conditions permit by giving top priority to the most common concerns of the employees and the public and the most prominent unresolved issues.

↔ **In 2013, as many eastern regions in China were shrouded in smog for a long time, the Chinese government published its *Action Plan for the Prevention and Control of Atmospheric Pollution*. What measures has PetroChina taken to support the building of an “ecological civilization”?**

Guided by our mission to “Energize, Harmonize, Realize”, PetroChina is dedicated to becoming a leader in green and sustainable

development, so as to build an ecologically civilized society together with all sections of the community.

Smog is caused by both meteorological conditions and pollution emissions. As a major supplier of clean energy in China, PetroChina actively fulfills its social responsibility to prevent and control air pollution by developing natural gas, accelerating oil product upgrades, and promoting clean production.

First, we will actively develop natural gas. In 2013, our natural gas supply accounts for about 70% of China’s natural gas consumption, playing an important role in rebalancing China’s energy mix.

Second, we will promote the utilization of natural gas terminals. We will actively promote the use of LNG trucks and ships for urban public transport, long-distance passenger transport, and logistics and transportation in the Bohai Rim, Yangtze River Delta and Sichuan-Chongqing Region.

Third, we will complete on schedule the 10 major energy security projects covered in the *Agreement for Fulfilling the Task of Major Energy Security Projects for Atmospheric Pollution and Prevention in the Capital*, including the third and the fourth Shaanxi-Beijing pipeline projects, the Beijing Section of the Datang coal-to-gas pipeline project, and the Enhanced Production Project at Changqing Oilfield.

Fourth, we will upgrade the quality of oil products. All our motor gasoline products have reached the National IV standard. We have started the upgrade of gasoline to the National V standard ahead of schedule.

Fifth, we will contribute to a greener society by promoting clean production, with a focus on emission reduction projects such as desulfurization and denitrification in power plants, flue gas desulfurization in FCC units, greenhouse gas controls, and clean fuel alternatives. We will remove nitrogen oxide, sulfur dioxide and dust from fuel gas, launch projects for the comprehensive treatment of oil and gas volatilization, and greatly reduce the volatilization of organic hydrocarbons during gasoline storage, transport and marketing.

Wang Dongjin, President



About PetroChina

PetroChina Company Limited (PetroChina, here in after also referred to as “the Company”, “we” or “us”) was established on 5 November, 1999, upon the restructuring of China National Petroleum Corporation (CNPC).PetroChina was listed on the NYSE (ADS code: PRT) and the HKEx (stock code: 00857) in April 2000 and on the Shanghai Stock Exchange (stock code: 601857) in November 2007, respectively. As of 31 December 2013, CNPC held over 86% of PetroChina’s shares.

PetroChina is not only a major oil and gas producer and distributor in China, but also one of the largest oil companies in the world. It engages in a wide range of activities related to oil and natural gas and provides sustainable energy for soci-economic development. We pursue harmonious relationships between energy and the environment, production and safety, industry and the community and employers and employees.

Our Mission	Energize, Harmonize, Realize
Our Vision	To be a world-class international energy company by 2020
Business Strategy	Resources, Markets, Internationalization
Our Values	Honesty, Innovation, Safety and Distinction

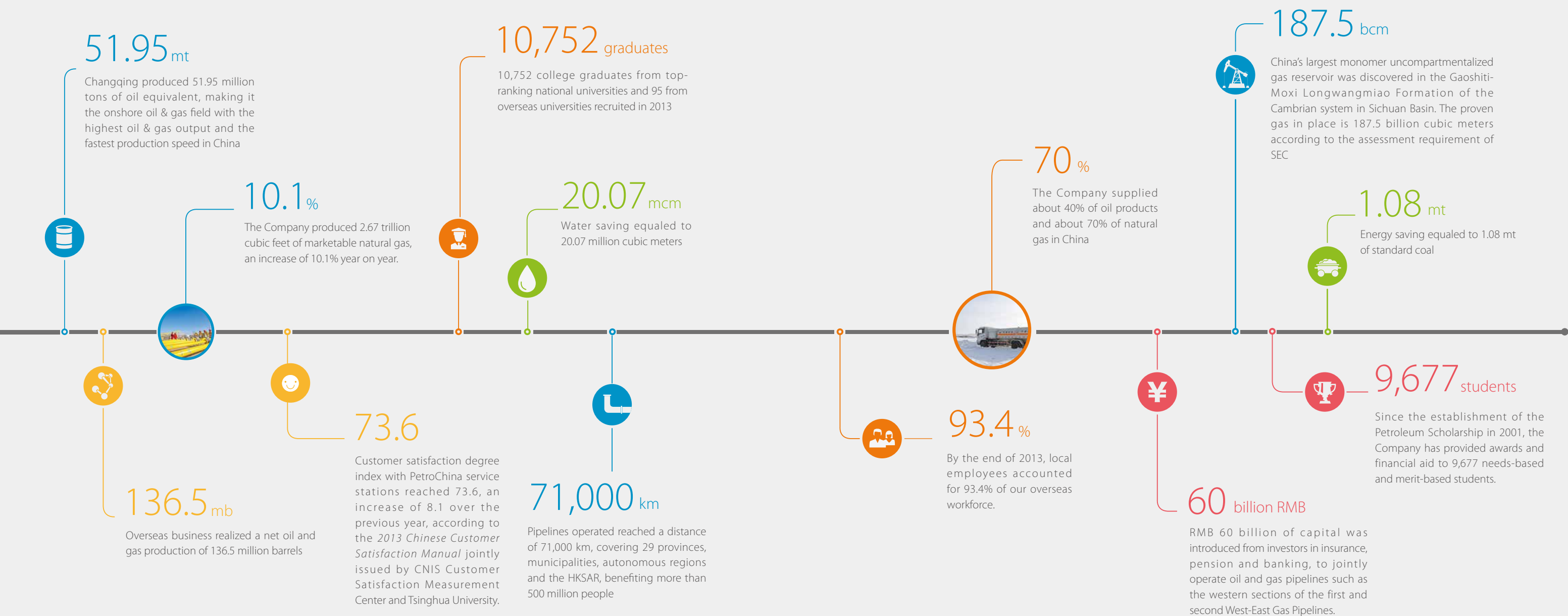
Rankings and Awards in 2013

Agency or Publication	Rankings and Awards
Financial Times	4th in Global top 500 enterprises
Platts Energy	8th in Top 250 global energy companies
Forbes	9th in the global top 2000 enterprises
BrandZ	65th in Top 100 Most Valuable Global Brands 3rd in Top 10 Most Valuable Global Oil & Gas Brands 11th in Top 50 Most Valuable Chinese Brands
Finance Asia	2012/2013 Finance Asia 100 List 3rd by aggregate profit over the past three years 1st by market capitalization 3rd in regional ranking (China) 3rd in FinanceAsia's list of credit rankings 8th in Best Corporate Social Responsibility - Asia's Best Managed Company 10th in Most Committed to a Strong Dividend Policy - Asia's Best Managed Company 1st in Natural Resources Industry - Asia's Best Managed Company
Asia Week	1st in 1000 world Chinese businessman list, The largest oil and energy companies in 1000 world Chinese businessman list
Corporate Governance Asia	The most potential companies corporate governance in Asia
Fortune China	2nd in Fortune China's 500 list in 2013
Booz	64th in 2013 global top 1000 innovation

Core Business

 <div>Upstream</div> <p>Our upstream business includes the exploration, development and production of crude oil and natural gas.</p>	<b>Oil and Gas Exploration, Development and Production</b> <p>As the major oil and gas producer and supplier in China, PetroChina takes a leading position both in domestic oil and gas exploration and development business, and in oil and gas production and reserves in the world. We operate in a number of major oil and gas producing regions such as Daqing, Changqing, Xinjiang, Liaohe, Tarim and Sichuan. By the end of 2013, our oil and gas production accounted for more than 60% of total domestic oil and gas production.</p>
 <div>Mid-Downstream</div> <p>Our midstream and downstream business includes refining, transportation, storage and marketing of crude oil and oil products, as well as production and marketing of basic, derivative and other chemical products; and transportation and marketing of natural gas.</p>	<b>Refining, Transportation, Storage and Marketing of Crude Oil and Oil Products</b> <p>We are the main petroleum refiner and distributor of oil products in China. In 2013, we owned seven ten-million-ton-level refining bases in China, processed 133.967 million tons of crude oil, produced 90.013 million tons of oil products, operated over 20,000 gas stations covering 31 provinces (municipalities and autonomous regions) and the HKSAR of China, and undertook the supply of about 40% of China’s oil products.</p>
	<b>Production, Transportation and Marketing of Petrochemical Products</b> <p>We are one of the major producers and suppliers of petrochemical products in China. The Company is engaged in producing six categories of chemical products- synthetic resin, synthetic fiber and raw materials of synthetic fiber, synthetic rubber, urea, organic and inorganic compounds with thousands of trademarked products. Our production capabilities of products such as ethylene, synthetic resin, synthetic rubber, synthetic and fiber ranked among the best in China. In 2013, we sold over 25 million tons of chemical products, and produced 3.98 million tons of ethylene.</p>
	<b>Transportation of Natural Gas, Crude Oil and Oil Products, and Distribution of Natural Gas</b> <p>As major pipeline transportation service provider in China, PetroChina is mainly responsible for transportation and marketing of natural gas, and storage and transportation of crude oil and oil products. The Company operated 71,000 km of pipelines in China, covering 29 provinces (municipalities and autonomous regions) and the HKSAR in China.</p>
 <div>International Business</div> <p>Our international business covers oil &amp; gas exploration, production and trade in nearly 30 countries.</p>	<b>International Business</b> <p>We maintain an international approach in our strategy to become a world-class international energy company. Currently, we have established five international oil and gas cooperation zones in the Middle East, Central Asia, Asia-Pacific, the Americas and Africa, and three oil and gas operation centers in Asia, Europe and the Americas. The expansion and growth of our international oil and gas cooperation has been substantial in terms of size and scope, with international businesses growing rapidly.</p>

# Highlights in 2013



# Corporate Governance

Improving its corporate governance is a continuous and far-reaching process. The Company will make unrelenting efforts to further improve its internal authorization and power restraint mechanism to enhance corporate governance and to promote efficient management and long-term operations in compliance with all legal requirements.

As one of the first Chinese companies to be listed on both the Hong Kong and New York stock exchanges, PetroChina has set itself the goal of being a market-oriented enterprise following international best practices. Since its debut, PetroChina established its corporate governance structure in compliance with international rules and regulations, including the Annual General Meetings of shareholders, the establishment of a Board of Directors with its affiliated committees, a Supervisory Committee, and the executive management led by the President. These management structures operate in compliance with domestic and foreign regulatory requirements.

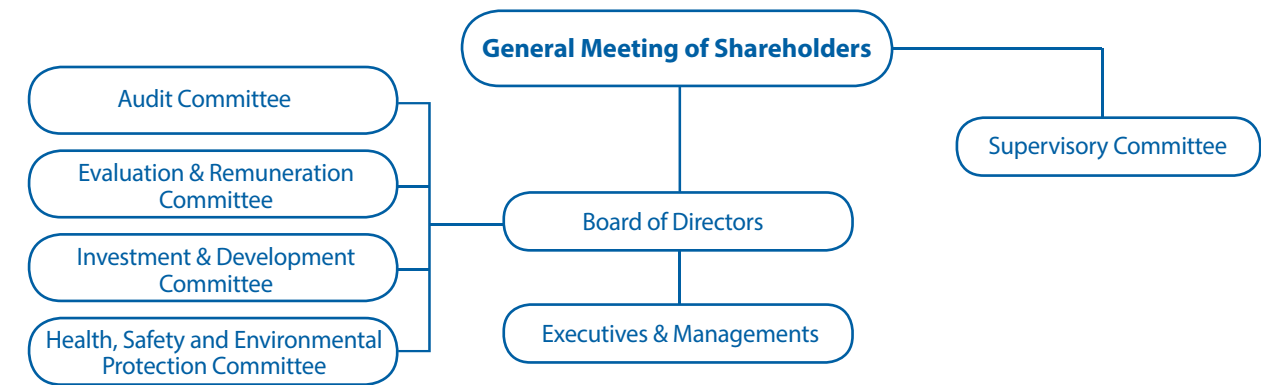
The Company integrates sustainable development into its overall strategy and follows a policy of quality, efficiency and sustainable development, with the intention of building an international energy enterprise and adopting green and sustainable

development. The foundations of our corporate governance are safety and environmental protection; harmony and stability and anti-corruption. We have revised and improved the strategic roadmaps and evaluation methods of the Company and its subsidiaries. To carry out the Company's goals of development and strategic objectives, we have charted nine guidelines as well as 590 assessment indicators and work programs which will gradually be applied to performance appraisals for senior and middle managers.

Management solicits suggestions on sustainable development from the general public and keeps itself well informed by holding face-to-face meetings, site visits, investor FAQs, and communication via mass media. In addition, the sustainability performance is assessed, and the content of sustainability report is also reviewed on a regular basis.



## 1. Corporate Governance Framework



### Shareholders' and Annual General Meeting (AGM)

The general meeting of stockholders is the top authority in the Company and acts in accordance with the laws. PetroChina's general shareholders' meetings are held annually and all shareholders enjoy equal privileges to exercise their rights. As the controlling shareholder of PetroChina, CNPC will abstain from voting when a connected transaction is presented to the general meeting for consideration in order to ensure fairness.

Board of Directors for consideration. Once deliberated on and approved by the Board, the list of nominees shall be submitted to the General Meeting for election. Written nomination is required from the Chairman of the Board for the nomination of the Company's President when proposed by the Company's Chairman. For all other senior management positions, written nomination from the President is required. The Company also considers establishing the Board Nomination Committee in a proper time.

### Board of Directors and its affiliated Board Committees

The Board of Directors and its affiliated committee board members are selected by shareholders at the AGM and are accountable to shareholders. The board has several committees: the Audit Committee, Evaluation & Remuneration Committee, Investment & Development Committee and the Health, Safety and Environmental Protection (HSE) Committee, all of which advise the board on its decisions. A board director serves a three-year term, after which they may run for re-election. Shareholders with 3% or more of the Company's voting shares may submit a written proposal to the General Meeting prior to the convening date with their intent to nominate a director for candidacy and the candidate's acceptance of the nomination. Appointment and removal of board members and senior management is carried out according to the *Articles of Association of the Company*.

In 2013, we improved the procedures for the appointment and removal of directors and executives. The list of candidates for director and executive positions shall be submitted to the

- Pursuant to the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited*, the positions of Chairman and President are served by separate individuals, currently Mr. Zhou Jiping and Mr. Wang Dongjin respectively.
- According to our *Board Diversity Policy*, nominees to the board are considered based on the needs and requirements of the Company, as well as the candidate's age, educational background and professional experience.
- The Board of Directors has 11 members, five of whom are non-executive independent directors, making up more than one-third of the Board. These independent directors are from different countries and technical backgrounds, including petroleum and petrochemical, accounting, finance, international investment and portfolio management.

Supervisory Committee

As specified in laws and administrative regulations, the Supervisory Committee is responsible for carrying out the duties of the AGM, such as attending supervisory committee meetings, participating in all board meetings, reporting to the AGM, and preparing proposals and reports for the Supervisory Committee. The committee supervises and monitors the legal compliance of finance officials, directors and senior management of the Company in order to ensure their responsibility to all shareholders. As of the end of 2013, the Company's Supervisory Committee has eight members, with three employees and two independent members being involved.

Executive Body

The Company's executive management body consists of a Vice President and a CFO presided over by the President. They are appointed by and accountable to the Board of Directors, and are responsible for carrying out the board's resolutions and day-to-day business operations as authorized under the *Articles of Association* and the Board of Directors. The Company has a two-tier executive governance organization for the headquarters and local offices, and a three-tier business structure consisting of the headquarters, subsidiaries and local operations. We have four core business operations: exploration and production, refining and chemicals, marketing, and natural gas and pipelines.

Anti-Corruption Measures

The Company continues to establish effective anti-corruption measures and exercises power with scientific decision-making, resolute execution and effective supervision. With these measures in place, the Company has established a unique anti-corruption system that is compatible with that of a modern enterprise. In order to improve anti-corruption measures, in 2013, the Company improved supervision and inspection and internal supervision. To strengthen anti-corruption measures, the Company implemented a new policy to perform special inspections regarding the implementation of especially important decisions concerning the appointment and dismissal of key officials and executives, investment arrangements for major projects, and decisions concerning large amounts of funds. We give full importance to the role of supervision

departments through joint meetings, enhanced supervisory power, and improving overall methods of supervision. We use our information platforms to strive for innovation in anti-corruption education and explore effective ways to prevent and control corruption through information technology. We have established and improved business management systems with a focus on the supervision management system for investment management, materials procurement, bidding and marketing, in order to strengthen the supervision and inspection of major engineering projects and overseas projects. We have also researched and investigated lines of accountability of the senior management to ensure that irregularities, violations or fraud would be investigated and disciplinary measures are carried out if necessary.

2. Management System

The Company's management approach stresses efficiency, specialization and integration to develop and improve internal control mechanisms that are accountable, rational, streamlined and dynamic to improve corporate social responsibility, performance and achieve sustainable growth. The Company proactively seeks out and integrates the guidance of independent directors to improve management practices.

Internal Control and Risk Management System

The company attaches great importance to internal controls and risk management. We strive to improve and integrate our internal control systems and integrate them into business management in order to achieve our development strategy and improve competitiveness. We have put into effect a basic management platform for regulating and improving management through the establishment and operation of our internal control systems. Since the establishment of the system, the Company has been working hard to enhance work-flow and risk awareness, strengthen major risk controls, regulate technical processes, improve evaluation quality and ensure its continual and effective operation.

The Company has been continuously strengthening supervision. It has established a supervision and inspection mechanism featuring daily self-inspection by operators, self-tests by local companies, testing by management, and external auditing. Furthermore, a management mechanism for testing-corrections-retesting has been established in order to strengthen process control and implement rectification measures effectively. We have developed assessment methods and test specifications, and achieved standardized and institutionalized internal control testing and appraisal. At the end of 2013, the Company had passed the internal control audit performed by external auditors for seven consecutive years. Its internal control system operated in a sustained and effective manner.



Promoting Anti-Corruption Construction

PetroChina makes unremitting efforts to combat corruption, promote integrity and stay vigilant against degeneration. We persist in combating corruption in an integrated way, addressing both its symptoms and root causes, and combining punishment and prevention, with an emphasis on the latter. We promote anti-corruption education, accelerate institutional building, strengthen supervision

and inspection of the exercise of power, conduct case investigation, and strictly implement the anti-corruption accountability system. As a result, new progress has been made in improving the “system + technology” anti-corruption system and in exploring the general pattern of supervision.

- 2013 Anti-corruption conference was held to establish the general guidelines and requirements for anti-corruption measures
- Video conferences for senior management were held to further implement the requirements for anti-corruption
- The relevant documents on eliminating corruption were issued to further specify the concept and systems of anti-corruption
- Meetings were held to identify typical problems and announce the Company's decision to punish individuals in violation of discipline
- Audit reporting systems are established to report major problems or defects to the management



### 3. Ethical Business Practices

We treat our business partners, customers, suppliers, contractors and counterparts with respect and equality. We oppose any form of commercial bribery and require our business partners (including contractors and suppliers) to follow the Company's anti-bribery and anti-corruption policies, including, among other things, no acceptance of any gift or entertainment with an illegal or inappropriate nature, no abuse of one's position in signing business contracts for personal gain or other illegal or immoral benefits, no disclosure of insider information, and no insider trading. Moreover, we never conduct, participate in or support any forms of money laundering.

The Company strictly abides by all the applicable laws and regulations on business competition in the jurisdictions where we operate to maintain a fair and open business competition environment. While conducting international trading, we strictly follow the local import and export regulations, as well as trade protocols. We never enter into any cartel with competitors to agree on matters such as market allocation, price fixing, costs and profits. On the contrary, we respect the principles of openness and transparency in the bidding process, only obtaining information publicly available or can be acquired through legitimate means.



## Communication with Stakeholders

We are dedicated to improving quality and efficiency to maximize returns to our shareholders and value for our stakeholders, to achieve our common goal of harmonious and mutually beneficial growth.

Gaining our stakeholders' trust and support is fundamental to us building a sustainable business. We actively perform our obligation of information disclosure, and provide the public with timely, accurate, complete and reliable information through various means according to the *Articles of Association*, as well as laws, regulations and regulatory requirements where the Company is listed. We solicit suggestions from stakeholders, and respond to these suggestions and make improvement accordingly. We improve the management and systems for information disclosure of significant events, and document every opinion and suggestion, and channel them to relevant departments, so that the Company is aware of the needs of the stakeholders.

We take the initiative to publish corporate information, and disclose important information through periodic reports and interim reports. We published our prospectuses, offering memorandums, listing announcements, annual reports, 20-F Form, interim reports, quarterly reports, and Social Responsibility Report ("Sustainability Report"), which cover information on the development of our technology, safety, clean energy, energy-saving, environmental protection and governance performance. Upon the occurrence of a major event, we issue a notice promptly to provide our shareholders with the latest information. We continue to improve our website design with new columns and updates, and introduce

interactive features such as the "Investor FAQs". We also respond to investors' questions and solicit shareholders' opinions through the E-interactive Platform of the Shanghai Stock Exchange. Moreover, we enhance communication with the media through press releases. At least three press conferences and media briefings are held annually. In addition, different forms of media visits and communication are provided to attend to external concerns.

We keep close contact with stakeholders, perform roadshows and participate in various types of investment conferences, and meet financial analysts and fund managers. We give investors the opportunity for meetings with executives and site visits to better understand the Company's management, performance and development strategies, and to foster confidence and trust. We invite individual shareholders to attend the AGM to give minority shareholders an opportunity to engage with the Board of Directors and executive managers.

In 2013, IR Magazine listed PetroChina in the world's top 50 companies with best investor relations and *Institutional Investor* ranked us third among Asian companies for best investor relations in the energy industry.



Stakeholders	Expectations	Communication Approach	Key Actions
Governments	<ul style="list-style-type: none"> <li>• Stable energy supply</li> <li>• Harmonious economic and social development</li> <li>• Leading role of brand and technology</li> <li>• Tax payment according to law</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in discussions on formulation of policies, regulations and standards, and offer company expertise</li> <li>• Attend to public concerns and improve corporate behavior</li> <li>• Launch strategic cooperation with relevant departments</li> <li>• Attend seminars and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Behave legally and ethically, and abide by the applicable laws and regulations in the jurisdictions where we operate</li> <li>• Stabilize oil and gas supplies</li> <li>• Pay close attention and play an active role in policy discussions on climate change, energy conservation and emission reduction</li> <li>• Promote local employment and cultivate local talents</li> <li>• Pay taxes</li> </ul>
Shareholders	<ul style="list-style-type: none"> <li>• Standardized corporate governance</li> <li>• Stable business growth</li> <li>• Sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• Fulfill requirements on statutory information disclosure</li> <li>• Roadshow activities</li> <li>• Issue reports and announce results performance on a regular basis</li> <li>• Launch an “Investor FAQs” mailbox to receive public opinions</li> </ul>	<ul style="list-style-type: none"> <li>• Operate in a responsible manner to maintain a good reputation</li> <li>• Convene annual general meetings</li> <li>• Equal treatment of shareholders, and value opinions of both small and medium sized shareholders</li> <li>• Hold dialogues with investors and shareholders in various ways</li> </ul>
Employees	<ul style="list-style-type: none"> <li>• Basic rights guaranteed</li> <li>• Professional development</li> <li>• Growth in wages and benefits</li> </ul>	<ul style="list-style-type: none"> <li>• Employee representatives on the Supervisory Committee</li> <li>• The establishment of trade unions at all levels</li> <li>• Convene employee representatives’ meetings</li> <li>• Organize employee training programs</li> <li>• Set up a complaints and feedback system</li> </ul>	<ul style="list-style-type: none"> <li>• Develop employee knowledge and skills and organize vocational skill competitions</li> <li>• Conduct occupational health checks</li> <li>• Promote local employment in overseas operations</li> <li>• Strengthen grassroots connections and provide a career development platform for employees</li> <li>• Protect employee safety in overseas operations</li> </ul>
Consumers	<ul style="list-style-type: none"> <li>• Provide safe, environmentally friendly, high-quality products and services</li> <li>• Constantly improve the quality and variety of services</li> <li>• Operate with integrity</li> </ul>	<ul style="list-style-type: none"> <li>• Carry out activities to protect consumers’ interests</li> <li>• Publicize commitment to quality services</li> <li>• Provide hotline services</li> <li>• Conduct customer satisfaction surveys.</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen quality management</li> <li>• Hold a Quality Month activity</li> <li>• Develop an appraisal methodology for the quality management system</li> <li>• Improve service quality at service stations</li> <li>• Increase the supply of clean fuel, such as natural gas, high-standard gasoline and diesel</li> <li>• Secure oil supplies for disaster relief and agricultural production</li> </ul>
Business partners	<ul style="list-style-type: none"> <li>• Fair and transparent procurement</li> <li>• Win-win cooperation</li> </ul>	<ul style="list-style-type: none"> <li>• Hold tendering meetings</li> <li>• Hold large cross-border business negotiations and technical exchange meetings</li> <li>• Use the electronic trading platform</li> <li>• Engage sharing managerial practices and technical standards;</li> <li>• Conduct contract negotiations and routine meetings</li> <li>• Hold training for business partners</li> <li>• Conduct daily operation meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Strengthen centralized procurement management to provide suppliers with equal opportunities and establish PetroChina’s strategic supplier system</li> <li>• Enhance communication and coordination with contractors and strengthen the HSE management of contractors by creating a safe and healthy working environment</li> <li>• Improve security measures and the emergency response network</li> <li>• Promote open investment</li> </ul>
NGOs	<ul style="list-style-type: none"> <li>• Improve sustainable management</li> <li>• Perform social responsibilities such as poverty alleviation and environmental protection</li> </ul>	<ul style="list-style-type: none"> <li>• Share the Company’s experiences</li> <li>• Participate in NGO activities</li> <li>• Promote international communication</li> </ul>	<ul style="list-style-type: none"> <li>• Submit a progress report to UN Global Compact</li> <li>• Attend to external concerns through various forms of communication</li> <li>• Play an active role in participating in and supporting international environment standardization</li> <li>• Participate in a wide range of forums and conferences</li> </ul>
Communities	<ul style="list-style-type: none"> <li>• Promote employment growth</li> <li>• Protect community environment</li> <li>• Promote economic development in the community</li> <li>• Respect cultural traditions of the community</li> </ul>	<ul style="list-style-type: none"> <li>• Hold dialogues with local communities</li> <li>• Organize community visits</li> <li>• Conduct social and environmental impact assessments</li> <li>• Promotion of education</li> <li>• Increase information disclosure</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in disaster relief and reconstruction, and provide financial support for education and poverty alleviation</li> <li>• Support and drive local economic growth through large projects</li> <li>• Supply clean energy, e.g. natural gas, to remote regions</li> <li>• Hold volunteering activities among employees</li> <li>• Procure locally, where the business is carried out</li> <li>• Provide job opportunities and training for the local community</li> </ul>



01

## SUSTAINED ENERGY SUPPLY

Energy is fundamental to socio-economic development. As an integrated energy company, our mission is to meet the increasing energy demand, fuel economic growth and promote social progress.

## Our Sustainable Energy Future

The world we live in is facing economic, social and environmental challenges to sustainable development. It is estimated by the United Nations that the world population will reach 9.6 billion by 2050, and as the developing countries are experiencing faster urbanization, demand for energy, water, health, public services and education grows continuously. However, it is more difficult to develop traditional hydrocarbon resources globally, and production costs continue to grow. The energy industry is confronted with increasingly prominent environmental challenges. Reducing greenhouse gas emissions and maintaining the global ecological balance are closely related to the continuous growth of the global economy and prosperity.

As the major oil and gas producer and supplier in China, PetroChina has always given priority to sustainable development at the core of our strategy. By adopting a policy of high quality high efficiency to achieve sustainable development, PetroChina has been consolidating its resource base through technological and management innovation. To ensure a sustainable supply of energy, we accelerate gas development, explore unconventional energy and supply more clean energy. We also expand international cooperation, optimize global businesses, and meet increasing global energy demand in a cleaner and greener way, serving the socio-economic development.

## 1. Consolidating Resource Base

Oil & gas resources are essential for building supply capacity and the foundation for our sustainable business growth. Thus, the resource strategy is our top priority. We have implemented our reserve-growth peak initiatives, to acquire economic and quality reserves and to consolidate the resource base.

### Domestic Oil and Gas Reserves Grew Stably

In 2013, the Company focused on key basins and target zones, strengthened pre-exploration and overall evaluation, accelerated exploration of unconventional resources, conducted technical problem-solving and advanced technology reserve research for lithology, foreland, carbonatite and mature exploration areas, and made significant achievements in key target areas such as Sichuan, Ordos, Tarim, Junggar, Qaidam and Bohai Bay basins. China's largest monomer uncompartmentalized gas reservoir was discovered in Gaoshiti-Moxi Longwangmiao Formation of the Cambrian System in the Sichuan Basin. The proven gas in place is 187.5 billion cubic meters according to the assessment requirement of SEC for hydrocarbon economic recoverable reserves. Our reserve replacement ratio is 1.06, according to an independent third-party review.

### Domestic Crude Output Maintained Steady Growth

In 2013, the Company accelerated commissioning of new capacity building projects, pushed on with water flood, secondary development and significant development tests, and implemented testing for large-scale development of tight oil. Our full-year domestic crude output was 110.846 million tons. Daqing Oilfield maintained stable oil production of over

40 million tons for 11 years in a row, and Changqing Oilfield realized 51.95 million tons of oil equivalent.

### Rapid Growth in Domestic Natural Gas Production

In 2013, we enhanced our operation in key gas areas and major projects, and optimized our operations to boost gas production, especially at the Sulige Gasfield in Changqing, and Dabei and Keshen Gasfields in Tarim. We also improved the CBM drainage and production system, and promoted shale gas development testing. Domestically, we produced 2.67 trillion feet cubic meters of marketable natural gas, an increase of 10.1% year on year.





## Dialogue with Stakeholders

**Q: It is said that gas development prospects in China are quite positive. Would you like to elaborate on that?**

A: Global natural gas demand, as forecasted by authoritative agencies, will reach 5.1 trillion cubic meters by 2035. By that time, natural gas will have become the world's largest energy source, exceeding both coal and oil. In the past 20 years, natural gas has become increasingly important, with annual consumption

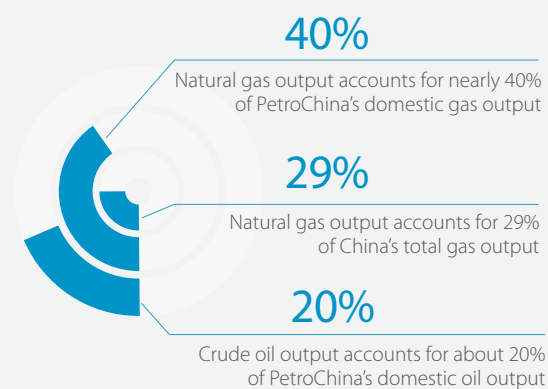
growth averaging 4.2%, or twice as fast as that of oil during the same period. In 2012, global gas consumption reached 3.31 trillion cubic meters, and global gas production approached 3.4 trillion cubic meters, with a rapid development speed which is second only to coal. From a global perspective, the reserve-production ratio of gas is significantly higher than that of oil. Therefore, the growth potential of natural gas is very high. Currently, gas consumption only accounts for 5-6% of China's primary energy consumption, compared to the global average level of approximately 24-25%. As a result, natural gas development enjoys a very good prospects in China.

## Case Study Oil & Gas Output of Changqing Oilfield Maintained Rapid Growth

The national economy's demand for energy is increasing substantially as China experiences more rapid industrialization and urbanization. However, the mature oilfields in eastern China have entered their mid and late development stage. Therefore, to build itself into an energy base in western China, Changqing Oilfield applied technologies such as horizontal well drilling and volume fracturing in the Ordos Basin featuring "low permeability, low pressure and low abundance", pursued integration of exploration and development, accelerated information renovation of the production and organization mode, and actively conducted domestic and international cooperation. Over the past decade, oil & gas output and reserves have maintained rapid growth. In 2013, Changqing Oilfield produced 51.95 million tons of oil equivalent, becoming the onshore oil & gas field with the highest output and the fastest production speed in China. Natural gas output witnessed rapid growth, and reached 34.68 billion cubic meters, increasing by nearly 20% over the previous year. Changqing Oilfield increased the supply of clean energy, which helped improve the

ecological environment. The production growth of Changqing Oilfield has enhanced China's oil productivity and guaranteed the national energy supply through an oilfield development pattern with Changqing in the west and Daqing in the east.

Changqing Oilfield 2013



## Dialogue with Stakeholders

**Q: What is the significance of Changqing's achievement of 50mt production in 2013?**

A: The fast growth and sustained efficiency of Changqing Oilfield reflect PetroChina's overall concept of "adhering to strategic development and focusing on quality and

efficiency". Natural gas production, in particular, accomplished double-digit growth. This has reinforced the Company's confidence in improving oil and gas supply capability through domestic production. Stepping onto the new starting point of 50mt production, and aiming at becoming a world-class modern oilfield, Changqing Oilfield will continue to pursue high quality and high efficiency sustainable development by arranging the production level pace and investment scale in a scientific manner.

## 2. Optimizing Product Structure

To meet society's growing demand for high-quality oil products, the Company has optimized its processing route and product structure based on market demand, and adjusted its diesel-gasoline ratio in a timely manner. We increased production of high-grade gasoline and jet fuel, and strived to enhance quality and efficiency. The allocation of refining resources has also been further optimized.

## 3. Accelerating Construction of Pipeline Network

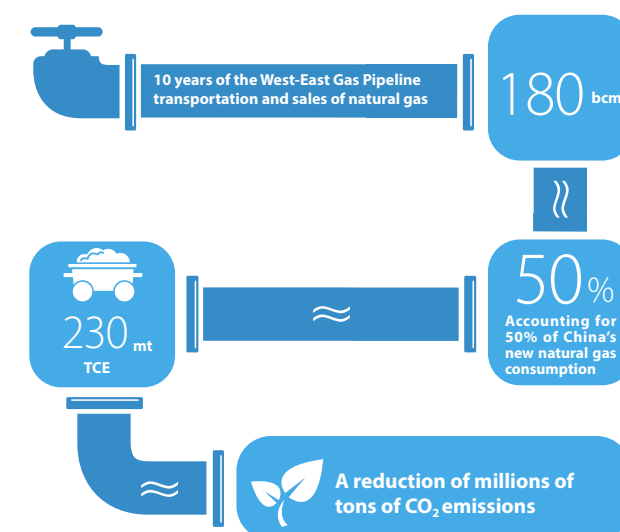
Pipeline transportation is the fifth transportation mode after waterways, roads, railway and air transportation. It is a more efficient, energy-saving, safe and environmentally-friendly way to enhance oil & gas transportation capacity. We keep expanding the oil and gas pipeline network to boost our capacities in transportation and allocation. This has further guaranteed the oil and gas supply for civilians, public utilities and industrial users.

### Improving Domestic Pipeline Network

In 2013, several domestic oil & gas pipelines were completed and became operational, including the Lanzhou-Chengdu Oil Pipeline, the Horgos-Urumqi-Lianmuqin section and Zhongwei-Guiyang connecting line of the Third West-East Gas Pipeline, and the section of Lanzhou-Zhengzhou-Changsha Oil Product Pipeline at the south of the Yangtze River. In addition, the Second West-East Gas Pipeline began to supply gas to Guangxi and Hong Kong, and the Jinzhou-Zhengzhou Oil Product Pipeline was under construction as planned. Gas storages facilities such as Hutubiin in Xinjiang, Suqiao in North China and Xiangguosi in Southwest China were completed with gas injection, enhancing the Company's emergency peak-shaving capacity. By the end of 2013, the Company has basically developed a nationwide network for oil & gas transportation connected to overseas countries, and operated pipelines with a total distance of 71,000 km, covering 29 provinces (municipalities and autonomous regions) and the Hong Kong Special Administrative Region in China, and benefiting over 500 million people.

### Expanding Transnational Oil and Gas Transportation Channels

In 2013, PetroChina continued to expand the transnational oil and gas transportation channels and promoted the construction of LNG receiving stations, in order to better connect the resources with the markets. The Tangshan LNG receiving terminal was completed and became operational, increasing the peak shaving capacity in North China. Line C of the Central Asia-China Gas Pipeline and Phase-II of the Kazakhstan-China Gas Pipeline progressed as planned.





## 4. Developing Alternative Energy

In view of the continuous decline in conventional, easily accessible and high-quality oil and gas resources, unconventional sources of energy such as tight oil and gas, CBM and shale gas are now being seen as a realistic and viable replacement. PetroChina is focusing on the future of energy supply and is actively promoting the development and use of unconventional oil and gas resources as well as renewable energy to create a diversified and secure energy supply system.

### Continuously Promoting the Development of Unconventional Hydrocarbons

In China, we continue to make efforts to develop unconventional resources such as tight oil and gas, CBM and shale gas. In 2013, we made progress in tight gas development and produced 24.8 billion cubic meters of tight gas, accounting for 28% of PetroChina's total domestic gas production. In Changqing Oilfield, we saw rapid growth of gas production at Sulige gas field, with tight gas production reaching 21.22 billion cubic meters. With respect to CBM, we achieved marketable quantities of 870 million cubic meters in two CBM bases (Qinshui in Shanxi Province and Eastern Ordos Basin in Inner Mongolia) and carried out commercial developments in Fanzhuang, Shanxi. With respect to shale gas, we made a breakthrough in field testing Changning in Sichuan. Moreover, progress was made in the Zhaotong National Shale Gas Demonstration Zone in Yunnan Province and the Fushun-Yongchuan Shale Gas Project in Sichuan.

### Technological R&D of Unconventional Resources

In 2013, we developed multi-data geophysical identification of high-abundance CBM zones and established the theory and methodology for enhancing CBM recovery, which supported CBM capacity building in the Qinshui Basin and the Ordos Basin. We also participated in national research projects in shale gas and geothermal power generation technologies.



#### Dialogue with Stakeholders

**Q: What are the Company's plans for developing unconventional natural gas?**

A: China has abundant unconventional oil and gas resources with huge potential for development. The government encourages the development and utilization of unconventional oil and gas resources, and has established a set of policies to support the CBM and shale gas industry, including tax exemptions, VAT reimbursements, development and utilization subsidies, and market-oriented pricing. As for PetroChina, we take unconventional hydrocarbons as important strategic substitute resources, and will give priority to the development of tight gas, CBM and shale gas during the 12th Five-Year Plan period.

Our tight gas resources are mainly located in Sulige in the Ordos Basin and Xujiache in the Sichuan Basin. The Company will continue to boost tight gas production.

With regards to CBM, we will continue to focus on the two CBM industrialization demonstration bases in the Qinshui Basin and Eastern Ordos Basin, further optimize supporting technologies such as drilling, fracturing and drainage, and vigorously promote foreign cooperation.

As for shale gas, PetroChina will work on the two national shale gas demonstration areas in Changning-Weiyuan in Sichuan Province and Zhaotong in Yunnan Province in the following two years, conduct independent research and development, strengthen our technological capabilities, and establish joint venture partnerships or cooperation with both domestic and overseas companies and organizations.

## 5. Extending International Cooperation

We adhere to the principles of "cooperation for mutual benefit and joint development" and comply with the laws, regulations and energy policies of the host countries. Based on our advantages in funding, technology and management, we have participated in oil and gas exploration with our partners globally, in order to stabilize the global oil and gas market.

### Overseas Energy Development

In 2013, great progress was made in our new projects in the Middle East, Latin America, and Australia. For instance, we successfully bought stakes in Iraq's West Qurna1 field, signed contracts with Petrobras to acquire all of its shares in PetrobrasEnergia Peru S.A., and purchased partial interests of ConocoPhillips' offshore natural gas and onshore shale gas projects in Western Australia along with all stakes of BHP Billiton's offshore natural gas in the Browse project in Western Australia. Implementation of water injection, horizontal well and EOR projects triggered the production increase in Rumaila Oilfield, and capacity building was accelerated at Halfaya as well as at the Aktobe project in Kazakhstan. In the whole year, we achieved net oil and gas production of 136.5 million barrels overseas.

### Promote Cooperation with International Partners in China

In 2013, we concentrated on international cooperation in unconventional resources such as shale gas and tight gas in China. We signed a contract with HESS on exploring and developing petroleum in the Malang block of Santanghu Basin in Xinjiang, and 3 joint study agreements on developing shale gas in the Neijiang-Dazu block, and in the northern Rongchang block in the Sichuan Basin, and exploring and developing Changdong block in Ordos Basin with ConocoPhillips, Eni and ExxonMobil respectively. The

Changbei Project in Changqing Oilfield maintained kept high and stable production, for which Stage II evaluation has commenced. The Haiyue Project in Liaohe Oilfield was put into production successfully. Exploration appraisal was expedited for the Fushun-Yongchuan shale gas project and the Jinqiu and Zitong tight gas projects in cooperation with Shell in southwest Sichuan. In 2013, net production from our domestic foreign cooperation projects reached 5.033 million tons of oil equivalent, representing an increase of 7.2% year on year.

### Steady Progress in International Trade

We maintained fast development of international trade and steady construction of three operation centers in Asia, Europe and the Americas. In 2013, both the volume and value of our international trade grew by 10%.

#### Dialogue with Stakeholders

**Q: How will PetroChina develop its international business in the long run?**

A: We will make more efforts to optimize the structures of overseas operations and assets, and to develop new projects and merge/acquire high-quality assets for purpose of enhancing capital operations with risks controlled effectively. We will establish an interest & risk sharing mechanism with host countries and partners, in order to boost our ability to manage international operations. PetroChina is willing to make contributions to global energy sustainability together with all our global partners.





# 02

## SAFE AND CLEAN PRODUCTION AND OPERATION

The natural environment is essential for the survival of all life on Earth and it has therefore been part of our philosophy of caring for people and protecting the environment. Upholding the principles of being “people-oriented, prevention-driven, all staff involved and continuously improving”, we strive to build a resource-saving, environment-friendly and safety-oriented business with the goals of “zero injuries, no pollution and zero accidents”.

## 1. Improving HSE Management

We place great emphasis on health, safety and the environment (HSE) and are constantly improving our HSE management. In 2013, our safety and environment protection efforts were under strict supervision. We drew profound lessons from the accident in Dalian Petrochemical Tank Explosion Accident on June 2nd, greatly promoted the establishment of a sound HSE management system, conducted HSE upgrading management and the building of risk prevention and control systems, and strived to enhance HSE management performance. As a result, our HSE situation is generally stable and controllable.

### Building a Sound HSE Management System

In 2013, we completed two HSE system reviews covering all of our businesses, to highlight risk control on site, and improve the effectiveness of the HSE system. The Company established and revised dozens of systems and standards, and improved our HSE management framework. Furthermore, we provided directors, supervisors and other full-time personnel with various types of training, enhancing the management capacities of key personnel. We conducted HSE benchmarking with international advanced enterprises, and carried out communication and cooperation at all levels. PetroChina Natural Gas & Pipeline Company integrated the HSE system and quality management system to publish a new version of the QHSE management manual.

### Enhancing Risk Control Capabilities

The Company strived to enhance its HSE risk control capabilities, and promoted an integrated HSE management framework based on responsibility fulfillment, centered upon risk prevention and control, and focusing on emergency support. In 2013, four HSE video conferences were attended by PetroChina’s senior executives to implement responsibilities in operational safety. We issued the *Administration Measures for the Responsibility System of Operational Safety and Environmental Protection and the Provisions on Management Duties for the Operational Safety and Environmental Protection of Headquarters*, with the key managers of every unit taking full responsibility for operational safety. Eight safety risks and six environmental risks were controlled at all levels. The demonstration of emergency response centers for well control, offshore operation and pipelines was completed. Some key enterprises have completed their emergency response bases. We strived to enhance the management of emergency preplans and improved



their practicality and operability. The linkage mechanism for emergency rescue jointly by enterprises and localities was improved, and we conducted comprehensive emergency drills for major road transportation accidents involving dangerous chemicals.

### Strengthening Hazard Control

We implemented hazard control responsibilities, measures, emergency plans and prepared funds and monitoring tools, strengthened follow-up assessment of hazard treatment results, and improved the Company’s intrinsic safety. In 2013, we revised the hazard management measures, and continued investing funds to control safety and environmental hazards. Remarkable achievements have been made in the treatment of abandoned wells and service station sheds.



## 2. Enhancing Operational Safety

PetroChina advocates the principles of “people-oriented safety management”, and believes that “safety comes from responsibility, design, quality and prevention”. As a result, we have adopted production safety as one of our core values, and have implemented this concept in all our sectors of production and operation. In 2013, the accident mortality rate was 0.25 person per 100 million working hours.

### Operational Safety Inspection

Since June 2013, we have conducted all-round operational safety inspections through our senior inspection team, following the general requirements of “full coverage, zero tolerance, strict enforcement, and pragmatic approach”. This is the largest operational safety inspection campaign in recent years, with the longest duration and the most extensive coverage. The inspection covers all of PetroChina's enterprises and institutes, as well as all of its production and operation segments, in an effort to identify and solve problems in the frontline and worksites. All the problems identified have been addressed within the time limit by those in charge of them, further enhancing the general safety guarantee level. During the inspection, we mainly focused on inspections at petrochemical companies, oil depots, loading docks and national oil repository, as well as special safety inspection for offshore oil operations. We revised and improved the *Specification for Hot Work Safety Management* and the *Specification for Confined Space Entry Safety Management*.



Website designed to follow correction progress of problems identified in operational safety inspection



### Upgrading Management of Significant Accidents

The Company has upgraded accident management, especially focusing on accidents which are likely to result in serious consequences. In 2013, we upgraded the investigation of potential risks and held in-depth and systematic analysis. After the investigation, we drew and shared lessons from the risks and held three seminars to provide education and training for 150,000 employees. We strengthened statistics on accidents and incidents per 100 million working hours, and kept abreast of all the accidents and incidents in a timely and accurate manner.

### Contractor Management

Contractors are our partners in our production and operation activities. We attach great importance to their safety, and have incorporated contractors' safety into our HSE management system. In 2013, we issued *Measures*

*for Contractor Safety Supervision and Administration*, putting forth requirements including review of contractor qualifications and HSE performance, bidding, execution of operational safety contracts, and safety performance assessment.

### Special Rectification in Key Areas and Processes

We carry out special rectification for operational safety and public safety, especially rectification of oil and gas pipelines. During our inspections, we focus on special oil and gas fields with high sulfur gas content and high temperature and pressure, large storage tanks, refining and petrochemical plants, long-distance pipelines, city gas and LNG enterprises, especially the inspection of hazardous chemicals, transportation, fire protection and other fields as well as site supervision over the crucial parts, repair and maintenance, starting and downtime of oil and gas production and storage facilities, key refining facilities, and special equipment.

### Warning Months of Gas Blowout Accident

The 10<sup>th</sup> anniversary of the Gas Blowout Accident of LuoJia Well 16H in Kaixian County in Chongqing Municipality was marked on December 23, 2013. To profoundly learn lessons from the accident and prevent similar accidents, the Company launched a two-month campaign called the “Warning Months of Gas Blowout Accident” from November 1 to December 31. Following the concept of the campaign, our subsidiaries launched a “five-action” program, including a case study seminar, risk investigation, an emergency drill, an appraisal of safety and environment papers, and a video conference on 12.23 Gas Blowout Accident. Through this campaign, all the employees learned serious warnings and lessons from the accident in order to enhance the HSE risk control capacity of the Company.





## Case Study

### Ningxia Petrochemical Enhanced Contractor Safety Management

PetroChina Ningxia Petrochemical Company exercised strict control over the selection, evaluation and assessment of contractors, and defined contractors' safety responsibilities. It reviewed their qualifications, confirmed their performance, and assessed their management and staff quality, regulated safety contracts and permits to work, and selected the best contractors through strict online review and approval; it strengthened process control, entered into HSE commitment agreements with contractors, developed contractor information management forms, improved their safety management organizations at all levels, provided their executives with special training, and ensured construction safety;

it conducted quantitative assessment and comprehensive assessment over their safety behavior, work attitudes, and work quality through monthly quantitative appraisal; it held quarterly special meetings to appraise contractors' performance, and appraised their performance at the end of the year through scoring, the one with the lowest score would be eliminated and the one with severe accidents would be vetoed; contractors' electronic archives, constructors' archives and health check archives were established. All contractors were asked to purchase work-related injury insurance for their construction workers. The company strictly managed contractors through systems, ensuring operational safety.



## 3. Promoting Energy Saving and Emissions Reduction

We continue to promote research and development for technologies related to energy conservation, emissions reduction and energy optimization. The Company also moved forwards with both its Ten Energy Saving Projects and Ten Emissions Reduction Projects. In 2013, the Company's energy and water savings were 1.08 million tons of TCE and 20.07 million cubic meters respectively, while COD and sulfur dioxide emissions decreased by 3.53% and 5.38% year on year respectively.

### Energy Conservation

We strengthened energy conservation target assessment and Lean Management and kept promoting Ten Energy Saving Projects. In 2013, we implemented 63 key energy conservation projects, including energy-saving upgrading of oil production and ground systems in oil & gas fields, sewage heat recovery, low-temperature refining heat recycling, and energy-saving upgrading of heating furnaces. We integrated and promoted sophisticated and applicable new energy-saving technology. We also strengthened optimization of refining energy systems and research of water-saving technologies, and developed the "refining water-saving technology evaluation method" and the "refining water-saving technology database". Energy-saving management information systems were built and put into trial operation at Xinjiang Oilfield, Jidong Oilfield, Lanzhou Petrochemical, and Karamay Petrochemical and other pilot units. In addition, these systems were promoted in the regional companies above these pilot units. We launched the energy conservation week campaign under the theme of "promoting energy conservation and low carbon, building a beautiful home" to enhance awareness of energy conservation among all of our employees.

# 3.53%

COD emission decreased by 3.53%

# 5.38%

Sulfur dioxide emissions decreased by 5.38%

### Emissions Reduction

The Company strictly conducted the assessment of pollutes reduction, and broke down the targets for major pollutants index like COD, ammonia, sulfur dioxide, and nitrogen oxides to our branches, and integrated them into our performance and contract assessment. We strictly assessed the fulfillment of emissions reduction targets to ensure they were achieved. We regulated online supervision management of pollution sources, promulgated and issued the *Administrative Measures for the Operation of Online Monitoring System of Pollution Sources*, completed the installation and data networking of online monitoring systems for wastewater and waste gas monitoring points, and realized real-time monitoring of key pollution sources.

In 2013, we designated special persons to supervise the handling of these projects through monthly scheduling for the nine FCC flue gas desulfurization projects and 11 refining wastewater treatment projects listed in the *Targets for Emissions Reduction of Main Pollutants in the Twelfth Five-Year Period* promulgated by the Ministry of Environmental Protection. These 20 projects have been completed and put into operation on schedule, reducing pollutants volumes of COD, sulfur dioxide in flue gas. We started comprehensive treatment projects of oil and gas volatilization in service stations in Beijing, Hebei, Hubei, Jiangsu, Shaanxi, Liaoning and other areas. By adding oil & gas recovery interfaces and refueling guns, we greatly reduced the volatilization of hydrocarbon organics during gasoline storage, transportation and marketing.







## Case Study

### Liaohe Petrochemical Company Reduced Pollution Emissions for Clean Production

In 2013, PetroChina Liaohe Petrochemical Company established the Clean Production Plan and took measures to ensure the targeted discharge of wastewater and waste gas during ultra-heavy oil processing. It established the 24-hour video and data monitoring system for pollutant discharge, to ensure treatment at source and process monitoring. Through oil pollution remediation of sewer systems and special treatment of hazardous gases, it identified and eliminated hazards in the sewer systems, and identified and treated emission points of harmful exhaust. It worked hard to promote pollution reduction projects, built PetroChina's first catalytic cracking regeneration flue gas desulphurization plant by introducing foreign patented technology, developed upgrading projects of sewage pretreatment for super-heavy oil, and built malodorous gas treatment equipment for wastewater treatment plants. It engaged in research on environmental technology, and designed and developed the upgrading project of primary

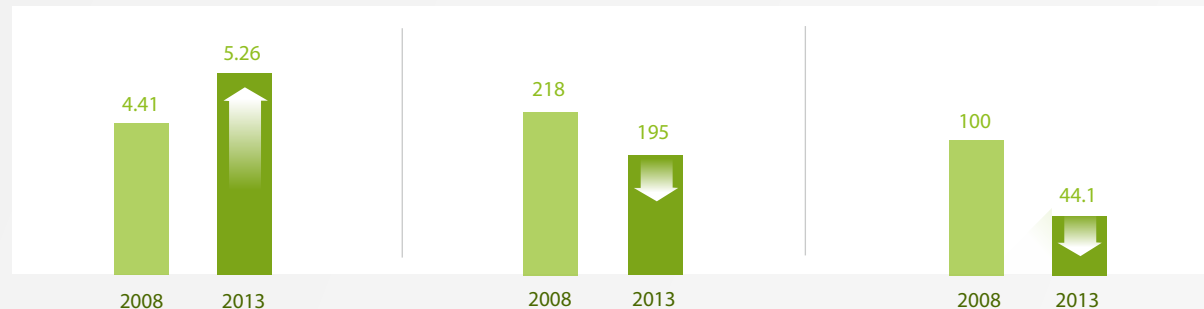
hydrolytic acidification tanks for wastewater treatment plants, thermal insulation projects for physical and chemical segment, upgrading projects of sour water stripping units, and promoted the upgrading and improvement of environmental devices. The company also established incentive funds for clear water and the blue sky project, fully stimulating the employees' initiative in environmental protection.

Through systematic treatment, waste oil in the sewerage system dropped 21% from the previous year, and the COD content of discharged sewage dropped significantly. Plant air quality in the plant met State-II standard. Liaohe Petrochemical met the requirements of the *Law of the People's Republic of China on Promoting Clean Production and the Acceptance Standard of Clean Production in Refining Enterprises*. It has passed the assessment and acceptance of the Liaoning Guidance Center of Clean Production to become the first refining enterprise in China to pass quality in terms of overall clean production.

Crude Run (mt)

COD Emissions (t)

COD Emission Concentration (mg/l)



## 4. Ecological Protection

A diversified environment is a valuable resource for humanity. Respecting nature, developing in harmony with nature and protecting nature are of great importance to our sustainable development. Therefore, we attach great importance to minimizing our environmental impacts on surrounding environments, strictly implementing environmental protection systems, reinforcing ecological restoration of environmentally sensitive areas, and striving to develop in harmony with the environment.

### Environmental Protection during Production

During production, we give priority to environmental protection. Preliminary environmental impact assessments were required in experimental pre-EIA projects in accordance with national laws and relevant regulation. For each construction project, the environmental protection facilities were required simultaneously with the main project in the process of design, construction and operation. We apply for the approval of environmental impact assessment of major projects in an orderly manner and work hard to minimize our negative impact on the ecological environment during operations and production. Environmental management is implemented in the whole process of construction projects. With regard of environmental risk factors in production, such as oil & gas spills, and emissions and waste discharge, we developed a multi-tiered risk management mechanism and formulated strict environmental protection measures, to eliminate pollution and protect ecological environment at the source. In 2013, we reviewed the implementation of our environmental impact assessments and environmental management plan for major refining projects and pipeline projects, to ensure their compliance with laws and regulations.

### Ecological Restoration

While working in environmentally sensitive areas, we strive to minimize the occupation of arable land, maintain good soil and water conservation, take vegetation restoration measures, protect biodiversity, strive to restore the landscape of work areas, and protect the habitats and the ecological environment. In 2013, a project was started to restore the marine environment and fishery resources of the subsea pipeline project for the Second West-East Gas Pipeline. Two million black sea bream fry were released into the sea, which is expected to add about 100 tons of black sea breams in surrounding waters of Dapeng Bay and Daya Bay. Remarkable achievements were also made in environmental protection and land reclamation in Lasaxing Oilfield in Daqing, Fengcheng Oilfield, Hutubi Gasfield in Xinjiang and Laojunmiao Oilfield in Yumen, which have been included in the third group of national pilot projects for green mines.



### Sichuan Petrochemical Company Established a Communication Platform and Invited the Public to Inspect Treatment of Waste Gas, Waste Water and Waste Residue

The Sichuan Petrochemical Project, consisting of 10 mt/a oil refining and 800kt/a ethylene production facilities, is a major project under the national energy development strategy. The project has been implemented in accordance with national laws and regulations and the highest environmental standard in China.

However, the project made the public worried about the impact of the environment. In 2013, in order to help the public better understand the environmental issues related to the Company made public the construction of environmental protection facilities through news media and social networks in a timely manner, and extensively invited representatives of community residents, environmental organizations, experts, scholars, entrepreneurs, college students and PLA soldiers in Chengdu to visit project plants for the treatment of waste gas, waste water and waste residue before the official acceptance of the project. It encouraged public supervision and suggestions, and ensured the project meets residents' expectation of a clean environment, and considers the interests of local residents.

After the visit, Yin Jian, Deputy Secretary of Chengdu Academy of Environmental Sciences, said: "The environmental protection facilities are so advanced that they are a benchmark in the world. These advanced environmental techniques can minimize the emissions of pollutants." Zhao Lei, a student of Sichuan University, said "Before the visit, I thought maybe it is the same as the other enterprises I have visited. However, on my visit, I find its equipment and technology are domestically and even internationally advanced, which can fully guarantee environmental protection".





## Case Study

### Ecological Protection of Deserts in Shixi Oilfield in Xinjiang

The work area of Xinjiang Oilfield Company is located in the hinterland of the Gurbantonggut Desert, China's largest fixed and semi-fixed desert. It is plagued by wind sand throughout the year. In the work area, the company strictly protected the natural environment, created the local circle-type protection mode, and planned an artificial green system composed of the windbreaks and sand belts, shelter belts and landscaped green area, which form three concentric circles. Reed grids and grass seeds were provided in the surrounding areas of the well site. Through recycling of domestic water in the oilfield and innovative use of mixed water irrigation technology, more than 200,000 cubic meters of irrigation water was saved annually. Through environmental and ecological wetland projects, it protected native wetland plants, and planted adaptable halophytes. Wastewater excluding that used for oilfield

reinjection was physically, chemically and biochemically treated before being treated through artificial wetlands, improving the local ecological environment of the desert and enriching biodiversity.

By 2013, the green coverage of the work area reached 62.5%, and the survival rate of the 20 acres of halophytes planted is above 90%. According to the monitoring data of Xinjiang Institute of Ecology and Geography of the Chinese Academy of Sciences, this area has a wind speed 28%-70% lower than the peripheral areas, with a decrease of 90% in sediment concentration in the air and an increase of 60%-200% in air humidity. A microclimate has taken shape in the desert area.



## 5. Response to Climate Change

Global climate change affects our future. As a responsible energy company, we attach great importance to the control and reduction of greenhouse gas emissions, and actively support the policies and actions to address climate change. Furthermore, we took the initiative to reduce carbon emissions and sequester carbon to contribute to mitigating global climate change.

### Participation in Greenhouse Gas Reduction Actions

We actively participate in carbon trading at home and abroad in order to achieve carbon reduction targets through the market mechanism. In 2013, our third carbon trading project—Daqing Oilfield Clean Development Mechanism (CDM) Project—was registered, which is expected to trade 400,000 tons of carbon dioxide emissions. At Shenzhen Emissions Exchange, we completed China's first quota (emission rights) trading; at China Beijing Environment Exchange, we completed China's first Chinese Certified Emission Reduction (CEER) trading, promoting the development of the domestic environmental market system; the energy-saving and emission reduction project developed by our Tianjin Climate Exchange helped save more than 200,000 tons of standard coal, corresponding to a reduction of 500,000 tons of carbon dioxide emissions. For three consecutive years, the Company has been named the "Chinese Model for Low Carbon" in the public charity photo exhibition held by China News Service.

### Research and Application of Carbon Reduction Technology

Carbon capture and sequestration is one of the most promising solutions to respond to global warming. Through carbon dioxide flooding, large amounts of carbon dioxide are sequestered underground, enhancing oil recovery and effectively reducing greenhouse gas emissions. In 2013, experimental development through carbon dioxide flooding progressed steadily in Jilin Oilfield. Three different types of test areas have been established, with 430,000 tons of carbon dioxide sequestered, and oil production per well increased by 30%-60% over water flooding.

### Afforestation

Forests are important carbon sink of the nature, a climate stabilizer and a shelter for biodiversity. The Company is actively engaged in forestry carbon sequestration transactions, promotes full participation in afforestation efforts, and strives to cultivate forest resources. Since 2008, PetroChina employees who have actively participated in voluntary tree planting have totaled 3 million person-times, planting a total of 20 million trees, with an increase of over 4,000 hectares in green areas. In 2013, China Green Carbon Foundation completed the site approval of PetroChina's carbon sink forests demonstration project. Ten of PetroChina subsidiaries, including Changqing Oilfield, Lanzhou Petrochemical and Huabei Oilfield, were named the "National Model Units for Afforestation" by the National Afforestation Committee.



4,000 hectares



Since 2008, PetroChina has actively participated in voluntary tree planting, leading to an increase of over 4,000 hectares of green areas.



## CUSTOMER-FIRST MARKET SERVICE

Petrochemical products play a vital role in China's national economy as well as in the life of the Chinese people. The Company pursues a business where the "emphasis is placed on the environment, safety, quality and people". It also adheres to the principle of "honesty and quality excellence". In this respect, the Company actively pursues its goal of producing products that have "zero defects", "zero accidents", and are of "leading first-class quality both domestically and internationally". We promote management and technological innovation, and try our best to provide diversified products and services for consumers.

## 1. Enhancing Quality Management

At PetroChina, quality is always a top priority. We strictly control product quality and measurement management. In 2013, we formally issued the plan for the implementation of the *State Council's Quality Development Program (2011-2020)*, further improved our quality management system, enhanced our measurement and testing capabilities, promoted our product and service quality, and ensured quality safety.

### Promoting Quality Management System

We work hard to improve our quality management system by intensifying our efforts on brands cultivation, quality supervision and inspection, and certification and accreditation. In 2013, quality management systems were certified in 82.29% of our subsidiaries, including all refining, petrochemical and marketing subsidiaries. The first round of quality management system review in major production units and research institutes was completed. To conduct quantitative evaluation of quality management, we issued and implemented the *Indicators for Product Engineering and Service Quality (Trial)*. A "Quality Month" campaign was launched to raise the employees' quality awareness.



# 100%



100% of the refining, petrochemical and marketing subsidiaries were certified by the third-party quality management systems.

### Quality Goal

To become a leading domestic and excellent global company with zero accidents and zero defects

### Stage Goal

By 2015: Promote quality, measurement and standardization management generally over the optimal level

By 2020: Promote quality, measurement and standardization management fully over the optimal level, and the excellent level in some subsidiaries

### Development Philosophy

Giving top priority to the environment, safety, quality and people



Enhancing Measurement Level

In 2013, we accomplished the three-year upgrading of measuring instruments, and achieved new progress in the development of the national authorized oil and gas transfer measurement and traceability system. Our regular measurement inspection and maintenance helped to ensure instruments' reliability. We performed a general survey of oil and gas transfer measurement, promoted relevant measurement standards, and constantly regulated transfer measurement management. Through information technology and automation technology, we actively promoted dynamic transfer metering to replace manual measurement, in order to improve efficiency and accuracy.

Achievements in Standardization

The Company developed a set of standards and operating procedures from research results and management experience and actively participated in the establishment of international standards. In 2013, the Company awarded The Excellent Standard Award for "the Eleventh Five-Year Plan" to 111 projects, promoting the modification and implementation of standards. To study and develop common and basic standards for shale gas, we established the Standardization Committee for Shale Gas. We served as the Secretariat of the ISO Upstream Natural Gas Technical Committee (ISO/TC193/SC3), which has accepted eight of our international standards proposals.



Optimize Supply Chain Management and Improve Product Procurement Quality

The Company keeps optimizing supply chain management, and puts forward specific requirements for suppliers' social responsibility and quality standards. A database was established to manage suppliers' qualifications and share supplier resources. By means of public bidding and online transactions, we provide suppliers with equal and fair opportunities and standardized transactions. In the procedures of

supplier access, valuation, material procurement, tendering and bid evaluation, suppliers are required to operate in accordance with the law and credit, and fulfill their social responsibilities. At the stage of supplier quality management, a comprehensive quality management system has been put in place to take quality assurance measures, in order to ensure the quality of procured products and prevent and mitigate quality risks.



140

140 enterprise standards developed and modified in 2013



Case Study Life-cycle Quality Management of OCTGs

OCTGs are critical to oil production at various stages, including drilling, completion and production. As we develop more and more special wells, such as ultra-deep wells, horizontal wells and high sour gas wells, our requirements for the quality of OCTGs continue to grow.

The Company strictly controls the quality of the OCTGs procured. We intensified our management of manufacturing licenses, improved product access standards and the systems to inspect products upon arrival, strengthened supervision and sampling, and established user quality accreditation systems. Furthermore, we strengthened on-site supervision, extended supervision services and items, promoted standardization of OCTGs, and strengthened basic research for application such as the identification of failure causes of OCTGs, in order to prevent failure at source.



2. Focusing on Research and Development

In line with our technological philosophy of “Strategy-Driven, Goal-Oriented and Top-Tier Design”, we strengthened technological exchanges and cooperation, spared no efforts to make key technological breakthroughs, enhanced R&D in new technologies, processes, equipment and materials, upgraded our production facilities, and carried out product innovation based on market demand, to offer consumers more varied quality products.

In 2013, we developed 58 brands of new chemical products which accounted for a total volume of 713,000 tons. Lanzhou Petrochemical developed and produced NBR3305-E environmentally friendly nitrile butadiene rubber which was widely applied in the manufacturing of fitness equipment and children’s toys. With milled powder from discarded tires as the raw material, Karamay Petrochemical developed rubber asphalt with waste tire rubber powder to realize waste recycling, achieving better performance than heavy traffic paving asphalt and SBS modified asphalt. With regard to oil and gas pipeline fields, four types of key equipment for large LNG projects realized local manufacturing, i.e. cooling agent compressor, steam turbine, cold box and LNG volatile gas compressor. A high-efficiency laser welding and an ultrasonic testing prototype and mechanized joint coating system were developed for pipeline anti-corrosion & mending.



Newly Developed Refined Products in 2013

Name	Description
Resin DFDA-9047 for High-performance Linear Membrane	used for sheds, floor sealers and irrigation
DMDB-4506 for IBC Material	used for large hollow containers and chassis supports
DMDA-6045	used for automobile fuel tanks
Hollow materials of DMDA-6200, 6400, 6143, 6150/6152	used for packaging of mineral water, edible oil and beverages
3020D, LD26D	used for medical injection bottles, infusion bags, infusion tubes and injectors, etc.
High-melting Injection Molding Compound K9928H	used for household appliances and car bumpers
High-melting Fiber Materials of S2025, S2040	used for sanitary towels, diapers and nonwoven fabrics, etc.
Ethylene Propylene Rubber J-0050, J-0010	used for preparing antifreeze fluid, and machining cutting fluid
Environmentally friendly Styrene-butadiene Rubber 1763N, 1763E, 1769E, 1778E	used for processing auto tires, including truck tires, radial tires, and semi-steel radial car tires, etc.

3. Providing High-quality Products

We are constantly improving our product mix. Our products, including gasoline, diesel, lubricants and different grades of chemical products, are widely used in many industries such as automobiles, building materials, electronics, pharmaceuticals, printing, household appliances and daily-use chemicals.

Upgrading of Oil Products Quality

To upgrade oil product quality, we developed and applied key technologies to reduce sulfur content in gasoline, such as selective hydrodesulfurization of catalytic gasoline and gasoline hydrogenation. In 2013, gasoline quality upgrade projects in 14 refining enterprises were completed and put into production, and gasoline quality was upgraded to the National V standard in advance in such subsidiary companies as Jinzhou, North China, Dalian and Liaoyang PetroChemicals. All our motor gasoline supplied has reached the National IV standard, increasing the proportion of high grade gasoline, #97 gasoline and jet fuel by 1.01%, 10.7% and 20.55% respectively year-on-year.

.... Dialogue with Stakeholders

**Q: What progress has PetroChina made to meet national requirements for oil products upgrade?**

A: Chinese government requires the implementation of the National IV motor gasoline standard by the end of 2013, the National IV motor diesel standard by the end of 2014, and the National V gasoline and diesel standard by the end of 2017.

PetroChina is upgrading oil products in three phases: Gasoline reaches the National IV standard by the end of 2013, diesel reaches the National IV standard by the end of 2014, and both gasoline and diesel meet the National V standard by the end of 2017.

Roadmap of PetroChina Oil Products Upgrade

PetroChina	National Standard	Sulphur Content Limit	Manganese Content Limit	Alkene Content
✓ In 2012, car fuels reach National III standard	Phase III	150ppm	16mg/L	30%
✓ By the end of 2013, gasoline for motor vehecles reaches National IV standard; by the end of 2014, diesel for motor vehecles reaches National IV standard	Phase IV	50ppm	8mg/L	28%
⌚ By the end of 2017, all gasoline and diesel products reach National V standard	Phase V	10ppm (80% lower)	2mg/L (manganese-containing additives prohibited)	24%
		Enhance the capability of automobile exhaust purification system, and reduce emissions	Mitigate the potential risk to human health and adverse impact on vehicle emission control system caused by manganese	Further reduce photochemical pollution caused by evaporative emission of gasoline and reduce sediments in air intake system of automobile engines

Promoting End-User Consumption of Natural Gas

The replacement of oil for automobiles and vessels with natural gas could bring environmental, economic and social benefits. On the one hand, we promoted LNG as an alternative for vehicle fuel, and reinforced LNG vehicle usage for urban, long-distance travel and heavy loads in the Bohai Rim, Yangtze River Delta, and Sichuan-Chongqing regions. On the other hand, we accelerated the construction of LNG filling stations as well as storage and transportation facilities. In 2013, we put Shanghai's first L-CNG filling station into operation, accelerated the construction of LNG filling stations for highways in Shandong Province, LNG ship filling demonstration sites along the Yangtze River (Chongqing, Wuhan and Wuhu), Ganjiang River, Beijing-Hangzhou Canal and Weishan Lake were established, and the *Research on Application Safety of LNG-fueled Vessels and the Demonstration Project on Supporting Technology of Replacing Oil by Gas for Vessels* were launched.

Providing High-quality Chemical Products

The Company cultivates high-quality brand products, and provides consumers with environmentally friendly and diversified products. Four products, including linear alkylbenzene of Fushun Petrochemical Company and polypropylene resin of Daqing Refining & Petrochemical Company were awarded the title of "Distinguished Brand" of 2013 by the China Petroleum and Chemical Industry Federation. In product quality supervision and random inspection, the rate for refining product quality and graded bulk commodities reached 100% and over 80% respectively.



"Distinguished Brand" Products of PetroChina

Year	Product Name	Production Unit
2011	"Kunlun" ethanediol for industrial use	Jilin Petrochemical Company
2011	"Kunlun" acrylonitrile-butadiene-styrene (ABS) resin	Jilin Petrochemical Company
2012	"Kunlun" petroleum benzene	Lanzhou Petrochemical Company
2012	"Kunlun" heavy traffic paving asphalt	Liaohe Petrochemical Company, Karamay Petrochemical Company
2012	"Kunlun" refined paraffin wax	PetroChina Company Limited
2012	"Kunlun" butadiene rubber	Daqing Petrochemical Company
2012	"Kunlun" polyacrylamide	Daqing Refining & Petrochemical Company
2013	"Kunlun" thin film polypropylene resin	Daqing Refining & Petrochemical Company
2013	"Kunlun" thin film polyethylene resin	Jilin Petrochemical Company
2013	"Kunlun" urea	Southwestern Tarim Exploration & Development Company
2013	"Kunlun" industrial linear alkylbenzene	Fushun Petrochemical Company

4. Delivering Considerate Services

To improve customer satisfaction, we strive to expand the coverage of our service network and functions and improve our services and quality to offer a better experience to our customers. In the *2013 Chinese Customer Satisfaction Manual* jointly issued by CNIS Customer Satisfaction Measurement Center and Tsinghua University, the satisfaction degree index of PetroChina's service stations is 73.6, rising by 8.1 over 2012.

Optimizing Our Service Network

In 2013, we continued to optimize our service network, and put 360 new service stations into operation, bringing the total number of our service stations up to over 20,000, covering 31 provinces (municipalities and autonomous regions) and the HKSAR in China. The stations continued to expand the scope of their service to provide customers with a one-stop service encompassing refueling, rest, shopping and vehicle maintenance. We strive to build the uSmile brand, and have added 1,650 "uSmile" convenience stores in 2013, bringing the number of our service stations with convenience stores to 14,799.

Improving Service Quality

The Company further improved the service system focusing on customer orientation, high-quality service and friendly service. For direct-sales customers, we set up customer service centers, and simplified the purchasing and sale process. By means of information technology, the Company realized the goal of "refueling nationwide with one card", and promoted self-service refueling to provide convenience to customers. Targeting customers' needs, we adjusted the marketing structure and strengthened sales of high-grade gasoline. We improved service specifications, and provided new services to provide product information and technical consulting to consumers. We started an end-to-end tracking service to track customer experiences, recommendations and satisfaction in order to build a caring and harmonious customer environment.





## Case Study

### Green Island Service Stations of Henan Marketing Company

Urban construction and the growing number of automobiles have made land a very scarce resource for building service stations. Refueling demand is confronted with the constraints of traditional service station layout. In order to support construction of local ecological corridors and satisfy consumers' needs, Henan Marketing Company turned 10 service stations in Zhengzhou into "compact" Green Island service stations. These stations satisfied automobile refueling demands, saved land and beautified

the urban environment. Architectural design has abandoned the pure straight line style for curved shapes, and uses membrane material which allows transmission of light, and is soft in texture and safe to use. For better identification, a road sign is installed 150m ahead of the service station's entrance, and PetroChina's logo is installed at both the entrance and the exit, and LED lighting is installed above the convenience store. The services offered include on-site guidance and fixed-time refueling with high efficiency.



## 5. Stabilizing Oil and Gas Supply

As a leading oil and gas supplier in China, we ensure the stability and safety of oil and gas supplies. In 2013, we closely tracked the market trend, adjusted the product mix based on market fluctuations, and conducted product allocation and transportation. We are responsible for about 40% of the domestic market supply of oil products, and about 70% of natural gas, meeting the needs of urban residents, public utilities and key customers.

### Stabilizing Supply in Agricultural Peak Periods

The peak periods in spring, summer and autumn are key stages of agricultural production, during which demand for agricultural oil and chemical products is high. In 2013, as the temperature was relatively lower than before in northeastern China, oil utilization for the "spring period" was delayed, clashing with the "summer period" in northern China, and the Huaihe and Yellow River areas, increasing China's total agricultural diesel demand by about 10% over the previous year. Through full production and multi-transportation, the Company allocated resources and increased diesel supply for major agricultural areas like northern China, and the Huaihe and Yellow River areas. The Company prolonged the operation time of service stations, opened green channels, and sent oil to farmland through small-amount distribution. We also added skid-mounted refueling facilities, promoted the usage of agricultural machinery IC card, and provided non-oil services. Between April and May, diesel oil supplied by the Company to the regions such as Hebei, Shanxi, Hubei, Anhui, Henan, Shandong, Jiangsu, Sichuan and Shaanxi, increased by 100,000 tons year-on-year, which ensured the supply of oil for agricultural production.

### Ensuring Supplies of Disaster Relief Oil Products

In 2013, when natural disasters occurred such as thick sea ice hitting the Bohai Bay, flooding in northeastern China, the Ya'an earthquake in Sichuan and a powerful typhoon in coastal areas, the Company launched its emergency mechanism and established an all-round oil product supply network, to guarantee local oil product supply. We also established the oil product distribution group for disaster relief, set up key supply guarantee service stations, organized mobile refueling vehicles, and optimized allocation and transportation of oil products. PetroChina's service stations in disaster areas were open around the clock to supply as much oil as possible.

### Ensuring Oil and Gas Supply in Winter

Energy demand increases in winter, especially when ice and snows poses challenges to oil and gas transportation and supply. In 2013, gas demand increased significantly due to the switch to gas-fueled heating boilers to improve air quality in urban areas. Sticking to the principle of "ensuring supply to civilians, the public and key units", the Company coordinated many resources like self-produced gas, imported gas and coal gas, utilized LNG receiving terminals and gas storage, optimized its market distribution program, and strengthened demand side management. Moreover, in order to ensure oil products supply in winter, we organized refineries to arrange production and transportation in advance, in order to satisfy the increasing market demand for low freezing point diesel.



# 11.7%

From October to December the Company's natural gas supply grew by 11.7% over the same period in 2012



# “PEOPLE-ORIENTED” EMPLOYEE DEVELOPMENT

At PetroChina, employees are our most valuable asset. The overall development of employees has been one of our development priorities. We strive to create a working environment of inclusion, equality, mutual trust and coordination. We protect employees’ rights, care for their well-being and provide a career development platform. We keep promoting the localization and diversification of our staff, and strengthen security in our overseas operations. As such, we aim to achieve the optimization of both corporate values and employees’ benefits.

## 1. Employee Rights

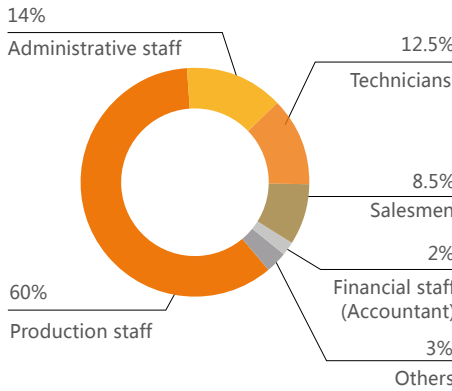
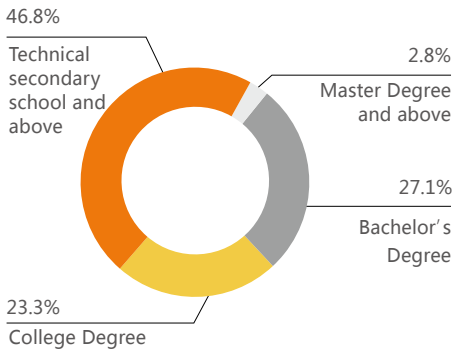
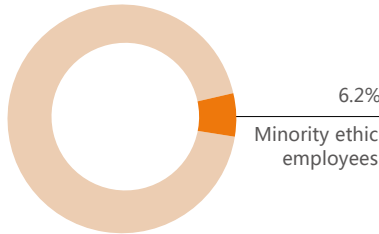
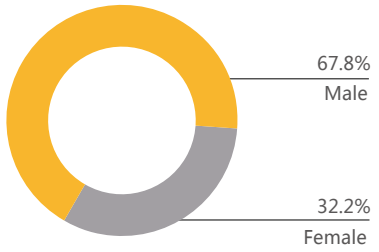
We remain committed to the “People First” philosophy in treating our employees with respect and equality, and protecting their legitimate rights. We strive to resolve the most pressing and most practical issues faced by our employees, so that they can share the fruits of our development.

### Fair Treatment

At PetroChina, we strictly abide by the *Labor Law of the People’s Republic of China* and *Labor Contract Law of the People’s Republic of China*, as well as the rules and regulations of the jurisdictions where we operate. We also scrupulously meet all obligations under the international conventions endorsed by the Chinese government. We have a well-established employment management system covering labor contracts, remuneration, insurance and benefits, performance review, rewards and disciplinary measures, training and leave benefits. We also regulate employee practices according to laws and regulations.

We implement the new *Labor Contract Law*, and propose specific measures for regulating labor dispatch based on the overall investigation on labor dispatch of subordinate companies. We make every effort to strengthen position management, protect employees’ legitimate rights, and build a mechanism to allow the Company and employees to benefit equally from growth.

We provide equal opportunities and fair treatment to all employees regardless of their nationality, ethnicity, race, gender, religion and culture. We prohibit the employment and use of child labor and avoid all forms of forced labor. Additionally, the Company has always emphasized the employment of local residents, women, ethnic minorities and college students to increase job opportunities for local communities.





### Remuneration and Motivation

The Company has further improved the performance appraisal and remuneration system, as well as the framework of employee compensation and benefits highlighting the value and performance of employees in different positions, so that every employee can reach his potential. In addition, we steadily extended the coverage of social security programs to our employees, and improved their supplementary medical care and insurance, enterprise annuity and living allowance schemes under the *Social Insurance Act of the People's Republic of China* to ensure employees' interests and rights are addressed. In 2013, the Company's compensation and benefits policy continued to favor employees taking front-line positions, working in harsh environments and assuming key responsibilities.

### Democratic Participation

The Company places great importance on democratic management, participation and supervision. Apart from establishing trade unions, it has put in place a democratic style of management and transparent approach to industrial affairs to ensure employees are well-informed and have the means for participation in and oversight of corporate management. By clarifying the obligations and rights, organization system and working system of the employee representative congress, we have further standardized the content, procedures and forms of the Industrial Affairs Open System.

The Company and its subsidiaries have established multiple channels to communicate with employees, persisted in implementing democratic procedures, and conducted multi-level communication by means of meeting with staff representatives and network interaction, to encourage employees to participate in the management of production and operation.

## 2. Occupational Health

The Company abides by the *PRC Prevention and Control of Occupational Diseases Act* in its occupational health management, focusing on the prevention and management of hazards as well as the implementation of such measures. By emphasizing health management in field operations, we give first priority to employee health and life safety. In 2013, the rate of occupational physical examination was over 91%, and the detection rate of occupational hazards in the workplace was over 94%.

We lay stress on monitoring employees' occupational health, and stepped up physical examination for front-line operators, contractors, and temporary workers. The Company has improved management of employee health surveillance records, to provide customized medical treatment for employees. In 2013, health surveillance records for dangerous positions were improved for more than 200,000 employees, and great progress was made in preventative occupational health evaluation. For example, Ningxia Petrochemical Company provided health intervention for 44 employees through the Hypertension Health Management Program, improving their blood pressure greatly within three months.

We have proactively implemented the monitoring and control of occupational hazards at workplaces, further standardized the evaluation of occupational hazards for construction projects, and guaranteed that labor safety and health facilities in a construction project are designed, constructed, and put into use simultaneously with the main project. In addition, the Company has checked equipment hazards and occupational hazard database, to continuously improve employees' working and living environment.

#### Case Study Caring for Employees' Health in Chad

In 2013, the Company sent a team composed of four medical experts and two psychological counselors, to worksites in Chad to provide physical examination, health instructions, and psychological counseling, helping our employees overcome psychological obstacles and keep a positive attitude. The team has provided physical examination for 342 person/times, held seven psychological counseling lectures, organized five team construction activities, and offered one-to-one counseling to employees for 73 person/times, benefiting nearly 400 employees.

The Company attaches great importance to disease prevention and health management at field operations, continues to provide healthcare services to front-line workers, and promotes

health management, disease prevention, and food/water safety. We have provided health education and psychological health counseling services, and held training classes for psychological counselors, training nearly 100 people since the first class. Liaohe Oilfield Company was granted the title of "National Advanced Unit for Occupational Health Management" by China Occupational Safety and Health Association.

We have implemented the Employee Assistance Program (EAP) in our overseas projects. Our companies in Kazakhstan and Iraq invited professional organizations to provide psychological counseling services. In addition, we carried out the activity of "bringing health and sunshine overseas", to organize medical and healthcare staff to provide physical examination and psychological counseling for employees overseas.



## 3. Platform for Employee Development

At PetroChina, we continue to improve our training centers and training networks from the perspective of a modern enterprise, aiming to build a learning organization with knowledge-based employees. We address our employees' need for career development at different stages and provide career planning counsel for people to achieve their personal goals.

### Employee Training

The Company has increased input for training infrastructure, and held training classes for remote training administrators, to improve their comprehensive qualities. In 2013, the training centers of Jilin and Qinghai oilfields were granted the title of "National Workers Vocational Skill Training Base" by the All-China Federation of Trade Unions, guaranteeing the cultivation of more application-oriented talents for the enterprise and society.

We continue to carry out multi-level training through numerous channels and forms, to improve comprehensive competence of managers, technical professionals, operators and international talent. In 2013, the Company held the 19th training class for young and middle-aged officials; organized technical experts to engage in advanced study at Tsinghua University and China University of Petroleum (Beijing); and provided demonstrative



training on unconventional oil & gas and coalbed methane technology for E&P, refining and pipeline senior technicians, to improve the quality of young and middle-aged backbone researchers and leading talents. To improve technicians' competence, 562 backbone technicians were trained through 16 classes. The Company continued to implement the "thousand talents training project" for international talents, sending 35 senior managers to attend the Fifth EMBA program at the University of Houston, USA; sending 10 technical experts from oil & gas fields to attend the world's leading upstream technology training class in Canada; and cultivating 65 talents with good English and Russian language skills through the overseas talent training program.

In 2013, PetroChina headquarters organized 166 training programs with approximately 20,000 participants.

### Platform for Employee Development

With a corporate culture that values moral integrity as well as professional competence, the Company has developed a selection process that is open, competitive and merit-based to create a positive workplace atmosphere, enabling the recognition and best use of talent. The quota of senior technical experts and trial units for the parallel managerial technical system has been increased, to expand the development space for employees. We select key young research staff to undertake national and company-level technology programs in domestic and overseas key projects and research bases, so as to put their talents into good use. Furthermore, the Company

has strengthened the rotation and temporary transfer of positions between the headquarters and overseas projects and supporting units, as well as between our domestic enterprises and institutions concerning foreign affairs and overseas projects. We have further introduced high caliber people from other countries, and three candidates have been evaluated under the "Thousand People" Plan, a national program aimed at attracting outstanding talent from abroad. Our employees have participated in international and domestic skill contests and achieved great performance. In particular, three employees were granted the title of "Personality of the Year" by the "Scientific Chinese" journal.

By the end of 2013, the Company had 12 academicians at the Chinese Academy of Sciences and the Chinese Academy of Engineering, 890 experts entitled to the Government Special Allowance, as well as 287 senior technical experts, 84 management experts, and 231 skilled experts.



166

The Company's headquarters held 166 training programs

20,000

The Company's headquarters trained nearly 20,000 employees



### Case Study

### Innovation Platform of Petrochemical Research Institute Helps Employee Development

At the Petrochemical Research Institute, employees under the age of 35 account for 40% of the total employees. In order to create development opportunities for young employees, the Petrochemical Research Institute carried out the youth innovation project. Young employees are offered opportunities to undertake the institute's projects first, and then sent to external cooperation projects to improve their professional skills. The institute holds a youth innovation forum, intellectual property debate and other activities monthly, to encourage young employees to study independently and communicate with each other.

Training examinations have been strengthened, and self-learning achievement and training are included in the annual performance review. The institute invites experts to provide training to all staff every week, and the total number of experts has reached more than 100. Furthermore, young employees are selected and sent overseas for training. Since the foundation of the institute, more than 70 young employees have won the Youth Innovation Award of State Enterprises, the Youth Civilization Title of State Enterprises, "Ten Outstanding Young People" of the Company, and other awards above the ministerial and provincial level.

## 4. Local Staff Development

At PetroChina, we embrace a respectful, open and inclusive culture and uphold the principles of local hiring, professionalism and market-orientation in managing overseas talent. While we establish ourselves as a global energy company, we also promote workforce localization.

### Local Hiring

We proactively recruit and train local employees and select the right people among local candidates for management positions through fair competition. The Company has co-established the "Central Asia Training Center" with China University of Petroleum, to carry out all-round strategic cooperation for local staff cultivation, Chinese employee training and talent support in Central Asia.

### Management of Local Employees

We have developed *Protocols on Local Employee Management in Overseas Operation* in line with the laws and regulations in host countries, covering hiring, the monitoring of attendance, vacation, performance evaluation, incentives and penalties for each management process and position, to attract and retain outstanding local talent. In 2013, our company in Iraq held the Second Excellent Employee Commending Conference, to award 68 local employees making great contributions to the project development.

### Respect for Cultural Differences

PetroChina fully respects cultural diversity and local customs. We promote understanding and respect for different values and traditions and foster cross-culture cooperation in a culturally diverse workplace. Chinese employees are encouraged to learn about the laws, history, culture and religious customs of local communities. On the other hand, foreign employees are invited to visit our headquarters in China and experience Chinese culture. Our PK Company in Kazakhstan advocates the concept of "fostering mutual respect, and enjoying work", respects the habits and customs of various nationalities, and establishes different types of communication platforms, to remove language obstacles and cultural barriers and promote harmony and cooperation among employees with different cultural backgrounds.



93.4%

By the end of 2013, local employees accounted for 93.4% of overseas workforce.



68

68 local employees in Iraq were awarded for their great contributions to the project development





## Case Study

### Halfaya Project Builds Teams with Diversified Culture

PetroChina's Halfaya Project in Iraq lays stress on fostering an international enterprise culture of openness and inclusiveness, and builds an international team with cultural integration.

Developing a team of multinational backgrounds. The project embraces industry elites from 37 countries across five continents. International and local employees account for 79% of total employees.

Strengthening employee training. The Project invests USD 5 million to train local employees every year. Performance review is carried out in an open and transparent way, and employees are given instructions for improvement. Local employees are provided with training on basic knowledge, operational skills, production process and language skills,

etc. Also, local college graduates are selected to receive training in China.

Respecting employees' religion and customs. Prayer rooms have been established in major oilfield camps for foreign and local employees. Employees receive good wishes on their birthdays or wedding days. Cultural integration is promoted through care and concern for the employees.

The international concept maintained by the Halfaya Project has enhanced the employees' sense of belonging. "Inclusiveness is very important, and the regional and language difference does not stand in the way of team collaboration", said an employee from the Finance Department.

## 5. Security in Overseas Operations

The safety of our employees has always been an overriding priority in our overseas operations. On the organizational level, security management bodies have been set up for overseas subsidiaries and affiliates, including the HSE Committee for International Cooperation and the Counterterrorism, Security and HSE Office. In 10 countries marked by conflicts and tight security, the Company set up social security task forces with dedicated security managers. A systemized management mechanism has been implemented, a promotion plan for social security management system of overseas subsidiaries is formulated, and 12 companies have compiled management manuals and procedure documents. With employee safety being part of our performance review, the Company has signed a Safety and Environment Agreement with each overseas affiliate to identify security-related roles and responsibilities in overseas projects. In addition, it has developed a dynamic, multi-tiered system for risk management and evaluation mechanism to eliminate

security hazards and improve crisis plans. The mechanisms to cooperate with host governments, Chinese embassies and security agencies, and to gather intelligence, were introduced to enable early warning and preparedness. A range of training programs tailored to overseas operations were developed for security managers, site managers and operating crews to improve emergency response capabilities. Furthermore, special drills for emergencies involving both overseas worksites and the headquarters were organized, improving the emergency command system based on maritime satellite phones. In 2013, the Company held the counterterrorism training class in Iraq, to teach terrorism-prevention knowledge, and to provide training on psychological counseling, hazard identification, self-rescue, simulation drills, situation analysis, pressure alleviation and crisis response. No security incident such as fatalities or abductions happened in our overseas projects in 2013.



# 0

No security incident such as fatalities or abductions happened in our overseas projects in 2013.



## Case Study

### International SOS Clinic Built in Rumaila Project

In Basra, Iraq, where our Rumaila Project is located, the security situation is severe, medical conditions are poor, and airports are not equipped with temporary hospitals compliant with international standards. In 2013, PetroChina cooperated with the International SOS rescue center for the first time to build Rumaila SOS Clinic, opening a green channel for overseas employees. PetroChina provides medical treatment unit for the SOS Clinic, and recruits the best local doctors; whereas the SOS rescue center provides bilingual medical staff, medical equipment and medicine free of charge. Basic surgical operations can be performed in the clinic. Upon completion, medical tasks such as treatment, rescue and transfer of the injured, of more than 1,000 PetroChina employees in Basra, will be covered in the SOS international rescue guarantee system. In case of emergency, the SOS clinic will respond immediately to send the injured to Dubai Airport by "Air Ambulance" to get medical treatment in SOS-designated hospitals in Dubai, or help them take a direct flight to Beijing for medical treatment. During SOS international rescue, all the rescue information will be transmitted simultaneously to the SOS rescue system, to save the injured with the greatest efforts in the shortest time.



05

## GIVING BACK TO SOCIETY

As we are from the society, we have a duty to give back to the community. As socio-economic development is our ultimate goal, we attach great importance to the well-being of people and social advancement. We never waver in assisting those living in poverty and students with financial difficulties, organizing volunteering activities in local communities, and promoting community construction. Through our efforts, we strive to make a contribution to building a harmonious society.

## 1. Promoting Local Development

PetroChina's development is inseparable from the support of the Government, communities and the public. In turn, we have maintained close cooperation with multiple investment bodies based on the principle of "open cooperation for mutual benefit". We have consistently cultivated and cooperated with local suppliers and contractors in the development of oil and gas fields and construction of refining chemicals plants and pipelines, boosting local development and creating employment opportunities.

In 2013, RMB 60 billion was introduced from insurance companies, pension funds, banks and public funds as joint venture in the operation of the Western Section of the First and Second West-East Gas Pipelines. The pilot development projects of non-producing reserves and cooperation projects of shale gas in China have been achieved; and the joint-venture platform for E&P and R&C projects has progressed steadily. The South Xinjiang Natural Gas Project was put into operation, fueling the coordinated development of the local economy, society and environment. Oil and gas exploration and production in Qinghai was strengthened to ensure local oil & gas supply, develop urban fuel gas businesses, and proactively promote the socio-economic development of Qinghai.



60 billion RMB

RMB 60 billion was introduced from insurance companies, pension funds, banks and public funds as joint venture in the operation of the Western Section of the First and Second West-East Gas Pipelines



### Dialogue with Stakeholders

**Q: Why does PetroChina implement an opening and foreign cooperation policy in its key assets and investment projects?**

A: Expanding cooperation in the oil & gas business and strengthening foreign investment cooperation is not only a response to national reform and open-up policy and the "New 36 Articles" of the State Council, but also an objective requirement for the Company to maintain sustainable, rapid and coordinated development and adapt to energy industry development trends, and a realistic choice to resolve our development difficulties. Under current situations, expanding opening-up and promoting joint investment and cooperation could

alleviate our investment and financing pressure, relieve cash flow constraints, optimize asset structure; and will introduce social resources, accelerate the development-mode transformation and quality benefit improvement, and finally achieve the goal of mutual benefit and a win-win situation leading to sustainable development.

**Q: What are the main sectors involved in the Company's opening and foreign cooperation?**

A: The Company has started to fully open its upstream, midstream and downstream, as well as the domestic and overseas oil & gas businesses. More emphasis has been placed on establishing joint-venture collaboration platforms for oil & gas pipelines, unused reserves, shale gas, oil refining and chemical engineering, and overseas oil & gas business, etc.





## Case Study

### West-East Gas Pipeline Project Drives Economic Development Along the Pipeline

The West-East Gas Pipeline is an integral part of China's clean energy supply. Since it became operational 10 years ago, this project has not only improved the energy structure in East China, but also promoted local investment and related industry upgrading, driving economic development in both eastern and western areas.

**Driving local investment.** The First West-East Gas Pipeline runs through nine provinces, while the Second Pipeline runs through 14 provinces and the Hong Kong Special Administrative Region. Almost all the steel and machinery equipment needed in engineering construction is procured from local enterprises in regions along the pipeline. The Second Pipeline involves more than RMB300 billion of direct investment being made in related industries, and provided services to more than 30,000 enterprises. The Third Line project involves a total investment of RMB125 billion in which social and private capital is initially introduced and the platform by which benefits are shared has also been established.

**Promoting corporate development within the industry chain.** The West-East Gas Pipeline directly drove the development and upgrading of metallurgy, machinery, electronics and equipment manufacturing industries. The mass production, manufacturing and welding of X70 and

X80 steel pipes led to a great improvement of domestic iron & steel enterprises in terms of their technology level and competence. We participated in developing three key equipments such as the 200,000MW motor-driven compressor unit, 30MW gas turbine driven compressor unit, and 48-inch full-welded high-pressure ball valve, and greatly improved the overall technology and quality level of high-end mechanical and electrical manufacturing enterprises.

**Boosting economic development.** The West-East Gas Pipeline has constantly transmitted natural gas to the eastern area, transforming its resources advantage into a real economic advantage that brings western areas more than RMB100 billion in revenue and income tax. The White Paper of "China's Ethnic Policy and Common Prosperity and Development of All Ethnic Groups", issued by The State Council Information Office of the People's Republic of China, states that the First West-East Gas Pipeline alone has increased Xinjiang's financial revenue by more than RMB1 billion for each single year. The First and Second West-East Gas Pipelines increased China's total energy supply, accelerated socio-economic development, and benefited over 100 cities, 3,000 large & medium-size enterprises and nearly 400 million people.



## 2. Poverty Alleviation

Poverty is a key constraint on sustainable development and tends to be exacerbated by natural disasters. The Company supports and promotes poverty alleviation by promoting related projects, providing more job opportunities, improving residents' life, and making a contribution to poverty alleviation. Investment in poverty alleviation in 2013 reached RMB67.99 million.

### Targeted and Pairing Assistance Programs for Poverty Alleviation

We care about the socio-economic development of impoverished areas, support local leading industries and unique sectors, carry out trainings for the young workers and entrepreneur operation and management, and strengthen basic education support. In 2013, PetroChina started the LNG Synthetic Welding Gas project in Kaixian County, Chongqing. In Fujian Changting, the feasibility study of the rare-earth oil catalyst project was completed, which is expected to produce 50,000 tons of rare-earth oil cracking catalysts. The "10,000-mu Ecological Demonstration Forest for Soil & Water Conservation" project was also almost accomplished. In Xinjiang, five sessions of skill training and four sessions of training for administrators and technicians were held in six poverty alleviation counties, with 370 persons being trained in the whole year. In Henan, we supported education and career development in less-developed areas, donating 200 computers and commodities to Tongbai County, and improved students' accommodation and schooling conditions in this county. Furthermore, in Tibet, we built the Housing Project, Rural Committee Lighting

Facility Renovation Project for Shuanghu County. Our support for poverty alleviation covers 14 counties (districts) in eight provinces (cities & autonomous regions) such as Xinjiang, Henan, Tibet, Qinghai, Chongqing, Guizhou, Jiangxi and Fujian.

### Disaster Relief

Facing major natural disasters in China in 2013, such as earthquakes, floods, and typhoons, the Company immediately launched the Emergency Response Plan to ease the adverse impact caused by these disasters. Within 24 hours of the Lushan earthquake in Ya'an, Sichuan, we built a three-layer oil product supply guarantee mechanism including the earthquake epicenter, surrounding area and peripheral area; we provided a 24-hour interrupted supply at service stations in the affected area; we opened a green oil filling channel to offer preferential services for medical and electricity rescue trucks; we built 5,000 residence houses in the disaster area, and donated 100 "Mother Health Express" ambulances.

67.99 million RMB

The input related to poverty alleviation was up to RMB 67.99 million in 2013

100 ambulances

100 'Mother Health Express' ambulances were donated by PetroChina to Ya'an after the Lushan earthquake.





### 3. Supports for Education

Education is the foundation for social justice and development. We consider support for education an important move accelerating social progress. Since the scholarship fund was established in 2001, PetroChina has rewarded nearly 9,677 students from poor families, and students with excellent academic performance. Moreover, all subsidiary enterprises also set up their own scholarship or fellowship in colleges and universities in order to assist students. The Company, in collaboration with the Society of Automotive Engineers of China and Xiangyang Municipal Government, held the Kunlun Lubricant Formula Student China (FSC) 2013. Furthermore, we reinforced cooperation with automobile manufacturers, industrial associations, and colleges & universities to jointly promote talent cultivation for the automobile industry. In 2013, the "Guo Mingyi Caring Team" donated RMB120,000 to the Xidatan Township Junior High School, Tianzhu County, Wuwei City, Gansu Province.

#### Case Study Helping Girls Back to School

PetroChina Marketing Yumen Company has paid close attention to education of young girls since 2007, and implemented the "Spring Bud Girl" initiative in collaboration with Yumen Women's Federation to help girls living in poverty to finish their education. The Yumen Company, by means of "one helps one", knew about the study and living conditions of the girls, sent stationary and living materials, and encouraged them to overcome difficulties and realize their ideals. In seven years, we have subsidized 75 girls to finish high school education, including 32 girls who were admitted by colleges. Yumen Women's Federation granted a silk banner to Northwest Marketing Yumen Company for its talent cultivation.

9,677

Since the scholarship fund was established in 2001, PetroChina has rewarded nearly 9,677 students from poor families and students with excellent academic performance.



### 4. Volunteer Activities



As a responsible member of the community, each one of us has an obligation to promote social harmony and civilization. At PetroChina, we encourage and support our employees to be volunteers in their communities. In 2013, the Company had 7,722 youth volunteer teams with 173,500 members, and the teams provided 624 thousand hours of volunteer service for 881,900 beneficiaries.

Province" and "Outstanding Youth Volunteer Collective." In Changqing Oilfield Company, Jingweiyuan Community youth volunteers have provided caring services for the elderly and children, and the community became the first demonstration base of volunteer youth services of Changqing Oilfield.

#### Case Study Youth Volunteer Team Provides Service for Community

The "Hand in Hand" youth volunteer team of Huabei Oilfield Company consists of 380 youth volunteers and is devoted to providing voluntary services to the elderly, poor students and other vulnerable groups, including phone greetings, housework service, party organization, physical examination at home, and sending Spring Festival couplets, birthday flowers, etc. In addition, the service team pays regular home visits to the elderly and offers a 24-hour emergency telephone service. They proactively aided poor students living in the community. Since its establishment in 2008, the service team has subsidized 19 poor students, of whom 10 were admitted to universities.



# 5. Contributions to Overseas Communities

PetroChina has long adhered to the principle of “Cooperation for mutual benefit and joint development”, and this has been beneficial to developing long-term partnerships with the countries in which we operate. We respect the cultures, beliefs and customs of different countries and try to promote socio-economic development in each local community. We have set up environmental protection and community relations coordination departments in many overseas areas to promote cooperation with local governments, NGOs, and community representatives beholding conferences, issuing reports and paying visits, etc.

## Local Procurement

Local procurement can boost the development of local SMEs, and generate economic income and create job opportunities for local communities indirectly. Therefore, PetroChina places strong emphasis on the procurement of local products and services relying on local community resources, and strengthens cooperation with local enterprises in technical services, logistical support, catering and logistics, to boost and promote the development of local SMEs.

## Environmental Protection

We have always had a strong focus on environmental protection while developing our projects. We act in strict compliance with the applicable laws and international standards on environmental protection, and implement practical measures tailored to the local environment. We protect the local ecological environment and try to minimize

the impact of our operations on the environment by optimizing our technical processes and by applying energy-saving and emission reduction technologies.

## Community Construction

We are actively involved in infrastructure construction to help improve the living conditions of local people, and fund education, health care and other public welfare programs to achieve harmonious and mutual development. In 2013, we sponsored 28 athletes of Iraq's national swimming team and diving team for one-month training in Beijing. In Chad, we donated to SOS Children's Villages to help local orphans. Mr. Chen Ziqiang, Deputy General Manager of K&K Project of PetroChina International (Azerbaijan), was awarded Prosperity Medal of Azerbaijan.



## Case Study

## Assisting Post-disaster Reconstruction of Calgary Zoo in Canada

Calgary Zoo, located in Alberta, Canada, is one of the famous zoos in North America, and ranks among the top research bases for species conservation by the *Journal Nature*. The zoo plays an important role in boosting local education, culture and economic development, as it has over 73,000 members and attracts visitors from around the world. In addition, more than 65,000 students participate in its species conservation education programs every year.

In June 2013, an extraordinary flood hits George Island, where Calgary Zoo is located. The zoo suffered huge losses as the buildings and cages were destroyed and animals had to be transferred to other places. PetroChina promptly provided support, and our employees offered voluntary services, so as to help the zoo resume operations as soon as possible, and protect local natural and cultural heritage.

“PetroChina gave a helping hand to us very promptly. Everyone in our community benefitted from it, especially the kids. We believe this is an important embodiment that PetroChina keeps her promise to the community.”

—the head of the Calgary Zoo



In Chad, we have established a close partnership with local communities. To help residents fully understand land and crop compensation standards, we printed plant compensation charts and manuals, and distributed them widely in the communities.



## Feature Story Serving Overseas Communities to Build a Better Life for Everyone

PetroChina's overseas business has experienced rapid growth since the Company started overseas cooperation. By developing oil and gas abroad, we have boosted economic development, strengthened environmental protection, promoted employment, and improved people's living standards in the host countries.

### Win-win cooperation for common development

The Company helps host countries to establish modern oil industry and provides them with reliable oil & gas supplies and financial support. With our support, a modern oil industry covering exploration and development, oil and gas transportation, and refining & chemicals was built in Chad and other countries, effectively promoting local socio-economic and social development. Our Rumaila and Halfaya projects in Iraq were constructed and commissioned at a fast speed, with production hitting the target yields. This had made Iraq the second largest oil producer in OPEC and contributed greatly to postwar re-construction. In Kazakhstan, over 70% of taxes from Aktobe are contributed by the PetroChina AktobeMunaiGaz each year.

### Clean production and ecological protection

The Company attaches great importance to HSE work by actively implementing a safe, green and economical development mode, to protect the eco-system of host countries. In Kazakhstan, the overall natural gas utilizing rates in the PK project and the Aktobe project reached over 90%, setting a model for environmental protection.

### Local employment and talent cultivation

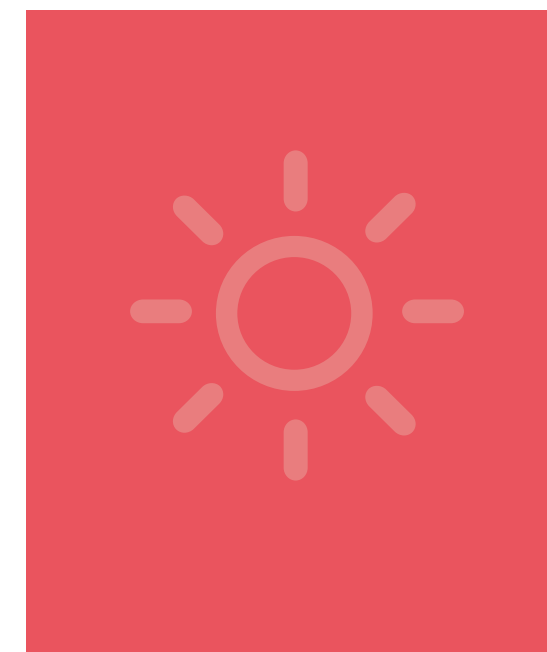
While promoting the economic development of host countries, PetroChina creates job and training opportunities for local people. In total, the Company has provided training for over 40,000 local employees. The localization rate of overseas employees is over 90%. In Kazakhstan in particular, the rate is over 97%. In addition, the Company has set up a scholarship in Kyzylorda, and sends 10-15 local outstanding senior high school graduates every year to continue their studies in famous schools in China, Kazakhstan and other countries.

### Serve local communities to promote harmonious development

The Company devotes itself to public welfare undertakings overseas to enhance living standards in host countries. Since 2006, AktobeMunaiGaz has made donations every year in Kazakhstan to facilitate the development of local culture, education, sports, medical services and rural infrastructure. In addition, the Company also provided financial support to the Fund for the Handicapped and orphanages in Aktobe State.

In Indonesia, PetroChina assisted the development of SMEs, helped farmers to procure tools and seeds for cash crops, and helped locals suffering from tsunami to rebuild the homes. In Iraq, the Company donated air conditioners, festive costumes, stationery and sports equipment to orphanages in Basra every year, and organized charity donations for orphanages in Basra.

The Company has gained respect and recognition from local communities by fulfilling social responsibilities and strives to become an "Global Excellent Corporate Citizen". In 2009, we won the "Outstanding Social Contribution Award" and the highest honor for environmental protection in the oil industry of Kazakhstan—the Golden Prometheus National Award. In 2010, the Company was granted the "Outstanding Social Responsibility Award" by the Kazakhstan government. Furthermore, in 2012, the Company was granted the Safety and Environmental Award by Pertamina in Indonesia.





Objectives and Plans

Looking ahead to 2014, in order to build a world-class international energy company, PetroChina will continue to implement its strategies with regard to resources, market and internationalization, guided by the development policy giving priority to quality, efficiency and sustainability. The Company will strengthen reform and innovation, promote the three fundamental projects including safety and environment, harmony and stability, and anti-corruption, consolidate the foundation for development, ensure sustained and stable energy supply, and boost social harmony and prosperity.

Aspects	2014 Objectives	2014 Action Plans
Oil & Gas Production and Supply	Adjust and optimize the structure, and fostercompetitive advantages in key areas	<div>1. Give priority to oil and gas exploration, find high-quality reserves and high-efficiency reserves</div> <div>2. Improve the overall value of natural gas operations</div> <div>3. Enhance international operation capacity for overseas business</div> <div>4. Focus on optimizing raw materials and processing routes, and developing high-efficiency products like high-grade gasoline, jet fuel, and lubricants</div> <div>5. Accelerate upgrading of oil product quality and meet the standard within the time limit</div>
Safety and Environmental Protection	Strengthen HSE system, establish a long-effective mechanism, and strive for world-class HSE performance	<div>1. Firmly establish the concept of safe development</div> <div>2. Improve the responsibility system of dual responsibilities for one position</div> <div>3. Focus on implementing safety and environmental protection measures for key areas and key processes</div> <div>4. Establish a pragmatic and effective supervision and inspection system with effective implementation</div> <div>5. Enhance the risk prevention and emergency response competence</div>
Employee Development	Integrate employee development into the Company's work plan, cultivate a large number of talents in various fields, improve overall staff quality, and turn rich human resources into competitive advantages	<div>1. Foster and introduce high-level talents, make innovations in talent cultivation, and accelerate professional and international staff development</div> <div>2. Promote high-efficiency development and utilization of human resources</div> <div>3. Establish the concept that all individuals have talents, promote regular and system-based staff training</div> <div>4. Conduct detection of occupational hazards, intensify occupational health surveillance, improve the working environment, and further enhance management of occupational health</div>
Public Welfare	Provide all people with the fruits of development, and jointly build a harmonious society	<div>1. Actively support and participate in public welfare programs, improve the community health and pension service system, and achieve a better social effect public welfare activities</div> <div>2. Continue to conduct target and non-targeted poverty alleviation programs, disaster relief, donations for education, youth volunteer campaigns and other activities, and reinforce development-oriented poverty alleviation with technology and education support</div> <div>3. Improve long-effect mechanism for poverty alleviation and carry out charity activities</div> <div>4. Establish a long-term and stable community coordination mechanism in cooperation with localities, poverty alleviation and development, and emergency management, enhance communication with investors, partners, customers, suppliers and other stakeholders, identify common interests and achieve mutual benefit and win-win results</div>

Aspects	2014 Objectives	2014 Action Plans
Anti-corruption	Innovate anti-corruption mechanisms and systems by regulating the exercise of power, actively explore effective ways to“put power under institutional checks”, intensify supervision and inspection and case handling, and create an honest and incorruptible business environment	<div>1. Promote mechanism innovation and institutional guarantees for anti-corruption, and explore and develop a mechanism for power featuring “implementation by deputy leaders, supervision by chief leaders, collective leadership, and democratic decision-making”</div> <div>2. Implement the responsibility system for building clean governance, establish an accountability system linked to the remuneration, selection and appointment of leaders; perform “dual checks for one case” to place responsibility on both the responsible person and the leader, for the departments and units that have major corruption cases, conceal cases or refuse to allow investigations</div> <div>3. Intensify efforts to investigate and handle cases, and rigorously punish corruption, resolutely investigate and handle any problem involving senior executives of the Company and its subsidiaries and any case involving seeking personal gains or harming the interests of the Company and its employees; and hand over any case constituting a crime to a judicial organ</div> <div>4. Strengthen supervision and inspection, focusing on identifying problems and ascertaining where the responsibility lies; conduct efficiency supervision and special inspection, improve and strengthen inspection, monitor any behavior in breach of laws and discipline, give play to the advantages of network information technology, accelerate supervision over the process of key operations, achieve the transformation from aftermath inspection to process monitoring, and ensure open and transparent exercise of power, online supervision and whole-process control</div> <div>5. Reinforce supervision and management over managers at all levels; identify, remind, correct and handle any emerging issues that signal unfavorable trends as early as possible, timely interview, consult and admonish to prevent the development of small problems into serious problems or cases, timely promote the pilot projects of making public the relevant personal issues of new leaders; thoroughly investigate those responsible as well as the offenders, in case of dereliction of duty such as personnel placement against regulations</div>

Performance Statistics

Category	Indicator	2009	2010	2011	2012	2013
Economic	Total assets (RMB 10 <sup>8</sup> )	14,503	16,565	19,176	21,689	23,421
	Turnover (RMB 10 <sup>8</sup> )	10,193	14,654	20,038	21,953	22,581
	Net Profit (RMB 10 <sup>8</sup> )	1,034	1,400	1,330	1,153	1,296
	Taxes (RMB 10 <sup>8</sup> )	2,045	2,870	3,744	3,620	3,758
	Proven crude reserves (10 <sup>6</sup> barrels)	11,263	11,278	11,128	11,018	10,820
	Proven gas reserves (10 <sup>8</sup> ft3)	632,440	655,030	666,530	675,810	693,230
	Oil equivalent production (10 <sup>6</sup> barrels)	1,196	1,228	1,286	1,343.1	1,400.0
	Crude oil production (10 <sup>6</sup> barrels )	844	858	886	916.5	932.9
	Marketable natural gas production(10 <sup>8</sup> ft <sup>3</sup> )	21,122	22,212	23,964	25,588	28,019
	Total length of crude oil pipelines (km)	13,164	14,782	14,782	16,344	17,614
	Total length of refined products pipelines (km)	8,868	9,257	9,334	9,437	9,534
	Total length of natural gas pipelines(km)	28,595	32,801	36,116	40,995	43,872
	Crude runs (10 <sup>6</sup> barrels)	829	904	985	1,012.5	992.3
	Ethylene production (10 <sup>4</sup> tons)	299	361	347	369	398.2
Safety	Death rate caused by accidents (person/100 million working hours)	0.36	1.02	0.70	0.20	0.25
	Total accident rate (incidents/million working hours )	0.0264	0.0120	0.0326	0.0387	0.0522

Category	Indicator	2009	2010	2011	2012	2013
Environment	Energy conserved (10 <sup>4</sup> TCE)	171	173	113	121	108
	Water conserved (10 <sup>4</sup> cubic meters)	3,188	2,865	1,744	1,926	2,007
	Oil discharged in waste water (tons)	701	698	642	604	577
	COD discharged in wastewater (tons)	16,949	18,741	17,731	18,005	17,369
	SO <sub>2</sub> discharged in waste gas (tons)	105,044	114,200	111,321	111,015	105,039
Employee	Number of employees (10 <sup>4</sup> )	53.9	55.3	55.3	54.8	54.4
	Percentage of employees receiving occupational health checks (%)	96	96	95	95	91
	Percentage of non-Chinese nationals in overseas hires (%)	94	94	94	94	93.4
Public welfare	Contribution to poverty alleviation(RMB 10 <sup>4</sup> )	5,828	6,308	3,706	4,124	6,799
	Educational donations (RMB 10 <sup>4</sup> )	3,782	3,458	11,928	9,151	10,736
	Donations to disaster relief (RMB 10 <sup>4</sup> )	935	4,499	595	1,881	2,152
	Environmental protection (RMB 10 <sup>4</sup> )	569	5,588	75	965	1,377

Note: Measurement units

1 BOE = 1 barrel of crude = 6,000 cubic feet of NG = 169.9 cubic meter of NG

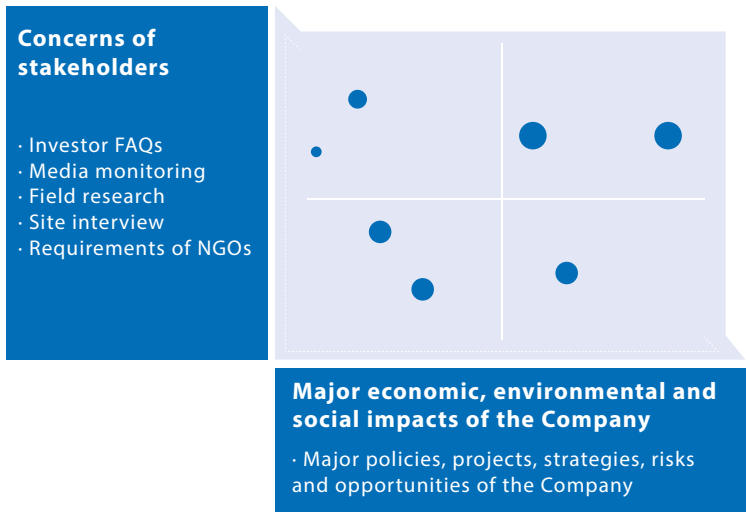
1 cubic meter of NG = 35.315 cubic feet of NG

1 metric ton of crude = 7.389 barrels of crude (API = 34)



# Approach to Reporting

This Report focuses on major international and domestic events related to the sustainable development of the Company and its subsidiaries.



## Content Selection Process

- 1. The Company pays close attention to the views of its stakeholders, and collects comments through community visits, periodical reports, field research, and communication via the Internet. Suggestions on the topics of the report are made taking account stakeholders' major concerns.
- 2. We assess the Company's sustainable development strategy, and select major social, economic and environmental events related to our strategies, risks and opportunities.
- 3. Topics are selected based on the comprehensive assessment of stakeholders' concerns and impact of the Company's strategies. The time span and impact scope of each specific topic is defined to ensure the accuracy of the information disclosed.

We also refer to the social responsibility initiatives proposed by NGOs for topic selection. These include the "G4 Sustainability Reporting Guidelines" of the Global Reporting Initiative (GRI), ISO26000 (Guidance on Social Responsibility), "Oil and Gas Industry Guidance on Voluntary Sustainability Reporting (2010)" by the International Petroleum Industry Environment Conservation Association (IPIECA) and the American Petroleum Institute (API), and the UN Global Compact and its 10 principles.



# About This Report

This report illustrates activities the Company undertook in 2013 pursuant to its ongoing commitment to advance the community, the economy and the environment. All information disclosed in this report was sourced from PetroChina's official documents and statistics as well as from statistics gathered from the Company's affiliated enterprises. It takes into account the Company's development priorities and stakeholder concerns. This report has been reviewed in accordance with the Company's Rules for Information Disclosure Control and Disclosure Procedures. For continuity and comparability purposes, this report provides explanations on past and future initiatives on certain issues.

This report is formulated according to the key principles of accuracy, transparency and consistency. We took reference from the Guideline on Preparing the *Report on Performance of Corporate Social Responsibility* issued by the Shanghai Stock Exchange and the *Environmental, Social and Governance (ESG) Reporting Guide* issued by the Hong Kong Stock Exchange. Furthermore, we continued to consult the *Sustainability Reporting Guideline* (Version 4.0) released by the Global Reporting Initiative (GRI) and the *Oil and Gas Industry Guidance on Voluntary Sustainability (2010)* co-published by the International Petroleum Industry Environmental Conservation Association (IPIECA) and the American Petroleum Institute (API). As a member of the United Nations Global Compact (UNGC), we report our progress in compliance with the Ten Principles and will submit the report to be posted on UNGC's website (<http://www.unglobalcompact.org>).

This report includes a set of Forward-Looking Statements. Excluding historical facts, all events that may or will occur (including, but not limited to, premise, objectives, estimation and business plans) and descriptions of such events are categorized as Forward-Looking Statements. Due to the presence of external uncertainties, actual outcomes or the future climate may differ from those expressed in the Forward-Looking Statements. As the Forward-Looking Statements were made prior to December 31, 2013, PetroChina holds no responsibility or liability for any modifications made subsequent to said date.

Thank you for taking the time to read this report. We welcome any comments and suggestions you may have as we believe that your feedback can improve our performance. This report is published, along with the Company's Annual Report 2013 in March 2014, in simplified Chinese, traditional Chinese and English. In the case of any discrepancy, the version in simplified Chinese shall act as the lead publication. Please visit our website ([www.petrochina.com.cn](http://www.petrochina.com.cn)) for more information or to download the electronic version of this report.

**The Board and all the Company's directors hereby certify that there are no misrepresentations, misleading statements or material omissions in this report. Furthermore, we jointly and severally accept full responsibility for the truthfulness, accuracy and completeness of this report.**

Please visit [www.petrochina.com.cn](http://www.petrochina.com.cn) to review PetroChina's compliance with *Sustainability Reporting Guidelines* (Version 4.0) released by the Global Reporting Initiative and *Oil and Gas Industry Guidance on Voluntary Sustainability* (2010).

Address: 9 Dongzhimen North Street, Dongcheng District, Beijing, P.R.China  
Post Code: 100007  
Website: [www.petrochina.com.cn](http://www.petrochina.com.cn)  
E-mail: [csr@petrochina.com.cn](mailto:csr@petrochina.com.cn)

 Printed on environment-friendly paper